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The Northern Road Upgrade Mersey Road, Bringelly to Glenmore Parkway, Glenmore Park

NSW Environmental Impact Statement /
Commonwealth Draft Environmental Impact Statement

Appendix H – Technical working paper: Noise and vibration

June 2017



The Northern Road Upgrade – Mersey Road to Glenmore Parkway

Prepared for Roads and Maritime Services by Jacobs Australia

Noise and Vibration Assessment

Final

15 May 2017

The Northern Road - Mersey Road to Glenmore Parkway

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Glossary

Term	Description
Acoustic terms (Noise)	
Acoustic Barrier	Solid walls or partitions, solid fences, earth mounds, earth berms, buildings, etc used to reduce noise, without eliminating it.
Ambient Noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far.
Assessment Period	The period in a day over which assessments are made.
Audible Range	The limits of frequency which are audible or heard as sound. The normal ear in young adults detects sound having frequencies in the region 20 Hz to 20 kHz, although it is possible for some people to detect frequencies outside these limits.
Background Noise	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L_{90} noise level (see below).
Decibels (dB)	The level of noise is measured objectively using a Sound Level Meter. This instrument has been specifically developed to mimic the operation of the human ear. The human ear responds to minute pressure variations in the air. These pressure variations can be likened to the ripples on the surface of water but of course cannot be seen. The pressure variations in the air cause the eardrum to vibrate and this is heard as sound in the brain. The stronger the pressure variations, the louder the sound is heard. The range of pressure variations associated with everyday living may span over a range of a million to one. On the top range may be the sound of a jet engine and on the bottom of the range may be the sound of a pin dropping. Instead of expressing pressure in units ranging from a million to one, it is found convenient to condense this range to a scale 0 to 120 and give it the units of decibels. The following are examples of the decibel readings of every day steady or quasi-steady sounds. *0dB the faintest sound we can hear under perfect conditions* *20dB quiet bedroom at night or recording studio* *30dB quiet library or quiet location in the country* *40dB living room* *50dB typical office space or ambience in the city at night* *60dB normal conversational speech* *70dB a car passing by* *80dB kerbside of a busy road* *90dB truck passing by* *100dB nightclub* *110dB rock band or 2m from a jackhammer* *120dB 70m from a jet aircraft*

Term	Description
	130dB threshold of pain *140dB 25m from a jet aircraft*
dB(A); A-weighted decibels	The ear is not as effective in hearing low frequency sounds as it is hearing high frequency sounds. That is, low frequency sounds of the same dB level are not heard as loud as high frequency sounds. The sound level meter replicates the human response of the ear by using an electronic filter which is called the "A" filter. A sound level measured with this filter switched in is denoted as dB(A). Most environmental noise is measured using the A filter.
dB(C); C-weighted decibels	C weighted adjustments are relatively flat across lower frequencies, and as such are better suited for the assessment of low frequency noise.
Diffraction	The distortion around solid obstacles of waves travelling past.
Frequency	Of a periodic quantity: the time rate of repetition. The reciprocal of the period. Frequency is measured in Hertz (Hz).
Loudness	A 3dB increase represents a doubling of the sound pressure, however an increase of about 10dB is required before the sound will subjectively appear to be twice as loud. That is, a sound of 85dB is twice as loud as a sound of 75dB which is twice as loud as a sound of 65dB and so on. That is, the sound of 85dB is four times as loud as a sound of 65dB. The smallest change which can be readily heard is about 2dB. An increase beyond 5dB is considered to represent the level at which a change in loudness begins to be clearly perceived.
L_{10}	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
L_{90}	The level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L_{90} noise level expressed in units of dB(A).
L_{eq}	Equivalent sound pressure level – the steady sound level that, over a specified period of time, would produce the same energy equivalence as the fluctuating sound level actually occurring. The sound weighting of the noise measurement is commonly added, for example L_{Aeq} or L_{Ceq}.
Reflection	Sound wave changed in direction of propagation due to a solid object obscuring its path.
SEL	Sound Exposure Level (SEL) is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain Leq sound levels over any period of time and can be used for predicting noise at various locations.
Sound Level Meter	An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels.
Sound Pressure Level	The level of sound pressure, expressed in decibels, as measured by a standard sound level meter with a microphone.
Sound Power Level	Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power.
Structure-borne noise	Vibration propagating through solid structures in the form of compression or bending waves, heard as sound.

Term	Description
Vibration terms	
Acceleration	A vector quantity that specifies the time derivative of velocity.
Accelerometer	A pickup that converts an input acceleration to an output (usually electrical) that is proportional to the input acceleration.
Ambient vibration	The all-encompassing vibration associated with a given environment, usually a composite of vibration from many sources, far and near.
Amplitude	The maximum value of a sinusoidal quantity.
Complex Wave	The resultant form of a number of sinusoidal waves that are summed together forming a periodic wave.
Crest factor	The ratio of the peak value to the r.m.s. value.
Cycle	The complete range of states or values through which a periodic phenomenon or function passes before repeating itself identically.
Displacement	A vector quantity that specifies the change of position of a body or particle with respect to a reference frame.
FFT	Fast Fourier Transform. A computationally efficient mathematical technique which converts digital information from the time domain to the frequency domain for rapid spectral analysis.
Frequency	The reciprocal of the period when the independent variable is time.
Harmonic	Of a periodic quantity. A sinusoidal quantity whose frequency is an integral multiple of the fundamental frequency of the quantity.
Hertz (Hz)	Units in which frequency is expressed. Synonymous with cycles per second.
Peak value	The maximum value of a quantity during a given interval.
Peak-to-peak value	Of an oscillating quantity. The algebraic difference between the extreme values of the quantity.
Periodic vibration	A periodic quantity whose values recur for certain equal increments of the independent variable.
Resonance	Of a system in forced oscillation. The condition of the system when any change in the frequency of excitation, however small the change , causes a decrease in a response of the system.
Resonance frequency	A frequency at which resonance occurs.
Roads and Maritime	Root Mean Square of the acceleration value of the vibration source. This measure allows for the magnitude of the vibration, regardless of its direction.
Spectrum	A description of a quantity as a function of frequency or wavelength.
Transducer	A device that receives energy from one system and supplies energy, of either the same or a different kind, to another system in such a manner that the desired characteristics of the input energy appear at the output.
Velocity	A vector quantity that specifies the time derivative of displacement.
Wavelength	Of a periodic wave. The distance, measured perpendicular to the wave front in the direction of propagation, between two successive points on the wave that are separated by one period.

Executive Summary

This report assesses the potential for noise and vibration impact to sensitive receivers from the proposed The Northern Road Upgrade, Mersey Road to Glenmore Parkway. Roads and Maritime Services proposes to upgrade The Northern Road as part of the Western Sydney Infrastructure Plan, a 10 year package of road upgrades which will support the planned western Sydney airport.

The project passes through a semi-rural corridor which is sparsely populated, although residential density increases at Glenmore Park at the northern end of the study area and at Luddenham at its southern end. The study area includes 1,349 acoustically-sensitive receivers including residences, schools, places of worship, commercial premises and active recreation areas. The types of project-related impacts to which these receivers may potentially be exposed include increased traffic noise, sleep disturbance resulting from an increase in heavy vehicle volumes at night, or noise or vibration from construction of the project.

The potential for noise or vibration impact has been assessed in accordance with the Commonwealth Assessment guidelines, the Secretary's Environmental Assessment Requirements (SEARs) and against NSW Government regulatory guidelines and Australian and international standards. In particular, this assessment is guided by the Road Noise Policy and Roads and Maritime's Noise Criteria Guideline, Noise Mitigation Guideline and its Construction Noise and Vibration Guideline.

The assessment identifies that 77 receivers (within 74 buildings) qualify for mitigation as a result of the operational noise impacts predicted from the project. The mitigation-eligible buildings are all residential other than three classroom buildings at Luddenham Public School.

The assessment determines that mitigation of operational impacts will be delivered as at-building acoustic treatments rather than as either low noise road pavement or noise barriers, as this is the most reasonable application of mitigation given the spatial separation of the eligible buildings.

The assessment identifies that the project's construction will substantially impact the community including triggering a small number of receivers to be highly noise affected, likely necessitating dedicated noise management measures.

The highest noise impacts will result from road works and paving works in particular, although impacts form other works stages are also predicted. Worst case noise exceedances at receivers of more than 25 dB(A) will occur along most of the project's alignment when noise-intensive processes such as rockbreaking, concrete sawing and vibratory rolling operate at their nearest point to receivers.

Noise impacts and potential for sleep disturbance are predicted also from out-of-hours (night) works including from the operation of ancillary facilities alone (ie, even in the absence of noise from mainline works).

The assessment has outlined standard as well as additional noise mitigation measures that would be expected to be deployed in the project's construction program to mitigate these impacts. These include restricting some construction staging and specific noise-intensive activities such as impact piling, rockbreaking and pavement saw cutting to day time periods, erecting noise hoardings and deploying low-noise plant. The offering to the community of periods of respite may also be required.

In all cases, the construction noise impacts reported in this assessment reflect worst-case conditions when all plant is operating concurrently nearest a receiver. Construction noise levels will typically be lower than these reported peak levels as works move away from the receiver and as fewer items of plant are operated.

No vibration impact is expected from the project although management measures may be required where vibratory rolling or rockbreaking is to be undertaken within 22m of buildings (whether habitable or non-habitable) or within 100m of human-habitable spaces.

1. Introduction

1.1 Purpose of this Report

Jacobs Group (Australia) Pty Ltd (Jacobs) was commissioned by Roads and Maritime to assess the potential environmental impact of The Northern Road Upgrade – Mersey Road to Glenmore Parkway ("the project") and prepare an Environmental Impact Statement (EIS) in accordance with the *Environmental Planning and Assessment Act 1979* (EP&A Act) that adequately addresses the Secretary's Environmental Assessment Requirements (SEARs) and the Commonwealth EIS Guidelines.

This report assesses the potential for noise or vibration impact from the construction and operation of the project and presents measures to mitigate any impact.

The types of impact that could potentially arise from the project include:

- New or increased exposure to noise from traffic on either the new road alignment or the surrounding road network;
- Noise or vibration from construction of the project, including during night time periods.

The methods to mitigate any predicted noise or vibration impact may include:

- In terms of potential impact from the operation of the project:
  - Low-noise road pavements
  - Roadside noise barriers
  - At-property architectural acoustic treatments
- In terms of potential impact from the project's construction:
  - Restricting construction activities and hours as required
  - Selecting low-noise plant, erecting noise hoardings around construction compounds or using non-tonal reversing beepers on mobile plant during any out-of-hours works.

1.2 Secretary's environmental assessment requirements (SEARs)

The assessment responds to the requirements of the *Secretary's Environmental Assessment Requirements (Application number SSI 7127* issued 28 July 2015) for the project. Table 1-1 identifies those SEARs relating to noise and vibration and where within this report, the technical response to these requirements may be found.

Table 1-1 Secretary's Environmental Assessment Requirements (SEARs)

SEARs Key Issue	Where found in this report
An assessment of noise impacts of the proposal during operation, consistent with the Road Noise Policy (RNP) (EPA, 2011), NSW (Industrial Noise Policy (INP) (EPA, 2000) and relevant guidelines. The assessment must include specific consideration of impacts to receivers (such as, but not limited to, dwellings, child and aged care centres, educational establishments, hospitals, motels, nursing homes, places of worship, or recreation), including specific consideration of sleep disturbance and, as relevant, the characteristics of noise (eg low frequency noise), and identify reasonable and feasible mitigation measures	Section 8.1

SEARs Key Issue	Where found in this report
An assessment of construction noise and vibration impacts, consistent with the Interim Construction Noise Guidelines (ICNG) (DECCW, 2006) and Assessing vibration: A technical guideline (DEC 2006). The assessment must have regard to the nature of construction activities (including transport, tonal or impulsive noise generating works and the removal of operational noise barriers, as relevant), the intensity and duration of noise and vibration impacts, cumulative effects of construction works undertaken concurrently, the nature, sensitivity and impact to potentially affected receivers, the need to balance timely conclusion of noise and vibration generating works with periods of receiver respite, and other factors that may influence the timing and duration of construction activities (such as traffic management), and mitigation and management measures	Section 10 and Section 11.3 Cumulative noise impacts are addressed in the EIS
If blasting is required, addressing the relevant requirements of Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC 1990)	Blasting will not be required for the project
If relevant, an indication of potential for works outside of standard working hours, including predicted levels and exceedances, justification for the activity and discussion of available mitigation and management measures	Section 10.13

1.3 Commonwealth EIS Guidelines

The assessment also responds to the noise and vibration requirements outlines in Section 528 of the Commonwealth EIS Guidelines. Table 1-2 identifies where within this report the technical responses to these requirements may be found.

Table 1-2 Commonwealth EIS Guidelines

Key Issue	Where found in this report
Road noise and vibration impacts on everyday activities and on sensitive environmental receptors (all sensitive receptors within the community and natural environment). Discussion and quantification/modelling of road noise impacts should include the range and frequency of noise, noise contours, cumulative exposure, peak noise and variations in noise patterns due to seasonal and meteorological factors.	Sections 7, 8 and 9 Additionally, there are no characteristic wind conditions in the area. The area does exhibit characteristic temperature inversions which can increase traffic noise levels by up to approximately 5 dB(A) at receivers at the outer reaches of the study area. It is to be noted however, that the RNP stipulates that noise criteria for the project do not need to be met under these adverse meteorological conditions.
Noise and vibration from construction activities and machinery	Sections 10 and 11

1.4 Relevant Guidelines

This assessment of impact has been prepared in accordance with the following regulatory guidelines:

- *Road Noise Policy*, NSW EPA, 2011
- *Noise Criteria Guideline*, Roads and Maritime Services, April 2015
- *Noise Mitigation Guideline*, Roads and Maritime Services, April 2015
- *Industrial Noise Policy, NSW EPA, 2000*
- *Procedure: Preparing an operational traffic and construction noise and vibration assessment report,* RMS, 2016
- *Environmental Noise Management Manual*, Roads and Maritime Services, December 2001
- *Calculation of Road Traffic Noise*, UK Department of Transport, 1988
- *Construction Noise and Vibration Guideline*, Transport (Roads and Maritime), April 2016
- *Interim Construction Noise Guideline*, Department of Environment and Climate Change NSW, July 2009
- *Assessing Vibration: a technical guideline*, DEC, 2006
- *AS1055 Acoustics - Description and measurement of environmental noise*, Standards Australia, 1997
- *AS IEC 61672.1—2004 - Electroacoustics—Sound level meters, Part 1: Specifications*, Standards Australia, 2004
- *BS 7385 Part 2-1993 Evaluation and measurement for vibration in buildings Part 2*, BSI, 1993
- *DIN 4150:Part 3-1999 Structural vibration - Effects of vibration on structures*, Deutsches Institute fur Normung, 1999

2. The project

Roads and Maritime is seeking approval to upgrade 16 km of The Northern Road between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park (the project). An overview of the project is shown in **Figure 2-1** which also indicates Noise Catchment Areas and noise and traffic monitoring locations which are discussed later in this report.

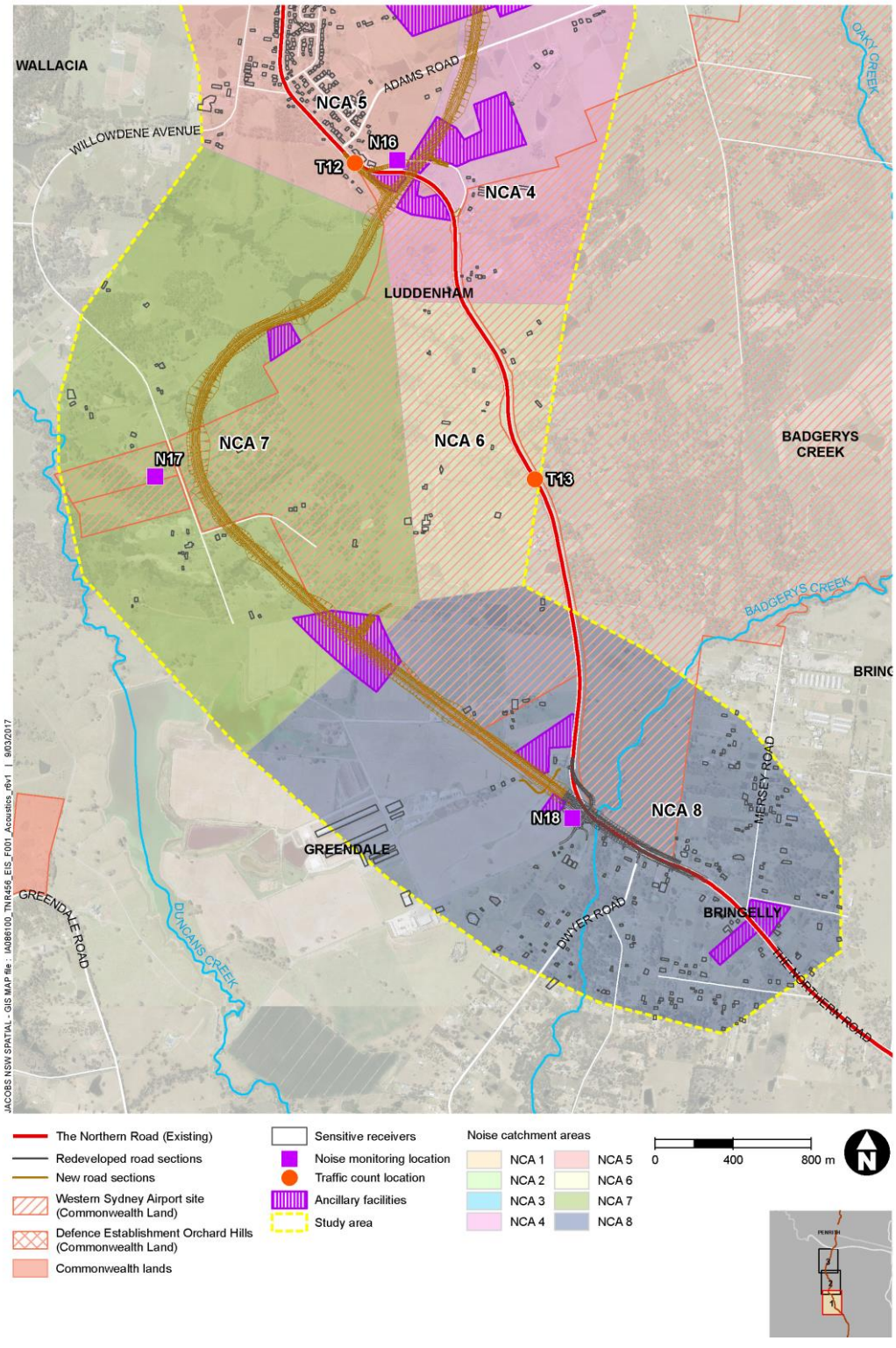


Figure 2-1 - Project context indicating sensitive receivers, noise monitoring and traffic count locations

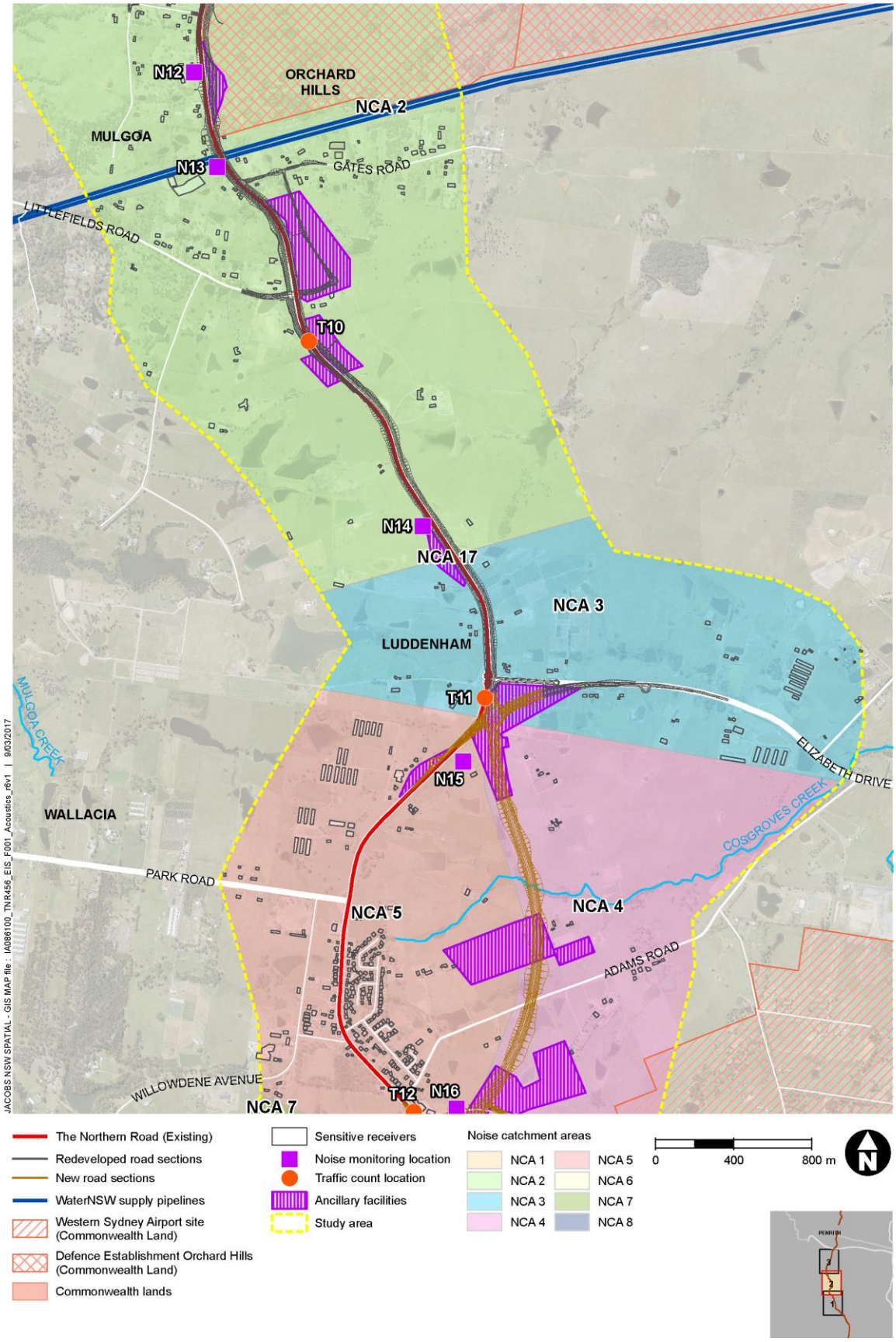


Figure 2.1 - Project context indicating sensitive receivers, noise monitoring and traffic count locations

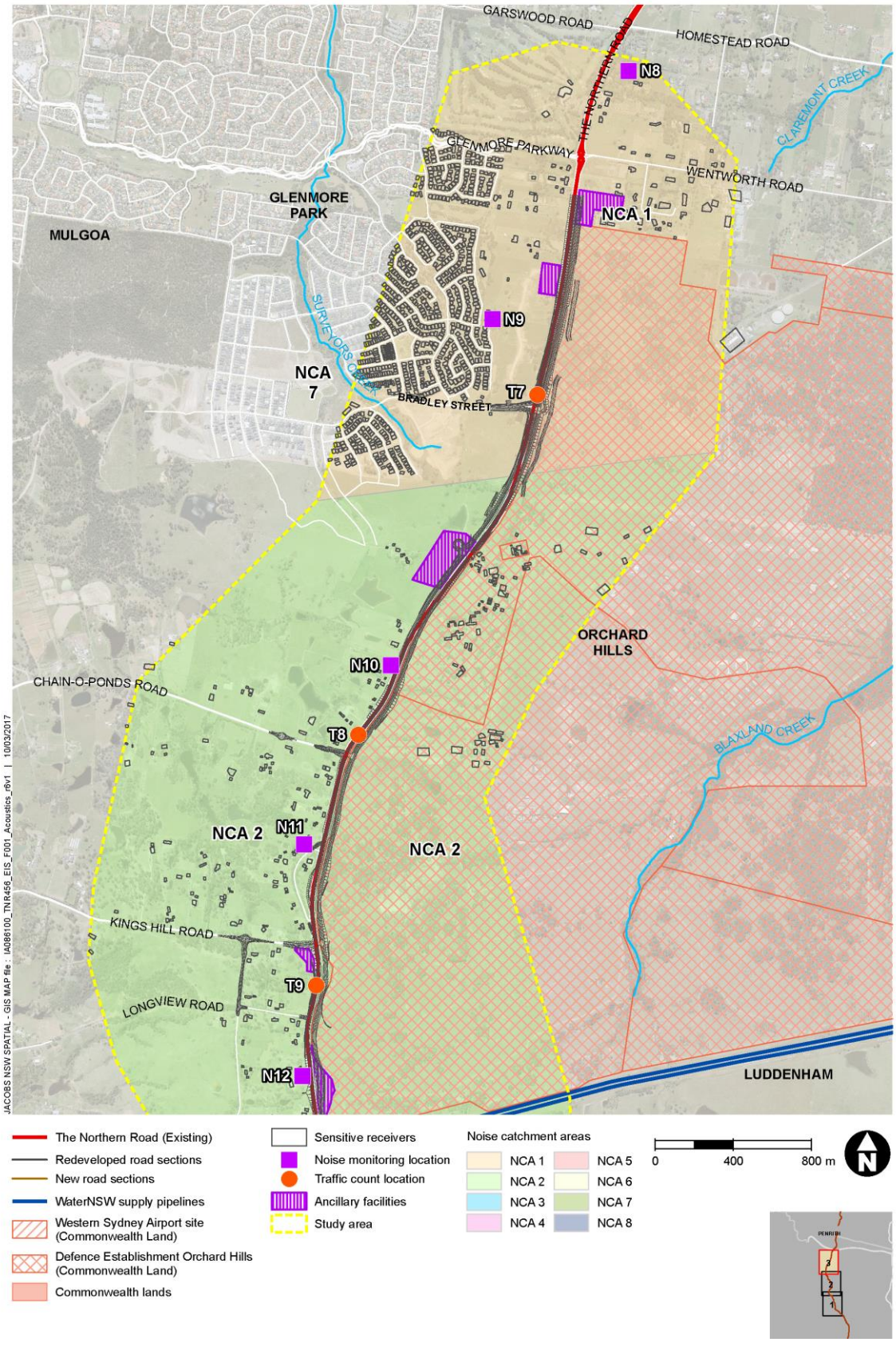


Figure 2.1 - Project context indicating sensitive receivers, noise monitoring and traffic count locations

The project comprises the following key features:

- A six-lane divided road between Mersey Road, Bringelly and Bradley Street, Glenmore Park (two general traffic lanes and a kerbside bus lane in each direction). The wide central median would allow for an additional travel lane in each direction in the future, if required
- An eight-lane divided road between Bradley Street, Glenmore Park and about 100 m south of Glenmore Parkway, Glenmore Park (three general traffic lanes and a kerbside bus lane in each direction separated by a median)
- About eight kilometres of new road between Mersey Road, Bringelly and just south of the existing Elizabeth Drive, Luddenham, to realign the section of The Northern Road that currently bisects the Western Sydney Airport site and to bypasses Luddenham
- About eight kilometres of upgraded and widened road between the existing Elizabeth Drive, Luddenham and about 100 m south of Glenmore Parkway, Glenmore Park
- Closure of the existing The Northern Road through the Western Sydney Airport site
- Tie-in works with the following projects:
  - The Northern Road Upgrade, between Peter Brock Drive, Oran Park and Mersey Road, Bringelly (to the south)
  - The Northern Road Upgrade, between Glenmore Parkway, Glenmore Park and Jamison Road, South Penrith (to the north)
- New intersections including:
  - A traffic light intersection connecting the existing The Northern Road at the southern boundary of the Western Sydney Airport, incorporating a dedicated u-turn facility on the western side
  - A traffic light intersection for service vehicles accessing the Western Sydney Airport, incorporating 160 m of new road connecting to the planned airport boundary
  - A traffic light intersection connecting the realigned The Northern Road with the existing The Northern Road (west of the new alignment) south of Luddenham
  - A ‘give way’ controlled intersection (that is, no traffic lights) connecting the realigned The Northern Road with Eaton Road (east of the new alignment, left in, left out only)
  - A four-way traffic light intersection formed from the realigned Elizabeth Drive, the realigned The Northern Road and the existing The Northern Road, north of Luddenham
  - A traffic light intersection at the Defence Establishment Orchard Hills entrance, incorporating a u-turn facility
- New traffic lights at four existing intersections:
  - Littlefields Road, Luddenham
  - Kings Hill Road, Mulgoa
  - Chain-O-Ponds Road, Mulgoa
  - Bradley Street, Glenmore Park incorporating a u-turn facility
- Modified intersection arrangements at:
  - Dwyer Road, Bringelly (left in, left out only)
  - Existing Elizabeth Drive, Luddenham (left out only)
  - Gates Road, Luddenham (left in only)
  - Longview Road, Luddenham (left in, left out only)

  - Grover Crescent south, Mulgoa (left in only)
  - Grover Crescent north, Mulgoa (left out only)
- Dedicated u-turn facilities at:
  - The existing The Northern Road at Luddenham, south-west of Elizabeth Drive
  - The existing Elizabeth Drive, Luddenham around 800 m east of The Northern Road
  - Chain-O-Ponds Road, Mulgoa
- Twin bridges over Adams Road, Luddenham
- Local road changes and upgrades, including:
  - Closure of Vicar Park Lane, east of the realigned The Northern Road, Luddenham
  - Eaton Road cul-de-sac, west of the realigned The Northern Road, Luddenham
  - Eaton Road cul-de-sac, east of the realigned The Northern Road, Luddenham
  - Elizabeth Drive cul-de-sac, about 300 m east of The Northern Road with a connection to the realigned Elizabeth Drive, Luddenham
  - Extension of Littlefields Road, east of The Northern Road, Mulgoa
  - A new roundabout on the Littlefields Road extension, Mulgoa
  - A new service road between the Littlefields Road roundabout and Gates Road, including a 'give way' controlled intersection (that is, no traffic lights) at Gates Road, Luddenham
  - Extension of Vineyard Road, Mulgoa between Longview Road and Kings Hill Road
  - A new roundabout on the Vineyard Road extension at Kings Hill Road, Mulgoa
- A new shared path on the western side of The Northern Road and footpaths on the eastern side of The Northern Road
- A new shared path on the western side of The Northern Road and footpaths on the eastern side of The Northern Road where required
- The upgrading of drainage infrastructure
- Operational ancillary facilities including:
  - Heavy vehicle inspection bays for both northbound and southbound traffic, adjacent to Grover Crescent, Mulgoa and Longview Road, Mulgoa respectively
  - An incident response facility on the south-western corner of the proposed four-way traffic light intersection at Elizabeth Drive, Luddenham
- New traffic management facilities including variable message signs (VMS)
- Roadside furniture and street lighting
- The relocation of utilities and services
- Changes to property access along The Northern Road (generally left in, left out only)
- Establishment and use of temporary ancillary facilities and access tracks during construction
- Property adjustments as required
- Clearance of undetonated explosive ordinance (UXO) within the Defence Establishment Orchard Hills as required.

3. Noise and vibration sensitive receivers

The noise- and vibration-sensitive receivers considered in this assessment are indicated in **Table** 3-1. These are the habitable buildings and parks that may potentially be impacted by either noise from the construction or operation of the project. The counts provided relate to the number of receivers included within the construction noise study area specifically. The operational noise study area is a smaller subset of this wider study area, primarily as it does not extend beyond the northern and southern extents of the road project, and extends only to 600 m from the project (other than where receivers at which the Relative Increase Criterion may be triggered. This is discussed further in Section 5.2.1).

The receivers included in this assessment have been identified from aerial photography, GIS databases and information gathered from site visits.

Table 3-1 Summary of noise sensitive receivers considered in this assessment

Receiver type	*Number of buildings*
Residential properties	1306
Commercial properties	23
Educational buildings	10
Places of worship	4
Outdoor recreational areas	4
Industrial buildings	2
TOTAL	1349

Note: Commercial receivers are considered acoustically-sensitive only in respect of noise or vibration from construction – but not operation - of the project.

No hospital wards, child care facilities, aged care facilities or motels, were identified within the study area

Receivers are grouped into Noise Catchment Areas (NCAs) which enable a logical grouping of receivers affected by the same works to assist with the assessment, consultation or notification. The NCAs used in this assessment are detailed in Table 3-2, and indicated in **Figure 2-1**. NCA boundaries were determined by considering:

- factors affecting how construction noise would propagate into a given area (eg, topography and screening by buildings),
- the level of background noise in that area,
- the type(s) of receivers within that area, eg, whether residences (for which noise goals are a function of emergence above the level of background noise) or commercial or industrial premises (for which fixed noise goals – not dependent on the level of background noise – apply), and
- the grouping of receivers into bands of similar construction noise impact.

Table 3-2 Noise Catchment Areas used in this assessment

NCA	Description
NCA 1	Properties in suburban Glenmore Park and semi-rural Orchard Hills (north) at which background noise is determined by traffic conveyed on The Northern Road, Glenmore Parkway and the M4 Motorway.
NCA 2	Semi-rural properties located between Bradley Street, Glenmore Park and Elizabeth Drive, Luddenham at which background noise is determined by traffic on The Northern Rd.
NCA 3	Semi-rural properties located near the junction between The Northern Road and Elizabeth Drive in Luddenham, at which background noise is determined by traffic on The Northern Road and Elizabeth Drive.
NCA 4	Semi-rural properties east of Luddenham, presently removed from major roads. Background noise is determined by rural noise sources
NCA 5	Properties in suburban Luddenham and its semi-rural surrounds. Existing background noise to these receivers results from traffic on The Northern Road.
NCA 6	Semi-rural properties in Badgery's Creek at which background noise is determined by traffic on The Northern Road.
NCA 7	Semi-rural properties located adjacent to new section of the project with minimal exposure to traffic noise on The Northern Rd.
NCA 8	Semi-rural properties in Greendale and Bringelly at which background noise is determined by traffic on The Northern Road.

4. Existing noise environment

This section outlines how the existing levels of background and traffic noise were determined for the project.

4.1 Existing ambient noise environment

The project extends approximately 16 km between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park. This section of The Northern Road presently conveys approximately 16,000 vehicles per day at its southern end to 22,000 vehicles per day at its northern end.

Acoustically sensitive receivers potentially affected by the project - primarily residences - are concentrated in Glenmore Park, at the northern end of the study area, and within the township of Luddenham in the south. The central sections of the study area are semi-rural and contain isolated residences.

Presently, daytime and night time ambient noise within the study area is determined by traffic conveyed on the existing The Northern Road, and secondarily, on adjoining roads such as the M4 Western Motorway and Elizabeth Drive.

4.2 Background Noise Survey Methodology

Long-term, unattended noise surveys were undertaken along the study corridor to determine the existing level of background noise at all receivers potentially affected by the project.

Monitoring sites were selected according to the noise sources affecting the site (eg, traffic and/or other ambient sources), land access permission and equipment security. The sites at which these background noise monitoring surveys were undertaken are indicated in **Figure 2-1** and detailed in Table 4-1 and

Table 4-2, which also detail the sources of background noise as identified by Jacobs at the time of installing and retrieving the noise loggers.

The background noise monitoring surveys were conducted between 9 February and 17 February 2016 and were undertaken in accordance with:

- The Roads and Maritime Procedure Preparing an operational traffic and constructions noise and vibration assessment report (April 2016)
- The EPA's Industrial Noise Policy (January 2000), and
- Australian Standard AS1055 Acoustics - Description and measurement of environmental noise.

The surveys were undertaken using unattended ARL Ngara noise loggers which continuously measured the level of ambient noise over 15-minute periods throughout the survey period. The loggers measure the L_{Aeq}, L_{A90} and other relevant statistical noise levels during each daytime, evening and night time period. Each logger was fitted with a wind shield and its calibration confirmed both prior to and immediately following each logging period.

After excluding extraneous noise sources and data captured during periods of adverse weather (excessive rain or wind), the survey noise level data were used to determine the Rating Background Level (RBL) (as shown in Table 4-1), which are used to define construction Noise Management Levels (NML's) in accordance with the Interim Construction Noise Guidelines. The noise surveys were also used to determine the existing daytime (15hour) and night time (9 hour) traffic noise levels (refer Table 4-2), which were also used to calibrate the noise model (discussed further in Section 7.2).

4.3 Existing Background and Traffic Noise Levels

The results of the unattended noise monitoring are presented in **Table 4-1** and **Table 4-2**.

Analysis of audio recordings of the background noise monitoring data indicated the presence of insect noise during some night periods at some monitoring locations. Given that insects may not be present during winter months, further analysis was undertaken to ensure noise contributed by insects was excluded when determining the true Rating Background Level (RBL).

This analysis indicated that noise from crickets was present for a substantial proportion of the night periods at logger location N17. As the results of noise monitoring at this location indicated the night RBL to be higher than the corresponding daytime RBL, it was determined that a (downward) correction should be applied to the reported night time RBL to remove any potential effect of this extraneous noise source. As a conservative measure, the night time RBL for location N17 has been reduced to be equal the daytime RBL of 37dB(A). This is within the range of observed night time RBLs for other similar locations.

Table 4-1 Unattended monitoring results* (Construction noise parameters)

Logger ID	Noise monitoring location	Monitored noise level dB(A)			Typical L_{Amax} noise levels from environmental noise sources dB(A)
		RBL	L_{Aeq}	L_{Amax}	
Daytime					
N9	2095/2113 The Northern Road, Glenmore Park	48	55	64	HV intermittent (60), LV constant (55),
N10	2289 / 2293 The Northern Road, Mulgoa	46	61	75	HV frequent (70-75) LV constant (60-65)
N11	1 Grover Crescent, Mulgoa	47	55	69	HV frequent (55-60), LV common (50)
N12	2519 / 2527 The Northern Road, Mulgoa	48	62	74	HV including idling (65-75), LV constant (50-55)
N13	2567 The Northern Road, Mulgoa	48	61	76	HV common (65-80) LV constant (55-60),
N14	2785 The Northern Road, Luddenham	46	61	72	HV frequent (70-80), LV frequent (55-60)
N15	2426 The Northern Road, Luddenham	37	54	67	Distant traffic constant (40), HV occasional (50-55)
N16	18 Eaton Road, Luddenham	42	56	70	LV occasional (40-45), Trucks occasional (<75)
N17	295 Willowdene Avenue, Luddenham	37	47	65	Distant traffic
N18	1675 The Northern Road, Greendale	48	59	72	HV occasional (<75) LV common (50)
Evening					
N9	2095/2113 The Northern Road, Glenmore Park	49	55	62	Motorbikes (70-75) HV infrequent (55-65), LV (55)
N10	2289 / 2293 The Northern Road, Mulgoa	44	58	72	HV frequent (65-75) LV frequent (60)

Logger ID	Noise monitoring location	Monitored noise level dB(A)			Typical L_{Amax} noise levels from environmental noise sources dB(A)
		RBL	L_{Aeq}	L_{Amax}	
N11	1 Grover Crescent, Mulgoa	43	55	65	HV frequent (60-70), LV frequent (50-55), residential noise infrequent (70)
N12	2519 / 2527 The Northern Road, Mulgoa	43	58	72	LV frequent (50-55), HV frequent (65-70), Motorbike occasional (70-75), residential noise (55-60)
N13	2567 The Northern Road, Mulgoa	44	58	73	HV frequent (70-80) LV occasional (55-60)
N14	2785 The Northern Road, Luddenham	46	56	68	HV occasional (<90), residential noise (50), LV infrequent
TN15	2426 The Northern Road, Luddenham	35	43	56	HV (55), LV constant (35-40)
N16	18 Eaton Road, Luddenham	43	57	68	Infrequent LV (55), HV (<75)
N17	295 Willowdene Avenue, Luddenham	38	45	59	
N18	1675 The Northern Road, Greendale	47	58	68	HV (<75), LV (55-50)
Night time					
N9	2095/2113 The Northern Road, Glenmore Park	44	54	60	HV occasional (50-60) LV intermittent (50-55),
N10	2289 / 2293 The Northern Road, Mulgoa	33	58	71	HV (65-75), LV common (55-60)
N11	1 Grover Crescent, Mulgoa	36	50	61	HV infrequent (55-60)
N12	2519 / 2527 The Northern Road, Mulgoa	38	56	68	HV occasional (65-70) LV infrequent (60)
N13	2567 The Northern Road, Mulgoa	36	56	71	HV occasional (75), LV infrequent (55)
N14	2785 The Northern Road, Luddenham	35	54	67	HV frequent (<75) LV infrequent (55)
N15	2426 The Northern Road, Luddenham	36	45	53	LV infrequent (35-40), infrequent HV (50-55)
N16	18 Eaton Road, Luddenham	34	55	66	Occasional HV idling (65-70),
N17	295 Willowdene Avenue, Luddenham	37 **	46	54	Local traffic (65)
N18	1675 The Northern Road, Greendale	42	54	67	HV (<75), LV (55-60)

* *The reported noise levels were measured at the building facade*

** *The night time RBL for location N17 has been reduced to be equal the daytime RBL of 37dB(A). Refer Section 4.3*

HV: Heavy Vehicles LV: Light Vehicles

Table 4-2 Unattended noise monitoring results* (Traffic noise parameters)

Background Noise Loc'n	Site	L_{Aeq} (15hour)	L_{Aeq} (9hour)	L_{Amax} (15hour)	L_{Amax} (9hour)
N9	2095/2113 The Northern Road, Glenmore Park	55	54	64	61
N10	2289 / 2293 The Northern Road, Mulgoa	61	58	74	72
N11	1 Grover Crescent, Mulgoa	55	50	67	63
N12	2519 / 2527 The Northern Road, Mulgoa	60	56	74	69
N13	2567 The Northern Road, Mulgoa	61	56	75	72
N14	2785 The Northern Road, Luddenham	61	54	71	67
N15	2426 The Northern Road, Luddenham	53	45	65	56
N16	18 Eaton Road, Luddenham	56	55	69	67
N18	1675 The Northern Road, Greendale	59	54	70	68

** The reported noise levels were measured at the building facade*

4.4 Concurrent Traffic Survey

Traffic count surveys were undertaken concurrently with the long term unattended noise monitoring surveys. These traffic counts have been used only for the specific purpose of calibrating the noise model (Section 7.2) and do not form part of the traffic modelling undertaken for the project's traffic and transport assessment.

The tube count traffic surveys along The Northern Road were undertaken by Austraffic (All Traffic Surveys (NSW) Pty Ltd) during the period 9 February and 17 February 2016 at the locations indicated in **Figure 2-1**. The traffic data and average traffic speeds collected during the tube counts are detailed in **Table 4-3**. (Traffic speed data was not available for the segment of The Northern Road immediately south of Elizabeth Drive due to traffic counts having been undertaken by cameras, rather than tube counters.) Vehicle speeds recorded by the surveys indicated traffic to be free flowing and not affected by congestion.

Table 4-3 Measured day and night traffic counts and speeds used to validate the noise model

Traffic Count Location on The Northern Road (TNR)	Direction	Measured traffic volumes and speeds							
		Daytime (15 hour)				Night time (9 hour)			
		Light	Heavy	% Heavy	Ave Speed (km/h)	Light	Heavy	% Heavy	Ave Speed (km/h)
TNR north of Bradley Street	Northbound	8,868	1,132	11%	72	1,454	136	9%	77
	Southbound	8,684	870	9%	72	1,655	149	8%	73
TNR north of Chain-O-Ponds road	Northbound	7,246	851	11%	77	1,080	107	9%	79
	Southbound	6,510	907	12%	78	1,373	151	10%	80
TNR between Kings Hill Road and Longview Road	Northbound	6,149	940	13%	77	865	104	11%	79
	Southbound	5,573	765	12%	77	1,265	131	9%	78
TNR south of Littlefields Road	Northbound	6,476	823	11%	77	867	93	10%	80
	Southbound	5,685	758	12%	78	1,281	128	9%	78
TNR south of Elizabeth Drive	Northbound	6,399	706	10%	*	1,322	236	15%	*
	Southbound	6,362	746	10%	*	1,194	196	14%	*
TNR east of Adams Road	Northbound	4,930	557	10%	56	1,050	128	11%	59
	Southbound	5,411	651	11%	52	820	82	9%	57
TNR north of Vicarys Winery	Northbound	5,216	599	10%	78	833	77	8%	79
	Southbound	4,985	541	10%	80	1,030	119	10%	81

* *Traffic speed data was not available at this location due to counts having been undertaken using cameras rather than tube counters (as at all other count locations)*

5. Operational noise criteria

5.1 Noise Criteria Guideline

Operational noise from the project refers to the noise from traffic using the road once it's opened to the public – the 'operational' phase of the project. The potential for operational noise impacts is assessed against the Noise Criteria Guideline (NCG) which describes the Roads and Maritime implementation of the Road Noise Policy (RNP).

The NCG upholds the RNP's principle of applying more stringent criteria for new roads than for redeveloped roads given the greater opportunity to minimise noise impacts, especially in greenfield locations.

Above all, the intention of the NCG in all situations is to meet the following principles. These principles take precedence over even the procedures of the NCG:

- Criteria are based on the road development type a residence is affected by due to the road project
- Adjacent and nearby residences should not have significantly different criteria for the same road
- Criteria for the surrounding road network are assessed where a road project generates and increases traffic noise greater than 2 dB(A) on the surrounding road network
- Protect existing quiet areas from excessive changes in amenity due to traffic noise.

5.2 Applying the Noise Criteria Guideline

The NCG applies noise criteria to sensitive receivers for both the project's year of opening (in this case, 2021) and 10 years after its opening (2031).

The study area adopted for this assessment extends not less than 600 metres either side of any road being assessed. The project study area is indicated in **Figure 2-1**.

Non-residential receivers such as school classrooms are assigned fixed noise criteria. Noise criteria for residences are determined based on the type of road development the residence is affected by.

5.2.1 Operational noise criteria for residential receivers

A residence may be assigned new road, redeveloped road, transition zone or relative increase criteria depending on how the project will influence noise levels. For each facade of the residence the most stringent applicable criteria are used in the assessment.

In some instances residences may be exposed to noise from both new and redeveloped roads. In such cases the proportional contribution from each road is used to determine "transition zone" criteria.

An additional test – known as the relative increase criteria - is applied to protect residences within quiet areas from large (greater than 12 dB(A)) increases in noise due to the project.

For the purposes of assessment against the NCG, the project is a redeveloped road except the Luddenham bypass proposed between Dwyer Road in the south and Elizabeth Drive in the north.

The project includes transition zones at:

- the interface of the redeveloped road and new bypass road segments 400m north-west of Dwyer Road, Greendale, and at
- the junction of the redeveloped road and new bypass road segments immediately south of Elizabeth Drive.

The functional class of roads and the road development types indicating existing, redeveloped and new segments of the project are indicated in Appendix B.

The NCG transition zones and the controlling NCG criteria type (i.e. new, redeveloped, transition zone or relative increase criteria) attributed to residential receivers considered in this assessment are indicated in Appendix C. Once determined, these criteria types where then used to attribute numerical noise criteria to each residential receiver in accordance with the NCG residential noise criteria outlined in Table 5-1.

Table 5-1 NCG noise criteria for residences

Road category	***Type of project/land use***	***Assessment Criteria***	
		Daytime (7am-10pm)	***Night-time (10pm-7am)***
Freeway/arterial/ sub-arterial roads	Existing residences affected by noise from **new** freeway/arterial/sub-arterial road corridors	55 dB(A) $L_{Aeq\ (15hour)}$ (external)	50 dB(A) $L_{Aeq\ (9hour)}$ (external)
	Existing residences affected by noise from **redevelopment** of existing freeway/arterial/sub-arterial roads	60 dB(A) $L_{Aeq\ (15hour)}$ (external)	55 dB(A) $L_{Aeq\ (9hour)}$ (external)
	Existing residences affected by **additional traffic** on existing freeways/arterial/sub-arterial roads generated by land use developments		
	Existing residences affected by increases in traffic noise of 12 dB(A)or more from **new** freeway/arterial/sub-arterial roads	Existing $L_{Aeq\ (15hour)}$ (external) + 12 dB(A) [capped at 55 dB(A)]	Existing $L_{Aeq\ (9hour)}$ (external) + 12 dB(A) [capped at 50 dB(A)]
	Existing residences affected by increases in traffic noise of 12 dB(A)or more from **redeveloped** freeway/arterial/sub-arterial roads	Existing $L_{Aeq\ (15hour)}$ (external) + 12 dB(A) [capped at 60 dB(A)]	Existing $L_{Aeq\ (9hour)}$ (external) + 12 dB(A) [capped at 55 dB(A)]
Local roads	Existing residences affected by noise from new local road corridors Existing residences affected by noise from redevelopment of existing local roads	55 dB(A) $L_{Aeq\ (1hour)}$ (external)	50 dB(A) $L_{Aeq\ (1hour)}$ (external)

5.2.2 Operational noise criteria for non-residential receivers

Noise criteria for non-residential land uses are presented in Table 5-2. These criteria are based on the level of impact, below which, normal operations or use can continue with minimal interruption or disturbance.

Table 5-2 Noise criteria for relevant non-residential land uses

Existing sensitive land use	***Assessment criteria dB(A)***		***Additional Considerations***
	Day (7 a.m.– 10 p.m.)	***Night (10 p.m.– 7 a.m.)***	
School classrooms	40 $L_{Aeq,1hour}$ (internal) when in use	–	In the case of buildings used for education or health care, noise level criteria for spaces other than classrooms and wards may be obtained by interpolation from the 'maximum' levels shown in Australian Standard 2107:2000 (Standards Australia 2000).
Places of Worship	40 $L_{Aeq,1hour}$ (internal)	40 $L_{Aeq,1hour}$ (internal)	The criteria are internal, i.e. the inside of a church. Areas outside the place of worship, such as a churchyard or cemetery, may also be a place of worship. Therefore, in determining appropriate criteria for such external areas, it should be established what is in these areas that may be affected by road traffic noise.
Open space (active use)	60 $L_{Aeq,15hour}$, (external) when in use	–	Active recreation is characterised by sporting activities and activities which generate their own noise or focus for participants, making them less sensitive to external noise intrusion. Passive recreation is characterised by contemplative activities that generate little noise and where benefits are compromised by external noise intrusion, eg playing chess, reading. For areas where there may be a mix of passive and active recreation, eg school playgrounds, the more stringent criteria apply. Open space may also be used as a buffer zone for more sensitive land uses.

No motels, aged care facilities or hospital wards were identified within the study area of this assessment.

As shown in Table 5.2 the noise criteria for some non-residential uses such as schools and places of worship are noise criteria assessed internal to the premises. These may be re-interpreted as external noise criteria by adding 10 dB(A) to the internal criterion. This reflects the sound attenuation assumed to be provided by the facade of typical buildings when the facade glazing is open for the purpose of ventilation. This assumption would be reviewed during detailed design, and where required, site specific monitoring undertaken to accurately determine the acoustic performance of the building facade.

Additionally, noise criteria for school classrooms and places of worship are assessed against a "one hour" $L_{Aeq,1hour}$ rather than $L_{Aeq,15hour}$ (entire day period) and $L_{Aeq,9hour}$ (entire night period) noise metrics (refer Table 7-1). The numerical corrections applied in noise modelling for this purpose are outlined in Table 7-1.

The (daytime) noise criteria for residential receivers considered by this assessment are indicated in Appendix D. Receivers qualify for the consideration of noise mitigation where predicted operational noise levels exceed these criteria. The assessment of eligibility for mitigation is discussed further in **Section 6**.

5.3 Assessing potential for sleep disturbance

A guide for assessing the potential for sleep disturbance within residences from the project's vehicle passbys is provided in the RNP:

> *"Triggers for, and effects of sleep disturbance from, exposure to intermittent noise such as noise from road traffic are still being studied. There appears to be insufficient evidence to set new indicators for potential sleep disturbance due to road traffic noise. The NSW Roads and Traffic Authority's Practice Note iii (NSW Roads and Traffic Authority 2008a) outlines a protocol for assessing and reporting on maximum noise levels and the potential for sleep disturbance."*

ENMM Practice Note iii indicates that:

- Maximum internal noise levels below 50–55 dB(A) are unlikely to cause awakening reactions, and
- One or two noise events per night with maximum internal noise levels of 65–70 dB(A) are not likely to significantly affect health and wellbeing.

Given the that it is generally accepted that the level of traffic noise within a dwelling having its windows open is 10 dB(A) lower than the corresponding noise level immediately outside the facade (refer ICNG), these internal noise goals may be re-expressed as external noise goals as follows:

- Maximum **external** noise levels below 60–65 dB(A) are unlikely to cause awakening reactions, and
- One or two noise events per night with maximum **external** noise levels of 75-80 dB(A) are not likely to significantly affect health and wellbeing.

A "maximum noise event" is defined as any vehicle pass-by for which

$$L_{Amax} - L_{Aeq(1\ hour)} \geq 15\ dB(A)$$

Practice Note iii states that the maximum noise level assessment should be used as a tool to help prioritise and rank mitigation strategies, but should not be applied as a decisive criterion in it.

6. Determining noise mitigation

The methodology for mitigating noise impacts resulting from a road project are outlined in the Roads and Maritime Noise Mitigation Guidelines (NMG).

6.1 Noise Mitigation Guideline

The NMG outlines the principles to be applied when assessing whether noise mitigation is feasible and reasonable. These are as follows:

1. Communities should receive reasonable and equitable outcomes
2. Noise mitigation should be designed to reduce noise levels to the criteria at qualifying receivers
3. Priority should be first given to reducing noise during corridor planning and road design where there may be greater opportunity to provide cost effective and integrated outcomes with better urban design
4. Following corridor and road design residual exceedances of noise criteria may be addressed at qualifying receivers using, in order of preference, quieter road surfaces, barriers and at-property treatments
5. Incidental benefits from the noise mitigation designed for qualifying receivers should be recognised at all receivers within a community where noise levels exceed WHO guidelines (façade noise levels of 50 dB(A) day and 45 dB(A) night)
6. Noise barrier evaluation processes must:
   - give preference to reducing outdoor noise levels and the number of at-property treatments
   - provide efficient barrier heights and extents without disregarding lengths of effective noise barrier in front of eligible groups of receivers
7. Noise mitigation shall be evaluated and installed where feasible and reasonable

6.2 Identifying receivers that may qualify for noise mitigation

Any of the following three triggers qualify a receiver for *consideration* of noise mitigation. Note that these do not prescribe that a receiver shall receive mitigation necessarily, as there are matters of the "reasonableness and feasibility" of the measures to also consider (discussed further in Section 9). These triggers are:

- The predicted total noise level to a receiver in the project "Build year" is 5 dB(A) or more above the relevant NCG noise criterion (this is termed the cumulative limit) and it is the project road noise that contributes most to this increase; or
- The noise level contribution from the road project is "acute", which is to say, greater than either 65 dB(A)$L_{eq,15hour}$ during daytime periods or 60 dB(A)$L_{eq,15hour}$ during night periods (regardless of the level of noise contributed from non-project roads);
- The predicted total noise level to a receiver for the project Build year both exceeds the NCG noise criterion AND the increase in noise created by the project (i.e. the Build minus the No Build noise level) is greater than 2 dB(A);

These tests are applied at the receiver prior to the application of noise mitigation measures, and determine whether the project is required to provide mitigation in accordance with Principle 4 above. This protocol is shown diagrammatically in Figure 6-1.

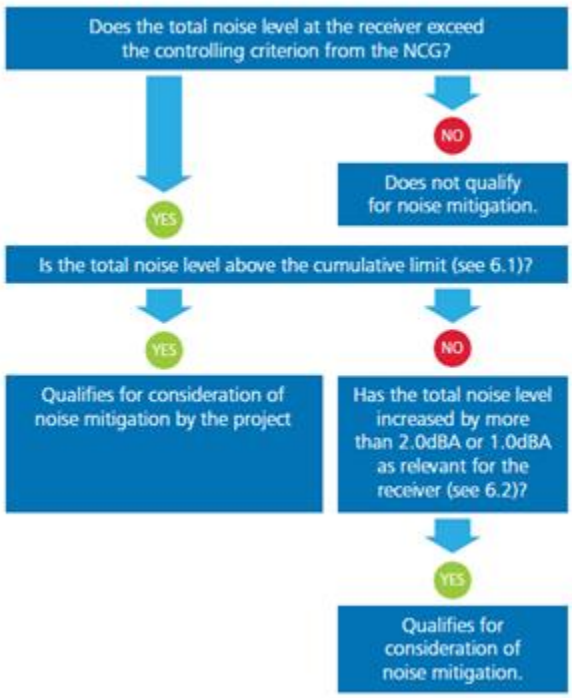


Figure 6-1 Eligibility triggers for consideration of noise mitigation

6.3 Identifying noise mitigation measures

Where operational noise levels from the project (without mitigation) are predicted to exceed compliance criteria at receivers, the assessment proceeds to investigate the acoustic benefit that may be provided to those receivers by the following noise mitigation measures, in order:

- The application of quieter road pavements
- Erection of noise mounds
- Erection of noise barriers
- Providing at-property treatments

Receivers do not qualify for these noise mitigation treatment(s) automatically if the predicted level of noise from the project exceeds the NCG criteria. The provision of mitigation measures depends also on the mitigation being “feasible and reasonable” to apply. For example the NMG specifies that it is not reasonable to provide mitigation by means of quieter road pavements or noise barriers where there are fewer than four impacted receivers who are closely spaced. In such cases it is more reasonable and cost-effective to provide at-property treatments to each of those dwellings.

Section 7 of the NMG provides further detail on the considerations relating to the deployment of quieter pavements and noise barriers. Where these measures do not exhaustively mitigate all impacts, at-property treatments are considered.

7. Noise modelling methodology and assumptions

7.1 Assessment methodology

7.1.1 Assessment scenarios

Assessment of the proposal's operational noise impacts compares the modelled traffic noise levels resulting from the "Build" and "No Build" (or "Do Nothing") options. (Note that the "Do Nothing" option is based on The Northern Road remaining in its existing alignment, rather than its temporarily diverted alignment (the "Do Minimum" option) assumed in the Transport Assessment (Chapter 4 of the EIS). This provides a more conservative approach for the assessment of noise impacts. In accordance with the RNP, the following four scenarios were modelled, where 2021 is taken to be the year of opening of the Northern Road project:

- **Year of Opening – 2021, No Build**
  Modelling is based on 2021 traffic on the existing road network;
- **Year of Opening – 2021, Build**
  Modelling is based on 2021 traffic volumes for the road network that includes the newly-upgraded The Northern Road and the diversion around the planned western Sydney airport
- **10 Years after Opening – 2031, No Build**
  Modelling is based on the 2031 traffic volumes on an unchanged road network (i.e. The Northern Road is not upgraded). This future traffic scenario includes the additional trips generated by forecast land use changes (ie western Sydney airport and Western Sydney Priority Growth Area) and other road network changes (proposed M12, Bringelly Road upgrade, etc).
- **10 Years after Opening – 2031, Build**
  Modelling is based on the 2031 traffic volumes based on a road network that includes The Northern Road, the diversion around the planned western Sydney airport. This future traffic scenario includes the additional trips generated by forecast land use changes (ie western Sydney airport and Western Sydney Priority Growth Area) and other road network changes (proposed M12, Bringelly Road upgrade, etc).

Each of these scenarios is modelled for both daytime (7am-10pm) and night (10pm-7am) periods.

7.1.2 Operational modelling inputs

The most significant factors in determining the level of noise received from a road are the receiver's distance from the road, shielding, ground absorption, the type and volume of vehicles, vehicles speeds and the road surface type.

The road and traffic parameters used and values adopted in the noise modelling are presented in Table 7-1.

Table 7-1 Operational noise modelling parameters

Parameter	Notes
Facades	Standard +2.5dB(A) correction applied to account for façade reflection Austroads correction of -1.7dB(A) has been applied to all properties
Side roads	Traffic volumes on the following sub arterial / collector roads were included in the noise model (refer to Appendix F): • Glenmore Parkway • Wentworth Road • Bradley Street • Chain-O-Ponds Road • Kings Hill Road • Littlefields Road • Elizabeth Drive • Park Road (2021 only • Adams Road) • Airport Access road (2031 only) Traffic volumes on local roads were not included in the noise model as noise from these low volume roads were assessed to not influence total noise levels.
Traffic speeds	The Northern Road (all scenarios): No Build scenario: • Posted traffic speeds Build scenario: • 60km/h through Luddenham town centre • 90km/h remaining sections Sub arterial / collector roads: • 60 km/h Noise model validation: Weighted average speed for the main alignment as taken from traffic monitoring.
Buildings	Footprints taken from aerial photography Heights determined from site inspections and Google Streetview.
Terrain	The TNR terrain data was derived from NSW Land Property Information (LPI) 1m resolution bare earth Digital Elevation Model (DEM). The DEM was produced from a standard LiDAR survey conducted by LPI. *Reference: NSW Land Property Information (LPI) LiDAR Product Specifications, Version 3.0, March 2013.*
Road surfaces / corrections	Unless otherwise stated, all roads are assumed to be Dense Graded Asphalt (0 dB(A) correction)
Congestion / intersections	Noise modelling is based on the free-flowing traffic. This is consistent with traffic flow conditions reported during traffic surveys undertaken for this assessment. No corrections have been applied at intersections
Ground surface / absorption	Residential areas: 50% ground factor Open grass areas: 75% ground factor

Parameter	Notes
Bus lane traffic	Project bus lane assumed to take 10% of daytime heavy vehicle and no traffic during nights
Source heights / corrections	Traffic has been divided into the following source heights and energy levels: • Car tyres and engines / 0.5m / 100% • Truck tyres / 0.5m / 29% • Truck engines / 1.5m / 57% • Truck exhaust / 3.6m / 14%
Receiver locations	All receivers within approximately 2.5km of the alignment have been considered. Noise predictions have been determined at 1m from the building facade. Ground floor receivers have been modelled at a height above ground of 1.5m, and first floor receivers at a height above ground of 4.5m.
L_{A10} to L_{Aeq} conversion	-3dB(A) (applied at all receivers)
$L_{Aeq,15hour}$ to $L_{Aeq,1hour}$ conversion	For day periods $L_{Aeq,1hour} = L_{Aeq,15hour} + 2.3$ dB(A)[1] For night periods $L_{Aeq,1hour} = L_{Aeq,9hour} + 3.9$ dB(A)[1]

1: Corrections are derived from noise monitoring data for Location 16, 18 Eaton Road, Luddenham.

7.2 Model validation

The noise model used for the assessment was subjected to a validation process to ensure the accuracy of its traffic noise predictions.

The model validation process allows for the identification of any errors in the modelling setup (eg, identifying inconsistencies in the geospatial data), and to also then demonstrate that the noise model accurately represents the existing, real-world conditions (within the limitations of the prediction algorithm). The validation process also allows for greater confidence in any recommendations that result from the assessment of the project, and provides context for post-construction validation testing.

The validation process compared predicted and measured traffic noise levels acquired from those long-term, unattended traffic noise monitoring locations having an unobstructed exposure to traffic noise. Some noise monitoring locations were excluded from the validation process due to the influence of non-traffic noise sources, e.g the presence of idling trucks during night periods at monitoring location N16.

The validation model was configured to reflect actual site conditions (eg, receiver distance from the road, total angle of view to traffic, type of road surface) and traffic volumes and speeds measured during the monitoring period (refer traffic count locations in **Figure 2-1**.

Any difference found between the predicted and measured noise levels would, if required, inform a correction to be applied to noise predictions of future assessment scenarios.

Table 7-2 outlines the validation testing for each of the noise monitoring locations selected for model validation for both daytime and night time periods.

Table 7-2 Comparison of measured and modelled road traffic noise levels

Validation Loc'n	Day $L_{Aeq(15\ hour)}$ dB(A)			Night $L_{Aeq(9\ hour)}$ dB(A)		
	Modelled	Measured	Difference	Modelled	Measured	Difference
N10	62.1	60.9	1.2	57.2	57.5	-0.3
N11	56.2	54.7	1.5	51.3	50.3	1.0
N12	61.4	60.4	1.0	56.4	55.8	0.6
N13	60.8	60.9	-0.1	55.8	55.8	0.0
N14	60.2	60.8	-0.6	55.2	54.3	0.9
N18	59.3	58.8	0.5	54.8	54.2	0.6
Median of results			0.7			0.6
Standard Deviation (all results)			0.7			0.5

* *Noise data from logger locations N15 and N16 were not suitable for use for model validation due to the influence of extraneous noise sources during either day or night periods. Data from Location N17 could not be used for model validation due to the logger being positioned too far away from (1.7km) the monitored traffic volumes on The Northern Road.*

Table 7-2 demonstrates the median differences between modelled and measured values to be 0.7 dB for day periods and 0.6 dB for night periods. This indicates that the model predicts traffic noise levels to within an accepted tolerance of +/- 2.0 dB(A)), and therefore there is no need for a correction factor to be applied to the noise model.

7.3 Traffic counts and distribution

The Average Daily Traffic (ADT) data used for the forecasting of noise impacts for the project has been developed using an Aimsun microsimulation traffic model. This model only provides morning and evening peak period flows. Expansion from peak period flow to daily flow was undertaken on the basis of observed daily traffic counts. A complete assessment of traffic data is available in the Traffic and Transport specialist paper which forms part of this EIS.

The traffic data used in the noise modelling including average hourly counts for Light Vehicles (LV) and Heavy Vehicles (HV) and the percentage of Heavy Vehicles (%HV) is presented in **Appendix F**.

8. Predicted operational noise impact

This section outlines the project's potential operational noise impacts to the 1,103 receivers within the operational noise assessment area. This count excludes industrial, commercial, military and storage buildings which are not eligible for operational noise mitigation. As outlined in Section 3, the operational noise assessment area is a smaller subset of the wider study area, primarily as it does not extend beyond the northern and southern extents of the road project, as the construction noise assessment area does.

8.1 Operational noise impacts prior to consideration of mitigation

Detailed predictions of the project's operational noise at each receiver are presented in tabular form in Appendix G and visually in Appendix I. These results are summarised for the entire project in **Table 8-1**.

The difference in noise at each receiver between the No Build and Build scenarios is presented in Appendix J.

Table 8-1 : Summary of receivers that qualify for consideration of noise mitigation

Noise Catchment Area	Number of receivers assessed	Number of receivers exceeding NCG Criteria	Number of receivers qualifying for consideration of mitigation	Mitigation Trigger			
				Cumulative Limit	Acute	>2dB(A) increase	Combination of Triggers
NCA 1	647	17	4			1	3
NCA 2	108	41	25			6	19
NCA 3	15	10	5			1	4
NCA 4	32	14	5			4	1
NCA 5	238	92	9			5	4
NCA 6	20	9					
NCA 7	20	17	17			10	7
NCA 8	39	15	12			7	5
Total	**1,103**	**215**	**77**	**0**	**0**	**34**	**43**

In summary, without noise mitigation, the assessment identifies that:

- most receivers in the study area are expected to experience some increase in traffic noise. For receivers close to the alignment, the increase may result in an exceedance of the operational noise criteria;
- the receivers expected to be subject to the greatest increase in traffic noise are the:
  - semi-rural receivers adjacent to the new bypass alignment in the vicinity of Willowdene Avenue, and
  - semi-rural receivers located near either the bypass' northern or southern junctions with the existing The Northern Road. These receivers will have noise exposure to both the existing

Northern Road and the new bypass,

- operational noise mitigation is not required for 1026 receivers (93% of all receivers) within the study area;
- there are 77 receivers (74 unique buildings) which qualify for consideration of noise mitigation. All triggering receivers are residences other than three classroom buildings at Luddenham Public School. These 77 mitigation-qualifying receivers are listed individually in **Table 8-2** and also shown in **Appendix H**;
- with reference to the mitigation qualification triggers identified in Section 6.2, of these 77 receivers:
  - none were triggered by the cumulative limit (alone);
  - 34 were triggered by the "Build minus No Build > 2 dB(A)" test (only), and
  - 43 receivers were triggered due to a combination of both triggers.
  - No receivers were identified as acute alone (in absence of other triggers).

The preferred operational noise mitigation options for these receivers are discussed in Section 9.

Table 8-2 : Receivers identified by the assessment as qualifying for consideration of noise mitigation

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
Receivers located within NCA 1																
2019 The Northern Rd Glenmore Park	GF	Residential	65	59	66	59	65	58	66	60	60	55	5	3	6	5
2023 The Northern Rd Glenmore Park	GF	Residential	64	58	64	58	64	57	65	59	60	55	4	2	5	4
1 Bradley St Glenmore Park	GF	Residential	63	56	63	57	63	56	65	58	60	55	3	1	5	3
2032 The Northern Rd Orchard Park	GF	Residential	60	53	60	54	62	55	63	57	60	55	2	0	3	2
Receivers located within NCA 2																
2-18 Littlefields Rd (1) Luddenham	GF	Residential	61	54	60	55	61	54	63	56	60	55	1	0	3	1
2-18 Littlefields Rd (1) Luddenham	F1	Residential	63	56	63	57	65	58	67	60	60	55	5	3	7	5
2785-2787 The Northern Rd Luddenham	GF	Residential	63	56	63	57	63	56	65	58	60	55	3	1	5	3
2627-2635 The Northern Rd Mulgoa	GF	Residential	60	53	60	54	63	56	65	58	60	55	3	1	5	3

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
2627-2635 The Northern Rd Mulgoa	F1	Residential	62	55	63	56	65	58	67	60	60	55	5	3	7	5
2575-2579 The Northern Rd Mulgoa	GF	Residential	58	51	59	52	60	53	62	55	60	55	0	0	2	0
2567-2573 The Northern Rd (1) Mulgoa	GF	Residential	63	56	63	57	65	58	67	60	60	55	5	3	7	5
2561 The Northern Rd (1) Mulgoa	GF	Residential	57	50	57	51	59	52	61	54	60	55	0	0	1	0
2529-2537 The Northern Rd Mulgoa	GF	Residential	64	57	65	58	64	56	65	59	60	55	4	1	5	4
2 Longview Rd (3) Mulgoa	GF	Residential	64	57	64	58	63	55	65	58	60	55	3	0	5	3
4 Grover Cr (1) Mulgoa	F1	Residential	58	51	59	52	59	52	61	54	60	55	0	0	1	0
2359-2365 The Northern Rd Mulgoa	GF	Residential	65	58	66	59	65	58	66	60	60	55	5	3	6	5
2351-2357 The Northern Rd (4) Mulgoa	GF	Residential	66	60	67	61	65	58	67	60	60	55	5	3	7	5
2345-2349 The Northern Rd Mulgoa	GF	Residential	65	58	66	60	64	57	66	59	60	55	4	2	6	4
2309-2317 The Northern Rd (1) Mulgoa	GF	Residential	65	59	66	60	64	57	66	59	60	55	4	2	6	4
2289-2293 The Northern Rd (1) Mulgoa	GF	Residential	65	58	65	59	64	57	66	59	60	55	4	2	6	4
Lot3/DP29081	GF	Residential	66	59	66	60	65	58	66	60	60	55	5	3	6	5
2297-2307 The Northern Rd (2) Mulgoa	GF	Residential	67	60	67	61	65	58	67	60	60	55	5	3	7	5
2373-2379(4) The Northern Rd Mulgoa	GF	Residential	68	61	69	62	66	59	68	61	60	55	6	4	8	6
1 Gates Rd (1) Mulgoa	GF	Residential	61	54	61	55	62	55	64	57	60	55	2	0	4	2
2580-2592 The Northern Rd Mulgoa	GF	Residential	63	57	64	58	65	58	68	61	60	55	5	3	8	6
2751 The Northern Rd Luddenham	GF	Residential	60	53	60	54	61	54	63	56	60	55	1	0	3	1
2751 The Northern Rd (1)	GF	Residential	65	58	66	59	67	60	69	62	60	55	7	5	9	7

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
Luddenham																
2587 The Northern Rd (1) Luddenham	GF	Residential	64	57	65	59	66	58	68	61	60	55	6	3	8	6
2295 The Northern Road Mulgoa	GF	Residential	66	59	66	60	64	57	66	59	60	55	4	2	6	4
Receivers located within NCA 3																
2843-2857 The Northern Rd (4) Luddenham	GF	Residential	63	56	63	57	64	57	66	58	60	55	4	2	6	3
2825-2841 The Northern Rd (5) Luddenham	GF	Residential	64	57	64	58	65	58	67	60	60	55	5	3	7	5
2311-2337 Elizabeth Dr (1) Luddenham	GF	Residential	61	57	63	54	62	55	64	56	56	51	6	4	8	5
2311-2337 Elizabeth Dr (1) Luddenham	F1	Residential	65	56	65	58	64	57	66	58	56	51	8	6	10	7
2859 The Northern Rd (1) Luddenham	GF	Residential	57	50	56	49	56	49	58	51	56	51	0	0	2	0
Receivers located within NCA 4																
140 Adams Rd (1) Luddenham	GF	Residential	46	39	45	39	58	51	60	53	55	50	3	1	5	3
2422-2430 The Northern Rd (3) Luddenham	GF	Residential	52	45	49	45	55	48	57	50	55	50	0	0	2	0
2420 The Northern Rd (2) Luddenham	GF	Residential	49	42	48	42	57	49	58	51	55	50	2	0	3	1
105-115 Adams Rd Luddenham	GF	Residential	47	40	47	41	55	48	57	50	55	50	0	0	2	0
125 Adams Rd (3) Luddenham	GF	Residential	48	41	50	43	54	47	56	49	55	50	0	0	1	0
Receivers located within NCA 5																
Luddenham Public School (2)	GF	Educational	57	52	49	51	52	47	51	50	50	-	2	-	1	-
Luddenham Public School (3)	GF	Educational	58	53	48	51	53	48	51	51	50	-	3	-	1	-
Luddenham Public School (1)	GF	Educational	57	52	48	51	52	47	51	50	50	-	2	-	1	-
2320-2390 The Northern Rd (2) Luddenham	GF	Residential	51	44	49	43	58	51	59	52	55	50	3	1	4	2
18 Eaton Road Luddenham	GF	Residential	59	49	59	53	61	51	62	56	55	50	6	1	7	6

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
16 Eaton Rd Luddenham	GF	Residential	60	53	59	53	60	53	61	55	55	50	5	3	6	5
14 Eaton Rd Luddenham	GF	Residential	60	53	59	54	59	52	60	54	55	50	4	2	5	4
2215 The Northern Rd (1) Luddenham	GF	Residential	56	49	51	49	54	47	56	50	55	50	0	0	1	0
45 Adams Rd (1) Luddenham	GF	Residential	50	41	51	44	61	54	62	56	55	50	6	4	7	6
Receivers located within NCA 6																
No receivers qualify																
Receivers located within NCA 7																
230A Willowdene Ave (1) Luddenham	GF	Residential	39	32	32	33	44	37	45	38	44	42	0	0	1	0
500 Willowdene Ave (1) Luddenham	GF	Residential	40	33	40	34	54	47	55	49	52	45	2	2	3	4
405 Willowdene Ave (1) Luddenham	GF	Residential	34	32	38	33	49	44	52	45	45	44	4	0	7	1
365 Willowdene Ave (1) Luddenham	GF	Residential	40	34	40	34	55	48	56	50	52	45	3	3	4	5
365 Willowdene Ave (3) Luddenham	GF	Residential	40	33	39	33	51	44	53	46	51	45	0	0	2	1
325 Willowdene Ave (1) Luddenham	GF	Residential	31	32	37	32	45	42	50	44	43	43	2	0	7	1
295 Willowdene Ave (1) Luddenham	GF	Residential	38	32	34	33	47	40	47	42	46	44	1	0	1	0
350 Willowdene Ave (2) Luddenham	GF	Residential	38	31	37	32	51	44	52	45	49	43	2	1	3	2
260 Willowdene Ave Luddenham	GF	Residential	32	32	32	33	47	41	48	43	44	43	3	0	4	0
320 Willowdene Ave (1) Luddenham	GF	Residential	39	32	39	33	53	46	54	47	49	42	4	4	5	5
Lot1/DP838361	GF	Residential	39	31	38	32	51	44	53	46	50	43	1	1	3	3
Lot1/DP838361	GF	Residential	36	30	36	30	52	45	54	47	48	42	4	3	6	5
Lot1/DP838361	GF	Residential	36	30	36	30	52	45	53	47	48	42	4	3	5	5
5 Vicar Park Lane,	GF	Residential	40	33	39	34	54	47	55	49	43	42	11	5	12	7

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
Luddenham																
400 Willowdene Ave Luddenham	GF	Residential	42	35	43	37	56	49	57	50	53	47	3	2	4	3
460 Willowdene Ave (1) Luddenham	GF	Residential	40	33	39	34	60	53	61	55	51	45	9	8	10	10
300-315 Willowdene Ave Luddenham	GF	Residential	36	27	36	30	50	43	51	44	45	42	5	1	6	2
Receivers located within NCA 8																
165 Greendale Rd (4) Greendale	GF	Residential	49	42	48	42	55	48	57	50	55	50	0	0	2	0
165 Greendale Rd (3) Greendale	GF	Residential	49	43	49	43	58	51	59	52	55	50	3	1	4	2
165 Greendale Rd (2) Greendale	GF	Residential	52	45	51	45	61	54	62	56	55	50	6	4	7	6
1592 The Northern Rd (1) Bringelly	GF	Residential	59	53	59	53	62	55	63	57	60	55	2	0	3	2
1602 The Northern Rd (3) Bringelly	GF	Residential	60	53	59	54	63	56	64	57	60	55	3	1	4	2
2 Dwyer Rd Bringelly	GF	Residential	63	56	63	57	64	57	65	58	60	55	4	2	5	3
1635 The Northern Rd (1) Bringelly	GF	Residential	60	53	60	54	62	55	63	56	60	55	2	0	3	1
1655 The Northern Rd (2) Bringelly	GF	Residential	59	52	58	53	61	54	62	55	60	55	1	0	2	0
165 Greendale Rd (1) Greendale	GF	Residential	57	50	57	51	59	53	61	54	55	50	4	3	6	4
165 Greendale Rd (1) Greendale	GF	Residential	59	52	59	53	64	57	65	59	60	55	4	2	5	4
165 Greendale Rd (2) Greendale	GF	Residential	60	53	59	53	63	56	64	58	60	55	3	1	4	3
1615 The Northern Rd (1) Bringelly	GF	Residential	62	55	62	56	63	56	65	58	60	55	3	1	5	3

9. Mitigation of operational noise impact

This section identifies options for mitigating the operational noise impacts predicted for the 77 receivers identified in Section 8. The method for determining a receiver's eligibility for mitigation is outlined in the RMS Noise Mitigation Guideline (NMG). The potential noise mitigation measures that may be applied by the RMS to those receivers that qualify for consideration of additional noise mitigation measures are outlined below in order of preference of application given in the RNP:

1. Low noise pavement surfaces
2. Noise mounds
3. Noise walls
4. At-property treatments.

9.1 Additional noise mitigation option: low noise pavement

The use of low-noise pavement is a preferred form of noise mitigation on road projects, as this form of mitigation reduces noise levels external to receivers and also provides benefit to the wider community, rather than only to individually targeted receivers. The use of Open Graded Asphalt or Stone Mastic Asphalt pavements can reduce noise levels by -2 dB(A) compared to Dense Graded Asphalt.

Whilst the use of low noise pavement is preferable as it reduces external noise levels and provide benefit to the wider community, it is not considered feasible due on-going maintenance requirement given that it is located close to an intersection. However, a quieter pavement in the form of dense graded ashphaltic concrete would be used.

9.2 Additional noise mitigation option: noise barriers (mounds or walls)

A noise barrier (e.g. noise mound) provides similar benefits to those provided by a quieter pavement surface through reducing both external and internal levels of noise.

As there are no groupings of four or more closely-spaced receivers of those eligible for consideration of mitigation, the use of noise barriers has not been identified as a mitigation measure for this project.

Where there are four or more closely spaced receivers that would benefit, a combination of noise treatment options, where feasible and reasonable, would be investigated further in detailed design in accordance with the NMG.

Noise mitigation to the 77 mitigation-eligible receivers will need to be provided by means of at-property acoustic treatments.

9.3 Additional noise mitigation option: at-property treatments

Where noise barriers and/or low noise pavements are not considered feasible and/or reasonable, noise impacts at affected dwellings will be mitigated by at-property treatments. The objective of this form of mitigation is to provide building treatments that reduce internal traffic noise to levels that would have prevailed had the external traffic noise criteria been able to be achieved.

The specific form of acoustic building treatment applied to achieve these reductions is considered on an individual basis in response to the existing construction of the dwelling. Building element treatments are more effective when applied to masonry structures than to lightly clad timber frame structures. Caution should be exercised before providing treatments for buildings in a poor state of repair, as they may be less effective in these cases and may not provide any appreciable noise reduction benefit.

Any treatments proposed would be considered in consultation with the landowner.

The NMG identifies that the treatments provided by the Roads and Maritime would be limited to:

- the installation of courtyard screen walls;
- fresh air ventilation systems that meet Building Code of Australia requirements with the windows and doors shut;
- upgraded windows and glazing and solid core doors on the exposed facades of masonry structures only (these techniques would be unlikely to produce any noticeable benefit for light frame structures with no acoustic insulation in the walls);
- upgrading window and door seals and treatment of sub floor ventilation;
- the sealing of wall vents;
- the sealing of the underfloor below the bearers;
- the sealing of eaves.

At-property treatments are considered the most reasonable form of noise mitigation for the 77 receivers (housed within 74 buildings) for which exceedances of operational noise criteria have been predicted by this assessment. The 77 receivers requiring at-property treatment are indicated in Appendix K.

Further assessment of individual dwellings and consultation with landowners will be required to identify the specific acoustic treatments to be applied to that dwelling.

9.4 Sensitivity analysis

A sensitivity analysis of the noise modelling results was undertaken in order to ensure that the proposal adequately accounts for potential variations in actual future vehicle speeds and/or traffic mix.

A sensitivity factor of between 0.5-2.0 dB(A) has been added iteratively to all predicted noise levels. Incrementing sensitivity by 1 dB(A) allows for an increase in speed of approximately 15 km/h to 20 km/h or a corresponding increase in heavy vehicle volumes of approximately 15 to 20 percent for the upgraded and bypass sections of the project respectively.

Figure 9-1 indicates the change in the number of at-property treatments that would be recommended by this assessment if 0.5 dBA is incrementally added to or subtracted from the assessment's noise level predictions.

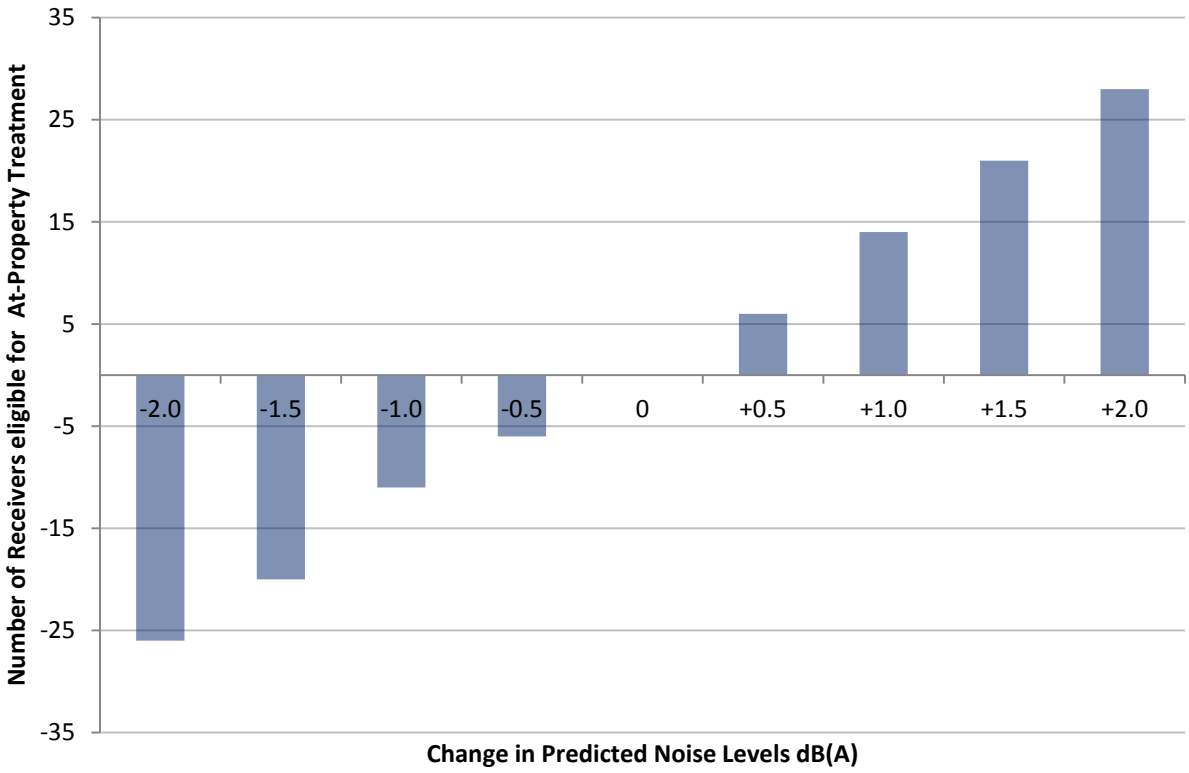


Figure 9-1 Noise assessment sensitivity analysis

This analysis demonstrates that where +2 dB(A) is added to all noise level predictions, the number of receivers qualifying for at-property treatment would increase by 27. Where 2 dB(A) is subtracted from all predicted noise levels, the number of eligible receivers would reduce by 26 receivers.

9.5 Maximum noise level assessment

Investigating the frequency of maximum noise level events seeks to quantitatively indicate both the potential for sleep disturbance within residences (as detailed in Section 5.3) and whether noise impacts may be expected from the project during night periods. The assessment is neither intended as a definitive assessment criterion nor acts as a trigger for providing noise mitigation. Investigating the frequency, extent and temporal distribution of maximum noise level events assists in the *prioritisation* of any mitigation (triggered by other considerations).

The assessment of maximum noise level events presented below is based on the night time traffic noise data acquired from noise monitoring location 12 (refer **Figure 2-1**). This dataset was chosen for the assessment as the monitoring location from which it was acquired best reflects the exposure of receivers likely to be most impacted from the project's night time traffic movements.

The number and distribution of existing night time maximum noise events are shown in

Figure 9-2 and Figure 9-3.

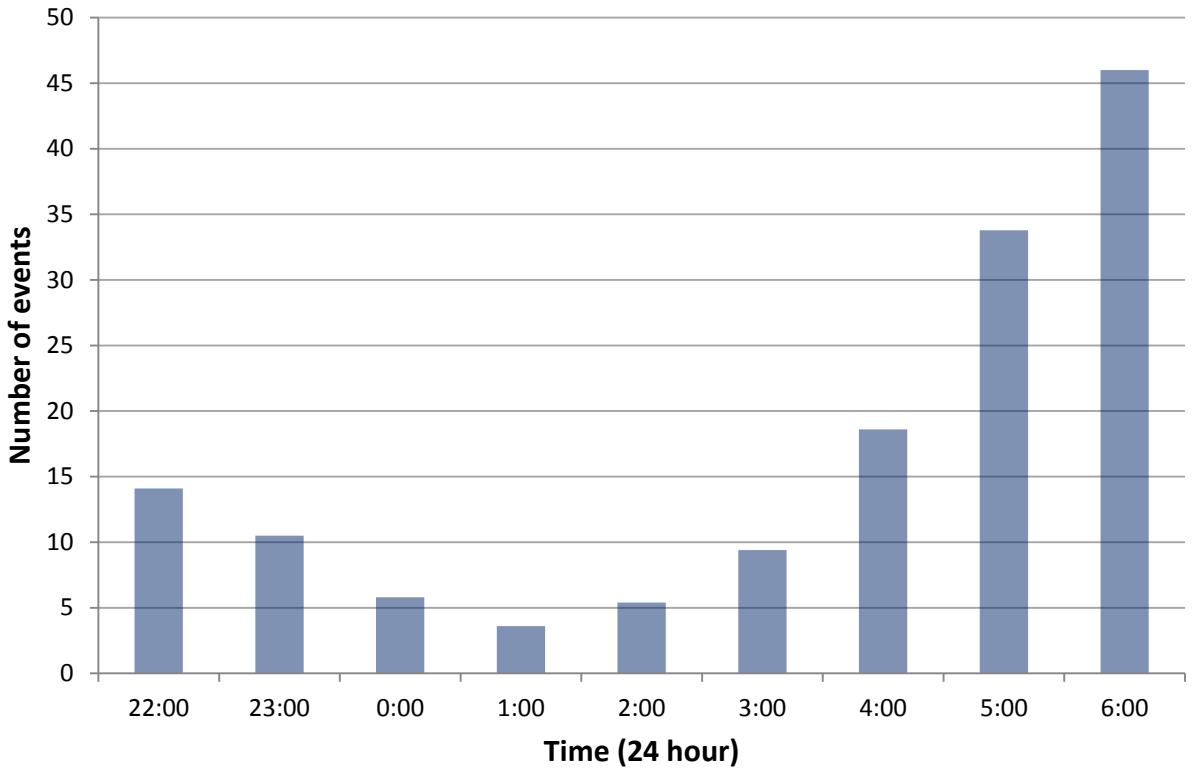


Figure 9-2 Number of noise events greater than 65dB(A) (Night time)

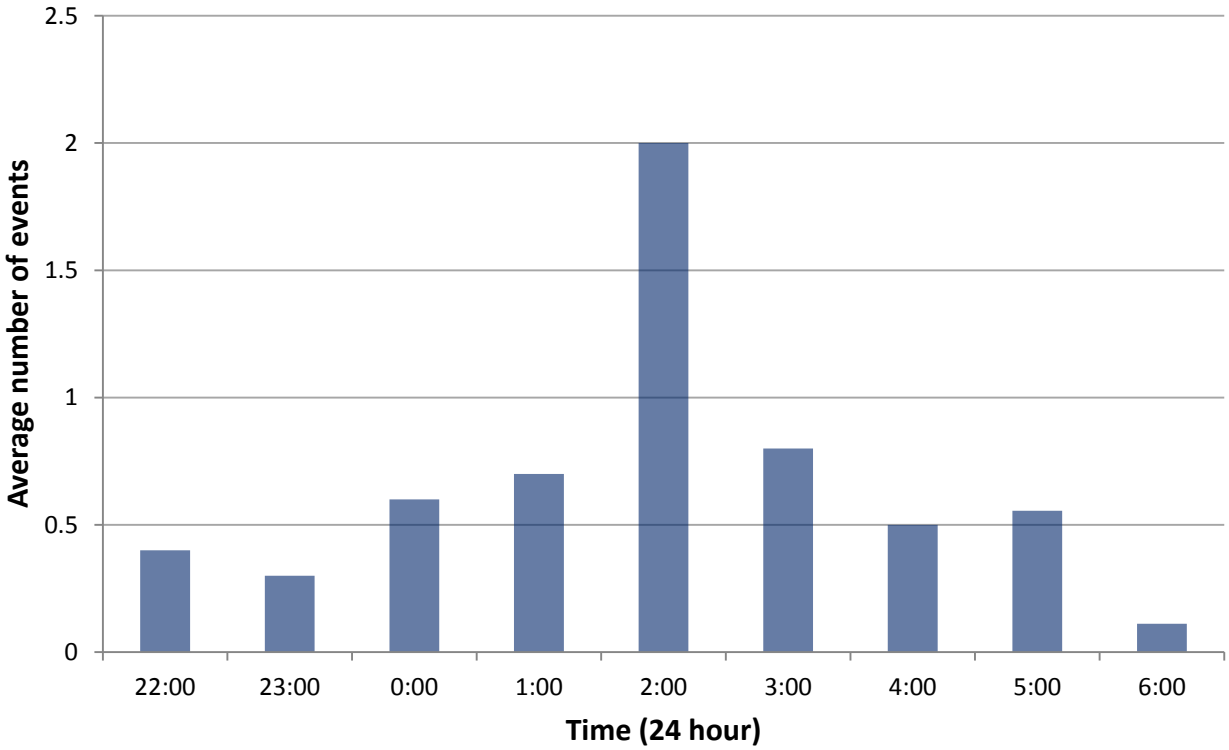


Figure 9-3 Average number of events when L_{AMax} - $L_{Aeq(1hour)}$ ≥ 15dB(A) (Night time)

Figure 9-2 indicates that the number of noise events greater than 65dB(A) during night periods presently is relatively low during the early and middle periods of the night, but increases substantially in the period 4am-7am.

Figure 9-3 indicates that there are presently few maximum noise events during night periods (approximately 4% of all measured noise events greater than 65dB(A)). The number of maximum noise events is greatest at 2am and reduces in the early morning hours.

From the traffic noise monitoring data, maximum noise levels within those residences closest to the road may be expected to exceed 65 dB(A) for about 147 noise events during an average night. Typically, in any single night period, six of these 147 events will exceed the prevailing L_{Aeq} noise level by more than 15dB(A).

Given that the project is expected to increase the number of night time heavy vehicle movements and also that it proposes seven new signalised intersections along the alignment including at South Luddenham and Glenmore Park (refer **Section 2**), the design would likely increase the number of engine compression braking events and the incidence of start-stop traffic.

10. Construction noise assessment

10.1 Overview

The effects of construction noise on the community relate to the type, timing and duration of the works, existing background noise level, and the intensity and character (eg, whether a constant or impulsive noise) of the noise from the works. This section outlines the assessment of noise from construction of the project in accordance with the Roads and Maritime Construction Noise and Vibration Guideline (CNVG), the RMS' application of the Interim Construction Noise Guideline (ICNG). Where impact is predicted, "reasonable and feasible" noise mitigation is outlined in **Section 10.13**.

The assessment of construction impacts specific to each NCA is presented in Section 12.

10.2 Principles for managing construction noise

The CNVG outlines the following principles which are to be applied when reviewing and assessing construction noise, vibration and construction traffic:

- Good engagement with the community will be maintained to facilitate effective project delivery with consideration of community impact, including procedures for notifying residents, business owners and other sensitive receivers, of any noise- or vibration-intensive construction activities likely to affect their amenity.
- Construction noise and vibration levels at sensitive receivers will be minimised where feasible and reasonable.
- Feasible and reasonable mitigation will reflect the time of day, and the degree and duration of the impact.
- The community will be informed of the dates for the intended works, sequencing and timing of noisy events. Where possible this will include an indicative schedule over a 24 hour period.
- Minimising construction noise and vibration will be viewed as a continuous improvement exercise that is inclusive of stakeholders where no idea is too small to be considered.
- Staff and community will be informed of the effort and methods undertaken to reduce noise and vibration for the works.
- Any operational noise and vibration improvements resulting from the works will be promoted to the community.

The CNVG pursues these principles by outlining how Noise Management Levels (NMLs) may be determined for a construction project and identifying feasible and reasonable noise mitigation options where construction noise levels are predicted to exceed these NML's.

10.3 Proposed works

It is expected that the project would be constructed over a two and a half year period and incorporate the following main construction phases (staging durations are indicative only):

- Early works, including site/compound establishment, installation of storage facilities, temporary fencing, erosion and sedimentation controls and signage. This stage is expected to last approximately 6 months.
- Earthworks, including areas of cut and fill and vegetation clearance and stripping (indicatively, lasting 18 months)
- Roadworks, including placement and compaction of sub-base course and base course (indicatively, 4 months)

- Works relating to the installation of the Adams Road bridge, east of Luddenham (indicatively, 6 months)
- Drainage works (indicatively, 15 months)
- Road paving works, including construction of pavement and median (indicatively, 18 months)
- Utility works (indicatively, 15 months)
- Finishing works, including landscaping and the installation of signs, barriers, etc. (indicatively, 9 months)

Construction stages involving impact piling, rockbreakers (bridge works) or concrete saws (paving works) have the highest potential to generate noise impacts. As a standard management measure the operation of such plant would be contained to standard hours where feasible. This assessment has assumed that these plant items would not operate during Out of Hours periods.

The prediction of noise from each of the construction stages is presented in Section 10.13. As a conservative approach, noise modelling has assumed that all 21 ancillary facilities would operate concurrent to each construction stage.

An Ancillary Facilities Management Plan outlining management practices and procedures for the establishment and operation of these facilities would be prepared to the satisfaction of the Secretary of the Department of Planning and Environment and the Commonwealth Government.

10.4 Indicative noise exposure to road corridor works

Most of the construction activities considered in this assessment (eg, road or paving works) progress linearly along the road alignment. In general, it is from these works that the highest of the predicted noise exceedances at receivers will result.

As perceived from any single residence, noise from any such mobile works will rise and then fall away in accordance with the passing of those works. The *extent* of the noise exceedance depends on the receiver's perpendicular offset from the road alignment.

Figure 10-1 illustrates this variation in construction noise exposure for three receivers, each with a different perpendicular offset from the road alignment, namely:

- a receiver set back approximately 20m from the passing works (ie, nearest to the works);
- a receiver set back 100m from the passing works and
- a receiver set back approximately 300m from the works (furthest from the works)

The vertical axis shows the indicative noise exceedance above the NML, while the horizontal axis indicates the location of the works as they approach and then pass the receiver in terms of angle of view, i.e. as the works approach from -90^{o}, to when the works are directly in front of the receiver (at 0^{o}) to, finally, once they have fully passed the receiver at 90^{o}.

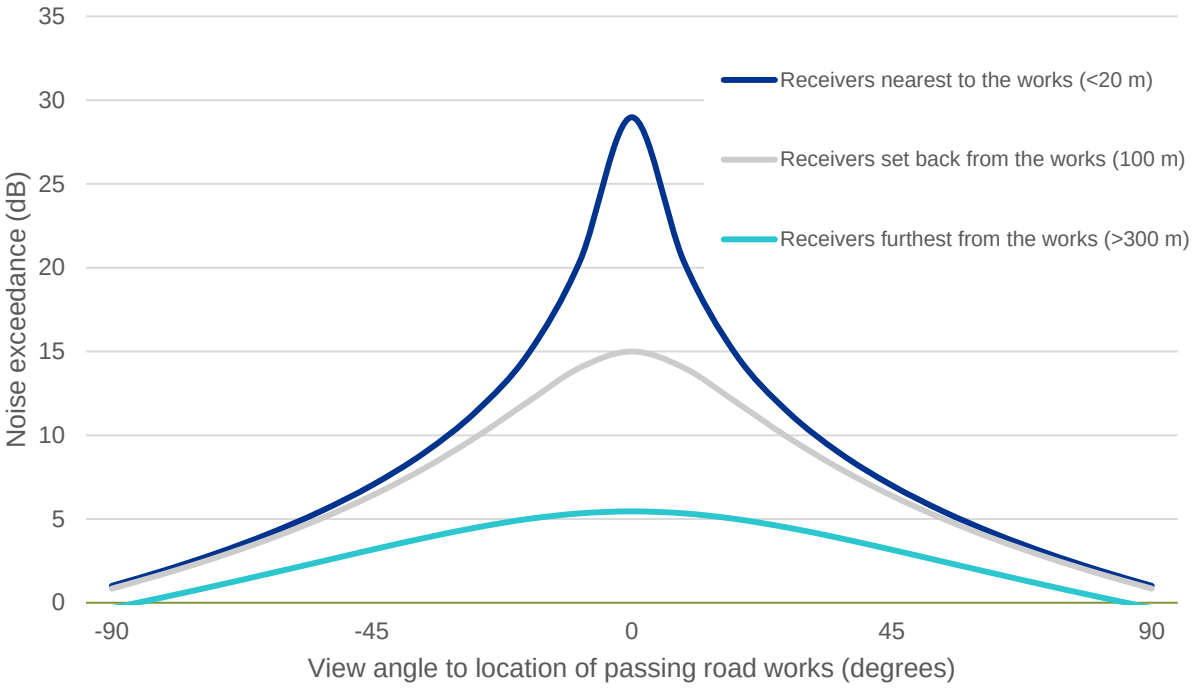


Figure 10-1 Indicative noise exceedance above NML of receivers to passing construction works

10.5 Noise from temporary ancillary facilities

The proposed locations of temporary ancillary facilities are indicated in **Figure 2-1**. Ancillary facilities will typically house the administrative functions for the project and would likely include offices, toilet and shower facilities, repair and maintenance facilities, equipment laydown areas and storage. Two ancillary facilities (C5 and C8) may incorporate a pug mill (refer Section 5.4.13 of the EIS). The plant expected to operate within these ancillary facilities is outlined in **Table 10-5**.

This noise assessment has conservatively assumed that all 21 ancillary facilities would operate simultaneously for the entire duration of the construction program throughout day and night periods.

Noise modelling (discussed in **Section 10.14** below) has included the acoustic benefit of applying 2.4m high hoarding to all sides and gates to an ancillary facility. The need for hoardings at ancillary facilities would be assessed on a case by case basis with consideration for the nature and duration of the use of the site, the proximity to sensitive receivers and the acoustic benefit that might be achieved.

Noise modelling has assessed both the combined noise impacts that may arise from the concurrent operation of road corridor works and ancillary facilities, as well as impacts from the operation of ancillary facilities alone. This allows for the assessment of worst case impacts, as well as any longer term impacts arising from the operation of ancillary facilities even once mainline road works have moved beyond a sensitive receiver.

10.6 Construction Hours

Construction of the project would be contained to standard construction hours where it is feasible and reasonable to do so.

However, some works would likely need to be undertaken during evening, night or weekend periods to ensure safe work practices or to avoid unacceptable impacts on traffic and disruptions to the road network. The specific activities that may need to be undertaken during out of hours periods are discussed in Chapter 5.4.15 of the EIS.

The CNVG's Standard and Out of Hours (OOH) construction periods are indicated in Table 10-1.

Table 10-1 Standard and Out of Hours construction periods

Construction hours	Monday to Friday	Saturday	Sunday / Public holiday
Standard hours construction periods			
Standard construction hours	7:00 to 18:00	8:00 to 13:00	No work
Activities with impulsive or tonal noise emissions	8:00 to 17:00	9:00 to 13:00	No work
Blasting	9:00 to 17:00	9:00 to 13:00	No blasting
Out of Hours construction periods			
Out of Hours (Day)	N/A	07:00 to 8:00, 13:00 to 18:00	08:00 to 18:00
Out of Hours (Evening)	18:00 to 22:00	18:00 to 22:00	18:00 to 22:00
Out of Hours (Night)	22:00 to 07:00	22:00 to 08:00	22:00 to 07:00

Note: 1 Works may be carried out in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block. 'Continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.

10.7 Construction Noise Management Levels

The CNVG specifies that each sensitive receiver potentially impacted by construction of the project be assigned a Noise Management Level (NML) which is defined by, and based on the ICNG's noise goals. Non-residential receivers are assigned fixed-value NML's, while the NML for each residential receiver is determined as an allowable exceedance above the level of background noise (refer Section 4.2).

The CNVG requires that all feasible and reasonable mitigation measures be applied where construction noise is predicted to exceed the NML.

Noise Management Levels for residential receivers

Table 10-2 outlines how NMLs are determined for residential receivers potentially impacted by noise from construction of the project. Table 10-2 also outlines how receivers that may be 'highly noise affected' by the project's construction works may be identified. In such instances, restrictions to construction hours may apply to minimise these impacts.

Table 10-2 Construction Noise Management Levels for residential receivers

Time of day	Noise Management Level (NML) $L_{Aeq(15\ min)}$*	How to apply
Recommended standard hours Monday to Friday 7.00am to 6.00pm Saturday 8.00am to 1.00pm No work on Sundays or public holidays	Noise affected (RBL + 10dB(A))	The noise affected level represents the point above which there may be some community reaction to noise. Where the predicted or measured LAeq (15 min) is greater than the noise affected level, the proponent should apply all feasible and reasonable work practices to meet the noise affected level The proponent should also inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and the duration, as well as contact details.
	Highly noise affected (75 dB(A))	The highly noise affected level represents the point above which there may be strong community reaction to noise. Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account: 1. Times identified by the community when they are less sensitive to noise (such as before and after school for works near schools, or mid-morning or mid-afternoon for works near residences 2. If the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
Outside recommended standard hours	Noise affected (RBL + 5dB(A))	A strong justification would typically be required for works outside the recommended standard hours The proponent should apply all feasible and reasonable work practices to meet the noise affected level Where all feasible and reasonable practices have been applied and noise is more than 5 dB(A) above the noise affected level, the proponent should negotiate with the community For guidance on negotiating agreements see Section 7.2.2 of the ICNG (DECC, 2009).

Source: Interim Construction Noise Guideline (DECC 2009)

Noise Management Levels for non-residential receivers

The following NML's apply for non-residential receivers:

- Industrial premises: external $L_{Aeq(15min)}$ 75 dB(A)
- Offices, retail outlets: external $L_{Aeq(15min)}$ 70 dB(A)
- Classrooms: internal $L_{Aeq(15min)}$ 45 dB(A)
- Places of worship: internal $L_{Aeq(15min)}$ 45 dB(A)
- Active recreational areas; external $L_{Aeq(15min)}$ 65 dB(A)

10.8 Sleep disturbance screening criterion

The assessment of the potential for sleep disturbance within residences from night time construction works is taken from the Interim Construction Noise Guideline (ICNG), which prescribes the following sleep disturbance "screening criterion":

$$L_{Amax} \leq L_{A90(15min)} + 15dB(A)$$

This screening criterion indicates that sleep disturbance may be possible where the L_{Amax} maximum noise level from construction exceeds the background noise level by more than 15 dB(A). Where this screening criterion is not met, more detailed analysis is required at the detailed design stage.

10.9 Project specific construction Noise Management Levels (NMLs)

Noise Management Levels (NMLs) for residential receivers

The construction Noise Management Levels (NMLs) and residential sleep disturbance screening criteria adopted in this assessment are summarised in Table 10-3. The NMLs are derived as an allowable emergence above the Rating Background Level (RBL). The RBLs for each NCA have been determined conservatively based on the representative lowest monitored background data for the local region. Where the most local night time background monitoring data yielded high RBL values or had been found to influenced by extraneous noise sources (eg, noise from insects), RBLs were determined from the monitoring data of nearby and similarly situated noise loggers.

Further, RBLs for receivers located further back from The Northern Road than the local noise monitoring location have been determined by correcting down the background noise data from that logger. For example, the night time RBL for NCA 25 has been conservatively determined as 34 dB(A) (refer Table 10-3) even though the night time RBL returned by the nearest background noise logger (monitoring location N17 – Table 4-1) was 41 dB(A). As a further check, this result correlates well with night time RBLs determined for other nearby projects as follows:

- Night time RBLs determined from long term background noise monitoring undertaken (July 2015) in as part of The Northern Road/Bringelly Road Grade Separated Interchange in the suburb of Bringelly were found to range between 33-37dB(A);
- Night time RBLs determined from long term background noise monitoring undertaken (April 2015) as part of the Western Sydney Airport EIS (Assessment of Ground-Based Operational Noise) in the suburbs around The Northern Road (including Orchard Hills, Glenmore Park, Mount Vernon, Wallacia, Mulgoa, Luddenham and Bringelly) were found to range between 35-43dB(A).

Table 10-3 Construction Noise Management Levels (NMLs) and sleep disturbance screening criteria at residences

NCA	Monitored or determined RBL dB(A)				Noise Management Level (NML) $L_{Aeq(15\ minute)}$ dB(A)				Sleep disturbance screening criterion L_{Amax} dB(A) (RBL+15dB)
					Standard hours (RBL+10dB)	Out Of Hours (OOH) (RBL+5dB)			
	Standard hours	OOH Day	OOH Evening	OOH Night	Day	Day	Evening	Night	
1	48	51	49	44	58	56	54	49	59
2	47	48	43	36	57	53	48	41	51
3	46	53	46	35	56	58	51	40	50
4	37	38	38	37	47	43	43	42	52
5	42	44	43	34	52	49	48	39	49
6	42	44	43	34	52	49	48	39	49
7	37	38	38	37	47	43	43	42	52
8	48	53	47	42	58	58	52	47	57

Noise Management Levels for non-residential receivers

The NML for each non-residential receiver within the study area is detailed in **Table 10-4**.

Table 10-4 Construction Noise Management Levels - Non-residential receivers

Non Residential Receiver	No. of buildings	Land Use	NCA	NML* $L_{Aeq(15\ minute)}$ dB(A)
Penrith Anglican College	4	Educational	1	45 (Internal)
Luddenham Public School	5	Educational	5	45 (Internal)
Holy Family Catholic Primary School	1	Educational	5	45 (Internal)
St James Anglican Church	1	Place of Worship	5	45 (Internal)
Sacred Heart Parish	1	Place of Worship	5	45 (Internal)
Luddenham Uniting Church	2	Place of Worship	5	45 (Internal)
Glenmore Ridge Dr Park	N/A	Active Recreation	1	65
Sales Park	N/A	Active Recreation	5	65
Willmington Reserve	N/A	Active Recreation	5	65
Luddenham Showground	N/A	Active Recreation	5	65
Penrith Golf and Recreation Club	3	Commercial	1	70
Produce Direct and Pet Care	3	Commercial	1	70
Orchard Hills Veterinary Hospital	1	Commercial	1	70

Non Residential Receiver	No. of buildings	Land Use	NCA	NML* $L_{Aeq(15\ minute)}$ dB(A)
Horse N Around	3	Commercial	2	70
The Honey Shed	1	Commercial	3	70
Sydney Society of Model Engineers	1	Commercial	3	70
Caltex Service Station	2	Commercial	5	70
Quality Meats Butcher	1	Commercial	5	70
2903 The Northern Road, Luddenham	1	Commercial	5	70
Luddenham Auto Repairs	1	Commercial	5	70
Ali's Bakery	1	Commercial	5	70
Shell Service Station	1	Commercial	5	70
IGA	3	Commercial	5	70
David's Stall Fruit and Veg	1	Commercial	5	70
Luddenham Progress Hall	1	Commercial	5	70
Board my Paws	1	Commercial	8	70
Water Filtration Plant	1	Industrial	1	75
Power Station 2552 The Northern Road	1	Industrial	2	75
Luddenham Showground	1	Stables	23	N/A
2042-2550 The Northern Road, Orchard Hills	81	Military	2	N/A

** When in use*

10.10 Construction noise modelling

Prediction of construction noise levels at sensitive receivers was modelled using the Soundplan (Version 7.3) noise modelling software based on the ISO9613 prediction algorithm. This three-dimensional model accounts for noise source and receiver locations, ground and air absorption as well as any acoustic shielding provided by intervening topography and structures. Where relevant, construction modelling parameters were held consistent with those used for the operational modelling outlined in **Table 7-1**.

10.11 Construction activities and proposed plant and equipment

The sound power level adopted for each item of plant and equipment in the modelling of construction noise is indicated in **Table 10-5**. The schedule of plant and equipment to be used would be confirmed with the final construction program. Predictions of construction noise impact consider, variously, each works stage running concurrent with all 21 ancillary facilities operating simultaneously.

Table 10-5 indicates the periods of exposure to any particular activity any one receiver may expect. These periods will vary according to a receiver's set back and line of view to the works between buildings.

Table 10-5 Plant sound power levels used in the modelling of construction noise

Construction phase	Typical plant and equipment	Sound Power Level dB(A) $L_{Aeq(15min)}$
Early Works (indicative time of exposure to any one receiver: 2-6 weeks)	Truck mounted crane Light vehicles Excavator Generator Bobcat Dump trucks	104 88 109 101 104 111
Earthworks (indicative time of exposure to any one receiver: 4-16 weeks)	Excavator Dump trucks Vibratory roller (20-30T) Light vehicles Bulldozer Grader Water cart Bobcat	109 114 110 * 88 112 112 107 104
Road work (indicative time of exposure to any one receiver: 2-10 weeks)	Excavator Bulldozer Water cart Grader Dump truck Spray sealing equipment Concrete truck and pump Asphalt paver (plus truck) Concrete saw Vibratory roller (20-30T) Franna crane Slip-forming machine	109 112 107 112 111 103 108 108 114 110 * 99 102
Bridge construction (indicative time of exposure to any one receiver: 0-26 weeks)	Excavators Light vehicles Generator Rock breaker Concrete trucks and pump Welding equipment Mobile crane Impact piling Oxy-cutting equipment	109 88 101 126 * 108 105 104 121 * 98
Drainage work (indicative time of exposure to any one receiver: 2-16 weeks)	Excavator Light vehicles Generator Jackhammer Concrete truck and pump Truck mounted crane Vibratory roller (20-30T) Bored piling Bobcat	109 88 101 118 * 108 104 110 * 112 104

Construction phase	Typical plant and equipment	Sound Power Level dB(A) $L_{Aeq(15min)}$
Paving (indicative time of exposure to any one receiver: 2-10 weeks)	Excavator Light vehicles Generator Asphalt paver (plus truck) Concrete trucks and pump Concrete saw Vibratory roller (20-30T) Slip-forming machine Truck mounted crane	109 88 101 108 108 119 * 110 * 102 104
Utility Relocation (indicative time of exposure to any one receiver: 2-16 weeks)	Excavator Bored piling Light vehicles Truck mounted crane Generators Dump trucks Plate compactor Concrete trucks and pump	109 112 88 104 101 111 106 108
Finishing works (indicative time of exposure to any one receiver: 2-10 weeks)	Excavator Generator Light vehicles Dump trucks Concrete trucks and pump Hydromulching equipment Truck mounted crane Water cart Vibratory roller(20-30T) Bobcat Road marking machine Welding equipment	109 101 88 111 108 116 104 107 110 * 104 108 105
Concurrently operating Ancillary Facilities		
Ancillary Facilities excluding C5 & C8 (which each include a pugmill)	Front end loader Excavator Road truck Compressor Welding equipment Light vehicles Generator	112 109 108 109 105 88 101
Ancillary Facilities C5 & C8 (each incorporating a pugmill)	Front end loader Excavator Road truck Compressor Welding equipment Light vehicles Generator Pugmill*	112 109 108 109 105 88 101 110

* *Note: sound power level includes a 5dB(A) penalty for annoying noise characteristics*

10.12 Sleep disturbance from night time construction works

The CNVG directs that, where works are expected to extend over more than two consecutive nights, the assessment should assess the potential for sleep disturbance within nearby residences.

As discussed in Section 10.13, this assessment has assumed that only bridge works (excluding impact piling and rockbreaking) and paving works (excluding concrete sawing) would operate during night periods, concurrent with operation of the ancillary facilities. The maximum L_{Amax} noise levels expected from equipment used in these stages are presented in Table 10-6. These noise levels have been used to assess the potential for sleep disturbance within residences. This is discussed further in Section 10.14.

Table 10-6 Plant L_{Amax} sound power levels used to assess the potential for sleep disturbance

Construction phase	*Typical plant and equipment*	*Sound Power Level dB(A) L_{Amax}*
Night Bridge Construction (indicative time of exposure to any one receiver: 0-26 weeks)	Excavator Generator Road truck Concrete trucks and pumps Welding equipment Truck mounted crane Oxy-cutting equipment	115 104 113 117 109 114 104
Night Paving (indicative time of exposure to any one receiver: 2-10 weeks)	Excavator Generator Asphalt paver (plus truck) Concrete trucks and pump Vibratory roller (20-30T)* Slip-forming machine Truck mounted crane	115 104 115 117 120 113 114
Ancillary Facilities excluding C5 & C8 (which each include a pugmill)	Front end loader Excavator Road truck Compressor Welding equipment Light vehicles Generator	119 115 113 112 109 100 104
Ancillary Facilities C5 & C8 (each incorporating a pugmill)	Front end loader Excavator Road truck Compressor Welding equipment Light vehicles Generator Pugmill*	119 115 113 112 109 100 104 119

* *Note: sound power level includes a 5dB(A) penalty for annoying noise characteristics*

10.13 Standard and Project-specific noise mitigation measures

Standard noise mitigation measures

The CNVG outlines standard mitigation measures that should be incorporated by default in all construction projects. Those most relevant to the construction of the project are listed below. A Construction Noise and Vibration Management Plan (CNVMP) would be prepared in consultation with relevant stakeholders prior to commencement of construction. The CNVMP would identify the main sources of noise impact, describe the measures to be taken to minimise the risk of specific adverse impacts, provide procedures for consultation with and notification of the community, address complaints and monitor noise impacts throughout the duration of the project.

Viable mitigation measures that would be expected to be deployed by the construction contractor once the final construction sequencing and scheduling is known include:

- Restricting works to standard construction hours as far as practicable, considering safety and traffic management requirements
- Selecting quieter plant and equipment
- Erecting temporary acoustic hoarding to reduce noise form works within a confined area such as long-term drainage works
- Deploying mobile hoardings (eg, acoustic screen curtains mounted on a wheeled trailer) to track moving, but tightly-contained processes;
- Maximising offset distances between receivers and noisy plant or activities
- Orientating plant and processes away from residences
- Scheduling works for times outside of heightened sensitivity for the impacted receiver, eg, outside of school hours, or at least outside of HSC and exam periods specifically;
- Optionally scheduling respite periods for noise-intensive processes undertaken near receivers, eg. limiting operation of pavement sawing to three hours at a time;
- Necessarily instigating respite periods where feasible and reasonable to do so for any receiver identified as highly affected (for which construction noise levels will be greater than 75dB(A))
- Planning any out of hours (OOH) works so that noisier works are carried out in the earlier part of the evening or night time
- Minimising the number of consecutive evenings/nights of works near any particular receiver(s)
- Restricting heavy vehicle movements, heavy deliveries and loading and unloading processes to daytime periods and to areas well away from receivers
- Regularly maintaining and monitoring plant and equipment to ensure that their noise emissions are not excessive
- Minimising the annoyance from reversing alarms by either fitting closed circuit monitors or non-tonal reversing alarms (“quackers”) on vehicles or deploying ‘spotters’ to oversee reversing movements. Sites should be designed to minimise or remove the need for plant to undertake reversing manoeuvres
- Reducing throttle settings and switching off equipment when it’s not being used.

The feasibility of applying these measures would be assessed as part of the CNVMP once the detailed construction program is known.

Project-specific mitigation measures

The following project-specific mitigation measures could reasonably be expected to be implemented for construction of the project:

- Restricting the following construction stages (refer Table 10-5) to daytime periods only:
  - Early works
  - Earthworks
  - Roadworks
  - Drainage works
  - Utility relocation works
  - Finishing works
- Restricting the most noise-intensive construction processes (eg, impact piling, rock breaking and pavement sawing) to standard construction hours, even though the contractor may elect to undertake any remaining, quieter elements of those works during evening and night periods. This would reduce noise levels from bridge works by up to 13 dB(A) (once impact piling and rockbreaking are excluded), and up to 5 dB(A) from paving works (once operation of the concrete saw is excluded)..
- Installing 2.4m-high perimeter hoarding to all sides and gates of all 21 ancillary facilities so as to interrupt the line-of-sight to ground-based construction activity within those facilities. This measure will reduce noise from these sites by 3-8 dB(A) depending on the height of the noise source relative to the hoarding height.

Other standard mitigation measures that also should be implemented by the project, but that have not been included in the noise modelling include:

- Screening noise-intensive processes such as rockbreaking and concrete sawing by the use of mobile screens (eg. acoustic screens mounted on trailers) that track the progress of works. Such screens can reduce noise levels by approximately 5-10 dB(A) where the line of sight to a receiver from the works is heavily screened. This level of acoustic screening is substantially reduced for receivers positioned obliquely or “end on” to the screen. Noise modelling has therefore not included this standard mitigation measure given that the acoustic benefit of this measure cannot be reliably applied to all receivers at all locations along the project due to their spread about any works site. The use of mobile acoustic screens would be assessed when developing the CNVMP.
- Maximising offset distances of construction works such that works nearest noise-sensitive receivers is undertaken at times less sensitive to them. The acoustic benefit of offsetting works in this way is approximately 6 dB(A) noise reduction per doubling of offset distance. This measure has not been included in the noise modelling as there is no reliable method to determine the noise reduction that can be achieved at all receivers from this measure.
- Screening or enclosing stationary noise sources such as pumps and compressors which can provide up to 15 dB(A) acoustic benefit. This benefit has not been included in the noise modelling.
- Shielding sensitive receivers from noisy construction activity by the judicious placement of structures (eg, site sheds, fencing or signage) or use of site topography to screen plant. This benefit has not been included in the noise modelling.

10.14 Prediction of construction noise impacts

This section provides an overview of construction noise impacts across the entire project. A summary of impacts for each NCA is presented in Section 12.

Detailed predictions of noise from construction undertaken during standard hours to any individual residence are presented in Appendix L.

An overview of the number of receivers predicted to be impacted from works undertaken during standard hours is presented in Table 10-7 and from out of hours works in Table 10-8. These tables indicate the worst case construction noise levels predicted for the least and most affected residences and also indicate the count of residences at which the Noise Management Level (NML) is exceeded. Counts are of impacted residential *storeys* rather than buildings to ensure all tenancies of a single building are represented.

All predictions factor in the acoustic benefit of the project-specific noise mitigation measures discussed in Section 10.13 above.

The indicative duration of exposure of any particular receiver to any works is indicated in Table 10-5.

Predicted impacts to residences from works during standard hours

Table 10-7 Predicted noise levels at residences from construction works during standard hours

NCA	NML (Standard Hours)	Construction Stage		Early works	Earthworks	Roadwork-	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
1	58	Range of predicted noise levels (dB(A))		34-77	38-82	40-84	30-63	39-83	40-84	36-80	39-83	27-63
		Number of Residences	Complying	1194	1179	1164	1204	1175	1164	1188	1175	1204
			0-10 dBA above NML	16	27	41	7	31	41	20	31	7
			10-20 dBA above NML	1	4	5		4	5	2	4	
			20+ dBA above NML		1	1		1	1	1	1	
		Highly noise affected	≥75dBA	1	1	1		1	1	1	1	
2	57	Range of predicted noise levels (dB(A))		39-78	44-83	46-85	34-61	45-84	46-85	42-81	45-84	34-61
		Number of Residences	Complying	63	47	39	128	44	39	55	44	128
			0-10 dBA above NML	39	30	34	9	32	34	32	32	9
			10-20 dBA above NML	33	50	50		49	50	46	49	
			20+ dBA above NML	2	10	14		12	14	4	12	
		Highly noise affected	≥75 dBA	4	15	25		17	25	10	17	
3	56	Range of predicted noise levels (dB(A))		43-73	48-78	50-80	43-61	49-79	50-80	46-76	49-79	35-61
		Number of Residences	Complying	10	6	4	20	4	4	7	4	20
			0-10 dBA above NML	5	8	7	3	10	7	8	10	3
			10-20 dBA above NML	8	7	9		7	9	8	7	
			20+ dBA above NML		2	3		2	3		2	
		Highly noise affected	≥75dBA		2	6		3	6	1	3	

NCA	NML (Standard Hours)	Construction Stage		Early works	Earthworks	Roadwork-	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
4	47	Range of predicted noise levels (dB(A))		49-63	50-68	52-67	52-65	51-66	52-67	50-63	51-66	46-60
		Number of Residences	Complying									1
			0-10 dBA above NML	13	9	8	6	8	8	10	8	14
			10-20 dBA above NML	3	6	7	10	8	7	6	8	1
			20+ dBA above NML		1	1			1			
		Highly noise affected	≥75 dBA									
5	52	Range of predicted noise levels (dB(A))		39-83	43-88	45-90	45-72	44-89	45-90	41-86	44-89	38-69
		Number of Residences	Complying	177	146	117	23	131	117	162	131	211
			0-10 dBA above NML	33	54	75	199	69	75	44	69	12
			10-20 dBA above NML	10	19	23	1	18	23	13	18	1
			20+ dBA above NML	4	5	9	1	6	9	5	6	
		Highly noise affected	≥75dBA	4	5	5		5	5	4	5	
6	52	Range of predicted noise levels (dB(A))		40-48	44-53	46-55	43-51	45-54	46-55	42-51	45-54	39-47
		Number of Residences	Complying	14	12	11	14	12	11	14	12	14
			0-10 dBA above NML		2	3		2	3		2	
			10-20 dBA above NML									
			20+ dBA above NML									
		Highly noise affected	≥75 dBA									
7	47	Range of predicted noise levels (dB(A))		43-64	48-69	50-71	40-49	49-70	50-71	46-67	49-70	40-49
		Number of Residences	Complying	4			17			1		17
			0-10 dBA above NML	12	8	5	2	6	5	14	6	2
			10-20 dBA above NML	3	10	13		12	13	4	12	
			20+ dBA above NML		1	1		1	1		1	
		Highly noise affected	≥75dBA									
8	58	Range of predicted noise levels (dB(A))		41-69	46-74	48-76	41-66	47-75	48-76	44-72	47-75	41-66
		Number of Residences	Complying	83	78	72	93	74	72	80	74	93
			0-10 dBA above NML	20	16	22	12	20	22	17	20	12
			10-20 dBA above NML	2	11	11		11	11	8	11	
			20+ dBA above NML									
		Highly noise affected	≥75 dBA			2		1	2		1	

Table 10-7 above indicates that for **standard hours** works, it is predicted that:

- the NML will not be exceeded at any time for most receivers (>60%) within NCAs 1, 6 and 8;
- across the entire study area, noise from even the loudest works will comply with the NML at 80% of all residences;

- of all works scenarios, road works and paving are expected to generate the greatest number of NML exceedances at residences, which are mostly located in NCAs 1, 2 and 5.
- The highest NML exceedances are predicted to occur at residences within NCA 2;
- at 195 residences (11% of all residences) within the study area the worst case exceedance of the NML from any standard hours works would be 10 dB(A) or less. At such times of peak impact, construction noise would be clearly audible;
- at 118 residences within the study area (7%) the worst case exceedance of the NML would be between 10-20 dB(A). At such times of peak impact, construction noise would be moderately intrusive;
- at 29 residences within the study area (2%) the worst case exceedance may be more than 20 dB(A). At such times of peak impact, construction noise would be highly intrusive;
- at times of the loudest works (road works and paving) 39 residences are predicted to be highly noise affected (noise levels > 75dB(A)). Fewer residences would be highly noise affected during quieter works (eg, 0 residences during bridge works). NCA 2 is predicted to have the highest number of highly noise affected receivers (25 during paving works);
- within most NCAs, it is expected that noise from the nearest ancillary facility (in isolation of noise from any other mainline works) may exceed the NML by up to 10 dB(A) at a small number of receivers (up to 12 receivers within NCA 5) when that facility is operating at peak capacity. Additionally, one receiver in each of NCA 4 and NCA 5 may be exposed to noise levels up to 20 dB(A) above the NML during times of peak operations.

Predicted impacts to residences from out of hours works

Detailed predictions of noise from out of hours works to any individual residence are presented in detail in Appendix L and summarised in Table 10-8 below.

Noise contours and maps of NML exceedance at each receiver for the loudest out of hours construction works - bridge works and paving works (in both cases, including noise contributed from ancillary compounds) - are presented in Appendix M.

All predictions factor in the acoustic benefit of the project-specific noise mitigation measures discussed in Section 10.13 above.

The indicative duration of exposure of any particular receiver to any works is indicated in Table 10-5.

Table 10-8 Predicted noise levels at residences from out of hours (OOH) works

NCA	NML OOH (Night)			OOH Work Stage: Bridge work	OOH Work Stage: Paving	Ancillary Facilities only	Sleep Disturbance Screening Criterion	OOH Work Stage: Bridge work	OOH Work Stage: Paving	Ancillary Facilities only
1	49	Range of predicted noise levels (dB(A))		30-63	35-79	27-63	59	33-66	39-83	30-66
		Number of Residences	Complying	1138	1034	1138		1199	1178	1199
			0-5 dBA above NML	57	137	57		10	21	10
			5-15 dBA above NML	16	35	16		2	11	2
			15-25 dBA above NML		4				1	
			≥25dBA above NML		1					
2	41	Range of predicted noise levels (dB(A))		34-61	41-80	34-61	51	37-64	45-84	37-64
		Number of Residences	Complying	22	1	22		79	15	79
			0-5 dBA above NML	44	11	44		39	24	39
			5-15 dBA above NML	60	43	60		19	34	19
			15-25 dBA above NML	11	32	11			50	
			≥25dBA above NML		50				14	
3	40	Range of predicted noise levels (dB(A))		35-61	45-75	35-61	50	38-64	49-79	38-64
		Number of Residences	Complying	6		6		12	2	12
			0-5 dBA above NML	6		6		4	2	4
			5-15 dBA above NML	7	7	7		7	7	7
			15-25 dBA above NML	4	8	4			9	
			≥25dBA above NML		8				3	
4	42	Range of predicted noise levels (dB(A))		46-60	50-62	46-60	52	49-63	53-68	49-63
		Number of 9Residences	Complying					1		1
			0-5 dBA above NML	1		1		11	8	11
			5-15 dBA above NML	14	11	14		4	7	4
			15-25 dBA above NML	1	5	1			1	
			≥25dBA above NML							
5	39	39Range of predicted noise levels		38-69	40-85	38-69	49	41-72	44-89	41-72
		N42umber of Residences	Complying	1		1		125	44	126
			0-5 dBA above NML	60	18	62		84	109	83
			5-15 dBA above NML	151	159	150		14	48	14
			15-25 dBA above NML	11	33	10		1	18	1
			≥25dBA above NML	1	14	1			5	
6	39	Range of predicted noise levels (dB(A))		39-47	41-50	39-47	49	42-50	45-54	42-50
		Number of Residences	Complying					12	8	12
			0-5 dBA above NML	12	6	12		2	6	2
			5-15 dBA above NML	2	8	2				
			15-25 dBA above NML							
			≥25dBA above NML							
7	42	Range of predicted noise levels (dB(A))		40-49	45-66	40-49	52	43-51	49-70	43-51
		Number of Residences	Complying	9		9		19	4	19
			0-5 dBA above NML	8	3	8			2	
			5-15 dBA above NML	2	13	2			12	
			15-25 dBA above NML		3				1	
			≥25dBA above NML							
8	47	Range of predicted noise levels (dB(A))		41-66	43-71	41-66	57	44-71	47-75	44-71
		Number of Residences	Complying	34	20	34		76	63	76
			0-5 dBA above NML	31	34	31		21	22	21
			5-15 dBA above NML	36	37	36		8	13	8
			15-25 dBA above NML	4	14	4			7	
			≥25dBA above NML							

Table 10-8 above indicates that for **out of hours** works, it is predicted that:

- across the entire study area, noise from even the loudest works will comply with the NML at 60% of all residences;
- paving are the out of hours works predicted to generate the greatest number of NML exceedances at residences, which are mostly located in NCAs 1, 2, 5 and 8;
- The highest NML exceedances are predicted to occur at residences within NCA 2;
- at 209 residences (12% of all residences) within the study area the worst case exceedance of the NML from any out of hours works would be 5 dB(A) or less. At such time of peak impact, construction noise would be noticeable;
- at 313 residences within the study area (18%) the worst case exceedance of the NML would be between 5-15 dB(A). At such times of peak impact, construction noise would be clearly audible;
- at 99 residences within the study area (6%) the worst case exceedance of the NML would be between 15-25 dB(A). At such times of peak impact, construction noise would be moderately intrusive;
- at 73 residences within the study area (4%) the worst case exceedance may be more than 25 dB(A). At such times of peak impact, construction noise would be highly intrusive;
- noise from the ancillary facilities (in isolation of noise from any other mainline works) may give rise to exceedances of the NML at up to 539 residences when nearby facilities are operating at peak capacity. The NML exceedance is predicted to be greater than 15 dB(A) at 31 of these residences.

Exceedances of the sleep disturbance screening criterion are predicted to be highest from paving works and for residences within NCAs 2, 3 and 5.

Over all NCAs, 87 residences may be exposed to exceedances of more than 15 dB(A) and 22 residence to exceedances of more than 25 dB(A) above the sleep disturbance screening criterion when paving works are most adjacent to those receivers.

Over all NCAs, noise from ancillary facilities alone may give rise to exceedances of the sleep disturbance criterion within 225 residences.

Predicted impacts to non-residential receivers

Exceedances of the NML from standard hours works are predicted at the following non-residential receivers within the study area. The noise levels reported relate to periods when works are nearest to the subject site:

- Power Station - minor exceedances of up to 2 dB(A);
- Horse N Around – moderate exceedances of up to 11 dB(A) at the most affected building;
- Shell Service Station – moderate exceedances of up to 17 dB(A);
- IGA Luddenham – moderate exceedances of up to 12 dB(A);
- Luddenham Public School - minor exceedances of up to 4 dB(A)

- St James Anglican Church - moderate exceedances of up to 11 dB(A)
- Luddenham Uniting Church – minor exceedances of up to 2 dB(A).

Management of construction noise impacts

The reported exceedances represent worst case impacts that would result when works are located nearest to the receiver and all plant is operating concurrently. Construction noise levels at receivers will be lower when not all plant is operating or when construction works moves on further from the receiver. For example, construction noise levels from paving works will be approximately 7 dB(A) lower than the levels reported in Table 10-7 when the vibratory rolling and concrete sawing are not in operation.

Construction noise levels at receivers will also decrease further as works move further away – in most cases, by 3-6dB(A) for each doubling of the separation distance to the works, depending on whether the residence is also exposed to noise from an operating ancillary facility.

Exceedances of the sleep disturbance screening criterion (Table 10-8) do not indicate that sleep arousal within residences will occur necessarily, but rather that further analysis of the potential for sleep disturbance is warranted. It is noted however, that the screening criterion is predicted to be exceeded by more than 25 dB(A) at some residences.

The exceedances of the sleep disturbance screening criterion would likely result from impact noises related to the operation of concrete trucks (eg, braking, reversing alarms), excavators (motor revvings, bucket scrapes) and in particular, vibratory rollers. The project's CNVMP should explicitly assess the potential for sleep disturbance and address how the identified maximum noise level events would be managed.

It is recommended, that in the first instance, noise-intensive construction processes not be undertaken out of hours where reasonably practicable.

As residual noise impacts are predicted even after standard- and project-specific noise mitigation have been employed, the project will need to consider the additional noise mitigation measures specified in the CNVG. This is discussed further in Section 10.15.

The final noise mitigation measures to be adopted by the project will be determined at its detailed design stage.

10.15 CNVG additional mitigation measures

In instances where after the application of standard noise mitigation measures there still remain receivers at which NMLs are exceeded, the CNVG directs that the project should consider implementing the additional mitigation measures detailed in Appendix C of the CNVG where feasible and reasonable. Table 10-9 summarises these additional measures and the triggers for their application.

Table 10-9 Triggers for additional mitigation measures (from CNVG Appendix C)

Predicted airborne $L_{Aeq(15min)}$ noise level at receiver			***Additional mitigation measures***	
Perception[1]	***dB(A) above RBL***	***dB(A) above NML***	***Type[2]***	***Mitigation level[3]***
All hours				
75 dB(A) or greater	-	-	N, V, PC, RO	HA
Standard Hours: Mon-Fri (7am – 6pm), Sat (8am-1pm), Sun/Pub Hol (Nil)				
Noticeable	5 to 10	0	-	NML
Clearly Audible	10 to 20	< 10	-	NML
Moderately Intrusive	20 to 30	10 to 20	N, V	NML + 10
Highly Intrusive	> 30	> 20	N, V	NML + 20
Out of Hours Works Period 1: Mon-Fri (6pm-10pm), Sat (7am-8am & 1pm-10pm), Sun/Pub Hol (8am-6pm)				
Noticeable	5 to 10	< 5	-	NML
Clearly Audible	10 to 20	5 to 15	N, R1, DR	NML + 5
Moderately Intrusive	20 to 30	15 to 25	V, N, R1, DR	NML + 15
Highly Intrusive	> 30	> 25	V, IB, N, R1, DR, PC, SN	NML + 25
Out of Hours Works Period 1: Mon-Fri (10pm-7am), Sat (10pm-8am), Sun/Pub Hol (6pm-7am)				
Noticeable	5 to 10	< 5	N	NML
Clearly Audible	10 to 20	5 to 15	V, N, R2, DR	NML + 5
Moderately Intrusive	20 to 30	15 to 25	V, IB, N, PC, SN, R2, DR	NML + 15
Highly Intrusive	> 30	> 25	AA, V, IB, N, PC, SN, R2, DR	NML + 25

1 Perception relates to the level above the RBL

2
AA = Alternative Accommodation
V = Verification
IB = Individual Briefing
N = Notification
RO = Respite offers
R1 = Respite Period 1
R2 = Respite Period 2
DR = Duration Respite
PC = Phone Calls
SN = Specific Notifications

3
NML = Noise Management Level (refer Appendix D of CNVG)
HA = Highly Affected (>75dB(A) – applies to residences only)

The detailed description of each additional mitigation measure is provided in Appendix C of the NCVG.

10.16 Construction traffic noise impact

The assessment of noise impact arising from construction vehicles on public roads (as opposed to when they operate within a construction site) is assessed in accordance with the CNVG, which states that where construction traffic will not increase existing traffic noise levels by more than 2 dB(A), then no further assessment is required. Where the increase in existing traffic noise due to construction traffic is predicted to be greater than 2 dB(A) then further assessment using the NCG is required.

The project's construction traffic would access construction sites using only designated heavy vehicle routes such as the M4 Motorway, Elizabeth Drive and The Northern Road.

The volumes of construction traffic predicted to be generated by the project is outlined are outlined in the traffic assessment presented in Section 7.1.3 of the EIS. In summary, the traffic assessment indicates that at its peak the project would be expected to generate the following construction traffic volumes:

- approximately 230 light vehicle movements per day, predominately (it is assumed 95%) during daytime periods;
- up to 13 heavy vehicle movements per hour during day periods.

The traffic assessment also indicates that approximately 90% of all construction traffic would travel along The Northern Road and 10% along Elizabeth Drive.

Table 10-10 indicates the increase in traffic noise levels at receivers adjacent to the project arising from the addition of peak construction traffic volumes to existing traffic volumes. Table 10-10 indicates that construction traffic will not increase existing traffic noise levels by more than 2dB, and that therefore, that no further assessment of construction traffic noise impacts is required.

Management measures for controlling noise from construction traffic are outlined in Appendix C4 of the CNVG.

Table 10-10 Predicted increase in traffic noise due to additional construction traffic

Haul Route	Existing Traffic Volumes				Proposed Additional Construction Traffic Volumes				Increase in traffic noise	
	Day (7am-10pm)		Night (10pm-7am)		Day (7am-10pm)		Night (10pm-7am)		Day	Night
	Light	Heavy	Light	Heavy	Light	Heavy	Light	Heavy	dB(A)	dB(A)
Along The Northern Road, between…										
Glenmore Parkway and Bradley Street	16,764	2,354	2,347	503	197	176	10	49	0.2	0.3
Chain-O-Ponds Rd and Kings Hill Road	13,685	1,480	1,972	355	197	176	10	49	0.3	0.4
Littlefields Rd and Elizabeth Drive	11,859	1,357	1,667	319	197	176	10	49	0.3	0.4
Elizabeth Drive and Park Road	12,052	1,519	1,810	351	197	176	10	49	0.3	0.4
Park Rd and Blaxland Avenue	10,139	1,301	1,469	310	197	176	10	49	0.3	0.4
Along Elizabeth Drive										
East of The Northern Road	6,160	887	1,093	197	22	20	10	5	0.1	0.1

10.17 Construction noise and vibration management plan

A Construction Noise and Vibration Management Plan (CNVMP) would be prepared during the detailed design stage of the project and applied to all construction processes throughout the project.

The CNVMP would nominate:

- noise goals at all sensitive receivers;
- restrictions on the hours of construction activity;
- works programming that has the aim of minimising impacts on sensitive receivers;
- noise and vibration mitigation measures consistent with the RMS' CNVG;
- the project's commitments to noise and vibration monitoring and reporting;
- protocols for engaging and notifying residents of any work processes that may impact them;
- a complaints mechanism so that residents may contact the project manager;
- a protocol to enable the project to respond quickly to non-compliances.

11. Construction vibration assessment

11.1 Overview of vibration impact

The potential for vibration impact to either residents or buildings from the project may reasonably be expected to be contained to the construction phase of the project. The construction program is expected to include the use of equipment such as rock breakers, vibratory rollers and impact piling rigs that could give rise to vibration impact.

Vibration from the project's construction processes could potentially impact humans, buildings or other vibration-sensitive 'special uses' such as medical imaging or electronics facilities. However, all non-residential uses (including commercial properties) are sufficiently well removed from the project such that no impact to them are predicted. Residential receivers are the only type of receiver within the study area potentially affected by construction vibration.

The project's construction activities may give rise to three types of vibration impact, each of which is assessed against different standards. Vibration from construction works may:

- adversely affect human comfort: this is assessed EPA, *Assessing Vibration: A Technical Guideline* (DEC 2006);
- cause cosmetic damage (eg surface cracks) to conventional buildings such as residences and light commercial buildings: this risk is assessed against the guidance of Australian Standard AS2187.2-2006 *Explosives – Storage, Transport and Use provides guidance for the assessment of structural damage to buildings caused by vibration*, or
- cause cosmetic damage to buildings or structures of "particular sensitivity" (eg, heritage or structurally unsound items): for such structures, the assessment is made against German Standard DIN 4150: Part 3-1999.

No blasting is expected to be required in the construction of the project.

11.2 Vibration Criteria

Vibration criteria to ensure the preservation of human comfort

Vibration from construction activities should comply with the EPA vibration guideline and AS2670.2 (DEC 2006). The NSW EPA classifies vibration as one of three types:

- Continuous – Where vibration occurs uninterrupted and can include sources such as machinery and constant road traffic;
- Impulsive – Where vibration occurs over a short duration (typically less than 2 seconds) and occurs less than three times during the assessment period, which is not defined. This may include activities such as occasional dropping of heavy equipment or loading / unloading activities;
- Intermittent – Occurs where continuous vibration activities are regularly interrupted, or where impulsive activities recur. This may include activities such as rock hammering, drilling, pile driving and heavy vehicle or train pass-bys.

Maximum and preferred values for continuous and impulsive vibration are defined in Table 11.1. Application of the criteria considers the level as well as the duration of exposure and the time of day, and similar to the noise criteria, also has separate values for residential and non-residential receivers.

Table 11-1 Preferred and maximum weighted Roads and Maritime values for continuous and impulsive vibration acceleration (m/s^2) 1-80 Hz

Location	Assessment period	Preferred values		Maximum values	
		z-axis	x and y axis	z-axis	x and y axis
Continuous vibration					
Critical areas[2]	Day or night time	0.0050	0.0036	0.010	0.0072
Residences	Daytime	0.010	0.0071	0.020	0.014
	Night-time	0.007	0.005	0.014	0.010
Offices, schools, educational institutions and places of worship	Day or night time	0.020	0.014	0.040	0.028
Workshops	Day or night time	0.04	0.029	0.080	0.058
Impulsive vibration					
Critical areas[2]	Day or night time	0.0050	0.0036	0.010	0.0072
Residences	Daytime	0.30	0.21	0.60	0.42
	Night-time	0.10	0.071	0.20	0.14
Offices, schools, educational institutions and places of worship	Day or night time	0.64	0.46	1.28	0.92
Workshops	Day or night time	0.64	0.46	1.28	0.92

1. Daytime is 7.00am to 10.00pm and night-time is 10.00pm to 7.00am
2. For example, hospital operating theatres or precision laboratories.

Intermittent vibration impact may be present when continuous vibration sources operate sporadically throughout the assessment period. This type of impact is assessed using vibration dose values (VDVs). The VDV method is more sensitive to peaks in the acceleration waveform and makes corrections to the criteria based on the duration of the source's operation. The VDV is calculated using the overall weighted Roads and Maritime acceleration of the vibrating source in each orthogonal axis and the duration which the vibration occurs. Preferred and maximum VDVs are defined in Table 11-2 of DECC (2006) and are reproduced in Table 11-2.

Table 11-2 Acceptable vibration dose values for intermittent vibration ($ms^{-1.75}$)

Locations	Daytime (7.00am – 10.00pm)		Night-time (10.00pm – 7.00am)	
	Preferred values	Maximum values	Preferred values	Maximum values
Critical areas1	0.10	0.20	0.10	0.02
Residences	0.20	0.40	0.13	0.26
Offices, schools, educational institutions and places of worship	0.40	0.80	0.40	0.80
Workshops	0.80	1.60	0.80	1.60

1. Includes operating theatres, precision laboratories and other areas where vibration sensitive activities may occur.

Vibration criteria to ensure prevention of structural damage

The OEH vibration guideline does not address the potential for damage to structures. Instead, the Australian Standard AS2187.2-2006 Explosives – Storage, Transport and Use provides guidance for the assessment of structural damage to buildings caused by vibration. This section of the standard is based on the British Standard 7385: Part 2 Evaluation and measurement of vibration in buildings and is used as a guide to assess the likelihood of building damage from ground vibration including piling, compaction, construction equipment and road and rail traffic. The standard recommends levels at which 'cosmetic', 'minor' and 'major' categories of damage might occur based on the type of structure affected.

The standard uses the peak particle velocity (PPV) parameter to quantify vibration and specifies damage criteria for frequencies within the 4 Hz to 250 Hz range for buildings. The criteria levels identified in the standard are outlined in Table 11-3.

Table 11-3 BS 7385 Structural damage criteria

Group	Type of structure	Peak particle velocity (PPV) - mm/s		
		4Hz to 15Hz	15Hz to 40Hz	40Hz and above
1	Reinforced or framed structures Industrial and heavy commercial buildings	50		
2	Un-reinforced or light framed structures Residential or light commercial type buildings	15 to 20	20 to 50	50

The levels for structural damage outlined in the standard refer to non-continuous vibration sources and are considered 'safe limits' up to which no damage due to vibration effects are expected to occur for the various building types. Where vibration is continuous these levels may be reduced by up to 50 per cent and additional assessment against the standard would be necessary.

Where heritage structures are impacted, the German DIN Standard 4150-3 *Structural Vibration, Part 3*: *Effects of Vibration on Structures* can be used for guidance. This standard recommends guideline values for short term vibration impact on heritage structures and have been summarised Table 11-4.

Table 11-4 DIN 4150-3 Vibration guidelines for heritage buildings

Type of structure	Guideline values for velocity - mm/s			
	Vibration at the foundation at a frequency of			Vibration at the horizontal plane of the highest floor at all frequencies
	1 Hz to 10 Hz	10 Hz to 50 Hz	50 Hz to 100 Hz	
Heritage buildings	3	3 – 8	8 – 10	8

11.3 Construction Vibration Assessment

Where vibration intensive plant such as rock breakers and vibratory rollers are used, vibration must be managed to minimise disturbance to building occupants and to avoid damage to buildings and other structures. **Table 11-5** indicates the safe working distances recommended by the CNVG for typical items of vibration intensive plant that must be complied with unless otherwise approved by Roads and Maritime.

Table 11-5 Safe working distances for vibration intensive plant (TfNSW 2013)

Plant item	Rating/description	Safe working distance	
		Cosmetic damage (British Std 7385)	Human response (DECCW)
Vibratory roller	<50 kN (typically 1-2 t) <100 kN (typically 2-4 t) <200 kN (typically 4-6 t) <300 kN (typically 7-13 t) >300 kN (typically 13-18 t) >300 kN (> 18 t)	5 m 6 m 12 m 15 m 20 m 25 m	15 m to 20 m 20 m 40 m 100 m 100 m 100 m
Small hydraulic hammer	300 kg – 5 to 12 t excavator	2 m	7 m
Medium hydraulic hammer	900 kg – 12 to 18t excavator	7 m	23 m
Large hydraulic hammer	1600 kg – 18 to 34 t excavator	22 m	73 m
Vibratory pile driver	Sheet piles	2 m to 20 m	20 m
Pile boring	≤800 mm	2 m	n/a
Jackhammer	Hand held	1 m	Avoid contact with structure

The safe working distances presented in **Table 11-5** are indicative and will vary depending on the item of plant (particularly its power rating) and local geotechnical conditions. The cosmetic damage thresholds apply to typical buildings under typical geotechnical conditions and vibration monitoring is recommended at specific sites. Where structures are more sensitive such as heritage items, more stringent conditions may be applicable and should be considered individually.

In relation to human response, the safe working distances relate to continuous vibration. For most construction activities, vibration emissions are intermittent and higher vibration levels over shorter periods are acceptable. Additional assessment should be undertaken where the human response criteria are exceeded.

Vibration intensive plant scheduled to be operated during the construction program include:

- vibratory rollers during earthworks, bridge construction and other stages
- jack hammers during drainage works
- impact piling and rockbreaking during bridgeworks

Based on the safe working distances to preserve the structural integrity of dwellings recommended in **Table 11-5**, structural damage criteria will be complied with where vibratory rolling or rockbreaking is operated not closer than 22 m from any dwelling or sensitive structure.

Impact piling required for bridge works is expected to occur not closer than 190m to the nearest residence, and so, is not predicted to cause structural damage.

Vibratory rolling is expected to be undertaken within 100 m of residences for various stages of works (refer Table 10-5) and so may impact human comfort within those residences. In these cases, the procedures outlined in Appendix C of the CNVG are to be followed in order to mitigate any such potential impacts. These measures include notification strategies, vibration monitoring, offering of periods of respite and offering of alternative accommodation. These management measures would be identified and actioned at the detailed design stage.

Table 11-6 indicates the number of vibration-sensitive receivers that likely would be situated within the 22m (preservation of structural integrity of buildings) and 100m (protection of human comfort) safe working distances.

Counts of receivers within the 100m buffer zone includes those receivers also within the 22m buffer zone (i.e., receivers within 22m of the project are included in both counts). Counts of military buildings include all building types due to detailed building information not being available.

Table 11-6 Indicative count of receivers within safe working distances of vibration-intensive works

Noise Catchment Area	Number of receivers within Safe Working Distance for...					
	Preservation of structural integrity of buildings (22m buffer zone)			Protection of human comfort (100m buffer zone)		
	Residential	Commercial	Military	Residential	Commercial	Military
NCA 1	1			8		
NCA 2	20	2	35	63	3	44
NCA 3				6	1	
NCA 4				1		
NCA 5	4	2		15	3	
NCA 6						
NCA 7				1		
NCA 8	2			12		
Total	**27**	**4**	**35**	**106**	**7**	**44**

Potential for vibration impacts to heritage items

Detailed heritage assessments have been carried out for the project which identify the heritage items within and immediately adjacent to the project area. The heritage impact assessment is presented in detail in Chapter 8.4 of the EIS. In summary, it identifies four heritage items as being potentially impacted by the project. Direct impacts are expected to three of the heritage items and so, they are proposed to be subject to salvage excavations and will therefore, not be present at the time of construction of the project. The project would also be constructed over a buried section of the Warragamba Dam to Prospect Reservoir pipeline. No vibration impact upon the pipeline is expected from construction works due to its depth below ground.

The heritage assessment identifies that the general and site-specific mitigation measures listed would minimise impacts on non-Aboriginal heritage to an acceptable level to proceed with the project as assessed.

12. Overall impact summary

This section presents an overall summary of the noise and vibration impact assessment for each Noise Catchment Area (NCA).

12.1 NCA 1 – Glenmore Park & Orchard Hills (north)

NCA 1, located at the northern end of the study area, includes Glenmore Park and the northern part of Orchard Hills. Existing ambient noise within the northern part of the NCA is generally dominated by traffic noise from the M4 Motorway, and within the southern part of the NCA, by traffic noise from The Northern Road. In general, the background noise levels (RBLs) within the NCA are 48 dB(A) during the daytime and 44 dB(A) during the night time.

The project would redevelop the existing road corridor from one/two lanes each way (south/north of Glenmore Parkway) to four lanes each way, with the existing road corridor being widened mostly on its eastern side to accommodate the road upgrade.

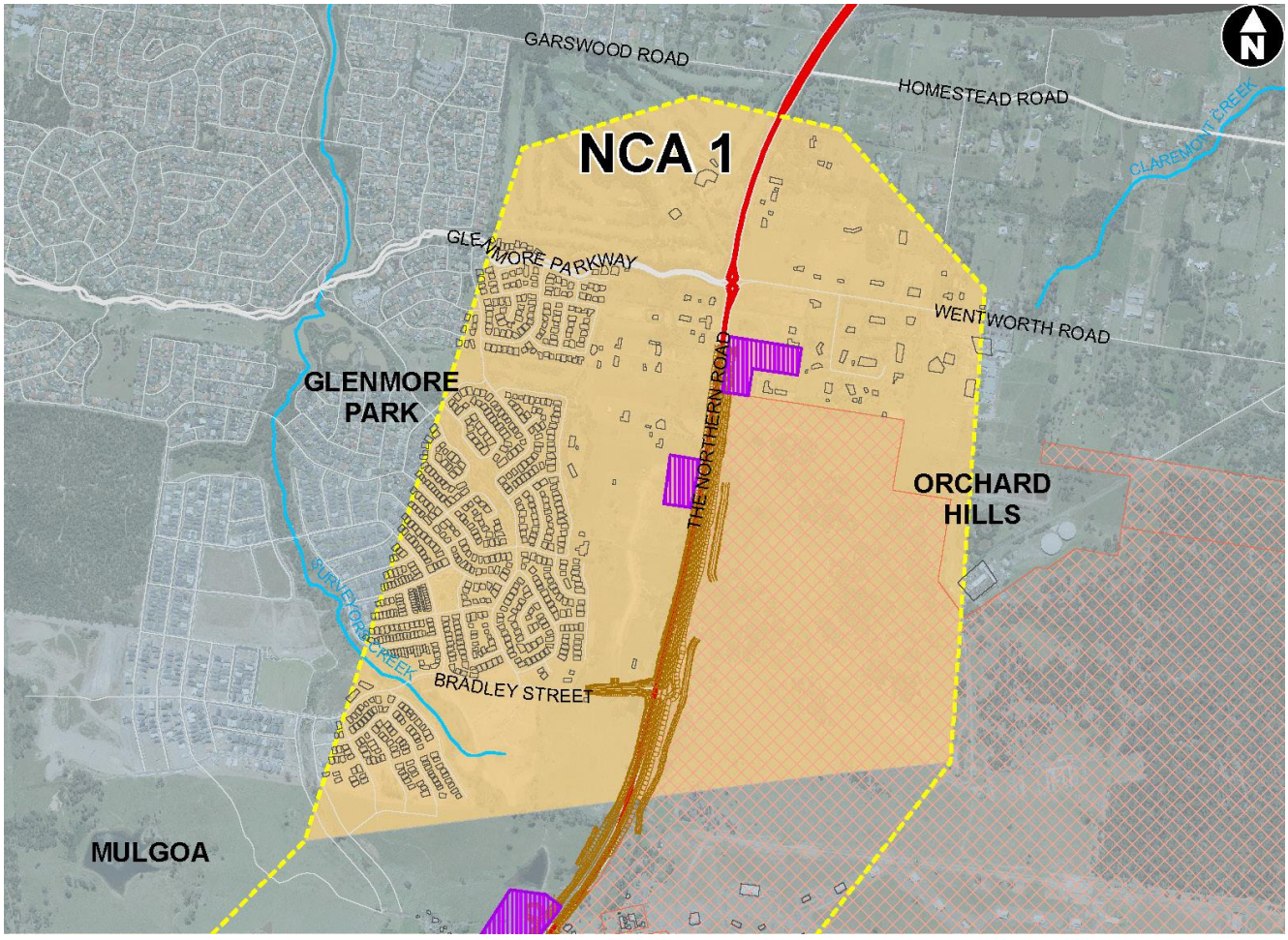


Figure 12-1 – Noise Catchment Area 1 - Glenmore Park and Orchard Hills (north)

12.1.1 Operational noise

Within NCA 1, as the road upgrade will not substantially realign the existing carriageway, the assessment of operational noise impacts to residences is based on applying redeveloped road criteria. These criteria are 60 dB(A) in the daytime and 55 dB(A) during the night time.

Operational noise levels (ie. noise from future traffic on the upgraded road) are predicted to be 66 dBA in the daytime and 60 dBA in the night-time for residences nearest the project in the north of the NCA. For residences nearest the road in the south of the NCA, operational noise levels are predicted to be 65 dBA in the daytime and 58 dBA in the night-time.

Without any noise mitigation one receiver (one individual building) qualifies for the consideration of noise mitigation due to the project increasing traffic noise levels. No receivers qualify for consideration of noise mitigation because they exceed the cumulative limit alone. An additional three receivers (three individual buildings) qualify because they exceed both of these criteria.

The installation of low noise pavements and noise barriers are not considered suitable noise mitigation in this NCA. The large separation distances between receivers that exceed the criteria means these mitigation measures are not reasonable or feasible.

Therefore, mitigation of operational noise impacts is required to be delivered as at-property acoustic treatments. In NCA 1, a total of four receivers (four individual buildings) qualify for at-property acoustic treatment.

Table 12-1 below summaries the assessment criteria, predicted noise levels and criteria exceedance for all receivers which have been identified as qualifying for at-property treatment within NCA 1.

Table 12-1 Predicted operational noise levels at receivers qualifying for at-property acoustic treatment.

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
2019 The Northern Rd Glenmore Park	GF	Residential	65	59	66	59	65	58	66	60	60	55	5	3	6	5
2023 The Northern Rd Glenmore Park	GF	Residential	64	58	64	58	64	57	65	59	60	55	4	2	5	4
1 Bradley St Glenmore Park	GF	Residential	63	56	63	57	63	56	65	58	60	55	3	1	5	3
2032 The Northern Rd Orchard Park	GF	Residential	60	53	60	54	62	55	63	57	60	55	2	0	3	2

At-property treatments typically provide 10 – 20 dB of noise reduction to the internal spaces of dwellings. The specific form of building treatment applied to achieve these reductions is determined for each dwelling individually based on their existing construction. Building treatments are more effective when applied to masonry structures than when applied to lightly clad timber frame structures. Caution should be exercised before providing treatments to buildings in a poor state of repair, as they may be less effective in these cases. Any acoustic treatments proposed would be considered in consultation with the landowner.

12.1.2 Construction noise

The project's construction activity within NCA 1 would include road corridor works and the operation of two ancillary facilities (C20 and C21). The offset distance of the nearest sensitive receivers (or land uses) to any works is approximately 40 metres. The catchment of receivers potentially affected by noise from the works extends 600 metres from the works area.

The level of noise at residences predicted to result from works during standard hours within NCA 1 is presented in **Table 12-2**.

Table 12-2 Predicted construction noise levels to residences during standard hours

NML (Standard Hours)	Construction Stage		Early works	Earthworks	Road work	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
58	Range of predicted noise levels (dB(A))		34-77	38-82	40-84	30-63	39-83	40-84	36-80	39-83	27-63
	Number of Residences	Complying	1194	1179	1164	1204	1175	1164	1188	1175	1204
		0-10 dBA above NML	16	27	41	7	31	41	20	31	7
		10-20 dBA above NML	1	4	5		4	5	2	4	
		20+ dBA above NML		1	1		1	1	1	1	
	Highly noise affected	≥75dBA	1	1	1		1	1	1	1	

Table 12-2 indicates that the worst-case noise level to any residence from any standard hours works is predicted to be 84 dB(A), due to paving and roadworks. Further away from the works, construction noise levels drop below the NML.

Table 12-2 also indicates that noise from works during standard hours is predicted to exceed the NML at 41 residences. Of these, the NML will be exceeded by between 10 - 20 dB(A) at five residences, and by more than 20 dB (A) at one residence.

The level of noise at residences predicted to result from out of hours works within NCA 1 is presented in **Table 12-3**.

Table 12-3 Predicted construction noise levels to residences during out of hours (OOH) works

NML (OOH)			OOH Work Stage			Sleep Disturbance Screening Criterion	OOH Work Stage		
			Bridge work	Paving	Ancillary Facilities only		Bridge work	Paving	Ancillary Facilities only
49	Range of predicted noise levels (dB(A))		30-63	35-79	27-63	59	33-66	39-83	30-66
	Number of Residences	Complying	1138	1034	1138		1199	1178	1199
		0-5 dBA above NML	57	137	57		10	21	10
		5-15 dBA above NML	16	35	16		2	11	2
		15-25 dBA above NML		4				1	
		≥25dBA above NML		1					

Table 12-3 indicates that the worst-case noise level to the nearest residence from any out of hours works is predicted to be 79 dB(A) due to paving works. Further away from the works, construction noise levels drop below the NML. As with other works, paving works are mobile and so noise from those works as perceived at any particular residence will rise and fall as the works progress along the alignment. This is discussed further in Section 10.4.

Table 12-3 also indicates that noise from out of hours works is predicted to exceed the NML at 137 residences. Of these, the NML will be exceeded by between 5 - 15 dB(A) at 35 residences, by between 15 - 25 dB(A) at four residences, and by more than 25 dB (A) at one residence.

Noise levels predicted from the operation of ancillary facilities will require that acoustic hoarding be applied to their entire perimeter to minimise noise impacts. The noise predictions in **Table 12-3** include the acoustic benefit of such hoarding; but indicate that exceedances of the NML are still expected at some receivers.

Table 12-3 indicates that the sleep disturbance screening criterion may be exceeded at up to ten residences within NCA 1.

There is one receiver located within the safe working (buffer) distance of vibration-intensive works proposed for the road corridor (eg, vibratory rolling). Vibration from such activates may trigger exceedances of the structural integrity vibration criteria within that residence. As a result, vibration monitoring should be undertaken at the residence prior to the commencement of works to ensure that vibration from construction processes are contained to acceptable limits.

Construction traffic will increase the noise on the surrounding roads by less than 0.5 dB(A). This means that the construction traffic noise impacts will be negligible. Therefore, no mitigation measures are required as a result.

At the detailed design stage, the project's CNVMP should specifically nominate the additional mitigation and community consultation measures it will apply to mitigate the predicted noise and vibration criteria exceedances identified above. In particular, the CNVMP should explicitly indicate how it will mitigate both the potential for sleep disturbance within residences and night time noise from ancillary facilities, including noise from heavy vehicles access or operating within them. The offer of alternative accommodation or at-property acoustic treatment may be required to be made to any receiver exposed to construction noise levels greater than 25 dB(A) above the NML during night periods. This is discussed further in **Section 10.15** along with the other additional mitigation measures the project shall be required to apply where residual noise impacts are expected to result even after the application of RMS standard mitigation measures.

12.2 NCA 2 – Mulgoa, Luddenham (north) & Orchard Hills (south)

NCA 2 extends from just south of Bradley Road to just north of Elizabeth Drive and incorporates Mulgoa, Luddenham and the southern part of Orchard Hills. Existing ambient noise within a few hundred metres of the alignment is generally dominated by traffic noise on the existing The Northern Road. Further from the alignment background noise levels will typically be controlled by noise from fauna. In general, the background noise levels (RBLs) within the NCA are 47 dB(A) during the daytime and 36 dB(A) during the night time.

The project would redevelop the existing road corridor from one/two lanes each way to three lanes each way, with the existing road corridor being widened mostly on its eastern side to accommodate the road upgrade. The widening would be to the west of the existing road corridor in the northern part of the NCA, near Glenmore Park.

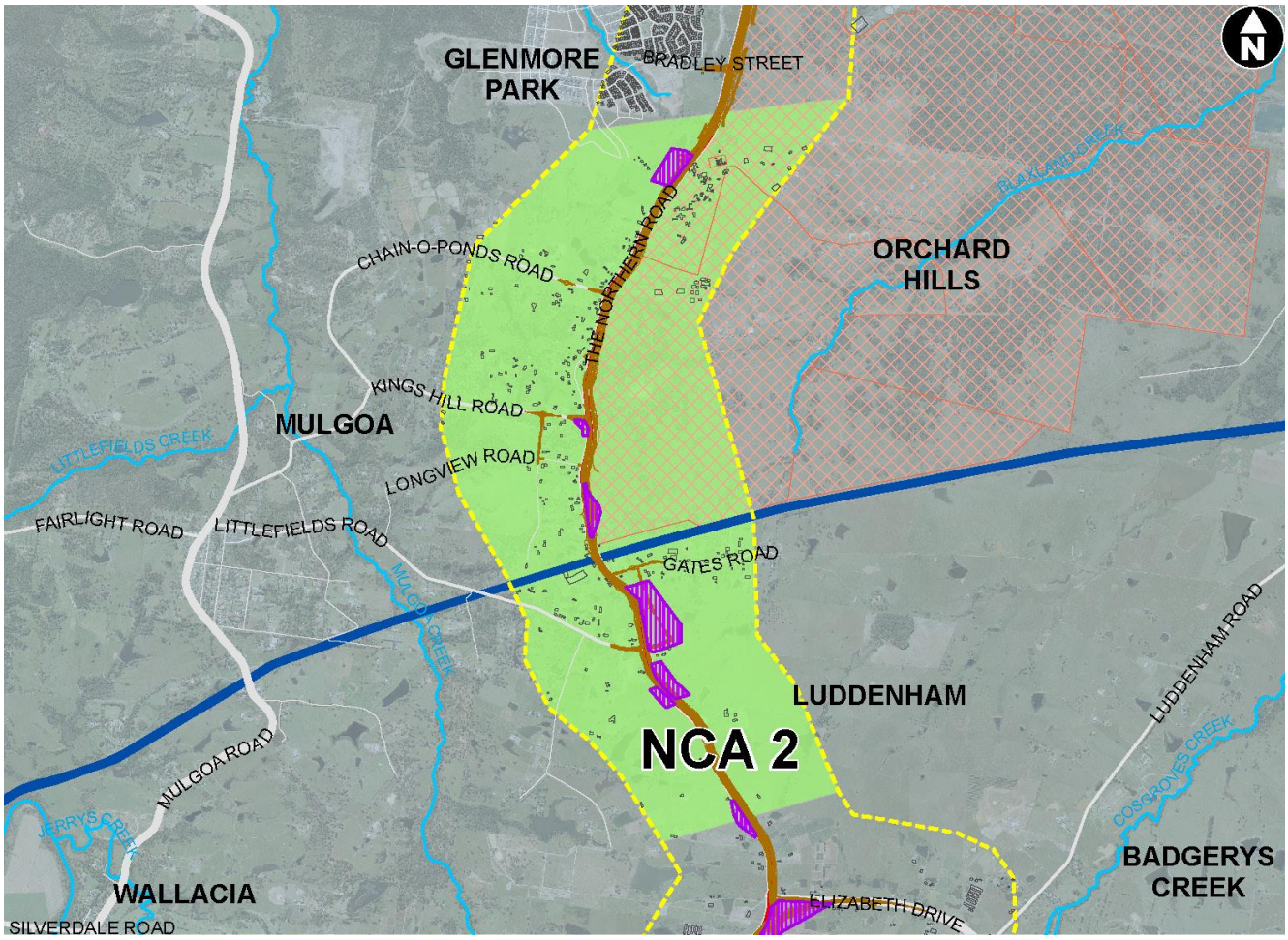


Figure 12-2 – Noise Catchment Area 2 – Mulgoa, Luddenham (north) and Orchard Hills (south)

12.2.1 Operational noise

Within NCA 2, as the road upgrade will not substantially realign the existing carriageway, the assessment of operational noise impacts to residences is based on applying redeveloped road criteria. These criteria are 60 dB(A) in the daytime and 55 dB(A) during the night time.

Operational noise levels (ie. noise from future traffic on the upgraded road) are predicted to be 63 dBA in the daytime and 56 dBA in the night-time for residences nearest the project in the north of the NCA. For residences nearest the road in the south of the NCA, operational noise levels are predicted to be 65 dBA in the daytime and 58 dBA in the night-time.

Without any noise mitigation five receivers (five individual building) qualify for the consideration of noise mitigation due to the project increasing traffic noise levels. No receivers qualify for consideration of noise mitigation because they exceed the cumulative limit alone. An additional 20 receivers (18 individual buildings) qualify because they exceed both of these criteria.

The installation of low noise pavements and noise barriers are not considered suitable noise mitigation in this NCA. The large separation distances between receivers that exceed the criteria means these mitigation measures are not reasonable or feasible.

Therefore, mitigation of operational noise impacts is required to be delivered as at-property acoustic treatments. In NCA 2, a total of 25 receivers (23 individual buildings) qualify for at-property acoustic treatment.

Table 12-4 below summaries the assessment criteria, predicted noise levels and criteria exceedance for all receivers which have been identified as qualifying for at-property treatment within NCA 2.

Table 12-4 Predicted operational noise levels at receivers qualifying for at-property acoustic treatment

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
2-18 Littlefields Rd (1) Luddenham	GF	Residential	61	54	60	55	61	54	63	56	60	55	1	0	3	1
2-18 Littlefields Rd (1) Luddenham	F1	Residential	63	56	63	57	65	58	67	60	60	55	5	3	7	5
2785-2787 The Northern Rd Luddenham	GF	Residential	63	56	63	57	63	56	65	58	60	55	3	1	5	3
2627-2635 The Northern Rd Mulgoa	GF	Residential	60	53	60	54	63	56	65	58	60	55	3	1	5	3
2627-2635 The Northern Rd Mulgoa	F1	Residential	62	55	63	56	65	58	67	60	60	55	5	3	7	5
2575-2579 The Northern Rd Mulgoa	GF	Residential	58	51	59	52	60	53	62	55	60	55	0	0	2	0
2567-2573 The Northern Rd (1) Mulgoa	GF	Residential	63	56	63	57	65	58	67	60	60	55	5	3	7	5
2561 The Northern Rd (1) Mulgoa	GF	Residential	57	50	57	51	59	52	61	54	60	55	0	0	1	0
2529-2537 The Northern Rd Mulgoa	GF	Residential	64	57	65	58	64	56	65	59	60	55	4	1	5	4
2 Longview Rd (3) Mulgoa	GF	Residential	64	57	64	58	63	55	65	58	60	55	3	0	5	3
4 Grover Cr (1) Mulgoa	F1	Residential	58	51	59	52	59	52	61	54	60	55	0	0	1	0
2359-2365 The Northern Rd Mulgoa	GF	Residential	65	58	66	59	65	58	66	60	60	55	5	3	6	5
2351-2357 The Northern Rd (4) Mulgoa	GF	Residential	66	60	67	61	65	58	67	60	60	55	5	3	7	5
2345-2349 The Northern Rd Mulgoa	GF	Residential	65	58	66	60	64	57	66	59	60	55	4	2	6	4
2309-2317 The Northern Rd (1) Mulgoa	GF	Residential	65	59	66	60	64	57	66	59	60	55	4	2	6	4
2289-2293 The Northern Rd (1) Mulgoa	GF	Residential	65	58	65	59	64	57	66	59	60	55	4	2	6	4
Lot3/DP29081	GF	Residential	66	59	66	60	65	58	66	60	60	55	5	3	6	5

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
2297-2307 The Northern Rd (2) Mulgoa	GF	Residential	67	60	67	61	65	58	67	60	60	55	5	3	7	5
2373-2379(4) The Northern Rd Mulgoa	GF	Residential	68	61	69	62	66	59	68	61	60	55	6	4	8	6
1 Gates Rd (1) Mulgoa	GF	Residential	61	54	61	55	62	55	64	57	60	55	2	0	4	2
2580-2592 The Northern Rd Mulgoa	GF	Residential	63	57	64	58	65	58	68	61	60	55	5	3	8	6
2751 The Northern Rd Luddenham	GF	Residential	60	53	60	54	61	54	63	56	60	55	1	0	3	1
2751 The Northern Rd (1) Luddenham	GF	Residential	65	58	66	59	67	60	69	62	60	55	7	5	9	7
2587 The Northern Rd (1) Luddenham	GF	Residential	64	57	65	59	66	58	68	61	60	55	6	3	8	6
2295 The Northern Road Mulgoa	GF	Residential	66	59	66	60	64	57	66	59	60	55	4	2	6	4

At-property treatments typically provide 10 – 20 dB of noise reduction to the internal spaces of dwellings. The specific form of building treatment applied to achieve these reductions is determined for each dwelling individually based on their existing construction. Building treatments are more effective when applied to masonry structures than when applied to lightly clad timber frame structures. Caution should be exercised before providing treatments to buildings in a poor state of repair, as they may be less effective in these cases. Any treatments proposed would be considered in consultation with the landowner.

12.2.2 Construction noise

The project's construction activity within NCA 2 would include road corridor works and the operation of seven ancillary facilities (C13 and C19). The offset distance of the nearest sensitive receivers (or land uses) to any works is approximately 15 metres. The catchment of receivers potentially affected by noise from the works extends 600 metres from the works area.

The level of noise at residences predicted to result from works during standard hours within NCA 2 is presented in Table 12-5.

Table 12-5 Predicted construction noise levels to residences during standard hours

NML (Standard Hours)	Construction Stage									
			Early works	Earthworks	Road work	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
57	Range of predicted noise levels (dB(A))		39-78	44-83	46-85	34-61	45-84	46-85	42-81	45.84	34-61
	Number of Residences	Complying	63	47	39	128	44	39	55	44	128
		0-10 dBA above NML	39	30	34	9	32	34	32	32	9
		10-20 dBA above NML	33	50	50		49	50	46	46	
		20+ dBA above NML	2	10	14		12	14	4	4	
	Highly noise affected	≥75dBA	4	15	25		17	25	10	10	

Table 12-5 indicates that the worst-case noise level to any residence from any standard hours works is predicted to be 85 dB(A), due to paving and roadworks. Further away from the works, construction noise levels drop below the NML.

Error! Reference source not found. Table 12-5 also indicates that noise from works during standard hours is redicted to exceed the NML at 98 residences. Of these, the NML will be exceeded by between 10 - 20 dB(A) at 50 residences, and by more than 20 dB (A) at 14 residences.

The level of noise at residences predicted to result from out of hours works within NCA 2 is presented in **Table 12-6**.

Table 12-6 Predicted construction noise levels to residences during out of hours (OOH) works

NML (OOH)		OOH Work Stage			Sleep Disturbance Screening Criterion	OOH Work Stage		
		Bridge work	Paving	Ancillary Facilities only		Bridge work	Paving	Ancillary Facilities only
41	Range of predicted noise levels (dB(A))	34-61	41-80	34-61	51	37-64	45-84	37-64
	Number of Residences – Complying	22	1	22		79	15	79
	0-5 dBA above NML	44	11	44		39	24	39
	5-15 dBA above NML	60	43	60		19	34	19
	15-25 dBA above NML	11	32	11			50	
	≥25dBA above NML		50				14	

Table 12-6 indicates that the worst-case noise level to the nearest residence from any out of hours works is predicted to be 80 dB(A) due to paving works. Further away from the works, construction noise levels drop below the NML. As with other works, paving works are mobile and so noise from those works as perceived at any particular residence will rise and fall as the works progress along the alignment. This is discussed further in Section 10.4.

Table 12-6 also indicates that noise from out of hours works is predicted to exceed the NML at 116 residences. Of these, the NML will be exceeded by between 5 - 15 dB(A) at 43 residences, by between 15 - 25 dB(A) at 32 residences, and by more than 25 dB (A) at 50 residences.

Noise levels predicted from the operation of ancillary facilities will require that acoustic hoarding be applied to their entire perimeter to minimise noise impacts. The noise predictions in **Table 12-3** include the acoustic benefit of such hoarding; but indicate that exceedances of the NML are still expected at some receivers.

Table 12-6 indicates that the sleep disturbance screening criterion may be exceeded at up to 58 residences within NCA 2.

There are 57 receivers located within the safe working (buffer) distance of vibration-intensive works proposed for the road corridor (eg, vibratory rolling). Vibration from such activities may trigger exceedances of the structural integrity vibration criteria within that residence. As a result, vibration monitoring should be undertaken at the residence prior to the commencement of works to ensure that vibration from construction processes are contained to acceptable limits.

Construction traffic will increase the noise on the surrounding roads by less than 0.5 dB(A). This means that the construction traffic noise impacts will be negligible. Therefore, no mitigation measures are required as a result.

At the detailed design stage, the project's CNVMP should specifically nominate the additional mitigation and community consultation measures it will apply to mitigate the predicted noise and vibration criteria exceedances identified above. In particular, the CNVMP should explicitly indicate how it will mitigate both the potential for sleep disturbance within residences and night time noise from ancillary facilities, including noise from heavy vehicles access or operating within them. The offer of alternative accommodation or at-property acoustic treatment may be required to be made to any receiver exposed to construction noise levels greater than 25 dB(A) above the NML during night periods. This is discussed further in **Section 10.15** along with the other additional mitigation measures the project shall be required to apply where residual noise impacts are expected to result even after the application of RMS standard mitigation measures.

12.3 NCA 3 – Luddenham (north)

NCA 3 is centred on the Elizabeth Drive/The Northern Road junction in the northern section of Luddenham. Existing ambient noise within this NCA is generally dominated by noise from traffic conveyed on Elizabeth Drive and the existing The Northern Road. In general, the background noise levels (RBLs) within NCA 3 are 46 dB(A) during the daytime and 35 dB(A) during the night time.

To the north of Elizabeth Drive, the project would redevelop the existing road corridor from one/two lanes each way to three lanes each way, with the existing road corridor being widened mostly on its eastern side to accommodate the road upgrade. South of Elizabeth Drive, the project would introduce a new bypass to the east of the existing The Northern Road (that segment of the project coloured brown in **Figure 12-3**).

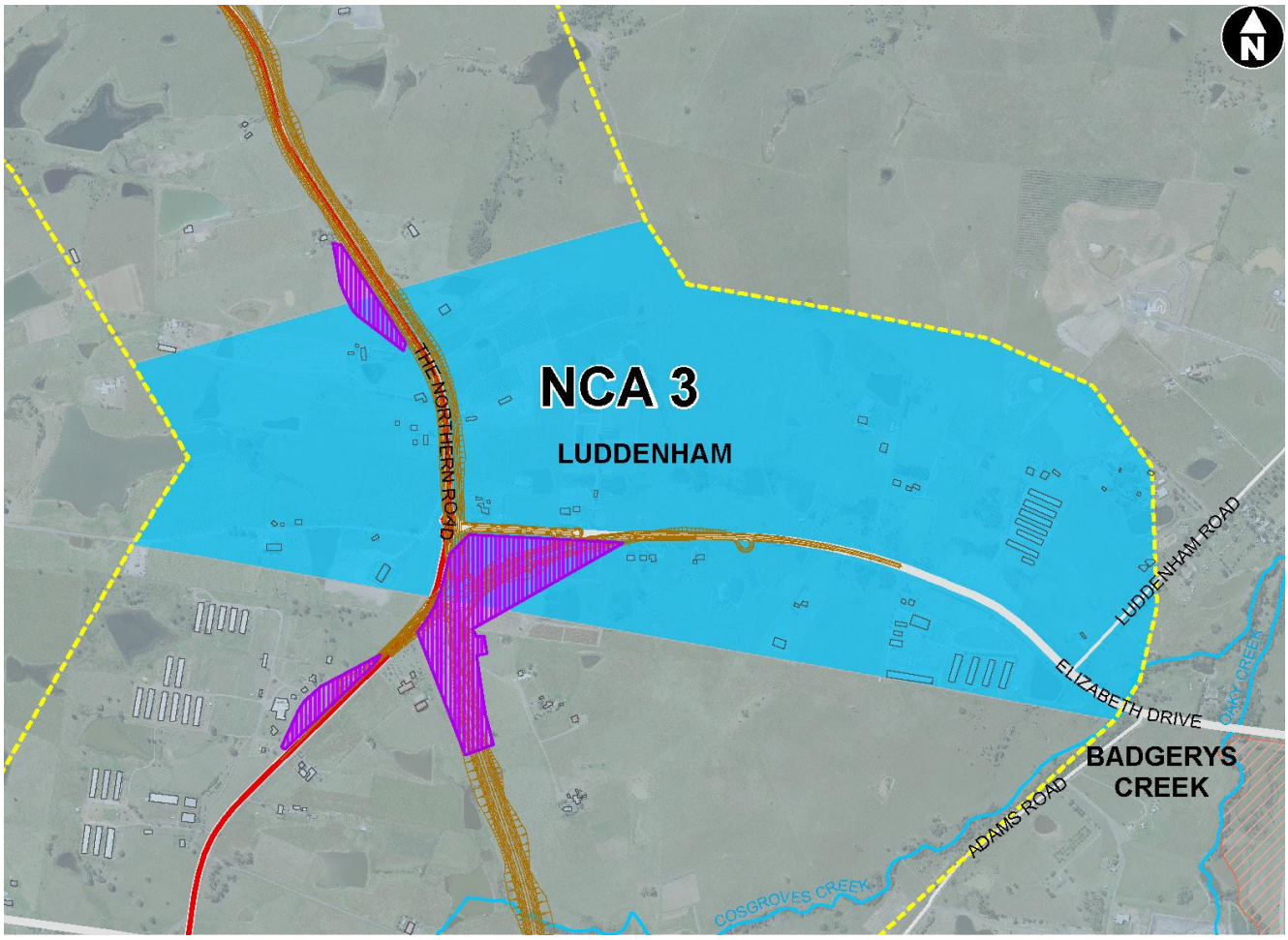


Figure 12-3 Noise Catchment Area 3 – Luddenham (north)

12.3.1 Operational noise

As that section of the road upgrade north of Elizabeth Drive will not substantially realign the existing carriageway, the assessment of operational noise impacts to residences north of Elizabeth Drive is based on applying redeveloped road criteria. These criteria are 60 dB(A) in the daytime and 55 dB(A) during the night time. New road criteria are applied to residences south of Elizabeth Drive as, in this section, the project will be introduced as a new road (a new bypass) well outside of the existing road corridor. These criteria are 55 dB(A) in the daytime and 50 dB(A) during the night time. Noise criteria for residences located between these two regions (ie. within the transition zone) are incremented appropriately to ensure that adjacent residences do not have significantly differing criteria. (Transition zone criteria are explained in more detail in **Section 5.2.1**).

Operational noise levels (ie. noise from future traffic on the upgraded road) are predicted to be 67 dBA in the daytime and 60 dBA in the night-time for residences nearest the project in the north of the NCA. For residences nearest the road in the south of the NCA, operational noise levels are predicted to be 66 dBA in the daytime and 58 dBA in the night-time.

Without any noise mitigation one receiver (one individual building) qualifies for the consideration of noise mitigation due to the project increasing traffic noise levels. No receivers qualify for consideration of noise mitigation because they exceed the cumulative limit alone. An additional four receivers (three individual buildings) qualify because they exceed both of these criteria.

The installation of low noise pavements and noise barriers are not considered suitable noise mitigation in this NCA. The large separation distances between receivers that exceed the criteria means these mitigation measures are not reasonable or feasible.

Therefore, mitigation of operational noise impacts is required to be delivered as at-property acoustic treatments. In NCA 3, a total of five receivers (four individual buildings) qualify for at-property acoustic treatment.

Table 12-7 below summaries the assessment criteria, predicted noise levels and criteria exceedance for the five receivers which have been identified as qualifying for at-property treatment within NCA 3.

Table 12-7 Predicted operational noise levels at receivers qualifying for at-property acoustic treatment

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
2843-2857 The Northern Rd (4) Luddenham	GF	Residential	63	56	63	57	64	57	66	58	60	55	4	2	6	3
2825-2841 The Northern Rd (5) Luddenham	GF	Residential	64	57	64	58	65	58	67	60	60	55	5	3	7	5
2311-2337 Elizabeth Dr (1) Luddenham	GF	Residential	61	57	63	54	62	55	64	56	56	51	6	4	8	5
2311-2337 Elizabeth Dr (1) Luddenham	F1	Residential	65	56	65	58	64	57	66	58	56	51	8	6	10	7
2859 The Northern Rd (1) Luddenham	GF	Residential	57	50	56	49	56	49	58	51	56	51	0	0	2	0

At-property treatments typically provide 10 – 20 dB of noise reduction to the internal spaces of dwellings. The specific form of building treatment applied to achieve these reductions is determined for each dwelling individually based on their existing construction. Building treatments are more effective when applied to masonry structures than when applied to lightly clad timber frame structures. Caution should be exercised before providing treatments to buildings in a poor state of repair, as they may be less effective in these cases. Any treatments proposed would be considered in consultation with the landowner.

12.3.2 Construction noise

The project's construction activity within NCA 3 would include road corridor works and the operation of two ancillary facilities (C10 and C13). The offset distance of the nearest sensitive receivers (or land uses) to any works is approximately 35 metres. The catchment of receivers potentially affected by noise from the works extends 600 metres from the works area.

The level of noise at residences predicted to result from works during standard hours within NCA 3 is presented in **Table 12-8**.

Table 12-8 Predicted construction noise levels to residences during standard hours

NML (Standard Hours)	Construction Stage									
			Early works	Earthworks	Road work	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
56	Range of predicted noise levels (dB(A))		43-73	48-78	50-80	43-61	49-79	50-80	46-76	49-79	35-61
	Number of Residences	Complying	10	6	4	20	4	4	7	4	20
		0-10 dBA above NML	5	8	7	3	10	7	8	10	3
		10-20 dBA above NML	8	7	9		7	9	8	7	
		20+ dBA above NML		2	3		2	3		2	
	Highly noise affected	≥75dBA		2	6		3	6	1	3	

Table 12-8 indicates that the worst-case noise level to any residence from any standard hours works is predicted to be 80 dB(A), due to paving and roadworks. Further away from the works, construction noise levels drop below the NML.

Table 12-8 also indicates that noise from works during standard hours is predicted to exceed the NML at 19 residences. Of these, the NML will be exceeded by between 10 - 20 dB(A) at nine residences, and by more than 20 dB (A) at three residences.

The level of noise at residences predicted to result from out of hours works within NCA 3 is presented in **Table 12-9**.

Table 12-9 Predicted construction noise levels to residences during out of hours (OOH) works

NML (OOH)		OOH Work Stage			Sleep Disturbance Screening Criterion	OOH Work Stage		
		Bridge work	Paving	Ancillary Facilities only		Bridge work	Paving	Ancillary Facilities only
40	Range of predicted noise levels (dB(A))	35-61	45-75	35-61	50	38-64	49-79	38-64
	Number of Residences – Complying	6		6		12	2	12
	0-5 dBA above NML	6		6		4	2	4
	5-15 dBA above NML	7	7	7		7	7	7
	15-25 dBA above NML	4	8	4			9	
	≥25dBA above NML		8				3	

Table 12-9 indicates that the worst-case noise level to the nearest residence from any out of hours works is predicted to be 75 dB(A) due to paving works. Further away from the works, construction noise levels drop below the NML. As with other works, paving works are mobile and so noise from those works as perceived at any particular residence will rise and fall as the works progress along the alignment. This is discussed further in Section 10.4.

Table 12-9 also indicates that noise from out of hours works is predicted to exceed the NML at 23 residences. Of these, the NML will be exceeded by between 5 - 15 dB(A) at seven residences, by between 15 - 25 dB(A) at eight residences, and by more than 25 dB (A) at eight residences.

Noise levels predicted from the operation of ancillary facilities will require that acoustic hoarding be applied to their entire perimeter to minimise noise impacts. The noise predictions in **Table 12-9** include the acoustic benefit of such hoarding; but indicate that exceedances of the NML are still expected at some receivers.

Table 12-9 indicates that the sleep disturbance screening criterion may be exceeded at up to 21 residences within NCA 3.

There are no receivers located within the safe working (buffer) distance of vibration-intensive works proposed for the road corridor (eg, vibratory rolling). As such, vibration monitoring at residences prior to the commencement of the vibration–intensive works proposed will not be required necessarily.

Construction traffic will increase the noise on the surrounding roads by less than 0.5 dB(A). This means that the construction traffic noise impacts will be negligible. Therefore, no mitigation measures are required as a result.

At the detailed design stage, the project's CNVMP should specifically nominate the additional mitigation and community consultation measures it will apply to mitigate the predicted NML exceedances identified above. In particular, the CNVMP should explicitly indicate how it will mitigate both the potential for sleep disturbance within residences and night time noise from ancillary facilities, including noise from heavy vehicles access or operating within them. The offer of alternative accommodation or at-property acoustic treatment may be required to be made to any receiver exposed to construction noise levels greater than 25 dB(A) above the NML during night periods. This is discussed further in **Section 10.15** along with the other additional mitigation measures the project shall be required to apply where residual noise impacts are expected to result even after the application of RMS standard mitigation measures.

12.4 NCA 4 – Luddenham (west)

NCA 4 is located immediately east of the proposed bypass, itself, to the east of the Luddenham township. NCA 4 extends south from Elizabeth Drive to just south of Luddenham. Existing ambient noise within the NCA is determined by noise from traffic on the existing The Northern Road, and to some extent, Adams Road as well as by local fauna. In general, the background noise levels (RBLs) within the NCA are 37 dB(A) during the daytime and 37 dB(A) during the night time.

The project proposes a new (2 x 3 lanes) bypass in this area, which would align with the western boundary of NCA 4.

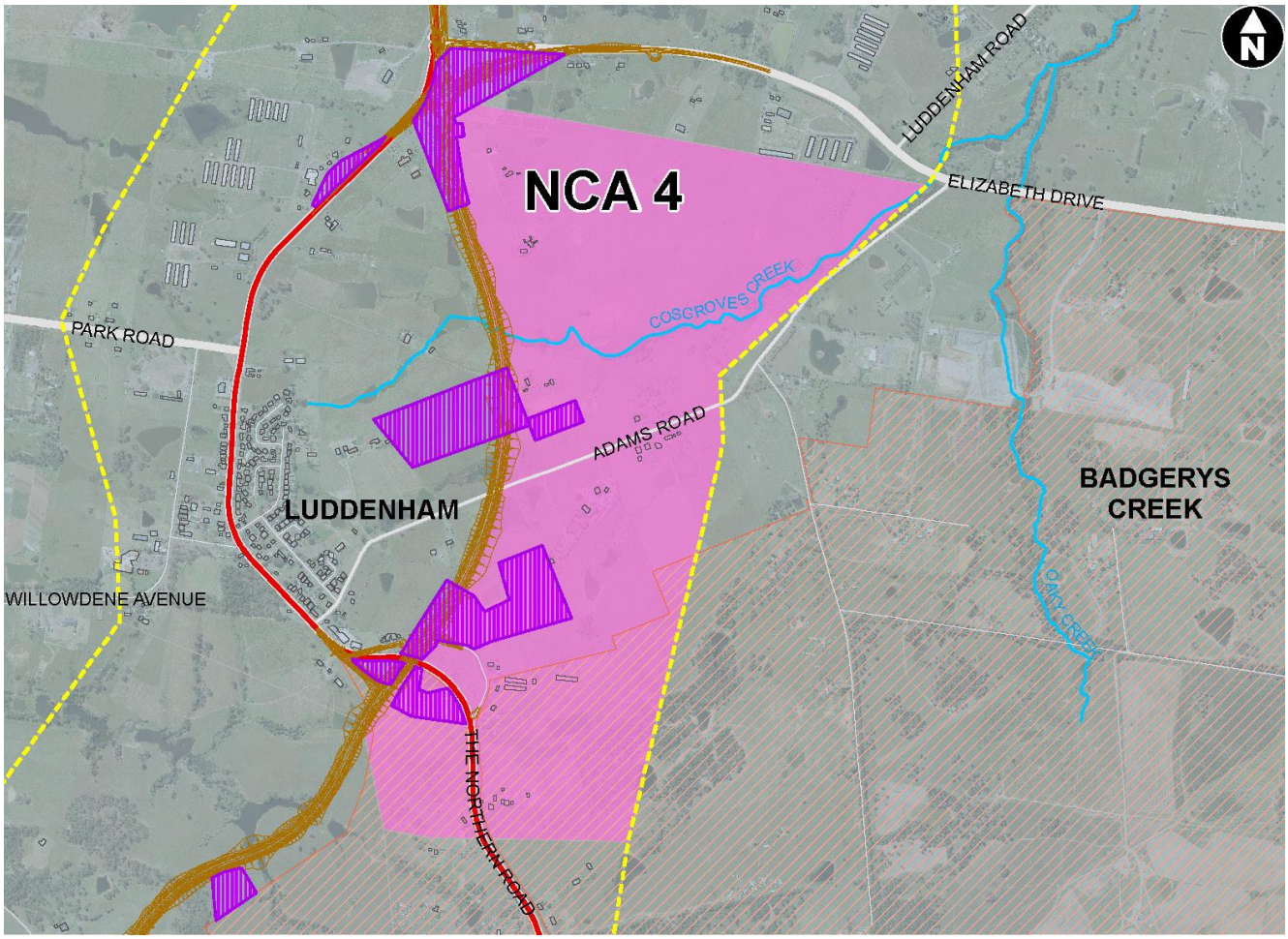


Figure 12-4 Noise Catchment Area 4 – Luddenham (west)

12.4.1 Operational noise

Within NCA 4, as the project will introduce a new bypass road, the assessment of operational noise impacts at residences is based on applying new road criteria. These criteria are 55 dB(A) in the daytime and 50 dB(A) during the night time.

Operational noise levels (ie. noise from future traffic on the upgraded road) are predicted to be 60 dBA in the daytime and 53 dBA in the night-time for residences nearest the project in the north of the NCA. For residences nearest the road in the south of the NCA, operational noise levels are predicted to be 56 dBA in the daytime and 50 dBA in the night-time.

Without any noise mitigation four receivers (four individual building) qualify for the consideration of noise mitigation due to the project increasing traffic noise levels. No receivers qualify for consideration of noise mitigation because they exceed the cumulative limit alone. An additional one receiver (one individual building) qualifies because they exceed both of these criteria.

The installation of low noise pavements and noise barriers are not considered suitable noise mitigation in this NCA. The large separation distances between receivers that exceed the criteria means these mitigation measures are not reasonable or feasible.

Therefore, mitigation of operational noise impacts is required to be delivered as at-property acoustic treatments. In NCA 4, a total of five receivers (five individual buildings) qualify for at-property acoustic treatment.

Table 12-10 below summaries the assessment criteria, predicted noise levels and criteria exceedance for all receivers which have been identified as qualifying for at-property treatment within NCA 4.

Table 12-10 Predicted operational noise levels at receivers qualifying for at-property acoustic treatment

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
140 Adams Rd (1) Luddenham	GF	Residential	46	39	45	39	58	51	60	53	55	50	3	1	5	3
2422-2430 The Northern Rd (3) Luddenham	GF	Residential	52	45	49	45	55	48	57	50	55	50	0	0	2	0
2420 The Northern Rd (2) Luddenham	GF	Residential	49	42	48	42	57	49	58	51	55	50	2	0	3	1
105-115 Adams Rd Luddenham	GF	Residential	47	40	47	41	55	48	57	50	55	50	0	0	2	0
125 Adams Rd (3) Luddenham	GF	Residential	48	41	50	43	54	47	56	49	55	50	0	0	1	0

At-property treatments typically provide 10 – 20 dB of noise reduction to the internal spaces of dwellings. The specific form of building treatment applied to achieve these reductions is determined for each dwelling individually based on their existing construction. Building treatments are more effective when applied to masonry structures than when applied to lightly clad timber frame structures. Caution should be exercised before providing treatments to buildings in a poor state of repair, as they may be less effective in these cases. Any treatments proposed would be considered in consultation with the landowner.

12.4.2 Construction noise

The project's construction activity within NCA 4 would include road corridor works and the operation of four ancillary facilities (C7 to C10). The offset distance of the nearest sensitive receivers (or land uses) to any works is approximately 10 metres. The catchment of receivers potentially affected by noise from the works extends 600 metres from the works area.

The level of noise at residences predicted to result from works during standard hours within NCA 4 is presented in **Table 12-11**.

Table 12-11 Predicted construction noise levels to residences during standard hours

NML (Standard Hours)	Construction Stage									
			Early works	Earthworks	Road work	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
47	Range of predicted noise levels (dB(A))		49-63	50-68	52-67	52-65	51-66	52-67	50-63	51-66	46-60
	Number of Residences	Complying									1
		0-10 dBA above NML	13	9	8	6	8	8	10	8	14
		10-20 dBA above NML	3	6	7	10	8	7	6	8	1
		20+ dBA above NML		1	1			1			
	Highly noise affected	≥75dBA									

Table 12-11 indicates that the worst-case noise level to any residence from any standard hours works is predicted to be 68 dB(A), due to roadworks. Further away from the works, construction noise levels drop below the NML.

Table 12-11 also indicates that noise from works during standard hours is predicted to exceed the NML at 16 residences. Of these, the NML will be exceeded by between 10 - 20 dB(A) at seven residences, and by more than 20 dB (A) at one residence.

The level of noise at residences predicted to result from out of hours works within NCA 4 is presented in **Table 12-12**.

Table 12-12 Predicted construction noise levels to residences during out of hours (OOH) works

NML (OOH)		OOH Work Stage			Sleep Disturbance Screening Criterion	OOH Work Stage		
		Bridge work	Paving	Ancillary Facilities only		Bridge work	Paving	Ancillary Facilities only
42	Range of predicted noise levels (dB(A))	46-60	50-62	46-60	52	49-63	53-68	49-63
	Number of Residences – Complying					1		1
	Number of Residences – 0-5 dBA above NML	1		1		11	8	11
	Number of Residences – 5-15 dBA above NML	14	11	14		4	7	4
	Number of Residences – 15-25 dBA above NML	1	5	1			1	
	Number of Residences – ≥25dBA above NML							

Table 12-12 indicates that the worst-case noise level to the nearest residence from any out of hours works is predicted to be 62 dB(A) due to paving works. As with other works, paving works are mobile and so noise from those works as perceived at any particular residence will rise and fall as the works progress along the alignment. This is discussed further in Section 10.4.

Table 12-12 also indicates that noise from out of hours works is predicted to exceed the NML at 16 residences. Of these, the NML will be exceeded by between 5 - 15 dB(A) at 11 residences, by between 15 - 25 dB(A) at 5 residences, with no residences exceeding the NML by more than 25 dB(A).

Noise levels predicted from the operation of ancillary facilities will require that acoustic hoarding be applied to their entire perimeter to minimise noise impacts. The noise predictions in **Table 12-12** include the acoustic benefit of such hoarding; but indicate that exceedances of the NML are still expected at some receivers.

Table 12-12 indicates that the sleep disturbance screening criterion may be exceeded at up to 16 residences within NCA 4.

There are no receivers located within the safe working (buffer) distance of vibration-intensive works proposed for the road corridor (eg, vibratory rolling). As such, vibration monitoring at residences prior to the commencement of the vibration–intensive works proposed will not be required necessarily.

Construction traffic will increase the noise on the surrounding roads by less than 0.5 dB(A). This means that the construction traffic noise impacts will be negligible. Therefore, no mitigation measures are required as a result.

At the detailed design stage, the project's CNVMP should specifically nominate the additional mitigation and community consultation measures it will apply to mitigate the predicted noise and vibration criteria exceedances identified above. In particular, the CNVMP should explicitly indicate how it will mitigate both the potential for sleep disturbance within residences and night time noise from ancillary facilities, including noise from heavy vehicles access or operating within them. The additional mitigation measures the project shall be required to apply where residual noise impacts are expected to result even after the application of RMS standard mitigation measures is discussed further in **Section 10.15**.

12.5 NCA 5 – Luddenham township

NCA 5 is centred on the township of Luddenham and extends from the southern side of Elizabeth Drive to the township's southern edge. Existing ambient noise within the NCA is generally determined by noise from traffic conveyed on the existing The Northern Road, and to some extent also traffic on Adams Road and Park Road. In general, the background noise levels (RBLs) within the NCA are 42 dB(A) during the daytime and 34 dB(A) during the night time.

The project proposes a new (2 x 3 lanes) bypass in this area, which would align with the eastern boundary of NCA 5.

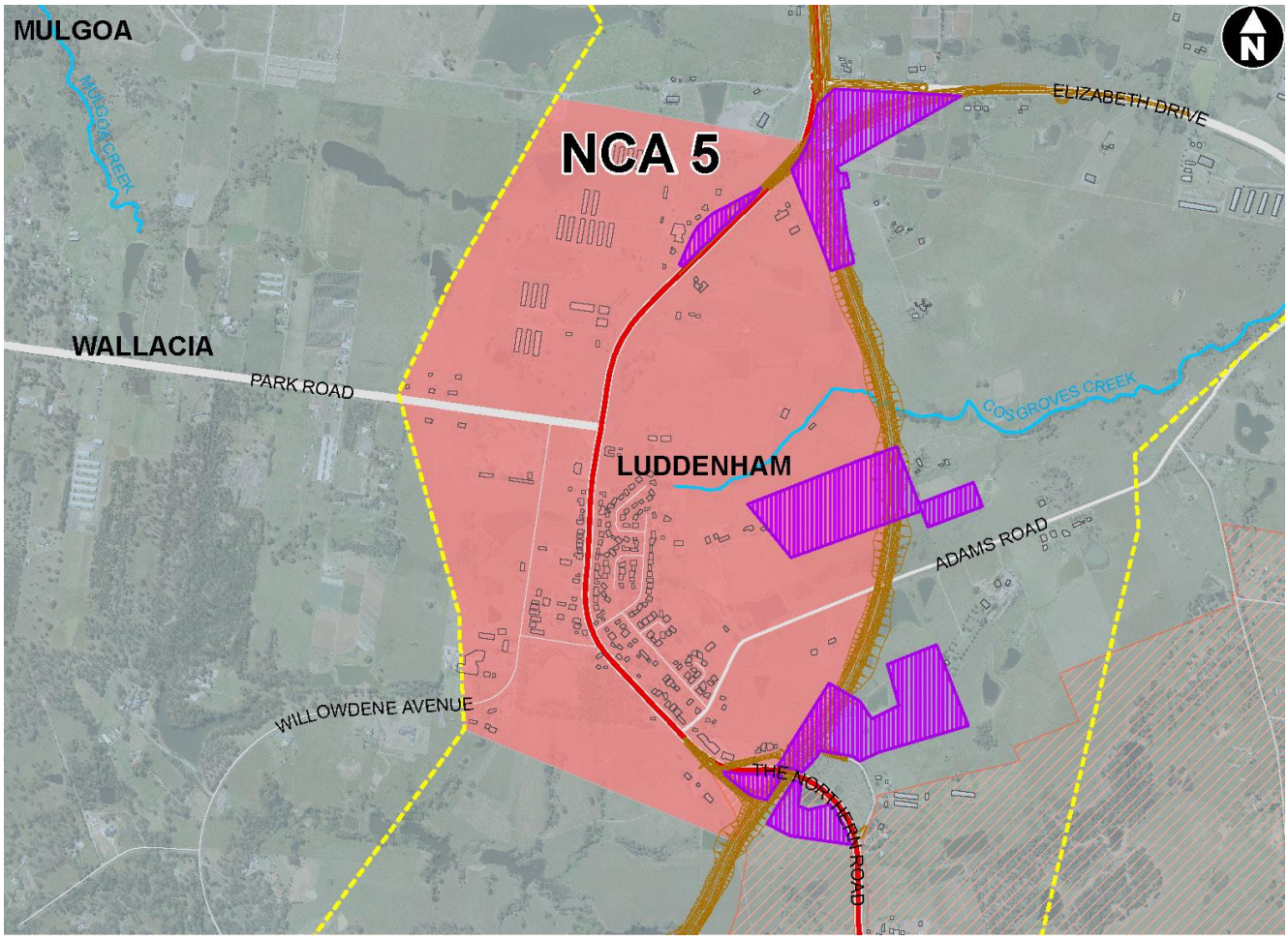


Figure 12-5 Noise Catchment Area 5 – Luddenham township

12.5.1 Operational noise

As the project will introduce a new road (the township bypass), the assessment of operational noise impacts at residences within the NCA is based on applying new road criteria. These criteria are 55 dB(A) in the daytime and 50 dB(A) during the night time. The daytime noise criterion for schools is 50 dB(A).

Operational noise levels (ie. noise from future traffic on the upgraded road) are predicted to be 61 dBA in the daytime and 55 dBA in the night-time for residences nearest the project in the north of the NCA. For residences nearest the road in the south of the NCA, operational noise levels are predicted to be 62 dBA in the daytime and 56 dBA in the night-time.

Without any noise mitigation five receivers (five individual building) qualify for the consideration of noise mitigation due to the project increasing traffic noise levels. No receivers qualify for consideration of noise mitigation because they exceed the cumulative limit alone. An additional four receivers (four individual buildings) qualify because they exceed both of these criteria.

The installation of low noise pavements and noise barriers are not considered suitable noise mitigation in this NCA. The large separation distances between receivers that exceed the criteria means these mitigation measures are not reasonable or feasible.

Therefore, mitigation of operational noise impacts is required to be delivered as at-property acoustic treatments. In NCA 5, a total of nine receivers (nine individual buildings) qualify for at-property acoustic treatment.

Table 12-13 below summaries the assessment criteria, predicted noise levels and criteria exceedance for all receivers which have been identified as qualifying for at-property treatment within NCA 5.

Table 12-13 Predicted operational noise levels at receivers qualifying for at-property acoustic treatment

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
Luddenham Public School (2)	GF	Educational	57	52	49	51	52	47	51	50	50	-	2	-	1	-
Luddenham Public School (3)	GF	Educational	58	53	48	51	53	48	51	51	50	-	3	-	1	-
Luddenham Public School (1)	GF	Educational	57	52	48	51	52	47	51	50	50	-	2	-	1	-
2320-2390 The Northern Rd (2) Luddenham	GF	Residential	51	44	49	43	58	51	59	52	55	50	3	1	4	2
18 Eaton Road Luddenham	GF	Residential	59	49	59	53	61	51	62	56	55	50	6	1	7	6
16 Eaton Rd Luddenham	GF	Residential	60	53	59	53	60	53	61	55	55	50	5	3	6	5
14 Eaton Rd Luddenham	GF	Residential	60	53	59	54	59	52	60	54	55	50	4	2	5	4
2215 The Northern Rd (1) Luddenham	GF	Residential	56	49	51	49	54	47	56	50	55	50	0	0	1	0
45 Adams Rd (1) Luddenham	GF	Residential	50	41	51	44	61	54	62	56	55	50	6	4	7	6

At-property treatments typically provide 10 – 20 dB of noise reduction to the internal spaces of dwellings. The specific form of building treatment applied to achieve these reductions is determined for each dwelling individually based on their existing construction. Building treatments are more effective when applied to masonry structures than when applied to lightly clad timber frame structures. Caution should be exercised before providing treatments to buildings in a poor state of repair, as they may be less effective in these cases. Any treatments proposed would be considered in consultation with the landowner.

12.5.2 Construction noise

The project's construction activity within NCA 5 would include road corridor works and the operation of four ancillary facilities (C7, C9, C10 and C11). The offset distance of the nearest sensitive receivers (or land uses) to any works is approximately 10 metres. The catchment of receivers potentially affected by noise from the works extends 600 metres from the works area.

The level of noise at residences predicted to result from works during standard hours within NCA 5 is presented in **Table 12-14**.

Table 12-14 Predicted construction noise levels to residences during standard hours

NML (Standard Hours)	Construction Stage									
			Early works	Earthworks	Road work	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
52	Range of predicted noise levels (dB(A))		39-83	43-88	45-90	45-72	44-89	45-90	41-86	44-89	38-69
	Number of Residences	Complying	177	146	117	23	131	117	162	131	211
		0-10 dBA above NML	33	54	75	199	69	75	44	69	12
		10-20 dBA above NML	10	19	23	1	18	23	13	18	1
		20+ dBA above NML	4	5	9	1	6	9	5	6	
	Highly noise affected	≥75dBA	4	5	5		5	5	4	5	

Table 12-14 indicates that the worst-case noise level to any residence from any standard hours works is predicted to be 90 dB(A), due to paving and road works. Further away from the works, construction noise levels drop below the NML.

Table 12-8 also indicates that noise from works during standard hours is predicted to exceed the NML at 107 receivers. Of these, the NML will be exceeded by between 10 - 20 dB(A) at 23 receivers, and by more than 20 dB (A) at nine receivers.

The level of noise at residences predicted to result from out of hours works within NCA 5 is presented in **Table 12-15**.

Table 12-15 Predicted construction noise levels to residences during out of hours (OOH) works

NML (OOH)		OOH Work Stage			Sleep Disturbance Screening Criterion	OOH Work Stage		
		Bridge work	Paving	Ancillary Facilities only		Bridge work	Paving	Ancillary Facilities only
39	Range of predicted noise levels (dB(A))	38-69	40-85	38-69	49	41-72	44-89	41-72
	Number of Residences – Complying	1		1		125	44	126
	0-5 dBA above NML	60	18	62		84	109	83
	5-15 dBA above NML	151	159	150		14	48	14
	15-25 dBA above NML	11	33	10		1	18	1
	≥25dBA above NML	1	14	1			5	

Table 12-15 indicates that the worst-case noise level to the nearest receivers from any out of hours works is predicted to be 85 dB(A) due to paving works. Further away from the works, construction noise levels drop below the NML. As with other works, paving works are mobile and so noise from those works as perceived at any particular residence will rise and fall as the works progress along the alignment. This is discussed further in Section 10.4.

Table 12-15 also indicates that noise from out of hours works is predicted to exceed the NML at 224 receivers. Of these, the NML will be exceeded by between 5 - 15 dB(A) at 159 receivers, by between 15 - 25 dB(A) at 33 receivers, and by more than 25 dB (A) at 14 receivers.

Noise levels predicted from the operation of ancillary facilities will require that acoustic hoarding be applied to their entire perimeter to minimise noise impacts. The noise predictions in Table 12-9 include the acoustic benefit of such hoarding; but indicate that exceedances of the NML are still expected at some receivers.

Table 12-15 indicates that the sleep disturbance screening criterion may be exceeded at up to 180 residences within NCA 5.

There are six receivers located within the safe working (buffer) distance of vibration-intensive works proposed for the road corridor (eg, vibratory rolling). Vibration from such activities may trigger exceedances of the structural integrity vibration criteria within that residence. As a result, vibration monitoring should be undertaken at the residence prior to the commencement of works to ensure that vibration from construction processes are contained to acceptable limits.

Construction traffic will increase the noise on the surrounding roads by less than 0.5 dB(A). This means that the construction traffic noise impacts will be negligible. Therefore, no mitigation measures are required as a result.

At the detailed design stage, the project's CNVMP should specifically nominate the additional mitigation and community consultation measures it will apply to mitigate the predicted noise and vibration criteria exceedances identified above. In particular, the CNVMP should explicitly indicate how it will mitigate both the potential for sleep disturbance within residences and night time noise from ancillary facilities, including noise from heavy vehicles access or operating within them. The offer of alternative accommodation or at-property acoustic treatment may be required to be made to any receiver exposed to construction noise levels greater than 25 dB(A) above the NML during night periods. This is discussed further in **Section 10.15** along with the other additional mitigation measures the project shall be required to apply where residual noise impacts are expected to result even after the application of RMS standard mitigation measures.

12.6 NCA 6 – Luddenham (south)

NCA 6 is centred on the alignment of the existing The Northern Road, and extends from just south of Eaton Road to north of Badgery's Creek (waterway) within south Luddenham. Existing ambient noise within the NCA is generally determined by noise from traffic conveyed on the existing The Northern Road. Further away from these traffic streams background noise levels will typically be determined by noise from fauna. In general, the background noise levels (RBLs) within the NCA are 42 dB(A) during the daytime and 34 dB(A) during the night time.

The project would not pass through NCA 6, but rather pass approximately 400-800m to its west. In the section, the project will be in the form of a new bypass, three lanes each way.

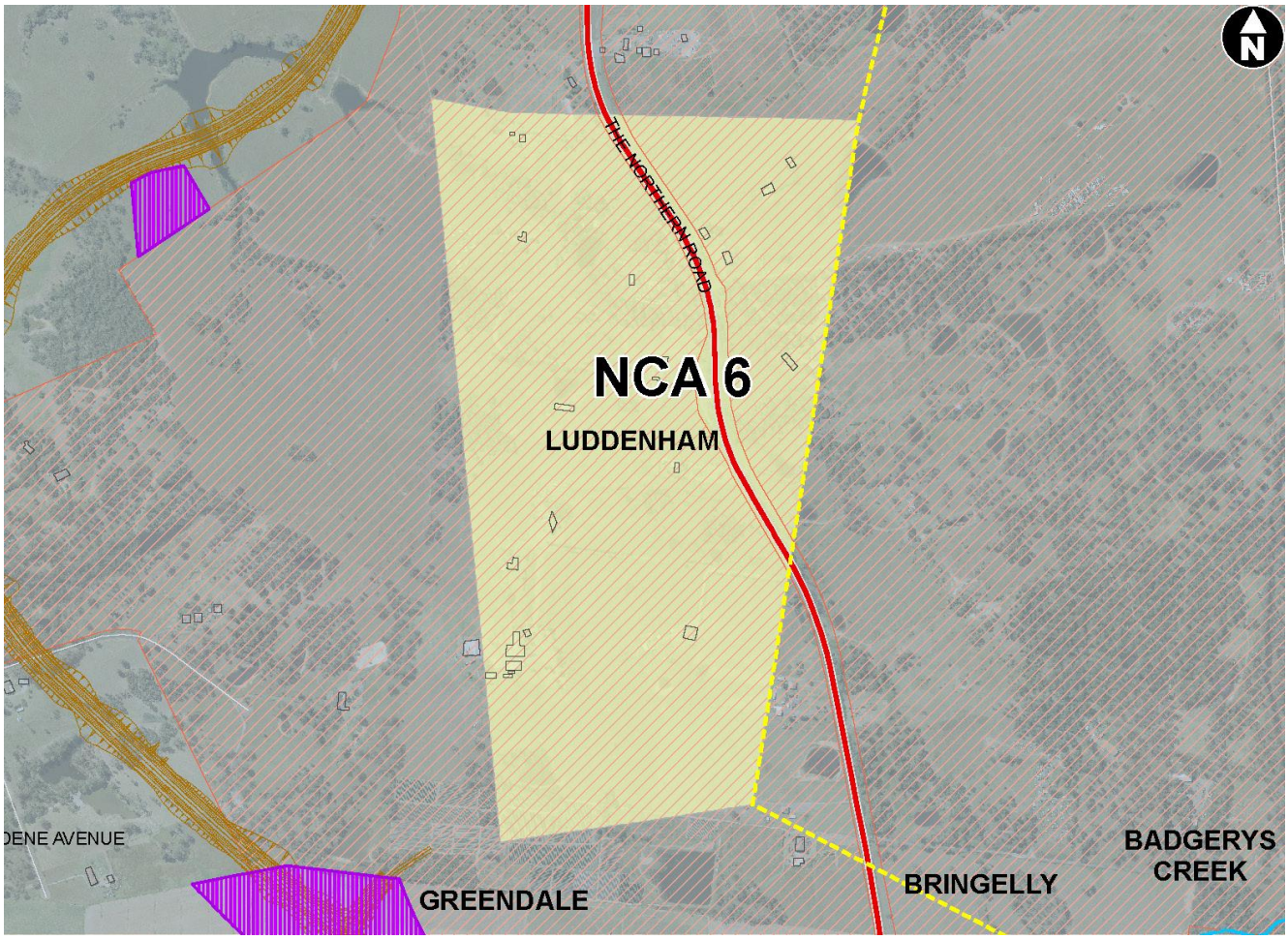


Figure 12-6 Noise Catchment Area 6 – Luddenham (south)

12.6.1 Operational noise

As the project will be of the form of a new road in this region (the township bypass), the assessment of operational noise impacts at residences within the NCA is based on applying new road criteria. These criteria are 55 dB(A) in the daytime and 50 dB(A) during the night time.

Operational noise levels (ie. noise from future traffic on the bypass) are predicted to be 52 dB(A) in the daytime and 46 dB(A) in the night-time for residences nearest the project in the north of the NCA. For residences nearest the road in the south of the NCA, operational noise levels are predicted to be 49 dB(A) in the daytime and 42 dB(A) in the night-time.

The predicted (future) traffic noise levels from the project do not exceed the operational noise criteria at any receiver within NCA 6, and so therefore, no operational noise mitigation is required.

12.6.2 Construction noise

No construction works are proposed to be undertaken within NCA 6. The offset distance of the nearest sensitive receivers (or land uses) to the nearest works is approximately 400 metres.

The level of noise at residences predicted to result from the nearest works in other NCAs during standard hours is presented in **Table 12-16**.

Table 12-16 Predicted construction noise levels to residences during standard hours

NML (Standard Hours)	Construction Stage									
			Early works	Earthworks	Road work	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
52	Range of predicted noise levels (dB(A))		40-48	44-53	46-55	43-51	45-54	46-55	42-51	45-54	39-47
	Number of Residences	Complying	14	12	11	14	12	11	14	12	14
		0-10 dBA above NML		2	3		2	3		2	
		10-20 dBA above NML									
		20+ dBA above NML									
	Highly noise affected	≥75dBA									

Table 12-16 indicates that the worst-case noise level to any residence within NCA 6 from any standard hours works is predicted to be 55 dB(A), due to paving and roadworks. At residences further east, further removed from the works, construction noise levels drop below the NML.

Table 12-16 also indicates that noise from works during standard hours is predicted to exceed the NML at three residences. All noise exceedances are predicted to be contained to 10 dB(A) above the NML.

The level of noise at residences predicted to result from out of hours works within NCA 6 is presented in **Table 12-17**.

Table 12-17 Predicted construction noise levels to residences during out of hours (OOH) works

NML (OOH)		OOH Work Stage			Sleep Disturbance Screening Criterion	OOH Work Stage		
		Bridge work	Paving	Ancillary Facilities only		Bridge work	Paving	Ancillary Facilities only
39	Range of predicted noise levels (dB(A))	39-47	41-50	39-47	49	42-50	45-54	42-50
	Number of Residences Complying					12	8	12
	0-5 dBA above NML	12	6	12		2	6	2
	5-15 dBA above NML	2	8	2				
	15-25 dBA above NML							
	≥25dBA above NML							

Table 12-17 indicates that the worst-case noise level to the nearest residence (at the western side of NCA 6) from any out of hours works is predicted to be 50 dB(A) due to paving works. Further away (east) from the works, construction noise levels drop below the NML. As with other works, paving works are mobile and so noise from those works as perceived at any particular residence will rise and fall as the works progress along the alignment. This is discussed further in Section 10.4.

Table 12-17 also indicates that noise from out of hours works is predicted to exceed the NML at 14 residences. Of these, the NML will be exceeded by between 5 - 15 dB(A) at eight residences. It is predicted that noise exceedances of the NML higher than 15 dB(A) will not occur at any residence.

Noise levels predicted from the operation of ancillary facilities will require that acoustic hoarding be applied to their entire perimeter to minimise noise impacts. The noise predictions in **Table 12-17** include the acoustic benefit of such hoarding; but indicate that exceedances of the NML are still expected at some receivers.

Table 12-17 indicates that the sleep disturbance screening criterion may be exceeded at up to six residences within NCA 6.

There are no receivers located within the safe working (buffer) distance of vibration-intensive works proposed for the road corridor (eg, vibratory rolling). As such, vibration monitoring at residences prior to the commencement of the vibration–intensive works proposed will not be required necessarily.

Construction traffic will increase the noise on the surrounding roads by less than 0.5 dB(A). This means that the construction traffic noise impacts will be negligible. Therefore, no mitigation measures are required as a result.

At the detailed design stage, the project's CNVMP should specifically nominate the additional mitigation and community consultation measures it will apply to mitigate the predicted noise and vibration criteria exceedances identified above. In particular, the CNVMP should explicitly indicate how it will mitigate both the potential for sleep disturbance within residences and night time noise from ancillary facilities, including noise from heavy vehicles access or operating within them. The additional mitigation measures the project shall be required to apply where residual noise impacts are expected to result even after the application of RMS standard mitigation measures is discussed further in **Section 10.15**.

12.7 NCA 7 – Luddenham (south) & Greendale (east)

NCA 7 is centred on the alignment of the proposed, future bypass, and extends from just south of the Luddenham township to the eastern reaches of Greendale. Existing ambient noise at the northern end of the NCA is generally determined by from traffic conveyed on the existing The Northern Road. To the southern end of the NCA, background noise levels will typically be determined by noise from fauna. In general, the background noise levels (RBLs) within the NCA are 37 dB(A) during the daytime and 37 dB(A) during the night time.

The project proposes a new (2 x 3 lanes) bypass in this area.

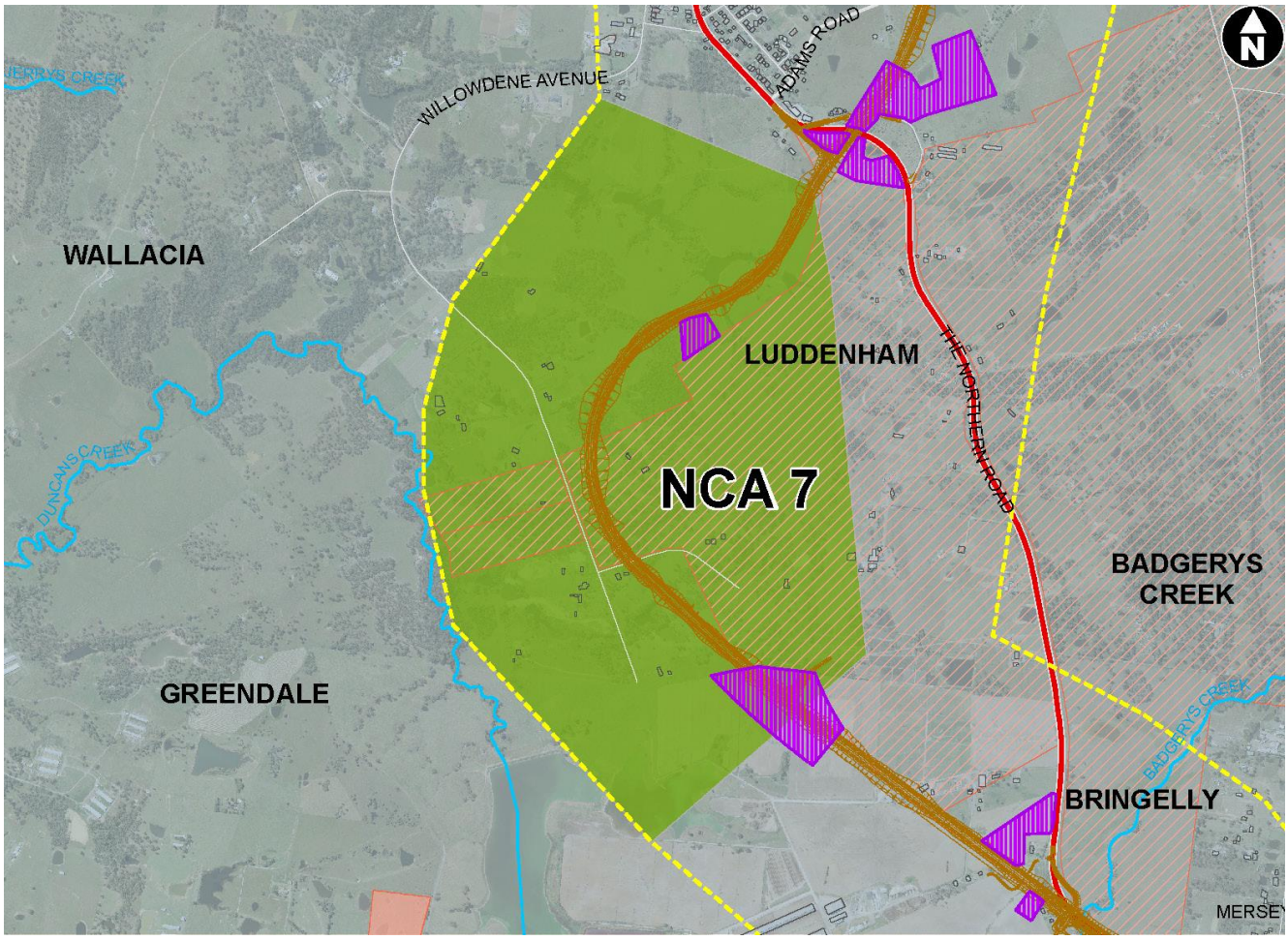


Figure 12-7 Noise Catchment Area 7 – Luddenham (south) & Greendale (east)

12.7.1 Operational noise

As the project will be of the form of a new road (a bypass) within NCA 7, the assessment of operational noise impacts at residences within the NCA is based on applying new road criteria. These criteria are 55 dB(A) in the daytime and 50 dB(A) during the night time.

Operational noise levels (ie. noise from future traffic on the upgraded road) are predicted to be 54 dBA in the daytime and 47 dBA in the night-time for residences nearest the project in the north of the NCA. For residences nearest the road in the south of the NCA, operational noise levels are predicted to be 56 dBA in the daytime and 50 dBA in the night-time.

Without any noise mitigation 11 receivers (11 individual building) qualify for the consideration of noise mitigation due to the project increasing traffic noise levels. No receivers qualify for consideration of noise mitigation because they exceed the cumulative limit alone. An additional six receivers (six individual buildings) qualify because they exceed both of these criteria.

The installation of low noise pavements and noise barriers are not considered suitable noise mitigation in this NCA. The large separation distances between receivers that exceed the criteria means these mitigation measures are not reasonable or feasible.

Therefore, mitigation of operational noise impacts is required to be delivered as at-property acoustic treatments. In NCA 7, a total of 17 receivers (17 individual buildings) qualify for at-property acoustic treatment.

Table 12-18 below summaries the assessment criteria, predicted noise levels and criteria exceedance for all receivers which have been identified as qualifying for at-property treatment within NCA 7.

Table 12-18 Predicted operational noise levels at receivers qualifying for at-property acoustic treatment

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
230A Willowdene Ave (1) Luddenham	GF	Residential	39	32	32	33	44	37	45	38	44	42	0	0	1	0
500 Willowdene Ave (1) Luddenham	GF	Residential	40	33	40	34	54	47	55	49	52	45	2	2	3	4
405 Willowdene Ave (1) Luddenham	GF	Residential	34	32	38	33	49	44	52	45	45	44	4	0	7	1
365 Willowdene Ave (1) Luddenham	GF	Residential	40	34	40	34	55	48	56	50	52	45	3	3	4	5
365 Willowdene Ave (3) Luddenham	GF	Residential	40	33	39	33	51	44	53	46	51	45	0	0	2	1
325 Willowdene Ave (1) Luddenham	GF	Residential	31	32	37	32	45	42	50	44	43	43	2	0	7	1
295 Willowdene Ave (1) Luddenham	GF	Residential	38	32	34	33	47	40	47	42	46	44	1	0	1	0
350 Willowdene Ave (2) Luddenham	GF	Residential	38	31	37	32	51	44	52	45	49	43	2	1	3	2
260 Willowdene Ave Luddenham	GF	Residential	32	32	32	33	47	41	48	43	44	43	3	0	4	0
320 Willowdene Ave (1) Luddenham	GF	Residential	39	32	39	33	53	46	54	47	49	42	4	4	5	5
Lot1/DP838361	GF	Residential	39	31	38	32	51	44	53	46	50	43	1	1	3	3
Lot1/DP838361	GF	Residential	36	30	36	30	52	45	54	47	48	42	4	3	6	5
Lot1/DP838361	GF	Residential	36	30	36	30	52	45	53	47	48	42	4	3	5	5
5 Vicar Park Lane, Luddenham	GF	Residential	40	33	39	34	54	47	55	49	43	42	11	5	12	7
400 Willowdene Ave Luddenham	GF	Residential	42	35	43	37	56	49	57	50	53	47	3	2	4	3
460 Willowdene Ave (1) Luddenham	GF	Residential	40	33	39	34	60	53	61	55	51	45	9	8	10	10
300-315 Willowdene Ave Luddenham	GF	Residential	36	27	36	30	50	43	51	44	45	42	5	1	6	2

At-property treatments typically provide 10 – 20 dB of noise reduction to the internal spaces of dwellings. The specific form of building treatment applied to achieve these reductions is determined for each dwelling individually based on their existing construction. Building treatments are more effective when applied to masonry structures than when applied to lightly clad timber frame structures. Caution should be exercised before providing treatments to buildings in a poor state of repair, as they may be less effective in these cases. Any treatments proposed would be considered in consultation with the landowner.

12.7.2 Construction noise

The project's construction activity within NCA 7 would include road corridor works and the operation of two ancillary facilities (C5 and C6). The offset distance of the nearest sensitive receivers (or land uses) to any works is approximately 30 metres. The catchment of receivers potentially affected by noise from the works extends 600 metres from the works area.

The level of noise at residences predicted to result from works during standard hours within NCA 7 is presented in **Table 12-19**.

Table 12-19 Predicted construction noise levels to residences during standard hours

NML (Standard Hours)	Construction Stage										
			Early works	Earthworks	Road work	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
47	Range of predicted noise levels (dB(A))		43-64	48-69	50-71	40-49	49-70	50-71	46-67	49-70	40-49
	Number of Residences	Complying	4			17			1		17
		0-10 dBA above NML	12	8	5	2	6	5	14	6	2
		10-20 dBA above NML	3	10	13		12	13	4	12	
		20+ dBA above NML		1	1		1	1		1	
	Highly noise affected	≥75dBA									

Table 12-19 indicates that the worst-case noise level to any residence from any standard hours works is predicted to be 71 dB(A), due to paving and roadworks. Further away from the works, construction noise levels drop below the NML.

Table 12-19 also indicates that noise from works during standard hours is predicted to exceed the NML at 19 residences. Of these, the NML will be exceeded by between 10 - 20 dB(A) at 13 residences, and by more than 20 dB (A) at 1 residence.

The level of noise at residences predicted to result from out of hours works within NCA 7 is presented in **Table 12-20**.

Table 12-20 Predicted construction noise levels to residences during out of hours (OOH) works

NML (OOH)			OOH Work Stage			Sleep Disturbance Screening Criterion	OOH Work Stage		
			Bridge work	Paving	Ancillary Facilities only		Bridge work	Paving	Ancillary Facilities only
42	Range of predicted noise levels (dB(A))		40-49	45-66	40-49	52	43-51	49-70	43-51
	Number of Residences	Complying	9		9		19	4	19
		0-5 dBA above NML	8	3	8			2	
		5-15 dBA above NML	2	13	2			12	
		15-25 dBA above NML		3				1	
		≥25dBA above NML							

Table 12-20 indicates that the worst-case noise level to the nearest residence from any out of hours works is predicted to be 66 dB(A) due to paving works. Further away from the works, construction noise levels drop below the NML. As with other works, paving works are mobile and so noise from those works as perceived at any particular residence will rise and fall as the works progress along the alignment. This is discussed further in Section 10.4.

Table 12-20 also indicates that noise from out of hours works is predicted to exceed the NML at 19 residences. Of these, the NML will be exceeded by between 5 - 15 dB(A) at 13 residences, by between 15 - 25 dB(A) at 3 residences. No NML exceedances higher than 25 dB(A) are expected at any residences within NCA 7.

Noise levels predicted from the operation of ancillary facilities will require that acoustic hoarding be applied to their entire perimeter to minimise noise impacts. The noise predictions in **Table 12-20** include the acoustic benefit of such hoarding; but indicate that exceedances of the NML are still expected at some receivers.

Table 12-20 indicates that the sleep disturbance screening criterion may be exceeded at up to 15 residences within NCA 7.

There are no receivers located within the safe working (buffer) distance of vibration-intensive works proposed for the road corridor (eg, vibratory rolling). As such, vibration monitoring at residences prior to the commencement of the vibration–intensive works proposed will not be required necessarily.

Construction traffic will increase the noise on the surrounding roads by less than 0.5 dB(A). This means that the construction traffic noise impacts will be negligible. Therefore, no mitigation measures are required as a result.

At the detailed design stage, the project's CNVMP should specifically nominate the additional mitigation and community consultation measures it will apply to mitigate the predicted noise and vibration criteria exceedances identified above. In particular, the CNVMP should explicitly indicate how it will mitigate both the potential for sleep disturbance within residences and night time noise from ancillary facilities, including noise from heavy vehicles access or operating within them. The additional mitigation measures the project shall be required to apply where residual noise impacts are expected to result even after the application of RMS standard mitigation measures is discussed further in **Section 10.15**.

12.8 NCA 8 – Greendale (east) & Bringelly

NCA 8 is located at the southern end of the study area incorporating Greendale (east) and Bringelly. The NCA is centred on the point at which the proposed bypass will break away from the existing road corridor. Existing ambient noise within the NCA is generally determined by noise from traffic conveyed on the existing The Northern Road. Further away from the alignment, background noise will typically be determined by noise from fauna. In general, the background noise levels (RBLs) within the NCA are 48 dB(A) during the daytime and 42 dB(A) during the night time.

Within the north-western half of NCA 8, the project would introduce a new bypass, while in the south-eastern half, the project would redevelop the existing road corridor from one lane each way to three lanes each way, for which the road corridor would be widened mostly to its northern eastern side.

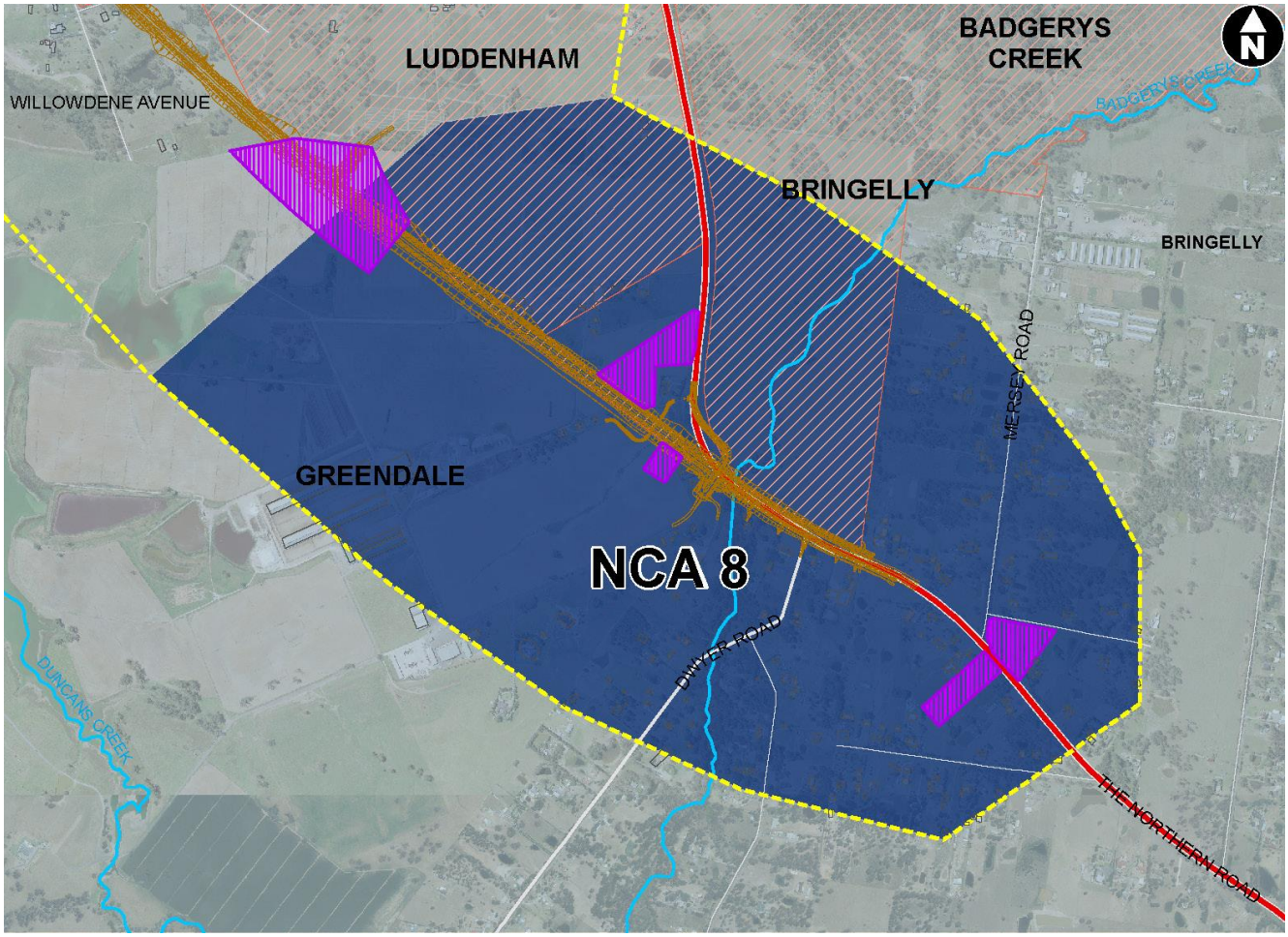


Figure 12-8 Noise Catchment Area 8 – Greendale (east) and Bringelly

12.8.1 Operational noise

Operational noise impacts to residences within the north-western half of the NCA are assessed based on new road criteria, as the adjacent section of the project is a new road, a bypass. These criteria are 55 dB(A) in the daytime and 50 dB(A) during the night time. Operational noise impacts to residences within the south-eastern half of the NCA are assessed based on redeveloped road criteria as, in this section, the project will not substantially realign the existing carriageway. These criteria are 60 dB(A) in the daytime and 55 dB(A) during the night time. Noise criteria for residences located between these two regions (ie. within the transition zone) are incremented appropriately to ensure that

adjacent residences do not have significantly differing criteria. (Transition zone criteria are explained in more detail in **Section 5.2.1**).

Operational noise levels (ie. noise from future traffic on the upgraded road) are predicted to be 69 dBA in the daytime and 62 dBA in the night-time for residences nearest the project in the north-west of the NCA. For residences nearest the road in the south-east of the NCA, operational noise levels are predicted to be 65 dBA in the daytime and 58 dBA in the night-time.

Without any noise mitigation seven receivers (seven individual building) qualify for the consideration of noise mitigation due to the project increasing traffic noise levels. No receivers qualify for consideration of noise mitigation because they exceed the cumulative limit alone. An additional five receivers (five individual buildings) qualify because they exceed both of these criteria.

The installation of low noise pavements and noise barriers are not considered suitable noise mitigation in this NCA. The large separation distances between receivers that exceed the criteria means these mitigation measures are not reasonable or feasible.

Therefore, mitigation of operational noise impacts is required to be delivered as at-property acoustic treatments. In NCA 8, a total of 12 receivers (12 individual buildings) qualify for at-property acoustic treatment.

Table 12-21 below summaries the assessment criteria, predicted noise levels and criteria exceedance for all receivers which have been identified as qualifying for at-property treatment within NCA 8.

Table 12-21 Predicted operational noise levels at receivers qualifying for at-property acoustic treatment

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
165 Greendale Rd (4) Greendale	GF	Residential	49	42	48	42	55	48	57	50	55	50	0	0	2	0
165 Greendale Rd (3) Greendale	GF	Residential	49	43	49	43	58	51	59	52	55	50	3	1	4	2
165 Greendale Rd (2) Greendale	GF	Residential	52	45	51	45	61	54	62	56	55	50	6	4	7	6
1592 The Northern Rd (1) Bringelly	GF	Residential	59	53	59	53	62	55	63	57	60	55	2	0	3	2
1602 The Northern Rd (3) Bringelly	GF	Residential	60	53	59	54	63	56	64	57	60	55	3	1	4	2
2 Dwyer Rd Bringelly	GF	Residential	63	56	63	57	64	57	65	58	60	55	4	2	5	3
1635 The Northern Rd (1) Bringelly	GF	Residential	60	53	60	54	62	55	63	56	60	55	2	0	3	1
1655 The Northern Rd (2) Bringelly	GF	Residential	59	52	58	53	61	54	62	55	60	55	1	0	2	0
165 Greendale Rd (1) Greendale	GF	Residential	57	50	57	51	59	53	61	54	55	50	4	3	6	4
165 Greendale Rd (1) Greendale	GF	Residential	59	52	59	53	64	57	65	59	60	55	4	2	5	4

Address	Flr	Land Use	Predicted noise level dB(A) NO Build				Predicted noise level dB(A) Build				NCG Criteria		Predicted Exceedance dB(A) Build			
			2021		2031		2021		2031				2021		2031	
			D	N	D	N	D	N	D	N	D	N	D	N	D	N
165 Greendale Rd (2) Greendale	GF	Residential	60	53	59	53	63	56	64	58	60	55	3	1	4	3
1615 The Northern Rd (1) Bringelly	GF	Residential	62	55	62	56	63	56	65	58	60	55	3	1	5	3

At-property treatments typically provide 10 – 20 dB of noise reduction to the internal spaces of dwellings. The specific form of building treatment applied to achieve these reductions is determined for each dwelling individually based on their existing construction. Building treatments are more effective when applied to masonry structures than when applied to lightly clad timber frame structures. Caution should be exercised before providing treatments to buildings in a poor state of repair, as they may be less effective in these cases. Any treatments proposed would be considered in consultation with the landowner.

12.8.2 Construction noise

The project's construction activity within NCA 8 would include road corridor works and the operation of seven ancillary facilities (C1 and C5). The offset distance of the nearest sensitive receivers (or land uses) to any works is approximately 15 metres. The catchment of receivers potentially affected by noise from the works extends 600 metres from the works area.

The level of noise at residences predicted to result from works during standard hours within NCA 8 is presented in **Table 12-22**.

Table 12-22 Predicted construction noise levels to residences during standard hours

NML (Standard Hours)	Construction Stage										
			Early works	Earthworks	Road work	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities only
58	Range of predicted noise levels (dB(A))		41-69	46-74	48-76	41-66	47-75	48-76	44-72	47-75	41-66
	Number of Residences	Complying	83	78	72	93	74	72	80	74	93
		0-10 dBA above NML	20	16	22	12	20	22	17	20	12
		10-20 dBA above NML	2	11	11		11	11	8	11	
		20+ dBA above NML									
	Highly noise affected	≥75dBA			2		1	2		1	

Table 12-22 indicates that the worst-case noise level to any residence from any standard hours works is predicted to be 76 dB(A), due to paving and roadworks. Further away from the works, construction noise levels drop below the NML.

Table 12-22 also indicates that noise from works during standard hours is predicted to exceed the NML at 33 residences. Of these, the NML will be exceeded by between 10 - 20 dB(A) at 11 residences, with no residences exceeding the NML by more than 20 dB(A).

The level of noise at residences predicted to result from out of hours works within NCA 8 is presented in **Table 12-23**.

Table 12-23 Predicted construction noise levels to residences during out of hours (OOH) works

NML (OOH)			OOH Work Stage			Sleep Disturbance Screening Criterion	OOH Work Stage		
			Bridge work	Paving	Ancillary Facilities only		Bridge work	Paving	Ancillary Facilities only
47	Range of predicted noise levels (dB(A))		41-66	43-71	41-66	57	44-71	47-75	44-71
	Number of Residences	Complying	34	20	34		76	63	76
		0-5 dBA above NML	31	34	31		21	22	21
		5-15 dBA above NML	36	37	36		8	13	8
		15-25 dBA above NML	4	14	4			7	
		≥25dBA above NML							

Table 12-23 indicates that the worst-case noise level to the nearest residence from any out of hours works is predicted to be 71 dB(A) due to paving works. Further away from the works, construction noise levels drop below the NML. As with other works, paving works are mobile and so noise from those works as perceived at any particular residence will rise and fall as the works progress along the alignment. This is discussed further in Section 10.4.

Table 12-23 also indicates that noise from out of hours works is predicted to exceed the NML at 85 residences. Of these, the NML will be exceeded by between 5 - 15 dB(A) at 37 residences and by between 15 - 25 dB(A) at 14 residences, with no residences exceeding the NML by more than 25 dB(A).

Noise levels predicted from the operation of ancillary facilities will require that acoustic hoarding be applied to their entire perimeter to minimise noise impacts. The noise predictions in **Table 12-23** include the acoustic benefit of such hoarding; but indicate that exceedances of the NML are still expected at some receivers.

Table 12-23 indicates that the sleep disturbance screening criterion may be exceeded at up to 42 residences within NCA 8.

There are two receivers located within the safe working (buffer) distance of vibration-intensive works proposed for the road corridor (eg, vibratory rolling). Vibration from such activities may trigger exceedances of the structural integrity vibration criteria within that residence. As a result, vibration monitoring should be undertaken at the residence prior to the commencement of works to ensure that vibration from construction processes are contained to acceptable limits.

Construction traffic will increase the noise on the surrounding roads by less than 0.5 dB(A). This means that the construction traffic noise impacts will be negligible. Therefore, no mitigation measures are required as a result.

At the detailed design stage, the project's CNVMP should specifically nominate the additional mitigation and community consultation measures it will apply to mitigate the predicted noise and vibration criteria exceedances identified above. In particular, the CNVMP should explicitly indicate

how it will mitigate both the potential for sleep disturbance within residences and night time noise from ancillary facilities, including noise from heavy vehicles access or operating within them. The additional mitigation measures the project shall be required to apply where residual noise impacts are expected to result even after the application of RMS standard mitigation measures is discussed further in **Section 10.15**.

13. Conclusion

This report assesses the potential for noise or vibration impacts prospectively resulting from the construction or operation of the proposed upgrade of The Northern Road (Mersey Road to Glenmore Parkway).

The assessment identifies that 77 receivers (within 74 buildings) qualify for mitigation as a result of the project's predicted operational noise impact. The mitigation-eligible buildings are all residential other than three classroom buildings at Luddenham Public School.

The assessment determines that mitigation will be most reasonably delivered as at-building acoustic treatments rather than as either low noise road pavement or noise barriers, given the spatial separation of the eligible buildings.

The types of at-property treatments that may be provided to by Roads and Maritime Services include:

- The installation of courtyard screen walls;
- Provision of fresh air ventilation systems (so that doors and windows may remain closed as preferred);
- Upgrading windows, glazing and solid core doors on the exposed facades;
- Upgrading window and door seals and treatment of sub floor ventilation;
- The sealing of building facade noise leakage paths such as at wall vents, eaves or below-floor spaces.

The specific acoustic treatment for each residence would be determined upon assessment of the dwelling in consultation with the landowner.

The assessment identifies that the project's construction will substantially impact the community including triggering a small number of receivers to be highly noise affected, likely necessitating dedicated noise management measures and the offering of periods of respite.

The highest noise impacts will result from road works and paving works in particular, although impacts form other works stages are also predicted. Worst case noise exceedances at receivers of more than 25 dB(A) will occur along most of the project's alignment when noise-intensive processes such as rockbreaking, concrete sawing and vibratory rolling operate at their nearest point to receivers.

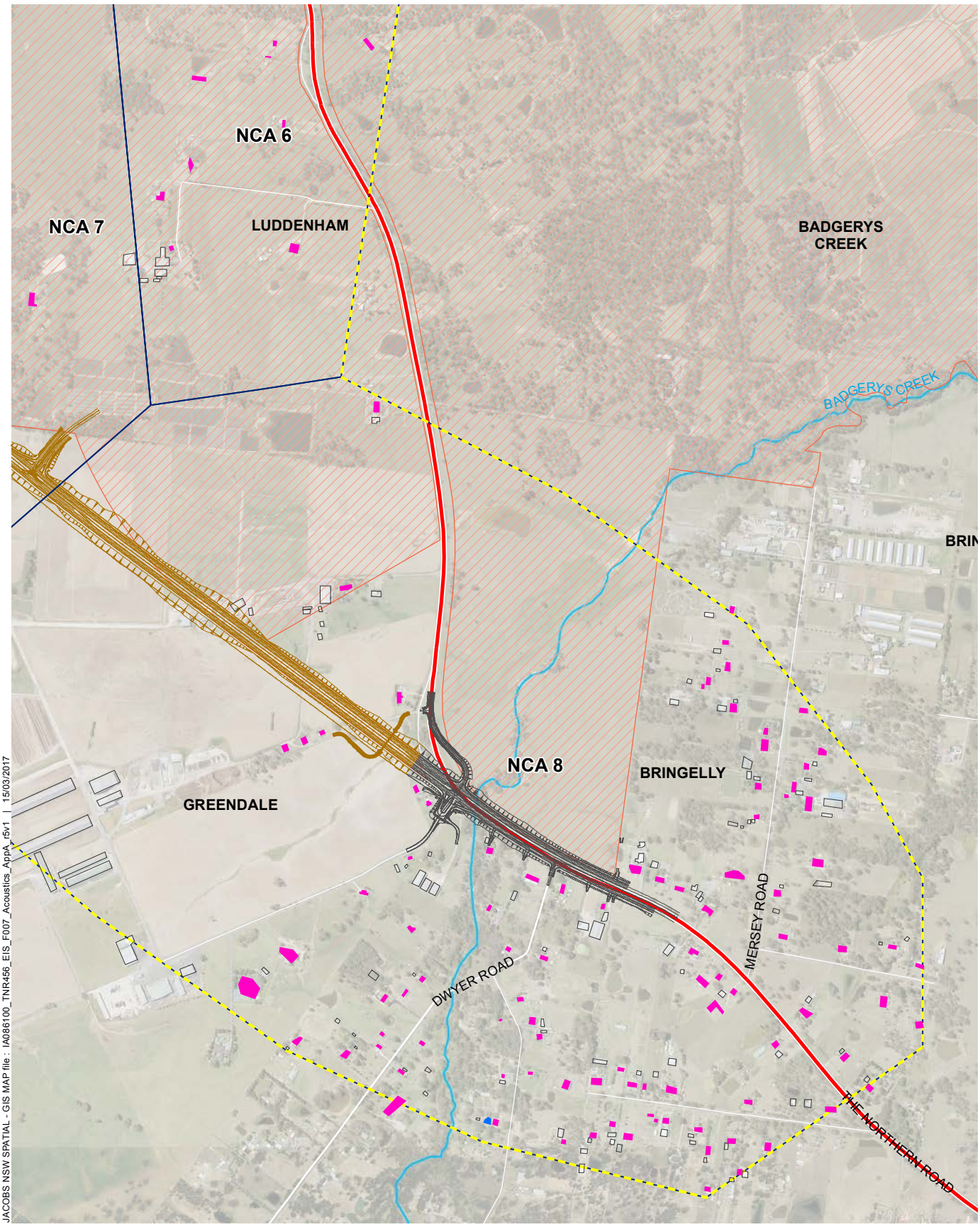
Noise impacts and potential for sleep disturbance are predicted also from out-of-hours (night) works including from the operation of ancillary facilities alone (ie, even in the absence of noise from mainline works).

The assessment has outlined standard as well as additional noise mitigation measures that would be expected to be deployed in the project's construction program to mitigate these impacts. These include restricting some construction staging and specific noise-intensive activities such as impact piling, rockbreaking and pavement saw cutting to day time periods, erecting noise hoardings and deploying low-noise plant. The offering to the community of periods of respite may also be required.

In all cases, the construction noise impacts reported in this assessment reflect worst-case conditions when all plant is operating concurrently nearest a receiver. Construction noise levels will typically be lower than these reported peak levels as works move away from the receiver and as fewer items of plant are operated.

No vibration impact is expected from the project although management measures may be required where vibratory rolling or rockbreaking is to be undertaken within 22m of buildings (whether habitable or non-habitable) or within 100m of human-habitable spaces.

Appendix A. Noise sensitive receivers considered in this assessment



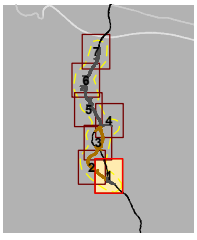
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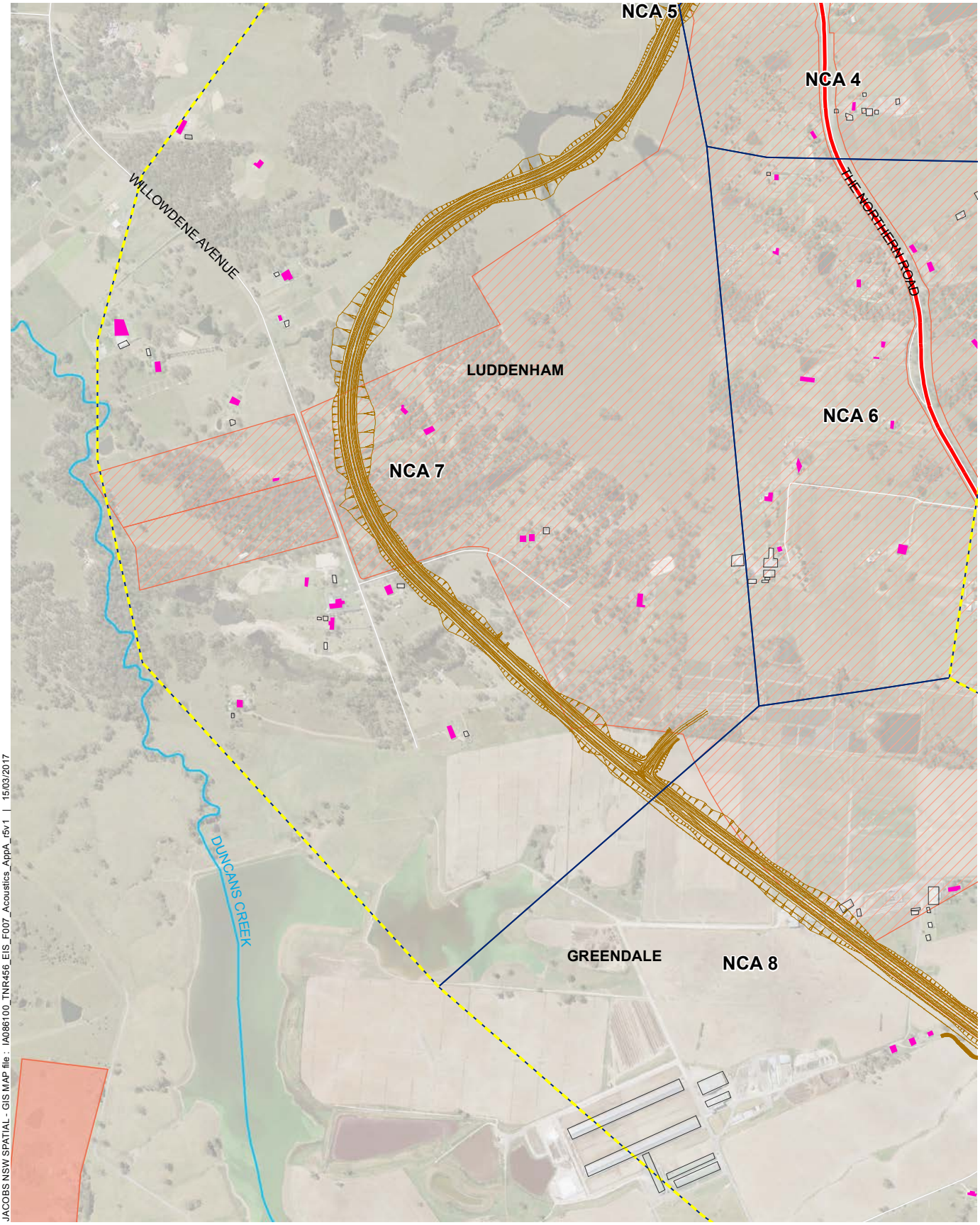
The Northern Road (Existing)
Redeveloped road sections
New road sections
Noise catchment areas
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Study area

Noise sensitive receivers (by land use)
Residential
Educational
Place of Worship
Active Recreation
Commercial
Not acoustically sensitive

0 200 400 m

N





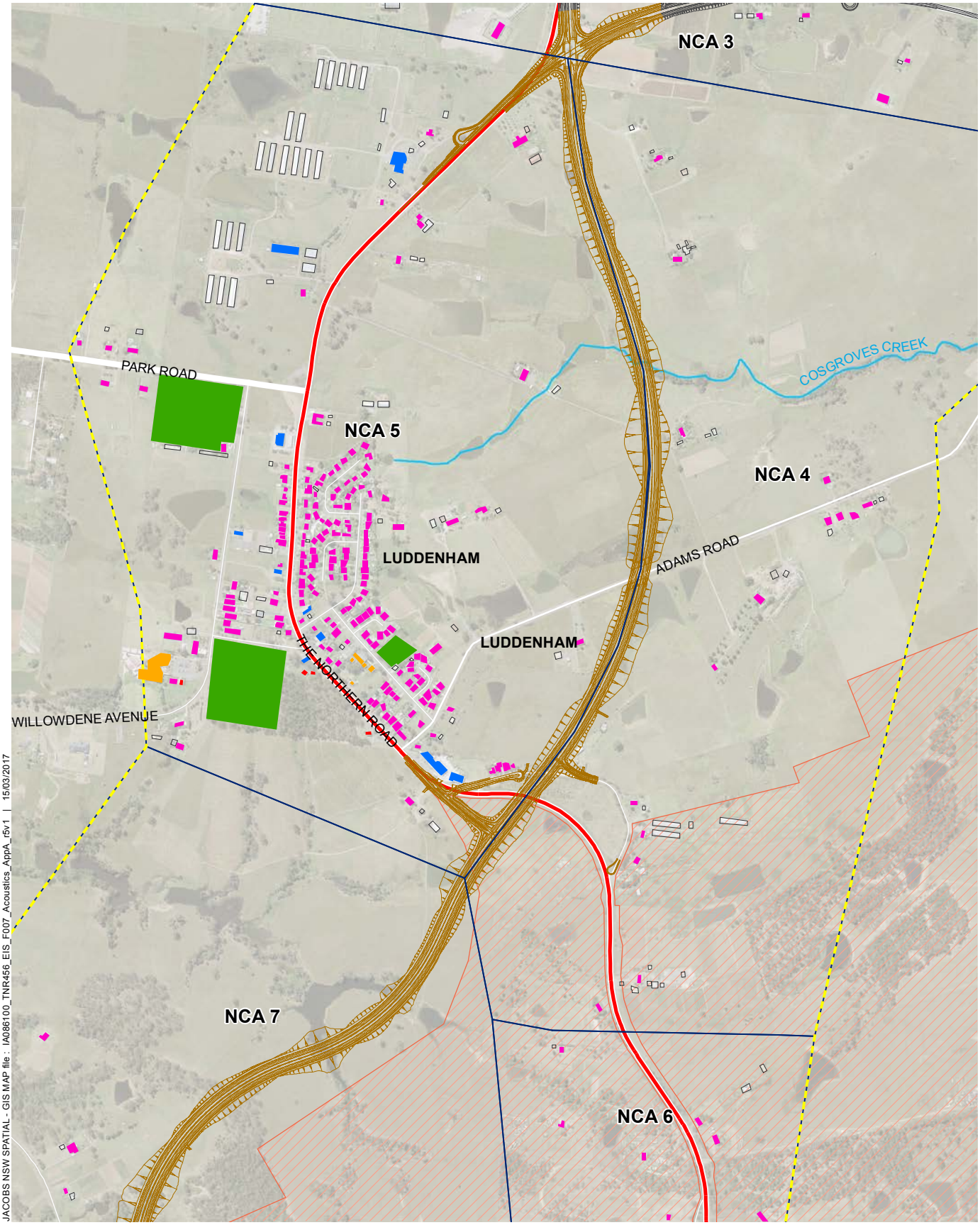
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The Northern Road (Existing)
Redeveloped road sections
New road sections
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Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Study area

Noise sensitive receivers (by land use)
Residential
Educational
Place of Worship
Active Recreation
Commercial
Not acoustically sensitive

0 200 400 m

N



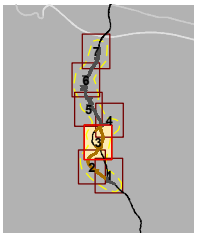
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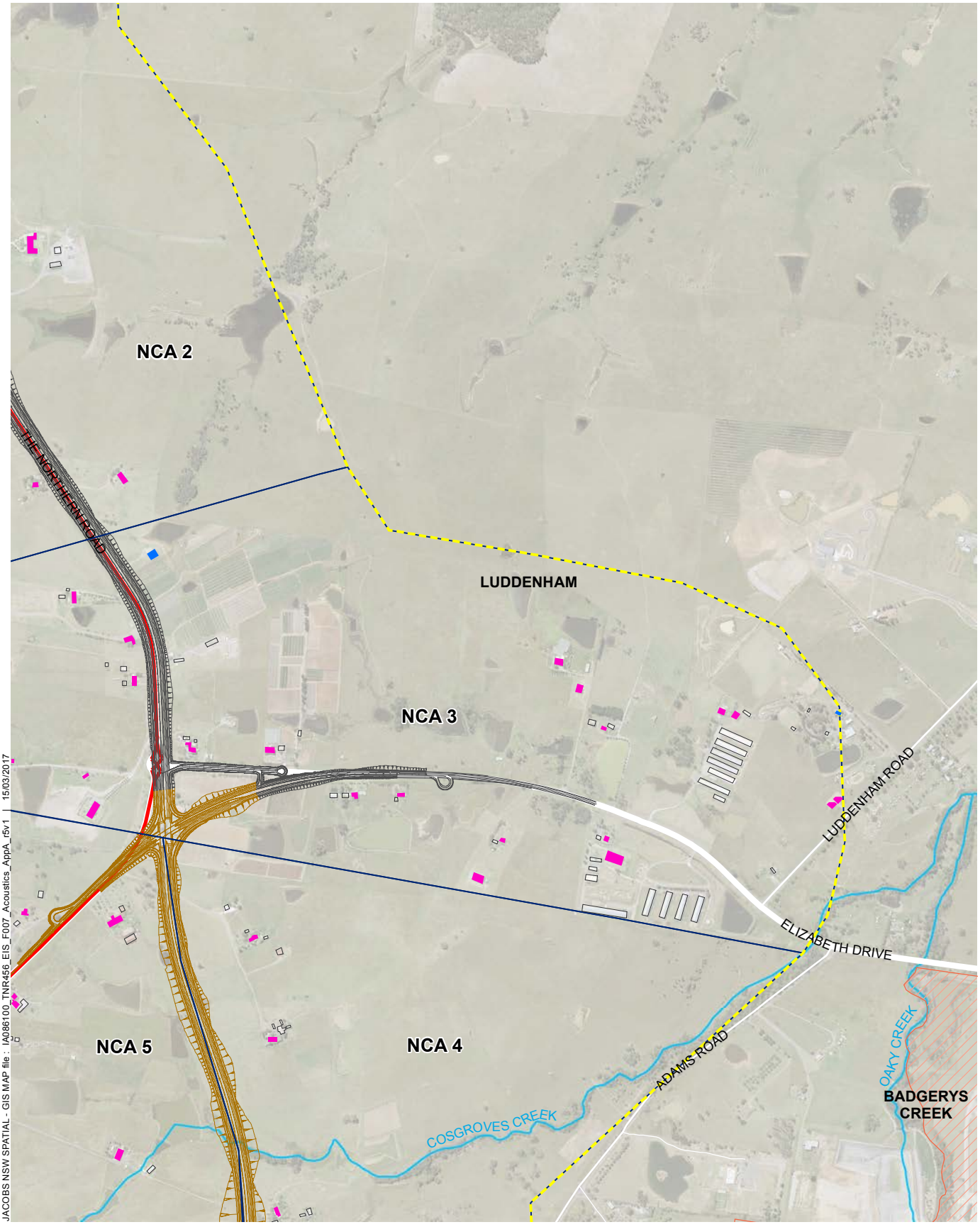
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Redeveloped road sections
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Noise catchment areas
Western Sydney Airport site (Commonwealth Land)
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Commonwealth lands
Study area

Noise sensitive receivers (by land use)
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Educational
Place of Worship
Active Recreation
Commercial
Not acoustically sensitive

0 200 400 m

N



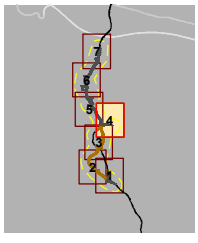


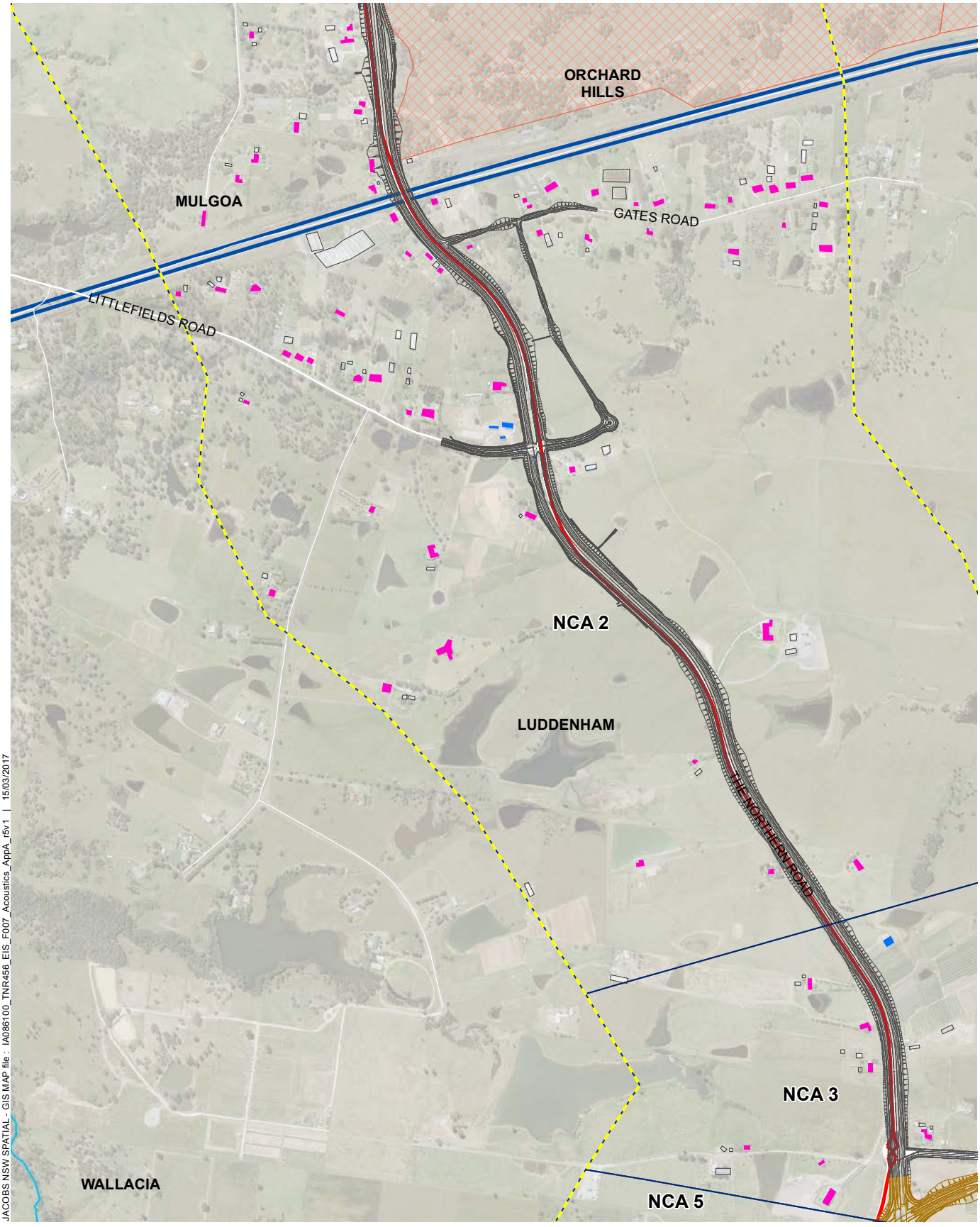
The Northern Road (Existing)
Redeveloped road sections
New road sections
Noise catchment areas
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Study area

Noise sensitive receivers (by land use)
Residential
Educational
Place of Worship
Active Recreation
Commercial
Not acoustically sensitive

0 200 400 m

N





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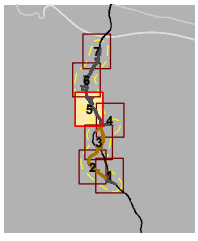
- The Northern Road (Existing)
- Redeveloped road sections
- New road sections
- WaterNSW supply pipelines
- Noise catchment areas
- Western Sydney Airport site (Commonwealth Land)
- Defence Establishment Orchard Hills (Commonwealth Land)
- Commonwealth lands
- Study area

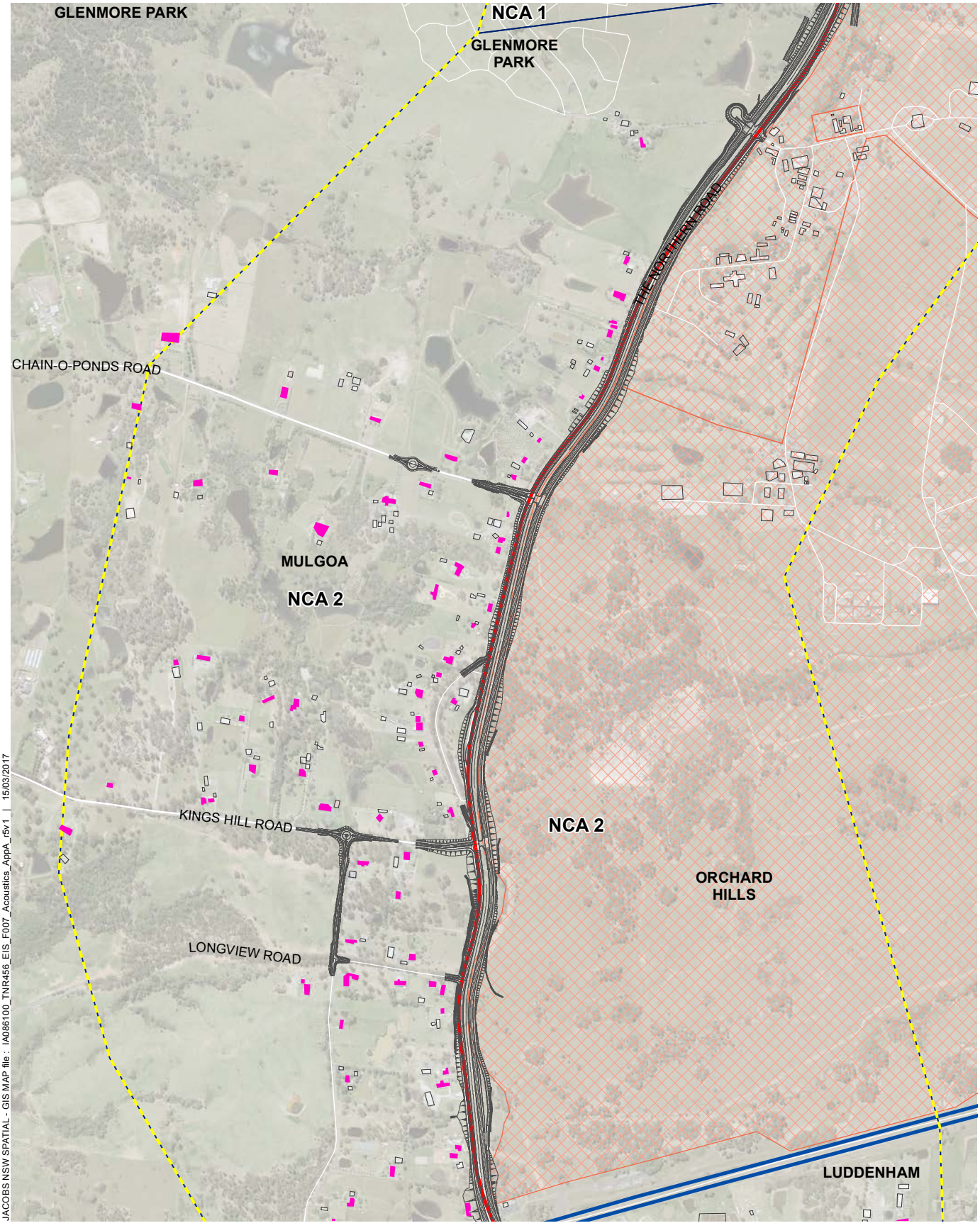
Noise sensitive receivers (by land use)

- Residential
- Educational
- Place of Worship
- Active Recreation
- Commercial
- Not acoustically sensitive

0 200 400 m

N





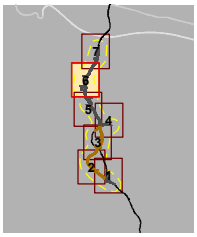
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F007_Acoustics_AppA_r5v1 | 15/03/2017

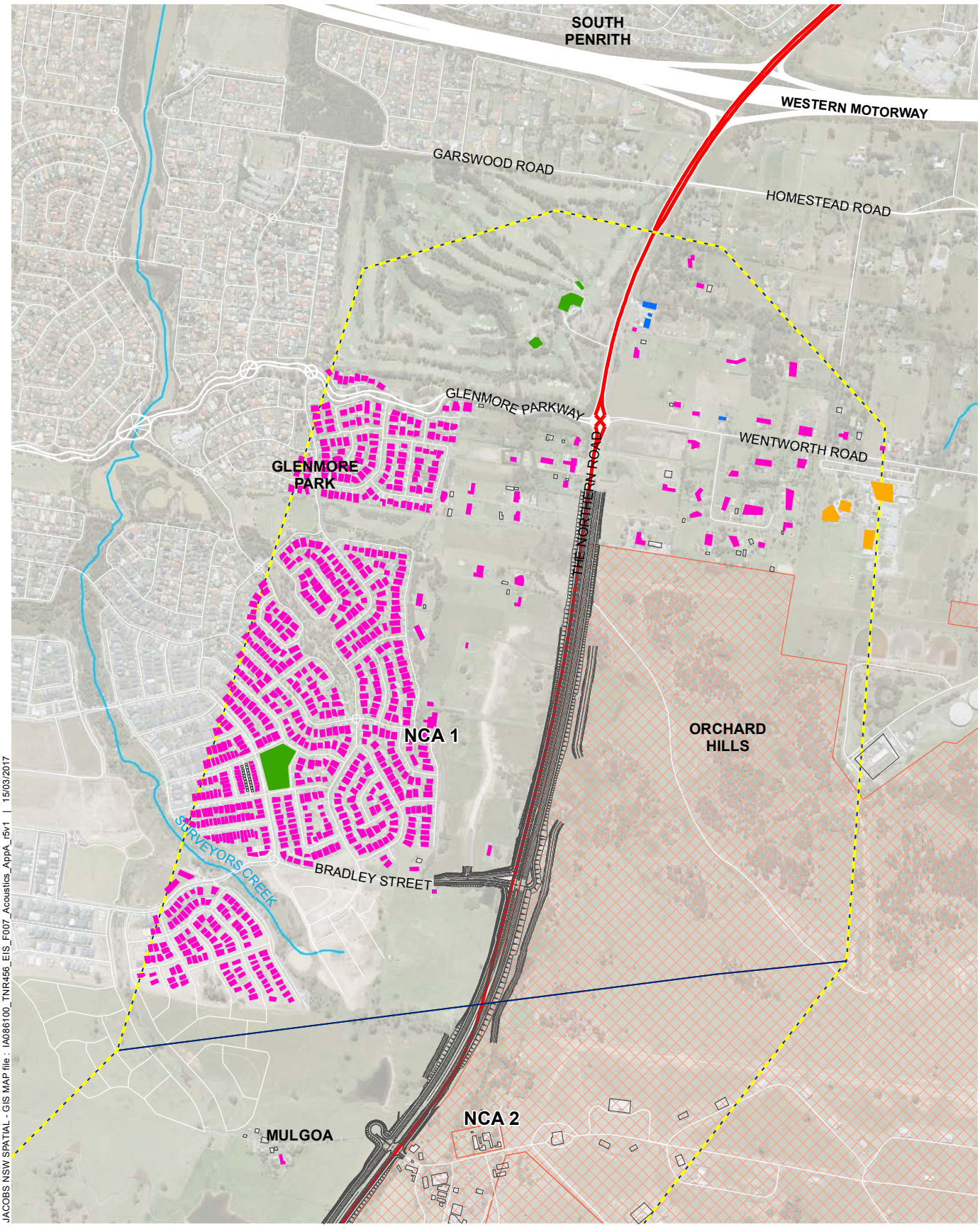
The Northern Road (Existing)
Redeveloped road sections
New road sections
WaterNSW supply pipelines
Noise catchment areas
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Study area

Noise sensitive receivers (by land use)
Residential
Educational
Place of Worship
Active Recreation
Commercial
Not acoustically sensitive

0 200 400 m

N





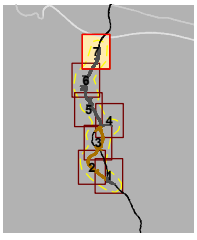
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F007_Acoustics_AppA_r5v1 | 15/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Noise catchment areas
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Study area

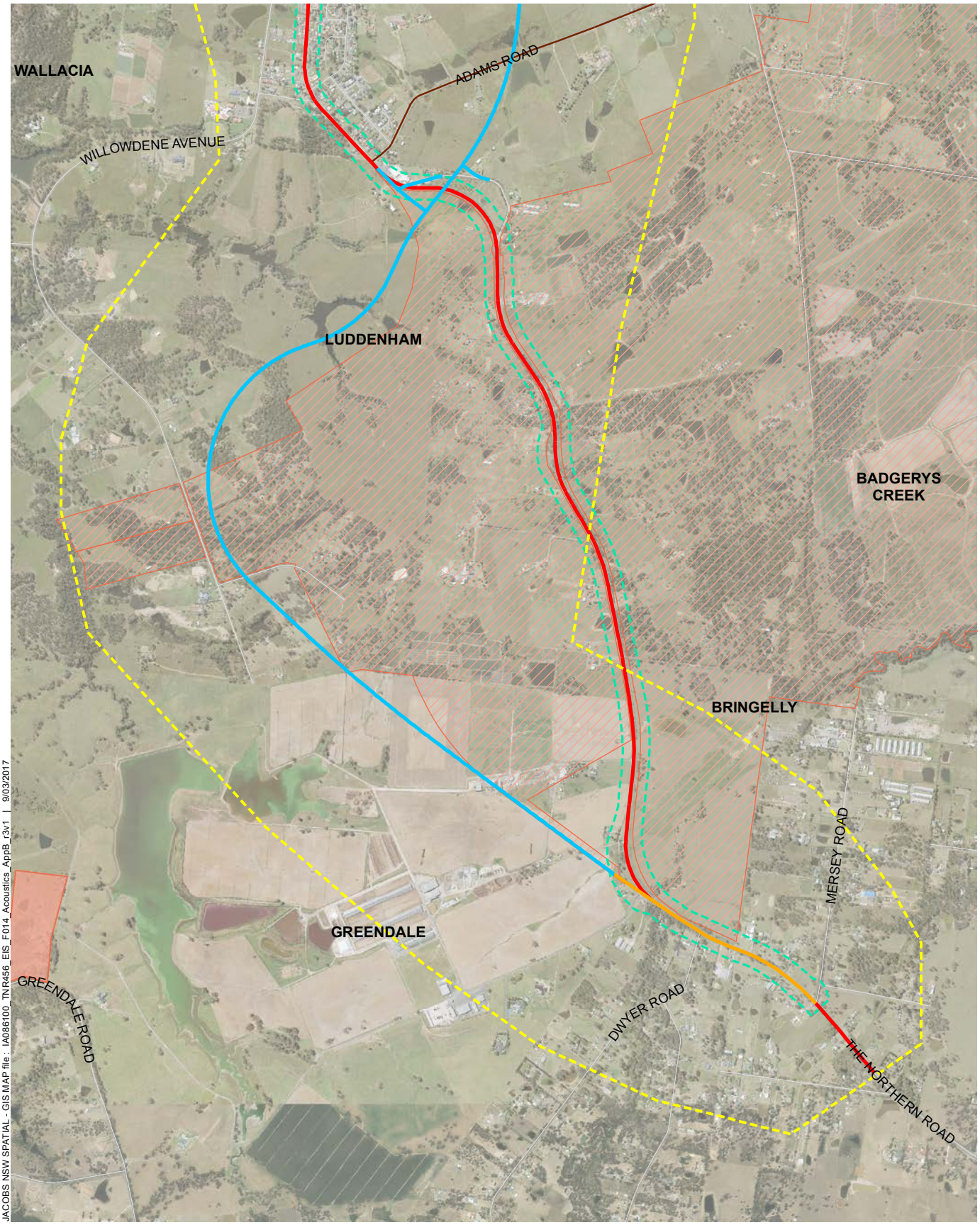
Noise sensitive receivers (by land use)
Residential
Educational
Place of Worship
Active Recreation
Commercial
Not acoustically sensitive

0 200 400 m

N



Appendix B. Road Functional Classes and Road Development Types Assessed



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F014_Acoustics_AppB_r3v1 | 9/03/2017

Western Sydney Airport site (Commonwealth Land)

Defence Establishment Orchard Hills (Commonwealth Land)

Commonwealth lands

Study area

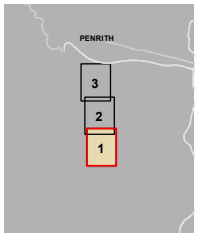
NCG tolerance band

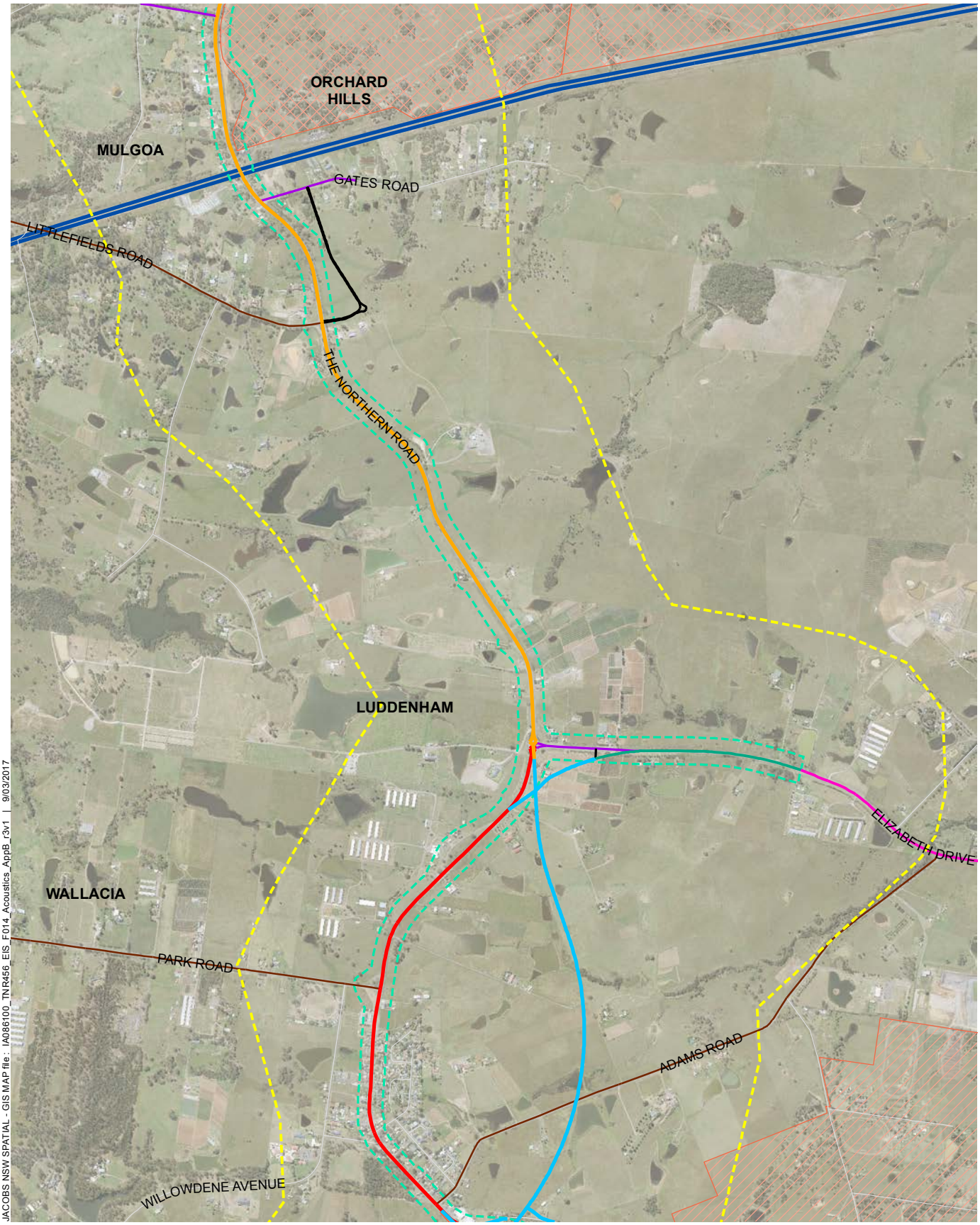
Functional class, Development type

- Freeway, Existing
- Arterial, New
- Arterial, Redeveloped
- Arterial, Existing
- Sub arterial, New
- Sub arterial, Redeveloped
- Sub arterial, Existing
- Collector, Existing
- Local, New
- Local, Redeveloped

0 400 800 m

N





JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F014_Acoustics_AppB_r3v1 | 9/03/2017

Western Sydney Airport site (Commonwealth Land)

Defence Establishment Orchard Hills (Commonwealth Land)

Commonwealth lands

Study area

NCG tolerance band

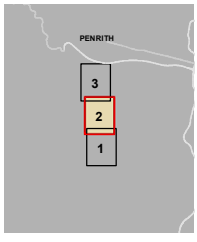
WaterNSW supply pipelines

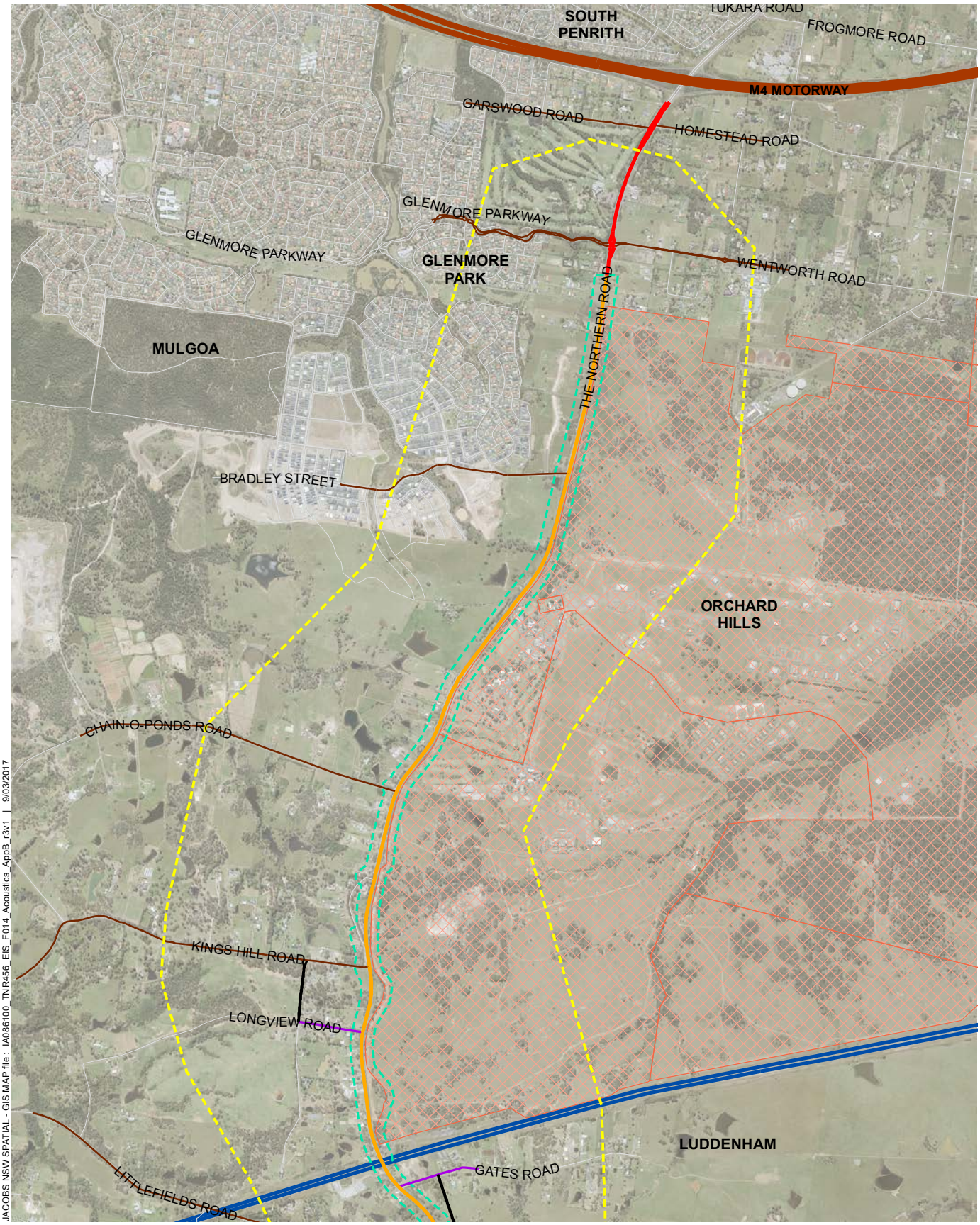
Functional class, Development type

- Freeway, Existing
- Arterial, New
- Arterial, Redeveloped
- Arterial, Existing
- Sub arterial, New
- Sub arterial, Redeveloped
- Sub arterial, Existing
- Collector, Existing
- Local, New
- Local, Redeveloped

0 400 800 m

N





JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F014_Acoustics_AppB_r3v1 | 9/03/2017

Western Sydney Airport site (Commonwealth Land)

Defence Establishment Orchard Hills (Commonwealth Land)

Commonwealth lands

Study area

NCG tolerance band

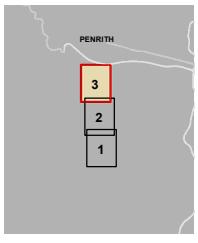
WaterNSW supply pipelines

Functional class, Development type

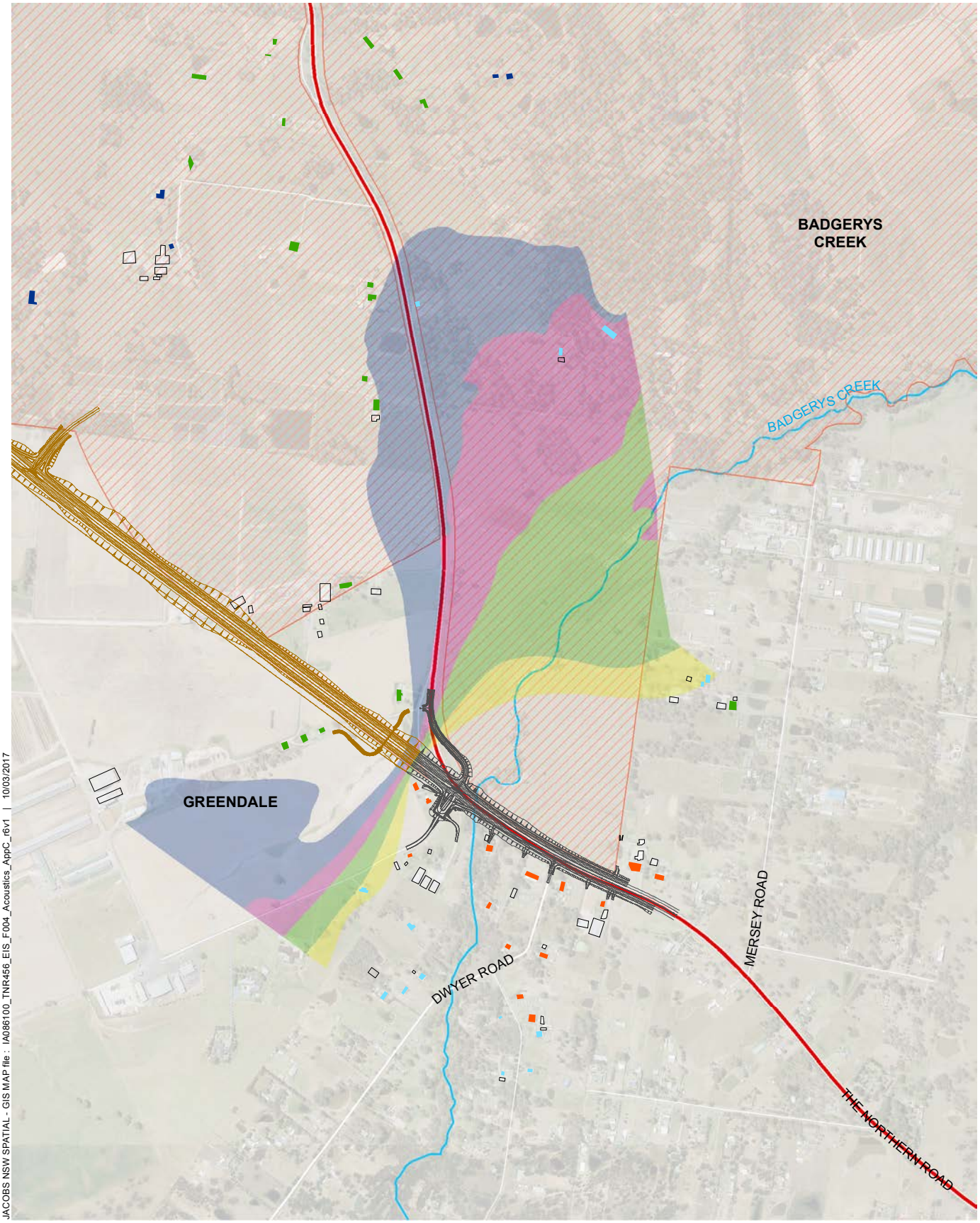
- Freeway, Existing
- Arterial, New
- Arterial, Redeveloped
- Arterial, Existing
- Sub arterial, New
- Sub arterial, Redeveloped
- Sub arterial, Existing
- Collector, Existing
- Local, New
- Local, Redeveloped

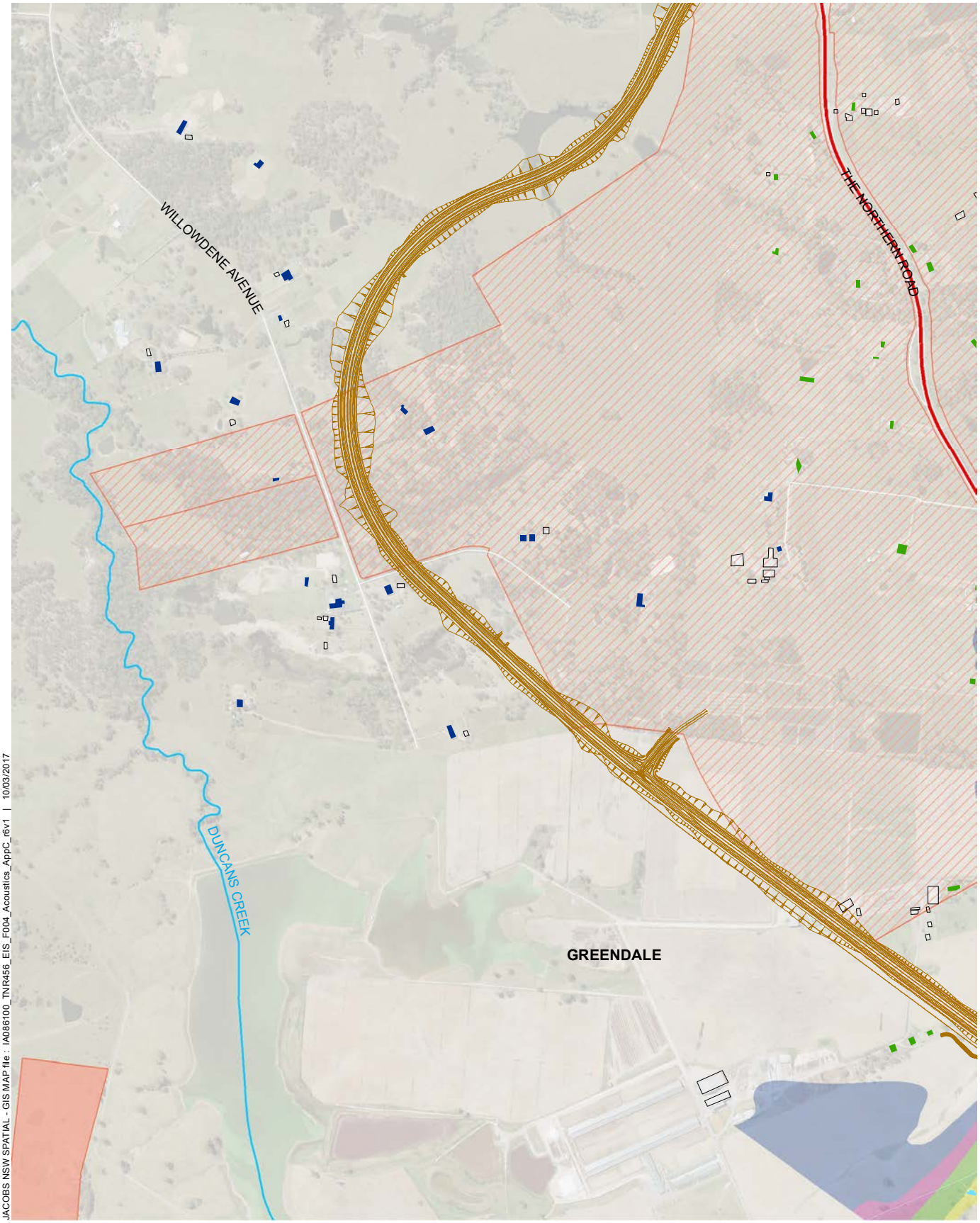
0 400 800 m

N



Appendix C. Controlling NCG operational noise criteria for residential receivers


BADGERYS CREEK
BADGERYS CREEK
GREENDALE
DWYER ROAD
MERSEY ROAD
THE NORTHERN ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F004_Acoustics_AppC_r6v1 | 10/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Noise criteria determined by:
Relative increase criteria
New road criteria
Redeveloped road criteria
Transition zone criteria
Non-residential receiver
Transition zone contours
Day 56 dBA / Night 51 dBA
Day 57 dBA / Night 52 dBA
Day 58 dBA / Night 53 dBA
Day 59 dBA / Night 54 dBA
0
200
400 m
N
7
6
5
4
3
2
1



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F004_Acoustics_AppC_r6v1 | 10/03/2017

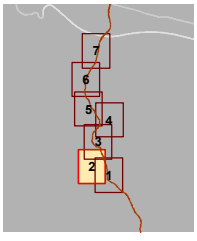
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

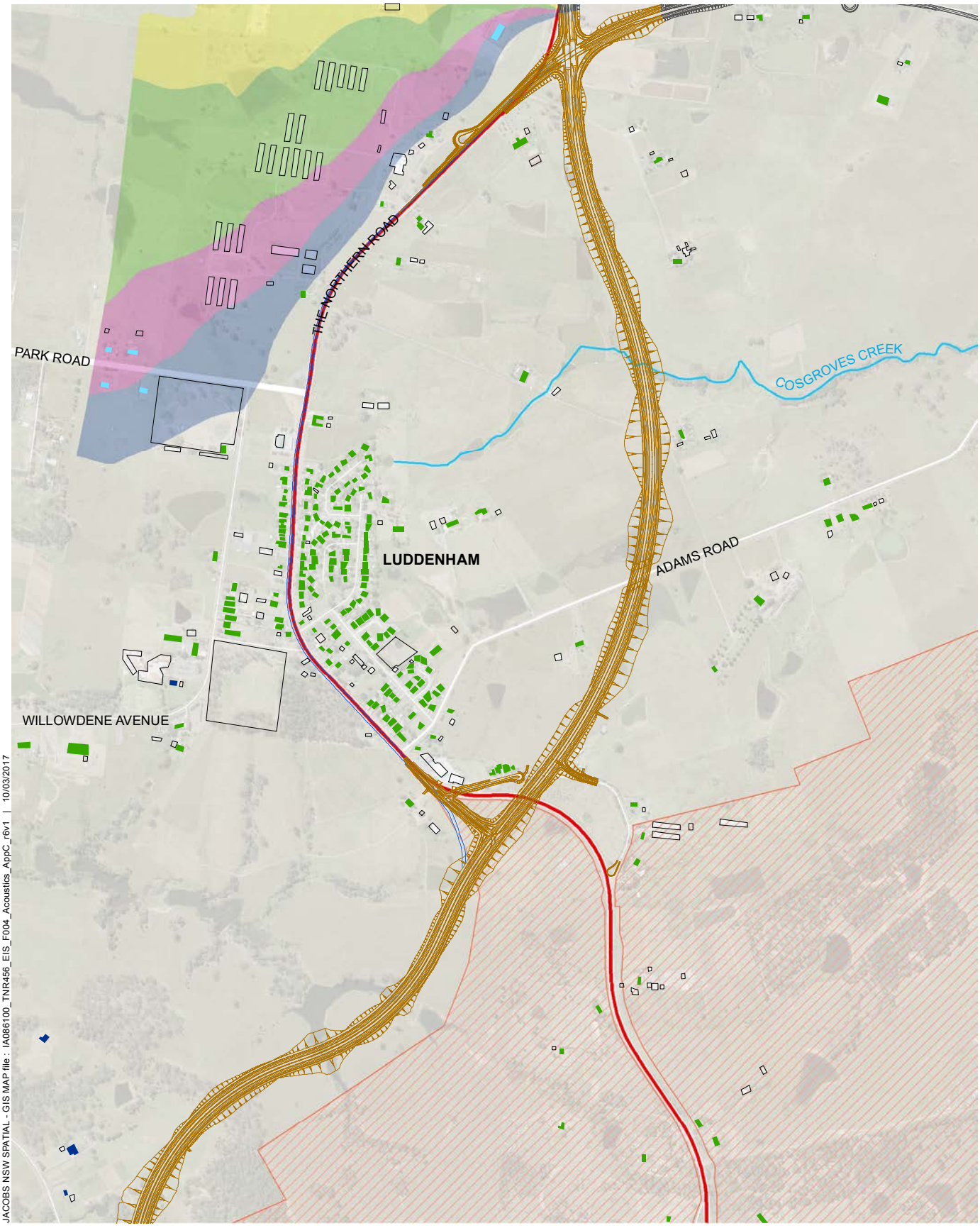
Noise criteria determined by:
Relative increase criteria
New road criteria
Redeveloped road criteria
Transition zone criteria
Non-residential receiver

Transition zone contours
Day 56 dBA / Night 51 dBA
Day 57 dBA / Night 52 dBA
Day 58 dBA / Night 53 dBA
Day 59 dBA / Night 54 dBA

0 200 400 m

N





JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F004_Acoustics_AppC_r6v1 | 10/03/2017

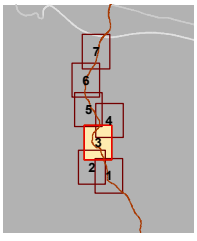
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

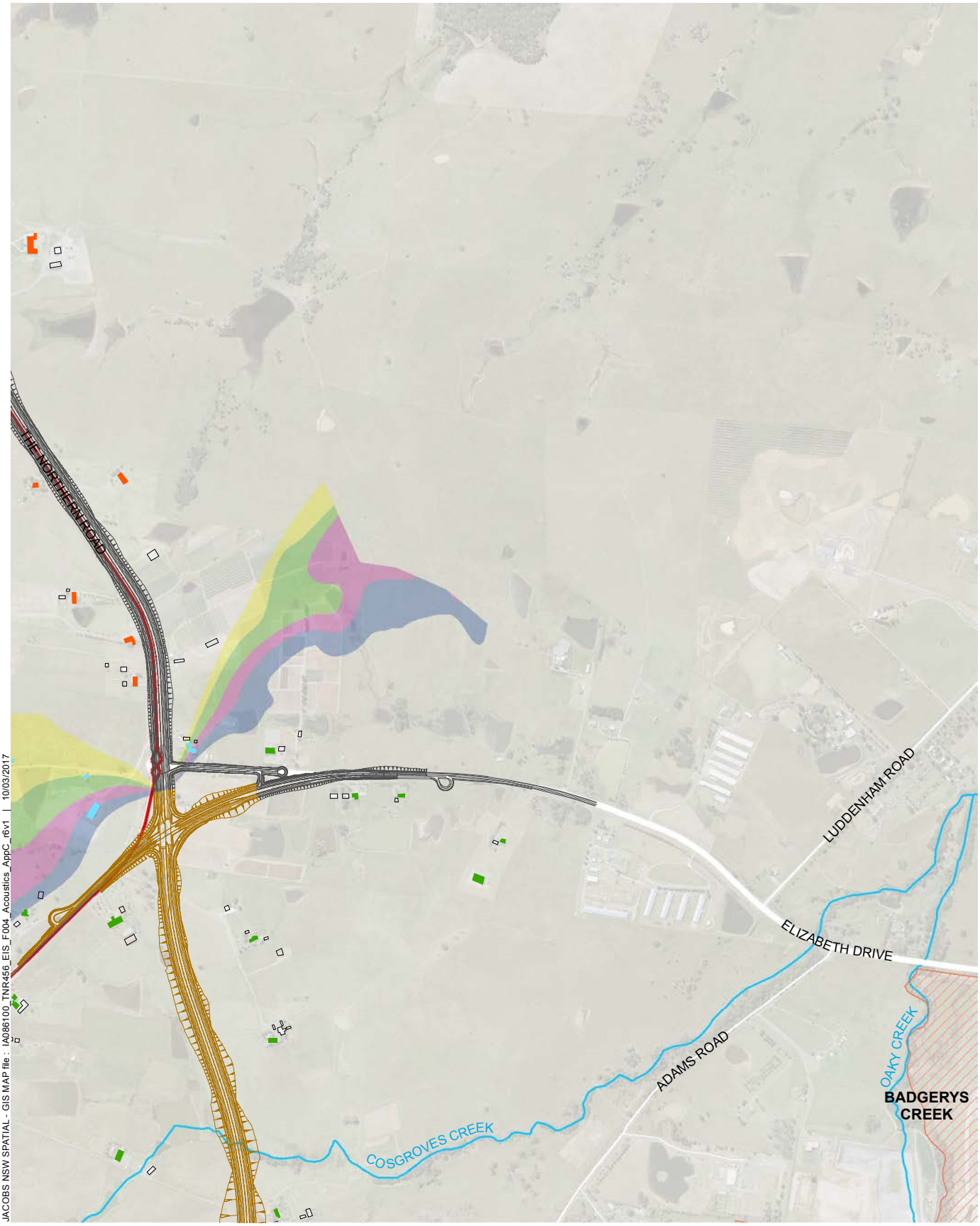
Noise criteria determined by:
Relative increase criteria
New road criteria
Redeveloped road criteria
Transition zone criteria
Non-residential receiver

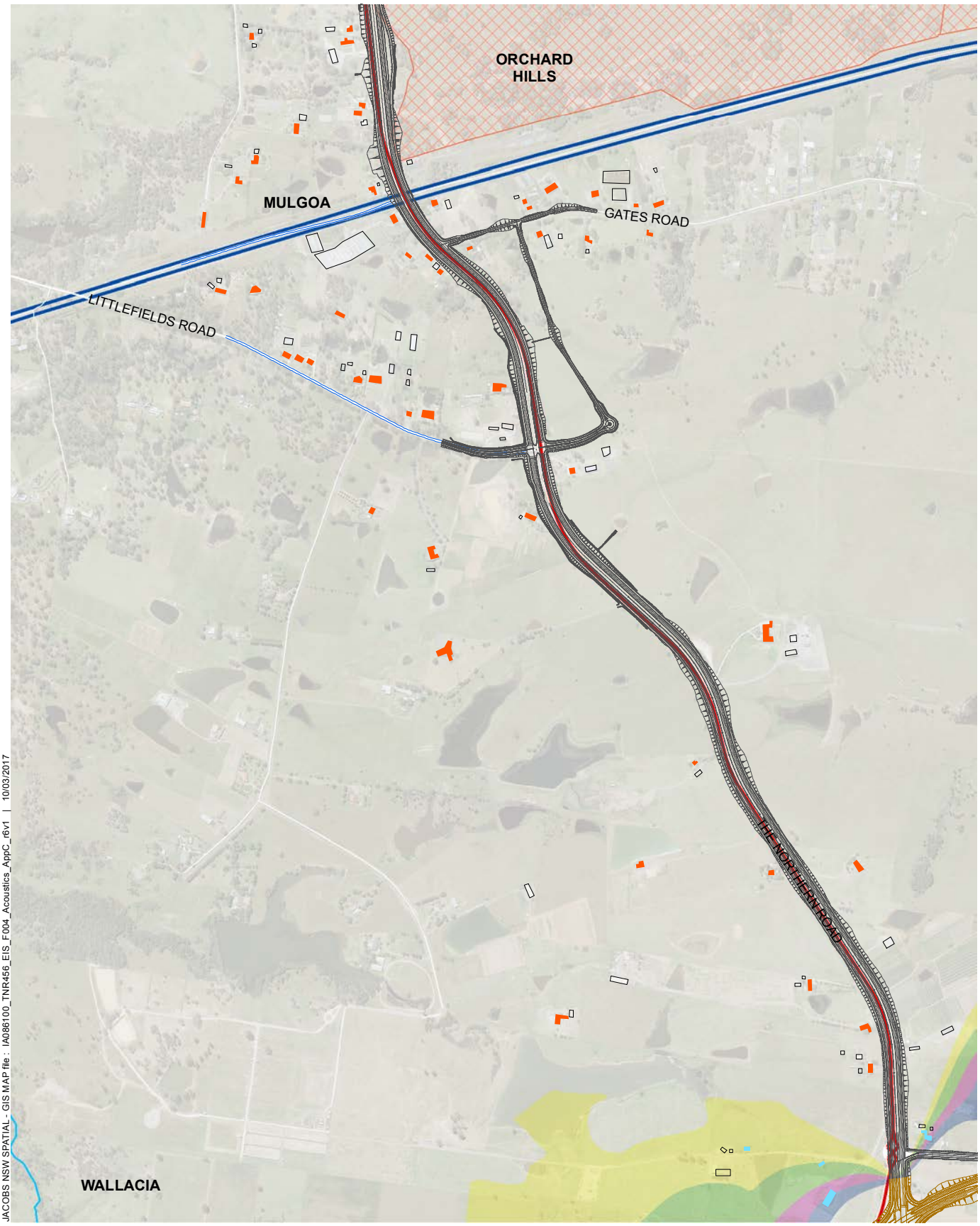
Transition zone contours
Day 56 dBA / Night 51 dBA
Day 57 dBA / Night 52 dBA
Day 58 dBA / Night 53 dBA
Day 59 dBA / Night 54 dBA

0 200 400 m

N




THE NORTHERN ROAD
LUDDENHAM ROAD
ELIZABETH DRIVE
ADAMS ROAD
COSGROVES CREEK
OAKY CREEK
BADGERYS CREEK
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F004_Acoustics_AppC_r6v1 | 10/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines
Noise criteria determined by:
Relative increase criteria
New road criteria
Redeveloped road criteria
Transition zone criteria
Non-residential receiver
Transition zone contours
Day 56 dBA / Night 51 dBA
Day 57 dBA / Night 52 dBA
Day 58 dBA / Night 53 dBA
Day 59 dBA / Night 54 dBA
0
200
400 m
N
7
6
5
4
3
2
1



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F004_Acoustics_AppC_r6v1 | 10/03/2017

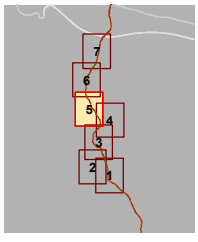
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines

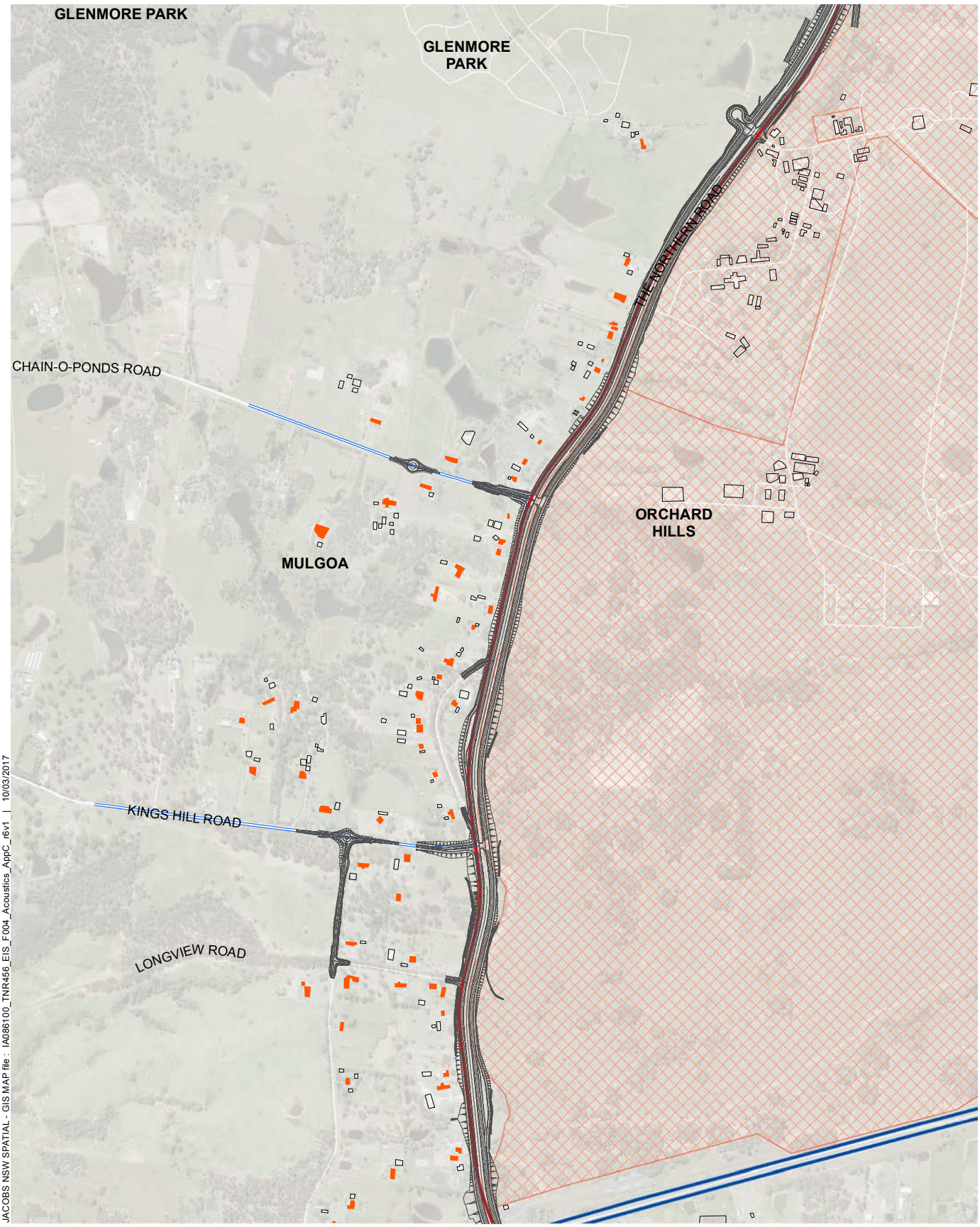
Noise criteria determined by:
Relative increase criteria
New road criteria
Redeveloped road criteria
Transition zone criteria
Non-residential receiver

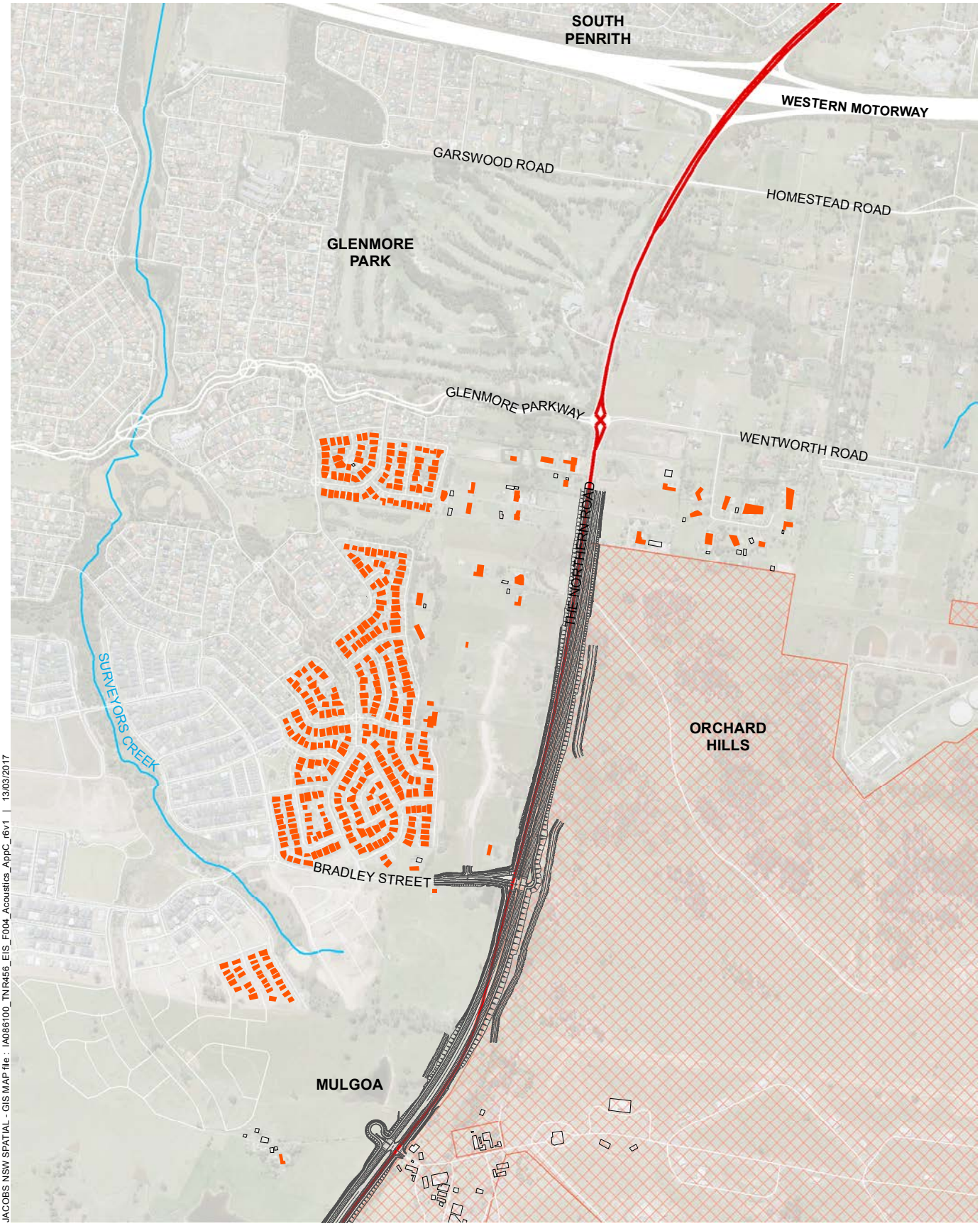
Transition zone contours
Day 56 dBA / Night 51 dBA
Day 57 dBA / Night 52 dBA
Day 58 dBA / Night 53 dBA
Day 59 dBA / Night 54 dBA

0 200 400 m

N




GLENMORE PARK
GLENMORE PARK
THE NORTHERN ROAD
CHAIN-O-PONDS ROAD
ORCHARD HILLS
MULGOA
KINGS HILL ROAD
LONGVIEW ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F004_Acoustics_AppC_r6v1 | 10/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines
Noise criteria determined by:
Relative increase criteria
New road criteria
Redeveloped road criteria
Transition zone criteria
Non-residential receiver
Transition zone contours
Day 56 dBA / Night 51 dBA
Day 57 dBA / Night 52 dBA
Day 58 dBA / Night 53 dBA
Day 59 dBA / Night 54 dBA
0
200
400 m
N
7
6
5
4
3
2
1



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F004_Acoustics_AppC_r6v1 | 13/03/2017

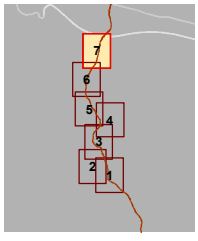
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Noise criteria determined by:
Relative increase criteria
New road criteria
Redeveloped road criteria
Transition zone criteria
Non-residential receiver

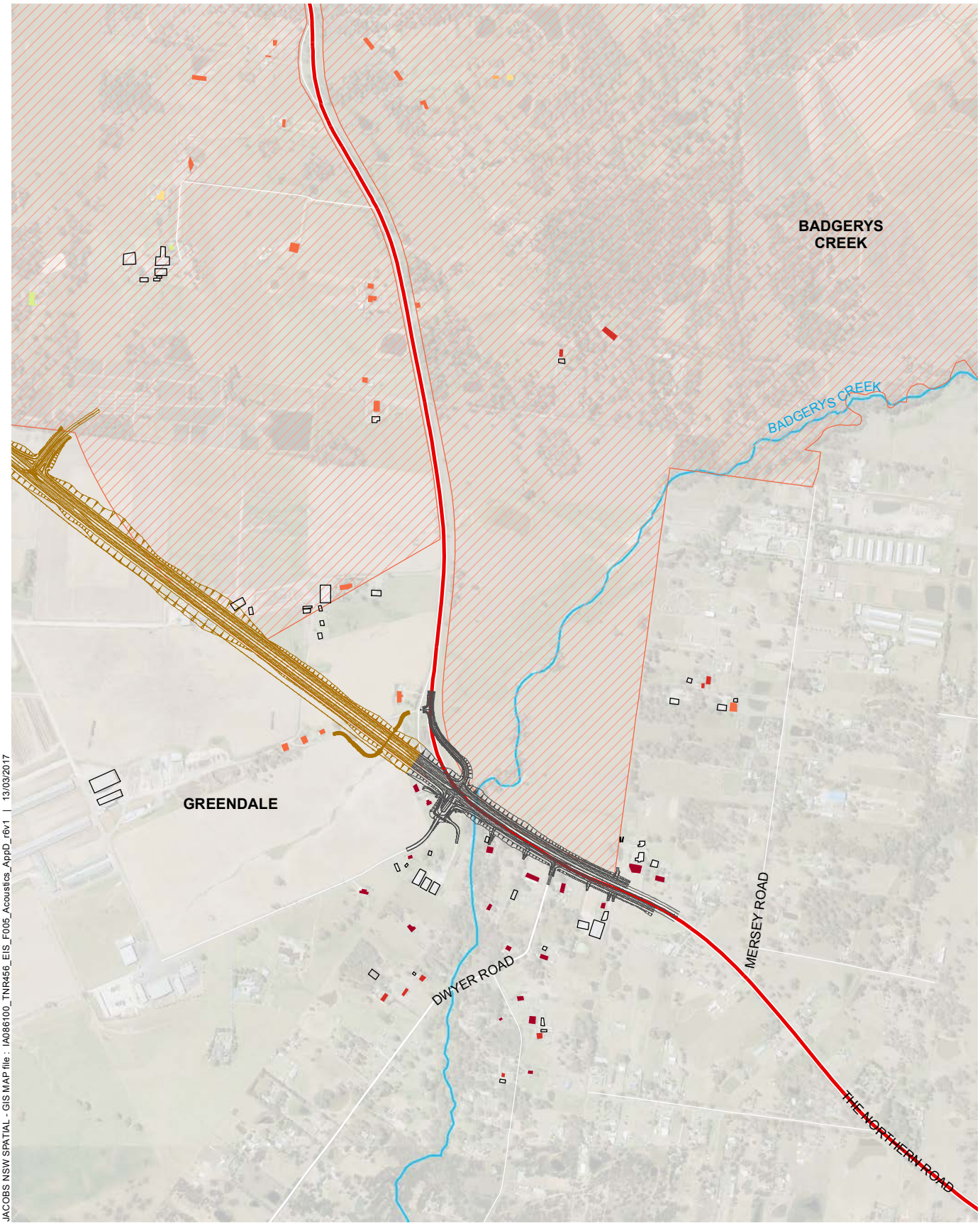
Transition zone contours
Day 56 dBA / Night 51 dBA
Day 57 dBA / Night 52 dBA
Day 58 dBA / Night 53 dBA
Day 59 dBA / Night 54 dBA

0 200 400 m

N



Appendix D. Operational noise criteria for residential receivers (Day time)



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F005_Acoustics_AppD_r6v1 | 13/03/2017

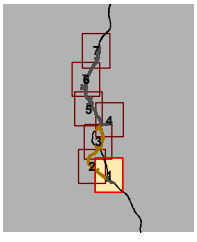
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Daytime noise criterion dB(A)

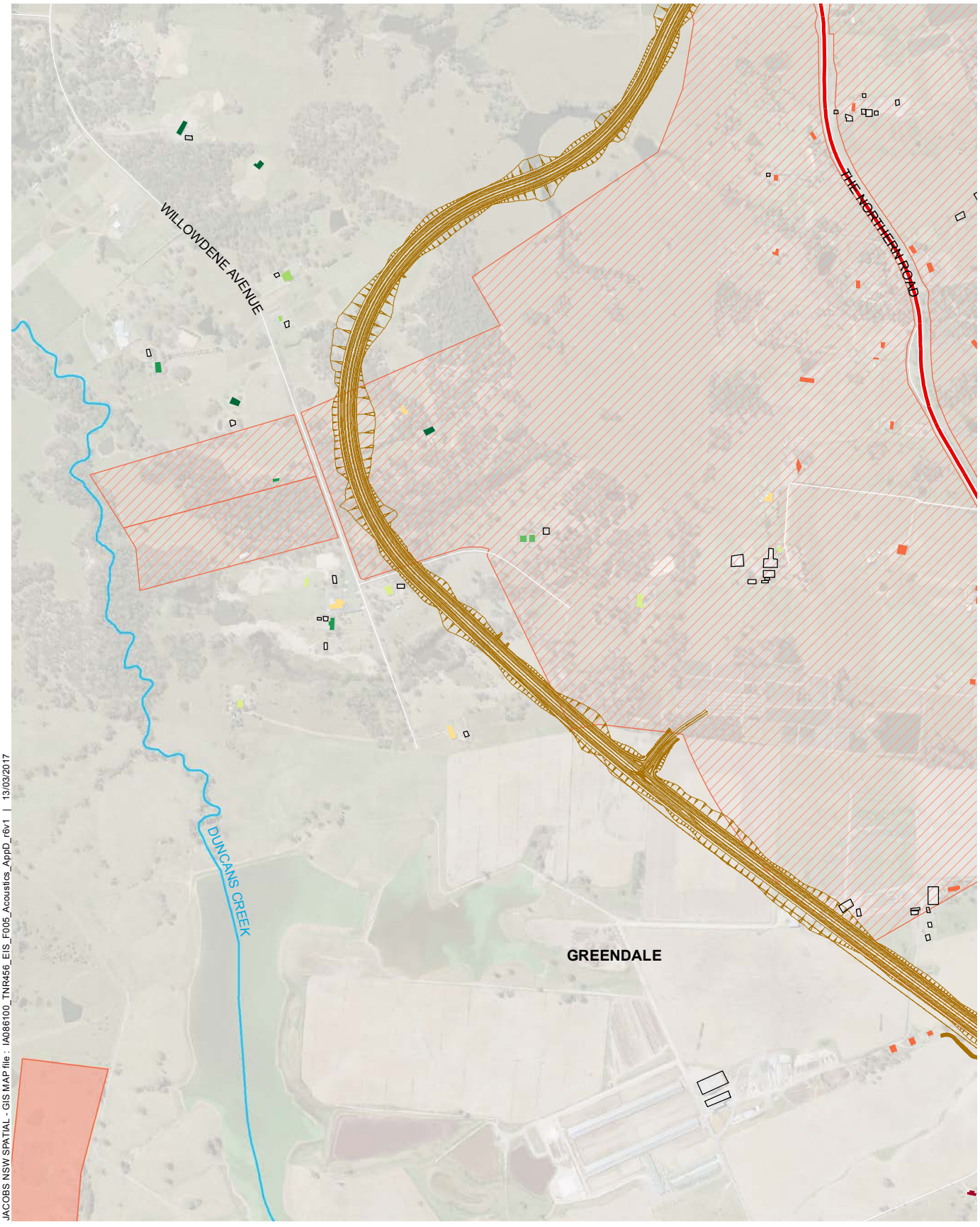
43	50	56
44	51	57
45	52	58
46	53	59
48	54	60
49	55	Non-residential

0 200 400 m

N



Appendix D | Operational noise criteria (day) for residential receivers within operational noise assessment area (refer Section 3)



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F005_Acoustics_AppD_r6v1 | 13/03/2017

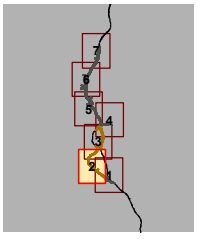
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

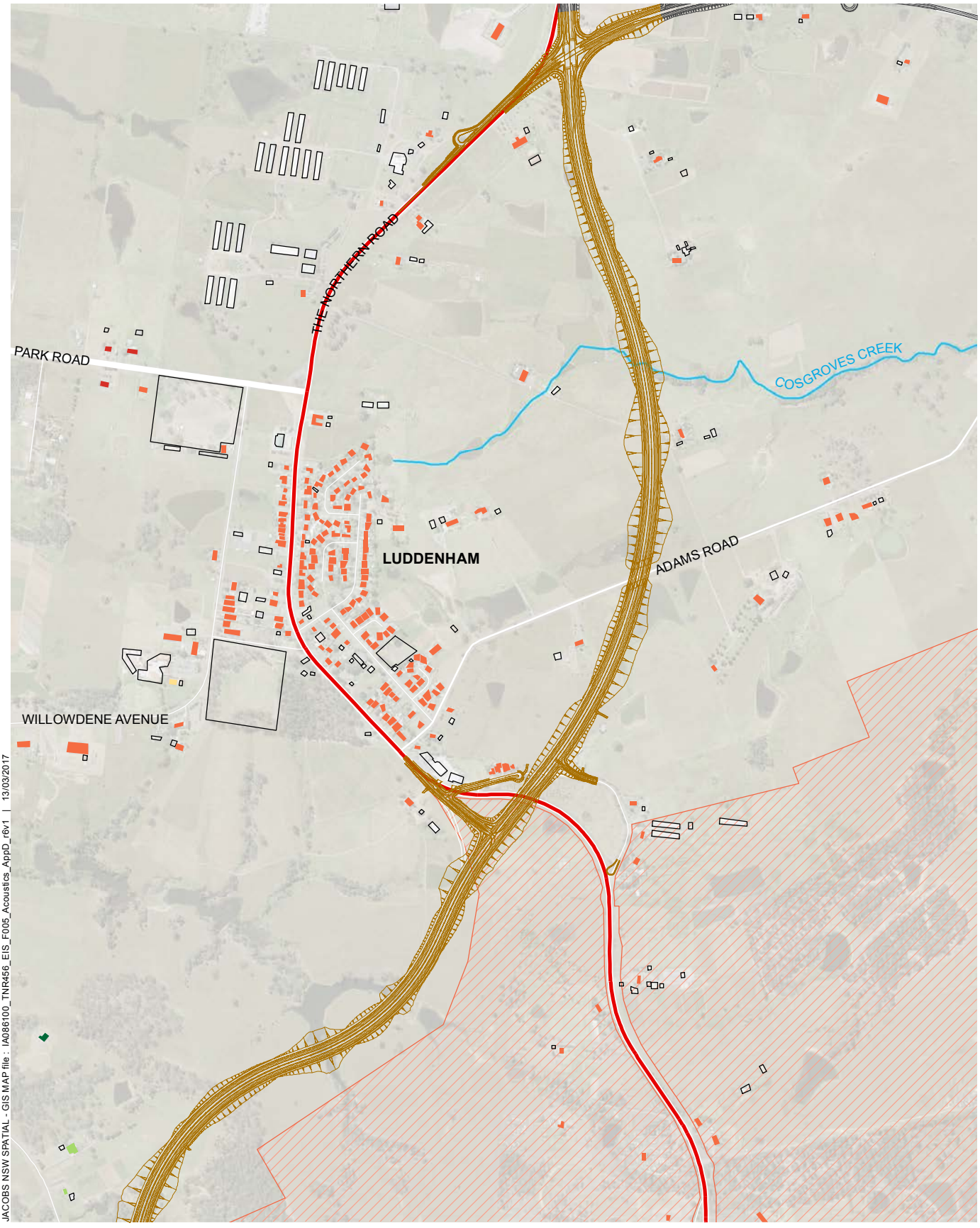
Daytime noise criterion dB(A)

43	50	56
44	51	57
45	52	58
46	53	59
48	54	60
49	55	Non-residential

0 200 400 m

N





JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F005_Acoustics_AppD_r6v1 | 13/03/2017

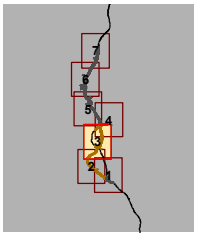
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Daytime noise criterion dB(A)

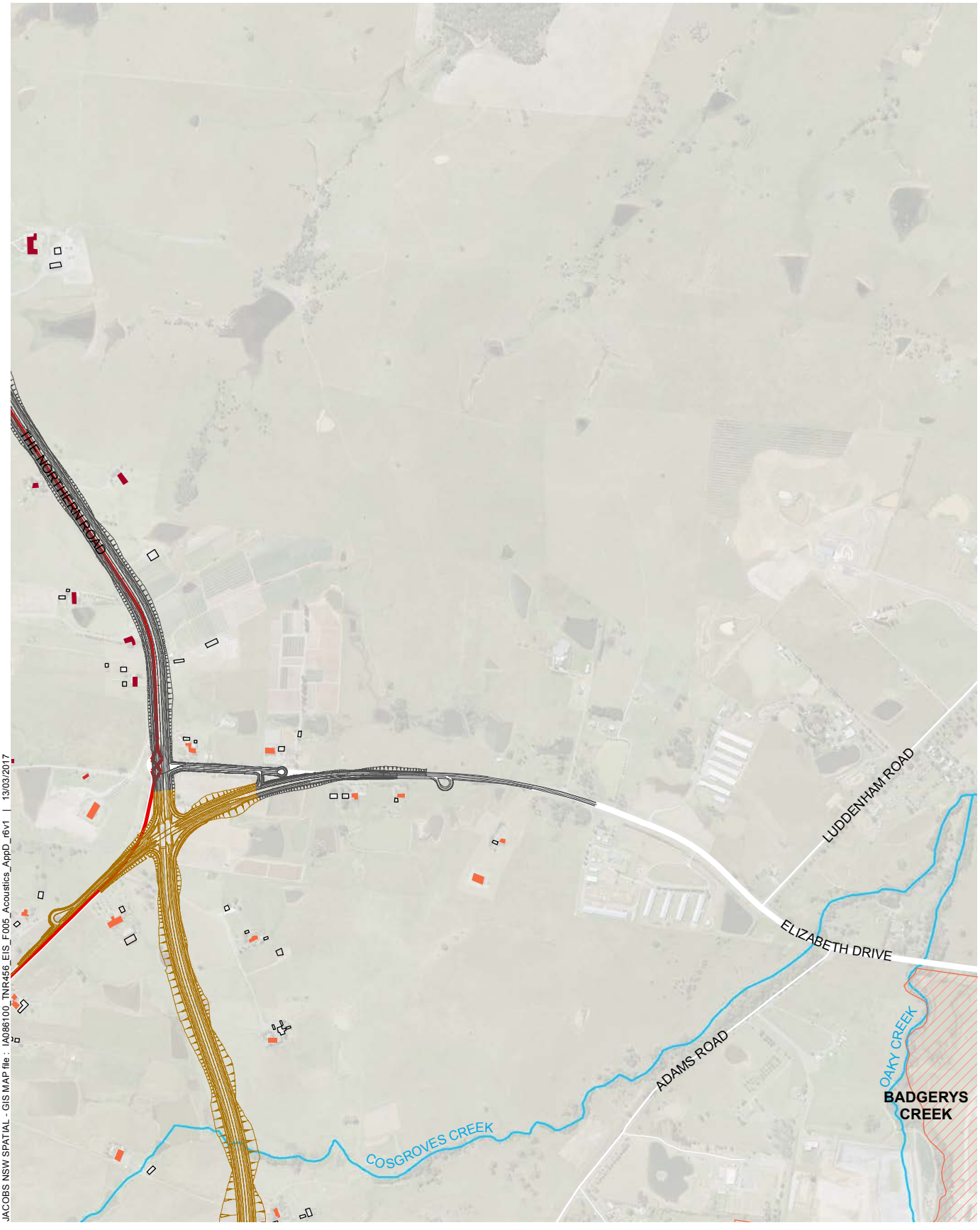
43	50	56
44	51	57
45	52	58
46	53	59
48	54	60
49	55	Non-residential

0 200 400 m

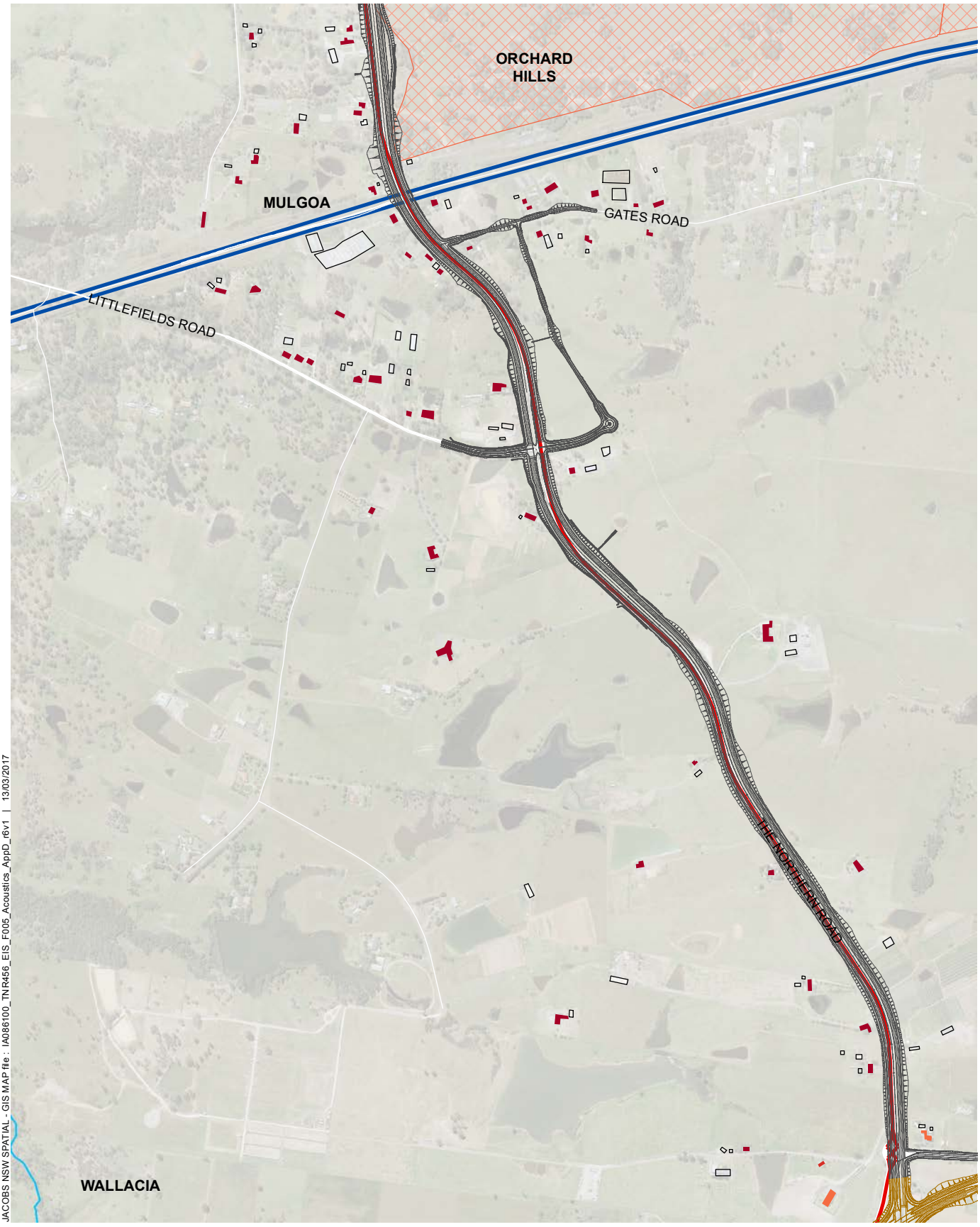
N



Appendix D | Operational noise criteria (day) for residential receivers within operational noise assessment area (refer Section 3)



Appendix D | Operational noise criteria (day) for residential receivers within operational noise assessment area (refer Section 3)



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F005_Acoustics_AppD_r6v1 | 13/03/2017

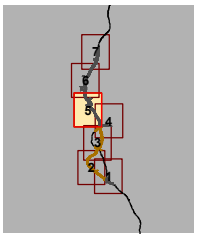
The Northern Road
Redeveloped road
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply

Daytime noise criterion dB(A)

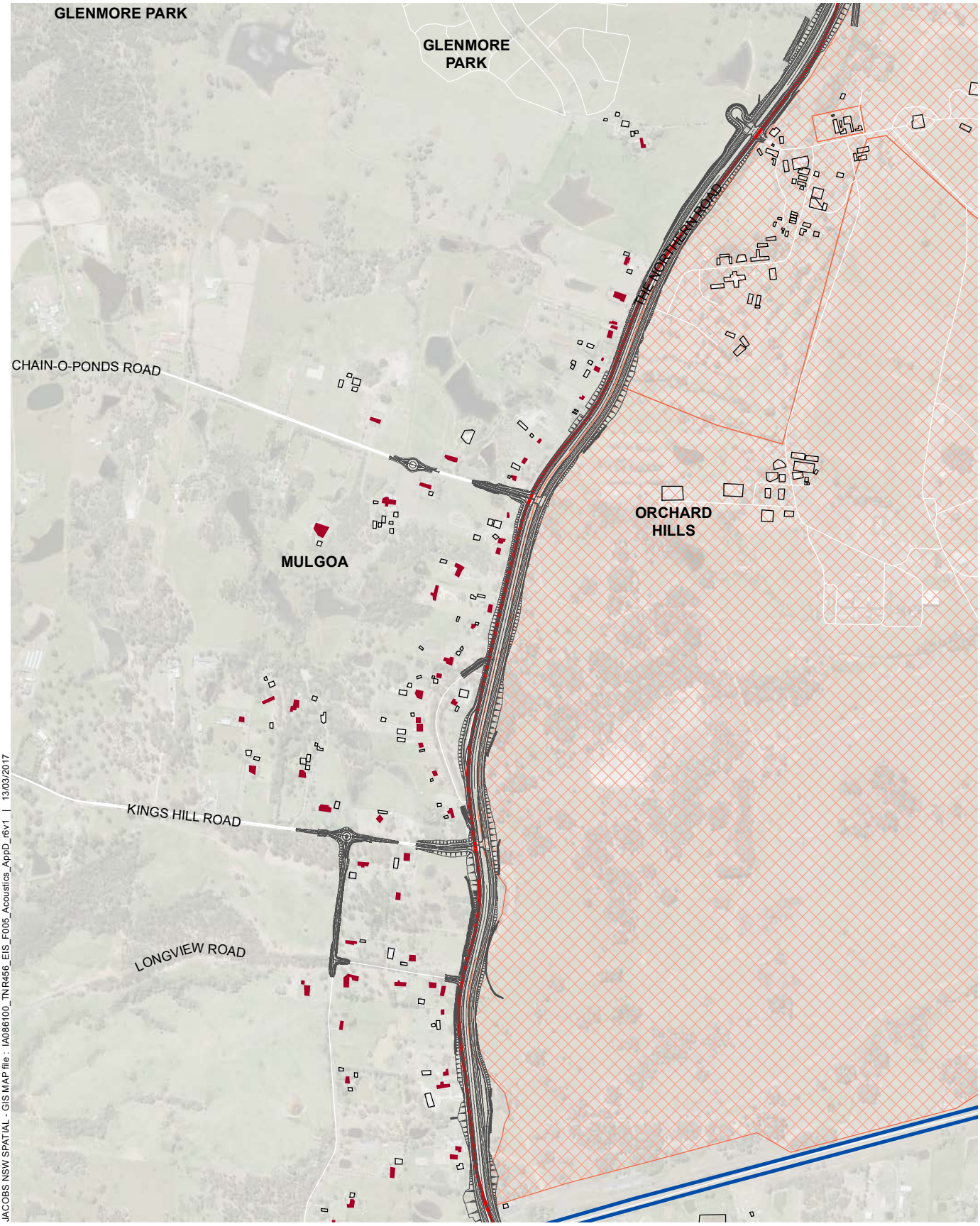
43	50	56
44	51	57
45	52	58
46	53	59
48	54	60
49	55	Non-residential

0 200 400 m

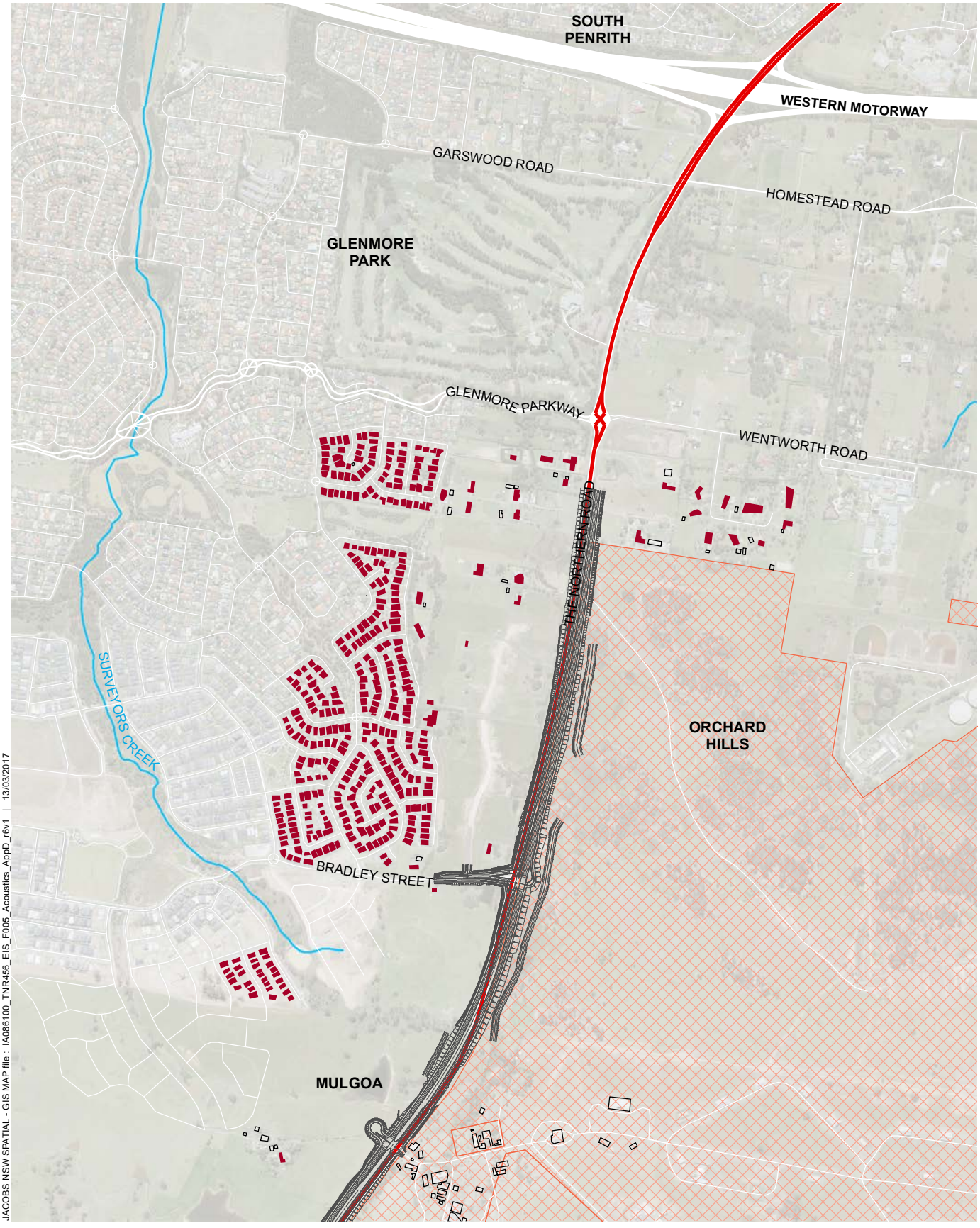
N



Appendix D | Operational noise criteria (day) for residential receivers within operational noise assessment area (refer Section 3)



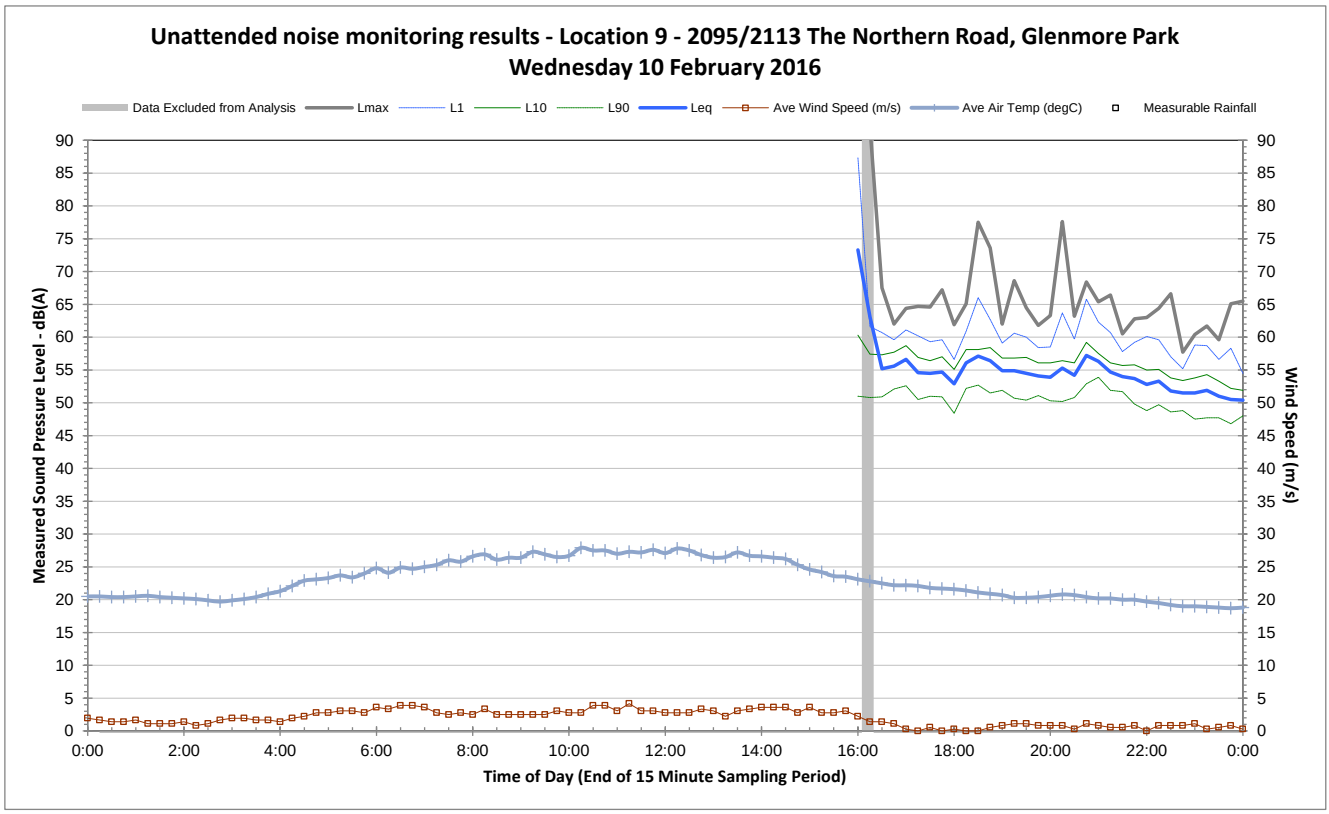
Appendix D | Operational noise criteria (day) for residential receivers within operational noise assessment area (refer Section 3)

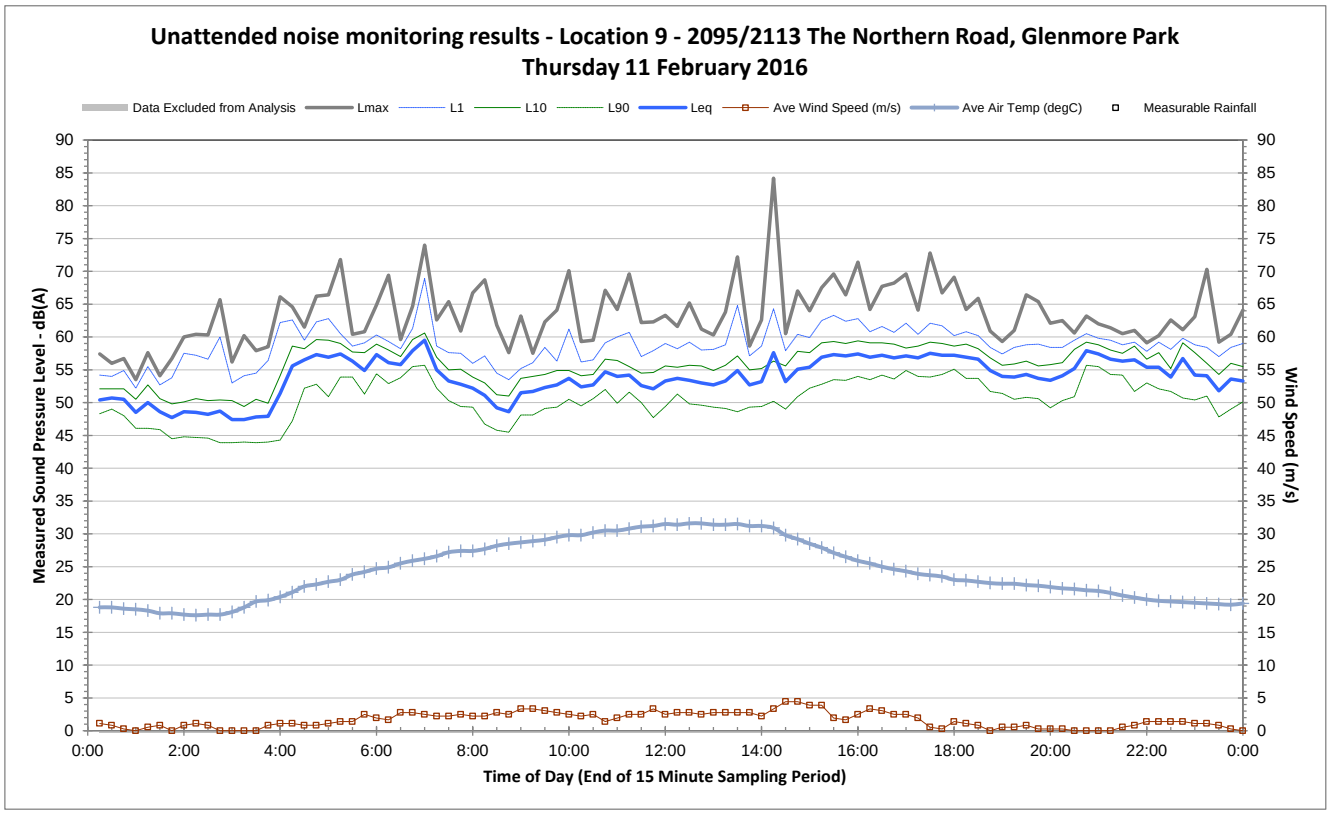


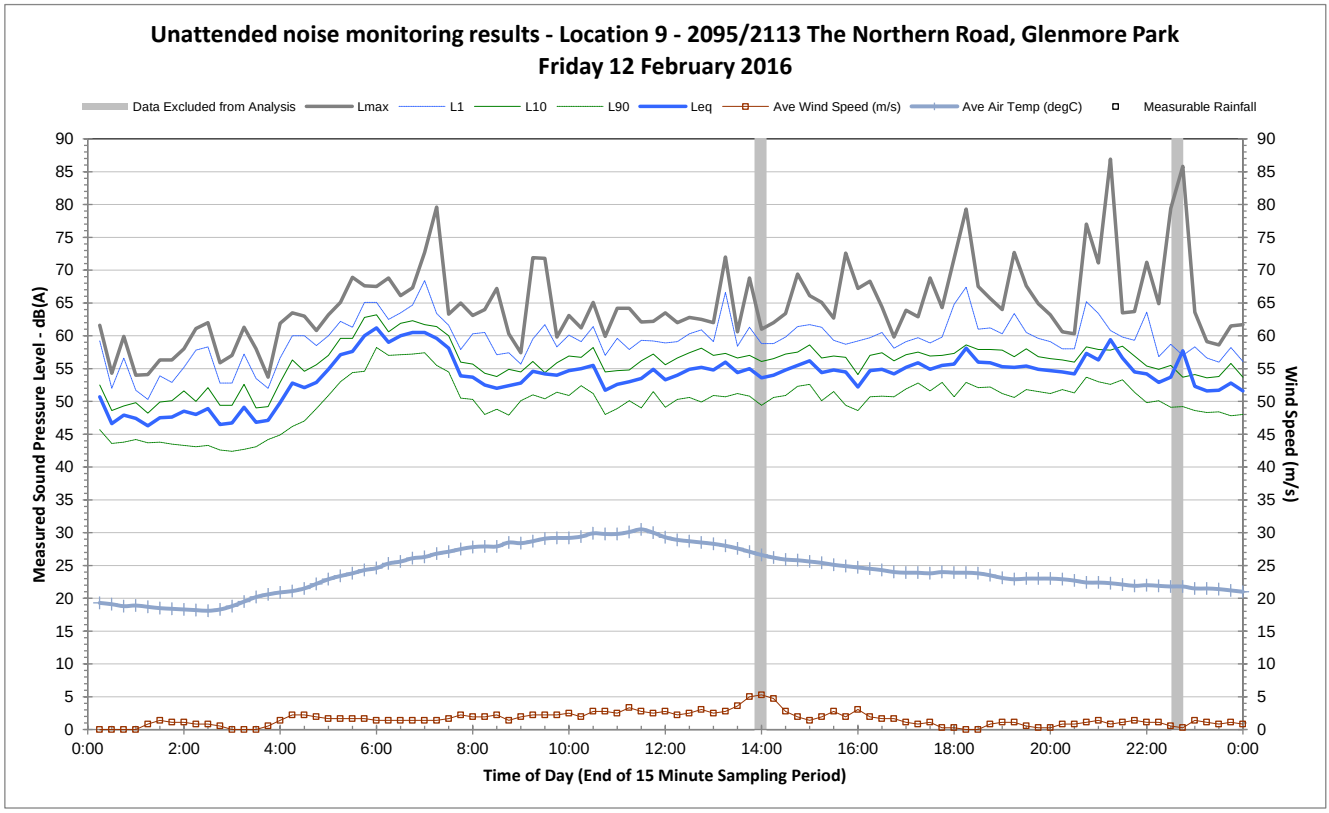
Appendix D | Operational noise criteria (day) for residential receivers within operational noise assessment area (refer Section 3)

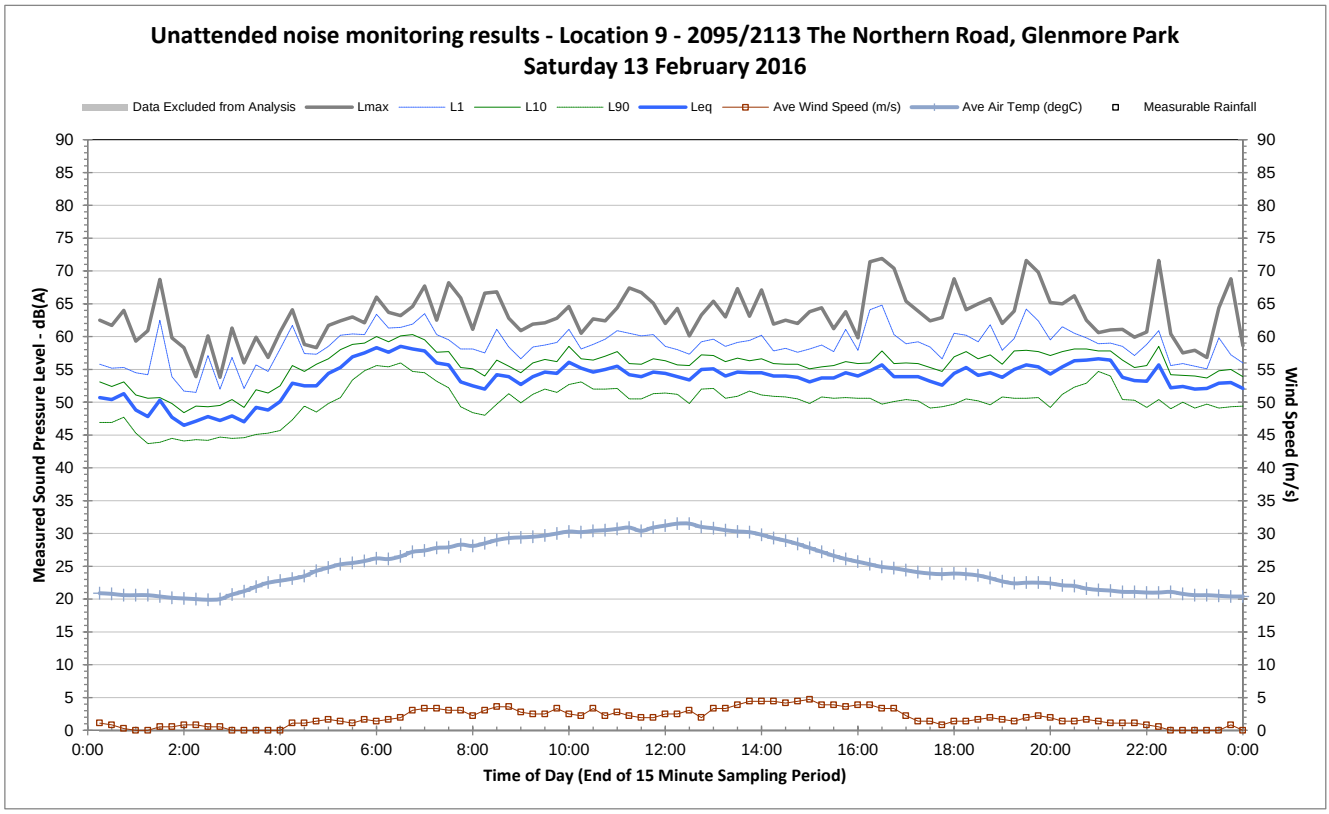
Appendix E. Noise monitoring results

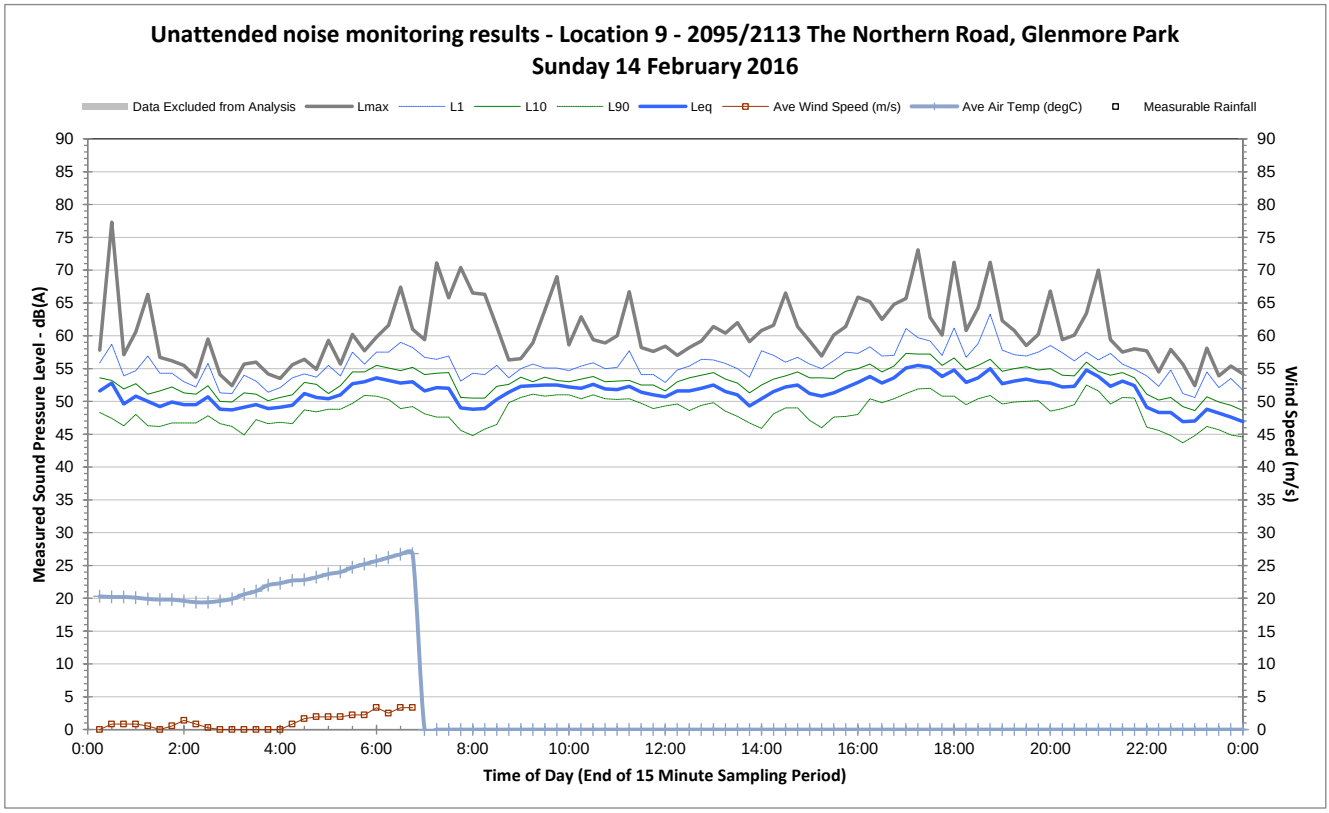
E.1 Location 9 – 2095 / 2113 The Northern Road, Glenmore Park

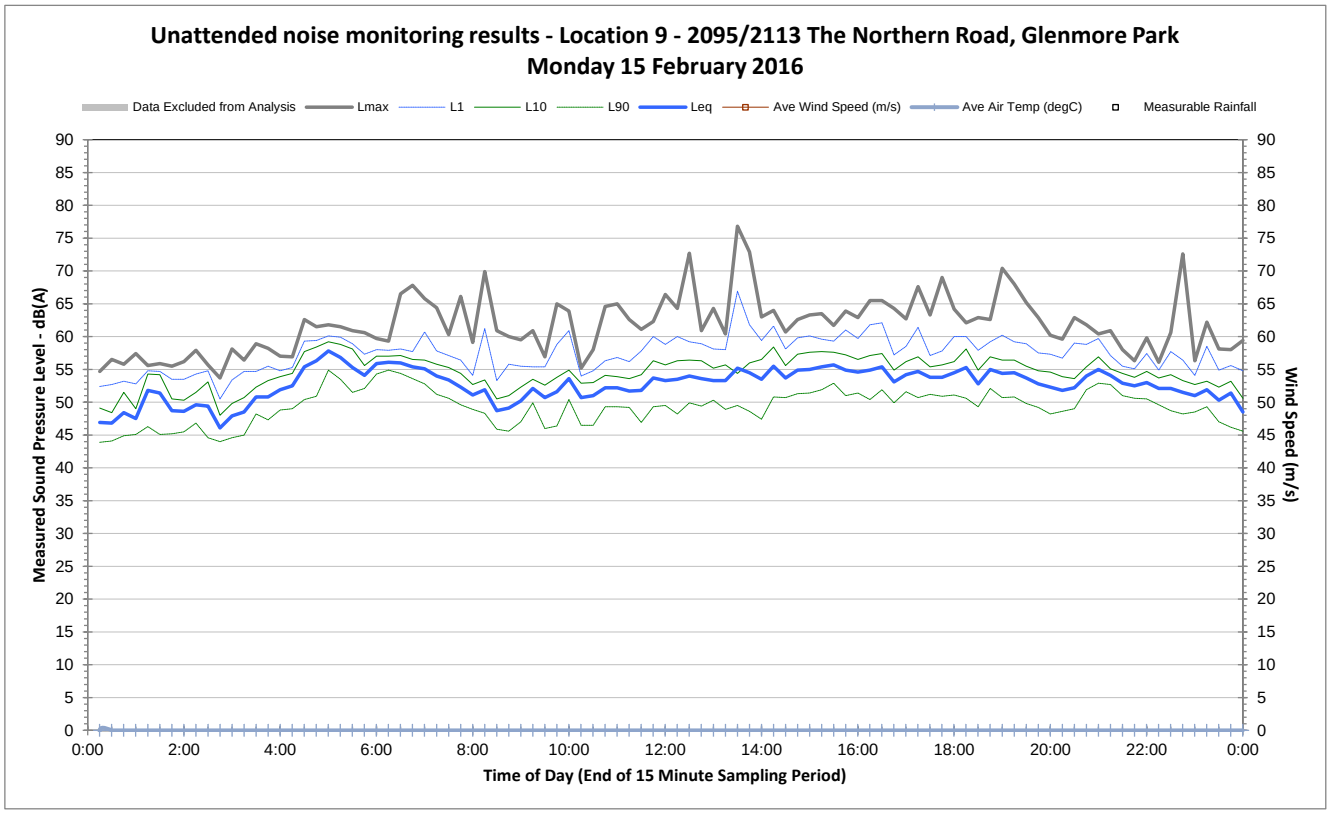


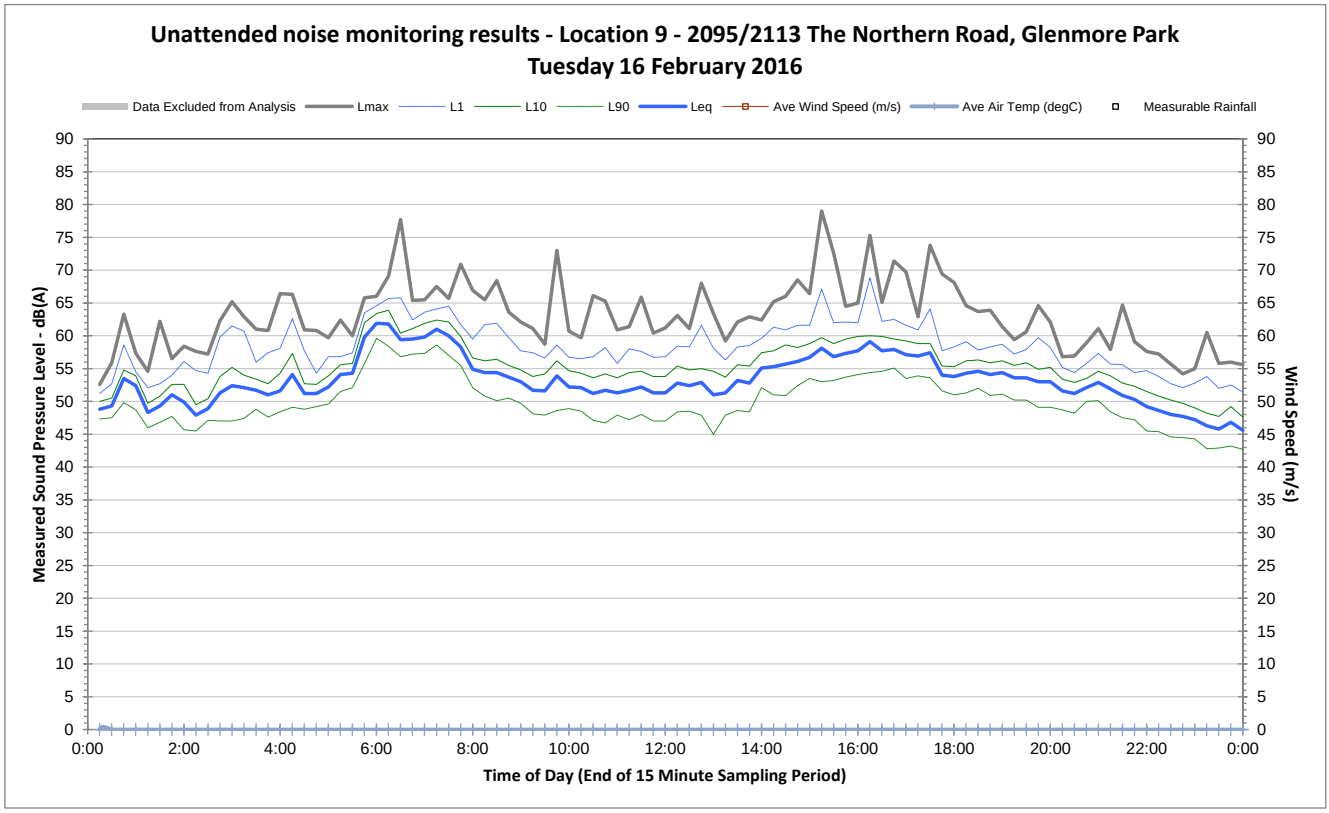


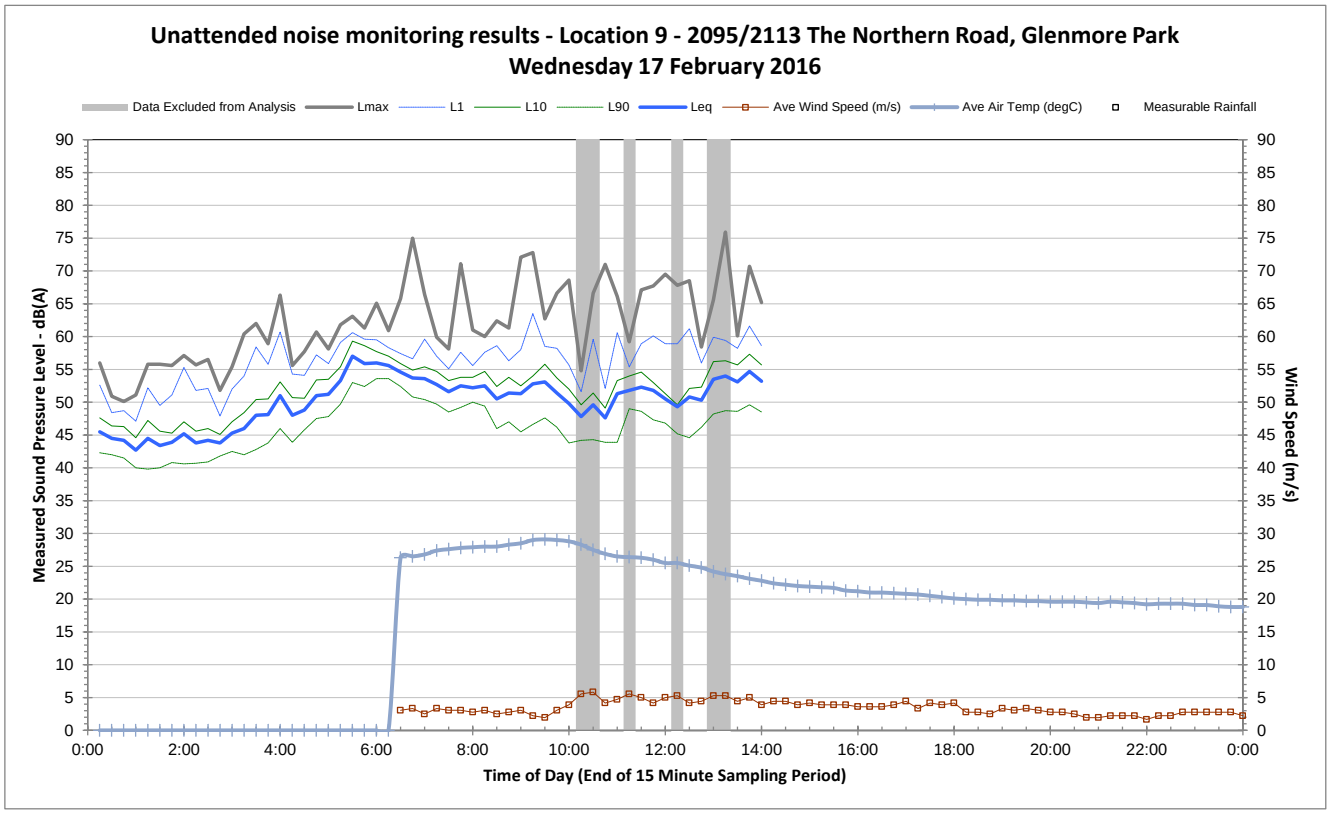

Unattended noise monitoring results - Location 9 - 2095/2113 The Northern Road, Glenmore Park
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 9 - 2095/2113 The Northern Road, Glenmore Park
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

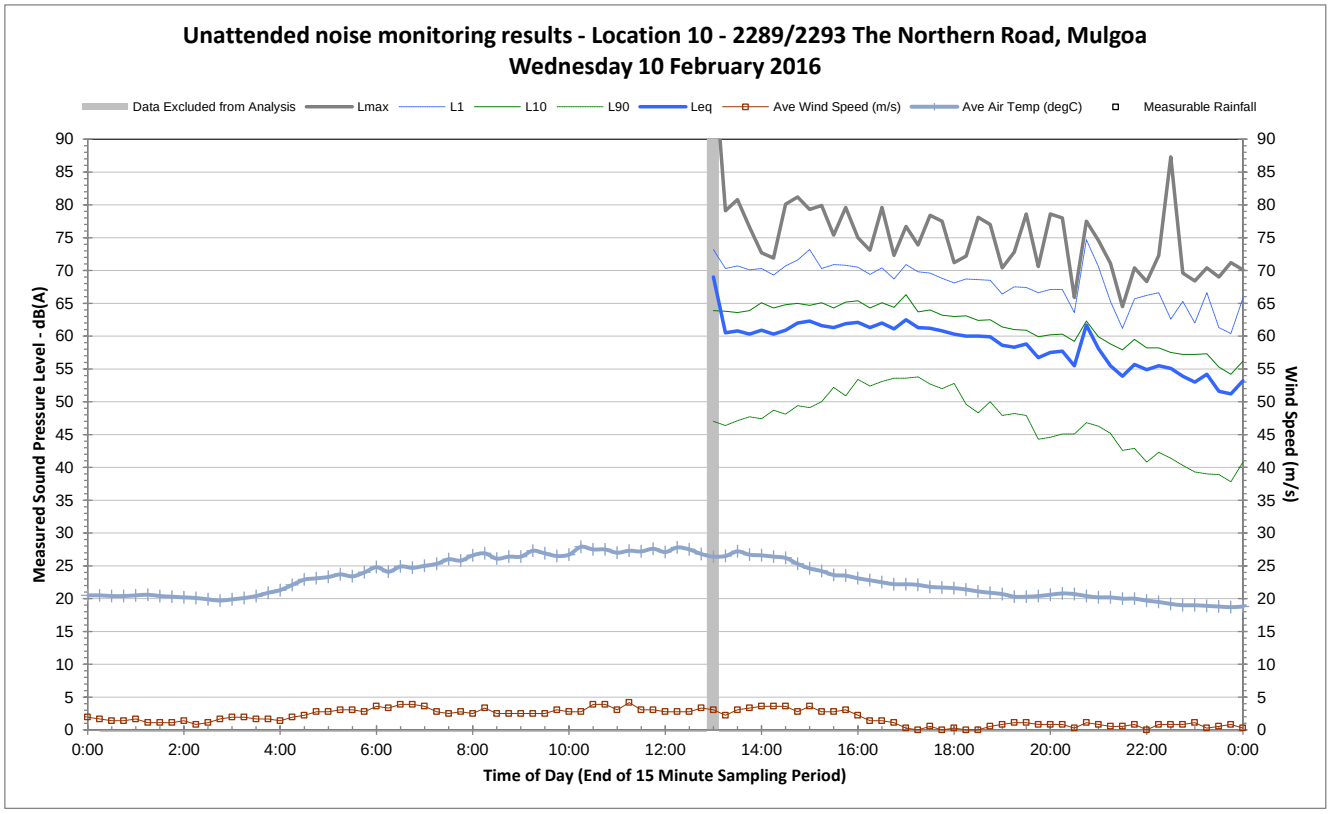

Unattended noise monitoring results - Location 9 - 2095/2113 The Northern Road, Glenmore Park
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

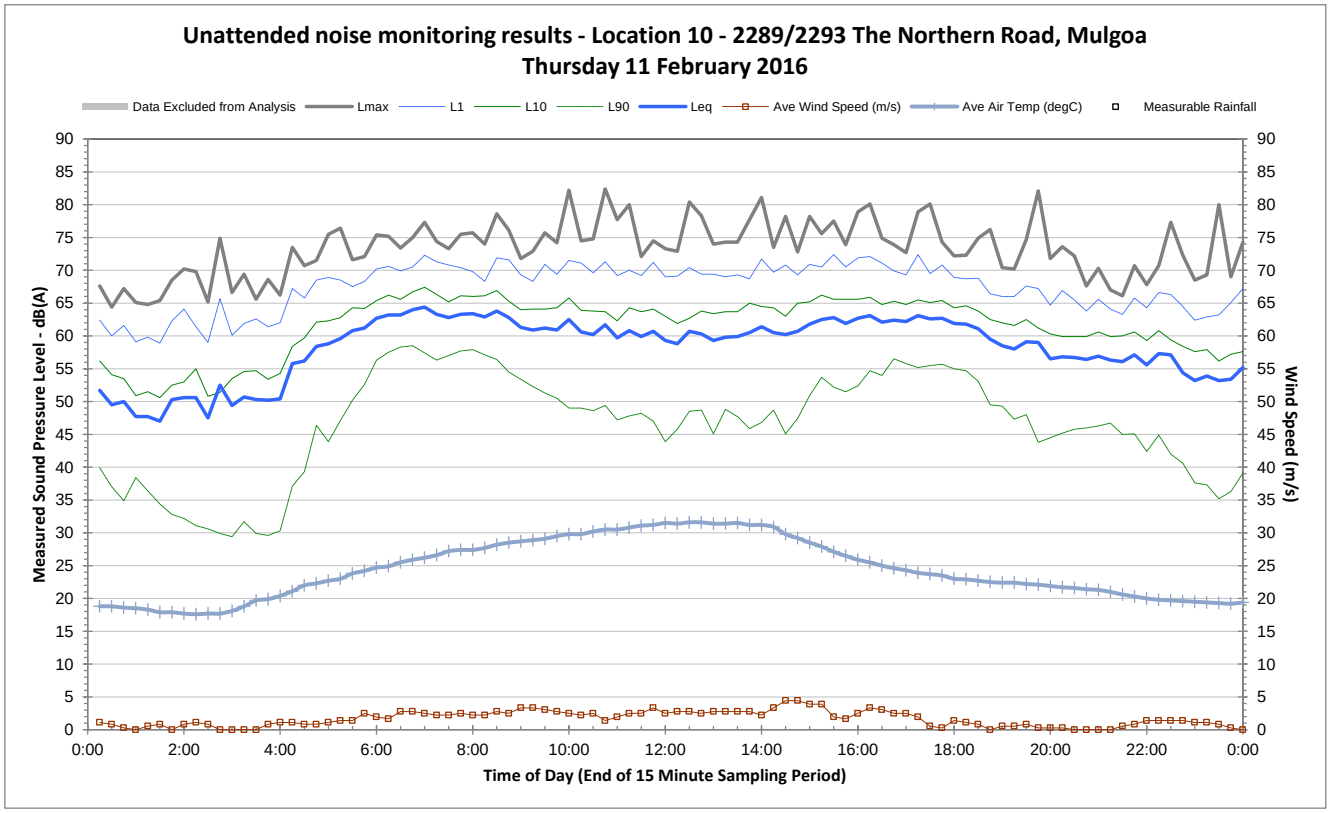

Unattended noise monitoring results - Location 9 - 2095/2113 The Northern Road, Glenmore Park
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

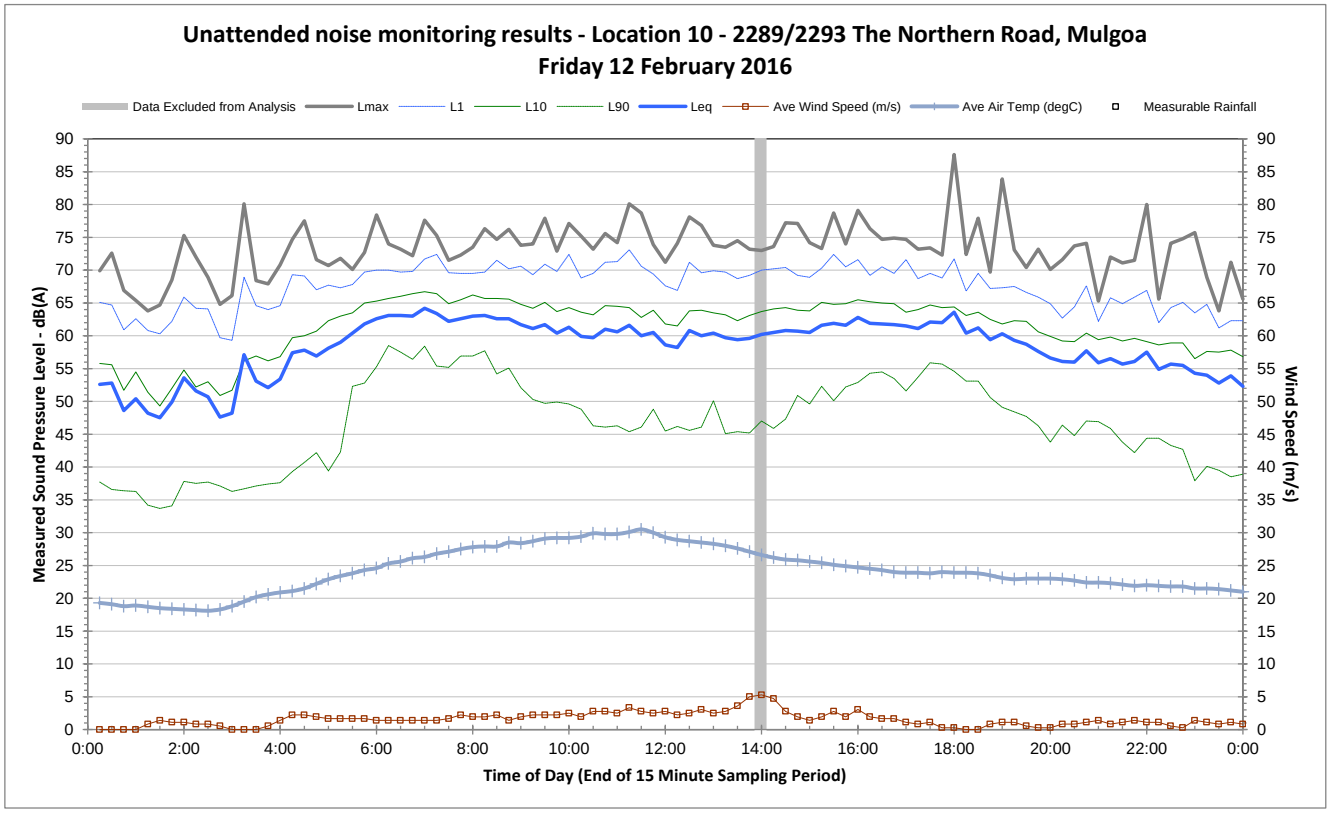

Unattended noise monitoring results - Location 9 - 2095/2113 The Northern Road, Glenmore Park
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

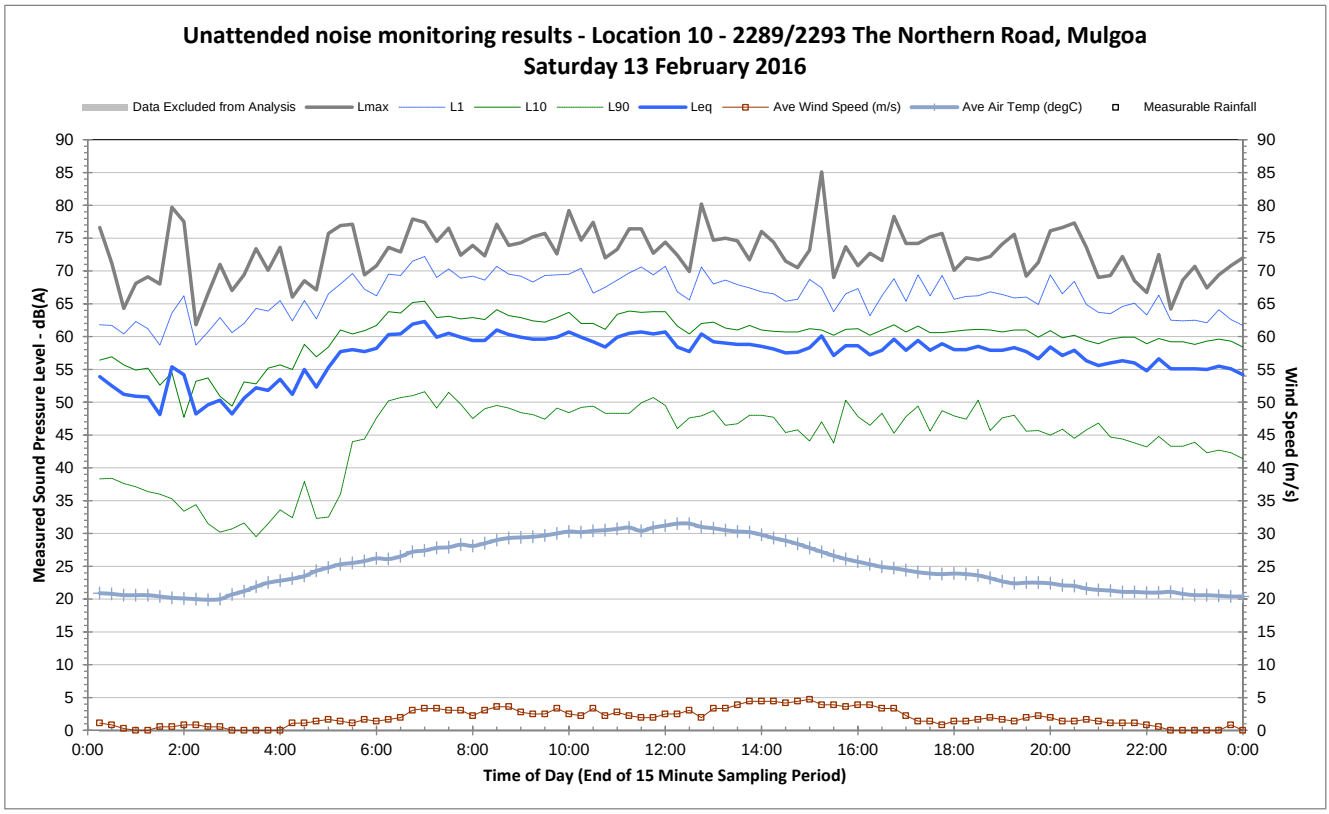

Unattended noise monitoring results - Location 9 - 2095/2113 The Northern Road, Glenmore Park
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

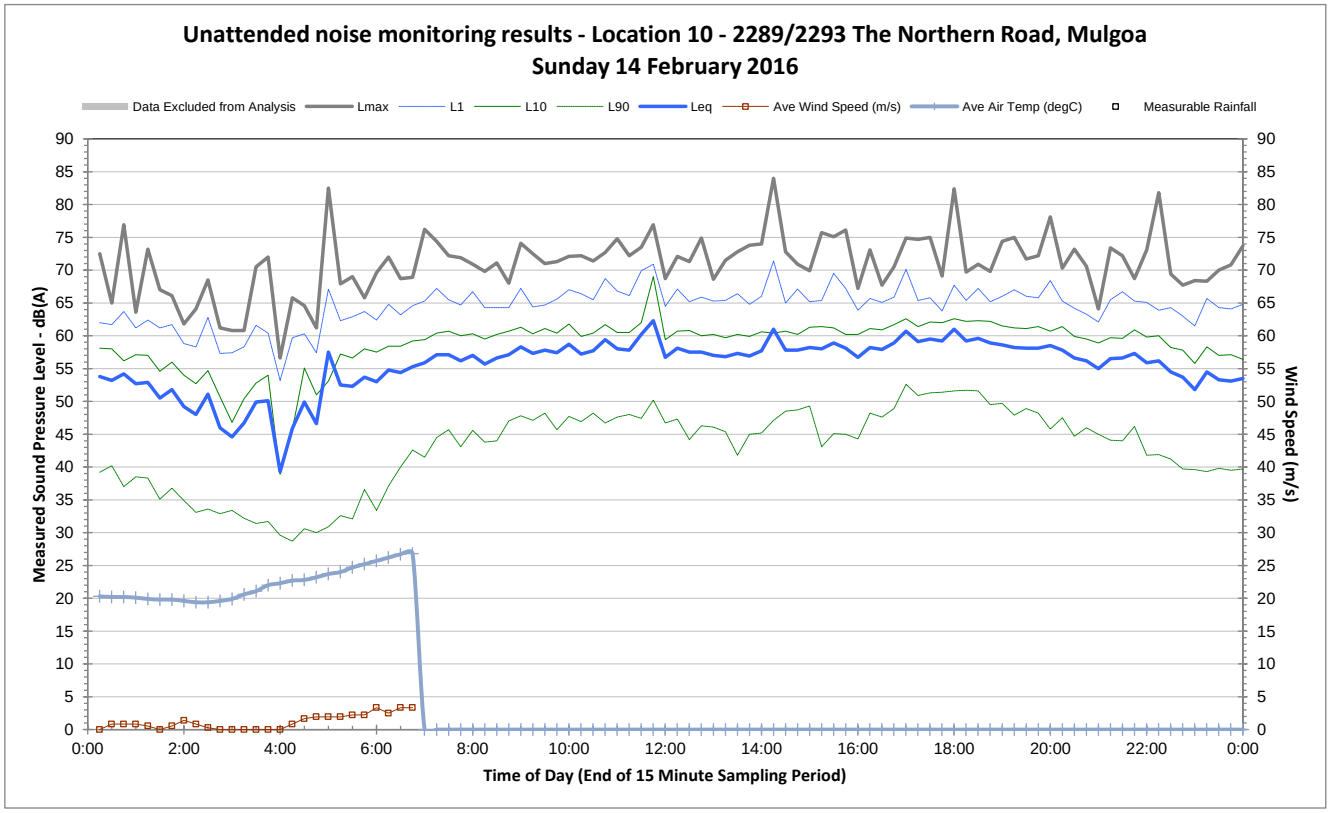
E.2 Location 10 – 2289 / 2293 The Northern Road, Mulgoa

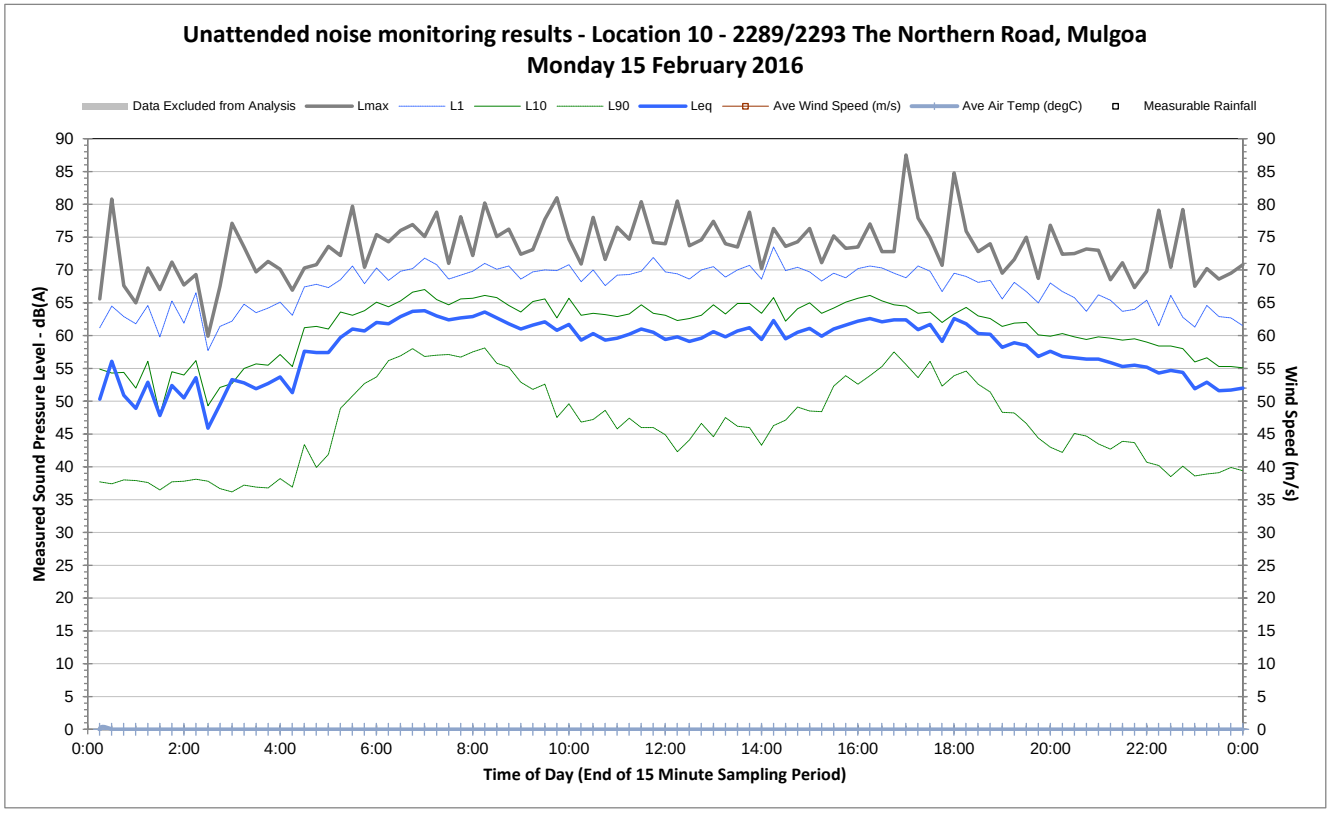


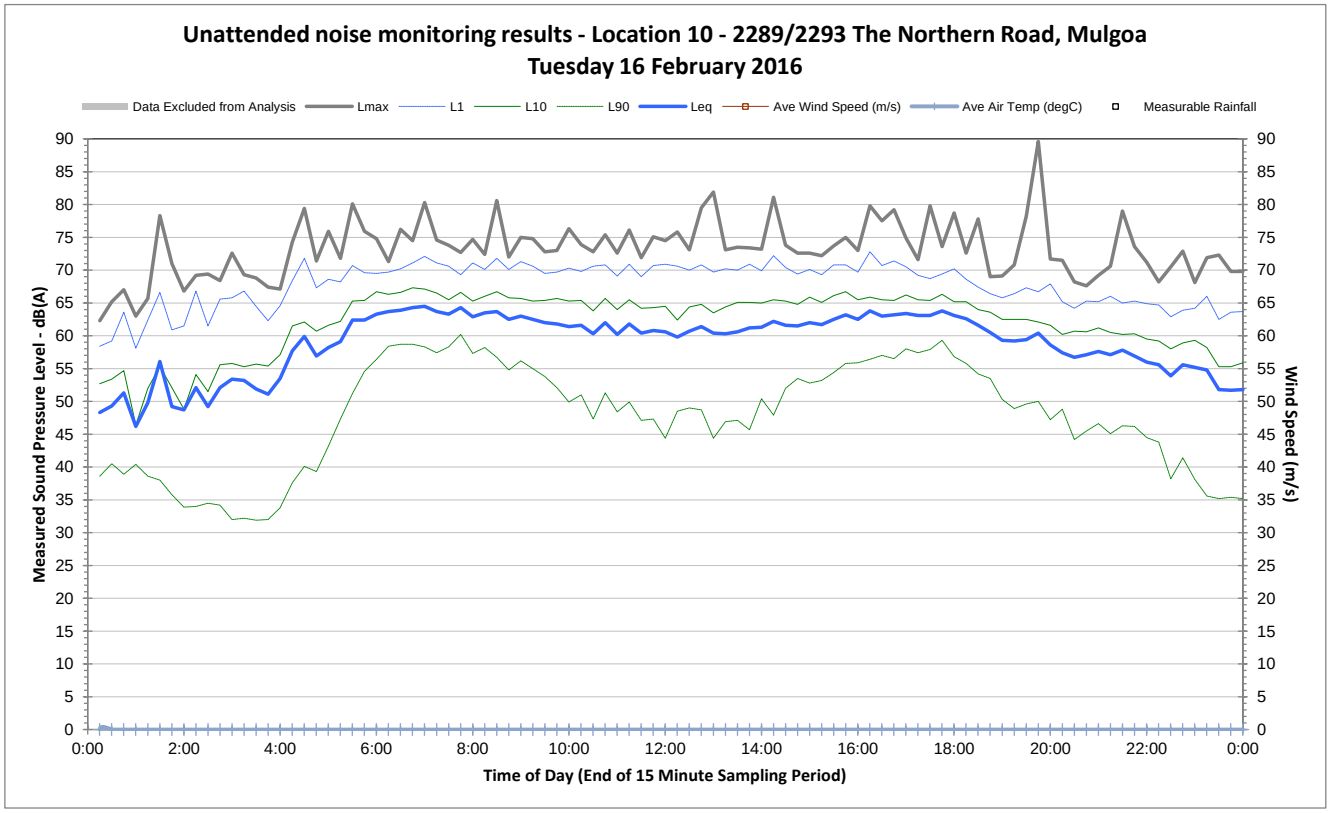


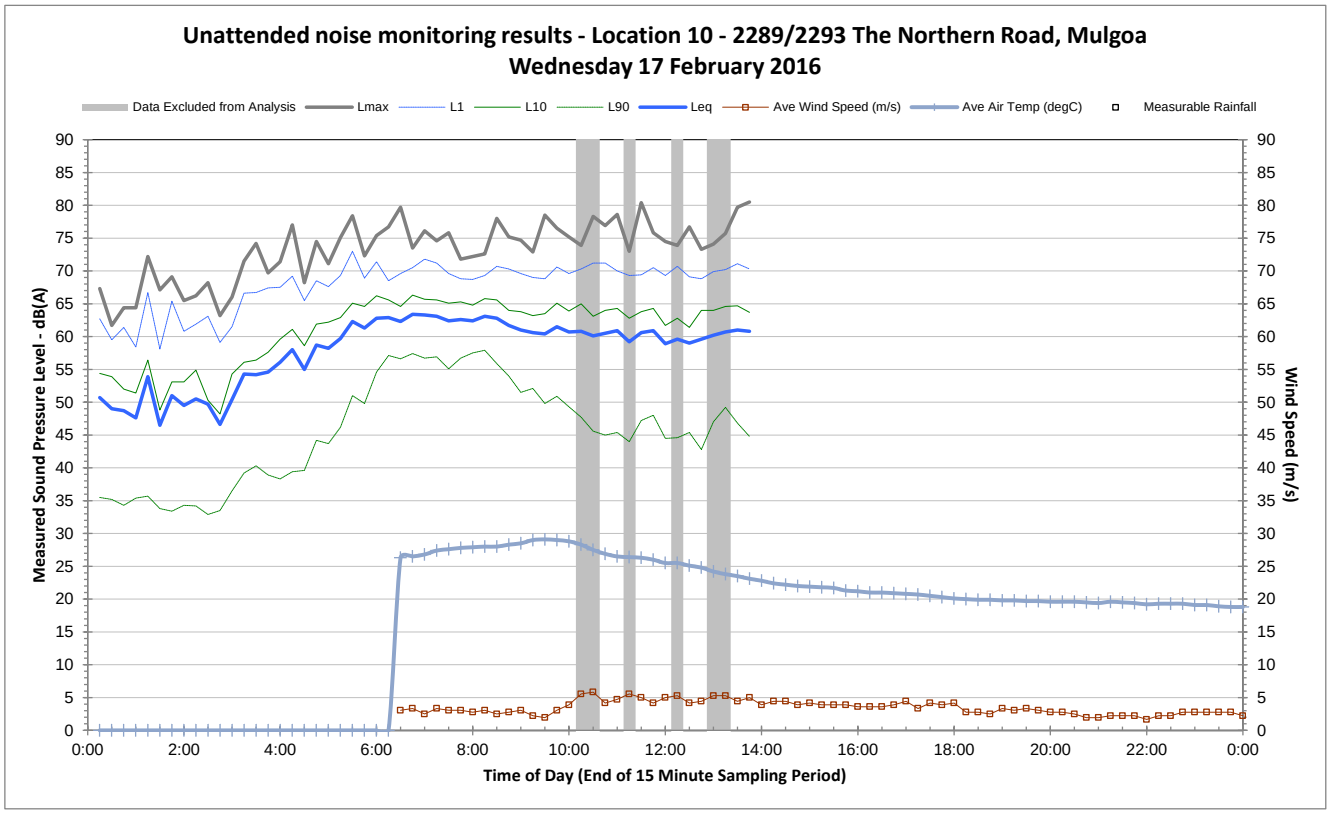

Unattended noise monitoring results - Location 10 - 2289/2293 The Northern Road, Mulgoa
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 10 - 2289/2293 The Northern Road, Mulgoa
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

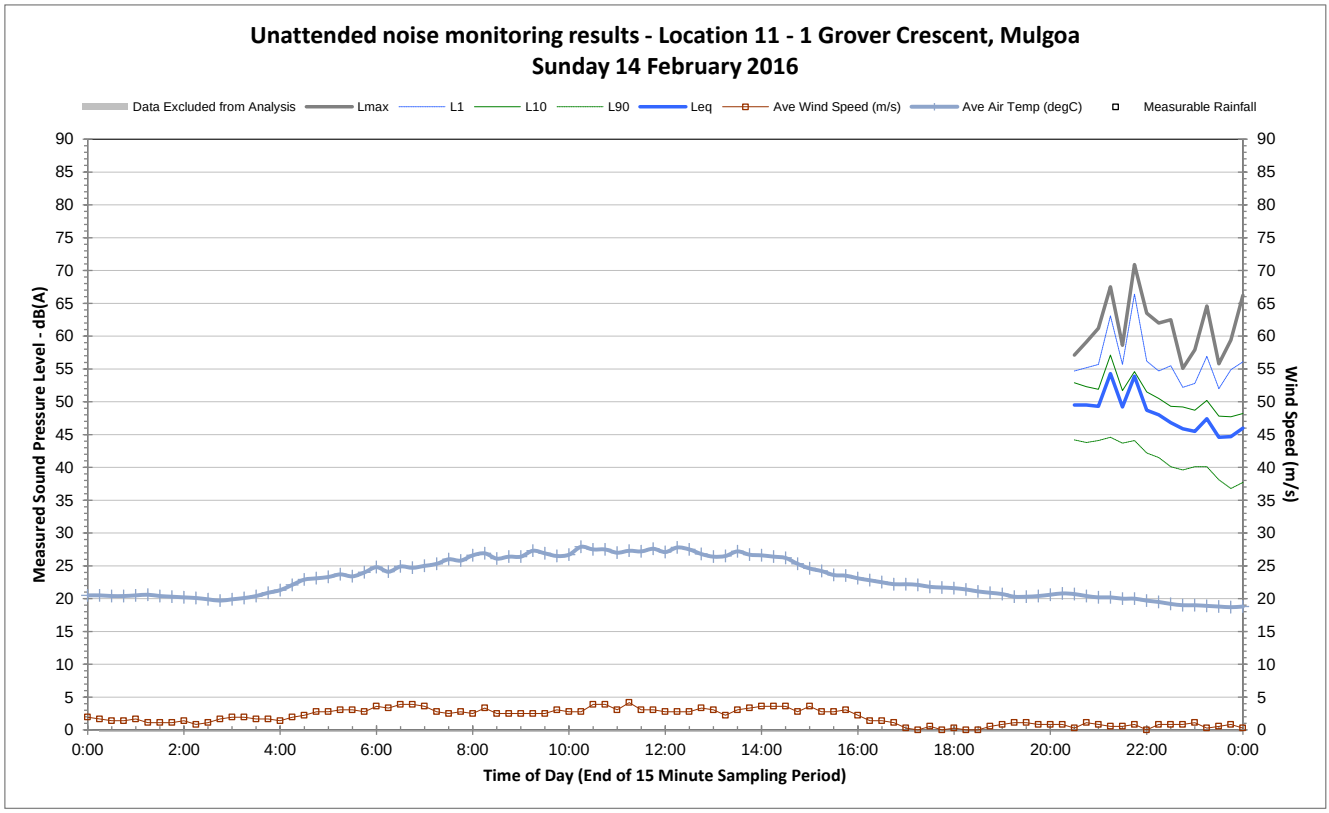

Unattended noise monitoring results - Location 10 - 2289/2293 The Northern Road, Mulgoa
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

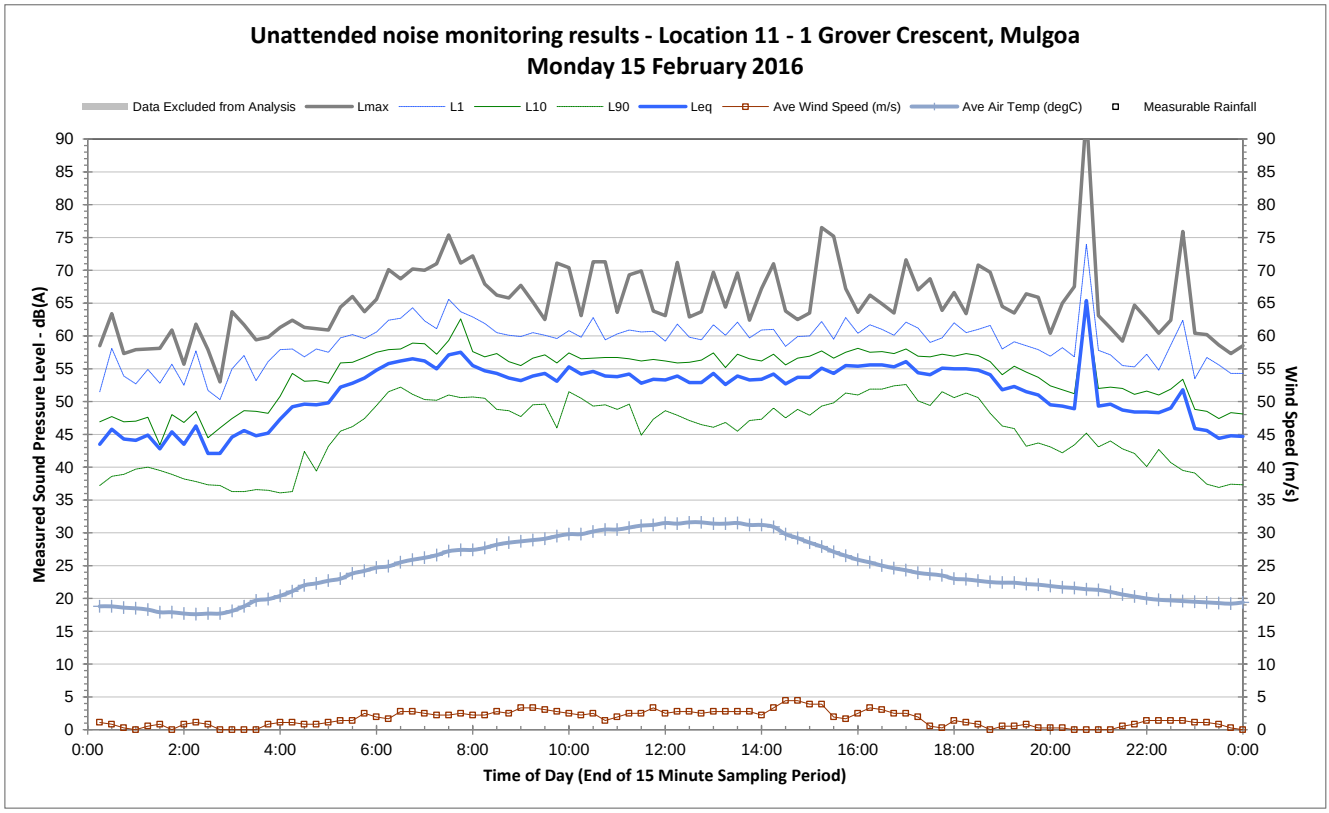

Unattended noise monitoring results - Location 10 - 2289/2293 The Northern Road, Mulgoa
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

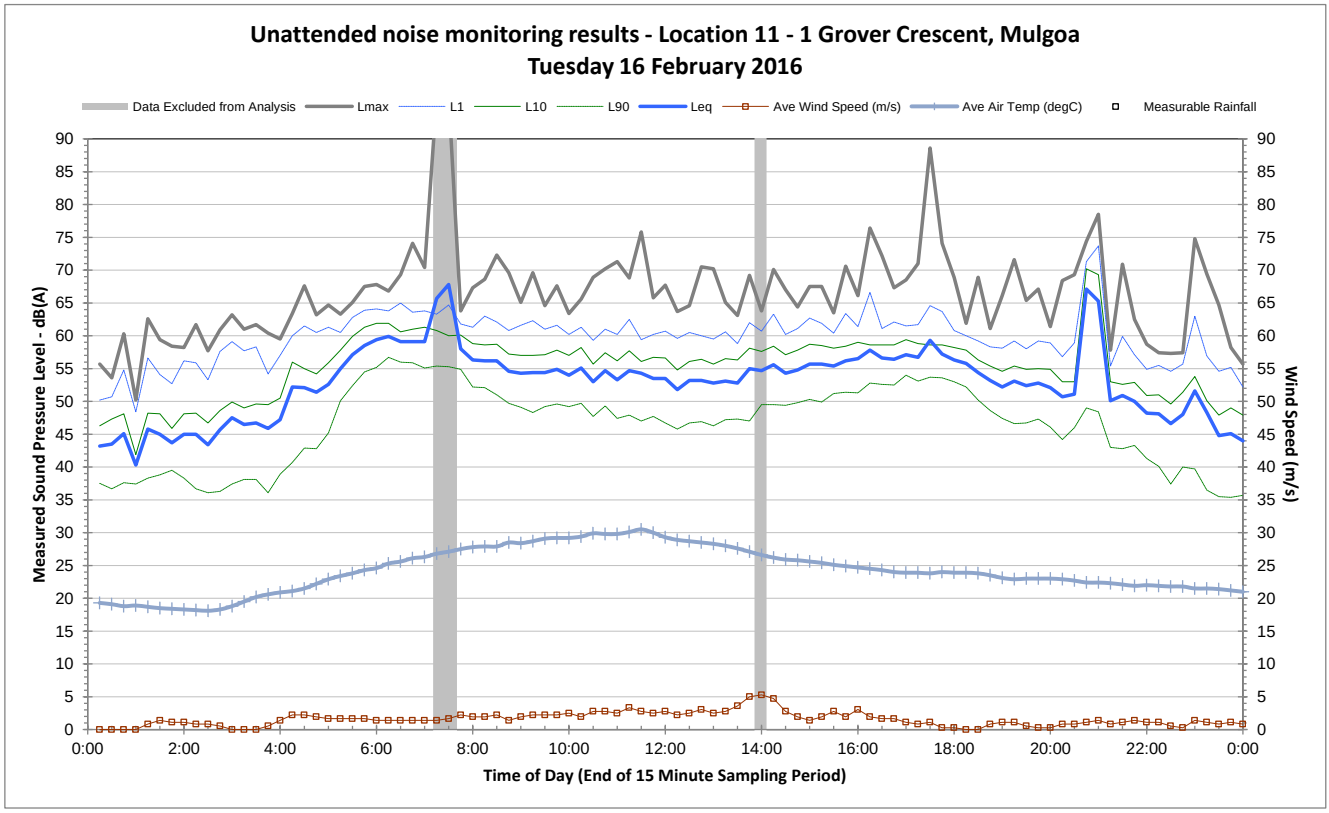

Unattended noise monitoring results - Location 10 - 2289/2293 The Northern Road, Mulgoa
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

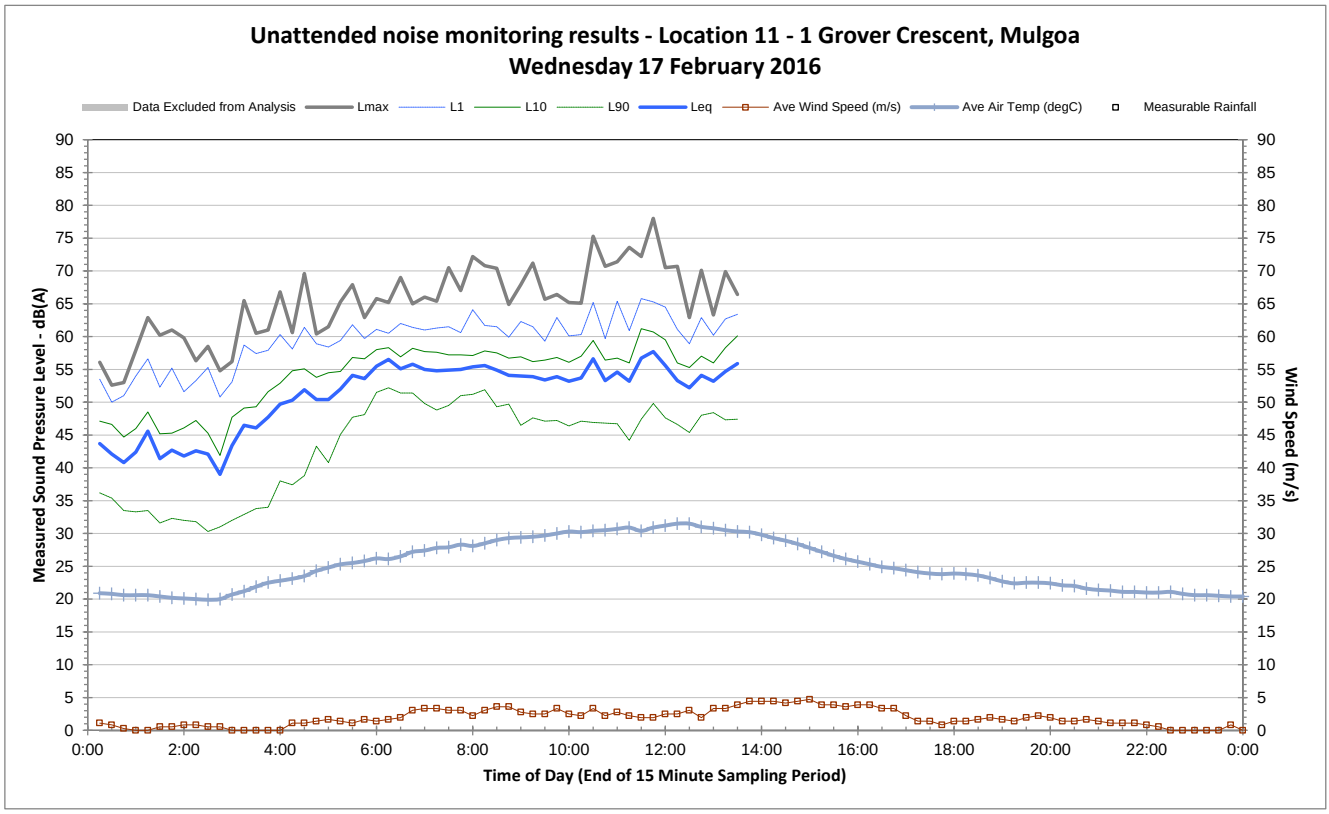

Unattended noise monitoring results - Location 10 - 2289/2293 The Northern Road, Mulgoa
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

E.3 Location 11 – 1 Grover Crescent, Mulgoa

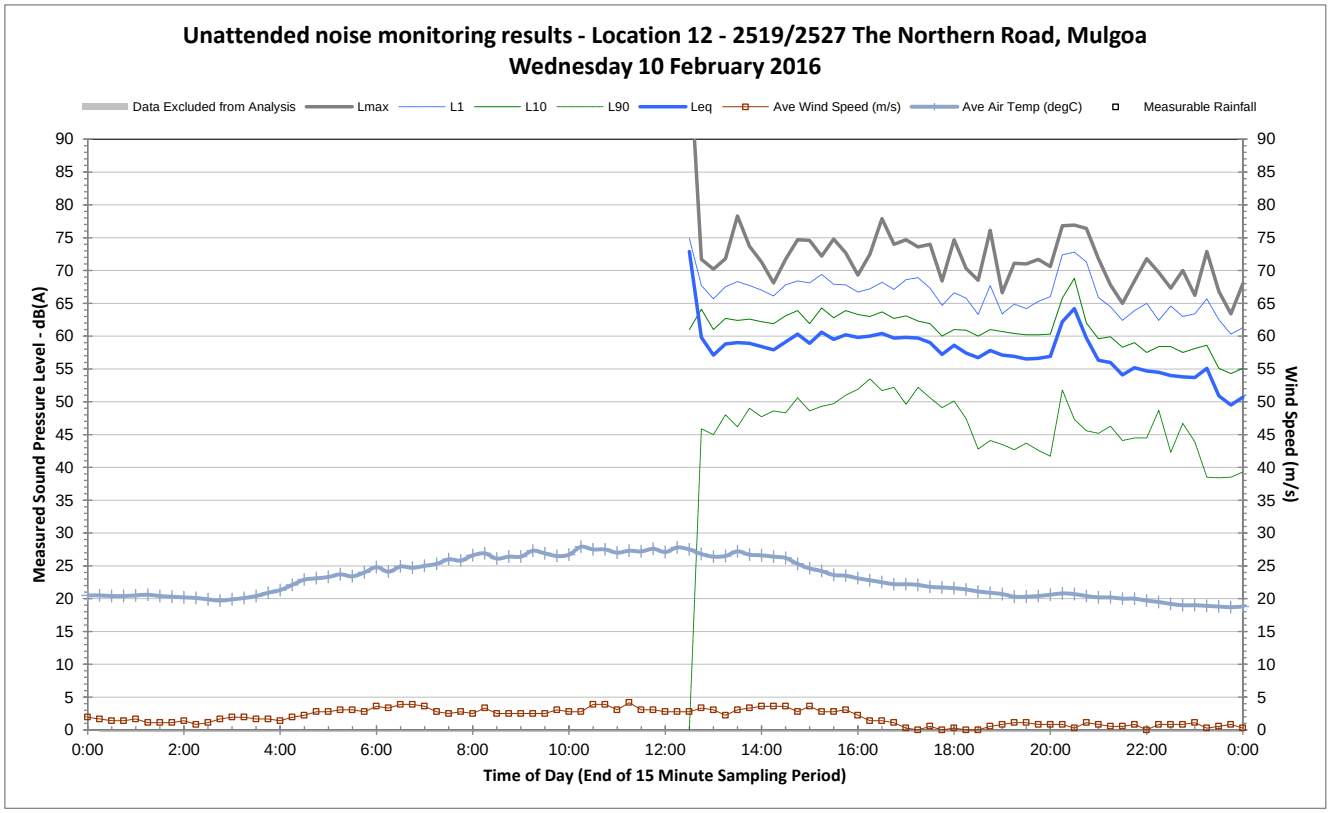


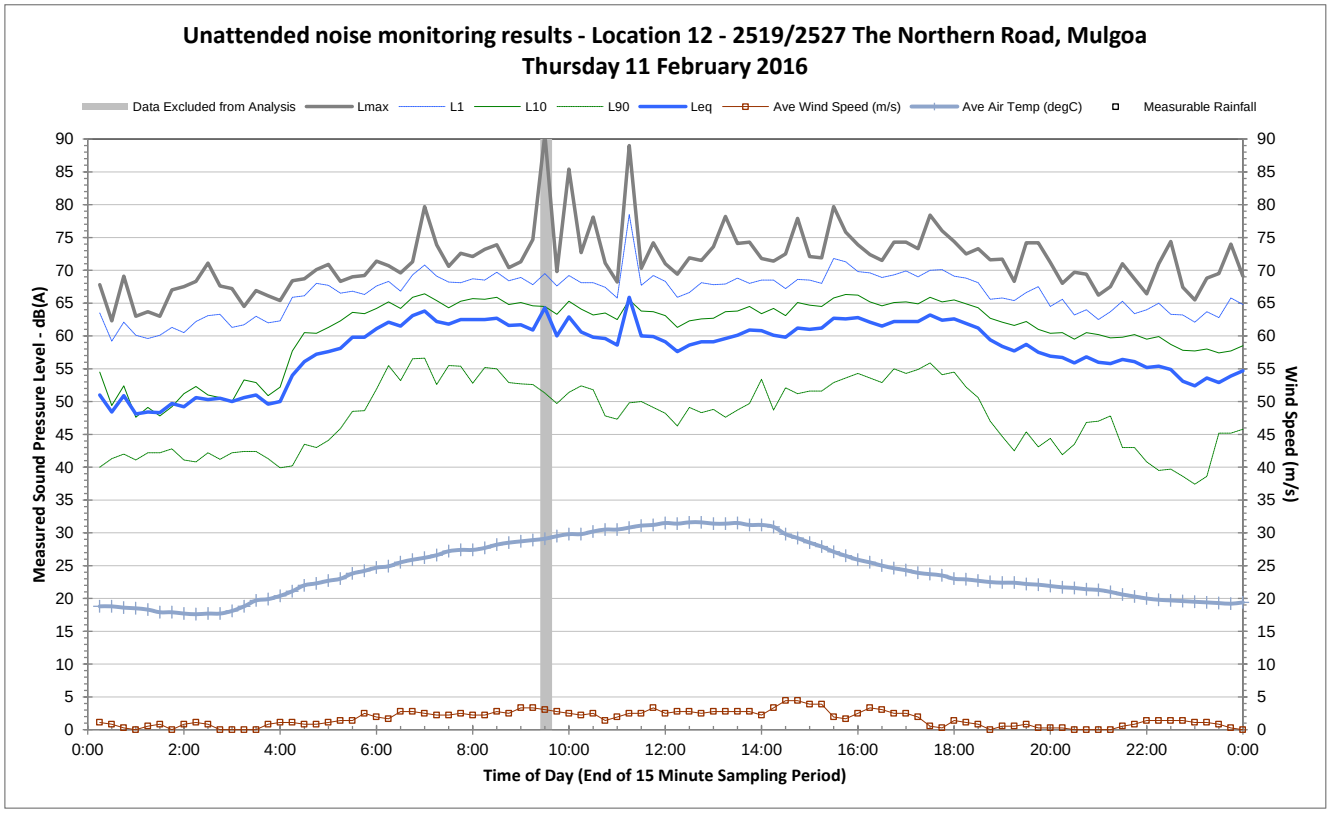


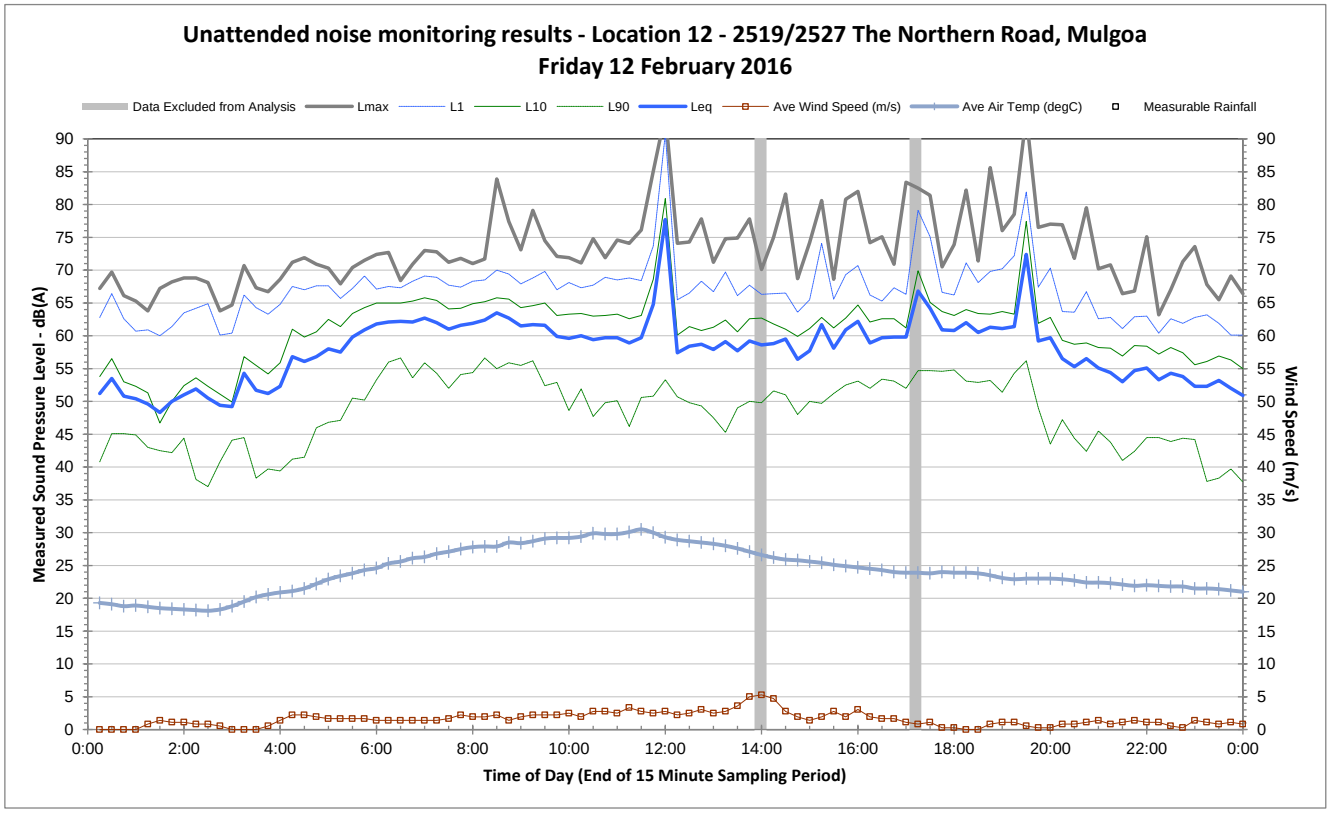

Unattended noise monitoring results - Location 11 - 1 Grover Crescent, Mulgoa
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

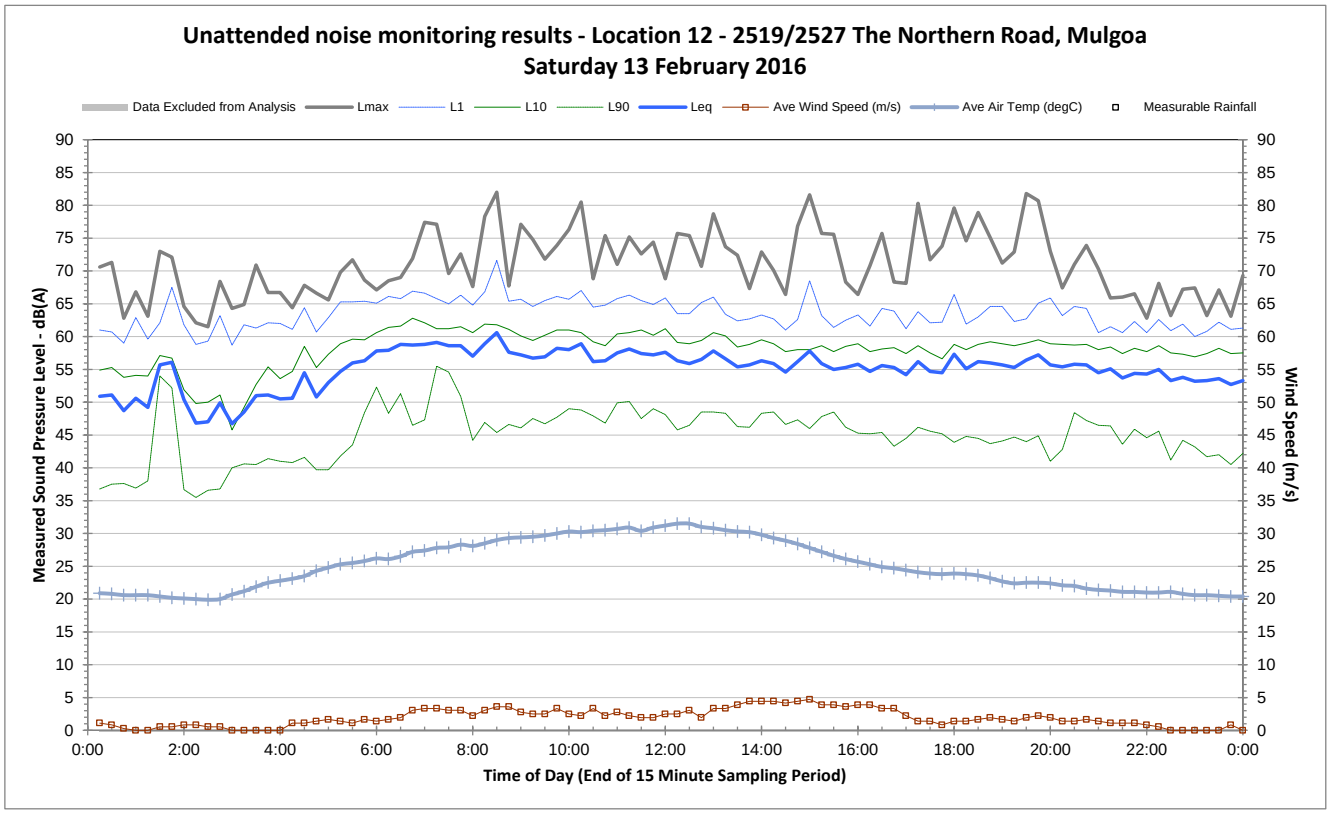

Unattended noise monitoring results - Location 11 - 1 Grover Crescent, Mulgoa
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

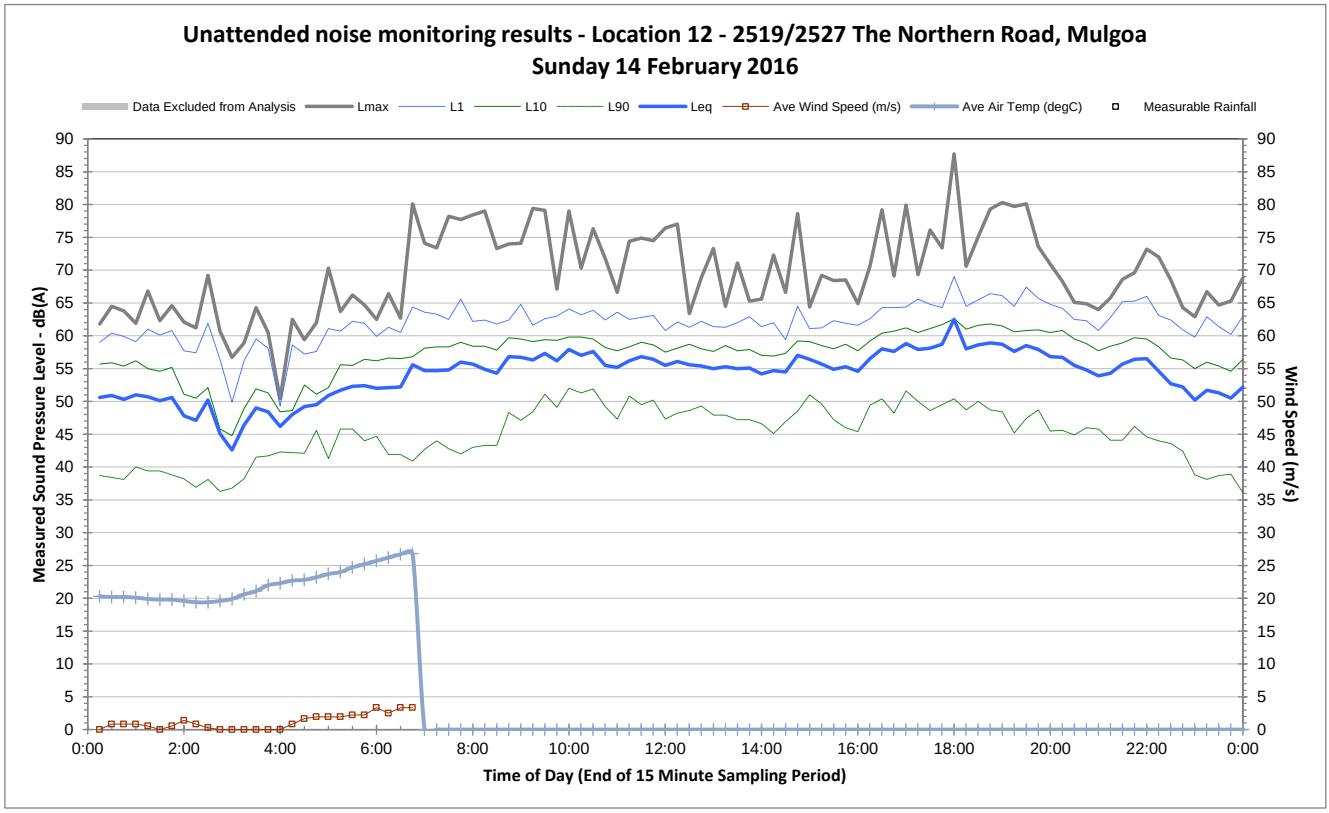
E.4 Location 12 – 2519 / 2527 The Northern Road, Mulgoa

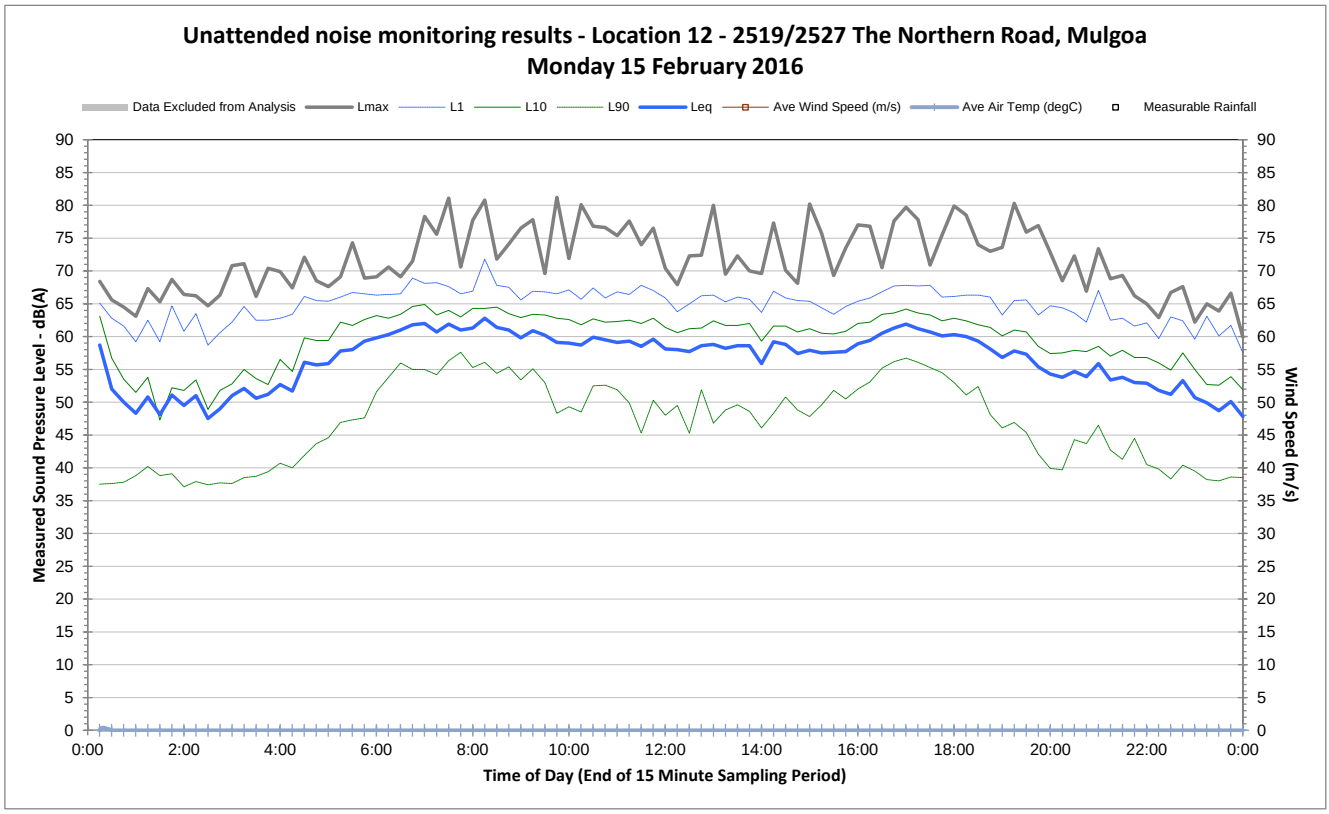


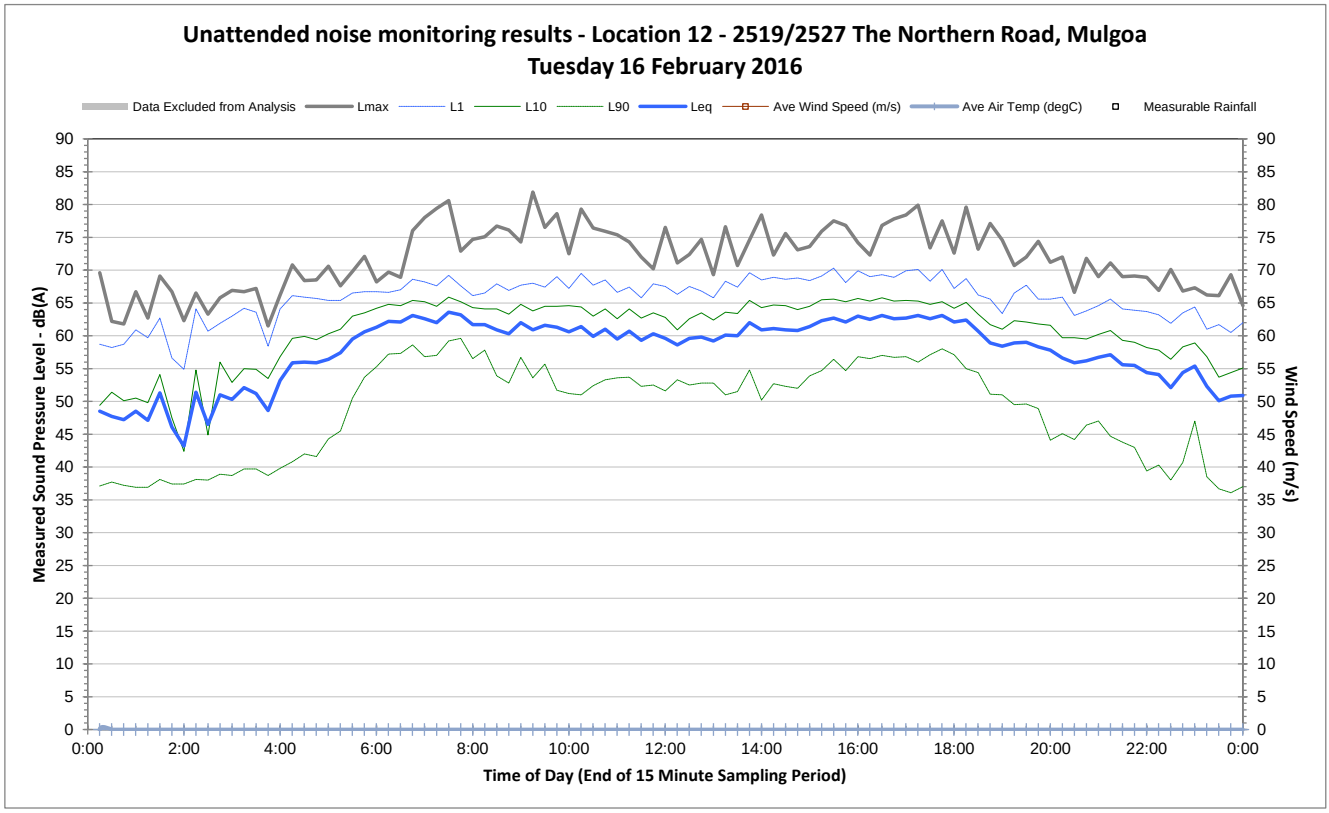


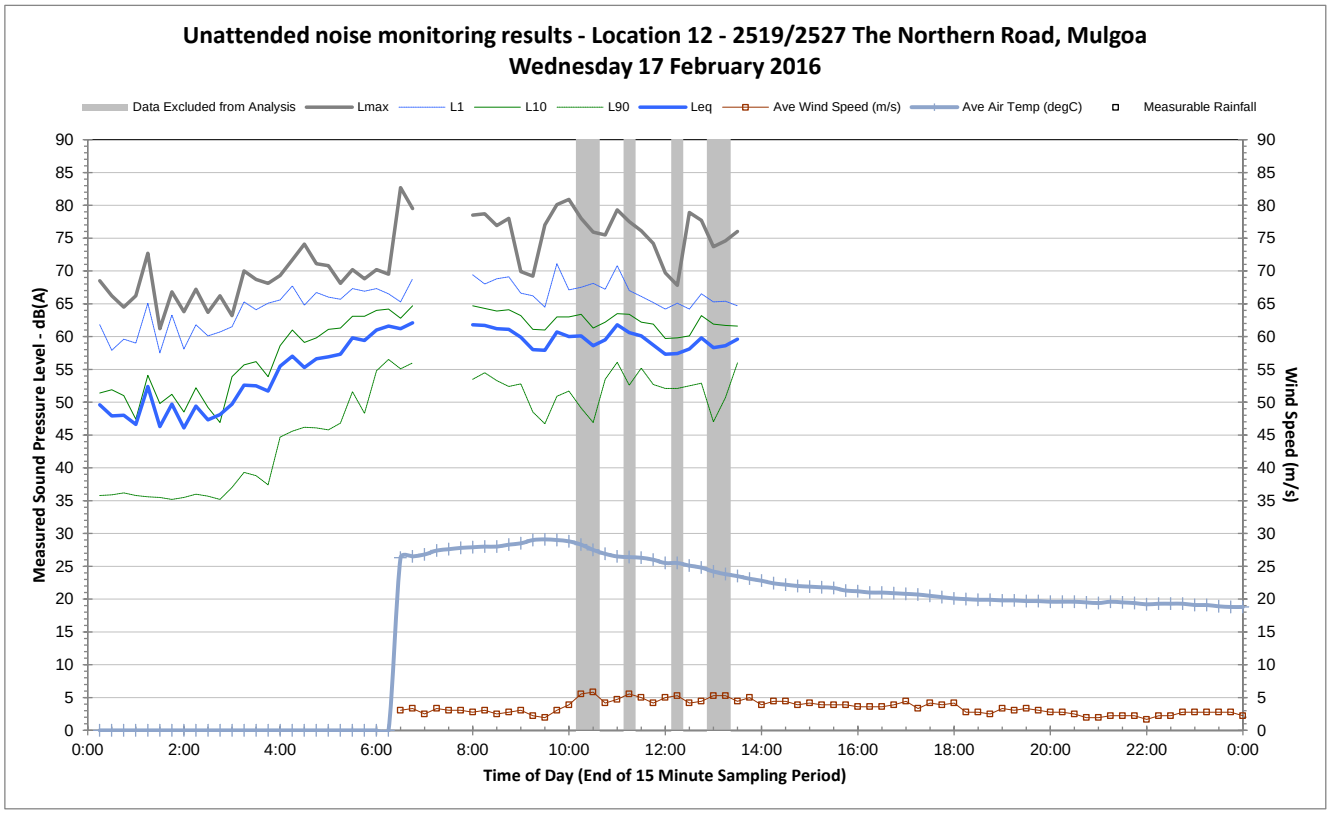

Unattended noise monitoring results - Location 12 - 2519/2527 The Northern Road, Mulgoa
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 12 - 2519/2527 The Northern Road, Mulgoa
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

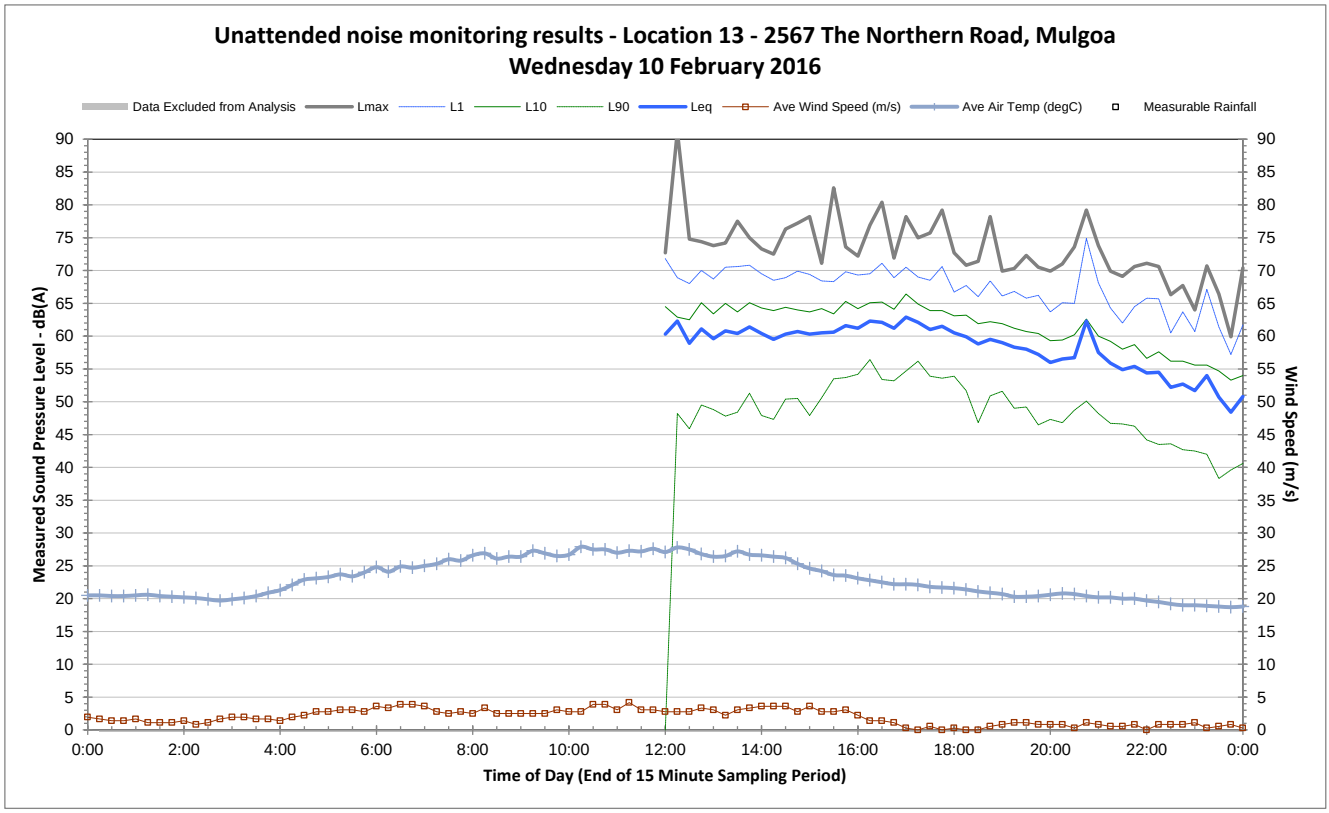

Unattended noise monitoring results - Location 12 - 2519/2527 The Northern Road, Mulgoa
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

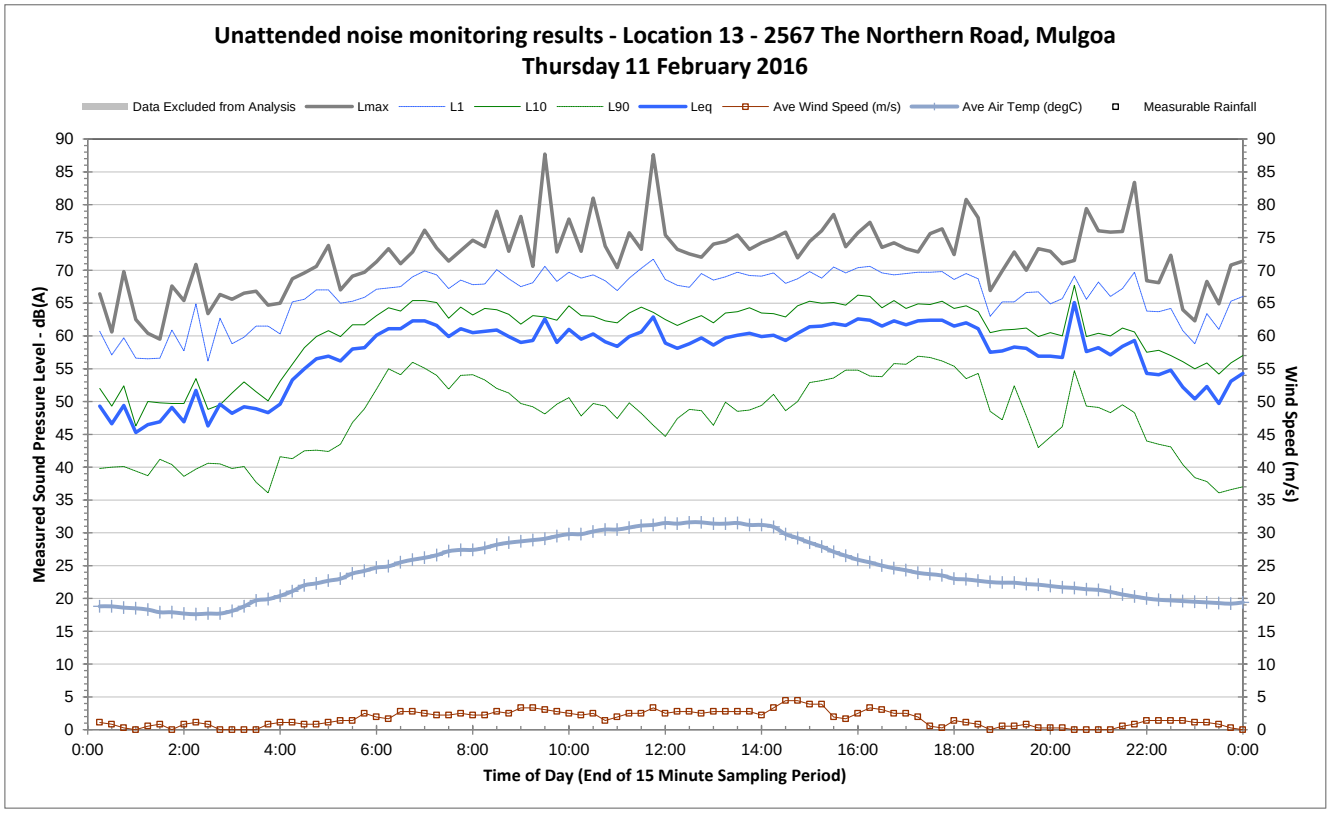

Unattended noise monitoring results - Location 12 - 2519/2527 The Northern Road, Mulgoa
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

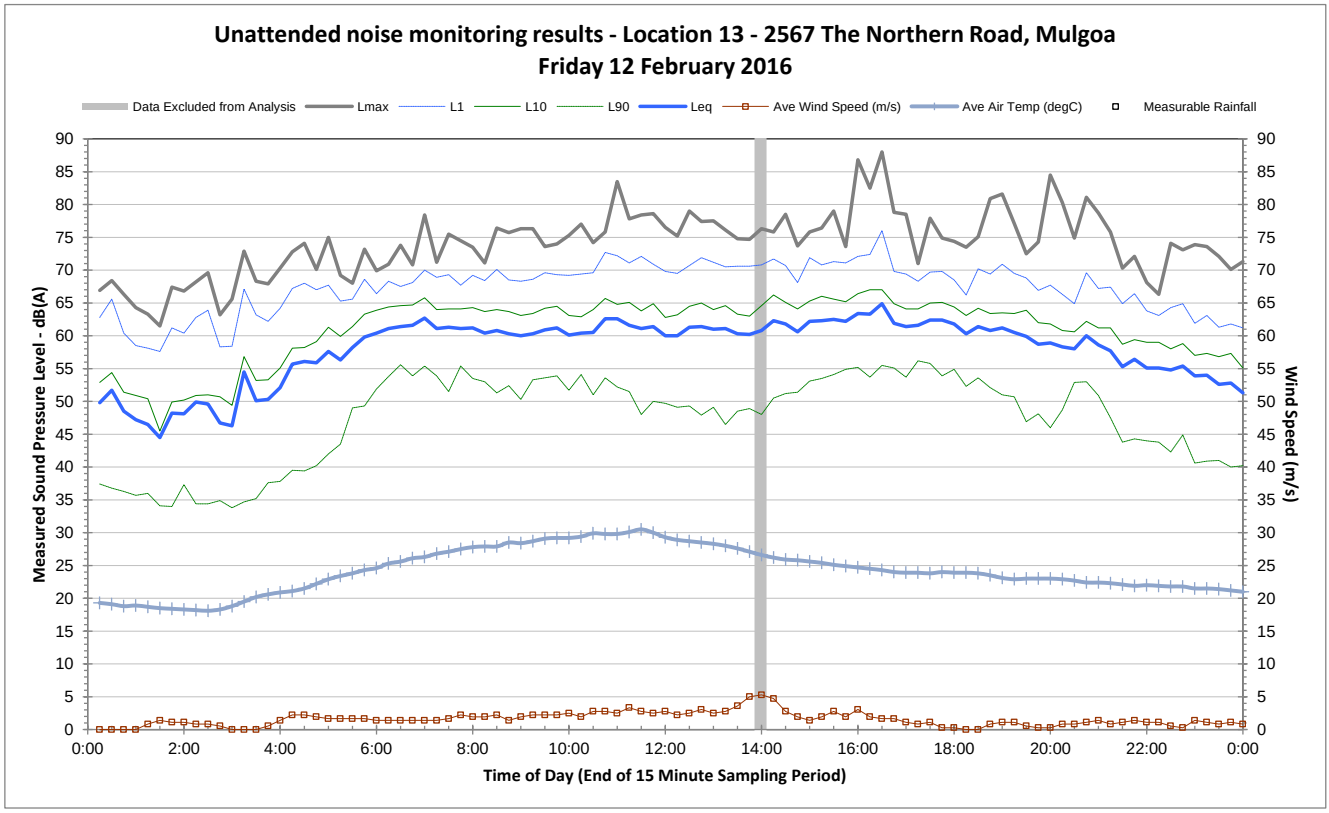

Unattended noise monitoring results - Location 12 - 2519/2527 The Northern Road, Mulgoa
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

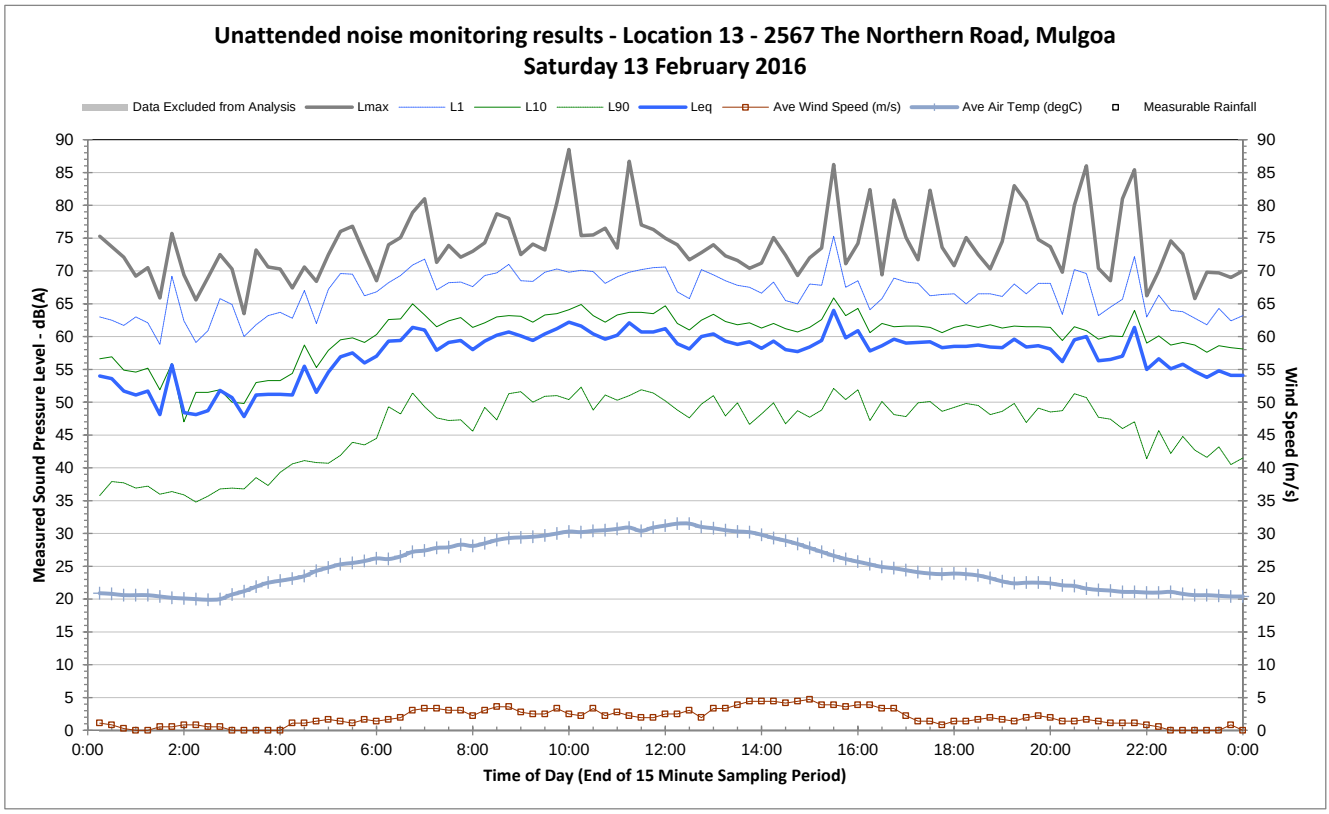

Unattended noise monitoring results - Location 12 - 2519/2527 The Northern Road, Mulgoa
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

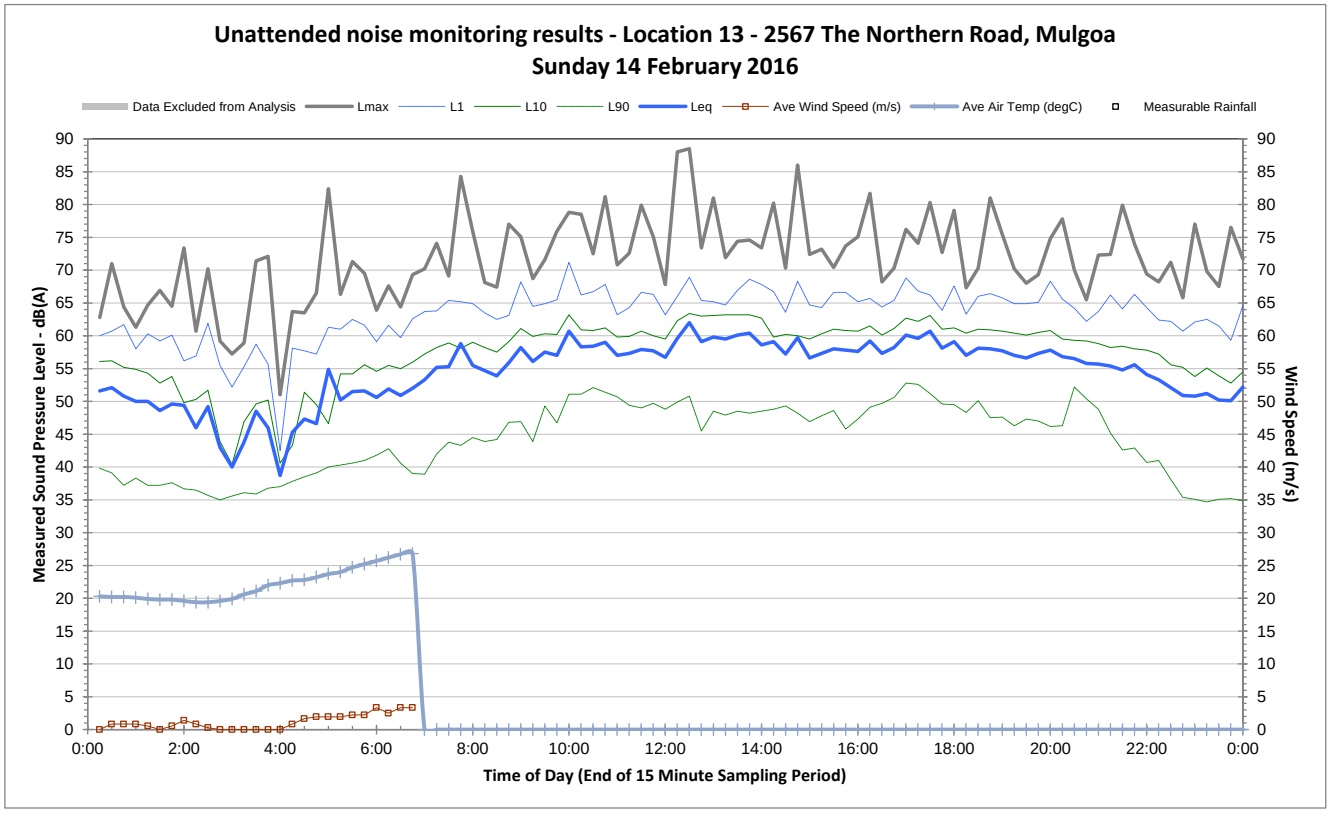
E.5 Location 13 – 2567 The Northern Road, Mulgoa

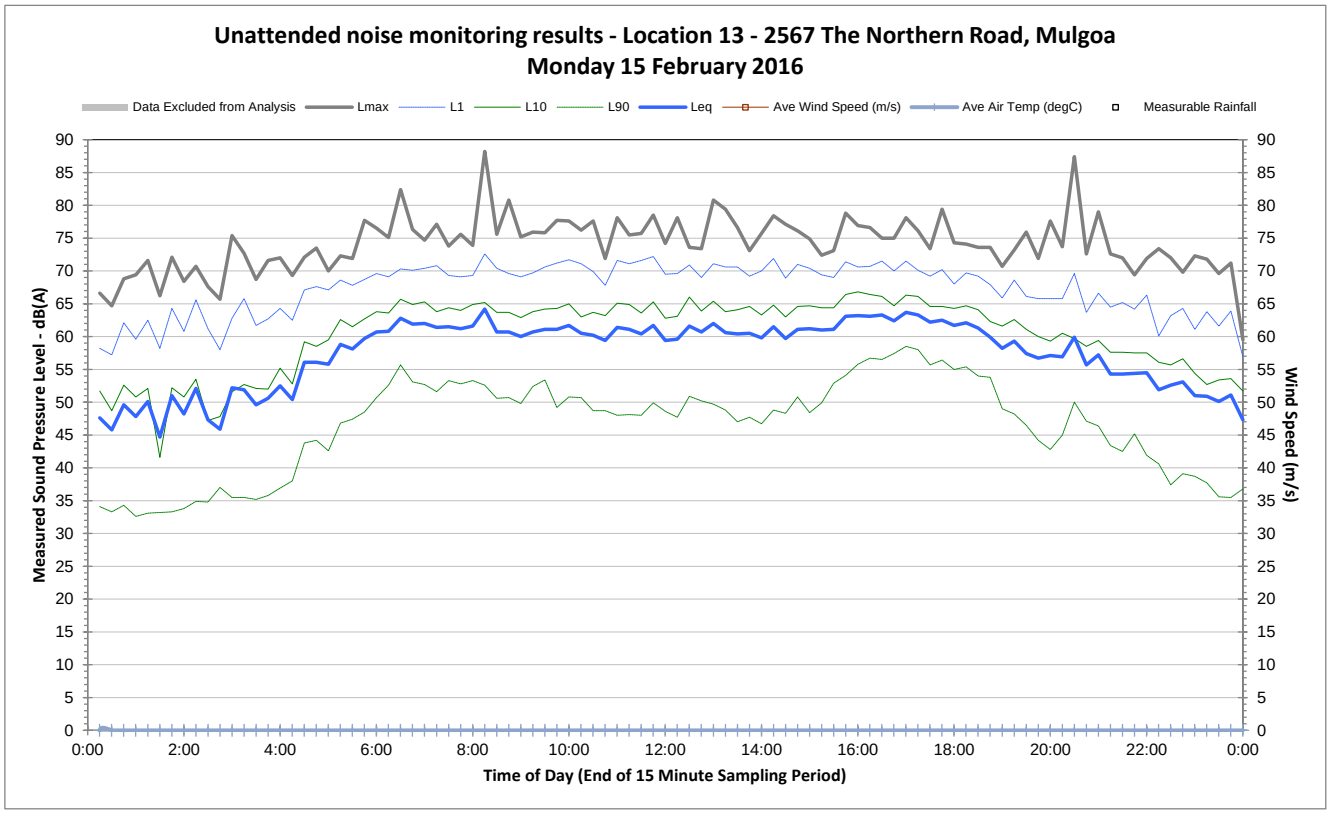


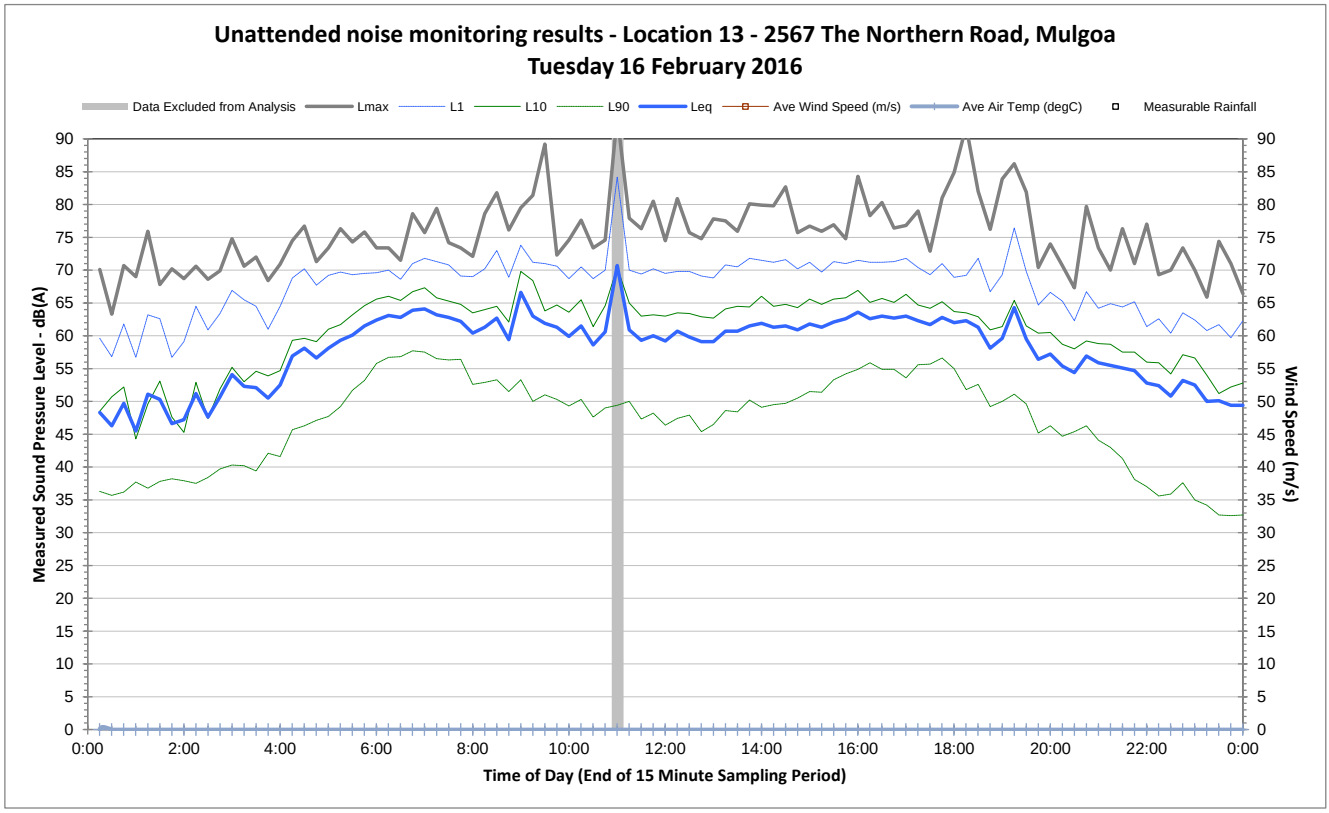


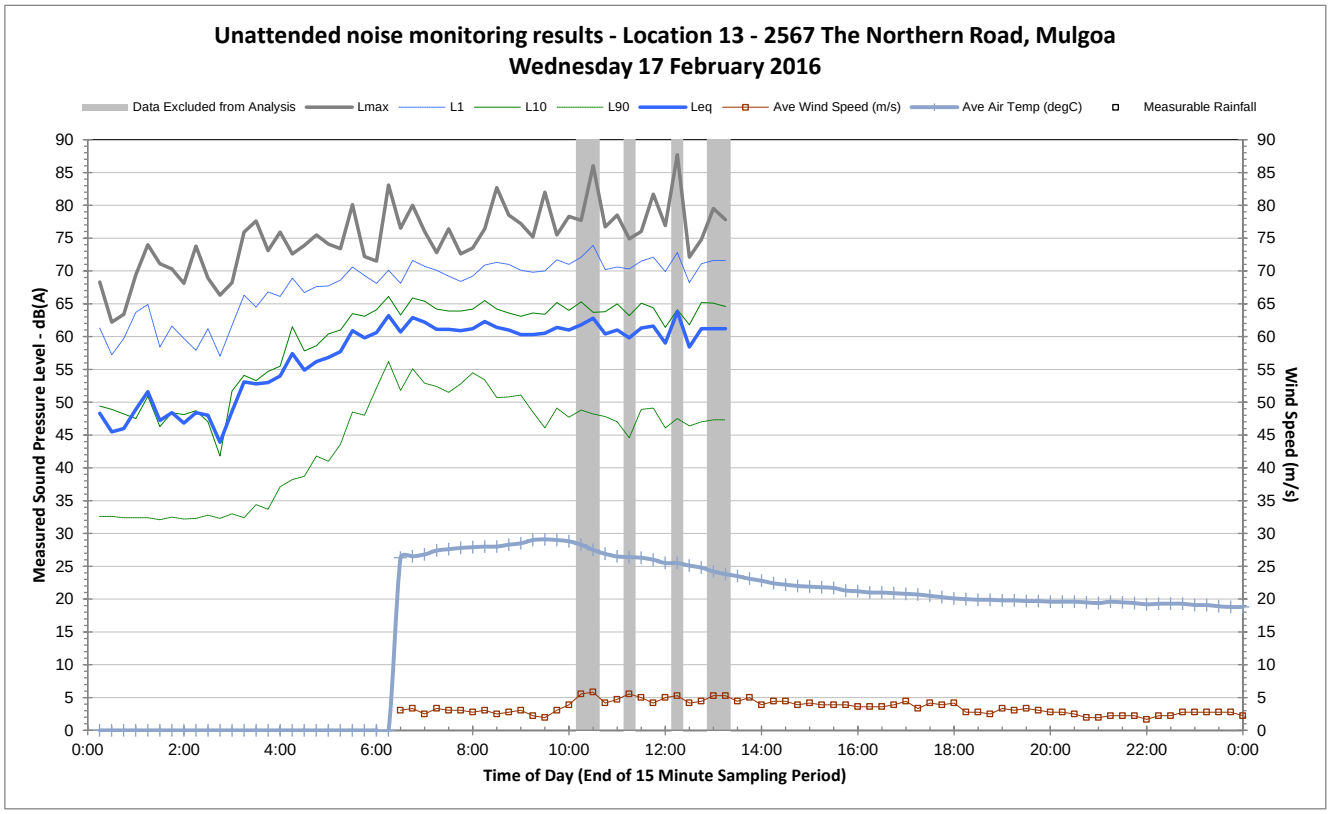

Unattended noise monitoring results - Location 13 - 2567 The Northern Road, Mulgoa
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 13 - 2567 The Northern Road, Mulgoa
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

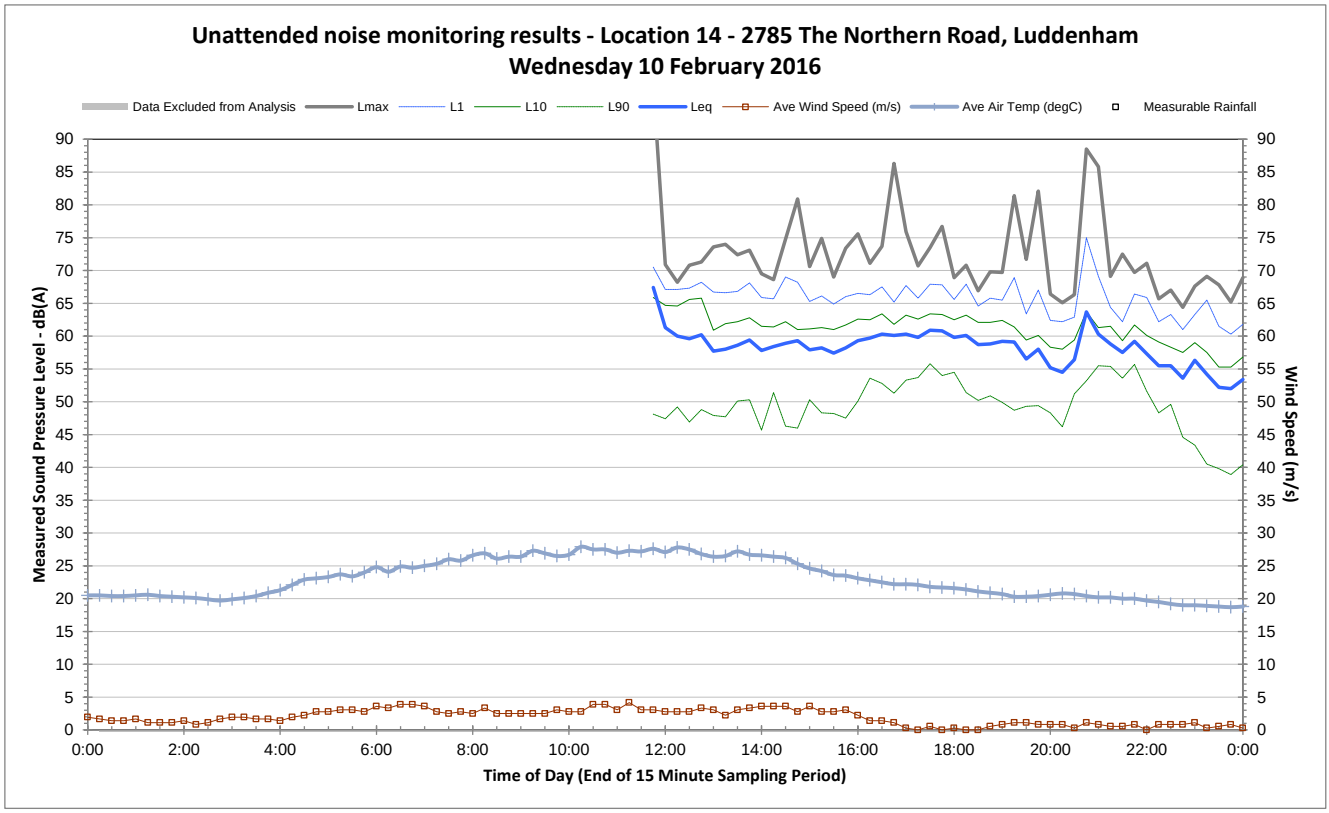

Unattended noise monitoring results - Location 13 - 2567 The Northern Road, Mulgoa
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

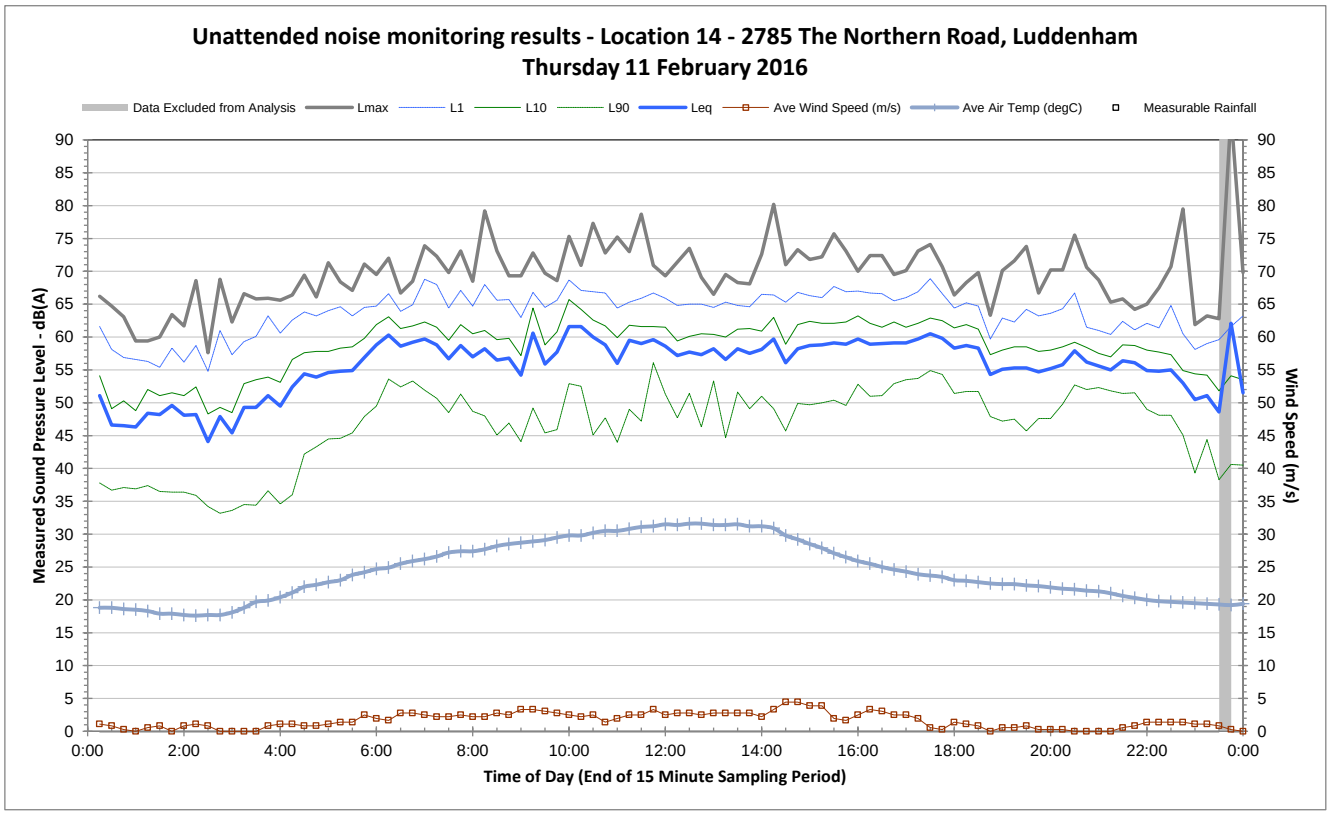

Unattended noise monitoring results - Location 13 - 2567 The Northern Road, Mulgoa
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

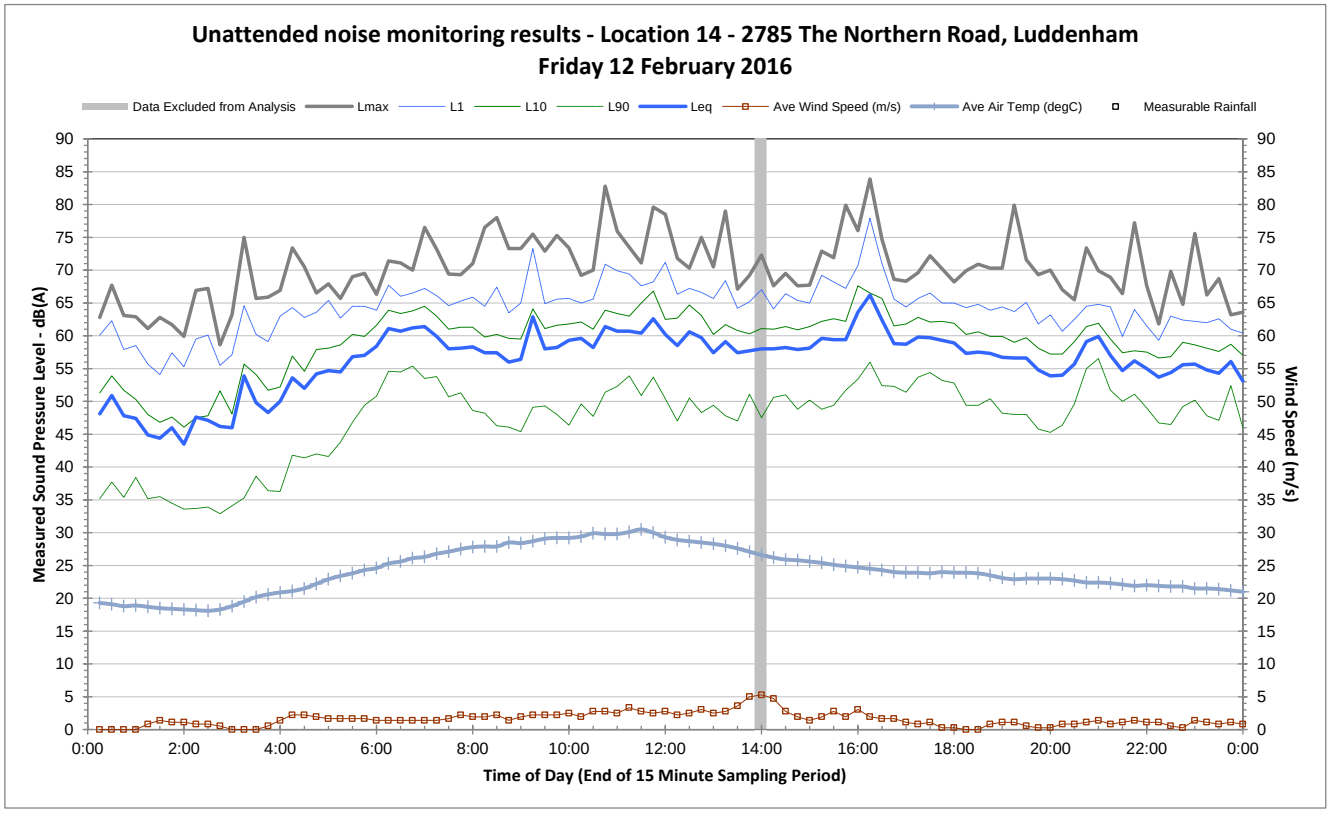

Unattended noise monitoring results - Location 13 - 2567 The Northern Road, Mulgoa
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

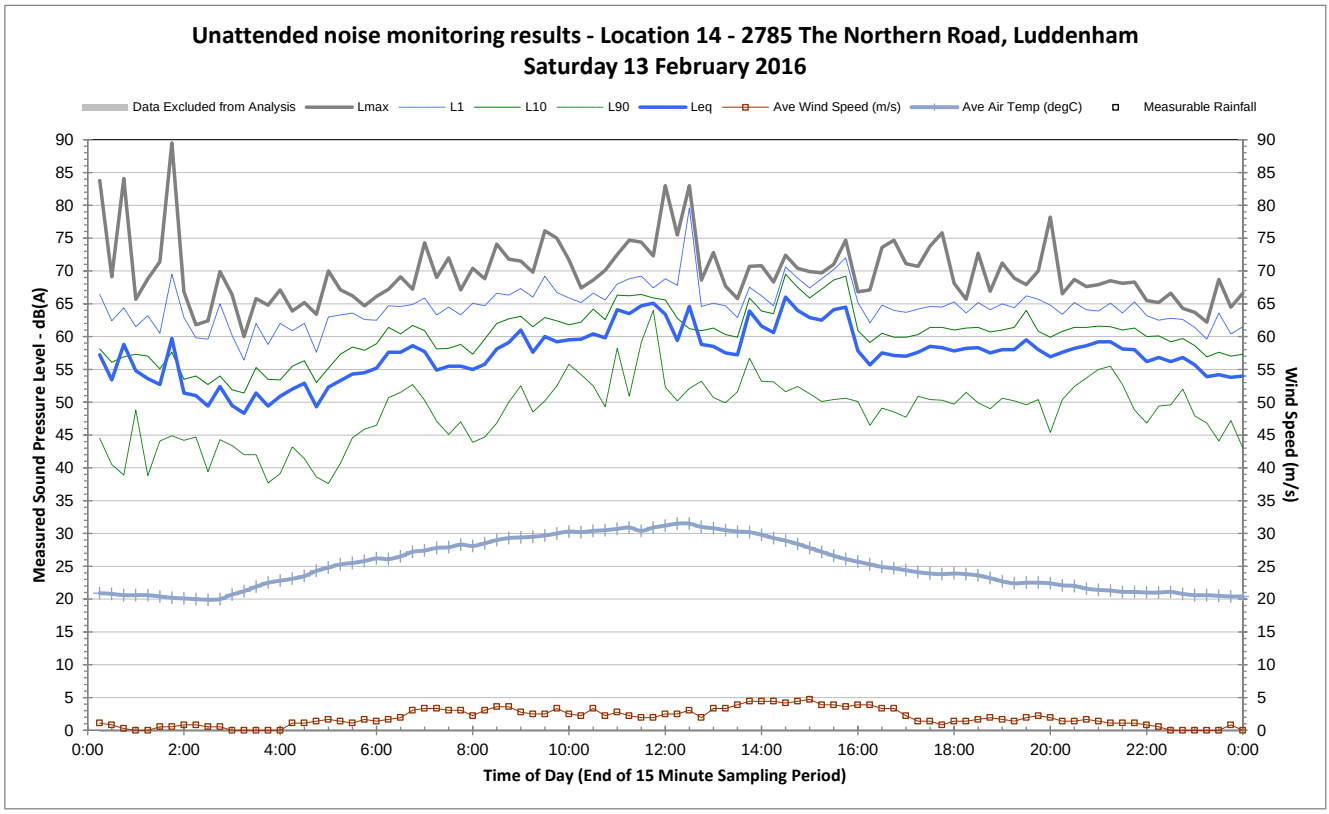

Unattended noise monitoring results - Location 13 - 2567 The Northern Road, Mulgoa
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

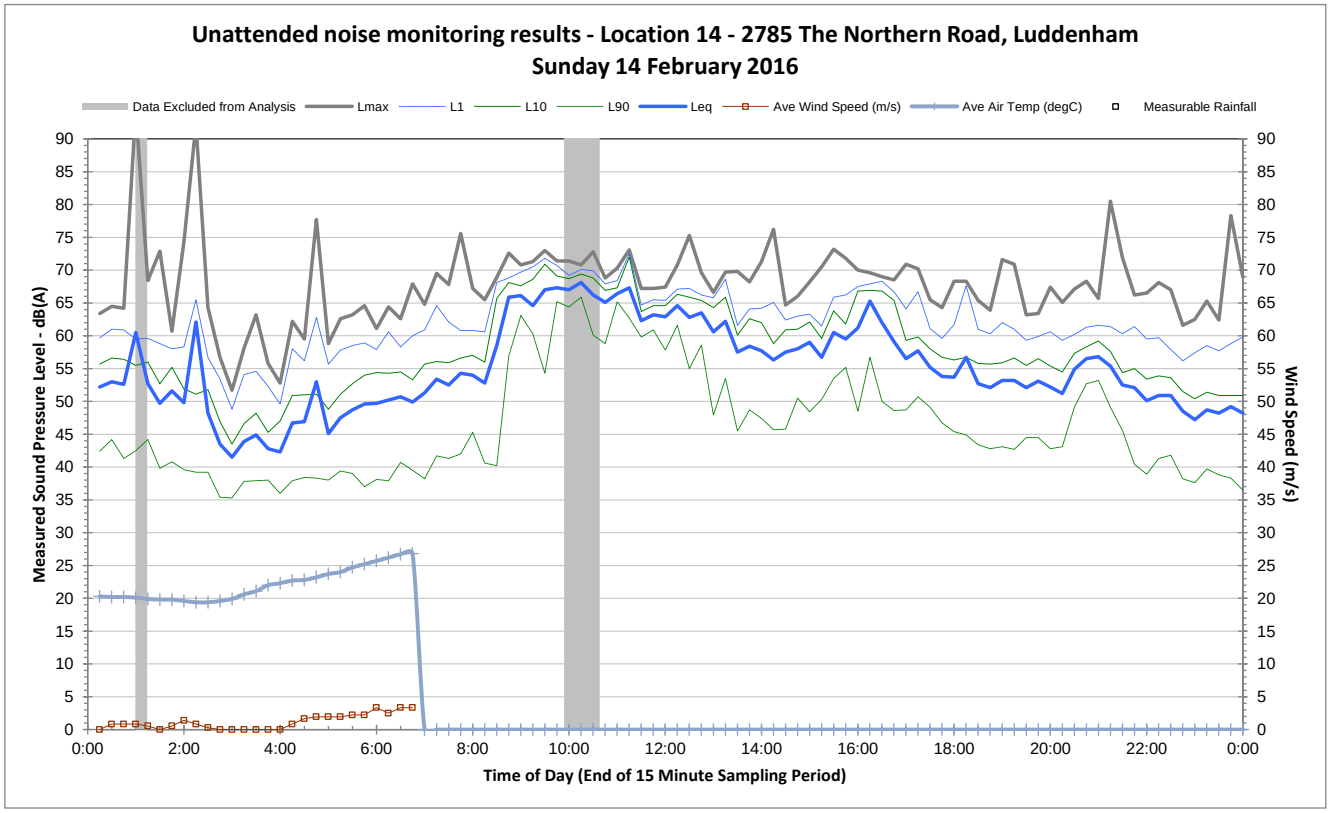
E.6 Location 14 – 2785 The Northern Road, Luddenham

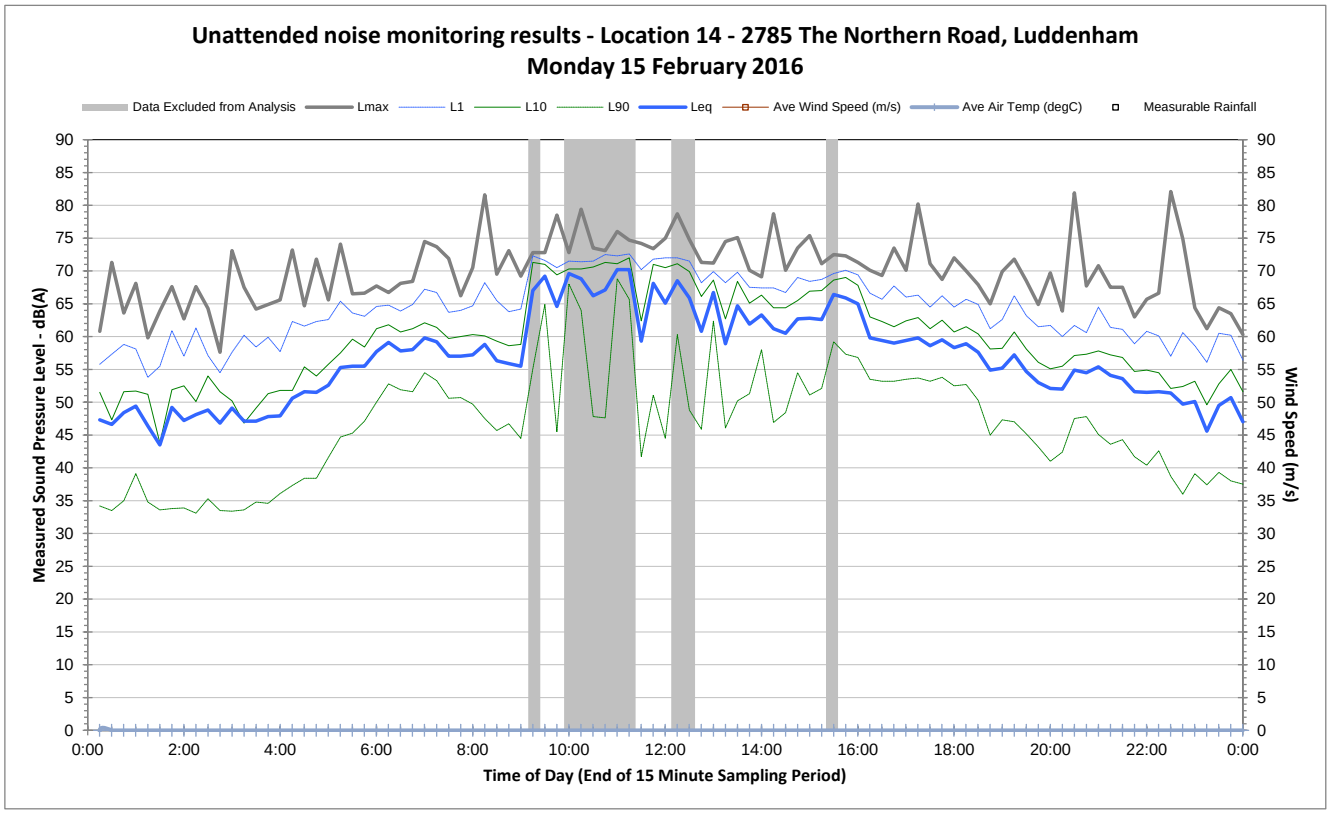


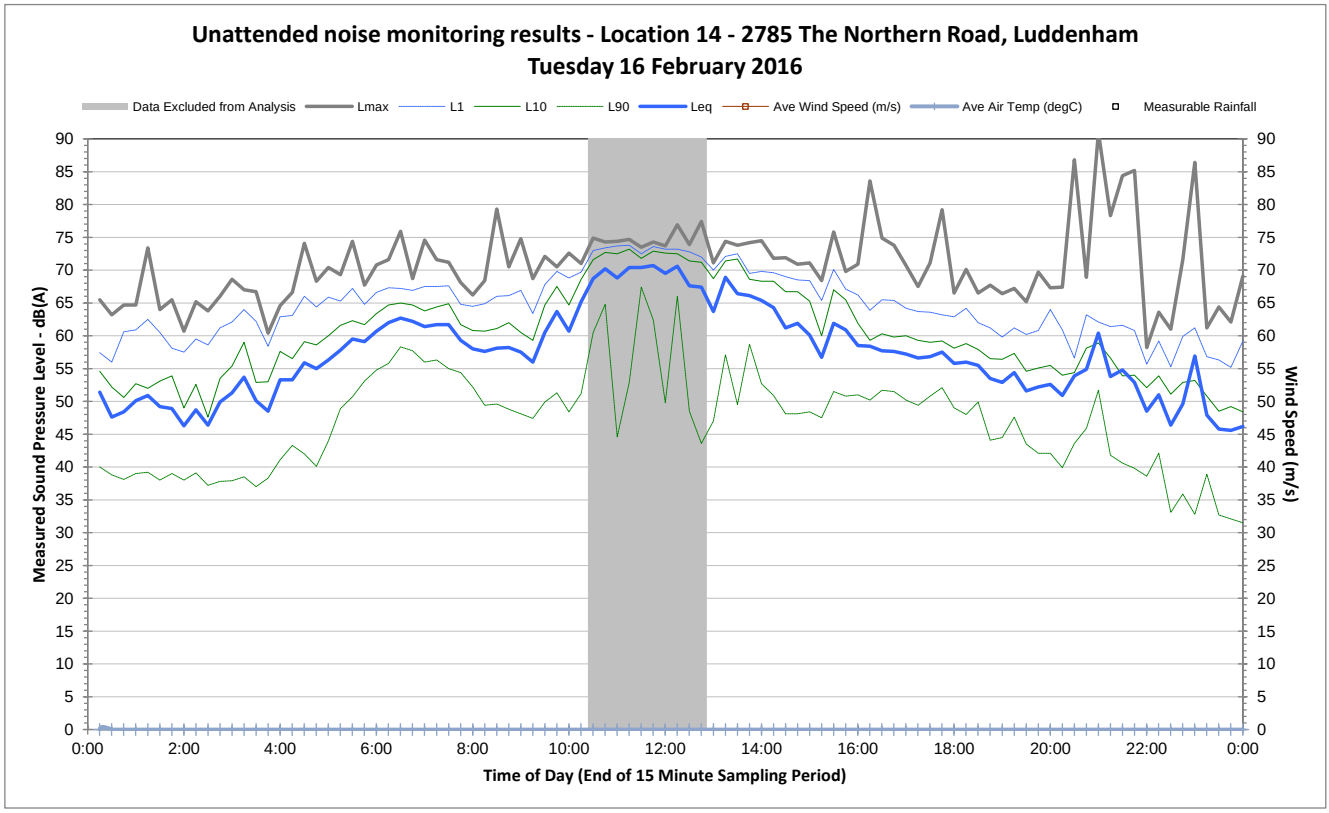


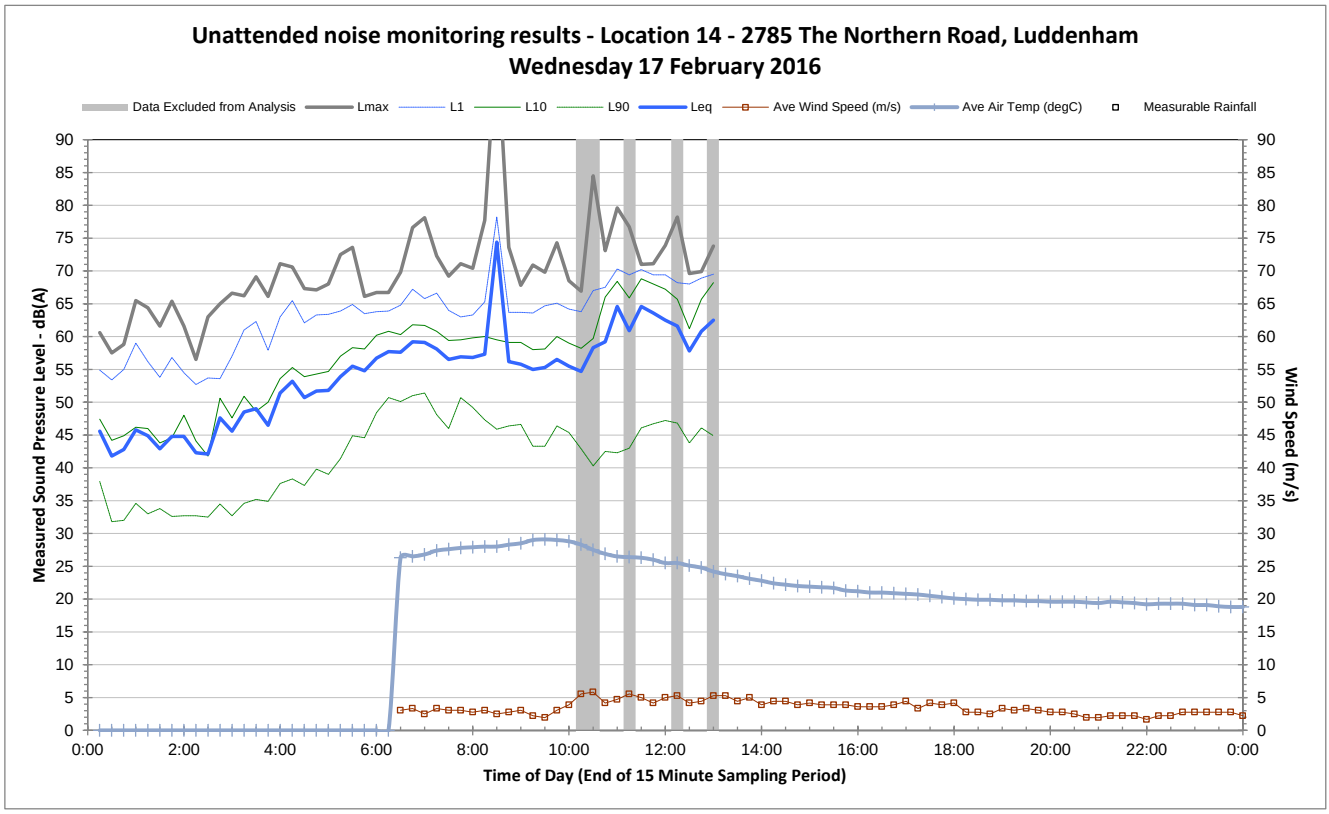

Unattended noise monitoring results - Location 14 - 2785 The Northern Road, Luddenham
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 14 - 2785 The Northern Road, Luddenham
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

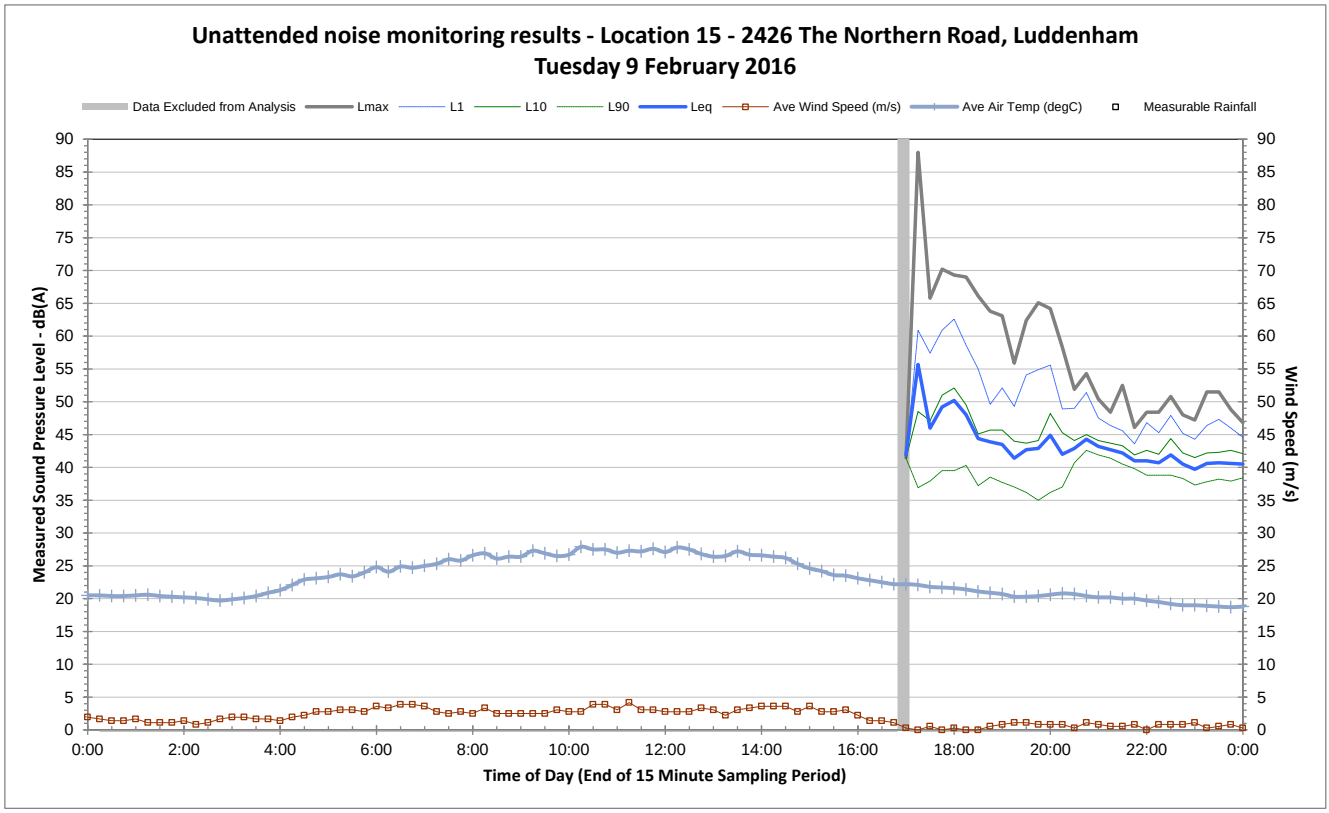

Unattended noise monitoring results - Location 14 - 2785 The Northern Road, Luddenham
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

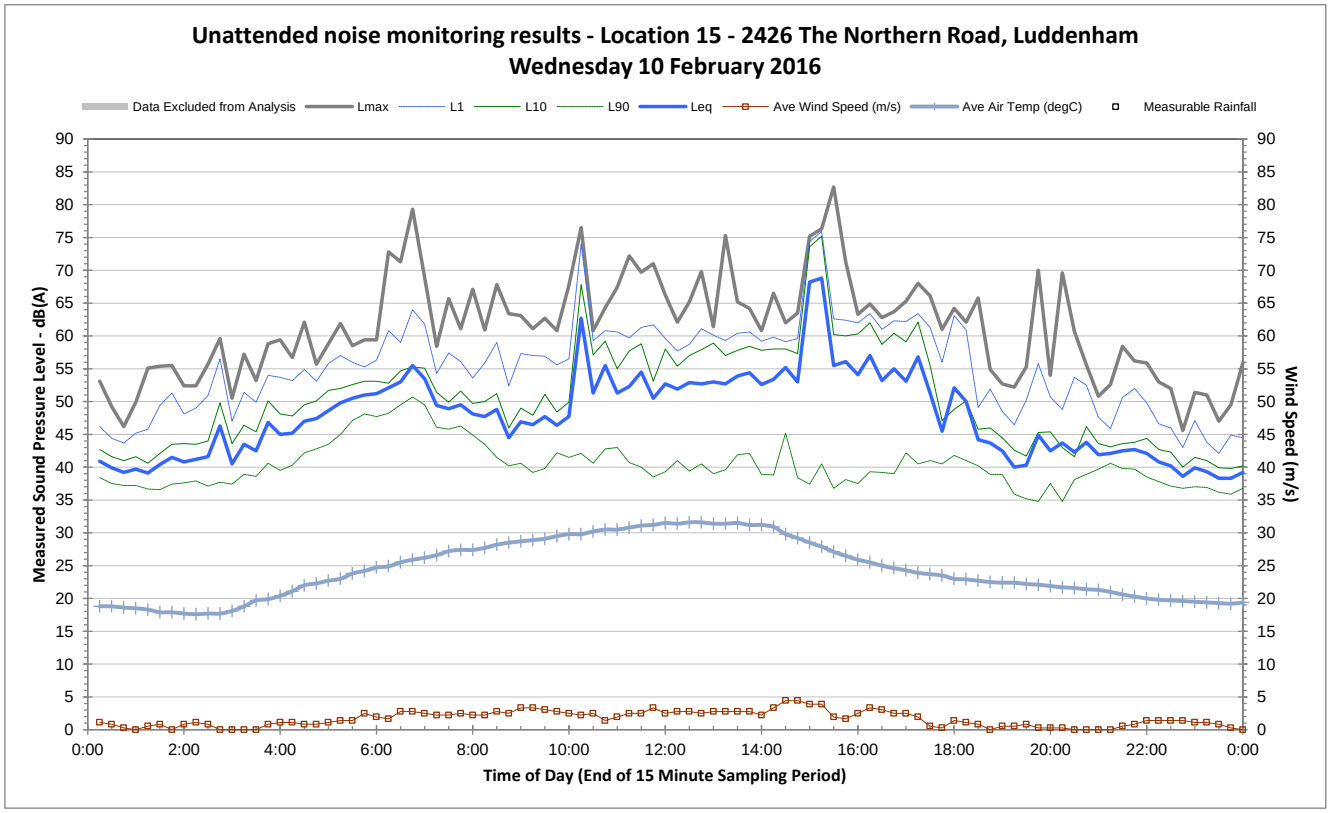

Unattended noise monitoring results - Location 14 - 2785 The Northern Road, Luddenham
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

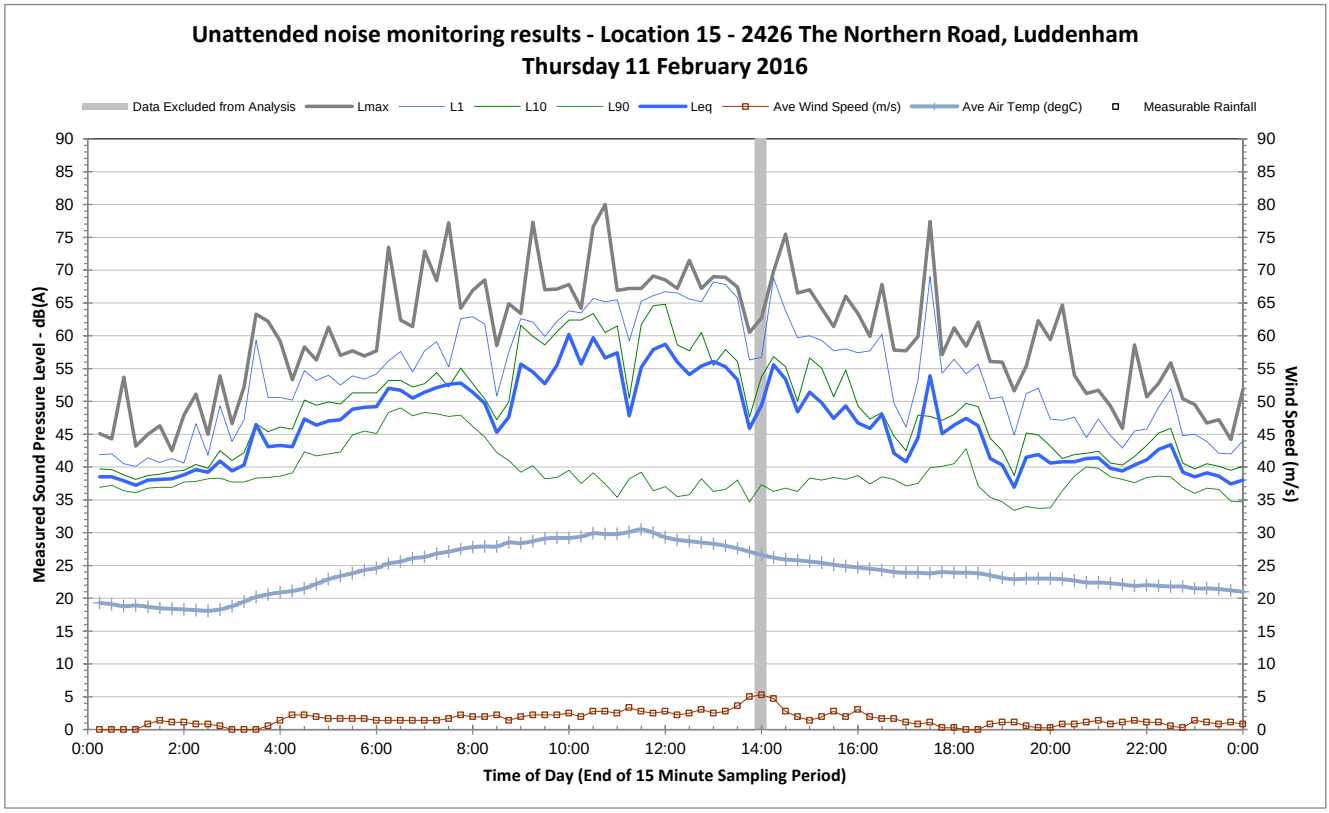

Unattended noise monitoring results - Location 14 - 2785 The Northern Road, Luddenham
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

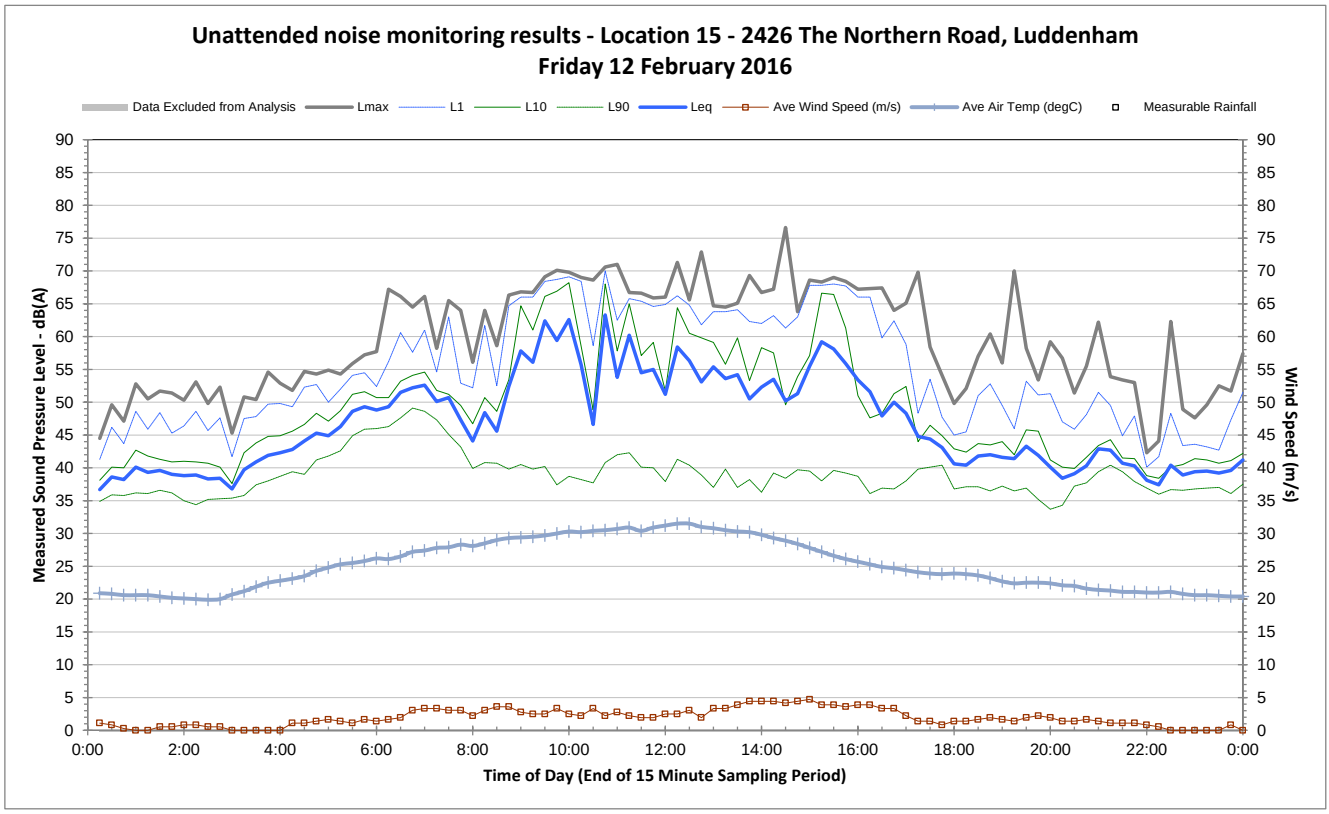

Unattended noise monitoring results - Location 14 - 2785 The Northern Road, Luddenham
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

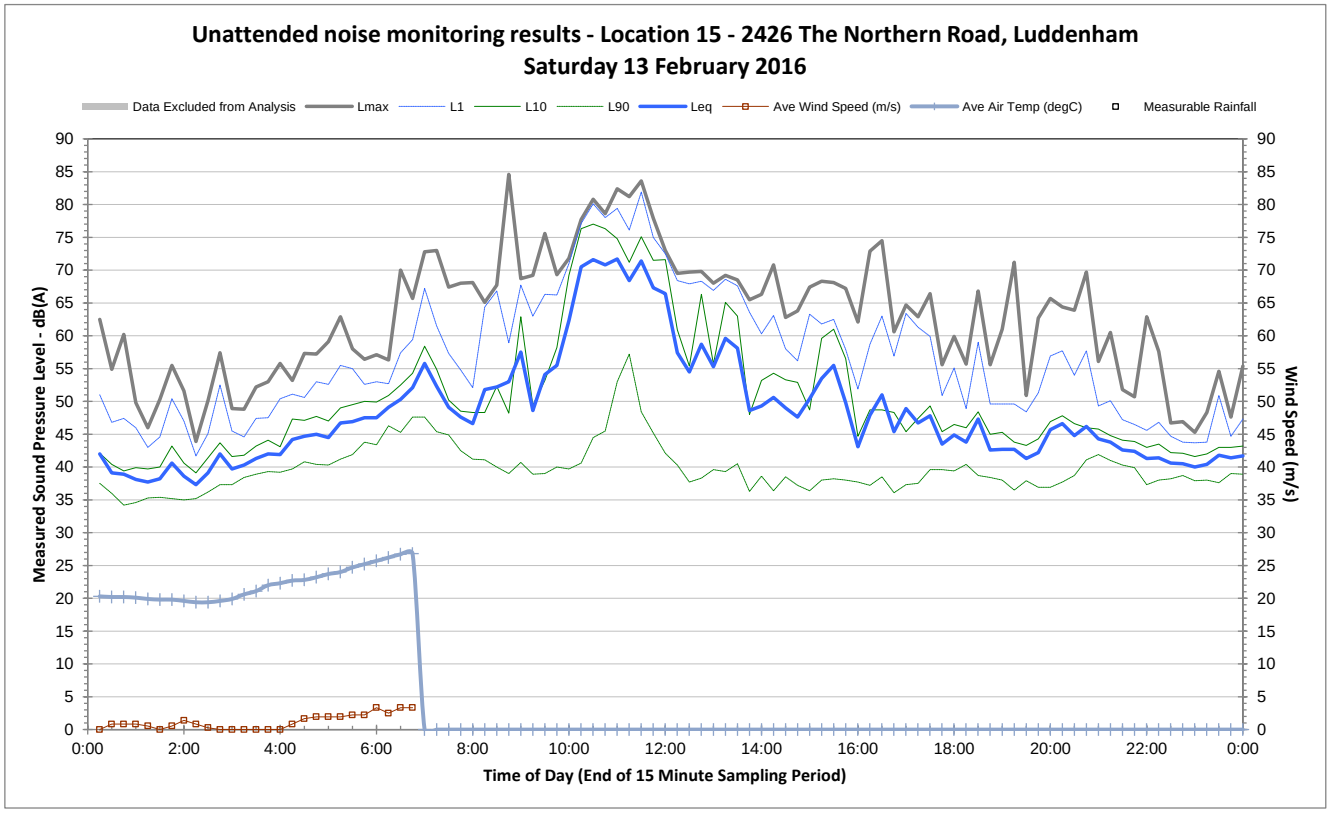
E.7 Location 15 – 2426 The Northern Road, Luddenham

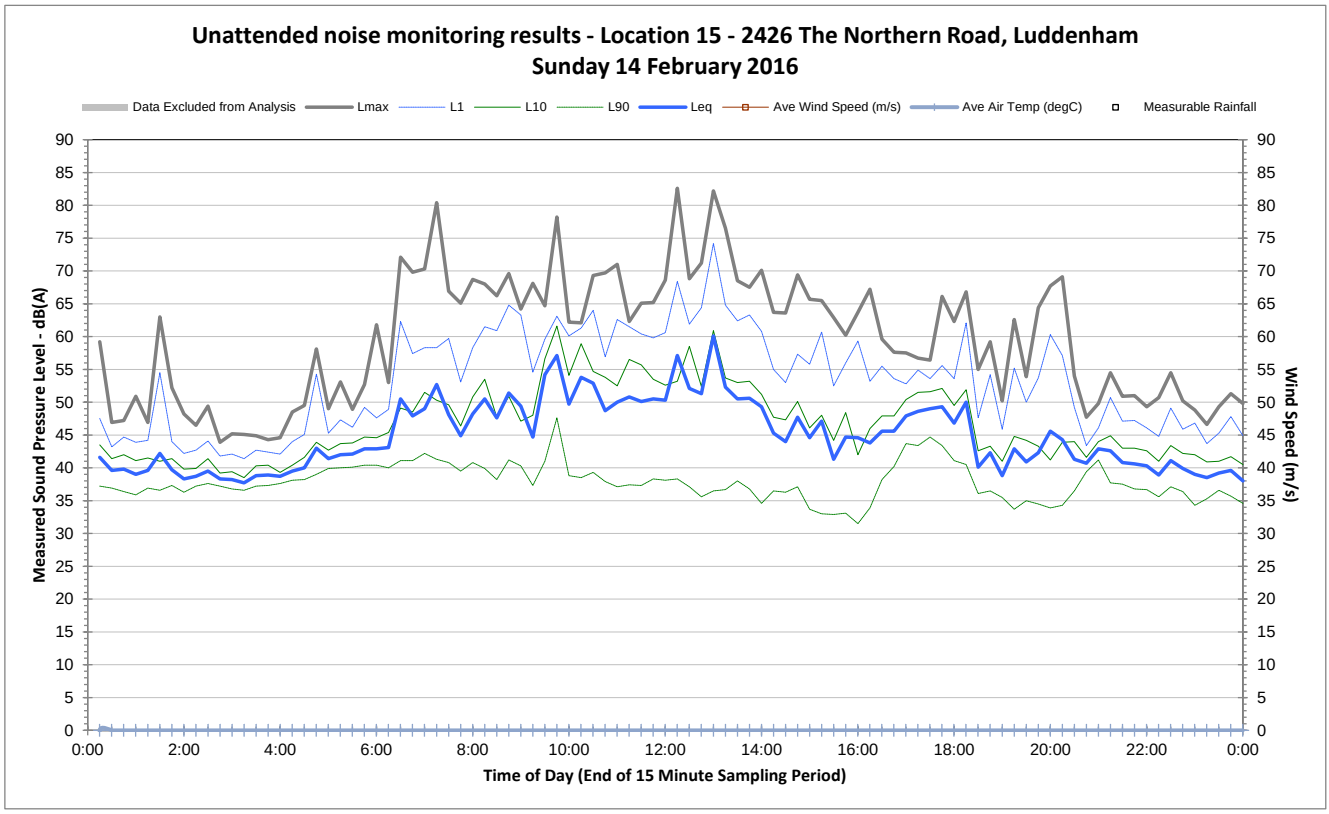


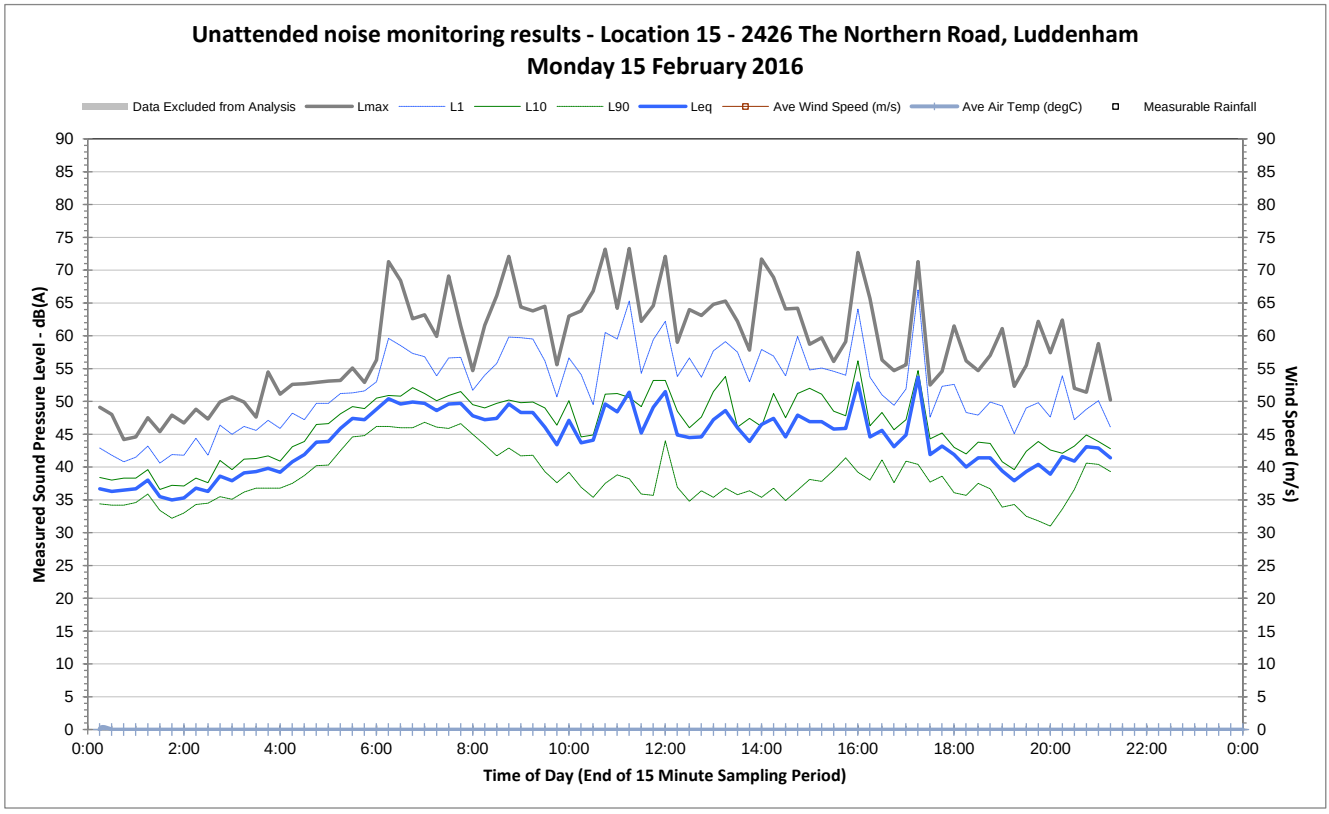



Unattended noise monitoring results - Location 15 - 2426 The Northern Road, Luddenham
Thursday 11 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

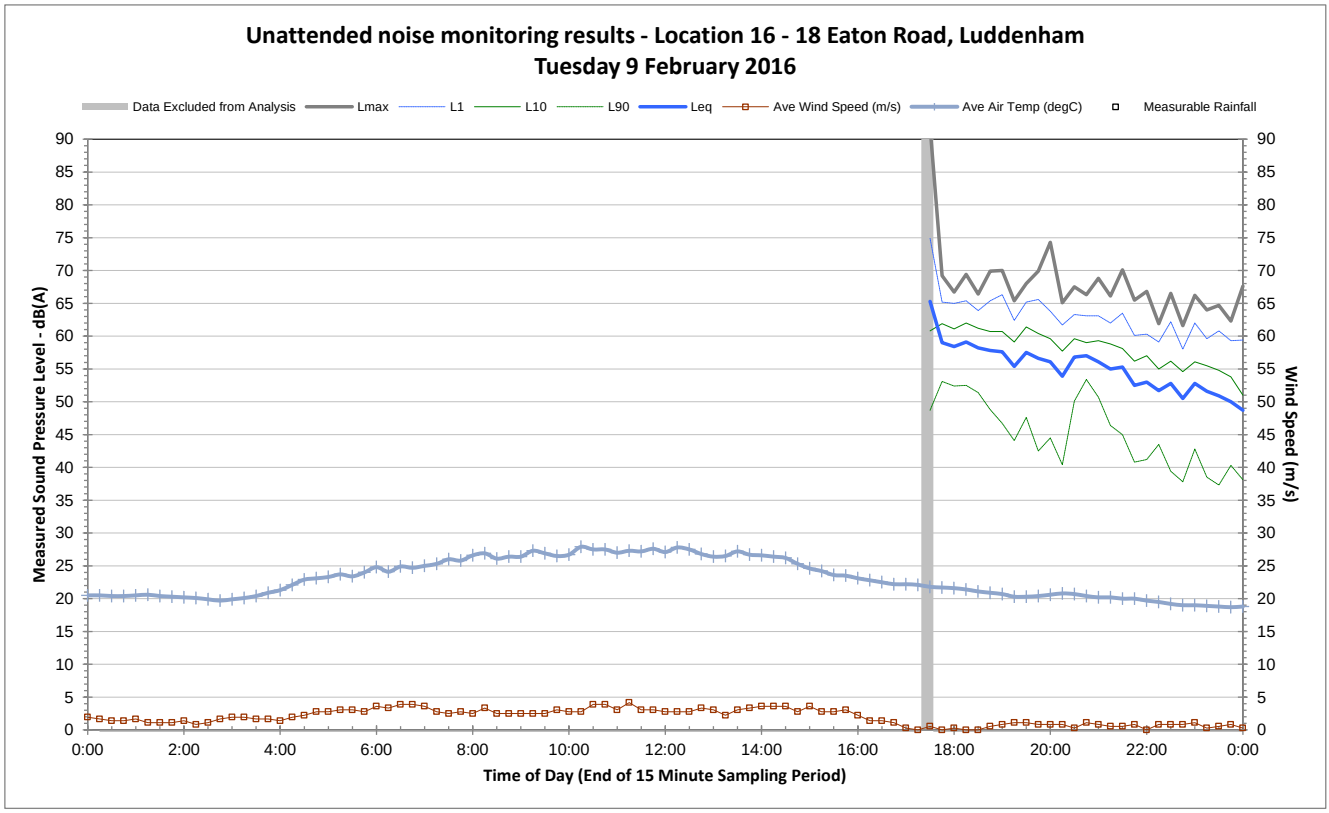

Unattended noise monitoring results - Location 15 - 2426 The Northern Road, Luddenham
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

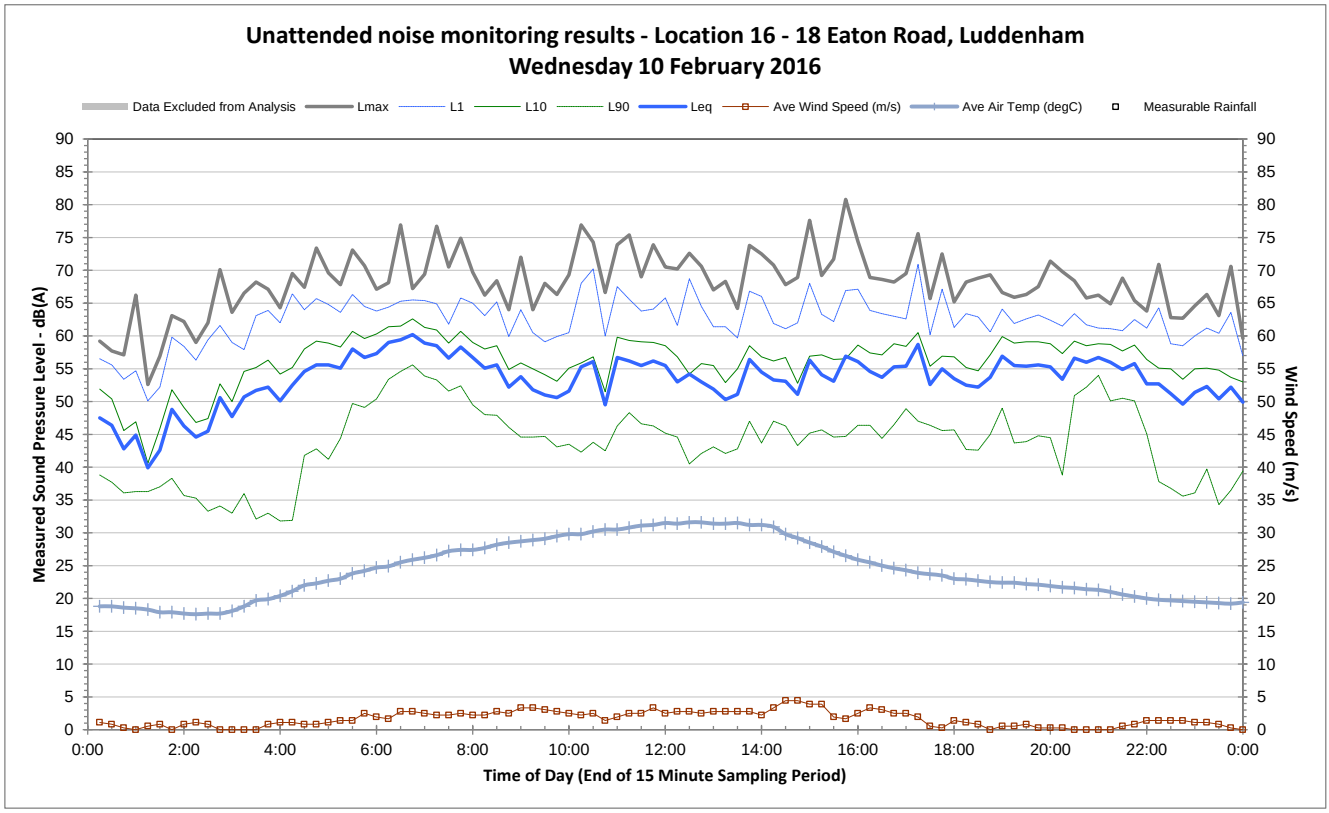

Unattended noise monitoring results - Location 15 - 2426 The Northern Road, Luddenham
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

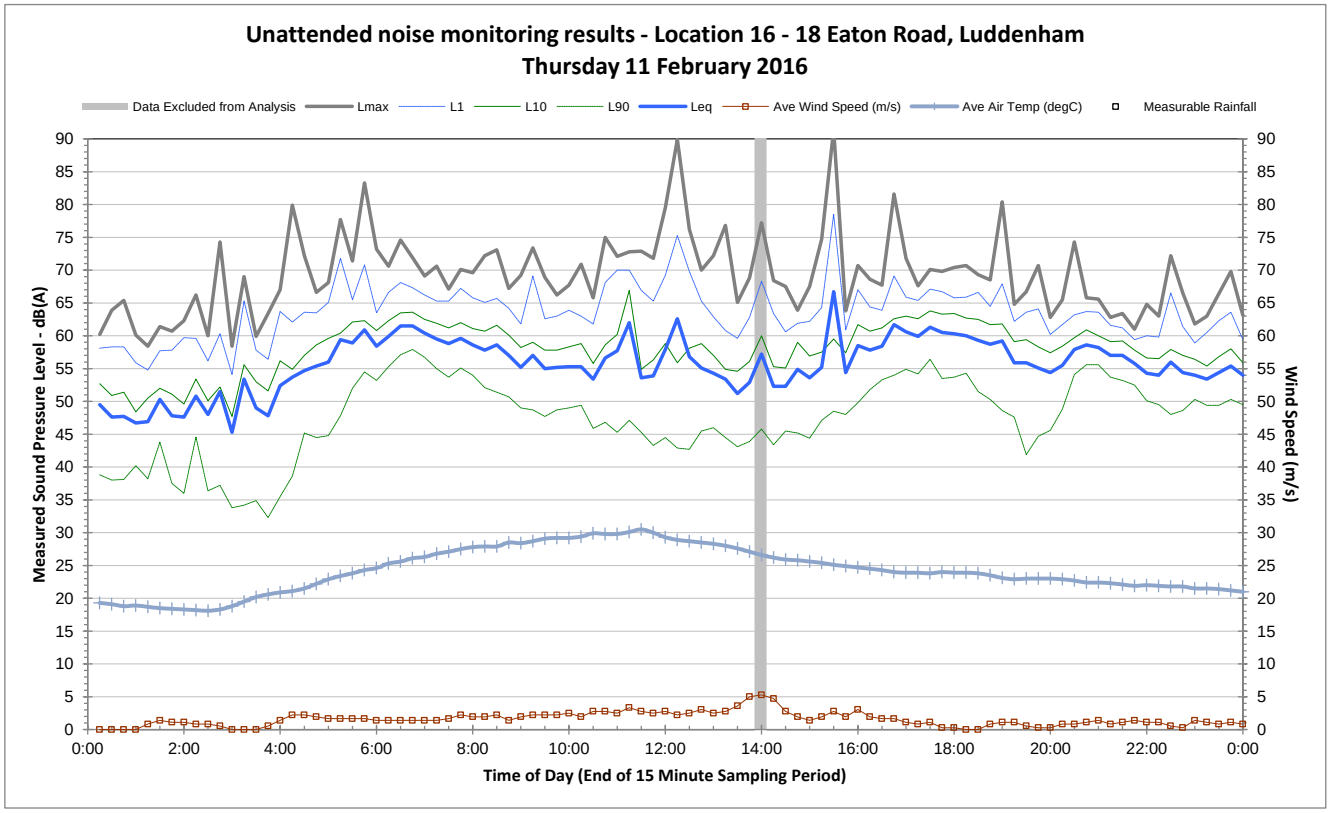

Unattended noise monitoring results - Location 15 - 2426 The Northern Road, Luddenham
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

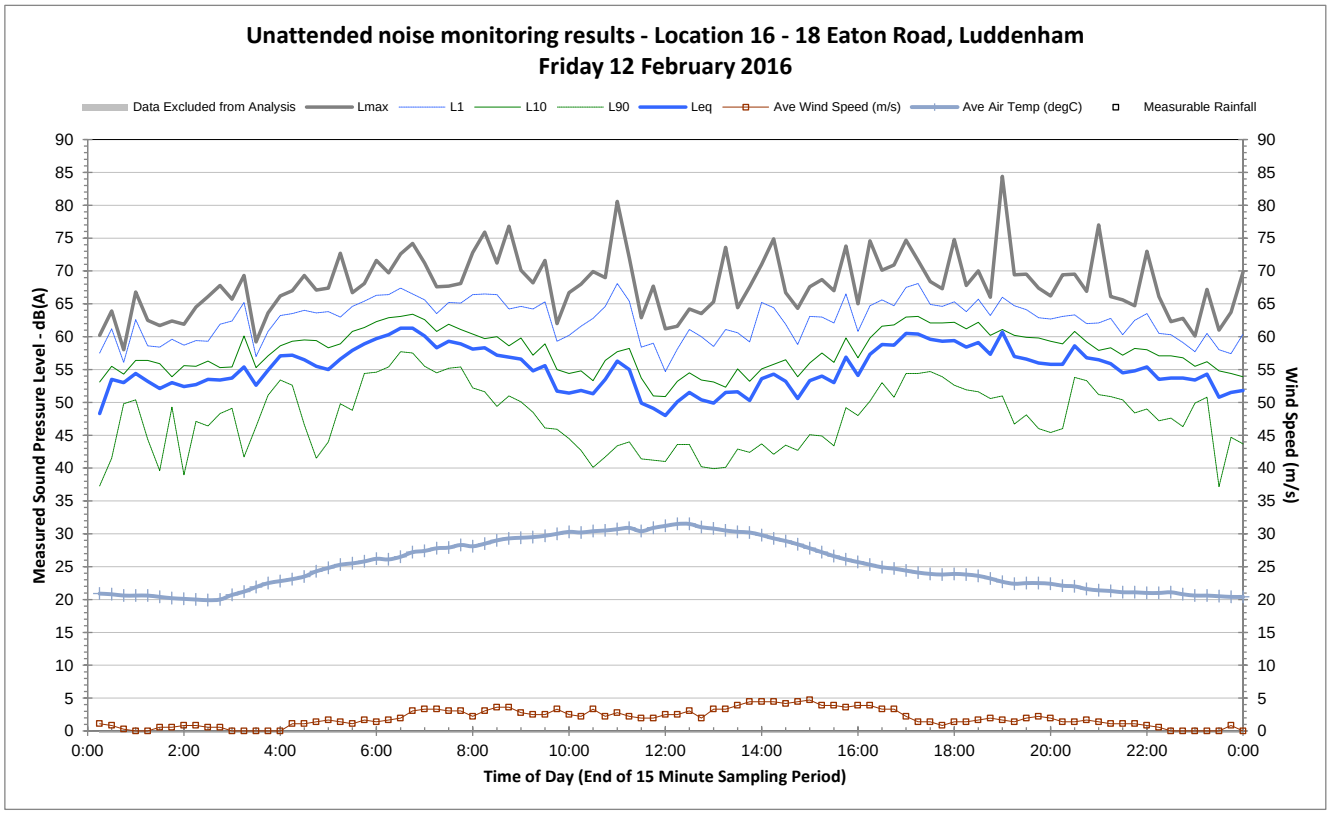

Unattended noise monitoring results - Location 15 - 2426 The Northern Road, Luddenham
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
0:00

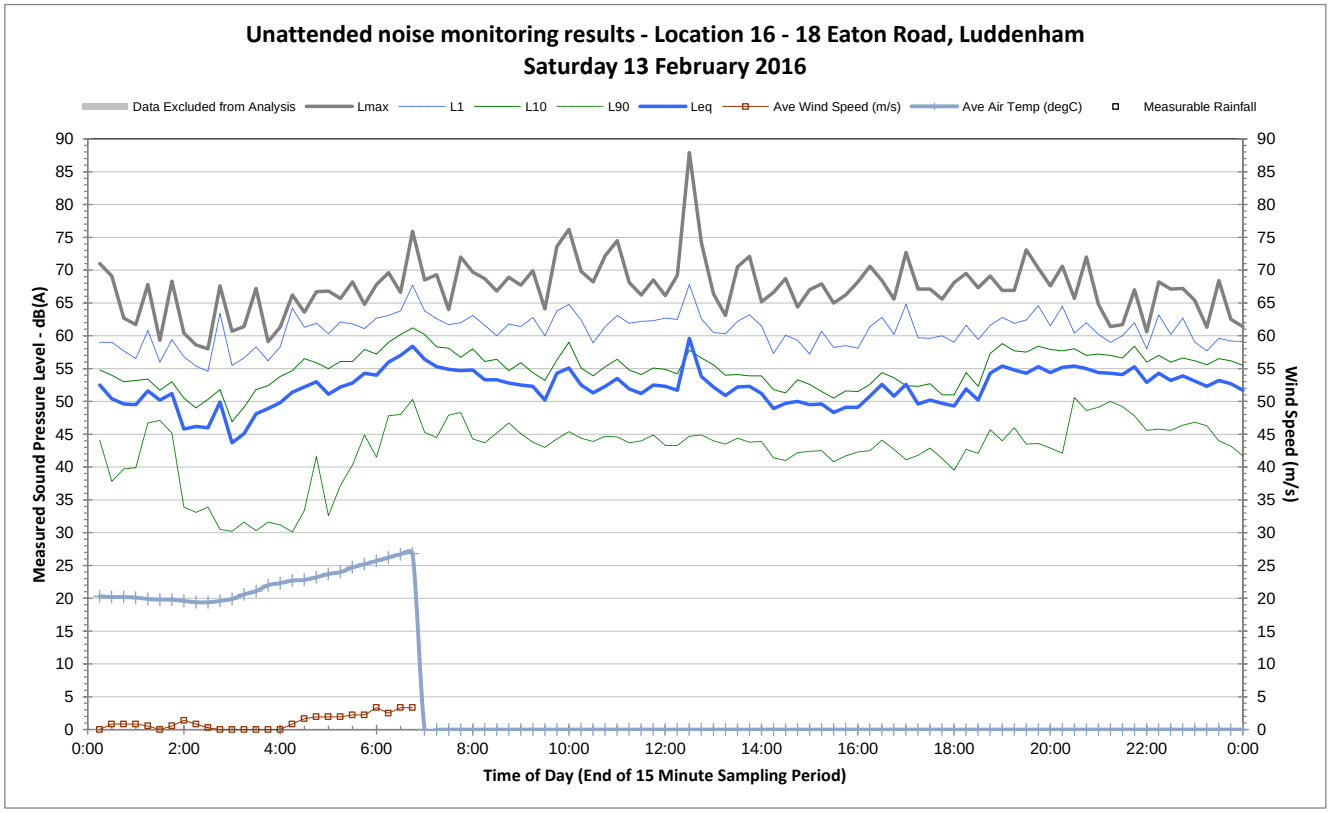
E.8 Location 16 – 18 Eaton Road, Luddenham

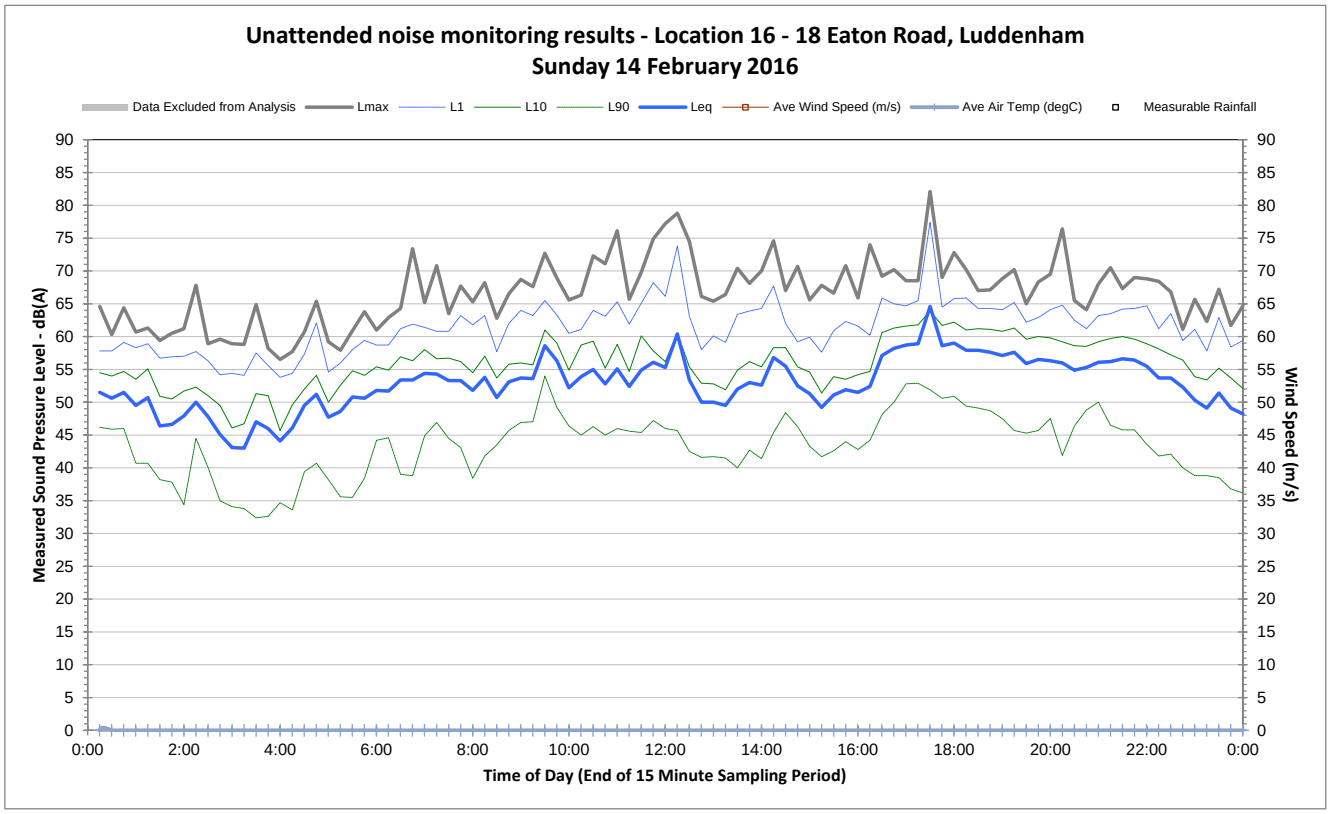


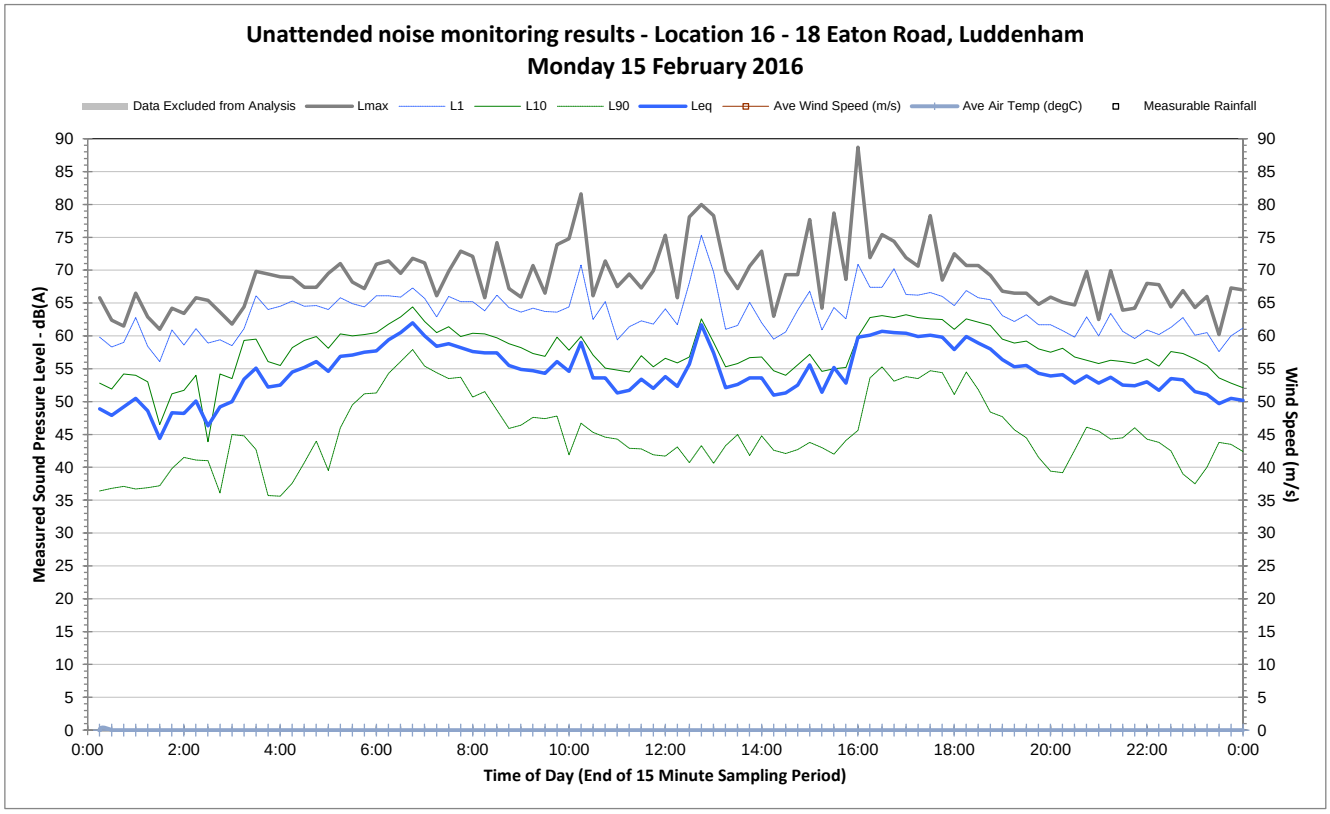


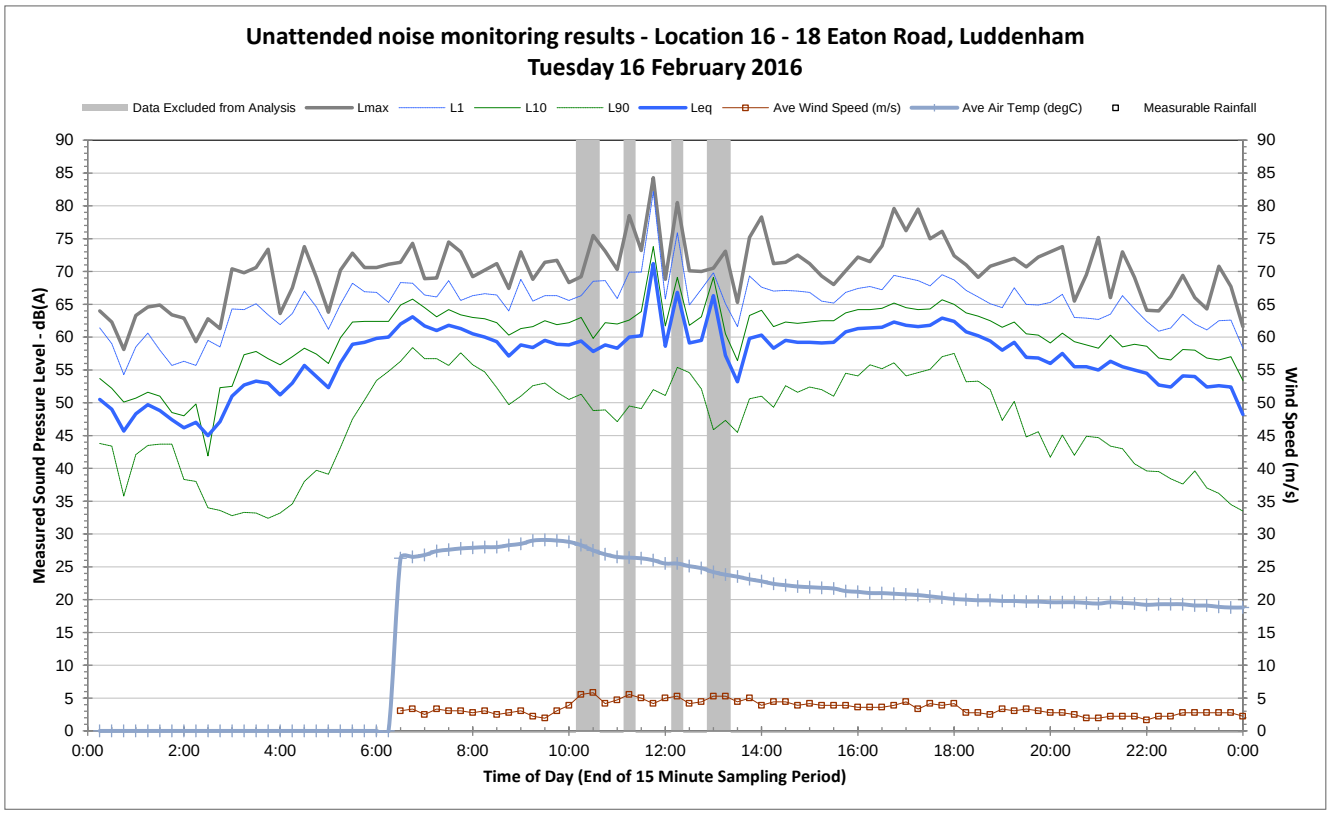

Unattended noise monitoring results - Location 16 - 18 Eaton Road, Luddenham
Thursday 11 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

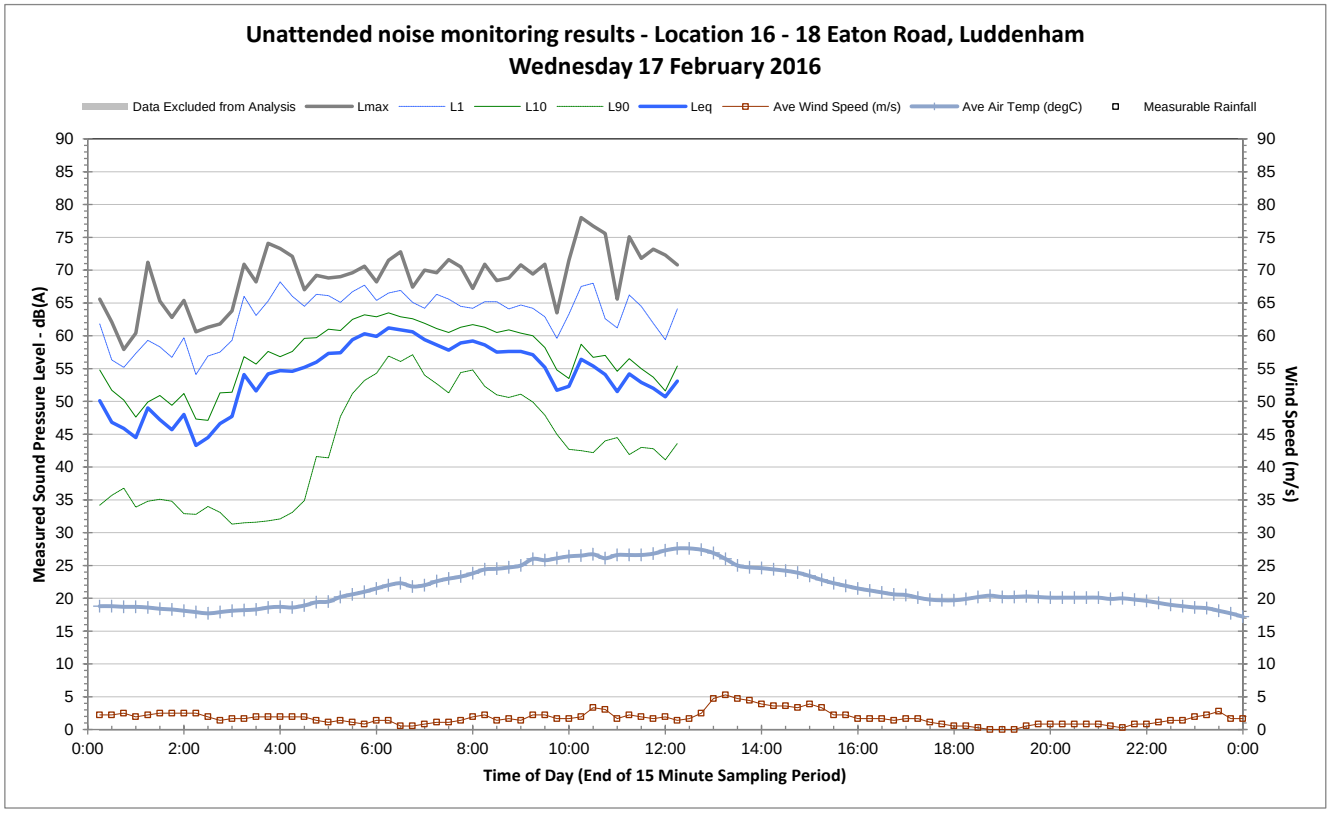

Unattended noise monitoring results - Location 16 - 18 Eaton Road, Luddenham
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 16 - 18 Eaton Road, Luddenham
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

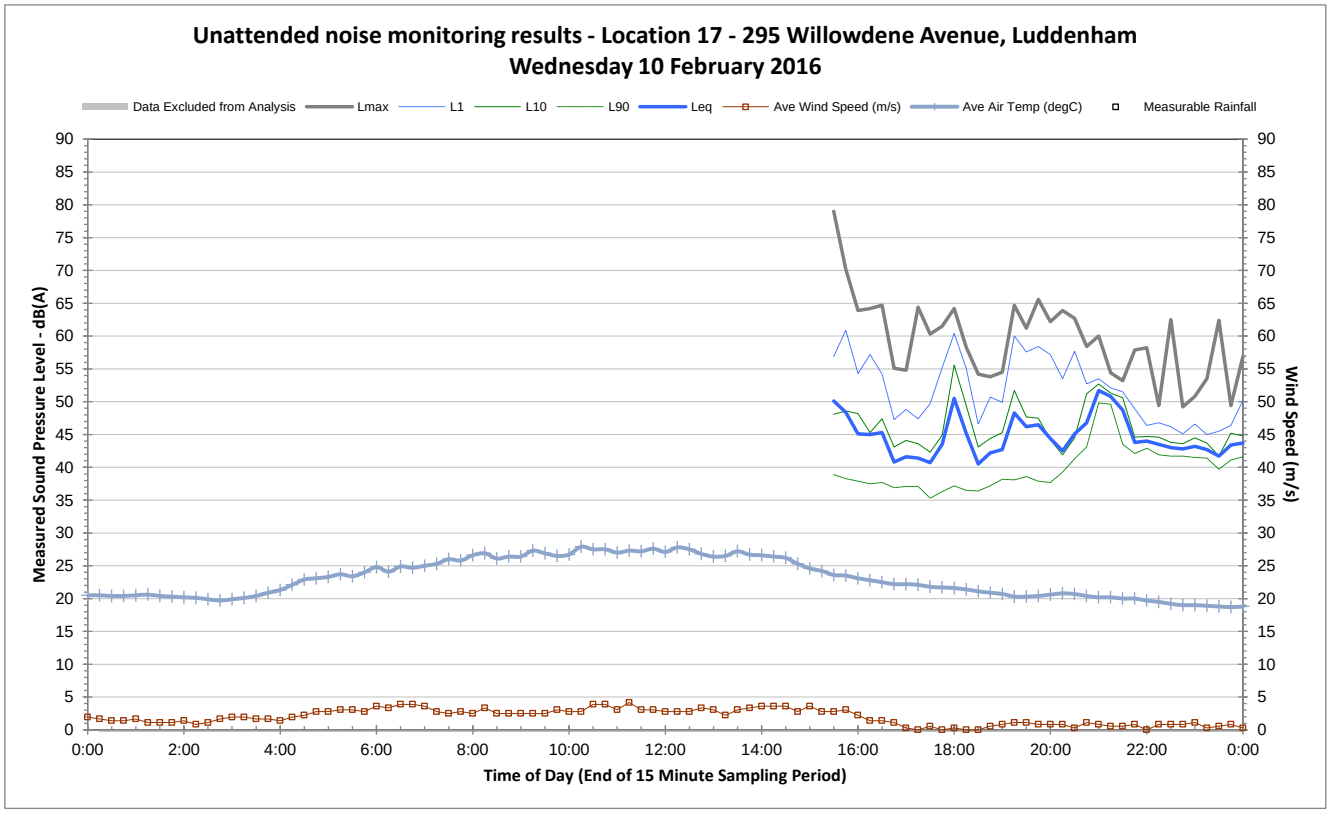

Unattended noise monitoring results - Location 16 - 18 Eaton Road, Luddenham
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

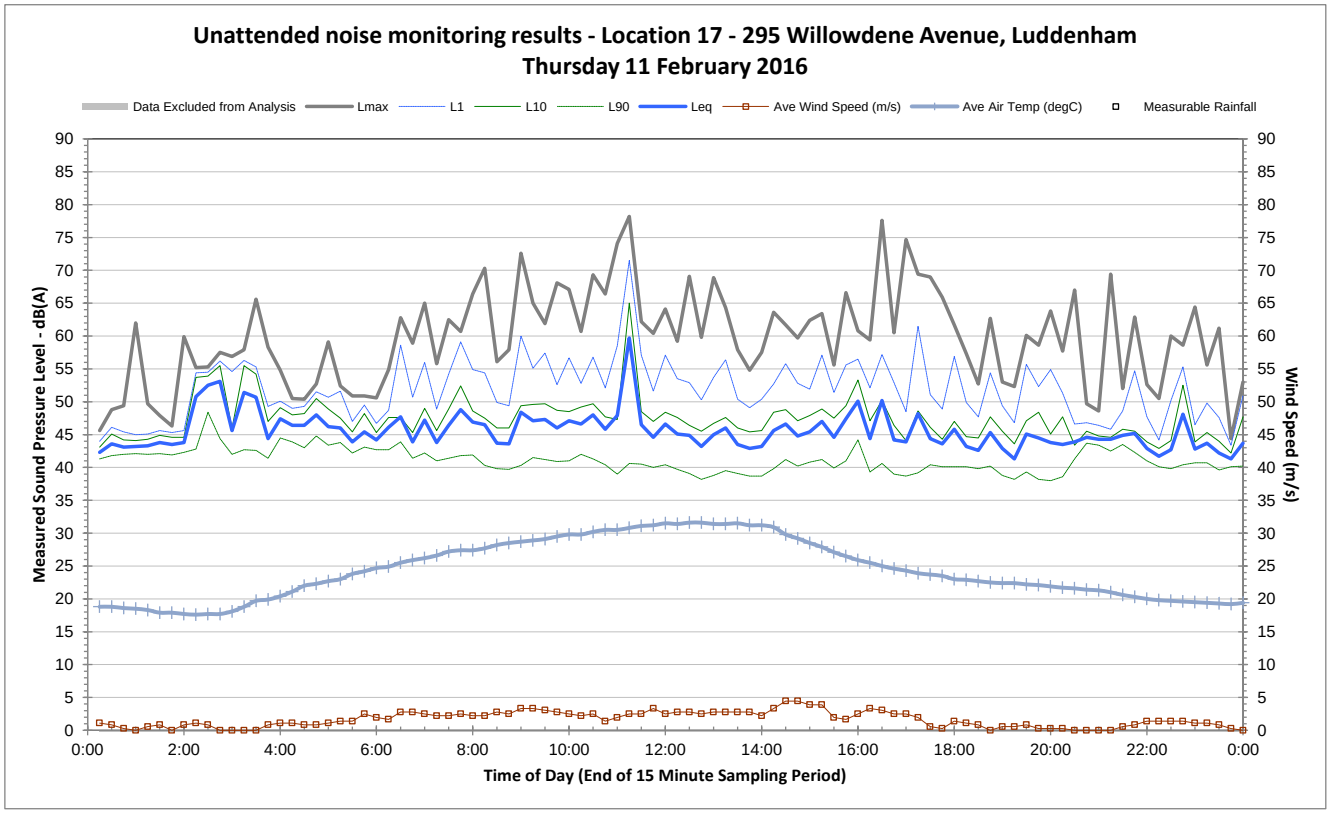

Unattended noise monitoring results - Location 16 - 18 Eaton Road, Luddenham
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

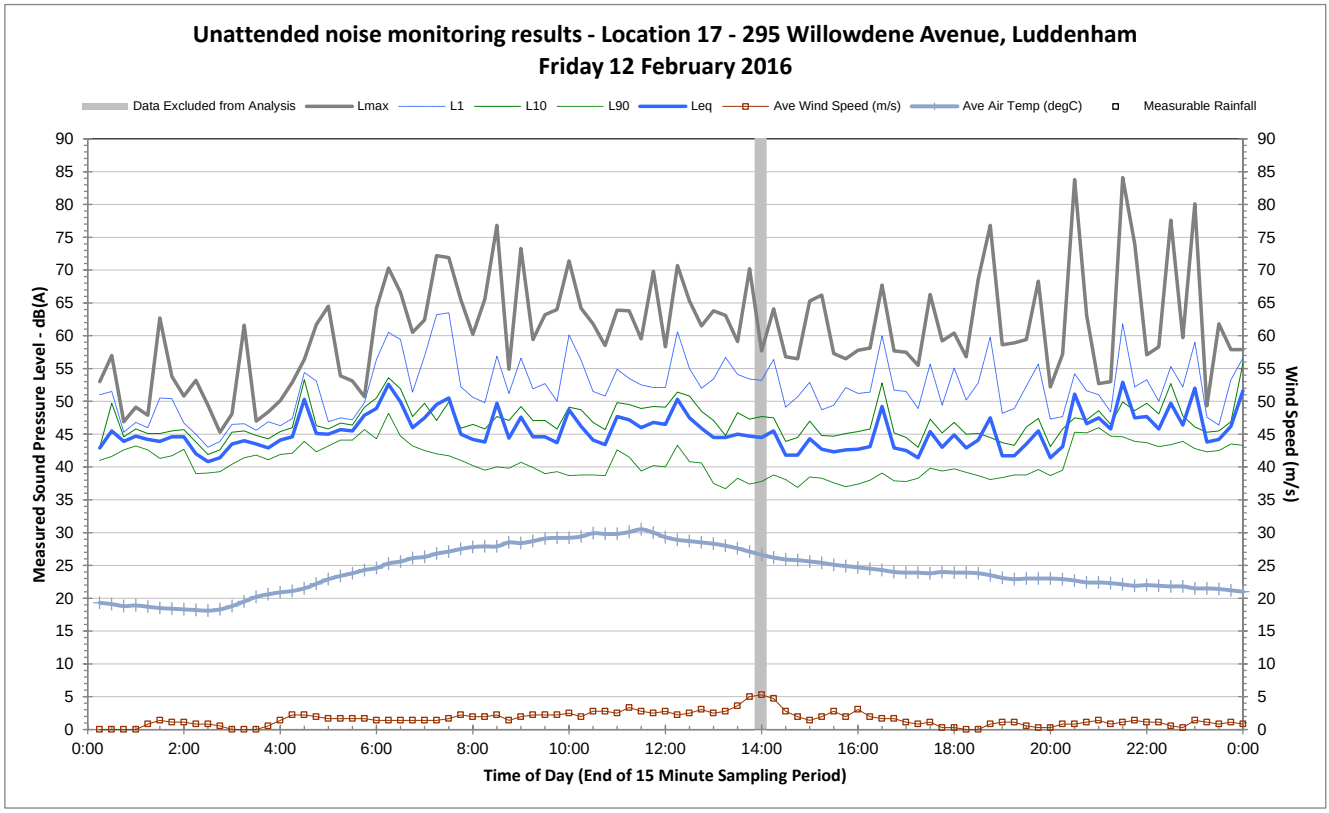

Unattended noise monitoring results - Location 16 - 18 Eaton Road, Luddenham
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

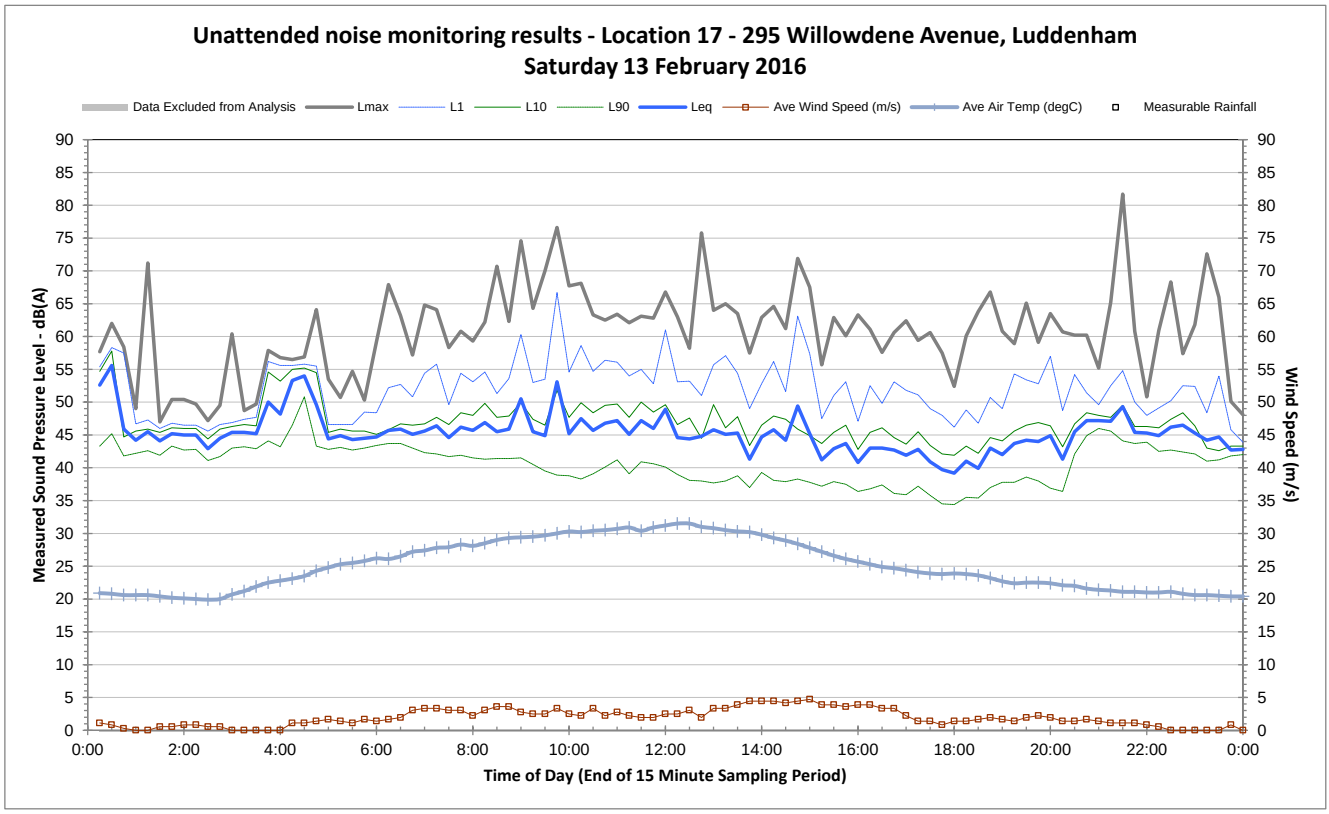

Unattended noise monitoring results - Location 16 - 18 Eaton Road, Luddenham
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
0:00

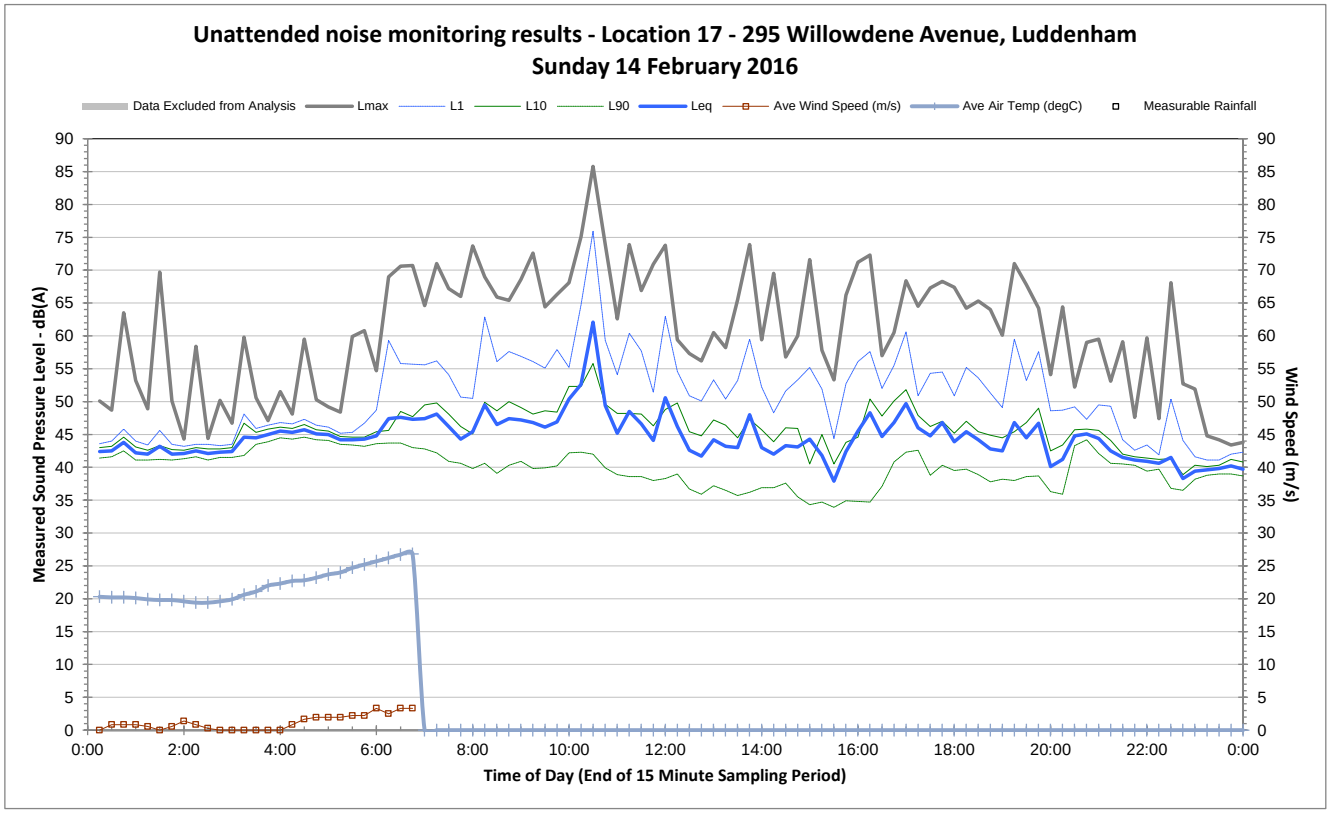
E.9 Location 17 – 295 Willowdene Avenue, Luddenham

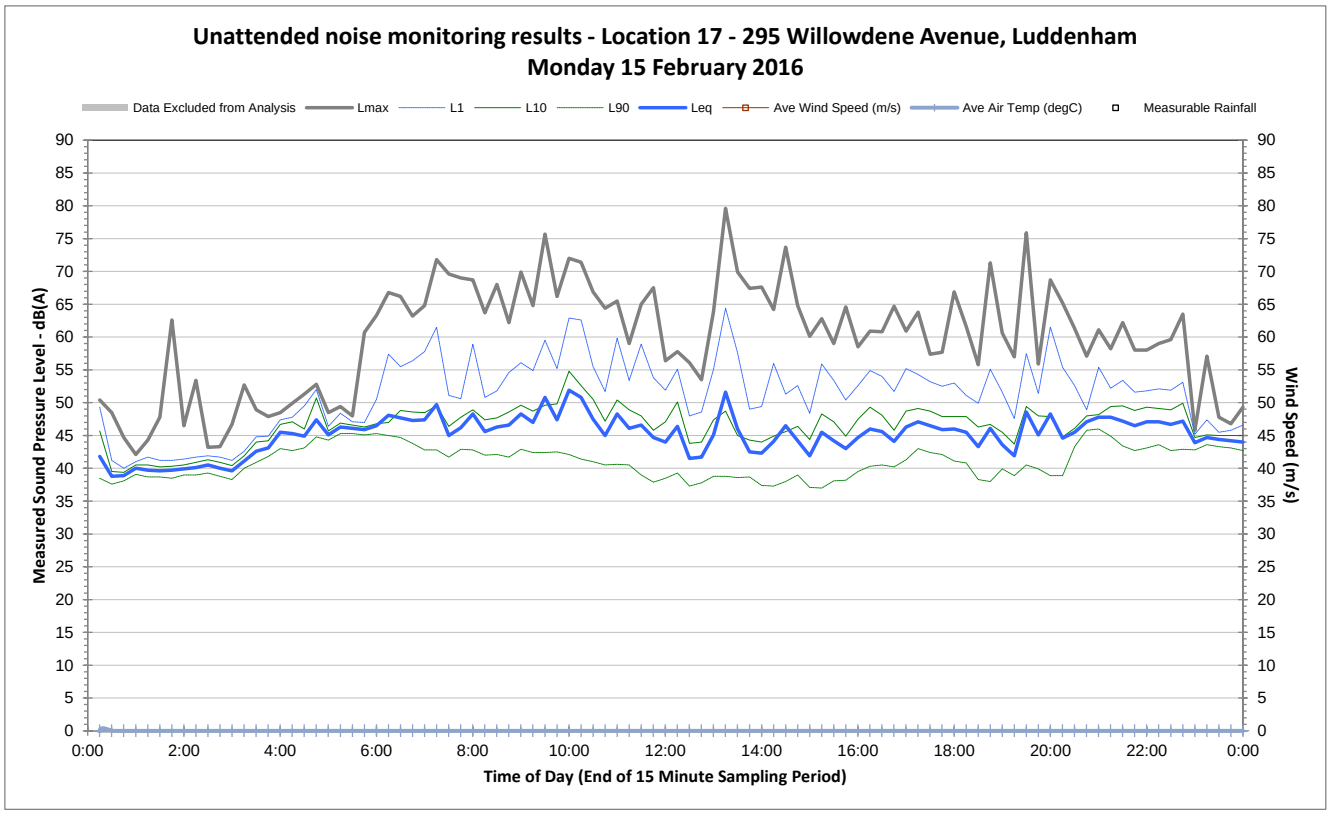


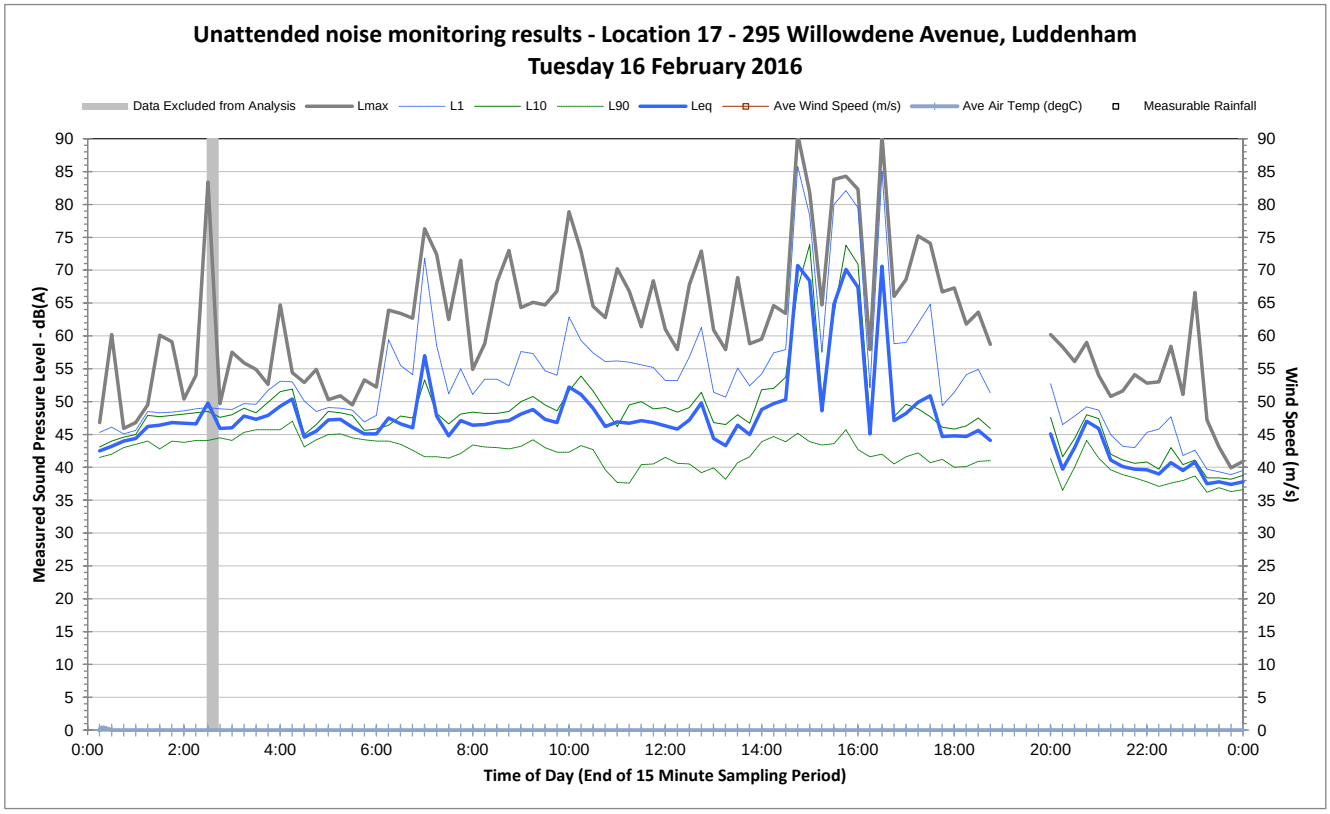


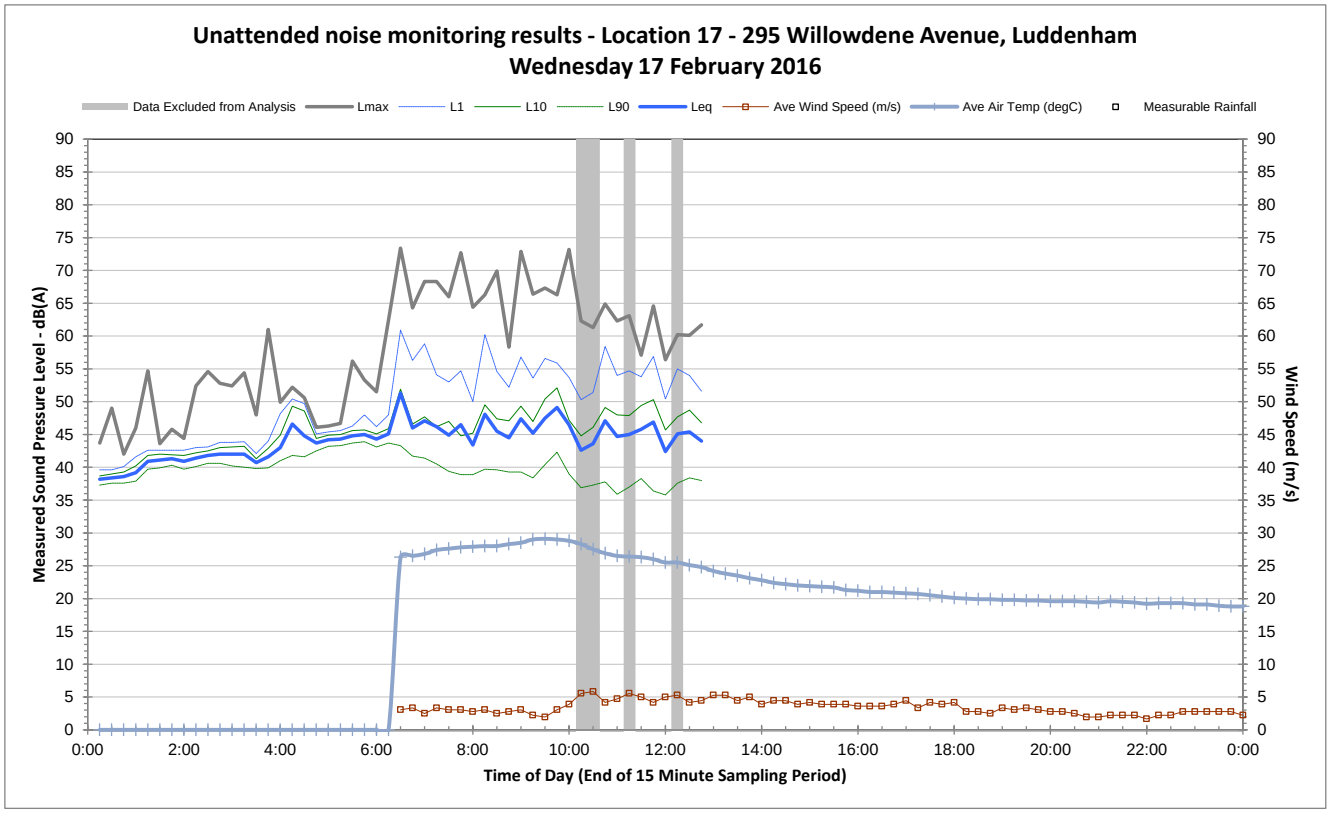

Unattended noise monitoring results - Location 17 - 295 Willowdene Avenue, Luddenham
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 17 - 295 Willowdene Avenue, Luddenham
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

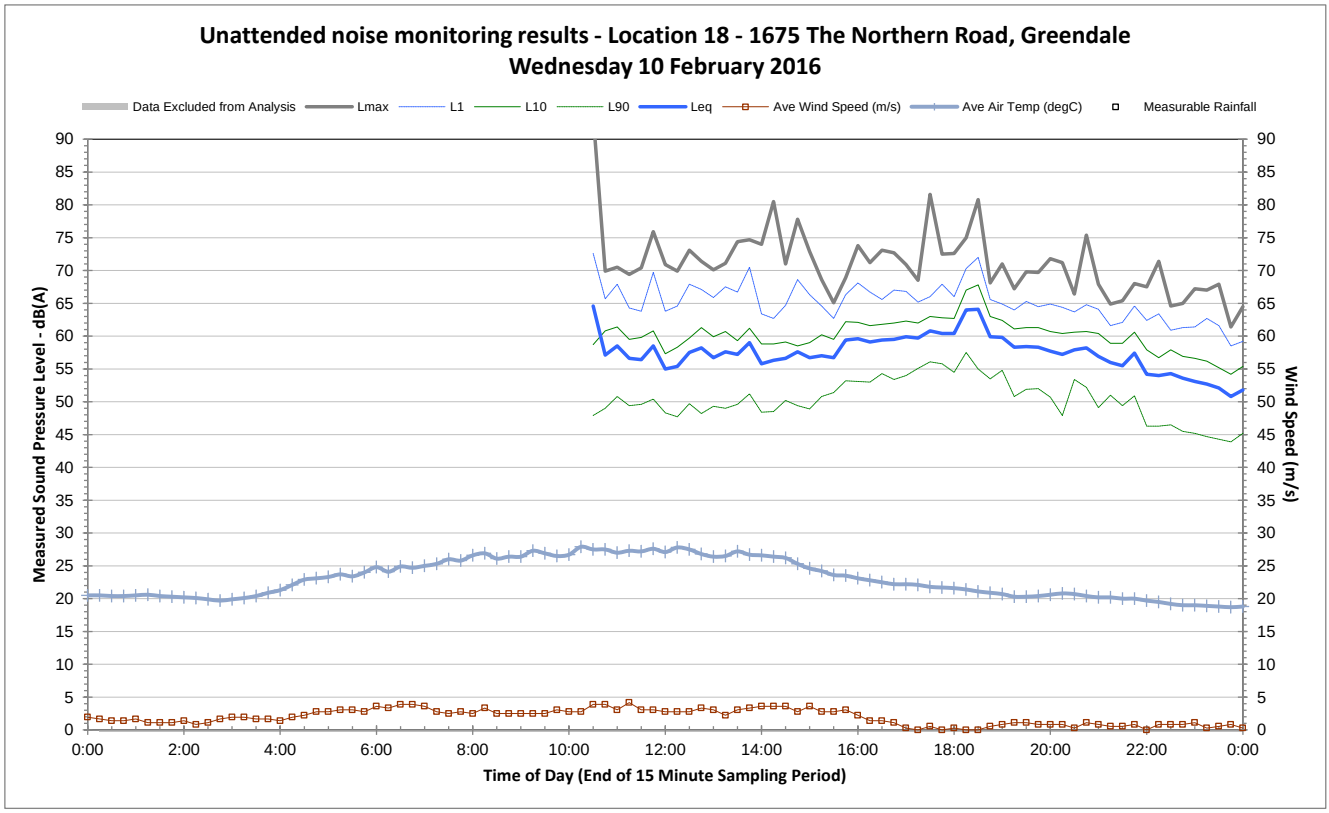

Unattended noise monitoring results - Location 17 - 295 Willowdene Avenue, Luddenham
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

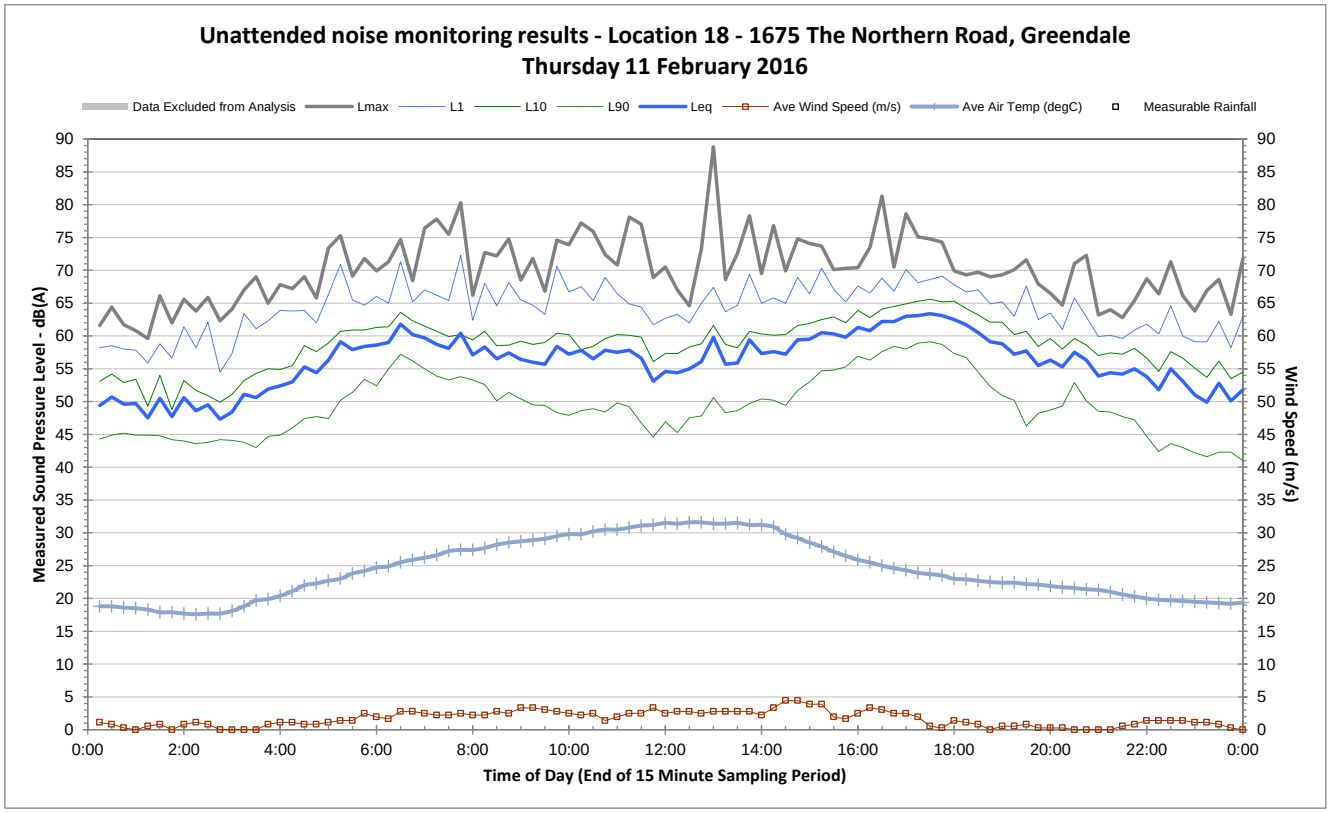

Unattended noise monitoring results - Location 17 - 295 Willowdene Avenue, Luddenham
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

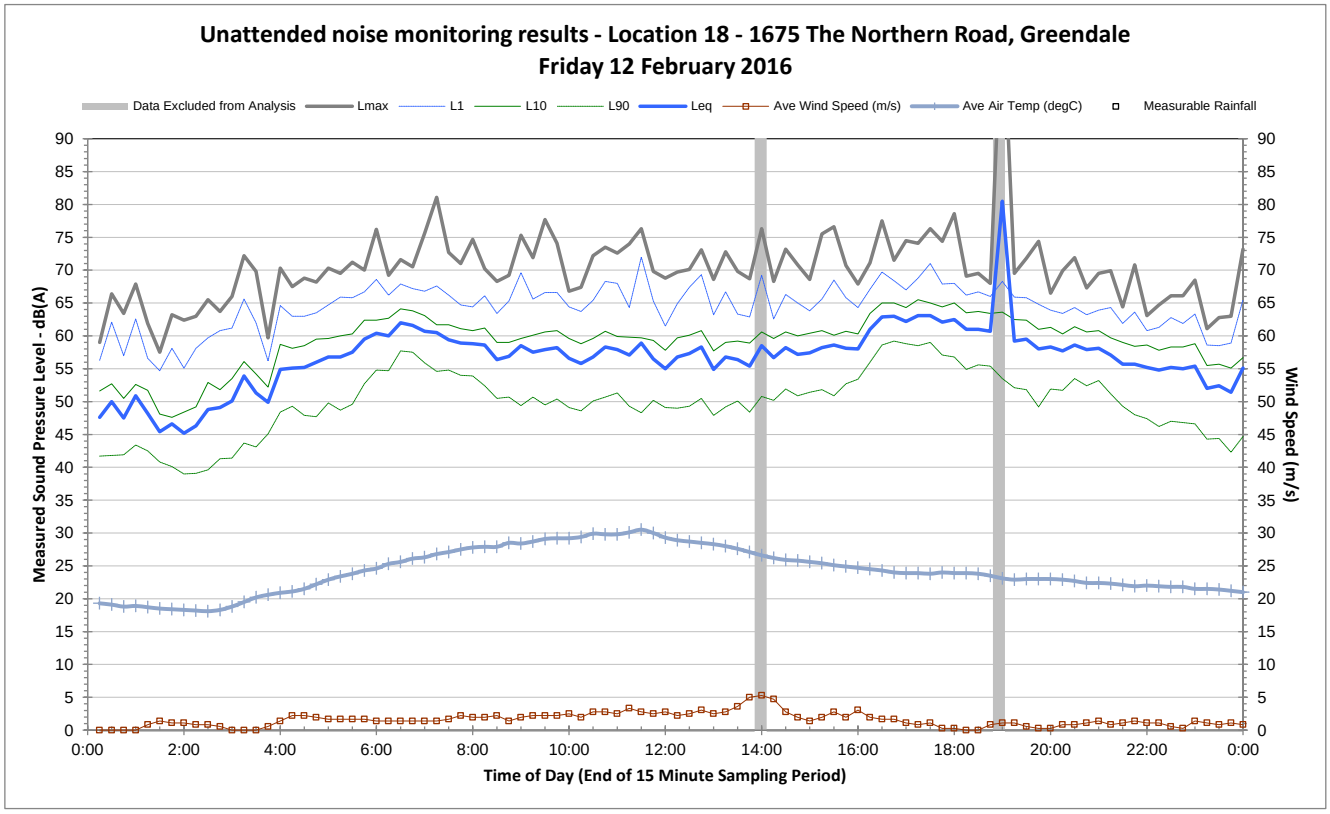

Unattended noise monitoring results - Location 17 - 295 Willowdene Avenue, Luddenham
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

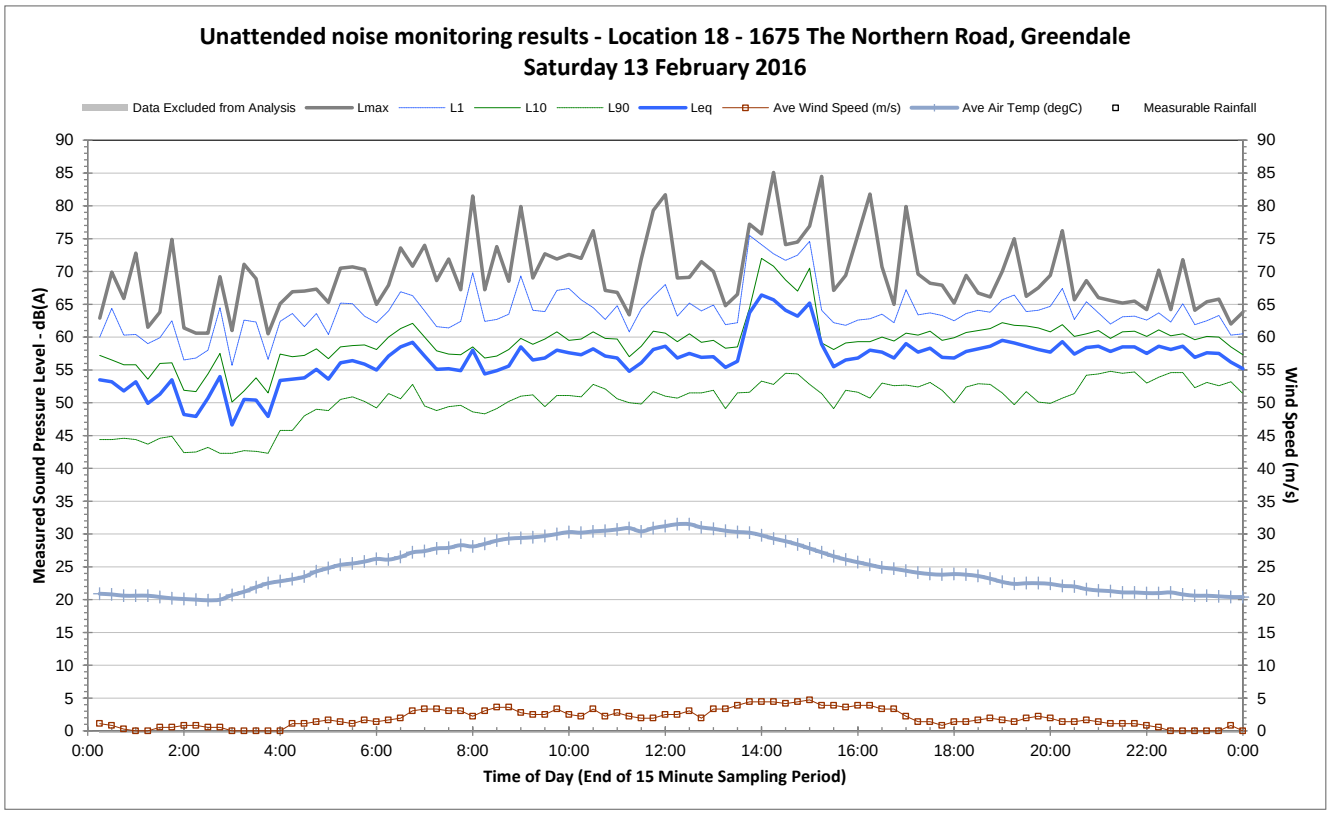

Unattended noise monitoring results - Location 17 - 295 Willowdene Avenue, Luddenham
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

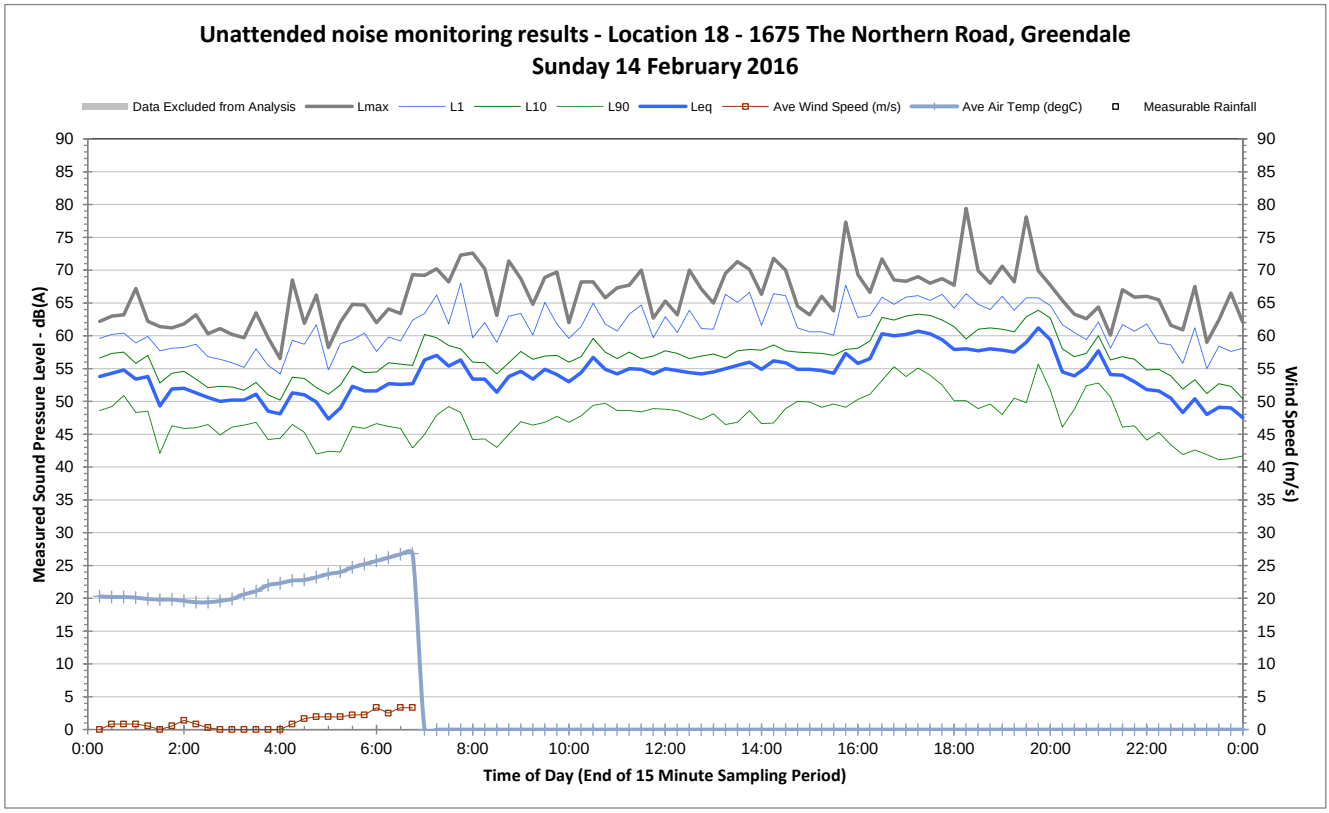
E.10 Location 18 – 1675 The Northern Road, Greendale

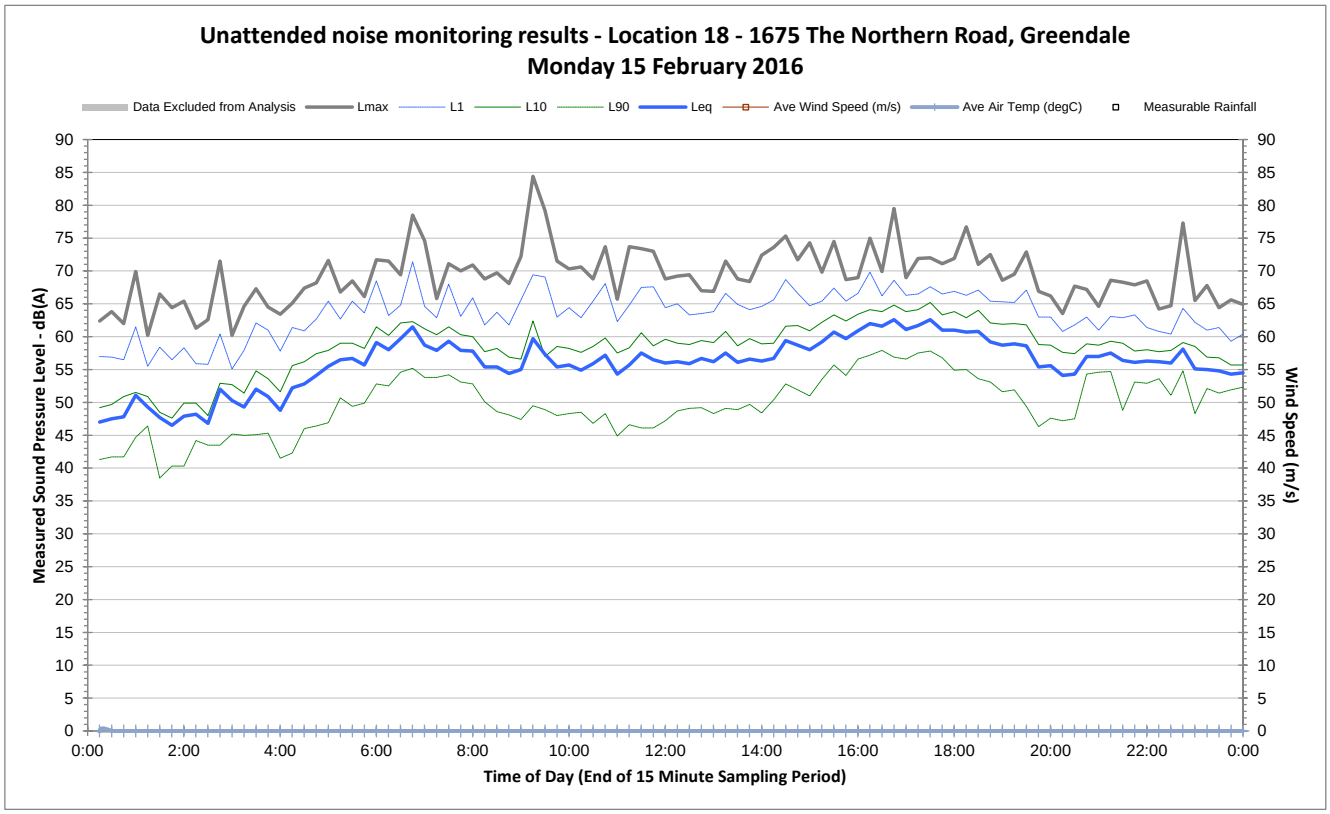


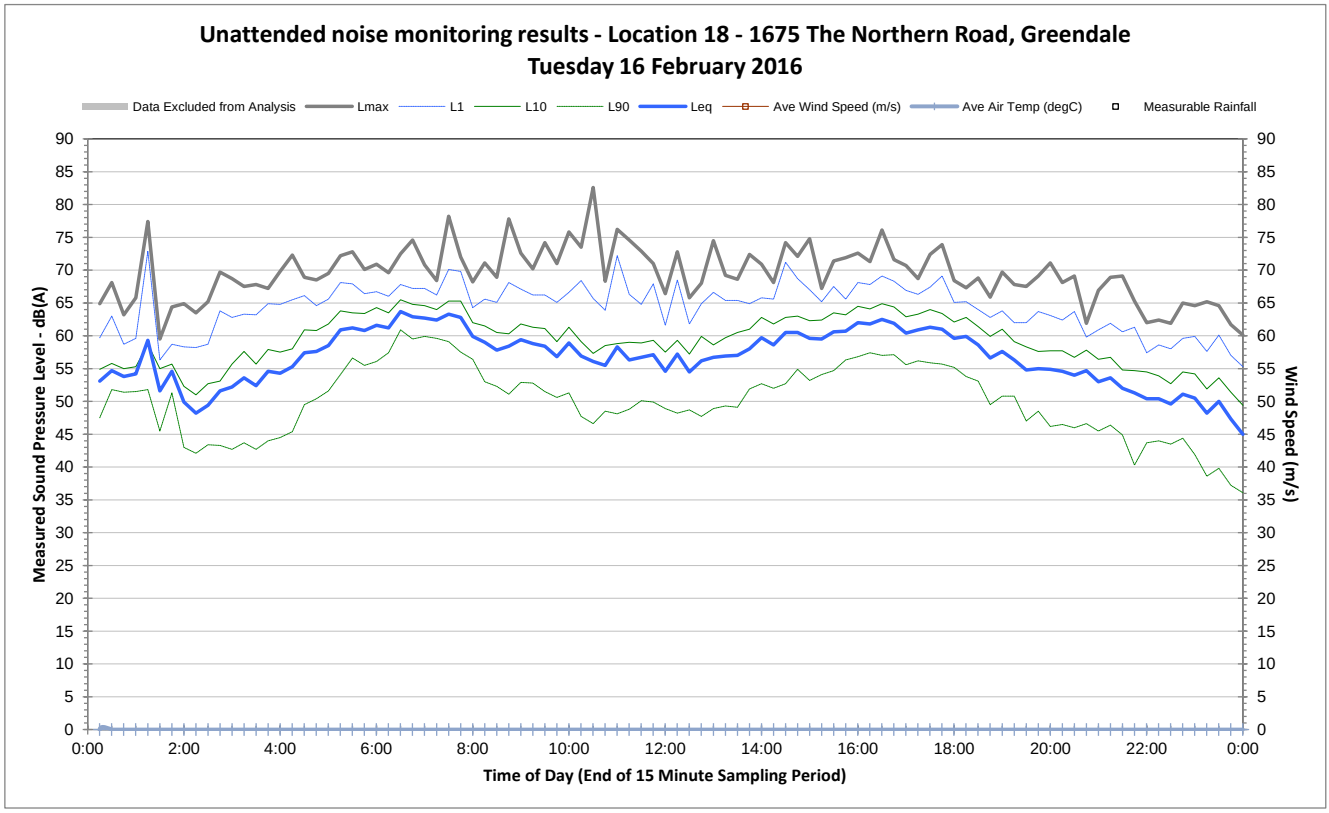


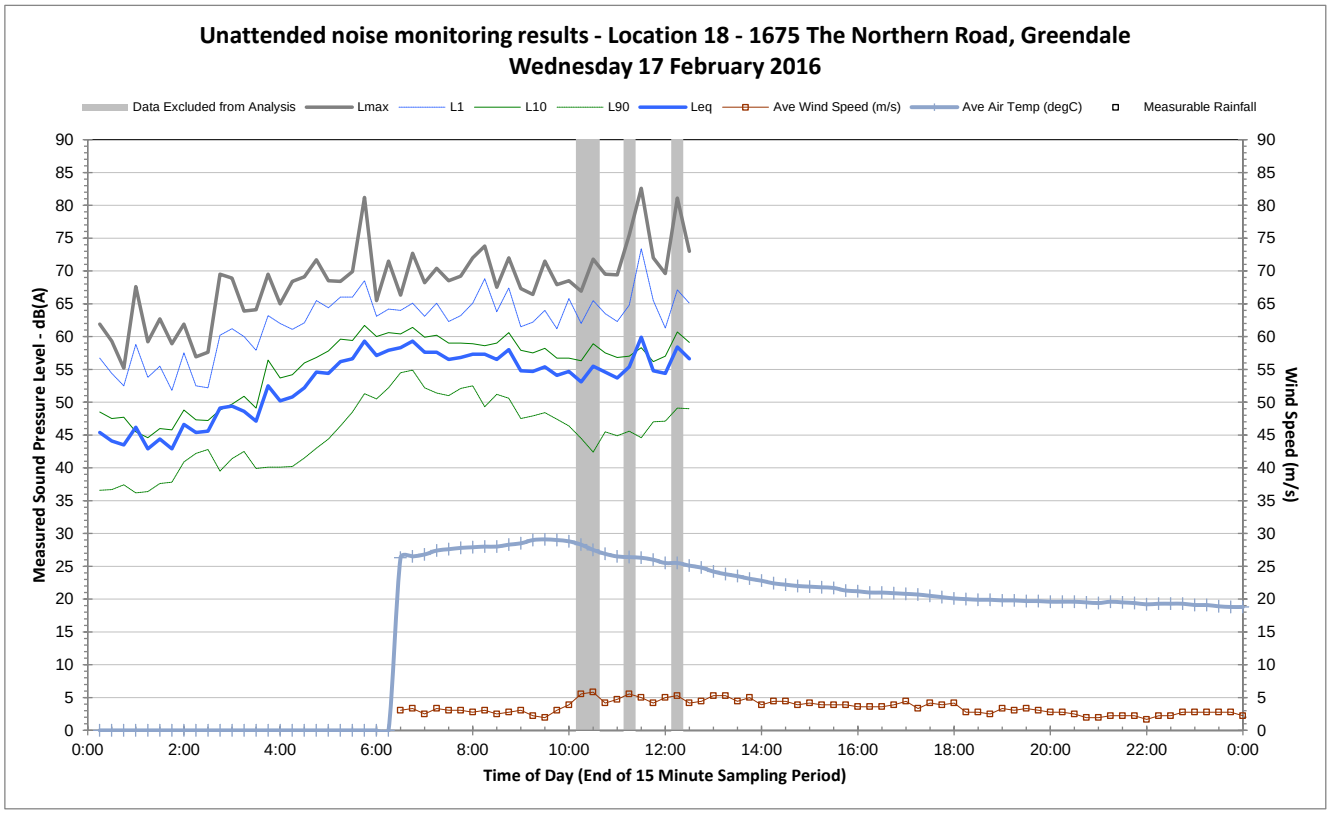

Unattended noise monitoring results - Location 18 - 1675 The Northern Road, Greendale
Friday 12 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 18 - 1675 The Northern Road, Greendale
Saturday 13 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 18 - 1675 The Northern Road, Greendale
Sunday 14 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 18 - 1675 The Northern Road, Greendale
Monday 15 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 18 - 1675 The Northern Road, Greendale
Tuesday 16 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)


Unattended noise monitoring results - Location 18 - 1675 The Northern Road, Greendale
Wednesday 17 February 2016
Data Excluded from Analysis
Lmax
L1
L10
L90
Leq
Ave Wind Speed (m/s)
Ave Air Temp (degC)
Measurable Rainfall
Measured Sound Pressure Level - dB(A)
Wind Speed (m/s)
Time of Day (End of 15 Minute Sampling Period)

Appendix F. Traffic data used in noise modelling

F.1 Traffic data used in noise modelling for the "Do nothing – Road Opening (2021)" case

Location	Direction	Daytime (hourly average)					Night time (hourly average)				
		LV	HV	Total	Posted Speed (km/h)	% HV	LV	HV	Total	Posted Speed (km/h)	% HV
The Northern Road											
Glenmore Pky to end of project design north	NB	1188	65	1253	90	5%	253	11	264	90	4%
	SB	874	42	916	90	5%	180	8	188	90	4%
End of project design north to Bradley St	NB	1183	65	1248	90	5%	255	11	266	90	4%
	SB	869	41	910	90	5%	179	8	187	90	4%
Bradley St to Chain-o-Ponds Rd	NB	856	63	919	90	7%	150	10	160	90	6%
	SB	511	40	551	90	7%	119	8	127	90	6%
Chain-o-Ponds Rd to Kings Hill Rd	NB	803	56	859	90	7%	142	8	150	90	5%
	SB	511	39	550	90	7%	114	7	121	90	6%
Kings Hill Rd to Littlefields Rd	NB	737	55	792	90	7%	123	8	131	90	6%
	SB	460	39	499	90	8%	106	7	113	90	6%
Littlefields Rd to Elizabeth Dr	NB	787	59	846	90	7%	130	9	139	90	6%
	SB	480	41	521	90	8%	114	8	122	90	7%
Elizabeth Dr to Park Rd	NB	629	48	677	90	7%	129	8	137	90	6%
	SB	559	47	606	90	8%	97	8	105	90	8%
Park Rd to Adams Rd	NB	612	48	660	90	7%	111	7	118	90	6%
	SB	437	35	472	90	7%	85	8	93	90	9%
Adams Rd to end of project design south	NB	543	44	587	90	7%	101	6	107	90	6%
	SB	467	28	495	90	6%	84	6	90	90	7%
Other roads											
Elizabeth Dr	WB	1124	31	1155	80	3%	66	5	71	80	7%
	EB	667	57	724	80	8%	193	13	206	80	6%
Park Rd	WB	247	25	272	80	9%	33	4	37	80	11%
	EB	118	12	130	80	9%	33	3	36	80	8%
Adams Rd	WB	87	9	96	70	9%	13	1	14	70	7%
	EB	21	2	23	70	9%	5	0	5	70	0%
Littlefields Rd	WB	80	4	84	80	5%	12	0	12	80	0%
	EB	51	2	53	80	4%	13	1	14	80	7%
Gates Rd (from TNR to Littlefields connection)	WB	8	0	8	60	0%	2	0	2	60	0%
	EB	10	1	11	60	9%	1	0	1	60	0%
Longview Rd (to Vineyard Rd)	WB	1	0	1	50	0%	0	0	0	50	0%
	EB	10	1	11	50	9%	1	0	1	50	0%

Location	Direction	Daytime (hourly average)					Night time (hourly average)				
		LV	HV	Total	Posted Speed (km/h)	% HV	LV	HV	Total	Posted Speed (km/h)	% HV
Kings Hill Rd (from design to Vineyard Rd)	WB	112	2	114	70	2%	18	0	18	70	0%
	EB	74	0	74	70	0%	22	0	22	70	0%
Kings Hill Rd (west of Vineyard Rd)	WB	83	2	85	70	2%	14	0	14	70	0%
	EB	96	0	96	70	0%	25	0	25	70	0%
Chain-o-Ponds Rd	WB	10	0	10	70	0%	1	0	1	70	0%
	EB	9	1	10	70	10%	2	0	2	70	0%
Bradley St	WB	584	15	599	50	3%	93	3	96	50	3%
	EB	1154	42	1196	50	4%	301	6	307	50	2%
Glenmore Pkwy	WB	1083	42	1125	50	4%	220	8	228	50	4%
	EB	472	10	482	50	2%	130	2	132	50	2%
Garswood Rd	WB	77	5	82	50	6%	9	0	9	50	0%
	EB	146	1	147	50	1%	37	0	37	50	0%
Homestead Rd	WB	72	3	75	70	4%	12	0	12	70	0%
	EB	130	12	142	70	8%	34	4	38	70	11%
Wentworth Rd	WB	465	11	476	70	2%	116	1	117	70	1%
	EB	366	16	382	70	4%	123	3	126	70	2%

F.2 Traffic data used in noise modelling for the "Do nothing - Future (2031)" case

Location	Direction	Daytime (hourly average)					Night time (hourly average)				
		LV	HV	Total	Posted Speed (km/h)	% HV	LV	HV	Total	Posted Speed (km/h)	% HV
The Northern Road											
Glenmore Pky to end of project design north	NB	1092	52	1144	90	5%	231	12	243	90	5%
	SB	943	66	1009	90	7%	184	11	195	90	6%
End of project design north to Bradley St	NB	1141	57	1198	90	5%	244	13	257	90	5%
	SB	947	65	1012	90	6%	184	11	195	90	6%
Bradley St to Chain-o-Ponds Rd	NB	847	62	909	90	7%	167	14	181	90	8%
	SB	684	66	750	90	9%	142	11	153	90	7%
Chain-o-Ponds Rd to Kings Hill Rd	NB	768	54	822	90	7%	155	12	167	90	7%
	SB	672	66	738	90	9%	138	12	150	90	8%
Kings Hill Rd to Littlefields Rd	NB	683	52	735	90	7%	132	12	144	90	8%
	SB	611	65	676	90	10%	130	12	142	90	8%
Littlefields Rd to Elizabeth Dr	NB	698	52	750	90	7%	131	12	143	90	8%
	SB	640	66	706	90	9%	146	13	159	90	8%
Elizabeth Dr to Park Rd	NB	432	34	466	90	7%	89	7	96	90	7%
	SB	257	29	286	90	10%	51	8	59	90	14%
Park Rd to Adams Rd	NB	552	45	597	90	8%	109	10	119	90	8%
	SB	156	15	171	90	9%	31	4	35	90	11%
Adams Rd to end of project design south	NB	633	51	684	90	7%	148	10	158	90	6%
	SB	314	13	327	90	4%	57	5	62	90	8%
Other roads											
Elizabeth Dr	WB	513	31	544	80	6%	1	0	1	80	0%
	EB	849	55	904	80	6%	0	0	0	80	0%
Park Rd	WB	490	60	550	80	11%	64	8	72	80	11%
	EB	356	39	395	80	10%	87	11	98	80	11%
Adams Rd	WB	129	10	139	70	7%	21	1	22	70	5%
	EB	72	6	78	70	8%	18	2	20	70	10%
Littlefields Rd	WB	157	7	164	80	4%	19	1	20	80	5%
	EB	72	4	76	80	5%	22	2	24	80	8%
Gates Rd (from TNR to Littlefields connection)	WB	10	0	10	60	0%	2	0	2	60	0%
	EB	8	0	8	60	0%	2	0	2	60	0%
Longview Rd (to Vineyard Rd)	WB	5	0	5	50	0%	1	0	1	50	0%
	EB	9	2	11	50	18%	1	0	1	50	0%
Kings Hill Rd (from design to Vineyard Rd)	WB	101	7	108	70	6%	14	1	15	70	7%
	EB	74	2	76	70	3%	21	0	21	70	0%
Kings Hill Rd (west of Vineyard Rd)	WB	61	4	65	70	6%	8	1	9	70	11%
	EB	98	4	102	70	4%	25	0	25	70	0%

Location	Direction	Daytime (hourly average)					Night time (hourly average)				
		LV	HV	Total	Posted Speed (km/h)	% HV	LV	HV	Total	Posted Speed (km/h)	% HV
Chain-o-Ponds Rd	WB	11	0	11	70	0%	2	0	2	70	0%
	EB	8	3	11	70	27%	1	0	1	70	0%
Bradley St	WB	639	14	653	50	2%	104	4	108	50	4%
	EB	1174	39	1213	50	3%	299	6	305	50	2%
Glenmore Pkwy	WB	1156	48	1204	50	4%	231	9	240	50	4%
	EB	498	14	512	50	3%	138	3	141	50	2%
Garswood Rd	WB	91	4	95	50	4%	11	1	12	50	8%
	EB	156	4	160	50	3%	41	1	42	50	2%
Homestead Rd	WB	86	1	87	70	1%	13	0	13	70	0%
	EB	155	11	166	70	7%	40	3	43	70	7%
Wentworth Rd	WB	477	18	495	70	4%	111	3	114	70	3%
	EB	392	31	423	70	7%	138	6	144	70	4%

F.3 Traffic data used in noise modelling for the "Build – Road Opening (2021)" case

Location	Direction	Daytime (hourly average)					Night time (hourly average)				
		LV	HV	Total	Posted Speed (km/h)	% HV	LV	HV	Total	Posted Speed (km/h)	% HV
The Northern Road											
North of Glenmore Pky	NB	1578	72	1651	90	4%	346	10	355	90	3%
	SB	1517	76	1594	90	5%	243	12	255	90	5%
Glenmore Pky to end of project design north	NB	1357	75	1432	90	5%	285	11	295	90	4%
	SB	1185	57	1242	90	5%	217	9	226	90	4%
End of project design north to Bradley St	NB	1365	75	1440	90	5%	287	11	298	90	4%
	SB	1186	57	1243	90	5%	217	9	226	90	4%
Bradley St to Chain-o-Ponds Rd	NB	1750	133	1882	90	7%	309	19	329	90	6%
	SB	1403	106	1509	90	7%	277	16	293	90	5%
Chain-o-Ponds Rd to Kings Hill Rd	NB	854	61	915	90	7%	153	8	162	90	5%
	SB	699	52	751	90	7%	139	8	147	90	5%
Kings Hill Rd to Littlefields Rd	NB	1586	120	1706	90	7%	267	16	284	90	6%
	SB	1170	99	1269	90	8%	248	16	264	90	6%
Littlefields Rd to Elizabeth Dr	NB	820	64	884	90	7%	136	8	145	90	6%
	SB	601	52	653	90	8%	132	9	141	90	6%
Elizabeth Dr to TNR intersection, south Luddenham	NB	565	48	612	90	8%	110	6	116	90	5%
	SB	971	69	1040	90	7%	166	12	178	90	7%
Existing TNR intersection, south Luddenham to south end of project design	NB	563	60	623	90	10%	105	8	113	90	7%
	SB	563	39	602	90	7%	103	8	111	90	7%
South of Project Design	NB	563	59	622	90	9%	105	8	113	90	7%
	SB	580	39	619	90	6%	106	8	114	90	7%
Other roads											
Existing TNR - Elizabeth Dr to Park Rd	NB	472	35	506	80	7%	130	10	140	80	7%
	SB	1003	77	1080	80	7%	168	13	181	80	7%
Existing TNR - Park Rd to Adams Rd	NB	85	15	100	60	15%	13	2	15	60	11%
	SB	162	13	175	60	7%	39	4	43	60	9%
Adams Rd to Design TNR ramp	NB	81	13	94	60	14%	12	1	13	60	8%
	SB	222	17	239	60	7%	47	4	51	60	8%
Eaton Rd to Design TNR	NB	17	0	17	80	0%	4	0	4	80	0%
	SB	8	1	9	80	11%	2	0	2	80	0%
Vineyard Rd to Kings Hill Rd	NB	3	0	3	50	0%	1	0	1	50	0%
	SB	13	1	14	50	7%	2	0	2	50	0%
Littlefields Rd to Gates Rd (east of design)	NB	1	0	1	50	0%	0	0	0	50	0%
	SB	0	0	0	50	0%	0	0	0	50	0%
Elizabeth Dr	WB	1124	31	1155	80	3%	66	5	71	80	7%

Location	Direction	Daytime (hourly average)					Night time (hourly average)				
		LV	HV	Total	Posted Speed (km/h)	% HV	LV	HV	Total	Posted Speed (km/h)	% HV
	EB	667	57	724	80	8%	193	13	206	80	6%
Park Rd	WB	247	25	272	80	9%	33	4	37	80	11%
	EB	118	12	130	80	9%	33	3	36	80	8%
Adams Rd	WB	87	9	96	70	9%	13	1	14	70	7%
	EB	21	2	23	70	9%	5	0	5	70	0%
Littlefields Rd (west of design)	WB	80	4	84	80	5%	12	0	12	80	0%
	EB	51	2	53	80	4%	13	1	14	80	7%
Littlefields Rd (east of design)	WB	11	0	11	80	0%	2	0	2	80	0%
	EB	12	0	12	80	0%	2	0	2	80	0%
Gates Rd (from design to Littlefields connection)	WB	8	0	8	60	0%	2	0	2	60	0%
	EB	10	1	11	60	9%	1	0	1	60	0%
Longview Rd (from design to Vineyard Rd)	WB	1	0	1	50	0%	0	0	0	50	0%
	EB	10	1	11	50	9%	1	0	1	50	0%
Kings Hill Rd (from design to Vineyard Rd)	WB	112	2	114	70	2%	18	0	18	70	0%
	EB	74	0	74	70	0%	22	0	22	70	0%
Kings Hill Rd (west of Vineyard Rd)	WB	83	2	85	70	2%	14	0	14	70	0%
	EB	96	0	96	70	0%	25	0	25	70	0%
Chain-o-Ponds Rd	WB	10	0	10	70	0%	1	0	1	70	0%
	EB	9	1	10	70	10%	2	0	2	70	0%
Bradley St	WB	584	15	599	50	3%	93	3	96	50	3%
	EB	1154	42	1196	50	4%	301	6	307	50	2%
Glenmore Pkwy	WB	1083	42	1125	50	4%	220	8	228	50	4%
	EB	472	10	482	50	2%	130	2	132	50	2%
Garswood Rd	WB	77	5	82	50	6%	9	0	9	50	0%
	EB	146	1	147	50	1%	37	0	37	50	0%
Homestead Rd	WB	72	3	75	70	4%	12	0	12	70	0%
	EB	130	12	142	70	8%	34	4	38	70	11%
Wentworth Rd	WB	465	11	476	70	2%	116	1	117	70	1%
	EB	366	16	382	70	4%	123	3	126	70	2%

F.4 Traffic data used in noise modelling for the "Build - Future (2031)" case

Location	Direction	Daytime (hourly average)					Night time (hourly average)				
		LV	HV	Total	Posted Speed (km/h)	% HV	LV	HV	Total	Posted Speed (km/h)	% HV
The Northern Road											
North of Glenmore Pky	NB	1887	84	1971	90	4%	396	16	412	90	4%
	SB	2007	131	2138	90	6%	330	20	350	90	6%
Glenmore Pky to end of project design north	NB	1717	92	1809	90	5%	351	19	371	90	5%
	SB	1723	114	1837	90	6%	318	18	337	90	5%
End of project design north to Bradley St	NB	1723	92	1815	90	5%	353	19	372	90	5%
	SB	1727	114	1840	90	6%	319	18	337	90	5%
Bradley St to Chain-o-Ponds Rd	NB	2465	172	2637	90	7%	442	35	478	90	7%
	SB	2392	235	2626	90	9%	457	33	491	90	7%
Chain-o-Ponds Rd to Kings Hill Rd	NB	1227	78	1305	90	6%	222	15	237	90	6%
	SB	1196	118	1314	90	9%	229	17	245	90	7%
Kings Hill Rd to Littlefields Rd	NB	2304	151	2455	90	6%	402	30	431	90	7%
	SB	2192	227	2420	90	9%	433	33	466	90	7%
Littlefields Rd to Elizabeth Dr	NB	1287	81	1368	90	6%	215	15	230	90	7%
	SB	1001	97	1098	90	9%	171	12	183	90	7%
Elizabeth Dr to TNR intersection, south Luddenham	NB	713	50	763	90	7%	167	10	177	90	6%
	SB	1617	111	1728	90	6%	242	19	260	90	7%
Existing TNR intersection, south Luddenham to south end of project design	NB	716	64	780	90	8%	160	11	171	90	6%
	SB	872	60	932	90	6%	139	11	150	90	7%
South of Project Design	NB	714	64	778	90	8%	160	11	171	90	6%
	SB	886	59	945	90	6%	141	11	152	90	7%
Other roads											
Existing TNR - Elizabeth Dr to Park Rd	NB	978	78	1056	80	7%	236	21	257	80	8%
	SB	1409	173	1582	80	11%	215	23	238	80	10%
Existing TNR - Park Rd to Adams Rd	NB	225	24	249	60	10%	38	3	41	60	7%
	SB	248	29	277	60	10%	61	10	71	60	14%
Adams Rd to Design TNR ramp	NB	250	26	276	60	9%	51	4	55	60	7%
	SB	309	32	341	60	9%	71	10	81	60	12%
Eaton Rd to Design TNR	NB	12	2	14	80	14%	3	0	3	80	0%
	SB	25	1	26	80	4%	4	0	4	80	0%
Vineyard Rd to Kings Hill Rd	NB	2	0	2	50	0%	0	0	0	50	0%
	SB	15	1	16	50	6%	2	0	2	50	0%
Littlefields Rd to Gates Rd (east of design)	NB	3	0	3	50	0%	1	0	1	50	0%
	SB	0	0	0	50	0%	0	0	0	50	0%
Elizabeth Dr	WB	513	31	544	80	6%	1	0	1	80	0%
	EB	849	55	904	80	6%	0	0	0	80	0%

Location	Direction	Daytime (hourly average)					Night time (hourly average)				
		LV	HV	Total	Posted Speed (km/h)	% HV	LV	HV	Total	Posted Speed (km/h)	% HV
Park Rd	WB	490	60	550	80	11%	64	8	72	80	11%
	EB	356	39	395	80	10%	87	11	98	80	11%
Adams Rd	WB	129	10	139	70	7%	21	1	22	70	5%
	EB	72	6	78	70	8%	18	2	20	70	10%
Littlefields Rd (west of design)	WB	157	7	164	80	4%	19	1	20	80	5%
	EB	72	4	76	80	5%	22	2	24	80	8%
Littlefields Rd (east of design)	WB	9	2	11	80	18%	2	0	2	80	0%
	EB	12	2	14	80	14%	2	0	2	80	0%
Gates Rd (from design to Littlefields connection)	WB	10	0	10	60	0%	2	0	2	60	0%
	EB	8	0	8	60	0%	2	0	2	60	0%
Longview Rd (from design to Vineyard Rd)	WB	5	0	5	50	0%	1	0	1	50	0%
	EB	9	2	11	50	18%	1	0	1	50	0%
Kings Hill Rd (from design to Vineyard Rd)	WB	101	7	108	70	6%	14	1	15	70	7%
	EB	74	2	76	70	3%	21	0	21	70	0%
Kings Hill Rd (west of Vineyard Rd)	WB	61	4	65	70	6%	8	1	9	70	11%
	EB	98	4	102	70	4%	25	0	25	70	0%
Chain-o-Ponds Rd	WB	11	0	11	70	0%	2	0	2	70	0%
	EB	8	3	11	70	27%	1	0	1	70	0%
Bradley St	WB	639	14	653	50	2%	104	4	108	50	4%
	EB	1174	39	1213	50	3%	299	6	305	50	2%
Glenmore Pkwy	WB	1156	48	1204	50	4%	231	9	240	50	4%
	EB	498	14	512	50	3%	138	3	141	50	2%
Garswood Rd	WB	91	4	95	50	4%	11	1	12	50	8%
	EB	156	4	160	50	3%	41	1	42	50	2%
Homestead Rd	WB	86	1	87	70	1%	13	0	13	70	0%
	EB	155	11	166	70	7%	40	3	43	70	7%
Wentworth Rd	WB	477	18	495	70	4%	111	3	114	70	3%
	EB	392	31	423	70	7%	138	6	144	70	4%

Appendix G. Detailed predictions of operational noise

Abbreviations Used

Flr	Floor (building level)
NCA	Noise Catchment Area (refer Figure 2-1)
D	Day period (7am-10pm)
N	Night period (10pm-7am)
NCG	RMS' Noise Criteria Guideline

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2019 The Northern Road, Glenmore Park	GF	NCA 1	286900	6258212	Residential	65	59	66	59	65	58	66	60	60	55	Y	Y	Y	Y	Y	Y	Y
2023 The Northern Road_1, Glenmore Park	GF	NCA 1	286883	6258157	Residential	64	58	64	58	64	57	65	59	60	55	Y	Y	Y		Y		Y
1 Bradley St, Glenmore Park	GF	NCA 1	286669	6257133	Residential	63	56	63	57	63	56	65	58	60	55	Y	Y			Y		Y
2032 The Northern Road_1, Orchard Park	GF	NCA 1	287090	6258001	Residential	60	53	60	54	62	55	63	57	60	55					Y	Y	Y
2-18 Littlefields Rd_1, Luddenham	GF	NCA 2	286045	6252307	Residential	61	54	60	55	61	54	63	56	60	55					Y		Y
2-18 Littlefields Rd_1, Luddenham	F1	NCA 2	286045	6252307	Residential	63	56	63	57	65	58	67	60	60	55	Y	Y	Y	Y	Y	Y	Y
2785-2787 The Northern Road, Luddenham	GF	NCA 2	286718	6251311	Residential	63	56	63	57	63	56	65	58	60	55	Y	Y	Y		Y		Y
2627-2635 The Northern Road, Mulgoa	GF	NCA 2	285955	6252670	Residential	60	53	60	54	63	56	65	58	60	55	Y	Y	Y		Y	Y	Y
2627-2635 The Northern Road, Mulgoa	F1	NCA 2	285955	6252670	Residential	62	55	63	56	65	58	67	60	60	55	Y	Y	Y	Y	Y	Y	Y
2575-2579 The Northern Road, Mulgoa	GF	NCA 2	285704	6253038	Residential	58	51	59	52	60	53	62	55	60	55					Y		Y
2567-2573 The Northern Road_1, Mulgoa	GF	NCA 2	285664	6253140	Residential	63	56	63	57	65	58	67	60	60	55	Y	Y	Y	Y	Y	Y	Y
2561 The Northern Road_1, Mulgoa	GF	NCA 2	285605	6253220	Residential	57	50	57	51	59	52	61	54	60	55					Y		Y
2529-2537 The Northern Road, Mulgoa	GF	NCA 2	285575	6253458	Residential	64	57	65	58	64	56	65	59	60	55	Y	Y	Y		Y		Y
2 Longview Rd_3, Mulgoa	GF	NCA 2	285532	6253900	Residential	64	57	64	58	63	55	65	58	60	55	Y	Y	Y		Y		Y
4 Grover Cr_1, Mulgoa	F1	NCA 2	285467	6254636	Residential	58	51	59	52	59	52	61	54	60	55					Y		Y
2359-2365 The Northern Road, Mulgoa	GF	NCA 2	285686	6255129	Residential	65	58	66	59	65	58	66	60	60	55	Y	Y	Y	Y	Y	Y	Y
2351-2357 The Northern Road_4, Mulgoa	GF	NCA 2	285695	6255157	Residential	66	60	67	61	65	58	67	60	60	55	Y	Y	Y	Y	Y	Y	Y
2345-2349 The Northern Road, Mulgoa	GF	NCA 2	285714	6255229	Residential	65	58	66	60	64	57	66	59	60	55	Y	Y	Y		Y		Y
2309-2317 The Northern Road_1, Mulgoa	GF	NCA 2	285921	6255557	Residential	65	59	66	60	64	57	66	59	60	55	Y	Y	Y		Y		Y
2289-2293 The Northern Road_1, Mulgoa	GF	NCA 2	285999	6255735	Residential	65	58	65	59	64	57	66	59	60	55	Y	Y	Y		Y		Y
Lot3/DP29081	GF	NCA 2	286010	6255754	Residential	66	59	66	60	65	58	66	60	60	55	Y	Y	Y	Y	Y	Y	Y
2297-2307 The Northern Road_2, Mulgoa	GF	NCA 2	285963	6255637	Residential	67	60	67	61	65	58	67	60	60	55	Y	Y	Y	Y	Y	Y	Y
2373-2379_4 The Northern Road, Mulgoa	GF	NCA 2	285664	6254968	Residential	68	61	69	62	66	59	68	61	60	55	Y	Y	Y	Y	Y	Y	Y
1 Gates Rd_1, Mulgoa	GF	NCA 2	285777	6253185	Residential	61	54	61	55	62	55	64	57	60	55					Y	Y	Y
2580-2592 The Northern Road, Mulgoa	GF	NCA 2	285875	6253058	Residential	63	57	64	58	65	58	68	61	60	55	Y	Y	Y	Y	Y	Y	Y
2751 The Northern Road Luddenham	GF	NCA 2	286504	6251619	Residential	60	53	60	54	61	54	63	56	60	55					Y		Y
2751 The Northern Road_1, Luddenham	GF	NCA 2	285762	6253032	Residential	65	58	66	59	67	60	69	62	60	55	Y	Y	Y	Y	Y	Y	Y
2587 The Northern Road_1, Luddenham	GF	NCA 2	285793	6252992	Residential	64	57	65	59	66	58	68	61	60	55	Y	Y	Y	Y	Y	Y	Y
2295 The Northern Road, Mulgoa	GF	NCA 2	285978	6255665	Residential	66	59	66	60	64	57	66	59	60	55	Y	Y	Y		Y		Y
2843-2857 The Northern Road_4, Luddenham	GF	NCA 3	286995	6250764	Residential	63	56	63	57	64	57	66	58	60	55	Y	Y	Y		Y		Y
2825-2841 The Northern Road_5, Luddenham	GF	NCA 3	286982	6250879	Residential	64	57	64	58	65	58	67	60	60	55	Y	Y	Y	Y	Y	Y	Y
2311-2337 Elizabeth Dr_1, Luddenham	GF	NCA 3	287153	6250577	Residential	61	57	63	54	62	55	64	56	56	51	Y	Y			Y	Y	Y
2311-2337 Elizabeth Dr_1, Luddenham	F1	NCA 3	287153	6250577	Residential	65	56	65	58	64	57	66	58	56	51	Y	Y	Y		Y	Y	Y
2859 The Northern Road_1, Luddenham	GF	NCA 3	286880	6250402	Residential	57	50	56	49	56	49	58	51	56	51					Y		Y
140 Adams Rd_1, Luddenham	GF	NCA 4	287393	6249278	Residential	46	39	45	39	58	51	60	53	55	50	Y	Y			Y	Y	Y
2422-2430 The Northern Road_3, Luddenham	GF	NCA 4	287328	6250045	Residential	52	45	49	45	55	48	57	50	55	50					Y		Y
2420 The Northern Road_2, Luddenham	GF	NCA 4	287381	6249762	Residential	49	42	48	42	57	49	58	51	55	50					Y	Y	Y
105-115 Adams Rd, Luddenham	GF	NCA 4	287484	6248622	Residential	47	40	47	41	55	48	57	50	55	50					Y		Y

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
125 Adams Rd_3, Luddenham	GF	NCA 4	287610	6248814	Residential	48	41	50	43	54	47	56	49	55	50					Y		Y
Luddenham Public School_2	GF	NCA 5	286489	6248647	Educational	57	52	49	51	52	47	51	50	50	-					Y		Y
Luddenham Public School_3	GF	NCA 5	286505	6248628	Educational	58	53	48	51	53	48	51	51	50	-					Y		Y
Luddenham Public School_1	GF	NCA 5	286525	6248618	Educational	57	52	48	51	52	47	51	50	50	-					Y		Y
2320-2390 The Northern Road_2, Luddenham	GF	NCA 5	286941	6250093	Residential	51	44	49	43	58	51	59	52	55	50					Y	Y	Y
16 Eaton Rd, Luddenham	GF	NCA 5	286902	6248345	Residential	60	53	59	53	60	53	61	55	55	50	Y	Y			Y	Y	Y
14 Eaton Rd, Luddenham	GF	NCA 5	286881	6248344	Residential	60	53	59	54	59	52	60	54	55	50	Y	Y			Y		Y
2215 The Northern Road_1, Luddenham	GF	NCA 5	286632	6248248	Residential	56	49	51	49	54	47	56	50	55	50					Y		Y
45 Adams Rd_1, Luddenham	GF	NCA 5	287107	6248693	Residential	50	41	51	44	61	54	62	56	55	50	Y	Y			Y	Y	Y
18 Eaton Road Luddenham	GF	NCA 5	286921	6248346	Residential	59	49	59	53	61	51	62	56	55	50	Y	Y			Y	Y	Y
230A Willowdene Ave_1, Luddenham	GF	NCA 7	285395	6247693	Residential	39	32	32	33	44	37	45	38	44	42					Y		Y
500 Willowdene Ave_1, Luddenham	GF	NCA 7	286149	6246002	Residential	40	33	40	34	54	47	55	49	52	45					Y	Y	Y
405 Willowdene Ave_1, Luddenham	GF	NCA 7	285815	6246305	Residential	34	32	38	33	49	44	52	45	45	44					Y	Y	Y
365 Willowdene Ave_1, Luddenham	GF	NCA 7	285830	6246360	Residential	40	34	40	34	55	48	56	50	52	45		Y			Y	Y	Y
365 Willowdene Ave_3, Luddenham	GF	NCA 7	285744	6246421	Residential	40	33	39	33	51	44	53	46	51	45					Y	Y	Y
325 Willowdene Ave_1, Luddenham	GF	NCA 7	285544	6246926	Residential	31	32	37	32	45	42	50	44	43	43					Y	Y	Y
295 Willowdene Ave_1, Luddenham	GF	NCA 7	285328	6247023	Residential	38	32	34	33	47	40	47	42	46	44					Y		Y
350 Willowdene Ave_2, Luddenham	GF	NCA 7	285671	6247159	Residential	38	31	37	32	51	44	52	45	49	43					Y	Y	Y
260 Willowdene Ave, Luddenham	GF	NCA 7	285611	6247590	Residential	32	32	32	33	47	41	48	43	44	43					Y		Y
320 Willowdene Ave_1, Luddenham	GF	NCA 7	285690	6247278	Residential	39	32	39	33	53	46	54	47	49	42	Y	Y			Y	Y	Y
Lot1/DP838361	GF	NCA 7	286677	6246369	Residential	39	31	38	32	51	44	53	46	50	43					Y	Y	Y
Lot1/DP838361	GF	NCA 7	286349	6246542	Residential	36	30	36	30	52	45	54	47	48	42	Y	Y			Y	Y	Y
Lot1/DP838361	GF	NCA 7	286374	6246545	Residential	36	30	36	30	52	45	53	47	48	42	Y	Y			Y	Y	Y
5 Vicar Park Lane, Luddenham	GF	NCA 7	286087	6246845	Residential	40	33	39	34	54	47	55	49	43	42	Y	Y			Y	Y	Y
400 Willowdene Ave, Luddenham	GF	NCA 7	286016	6246902	Residential	42	35	43	37	56	49	57	50	53	47					Y	Y	Y
460 Willowdene Ave_2, Luddenham	GF	NCA 7	285974	6246399	Residential	40	33	39	34	60	53	61	55	51	45	Y	Y			Y	Y	Y
300-315 Willowdene Ave, Luddenham	GF	NCA 7	285658	6246708	Residential	36	27	36	30	50	43	51	44	45	42	Y	Y			Y	Y	Y
165 Greendale Rd_4, Greendale	GF	NCA 8	287385	6245116	Residential	49	42	48	42	55	48	57	50	55	50					Y		Y
165 Greendale Rd_3, Greendale	GF	NCA 8	287439	6245137	Residential	49	43	49	43	58	51	59	52	55	50					Y	Y	Y
165 Greendale Rd_2, Greendale	GF	NCA 8	287489	6245159	Residential	52	45	51	45	61	54	62	56	55	50	Y	Y			Y	Y	Y
1592 The Northern Road_1, Bringelly	GF	NCA 8	288432	6244747	Residential	59	53	59	53	62	55	63	57	60	55					Y	Y	Y
1602 The Northern Road_3, Bringelly	GF	NCA 8	288365	6244777	Residential	60	53	59	54	63	56	64	57	60	55					Y	Y	Y
2 Dwyer Rd, Bringelly	GF	NCA 8	288161	6244722	Residential	63	56	63	57	64	57	65	58	60	55	Y	Y	Y		Y		Y
1635 The Northern Road_1, Bringelly	GF	NCA 8	288076	6244752	Residential	60	53	60	54	62	55	63	56	60	55					Y	Y	Y
1655 The Northern Road_2, Bringelly	GF	NCA 8	287957	6244829	Residential	59	52	58	53	61	54	62	55	60	55					Y		Y
165 Greendale Rd_1, Greendale	GF	NCA 8	287704	6245257	Residential	57	50	57	51	59	53	61	54	55	50	Y	Y			Y	Y	Y
165 Greendale Rd_1, Grendale	GF	NCA 8	287751	6245001	Residential	59	52	59	53	64	57	65	59	60	55	Y	Y	Y		Y	Y	Y
165 Greendale Rd_2, Greendale	GF	NCA 8	287786	6244961	Residential	60	53	59	53	63	56	64	58	60	55					Y	Y	Y

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
1615 The Northern Road_1, Bringelly	GF	NCA 8	288274	6244673	Residential	62	55	62	56	63	56	65	58	60	55	Y	Y	Y		Y	Y	Y
35 Greenlink Dr, Glenmore Park	GF	NCA 1	286115	6256715	Residential	47	42	48	42	48	42	50	44	60	55							N
35 Greenlink Dr, Glenmore Park	F1	NCA 1	286115	6256715	Residential	48	43	49	44	49	44	51	45	60	55							N
29 Greenlink Dr, Glenmore Park	GF	NCA 1	286083	6256764	Residential	47	42	47	42	48	42	49	43	60	55							N
29 Greenlink Dr, Glenmore Park	F1	NCA 1	286083	6256764	Residential	48	43	48	43	49	43	50	44	60	55							N
27 Greenlink Dr, Glenmore Park	GF	NCA 1	286074	6256781	Residential	48	43	48	43	48	43	49	44	60	55							N
27 Greenlink Dr, Glenmore Park	F1	NCA 1	286074	6256781	Residential	48	43	49	44	49	44	50	45	60	55							N
25 Greenlink Dr, Glenmore Park	GF	NCA 1	286067	6256794	Residential	48	43	48	43	48	43	49	44	60	55							N
25 Greenlink Dr, Glenmore Park	F1	NCA 1	286067	6256794	Residential	49	44	49	44	49	44	50	45	60	55							N
21 Greenlink Dr, Glenmore Park	GF	NCA 1	286045	6256830	Residential	48	44	49	44	49	44	49	44	60	55							N
21 Greenlink Dr, Glenmore Park	F1	NCA 1	286045	6256830	Residential	49	44	49	45	49	44	50	45	60	55							N
50 Highdale Tce, Glenmore Park	GF	NCA 1	286012	6256820	Residential	45	39	45	40	46	40	47	41	60	55							N
50 Highdale Tce, Glenmore Park	F1	NCA 1	286012	6256820	Residential	48	42	48	43	48	43	50	44	60	55							N
48 Highdale Tce, Glenmore Park	GF	NCA 1	286006	6256834	Residential	46	42	47	42	47	42	47	42	60	55							N
37 Highdale Tce, Glenmore Park	GF	NCA 1	285962	6256820	Residential	46	41	46	41	47	41	48	42	60	55							N
39 Highdale Tce, Glenmore Park	GF	NCA 1	285967	6256800	Residential	45	39	45	40	45	40	47	41	60	55							N
41 Highdale Tce, Glenmore Park	GF	NCA 1	285977	6256785	Residential	45	38	45	39	46	39	48	41	60	55							N
45 Highdale Tce, Glenmore Park	GF	NCA 1	285994	6256755	Residential	45	38	46	39	46	40	48	42	60	55							N
16 Capstone Tce, Glenmore Park	GF	NCA 1	285945	6256778	Residential	43	37	43	38	44	38	46	40	60	55							N
12 Capstone Tce, Glenmore Park	GF	NCA 1	285928	6256810	Residential	43	37	43	38	44	38	46	40	60	55							N
19 Greenlink Dr, Glenmore Park	GF	NCA 1	286037	6256845	Residential	48	44	49	44	49	44	50	45	60	55							N
19 Greenlink Dr, Glenmore Park	F1	NCA 1	286037	6256845	Residential	49	45	50	45	49	45	50	45	60	55							N
47 Highdale Tce, Glenmore Park	GF	NCA 1	286005	6256741	Residential	44	38	44	38	45	39	47	40	60	55							N
20 Capstone Tce, Glenmore Park	GF	NCA 1	285966	6256744	Residential	43	37	44	38	44	38	46	40	60	55							N
23 Cooee Ave_1, Glenmore Park	GF	NCA 1	286160	6257118	Residential	49	45	50	45	49	45	50	46	60	55							N
23 Cooee Ave_1, Glenmore Park	F1	NCA 1	286160	6257118	Residential	51	47	52	47	51	47	52	47	60	55							N
23 Cooee Av_2, Glenmore Park	GF	NCA 1	286163	6257096	Residential	68	64	68	64	68	64	68	64	60	55	Y	Y					N
23 Cooee Av_2, Glenmore Park	F1	NCA 1	286163	6257096	Residential	67	63	67	63	67	63	67	63	60	55	Y	Y					N
23 Cooee Ave_3, Glenmore Park	GF	NCA 1	286180	6257118	Residential	58	54	59	55	58	54	59	54	60	55							N
23 Cooee Ave_3, Glenmore Park	F1	NCA 1	286180	6257118	Residential	60	56	60	56	60	55	60	56	60	55							N
21 Cooee Ave, Glenmore Park	GF	NCA 1	286132	6257102	Residential	67	63	67	63	67	63	68	64	60	55	Y	Y					N
21 Cooee Ave, Glenmore Park	F1	NCA 1	286132	6257102	Residential	66	63	67	63	67	63	67	63	60	55	Y	Y					N
19 Cooee Ave, Glenmore Park	GF	NCA 1	286136	6257129	Residential	47	42	47	43	47	43	48	43	60	55							N
19 Cooee Ave, Glenmore Park	F1	NCA 1	286136	6257129	Residential	51	47	52	47	51	47	52	48	60	55							N
25 Cooee Ave, Glenmore Park	GF	NCA 1	286195	6257123	Residential	57	53	57	53	57	53	57	53	60	55							N
25 Cooee Ave, Glenmore Park	F1	NCA 1	286195	6257123	Residential	59	55	59	55	59	55	59	55	60	55							N
27 Cooee Ave, Glenmore Park	GF	NCA 1	286213	6257130	Residential	56	51	56	52	56	51	56	52	60	55							N
27 Cooee Ave, Glenmore Park	F1	NCA 1	286213	6257130	Residential	58	54	58	54	58	53	58	54	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
29 Cooee Ave, Glenmore Park	GF	NCA 1	286230	6257138	Residential	55	51	55	51	55	50	55	51	60	55							N
29 Cooee Ave, Glenmore Park	F1	NCA 1	286230	6257138	Residential	57	52	57	53	57	52	57	53	60	55							N
31 Cooee Ave, Glenmore Park	GF	NCA 1	286245	6257145	Residential	55	50	55	50	54	50	55	50	60	55							N
31 Cooee Ave, Glenmore Park	F1	NCA 1	286245	6257145	Residential	57	52	57	52	56	51	57	52	60	55							N
1 Glenmore Ridge Dr_2, Glenmore Park	GF	NCA 1	286112	6257109	Residential	67	63	67	63	67	63	67	63	60	55	Y	Y					N
1 Glenmore Ridge Dr_2, Glenmore Park	F1	NCA 1	286112	6257109	Residential	66	62	67	63	66	62	67	63	60	55	Y	Y					N
1 Glenmore Ridge Dr_1, Glenmore Park	GF	NCA 1	286094	6257120	Residential	66	62	67	63	66	62	66	62	60	55	Y	Y					N
1 Glenmore Ridge Dr_1, Glenmore Park	F1	NCA 1	286094	6257120	Residential	66	62	66	62	65	62	66	62	60	55	Y	Y					N
12 Glenmore Ridge Dr_3. Glenmore Park	GF	NCA 1	286183	6257164	Residential	43	38	44	39	44	38	45	40	60	55							N
12 Glenmore Ridge Dr_3. Glenmore Park	F1	NCA 1	286183	6257164	Residential	46	40	46	41	46	41	48	42	60	55							N
12 Glenmore Ridge Dr_2, Glenmore Park	GF	NCA 1	286166	6257160	Residential	43	37	43	38	44	39	46	40	60	55							N
12 Glenmore Ridge Dr_2, Glenmore Park	F1	NCA 1	286166	6257160	Residential	45	40	46	40	47	41	48	42	60	55							N
1 Cooee Ave, Glenmore Park	GF	NCA 1	286106	6257281	Residential	43	37	44	38	44	38	46	39	60	55							N
1 Cooee Ave, Glenmore Park	F1	NCA 1	286106	6257281	Residential	45	39	45	39	46	40	47	41	60	55							N
3 Cooee Ave, Glenmore Park	GF	NCA 1	286107	6257263	Residential	42	36	43	37	43	37	45	39	60	55							N
3 Cooee Ave, Glenmore Park	F1	NCA 1	286107	6257263	Residential	44	38	45	39	46	39	47	41	60	55							N
9 Cooee Ave, Glenmore Park	GF	NCA 1	286117	6257216	Residential	42	36	43	37	43	37	45	38	60	55							N
9 Cooee Ave, Glenmore Park	F1	NCA 1	286117	6257216	Residential	44	39	45	39	46	40	47	41	60	55							N
13 Cooee Ave, Glenmore Park	GF	NCA 1	286123	6257185	Residential	42	36	43	37	43	37	44	38	60	55							N
13 Cooee Ave, Glenmore Park	F1	NCA 1	286123	6257185	Residential	44	38	45	39	45	39	46	40	60	55							N
15 Cooee Ave, Glenmore Park	GF	NCA 1	286127	6257170	Residential	42	36	42	37	43	37	44	38	60	55							N
15 Cooee Ave, Glenmore Park	F1	NCA 1	286127	6257170	Residential	44	39	45	40	45	40	46	41	60	55							N
17 Cooee Ave, Glenmore Park	GF	NCA 1	286131	6257153	Residential	46	43	47	43	46	42	47	42	60	55							N
17 Cooee Ave, Glenmore Park	F1	NCA 1	286131	6257153	Residential	48	44	48	44	48	44	49	44	60	55							N
5 Cooee Ave, Glenmore Park	GF	NCA 1	286112	6257248	Residential	43	37	43	37	44	37	45	39	60	55							N
7 Cooee Ave, Glenmore Park	GF	NCA 1	286113	6257232	Residential	42	37	43	37	43	37	45	39	60	55							N
11 Cooee Ave, Glenmore Park	GF	NCA 1	286120	6257200	Residential	43	37	43	37	43	37	45	39	60	55							N
12 Cooee Ave, Glenmore Park	GF	NCA 1	286167	6257179	Residential	43	37	43	37	43	37	45	39	60	55							N
10 Cooee Ave, Glenmore Park	GF	NCA 1	286168	6257195	Residential	44	38	44	39	45	38	46	40	60	55							N
10 Cooee Ave, Glenmore Park	F1	NCA 1	286168	6257195	Residential	46	40	46	40	47	40	48	42	60	55							N
8 Cooee Ave, Glenmore Park	GF	NCA 1	286163	6257218	Residential	43	37	44	38	44	38	46	39	60	55							N
8 Cooee Ave, Glenmore Park	F1	NCA 1	286163	6257218	Residential	45	39	46	40	46	40	48	41	60	55							N
6 Cooee Ave, Glenmore Park	GF	NCA 1	286163	6257231	Residential	43	37	43	38	44	38	45	39	60	55							N
6 Cooee Ave, Glenmore Park	F1	NCA 1	286163	6257231	Residential	45	39	45	39	46	40	48	41	60	55							N
4 Cooee Ave, Glenmore Park	GF	NCA 1	286154	6257252	Residential	43	37	44	38	44	38	46	39	60	55							N
4 Cooee Ave, Glenmore Park	F1	NCA 1	286154	6257252	Residential	45	39	45	39	46	40	47	41	60	55							N
5 Broadlands Ave, Glenmore Park	GF	NCA 1	286168	6257330	Residential	42	36	42	36	42	36	44	38	60	55							N
5 Broadlands Ave, Glenmore Park	F1	NCA 1	286168	6257330	Residential	44	38	44	38	45	38	46	40	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
3 Broadlands Ave, Glenmore Park	GF	NCA 1	286190	6257333	Residential	41	35	42	36	42	36	43	37	60	55							N
3 Broadlands Ave, Glenmore Park	F1	NCA 1	286190	6257333	Residential	44	38	44	38	45	38	46	40	60	55							N
1 Broadlands Ave, Glenmore Park	GF	NCA 1	286209	6257331	Residential	43	37	43	37	44	37	45	39	60	55							N
1 Broadlands Ave, Glenmore Park	F1	NCA 1	286209	6257331	Residential	44	38	44	38	45	38	46	40	60	55							N
2 Broadlands Ave, Glenmore Park	GF	NCA 1	286198	6257289	Residential	43	37	43	37	44	37	45	39	60	55							N
2 Broadlands Ave, Glenmore Park	F1	NCA 1	286198	6257289	Residential	44	38	44	38	45	39	46	40	60	55							N
6 Broadlands Ave, Glenmore Park	GF	NCA 1	286161	6257282	Residential	43	37	43	37	44	37	45	39	60	55							N
6 Broadlands Ave, Glenmore Park	F1	NCA 1	286161	6257282	Residential	44	38	45	39	46	39	47	41	60	55							N
8 Broadlands Ave, Glenmore Park	GF	NCA 1	286146	6257277	Residential	40	35	41	35	41	35	43	36	60	55							N
8 Broadlands Ave, Glenmore Park	F1	NCA 1	286146	6257277	Residential	43	37	43	37	44	38	45	39	60	55							N
4 Broadlands Ave, Glenmore Park	GF	NCA 1	286183	6257286	Residential	41	35	42	36	42	36	44	37	60	55							N
115 Glengarry Dr, Glenmore Park	GF	NCA 1	286218	6257180	Residential	46	40	47	41	47	41	48	42	60	55							N
107 Glengarry Dr, Glenmore Park	GF	NCA 1	286198	6257254	Residential	43	37	44	38	44	38	45	39	60	55							N
107 Glengarry Dr, Glenmore Park	F1	NCA 1	286198	6257254	Residential	45	39	45	39	46	39	47	41	60	55							N
109 Glengarry Dr, Glenmore Park	GF	NCA 1	286203	6257234	Residential	43	37	44	38	44	38	45	39	60	55							N
109 Glengarry Dr, Glenmore Park	F1	NCA 1	286203	6257234	Residential	45	39	46	40	46	40	47	41	60	55							N
111 Glengarry Dr, Glenmore Park	GF	NCA 1	286212	6257217	Residential	43	37	43	37	44	37	45	39	60	55							N
111 Glengarry Dr, Glenmore Park	F1	NCA 1	286212	6257217	Residential	45	39	45	39	46	39	47	41	60	55							N
113 Glengarry Dr, Glenmore Park	GF	NCA 1	286219	6257200	Residential	45	39	45	39	45	39	47	40	60	55							N
113 Glengarry Dr, Glenmore Park	F1	NCA 1	286219	6257200	Residential	47	41	48	42	48	42	49	43	60	55							N
14 Cooee Ave, Glenmore Park	GF	NCA 1	286194	6257175	Residential	43	38	44	38	44	38	45	39	60	55							N
8 Jacaranda Tce, Glenmore Park	GF	NCA 1	286140	6257323	Residential	42	36	43	37	43	37	45	38	60	55							N
8 Jacaranda Tce, Glenmore Park	F1	NCA 1	286140	6257323	Residential	45	39	45	39	46	40	47	41	60	55							N
6 Jacaranda Tce, Glenmore Park	GF	NCA 1	286133	6257342	Residential	43	37	43	37	44	37	45	39	60	55							N
6 Jacaranda Tce, Glenmore Park	F1	NCA 1	286133	6257342	Residential	44	38	45	38	45	39	47	40	60	55							N
4 Jacaranda Tce, Glenmore Park	GF	NCA 1	286138	6257364	Residential	43	37	44	37	44	38	46	39	60	55							N
4 Jacaranda Tce, Glenmore Park	F1	NCA 1	286138	6257364	Residential	44	38	45	39	45	39	47	40	60	55							N
2 Jacaranda Tce, Glenmore Park	GF	NCA 1	286144	6257382	Residential	43	37	43	37	44	38	46	39	60	55							N
2 Jacaranda Tce, Glenmore Park	F1	NCA 1	286144	6257382	Residential	44	38	45	39	45	39	47	40	60	55							N
8 Branksome Way, Glenmore Park	GF	NCA 1	286171	6257374	Residential	42	36	42	36	43	36	44	38	60	55							N
3 Branksome Way, Glenmore Park	GF	NCA 1	286236	6257428	Residential	42	36	43	37	43	37	45	38	60	55							N
5 Branksome Way, Glenmore Park	GF	NCA 1	286217	6257428	Residential	43	37	43	37	44	37	45	39	60	55							N
9 Branksome Way, Glenmore Park	GF	NCA 1	286178	6257423	Residential	42	36	42	36	43	36	44	38	60	55							N
11 Branksome Way, Glenmore Park	GF	NCA 1	286158	6257427	Residential	42	36	43	37	43	37	45	38	60	55							N
13 Branksome Way, Glenmore Park	GF	NCA 1	286145	6257437	Residential	42	36	42	36	43	37	45	38	60	55							N
15 Branksome Way, Glenmore Park	GF	NCA 1	286130	6257447	Residential	42	36	43	36	44	37	45	38	60	55							N
17 Branksome Way, Glenmore Park	GF	NCA 1	286114	6257460	Residential	42	36	42	36	43	37	44	38	60	55							N
17 Branksome Way, Glenmore Park	F1	NCA 1	286114	6257460	Residential	43	37	44	38	45	38	46	40	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
7 Branksome Way, Glenmore Park	GF	NCA 1	286196	6257425	Residential	43	36	43	37	44	37	45	38	60	55							N
7 Branksome Way, Glenmore Park	F1	NCA 1	286196	6257425	Residential	44	38	44	38	45	38	46	40	60	55							N
4 Branksome Way, Glenmore Park	GF	NCA 1	286211	6257379	Residential	43	36	43	37	44	37	45	39	60	55							N
4 Branksome Way, Glenmore Park	F1	NCA 1	286211	6257379	Residential	44	37	44	38	45	38	46	40	60	55							N
6 Branksome Way, Glenmore Park	GF	NCA 1	286191	6257377	Residential	41	35	41	35	42	35	43	37	60	55							N
6 Branksome Way, Glenmore Park	F1	NCA 1	286191	6257377	Residential	43	37	44	38	44	38	46	39	60	55							N
19 Branksome Way, Glenmore Park	GF	NCA 1	286108	6257473	Residential	42	36	43	36	43	37	45	38	60	55							N
19 Branksome Way, Glenmore Park	F1	NCA 1	286108	6257473	Residential	43	37	44	37	45	38	46	40	60	55							N
21 Branksome Way, Glenmore Park	GF	NCA 1	286100	6257493	Residential	42	35	42	36	43	36	44	38	60	55							N
21 Branksome Way, Glenmore Park	F1	NCA 1	286100	6257493	Residential	43	37	44	37	45	38	46	40	60	55							N
101 Glengarry Dr, Glenmore Park	GF	NCA 1	286228	6257356	Residential	43	36	43	37	44	37	45	39	60	55							N
99 Glengarry Dr, Glenmore Park	GF	NCA 1	286236	6257374	Residential	42	36	43	37	43	37	45	38	60	55							N
97 Glengarry Dr, Glenmore Park	GF	NCA 1	286258	6257408	Residential	42	36	42	36	43	36	44	38	60	55							N
95 Glengarry Dr, Glenmore Park	GF	NCA 1	286265	6257425	Residential	42	36	42	36	43	36	44	38	60	55							N
93 Glengarry Dr, Glenmore Park	GF	NCA 1	286274	6257444	Residential	42	36	42	36	43	36	44	38	60	55							N
93 Glengarry Dr, Glenmore Park	F1	NCA 1	286274	6257444	Residential	43	37	43	37	44	37	45	39	60	55							N
1 Ridgetop Dr, Glenmore Park	GF	NCA 1	286273	6257471	Residential	42	36	42	36	43	36	44	38	60	55							N
19 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286073	6257274	Residential	43	38	44	39	44	39	45	39	60	55							N
13 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286083	6257226	Residential	46	41	46	42	47	42	47	43	60	55							N
11 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286084	6257211	Residential	47	43	47	43	47	43	48	43	60	55							N
9 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286090	6257197	Residential	47	43	48	44	47	43	48	43	60	55							N
7 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286089	6257179	Residential	51	47	51	47	50	46	51	47	60	55							N
7 Glenmore Ridge Dr, Glenmore Park	F1	NCA 1	286089	6257179	Residential	52	48	52	48	52	47	52	48	60	55							N
5 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286093	6257163	Residential	53	50	54	50	53	49	54	50	60	55							N
5 Glenmore Ridge Dr, Glenmore Park	F1	NCA 1	286093	6257163	Residential	54	50	55	51	54	50	55	51	60	55							N
3 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286096	6257148	Residential	56	52	56	52	55	52	56	52	60	55							N
3 Glenmore Ridge Dr, Glenmore Park	F1	NCA 1	286096	6257148	Residential	57	53	57	53	56	52	57	53	60	55							N
15 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286076	6257241	Residential	45	40	45	41	45	41	46	41	60	55							N
15 Glenmore Ridge Dr, Glenmore Park	F1	NCA 1	286076	6257241	Residential	47	42	47	43	48	43	48	43	60	55							N
17 Glenmore Ridge Dr, Glenmore Park	GF	NCA 1	286074	6257258	Residential	44	39	44	40	44	39	45	40	60	55							N
17 Glenmore Ridge Dr, Glenmore Park	F1	NCA 1	286074	6257258	Residential	46	42	47	42	46	41	47	42	60	55							N
163 Ridgetop Dr, Glenmore Park	GF	NCA 1	286137	6257497	Residential	42	36	42	36	43	36	44	38	60	55							N
180 Ridgetop Dr, Glenmore Park	GF	NCA 1	286153	6257567	Residential	41	35	42	36	42	36	44	37	60	55							N
182 Ridgetop Dr, Glenmore Park	GF	NCA 1	286166	6257550	Residential	41	35	42	35	42	36	43	37	60	55							N
167 Ridgetop Dr, Glenmore Park	GF	NCA 1	286164	6257467	Residential	41	35	42	36	43	36	44	37	60	55							N
169 Ridgetop Dr, Glenmore Park	GF	NCA 1	286184	6257461	Residential	41	35	42	35	42	36	44	37	60	55							N
171 Ridgetop Dr, Glenmore Park	GF	NCA 1	286203	6257460	Residential	42	36	42	36	43	36	44	38	60	55							N
173 Ridgetop Dr, Glenmore Park	GF	NCA 1	286222	6257464	Residential	41	35	42	35	42	36	44	37	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
175 Ridgetop Dr, Glenmore Park	GF	NCA 1	286239	6257467	Residential	41	35	41	35	42	35	43	37	60	55							N
177 Ridgetop Dr, Glenmore Park	GF	NCA 1	286256	6257470	Residential	41	35	41	35	42	35	43	37	60	55							N
194 Ridgetop Dr, Glenmore Park	GF	NCA 1	286255	6257518	Residential	42	36	42	36	43	36	44	38	60	55							N
192 Ridgetop Dr, Glenmore Park	GF	NCA 1	286236	6257517	Residential	41	35	41	35	42	35	43	37	60	55							N
190 Ridgetop Dr, Glenmore Park	GF	NCA 1	286220	6257514	Residential	41	35	42	36	42	36	44	37	60	55							N
188 Ridgetop Dr, Glenmore Park	GF	NCA 1	286201	6257511	Residential	42	35	42	36	43	36	44	38	60	55							N
184 Ridgetop Dr, Glenmore Park	GF	NCA 1	286172	6257534	Residential	41	35	42	35	42	36	44	37	60	55							N
184 Ridgetop Dr, Glenmore Park	F1	NCA 1	286172	6257534	Residential	43	37	43	37	44	38	45	39	60	55							N
186 Ridgetop Dr, Glenmore Park	GF	NCA 1	286179	6257519	Residential	42	36	42	36	43	36	44	38	60	55							N
186 Ridgetop Dr, Glenmore Park	F1	NCA 1	286179	6257519	Residential	43	37	43	37	44	37	45	39	60	55							N
165 Ridgetop Dr, Glenmore Park	GF	NCA 1	286147	6257480	Residential	42	36	42	36	43	36	44	38	60	55							N
165 Ridgetop Dr, Glenmore Park	F1	NCA 1	286147	6257480	Residential	43	37	43	37	44	38	46	39	60	55							N
161 Ridgetop Dr, Glenmore Park	GF	NCA 1	286128	6257515	Residential	42	36	42	36	43	37	44	38	60	55							N
161 Ridgetop Dr, Glenmore Park	F1	NCA 1	286128	6257515	Residential	43	37	43	37	44	38	46	39	60	55							N
17 Gemalong Pl, Glenmore Park	GF	NCA 1	286152	6257636	Residential	40	34	41	35	41	35	43	36	60	55							N
17 Gemalong Pl, Glenmore Park	F1	NCA 1	286152	6257636	Residential	42	36	42	36	43	37	45	38	60	55							N
16 Gemalong Pl, Glenmore Park	GF	NCA 1	286173	6257651	Residential	41	35	41	35	42	36	43	37	60	55							N
16 Gemalong Pl, Glenmore Park	F1	NCA 1	286173	6257651	Residential	42	36	42	36	43	37	45	38	60	55							N
15 Gemalong Pl, Glenmore Park	GF	NCA 1	286190	6257637	Residential	40	34	41	35	42	35	43	36	60	55							N
15 Gemalong Pl, Glenmore Park	F1	NCA 1	286190	6257637	Residential	42	35	42	36	43	36	44	38	60	55							N
14 Gemalong Pl, Glenmore Park	GF	NCA 1	286206	6257619	Residential	41	35	41	35	42	35	43	37	60	55							N
14 Gemalong Pl, Glenmore Park	F1	NCA 1	286206	6257619	Residential	42	36	42	36	43	36	44	38	60	55							N
13 Gemalong Pl, Glenmore Park	GF	NCA 1	286166	6257611	Residential	40	34	41	34	41	35	43	36	60	55							N
13 Gemalong Pl, Glenmore Park	F1	NCA 1	286166	6257611	Residential	42	36	42	36	43	37	45	38	60	55							N
12 Gemalong Pl, Glenmore Park	GF	NCA 1	286176	6257594	Residential	41	35	41	35	42	35	43	37	60	55							N
12 Gemalong Pl, Glenmore Park	F1	NCA 1	286176	6257594	Residential	42	36	43	36	44	37	45	38	60	55							N
11 Gemalong Pl, Glenmore Park	GF	NCA 1	286187	6257576	Residential	41	35	42	35	42	36	44	37	60	55							N
11 Gemalong Pl, Glenmore Park	F1	NCA 1	286187	6257576	Residential	42	36	43	37	43	37	45	38	60	55							N
10 Gemalong Pl, Glenmore Park	GF	NCA 1	286199	6257559	Residential	41	35	42	35	42	36	44	37	60	55							N
10 Gemalong Pl, Glenmore Park	F1	NCA 1	286199	6257559	Residential	42	36	43	37	44	37	45	39	60	55							N
9 Gemalong Pl, Glenmore Park	GF	NCA 1	286212	6257540	Residential	42	36	42	36	43	36	44	38	60	55							N
9 Gemalong Pl, Glenmore Park	F1	NCA 1	286212	6257540	Residential	43	37	43	37	44	37	45	39	60	55							N
6 Gemalong Pl, Glenmore Park	GF	NCA 1	286244	6257542	Residential	41	35	42	35	42	36	44	37	60	55							N
8 Gemalong Pl, Glenmore Park	GF	NCA 1	286238	6257562	Residential	41	35	42	35	42	36	44	37	60	55							N
8 Gemalong Pl, Glenmore Park	F1	NCA 1	286238	6257562	Residential	42	36	43	37	43	37	45	38	60	55							N
7 Gemalong Pl, Glenmore Park	GF	NCA 1	286236	6257580	Residential	41	35	41	35	42	35	43	37	60	55							N
7 Gemalong Pl, Glenmore Park	F1	NCA 1	286236	6257580	Residential	42	36	42	36	43	37	44	38	60	55							N
18 Gemalong Pl, Glenmore Park	GF	NCA 1	286136	6257624	Residential	41	35	41	35	42	35	43	37	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
19 Gemalong Pl, Glenmore Park	GF	NCA 1	286112	6257606	Residential	42	35	42	36	43	37	44	38	60	55							N
176 Ridgetop Dr, Glenmore Park	GF	NCA 1	286128	6257594	Residential	42	36	42	36	43	37	45	38	60	55							N
178 Ridgetop Dr, Glenmore Park	GF	NCA 1	286136	6257581	Residential	42	35	42	36	43	36	44	38	60	55							N
178 Ridgetop Dr, Glenmore Park	F1	NCA 1	286136	6257581	Residential	43	37	43	37	44	38	46	39	60	55							N
23 Greenlink Dr, Glenmore Park	GF	NCA 1	286055	6256809	Residential	48	43	48	44	48	43	49	44	60	55							N
23 Greenlink Dr, Glenmore Park	F1	NCA 1	286055	6256809	Residential	49	44	49	44	49	44	50	45	60	55							N
31 Greenlink Dr, Glenmore Park	GF	NCA 1	286091	6256749	Residential	46	41	47	42	47	42	48	43	60	55							N
31 Greenlink Dr, Glenmore Park	F1	NCA 1	286091	6256749	Residential	48	42	48	43	48	43	50	44	60	55							N
33 Greenlink Dr, Glenmore Park	GF	NCA 1	286102	6256731	Residential	46	41	47	42	47	42	48	43	60	55							N
33 Greenlink Dr, Glenmore Park	F1	NCA 1	286102	6256731	Residential	48	42	48	43	48	43	50	44	60	55							N
52 Highdale Tce, Glenmore Park	GF	NCA 1	286017	6256805	Residential	45	40	46	40	46	40	48	42	60	55							N
64 Highdale Tce, Glenmore Park	GF	NCA 1	286063	6256717	Residential	46	40	46	40	47	41	49	42	60	55							N
62 Highdale Tce, Glenmore Park	GF	NCA 1	286055	6256741	Residential	45	39	45	40	46	40	48	41	60	55							N
60 Highdale Tce, Glenmore Park	GF	NCA 1	286048	6256754	Residential	45	39	45	39	46	39	47	41	60	55							N
58 Highdale Tce, Glenmore Park	GF	NCA 1	286041	6256767	Residential	45	39	46	40	46	40	48	41	60	55							N
56 Highdale Tce, Glenmore Park	GF	NCA 1	286031	6256779	Residential	46	40	46	41	47	41	48	42	60	55							N
54 Highdale Tce, Glenmore Park	GF	NCA 1	286026	6256790	Residential	46	40	47	41	47	41	49	42	60	55							N
49 Highdale Tce, Glenmore Park	GF	NCA 1	286010	6256723	Residential	45	38	45	39	46	39	48	41	60	55							N
14 Capstone Tce, Glenmore Park	GF	NCA 1	285935	6256791	Residential	43	37	43	37	45	38	46	40	60	55							N
18 Capstone Tce, Glenmore Park	GF	NCA 1	285952	6256763	Residential	42	36	43	37	44	38	46	40	60	55							N
18 Capstone Tce, Glenmore Park	F1	NCA 1	285952	6256763	Residential	45	39	46	40	47	40	48	42	60	55							N
20-30 Saddler Way_2, Glenmore Park	GF	NCA 1	286488	6257815	Garage / Shed	54	47	54	48	55	48	56	50	-	-							N
15-29 Bradley St_1, Glenmore Park	GF	NCA 1	286473	6257104	Garage / Shed	58	51	58	52	58	51	59	53	-	-							N
2039 The Northern Road_2, Glenmore Park	GF	NCA 1	286559	6258077	Garage / Shed	53	47	53	47	54	48	56	49	-	-							N
2033 The Northern Road_2, Glenmore Park	GF	NCA 1	286564	6258128	Garage / Shed	53	47	54	47	55	49	56	50	-	-							N
7 Isca Pl_2, Glenmore Park	GF	NCA 1	286289	6258208	Garage / Shed	44	38	44	38	45	39	47	40	-	-							N
17 Saddler Way, Glenmore Park	GF	NCA 1	286427	6257955	Residential	49	43	50	43	50	44	52	45	60	55							N
19 Saddler Way, Glenmore Park	GF	NCA 1	286426	6257937	Residential	49	43	50	44	51	44	52	45	60	55							N
21 Saddler Way, Glenmore Park	GF	NCA 1	286425	6257920	Residential	50	44	51	44	51	45	53	46	60	55							N
23 Saddler Way, Glenmore Park	GF	NCA 1	286419	6257903	Residential	50	43	50	44	51	44	52	46	60	55							N
25 Saddler Way, Glenmore Park	GF	NCA 1	286413	6257884	Residential	49	43	50	43	50	44	52	45	60	55							N
27 Saddler Way, Glenmore Park	GF	NCA 1	286406	6257864	Residential	48	42	49	42	49	43	51	44	60	55							N
29 Saddler Way, Glenmore Park	GF	NCA 1	286407	6257846	Residential	48	42	48	42	49	43	51	44	60	55							N
31 Saddler Way, Glenmore Park	GF	NCA 1	286406	6257826	Residential	48	42	48	42	50	43	51	44	60	55							N
33 Saddler Way, Glenmore Park	GF	NCA 1	286408	6257808	Residential	48	42	49	42	50	44	52	45	60	55							N
20-30 Saddler Way_1, Glenmore Park	GF	NCA 1	286473	6257833	Residential	53	47	54	47	55	48	56	50	60	55							N
35 Saddler Way, Glenmore Park	GF	NCA 1	286406	6257788	Residential	48	42	48	42	50	43	51	45	60	55							N
37 Saddler Way, Glenmore Park	GF	NCA 1	286405	6257769	Residential	48	42	48	42	49	43	50	44	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
39 Saddler Way, Glenmore Park	GF	NCA 1	286408	6257748	Residential	48	42	48	42	49	43	51	44	60	55							N
39 Saddler Way, Glenmore Park	F1	NCA 1	286408	6257748	Residential	52	46	52	46	53	47	55	48	60	55							N
32-52 Saddler Way, Glenmore Park	GF	NCA 1	286474	6257741	Residential	54	48	55	48	55	49	57	50	60	55							N
41 Saddler Way, Glenmore Park	GF	NCA 1	286415	6257711	Residential	49	43	49	43	50	43	51	45	60	55							N
43 Saddler Way, Glenmore Park	GF	NCA 1	286416	6257690	Residential	49	43	49	43	50	43	51	45	60	55							N
45 Saddler Way, Glenmore Park	GF	NCA 1	286421	6257670	Residential	48	42	49	43	49	43	51	44	60	55							N
47 Saddler Way, Glenmore Park	GF	NCA 1	286426	6257655	Residential	49	43	49	43	50	43	51	45	60	55							N
49 Saddler Way, Glenmore Park	GF	NCA 1	286429	6257637	Residential	48	42	49	42	49	43	51	44	60	55							N
51 Saddler Way, Glenmore Park	GF	NCA 1	286435	6257620	Residential	49	42	49	43	49	43	51	44	60	55							N
53 Saddler Way, Glenmore Park	GF	NCA 1	286440	6257600	Residential	50	43	50	44	50	44	52	45	60	55							N
55 Saddler Way, Glenmore Park	GF	NCA 1	286440	6257582	Residential	49	42	49	43	50	43	51	44	60	55							N
57 Saddler Way, Glenmore Park	GF	NCA 1	286450	6257566	Residential	48	42	49	42	49	43	51	44	60	55							N
2089-2093 The Northern Road, Glenmore Pa	GF	NCA 1	286505	6257542	Residential	55	49	56	49	56	50	58	51	60	55							N
59 Saddler Way, Glenmore Park	GF	NCA 1	286447	6257545	Residential	47	41	47	41	48	41	49	43	60	55							N
59 Saddler Way, Glenmore Park	F1	NCA 1	286447	6257545	Residential	51	45	51	45	53	46	54	48	60	55							N
2095 The Northern Road, Glenmore Park	GF	NCA 1	286509	6257495	Residential	56	49	56	50	57	50	58	51	60	55							N
61 Saddler Way, Glenmore Park	GF	NCA 1	286440	6257525	Residential	46	40	46	40	47	40	48	42	60	55							N
61 Saddler Way, Glenmore Park	F1	NCA 1	286440	6257525	Residential	49	43	50	43	51	45	52	46	60	55							N
63 Saddler Way, Glenmore Park	GF	NCA 1	286439	6257510	Residential	45	39	46	39	46	40	48	41	60	55							N
63 Saddler Way, Glenmore Park	F1	NCA 1	286439	6257510	Residential	48	42	49	42	50	43	51	45	60	55							N
65 Saddler Way, Glenmore Park	GF	NCA 1	286438	6257490	Residential	44	38	45	39	45	39	47	40	60	55							N
65 Saddler Way, Glenmore Park	F1	NCA 1	286438	6257490	Residential	47	41	48	41	49	42	50	44	60	55							N
6 Bangaroo Ave, Glenmore Park	GF	NCA 1	286362	6257693	Residential	41	35	42	35	42	36	43	37	60	55							N
6 Bangaroo Ave, Glenmore Park	F1	NCA 1	286362	6257693	Residential	43	37	44	38	44	38	46	39	60	55							N
4 Bangaroo Ave, Glenmore Park	GF	NCA 1	286383	6257705	Residential	43	36	43	37	43	37	45	38	60	55							N
4 Orlander Ave, Glenmore Park	GF	NCA 1	286380	6257668	Residential	43	36	43	37	43	37	45	38	60	55							N
4 Orlander Ave, Glenmore Park	F1	NCA 1	286380	6257668	Residential	46	39	46	40	46	40	48	41	60	55							N
6 Orlander Ave, Glenmore Park	GF	NCA 1	286390	6257649	Residential	43	36	43	37	43	37	45	38	60	55							N
6 Orlander Ave, Glenmore Park	F1	NCA 1	286390	6257649	Residential	46	39	46	40	46	40	48	41	60	55							N
8 Orlander Ave, Glenmore Park	GF	NCA 1	286393	6257630	Residential	42	36	42	36	43	36	44	38	60	55							N
8 Orlander Ave, Glenmore Park	F1	NCA 1	286393	6257630	Residential	45	39	45	39	46	39	47	40	60	55							N
10 Orlander Ave, Glenmore Park	GF	NCA 1	286397	6257611	Residential	41	35	42	36	42	35	43	37	60	55							N
10 Orlander Ave, Glenmore Park	F1	NCA 1	286397	6257611	Residential	44	38	44	38	45	38	46	40	60	55							N
12 Orlander Ave, Glenmore Park	GF	NCA 1	286400	6257591	Residential	41	35	41	35	42	35	43	36	60	55							N
12 Orlander Ave, Glenmore Park	F1	NCA 1	286400	6257591	Residential	44	37	44	38	44	38	46	39	60	55							N
14 Orlander Ave, Glenmore Park	GF	NCA 1	286405	6257569	Residential	41	35	41	35	42	35	43	37	60	55							N
14 Orlander Ave, Glenmore Park	F1	NCA 1	286405	6257569	Residential	44	37	44	38	44	38	46	39	60	55							N
16 Orlander Ave, Glenmore Park	GF	NCA 1	286404	6257550	Residential	41	35	42	36	42	36	44	37	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
16 Orlander Ave, Glenmore Park	F1	NCA 1	286404	6257550	Residential	44	38	44	38	45	38	46	40	60	55							N
18 Orlander Ave, Glenmore Park	GF	NCA 1	286399	6257530	Residential	40	34	41	34	41	34	42	36	60	55							N
18 Orlander Ave, Glenmore Park	F1	NCA 1	286399	6257530	Residential	43	37	43	37	44	37	45	39	60	55							N
8 Warrawong St, Glenmore Park	GF	NCA 1	286406	6257501	Residential	41	35	41	35	42	35	43	37	60	55							N
8 Warrawong St, Glenmore Park	F1	NCA 1	286406	6257501	Residential	43	37	43	37	44	37	45	39	60	55							N
6 Warrawong St, Glenmore Park	GF	NCA 1	286386	6257507	Residential	41	34	41	35	41	35	43	36	60	55							N
6 Warrawong St, Glenmore Park	F1	NCA 1	286386	6257507	Residential	42	36	43	37	43	37	44	38	60	55							N
2 Crestwood Ave, Glenmore Park	GF	NCA 1	286447	6257454	Residential	44	37	44	38	44	38	46	39	60	55							N
4 Crestwood Ave, Glenmore Park	GF	NCA 1	286444	6257437	Residential	42	36	42	36	43	36	44	38	60	55							N
4 Crestwood Ave, Glenmore Park	F1	NCA 1	286444	6257437	Residential	44	38	45	39	45	39	47	40	60	55							N
6 Crestwood Ave, Glenmore Park	GF	NCA 1	286445	6257417	Residential	43	37	43	37	43	37	45	38	60	55							N
6 Crestwood Ave, Glenmore Park	F1	NCA 1	286445	6257417	Residential	45	39	46	40	46	40	47	41	60	55							N
8-10 Crestwood Ave, Glenmore Park	GF	NCA 1	286458	6257386	Residential	44	38	45	38	45	38	46	40	60	55							N
20 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286487	6257456	Residential	52	46	52	46	52	46	54	47	60	55							N
20 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286487	6257456	Residential	54	48	55	48	55	49	57	50	60	55							N
19 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286485	6257436	Residential	50	44	51	44	51	45	53	46	60	55							N
19 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286485	6257436	Residential	54	48	54	48	55	48	56	50	60	55							N
18 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286483	6257420	Residential	49	43	50	44	51	44	52	45	60	55							N
18 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286483	6257420	Residential	53	47	54	48	55	48	56	50	60	55							N
17 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286486	6257401	Residential	48	42	49	43	49	43	51	44	60	55							N
17 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286486	6257401	Residential	53	47	53	47	54	47	56	49	60	55							N
16 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286494	6257383	Residential	48	42	49	42	49	42	50	44	60	55							N
16 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286494	6257383	Residential	53	46	53	47	54	47	55	49	60	55							N
15 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286497	6257364	Residential	49	43	49	43	50	43	51	44	60	55							N
14 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286503	6257327	Residential	49	43	49	43	50	43	51	45	60	55							N
14 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286503	6257327	Residential	53	46	53	47	54	47	55	49	60	55							N
13 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286499	6257308	Residential	49	43	49	43	50	43	51	45	60	55							N
13 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286499	6257308	Residential	53	46	53	47	54	47	55	49	60	55							N
12 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286499	6257289	Residential	50	43	50	44	50	44	52	45	60	55							N
17 Crestwood Ave, Glenmore Park	GF	NCA 1	286470	6257326	Residential	44	37	44	38	44	38	46	39	60	55							N
17 Crestwood Ave, Glenmore Park	F1	NCA 1	286470	6257326	Residential	46	40	47	40	47	40	48	42	60	55							N
6 Grandeur Cr, Glenmore Park	GF	NCA 1	286463	6257293	Residential	45	38	45	39	45	39	47	40	60	55							N
6 Grandeur Cr, Glenmore Park	F1	NCA 1	286463	6257293	Residential	47	41	47	41	48	41	49	43	60	55							N
4 Grandeur Cr, Glenmore Park	GF	NCA 1	286445	6257291	Residential	44	38	45	38	45	38	46	40	60	55							N
4 Grandeur Cr, Glenmore Park	F1	NCA 1	286445	6257291	Residential	46	40	47	41	47	40	48	42	60	55							N
15 Crestwood Ave, Glenmore Park	GF	NCA 1	286450	6257329	Residential	42	36	43	36	43	36	44	38	60	55							N
15 Crestwood Ave, Glenmore Park	F1	NCA 1	286450	6257329	Residential	45	39	45	39	45	39	47	40	60	55							N
1 Grandeur Cr, Glenmore Park	GF	NCA 1	286442	6257244	Residential	45	39	46	39	46	39	47	40	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
3 Grandeur Cr, Glenmore Park	GF	NCA 1	286457	6257247	Residential	45	38	45	39	45	39	47	40	60	55							N
5 Grandeur Cr, Glenmore Park	GF	NCA 1	286472	6257247	Residential	45	39	46	39	46	39	47	41	60	55							N
7 Grandeur Cr, Glenmore Park	GF	NCA 1	286487	6257247	Residential	45	39	45	39	45	39	47	40	60	55							N
7 Grandeur Cr, Glenmore Park	F1	NCA 1	286487	6257247	Residential	49	42	49	43	49	43	51	44	60	55							N
9 Grandeur Cr, Glenmore Park	GF	NCA 1	286502	6257247	Residential	50	43	50	44	50	44	52	45	60	55							N
24 Bangalla Pde, Glenmore Park	GF	NCA 1	286454	6257220	Residential	44	38	44	38	45	38	46	39	60	55							N
24 Bangalla Pde, Glenmore Park	F1	NCA 1	286454	6257220	Residential	47	40	47	41	47	41	49	42	60	55							N
26 Bangalla Pde, Glenmore Park	GF	NCA 1	286452	6257205	Residential	44	38	45	39	45	38	46	39	60	55							N
26 Bangalla Pde, Glenmore Park	F1	NCA 1	286452	6257205	Residential	47	40	47	41	47	41	49	42	60	55							N
10 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286494	6257219	Residential	50	44	50	44	51	44	52	46	60	55							N
10 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286494	6257219	Residential	54	47	54	48	55	48	56	50	60	55							N
9 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286491	6257200	Residential	50	44	51	45	51	45	53	46	60	55							N
9 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286491	6257200	Residential	54	48	55	48	55	48	57	50	60	55							N
8 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286489	6257183	Residential	51	45	51	45	52	45	53	47	60	55							N
8 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286489	6257183	Residential	54	48	55	49	56	49	57	51	60	55							N
7 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286489	6257168	Residential	52	46	53	46	53	46	54	48	60	55							N
7 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286489	6257168	Residential	56	49	56	50	57	50	58	52	60	55							N
6 Harold Bentleys Way, Glenmore Park	GF	NCA 1	286489	6257150	Residential	53	46	53	47	53	47	55	48	60	55							N
6 Harold Bentleys Way, Glenmore Park	F1	NCA 1	286489	6257150	Residential	57	50	57	51	57	51	59	52	60	55							N
32 Bangalla Pde, Glenmore Park	GF	NCA 1	286442	6257153	Residential	52	45	52	46	52	45	52	46	60	55							N
28 Bangalla Pde, Glenmore Park	GF	NCA 1	286451	6257186	Residential	45	39	46	40	46	39	47	41	60	55							N
28 Bangalla Pde, Glenmore Park	F1	NCA 1	286451	6257186	Residential	48	42	48	42	49	42	50	43	60	55							N
30 Bangalla Pde, Glenmore Park	GF	NCA 1	286446	6257170	Residential	47	40	47	41	47	40	48	42	60	55							N
30 Bangalla Pde, Glenmore Park	F1	NCA 1	286446	6257170	Residential	50	43	50	44	50	44	51	45	60	55							N
15-29 Bradley St_2, Glenmore Park	GF	NCA 1	286460	6257081	Residential	62	56	62	56	62	55	62	56	60	55							N
36 Bangalla Pde, Glenmore Park	GF	NCA 1	286374	6257112	Residential	54	48	55	48	54	48	54	48	60	55							N
38 Bangalla Pde, Glenmore Park	GF	NCA 1	286385	6257095	Residential	57	51	57	51	57	51	58	51	60	55							N
54 Glengarry Dr, Glenmore Park	GF	NCA 1	286368	6257850	Residential	43	37	43	37	44	37	45	39	60	55							N
56 Glengarry Dr, Glenmore Park	GF	NCA 1	286367	6257825	Residential	43	37	43	37	44	38	46	39	60	55							N
58 Glengarry Dr, Glenmore Park	GF	NCA 1	286364	6257809	Residential	43	37	43	37	44	37	45	39	60	55							N
3 Bangaroo Ave, Glenmore Park	GF	NCA 1	286378	6257758	Residential	43	37	43	37	44	37	45	39	60	55							N
1 Orlander Ave, Glenmore Park	GF	NCA 1	286328	6257667	Residential	41	34	41	35	41	35	43	36	60	55							N
3 Orlander Ave, Glenmore Park	GF	NCA 1	286342	6257652	Residential	41	34	41	35	41	35	43	36	60	55							N
5 Orlander Ave, Glenmore Park	GF	NCA 1	286346	6257633	Residential	41	35	41	35	41	35	43	36	60	55							N
7 Orlander Ave, Glenmore Park	GF	NCA 1	286353	6257616	Residential	41	35	42	35	42	35	43	37	60	55							N
9 Orlander Ave, Glenmore Park	GF	NCA 1	286354	6257598	Residential	41	35	41	35	42	35	43	37	60	55							N
11 Orlander Ave, Glenmore Park	GF	NCA 1	286359	6257578	Residential	41	35	42	35	42	35	43	37	60	55							N
13 Orlander Ave, Glenmore Park	GF	NCA 1	286357	6257557	Residential	41	35	42	35	42	36	43	37	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
15 Orlander Ave, Glenmore Park	GF	NCA 1	286351	6257538	Residential	41	35	42	36	42	36	43	37	60	55							N
17 Orlander Ave_1, Glenmore Park	GF	NCA 1	286346	6257521	Residential	41	35	42	36	42	36	44	37	60	55							N
17 Orlander Ave_2, Glenmore Park	GF	NCA 1	286346	6257508	Residential	42	35	42	36	42	36	44	37	60	55							N
3 Warrawong St, Glenmore Park	GF	NCA 1	286350	6257470	Residential	41	35	42	35	42	35	43	37	60	55							N
20 Bangalla Pde, Glenmore Park	GF	NCA 1	286422	6257284	Residential	46	39	46	40	46	40	47	41	60	55							N
11 Bangalla Pde, Glenmore Park	GF	NCA 1	286380	6257267	Residential	44	38	44	38	45	38	46	40	60	55							N
13 Bangalla Pde, Glenmore Park	GF	NCA 1	286389	6257253	Residential	44	38	45	39	45	39	47	40	60	55							N
15 Bangalla Pde, Glenmore Park	GF	NCA 1	286402	6257231	Residential	45	39	45	39	46	39	47	40	60	55							N
17 Bangalla Pde, Glenmore Park	GF	NCA 1	286403	6257210	Residential	47	41	47	41	47	41	48	42	60	55							N
19 Bangalla Pde, Glenmore Park	GF	NCA 1	286402	6257190	Residential	49	43	49	43	49	43	50	44	60	55							N
27 Bangalla Pde, Glenmore Park	GF	NCA 1	286352	6257146	Residential	53	46	53	47	53	46	53	47	60	55							N
21 Bangalla Pde, Glenmore Park	GF	NCA 1	286393	6257172	Residential	51	44	51	45	51	44	52	45	60	55							N
23 Bangalla Pde, Glenmore Park	GF	NCA 1	286380	6257161	Residential	51	45	51	45	51	45	52	46	60	55							N
25 Bangalla Pde, Glenmore Park	GF	NCA 1	286366	6257153	Residential	52	46	52	46	52	46	53	46	60	55							N
13 Crestwood Ave, Glenmore Park	GF	NCA 1	286434	6257343	Residential	43	37	43	37	43	37	45	38	60	55							N
11 Crestwood Ave, Glenmore Park	GF	NCA 1	286423	6257362	Residential	43	37	43	37	44	37	45	38	60	55							N
9 Crestwood Ave, Glenmore Park	GF	NCA 1	286412	6257377	Residential	42	36	43	37	43	37	45	38	60	55							N
7 Crestwood Ave, Glenmore Park	GF	NCA 1	286405	6257394	Residential	42	36	42	36	43	36	44	38	60	55							N
5 Crestwood Ave, Glenmore Park	GF	NCA 1	286395	6257411	Residential	42	36	42	36	43	36	44	38	60	55							N
3 Crestwood Ave, Glenmore Park	GF	NCA 1	286394	6257431	Residential	42	36	43	37	43	37	44	38	60	55							N
9 Warrawong St, Glenmore Park	GF	NCA 1	286403	6257454	Residential	43	36	43	37	43	37	45	38	60	55							N
5 Warrawong St, Glenmore Park	GF	NCA 1	286369	6257462	Residential	42	35	42	36	42	36	44	37	60	55							N
7 Warrawong St, Glenmore Park	GF	NCA 1	286385	6257457	Residential	41	35	42	36	42	36	43	37	60	55							N
5 Bangaroo Ave, Glenmore Park	GF	NCA 1	286357	6257747	Residential	41	35	42	36	43	36	44	38	60	55							N
7 Bangaroo Ave, Glenmore Park	GF	NCA 1	286345	6257735	Residential	41	35	42	35	42	36	44	37	60	55							N
9 Bangaroo Ave, Glenmore Park	GF	NCA 1	286330	6257725	Residential	41	35	41	35	42	35	43	37	60	55							N
11 Bangaroo Ave, Glenmore Park	GF	NCA 1	286318	6257717	Residential	41	35	41	35	42	36	43	37	60	55							N
2073-2077 The Northern Road_1, Glenmore	GF	NCA 1	286606	6257706	Residential	56	50	57	50	57	51	59	52	60	55							N
2055-2057 The Northern Road, Glenmore Pa	GF	NCA 1	286642	6257912	Residential	55	49	55	49	56	50	58	51	60	55							N
2039 The Northern Road_1, Glenmore Park	GF	NCA 1	286612	6258087	Residential	54	48	55	48	56	49	57	51	60	55							N
2033 The Northern Road_1, Glenmore Park	GF	NCA 1	286621	6258143	Residential	55	48	55	49	56	50	58	51	60	55							N
21 Boldero Cr, Glenmore Park	GF	NCA 1	286542	6258123	Residential	52	46	52	46	54	47	55	48	60	55							N
12 Boldero Cr, Glenmore Park	GF	NCA 1	286530	6258241	Residential	53	47	53	47	54	48	56	49	60	55							N
14 Boldero Cr, Glenmore Park	GF	NCA 1	286518	6258214	Residential	52	46	52	46	54	47	55	49	60	55							N
14 Boldero Cr, Glenmore Park	F1	NCA 1	286518	6258214	Residential	53	47	53	47	55	48	56	50	60	55							N
16 Boldero Cr, Glenmore Park	GF	NCA 1	286512	6258196	Residential	52	46	52	46	54	47	55	49	60	55							N
16 Boldero Cr, Glenmore Park	F1	NCA 1	286512	6258196	Residential	53	47	53	47	55	48	56	50	60	55							N
18 Boldero Cr, Glenmore Park	GF	NCA 1	286510	6258175	Residential	51	45	51	45	54	47	55	48	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
18 Boldero Cr, Glenmore Park	F1	NCA 1	286510	6258175	Residential	53	46	53	47	55	48	56	49	60	55							N
20 Boldero Cr, Glenmore Park	GF	NCA 1	286505	6258155	Residential	51	44	51	45	53	47	54	48	60	55							N
20 Boldero Cr, Glenmore Park	F1	NCA 1	286505	6258155	Residential	52	46	52	46	54	48	55	49	60	55							N
22 Boldero Cr, Glenmore Park	GF	NCA 1	286499	6258139	Residential	50	43	50	44	52	46	54	47	60	55							N
22 Boldero Cr, Glenmore Park	F1	NCA 1	286499	6258139	Residential	51	45	52	45	54	47	55	48	60	55							N
27 Boldero Cr, Glenmore Park	GF	NCA 1	286499	6258090	Residential	51	44	51	45	52	45	53	47	60	55							N
10 Boldero Cr, Glenmore Park	GF	NCA 1	286513	6258245	Residential	49	42	49	43	50	44	52	45	60	55							N
10 Boldero Cr, Glenmore Park	F1	NCA 1	286513	6258245	Residential	50	44	50	44	52	45	53	47	60	55							N
8 Boldero Cr, Glenmore Park	GF	NCA 1	286493	6258248	Residential	49	43	49	43	50	44	51	45	60	55							N
8 Boldero Cr, Glenmore Park	F1	NCA 1	286493	6258248	Residential	50	44	51	44	51	45	52	46	60	55							N
6 Boldero Cr, Glenmore Park	GF	NCA 1	286472	6258254	Residential	49	43	50	43	50	44	51	45	60	55							N
6 Boldero Cr, Glenmore Park	F1	NCA 1	286472	6258254	Residential	51	45	51	45	52	45	53	46	60	55							N
4 Briarwood Ave, Glenmore Park	GF	NCA 1	286473	6258222	Residential	44	38	45	38	46	39	47	41	60	55							N
6 Briarwood Ave, Glenmore Park	GF	NCA 1	286470	6258204	Residential	43	36	43	37	44	38	45	39	60	55							N
6 Briarwood Ave, Glenmore Park	F1	NCA 1	286470	6258204	Residential	45	39	46	39	47	40	48	42	60	55							N
8 Briarwood Ave, Glenmore Park	GF	NCA 1	286466	6258186	Residential	42	36	43	36	44	37	45	38	60	55							N
8 Briarwood Ave, Glenmore Park	F1	NCA 1	286466	6258186	Residential	45	39	45	39	46	40	48	41	60	55							N
10 Briarwood Ave, Glenmore Park	GF	NCA 1	286461	6258170	Residential	42	36	43	36	44	37	45	38	60	55							N
10 Briarwood Ave, Glenmore Park	F1	NCA 1	286461	6258170	Residential	45	39	45	39	46	40	48	41	60	55							N
26 Boldero Cr, Glenmore Park	GF	NCA 1	286455	6258143	Residential	43	36	43	37	44	37	45	38	60	55							N
24 Boldero Cr, Glenmore Park	GF	NCA 1	286473	6258141	Residential	43	37	43	37	44	37	45	39	60	55							N
33 Boldero Cr, Glenmore Park	GF	NCA 1	286446	6258096	Residential	45	39	45	39	46	40	47	41	60	55							N
31 Boldero Cr, Glenmore Park	GF	NCA 1	286465	6258095	Residential	46	40	46	40	48	41	49	42	60	55							N
31 Boldero Cr, Glenmore Park	F1	NCA 1	286465	6258095	Residential	48	42	48	42	50	43	51	44	60	55							N
29 Boldero Cr, Glenmore Park	GF	NCA 1	286483	6258091	Residential	48	41	48	41	50	44	52	45	60	55							N
29 Boldero Cr, Glenmore Park	F1	NCA 1	286483	6258091	Residential	50	43	50	44	52	46	53	47	60	55							N
12 Windorra Ave, Glenmore Park	GF	NCA 1	286393	6258242	Residential	45	39	45	39	45	39	46	39	60	55							N
14 Windorra Ave, Glenmore Park	GF	NCA 1	286388	6258223	Residential	43	37	44	37	44	38	45	39	60	55							N
14 Windorra Ave, Glenmore Park	F1	NCA 1	286388	6258223	Residential	46	40	46	40	47	41	49	42	60	55							N
16 Windorra Ave, Glenmore Park	GF	NCA 1	286386	6258201	Residential	43	37	43	37	44	38	46	39	60	55							N
16 Windorra Ave, Glenmore Park	F1	NCA 1	286386	6258201	Residential	45	39	46	39	47	40	48	42	60	55							N
18 Windorra Ave, Glenmore Park	GF	NCA 1	286379	6258180	Residential	43	37	43	37	44	38	45	39	60	55							N
18 Windorra Ave, Glenmore Park	F1	NCA 1	286379	6258180	Residential	45	39	46	39	47	40	48	41	60	55							N
20 Windorra Ave, Glenmore Park	GF	NCA 1	286369	6258165	Residential	42	36	42	36	44	37	45	39	60	55							N
20 Windorra Ave, Glenmore Park	F1	NCA 1	286369	6258165	Residential	44	38	45	38	46	40	47	41	60	55							N
3 Briarwood Ave, Glenmore Park	GF	NCA 1	286427	6258239	Residential	46	40	47	40	49	42	49	43	60	55							N
5 Briarwood Ave, Glenmore Park	GF	NCA 1	286424	6258221	Residential	46	40	46	40	47	40	48	41	60	55							N
13 Briarwood Ave, Glenmore Park	GF	NCA 1	286414	6258146	Residential	44	37	44	38	45	38	46	40	60	55							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
11 Briarwood Ave, Glenmore Park	GF	NCA 1	286415	6258163	Residential	44	37	44	38	45	38	46	40	60	55							N
9 Briarwood Ave, Glenmore Park	GF	NCA 1	286418	6258184	Residential	44	38	44	38	45	39	46	40	60	55							N
35 Boldero Cr, Glenmore Park	GF	NCA 1	286430	6258100	Residential	44	38	44	38	45	39	47	40	60	55							N
37 Boldero Cr, Glenmore Park	GF	NCA 1	286408	6258102	Residential	44	37	44	38	45	39	46	40	60	55							N
39 Boldero Cr, Glenmore Park	GF	NCA 1	286393	6258108	Residential	44	38	44	38	45	39	47	40	60	55							N
41 Boldero Cr, Glenmore Park	GF	NCA 1	286373	6258106	Residential	43	37	44	38	45	39	46	40	60	55							N
1 Briarwood Ave, Glenmore Park	GF	NCA 1	286431	6258264	Residential	46	40	46	40	47	41	48	42	60	55							N
1 Briarwood Ave, Glenmore Park	F1	NCA 1	286431	6258264	Residential	48	41	48	42	49	43	50	44	60	55							N
7 Briarwood Ave, Glenmore Park	GF	NCA 1	286423	6258204	Residential	45	39	45	39	46	40	47	41	60	55							N
7 Briarwood Ave, Glenmore Park	F1	NCA 1	286423	6258204	Residential	47	41	47	41	48	42	50	43	60	55							N
43 Boldero Cr, Glenmore Park	GF	NCA 1	286351	6258119	Residential	44	38	44	38	45	39	46	40	60	55							N
43 Boldero Cr, Glenmore Park	F1	NCA 1	286351	6258119	Residential	46	40	46	40	47	41	49	42	60	55							N
30 Boldero Cr, Glenmore Park	GF	NCA 1	286390	6258150	Residential	42	36	42	36	43	37	45	38	60	55							N
30 Boldero Cr, Glenmore Park	F1	NCA 1	286390	6258150	Residential	46	40	46	40	47	41	49	42	60	55							N
3 Saddler Way, Glenmore Park	GF	NCA 1	286293	6257976	Residential	43	37	43	37	45	38	46	39	60	55							N
3 Saddler Way, Glenmore Park	F1	NCA 1	286293	6257976	Residential	44	38	45	39	46	40	48	41	60	55							N
5 Saddler Way, Glenmore Park	GF	NCA 1	286312	6257972	Residential	43	37	43	37	45	38	46	39	60	55							N
5 Saddler Way, Glenmore Park	F1	NCA 1	286312	6257972	Residential	44	38	45	38	46	40	48	41	60	55							N
9 Saddler Way, Glenmore Park	GF	NCA 1	286346	6257963	Residential	44	37	44	38	45	39	47	40	60	55							N
9 Saddler Way, Glenmore Park	F1	NCA 1	286346	6257963	Residential	46	39	46	40	48	41	49	42	60	55							N
11 Saddler Way, Glenmore Park	GF	NCA 1	286365	6257963	Residential	44	38	44	38	46	39	47	40	60	55							N
11 Saddler Way, Glenmore Park	F1	NCA 1	286365	6257963	Residential	46	40	46	40	48	42	49	43	60	55							N
13 Saddler Way, Glenmore Park	GF	NCA 1	286380	6257960	Residential	45	38	45	39	46	40	48	41	60	55							N
13 Saddler Way, Glenmore Park	F1	NCA 1	286380	6257960	Residential	47	41	47	41	49	43	50	44	60	55							N
3 Suntop Pl, Glenmore Park	GF	NCA 1	286352	6257933	Residential	41	35	41	35	42	35	43	37	60	55							N
3 Suntop Pl, Glenmore Park	F1	NCA 1	286352	6257933	Residential	43	37	44	37	44	38	46	39	60	55							N
4 Suntop Pl, Glenmore Park	GF	NCA 1	286370	6257930	Residential	42	36	43	36	43	37	45	38	60	55							N
4 Suntop Pl, Glenmore Park	F1	NCA 1	286370	6257930	Residential	45	39	46	39	46	40	48	41	60	55							N
5 Suntop Pl, Glenmore Park	GF	NCA 1	286383	6257909	Residential	43	37	43	37	44	37	45	39	60	55							N
5 Suntop Pl, Glenmore Park	F1	NCA 1	286383	6257909	Residential	46	40	46	40	47	41	49	42	60	55							N
8 Suntop Pl, Glenmore Park	GF	NCA 1	286345	6257870	Residential	42	36	42	36	43	36	44	38	60	55							N
8 Suntop Pl, Glenmore Park	F1	NCA 1	286345	6257870	Residential	45	39	45	39	46	40	47	41	60	55							N
48 Glengarry Dr, Glenmore Park	GF	NCA 1	286307	6257928	Residential	41	35	42	35	42	36	44	37	60	55							N
48 Glengarry Dr, Glenmore Park	F1	NCA 1	286307	6257928	Residential	44	38	44	38	45	38	46	40	60	55							N
7 Suntop Pl, Glenmore Park	GF	NCA 1	286363	6257878	Residential	42	36	43	36	43	37	44	38	60	55							N
6 Suntop Pl, Glenmore Park	GF	NCA 1	286379	6257885	Residential	43	37	44	37	44	38	46	39	60	55							N
50 Glengarry Dr, Glenmore Park	GF	NCA 1	286318	6257907	Residential	42	36	42	36	43	36	44	38	60	55							N
2 Suntop Pl, Glenmore Park	GF	NCA 1	286332	6257918	Residential	42	36	43	36	43	37	44	38	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
7 Saddler Way, Glenmore Park	GF	NCA 1	286329	6257967	Residential	44	37	44	38	45	39	47	40	60	55							N
15 Saddler Way, Glenmore Park	GF	NCA 1	286399	6257957	Residential	46	39	46	40	48	41	49	42	60	55							N
46 Glengarry Dr, Glenmore Park	GF	NCA 1	286297	6257941	Residential	42	35	42	36	43	36	44	38	60	55							N
108 Glengarry Dr, Glenmore Park	GF	NCA 1	286257	6257306	Residential	42	36	42	36	43	37	44	38	60	55							N
116 Glengarry Dr, Glenmore Park	GF	NCA 1	286260	6257230	Residential	44	38	44	38	45	38	46	40	60	55							N
118 Glengarry Dr, Glenmore Park	GF	NCA 1	286269	6257212	Residential	45	39	45	39	45	39	47	40	60	55							N
128 Glengarry Dr, Glenmore Park	GF	NCA 1	286314	6257131	Residential	56	50	56	51	56	50	57	51	60	55							N
126 Glengarry Dr, Glenmore Park	GF	NCA 1	286302	6257143	Residential	53	48	54	49	53	48	54	48	60	55							N
124 Glengarry Dr, Glenmore Park	GF	NCA 1	286286	6257161	Residential	50	45	51	46	50	45	51	46	60	55							N
124 Glengarry Dr, Glenmore Park	F1	NCA 1	286286	6257161	Residential	53	48	53	48	53	48	54	48	60	55							N
122 Glengarry Dr, Glenmore Park	GF	NCA 1	286278	6257173	Residential	47	42	48	43	48	43	49	43	60	55							N
122 Glengarry Dr, Glenmore Park	F1	NCA 1	286278	6257173	Residential	50	45	50	45	50	45	51	46	60	55							N
120 Glengarry Dr, Glenmore Park	GF	NCA 1	286274	6257193	Residential	45	39	46	39	46	39	47	41	60	55							N
120 Glengarry Dr, Glenmore Park	F1	NCA 1	286274	6257193	Residential	47	41	48	42	49	42	50	43	60	55							N
114 Glengarry Dr, Glenmore Park	GF	NCA 1	286251	6257249	Residential	43	37	44	37	44	38	45	39	60	55							N
114 Glengarry Dr, Glenmore Park	F1	NCA 1	286251	6257249	Residential	45	39	46	40	46	40	48	41	60	55							N
112 Glengarry Dr, Glenmore Park	GF	NCA 1	286245	6257270	Residential	42	36	43	37	43	37	45	38	60	55							N
112 Glengarry Dr, Glenmore Park	F1	NCA 1	286245	6257270	Residential	44	38	45	39	45	39	47	40	60	55							N
110 Glengarry Dr, Glenmore Park	GF	NCA 1	286246	6257286	Residential	42	36	43	36	43	37	44	38	60	55							N
110 Glengarry Dr, Glenmore Park	F1	NCA 1	286246	6257286	Residential	44	38	45	38	45	39	47	40	60	55							N
5 Karingal Ct, Glenmore Park	GF	NCA 1	286357	6257251	Residential	44	38	45	38	45	38	46	40	60	55							N
5 Karingal Ct, Glenmore Park	F1	NCA 1	286357	6257251	Residential	46	39	46	40	47	40	48	42	60	55							N
6 Karingal Ct, Glenmore Park	GF	NCA 1	286371	6257205	Residential	46	40	46	40	46	40	48	41	60	55							N
6 Karingal Ct, Glenmore Park	F1	NCA 1	286371	6257205	Residential	48	42	49	42	49	42	50	44	60	55							N
7 Karingal Ct, Glenmore Park	GF	NCA 1	286354	6257193	Residential	46	40	47	41	47	40	48	42	60	55							N
7 Karingal Ct, Glenmore Park	F1	NCA 1	286354	6257193	Residential	49	43	49	43	49	43	50	44	60	55							N
11 Karingal Ct, Glenmore Park	GF	NCA 1	286302	6257232	Residential	44	37	44	38	44	38	46	39	60	55							N
11 Karingal Ct, Glenmore Park	F1	NCA 1	286302	6257232	Residential	46	39	46	40	47	40	48	42	60	55							N
12 Karingal Ct, Glenmore Park	GF	NCA 1	286292	6257254	Residential	43	37	44	37	44	38	45	39	60	55							N
12 Karingal Ct, Glenmore Park	F1	NCA 1	286292	6257254	Residential	45	39	45	39	46	39	47	41	60	55							N
13 Karingal Ct, Glenmore Park	GF	NCA 1	286284	6257276	Residential	43	37	44	38	44	38	46	39	60	55							N
13 Karingal Ct, Glenmore Park	F1	NCA 1	286284	6257276	Residential	45	39	45	39	46	39	47	41	60	55							N
14 Karingal Ct, Glenmore Park	GF	NCA 1	286291	6257299	Residential	42	36	43	37	43	37	44	38	60	55							N
14 Karingal Ct, Glenmore Park	F1	NCA 1	286291	6257299	Residential	44	38	44	38	45	38	46	40	60	55							N
15 Karingal Ct, Glenmore Park	GF	NCA 1	286306	6257311	Residential	43	36	43	37	43	37	45	38	60	55							N
15 Karingal Ct, Glenmore Park	F1	NCA 1	286306	6257311	Residential	44	38	45	38	45	39	46	40	60	55							N
17 Karingal Ct, Glenmore Park	GF	NCA 1	286314	6257329	Residential	42	36	43	37	43	37	45	38	60	55							N
17 Karingal Ct, Glenmore Park	F1	NCA 1	286314	6257329	Residential	44	38	44	38	45	38	46	40	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2 Karingal Ct, Glenmore Park	GF	NCA 1	286343	6257299	Residential	43	37	43	37	44	37	45	39	60	55							N
2 Karingal Ct, Glenmore Park	F1	NCA 1	286343	6257299	Residential	45	39	45	39	46	39	47	41	60	55							N
3 Karingal Ct, Glenmore Park	GF	NCA 1	286335	6257278	Residential	43	37	43	37	44	37	45	39	60	55							N
3 Karingal Ct, Glenmore Park	F1	NCA 1	286335	6257278	Residential	45	38	45	39	46	39	47	41	60	55							N
4 Karingal Ct, Glenmore Park	GF	NCA 1	286344	6257243	Residential	43	37	44	38	44	38	46	39	60	55							N
4 Karingal Ct, Glenmore Park	F1	NCA 1	286344	6257243	Residential	45	39	46	40	46	40	47	41	60	55							N
8 Karingal Ct, Glenmore Park	GF	NCA 1	286336	6257183	Residential	46	40	46	40	46	40	48	41	60	55							N
8 Karingal Ct, Glenmore Park	F1	NCA 1	286336	6257183	Residential	49	43	49	43	49	43	51	44	60	55							N
9 Karingal Ct, Glenmore Park	GF	NCA 1	286313	6257182	Residential	45	39	46	40	46	40	47	41	60	55							N
9 Karingal Ct, Glenmore Park	F1	NCA 1	286313	6257182	Residential	48	42	49	43	49	42	50	44	60	55							N
18 Bangalla Pde, Glenmore Park	GF	NCA 1	286414	6257303	Residential	42	35	42	36	42	36	44	37	60	55							N
18 Bangalla Pde, Glenmore Park	F1	NCA 1	286414	6257303	Residential	44	38	45	39	45	38	47	40	60	55							N
16 Bangalla Pde, Glenmore Park	GF	NCA 1	286405	6257321	Residential	42	36	43	36	43	36	44	38	60	55							N
16 Bangalla Pde, Glenmore Park	F1	NCA 1	286405	6257321	Residential	44	38	45	39	45	39	47	40	60	55							N
14 Bangalla Pde, Glenmore Park	GF	NCA 1	286395	6257337	Residential	42	36	42	36	43	36	44	38	60	55							N
14 Bangalla Pde, Glenmore Park	F1	NCA 1	286395	6257337	Residential	44	38	44	38	45	38	46	40	60	55							N
12 Bangalla Pde, Glenmore Park	GF	NCA 1	286386	6257355	Residential	42	36	42	36	42	36	44	37	60	55							N
12 Bangalla Pde, Glenmore Park	F1	NCA 1	286386	6257355	Residential	44	37	44	38	44	38	46	39	60	55							N
9 Bangalla Pde, Glenmore Park	GF	NCA 1	286372	6257282	Residential	43	37	43	37	44	37	45	39	60	55							N
9 Bangalla Pde, Glenmore Park	F1	NCA 1	286372	6257282	Residential	45	39	45	39	46	39	47	41	60	55							N
3 Bangalla Pde, Glenmore Park	GF	NCA 1	286328	6257366	Residential	42	35	42	36	42	36	44	37	60	55							N
3 Bangalla Pde, Glenmore Park	F1	NCA 1	286328	6257366	Residential	43	37	44	37	44	38	45	39	60	55							N
10 Bangalla Pde, Glenmore Park	GF	NCA 1	286373	6257372	Residential	41	35	42	35	42	35	43	37	60	55							N
10 Bangalla Pde, Glenmore Park	F1	NCA 1	286373	6257372	Residential	43	37	44	37	44	37	45	39	60	55							N
8 Bangalla Pde, Glenmore Park	GF	NCA 1	286366	6257388	Residential	42	35	42	36	42	36	44	37	60	55							N
8 Bangalla Pde, Glenmore Park	F1	NCA 1	286366	6257388	Residential	43	37	44	37	44	37	45	39	60	55							N
6 Bangalla Pde, Glenmore Park	GF	NCA 1	286358	6257402	Residential	41	35	42	36	42	36	44	37	60	55							N
6 Bangalla Pde, Glenmore Park	F1	NCA 1	286358	6257402	Residential	43	37	43	37	44	37	45	39	60	55							N
4 Bangalla Pde, Glenmore Park	GF	NCA 1	286349	6257427	Residential	41	35	41	35	42	35	43	37	60	55							N
4 Bangalla Pde, Glenmore Park	F1	NCA 1	286349	6257427	Residential	42	36	43	37	43	37	45	38	60	55							N
5 Bangalla Pde, Glenmore Park	GF	NCA 1	286333	6257350	Residential	42	36	43	36	43	36	44	38	60	55							N
1 Bangalla Pde, Glenmore Park	GF	NCA 1	286362	6257314	Residential	43	36	43	37	43	37	45	38	60	55							N
106 Glengarry Dr, Glenmore Park	GF	NCA 1	286269	6257328	Residential	42	35	42	36	43	36	44	37	60	55							N
106 Glengarry Dr, Glenmore Park	F1	NCA 1	286269	6257328	Residential	43	37	44	38	44	38	46	39	60	55							N
102 Glengarry Dr, Glenmore Park	GF	NCA 1	286289	6257361	Residential	42	36	42	36	43	36	44	38	60	55							N
102 Glengarry Dr, Glenmore Park	F1	NCA 1	286289	6257361	Residential	43	37	44	37	44	38	45	39	60	55							N
100 Glengarry Dr, Glenmore Park	GF	NCA 1	286297	6257378	Residential	41	35	42	36	42	36	44	37	60	55							N
100 Glengarry Dr, Glenmore Park	F1	NCA 1	286297	6257378	Residential	43	37	44	37	44	38	45	39	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
98 Glengarry Dr, Glenmore Park	GF	NCA 1	286311	6257394	Residential	42	35	42	36	42	36	44	37	60	55							N
104 Glengarry Dr, Glenmore Park	GF	NCA 1	286278	6257345	Residential	42	36	42	36	43	36	44	38	60	55							N
1 Warrawong St, Glenmore Park	GF	NCA 1	286324	6257477	Residential	41	35	42	36	42	36	44	37	60	55							N
1 Warrawong St, Glenmore Park	F1	NCA 1	286324	6257477	Residential	43	37	43	37	44	37	45	39	60	55							N
94 Glengarry Dr, Glenmore Park	GF	NCA 1	286327	6257459	Residential	41	35	41	35	42	35	43	37	60	55							N
96 Glengarry Dr, Glenmore Park	GF	NCA 1	286319	6257438	Residential	41	35	42	36	42	36	44	37	60	55							N
29 Bangalla Pde, Glenmore Park	GF	NCA 1	286336	6257139	Residential	55	48	55	49	54	48	55	49	60	55							N
10 Karingal Ct, Glenmore Park	GF	NCA 1	286308	6257213	Residential	44	38	45	39	45	39	46	40	60	55							N
76 Glengarry Dr, Glenmore Park	GF	NCA 1	286275	6257679	Residential	41	35	41	35	42	35	43	37	60	55							N
82 Glengarry Dr, Glenmore Park	GF	NCA 1	286318	6257606	Residential	41	35	41	35	42	35	43	37	60	55							N
86 Glengarry Dr, Glenmore Park	GF	NCA 1	286319	6257564	Residential	41	35	42	36	42	36	43	37	60	55							N
90 Glengarry Dr, Glenmore Park	GF	NCA 1	286322	6257522	Residential	41	34	41	35	41	35	43	36	60	55							N
90 Glengarry Dr, Glenmore Park	F1	NCA 1	286322	6257522	Residential	43	36	43	37	43	37	45	38	60	55							N
88 Glengarry Dr, Glenmore Park	GF	NCA 1	286319	6257544	Residential	41	35	42	35	42	36	43	37	60	55							N
88 Glengarry Dr, Glenmore Park	F1	NCA 1	286319	6257544	Residential	43	36	43	37	43	37	45	38	60	55							N
84 Glengarry Dr, Glenmore Park	GF	NCA 1	286315	6257586	Residential	41	35	41	35	42	35	43	37	60	55							N
84 Glengarry Dr, Glenmore Park	F1	NCA 1	286315	6257586	Residential	42	36	43	37	43	37	44	38	60	55							N
80 Glengarry Dr, Glenmore Park	GF	NCA 1	286309	6257626	Residential	40	34	41	34	41	34	42	36	60	55							N
80 Glengarry Dr, Glenmore Park	F1	NCA 1	286309	6257626	Residential	42	36	42	36	43	36	44	38	60	55							N
78 Glengarry Dr, Glenmore Park	GF	NCA 1	286302	6257646	Residential	40	34	40	34	41	34	42	36	60	55							N
78 Glengarry Dr, Glenmore Park	F1	NCA 1	286302	6257646	Residential	42	35	42	36	42	36	44	37	60	55							N
74 Glengarry Dr, Glenmore Park	GF	NCA 1	286263	6257692	Residential	40	34	40	34	41	34	42	36	60	55							N
74 Glengarry Dr, Glenmore Park	F1	NCA 1	286263	6257692	Residential	42	36	42	36	43	36	44	38	60	55							N
72 Glengarry Dr, Glenmore Park	GF	NCA 1	286252	6257711	Residential	39	32	39	33	40	33	41	34	60	55							N
72 Glengarry Dr, Glenmore Park	F1	NCA 1	286252	6257711	Residential	41	35	41	35	42	35	43	37	60	55							N
70 Glengarry Dr, Glenmore Park	GF	NCA 1	286274	6257726	Residential	40	34	41	35	41	35	43	36	60	55							N
70 Glengarry Dr, Glenmore Park	F1	NCA 1	286274	6257726	Residential	42	36	42	36	43	36	44	38	60	55							N
68 Glengarry Dr, Glenmore Park	GF	NCA 1	286291	6257738	Residential	41	35	41	35	42	35	43	37	60	55							N
68 Glengarry Dr, Glenmore Park	F1	NCA 1	286291	6257738	Residential	42	36	43	36	43	37	45	38	60	55							N
66 Glengarry Dr, Glenmore Park	GF	NCA 1	286311	6257749	Residential	40	34	41	35	42	35	43	36	60	55							N
64 Glengarry Dr, Glenmore Park	GF	NCA 1	286323	6257761	Residential	41	35	41	35	42	35	43	37	60	55							N
60 Glengarry Dr, Glenmore Park	GF	NCA 1	286354	6257789	Residential	42	36	42	36	43	36	44	38	60	55							N
60 Glengarry Dr, Glenmore Park	F1	NCA 1	286354	6257789	Residential	45	39	45	39	46	40	48	41	60	55							N
62 Glengarry Dr, Glenmore Park	GF	NCA 1	286340	6257774	Residential	41	35	41	35	42	35	43	37	60	55							N
62 Glengarry Dr, Glenmore Park	F1	NCA 1	286340	6257774	Residential	43	37	44	38	44	38	46	39	60	55							N
1 Saddler Way, Glenmore Park	GF	NCA 1	286270	6257980	Residential	43	37	43	37	45	38	46	39	60	55							N
1 Saddler Way, Glenmore Park	F1	NCA 1	286270	6257980	Residential	44	38	45	38	46	40	47	41	60	55							N
44 Glengarry Dr, Glenmore Park	GF	NCA 1	286283	6257955	Residential	40	34	41	34	41	35	43	36	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
44 Glengarry Dr, Glenmore Park	F1	NCA 1	286283	6257955	Residential	43	37	44	37	45	38	46	39	60	55							N
15 Bangaroo Ave, Glenmore Park	GF	NCA 1	286293	6257699	Residential	41	35	41	35	42	35	43	37	60	55							N
13 Bangaroo Ave, Glenmore Park	GF	NCA 1	286306	6257708	Residential	41	35	41	35	42	35	43	37	60	55							N
10 Windorra Ave, Glenmore Park	GF	NCA 1	286394	6258262	Residential	46	39	46	39	46	39	46	40	60	55							N
10 Windorra Ave, Glenmore Park	F1	NCA 1	286394	6258262	Residential	47	40	47	41	48	42	49	42	60	55							N
7 Windorra Ave, Glenmore Park	GF	NCA 1	286347	6258291	Residential	49	42	49	43	49	43	50	43	60	55							N
9 Windorra Ave, Glenmore Park	GF	NCA 1	286346	6258272	Residential	48	41	48	41	48	42	49	42	60	55							N
11 Windorra Ave, Glenmore Park	GF	NCA 1	286346	6258251	Residential	46	40	47	40	47	40	48	41	60	55							N
11 Windorra Ave, Glenmore Park	F1	NCA 1	286346	6258251	Residential	48	41	48	42	49	42	50	43	60	55							N
13 Windorra Ave, Glenmore Park	GF	NCA 1	286342	6258231	Residential	45	39	45	39	46	39	47	40	60	55							N
13 Windorra Ave, Glenmore Park	F1	NCA 1	286342	6258231	Residential	47	40	47	41	48	41	49	42	60	55							N
22 Windorra Ave, Glenmore Park	GF	NCA 1	286337	6258136	Residential	45	38	45	38	46	39	47	40	60	55							N
22 Windorra Ave, Glenmore Park	F1	NCA 1	286337	6258136	Residential	46	40	46	40	47	41	49	42	60	55							N
24 Windorra Ave, Glenmore Park	GF	NCA 1	286322	6258122	Residential	42	36	43	37	43	37	45	38	60	55							N
24 Windorra Ave, Glenmore Park	F1	NCA 1	286322	6258122	Residential	44	38	45	38	45	39	47	40	60	55							N
26 Windorra Ave, Glenmore Park	GF	NCA 1	286297	6258118	Residential	43	37	43	37	44	38	45	39	60	55							N
28 Windorra Ave, Glenmore Park	GF	NCA 1	286277	6258121	Residential	43	37	44	37	45	39	46	40	60	55							N
30 Windorra Ave, Glenmore Park	GF	NCA 1	286259	6258124	Residential	43	37	44	37	45	39	46	40	60	55							N
32 Windorra Ave, Glenmore Park	GF	NCA 1	286242	6258126	Residential	43	37	44	37	45	39	46	40	60	55							N
4 Roseville Tce, Glenmore Park	GF	NCA 1	286321	6258287	Residential	45	39	45	39	46	39	47	40	60	55							N
4 Roseville Tce, Glenmore Park	F1	NCA 1	286321	6258287	Residential	48	41	48	42	49	43	50	44	60	55							N
6 Roseville Tce, Glenmore Park	GF	NCA 1	286306	6258285	Residential	44	37	44	38	45	39	46	40	60	55							N
2 Isca Pl, Glenmore Park	GF	NCA 1	286311	6258257	Residential	44	38	45	38	46	39	47	41	60	55							N
2 Isca Pl, Glenmore Park	F1	NCA 1	286311	6258257	Residential	47	41	47	41	49	42	50	43	60	55							N
8 Roseville Tce, Glenmore Park	GF	NCA 1	286270	6258276	Residential	50	43	50	44	50	44	51	44	60	55							N
8 Roseville Tce, Glenmore Park	F1	NCA 1	286270	6258276	Residential	51	45	51	45	52	45	53	46	60	55							N
3 Isca Pl, Glenmore Park	GF	NCA 1	286305	6258239	Residential	43	37	44	37	45	38	46	39	60	55							N
3 Isca Pl, Glenmore Park	F1	NCA 1	286305	6258239	Residential	46	40	47	40	48	42	49	43	60	55							N
4 Isca Pl, Glenmore Park	GF	NCA 1	286305	6258222	Residential	43	37	43	37	44	38	45	39	60	55							N
15 Windorra Ave Glenmore Park	GF	NCA 1	286341	6258211	Residential	44	38	45	38	45	39	46	40	60	55							N
15 Windorra Ave Glenmore Park	F1	NCA 1	286341	6258211	Residential	46	40	46	40	47	41	48	42	60	55							N
17 Windorra Ave, Glenmore Park	GF	NCA 1	286326	6258196	Residential	43	36	43	37	44	38	45	39	60	55							N
17 Windorra Ave, Glenmore Park	F1	NCA 1	286326	6258196	Residential	45	39	45	39	46	40	48	41	60	55							N
19 Windorra Ave, Glenmore Park	GF	NCA 1	286312	6258182	Residential	43	37	44	37	45	38	46	40	60	55							N
16 Glengarry Dr, Glenmore Park	GF	NCA 1	286206	6258273	Residential	44	38	44	38	47	40	48	41	60	55							N
16 Glengarry Dr, Glenmore Park	F1	NCA 1	286206	6258273	Residential	46	40	46	40	49	42	50	43	60	55							N
18 Glengarry Dr, Glenmore Park	GF	NCA 1	286212	6258255	Residential	44	38	44	38	45	39	46	40	60	55							N
20 Glengarry Dr, Glenmore Park	GF	NCA 1	286212	6258236	Residential	43	37	43	37	44	38	46	39	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
20 Glengarry Dr, Glenmore Park	F1	NCA 1	286212	6258236	Residential	46	40	46	40	48	42	49	43	60	55							N
22 Glengarry Dr, Glenmore Park	GF	NCA 1	286210	6258217	Residential	43	37	44	37	44	38	46	39	60	55							N
22 Glengarry Dr, Glenmore Park	F1	NCA 1	286210	6258217	Residential	45	39	46	39	47	40	48	42	60	55							N
24 Glengarry Dr, Glenmore Park	GF	NCA 1	286211	6258198	Residential	44	38	45	38	46	39	47	41	60	55							N
26 Glengarry Dr, Glenmore Park	GF	NCA 1	286209	6258181	Residential	43	37	44	37	45	38	46	39	60	55							N
26 Glengarry Dr, Glenmore Park	F1	NCA 1	286209	6258181	Residential	46	40	47	40	49	42	50	43	60	55							N
12 Roseville Tce, Glenmore Park	GF	NCA 1	286232	6258273	Residential	46	40	46	40	47	40	47	41	60	55							N
12 Roseville Tce, Glenmore Park	F1	NCA 1	286232	6258273	Residential	48	42	49	42	50	43	51	44	60	55							N
10 Roseville Tce, Glenmore Park	GF	NCA 1	286250	6258275	Residential	49	43	50	43	50	43	50	44	60	55							N
8 Isca Pl, Glenmore Park	GF	NCA 1	286255	6258248	Residential	44	38	45	38	46	40	47	41	60	55							N
8 Isca Pl, Glenmore Park	F1	NCA 1	286255	6258248	Residential	47	40	47	41	49	42	50	44	60	55							N
7 Isca Pl, Glenmore Park	GF	NCA 1	286245	6258227	Residential	45	38	45	39	46	40	47	41	60	55							N
7 Isca Pl, Glenmore Park	F1	NCA 1	286245	6258227	Residential	47	41	47	41	49	43	50	44	60	55							N
6 Isca Pl, Glenmore Park	GF	NCA 1	286253	6258209	Residential	44	38	44	38	46	39	47	40	60	55							N
7 Isca Pl_1, Glenmore Park	GF	NCA 1	286276	6258202	Residential	44	38	45	38	46	39	47	40	60	55							N
7 Isca Pl_1, Glenmore Park	F1	NCA 1	286276	6258202	Residential	47	40	47	41	49	42	50	43	60	55							N
27 Windorra Ave, Glenmore Park	GF	NCA 1	286235	6258179	Residential	43	37	43	37	44	38	45	39	60	55							N
25 Windorra Ave, Glenmore Park	GF	NCA 1	286255	6258175	Residential	43	37	43	37	44	37	45	39	60	55							N
23 Windorra Ave, Glenmore Park	GF	NCA 1	286273	6258173	Residential	43	37	43	37	45	38	46	40	60	55							N
21 Windorra Ave, Glenmore Park	GF	NCA 1	286294	6258169	Residential	43	37	43	37	44	38	45	39	60	55							N
21 Windorra Ave, Glenmore Park	F1	NCA 1	286294	6258169	Residential	46	39	46	40	47	41	48	42	60	55							N
36 Windorra Ave, Glenmore Park	GF	NCA 1	286207	6258132	Residential	43	36	43	37	44	38	46	39	60	55							N
36 Windorra Ave, Glenmore Park	F1	NCA 1	286207	6258132	Residential	45	39	46	39	47	41	48	42	60	55							N
34 Windorra Ave, Glenmore Park	GF	NCA 1	286227	6258127	Residential	43	37	43	37	45	38	46	40	60	55							N
2035-2037 The Northern Road_2, Glenmore	GF	NCA 1	286702	6258068	Garage / Shed	55	49	55	49	56	49	57	51	-	-							N
2029-2031 The Northern Road_2, Glenmore	GF	NCA 1	286727	6258145	Garage / Shed	52	46	53	46	54	47	55	49	-	-							N
2059 The Northern Road_2, Glenmore Park	GF	NCA 1	286721	6257855	Garage / Shed	56	49	56	50	56	50	58	51	-	-							N
2051-2053 The Northern Road, Glenmore Pa	GF	NCA 1	286713	6257881	Garage / Shed	56	49	56	50	57	50	58	51	-	-							N
2029-2031 The Northern Road_3, Glenmore	GF	NCA 1	286745	6258144	Garage / Shed	56	50	56	50	57	50	58	52	-	-							N
343 Bradley St, Glenmore Park	GF	NCA 1	286516	6257018	Residential	64	58	65	58	65	58	65	58	60	55	Y	Y					N
2051-2053 The Northern Road, Glenmore Pa	GF	NCA 1	286754	6257887	Residential	60	54	60	54	60	54	62	55	60	55							N
2059 The Northern Road_1, Glenmore Park	GF	NCA 1	286751	6257826	Residential	60	54	60	54	60	54	62	55	60	55							N
2021 The Northern Road_2, Glenmore Park	GF	NCA 1	286830	6258222	Residential	57	51	58	51	58	52	60	53	60	55							N
2029-2031 The Northern Road_1, Glenmore	GF	NCA 1	286746	6258121	Residential	57	51	57	51	58	51	59	53	60	55							N
2035-2037 The Northern Road_1, Glenmore	GF	NCA 1	286747	6258066	Residential	58	51	58	52	58	52	60	53	60	55							N
2021 The Northern Road_1, Glenmore Park	GF	NCA 1	286736	6258226	Residential	56	50	56	50	57	51	59	52	60	55							N
2023 The Northern Road_2, Glenmore Park	GF	NCA 1	286855	6258178	Garage / Shed	58	52	58	52	58	52	60	53	-	-							N
2023 The Northern Road_3, Glenmore Park	GF	NCA 1	286887	6258169	Garage / Shed	64	58	64	58	63	57	65	58	-	-							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2014 The Northern Road_2, Orchard Hills	GF	NCA 1	287169	6258185	Garage / Shed	56	50	56	50	58	52	60	53	-	-							N
2014 The Northern Road_2, Orchard Hills	F1	NCA 1	287169	6258185	Garage / Shed	58	52	58	52	60	53	61	55	-	-							N
2032 The Northern Road_2, Orchard Hills	GF	NCA 1	287133	6257989	Garage / Shed	55	49	55	49	57	50	59	52	-	-							N
2014 The Northern Road_1, Orchard Hills	GF	NCA 1	287169	6258144	Residential	56	50	57	51	59	52	60	53	60	55							N
66 Carolyn Chase_2, Orchard Hills	GF	NCA 1	287213	6258055	Garage / Shed	54	48	55	48	56	49	57	51	-	-							N
64 Carolyn Chase_2, Orchard Hills	GF	NCA 1	287280	6257964	Garage / Shed	53	47	53	47	55	48	56	50	-	-							N
55 Carolyn Chase_2, Orchard Hills	GF	NCA 1	287367	6257964	Garage / Shed	51	45	51	45	52	46	54	47	-	-							N
49 Carolyn Chase_2, Orchard Hills	GF	NCA 1	287401	6257996	Garage / Shed	49	43	50	44	51	45	53	46	-	-							N
49 Carolyn Chase_3, Orchard Hills	GF	NCA 1	287383	6257964	Garage / Shed	49	43	49	43	50	43	51	45	-	-							N
49 Carolyn Chase_4, Orchard Hills	GF	NCA 1	287460	6257919	Garage / Shed	49	43	50	43	51	44	52	46	-	-							N
12 Carolyn Chase_2, Orchard Hills	GF	NCA 1	287361	6258081	Garage / Shed	51	45	51	45	52	46	54	47	-	-							N
44 Carolyn Chase_2, Orchard Hills	GF	NCA 1	287489	6258021	Garage / Shed	50	44	51	44	52	45	53	47	-	-							N
70 Carolyn Chase Orchard Hills	GF	NCA 1	287255	6258127	Residential	53	47	53	47	55	48	56	50	60	55							N
66 Carolyn Chase_1, Orchard Hills	GF	NCA 1	287246	6258071	Residential	54	48	55	49	56	50	58	51	60	55							N
64 Carolyn Chase_1, Orchard Hills	GF	NCA 1	287282	6258002	Residential	53	47	54	48	55	48	56	50	60	55							N
55 Carolyn Chase_1, Orchard Hills	GF	NCA 1	287354	6257998	Residential	52	46	52	46	53	47	55	48	60	55							N
12 Carolyn Chase_1, Orchard Hills	GF	NCA 1	287330	6258103	Residential	53	47	53	47	54	48	56	49	60	55							N
30 Carolyn Chase Orchard Hills	GF	NCA 1	287405	6258084	Residential	51	45	51	45	52	46	54	47	60	55							N
42 Carolyn Chase Orchard Hills	GF	NCA 1	287508	6258114	Residential	51	45	52	46	53	47	54	48	60	55							N
44 Carolyn Chase_1, Orchard Hills	GF	NCA 1	287502	6258040	Residential	51	45	51	45	52	46	54	47	60	55							N
49 Carolyn Chase_1, Orchard Hills	GF	NCA 1	287430	6257987	Residential	48	42	49	43	50	44	52	45	60	55							N
20-32 Littlefields Rd_2, Luddenham	GF	NCA 2	285766	6252158	Garage / Shed	49	42	49	43	50	43	52	45	-	-							N
2825-2841 The Northern Road_1, Luddenham	GF	NCA 2	286293	6251011	Garage / Shed	49	42	49	43	50	43	52	45	-	-							N
35-41 Littlefields Rd_3, Luddenham	GF	NCA 2	285702	6252682	Garage / Shed	48	42	50	44	49	42	51	44	-	-							N
43-49 Littlefields Rd_3, Luddenham	GF	NCA 2	285657	6252721	Garage / Shed	47	40	48	42	48	41	50	43	-	-							N
51-57 Littlefields Rd_4, Mulgoa	GF	NCA 2	285581	6252710	Garage / Shed	49	42	49	44	50	43	52	45	-	-							N
51-57 Littlefields Rd_2, Mulgoa	GF	NCA 2	285540	6252735	Garage / Shed	48	42	49	43	49	43	52	45	-	-							N
73-79 Littlefields Rd_2, Mulgoa	GF	NCA 2	285368	6252797	Garage / Shed	49	45	51	47	49	45	51	47	-	-							N
73-79 Littlefields Rd_2, Mulgoa	F1	NCA 2	285368	6252797	Garage / Shed	51	46	53	49	51	46	53	49	-	-							N
43-49 Littlefields Rd_1, Luddenham	GF	NCA 2	285675	6252813	Garage / Shed	51	44	52	46	52	45	54	48	-	-							N
35-41 Littlefields Rd_1, Luddenham	GF	NCA 2	285717	6252795	Garage / Shed	51	44	52	46	52	45	55	48	-	-							N
35-41 Littlefields Rd_4, Luddenham	GF	NCA 2	285706	6252712	Garage / Shed	48	42	49	43	50	43	52	45	-	-							N
89-101 Littlefields Rd_2, Mulgoa	GF	NCA 2	285152	6252953	Garage / Shed	45	41	47	43	46	41	48	43	-	-							N
89-101 Littlefields Rd_3, Mulgoa	GF	NCA 2	285175	6252968	Garage / Shed	48	41	48	42	48	42	51	44	-	-							N
106-116 Vineyard Rd_2, Mulgoa	GF	NCA 2	285201	6253288	Garage / Shed	47	41	48	42	48	41	50	44	-	-							N
96-104 Vineyard Rd_2, Mulgoa	GF	NCA 2	285279	6253329	Garage / Shed	50	43	50	44	51	43	53	46	-	-							N
86-94 Vineyard Rd_2, Mulgoa	GF	NCA 2	285408	6253423	Garage / Shed	54	47	54	48	54	47	56	49	-	-							N
66-74 Vineyard Rd_4, Mulgoa	GF	NCA 2	285273	6253625	Garage / Shed	48	42	49	43	49	42	51	44	-	-							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
66-74 Vineyard Rd_3, Mulgoa	GF	NCA 2	285248	6253680	Garage / Shed	49	42	49	43	49	42	51	44	-	-							N
66-74 Vineyard Rd_2, Mulgoa	GF	NCA 2	285289	6253665	Garage / Shed	49	42	49	43	49	42	51	44	-	-							N
1 Longview Rd_2, Mulgoa	GF	NCA 2	285422	6253976	Garage / Shed	53	46	54	47	54	47	56	49	-	-							N
1 Longview Rd_3, Mulgoa	GF	NCA 2	285386	6254005	Garage / Shed	54	47	55	48	55	48	57	50	-	-							N
23-33 Longview Rd_2, Mulgoa	GF	NCA 2	285308	6254039	Garage / Shed	53	46	54	47	54	47	56	50	-	-							N
20-32 Kings Hill Rd_2, Mulgoa	GF	NCA 2	285279	6254222	Garage / Shed	51	44	52	46	52	45	54	48	-	-							N
2 Kings Hill Rd_2, Mulgoa	GF	NCA 2	285401	6254257	Garage / Shed	54	48	55	49	55	48	57	50	-	-							N
1 Kings Hill Rd_2, Mulgoa	GF	NCA 2	285364	6254399	Garage / Shed	55	48	56	49	56	49	58	51	-	-							N
33-41 Kings Hill Rd_2, Mulgoa	GF	NCA 2	285236	6254419	Garage / Shed	52	45	52	46	52	46	54	47	-	-							N
4 Grover Cr_2, Mulgoa	GF	NCA 2	285416	6254625	Garage / Shed	53	46	53	47	53	46	55	48	-	-							N
5 Grover Cr_2, Mulgoa	GF	NCA 2	285415	6254601	Garage / Shed	53	46	53	47	53	46	55	48	-	-							N
3 Grover Cr_3, Mulgoa	GF	NCA 2	285421	6254734	Garage / Shed	52	45	52	46	53	46	55	48	-	-							N
55 Kings Hill Rd_3, Mulgoa	GF	NCA 2	284989	6254565	Garage / Shed	45	39	46	40	47	40	49	42	-	-							N
43 Kings Hill Rd_4, Mulgoa	GF	NCA 2	285187	6254577	Garage / Shed	49	43	50	44	50	43	52	46	-	-							N
43 Kings Hill Rd_3, Mulgoa	GF	NCA 2	285178	6254588	Garage / Shed	48	41	48	42	49	42	51	44	-	-							N
45 Kings Hill Rd_2, Mulgoa	GF	NCA 2	285156	6254550	Garage / Shed	48	42	49	43	49	43	51	45	-	-							N
45 Kings Hill Rd_4, Mulgoa	GF	NCA 2	285154	6254524	Garage / Shed	49	42	50	43	50	43	52	45	-	-							N
45 Kings Hill Rd_3, Mulgoa	GF	NCA 2	285141	6254542	Garage / Shed	44	38	45	39	45	38	47	40	-	-							N
43 Kings Hill Rd_5, Mulgoa	GF	NCA 2	285199	6254662	Garage / Shed	47	41	48	42	49	42	51	44	-	-							N
55 Kings Hill Rd_2, Mulgoa	GF	NCA 2	285012	6254549	Garage / Shed	47	40	48	41	48	41	50	43	-	-							N
53 Kings Hill Rd_2, Mulgoa	GF	NCA 2	285053	6254642	Garage / Shed	47	41	48	42	48	42	50	44	-	-							N
4 Grover Cr_3, Mulgoa	GF	NCA 2	285366	6254658	Garage / Shed	50	44	51	45	51	44	53	46	-	-							N
43 Kings Hill Rd_2, Mulgoa	GF	NCA 2	285173	6254717	Garage / Shed	46	39	47	40	47	40	49	42	-	-							N
3 Grover Cr_2, Mulgoa	GF	NCA 2	285439	6254754	Garage / Shed	50	43	51	44	51	44	53	46	-	-							N
1 Grover Cr_4, Mulgoa	GF	NCA 2	285471	6254858	Garage / Shed	51	45	52	46	53	46	55	48	-	-							N
2367-2371 The Northern Road_2, Mulgoa	GF	NCA 2	285534	6255100	Garage / Shed	51	44	51	45	52	45	54	47	-	-							N
34 Chain-O-Ponds Rd_2, Mulgoa	GF	NCA 2	285387	6255208	Garage / Shed	50	43	50	44	51	44	53	46	-	-							N
35-53 Chain-O-Ponds Rd_3, Mulgoa	GF	NCA 2	285286	6255581	Garage / Shed	47	41	48	42	49	42	51	44	-	-							N
35-53 Chain-O-Ponds Rd_2, Mulgoa	GF	NCA 2	285290	6255602	Garage / Shed	47	41	48	42	48	42	50	44	-	-							N
55 Chain-O-Ponds Rd_2, Mulgoa	GF	NCA 2	285271	6255620	Garage / Shed	45	39	46	40	46	39	48	41	-	-							N
55 Chain-O-Ponds Rd_1, Mulgoa	GF	NCA 2	285247	6255597	Garage / Shed	45	38	46	40	46	39	48	41	-	-							N
2205 The Northern Road_4, Mulgoa	GF	NCA 2	286061	6256294	Garage / Shed	51	45	52	46	52	45	54	47	-	-							N
2205 The Northern Road_5, Mulgoa	GF	NCA 2	286073	6256299	Garage / Shed	52	45	52	46	53	46	55	48	-	-							N
2205 The Northern Road_2, Mulgoa	GF	NCA 2	286041	6256323	Garage / Shed	51	45	52	46	53	46	55	48	-	-							N
2205 The Northern Road_1, Mulgoa	GF	NCA 2	286020	6256349	Garage / Shed	50	43	51	44	52	45	54	47	-	-							N
2205 The Northern Road_3, Mulgoa	GF	NCA 2	285986	6256334	Garage / Shed	49	43	50	44	51	44	53	46	-	-							N
51-57 Littlefields Rd_3, Mulgoa	GF	NCA 2	285521	6252725	Garage / Shed	49	45	52	47	49	45	52	47	-	-							N
3 Chain-O-Ponds Rd_2, Mulgoa	GF	NCA 2	285602	6255450	Garage / Shed	53	46	53	47	54	47	56	49	-	-							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
Galaxy Rd_3, Luddenham	GF	NCA 2	286042	6251261	Garage / Shed	48	41	48	42	49	42	51	44	-	-							N
34 Chain-O-Ponds Rd_3, Mulgoa	GF	NCA 2	285344	6255265	Garage / Shed	45	38	46	39	46	39	48	42	-	-							N
34 Chain-O-Ponds Rd_4, Mulgoa	GF	NCA 2	285400	6255231	Garage / Shed	50	43	50	44	51	44	53	46	-	-							N
34 Chain-O-Ponds Rd_5, Mulgoa	GF	NCA 2	285366	6255217	Garage / Shed	47	40	47	41	48	41	50	43	-	-							N
34 Chain-O-Ponds Rd_6, Mulgoa	GF	NCA 2	285341	6255202	Garage / Shed	47	41	48	42	49	42	51	44	-	-							N
34 Chain-O-Ponds Rd_7, Mulgoa	GF	NCA 2	285355	6255202	Garage / Shed	47	41	48	42	49	42	51	44	-	-							N
34 Chain-O-Ponds Rd_8, Mulgoa	GF	NCA 2	285389	6255185	Garage / Shed	50	43	50	44	51	44	53	46	-	-							N
2 Chain-O-Ponds Rd_2, Mulgoa	GF	NCA 2	285498	6255289	Garage / Shed	52	45	53	46	53	46	55	48	-	-							N
48 Chain-O-Ponds Rd_2, Mulgoa	GF	NCA 2	285187	6255150	Garage / Shed	46	39	46	40	47	40	49	43	-	-							N
53 Kings Hill Rd_3, Mulgoa	GF	NCA 2	285054	6254756	Garage / Shed	47	40	47	41	48	41	50	44	-	-							N
53 Kings Hill Rd_4, Mulgoa	GF	NCA 2	285037	6254772	Garage / Shed	46	39	46	40	47	40	49	42	-	-							N
2567-2573 The Northern Road_4, Mulgoa	GF	NCA 2	285441	6253073	Garage / Shed	50	43	51	44	51	44	53	46	-	-							N
20-32 Littlefields Rd_1, Luddenham	GF	NCA 2	285771	6252206	Residential	53	46	53	47	54	47	56	49	60	55							N
2681The Northern Road, Luddenham	GF	NCA 2	285810	6251932	Residential	50	43	50	44	51	44	53	46	60	55							N
2761-2783 The Northern Road, Luddenham	GF	NCA 2	286352	6251334	Residential	51	44	52	45	52	46	54	47	60	55							N
35-41 Littlefields Rd_2, Luddenham	GF	NCA 2	285705	6252595	Residential	54	48	56	50	54	48	56	50	60	55							N
29-33 Littlefields Rd, Luddenham	GF	NCA 2	285759	6252593	Residential	53	46	55	48	53	46	55	49	60	55							N
43-49 Littlefields Rd_2, Luddenham	GF	NCA 2	285612	6252691	Residential	50	44	52	46	50	44	52	46	60	55							N
51-57 Littlefields Rd_1, Mulgoa	GF	NCA 2	285563	6252690	Residential	52	47	54	49	52	47	54	49	60	55							N
67-71 Littlefields Rd_1, Mulgoa	GF	NCA 2	285429	6252740	Residential	54	50	56	52	54	50	56	52	60	55							N
67-71 Littlefields Rd_1, Mulgoa	F1	NCA 2	285429	6252740	Residential	56	51	58	54	56	51	58	54	60	55							N
73-79 Littlefields Rd_1, Mulgoa	GF	NCA 2	285364	6252759	Residential	58	54	60	56	58	54	60	56	60	55							N
73-79 Littlefields Rd_1, Mulgoa	F1	NCA 2	285364	6252759	Residential	59	55	62	57	59	55	62	58	60	55							N
59-65 Littlefields Rd, Mulgoa	GF	NCA 2	285513	6252873	Residential	49	42	49	43	50	43	52	45	60	55							N
81-87 Littlefields Rd, Mulgoa	GF	NCA 2	285276	6252942	Residential	49	43	50	44	50	43	52	45	60	55							N
81-87 Littlefields Rd, Mulgoa	F1	NCA 2	285276	6252942	Residential	50	44	51	45	51	44	53	46	60	55							N
96-104 Vineyard Rd_1, Mulgoa	GF	NCA 2	285276	6253304	Residential	50	43	50	44	51	44	53	46	60	55							N
89-101 Littlefields Rd_1, Mulgoa	GF	NCA 2	285179	6252939	Residential	47	42	48	44	48	42	50	44	60	55							N
1 Vineyard Rd, Mulgoa	GF	NCA 2	285131	6253137	Residential	46	39	47	40	47	40	49	43	60	55							N
106-116 Vineyard Rd_1, Mulgoa	GF	NCA 2	285228	6253246	Residential	48	42	49	43	50	43	52	45	60	55							N
86-94 Vineyard Rd_1, Mulgoa	GF	NCA 2	285391	6253392	Residential	52	45	53	47	53	46	55	48	60	55							N
66-74 Vineyard Rd_1, Mulgoa	GF	NCA 2	285265	6253650	Residential	48	41	49	42	49	42	51	44	60	55							N
2A Longview Rd, Mulgoa	GF	NCA 2	285412	6253919	Residential	54	47	55	49	55	48	57	50	60	55							N
2A Longview Rd, Mulgoa	F1	NCA 2	285412	6253919	Residential	55	49	56	50	56	49	58	51	60	55							N
46-54 Vineyard Rd, Mulgoa	GF	NCA 2	285248	6253803	Residential	51	44	52	45	52	45	54	47	60	55							N
1 Vineyard Rd_1, Mulgoa	GF	NCA 2	285152	6253901	Residential	51	44	52	45	52	45	54	47	60	55							N
1 Vineyard Rd_2, Mulgoa	GF	NCA 2	285140	6253923	Residential	49	43	50	44	51	44	53	46	60	55							N
36-44 Vineyard Rd, Mulgoa	GF	NCA 2	285271	6253930	Residential	52	46	53	47	53	47	56	49	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
36-44 Vineyard Rd, Mulgoa	F1	NCA 2	285271	6253930	Residential	53	47	54	48	54	48	57	50	60	55							N
1 Longview Rd_1, Mulgoa	GF	NCA 2	285446	6253991	Residential	56	50	57	51	57	50	59	53	60	55							N
23-33 Longview Rd_1, Mulgoa	GF	NCA 2	285275	6254035	Residential	51	44	52	45	52	46	54	48	60	55							N
20-32 Kings Hill Rd_1, Mulgoa	GF	NCA 2	285309	6254254	Residential	54	47	54	48	54	47	57	50	60	55							N
2465-2475 The Northern Road, Mulgoa	GF	NCA 2	285407	6254164	Residential	56	49	56	50	56	49	58	52	60	55							N
2 Kings Hill Rd_1, Mulgoa	GF	NCA 2	285431	6254274	Residential	59	52	60	53	57	50	59	53	60	55							N
1 Kings Hill Rd_1, Mulgoa	GF	NCA 2	285355	6254381	Residential	55	49	56	49	56	49	58	51	60	55							N
33-41 Kings Hill Rd_1, Mulgoa	GF	NCA 2	285202	6254410	Residential	52	46	54	47	52	46	53	47	60	55							N
45 Kings Hill Rd_1, Mulgoa	GF	NCA 2	285139	6254506	Residential	49	42	49	43	50	43	52	45	60	55							N
55 Kings Hill Rd_1, Mulgoa	GF	NCA 2	285000	6254518	Residential	48	41	49	42	48	42	50	44	60	55							N
53 Kings Hill Rd_1, Mulgoa	GF	NCA 2	285044	6254712	Residential	47	40	48	41	48	41	50	43	60	55							N
43 Kings Hill Rd_1, Mulgoa	GF	NCA 2	285119	6254697	Residential	48	41	49	42	49	43	52	45	60	55							N
2373-2379_1 The Northern Road, Mulgoa	GF	NCA 2	285510	6255012	Residential	51	44	52	46	53	46	55	48	60	55							N
2 Chain-O-Ponds Rd_1, Mulgoa	GF	NCA 2	285484	6255312	Residential	51	45	52	46	53	46	55	48	60	55							N
34 Chain-O-Ponds Rd_1, Mulgoa	GF	NCA 2	285380	6255267	Residential	49	42	49	43	50	43	52	45	60	55							N
3 Chain-O-Ponds Rd_1, Mulgoa	GF	NCA 2	285555	6255388	Residential	53	46	54	47	54	47	56	49	60	55							N
35-53 Chain-O-Ponds Rd_1, Mulgoa	GF	NCA 2	285344	6255494	Residential	49	42	50	43	50	43	52	46	60	55							N
2205 The Northern Road_6, Mulgoa	GF	NCA 2	286089	6256268	Residential	54	47	55	48	56	49	58	51	60	55							N
34-48 Littlefields Rd, Luddenham	GF	NCA 2	285602	6252324	Residential	49	43	50	44	50	43	52	45	60	55							N
67-71 Littlefields Rd_2, Mulgoa	GF	NCA 2	285399	6252749	Residential	55	51	57	53	55	51	58	53	60	55							N
48 Chain-O-Ponds Rd_1, Mulgoa	GF	NCA 2	285190	6255188	Residential	46	39	46	40	47	40	49	42	60	55							N
63 Kings Hill Rd_1, Mulgoa	GF	NCA 2	284970	6254658	Residential	46	39	47	40	47	40	49	42	60	55							N
Horse N Around_3, Mulgoa	GF	NCA 2	285943	6252554	Commercial	55	48	56	50	56	49	58	52	-	-							N
Horse N Around_2, Mulgoa	GF	NCA 2	285981	6252560	Commercial	60	53	60	54	62	55	64	57	-	-							N
Horse N Around_1, Mulgoa	GF	NCA 2	285967	6252525	Commercial	58	52	59	53	60	53	62	55	-	-							N
Horse N Around_1, Mulgoa	F1	NCA 2	285967	6252525	Commercial	60	53	61	55	62	55	64	58	-	-							N
2594-2776 The Northern Road_3, Luddenham	GF	NCA 2	286214	6252442	Garage / Shed	57	50	57	51	57	50	60	53	-	-							N
2-18 Littlefields Rd_2, Luddenham	GF	NCA 2	286017	6252306	Garage / Shed	56	50	57	51	58	51	60	53	-	-							N
2539-2547 The Northern Road_2, Mulgoa	GF	NCA 2	285581	6253409	Garage / Shed	64	57	65	59	64	57	66	59	-	-			Y				N
2519-2527 The Northern Road_2, Mulgoa	GF	NCA 2	285494	6253595	Garage / Shed	57	50	57	51	57	50	59	52	-	-							N
2509-2517 The Northern Road_1, Mulgoa	GF	NCA 2	285485	6253671	Garage / Shed	55	48	56	49	55	48	57	50	-	-							N
2497-2507 The Northern Road_3, Mulgoa	GF	NCA 2	285519	6253804	Garage / Shed	61	54	62	55	59	52	61	54	-	-							N
2497-2507 The Northern Road_2, Mulgoa	GF	NCA 2	285505	6253804	Garage / Shed	52	45	53	46	52	45	54	47	-	-							N
2 Longview Rd_2, Mulgoa	GF	NCA 2	285472	6253870	Garage / Shed	54	47	54	48	53	46	55	48	-	-							N
7 Grover Cr_2, Mulgoa	GF	NCA 2	285522	6254420	Garage / Shed	58	51	58	52	57	50	59	52	-	-							N
7 Grover Cr_3, Mulgoa	GF	NCA 2	285541	6254386	Garage / Shed	59	52	59	53	58	51	60	53	-	-							N
2 Grover Cr_2, Mulgoa	GF	NCA 2	285511	6254766	Garage / Shed	56	50	57	51	57	50	59	52	-	-							N
1 Grover Cr_2, Mulgoa	GF	NCA 2	285575	6254843	Garage / Shed	57	51	58	52	58	51	60	54	-	-							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
1 Grover Cr_3, Mulgoa	GF	NCA 2	285585	6254857	Garage / Shed	58	51	59	53	59	52	61	54	-	-							N
2381 The Northern Road_2, Mulgoa	GF	NCA 2	285574	6254939	Garage / Shed	55	48	55	49	56	49	58	51	-	-							N
2373-2379_3 The Northern Road, Mulgoa	GF	NCA 2	285638	6255003	Garage / Shed	62	55	62	56	62	55	64	57	-	-							N
2373-2379_2 The Northern Road, Mulgoa	GF	NCA 2	285616	6255000	Garage / Shed	57	50	57	51	58	51	59	53	-	-							N
2351-2357 The Northern Road_2, Mulgoa	GF	NCA 2	285664	6255209	Garage / Shed	57	50	58	51	57	50	59	52	-	-							N
2351-2357 The Northern Road_1, Mulgoa	GF	NCA 2	285684	6255204	Garage / Shed	61	54	62	55	61	54	63	56	-	-							N
2351-2357 The Northern Road_5, Mulgoa	GF	NCA 2	285627	6255166	Garage / Shed	55	48	55	49	56	49	58	51	-	-							N
2351-2357 The Northern Road_3, Mulgoa	GF	NCA 2	285679	6255169	Garage / Shed	60	54	61	55	60	53	62	55	-	-							N
2329-2335 The Northern Road_2, Mulgoa	GF	NCA 2	285735	6255365	Garage / Shed	62	55	62	56	61	54	63	56	-	-							N
2319-2327 The Northern Road_3, Mulgoa	GF	NCA 2	285755	6255480	Garage / Shed	57	50	57	51	57	50	59	52	-	-							N
2319-2327 The Northern Road_2, Mulgoa	GF	NCA 2	285780	6255452	Garage / Shed	59	52	60	53	59	52	61	54	-	-							N
2297-2307 The Northern Road_3, Mulgoa	GF	NCA 2	285934	6255624	Garage / Shed	62	56	63	57	62	55	63	57	-	-							N
2289-2293 The Northern Road_2, Mulgoa	GF	NCA 2	285944	6255702	Garage / Shed	58	51	58	52	57	50	59	52	-	-							N
2297-2307 The Northern Road_1, Mulgoa	GF	NCA 2	285943	6255656	Garage / Shed	59	52	60	53	58	51	60	53	-	-							N
2265 The Northern Road_1, Mulgoa	GF	NCA 2	286045	6255960	Garage / Shed	58	52	59	53	59	52	61	54	-	-							N
2265 The Northern Road_3, Mulgoa	GF	NCA 2	286053	6255910	Garage / Shed	62	55	62	56	61	54	63	56	-	-							N
2309-2317 The Northern Road_3, Mulgoa	GF	NCA 2	285900	6255515	Garage / Shed	66	60	67	61	64	57	65	59	-	-			Y				N
2309-2317 The Northern Road_2, Mulgoa	GF	NCA 2	285905	6255521	Garage / Shed	66	60	67	61	64	57	65	59	-	-			Y				N
8 Grover Cr_2, Mulgoa	GF	NCA 2	285590	6254731	Garage / Shed	66	59	67	60	65	58	67	60	-	-			Y	Y			N
1 Gates Rd_2, Mulgoa	GF	NCA 2	285815	6253181	Garage / Shed	57	50	57	51	58	51	60	53	-	-							N
2581 The Northern Road_2, Luddenham	GF	NCA 2	285781	6253008	Garage / Shed	65	58	65	59	67	60	69	62	-	-			Y	Y			N
2651 The Northern Road_3, Mulgoa	GF	NCA 2	285620	6253237	Garage / Shed	62	55	62	56	63	56	65	58	-	-			Y				N
2567-2573 The Northern Road_3, Mulgoa	GF	NCA 2	285529	6253050	Garage / Shed	52	45	53	47	54	47	56	49	-	-							N
2381 The Northern Road_3, Mulgoa	GF	NCA 2	285626	6254926	Garage / Shed	62	55	62	56	62	54	63	56	-	-							N
2 Grover Cr_3, Mulgoa	GF	NCA 2	285505	6254777	Garage / Shed	47	41	48	42	48	41	50	43	-	-							N
8 Grover Cr_3, Mulgoa	GF	NCA 2	285571	6254688	Garage / Shed	64	57	64	58	63	56	65	58	-	-			Y				N
2 Grover Cr_4, Mulgoa	GF	NCA 2	285466	6254777	Garage / Shed	54	47	54	48	54	48	57	50	-	-							N
4 Grover Cr_5, Mulgoa	GF	NCA 2	285447	6254672	Garage / Shed	52	46	53	47	53	46	55	48	-	-							N
2751 The Northern Road_1, Luddenham	GF	NCA 2	286514	6251590	Garage / Shed	59	53	60	54	61	53	62	55	-	-							N
2289-2293 The Northern Road_1, Mulgoa	GF	NCA 2	285915	6255712	Garage / Shed	54	47	55	48	55	48	57	50	-	-							N
2297-2307 The Northern Road_3, Mulgoa	GF	NCA 2	285896	6255655	Garage / Shed	57	50	57	51	57	50	59	52	-	-							N
2297-2307 The Northern Road_5, Mulgoa	GF	NCA 2	285894	6255643	Garage / Shed	57	50	58	51	57	50	59	52	-	-							N
2337-2339 The Northern Road_2, Mulgoa	GF	NCA 2	285717	6255336	Garage / Shed	57	50	58	51	57	50	59	52	-	-							N
5 Grover Cr_3, Mulgoa	GF	NCA 2	285473	6254571	Garage / Shed	56	50	57	51	57	50	59	52	-	-							N
6 Grover Cr_2, Mulgoa	GF	NCA 2	285500	6254489	Garage / Shed	56	50	57	51	57	50	59	52	-	-							N
Power Station 2552 The Northern Road	GF	NCA 2	285707	6253299	Industrial	63	56	64	58	65	58	67	61	-	-			Y	Y			N
2042-2550 The Northern Road_28, Orchard	GF	NCA 2	286452	6256242	Military	61	54	62	55	61	54	63	56	-	-							N
2042-2550 The Northern Road_26, Orchard	GF	NCA 2	286478	6256277	Military	58	52	59	52	59	52	61	54	-	-							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2042-2550 The Northern Road_29, Orchard	GF	NCA 2	286457	6256217	Military	58	51	58	52	59	52	61	54	-	-							N
2042-2550 The Northern Road_48, Orchard	GF	NCA 2	286454	6256263	Military	61	54	62	55	61	54	63	57	-	-							N
2042-2550 The Northern Road_12, Orchard	GF	NCA 2	286459	6256300	Military	68	61	69	62	67	60	69	62	-	-			Y	Y			N
2042-2550 The Northern Road_50, Orchard	GF	NCA 2	286417	6256244	Military	66	60	67	61	66	59	68	61	-	-			Y	Y			N
2594-2776 The Northern Road_1, Luddenham	GF	NCA 2	286162	6252436	Residential	60	54	61	55	60	53	62	55	60	55							N
2539-2547 The Northern Road_1, Mulgoa	GF	NCA 2	285562	6253436	Residential	61	54	61	55	61	54	63	56	60	55							N
2519-2527 The Northern Road_1, Mulgoa	GF	NCA 2	285532	6253635	Residential	62	55	62	56	61	54	63	56	60	55							N
2509-2517 The Northern Road_2, Mulgoa	GF	NCA 2	285541	6253671	Residential	61	54	61	55	61	54	63	56	60	55							N
2497-2507 The Northern Road_1, Mulgoa	GF	NCA 2	285531	6253840	Residential	64	57	64	58	62	55	64	57	60	55							N
2 Longview Rd_1, Mulgoa	GF	NCA 2	285503	6253916	Residential	58	51	59	53	58	51	60	53	60	55							N
7 Grover Cr_1, Mulgoa	GF	NCA 2	285555	6254397	Residential	63	56	64	57	62	55	64	57	60	55							N
6 Grover Cr_1, Mulgoa	GF	NCA 2	285509	6254507	Residential	59	52	60	54	59	52	61	54	60	55							N
5 Grover Cr_1, Mulgoa	GF	NCA 2	285471	6254587	Residential	56	49	57	51	56	49	58	52	60	55							N
4 Grover Cr_1, Mulgoa	GF	NCA 2	285467	6254636	Residential	57	50	57	51	57	50	59	52	60	55							N
4 Grover Cr_4, Mulgoa	GF	NCA 2	285462	6254657	Residential	56	49	56	50	56	49	58	52	60	55							N
3 Grover Cr_1, Mulgoa	GF	NCA 2	285466	6254729	Residential	55	49	56	50	56	49	58	51	60	55							N
1 Grover Cr_1, Mulgoa	GF	NCA 2	285549	6254822	Residential	56	50	57	51	58	51	60	53	60	55							N
2 Grover Cr_1, Mulgoa	GF	NCA 2	285521	6254781	Residential	57	50	57	51	57	51	59	53	60	55							N
2381 The Northern Road_1, Mulgoa	GF	NCA 2	285616	6254919	Residential	60	54	61	55	60	53	62	55	60	55							N
2367-2371 The Northern Road_1, Mulgoa	GF	NCA 2	285576	6255077	Residential	54	47	55	49	56	49	58	51	60	55							N
2337-2339 The Northern Road_1, Mulgoa	GF	NCA 2	285730	6255333	Residential	62	56	63	57	62	55	64	57	60	55							N
2329-2335 The Northern Road_1, Mulgoa	GF	NCA 2	285759	6255381	Residential	63	56	63	57	62	55	64	57	60	55							N
2319-2327 The Northern Road_1, Mulgoa	GF	NCA 2	285802	6255437	Residential	63	56	63	57	62	55	64	57	60	55							N
2285 The Northern Road, Mulgoa	GF	NCA 2	286008	6255767	Residential	63	57	64	58	62	55	64	57	60	55							N
2265 The Northern Road_2, Mulgoa	GF	NCA 2	286046	6255940	Residential	59	53	60	54	60	53	62	55	60	55							N
2277-2283 The Northern Road, Mulgoa	GF	NCA 2	286026	6255841	Residential	57	50	57	51	55	48	57	50	60	55							N
8 Grover Cr_1, Mulgoa	GF	NCA 2	285563	6254706	Residential	60	53	61	54	60	53	62	55	60	55							N
2594-2776 The Northern Road_2, Luddenham	GF	NCA 2	286257	6252490	Garage / Shed	55	49	56	50	56	49	58	51	-	-							N
2594-2776 The Northern Road_5, Luddenham	GF	NCA 2	286774	6251927	Garage / Shed	53	46	53	47	55	48	57	50	-	-							N
2594-2776 The Northern Road_6, Luddenham	GF	NCA 2	286780	6251967	Garage / Shed	50	43	50	44	52	45	54	47	-	-							N
22-40 Gates Rd_2, Luddenham	GF	NCA 2	286094	6253077	Garage / Shed	54	48	55	49	55	48	57	51	-	-							N
51 Gates Rd_2, Luddenham	GF	NCA 2	286286	6253257	Garage / Shed	48	41	48	42	49	42	51	45	-	-							N
51 Gates Rd_3, Luddenham	GF	NCA 2	286293	6253209	Garage / Shed	47	40	47	41	48	41	50	44	-	-							N
63-73 Gates Rd_2, Luddenham	GF	NCA 2	286395	6253276	Garage / Shed	45	38	46	40	47	40	49	42	-	-							N
42-56 Gates Rd_2, Mulgoa	GF	NCA 2	286204	6253049	Garage / Shed	51	44	52	45	52	45	54	47	-	-							N
17-31 Gates Rd_3, Mulgoa	GF	NCA 2	286006	6253201	Garage / Shed	54	47	54	48	55	48	57	51	-	-							N
22-40 Gates Rd_3, Mulgoa	GF	NCA 2	286128	6253091	Garage / Shed	51	44	51	45	52	45	54	47	-	-							N
2042-2550 The Northern Road_1, Orchard H	GF	NCA 2	287034	6256419	Military	52	45	52	46	53	46	55	48	-	-							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2042-2550 The Northern Road_2, Orchard H	GF	NCA 2	286992	6256312	Military	51	44	51	45	52	45	54	47	-	-							N
2042-2550 The Northern Road_3, Orchard H	GF	NCA 2	287073	6256301	Military	46	40	47	41	48	41	50	43	-	-							N
2042-2550 The Northern Road_5, Orchard H	GF	NCA 2	286859	6256328	Military	53	46	53	47	54	47	56	49	-	-							N
2042-2550 The Northern Road_10, Orchard	GF	NCA 2	286630	6256316	Military	56	50	57	51	57	50	59	52	-	-							N
2042-2550 The Northern Road_11, Orchard	GF	NCA 2	286665	6256328	Military	56	49	56	50	57	50	59	52	-	-							N
2042-2550 The Northern Road_6, Orchard H	GF	NCA 2	286622	6256346	Military	58	51	58	52	58	51	60	53	-	-							N
2042-2550 The Northern Road_7, Orchard H	GF	NCA 2	286643	6256322	Military	54	47	54	48	54	47	56	50	-	-							N
2042-2550 The Northern Road_9, Orchard H	GF	NCA 2	286652	6256301	Military	50	43	51	44	51	44	53	46	-	-							N
2042-2550 The Northern Road_8, Orchard H	GF	NCA 2	286695	6256310	Military	54	47	54	48	55	48	57	50	-	-							N
2042-2550 The Northern Road_18, Orchard	GF	NCA 2	286706	6256250	Military	52	46	53	47	54	47	56	49	-	-							N
2042-2550 The Northern Road_19, Orchard	GF	NCA 2	286704	6256228	Military	47	40	47	41	48	41	50	43	-	-							N
2042-2550 The Northern Road_16, Orchard	GF	NCA 2	286684	6256229	Military	52	46	53	47	54	47	56	49	-	-							N
2042-2550 The Northern Road_13, Orchard	GF	NCA 2	286531	6256214	Military	57	50	57	51	58	51	60	53	-	-							N
2042-2550 The Northern Road_14, Orchard	GF	NCA 2	286491	6256205	Military	55	49	56	50	56	50	59	52	-	-							N
2042-2550 The Northern Road_15, Orchard	GF	NCA 2	286576	6256183	Military	55	48	55	49	56	49	58	51	-	-							N
2042-2550 The Northern Road_57, Orchard	GF	NCA 2	286513	6256162	Military	56	49	56	50	57	50	59	52	-	-							N
2042-2550 The Northern Road_55, Orchard	GF	NCA 2	286537	6256171	Military	53	47	54	48	55	48	57	50	-	-							N
2042-2550 The Northern Road_60, Orchard	GF	NCA 2	286542	6256190	Military	53	46	54	47	54	47	56	49	-	-							N
2042-2550 The Northern Road_30, Orchard	GF	NCA 2	286535	6256155	Military	51	45	52	45	52	45	54	48	-	-							N
2042-2550 The Northern Road_46, Orchard	GF	NCA 2	286642	6256180	Military	55	48	56	49	56	49	58	51	-	-							N
2042-2550 The Northern Road_40, Orchard	GF	NCA 2	286578	6256129	Military	53	47	54	48	54	47	56	50	-	-							N
2042-2550 The Northern Road_39, Orchard	GF	NCA 2	286572	6256098	Military	54	47	54	48	55	48	57	50	-	-							N
2042-2550 The Northern Road_41, Orchard	GF	NCA 2	286535	6256143	Military	54	47	54	48	55	48	57	50	-	-							N
2042-2550 The Northern Road_43, Orchard	GF	NCA 2	286598	6256091	Military	48	41	48	42	49	42	51	44	-	-							N
2042-2550 The Northern Road_42, Orchard	GF	NCA 2	286549	6256040	Military	51	44	51	45	51	45	53	47	-	-							N
2042-2550 The Northern Road_38, Orchard	GF	NCA 2	286575	6256014	Military	47	40	47	41	48	41	50	43	-	-							N
2042-2550 The Northern Road_34, Orchard	GF	NCA 2	286537	6256021	Military	49	43	50	44	51	44	53	46	-	-							N
2042-2550 The Northern Road_33, Orchard	GF	NCA 2	286514	6256072	Military	54	48	55	49	56	49	58	51	-	-							N
2042-2550 The Northern Road_35, Orchard	GF	NCA 2	286512	6256064	Military	54	47	55	48	55	48	57	51	-	-							N
2042-2550 The Northern Road_37, Orchard	GF	NCA 2	286510	6256056	Military	53	47	54	48	55	48	57	50	-	-							N
2042-2550 The Northern Road_36, Orchard	GF	NCA 2	286508	6256049	Military	53	46	54	47	54	48	56	50	-	-							N
2042-2550 The Northern Road_22, Orchard	GF	NCA 2	286492	6256015	Military	49	43	50	44	51	44	53	46	-	-							N
2042-2550 The Northern Road_20, Orchard	GF	NCA 2	286458	6256042	Military	56	49	57	50	57	50	59	52	-	-							N
2042-2550 The Northern Road_21, Orchard	GF	NCA 2	286473	6256058	Military	56	49	57	50	57	50	59	52	-	-							N
2042-2550 The Northern Road_49, Orchard	GF	NCA 2	286481	6256020	Military	52	46	53	47	54	47	56	49	-	-							N
2042-2550 The Northern Road_45, Orchard	GF	NCA 2	286482	6256028	Military	53	46	54	47	54	47	56	49	-	-							N
2042-2550 The Northern Road_44, Orchard	GF	NCA 2	286453	6255903	Military	49	42	49	43	50	43	52	45	-	-							N
2042-2550 The Northern Road_47, Orchard	GF	NCA 2	286391	6255833	Military	50	43	50	44	51	44	53	46	-	-							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2042-2550 The Northern Road_23, Orchard	GF	NCA 2	286413	6255829	Military	47	41	48	42	49	42	51	44	-	-							N
2042-2550 The Northern Road_31, Orchard	GF	NCA 2	286411	6255812	Military	47	40	48	41	48	42	50	44	-	-							N
2042-2550 The Northern Road_32, Orchard	GF	NCA 2	286299	6255868	Military	56	49	57	50	58	51	60	53	-	-							N
2042-2550 The Northern Road_27, Orchard	GF	NCA 2	286348	6255889	Military	54	48	55	49	56	49	58	51	-	-							N
2042-2550 The Northern Road_25, Orchard	GF	NCA 2	286360	6255689	Military	54	48	55	48	55	48	57	51	-	-							N
2042-2550 The Northern Road_24, Orchard	GF	NCA 2	286374	6255714	Military	53	46	54	47	55	48	56	50	-	-							N
2042-2550 The Northern Road_56, Orchard	GF	NCA 2	286335	6255734	Military	56	50	57	51	58	51	60	53	-	-							N
2042-2550 The Northern Road_138, Orchard	GF	NCA 2	286524	6255394	Military	47	40	48	41	48	42	50	44	-	-							N
2042-2550 The Northern Road_139, Orchard	GF	NCA 2	286563	6255387	Military	44	37	44	38	45	38	47	40	-	-							N
2042-2550 The Northern Road_136, Orchard	GF	NCA 2	286541	6255363	Military	45	38	46	39	47	40	49	42	-	-							N
2042-2550 The Northern Road_124, Orchard	GF	NCA 2	286343	6255299	Military	50	43	50	44	51	44	53	47	-	-							N
2042-2550 The Northern Road_128, Orchard	GF	NCA 2	286478	6255288	Military	47	40	48	41	49	42	51	44	-	-							N
2042-2550 The Northern Road_125, Orchard	GF	NCA 2	286438	6255227	Military	49	42	49	43	50	43	52	45	-	-							N
2042-2550 The Northern Road_126, Orchard	GF	NCA 2	286499	6255232	Military	49	42	49	43	50	44	52	46	-	-							N
2042-2550 The Northern Road_127, Orchard	GF	NCA 2	286439	6255291	Military	48	42	49	43	50	43	52	45	-	-							N
2042-2550 The Northern Road_130, Orchard	GF	NCA 2	286480	6255332	Military	45	38	45	39	46	40	49	42	-	-							N
2042-2550 The Northern Road_131, Orchard	GF	NCA 2	286523	6255340	Military	45	38	45	39	46	39	48	41	-	-							N
2042-2550 The Northern Road_132, Orchard	GF	NCA 2	286548	6255329	Military	45	38	45	39	46	40	49	42	-	-							N
2042-2550 The Northern Road_137, Orchard	GF	NCA 2	286574	6255350	Military	42	35	43	36	44	37	46	39	-	-							N
2042-2550 The Northern Road_133, Orchard	GF	NCA 2	286546	6255317	Military	46	39	47	40	48	41	50	43	-	-							N
2042-2550 The Northern Road_134, Orchard	GF	NCA 2	286553	6255317	Military	44	38	45	39	46	39	48	41	-	-							N
2042-2550 The Northern Road_135, Orchard	GF	NCA 2	286471	6255370	Military	49	42	49	43	50	43	52	45	-	-							N
2042-2550 The Northern Road_129, Orchard	GF	NCA 2	286451	6255337	Military	49	42	49	43	50	43	52	46	-	-							N
2042-2550 The Northern Road_123, Orchard	GF	NCA 2	286173	6255290	Military	52	45	52	46	54	47	56	49	-	-							N
2042-2550 The Northern Road_58, Orchard	GF	NCA 2	286302	6255938	Military	57	51	58	52	58	52	61	54	-	-							N
2042-2550 The Northern Road_59, Orchard	GF	NCA 2	286335	6255941	Military	53	47	54	47	54	48	56	50	-	-							N
2042-2550 The Northern Road_17, Orchard	GF	NCA 2	286319	6255954	Military	57	50	58	51	58	51	60	53	-	-							N
2042-2550 The Northern Road_52, Orchard	GF	NCA 2	286366	6255947	Military	55	49	56	50	57	50	59	52	-	-							N
2042-2550 The Northern Road_53, Orchard	GF	NCA 2	286425	6255983	Military	55	49	56	50	57	50	59	52	-	-							N
2042-2550 The Northern Road_54, Orchard	GF	NCA 2	286449	6256002	Military	55	48	56	49	56	49	58	52	-	-							N
2042-2550 The Northern Road_51, Orchard	GF	NCA 2	286416	6255949	Military	54	48	55	49	56	49	58	51	-	-							N
2042-2550 The Northern Road_4, Orchard H	GF	NCA 2	286649	6256400	Military	59	52	59	53	59	52	61	54	-	-							N
2778-2828 The Northern Road, Luddenham	GF	NCA 2	286962	6251330	Residential	57	50	57	51	58	51	60	53	60	55							N
2594-2776 The Northern Road_4, Luddenham	GF	NCA 2	286708	6251983	Residential	54	47	55	48	56	50	58	51	60	55							N
2594-2776 The Northern Road_4, Luddenham	F1	NCA 2	286708	6251983	Residential	55	48	55	49	57	50	59	52	60	55							N
33-49 Gates Rd_1, Luddenham	GF	NCA 2	286103	6253226	Residential	48	41	49	42	50	43	52	45	60	55							N
22-40 Gates Rd_1, Luddenham	GF	NCA 2	286070	6253097	Residential	55	48	55	49	56	49	58	51	60	55							N
33-49 Gates Rd_2, Luddenham	GF	NCA 2	286225	6253210	Residential	48	42	49	43	50	43	52	45	60	55							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
63-73 Gates Rd_1, Luddenham	GF	NCA 2	286403	6253182	Residential	45	38	46	40	47	40	49	42	60	55							N
51 Gates Rd_1, Luddenham	GF	NCA 2	286340	6253178	Residential	46	39	46	40	47	40	49	43	60	55							N
58-72 Gates Rd, Luddenham	GF	NCA 2	286377	6253099	Residential	46	40	47	41	48	41	50	43	60	55							N
42-56 Gates Rd_1, Mulgoa	GF	NCA 2	286206	6253083	Residential	51	44	52	45	52	45	54	47	60	55							N
17-31 Gates Rd_1, Mulgoa	GF	NCA 2	286042	6253171	Residential	54	47	55	48	55	48	57	51	60	55							N
17-31 Gates Rd_2, Mulgoa	GF	NCA 2	286029	6253189	Residential	54	47	54	48	55	48	57	50	60	55							N
2859 The Northern Road_3 Luddenham	GF	NCA 3	286606	6250534	Garage / Shed	51	44	50	44	51	44	53	46	-	-							N
2859 The Northern Road_4, Luddenham	GF	NCA 3	286584	6250537	Garage / Shed	49	42	49	43	50	43	52	45	-	-							N
2859 The Northern Road_3, Luddenham	GF	NCA 3	286650	6250540	Residential	51	45	51	45	52	45	54	47	59	54							N
The Honey Shed	GF	NCA 3	287046	6251116	Commercial	58	51	58	52	60	53	62	55	-	-							N
2843-2857 The Northern Road_2, Luddenham	GF	NCA 3	286964	6250797	Garage / Shed	59	52	59	53	60	53	62	55	-	-							N
2828 The Northern Road_2, Luddenham	GF	NCA 3	287119	6250821	Garage / Shed	62	55	62	56	64	58	66	59	-	-			Y				N
2843-2857 The Northern Road_1, Luddenham	GF	NCA 3	286918	6250809	Garage / Shed	55	49	56	49	57	50	59	52	-	-							N
2843-2857 The Northern Road_3, Luddenham	GF	NCA 3	286967	6250757	Garage / Shed	58	51	58	52	59	52	60	53	-	-							N
2825-2841 The Northern Road_3, Luddenham	GF	NCA 3	286793	6250999	Garage / Shed	52	45	52	46	53	46	55	48	-	-							N
2825-2841 The Northern Road_2, Luddenham	GF	NCA 3	286809	6251019	Garage / Shed	56	49	56	50	57	50	59	51	-	-							N
2311-2337 Elizabeth Dr_2, Luddenham	GF	NCA 3	287140	6250604	Garage / Shed	61	54	61	55	63	56	65	57	-	-			Y				N
2311-2337 Elizabeth Dr, Luddenham	GF	NCA 3	287166	6250596	Garage / Shed	57	51	57	51	57	50	59	51	-	-							N
2825-2841 The Northern Road_4, Luddenham	GF	NCA 3	286826	6250997	Residential	56	49	57	50	57	50	59	52	60	55							N
2828 The Northern Road_1, Luddenham	GF	NCA 3	287211	6250871	Garage / Shed	57	50	57	51	58	51	60	53	-	-							N
2289-2309 Elizabeth Dr_2, Luddenham	GF	NCA 3	287406	6250575	Garage / Shed	59	53	59	53	57	50	57	51	-	-							N
2289-2309 Elizabeth Dr_3, Luddenham	GF	NCA 3	287457	6250617	Garage / Shed	53	47	53	47	52	46	53	46	-	-							N
2289-2309 Elizabeth Dr_1, Luddenham	GF	NCA 3	287374	6250570	Residential	61	54	61	54	57	50	57	51	55	50							N
2289-2309 Elizabeth Dr_1, Luddenham	F1	NCA 3	287374	6250570	Residential	63	56	63	56	59	52	59	53	55	50							N
2859 The Northern Road_6, Luddenham	GF	NCA 3	286584	6250473	Garage / Shed	51	44	50	44	51	44	53	46	-	-							N
2859 The Northern Road_2, Luddenham	GF	NCA 3	286859	6250498	Residential	54	48	54	48	55	48	57	50	58	53							N
2650 Elizabeth Dr_1, Luddenham	GF	NCA 3	287552	6250443	Garage / Shed	60	53	60	53	61	54	61	55	-	-							N
2650 Elizabeth Dr_2, Luddenham	GF	NCA 3	287585	6250443	Garage / Shed	60	53	60	53	61	54	61	54	-	-							N
2650 Elizabeth Rd_2, Luddenham	GF	NCA 3	287727	6250432	Garage / Shed	57	50	57	50	57	50	57	51	-	-							N
2620 Elizabeth Dr_2, Luddenham	GF	NCA 3	288003	6250314	Garage / Shed	55	48	55	49	56	49	56	49	-	-							N
2650 Elizabeth Dr_3. Luddenham	GF	NCA 3	287612	6250443	Residential	61	54	61	54	61	54	61	54	55	50	Y	Y					N
2650 Elizabeth Dr_5, Luddenham	GF	NCA 3	287741	6250445	Residential	61	54	61	54	61	54	61	54	55	50	Y	Y					N
2620 Elizabeth Dr_1, Luddenham	GF	NCA 3	288025	6250318	Residential	56	49	56	49	56	49	56	50	55	50							N
2620 Elizabeth Dr_3, Luddenham	GF	NCA 3	287956	6250212	Residential	54	47	54	47	54	47	54	47	55	50							N
140 Adams Rd_4, Luddenham	GF	NCA 4	287483	6249280	Garage / Shed	45	37	47	40	53	45	54	47	-	-							N
140 Adams Rd_3, Luddenham	GF	NCA 4	287465	6249268	Garage / Shed	45	38	47	39	54	47	56	49	-	-							N
140 Adams Rd_2, Luddenham	GF	NCA 4	287388	6249251	Garage / Shed	47	40	47	40	59	51	60	53	-	-							N
2422-2430 The Northern Road_5, Luddenham	GF	NCA 4	287401	6250007	Garage / Shed	51	44	51	44	53	46	55	48	-	-							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2422-2430 The Northern Road_4, Luddenham	GF	NCA 4	287362	6250046	Garage / Shed	51	45	51	45	54	47	55	49	-	-							N
2422-2430 The Northern Road_2, Luddenham	GF	NCA 4	287310	6250064	Garage / Shed	53	46	52	46	56	49	58	51	-	-							N
2422-2430 The Northern Road_1, Luddenham	GF	NCA 4	287253	6250130	Garage / Shed	54	47	53	47	57	50	59	52	-	-							N
2420 The Northern Road_1, Luddenham	GF	NCA 4	287406	6249809	Garage / Shed	49	42	48	42	53	46	55	48	-	-							N
2420 The Northern Road_5, Luddenham	GF	NCA 4	287406	6249788	Garage / Shed	47	40	46	40	53	46	55	48	-	-							N
2420 The Northern Road_3, Luddenham	GF	NCA 4	287384	6249798	Garage / Shed	49	42	48	42	54	47	56	49	-	-							N
2420 The Northern Road_4, Luddenham	GF	NCA 4	287426	6249796	Garage / Shed	46	39	45	39	51	44	52	46	-	-							N
2026 The Northern Road_4, Luddenham	GF	NCA 4	287261	6247721	Garage / Shed	60	53	60	54	48	41	50	43	-	-							N
2026 The Northern Road_2, Luddenham	GF	NCA 4	287225	6247738	Garage / Shed	66	60	66	60	51	44	52	45	-	-							N
2026 The Northern Road_5, Luddenham	GF	NCA 4	287302	6247738	Garage / Shed	55	48	55	49	46	39	47	41	-	-							N
2026 The Northern Road_6, Luddenham	GF	NCA 4	287318	6247734	Garage / Shed	55	48	54	49	45	38	47	41	-	-							N
2026 The Northern Road_8, Luddenham	GF	NCA 4	287397	6247764	Garage / Shed	53	46	52	47	44	38	46	39	-	-							N
2026 The Northern Road_7, Luddenham	GF	NCA 4	287338	6247734	Garage / Shed	54	47	54	48	45	38	46	40	-	-							N
2026 The Northern Road_3, Luddenham	GF	NCA 4	287304	6247783	Garage / Shed	56	49	56	50	48	41	49	43	-	-							N
68 Eaton Rd_3, Luddenham	GF	NCA 4	287349	6248184	Garage / Shed	53	46	53	47	52	45	54	47	-	-							N
68 Eaton Rd_2, Luddenham	GF	NCA 4	287348	6248156	Garage / Shed	53	46	52	46	50	43	52	45	-	-							N
70 Eaton Rd_2, Luddenham	GF	NCA 4	287287	6248229	Garage / Shed	54	48	54	48	54	47	55	49	-	-							N
Lot1/DP838361	GF	NCA 4	287161	6247671	Residential	62	55	62	56	52	45	53	46	55	50							N
2026 The Northern Road_1, Luddenham	GF	NCA 4	287274	6247750	Residential	58	51	57	51	49	42	50	44	55	50							N
2026 The Northern Road_1, Luddenham	F1	NCA 4	287274	6247750	Residential	60	53	59	53	50	43	52	45	55	50							N
96 Eaton Rd, Luddenham	GF	NCA 4	287268	6248083	Residential	58	51	58	52	51	45	53	46	55	50							N
70 Eaton Rd_1, Luddenham	GF	NCA 4	287259	6248243	Residential	56	49	55	49	55	48	56	50	55	50							N
68 Eaton Rd_1, Luddenham	GF	NCA 4	287284	6248156	Residential	56	49	55	49	52	45	54	47	55	50							N
68 Eaton Rd_5, Luddenham	GF	NCA 4	287537	6248191	Garage / Shed	49	42	48	42	48	41	50	43	-	-							N
68 Eaton Rd_4, Luddenham	GF	NCA 4	287419	6248182	Garage / Shed	49	42	49	43	50	43	51	45	-	-							N
161 Adams Rd_3, Luddenham	GF	NCA 4	287951	6249092	Garage / Shed	55	47	57	50	55	47	57	50	-	-							N
161 Adams Rd_2, Luddenham	GF	NCA 4	287934	6249084	Garage / Shed	54	46	57	49	54	47	56	50	-	-							N
125 Adams Rd_1, Luddenham	GF	NCA 4	287652	6248881	Garage / Shed	49	42	52	44	54	46	56	49	-	-							N
125 Adams Rd_2, Luddenham	GF	NCA 4	287685	6248884	Garage / Shed	47	40	49	42	51	43	52	46	-	-							N
151 Adams Rd_2, Luddenham	GF	NCA 4	287808	6248999	Garage / Shed	47	40	49	42	51	43	52	46	-	-							N
151 Adams Rd_1, Luddenham	GF	NCA 4	287803	6249031	Residential	55	47	58	50	56	48	58	51	55	50							N
180 Adams Rd, Luddenham	GF	NCA 4	287798	6249145	Residential	52	44	54	47	52	45	55	48	55	50							N
145 Adams Rd_1, Luddenham	GF	NCA 4	287835	6249044	Residential	55	47	57	50	55	48	57	50	55	50							N
161 Adams Rd_1, Luddenham	GF	NCA 4	287913	6249076	Residential	55	47	57	50	55	47	57	50	55	50							N
145 Adams Rd_2, Luddenham	GF	NCA 4	287875	6249046	Residential	52	45	55	47	53	45	55	48	55	50							N
2903 The Northern Road_24, Luddenham	GF	NCA 5	286602	6250036	Commercial	59	53	57	51	57	50	59	52	-	-							N
Caltex Service Station	GF	NCA 5	286270	6249259	Commercial	62	55	60	54	57	50	59	53	-	-							N
Caltex Service Station	F1	NCA 5	286270	6249259	Commercial	63	57	62	56	58	52	61	55	-	-							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2903 The Northern Road_30, Luddenham	GF	NCA 5	286284	6249790	Commercial	51	44	50	44	48	42	51	44	-	-							N
Quality Meats Butcher	GF	NCA 5	286264	6248890	Commercial	67	60	65	59	61	55	64	58	-	-							N
Luddenham Auto Repairs	GF	NCA 5	286154	6248997	Commercial	49	43	49	43	47	40	49	43	-	-							N
Ali's Bakery	GF	NCA 5	286346	6248781	Commercial	63	56	61	55	57	51	60	55	-	-							N
Shell Service Station, Luddenham	GF	NCA 5	286763	6248314	Commercial	66	59	65	59	58	52	61	55	-	-							N
IGA Luddenham	GF	NCA 5	286702	6248354	Commercial	65	58	64	59	59	53	62	56	-	-							N
IGA Luddenham	F1	NCA 5	286702	6248354	Commercial	66	59	66	60	61	54	63	57	-	-							N
David's Stall Fruit and Veg	GF	NCA 5	286384	6248709	Commercial	61	54	59	53	55	49	58	53	-	-							N
Luddenham Progress Hall	GF	NCA 5	286341	6248643	Commercial	72	65	70	64	66	59	69	63	-	-							N
2320-2390 The Northern Road_3, Luddenham	GF	NCA 5	286983	6250042	Garage / Shed	53	47	52	46	60	53	61	55	-	-							N
2320-2390 The Northern Road_1, Luddenham	GF	NCA 5	286960	6250126	Garage / Shed	60	53	58	52	59	52	61	54	-	-							N
2903 The Northern Road_21, Luddenham	GF	NCA 5	286733	6250167	Garage / Shed	58	51	56	50	55	49	58	51	-	-							N
2292 The Northern Road_2, Luddenham	GF	NCA 5	287042	6249398	Garage / Shed	45	38	44	38	53	46	55	48	-	-							N
2903 The Northern Road_23, Luddenham	GF	NCA 5	286666	6250085	Garage / Shed	59	52	57	51	56	50	59	52	-	-							N
2903 The Northern Road_25, Luddenham	GF	NCA 5	286637	6250066	Garage / Shed	58	51	56	50	56	49	58	51	-	-							N
2903 The Northern Road_29, Luddenham	GF	NCA 5	286547	6250076	Garage / Shed	53	46	51	45	51	44	53	46	-	-							N
17 Jamison St, Luddenham	GF	NCA 5	286592	6248621	Garage / Shed	51	44	49	43	47	41	49	44	-	-							N
2392-2398 The Northern Road_2, Luddenham	GF	NCA 5	286683	6249857	Garage / Shed	58	51	56	50	56	49	58	51	-	-							N
2300 The Northern Road_2, Luddenham	GF	NCA 5	286644	6249766	Garage / Shed	55	48	53	47	52	45	54	47	-	-							N
2300 The Northern Road_3, Luddenham	GF	NCA 5	286667	6249761	Garage / Shed	52	46	51	45	51	44	53	46	-	-							N
2903 The Northern Road_27, Luddenham	GF	NCA 5	286583	6249974	Garage / Shed	61	54	59	53	57	51	60	53	-	-							N
2230 The Northern Road_5, Luddenham	GF	NCA 5	286560	6249358	Garage / Shed	53	47	52	46	52	45	54	47	-	-							N
2230 The Northern Road_4, Luddenham	GF	NCA 5	286516	6249359	Garage / Shed	54	48	53	47	52	46	55	48	-	-							N
2230 The Northern Road_3, Luddenham	GF	NCA 5	286406	6249303	Garage / Shed	55	48	53	47	51	45	54	47	-	-							N
2230 The Northern Road_2, Luddenham	GF	NCA 5	286410	6249323	Garage / Shed	57	51	57	51	54	48	58	51	-	-							N
3037 The Northern Road_2, Luddenham	GF	NCA 5	286244	6249191	Garage / Shed	56	50	55	49	52	45	54	49	-	-							N
2903 The Northern Road_31, Luddenham	GF	NCA 5	286357	6249780	Garage / Shed	59	52	57	51	55	49	58	51	-	-							N
2903 The Northern Road_32, Luddenham	GF	NCA 5	286350	6249739	Garage / Shed	60	54	58	52	57	50	59	53	-	-							N
2903 The Northern Road_33, Luddenham	GF	NCA 5	286242	6249700	Garage / Shed	53	47	52	47	51	44	53	47	-	-							N
2180 The Northern Road_2, Luddenham	GF	NCA 5	286353	6248765	Garage / Shed	59	53	57	51	54	48	57	51	-	-							N
Luddenham Showground_1	GF	NCA 5	285970	6249237	Garage / Shed	51	45	53	48	50	45	54	48	-	-							N
2903 The Northern Road_20, Luddenham	GF	NCA 5	286559	6250166	Garage / Shed	52	45	50	44	50	44	53	46	-	-							N
2903 The Northern Road_5, Luddenham	GF	NCA 5	286502	6250270	Garage / Shed	51	44	50	44	50	43	52	45	-	-							N
2903 The Northern Road_4, Luddenham	GF	NCA 5	286471	6250275	Garage / Shed	50	43	48	42	48	42	50	43	-	-							N
2903 The Northern Road_3, Luddenham	GF	NCA 5	286442	6250280	Garage / Shed	49	43	48	42	48	41	50	43	-	-							N
2903 The Northern Road_2, Luddenham	GF	NCA 5	286410	6250278	Garage / Shed	49	42	47	42	48	41	50	43	-	-							N
2903 The Northern Road_1, Luddenham	GF	NCA 5	286380	6250283	Garage / Shed	48	41	47	41	48	41	49	42	-	-							N
2903 The Northern Road_7, Luddenham	GF	NCA 5	286327	6250132	Garage / Shed	48	42	47	41	47	41	50	43	-	-							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2903 The Northern Road_6, Luddenham	GF	NCA 5	286296	6250137	Garage / Shed	46	39	45	39	46	39	48	41	-	-							N
2903 The Northern Road_8, Luddenham	GF	NCA 5	286214	6250052	Garage / Shed	48	42	48	42	46	40	49	43	-	-							N
2903 The Northern Road_9, Luddenham	GF	NCA 5	286246	6250048	Garage / Shed	49	42	48	42	47	40	49	43	-	-							N
2903 The Northern Road_10, Luddenham	GF	NCA 5	286282	6250041	Garage / Shed	50	43	49	43	47	41	50	44	-	-							N
2903 The Northern Road_11, Luddenham	GF	NCA 5	286314	6250038	Garage / Shed	51	44	49	44	48	42	51	44	-	-							N
2903 The Northern Road_12, Luddenham	GF	NCA 5	286345	6250033	Garage / Shed	51	45	50	44	49	42	51	45	-	-							N
2903 The Northern Road_13, Luddenham	GF	NCA 5	286377	6250028	Garage / Shed	53	46	51	45	50	44	52	46	-	-							N
2903 The Northern Road_16, Luddenham	GF	NCA 5	286160	6249826	Garage / Shed	50	43	49	43	48	42	51	44	-	-							N
2903 The Northern Road_15, Luddenham	GF	NCA 5	286127	6249829	Garage / Shed	48	42	48	43	46	40	49	44	-	-							N
2903 The Northern Road_14, Luddenham	GF	NCA 5	286095	6249833	Garage / Shed	47	41	48	43	46	40	49	44	-	-							N
2903 The Northern Road_17, Luddenham	GF	NCA 5	286074	6249681	Garage / Shed	50	45	53	48	49	44	53	48	-	-							N
2903 The Northern Road_18, Luddenham	GF	NCA 5	286105	6249677	Garage / Shed	51	45	53	48	50	44	53	48	-	-							N
2903 The Northern Road_19, Luddenham	GF	NCA 5	286137	6249670	Garage / Shed	51	45	53	48	50	45	54	48	-	-							N
50-80 Adams Rd_3, Luddenham	GF	NCA 5	286698	6249025	Garage / Shed	47	41	47	41	49	42	51	44	-	-							N
50-80 Adams Rd_4, Luddenham	GF	NCA 5	286725	6249037	Garage / Shed	47	41	47	41	48	41	50	43	-	-							N
50-80 Adams Rd_5, Luddenham	GF	NCA 5	286880	6249061	Garage / Shed	47	41	48	41	52	45	54	47	-	-							N
57-73 Campbell St_2, Luddenham	GF	NCA 5	286022	6248723	Garage / Shed	45	39	45	39	45	38	47	40	-	-							N
58 Campbell St_2, Luddenham	GF	NCA 5	286167	6248821	Garage / Shed	51	44	50	44	48	41	50	44	-	-							N
3077 The Northern Road_2, Luddenham	GF	NCA 5	286217	6248814	Garage / Shed	53	47	52	46	49	43	52	46	-	-							N
2198 The Northern Road_2, Luddenham	GF	NCA 5	286348	6248976	Garage / Shed	48	42	47	41	45	39	47	41	-	-							N
14 Hawkins Ave_2, Luddenham	GF	NCA 5	286370	6249121	Garage / Shed	48	41	47	41	45	39	48	41	-	-							N
39 Blaxland Ave_2, Luddenham	GF	NCA 5	286550	6249031	Garage / Shed	46	39	46	40	48	41	50	43	-	-							N
3081 The Northern Road_2, Luddenham	GF	NCA 5	286214	6248771	Garage / Shed	51	45	50	44	49	42	51	45	-	-							N
3061-3063 The Northern Road_2, Luddenham	GF	NCA 5	286230	6248951	Garage / Shed	58	51	56	50	53	46	55	50	-	-							N
3061-3063 The Northern Road_2, Luddenham	F1	NCA 5	286230	6248951	Garage / Shed	59	52	57	51	54	48	57	51	-	-							N
429 Park Rd_2, Luddenham	GF	NCA 5	285877	6249560	Garage / Shed	52	47	56	51	52	47	56	51	-	-							N
417 Park Rd_2, Luddenham	GF	NCA 5	285786	6249568	Garage / Shed	52	48	56	52	52	47	56	52	-	-							N
78 Campbell St_2, Luddenham	GF	NCA 5	285974	6248412	Garage / Shed	46	39	45	39	45	39	47	41	-	-							N
2 Willowdene Ave_2, Luddenham	GF	NCA 5	285925	6248427	Garage / Shed	45	38	44	38	46	40	48	42	-	-							N
7 Adams Rd_2, Luddenham	GF	NCA 5	286719	6248428	Garage / Shed	53	45	54	47	53	46	55	48	-	-							N
15 Adams Rd_2, Luddenham	GF	NCA 5	286751	6248474	Garage / Shed	54	47	56	49	54	46	56	49	-	-							N
45 Adams Rd_2, Luddenham	GF	NCA 5	287048	6248656	Garage / Shed	50	42	52	44	56	49	58	51	-	-							N
10 Wade Cl_2, Luddenham	GF	NCA 5	286638	6248644	Garage / Shed	47	40	46	40	45	38	47	41	-	-							N
1 Adams Rd_2, Luddenham	GF	NCA 5	286758	6248732	Garage / Shed	52	45	55	47	53	45	55	48	-	-							N
34 Jamison St_2, Luddenham	GF	NCA 5	286443	6248679	Garage / Shed	53	47	52	46	49	43	52	46	-	-							N
2215 The Northern Road_3, Luddenham	GF	NCA 5	286701	6248177	Garage / Shed	52	45	51	45	58	51	59	53	-	-							N
2215 The Northern Road_2, Luddenham	GF	NCA 5	286666	6248220	Garage / Shed	54	47	54	48	55	48	56	50	-	-							N
Lot4/DP1655	GF	NCA 5	286266	6248720	Garage / Shed	58	51	56	50	53	47	56	50	-	-							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
Luddenham Public School 5	GF	NCA 5	286471	6248578	Educational	67	62	65	60	61	57	64	60	50	-	Y	Y					N
Luddenham Public School_4	GF	NCA 5	286471	6248643	Educational	59	54	57	53	54	49	57	53	50	-	Y	Y					N
Holy Family Catholic Primary School_1	GF	NCA 5	285921	6248620	Educational	46	41	46	41	46	41	48	44	50	-							N
Holy Family Catholic Primary School_1	F1	NCA 5	285921	6248620	Educational	48	44	48	44	48	43	50	46	50	-							N
Holy Family Catholic Primary School_2	GF	NCA 5	285852	6248650	Educational	45	40	45	42	45	40	48	43	50	-							N
Sales Park	GF	NCA 5	286180	6248568	Active Recreation	54	47	52	46	49	43	52	46	60	-							N
Willmington Reserve	GF	NCA 5	286596	6248672	Active Recreation	48	41	47	41	47	40	49	43	60	-							N
Luddenham Showground	GF	NCA 5	286040	6249343	Active Recreation	60	55	64	59	60	55	64	59	60	-							N
St James Anglican Church	GF	NCA 5	286517	6248438	Place of Worship	67	62	66	61	62	57	65	61	50	50	Y	Y					N
Sacred Heart Parish	GF	NCA 5	285994	6248580	Place of Worship	47	42	46	42	47	42	49	44	50	50							N
Luddenham Uniting Church_1	GF	NCA 5	286362	6248606	Place of Worship	67	62	66	61	62	57	65	60	50	50	Y	Y					N
Luddenham Uniting Church_2	GF	NCA 5	286338	6248608	Place of Worship	60	55	59	55	55	51	58	54	50	50	Y	Y					N
Luddenham Showground_2	GF	NCA 5	286084	6249219	Stables	51	45	52	47	49	43	52	47	-	-							N
2392-2398 The Northern Road_1, Luddenham	GF	NCA 5	286659	6249881	Residential	63	56	61	55	60	53	62	55	55	50	Y	Y					N
2392-2398 The Northern Road_1, Luddenham	F1	NCA 5	286659	6249881	Residential	65	58	63	57	61	55	64	57	55	50	Y	Y					N
2300 The Northern Road_1, Luddenham	GF	NCA 5	286601	6249761	Residential	58	51	56	50	54	48	57	50	55	50							N
2230 The Northern Road_1, Luddenham	GF	NCA 5	286374	6249316	Residential	64	58	63	57	60	54	63	57	55	50	Y	Y					N
3037 The Northern Road_1, Luddenham	GF	NCA 5	286289	6249182	Residential	68	61	67	60	62	56	65	59	55	50	Y	Y					N
2210 The Northern Road, Luddenham	GF	NCA 5	286355	6249176	Residential	64	57	62	56	59	53	62	56	55	50	Y	Y					N
3039 The Northern Road, Luddenham	GF	NCA 5	286282	6249150	Residential	67	60	65	59	61	55	64	58	55	50	Y	Y					N
Lot1/DP931631	GF	NCA 5	286113	6249236	Residential	52	46	54	48	51	45	54	49	55	50							N
50-80 Adams Rd_2, Luddenham	GF	NCA 5	286752	6249029	Residential	47	40	47	41	51	44	52	46	55	50							N
50-80 Adams Rd_1, Luddenham	GF	NCA 5	286833	6249062	Residential	48	41	48	41	51	44	53	46	55	50							N
2292 The Northern Road_1, Luddenham	GF	NCA 5	286952	6249439	Residential	46	40	45	39	53	46	54	48	55	50							N
57-73 Campbell St_3, Luddenham	GF	NCA 5	285970	6248709	Residential	43	37	44	38	44	37	46	40	55	49							N
70 Campbell St, Luddenham	GF	NCA 5	286138	6248722	Residential	47	40	46	40	46	39	48	42	55	50							N
68 Campbell St, Luddenham	GF	NCA 5	286122	6248746	Residential	44	37	43	37	42	36	44	39	55	46							N
66 Campbell St, Luddenham	GF	NCA 5	286132	6248765	Residential	44	38	43	37	44	37	46	39	55	49							N
64 Campbell St, Luddenham	GF	NCA 5	286127	6248787	Residential	45	38	44	38	44	37	46	40	55	50							N
60 Campbell St, Luddenham	GF	NCA 5	286130	6248805	Residential	45	39	44	39	45	38	47	40	55	50							N
58 Campbell St_1, Luddenham	GF	NCA 5	286131	6248820	Residential	44	38	44	39	44	38	46	40	55	50							N
3077 The Northern Road_1, Luddenham	GF	NCA 5	286253	6248804	Residential	64	57	62	56	59	52	61	56	55	50	Y	Y					N
3077 The Northern Road_1, Luddenham	F1	NCA 5	286253	6248804	Residential	65	59	64	58	60	54	63	57	55	50	Y	Y					N
3081 The Northern Road_1, Luddenham	GF	NCA 5	286267	6248760	Residential	65	59	64	58	60	54	63	57	55	50	Y	Y					N
56 Campbell St, Luddenham	GF	NCA 5	286142	6248851	Residential	50	43	49	43	47	41	49	44	55	50							N
3083 The Northern Road, Luddenham	GF	NCA 5	286268	6248741	Residential	64	57	63	56	58	52	61	55	55	50	Y	Y					N
3083 The Northern Road, Luddenham	F1	NCA 5	286268	6248741	Residential	65	59	64	58	60	54	63	57	55	50	Y	Y					N
Lot4/DP1655	GF	NCA 5	286294	6248719	Residential	68	62	67	61	62	56	65	59	55	50	Y	Y					N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2903 The Northern Road_34, Luddenham	GF	NCA 5	286335	6249669	Residential	61	55	59	53	58	51	60	54	55	50	Y	Y					N
3075 The Northern Road, Luddenham	GF	NCA 5	286259	6248830	Residential	65	58	63	57	59	53	62	57	55	50	Y	Y					N
21-55 Campbell St, Luddenham	GF	NCA 5	286089	6248937	Residential	48	42	48	42	47	40	49	43	55	50							N
3061-3063 The Northern Road_1, Luddenham	GF	NCA 5	286274	6248971	Residential	69	62	67	61	63	57	66	60	55	50	Y	Y					N
3061-3063 The Northern Road_1, Luddenham	F1	NCA 5	286274	6248971	Residential	69	63	68	62	64	58	67	61	55	50	Y	Y					N
3059 The Northern Road_1, Luddenham	GF	NCA 5	286277	6248986	Residential	67	60	66	60	61	55	64	58	55	50	Y	Y					N
3053 The Northern Road, Luddenham	GF	NCA 5	286277	6249036	Residential	67	61	66	60	62	55	65	59	55	50	Y	Y					N
3055 The Northern Road, Luddenham	GF	NCA 5	286276	6249021	Residential	67	60	66	60	61	55	64	59	55	50	Y	Y					N
3057 The Northern Road, Luddenham	GF	NCA 5	286276	6249007	Residential	67	61	66	60	62	55	64	59	55	50	Y	Y					N
3059 The Northern Road_2, Luddenham	GF	NCA 5	286276	6248996	Residential	67	60	65	59	61	55	64	58	55	50	Y	Y					N
3047 The Northern Road, Luddenham	GF	NCA 5	286277	6249083	Residential	67	61	66	60	62	55	64	59	55	50	Y	Y					N
3047 The Northern Road, Luddenham	F1	NCA 5	286277	6249083	Residential	68	62	67	61	63	56	66	60	55	50	Y	Y					N
3051 The Northern Road, Luddenham	GF	NCA 5	286279	6249052	Residential	69	62	67	61	63	57	66	60	55	50	Y	Y					N
3045 The Northern Road, Luddenham	GF	NCA 5	286282	6249100	Residential	67	60	66	60	62	55	64	59	55	50	Y	Y					N
3043 The Northern Road, Luddenham	GF	NCA 5	286285	6249120	Residential	68	61	66	60	62	55	65	59	55	50	Y	Y					N
2208 The Northern Road, Luddenham	GF	NCA 5	286346	6249146	Residential	65	58	63	57	59	53	62	57	55	50	Y	Y					N
2208 The Northern Road, Luddenham	F1	NCA 5	286346	6249146	Residential	66	59	64	58	61	54	63	58	55	50	Y	Y					N
2206 The Northern Road, Luddenham	GF	NCA 5	286350	6249119	Residential	65	58	63	57	59	53	62	57	55	50	Y	Y					N
2204 The Northern Road, Luddenham	GF	NCA 5	286342	6249080	Residential	65	59	63	57	59	53	62	57	55	50	Y	Y					N
2204 The Northern Road, Luddenham	F1	NCA 5	286342	6249080	Residential	66	59	64	58	60	54	63	58	55	50	Y	Y					N
2202 The Northern Road, Luddenham	GF	NCA 5	286348	6249043	Residential	64	58	62	56	59	53	61	56	55	50	Y	Y					N
2200 The Northern Road, Luddenham	GF	NCA 5	286344	6249015	Residential	64	58	63	57	59	53	62	56	55	50	Y	Y					N
2198 The Northern Road_1, Luddenham	GF	NCA 5	286337	6248989	Residential	65	59	63	57	60	54	62	57	55	50	Y	Y					N
2198 The Northern Road_1, Luddenham	F1	NCA 5	286337	6248989	Residential	66	60	64	58	61	55	64	58	55	50	Y	Y					N
2196 The Northern Road, Luddenham	GF	NCA 5	286334	6248969	Residential	66	59	64	58	60	54	63	57	55	50	Y	Y					N
2194 The Northern Road, Luddenham	GF	NCA 5	286335	6248935	Residential	65	59	64	58	60	54	63	57	55	50	Y	Y					N
2192 The Northern Road, Luddenham	GF	NCA 5	286334	6248909	Residential	65	59	63	57	60	54	63	57	55	50	Y	Y					N
2186 The Northern Road, Luddenham	GF	NCA 5	286330	6248829	Residential	65	58	63	57	59	53	62	57	55	50	Y	Y					N
2184 The Northern Road, Luddenham	GF	NCA 5	286331	6248802	Residential	65	58	63	57	60	54	62	57	55	50	Y	Y					N
2188 The Northern Road, Luddenham	GF	NCA 5	286331	6248856	Residential	65	58	63	57	59	54	62	57	55	50	Y	Y					N
2190 The Northern Road, Luddenham	GF	NCA 5	286332	6248887	Residential	65	59	63	57	60	54	62	57	55	50	Y	Y					N
25 Blaxland Ave, Luddenham	GF	NCA 5	286507	6248912	Residential	45	38	45	38	47	39	48	42	55	49							N
27 Blaxland Ave, Luddenham	GF	NCA 5	286508	6248932	Residential	45	38	44	37	46	39	48	41	55	48							N
27 Blaxland Ave, Luddenham	F1	NCA 5	286508	6248932	Residential	46	39	46	39	47	40	49	43	55	50							N
29 Blaxland Ave, Luddenham	GF	NCA 5	286510	6248952	Residential	45	39	45	38	47	40	49	42	55	50							N
31 Blaxland Ave, Luddenham	GF	NCA 5	286510	6248971	Residential	46	39	45	39	47	40	49	42	55	50							N
33 Blaxland Ave, Luddenham	GF	NCA 5	286511	6248994	Residential	46	40	45	39	47	40	49	42	55	50							N
35 Blaxland Ave, Luddenham	GF	NCA 5	286516	6249020	Residential	47	40	46	40	47	40	49	42	55	50							N

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						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
37 Blaxland Ave, Luddenham	GF	NCA 5	286519	6249043	Residential	47	41	46	40	48	41	49	43	55	50							N
39 Blaxland Ave_1, Luddenham	GF	NCA 5	286601	6249014	Residential	47	40	47	41	49	42	51	44	55	50							N
41 Blaxland Ave, Luddenham	GF	NCA 5	286564	6249094	Residential	48	41	47	41	48	41	50	44	55	50							N
3 Hawkins Ave, Luddenham	GF	NCA 5	286432	6249072	Residential	49	43	48	42	45	39	48	42	55	50							N
1 Hawkins Ave, Luddenham	GF	NCA 5	286459	6249072	Residential	46	40	45	40	47	40	48	42	55	50							N
45 Blaxland Ave, Luddenham	GF	NCA 5	286498	6249126	Residential	47	41	46	40	48	41	50	43	55	50							N
43 Blaxland Ave, Luddenham	GF	NCA 5	286522	6249107	Residential	48	41	47	40	48	41	50	43	55	50							N
43 Blaxland Ave, Luddenham	F1	NCA 5	286522	6249107	Residential	49	43	48	43	49	42	51	44	55	50							N
30 Blaxland Ave, Luddenham	GF	NCA 5	286475	6249116	Residential	47	40	46	40	46	40	49	42	55	50							N
11 Hawkins Ave, Luddenham	GF	NCA 5	286479	6249150	Residential	48	41	47	41	46	40	48	42	55	50							N
11 Hawkins Ave, Luddenham	F1	NCA 5	286479	6249150	Residential	51	44	50	44	49	42	51	45	55	50							N
28 Blaxland Ave, Luddenham	GF	NCA 5	286461	6249100	Residential	47	41	47	41	46	39	48	42	55	50							N
9 Hawkins Ave, Luddenham	GF	NCA 5	286457	6249138	Residential	48	42	48	42	46	40	49	43	55	50							N
7 Hawkins Ave, Luddenham	GF	NCA 5	286431	6249119	Residential	49	43	49	43	47	40	49	43	55	50							N
7 Hawkins Ave, Luddenham	F1	NCA 5	286431	6249119	Residential	52	45	51	45	49	43	52	46	55	50							N
5 Hawkins Ave, Luddenham	GF	NCA 5	286418	6249098	Residential	49	42	48	42	45	39	48	42	55	50							N
13 Hawkins Ave, Luddenham	GF	NCA 5	286506	6249162	Residential	47	40	46	40	45	38	47	41	55	48							N
15 Hawkins Ave, Luddenham	GF	NCA 5	286513	6249180	Residential	46	40	45	40	46	39	48	41	55	49							N
17 Hawkins Ave, Luddenham	GF	NCA 5	286519	6249213	Residential	45	38	44	38	46	39	48	41	55	49							N
28 Hawkins Ave, Luddenham	GF	NCA 5	286508	6249242	Residential	49	42	48	42	47	40	49	42	55	50							N
26 Hawkins Ave, Luddenham	GF	NCA 5	286472	6249224	Residential	50	43	49	43	47	40	49	43	55	50							N
26 Hawkins Ave, Luddenham	F1	NCA 5	286472	6249224	Residential	52	46	51	45	49	43	52	46	55	50							N
24 Hawkins Ave, Luddenham	GF	NCA 5	286449	6249200	Residential	51	44	50	44	47	41	50	44	55	50							N
22 Hawkins Ave, Luddenham	GF	NCA 5	286430	6249180	Residential	52	45	51	45	48	42	50	45	55	50							N
20 Hawkins Ave, Luddenham	GF	NCA 5	286413	6249165	Residential	53	47	52	46	49	43	52	46	55	50							N
18 Hawkins Ave, Luddenham	GF	NCA 5	286391	6249153	Residential	55	48	53	47	50	44	53	47	55	50							N
16 Hawkins Ave, Luddenham	GF	NCA 5	286378	6249136	Residential	54	47	52	46	49	43	52	46	55	50							N
14 Hawkins Ave_1, Luddenham	GF	NCA 5	286369	6249105	Residential	55	49	54	48	50	44	53	47	55	50							N
2 Hawkins Ave, Luddenham	GF	NCA 5	286458	6249030	Residential	46	40	45	40	46	39	48	41	55	50							N
2 Hawkins Ave, Luddenham	F1	NCA 5	286458	6249030	Residential	48	42	48	42	48	42	50	44	55	50							N
12 Hawkins Ave, Luddenham	GF	NCA 5	286370	6249074	Residential	55	49	54	48	50	44	53	47	55	50							N
10 Hawkins Ave, Luddenham	GF	NCA 5	286372	6249046	Residential	54	48	53	47	49	43	52	46	55	50							N
8 Hawkins Ave, Luddenham	GF	NCA 5	286388	6249032	Residential	51	44	49	43	46	40	49	43	55	50							N
8 Hawkins Ave, Luddenham	F1	NCA 5	286388	6249032	Residential	53	46	51	45	48	42	51	45	55	50							N
22 Blaxland Ave, Luddenham	GF	NCA 5	286462	6249013	Residential	46	39	45	39	46	39	48	42	55	50							N
3 Michael Ave, Luddenham	GF	NCA 5	286425	6248996	Residential	47	40	46	40	45	38	47	41	55	50							N
20 Blaxland Ave, Luddenham	GF	NCA 5	286456	6248992	Residential	46	40	45	39	45	39	47	41	55	50							N
5 Michael Ave, Luddenham	GF	NCA 5	286397	6248999	Residential	50	43	48	42	45	39	48	42	55	50							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
4 Hawkins Ave, Luddenham	GF	NCA 5	286430	6249027	Residential	46	40	46	40	44	37	46	40	55	49							N
4 Hawkins Ave, Luddenham	F1	NCA 5	286430	6249027	Residential	49	43	48	42	47	40	49	43	55	50							N
6 Hawkins Ave, Luddenham	GF	NCA 5	286405	6249025	Residential	50	43	48	42	46	39	48	42	55	50							N
7 Michael Ave, Luddenham	GF	NCA 5	286384	6248984	Residential	51	44	49	43	46	40	49	43	55	50							N
11 Michael Ave, Luddenham	GF	NCA 5	286362	6248948	Residential	55	48	53	47	50	44	52	47	55	50							N
4 Michael Ave, Luddenham	GF	NCA 5	286417	6248944	Residential	47	40	45	40	45	38	47	40	55	50							N
6 Michael Ave, Luddenham	GF	NCA 5	286417	6248922	Residential	47	40	45	39	45	38	47	40	55	50							N
14 Blaxland Ave, Luddenham	GF	NCA 5	286448	6248913	Residential	45	38	44	38	45	38	46	40	55	49							N
8 Michael Ave, Luddenham	GF	NCA 5	286413	6248902	Residential	47	40	46	40	44	38	46	40	55	50							N
18 Blaxland Ave, Luddenham	GF	NCA 5	286454	6248949	Residential	45	38	44	38	44	37	46	40	55	49							N
16 Blaxland Ave, Luddenham	GF	NCA 5	286454	6248932	Residential	44	38	43	37	44	38	46	40	55	49							N
12 Blaxland Ave, Luddenham	GF	NCA 5	286449	6248893	Residential	45	39	44	38	44	37	46	39	54	48							N
12 Blaxland Ave, Luddenham	F1	NCA 5	286449	6248893	Residential	47	41	46	40	47	40	48	42	55	50							N
10 Michael Ave, Luddenham	GF	NCA 5	286413	6248874	Residential	47	40	46	40	45	38	47	41	55	50							N
13 Michael Ave, Luddenham	GF	NCA 5	286367	6248926	Residential	49	43	48	42	46	39	48	42	55	50							N
15 Michael Ave, Luddenham	GF	NCA 5	286360	6248907	Residential	48	42	47	41	46	39	48	42	55	50							N
21 Michael Ave, Luddenham	GF	NCA 5	286369	6248829	Residential	50	43	49	43	46	40	48	43	55	50							N
19 Michael Ave, Luddenham	GF	NCA 5	286356	6248846	Residential	50	43	48	42	46	39	48	43	55	50							N
17 Michael Ave, Luddenham	GF	NCA 5	286356	6248873	Residential	52	45	50	44	47	41	50	44	55	50							N
9 Michael Ave, Luddenham	GF	NCA 5	286366	6248975	Residential	52	45	50	44	47	41	50	44	55	50							N
57-73 Campbell St_1, Luddenham	GF	NCA 5	286033	6248677	Residential	46	40	45	39	46	39	48	42	55	50							N
406 Park Rd_2, Luddenham	GF	NCA 5	285888	6249401	Residential	58	53	62	57	57	53	61	57	56	51	Y	Y					N
406 Park Rd_1, Luddenham	GF	NCA 5	285780	6249416	Residential	58	53	61	57	57	53	61	57	57	52		Y					N
429 Park Rd_1, Luddenham	GF	NCA 5	285859	6249508	Residential	58	54	62	58	58	54	63	58	57	52	Y	Y					N
417 Park Rd_1, Luddenham	GF	NCA 5	285791	6249515	Residential	59	55	63	59	59	55	63	59	57	52	Y	Y					N
3065-3067 The Northern Road, Luddenham	GF	NCA 5	286271	6248907	Residential	67	60	65	59	61	55	64	58	55	50	Y	Y					N
10 Blaxland Ave, Luddenham	GF	NCA 5	286452	6248873	Residential	46	40	45	39	45	38	47	40	55	50							N
2392-2398 The Northern Road_3, Luddenham	GF	NCA 5	286662	6249860	Residential	60	53	58	52	56	50	59	52	55	50							N
78 Campbell St_1, Luddenham	GF	NCA 5	285990	6248401	Residential	46	40	46	40	48	41	50	43	55	50							N
2 Willowdene Ave_1, Luddenham	GF	NCA 5	285988	6248464	Residential	47	40	46	40	47	40	49	42	55	50							N
12 Eaton Rd, Luddenham	GF	NCA 5	286865	6248332	Residential	60	53	60	54	58	51	59	53	55	50							N
5 Adams Rd, Luddenham	GF	NCA 5	286656	6248401	Residential	64	56	65	58	62	55	64	58	55	50	Y	Y					N
7 Adams Rd_1, Luddenham	GF	NCA 5	286698	6248432	Residential	59	52	62	54	59	51	61	54	55	50	Y	Y					N
7 Adams Rd_1, Luddenham	F1	NCA 5	286698	6248432	Residential	60	53	63	55	60	52	62	55	55	50	Y	Y					N
15 Adams Rd_1, Luddenham	GF	NCA 5	286747	6248505	Residential	60	52	62	55	60	52	62	55	55	50	Y	Y					N
2 Jamison St, Luddenham	GF	NCA 5	286664	6248463	Residential	62	54	65	57	62	54	64	57	55	50	Y	Y					N
10 Adams Rd, Luddenham	GF	NCA 5	286695	6248515	Residential	61	53	64	57	61	53	63	57	55	50	Y	Y					N
2142 The Northern Road, Luddenham	GF	NCA 5	286610	6248433	Residential	65	58	64	57	61	54	63	57	55	50	Y	Y					N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
6 Jamison St, Luddenham	GF	NCA 5	286639	6248492	Residential	52	45	55	47	52	45	54	48	55	50							N
18 Adams Rd, Luddenham	GF	NCA 5	286719	6248570	Residential	58	50	61	53	58	50	60	53	55	50	Y	Y					N
18 Adams Rd, Luddenham	F1	NCA 5	286719	6248570	Residential	61	54	64	57	62	54	64	57	55	50	Y	Y					N
16 Adams Rd, Luddenham	GF	NCA 5	286707	6248554	Residential	57	49	59	52	57	50	59	53	55	50							N
16 Adams Rd, Luddenham	F1	NCA 5	286707	6248554	Residential	60	52	63	55	60	52	62	56	55	50	Y	Y					N
1 Wade Cl, Luddenham	GF	NCA 5	286670	6248527	Residential	52	45	55	47	52	45	54	48	55	50							N
3 Wade Cl, Luddenham	GF	NCA 5	286683	6248544	Residential	52	45	55	48	53	45	55	48	55	50							N
5 Jamison St, Luddenham	GF	NCA 5	286645	6248564	Residential	49	41	50	43	50	42	51	45	55	50							N
5 Jamison St, Luddenham	F1	NCA 5	286645	6248564	Residential	51	44	52	45	51	44	53	47	55	50							N
4 Wade Cl, Luddenham	GF	NCA 5	286664	6248583	Residential	50	42	52	45	51	43	53	46	55	50							N
7 Jamison St, Luddenham	GF	NCA 5	286631	6248579	Residential	47	41	47	40	45	38	47	41	55	50							N
6 Wade Cl, Luddenham	GF	NCA 5	286654	6248597	Residential	47	39	49	42	48	41	50	43	55	50							N
6 Wade Cl, Luddenham	F1	NCA 5	286654	6248597	Residential	48	41	50	43	49	42	51	45	55	50							N
7 Wade Cl, Luddenham	GF	NCA 5	286686	6248620	Residential	52	44	54	47	53	45	54	48	55	50							N
7 Wade Cl, Luddenham	F1	NCA 5	286686	6248620	Residential	53	45	55	48	53	46	55	49	55	50							N
11 Jamison St, Luddenham	GF	NCA 5	286605	6248607	Residential	50	44	50	43	47	40	49	43	55	50							N
11 Jamison St, Luddenham	F1	NCA 5	286605	6248607	Residential	51	45	51	44	48	41	50	44	55	50							N
1 Adams Rd_1, Luddenham	GF	NCA 5	286705	6248674	Residential	52	44	54	47	53	45	55	48	55	50							N
9 Wade Cl, Luddenham	GF	NCA 5	286672	6248645	Residential	51	43	53	46	52	44	54	47	55	50							N
2903 The Northern Road_28, Luddenham	GF	NCA 5	286555	6249922	Residential	62	55	60	54	58	52	61	54	55	50	Y	Y					N
8 Wade Cl, Luddenham	GF	NCA 5	286636	6248615	Residential	47	39	49	41	48	41	50	43	55	50							N
8 Wade Cl, Luddenham	F1	NCA 5	286636	6248615	Residential	48	41	50	43	50	43	52	45	55	50							N
11 Wade Cl, Luddenham	GF	NCA 5	286654	6248652	Residential	46	39	45	39	47	40	49	42	55	50							N
10 Wade Cl_1, Luddenham	GF	NCA 5	286636	6248630	Residential	47	40	46	40	46	39	47	41	55	49							N
10 Wade Cl_1, Luddenham	F1	NCA 5	286636	6248630	Residential	49	42	48	42	49	42	51	44	55	50							N
2144 The Northern Road, Luddenham	GF	NCA 5	286598	6248458	Residential	64	57	62	56	59	53	62	56	55	50	Y	Y					N
2146 The Northern Road, Luddenham	GF	NCA 5	286583	6248474	Residential	64	58	62	56	59	53	62	56	55	50	Y	Y					N
12 Jamison St, Luddenham	GF	NCA 5	286596	6248537	Residential	52	45	51	45	49	42	51	45	55	50							N
12 Jamison St, Luddenham	F1	NCA 5	286596	6248537	Residential	53	47	53	46	51	44	53	46	55	50							N
14 Jamison St, Luddenham	GF	NCA 5	286584	6248548	Residential	51	44	50	44	47	41	50	44	55	50							N
14 Jamison St, Luddenham	F1	NCA 5	286584	6248548	Residential	53	46	52	46	49	43	52	46	55	50							N
2154 The Northern Road, Luddenham	GF	NCA 5	286536	6248520	Residential	64	57	62	56	59	53	62	56	55	50	Y	Y					N
2154 The Northern Road, Luddenham	F1	NCA 5	286536	6248520	Residential	65	59	63	57	60	54	63	57	55	50	Y	Y					N
16 Jamison St, Luddenham	GF	NCA 5	286572	6248557	Residential	54	47	52	46	49	43	52	46	55	50							N
18 Jamison St, Luddenham	GF	NCA 5	286563	6248570	Residential	54	48	53	47	50	44	52	47	55	50							N
18 Jamison St, Luddenham	F1	NCA 5	286563	6248570	Residential	56	49	54	48	51	45	54	48	55	50							N
2156 The Northern Road, Luddenham	GF	NCA 5	286523	6248527	Residential	64	58	63	56	60	54	62	57	55	50	Y	Y					N
2150 The Northern Road, Luddenham	GF	NCA 5	286559	6248512	Residential	59	53	57	51	55	48	57	52	55	50							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2148 The Northern Road, Luddenham	GF	NCA 5	286567	6248485	Residential	64	58	63	57	59	53	62	57	55	50	Y	Y					N
21 Jamison St, Luddenham	GF	NCA 5	286535	6248685	Residential	48	41	48	41	48	41	50	43	55	50							N
21 Jamison St, Luddenham	F1	NCA 5	286535	6248685	Residential	49	43	49	43	49	42	51	44	55	50							N
5 Ethan Cl, Luddenham	GF	NCA 5	286550	6248711	Residential	43	36	43	37	44	37	46	39	55	48							N
5 Ethan Cl, Luddenham	F1	NCA 5	286550	6248711	Residential	45	39	45	39	46	39	48	41	55	50							N
16 Ethan Cl, Luddenham	GF	NCA 5	286581	6248730	Residential	46	39	46	40	47	40	49	43	55	50							N
7 Ethan Cl, Luddenham	GF	NCA 5	286568	6248718	Residential	46	39	46	40	47	40	49	42	55	50							N
7 Ethan Cl, Luddenham	F1	NCA 5	286568	6248718	Residential	48	41	48	41	48	41	50	43	55	50							N
23 Jamison St, Luddenham	GF	NCA 5	286520	6248695	Residential	47	40	46	40	45	38	47	40	55	49							N
25 Jamison St, Luddenham	GF	NCA 5	286509	6248713	Residential	47	41	46	40	46	39	48	42	55	49							N
25 Jamison St, Luddenham	F1	NCA 5	286509	6248713	Residential	49	43	48	42	48	41	50	43	55	50							N
2 Ethan Cl, Luddenham	GF	NCA 5	286477	6248744	Residential	47	40	46	40	46	40	48	42	55	50							N
8 Ethan Cl, Luddenham	GF	NCA 5	286522	6248779	Residential	45	38	44	38	45	38	47	40	55	49							N
10 Ethan Cl, Luddenham	GF	NCA 5	286544	6248781	Residential	45	38	46	39	47	40	49	42	55	50							N
4 Ethan Cl, Luddenham	GF	NCA 5	286493	6248756	Residential	46	39	46	39	46	39	48	42	55	50							N
4 Ethan Cl, Luddenham	F1	NCA 5	286493	6248756	Residential	48	41	48	41	48	41	49	43	55	50							N
6 Ethan Cl, Luddenham	GF	NCA 5	286509	6248767	Residential	45	38	45	38	46	39	47	41	55	50							N
6 Ethan Cl, Luddenham	F1	NCA 5	286509	6248767	Residential	47	40	47	41	47	40	49	43	55	50							N
12 Ethan Cl, Luddenham	GF	NCA 5	286562	6248765	Residential	45	38	46	40	47	40	49	43	55	50							N
9 Blaxland Ave, Luddenham	GF	NCA 5	286447	6248780	Residential	48	42	47	41	46	39	48	42	55	50							N
9 Blaxland Ave, Luddenham	F1	NCA 5	286447	6248780	Residential	50	43	49	43	48	41	50	43	55	50							N
11 Blaxland Ave, Luddenham	GF	NCA 5	286461	6248788	Residential	47	40	46	40	47	40	49	42	55	50							N
15 Blaxland Ave, Luddenham	GF	NCA 5	286491	6248814	Residential	46	39	46	40	47	40	49	43	55	50							N
13 Blaxland Ave, Luddenham	GF	NCA 5	286474	6248804	Residential	48	41	47	41	47	40	48	42	55	50							N
17 Blaxland Ave, Luddenham	GF	NCA 5	286506	6248832	Residential	46	40	46	39	48	41	49	43	55	50							N
19 Blaxland Ave, Luddenham	GF	NCA 5	286504	6248856	Residential	47	40	46	40	47	40	49	42	55	50							N
21 Blaxland Ave, Luddenham	GF	NCA 5	286508	6248875	Residential	46	39	46	39	47	40	49	42	55	50							N
23 Blaxland Ave, Luddenham	GF	NCA 5	286508	6248893	Residential	45	39	45	39	47	40	49	42	55	50							N
2166 The Northern Road, Luddenham	GF	NCA 5	286433	6248633	Residential	63	56	61	55	58	51	60	55	55	50	Y	Y					N
34 Jamison St_1, Luddenham	GF	NCA 5	286458	6248694	Residential	51	44	50	44	48	41	50	44	55	50							N
2168 The Northern Road, Luddenham	GF	NCA 5	286406	6248641	Residential	66	60	65	59	61	55	64	58	55	50	Y	Y					N
2170 The Northern Road, Luddenham	GF	NCA 5	286408	6248673	Residential	59	52	57	51	53	47	56	51	55	50							N
38 Jamison St, Luddenham	GF	NCA 5	286427	6248719	Residential	50	43	48	42	46	39	48	42	55	50							N
2172 The Northern Road, Luddenham	GF	NCA 5	286387	6248680	Residential	63	56	61	55	58	51	60	55	55	50	Y	Y					N
40 Jamison St, Luddenham	GF	NCA 5	286419	6248741	Residential	49	42	48	42	45	39	48	42	55	50							N
42 Jamison St, Luddenham	GF	NCA 5	286402	6248755	Residential	52	45	50	44	47	41	49	44	55	50							N
2176 The Northern Road, Luddenham	GF	NCA 5	286366	6248731	Residential	61	54	59	53	55	49	58	53	55	50							N
Sacred Heart Parish - Residence	GF	NCA 5	285972	6248583	Residential	43	37	43	37	43	36	45	38	53	47							N

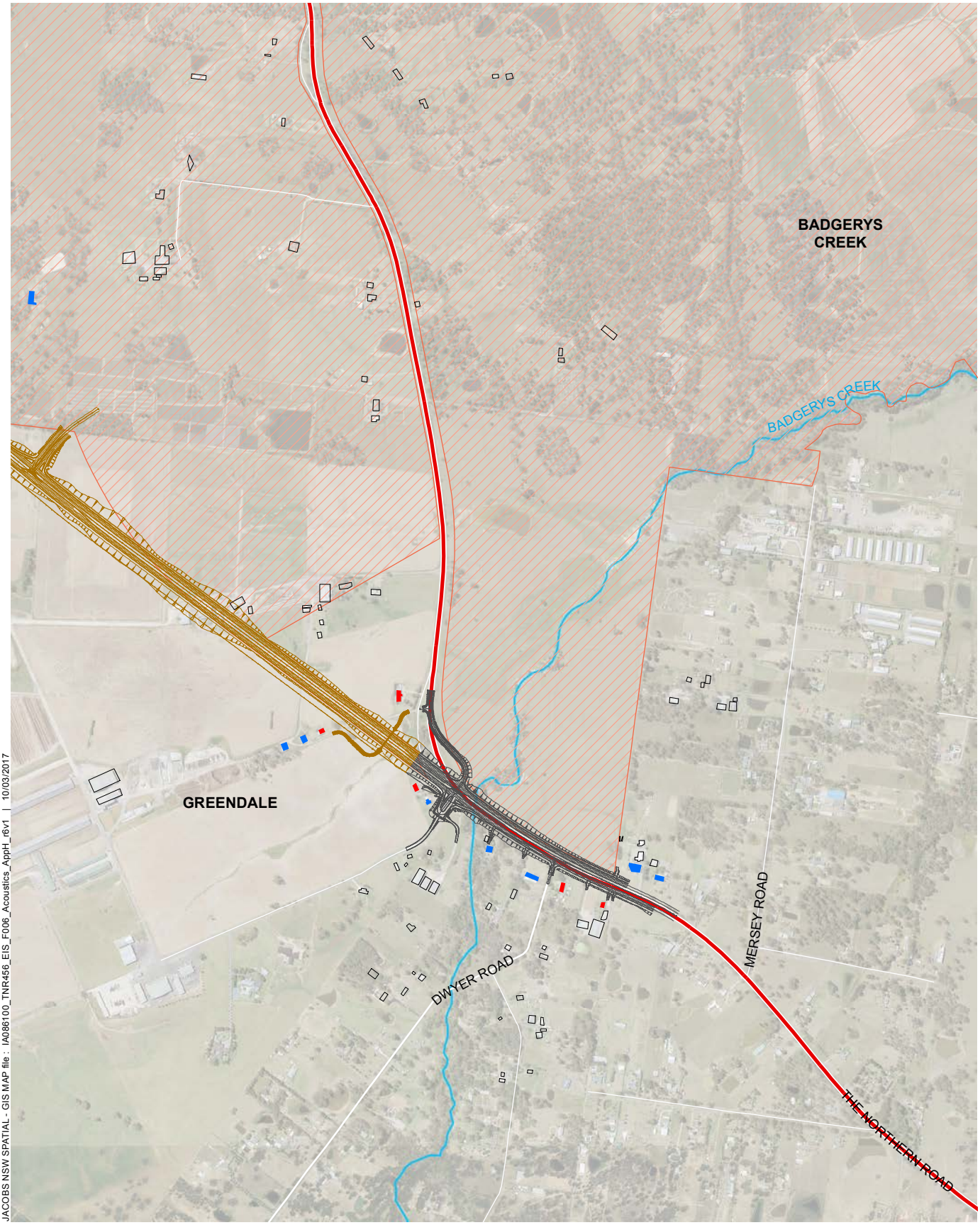
Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
2180 The Northern Road_1, Luddenham	GF	NCA 5	286331	6248752	Residential	68	62	66	60	63	57	65	60	55	50	Y	Y					N
2903 The Northern Road_22, Luddenham	GF	NCA 5	286689	6250116	Residential	59	52	57	51	56	50	59	52	55	50							N
Lot1/DP838361	GF	NCA 6	287036	6247562	Garage / Shed	50	43	50	44	51	44	52	46	-	-							N
Lot1/DP838361	GF	NCA 6	287057	6247553	Residential	52	45	52	46	49	43	51	44	55	50							N
1935 The Northern Rd_3, Luddenham	GF	NCA 6	287042	6246482	Garage / Shed	47	41	47	41	47	40	48	42	-	-							N
1935 The Northern Rd_4, Luddenham	GF	NCA 6	287038	6246444	Garage / Shed	47	40	47	41	46	40	48	41	-	-							N
1935 The Northern Road_7, Luddenham	GF	NCA 6	286990	6246423	Garage / Shed	45	38	45	39	48	41	49	42	-	-							N
1935 The Northern Road_6, Luddenham	GF	NCA 6	287026	6246423	Garage / Shed	45	38	45	39	47	40	48	42	-	-							N
1935 The Northern Rd_5, Luddenham	GF	NCA 6	287033	6246430	Garage / Shed	44	37	44	38	45	38	46	39	-	-							N
1935 The Northern Road_2, Luddenham	GF	NCA 6	287038	6246657	Residential	48	41	48	42	47	40	49	42	53	47							N
2055 The Northern Road, Luddenham	GF	NCA 6	287058	6247344	Residential	52	45	51	45	49	42	51	44	55	50							N
Lot1/DP838361	GF	NCA 6	287145	6246987	Residential	50	43	50	44	47	40	48	41	55	49							N
1935 The Northern Road_1, Luddenham	GF	NCA 6	287120	6246747	Residential	50	44	50	44	47	40	48	41	55	49							N
1935 The Northern Rd_9, Luddenham	GF	NCA 6	287067	6246513	Residential	49	42	49	43	46	39	48	41	51	45							N
1923 The Northern Road, Luddenham	GF	NCA 6	287410	6246513	Residential	54	47	54	48	45	38	46	39	55	50							N
Lot1/DP838361	GF	NCA 6	287381	6246861	Residential	57	51	57	51	43	37	45	38	55	50							N
Lot1/DP838361	GF	NCA 6	287356	6247086	Residential	58	52	58	52	46	39	48	41	55	50							N
2059 The Northern Road, Luddenham	GF	NCA 6	287287	6247255	Residential	55	48	55	49	47	40	49	42	55	50							N
1970 The Northern Road, Luddenham	GF	NCA 6	287488	6247302	Residential	56	49	55	49	44	37	45	38	55	50							N
1972 The Northern Road_1, Luddenham	GF	NCA 6	287440	6247353	Residential	63	56	63	57	47	40	48	42	55	50							N
Lot1/DP838361	GF	NCA 6	287337	6247048	Residential	57	50	57	51	46	40	48	41	55	50							N
1972 The Northern Road_3, Luddenham	GF	NCA 6	287621	6247502	Garage / Shed	51	44	50	44	43	36	44	38	-	-							N
1972 The Norhtern Road_2, Luddenham	GF	NCA 6	287574	6247445	Garage / Shed	52	46	52	46	43	36	45	38	-	-							N
1912 The Northern Road_1, Luddenham	GF	NCA 6	287619	6247084	Residential	57	50	57	51	46	39	47	40	55	50							N
230A Willowdene Ave_2, Luddenham	GF	NCA 7	285414	6247666	Garage / Shed	39	32	39	33	45	39	47	40	-	-							N
405 Willowdene Ave_3, Luddenham	GF	NCA 7	285798	6246243	Garage / Shed	37	30	37	31	49	42	50	43	-	-							N
405 Willowdene Ave_4, Luddenham	GF	NCA 7	285797	6246319	Garage / Shed	36	29	36	30	47	40	48	42	-	-							N
405 Willowdene Ave_2, Luddenham	GF	NCA 7	285780	6246319	Garage / Shed	36	29	36	30	45	38	46	40	-	-							N
365 Willowdene Ave_2, Luddenham	GF	NCA 7	285822	6246429	Garage / Shed	40	34	40	34	56	49	57	51	-	-							N
325 Willowdene Ave_2, Luddenham	GF	NCA 7	285537	6246868	Garage / Shed	38	32	38	32	51	44	52	46	-	-							N
295 Willowdene Ave_2, Luddenham	GF	NCA 7	285302	6247063	Garage / Shed	38	32	38	32	47	40	48	42	-	-							N
350 Willowdene Ave_1, Luddenham	GF	NCA 7	285689	6247144	Garage / Shed	38	31	37	32	53	46	54	47	-	-							N
320 Willowdene Ave_2, Luddenham	GF	NCA 7	285661	6247281	Garage / Shed	38	31	38	32	49	42	50	44	-	-							N
Lot1/DP838361	GF	NCA 7	286415	6246564	Garage / Shed	43	36	43	37	51	44	53	46	-	-							N
460 Willowdene Ave_1, Luddenham	GF	NCA 7	286007	6246410	Garage / Shed	40	33	40	34	65	58	66	59	-	-			Y				N
500 Willowdene Ave_2, Luddenham	GF	NCA 7	286191	6245997	Garage / Shed	40	33	40	34	55	48	56	50	-	-							N
435 Willowdene Ave_1, Luddenham	GF	NCA 7	285558	6246081	Residential	39	32	39	33	48	41	49	43	51	44							N
1935 The Northern Road_8, Luddenham	GF	NCA 7	286950	6246481	Garage / Shed	46	39	46	40	48	41	50	43	-	-							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
1625 The Northern Road_2, Luddenham	GF	NCA 8	287637	6246032	Garage / Shed	56	49	55	50	46	39	48	41	-	-							N
1625 The Northern Road_2, Luddenham	F1	NCA 8	287637	6246032	Garage / Shed	57	50	57	51	47	40	48	41	-	-							N
1625 The Northern Road_1, Luddenham	GF	NCA 8	287641	6246069	Residential	57	50	56	50	44	37	45	38	55	50							N
1625 The Northern Road_1, Luddenham	F1	NCA 8	287641	6246069	Residential	58	51	58	52	44	38	46	39	55	50							N
165 Greendale Rd_7, Greendale	GF	NCA 8	286895	6244975	Garage / Shed	43	36	42	37	46	39	47	41	-	-							N
3 Francis St_2, Bringelly	GF	NCA 8	287992	6244182	Garage / Shed	44	37	44	38	44	37	45	39	-	-							N
3 Francis St_1, Bringelly	GF	NCA 8	287995	6244199	Residential	46	39	45	39	46	39	47	40	57	51							N
2A Dwyer Rd_2, Bringelly	GF	NCA 8	288110	6244553	Garage / Shed	51	44	51	45	53	46	54	48	-	-							N
165 Greendale Rd_8, Greendale	GF	NCA 8	286880	6245021	Garage / Shed	43	36	42	36	47	40	48	42	-	-							N
1755 The Northern Road_3, Bringelly	GF	NCA 8	287498	6245545	Garage / Shed	51	44	51	45	52	46	54	47	-	-							N
1755 The Northern Road_1, Bringelly	GF	NCA 8	287639	6245547	Garage / Shed	55	48	55	49	52	45	53	47	-	-							N
1755 The Northern Road_5, Bringelly	GF	NCA 8	287488	6245463	Garage / Shed	50	43	50	44	56	49	57	50	-	-							N
1755 The Northern Road_6, Bringelly	GF	NCA 8	287482	6245427	Garage / Shed	50	43	50	44	58	52	60	53	-	-							N
1755 The Northern Road_4, Bringelly	GF	NCA 8	287483	6245504	Garage / Shed	50	43	50	44	55	48	56	49	-	-							N
1755 The Northern Road_7, Bringelly	GF	NCA 8	287447	6245507	Garage / Shed	48	41	48	42	54	47	55	49	-	-							N
1755 The Northern Road_8, Bringelly	GF	NCA 8	287446	6245497	Garage / Shed	48	41	47	42	56	49	57	51	-	-							N
1755 The Northern Road_9, Bringelly	GF	NCA 8	287254	6245516	Garage / Shed	48	41	48	42	67	60	69	62	-	-			Y	Y			N
1755 The Northern Road_11, Bringelly	GF	NCA 8	287289	6245497	Garage / Shed	49	42	48	42	63	56	64	57	-	-							N
1675 The Northern Road_2, Bringelly	GF	NCA 8	287790	6244819	Garage / Shed	54	47	54	48	57	50	58	52	-	-							N
7 Dwyer Rd_2, Bringelly	GF	NCA 8	287745	6244482	Garage / Shed	46	39	46	40	48	41	50	43	-	-							N
9 Dwyer Rd_2, Bringelly	GF	NCA 8	287633	6244481	Garage / Shed	45	38	45	39	47	41	49	42	-	-							N
4 Francis St_2, Bringelly	GF	NCA 8	288104	6244347	Garage / Shed	50	43	49	44	51	44	52	45	-	-							N
6 Francis St_2, Bringelly	GF	NCA 8	288108	6244323	Garage / Shed	49	42	48	42	49	42	50	44	-	-							N
1675 The Northern Road_6, Bringelly	GF	NCA 8	287724	6244785	Garage / Shed	50	43	50	44	54	47	55	48	-	-							N
1675 The Northern Road_7, Bringelly	GF	NCA 8	287698	6244779	Garage / Shed	50	44	50	44	53	46	54	47	-	-							N
1675 The Northern Road_5, Bringelly	GF	NCA 8	287802	6244721	Garage / Shed	51	44	51	45	54	47	55	48	-	-							N
1675 The Northern Road_4, Bringelly	GF	NCA 8	287779	6244734	Garage / Shed	51	44	50	44	53	46	55	48	-	-							N
1675 The Northern Road_3, Bringelly	GF	NCA 8	287760	6244752	Garage / Shed	51	44	50	44	53	46	55	48	-	-							N
2A Dwyer Rd_1, Bringelly	GF	NCA 8	288109	6244529	Residential	49	42	49	43	51	45	53	46	60	54							N
3 Dwyer Rd, Bringelly	GF	NCA 8	288009	6244554	Residential	51	44	50	44	52	45	53	47	60	55							N
1645 The Northern Road, Bringelly	GF	NCA 8	287956	6244669	Residential	52	45	52	46	54	47	55	48	60	55							N
5 Dwyer Rd, Bringelly	GF	NCA 8	287738	6244610	Residential	48	41	47	41	50	43	51	45	59	53							N
1675 The Northern Road_8, Bringelly	GF	NCA 8	287605	6244711	Residential	50	43	49	44	52	45	53	46	59	54							N
1755 The Northern Road_2, Bringelly	GF	NCA 8	287555	6245564	Residential	53	46	53	47	52	45	53	47	55	50							N
1675 The Northern Road_1, Bringelly	GF	NCA 8	287735	6244809	Residential	53	46	52	47	55	48	56	49	60	55							N
7 Dwyer Rd_1, Bringelly	GF	NCA 8	287769	6244470	Residential	46	39	46	40	48	41	50	43	58	51							N
9 Dwyer Rd_1, Bringelly	GF	NCA 8	287720	6244431	Residential	45	39	45	39	47	41	49	42	57	51							N
11 Dwyer Rd, Bringelly	GF	NCA 8	287662	6244416	Residential	45	38	45	39	47	40	49	42	57	50							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
11 Dwyer Rd, Bringelly	F1	NCA 8	287662	6244416	Residential	46	40	46	40	48	41	50	43	58	52							N
2 Francis St, Bringelly	GF	NCA 8	288043	6244414	Residential	49	42	48	42	50	43	51	45	60	54							N
1 Francis St, Bringelly	GF	NCA 8	287987	6244356	Residential	47	40	47	41	48	41	49	43	59	52							N
4 Francis St_1, Bringelly	GF	NCA 8	288076	6244353	Residential	50	43	49	43	51	44	52	45	60	55							N
6 Francis St_1, Bringelly	GF	NCA 8	288096	6244309	Residential	46	39	45	40	46	39	48	41	57	51							N
8 Francis St, Bringelly	GF	NCA 8	288070	6244207	Residential	46	39	45	40	47	40	48	41	57	51							N
8 Francis St, Bringelly	F1	NCA 8	288070	6244207	Residential	48	41	47	41	48	41	49	43	59	53							N
1615 The Northern Road_3, Bringelly	GF	NCA 8	288256	6244607	Garage / Shed	54	47	53	48	55	48	56	50	-	-							N
1635 The Northern Road_2, Bringelly	GF	NCA 8	288025	6244703	Garage / Shed	54	47	54	48	56	49	57	50	-	-							N
1592 The Northern Road_2, Bringelly	GF	NCA 8	288418	6244790	Garage / Shed	55	48	54	48	57	50	58	52	-	-							N
1602 The Northern Road_2, Bringelly	GF	NCA 8	288378	6244808	Garage / Shed	54	47	53	47	56	50	58	51	-	-							N
1602 The Northern Road_2, Bringelly	F1	NCA 8	288378	6244808	Garage / Shed	56	49	55	49	58	51	60	53	-	-							N
1602 The Northern Road_1, Bringelly	GF	NCA 8	288382	6244845	Garage / Shed	53	46	52	47	55	48	56	50	-	-							N
1602 The Northern Road_1, Bringelly	F1	NCA 8	288382	6244845	Garage / Shed	55	48	54	48	57	50	58	52	-	-							N
1602 The Northern Road_5, Bringelly	GF	NCA 8	288322	6244858	Garage / Shed	54	48	54	48	57	50	58	51	-	-							N
1602 The Northern Road_4, Bringelly	GF	NCA 8	288329	6244857	Garage / Shed	49	42	49	43	51	45	53	46	-	-							N
1615 The Northern Road_2, Bringelly	GF	NCA 8	288279	6244643	Garage / Shed	57	50	57	51	59	52	60	53	-	-							N
1655 The Northern Road_1, Bringelly	GF	NCA 8	287949	6244858	Garage / Shed	63	56	62	56	64	57	65	58	-	-			Y				N
1615 The Northern Road_4, Bringelly	GF	NCA 8	288218	6244619	Garage / Shed	54	48	54	48	56	49	57	50	-	-							N
88 Mersey Dr, Bringelly	GF	NCA 8	288473	6245244	Garage / Shed	48	41	48	42	48	41	49	42	-	-							N
88 Mersey Rd_2, Bringelly	GF	NCA 8	288644	6245247	Garage / Shed	43	36	43	37	42	35	43	37	-	-							N
88 Mersey Rd_3, Bringelly	GF	NCA 8	288606	6245226	Garage / Shed	45	38	44	38	45	38	47	40	-	-							N
92 Mersey Rd_3, Bringelly	GF	NCA 8	288515	6245303	Garage / Shed	47	41	47	41	47	40	48	41	-	-							N
88 Mersey Rd_1, Bringelly	GF	NCA 8	288638	6245228	Residential	43	37	43	37	45	38	46	39	55	49							N
92 Mersey Rd_1, Bringelly	GF	NCA 8	288568	6245303	Residential	46	39	46	40	43	37	45	38	58	51							N
92 Mersey Rd_2, Bringelly	GF	NCA 8	288553	6245288	Residential	46	40	46	40	46	40	48	41	58	52							N
76 Galaxy Rd_2, Luddenham	GF	NCA 3	286159	6250917	Garage / Shed	48	41	48	42	48	41	50	43	-	-							N
44 Galaxy Rd_2, Luddenham	GF	NCA 3	286128	6250904	Residential	46	39	45	39	46	39	48	41	60	55							N
50 Willowdene Ave_2, Luddenham	GF	NCA 7	285726	6248372	Garage / Shed	43	37	43	37	46	40	48	41	-	-							N
50 Willowdene Ave_1, Luddenham	GF	NCA 7	285706	6248399	Residential	43	37	43	37	46	39	48	41	55	49							N
80 Willowdene Ave, Luddenham	GF	NCA 7	285554	6248410	Residential	43	36	43	37	45	39	47	41	55	48							N
1845 The Northern Road, Luddenham	GF	NCA 8	287608	6246143	Residential	55	48	55	49	45	38	46	39	55	50							N
1885 The Nothern Road, Luddenham	GF	NCA 6	287624	6246405	Residential	59	53	59	53	42	36	44	37	55	50							N
1875 The Nothern Road, Luddenham	GF	NCA 6	287627	6246370	Residential	59	53	59	53	43	37	45	38	55	50							N
1850 The Northern Road, Luddenham	GF	NCA 6	287756	6246352	Residential	66	59	65	60	43	37	45	38	56	51							N
1810 The Northern Road_2, Bringelly	GF	NCA 8	288158	6246196	Garage / Shed	52	45	51	45	45	38	46	39	-	-							N
1810 The Northern Road_1, Bringelly	GF	NCA 8	288156	6246218	Residential	51	45	51	45	44	37	45	38	57	52							N
1900 The Northern Road_3, LuddenhamLL	GF	NCA 6	288013	6246989	Residential	42	35	41	35	40	33	41	35	53	47							N

Address	Flr	NCA	Easting	Northing	Land Use	Predicted noise level dB(A) - NO Build				Predicted noise level dB(A) - Build				NCG Criteria		Exceeds Cumulative Limit?		Acute?		>2dB(A) increase?		Eligible for consideration of mitigation
						2021		2031		2021		2031										
						D	N	D	N	D	N	D	N	D	N	D	N	D	N	D	N	
1900 The Northern Road_2, Luddenham	GF	NCA 6	287974	6246989	Residential	42	35	42	36	40	34	42	35	54	47							N
1900 The Northern Road_1, Luddenham	GF	NCA 6	287774	6246914	Residential	55	48	55	49	46	39	47	41	55	50							N
Lot 1/DP1223566	GF	NCA 8	288293	6246273	Residential	50	43	49	43	44	38	46	39	57	52							N
1912 The Northern Road_2, Luddenham	GF	NCA 8	287701	6246994	Residential	56	49	55	50	45	39	47	40	55	50							N

Appendix H. Receivers qualifying for consideration of mitigation of operational noise



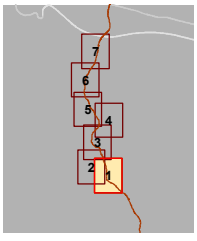
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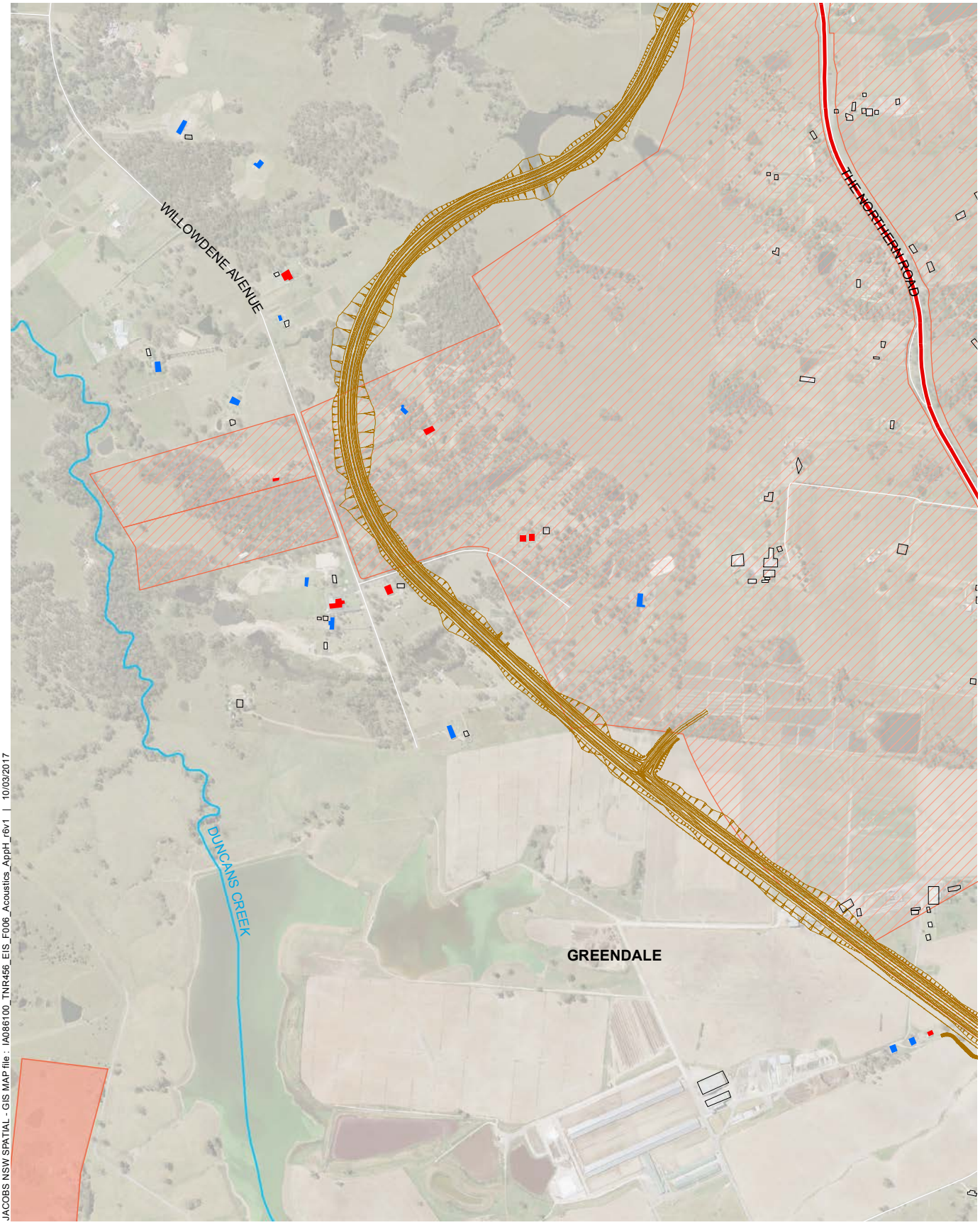
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Receivers qualifying for consideration of noise mitigation (by mitigation trigger)
>2dB(A) increase
Combination of triggers
Receivers not qualifying for mitigation

0 200 400 m

N





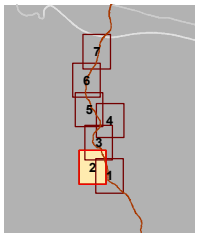
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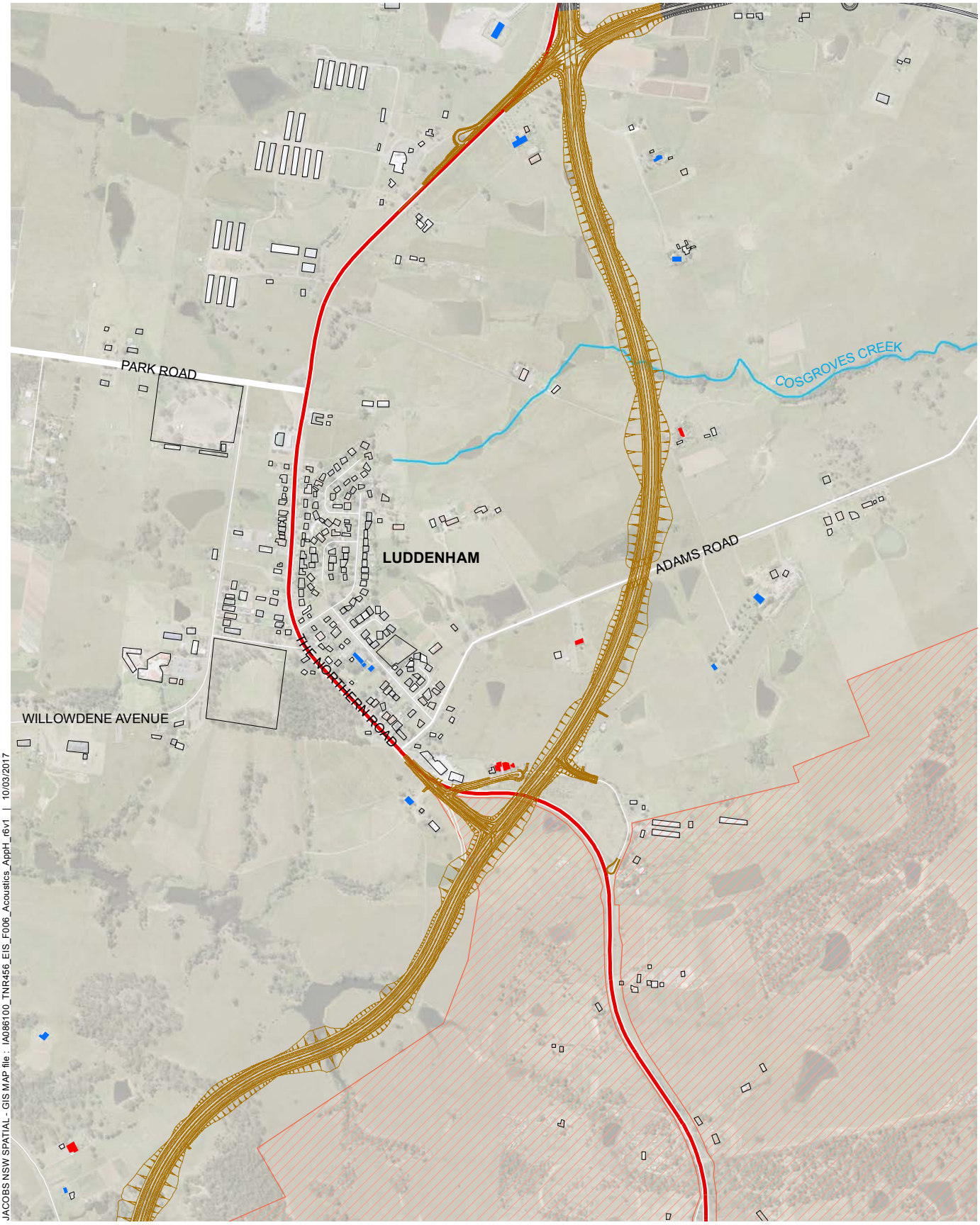
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Receivers qualifying for consideration of noise mitigation (by mitigation trigger)
>2dB(A) increase
Combination of triggers
Receivers not qualifying for mitigation

0 200 400 m

N





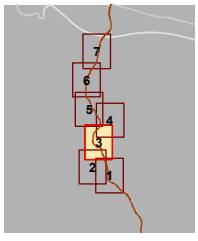
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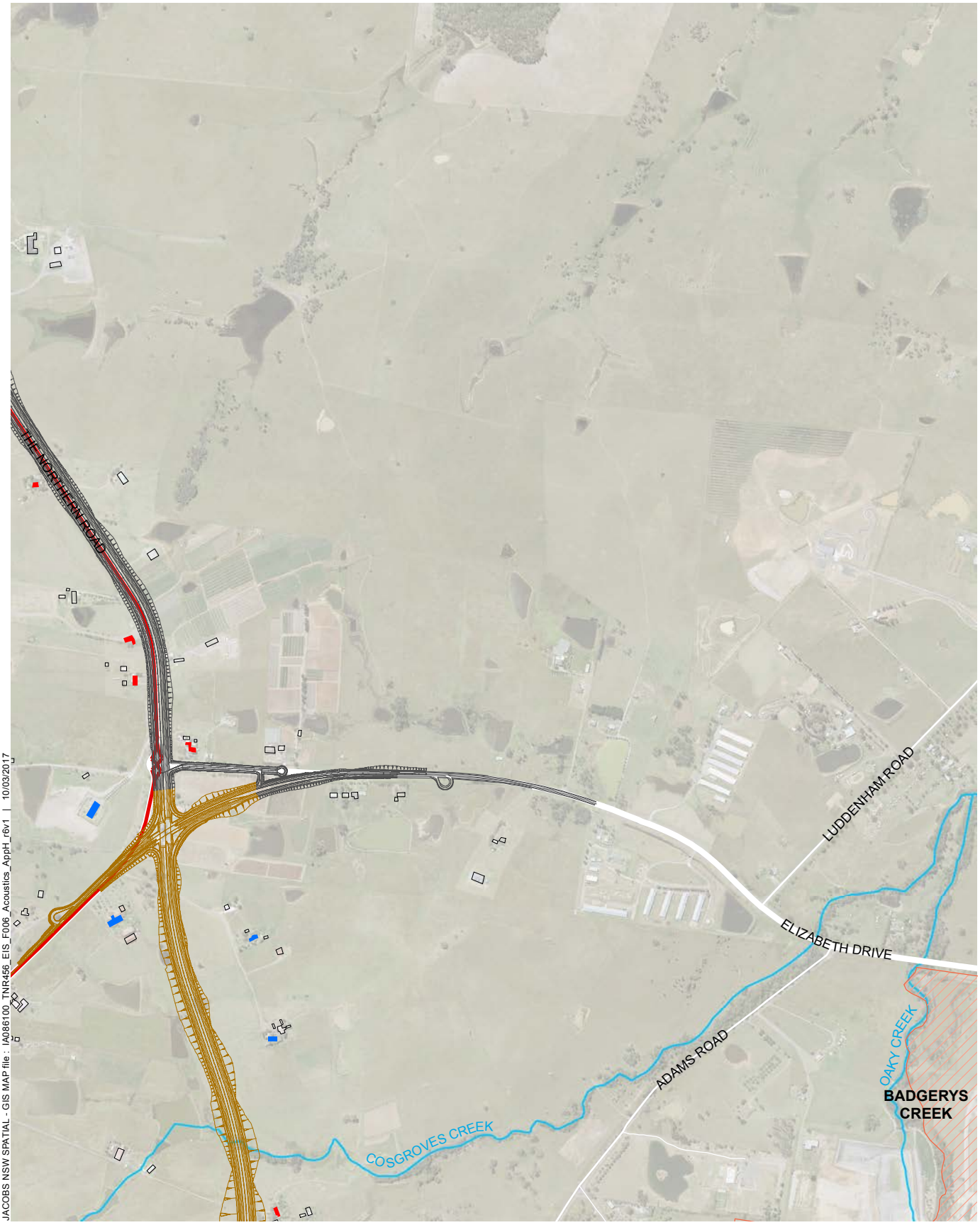
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Receivers qualifying for consideration of noise mitigation (by mitigation trigger)
>2dB(A) increase
Combination of triggers
Receivers not qualifying for mitigation

0 200 400 m

N





JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F006_Acoustics_AppH_r6v1 | 10/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines

Receivers qualifying for consideration of noise mitigation (by mitigation trigger)
>2dB(A) increase
Combination of triggers
Receivers not qualifying for mitigation

0 200 400 m

N



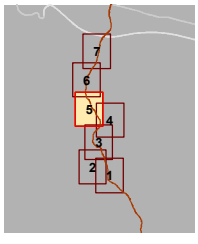
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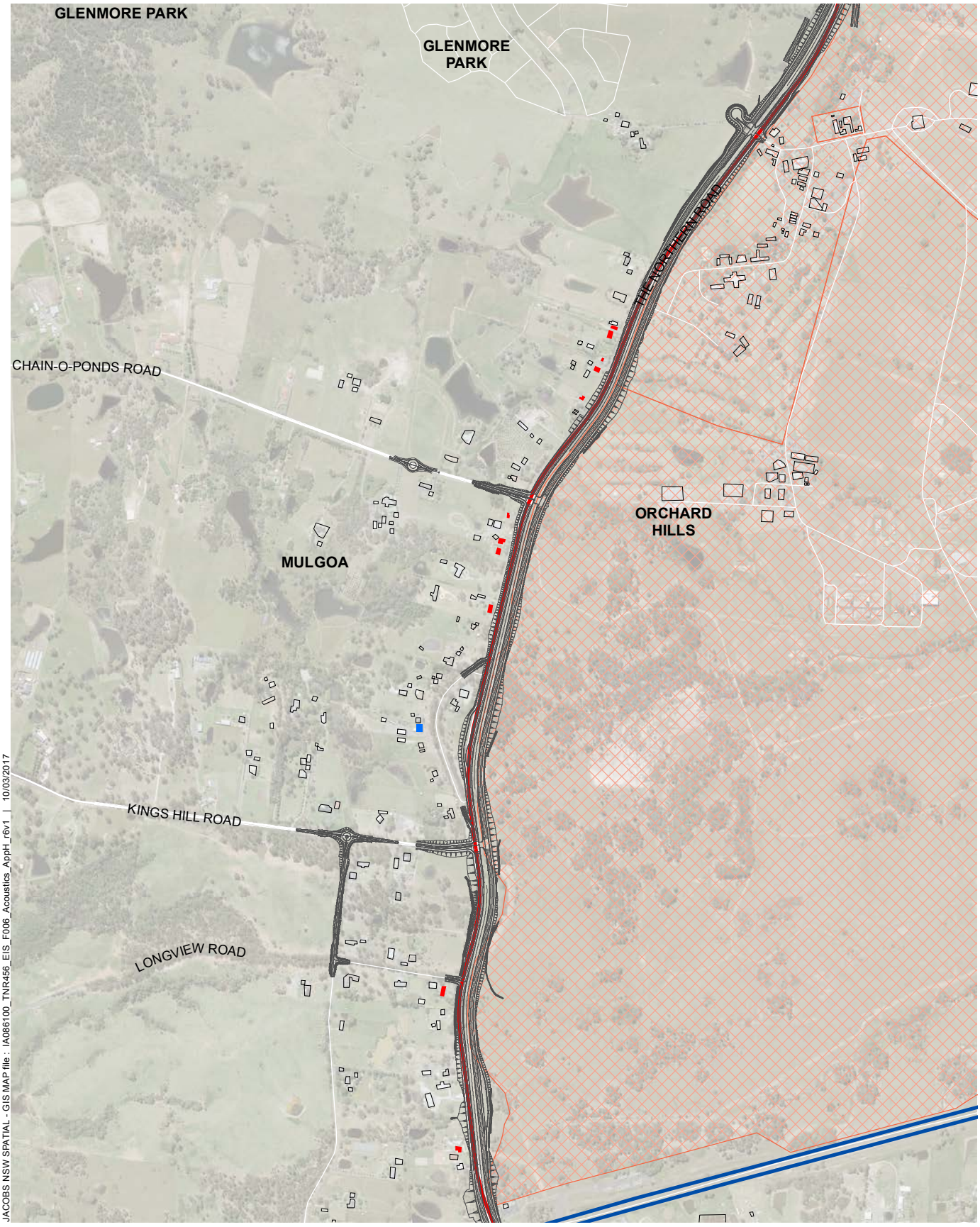
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines

Receivers qualifying for consideration of noise mitigation (by mitigation trigger)
>2dB(A) increase
Combination of triggers
Receivers not qualifying for mitigation

0 200 400 m

N





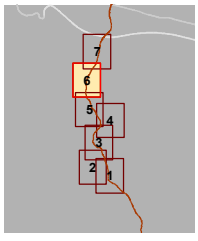
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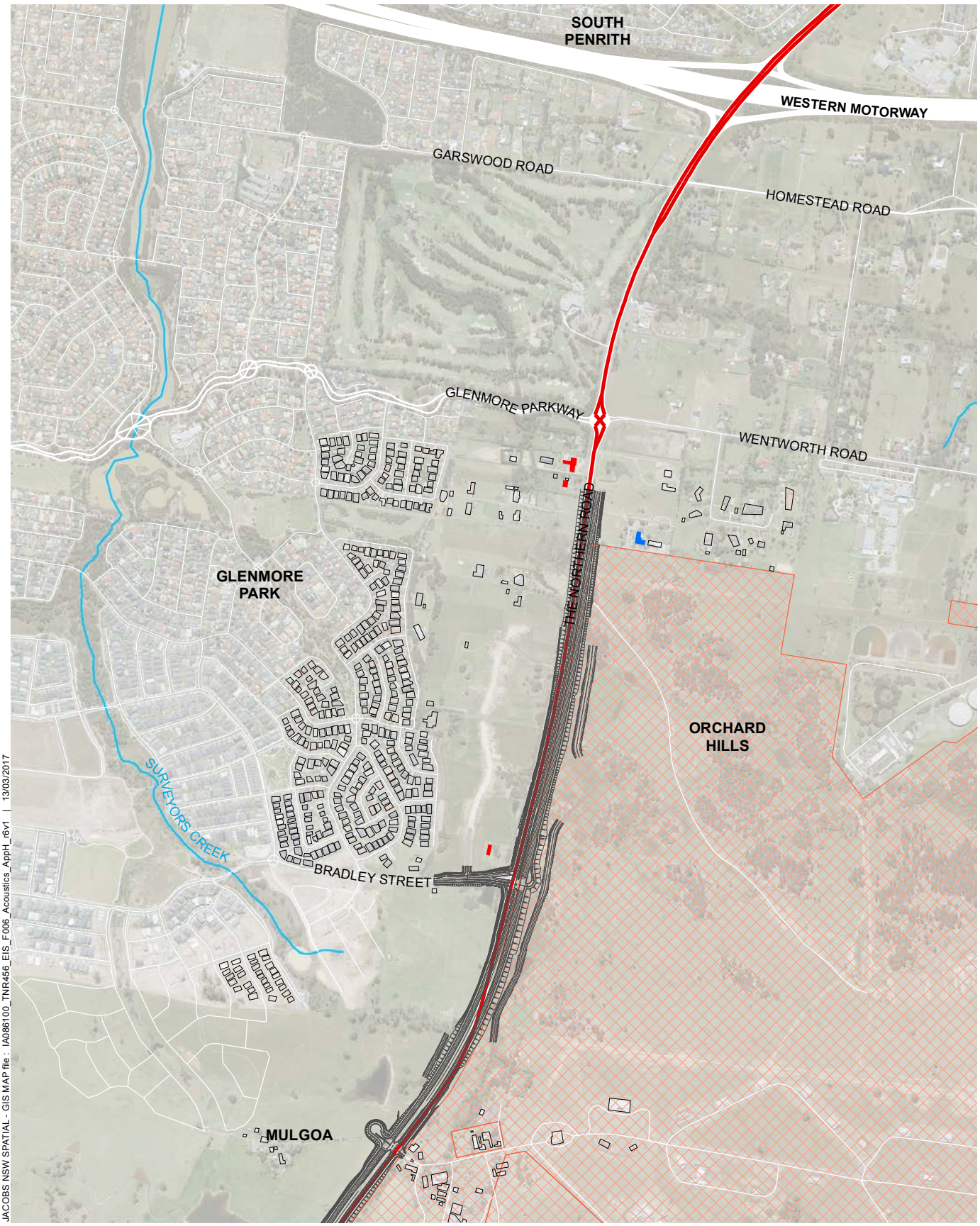
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines

Receivers qualifying for consideration of noise mitigation (by mitigation trigger)
>2dB(A) increase
Combination of triggers
Receivers not qualifying for mitigation

0 200 400 m

N





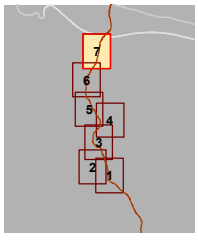
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F006_Acoustics_AppH_r6v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Receivers qualifying for consideration of noise mitigation (by mitigation trigger)
>2dB(A) increase
Combination of triggers
Receivers not qualifying for mitigation

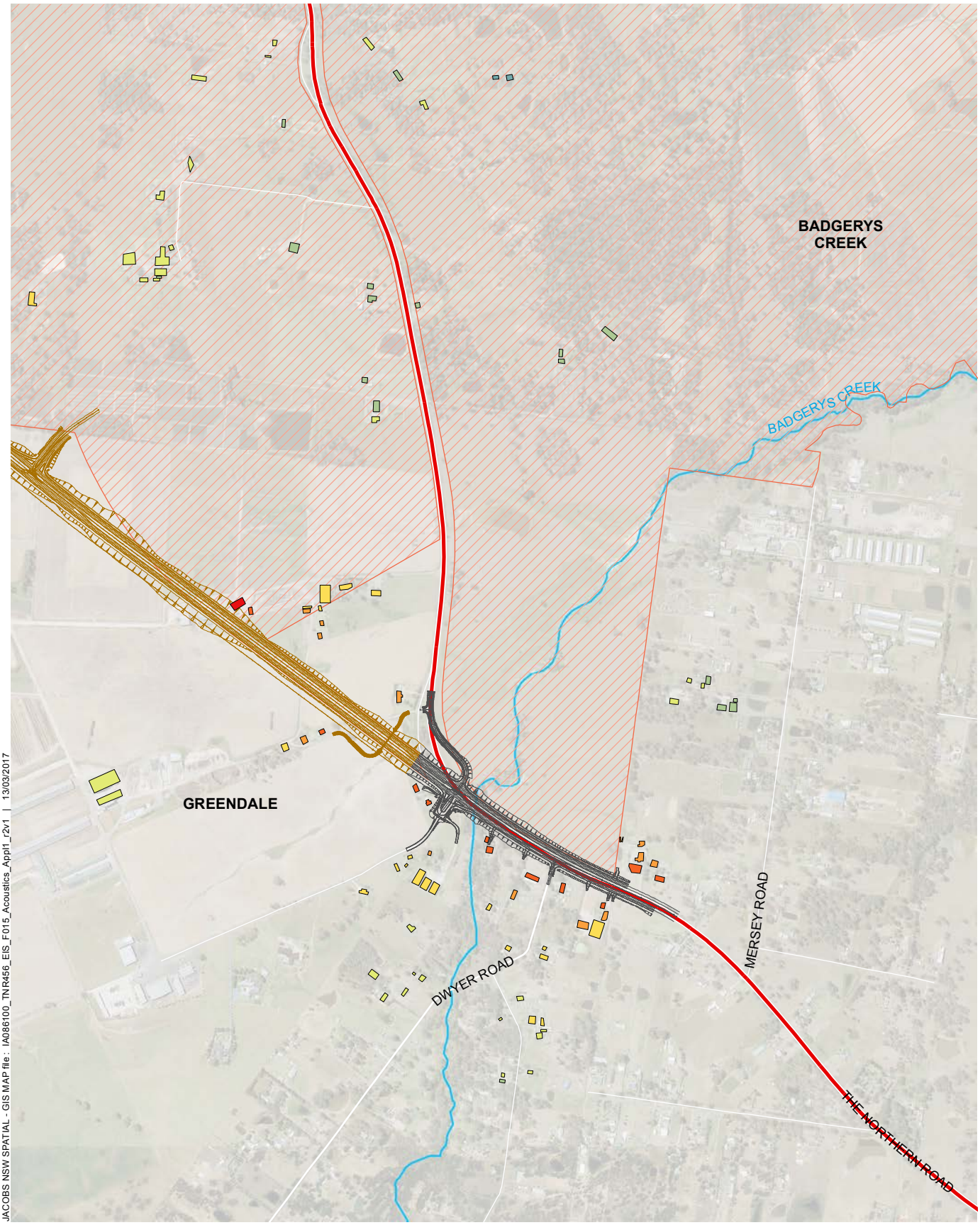
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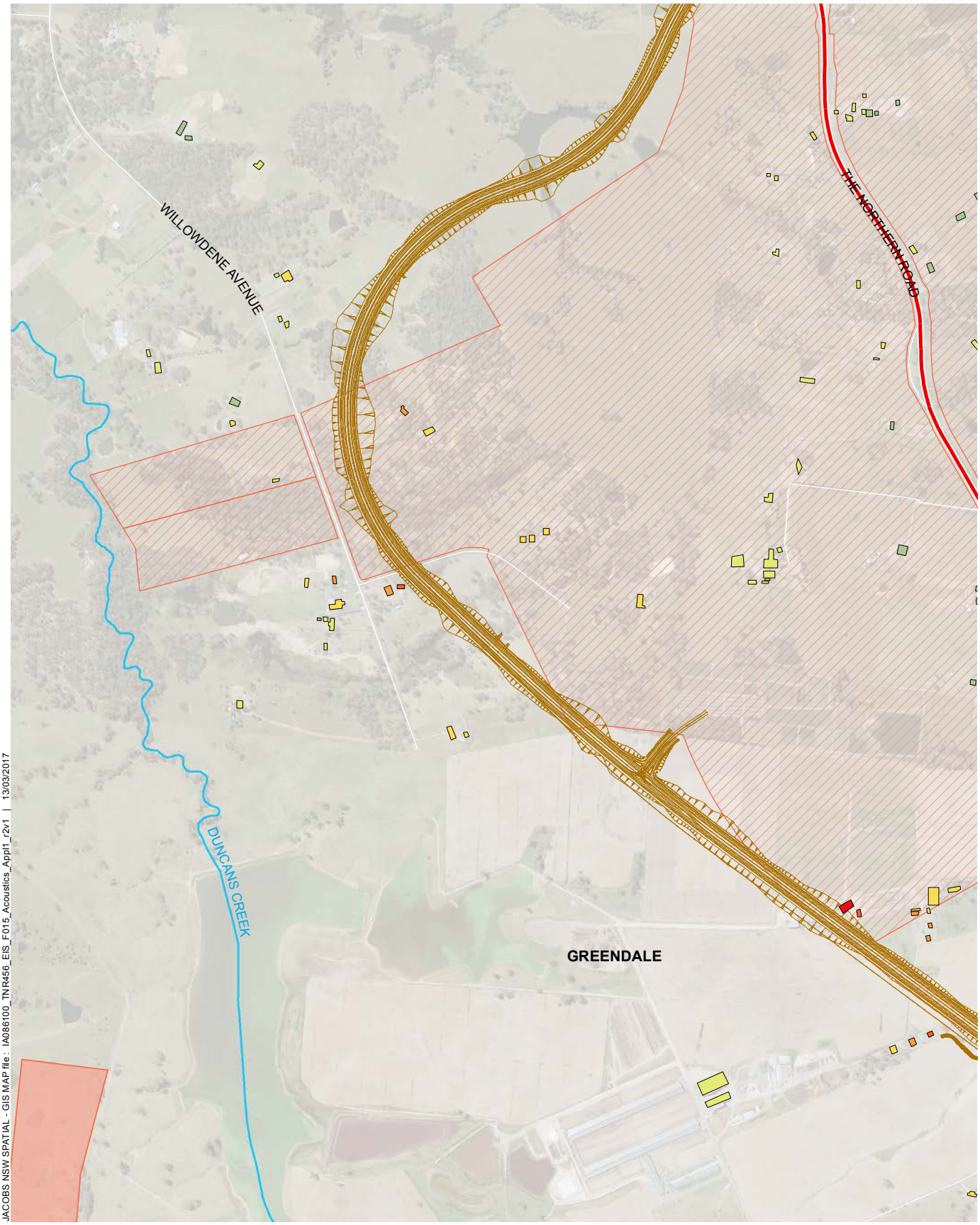
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Appendix I. Predicted operational noise levels

I.1 Predicted operational noise – Build 2021 (Day)


BADGERYS CREEK
BADGERYS CREEK
GREENDALE
DWYER ROAD
MERSEY ROAD
THE NORTHERN ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F015_Acoustics_Appl1_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
0
200
400 m
N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F015_Acoustics_Appl1_r2v1 | 13/03/2017

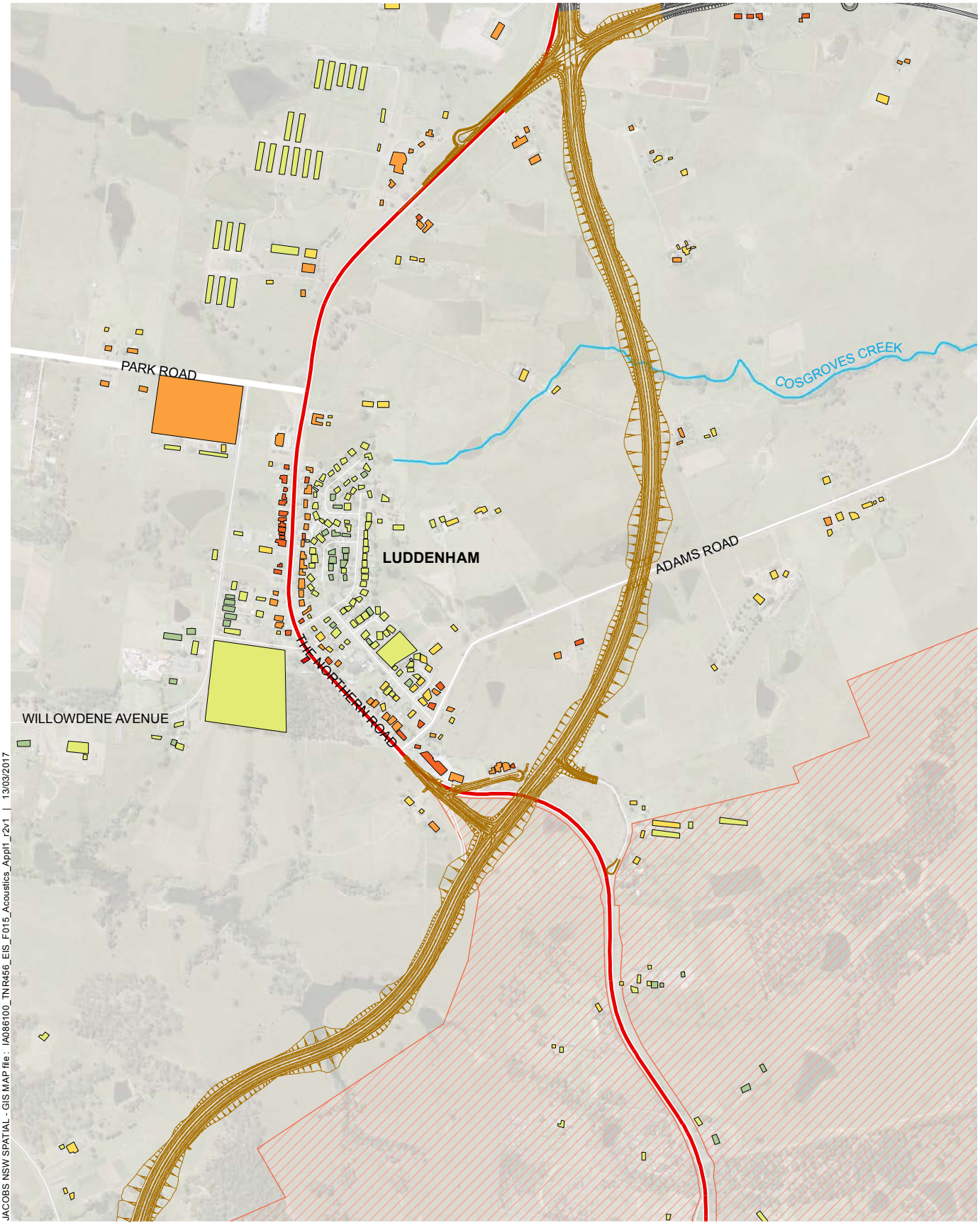
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Predicted noise level dB(A)

30 - 35	50 - 55
35 - 40	55 - 60
40 - 45	60 - 65
45 - 50	65 - 70

0 200 400 m

N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F015_Acoustics_Appl1_r2v1 | 13/03/2017

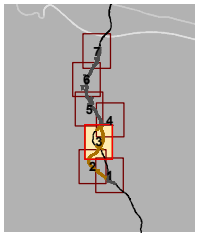
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

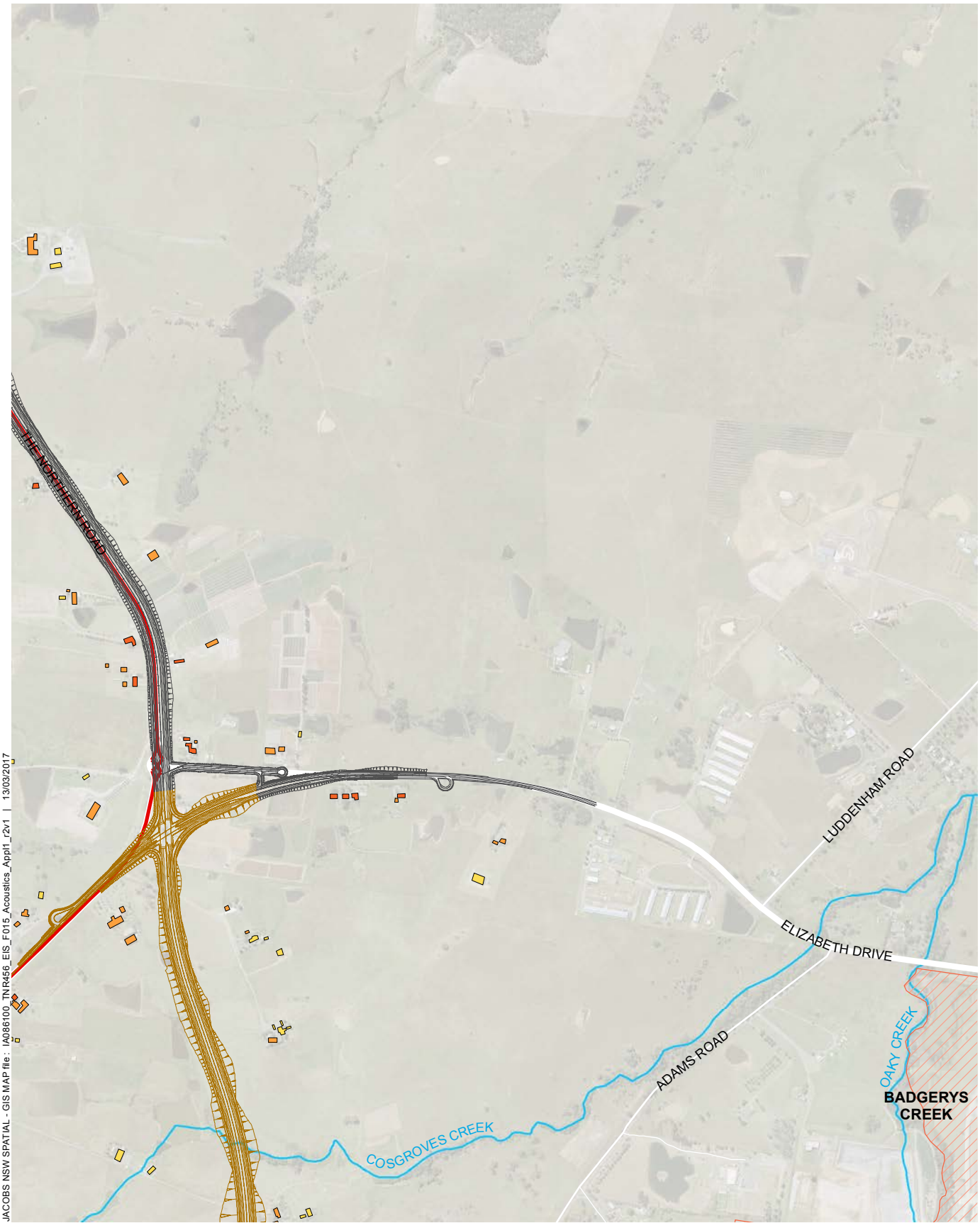
Predicted noise level dB(A)

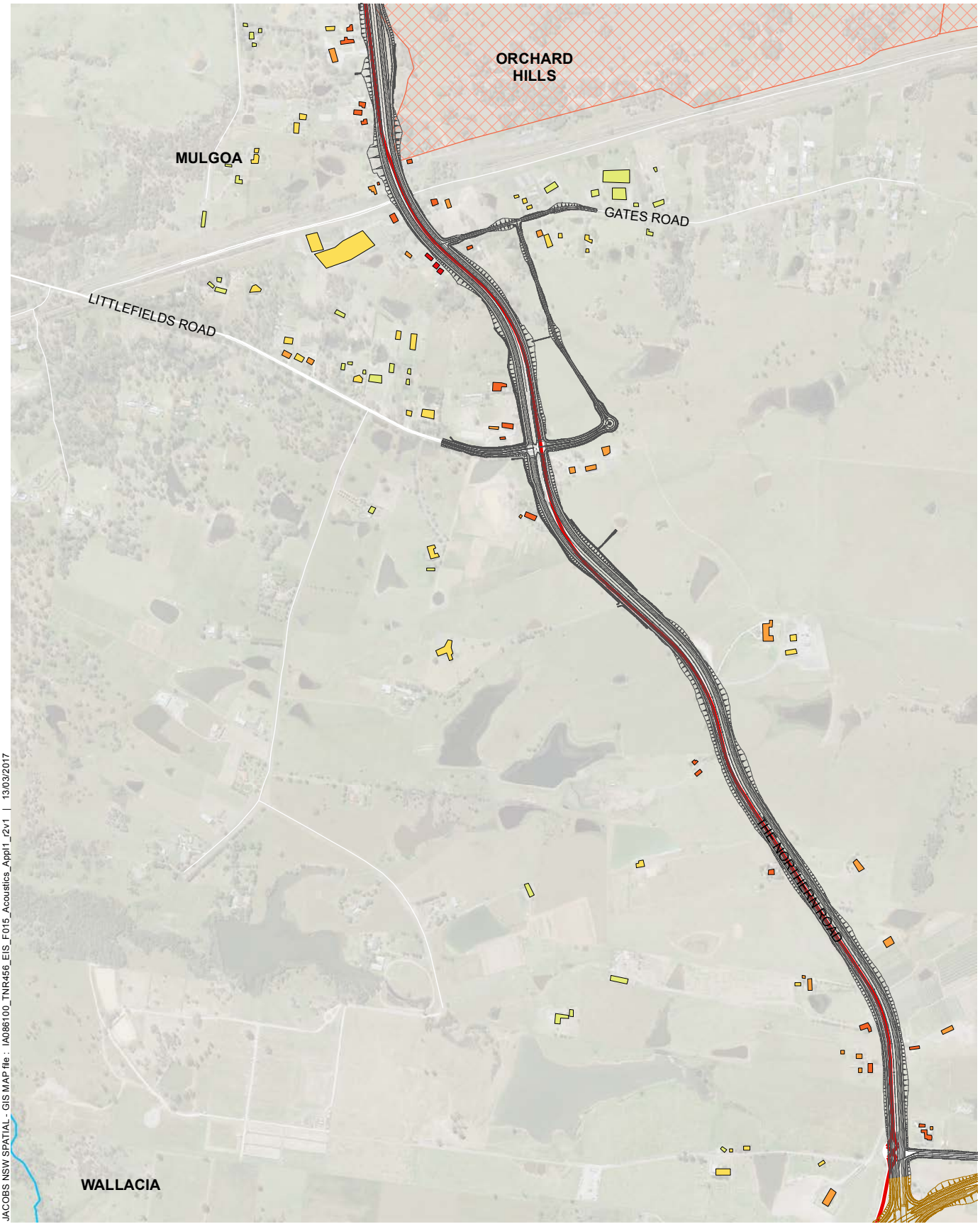
30 - 35	50 - 55
35 - 40	55 - 60
40 - 45	60 - 65
45 - 50	65 - 70

0 200 400 m

N




THE NORTHERN ROAD
LUDDENHAM ROAD
ELIZABETH DRIVE
ADAMS ROAD
COSGROVES CREEK
OAKY CREEK
BADGERYS CREEK
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F015_Acoustics_Appl1_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
0
200
400 m
N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F015_Acoustics_Appl1_r2v1 | 13/03/2017

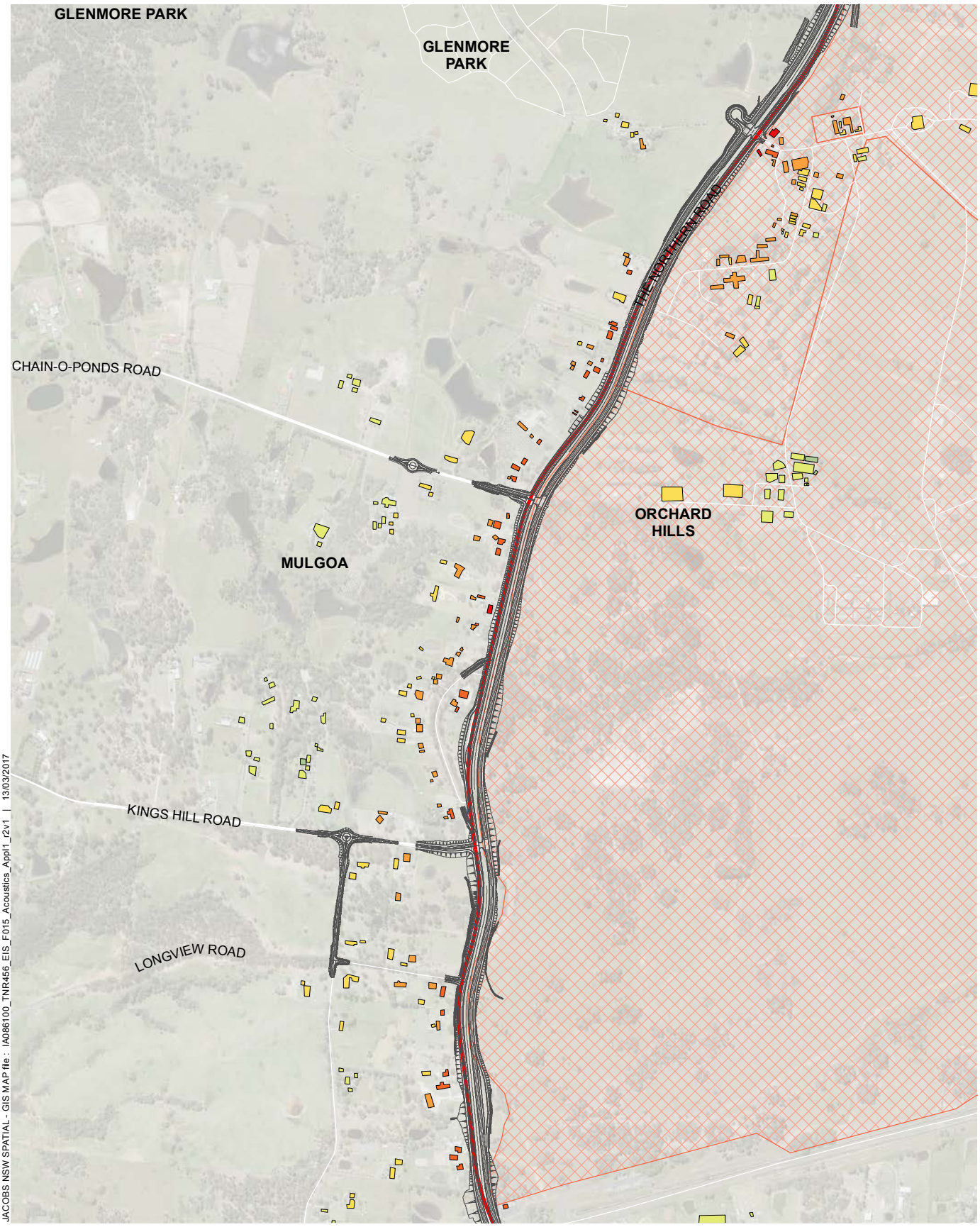
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

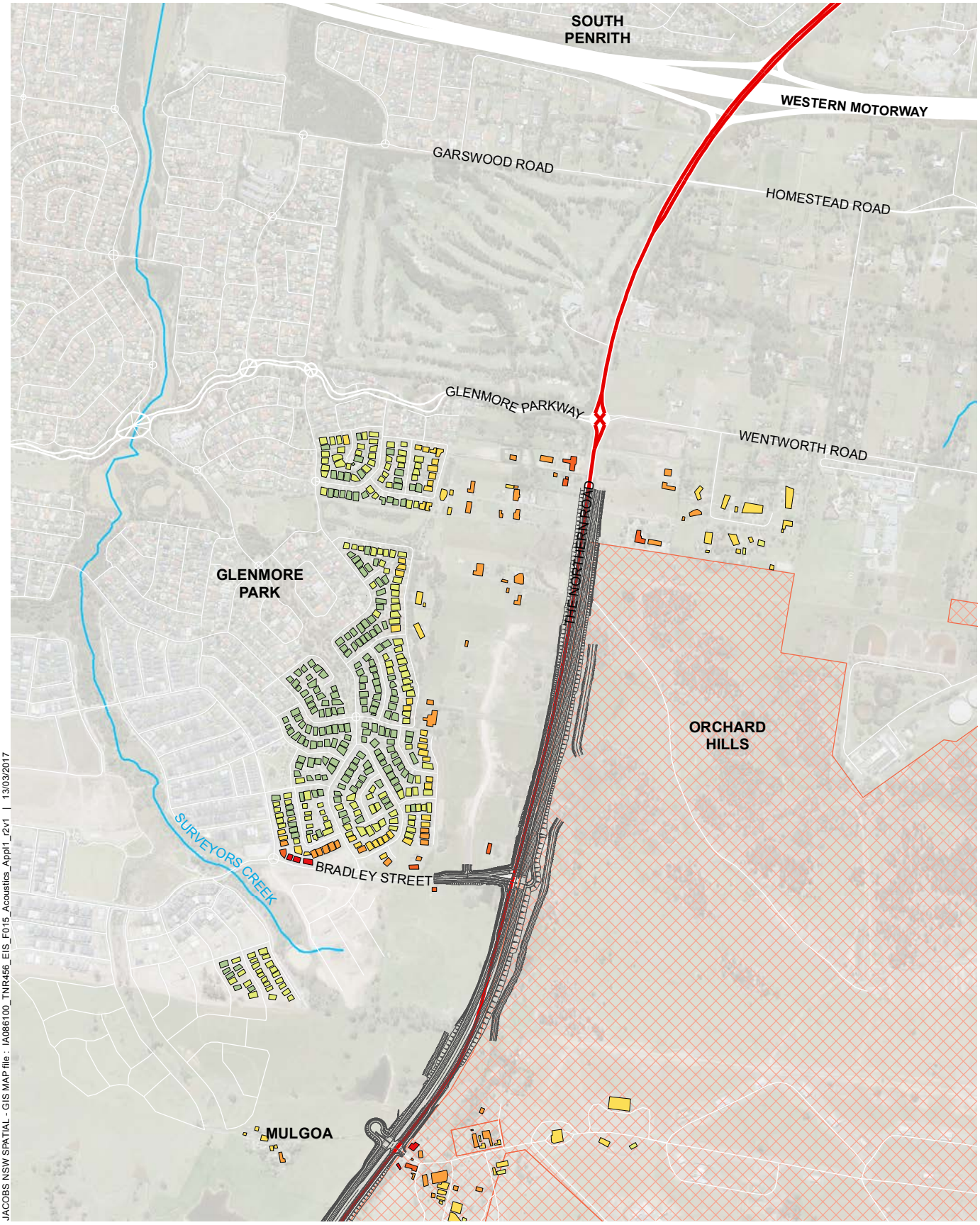
Predicted noise level dB(A)

30 - 35	50 - 55
35 - 40	55 - 60
40 - 45	60 - 65
45 - 50	65 - 70

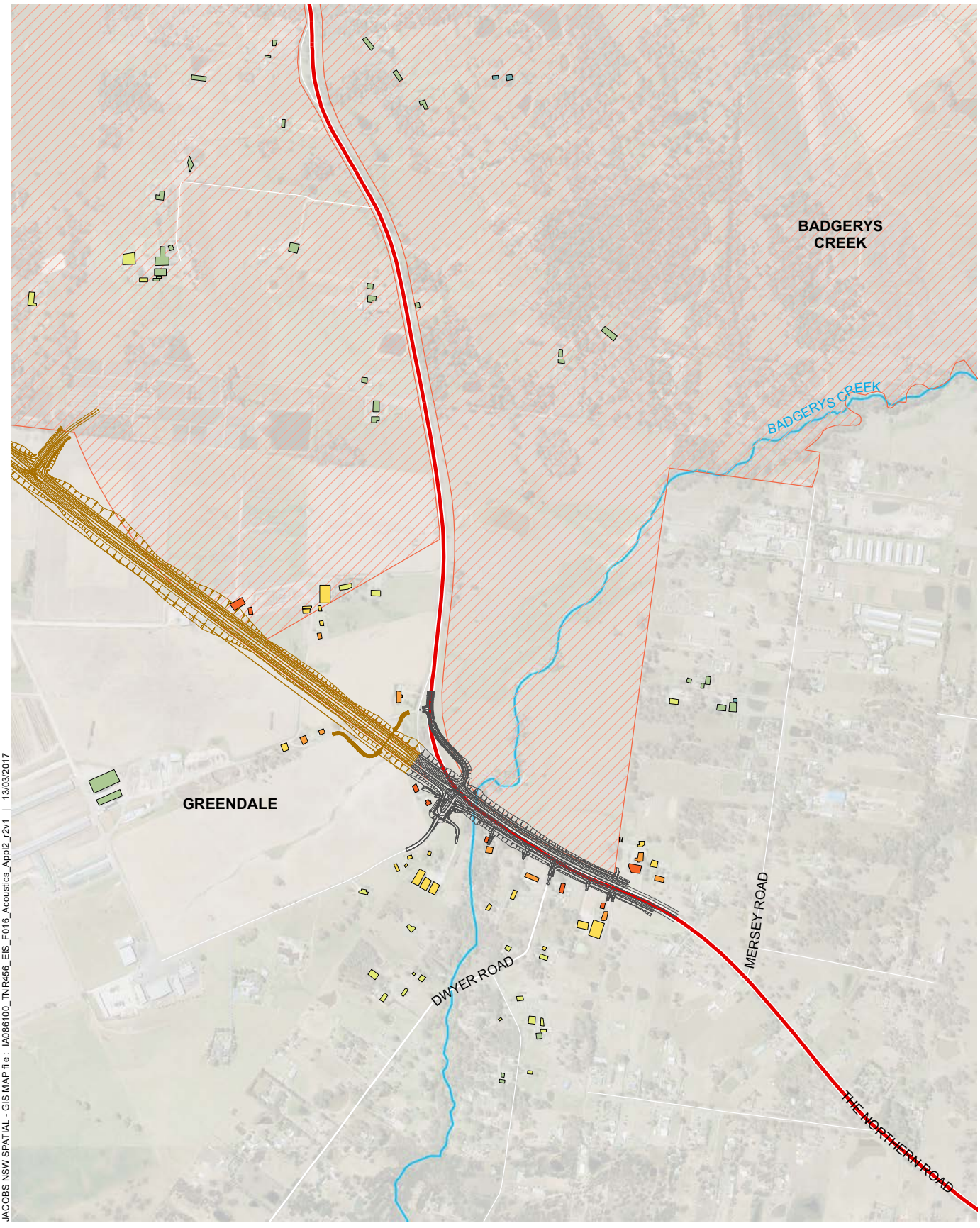
0 200 400 m

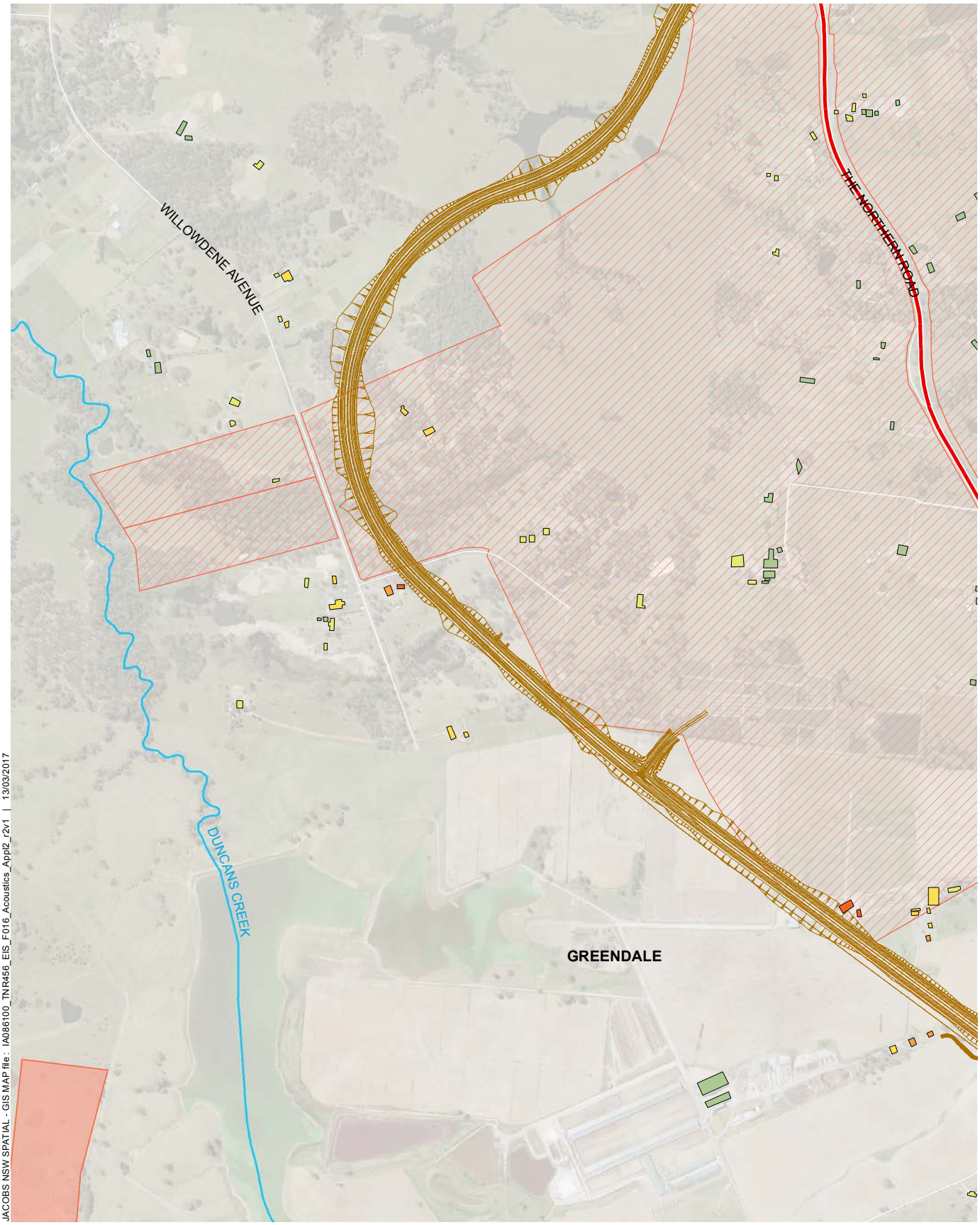
N


GLENMORE PARK
GLENMORE PARK
THE NORTHERN ROAD
CHAIN-O-PONDS ROAD
ORCHARD HILLS
MULGOA
KINGS HILL ROAD
LONGVIEW ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F015_Acoustics_Appl1_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
0
200
400 m
N


SOUTH PENRITH
WESTERN MOTORWAY
GARSWOOD ROAD
HOMESTEAD ROAD
GLENMORE PARKWAY
WENTWORTH ROAD
THE NORTHERN ROAD
GLENMORE PARK
ORCHARD HILLS
SURVEYORS CREEK
BRADLEY STREET
MULGOA
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F015_Acoustics_Appl1_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
0
200
400 m
N

I.2 Predicted operational noise – Build 2021 (Night)


BADGERYS CREEK
BADGERYS CREEK
GREENDALE
DWYER ROAD
MERSEY ROAD
THE NORTHERN ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F016_Acoustics_Appl2_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
25 - 30
30 - 35
35 - 40
40-45
45 - 50
50 - 55
55 - 60
60 - 65
0
200
400 m
N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F016_Acoustics_Appl2_r2v1 | 13/03/2017

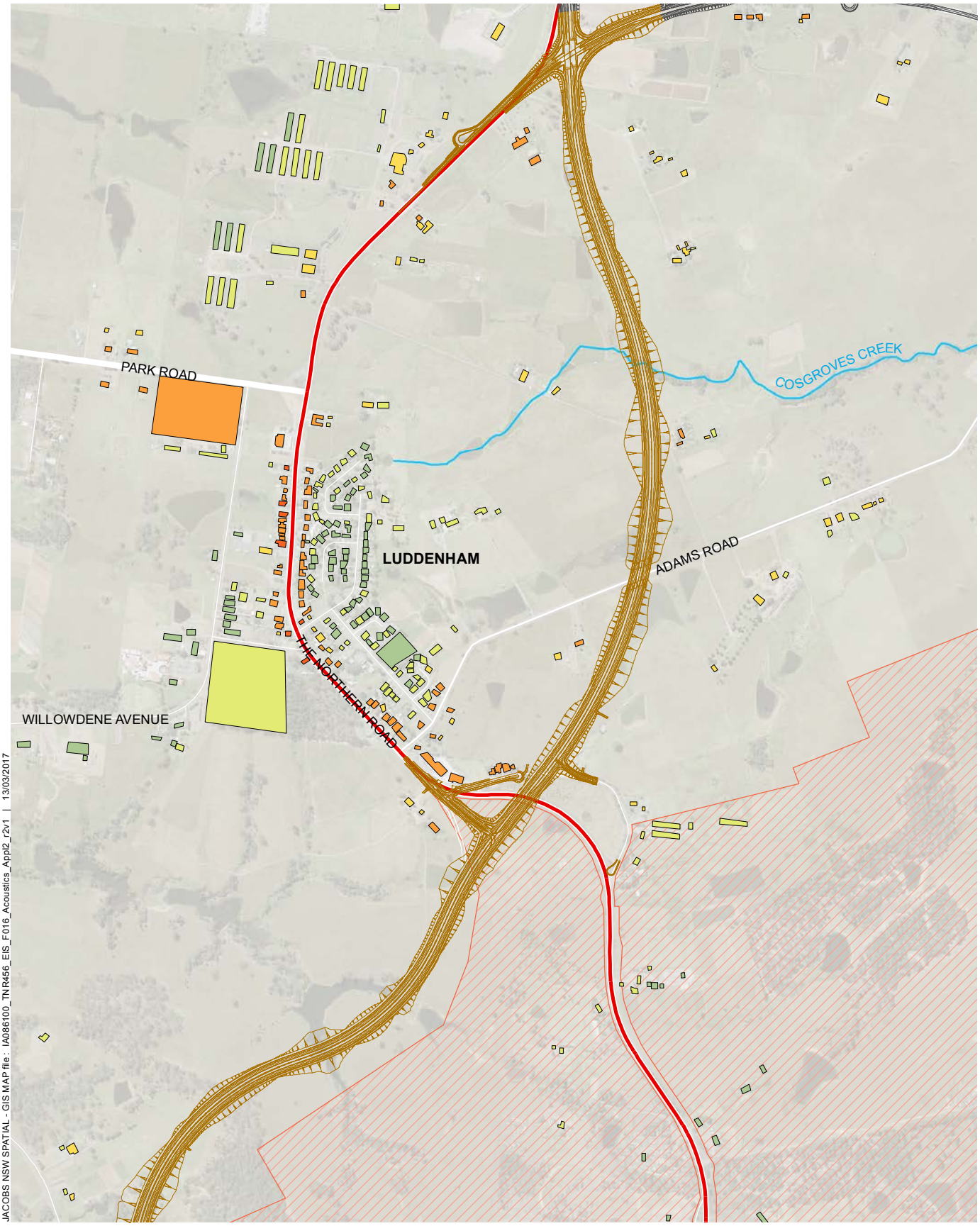
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

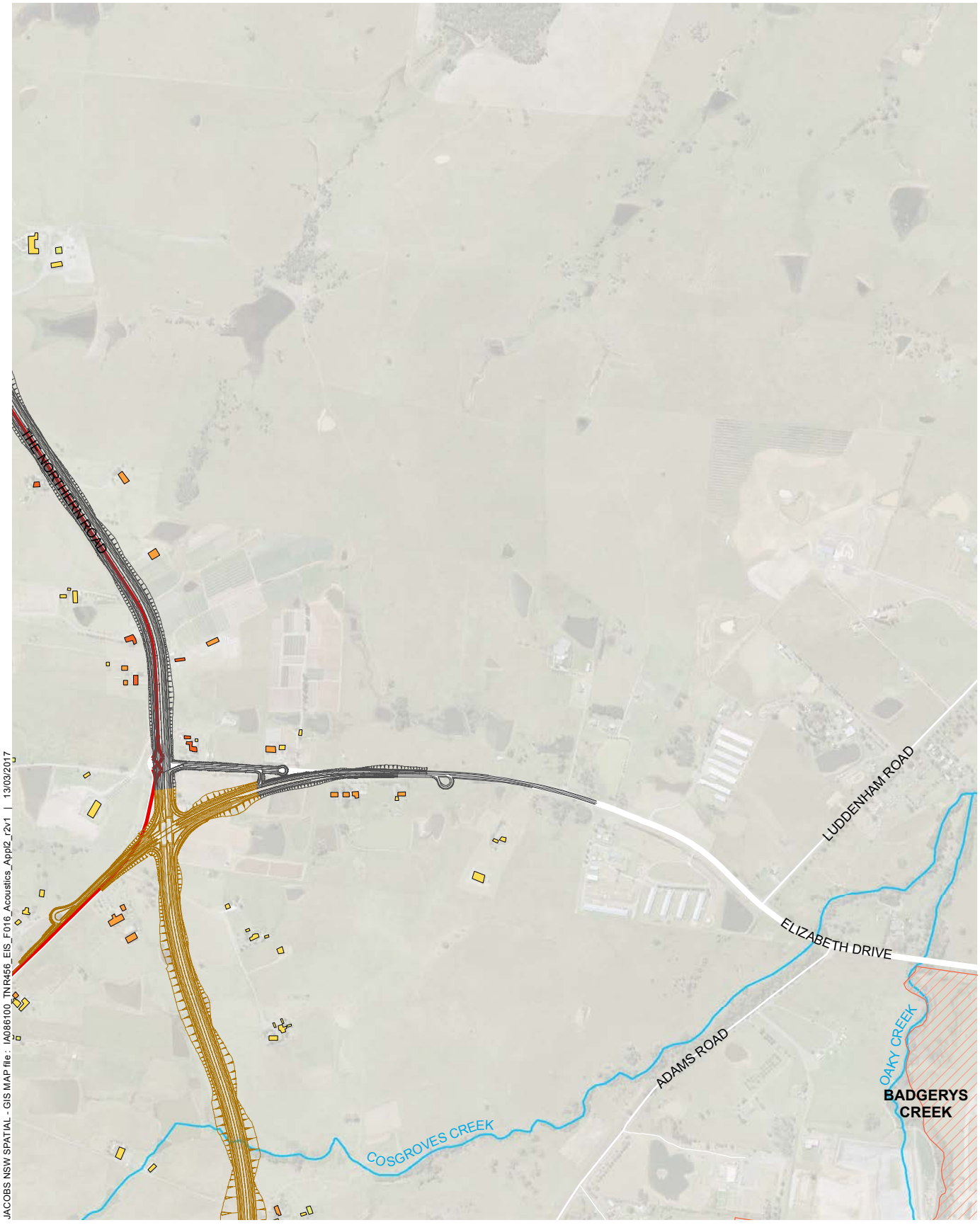
Predicted noise level dB(A)

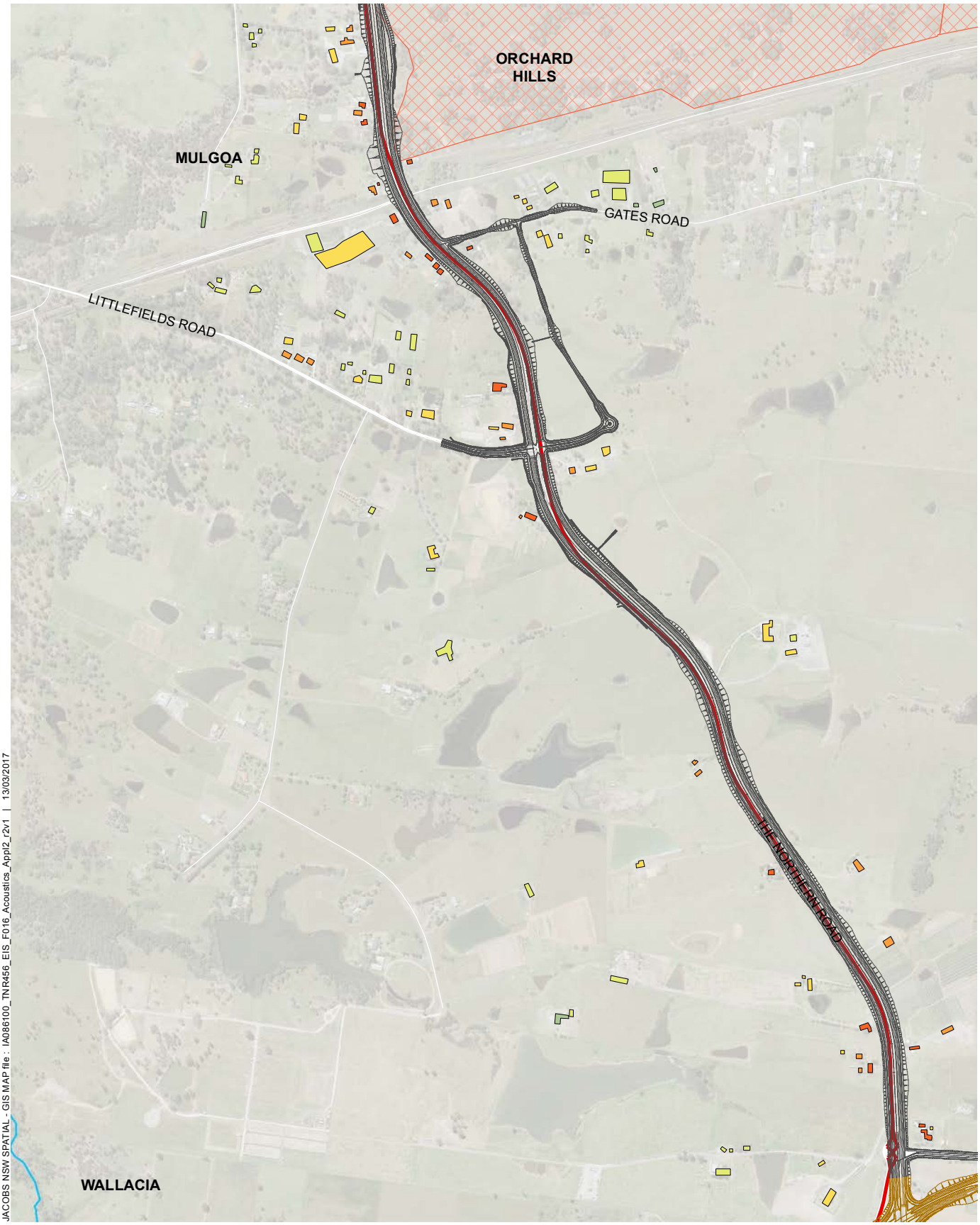
25 - 30	45 - 50
30 - 35	50 - 55
35 - 40	55 - 60
40-45	60 - 65

0 200 400 m

N


PARK ROAD
COSGROVES CREEK
LUDDENHAM
ADAMS ROAD
THE NORTHERN ROAD
WILLOWDENE AVENUE
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F016_Acoustics_Appl2_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
25 - 30
30 - 35
35 - 40
40-45
45 - 50
50 - 55
55 - 60
60 - 65
0
200
400 m
N


THE NORTHERN ROAD
LUDDENHAM ROAD
ELIZABETH DRIVE
ADAMS ROAD
COSGROVES CREEK
OAKY CREEK
BADGERYS CREEK
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F016_Acoustics_Appl2_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
25 - 30
30 - 35
35 - 40
40-45
45 - 50
50 - 55
55 - 60
60 - 65
0
200
400 m
N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F016_Acoustics_Appl2_r2v1 | 13/03/2017

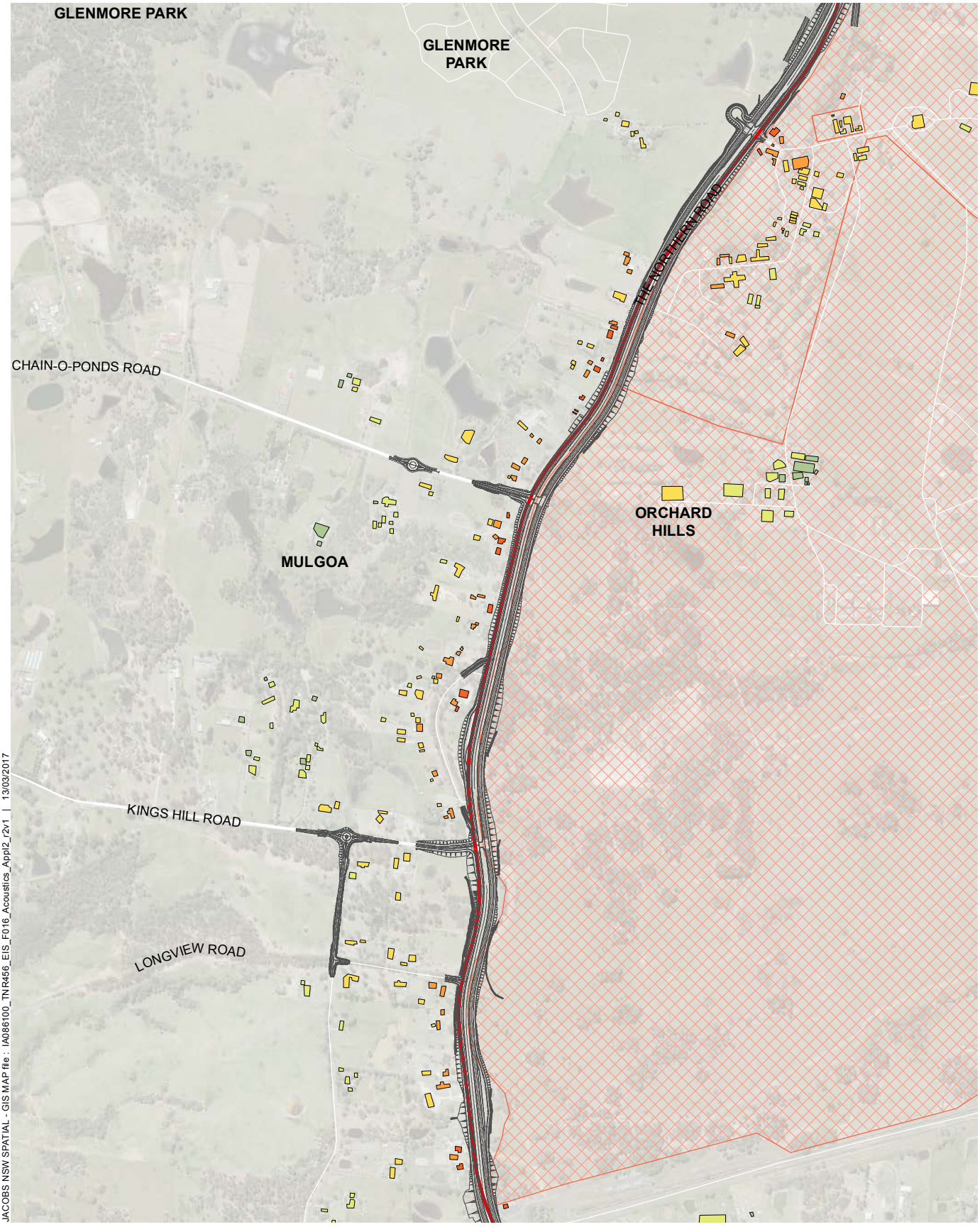
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

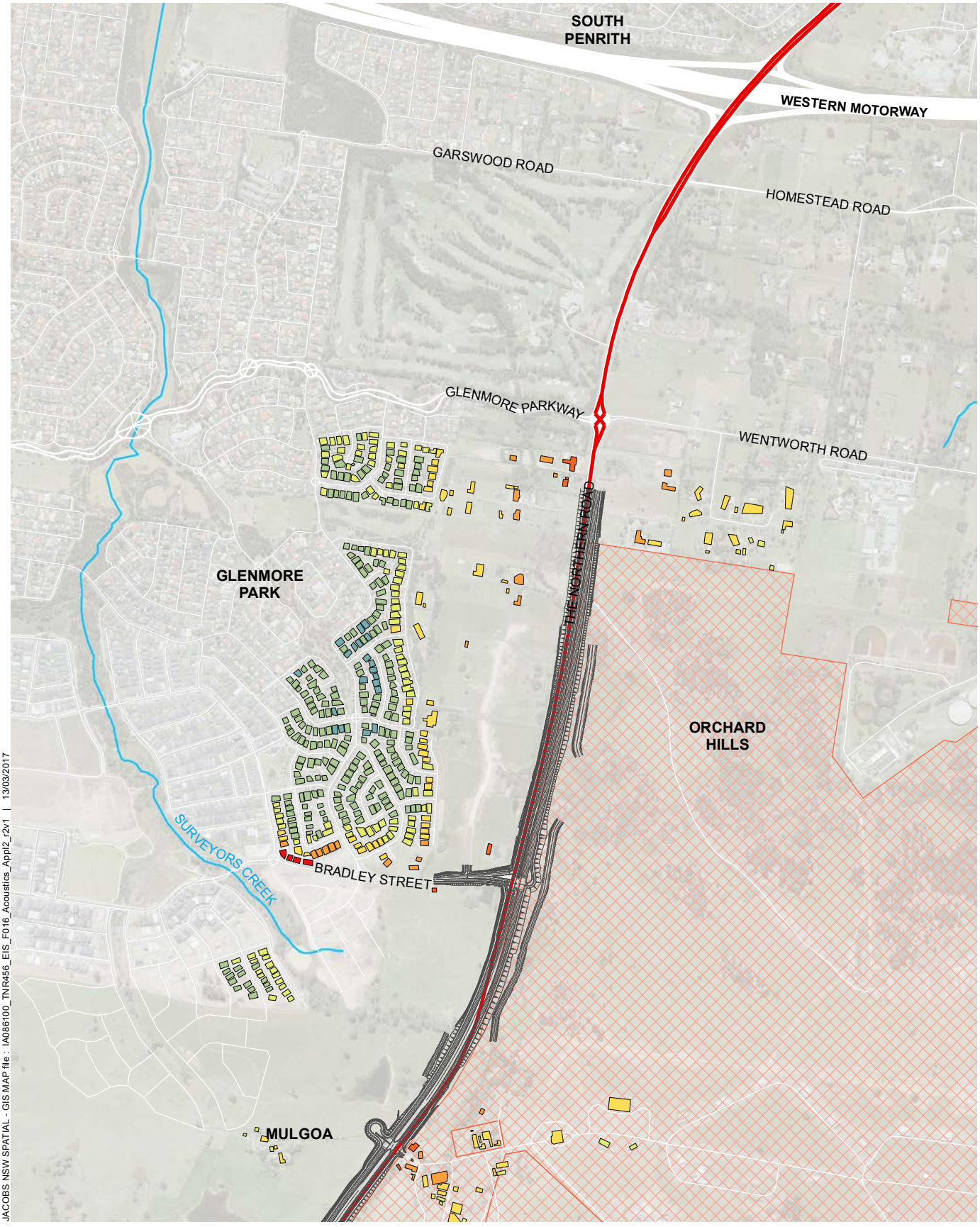
Predicted noise level dB(A)

25 - 30	45 - 50
30 - 35	50 - 55
35 - 40	55 - 60
40-45	60 - 65

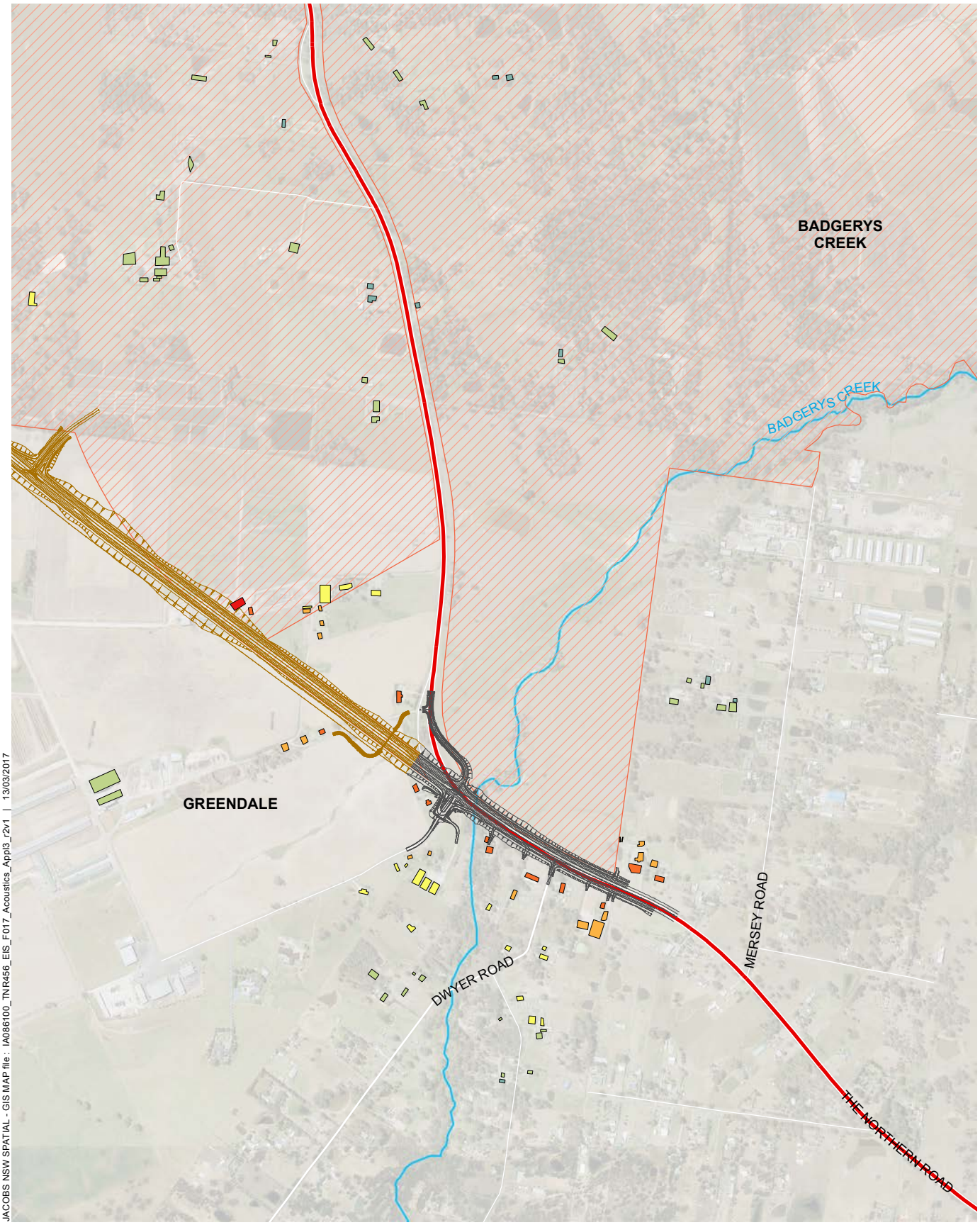
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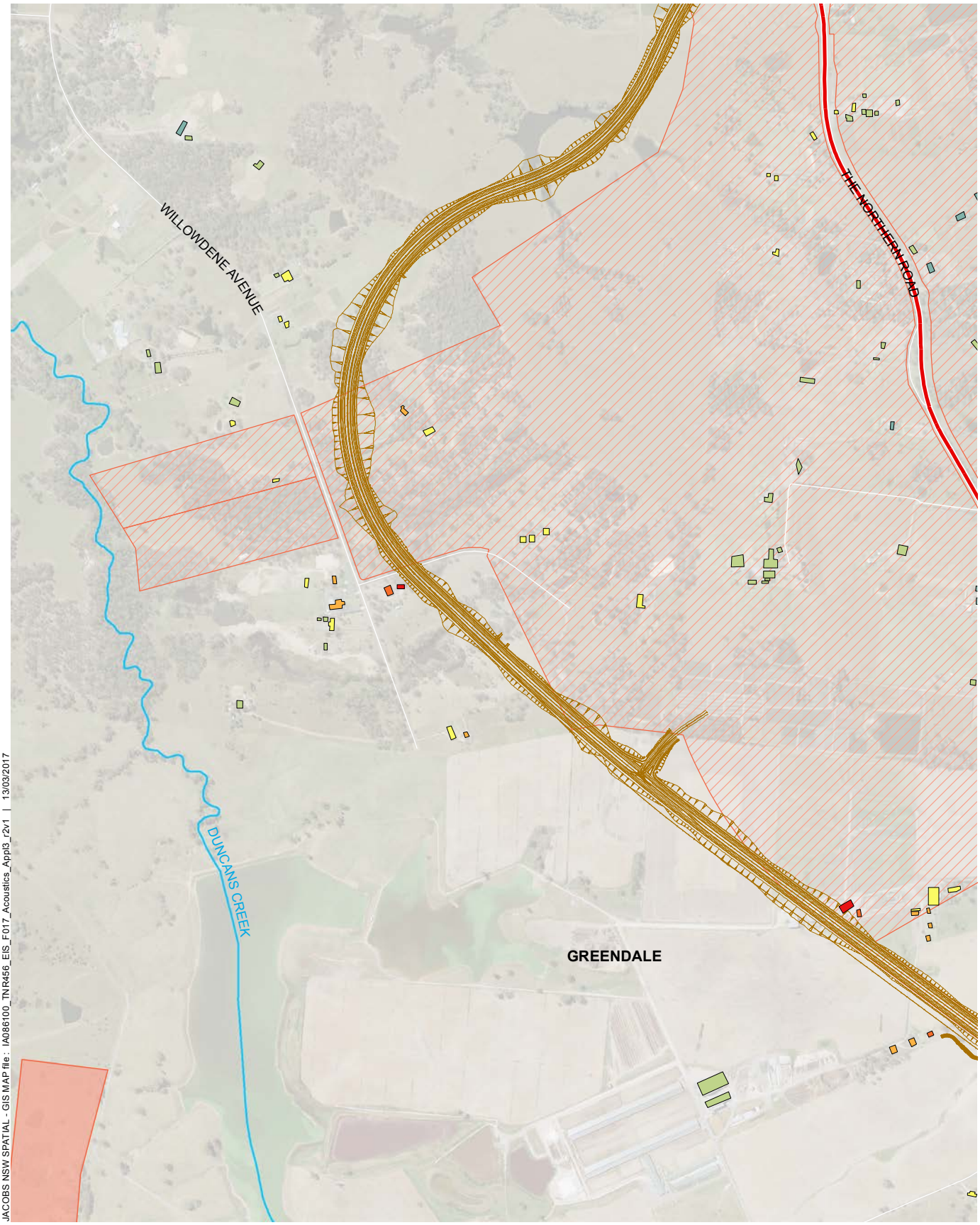
N


GLENMORE PARK
GLENMORE PARK
THE NORTHERN ROAD
CHAIN-O-PONDS ROAD
MULGOA
ORCHARD HILLS
KINGS HILL ROAD
LONGVIEW ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F016_Acoustics_Appl2_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
25 - 30
30 - 35
35 - 40
40-45
45 - 50
50 - 55
55 - 60
60 - 65
0
200
400 m
N


SOUTH PENRITH
WESTERN MOTORWAY
GARSWOOD ROAD
HOMESTEAD ROAD
GLENMORE PARKWAY
WENTWORTH ROAD
THE NORTHERN ROAD
GLENMORE PARK
ORCHARD HILLS
SURVEYORS CREEK
BRADLEY STREET
MULGOA
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F016_Acoustics_Appl2_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
25 - 30
30 - 35
35 - 40
40-45
45 - 50
50 - 55
55 - 60
60 - 65
0
200
400 m
N

I.3 Predicted operational noise – Build 2031 (Day)


BADGERYS CREEK
BADGERYS CREEK
GREENDALE
DWYER ROAD
MERSEY ROAD
THE NORTHERN ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F017_Acoustics_Appl3_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
0
200
400 m
N



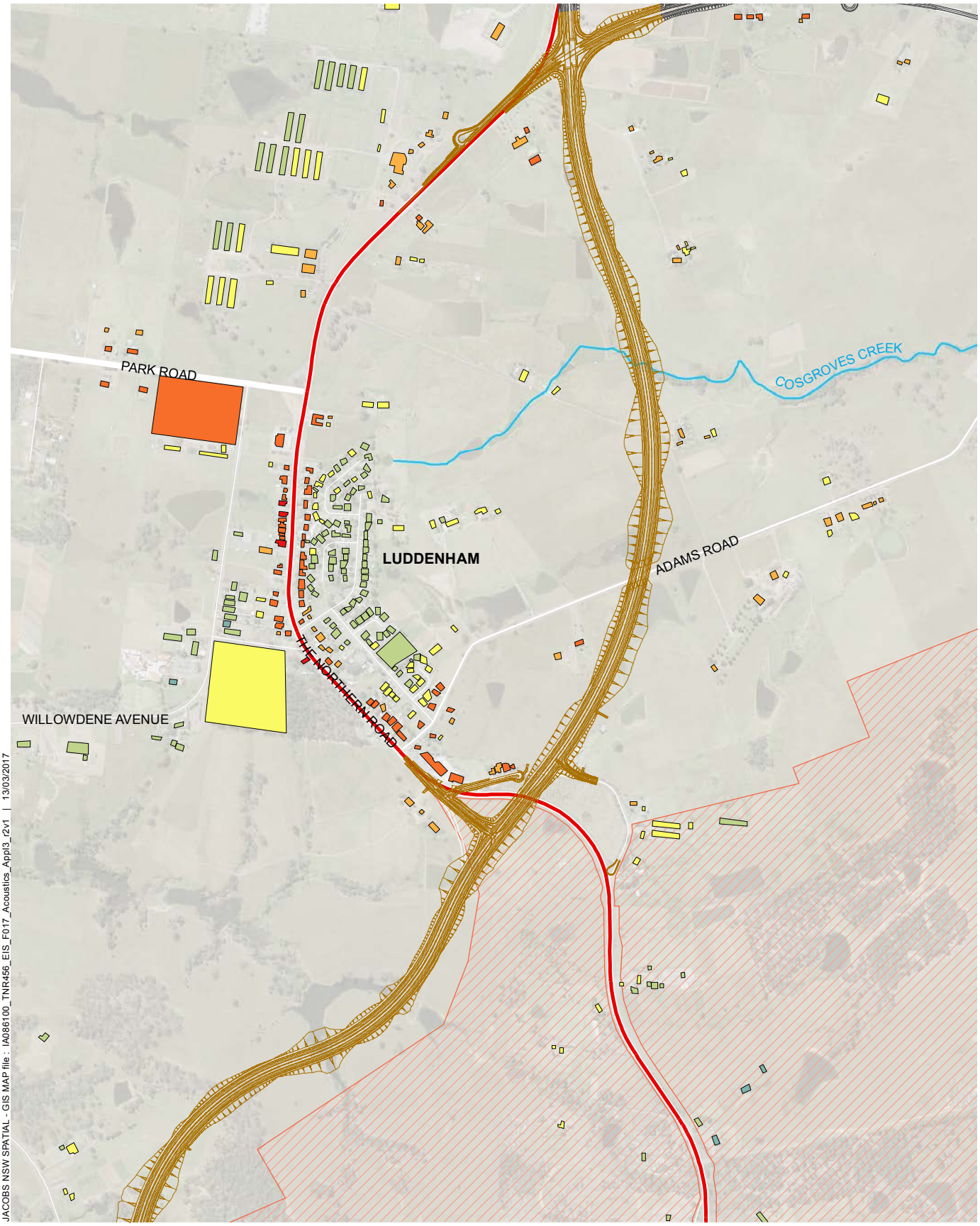
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F017_Acoustics_Appl3_r2v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Predicted noise level dB(A)
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70

0 200 400 m

N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F017_Acoustics_Appl3_r2v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Predicted noise level dB(A)
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70

0 200 400 m

N



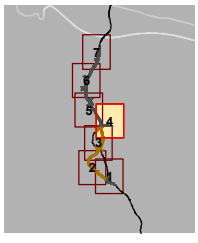
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

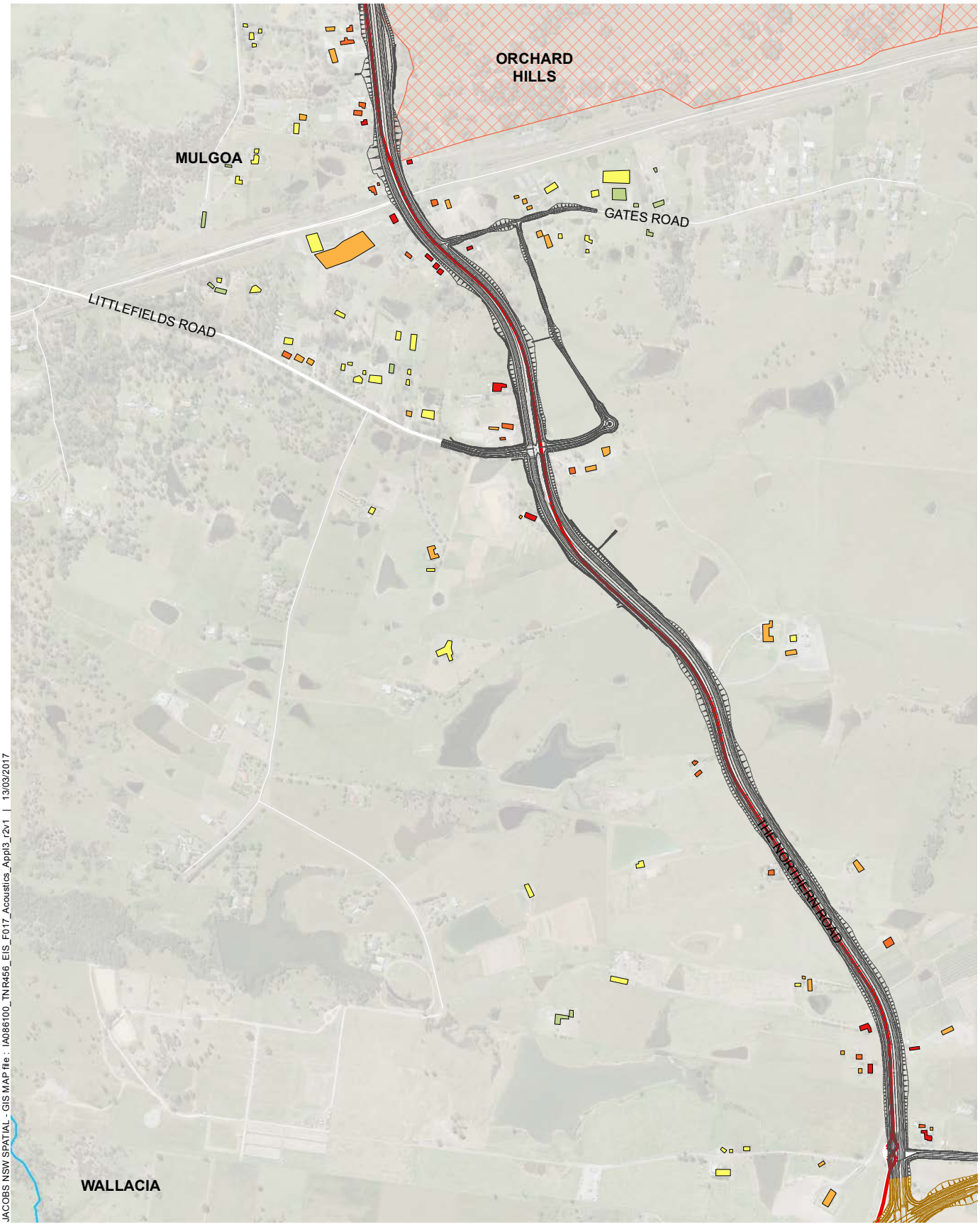
Predicted noise level dB(A)

35 - 40	55 - 60
40 - 45	60 - 65
45 - 50	65 - 70
50 - 55	

0 200 400 m

N





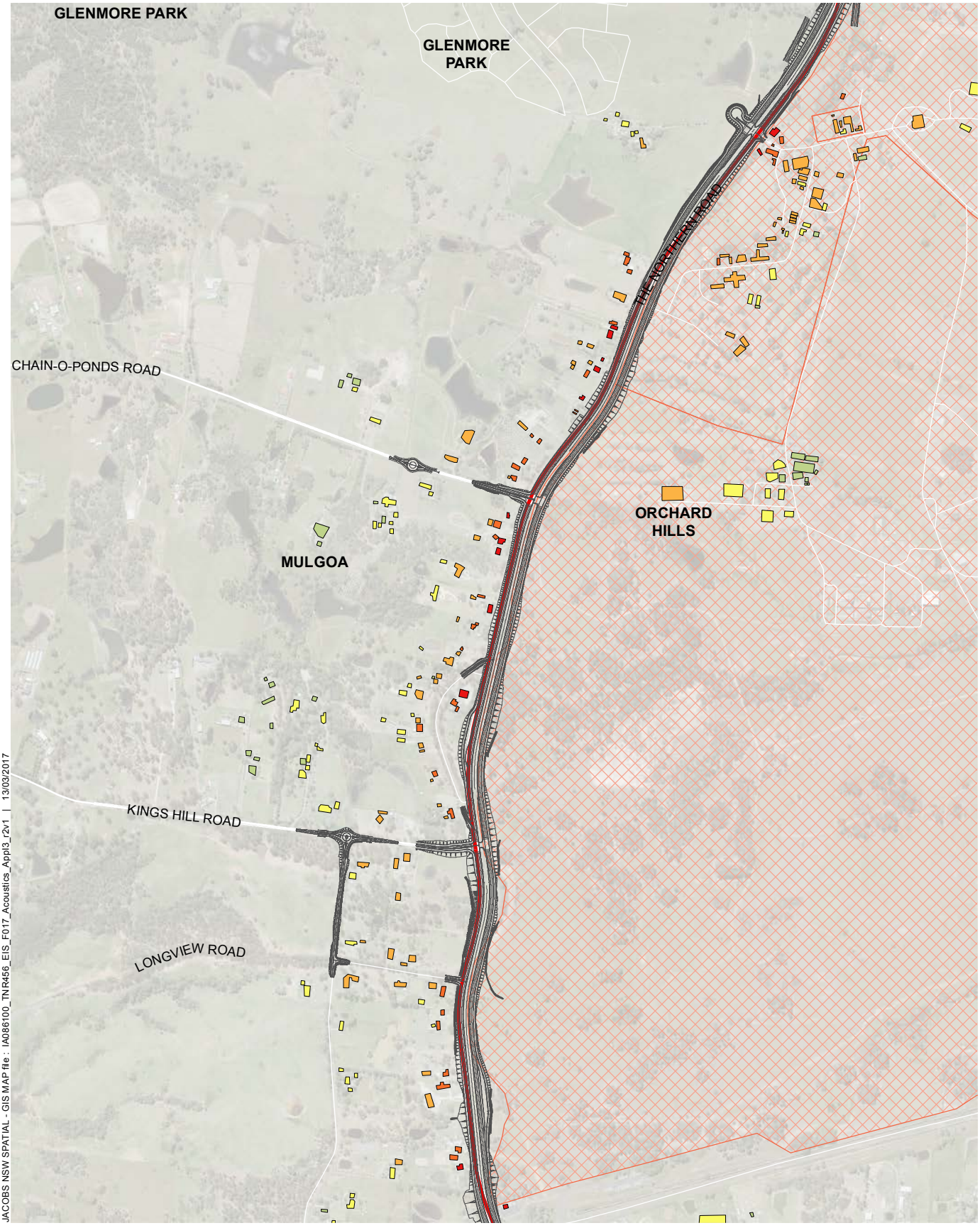
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F017_Acoustics_Appl3_r2v1 | 13/03/2017

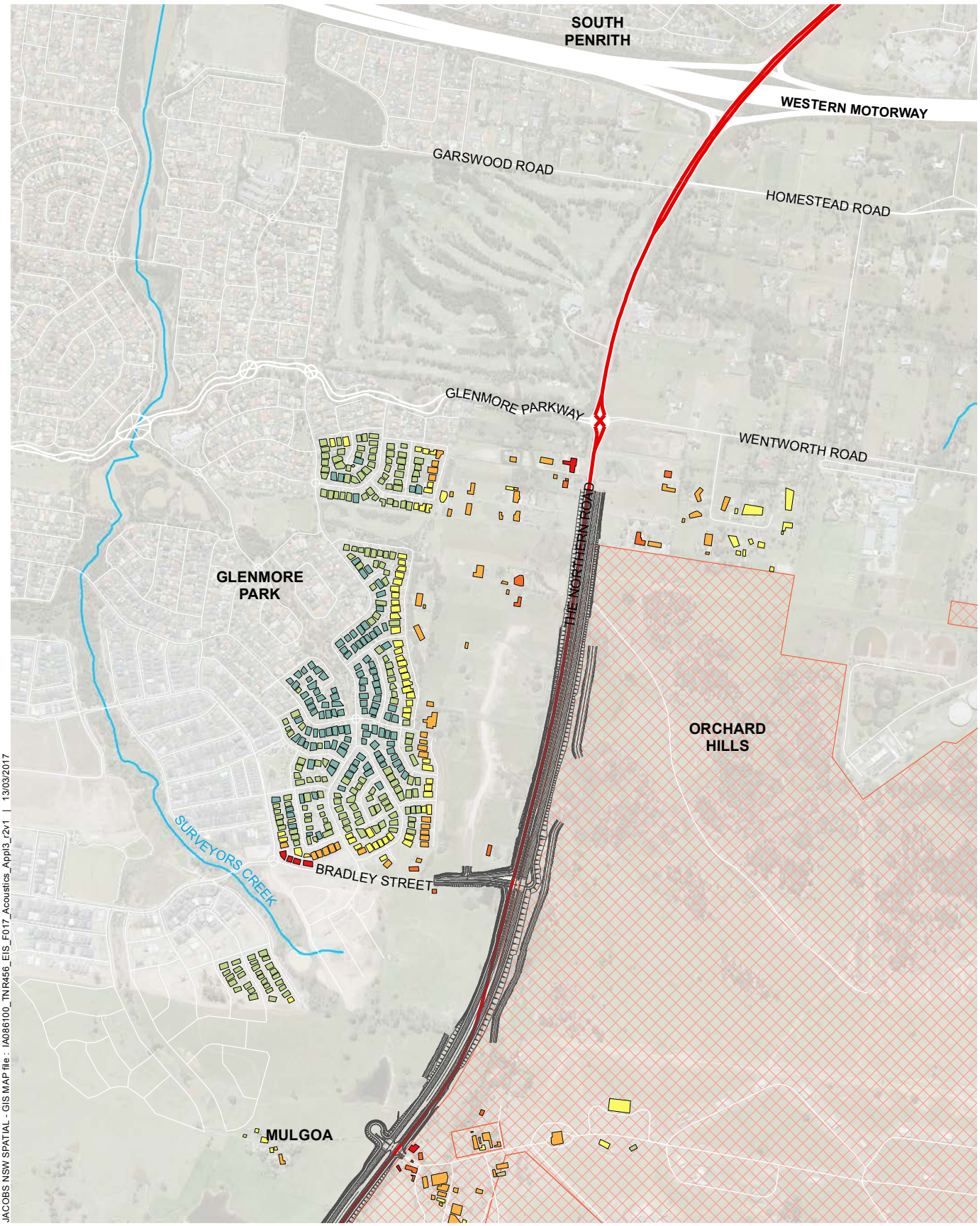
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Predicted noise level dB(A)
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70

0 200 400 m

N


GLENMORE PARK
GLENMORE PARK
THE NORTHERN ROAD
CHAIN-O-PONDS ROAD
ORCHARD HILLS
MULGOA
KINGS HILL ROAD
LONGVIEW ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F017_Acoustics_Appl3_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
0
200
400 m
N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F017_Acoustics_Appl3_r2v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

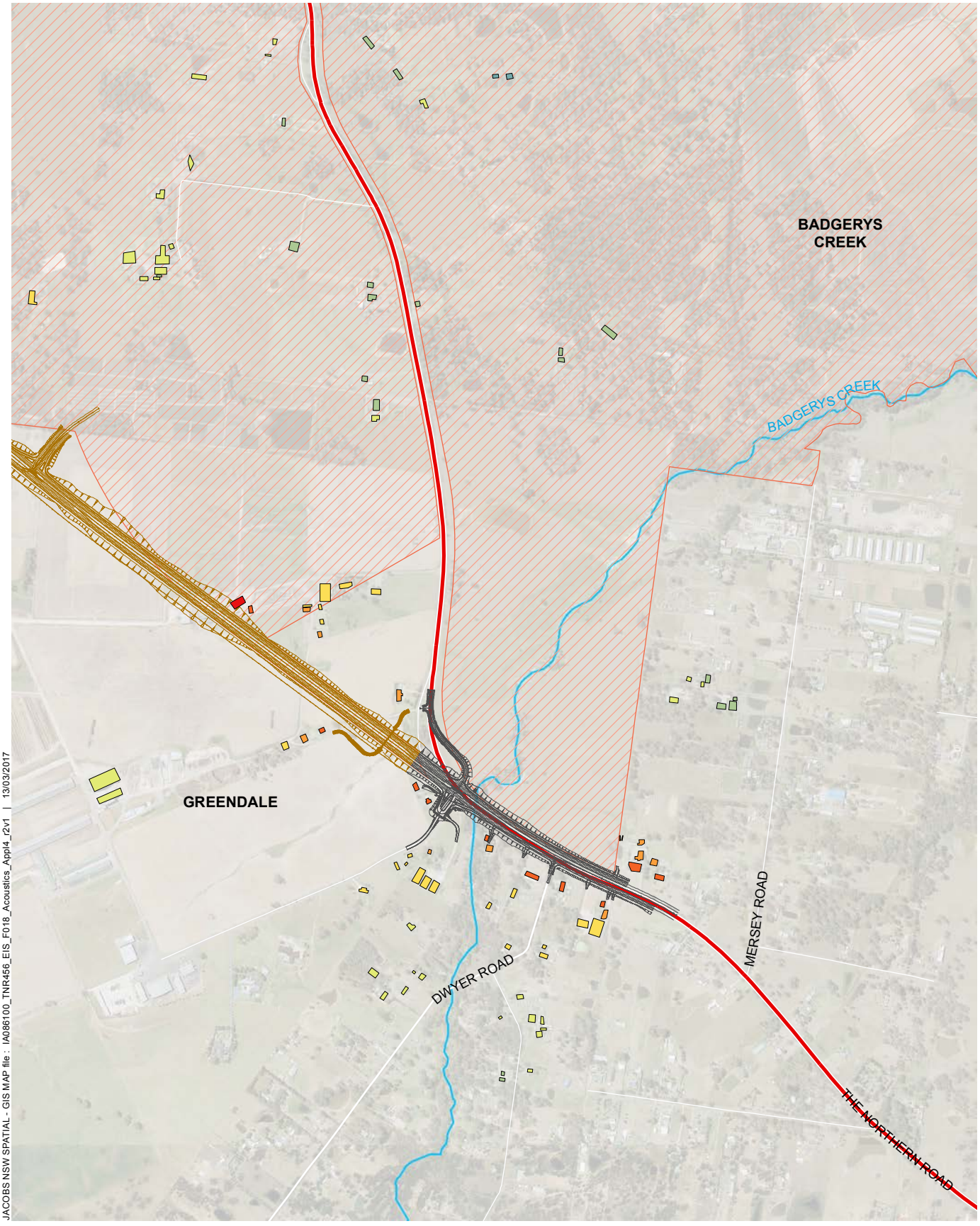
Predicted noise level dB(A)

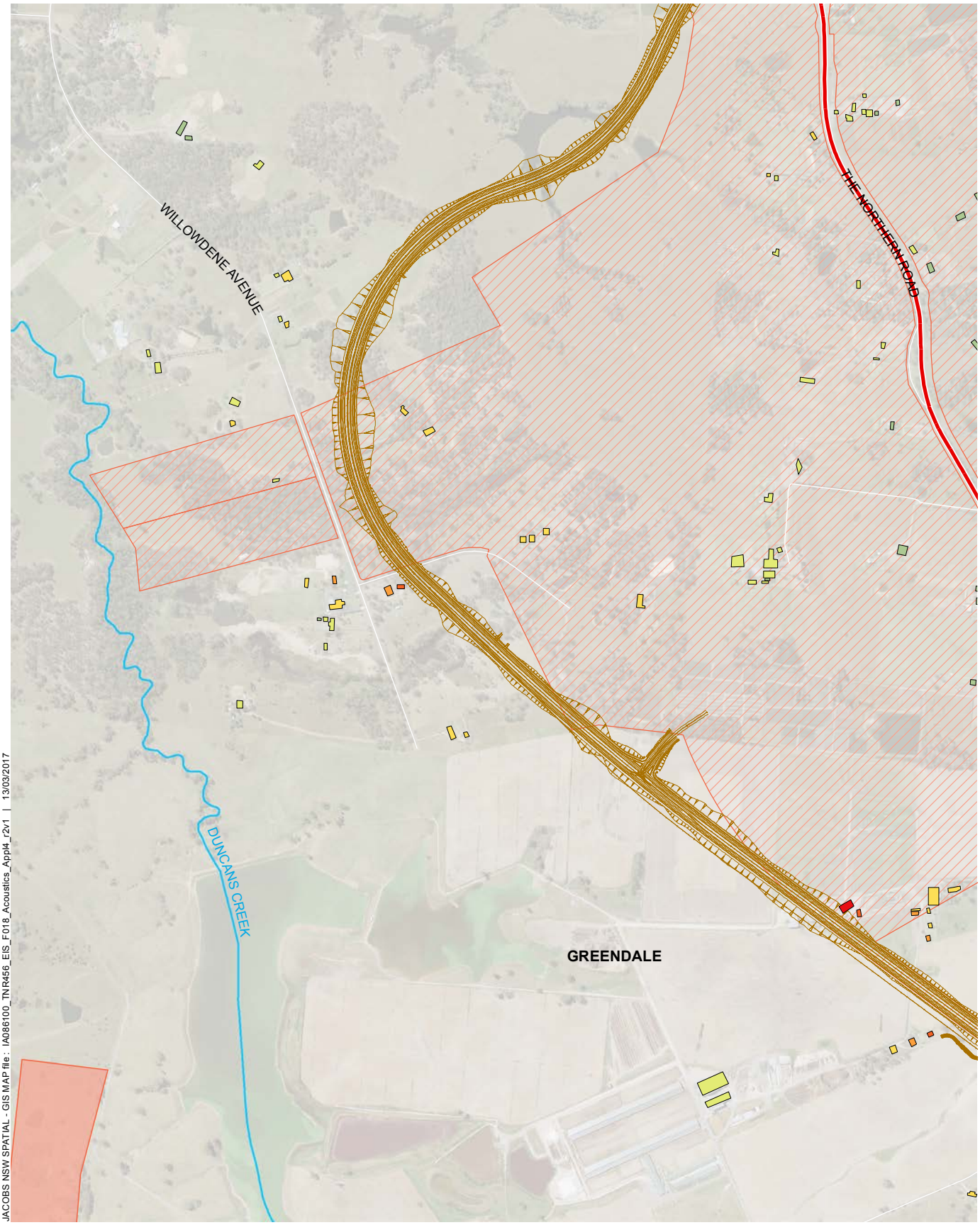
35 - 40	55 - 60
40 - 45	60 - 65
45 - 50	65 - 70
50 - 55	

0 200 400 m

N

I.4 Predicted operational noise – Build 2031 (Night)


BADGERYS CREEK
BADGERYS CREEK
GREENDALE
DWYER ROAD
MERSEY ROAD
THE NORTHERN ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F018_Acoustics_Appl4_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
0
200
400 m
N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F018_Acoustics_Appl4_r2v1 | 13/03/2017

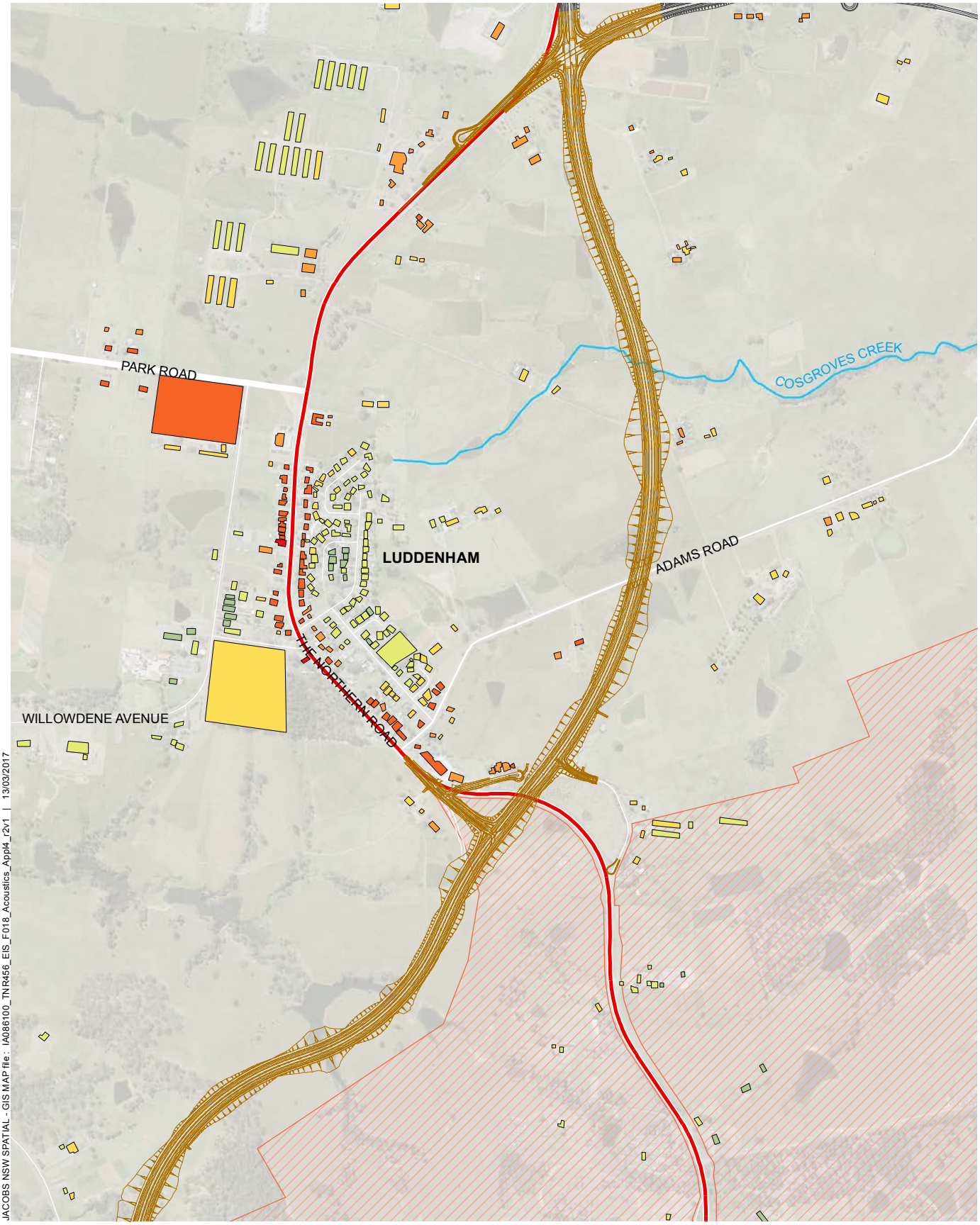
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Predicted noise level dB(A)

25 - 30	45 - 50
30 - 35	50 - 55
35 - 40	55 - 60
40 - 45	60 - 65

0 200 400 m

N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F018_Acoustics_Appl4_r2v1 | 13/03/2017

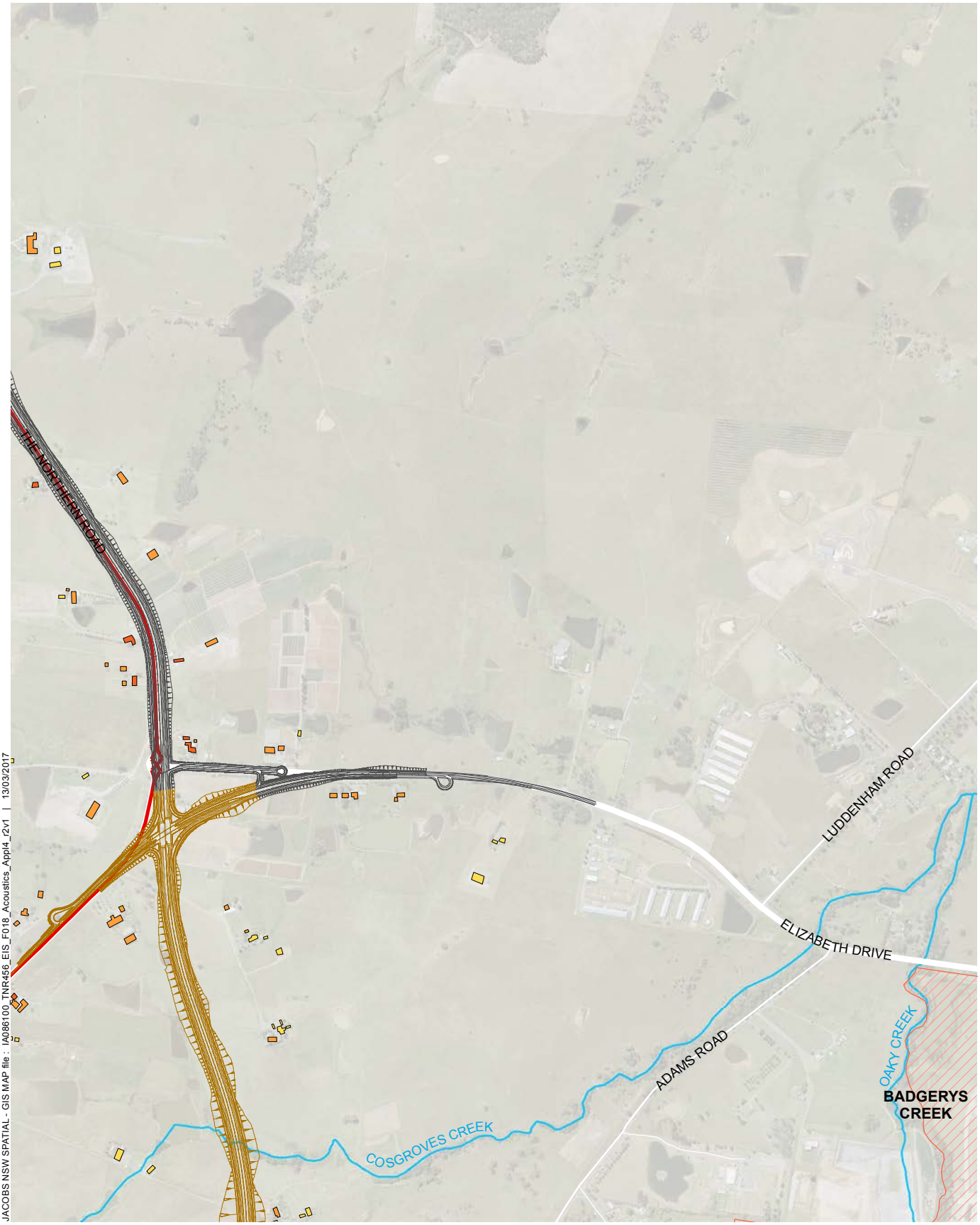
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Predicted noise level dB(A)

25 - 30	45 - 50
30 - 35	50 - 55
35 - 40	55 - 60
40 - 45	60 - 65

0 200 400 m

N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F018_Acoustics_Appl4_r2v1 | 13/03/2017

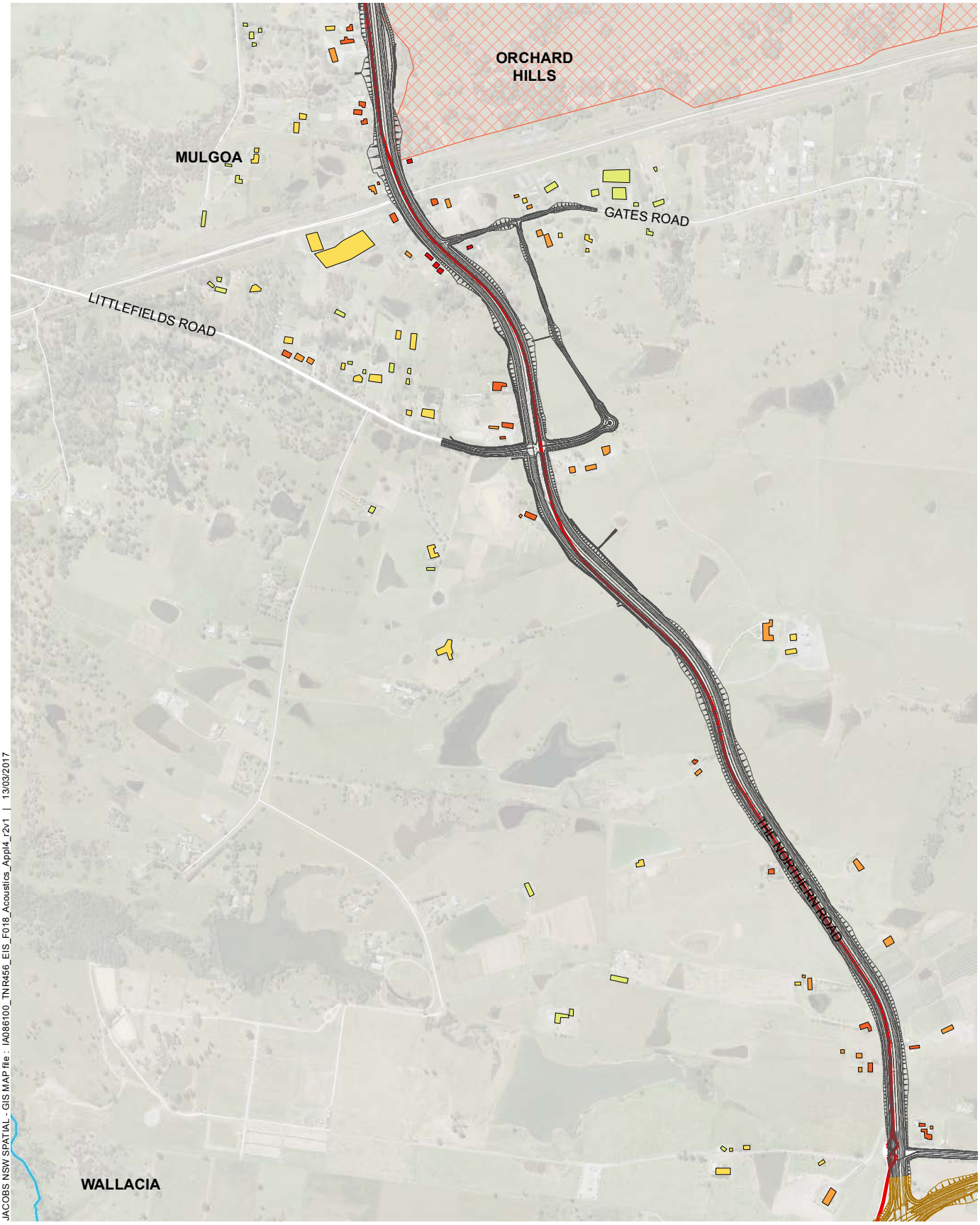
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Predicted noise level dB(A)

25 - 30	45 - 50
30 - 35	50 - 55
35 - 40	55 - 60
40 - 45	60 - 65

0 200 400 m

N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F018_Acoustics_Appl4_r2v1 | 13/03/2017

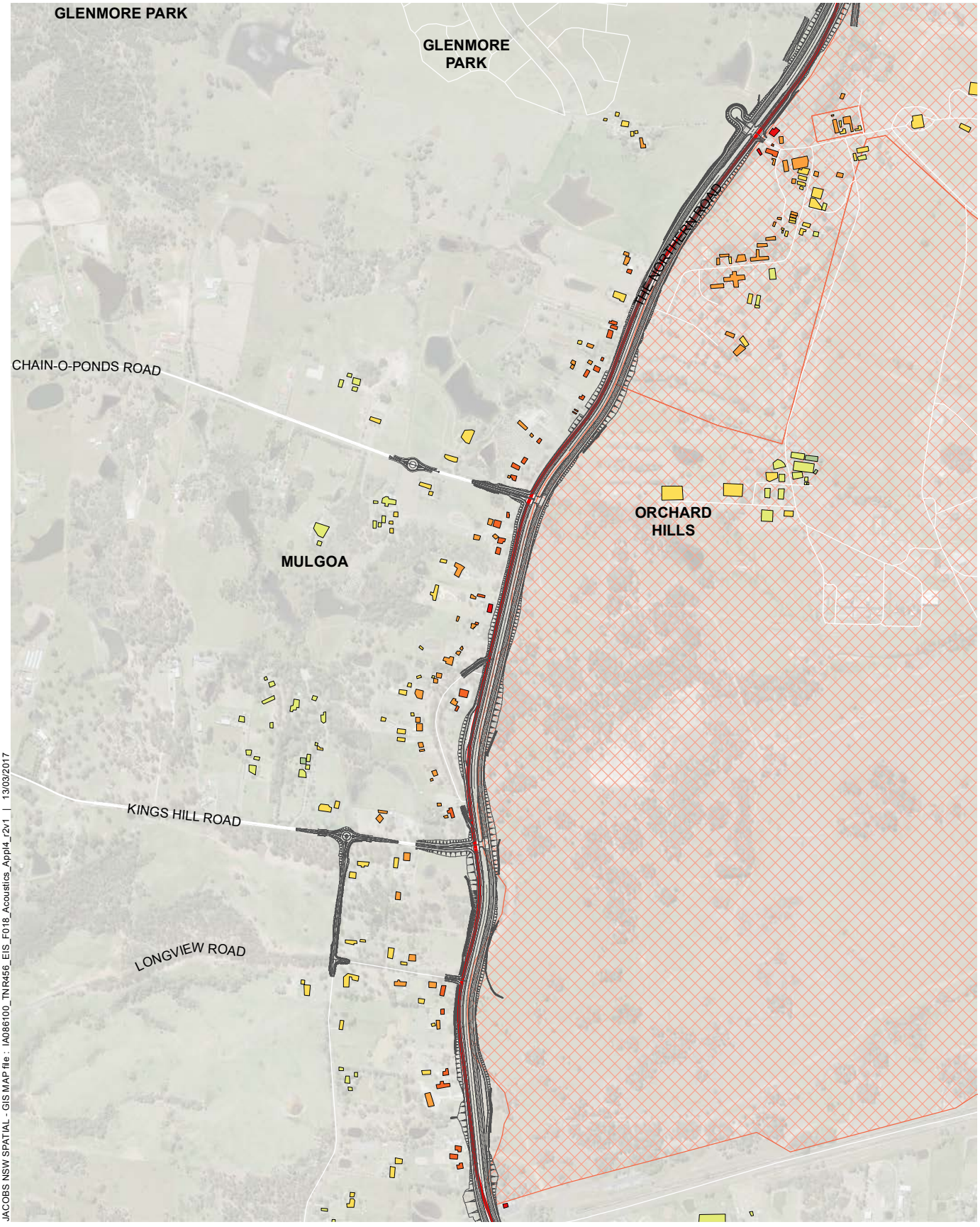
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

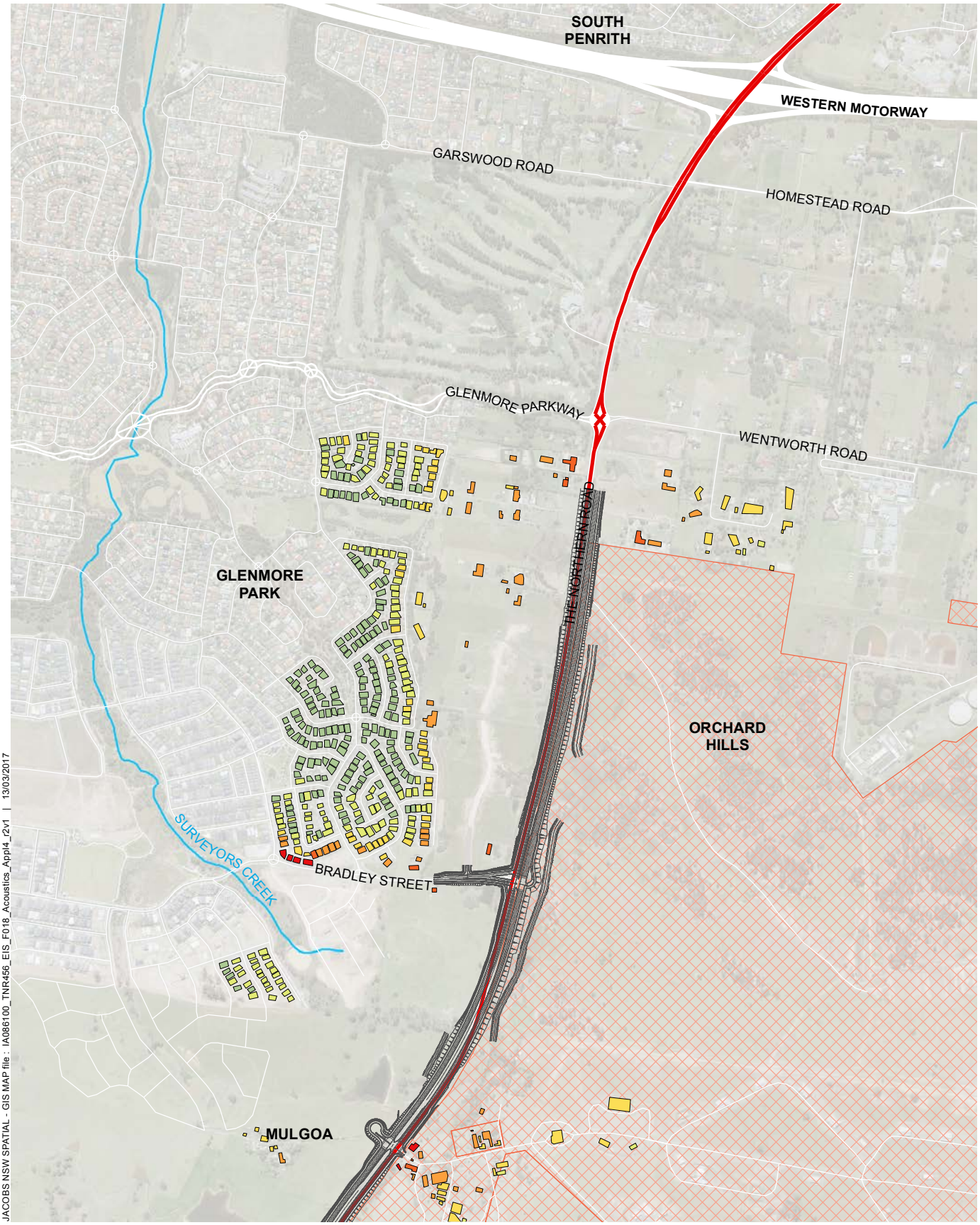
Predicted noise level dB(A)

25 - 30	45 - 50
30 - 35	50 - 55
35 - 40	55 - 60
40 - 45	60 - 65

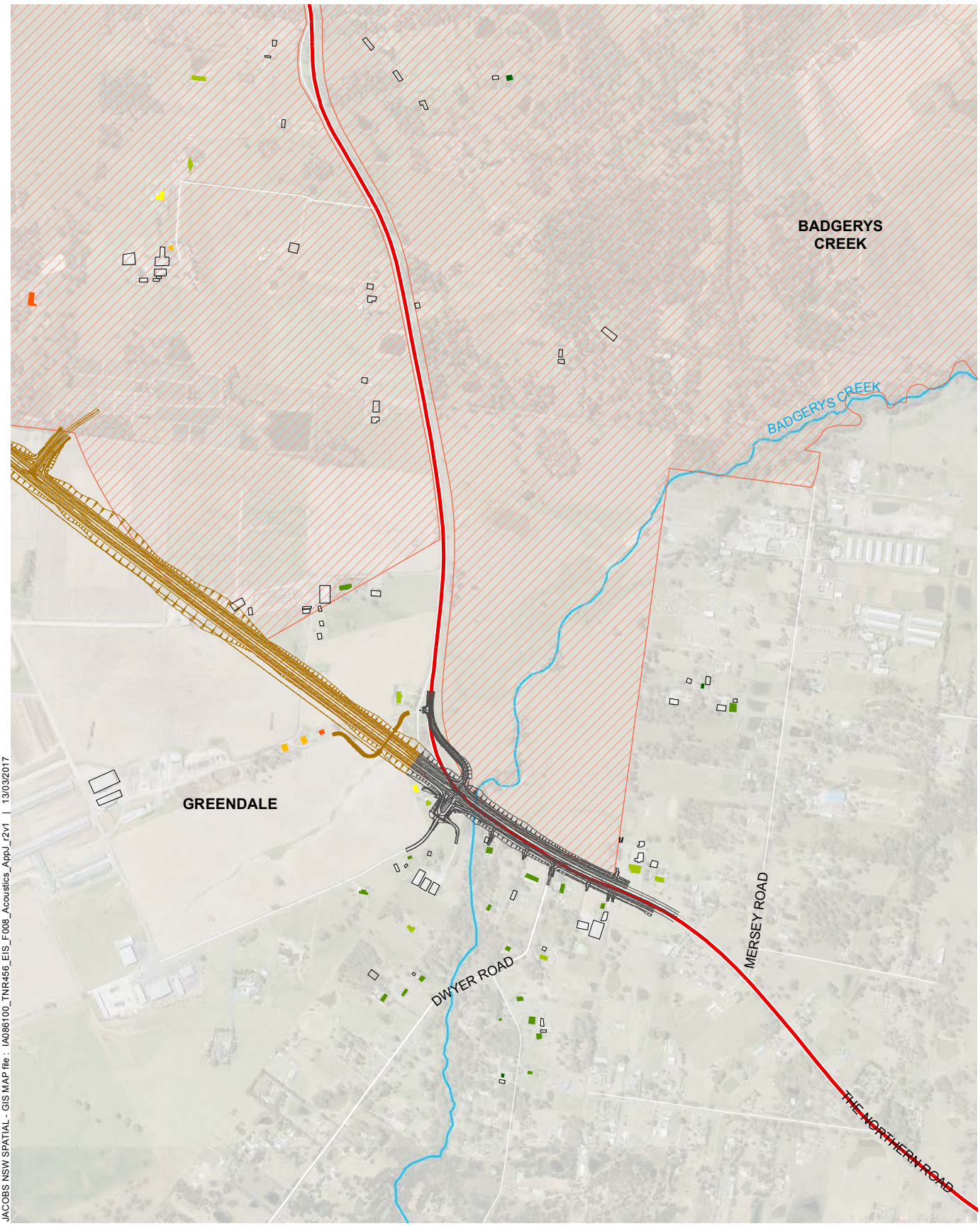
0 200 400 m

N


GLENMORE PARK
GLENMORE PARK
THE NORTHERN ROAD
CHAIN-O-PONDS ROAD
MULGOA
ORCHARD HILLS
KINGS HILL ROAD
LONGVIEW ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F018_Acoustics_Appl4_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
0
200
400 m
N


SOUTH PENRITH
WESTERN MOTORWAY
GARSWOOD ROAD
HOMESTEAD ROAD
GLENMORE PARKWAY
WENTWORTH ROAD
THE NORTHERN ROAD
GLENMORE PARK
ORCHARD HILLS
SURVEYORS CREEK
BRADLEY STREET
MULGOA
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F018_Acoustics_Appl4_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Predicted noise level dB(A)
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
0
200
400 m
N

Appendix J. Predicted difference in operational noise level between Build and No Build scenarios



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F008_Acoustics_AppJ_r2v1 | 13/03/2017

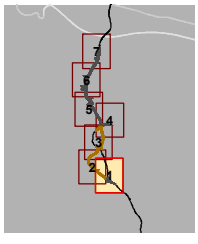
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

Difference in Build versus No Build noise level dB(A)

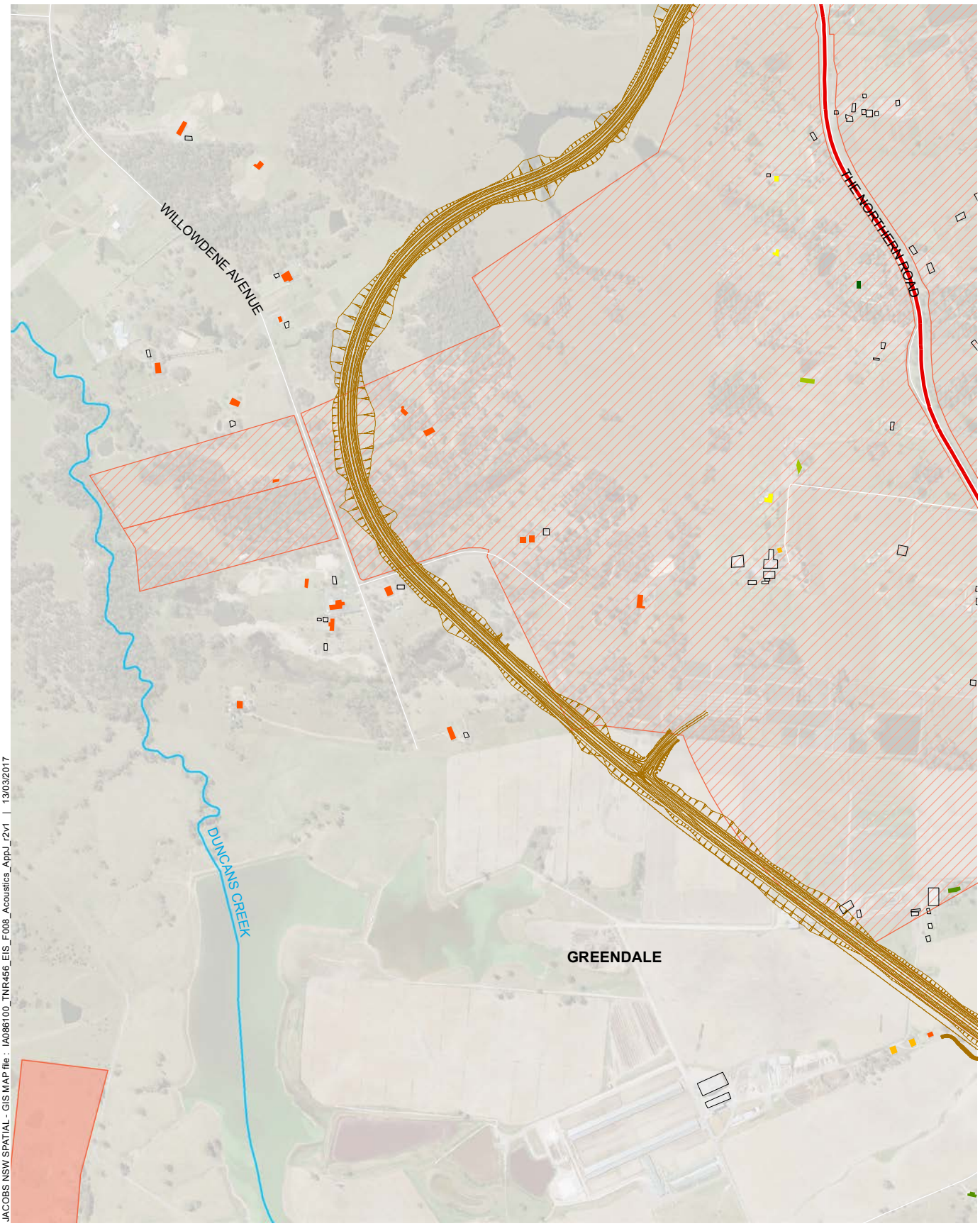
0 - 2
2.1 - 4
4.1 - 6
6.1 - 8
8.1 - 10
> 10
Receiver not acoustically sensitive

0 200 400 m

N



Appendix J | Predicted difference in operational noise between Build and No Build scenarios (maximum of day or night difference)



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F008_Acoustics_AppJ_r2v1 | 13/03/2017

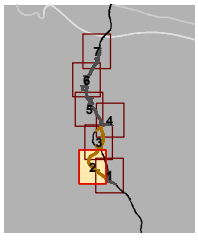
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

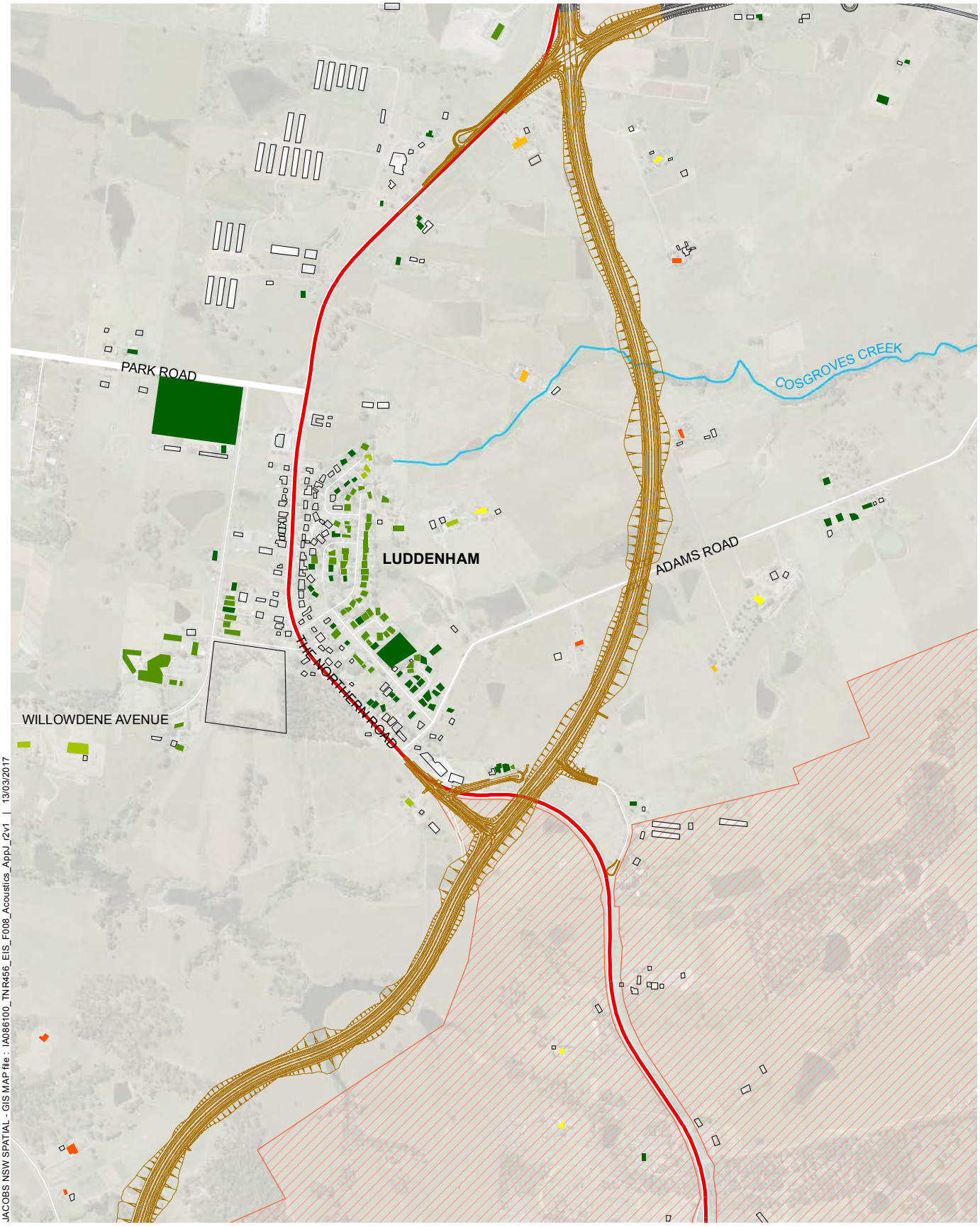
Difference in Build versus No Build noise level dB(A)

0 - 2
2.1 - 4
4.1 - 6
6.1 - 8
8.1 - 10
> 10
Receiver not acoustically sensitive

0 200 400 m

N





JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F008_Acoustics_AppJ_r2v1 | 13/03/2017

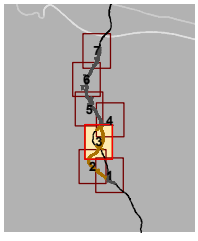
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands

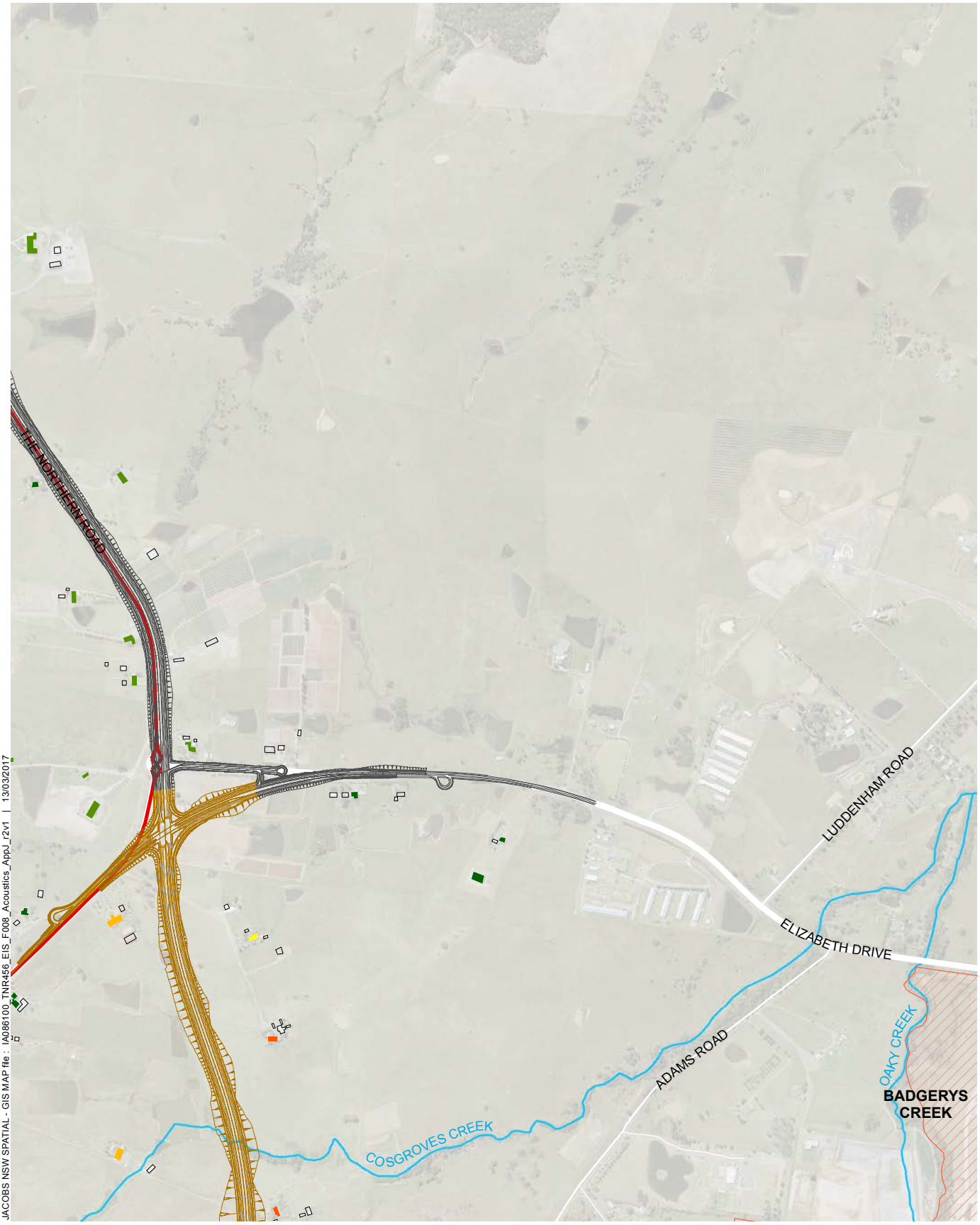
Difference in Build versus No Build noise level dB(A)

0 - 2
2.1 - 4
4.1 - 6
6.1 - 8
8.1 - 10
> 10
Receiver not acoustically sensitive

0 200 400 m

N





The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines

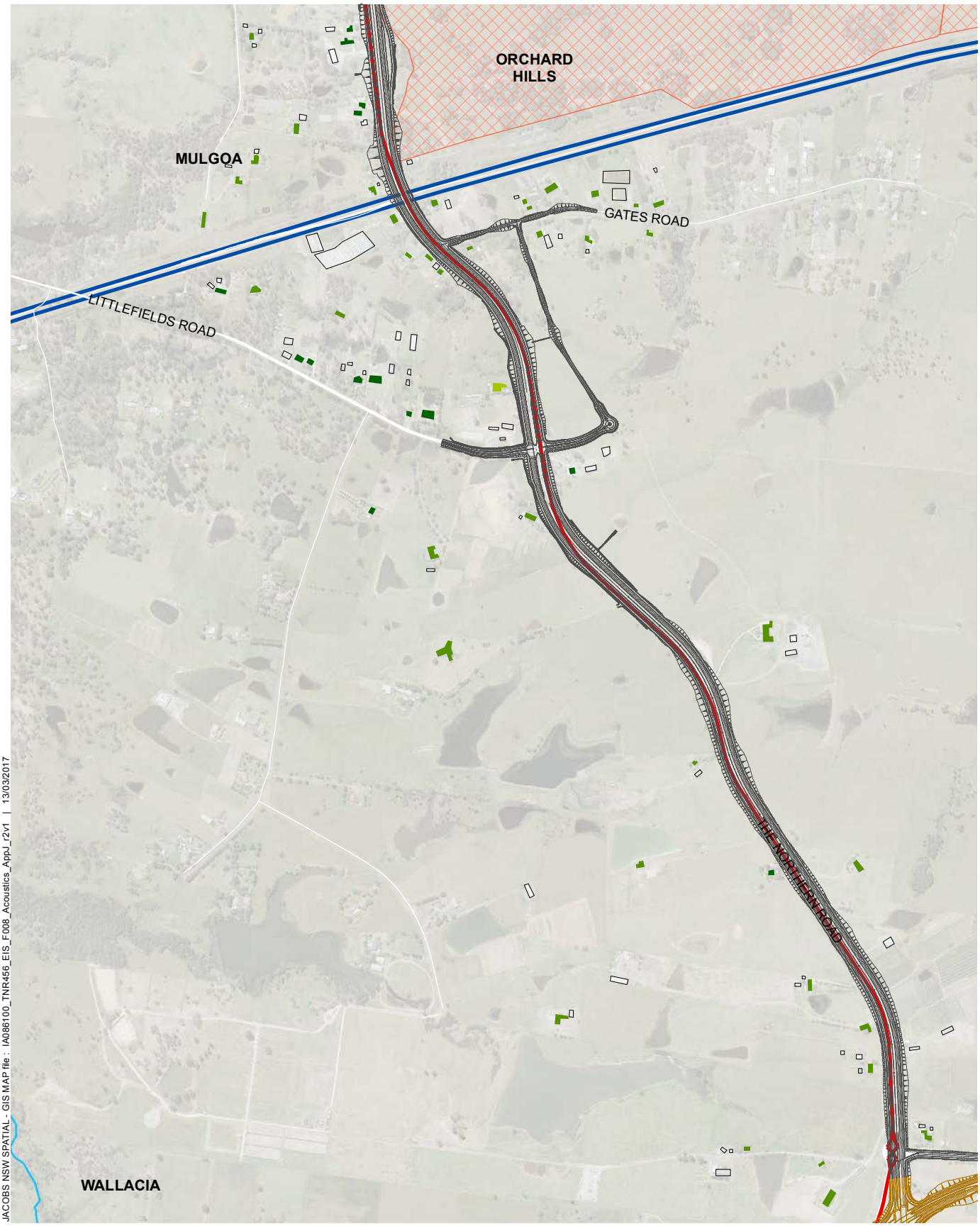
Difference in Build versus No Build noise level dB(A)

0 - 2
2.1 - 4
4.1 - 6
6.1 - 8
8.1 - 10
> 10
Receiver not acoustically sensitive

0 200 400 m

N

Appendix J | Predicted difference in operational noise between Build and No Build scenarios (maximum of day or night difference)



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F008_Acoustics_AppJ_r2v1 | 13/03/2017

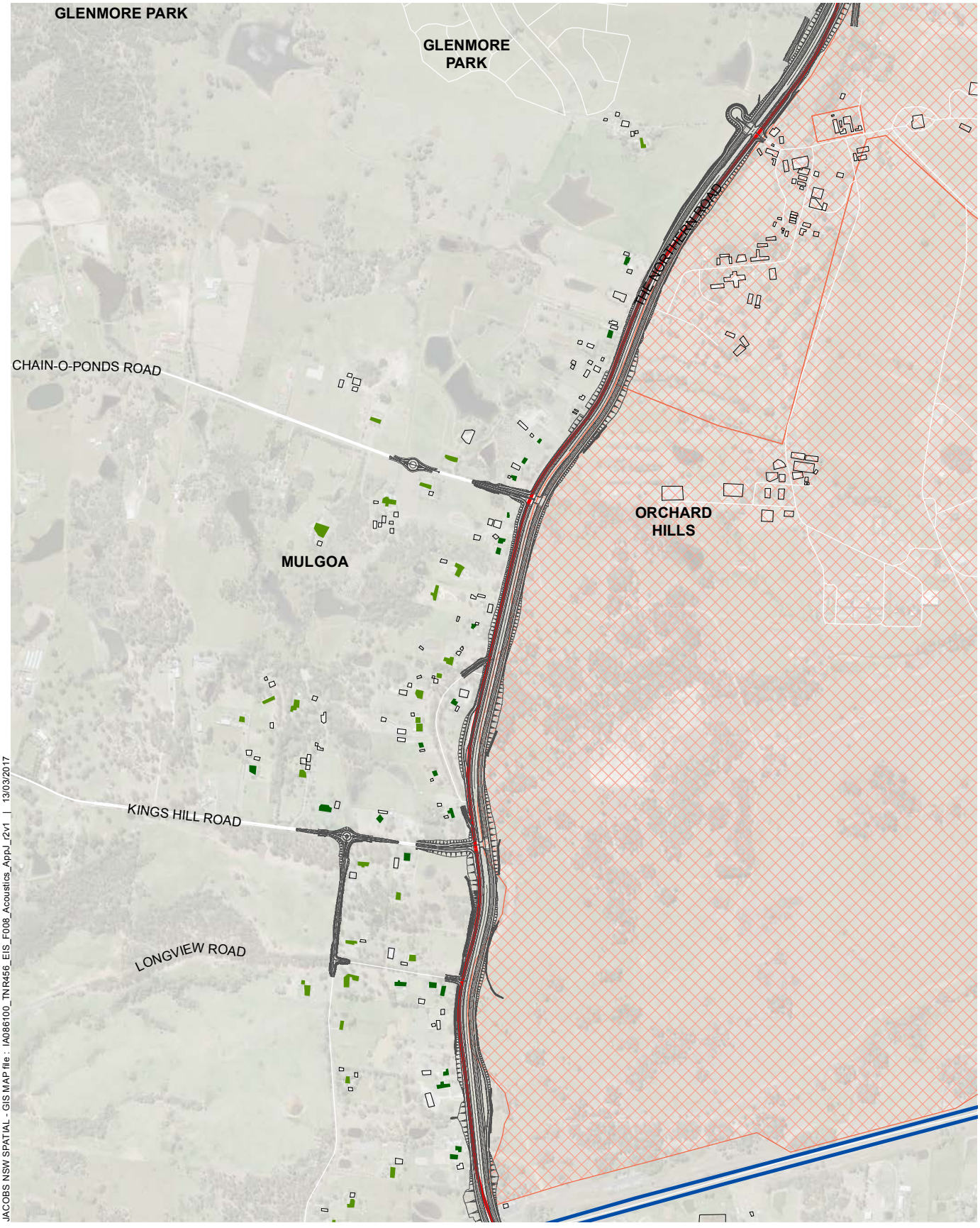
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines

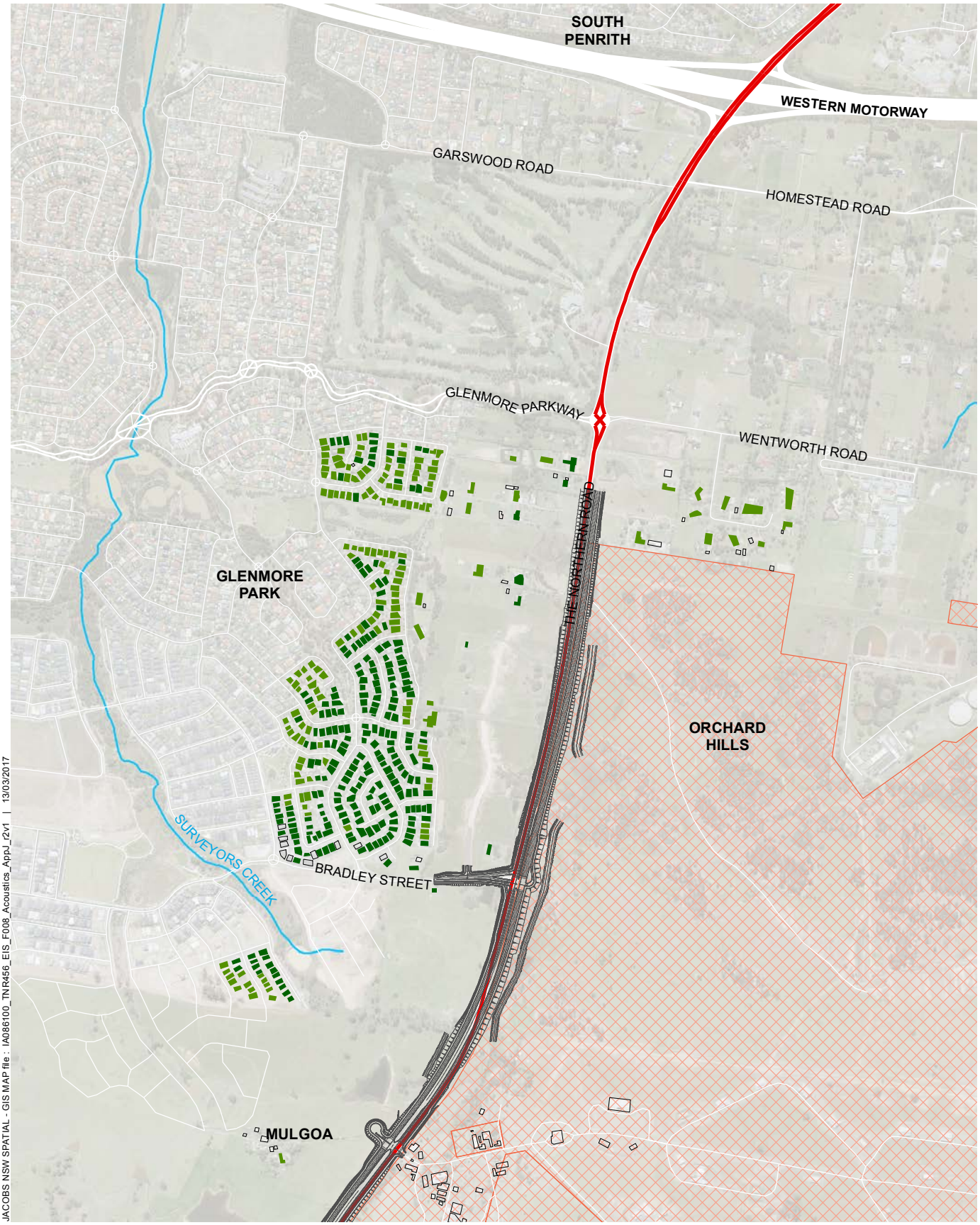
Difference in Build versus No Build noise level dB(A)

0 - 2
2.1 - 4
4.1 - 6
6.1 - 8
8.1 - 10
> 10
Receiver not acoustically sensitive

0 200 400 m

N


GLENMORE PARK
GLENMORE PARK
THE NORTHERN ROAD
CHAIN-O-PONDS ROAD
MULGOA
ORCHARD HILLS
KINGS HILL ROAD
LONGVIEW ROAD
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F008_Acoustics_AppJ_r2v1 | 13/03/2017
The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
WaterNSW supply pipelines
Difference in Build versus No Build noise level dB(A)
0 - 2
2.1 - 4
4.1 - 6
6.1 - 8
8.1 - 10
> 10
Receiver not acoustically sensitive
0
200
400 m
N



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F008_Acoustics_AppJ_r2v1 | 13/03/2017

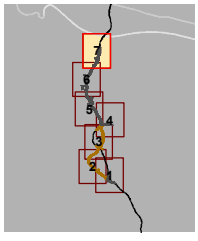
- The Northern Road (Existing)
- Redeveloped road sections
- New road sections
- Western Sydney Airport site (Commonwealth Land)
- Defence Establishment Orchard Hills (Commonwealth Land)
- Commonwealth lands

Difference in Build versus No Build noise level dB(A)

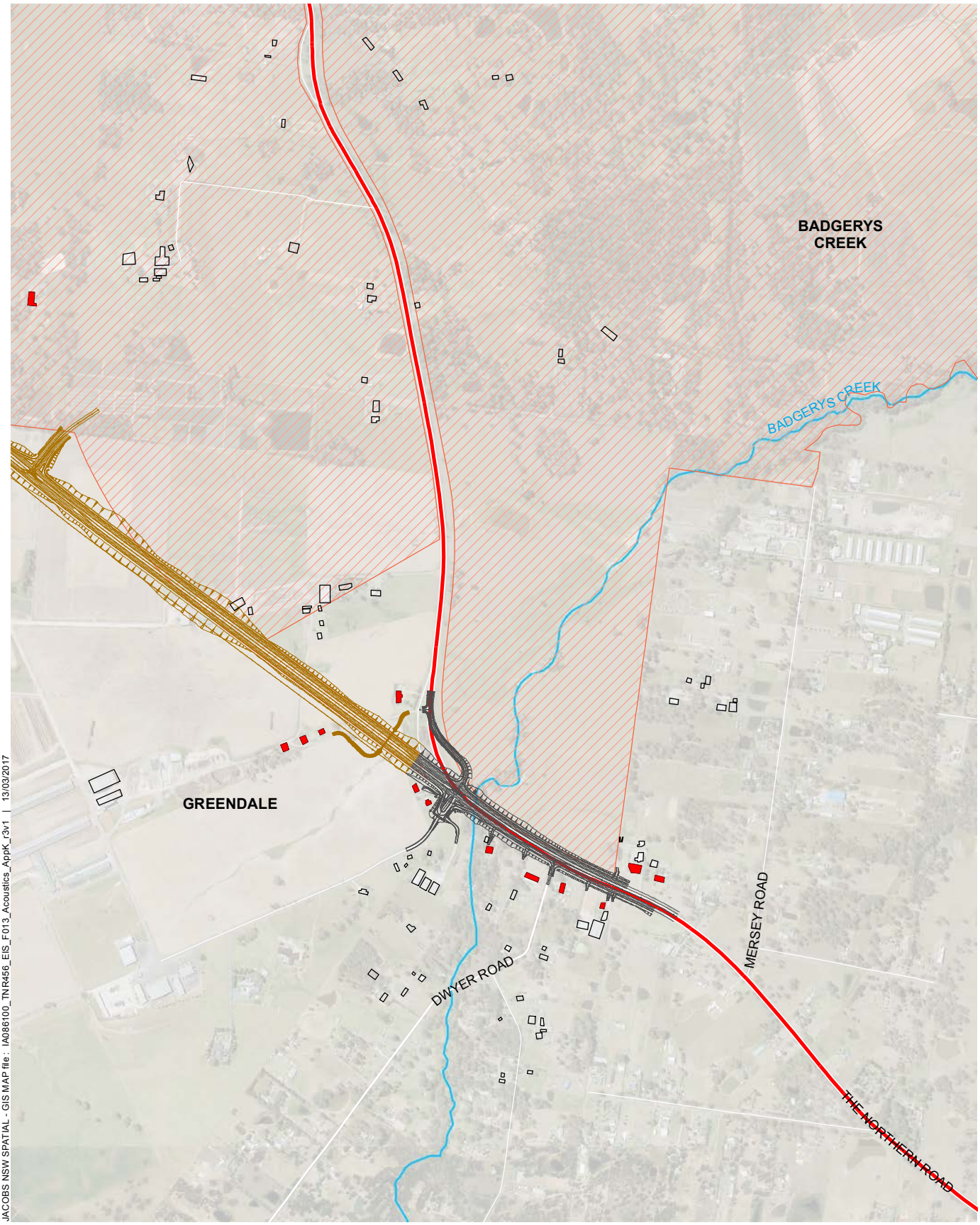
- 0 - 2
- 2.1 - 4
- 4.1 - 6
- 6.1 - 8
- 8.1 - 10
- > 10
- Receiver not acoustically sensitive

0 200 400 m

N



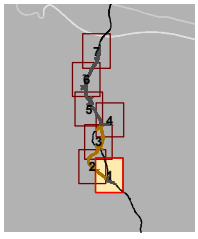
Appendix K. Receivers requiring at-property treatment

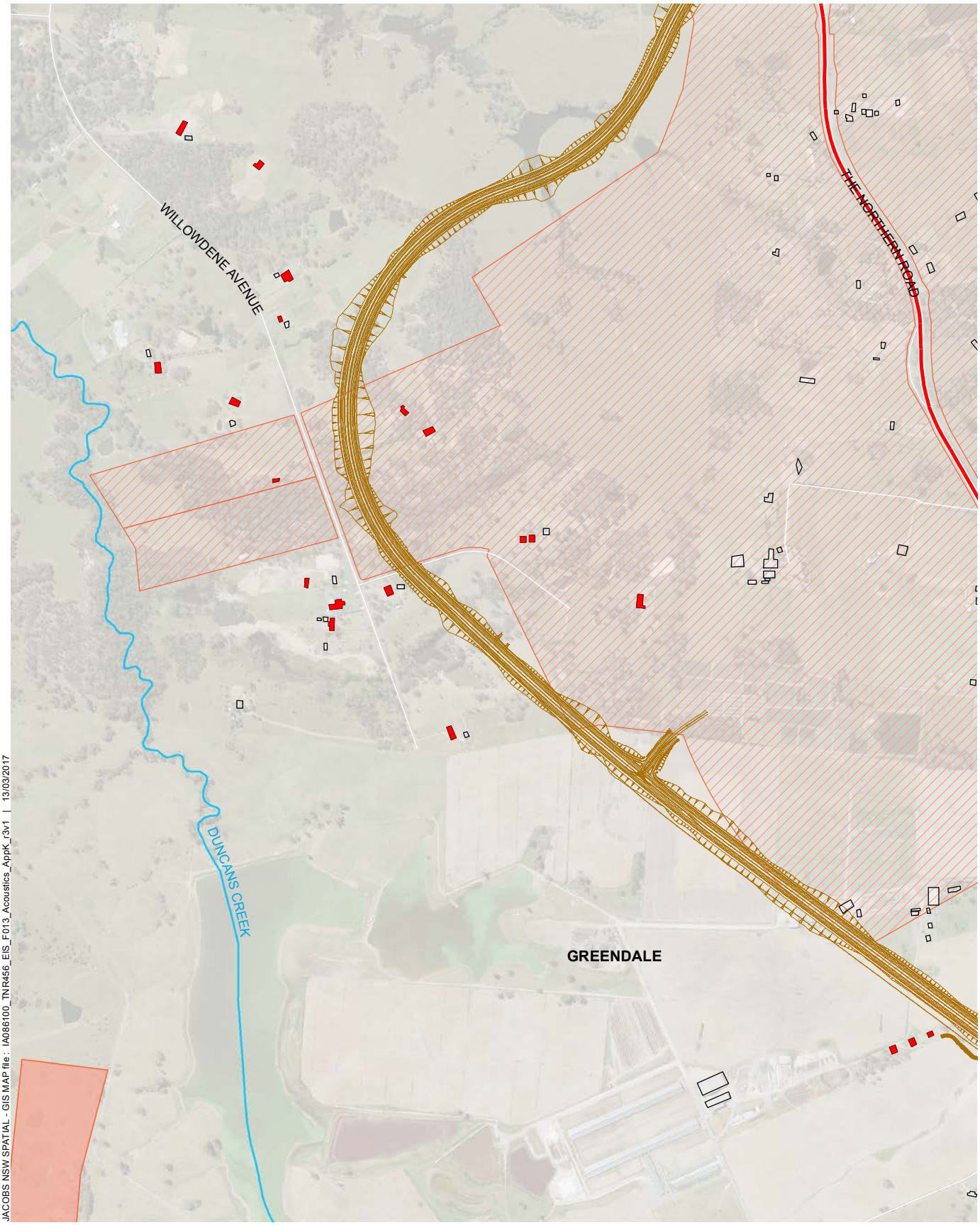


JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F013_Acoustics_AppK_r3v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Receivers requiring at-property acoustic treatment

0 200 400 m



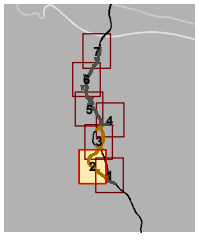


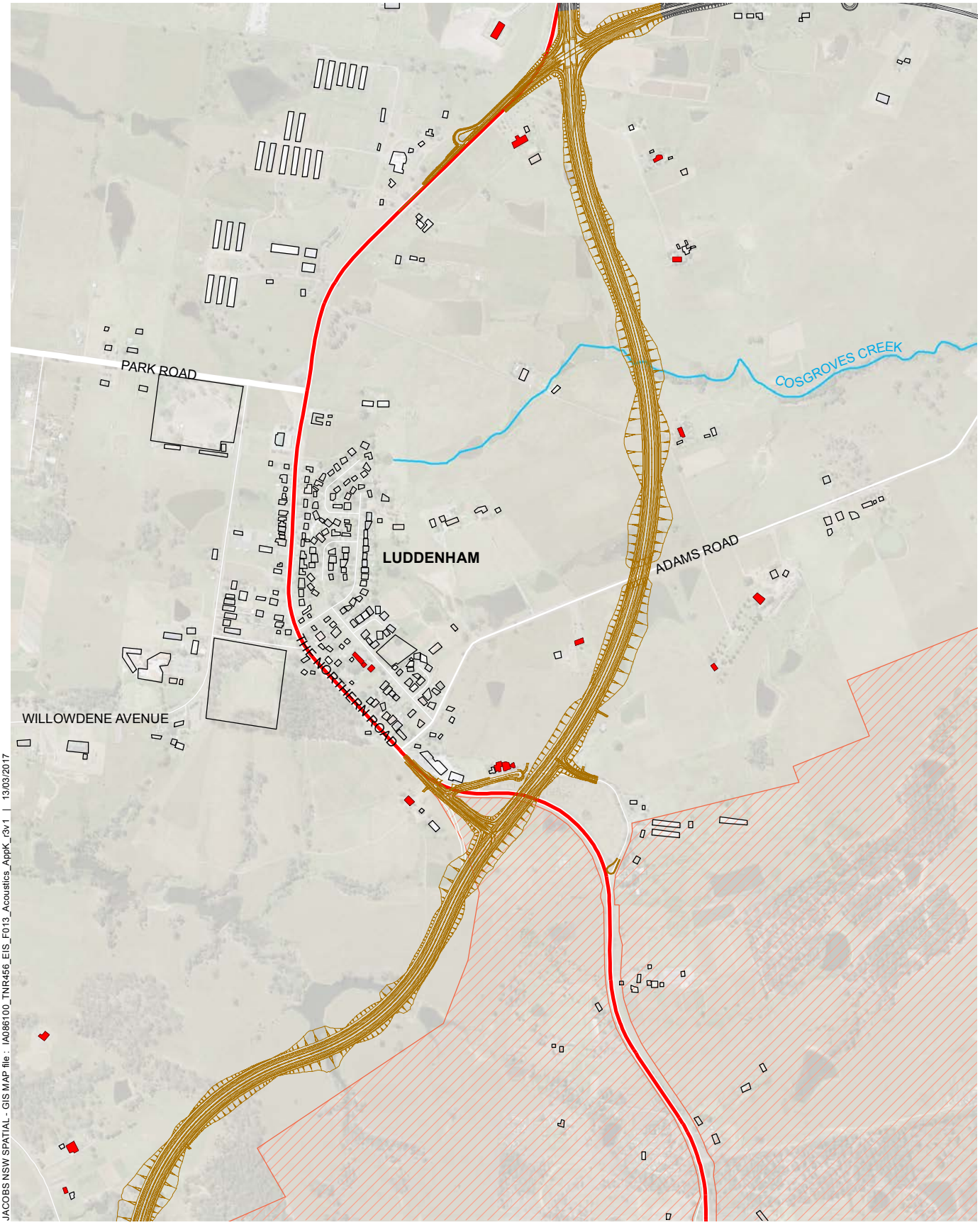
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F013_Acoustics_AppK_r3v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Receivers requiring at-property acoustic treatment

0 200 400 m

N



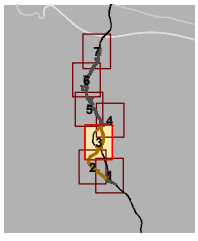


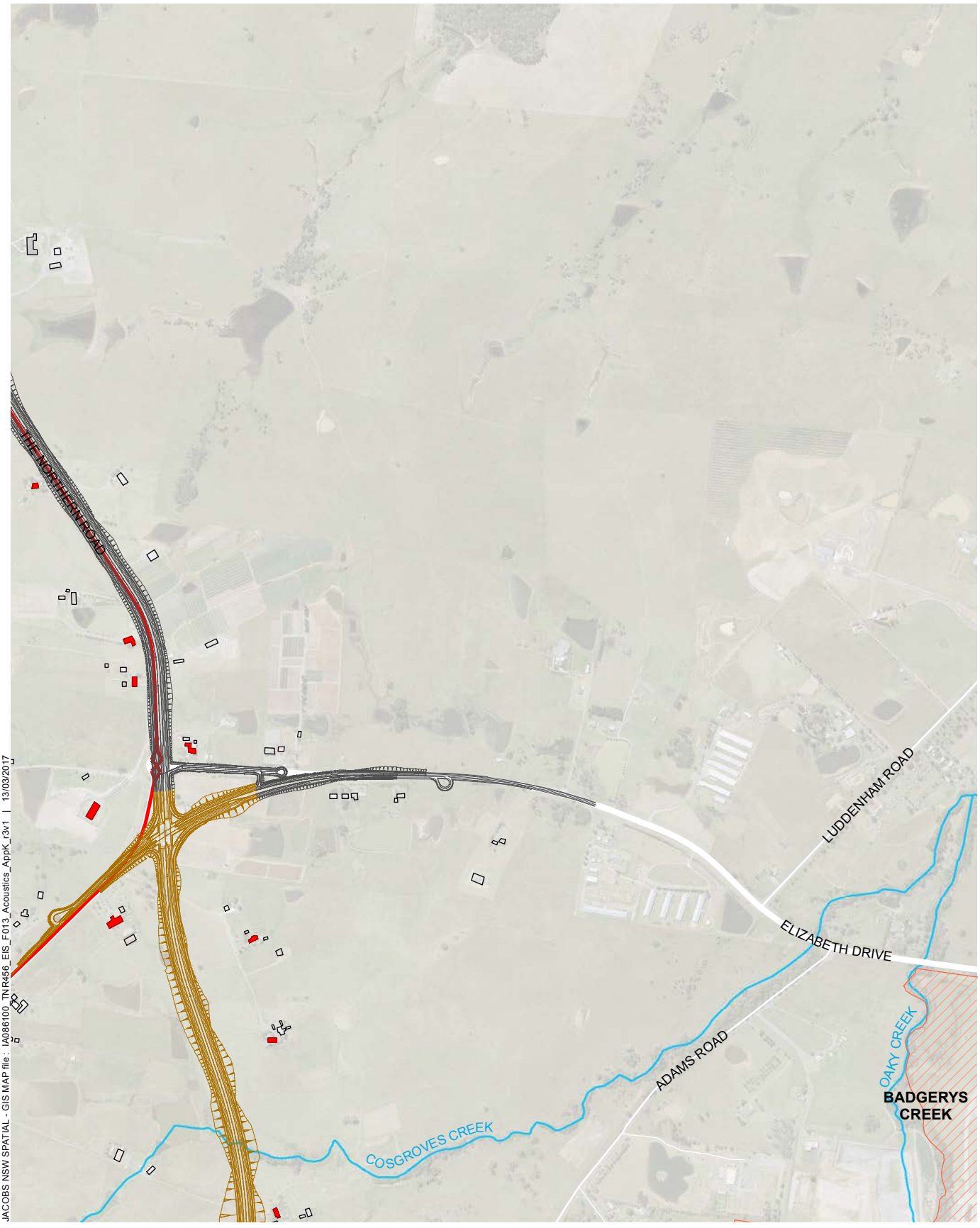
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F013_Acoustics_AppK_r3v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Receivers requiring at-property acoustic treatment

0 200 400 m

N



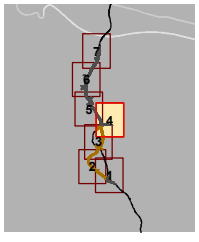


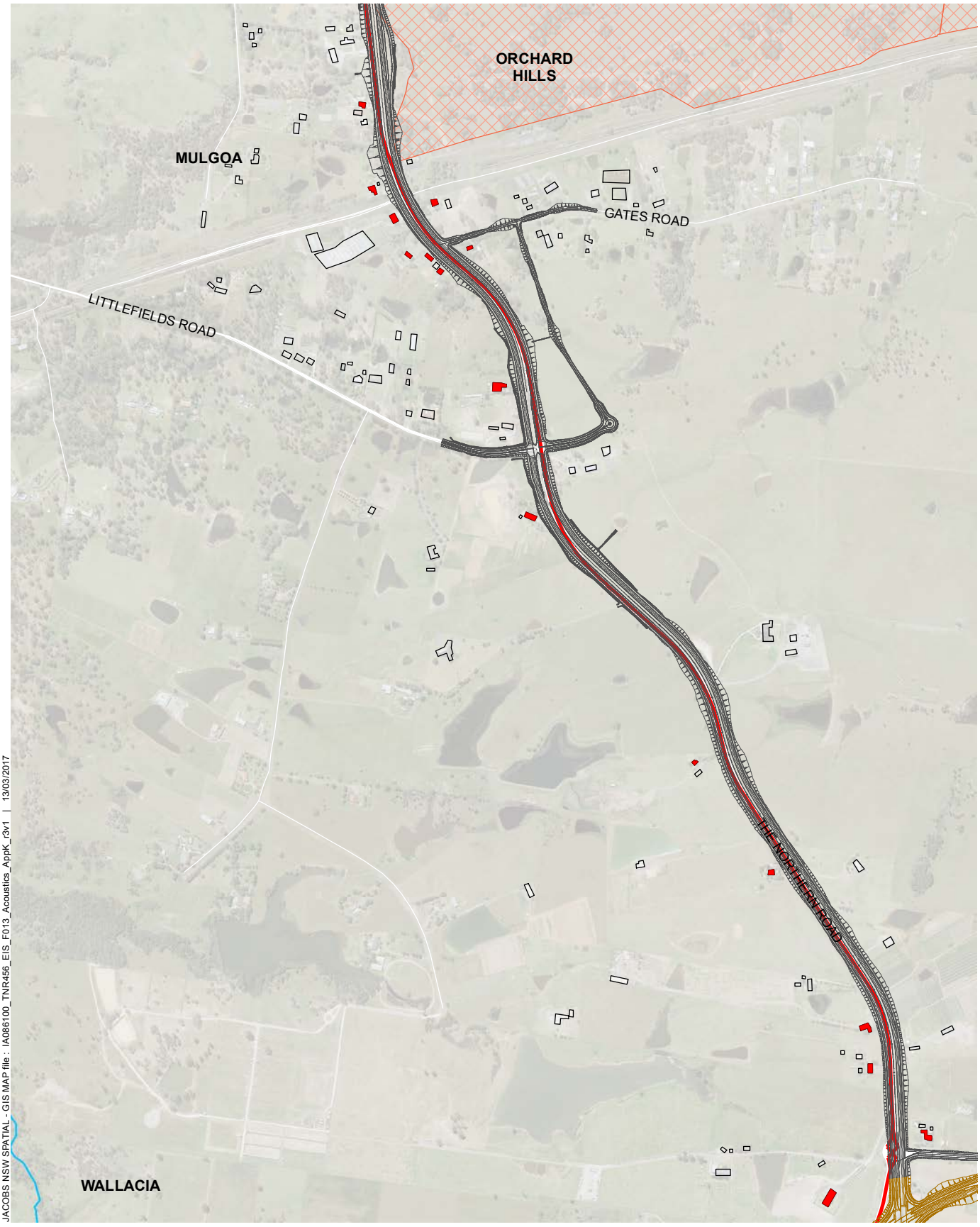
JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F013_Acoustics_AppK_r3v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Receivers requiring at-property acoustic treatment

0 200 400 m

N



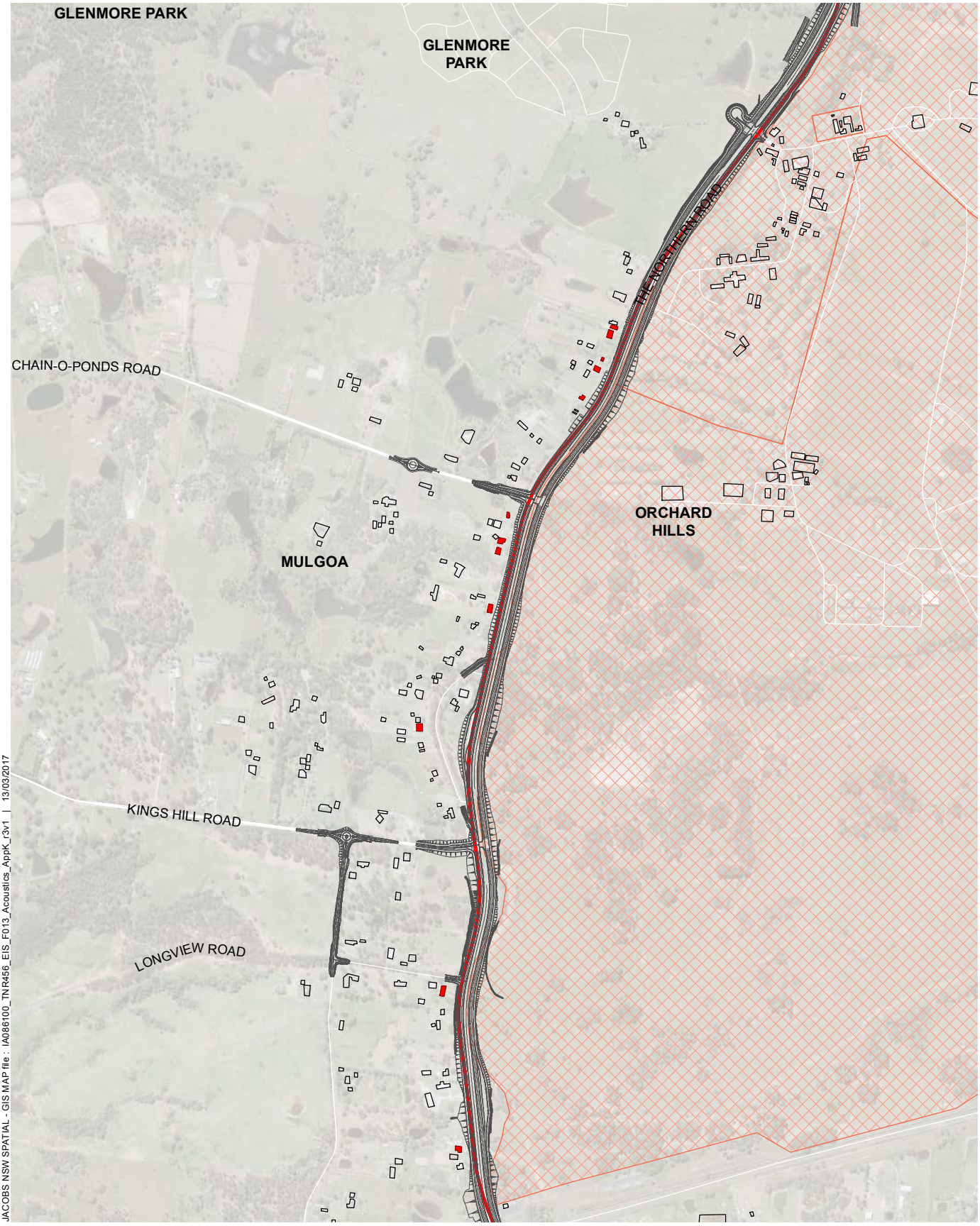


JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F013_Acoustics_AppK_r3v1 | 13/03/2017

The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Receivers requiring at-property acoustic treatment

0 200 400 m

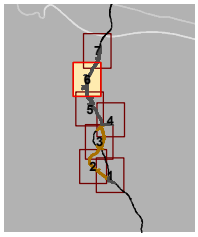
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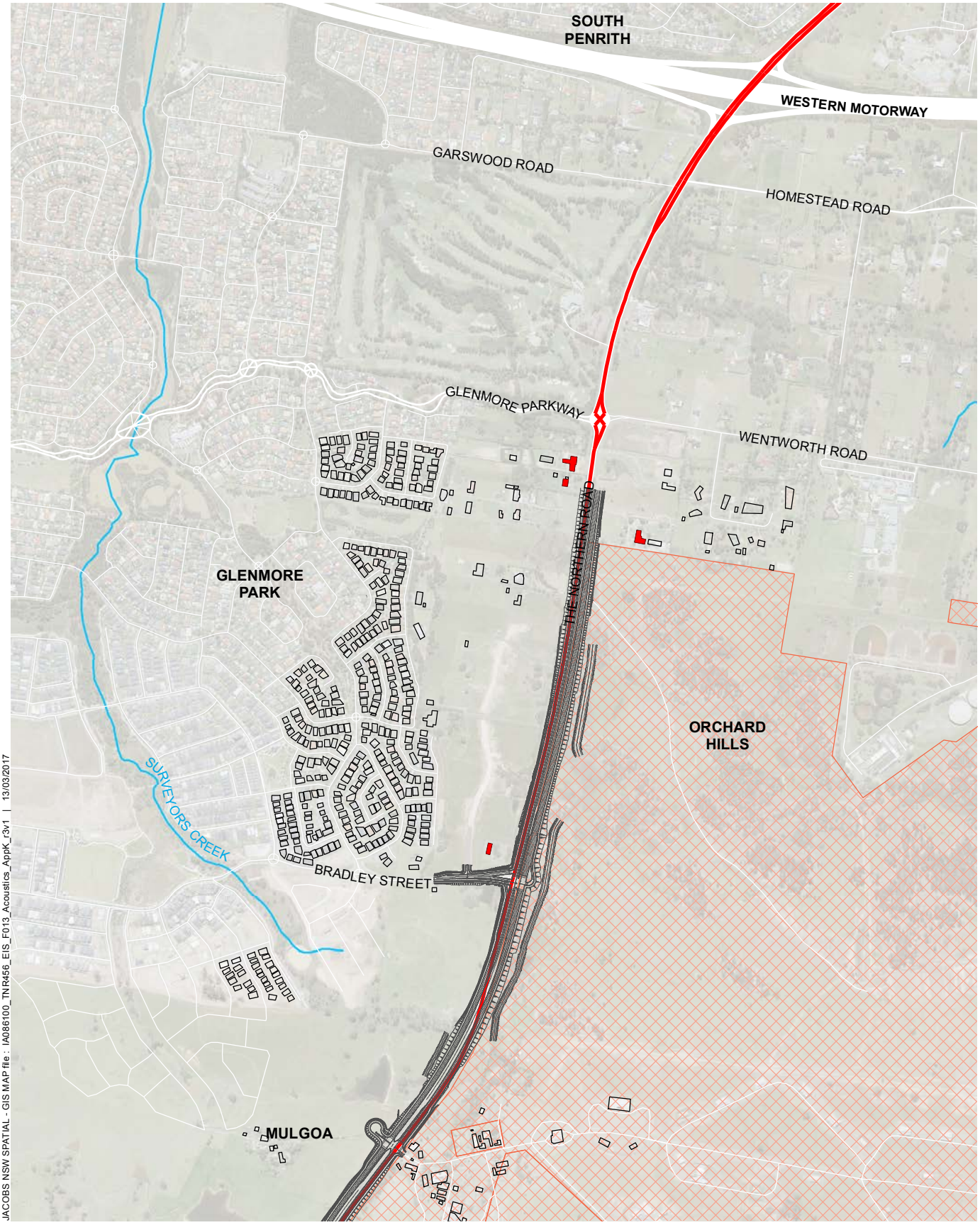


The Northern Road (Existing)
Redeveloped road sections
New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Receivers requiring at-property acoustic treatment

0 200 400 m

N




SOUTH PENRITH
WESTERN MOTORWAY
GARSWOOD ROAD
HOMESTEAD ROAD
GLENMORE PARKWAY
WENTWORTH ROAD
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The Northern Road (Existing)
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New road sections
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth lands
Receivers requiring at-property acoustic treatment
0
200
400 m
N

Appendix L. Detailed predictions of construction noise

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))														
					Works during standard hours									Out of hours works		Sleep disturbance			
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA03.GAR.0004.01	1964-1972 The Northern Road_2, Orchard H	GAR	1	45	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA03.RES.0008.01	1962 The Northern Road, Orchard Hills	RES	1	45	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA03.RES.0009.01	1964-1972 The Northern Road_1, Orchard H	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	NCA 1_NCA04.COM.0001.01	Penrith Golf and Recreation Club_1	COM	1	51	53	55	51	54	55	51	54	51	51	51	54	54	54
GF	NCA 1_NCA04.COM.0002.01	Penrith Golf and Recreation Club_2	COM	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA04.COM.0003.01	Penrith Golf and Recreation Club_3	COM	1	49	53	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 1_NCA04.RES.0001.01	1 Fairwater Ct, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
F1	NCA 1_NCA04.RES.0001.01	1 Fairwater Ct, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA04.RES.0002.01	2 Fairwater Ct, Glenmore Park	RES	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
F1	NCA 1_NCA04.RES.0002.01	2 Fairwater Ct, Glenmore Park	RES	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 1_NCA04.RES.0003.01	3 Fairwater Ct, Glenmore Park	RES	1	43	48	50	38	49	50	46	49	38	38	45	41	49	41
GF	NCA 1_NCA04.RES.0004.01	4 Fairwater Ct, Glenmore Park	RES	1	46	51	53	46	52	53	49	52	46	46	48	49	52	49
F1	NCA 1_NCA04.RES.0004.01	4 Fairwater Ct, Glenmore Park	RES	1	46	51	54	46	53	54	50	53	46	46	49	49	53	49
GF	NCA 1_NCA04.RES.0005.01	5 Fairwater Ct, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
F1	NCA 1_NCA04.RES.0005.01	5 Fairwater Ct, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA04.RES.0006.01	6 Fairwater Ct, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
F1	NCA 1_NCA04.RES.0006.01	6 Fairwater Ct, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA04.RES.0093.01	7 Fairwater Ct, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
F1	NCA 1_NCA04.RES.0093.01	7 Fairwater Ct, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA04.RES.0094.01	8 Fairwater Ct, Glenmore Park	RES	1	38	43	45	33	44	45	41	44	27	33	40	36	44	30
F1	NCA 1_NCA04.RES.0094.01	8 Fairwater Ct, Glenmore Park	RES	1	38	43	45	34	44	45	41	44	34	34	40	37	44	37
GF	NCA 1_NCA04.RES.0095.01	9 Fairwater Ct, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
F1	NCA 1_NCA04.RES.0095.01	9 Fairwater Ct, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
GF	NCA 1_NCA05.COM.0001.01	Produce Direct and Pet Care_1	COM	1	46	49	51	46	50	51	47	50	46	46	46	49	50	49
GF	NCA 1_NCA05.COM.0002.01	Produce Direct and Pet Care_2	COM	1	47	47	49	46	48	49	46	48	46	46	46	49	49	49
GF	NCA 1_NCA05.COM.0003.01	Produce Direct and Pet Care_3	COM	1	47	47	48	47	47	48	47	47	47	47	47	50	50	50
GF	NCA 1_NCA05.GAR.0001.01	1988 The Northern Rd_2, Orchard Hills	GAR	1	49	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 1_NCA05.RES.0001.01	1988 The Northern Road_1, Orchard Hills	RES	1	50	54	56	49	55	56	52	55	49	49	51	52	55	52
F1	NCA 1_NCA05.RES.0001.01	1988 The Northern Road_1, Orchard Hills	RES	1	51	54	56	51	55	56	52	55	51	51	51	54	55	54
GF	NCA 1_NCA05.RES.0002.01	1976 The Northern Road, Orchard Hills	RES	1	48	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 1_NCA06.COM.0001.01	Orchard Hills Veterinary Hospital	COM	1	48	53	55	45	54	55	51	54	45	45	50	48	54	48
GF	NCA 1_NCA06.GAR.0001.01	379-387 Wentworth Rd_2, Orchard Hills	GAR	1	53	55	57	53	56	57	53	56	53	53	53	56	56	56
GF	NCA 1_NCA06.GAR.0008.01	341 Wentworth Rd_2, Orchard Hills	GAR	1	46	46	49	46	48	49	46	48	46	46	46	49	49	49
GF	NCA 1_NCA06.GAR.0009.01	341 Wentworth Rd_3, Orchard Hills	GAR	1	45	46	48	45	47	48	45	47	45	45	45	48	48	48
GF	NCA 1_NCA06.RES.0001.01	377A Wentworth Rd, Orchard Hills	RES	1	53	55	57	53	56	57	53	56	53	53	53	56	56	56
GF	NCA 1_NCA06.RES.0002.01	363-375 Wentworth Rd, Orchard Hills	RES	1	50	51	53	50	52	53	50	52	50	50	50	53	53	53
F1	NCA 1_NCA06.RES.0002.01	363-375 Wentworth Rd, Orchard Hills	RES	1	50	51	53	50	52	53	50	52	50	50	50	53	53	53
GF	NCA 1_NCA06.RES.0003.01	351-361 Wentworth Rd, Orchard Hills	RES	1	48	49	51	48	50	51	48	50	48	48	48	51	51	51
GF	NCA 1_NCA06.RES.0004.01	341 Wentworth Rd_1, Orchard Hills	RES	1	48	49	51	48	50	51	48	50	48	48	48	51	51	51

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA06.RES.0005.01	379-387 Wentworth Rd_1, Orchard Hills	RES	1	53	55	57	53	56	57	53	56	53	53	53	56	56	56
GF	NCA 1_NCA06.RES.0006.01	1980 The Northern Road, Orchard Hills	RES	1	47	48	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 1_NCA06.RES.0007.01	43 Cross Rd, Orchard Hills	RES	1	46	47	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 1_NCA06.RES.0010.01	333 Wentworth Rd_1, Orchard Hills	RES	1	45	46	48	45	47	48	45	47	45	45	45	48	48	48
GF	NCA 1_NCA08.GAR.0001.01	18 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	41	42	44	41	43	44	41	43	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0002.01	36 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	42	44	46	42	45	46	42	45	42	42	42	45	45	45
GF	NCA 1_NCA08.GAR.0003.01	34 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	40	41	43	40	42	43	40	42	40	40	40	43	43	43
GF	NCA 1_NCA08.GAR.0004.01	32 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	40	42	43	40	42	43	40	42	40	40	40	43	43	43
GF	NCA 1_NCA08.GAR.0005.01	30 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	40	41	43	40	42	43	40	42	40	40	40	43	43	43
GF	NCA 1_NCA08.GAR.0006.01	28 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	39	41	44	39	43	44	40	43	39	39	39	42	43	42
GF	NCA 1_NCA08.GAR.0007.01	26 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	38	42	45	38	44	45	41	44	38	38	40	41	44	41
GF	NCA 1_NCA08.GAR.0008.01	24 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
GF	NCA 1_NCA08.GAR.0009.01	22 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	41	42	44	41	43	44	41	43	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0010.01	20 Glenmore Ridge Dr_2, Glenmore Park	GAR	1	40	42	44	40	43	44	40	43	40	40	40	43	43	43
GF	NCA 1_NCA08.GAR.0011.01	2 Lyora St_2, Glenmore Park	GAR	1	41	43	45	41	44	45	41	44	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0012.01	4 Lyora St_2, Glenmore Park	GAR	1	41	42	43	41	42	43	41	42	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0013.01	6 Lyora St_2, Glenmore Park	GAR	1	41	41	43	41	42	43	41	42	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0014.01	8 Lyora St_2, Glenmore Park	GAR	1	41	41	43	41	42	43	41	42	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0015.01	10 Lyora St_2, Glenmore Park	GAR	1	41	43	45	41	44	45	41	44	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0016.01	12 Lyora St_2, Glenmore Park	GAR	1	41	43	45	41	44	45	41	44	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0017.01	14 Lyora St_2, Glenmore Park	GAR	1	41	41	43	41	42	43	41	42	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0018.01	16 Lyora St_2, Glenmore Park	GAR	1	41	41	43	41	42	43	41	42	41	41	41	44	44	44
GF	NCA 1_NCA08.GAR.0019.01	18 Lyora St_2, Glenmore Park	GAR	1	41	43	44	41	43	44	41	43	41	41	41	44	44	44
GF	NCA 1_NCA08.RES.0001.01	24 Highdale Tce, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
GF	NCA 1_NCA08.RES.0002.01	26 Highdale Tce, Glenmore Park	RES	1	39	44	46	33	45	46	42	45	33	33	41	36	45	36
GF	NCA 1_NCA08.RES.0003.01	11 Highdale Tce, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
GF	NCA 1_NCA08.RES.0004.01	13 Highdale Tce, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
GF	NCA 1_NCA08.RES.0005.01	15 Highdale Tce, Glenmore Park	RES	1	39	44	46	33	45	46	42	45	33	33	41	36	45	36
GF	NCA 1_NCA08.RES.0006.01	17 Highdale Tce, Glenmore Park	RES	1	39	44	46	37	45	46	42	45	37	37	41	40	45	40
GF	NCA 1_NCA08.RES.0007.01	19 Highdale Tce, Glenmore Park	RES	1	37	41	43	37	42	43	39	42	37	37	38	40	42	40
GF	NCA 1_NCA08.RES.0008.01	21 Highdale Tce, Glenmore Park	RES	1	40	45	45	37	44	45	41	44	37	37	40	40	44	40
GF	NCA 1_NCA08.RES.0009.01	23 Highdale Tce, Glenmore Park	RES	1	40	45	47	38	46	47	43	46	38	38	42	41	46	41
GF	NCA 1_NCA08.RES.0010.01	25 Highdale Tce, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA08.RES.0011.01	38 Highdale Tce, Glenmore Park	RES	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
GF	NCA 1_NCA08.RES.0012.01	30 Highdale Tce, Glenmore Park	RES	1	41	46	48	37	47	48	44	47	37	37	43	40	47	40
GF	NCA 1_NCA08.RES.0013.01	32 Highdale Tce, Glenmore Park	RES	1	43	48	50	38	49	50	46	49	38	38	45	41	49	41
GF	NCA 1_NCA08.RES.0014.01	34 Highdale Tce, Glenmore Park	RES	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
GF	NCA 1_NCA08.RES.0015.01	9 Greenlink Dr, Glenmore Park	RES	1	45	50	52	37	51	52	48	51	37	37	47	40	51	40
F1	NCA 1_NCA08.RES.0015.01	9 Greenlink Dr, Glenmore Park	RES	1	45	50	52	39	51	52	48	51	39	39	47	42	51	42

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0016.01	7 Greenlink Dr_2, Glenmore Park	RES	1	39	44	44	37	43	44	40	43	37	37	39	40	43	40
GF	NCA 1_NCA08.RES.0017.01	7 Greenlink Dr_1, Glenmore Park	RES	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
GF	NCA 1_NCA08.RES.0018.01	5 Greenlink Dr, Glenmore Park	RES	1	44	49	51	38	50	51	47	50	38	38	46	41	50	41
GF	NCA 1_NCA08.RES.0019.01	28 Highdale Tce, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA08.RES.0020.01	29 Highdale Tce, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
GF	NCA 1_NCA08.RES.0021.01	31 Highdale Tce, Glenmore Park	RES	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 1_NCA08.RES.0022.01	33 Highdale Tce, Glenmore Park	RES	1	47	48	48	47	47	48	47	47	47	47	47	50	50	50
GF	NCA 1_NCA08.RES.0023.01	10 Capstone Tce, Glenmore Park	RES	1	40	45	47	35	46	47	43	46	35	35	42	38	46	38
GF	NCA 1_NCA08.RES.0024.01	8 Capstone Tce, Glenmore Park	RES	1	40	45	47	34	46	47	43	46	34	34	42	37	46	37
GF	NCA 1_NCA08.RES.0025.01	6 Capstone Tce, Glenmore Park	RES	1	40	45	47	38	46	47	43	46	38	38	42	41	46	41
GF	NCA 1_NCA08.RES.0026.01	4 Capstone Tce, Glenmore Park	RES	1	42	47	49	35	48	49	45	48	35	35	44	38	48	38
GF	NCA 1_NCA08.RES.0027.01	35 Greenlink Dr, Glenmore Park	RES	1	50	52	54	50	53	54	50	53	50	50	50	53	53	53
F1	NCA 1_NCA08.RES.0027.01	35 Greenlink Dr, Glenmore Park	RES	1	53	53	54	53	53	54	53	53	53	53	53	56	56	56
GF	NCA 1_NCA08.RES.0028.01	46 Highdale Tce, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
F1	NCA 1_NCA08.RES.0028.01	46 Highdale Tce, Glenmore Park	RES	1	47	49	51	47	50	51	47	50	47	47	47	50	50	50
GF	NCA 1_NCA08.RES.0029.01	44 Highdale Tce, Glenmore Park	RES	1	44	49	52	43	51	52	48	51	43	43	47	46	51	46
F1	NCA 1_NCA08.RES.0029.01	44 Highdale Tce, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA08.RES.0030.01	17 Greenlink Dr, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
F1	NCA 1_NCA08.RES.0030.01	17 Greenlink Dr, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA08.RES.0031.01	15 Greenlink Dr, Glenmore Park	RES	1	43	48	50	38	49	50	46	49	38	38	45	41	49	41
F1	NCA 1_NCA08.RES.0031.01	15 Greenlink Dr, Glenmore Park	RES	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
GF	NCA 1_NCA08.RES.0032.01	13 Greenlink Dr, Glenmore Park	RES	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
F1	NCA 1_NCA08.RES.0032.01	13 Greenlink Dr, Glenmore Park	RES	1	43	48	51	41	50	51	47	50	41	41	46	44	50	44
GF	NCA 1_NCA08.RES.0033.01	11 Greenlink Dr, Glenmore Park	RES	1	43	48	50	37	49	50	46	49	37	37	45	40	49	40
F1	NCA 1_NCA08.RES.0033.01	11 Greenlink Dr, Glenmore Park	RES	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
GF	NCA 1_NCA08.RES.0034.01	42 Highdale Tce, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA08.RES.0035.01	40 Highdale Tce, Glenmore Park	RES	1	42	47	49	39	48	49	45	48	39	39	44	42	48	42
GF	NCA 1_NCA08.RES.0036.01	29 Greenlink Dr, Glenmore Park	RES	1	47	51	53	47	52	53	49	52	47	47	48	50	52	50
F1	NCA 1_NCA08.RES.0036.01	29 Greenlink Dr, Glenmore Park	RES	1	50	51	53	50	52	53	50	52	50	50	50	53	53	53
GF	NCA 1_NCA08.RES.0037.01	27 Greenlink Dr, Glenmore Park	RES	1	48	51	53	48	52	53	49	52	48	48	48	51	52	51
F1	NCA 1_NCA08.RES.0037.01	27 Greenlink Dr, Glenmore Park	RES	1	50	51	53	50	52	53	50	52	50	50	50	53	53	53
GF	NCA 1_NCA08.RES.0038.01	25 Greenlink Dr, Glenmore Park	RES	1	47	50	52	47	51	52	48	51	47	47	47	50	51	50
F1	NCA 1_NCA08.RES.0038.01	25 Greenlink Dr, Glenmore Park	RES	1	48	50	52	48	51	52	48	51	48	48	48	51	51	51
GF	NCA 1_NCA08.RES.0039.01	21 Greenlink Dr, Glenmore Park	RES	1	45	50	52	40	51	52	48	51	40	40	47	43	51	43
F1	NCA 1_NCA08.RES.0039.01	21 Greenlink Dr, Glenmore Park	RES	1	45	50	52	41	51	52	48	51	41	41	47	44	51	44
GF	NCA 1_NCA08.RES.0040.01	50 Highdale Tce, Glenmore Park	RES	1	48	50	53	48	52	53	49	52	48	48	48	51	52	51
F1	NCA 1_NCA08.RES.0040.01	50 Highdale Tce, Glenmore Park	RES	1	48	51	53	48	52	53	49	52	48	48	48	51	52	51
GF	NCA 1_NCA08.RES.0041.01	48 Highdale Tce, Glenmore Park	RES	1	47	47	48	47	47	48	47	47	47	47	47	50	50	50
GF	NCA 1_NCA08.RES.0042.01	37 Highdale Tce, Glenmore Park	RES	1	43	47	48	43	47	48	44	47	43	43	43	46	47	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0043.01	39 Highdale Tce, Glenmore Park	RES	1	43	48	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0044.01	41 Highdale Tce, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0045.01	45 Highdale Tce, Glenmore Park	RES	1	48	50	52	48	51	52	48	51	48	48	48	51	51	51
GF	NCA 1_NCA08.RES.0046.01	16 Capstone Tce, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0047.01	12 Capstone Tce, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA08.RES.0048.01	19 Greenlink Dr, Glenmore Park	RES	1	46	51	52	40	51	52	48	51	40	40	47	43	51	43
F1	NCA 1_NCA08.RES.0048.01	19 Greenlink Dr, Glenmore Park	RES	1	45	50	52	43	51	52	48	51	43	43	47	46	51	46
GF	NCA 1_NCA08.RES.0049.01	47 Highdale Tce, Glenmore Park	RES	1	47	50	51	47	50	51	47	50	47	47	47	50	50	50
GF	NCA 1_NCA08.RES.0050.01	20 Capstone Tce, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA08.RES.0051.01	78 Bradley St, Glenmore Park	RES	1	40	45	47	37	46	47	43	46	37	37	42	40	46	40
GF	NCA 1_NCA08.RES.0052.01	74 Bradley St, Glenmore Park	RES	1	40	45	47	36	46	47	43	46	36	36	42	39	46	39
F1	NCA 1_NCA08.RES.0052.01	74 Bradley St, Glenmore Park	RES	1	41	46	48	37	47	48	44	47	37	37	43	40	47	40
GF	NCA 1_NCA08.RES.0053.01	3 Greenlink Dr, Glenmore Park	RES	1	42	47	50	37	49	50	46	49	37	37	45	40	49	40
F1	NCA 1_NCA08.RES.0053.01	3 Greenlink Dr, Glenmore Park	RES	1	43	48	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 1_NCA08.RES.0054.01	23 Cooee Ave_1, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
F1	NCA 1_NCA08.RES.0054.01	23 Cooee Ave_1, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	NCA 1_NCA08.RES.0055.01	23 Cooee Av_2, Glenmore Park	RES	1	48	53	54	44	53	54	50	53	44	44	49	47	53	47
F1	NCA 1_NCA08.RES.0055.01	23 Cooee Av_2, Glenmore Park	RES	1	50	55	55	44	54	55	51	54	44	44	50	47	54	47
GF	NCA 1_NCA08.RES.0056.01	23 Cooee Ave_3, Glenmore Park	RES	1	45	50	51	44	50	51	47	50	44	44	46	47	50	47
F1	NCA 1_NCA08.RES.0056.01	23 Cooee Ave_3, Glenmore Park	RES	1	47	52	53	47	52	53	49	52	47	47	48	50	52	50
GF	NCA 1_NCA08.RES.0057.01	21 Cooee Ave, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
F1	NCA 1_NCA08.RES.0057.01	21 Cooee Ave, Glenmore Park	RES	1	45	50	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA08.RES.0058.01	19 Cooee Ave, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
F1	NCA 1_NCA08.RES.0058.01	19 Cooee Ave, Glenmore Park	RES	1	47	49	51	47	50	51	47	50	47	47	47	50	50	50
GF	NCA 1_NCA08.RES.0059.01	25 Cooee Ave, Glenmore Park	RES	1	45	50	51	44	50	51	47	50	44	44	46	47	50	47
F1	NCA 1_NCA08.RES.0059.01	25 Cooee Ave, Glenmore Park	RES	1	47	52	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA08.RES.0060.01	27 Cooee Ave, Glenmore Park	RES	1	45	50	51	44	50	51	47	50	44	44	46	47	50	47
F1	NCA 1_NCA08.RES.0060.01	27 Cooee Ave, Glenmore Park	RES	1	48	53	54	44	53	54	50	53	44	44	49	47	53	47
GF	NCA 1_NCA08.RES.0061.01	29 Cooee Ave, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
F1	NCA 1_NCA08.RES.0061.01	29 Cooee Ave, Glenmore Park	RES	1	49	54	54	44	53	54	50	53	44	44	49	47	53	47
GF	NCA 1_NCA08.RES.0062.01	31 Cooee Ave, Glenmore Park	RES	1	46	51	52	44	51	52	48	51	44	44	47	47	51	47
F1	NCA 1_NCA08.RES.0062.01	31 Cooee Ave, Glenmore Park	RES	1	50	55	56	44	55	56	52	55	44	44	51	47	55	47
GF	NCA 1_NCA08.RES.0063.01	1 Glenmore Ridge Dr_2, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA08.RES.0063.01	1 Glenmore Ridge Dr_2, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA08.RES.0064.01	1 Glenmore Ridge Dr_1, Glenmore Park	RES	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
F1	NCA 1_NCA08.RES.0064.01	1 Glenmore Ridge Dr_1, Glenmore Park	RES	1	46	47	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0065.01	12 Glenmore Ridge Dr_3. Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
F1	NCA 1_NCA08.RES.0065.01	12 Glenmore Ridge Dr_3. Glenmore Park	RES	1	46	48	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0066.01	12 Glenmore Ridge Dr_2, Glenmore Park	RES	1	41	45	46	41	45	46	42	45	41	41	41	44	45	44

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 1_NCA08.RES.0066.01	12 Glenmore Ridge Dr_2, Glenmore Park	RES	1	46	48	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0067.01	1 Cooee Ave, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
F1	NCA 1_NCA08.RES.0067.01	1 Cooee Ave, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA08.RES.0068.01	3 Cooee Ave, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0068.01	3 Cooee Ave, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0069.01	9 Cooee Ave, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
F1	NCA 1_NCA08.RES.0069.01	9 Cooee Ave, Glenmore Park	RES	1	46	47	49	46	48	49	46	48	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0070.01	13 Cooee Ave, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
F1	NCA 1_NCA08.RES.0070.01	13 Cooee Ave, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0071.01	15 Cooee Ave, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
F1	NCA 1_NCA08.RES.0071.01	15 Cooee Ave, Glenmore Park	RES	1	44	47	48	44	47	48	44	47	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0072.01	17 Cooee Ave, Glenmore Park	RES	1	42	47	49	37	48	49	45	48	37	37	44	40	48	40
F1	NCA 1_NCA08.RES.0072.01	17 Cooee Ave, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0073.01	5 Cooee Ave, Glenmore Park	RES	1	42	47	49	39	48	49	45	48	39	39	44	42	48	42
GF	NCA 1_NCA08.RES.0074.01	7 Cooee Ave, Glenmore Park	RES	1	40	45	47	38	46	47	43	46	38	38	42	41	46	41
GF	NCA 1_NCA08.RES.0075.01	11 Cooee Ave, Glenmore Park	RES	1	43	44	46	43	45	46	43	45	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0076.01	12 Cooee Ave, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA08.RES.0077.01	10 Cooee Ave, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0077.01	10 Cooee Ave, Glenmore Park	RES	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 1_NCA08.RES.0078.01	8 Cooee Ave, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
F1	NCA 1_NCA08.RES.0078.01	8 Cooee Ave, Glenmore Park	RES	1	44	49	51	42	50	51	47	50	42	42	46	45	50	45
GF	NCA 1_NCA08.RES.0079.01	6 Cooee Ave, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
F1	NCA 1_NCA08.RES.0079.01	6 Cooee Ave, Glenmore Park	RES	1	44	49	51	41	50	51	47	50	41	41	46	44	50	44
GF	NCA 1_NCA08.RES.0080.01	4 Cooee Ave, Glenmore Park	RES	1	45	46	48	45	47	48	45	47	45	45	45	48	48	48
F1	NCA 1_NCA08.RES.0080.01	4 Cooee Ave, Glenmore Park	RES	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 1_NCA08.RES.0081.01	5 Broadlands Ave, Glenmore Park	RES	1	44	49	51	42	50	51	47	50	42	42	46	45	50	45
F1	NCA 1_NCA08.RES.0081.01	5 Broadlands Ave, Glenmore Park	RES	1	47	50	52	47	51	52	48	51	47	47	47	50	51	50
GF	NCA 1_NCA08.RES.0082.01	3 Broadlands Ave, Glenmore Park	RES	1	44	46	49	44	48	49	45	48	44	44	44	47	48	47
F1	NCA 1_NCA08.RES.0082.01	3 Broadlands Ave, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA08.RES.0083.01	1 Broadlands Ave, Glenmore Park	RES	1	43	48	51	42	50	51	47	50	42	42	46	45	50	45
F1	NCA 1_NCA08.RES.0083.01	1 Broadlands Ave, Glenmore Park	RES	1	47	50	52	47	51	52	48	51	47	47	47	50	51	50
GF	NCA 1_NCA08.RES.0084.01	2 Broadlands Ave, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
F1	NCA 1_NCA08.RES.0084.01	2 Broadlands Ave, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0085.01	6 Broadlands Ave, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
F1	NCA 1_NCA08.RES.0085.01	6 Broadlands Ave, Glenmore Park	RES	1	44	49	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA08.RES.0086.01	8 Broadlands Ave, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
F1	NCA 1_NCA08.RES.0086.01	8 Broadlands Ave, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA08.RES.0087.01	4 Broadlands Ave, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0088.01	115 Glengarry Dr, Glenmore Park	RES	1	42	47	50	40	49	50	46	49	40	40	45	43	49	43

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0089.01	107 Glengarry Dr, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
F1	NCA 1_NCA08.RES.0089.01	107 Glengarry Dr, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA08.RES.0090.01	109 Glengarry Dr, Glenmore Park	RES	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
F1	NCA 1_NCA08.RES.0090.01	109 Glengarry Dr, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA08.RES.0091.01	111 Glengarry Dr, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
F1	NCA 1_NCA08.RES.0091.01	111 Glengarry Dr, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA08.RES.0092.01	113 Glengarry Dr, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
F1	NCA 1_NCA08.RES.0092.01	113 Glengarry Dr, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA08.RES.0093.01	14 Cooee Ave, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
GF	NCA 1_NCA08.RES.0094.01	8 Jacaranda Tce, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA08.RES.0094.01	8 Jacaranda Tce, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA08.RES.0095.01	6 Jacaranda Tce, Glenmore Park	RES	1	45	50	52	43	51	52	48	51	43	43	47	46	51	46
F1	NCA 1_NCA08.RES.0095.01	6 Jacaranda Tce, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA08.RES.0096.01	4 Jacaranda Tce, Glenmore Park	RES	1	44	49	51	39	50	51	47	50	39	39	46	42	50	42
F1	NCA 1_NCA08.RES.0096.01	4 Jacaranda Tce, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA08.RES.0097.01	2 Jacaranda Tce, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
F1	NCA 1_NCA08.RES.0097.01	2 Jacaranda Tce, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA08.RES.0098.01	8 Branksome Way, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0099.01	3 Branksome Way, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA08.RES.0100.01	5 Branksome Way, Glenmore Park	RES	1	43	46	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0101.01	9 Branksome Way, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0102.01	11 Branksome Way, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA08.RES.0103.01	13 Branksome Way, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA08.RES.0104.01	15 Branksome Way, Glenmore Park	RES	1	45	48	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA08.RES.0105.01	17 Branksome Way, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
F1	NCA 1_NCA08.RES.0105.01	17 Branksome Way, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0106.01	7 Branksome Way, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
F1	NCA 1_NCA08.RES.0106.01	7 Branksome Way, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA08.RES.0107.01	4 Branksome Way, Glenmore Park	RES	1	42	46	49	42	48	49	45	48	42	42	44	45	48	45
F1	NCA 1_NCA08.RES.0107.01	4 Branksome Way, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0108.01	6 Branksome Way, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
F1	NCA 1_NCA08.RES.0108.01	6 Branksome Way, Glenmore Park	RES	1	46	51	53	43	52	53	49	52	43	43	48	46	52	46
GF	NCA 1_NCA08.RES.0109.01	19 Branksome Way, Glenmore Park	RES	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
F1	NCA 1_NCA08.RES.0109.01	19 Branksome Way, Glenmore Park	RES	1	45	50	52	42	51	52	48	51	42	42	47	45	51	45
GF	NCA 1_NCA08.RES.0110.01	21 Branksome Way, Glenmore Park	RES	1	40	45	48	40	47	48	44	47	40	40	43	43	47	43
F1	NCA 1_NCA08.RES.0110.01	21 Branksome Way, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	NCA 1_NCA08.RES.0111.01	101 Glengarry Dr, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0112.01	99 Glengarry Dr, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA08.RES.0113.01	97 Glengarry Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0114.01	95 Glengarry Dr, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA08.RES.0115.01	93 Glengarry Dr, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
F1	NCA 1_NCA08.RES.0115.01	93 Glengarry Dr, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA08.RES.0116.01	1 Ridgetop Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0117.01	19 Glenmore Ridge Dr, Glenmore Park	RES	1	42	43	45	42	44	45	42	44	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0118.01	13 Glenmore Ridge Dr, Glenmore Park	RES	1	42	43	45	42	44	45	42	44	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0119.01	11 Glenmore Ridge Dr, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
GF	NCA 1_NCA08.RES.0120.01	9 Glenmore Ridge Dr, Glenmore Park	RES	1	43	43	45	43	44	45	43	44	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0121.01	7 Glenmore Ridge Dr, Glenmore Park	RES	1	40	45	46	36	45	46	42	45	36	36	41	39	45	39
F1	NCA 1_NCA08.RES.0121.01	7 Glenmore Ridge Dr, Glenmore Park	RES	1	42	47	49	38	48	49	45	48	38	38	44	41	48	41
GF	NCA 1_NCA08.RES.0122.01	5 Glenmore Ridge Dr, Glenmore Park	RES	1	39	43	45	39	44	45	41	44	39	39	40	42	44	42
F1	NCA 1_NCA08.RES.0122.01	5 Glenmore Ridge Dr, Glenmore Park	RES	1	43	45	46	43	45	46	43	45	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0123.01	3 Glenmore Ridge Dr, Glenmore Park	RES	1	38	43	44	36	43	44	40	43	36	36	39	39	43	39
F1	NCA 1_NCA08.RES.0123.01	3 Glenmore Ridge Dr, Glenmore Park	RES	1	43	47	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0124.01	15 Glenmore Ridge Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
F1	NCA 1_NCA08.RES.0124.01	15 Glenmore Ridge Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0125.01	17 Glenmore Ridge Dr, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
F1	NCA 1_NCA08.RES.0125.01	17 Glenmore Ridge Dr, Glenmore Park	RES	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 1_NCA08.RES.0126.01	163 Ridgetop Dr, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0127.01	180 Ridgetop Dr, Glenmore Park	RES	1	39	44	46	35	45	46	42	45	35	35	41	38	45	38
GF	NCA 1_NCA08.RES.0128.01	182 Ridgetop Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0129.01	167 Ridgetop Dr, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA08.RES.0130.01	169 Ridgetop Dr, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA08.RES.0131.01	171 Ridgetop Dr, Glenmore Park	RES	1	43	48	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA08.RES.0132.01	173 Ridgetop Dr, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0133.01	175 Ridgetop Dr, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA08.RES.0134.01	177 Ridgetop Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0135.01	194 Ridgetop Dr, Glenmore Park	RES	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 1_NCA08.RES.0136.01	192 Ridgetop Dr, Glenmore Park	RES	1	41	46	48	36	47	48	44	47	36	36	43	39	47	39
GF	NCA 1_NCA08.RES.0137.01	190 Ridgetop Dr, Glenmore Park	RES	1	41	46	48	36	47	48	44	47	36	36	43	39	47	39
GF	NCA 1_NCA08.RES.0138.01	188 Ridgetop Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0139.01	184 Ridgetop Dr, Glenmore Park	RES	1	41	46	49	37	48	49	45	48	37	37	44	40	48	40
F1	NCA 1_NCA08.RES.0139.01	184 Ridgetop Dr, Glenmore Park	RES	1	42	47	50	39	49	50	46	49	39	39	45	42	49	42
GF	NCA 1_NCA08.RES.0140.01	186 Ridgetop Dr, Glenmore Park	RES	1	41	46	49	40	48	49	45	48	40	40	44	43	48	43
F1	NCA 1_NCA08.RES.0140.01	186 Ridgetop Dr, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA08.RES.0141.01	165 Ridgetop Dr, Glenmore Park	RES	1	45	50	52	40	51	52	48	51	40	40	47	43	51	43
F1	NCA 1_NCA08.RES.0141.01	165 Ridgetop Dr, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	NCA 1_NCA08.RES.0142.01	161 Ridgetop Dr, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
F1	NCA 1_NCA08.RES.0142.01	161 Ridgetop Dr, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))														
					Works during standard hours									Out of hours works		Sleep disturbance			
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0143.01	17 Gemalong Pl, Glenmore Park	RES	1	40	45	47	38	46	47	43	46	38	38	42	41	46	41
F1	NCA 1_NCA08.RES.0143.01	17 Gemalong Pl, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0144.01	16 Gemalong Pl, Glenmore Park	RES	1	40	45	48	40	47	48	44	47	40	40	43	43	47	43
F1	NCA 1_NCA08.RES.0144.01	16 Gemalong Pl, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA08.RES.0145.01	15 Gemalong Pl, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0145.01	15 Gemalong Pl, Glenmore Park	RES	1	43	48	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0146.01	14 Gemalong Pl, Glenmore Park	RES	1	40	45	48	40	47	48	44	47	40	40	43	43	47	43
F1	NCA 1_NCA08.RES.0146.01	14 Gemalong Pl, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA08.RES.0147.01	13 Gemalong Pl, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
F1	NCA 1_NCA08.RES.0147.01	13 Gemalong Pl, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA08.RES.0148.01	12 Gemalong Pl, Glenmore Park	RES	1	41	46	49	41	48	49	45	48	41	41	44	44	48	44
F1	NCA 1_NCA08.RES.0148.01	12 Gemalong Pl, Glenmore Park	RES	1	43	47	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA08.RES.0149.01	11 Gemalong Pl, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0149.01	11 Gemalong Pl, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA08.RES.0150.01	10 Gemalong Pl, Glenmore Park	RES	1	41	46	49	41	48	49	45	48	41	41	44	44	48	44
F1	NCA 1_NCA08.RES.0150.01	10 Gemalong Pl, Glenmore Park	RES	1	43	48	51	42	50	51	47	50	42	42	46	45	50	45
GF	NCA 1_NCA08.RES.0151.01	9 Gemalong Pl, Glenmore Park	RES	1	43	48	50	38	49	50	46	49	38	38	45	41	49	41
F1	NCA 1_NCA08.RES.0151.01	9 Gemalong Pl, Glenmore Park	RES	1	44	49	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA08.RES.0152.01	6 Gemalong Pl, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0153.01	8 Gemalong Pl, Glenmore Park	RES	1	41	46	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA08.RES.0153.01	8 Gemalong Pl, Glenmore Park	RES	1	42	46	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0154.01	7 Gemalong Pl, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
F1	NCA 1_NCA08.RES.0154.01	7 Gemalong Pl, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA08.RES.0155.01	18 Gemalong Pl, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA08.RES.0156.01	19 Gemalong Pl, Glenmore Park	RES	1	42	46	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0157.01	176 Ridgetop Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0158.01	178 Ridgetop Dr, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0158.01	178 Ridgetop Dr, Glenmore Park	RES	1	44	48	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA08.RES.0159.01	82 Bradley St, Glenmore Park	RES	1	39	44	45	37	44	45	41	44	37	37	40	40	44	40
F1	NCA 1_NCA08.RES.0159.01	82 Bradley St, Glenmore Park	RES	1	41	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA08.RES.0160.01	90 Bradley St, Glenmore Park	RES	1	36	41	41	30	40	41	37	40	30	30	36	33	40	33
GF	NCA 1_NCA08.RES.0161.01	88 Bradley St, Glenmore Park	RES	1	34	39	43	34	42	43	39	42	34	34	38	37	42	37
F1	NCA 1_NCA08.RES.0161.01	88 Bradley St, Glenmore Park	RES	1	38	41	44	38	43	44	40	43	38	38	39	41	43	41
GF	NCA 1_NCA08.RES.0162.01	86 Bradley St, Glenmore Park	RES	1	38	43	45	34	44	45	41	44	34	34	40	37	44	37
GF	NCA 1_NCA08.RES.0163.01	84 Bradley St, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
F1	NCA 1_NCA08.RES.0163.01	84 Bradley St, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0164.01	80 Bradley St, Glenmore Park	RES	1	39	44	46	37	45	46	42	45	37	37	41	40	45	40
F1	NCA 1_NCA08.RES.0164.01	80 Bradley St, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
GF	NCA 1_NCA08.RES.0165.01	22 Highdale Tce, Glenmore Park	RES	1	38	43	45	35	44	45	41	44	35	35	40	38	44	38

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0166.01	20 Highdale Tce, Glenmore Park	RES	1	37	42	43	35	42	43	39	42	35	35	38	38	42	38
GF	NCA 1_NCA08.RES.0167.01	18 Highdale Tce, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
GF	NCA 1_NCA08.RES.0168.01	16 Highdale Tce, Glenmore Park	RES	1	38	41	43	38	42	43	39	42	38	38	38	41	42	41
F1	NCA 1_NCA08.RES.0168.01	16 Highdale Tce, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA08.RES.0169.01	14 Highdale Tce, Glenmore Park	RES	1	38	43	45	35	44	45	41	44	35	35	40	38	44	38
F1	NCA 1_NCA08.RES.0169.01	14 Highdale Tce, Glenmore Park	RES	1	39	44	46	37	45	46	42	45	37	37	41	40	45	40
GF	NCA 1_NCA08.RES.0170.01	12 Highdale Tce, Glenmore Park	RES	1	39	44	46	35	45	46	42	45	35	35	41	38	45	38
F1	NCA 1_NCA08.RES.0170.01	12 Highdale Tce, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA08.RES.0171.01	23 Greenlink Dr, Glenmore Park	RES	1	45	50	52	40	51	52	48	51	40	40	47	43	51	43
F1	NCA 1_NCA08.RES.0171.01	23 Greenlink Dr, Glenmore Park	RES	1	48	50	52	48	51	52	48	51	48	48	48	51	51	51
GF	NCA 1_NCA08.RES.0172.01	31 Greenlink Dr, Glenmore Park	RES	1	46	51	53	46	52	53	49	52	46	46	48	49	52	49
F1	NCA 1_NCA08.RES.0172.01	31 Greenlink Dr, Glenmore Park	RES	1	49	51	53	49	52	53	49	52	49	49	49	52	52	52
GF	NCA 1_NCA08.RES.0173.01	33 Greenlink Dr, Glenmore Park	RES	1	46	51	53	43	52	53	49	52	43	43	48	46	52	46
F1	NCA 1_NCA08.RES.0173.01	33 Greenlink Dr, Glenmore Park	RES	1	50	52	54	50	53	54	50	53	50	50	50	53	53	53
GF	NCA 1_NCA08.RES.0174.01	52 Highdale Tce, Glenmore Park	RES	1	50	50	51	50	50	51	50	50	50	50	50	53	53	53
GF	NCA 1_NCA08.RES.0175.01	64 Highdale Tce, Glenmore Park	RES	1	49	53	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 1_NCA08.RES.0176.01	62 Highdale Tce, Glenmore Park	RES	1	49	53	56	49	55	56	52	55	49	49	51	52	55	52
GF	NCA 1_NCA08.RES.0177.01	60 Highdale Tce, Glenmore Park	RES	1	48	53	55	41	54	55	51	54	41	41	50	44	54	44
GF	NCA 1_NCA08.RES.0178.01	58 Highdale Tce, Glenmore Park	RES	1	46	51	54	45	53	54	50	53	45	45	49	48	53	48
GF	NCA 1_NCA08.RES.0179.01	56 Highdale Tce, Glenmore Park	RES	1	47	50	52	47	51	52	48	51	47	47	47	50	51	50
GF	NCA 1_NCA08.RES.0180.01	54 Highdale Tce, Glenmore Park	RES	1	46	51	54	45	53	54	50	53	45	45	49	48	53	48
GF	NCA 1_NCA08.RES.0181.01	35 Highdale Tce, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0182.01	49 Highdale Tce, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA08.RES.0183.01	1 Gemalong Pl, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0184.01	2 Gemalong Pl, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0185.01	3 Gemalong Pl, Glenmore Park	RES	1	41	45	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0185.01	3 Gemalong Pl, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0186.01	4 Gemalong Pl, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
F1	NCA 1_NCA08.RES.0186.01	4 Gemalong Pl, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0187.01	170 Ridgetop Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0188.01	168 Ridgetop Dr, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
F1	NCA 1_NCA08.RES.0188.01	168 Ridgetop Dr, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0189.01	166 Ridgetop Dr, Glenmore Park	RES	1	40	45	47	38	46	47	43	46	38	38	42	41	46	41
F1	NCA 1_NCA08.RES.0189.01	166 Ridgetop Dr, Glenmore Park	RES	1	41	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0190.01	164 Ridgetop Dr, Glenmore Park	RES	1	38	43	45	35	44	45	41	44	35	35	40	38	44	38
F1	NCA 1_NCA08.RES.0190.01	164 Ridgetop Dr, Glenmore Park	RES	1	43	48	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 1_NCA08.RES.0191.01	162 Ridgetop Dr, Glenmore Park	RES	1	42	45	48	42	47	48	44	47	42	42	43	45	47	45
F1	NCA 1_NCA08.RES.0191.01	162 Ridgetop Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0192.01	160 Ridgetop Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 1_NCA08.RES.0192.01	160 Ridgetop Dr, Glenmore Park	RES	1	42	46	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0193.01	158 Ridgetop Dr, Glenmore Park	RES	1	37	42	44	36	43	44	40	43	36	36	39	39	43	39
F1	NCA 1_NCA08.RES.0193.01	158 Ridgetop Dr, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA08.RES.0194.01	156 Ridgetop Dr, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
F1	NCA 1_NCA08.RES.0194.01	156 Ridgetop Dr, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0195.01	154 Ridgetop Dr, Glenmore Park	RES	1	38	43	45	36	44	45	41	44	36	36	40	39	44	39
GF	NCA 1_NCA08.RES.0206.01	4 Monteray Tce, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0207.01	6 Monteray Tce, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA08.RES.0208.01	8 Monteray Tce, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
F1	NCA 1_NCA08.RES.0208.01	8 Monteray Tce, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0209.01	10 Monteray Tce, Glenmore Park	RES	1	43	44	46	43	45	46	43	45	43	43	43	46	46	46
F1	NCA 1_NCA08.RES.0209.01	10 Monteray Tce, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0210.01	12 Monteray Tce, Glenmore Park	RES	1	37	42	44	36	43	44	40	43	36	36	39	39	43	39
F1	NCA 1_NCA08.RES.0210.01	12 Monteray Tce, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0211.01	14 Monteray Tce, Glenmore Park	RES	1	39	44	46	35	45	46	42	45	35	35	41	38	45	38
GF	NCA 1_NCA08.RES.0212.01	16 Monteray Tce, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0213.01	18 Monteray Tce, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0214.01	20 Monteray Tce, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA08.RES.0215.01	22 Monteray Tce, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA08.RES.0215.01	22 Monteray Tce, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA08.RES.0216.01	24 Monteray Tce, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0217.01	26 Monteray Tce, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
F1	NCA 1_NCA08.RES.0217.01	26 Monteray Tce, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0218.01	28 Monteray Tce, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0219.01	30 Monteray Tce, Glenmore Park	RES	1	40	45	47	35	46	47	43	46	35	35	42	38	46	38
F1	NCA 1_NCA08.RES.0219.01	30 Monteray Tce, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0220.01	32 Monteray Tce, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0221.01	15 Monteray Tce, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA08.RES.0222.01	17 Monteray Tce, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0223.01	19 Monteray Tce, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA08.RES.0224.01	21 Monteray Tce, Glenmore Park	RES	1	41	45	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0224.01	21 Monteray Tce, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA08.RES.0225.01	23 Monteray Tce, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0226.01	25 Monteray Tce, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
F1	NCA 1_NCA08.RES.0226.01	25 Monteray Tce, Glenmore Park	RES	1	42	47	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 1_NCA08.RES.0227.01	27 Monteray Tce, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
F1	NCA 1_NCA08.RES.0227.01	27 Monteray Tce, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0228.01	7 Monteray Tce, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0228.01	7 Monteray Tce, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0229.01	9 Monteray Tce, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
F1	NCA 1_NCA08.RES.0229.01	9 Monteray Tce, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA08.RES.0230.01	11 Monteray Tce, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA08.RES.0231.01	13 Monteray Tce, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
GF	NCA 1_NCA08.RES.0232.01	159 Ridgetop Dr, Glenmore Park	RES	1	40	45	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA08.RES.0233.01	157 Ridgetop Dr, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
F1	NCA 1_NCA08.RES.0233.01	157 Ridgetop Dr, Glenmore Park	RES	1	44	47	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA08.RES.0234.01	2 Holland Ct, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA08.RES.0235.01	4 Holland Ct, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0236.01	1 Holland Ct, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
F1	NCA 1_NCA08.RES.0236.01	1 Holland Ct, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0237.01	3 Holland Ct, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA08.RES.0238.01	151 Ridgetop Dr, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0239.01	149 Ridgetop Dr, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0240.01	147 Ridgetop Dr, Glenmore Park	RES	1	39	44	46	37	45	46	42	45	37	37	41	40	45	40
F1	NCA 1_NCA08.RES.0240.01	147 Ridgetop Dr, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA08.RES.0241.01	145 Ridgetop Dr, Glenmore Park	RES	1	39	43	45	39	44	45	41	44	39	39	40	42	44	42
GF	NCA 1_NCA08.RES.0242.01	143 Ridgetop Dr, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
GF	NCA 1_NCA08.RES.0285.01	15 Rosecrea Ct, Glenmore Park	RES	1	37	42	44	37	43	44	40	43	37	37	39	40	43	40
F1	NCA 1_NCA08.RES.0285.01	15 Rosecrea Ct, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0286.01	13 Rosecrea Ct, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
F1	NCA 1_NCA08.RES.0286.01	13 Rosecrea Ct, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0287.01	11 Rosecrea Ct, Glenmore Park	RES	1	39	44	46	37	45	46	42	45	37	37	41	40	45	40
F1	NCA 1_NCA08.RES.0287.01	11 Rosecrea Ct, Glenmore Park	RES	1	43	48	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 1_NCA08.RES.0288.01	9 Rosecrea Ct, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
F1	NCA 1_NCA08.RES.0288.01	9 Rosecrea Ct, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA08.RES.0289.01	7 Rosecrea Ct, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA08.RES.0290.01	5 Rosecrea Ct, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0291.01	3 Rosecrea Ct, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
F1	NCA 1_NCA08.RES.0291.01	3 Rosecrea Ct, Glenmore Park	RES	1	46	48	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0292.01	1 Rosecrea Ct, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
F1	NCA 1_NCA08.RES.0292.01	1 Rosecrea Ct, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA08.RES.0293.01	14 Branksome Way, Glenmore Park	RES	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
F1	NCA 1_NCA08.RES.0293.01	14 Branksome Way, Glenmore Park	RES	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 1_NCA08.RES.0294.01	41 Blue View Tce, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
F1	NCA 1_NCA08.RES.0294.01	41 Blue View Tce, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA08.RES.0295.01	39 Blue View Tce, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
F1	NCA 1_NCA08.RES.0295.01	39 Blue View Tce, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA08.RES.0296.01	31-37 Blue View Tce, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 1_NCA08.RES.0296.01	31-37 Blue View Tce, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0297.01	16 Branksome Way, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
F1	NCA 1_NCA08.RES.0297.01	16 Branksome Way, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA08.RES.0298.01	2 Rosecrea Ct, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA08.RES.0298.01	2 Rosecrea Ct, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	NCA 1_NCA08.RES.0299.01	4 Rosecrea Ct, Glenmore Park	RES	1	43	48	50	35	49	50	46	49	35	35	45	38	49	38
F1	NCA 1_NCA08.RES.0299.01	4 Rosecrea Ct, Glenmore Park	RES	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
GF	NCA 1_NCA08.RES.0300.01	6 Rosecrea Ct, Glenmore Park	RES	1	38	43	45	37	44	45	41	44	37	37	40	40	44	40
F1	NCA 1_NCA08.RES.0300.01	6 Rosecrea Ct, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA08.RES.0301.01	8 Rosecrea Ct, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
F1	NCA 1_NCA08.RES.0301.01	8 Rosecrea Ct, Glenmore Park	RES	1	39	43	45	39	44	45	41	44	39	39	40	42	44	42
GF	NCA 1_NCA08.RES.0302.01	10 Rosecrea Ct, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA08.RES.0303.01	12 Rosecrea Ct, Glenmore Park	RES	1	39	42	44	39	43	44	40	43	39	39	39	42	43	42
GF	NCA 1_NCA08.RES.0304.01	14 Rosecrea Ct, Glenmore Park	RES	1	35	40	42	34	41	42	38	41	34	34	37	37	41	37
GF	NCA 1_NCA08.RES.0305.01	16 Rosecrea Ct, Glenmore Park	RES	1	37	42	45	32	44	45	41	44	32	32	40	35	44	35
GF	NCA 1_NCA08.RES.0306.01	18 Rosecrea Ct, Glenmore Park	RES	1	39	44	46	35	45	46	42	45	35	35	41	38	45	38
GF	NCA 1_NCA08.RES.0316.01	51 Glenmore Ridge Dr, Glenmore Park	RES	1	37	40	43	37	42	43	39	42	37	37	38	40	42	40
GF	NCA 1_NCA08.RES.0317.01	49 Glenmore Ridge Dr, Glenmore Park	RES	1	36	41	43	36	42	43	39	42	36	36	38	39	42	39
GF	NCA 1_NCA08.RES.0318.01	47 Glenmore Ridge Dr, Glenmore Park	RES	1	36	41	43	36	42	43	39	42	36	36	38	39	42	39
GF	NCA 1_NCA08.RES.0319.01	45 Glenmore Ridge Dr, Glenmore Park	RES	1	37	42	43	37	42	43	39	42	37	37	38	40	42	40
GF	NCA 1_NCA08.RES.0320.01	43 Glenmore Ridge Dr, Glenmore Park	RES	1	37	42	44	35	43	44	40	43	35	35	39	38	43	38
GF	NCA 1_NCA08.RES.0321.01	41 Glenmore Ridge Dr, Glenmore Park	RES	1	37	42	44	37	43	44	40	43	37	37	39	40	43	40
F1	NCA 1_NCA08.RES.0321.01	41 Glenmore Ridge Dr, Glenmore Park	RES	1	39	42	44	39	43	44	40	43	39	39	39	42	43	42
GF	NCA 1_NCA08.RES.0322.01	39 Glenmore Ridge Dr, Glenmore Park	RES	1	40	42	44	40	43	44	40	43	40	40	40	43	43	43
GF	NCA 1_NCA08.RES.0323.01	37 Glenmore Ridge Dr, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
F1	NCA 1_NCA08.RES.0323.01	37 Glenmore Ridge Dr, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA08.RES.0324.01	35 Glenmore Ridge Dr, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA08.RES.0325.01	4 Glenmore Ridge Dr, Glenmore Park	RES	1	43	43	45	43	44	45	43	44	43	43	43	46	46	46
F1	NCA 1_NCA08.RES.0325.01	4 Glenmore Ridge Dr, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0326.01	6 Glenmore Ridge Dr, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
F1	NCA 1_NCA08.RES.0326.01	6 Glenmore Ridge Dr, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0327.01	8 Glenmore Ridge Dr, Glenmore Park	RES	1	43	45	46	43	45	46	43	45	43	43	43	46	46	46
F1	NCA 1_NCA08.RES.0327.01	8 Glenmore Ridge Dr, Glenmore Park	RES	1	43	45	46	43	45	46	43	45	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0328.01	10 Glenmore Ridge Dr, Glenmore Park	RES	1	42	44	45	42	44	45	42	44	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0329.01	12 Glenmore Ridge Dr_1, Glenmore Park	RES	1	42	44	45	42	44	45	42	44	42	42	42	45	45	45
F1	NCA 1_NCA08.RES.0329.01	12 Glenmore Ridge Dr_1, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA08.RES.0330.01	14 Glenmore Ridge Dr, Glenmore Park	RES	1	44	45	47	44	46	47	44	46	44	44	44	47	47	47
F1	NCA 1_NCA08.RES.0330.01	14 Glenmore Ridge Dr, Glenmore Park	RES	1	44	45	47	44	46	47	44	46	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0331.01	16 Glenmore Ridge Dr, Glenmore Park	RES	1	44	46	49	44	48	49	45	48	44	44	44	47	48	47

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0332.01	18 Glenmore Ridge Dr_1, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
F1	NCA 1_NCA08.RES.0332.01	18 Glenmore Ridge Dr_1, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0333.01	20 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
F1	NCA 1_NCA08.RES.0333.01	20 Glenmore Ridge Dr_1, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA08.RES.0334.01	22 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
F1	NCA 1_NCA08.RES.0334.01	22 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA08.RES.0335.01	24 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
F1	NCA 1_NCA08.RES.0335.01	24 Glenmore Ridge Dr_1, Glenmore Park	RES	1	42	44	46	42	45	46	42	45	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0336.01	26 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	44	45	41	44	45	41	44	41	41	41	44	44	44
F1	NCA 1_NCA08.RES.0336.01	26 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	44	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0337.01	28 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	43	45	41	44	45	41	44	41	41	41	44	44	44
F1	NCA 1_NCA08.RES.0337.01	28 Glenmore Ridge Dr_1, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0338.01	30 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	43	45	41	44	45	41	44	41	41	41	44	44	44
F1	NCA 1_NCA08.RES.0338.01	30 Glenmore Ridge Dr_1, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0339.01	32 Glenmore Ridge Dr_1, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
F1	NCA 1_NCA08.RES.0339.01	32 Glenmore Ridge Dr_1, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0340.01	34 Glenmore Ridge Dr_1, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
F1	NCA 1_NCA08.RES.0340.01	34 Glenmore Ridge Dr_1, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0341.01	36 Glenmore Ridge Dr_1, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
F1	NCA 1_NCA08.RES.0341.01	36 Glenmore Ridge Dr_1, Glenmore Park	RES	1	43	45	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0342.01	38 Glenmore Ridge Dr, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0342.01	38 Glenmore Ridge Dr, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0343.01	40 Glenmore Ridge Dr, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
F1	NCA 1_NCA08.RES.0343.01	40 Glenmore Ridge Dr, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA08.RES.0344.01	42 Glenmore Ridge Dr, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
GF	NCA 1_NCA08.RES.0345.01	44 Glenmore Ridge Dr, Glenmore Park	RES	1	38	43	45	37	44	45	41	44	37	37	40	40	44	40
GF	NCA 1_NCA08.RES.0346.01	46 Glenmore Ridge Dr, Glenmore Park	RES	1	35	40	42	35	41	42	38	41	35	35	37	38	41	38
GF	NCA 1_NCA08.RES.0347.01	48 Glenmore Ridge Dr, Glenmore Park	RES	1	35	40	42	34	41	42	38	41	34	34	37	37	41	37
GF	NCA 1_NCA08.RES.0348.01	50 Glenmore Ridge Dr, Glenmore Park	RES	1	35	40	42	35	41	42	38	41	35	35	37	38	41	38
GF	NCA 1_NCA08.RES.0358.01	3 Sunrise Tce, Glenmore Park	RES	1	36	40	42	36	41	42	38	41	36	36	37	39	41	39
GF	NCA 1_NCA08.RES.0359.01	5 Sunrise Tce, Glenmore Park	RES	1	37	40	43	37	42	43	39	42	37	37	38	40	42	40
GF	NCA 1_NCA08.RES.0363.01	4 Sunrise Tce, Glenmore Park	RES	1	38	41	43	38	42	43	39	42	38	38	38	41	42	41
F1	NCA 1_NCA08.RES.0363.01	4 Sunrise Tce, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
GF	NCA 1_NCA08.RES.0364.01	6 Sunrise Tce, Glenmore Park	RES	1	38	41	43	38	42	43	39	42	38	38	38	41	42	41
GF	NCA 1_NCA08.RES.0365.01	8 Sunrise Tce, Glenmore Park	RES	1	38	41	43	38	42	43	39	42	38	38	38	41	42	41
GF	NCA 1_NCA08.RES.0366.01	10 Sunrise Tce, Glenmore Park	RES	1	37	41	43	37	42	43	39	42	37	37	38	40	42	40
GF	NCA 1_NCA08.RES.0367.01	12 Sunrise Tce, Glenmore Park	RES	1	36	41	43	36	42	43	39	42	36	36	38	39	42	39
GF	NCA 1_NCA08.RES.0368.01	33 Blue View Tce, Glenmore Park	RES	1	39	44	47	36	46	47	43	46	36	36	42	39	46	39
GF	NCA 1_NCA08.RES.0369.01	31 Blue View Tce, Glenmore Park	RES	1	39	44	46	36	45	46	42	45	36	36	41	39	45	39

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0370.01	29 Blue View Tce, Glenmore Park	RES	1	39	44	46	36	45	46	42	45	36	36	41	39	45	39
GF	NCA 1_NCA08.RES.0371.01	27 Blue View Tce, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
GF	NCA 1_NCA08.RES.0372.01	25 Blue View Tce, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0373.01	23 Blue View Tce, Glenmore Park	RES	1	36	40	43	36	42	43	39	42	36	36	38	39	42	39
GF	NCA 1_NCA08.RES.0374.01	21 Blue View Tce, Glenmore Park	RES	1	38	43	45	36	44	45	41	44	36	36	40	39	44	39
GF	NCA 1_NCA08.RES.0375.01	19 Blue View Tce, Glenmore Park	RES	1	35	40	43	35	42	43	39	42	35	35	38	38	42	38
GF	NCA 1_NCA08.RES.0376.01	17 Blue View Tce, Glenmore Park	RES	1	38	43	45	34	44	45	41	44	34	34	40	37	44	37
GF	NCA 1_NCA08.RES.0391.01	2 Lyora St_1, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
F1	NCA 1_NCA08.RES.0391.01	2 Lyora St_1, Glenmore Park	RES	1	42	44	46	42	45	46	42	45	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0392.01	4 Lyora St_1, Glenmore Park	RES	1	36	40	42	36	41	42	38	41	36	36	37	39	41	39
GF	NCA 1_NCA08.RES.0393.01	6 Lyora St_1, Glenmore Park	RES	1	36	40	42	36	41	42	38	41	36	36	37	39	41	39
GF	NCA 1_NCA08.RES.0394.01	8 Lyora St_1, Glenmore Park	RES	1	40	40	42	40	41	42	40	41	40	40	40	43	43	43
GF	NCA 1_NCA08.RES.0395.01	10 Lyora St_1, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
GF	NCA 1_NCA08.RES.0396.01	12 Lyora St_1, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA08.RES.0397.01	14 Lyora St_1, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA08.RES.0398.01	16 Lyora St_1, Glenmore Park	RES	1	38	41	43	38	42	43	39	42	38	38	38	41	42	41
GF	NCA 1_NCA08.RES.0399.01	18 Lyora St_1, Glenmore Park	RES	1	40	42	44	40	43	44	40	43	40	40	40	43	43	43
GF	NCA 1_NCA08.RES.0400.01	1 Lyora St, Glenmore Park	RES	1	38	43	45	37	44	45	41	44	37	37	40	40	44	40
GF	NCA 1_NCA08.RES.0401.01	3 Lyora St, Glenmore Park	RES	1	37	39	41	37	40	41	37	40	37	37	37	40	40	40
GF	NCA 1_NCA08.RES.0402.01	5 Lyora St, Glenmore Park	RES	1	36	41	43	36	42	43	39	42	36	36	38	39	42	39
GF	NCA 1_NCA08.RES.0403.01	7 Lyora St, Glenmore Park	RES	1	38	43	44	35	43	44	40	43	35	35	39	38	43	38
GF	NCA 1_NCA08.RES.0404.01	9 Lyora St, Glenmore Park	RES	1	38	43	45	34	44	45	41	44	34	34	40	37	44	37
GF	NCA 1_NCA08.RES.0405.01	11 Lyora St, Glenmore Park	RES	1	40	41	44	40	43	44	40	43	40	40	40	43	43	43
GF	NCA 1_NCA08.RES.0406.01	65 Tall Trees Dr, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
F1	NCA 1_NCA08.RES.0406.01	65 Tall Trees Dr, Glenmore Park	RES	1	42	46	46	42	45	46	42	45	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0407.01	63 Tall Trees Dr, Glenmore Park	RES	1	43	43	43	43	43	43	43	43	43	43	43	46	46	46
F1	NCA 1_NCA08.RES.0407.01	63 Tall Trees Dr, Glenmore Park	RES	1	43	43	45	43	44	45	43	44	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0408.01	61 Tall Trees Dr, Glenmore Park	RES	1	39	41	43	39	42	43	39	42	39	39	39	42	42	42
F1	NCA 1_NCA08.RES.0408.01	61 Tall Trees Dr, Glenmore Park	RES	1	43	43	45	43	44	45	43	44	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0409.01	59 Tall Trees Dr, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
F1	NCA 1_NCA08.RES.0409.01	59 Tall Trees Dr, Glenmore Park	RES	1	42	44	46	42	45	46	42	45	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0410.01	57 Tall Trees Dr, Glenmore Park	RES	1	38	43	45	34	44	45	41	44	34	34	40	37	44	37
F1	NCA 1_NCA08.RES.0410.01	57 Tall Trees Dr, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA08.RES.0411.01	55 Tall Trees Dr, Glenmore Park	RES	1	43	43	45	43	44	45	43	44	43	43	43	46	46	46
F1	NCA 1_NCA08.RES.0411.01	55 Tall Trees Dr, Glenmore Park	RES	1	43	43	45	43	44	45	43	44	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0412.01	53 Tall Trees Dr, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
F1	NCA 1_NCA08.RES.0412.01	53 Tall Trees Dr, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0413.01	51 Tall Trees Dr, Glenmore Park	RES	1	43	45	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 1_NCA08.RES.0414.01	49 Tall Trees Dr, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0415.01	47 Tall Trees Dr, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0416.01	45 Tall Trees Dr, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
F1	NCA 1_NCA08.RES.0416.01	45 Tall Trees Dr, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA08.RES.0417.01	43 Tall Trees Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA08.RES.0418.01	41 Tall Trees Dr, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA08.RES.0418.01	41 Tall Trees Dr, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA08.RES.0419.01	39 Tall Trees Dr, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA08.RES.0419.01	39 Tall Trees Dr, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA08.RES.0420.01	64 Tall Trees Dr, Glenmore Park	RES	1	42	43	43	42	42	43	42	42	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0421.01	62 Tall Trees Dr, Glenmore Park	RES	1	38	43	45	37	44	45	41	44	37	37	40	40	44	40
GF	NCA 1_NCA08.RES.0422.01	60 Tall Trees Dr, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
GF	NCA 1_NCA08.RES.0423.01	58 Tall Trees Dr, Glenmore Park	RES	1	37	42	44	36	43	44	40	43	36	36	39	39	43	39
GF	NCA 1_NCA08.RES.0424.01	56 Tall Trees Dr, Glenmore Park	RES	1	37	42	44	35	43	44	40	43	35	35	39	38	43	38
GF	NCA 1_NCA08.RES.0425.01	54 Tall Trees Dr, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA08.RES.0426.01	52 Tall Trees Dr, Glenmore Park	RES	1	38	43	44	38	43	44	40	43	38	38	39	41	43	41
GF	NCA 1_NCA08.RES.0427.01	50 Tall Trees Dr, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA08.RES.0428.01	48 Tall Trees Dr, Glenmore Park	RES	1	38	43	44	35	43	44	40	43	35	35	39	38	43	38
GF	NCA 1_NCA08.RES.0429.01	46 Tall Trees Dr, Glenmore Park	RES	1	37	42	44	36	43	44	40	43	36	36	39	39	43	39
GF	NCA 1_NCA08.RES.0430.01	44 Tall Trees Dr, Glenmore Park	RES	1	38	43	45	34	44	45	41	44	34	34	40	37	44	37
GF	NCA 1_NCA08.RES.0431.01	42 Tall Trees Dr, Glenmore Park	RES	1	38	43	44	30	43	44	40	43	30	30	39	33	43	33
GF	NCA 1_NCA08.RES.0432.01	40 Tall Trees Dr, Glenmore Park	RES	1	38	43	44	33	43	44	40	43	33	33	39	36	43	36
GF	NCA 1_NCA08.RES.0433.01	38 Tall Trees Dr, Glenmore Park	RES	1	40	43	43	40	42	43	40	42	40	40	40	43	43	43
GF	NCA 1_NCA08.RES.0434.01	24 Domus St, Glenmore Park	RES	1	40	42	44	40	43	44	40	43	40	40	40	43	43	43
GF	NCA 1_NCA08.RES.0435.01	22 Domus St, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
F1	NCA 1_NCA08.RES.0435.01	22 Domus St, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA08.RES.0436.01	20 Domus St, Glenmore Park	RES	1	41	42	44	41	43	44	41	43	41	41	41	44	44	44
F1	NCA 1_NCA08.RES.0436.01	20 Domus St, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA08.RES.0437.01	18 Domus St, Glenmore Park	RES	1	40	42	43	40	42	43	40	42	40	40	40	43	43	43
GF	NCA 1_NCA08.RES.0438.01	16 Domus St, Glenmore Park	RES	1	39	43	45	39	44	45	41	44	39	39	40	42	44	42
GF	NCA 1_NCA08.RES.0439.01	14 Domus St, Glenmore Park	RES	1	39	42	44	39	43	44	40	43	39	39	39	42	43	42
GF	NCA 1_NCA08.RES.0440.01	12 Domus St, Glenmore Park	RES	1	41	43	44	41	43	44	41	43	41	41	41	44	44	44
F1	NCA 1_NCA08.RES.0440.01	12 Domus St, Glenmore Park	RES	1	42	44	46	42	45	46	42	45	42	42	42	45	45	45
GF	NCA 1_NCA08.RES.0441.01	10 Domus St, Glenmore Park	RES	1	35	40	41	34	40	41	37	40	34	34	36	37	40	37
GF	NCA 1_NCA08.RES.0442.01	8 Domus St, Glenmore Park	RES	1	34	39	41	33	40	41	37	40	33	33	36	36	40	36
GF	NCA 1_NCA08.RES.0443.01	6 Domus St, Glenmore Park	RES	1	38	43	45	31	44	45	41	44	31	31	40	34	44	34
GF	NCA 1_NCA08.RES.0444.01	19 Domus St, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
GF	NCA 1_NCA08.RES.0445.01	17 Domus St, Glenmore Park	RES	1	39	42	44	39	43	44	40	43	39	39	39	42	43	42
GF	NCA 1_NCA08.RES.0446.01	15 Domus St, Glenmore Park	RES	1	36	41	43	36	42	43	39	42	36	36	38	39	42	39
GF	NCA 1_NCA08.RES.0447.01	13 Domus St, Glenmore Park	RES	1	37	42	44	34	43	44	40	43	34	34	39	37	43	37

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))														
					Works during standard hours									Out of hours works		Sleep disturbance			
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0448.01	11 Domus St, Glenmore Park	RES	1	34	39	41	34	40	41	37	40	34	34	36	37	40	37
GF	NCA 1_NCA08.RES.0449.01	9 Domus St, Glenmore Park	RES	1	36	41	43	33	42	43	39	42	33	33	38	36	42	36
GF	NCA 1_NCA08.RES.0450.01	7 Domus St, Glenmore Park	RES	1	35	40	40	32	39	40	36	39	32	32	35	35	39	35
GF	NCA 1_NCA08.RES.0451.01	16 Blue View Tce, Glenmore Park	RES	1	39	44	45	36	44	45	41	44	36	36	40	39	44	39
F1	NCA 1_NCA08.RES.0451.01	16 Blue View Tce, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA08.RES.0452.01	14 Blue View Tce, Glenmore Park	RES	1	37	42	44	35	43	44	40	43	35	35	39	38	43	38
F1	NCA 1_NCA08.RES.0452.01	14 Blue View Tce, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
GF	NCA 1_NCA08.RES.0453.01	12 Blue View Tce, Glenmore Park	RES	1	37	42	44	37	43	44	40	43	37	37	39	40	43	40
F1	NCA 1_NCA08.RES.0453.01	12 Blue View Tce, Glenmore Park	RES	1	39	43	45	39	44	45	41	44	39	39	40	42	44	42
GF	NCA 1_NCA08.RES.0454.01	10 Blue View Tce, Glenmore Park	RES	1	37	42	44	37	43	44	40	43	37	37	39	40	43	40
F1	NCA 1_NCA08.RES.0454.01	10 Blue View Tce, Glenmore Park	RES	1	39	43	45	39	44	45	41	44	39	39	40	42	44	42
GF	NCA 1_NCA08.RES.0455.01	2 Glenmore Ridge Dr_1, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
F1	NCA 1_NCA08.RES.0455.01	2 Glenmore Ridge Dr_1, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA08.RES.0456.01	2 Glenmore Ridge Dr21, Glenmore Park	RES	1	43	46	48	43	47	48	44	47	43	43	43	46	47	46
F1	NCA 1_NCA08.RES.0456.01	2 Glenmore Ridge Dr21, Glenmore Park	RES	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 1_NCA08.RES.0457.01	2 Glenmore Ridge Dr_3, Glenmore Park	RES	1	45	47	48	45	47	48	45	47	45	45	45	48	48	48
F1	NCA 1_NCA08.RES.0457.01	2 Glenmore Ridge Dr_3, Glenmore Park	RES	1	46	49	51	46	50	51	47	50	46	46	46	49	50	49
GF	NCA 1_NCA08.RES.0458.01	2 Glenmore Ridge Dr_4, Glenmore Park	RES	1	46	47	48	46	47	48	46	47	46	46	46	49	49	49
F1	NCA 1_NCA08.RES.0458.01	2 Glenmore Ridge Dr_4, Glenmore Park	RES	1	46	47	48	46	47	48	46	47	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0459.01	2 Capstone Tce, Glenmore Park	RES	1	40	45	47	36	46	47	43	46	36	36	42	39	46	39
GF	NCA 1_NCA08.RES.0460.01	14 Capstone Tce, Glenmore Park	RES	1	43	48	50	35	49	50	46	49	35	35	45	38	49	38
GF	NCA 1_NCA08.RES.0461.01	18 Capstone Tce, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
F1	NCA 1_NCA08.RES.0461.01	18 Capstone Tce, Glenmore Park	RES	1	49	49	51	49	50	51	49	50	49	49	49	52	52	52
GF	NCA 1_NCA08.RES.0462.01	1 Capstone Tce, Glenmore Park	RES	1	41	46	48	37	47	48	44	47	37	37	43	40	47	40
GF	NCA 1_NCA08.RES.0463.01	3 Capstone Tce, Glenmore Park	RES	1	41	46	48	30	47	48	44	47	30	30	43	33	47	33
GF	NCA 1_NCA08.RES.0464.01	5 Capstone Tce, Glenmore Park	RES	1	40	45	47	36	46	47	43	46	36	36	42	39	46	39
F1	NCA 1_NCA08.RES.0464.01	5 Capstone Tce, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
GF	NCA 1_NCA08.RES.0465.01	2 Middlebrook Rise, Glenmore Park	RES	1	40	45	47	37	46	47	43	46	37	37	42	40	46	40
GF	NCA 1_NCA08.RES.0466.01	4 Middlebrook Rise, Glenmore Park	RES	1	42	47	49	34	48	49	45	48	34	34	44	37	48	37
GF	NCA 1_NCA08.RES.0467.01	2 Pinnacle Ridge, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0468.01	4 Pinnacle Ridge, Glenmore Park	RES	1	44	45	47	44	46	47	44	46	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0469.01	6 Pinnacle Ridge, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
F1	NCA 1_NCA08.RES.0469.01	6 Pinnacle Ridge, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	NCA 1_NCA08.RES.0470.01	8 Pinnacle Ridge, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
F1	NCA 1_NCA08.RES.0470.01	8 Pinnacle Ridge, Glenmore Park	RES	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 1_NCA08.RES.0471.01	91 Bradley St, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
GF	NCA 1_NCA08.RES.0584.01	4 Domus St, Glenmore Park	RES	1	34	38	40	34	39	40	36	39	34	34	35	37	39	37
GF	NCA 1_NCA08.RES.0586.01	34 Tall Trees Dr, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
F1	NCA 1_NCA08.RES.0586.01	34 Tall Trees Dr, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA08.RES.0587.01	36 Tall Trees Dr, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
F1	NCA 1_NCA08.RES.0587.01	36 Tall Trees Dr, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
GF	NCA 1_NCA08.RES.0590.01	10 Highdale Tce, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
F1	NCA 1_NCA08.RES.0590.01	10 Highdale Tce, Glenmore Park	RES	1	44	44	46	44	45	46	44	45	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0591.01	8 Highdale Tce, Glenmore Park	RES	1	36	40	43	36	42	43	39	42	36	36	38	39	42	39
F1	NCA 1_NCA08.RES.0591.01	8 Highdale Tce, Glenmore Park	RES	1	43	44	46	43	45	46	43	45	43	43	43	46	46	46
GF	NCA 1_NCA08.RES.0596.01	5 Middlebrook Rise, Glenmore Park	RES	1	44	44	44	44	44	44	44	44	44	44	44	47	47	47
F1	NCA 1_NCA08.RES.0596.01	5 Middlebrook Rise, Glenmore Park	RES	1	44	45	46	44	45	46	44	45	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0597.01	7 Middlebrook Rise, Glenmore Park	RES	1	44	44	45	44	44	45	44	44	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0598.01	9 Middlebrook Rise, Glenmore Park	RES	1	44	45	47	44	46	47	44	46	44	44	44	47	47	47
F1	NCA 1_NCA08.RES.0598.01	9 Middlebrook Rise, Glenmore Park	RES	1	45	46	47	45	46	47	45	46	45	45	45	48	48	48
GF	NCA 1_NCA08.RES.0599.01	11 Middlebrook Rise, Glenmore Park	RES	1	45	45	47	45	46	47	45	46	45	45	45	48	48	48
GF	NCA 1_NCA08.RES.0600.01	13 Middlebrook Rise, Glenmore Park	RES	1	43	45	48	43	47	48	44	47	43	43	43	46	47	46
F1	NCA 1_NCA08.RES.0600.01	13 Middlebrook Rise, Glenmore Park	RES	1	46	46	48	46	47	48	46	47	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0601.01	15 Middlebrook Rise, Glenmore Park	RES	1	44	46	48	44	47	48	44	47	44	44	44	47	47	47
GF	NCA 1_NCA08.RES.0603.01	5 Highdale Tce, Glenmore Park	RES	1	40	43	44	40	43	44	40	43	40	40	40	43	43	43
GF	NCA 1_NCA08.RES.0604.01	7 Highdale Tce, Glenmore Park	RES	1	40	45	47	36	46	47	43	46	36	36	42	39	46	39
GF	NCA 1_NCA08.RES.0605.01	4 Altavista Rise, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA08.RES.0606.01	6 Altavista Rise, Glenmore Park	RES	1	42	47	49	35	48	49	45	48	35	35	44	38	48	38
F1	NCA 1_NCA08.RES.0606.01	6 Altavista Rise, Glenmore Park	RES	1	42	47	49	38	48	49	45	48	38	38	44	41	48	41
GF	NCA 1_NCA08.RES.0607.01	8 Altavista Rise, Glenmore Park	RES	1	40	45	47	38	46	47	43	46	38	38	42	41	46	41
GF	NCA 1_NCA08.RES.0608.01	7 Altavista Rise, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA08.RES.0609.01	2 Clearview Tce, Glenmore Park	RES	1	40	45	47	36	46	47	43	46	36	36	42	39	46	39
F1	NCA 1_NCA08.RES.0609.01	2 Clearview Tce, Glenmore Park	RES	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
GF	NCA 1_NCA08.RES.0610.01	4 Clearview Tce, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA08.RES.0611.01	1 Clearview Tce, Glenmore Park	RES	1	40	45	47	38	46	47	43	46	38	38	42	41	46	41
F1	NCA 1_NCA08.RES.0611.01	1 Clearview Tce, Glenmore Park	RES	1	46	47	48	46	47	48	46	47	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0612.01	3 Clearview Tce, Glenmore Park	RES	1	46	47	48	46	47	48	46	47	46	46	46	49	49	49
GF	NCA 1_NCA08.RES.0617.01	22 Riverflat Dr, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA08.RES.0617.01	22 Riverflat Dr, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 1_NCA08.RES.0618.01	200 Bradley St, Glenmore Park	RES	1	40	45	48	36	47	48	44	47	36	36	43	39	47	39
GF	NCA 1_NCA08.RES.0619.01	200 Bradley St, Glenmore Park	RES	1	40	45	47	33	46	47	43	46	33	33	42	36	46	36
F1	NCA 1_NCA08.RES.0619.01	200 Bradley St, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA09.GAR.0001.01	20-30 Saddler Way_2, Glenmore Park	GAR	1	52	56	58	52	57	58	54	57	52	52	53	55	57	55
GF	NCA 1_NCA09.GAR.0002.01	15-29 Bradley St_1, Glenmore Park	GAR	1	66	71	72	45	71	72	68	71	45	45	67	48	71	48
GF	NCA 1_NCA09.GAR.0003.01	13 Kyarra Tce_2, Glenmore Park	GAR	1	49	54	56	49	55	56	52	55	49	49	51	52	55	52
GF	NCA 1_NCA09.GAR.0004.01	2039 The Northern Road_2, Glenmore Park	GAR	1	49	54	56	49	55	56	52	55	49	49	51	52	55	52
GF	NCA 1_NCA09.GAR.0005.01	2033 The Northern Road_2, Glenmore Park	GAR	1	51	56	58	49	57	58	54	57	49	49	53	52	57	52
GF	NCA 1_NCA09.GAR.0006.01	7 Isca Pl_2, Glenmore Park	GAR	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0001.01	17 Saddler Way, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0002.01	19 Saddler Way, Glenmore Park	RES	1	49	52	54	49	53	54	50	53	49	49	49	52	53	52
GF	NCA 1_NCA09.RES.0003.01	21 Saddler Way, Glenmore Park	RES	1	50	53	55	50	54	55	51	54	50	50	50	53	54	53
GF	NCA 1_NCA09.RES.0004.01	23 Saddler Way, Glenmore Park	RES	1	49	52	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 1_NCA09.RES.0005.01	25 Saddler Way, Glenmore Park	RES	1	49	52	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 1_NCA09.RES.0006.01	27 Saddler Way, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0007.01	29 Saddler Way, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0008.01	31 Saddler Way, Glenmore Park	RES	1	47	51	53	47	52	53	49	52	47	47	48	50	52	50
GF	NCA 1_NCA09.RES.0009.01	33 Saddler Way, Glenmore Park	RES	1	48	51	53	48	52	53	49	52	48	48	48	51	52	51
GF	NCA 1_NCA09.RES.0010.01	20-30 Saddler Way_1, Glenmore Park	RES	1	51	53	55	51	54	55	51	54	51	51	51	54	54	54
GF	NCA 1_NCA09.RES.0011.01	35 Saddler Way, Glenmore Park	RES	1	49	53	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 1_NCA09.RES.0012.01	37 Saddler Way, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0013.01	39 Saddler Way, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
F1	NCA 1_NCA09.RES.0013.01	39 Saddler Way, Glenmore Park	RES	1	48	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 1_NCA09.RES.0014.01	32-52 Saddler Way, Glenmore Park	RES	1	52	53	56	52	55	56	52	55	52	52	52	55	55	55
GF	NCA 1_NCA09.RES.0015.01	41 Saddler Way, Glenmore Park	RES	1	49	51	54	49	53	54	50	53	49	49	49	52	53	52
GF	NCA 1_NCA09.RES.0016.01	43 Saddler Way, Glenmore Park	RES	1	49	54	56	49	55	56	52	55	49	49	51	52	55	52
GF	NCA 1_NCA09.RES.0017.01	45 Saddler Way, Glenmore Park	RES	1	49	52	54	49	53	54	50	53	49	49	49	52	53	52
GF	NCA 1_NCA09.RES.0018.01	47 Saddler Way, Glenmore Park	RES	1	51	53	55	51	54	55	51	54	51	51	51	54	54	54
GF	NCA 1_NCA09.RES.0019.01	49 Saddler Way, Glenmore Park	RES	1	50	52	54	50	53	54	50	53	50	50	50	53	53	53
GF	NCA 1_NCA09.RES.0020.01	51 Saddler Way, Glenmore Park	RES	1	50	53	55	50	54	55	51	54	50	50	50	53	54	53
GF	NCA 1_NCA09.RES.0021.01	53 Saddler Way, Glenmore Park	RES	1	51	53	55	51	54	55	51	54	51	51	51	54	54	54
GF	NCA 1_NCA09.RES.0022.01	55 Saddler Way, Glenmore Park	RES	1	52	55	57	52	56	57	53	56	52	52	52	55	56	55
GF	NCA 1_NCA09.RES.0023.01	57 Saddler Way, Glenmore Park	RES	1	50	54	56	50	55	56	52	55	50	50	51	53	55	53
GF	NCA 1_NCA09.RES.0024.01	2089-2093 The Northern Road, Glenmore Pa	RES	1	52	55	57	52	56	57	53	56	52	52	52	55	56	55
GF	NCA 1_NCA09.RES.0025.01	59 Saddler Way, Glenmore Park	RES	1	48	51	53	48	52	53	49	52	48	48	48	51	52	51
F1	NCA 1_NCA09.RES.0025.01	59 Saddler Way, Glenmore Park	RES	1	50	53	55	50	54	55	51	54	50	50	50	53	54	53
GF	NCA 1_NCA09.RES.0026.01	2095 The Northern Road, Glenmore Park	RES	1	54	59	61	52	60	61	57	60	52	52	56	55	60	55
GF	NCA 1_NCA09.RES.0027.01	61 Saddler Way, Glenmore Park	RES	1	45	50	53	44	52	53	49	52	44	44	48	47	52	47
F1	NCA 1_NCA09.RES.0027.01	61 Saddler Way, Glenmore Park	RES	1	48	53	55	44	54	55	51	54	44	44	50	47	54	47
GF	NCA 1_NCA09.RES.0028.01	63 Saddler Way, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA09.RES.0028.01	63 Saddler Way, Glenmore Park	RES	1	47	52	54	46	53	54	50	53	46	46	49	49	53	49
GF	NCA 1_NCA09.RES.0029.01	65 Saddler Way, Glenmore Park	RES	1	44	47	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA09.RES.0029.01	65 Saddler Way, Glenmore Park	RES	1	50	53	55	50	54	55	51	54	50	50	50	53	54	53
GF	NCA 1_NCA09.RES.0030.01	6 Bangaroo Ave, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
F1	NCA 1_NCA09.RES.0030.01	6 Bangaroo Ave, Glenmore Park	RES	1	44	49	51	39	50	51	47	50	39	39	46	42	50	42
GF	NCA 1_NCA09.RES.0031.01	4 Bangaroo Ave, Glenmore Park	RES	1	44	48	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA09.RES.0032.01	4 Orlander Ave, Glenmore Park	RES	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
F1	NCA 1_NCA09.RES.0032.01	4 Orlander Ave, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0033.01	6 Orlander Ave, Glenmore Park	RES	1	47	50	52	47	51	52	48	51	47	47	47	50	51	50
F1	NCA 1_NCA09.RES.0033.01	6 Orlander Ave, Glenmore Park	RES	1	49	52	54	49	53	54	50	53	49	49	49	52	53	52
GF	NCA 1_NCA09.RES.0034.01	8 Orlander Ave, Glenmore Park	RES	1	48	50	52	48	51	52	48	51	48	48	48	51	51	51
F1	NCA 1_NCA09.RES.0034.01	8 Orlander Ave, Glenmore Park	RES	1	49	51	53	49	52	53	49	52	49	49	49	52	52	52
GF	NCA 1_NCA09.RES.0035.01	10 Orlander Ave, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
F1	NCA 1_NCA09.RES.0035.01	10 Orlander Ave, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA09.RES.0036.01	12 Orlander Ave, Glenmore Park	RES	1	42	45	48	42	47	48	44	47	42	42	43	45	47	45
F1	NCA 1_NCA09.RES.0036.01	12 Orlander Ave, Glenmore Park	RES	1	48	51	53	48	52	53	49	52	48	48	48	51	52	51
GF	NCA 1_NCA09.RES.0037.01	14 Orlander Ave, Glenmore Park	RES	1	41	46	49	38	48	49	45	48	38	38	44	41	48	41
F1	NCA 1_NCA09.RES.0037.01	14 Orlander Ave, Glenmore Park	RES	1	45	50	52	42	51	52	48	51	42	42	47	45	51	45
GF	NCA 1_NCA09.RES.0038.01	16 Orlander Ave, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
F1	NCA 1_NCA09.RES.0038.01	16 Orlander Ave, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA09.RES.0039.01	18 Orlander Ave, Glenmore Park	RES	1	38	43	46	38	45	46	42	45	38	38	41	41	45	41
F1	NCA 1_NCA09.RES.0039.01	18 Orlander Ave, Glenmore Park	RES	1	44	49	52	42	51	52	48	51	42	42	47	45	51	45
GF	NCA 1_NCA09.RES.0040.01	8 Warrawong St, Glenmore Park	RES	1	39	44	47	37	46	47	43	46	37	37	42	40	46	40
F1	NCA 1_NCA09.RES.0040.01	8 Warrawong St, Glenmore Park	RES	1	43	48	51	40	50	51	47	50	40	40	46	43	50	43
GF	NCA 1_NCA09.RES.0041.01	6 Warrawong St, Glenmore Park	RES	1	37	42	44	35	43	44	40	43	35	35	39	38	43	38
F1	NCA 1_NCA09.RES.0041.01	6 Warrawong St, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA09.RES.0042.01	2 Crestwood Ave, Glenmore Park	RES	1	43	48	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA09.RES.0043.01	4 Crestwood Ave, Glenmore Park	RES	1	45	50	52	42	51	52	48	51	42	42	47	45	51	45
F1	NCA 1_NCA09.RES.0043.01	4 Crestwood Ave, Glenmore Park	RES	1	47	52	55	44	54	55	51	54	44	44	50	47	54	47
GF	NCA 1_NCA09.RES.0044.01	6 Crestwood Ave, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
F1	NCA 1_NCA09.RES.0044.01	6 Crestwood Ave, Glenmore Park	RES	1	46	51	53	43	52	53	49	52	43	43	48	46	52	46
GF	NCA 1_NCA09.RES.0045.01	8-10 Crestwood Ave, Glenmore Park	RES	1	44	49	51	40	50	51	47	50	40	40	46	43	50	43
GF	NCA 1_NCA09.RES.0046.01	20 Harold Bentleys Way, Glenmore Park	RES	1	50	55	57	50	56	57	53	56	50	50	52	53	56	53
F1	NCA 1_NCA09.RES.0046.01	20 Harold Bentleys Way, Glenmore Park	RES	1	50	55	57	50	56	57	53	56	50	50	52	53	56	53
GF	NCA 1_NCA09.RES.0047.01	19 Harold Bentleys Way, Glenmore Park	RES	1	50	54	56	50	55	56	52	55	50	50	51	53	55	53
F1	NCA 1_NCA09.RES.0047.01	19 Harold Bentleys Way, Glenmore Park	RES	1	51	56	58	50	57	58	54	57	50	50	53	53	57	53
GF	NCA 1_NCA09.RES.0048.01	18 Harold Bentleys Way, Glenmore Park	RES	1	50	55	57	49	56	57	53	56	49	49	52	52	56	52
F1	NCA 1_NCA09.RES.0048.01	18 Harold Bentleys Way, Glenmore Park	RES	1	51	56	58	50	57	58	54	57	50	50	53	53	57	53
GF	NCA 1_NCA09.RES.0049.01	17 Harold Bentleys Way, Glenmore Park	RES	1	48	53	55	46	54	55	51	54	46	46	50	49	54	49
F1	NCA 1_NCA09.RES.0049.01	17 Harold Bentleys Way, Glenmore Park	RES	1	50	55	57	49	56	57	53	56	49	49	52	52	56	52
GF	NCA 1_NCA09.RES.0050.01	16 Harold Bentleys Way, Glenmore Park	RES	1	49	53	55	49	54	55	51	54	49	49	50	52	54	52
F1	NCA 1_NCA09.RES.0050.01	16 Harold Bentleys Way, Glenmore Park	RES	1	52	55	57	52	56	57	53	56	52	52	52	55	56	55
GF	NCA 1_NCA09.RES.0051.01	15 Harold Bentleys Way, Glenmore Park	RES	1	50	55	55	46	54	55	51	54	46	46	50	49	54	49
GF	NCA 1_NCA09.RES.0052.01	14 Harold Bentleys Way, Glenmore Park	RES	1	51	56	57	47	56	57	53	56	47	47	52	50	56	50
F1	NCA 1_NCA09.RES.0052.01	14 Harold Bentleys Way, Glenmore Park	RES	1	52	57	59	48	58	59	55	58	48	48	54	51	58	51
GF	NCA 1_NCA09.RES.0053.01	13 Harold Bentleys Way, Glenmore Park	RES	1	50	55	57	46	56	57	53	56	46	46	52	49	56	49
F1	NCA 1_NCA09.RES.0053.01	13 Harold Bentleys Way, Glenmore Park	RES	1	53	58	60	48	59	60	56	59	48	48	55	51	59	51

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0054.01	12 Harold Bentleys Way, Glenmore Park	RES	1	52	57	58	46	57	58	54	57	46	46	53	49	57	49
GF	NCA 1_NCA09.RES.0055.01	17 Crestwood Ave, Glenmore Park	RES	1	46	51	53	40	52	53	49	52	40	40	48	43	52	43
F1	NCA 1_NCA09.RES.0055.01	17 Crestwood Ave, Glenmore Park	RES	1	49	54	56	45	55	56	52	55	45	45	51	48	55	48
GF	NCA 1_NCA09.RES.0056.01	6 Grandeur Cr, Glenmore Park	RES	1	48	53	56	41	55	56	52	55	41	41	51	44	55	44
F1	NCA 1_NCA09.RES.0056.01	6 Grandeur Cr, Glenmore Park	RES	1	51	56	58	44	57	58	54	57	44	44	53	47	57	47
GF	NCA 1_NCA09.RES.0057.01	4 Grandeur Cr, Glenmore Park	RES	1	47	52	54	43	53	54	50	53	43	43	49	46	53	46
F1	NCA 1_NCA09.RES.0057.01	4 Grandeur Cr, Glenmore Park	RES	1	49	54	56	44	55	56	52	55	44	44	51	47	55	47
GF	NCA 1_NCA09.RES.0058.01	15 Crestwood Ave, Glenmore Park	RES	1	46	51	53	41	52	53	49	52	41	41	48	44	52	44
F1	NCA 1_NCA09.RES.0058.01	15 Crestwood Ave, Glenmore Park	RES	1	47	52	54	42	53	54	50	53	42	42	49	45	53	45
GF	NCA 1_NCA09.RES.0059.01	1 Grandeur Cr, Glenmore Park	RES	1	47	52	54	42	53	54	50	53	42	42	49	45	53	45
GF	NCA 1_NCA09.RES.0060.01	3 Grandeur Cr, Glenmore Park	RES	1	48	53	55	39	54	55	51	54	39	39	50	42	54	42
GF	NCA 1_NCA09.RES.0061.01	5 Grandeur Cr, Glenmore Park	RES	1	48	53	55	41	54	55	51	54	41	41	50	44	54	44
GF	NCA 1_NCA09.RES.0062.01	7 Grandeur Cr, Glenmore Park	RES	1	48	53	55	41	54	55	51	54	41	41	50	44	54	44
F1	NCA 1_NCA09.RES.0062.01	7 Grandeur Cr, Glenmore Park	RES	1	51	56	58	47	57	58	54	57	47	47	53	50	57	50
GF	NCA 1_NCA09.RES.0063.01	9 Grandeur Cr, Glenmore Park	RES	1	53	58	59	47	58	59	55	58	47	47	54	50	58	50
GF	NCA 1_NCA09.RES.0064.01	24 Bangalla Pde, Glenmore Park	RES	1	46	51	53	43	52	53	49	52	43	43	48	46	52	46
F1	NCA 1_NCA09.RES.0064.01	24 Bangalla Pde, Glenmore Park	RES	1	50	55	57	46	56	57	53	56	46	46	52	49	56	49
GF	NCA 1_NCA09.RES.0065.01	26 Bangalla Pde, Glenmore Park	RES	1	48	53	55	40	54	55	51	54	40	40	50	43	54	43
F1	NCA 1_NCA09.RES.0065.01	26 Bangalla Pde, Glenmore Park	RES	1	50	55	57	43	56	57	53	56	43	43	52	46	56	46
GF	NCA 1_NCA09.RES.0066.01	10 Harold Bentleys Way, Glenmore Park	RES	1	56	61	62	47	61	62	58	61	47	47	57	50	61	50
F1	NCA 1_NCA09.RES.0066.01	10 Harold Bentleys Way, Glenmore Park	RES	1	58	63	65	48	64	65	61	64	48	48	60	51	64	51
GF	NCA 1_NCA09.RES.0067.01	9 Harold Bentleys Way, Glenmore Park	RES	1	55	60	61	46	60	61	57	60	46	46	56	49	60	49
F1	NCA 1_NCA09.RES.0067.01	9 Harold Bentleys Way, Glenmore Park	RES	1	57	62	64	47	63	64	60	63	47	47	59	50	63	50
GF	NCA 1_NCA09.RES.0068.01	8 Harold Bentleys Way, Glenmore Park	RES	1	56	61	62	46	61	62	58	61	46	46	57	49	61	49
F1	NCA 1_NCA09.RES.0068.01	8 Harold Bentleys Way, Glenmore Park	RES	1	58	63	65	46	64	65	61	64	46	46	60	49	64	49
GF	NCA 1_NCA09.RES.0069.01	7 Harold Bentleys Way, Glenmore Park	RES	1	57	62	63	46	62	63	59	62	46	46	58	49	62	49
F1	NCA 1_NCA09.RES.0069.01	7 Harold Bentleys Way, Glenmore Park	RES	1	60	65	67	46	66	67	63	66	46	46	62	49	66	49
GF	NCA 1_NCA09.RES.0070.01	6 Harold Bentleys Way, Glenmore Park	RES	1	58	63	64	46	63	64	60	63	46	46	59	49	63	49
F1	NCA 1_NCA09.RES.0070.01	6 Harold Bentleys Way, Glenmore Park	RES	1	61	66	68	46	67	68	64	67	46	46	63	49	67	49
GF	NCA 1_NCA09.RES.0071.01	32 Bangalla Pde, Glenmore Park	RES	1	53	58	59	43	58	59	55	58	43	43	54	46	58	46
GF	NCA 1_NCA09.RES.0072.01	28 Bangalla Pde, Glenmore Park	RES	1	52	57	57	43	56	57	53	56	43	43	52	46	56	46
F1	NCA 1_NCA09.RES.0072.01	28 Bangalla Pde, Glenmore Park	RES	1	55	60	60	43	59	60	56	59	43	43	55	46	59	46
GF	NCA 1_NCA09.RES.0073.01	30 Bangalla Pde, Glenmore Park	RES	1	54	59	60	37	59	60	56	59	37	37	55	40	59	40
F1	NCA 1_NCA09.RES.0073.01	30 Bangalla Pde, Glenmore Park	RES	1	58	63	64	42	63	64	60	63	42	42	59	45	63	45
GF	NCA 1_NCA09.RES.0074.01	15-29 Bradley St_2, Glenmore Park	RES	1	67	72	74	45	73	74	70	73	45	45	69	48	73	48
GF	NCA 1_NCA09.RES.0075.01	36 Bangalla Pde, Glenmore Park	RES	1	51	56	59	43	58	59	55	58	43	43	54	46	58	46
GF	NCA 1_NCA09.RES.0076.01	38 Bangalla Pde, Glenmore Park	RES	1	55	60	61	42	60	61	57	60	42	42	56	45	60	45
GF	NCA 1_NCA09.RES.0077.01	54 Glengarry Dr, Glenmore Park	RES	1	45	50	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 1_NCA09.RES.0078.01	56 Glengarry Dr, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0079.01	58 Glengarry Dr, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA09.RES.0080.01	3 Bangaroo Ave, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA09.RES.0081.01	1 Orlander Ave, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
GF	NCA 1_NCA09.RES.0082.01	3 Orlander Ave, Glenmore Park	RES	1	39	43	45	39	44	45	41	44	39	39	40	42	44	42
GF	NCA 1_NCA09.RES.0083.01	5 Orlander Ave, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
GF	NCA 1_NCA09.RES.0084.01	7 Orlander Ave, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
GF	NCA 1_NCA09.RES.0085.01	9 Orlander Ave, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA09.RES.0086.01	11 Orlander Ave, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA09.RES.0087.01	13 Orlander Ave, Glenmore Park	RES	1	40	43	45	40	44	45	41	44	40	40	40	43	44	43
GF	NCA 1_NCA09.RES.0088.01	15 Orlander Ave, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA09.RES.0089.01	17 Orlander Ave_1, Glenmore Park	RES	1	38	41	43	38	42	43	39	42	38	38	38	41	42	41
GF	NCA 1_NCA09.RES.0090.01	17 Orlander Ave_2, Glenmore Park	RES	1	36	41	44	34	43	44	40	43	34	34	39	37	43	37
GF	NCA 1_NCA09.RES.0091.01	3 Warrawong St, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA09.RES.0092.01	20 Bangalla Pde, Glenmore Park	RES	1	46	51	53	38	52	53	49	52	38	38	48	41	52	41
GF	NCA 1_NCA09.RES.0093.01	11 Bangalla Pde, Glenmore Park	RES	1	46	51	53	40	52	53	49	52	40	40	48	43	52	43
GF	NCA 1_NCA09.RES.0094.01	13 Bangalla Pde, Glenmore Park	RES	1	47	52	54	39	53	54	50	53	39	39	49	42	53	42
GF	NCA 1_NCA09.RES.0095.01	15 Bangalla Pde, Glenmore Park	RES	1	45	50	52	41	51	52	48	51	41	41	47	44	51	44
GF	NCA 1_NCA09.RES.0096.01	17 Bangalla Pde, Glenmore Park	RES	1	47	52	54	39	53	54	50	53	39	39	49	42	53	42
GF	NCA 1_NCA09.RES.0097.01	19 Bangalla Pde, Glenmore Park	RES	1	47	52	54	43	53	54	50	53	43	43	49	46	53	46
GF	NCA 1_NCA09.RES.0098.01	27 Bangalla Pde, Glenmore Park	RES	1	52	57	58	46	57	58	54	57	46	46	53	49	57	49
GF	NCA 1_NCA09.RES.0099.01	21 Bangalla Pde, Glenmore Park	RES	1	52	57	58	39	57	58	54	57	39	39	53	42	57	42
GF	NCA 1_NCA09.RES.0100.01	23 Bangalla Pde, Glenmore Park	RES	1	55	60	60	41	59	60	56	59	41	41	55	44	59	44
GF	NCA 1_NCA09.RES.0101.01	25 Bangalla Pde, Glenmore Park	RES	1	52	57	58	44	57	58	54	57	44	44	53	47	57	47
GF	NCA 1_NCA09.RES.0102.01	13 Crestwood Ave, Glenmore Park	RES	1	46	51	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 1_NCA09.RES.0103.01	11 Crestwood Ave, Glenmore Park	RES	1	46	51	53	39	52	53	49	52	39	39	48	42	52	42
GF	NCA 1_NCA09.RES.0104.01	9 Crestwood Ave, Glenmore Park	RES	1	44	49	51	40	50	51	47	50	40	40	46	43	50	43
GF	NCA 1_NCA09.RES.0105.01	7 Crestwood Ave, Glenmore Park	RES	1	40	44	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA09.RES.0106.01	5 Crestwood Ave, Glenmore Park	RES	1	40	44	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA09.RES.0107.01	3 Crestwood Ave, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA09.RES.0108.01	9 Warrawong St, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA09.RES.0109.01	5 Warrawong St, Glenmore Park	RES	1	39	44	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA09.RES.0110.01	7 Warrawong St, Glenmore Park	RES	1	42	47	50	36	49	50	46	49	36	36	45	39	49	39
GF	NCA 1_NCA09.RES.0111.01	5 Bangaroo Ave, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA09.RES.0112.01	7 Bangaroo Ave, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
GF	NCA 1_NCA09.RES.0113.01	9 Bangaroo Ave, Glenmore Park	RES	1	38	43	45	36	44	45	41	44	36	36	40	39	44	39
GF	NCA 1_NCA09.RES.0114.01	11 Bangaroo Ave, Glenmore Park	RES	1	38	43	46	36	45	46	42	45	36	36	41	39	45	39
GF	NCA 1_NCA09.RES.0115.01	2073-2077 The Northern Road_1, Glenmore	RES	1	56	57	59	56	58	59	56	58	56	56	56	59	59	59
GF	NCA 1_NCA09.RES.0116.01	2055-2057 The Northern Road, Glenmore Pa	RES	1	55	57	59	55	58	59	55	58	55	55	55	58	58	58
GF	NCA 1_NCA09.RES.0117.01	2039 The Northern Road_1, Glenmore Park	RES	1	51	56	58	50	57	58	54	57	50	50	53	53	57	53

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0118.01	2033 The Northern Road_1, Glenmore Park	RES	1	51	56	58	50	57	58	54	57	50	50	53	53	57	53
GF	NCA 1_NCA09.RES.0119.01	21 Boldero Cr, Glenmore Park	RES	1	52	57	59	51	58	59	55	58	51	51	54	54	58	54
GF	NCA 1_NCA09.RES.0120.01	5 Kyarra Tce, Glenmore Park	RES	1	43	45	47	43	46	47	43	46	43	43	43	46	46	46
GF	NCA 1_NCA09.RES.0121.01	3 Kyarra Tce, Glenmore Park	RES	1	42	47	50	37	49	50	46	49	37	37	45	40	49	40
GF	NCA 1_NCA09.RES.0122.01	4 Kyarra Tce, Glenmore Park	RES	1	45	50	52	43	51	52	48	51	43	43	47	46	51	46
F1	NCA 1_NCA09.RES.0122.01	4 Kyarra Tce, Glenmore Park	RES	1	47	52	54	46	53	54	50	53	46	46	49	49	53	49
GF	NCA 1_NCA09.RES.0123.01	6 Kyarra Tce, Glenmore Park	RES	1	47	51	53	46	52	53	49	52	46	46	48	49	52	49
F1	NCA 1_NCA09.RES.0123.01	6 Kyarra Tce, Glenmore Park	RES	1	50	54	56	49	55	56	52	55	49	49	51	52	55	52
GF	NCA 1_NCA09.RES.0124.01	8 Kyarra Tce, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0125.01	9 Kyarra Tce, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
F1	NCA 1_NCA09.RES.0125.01	9 Kyarra Tce, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
GF	NCA 1_NCA09.RES.0126.01	11 Kyarra Tce, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
F1	NCA 1_NCA09.RES.0126.01	11 Kyarra Tce, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0127.01	13 Kyarra Tce_1, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0128.01	10 Kyarra Tce, Glenmore Park	RES	1	50	53	55	50	54	55	51	54	50	50	50	53	54	53
F1	NCA 1_NCA09.RES.0128.01	10 Kyarra Tce, Glenmore Park	RES	1	51	54	56	50	55	56	52	55	50	50	51	53	55	53
GF	NCA 1_NCA09.RES.0129.01	15 Boldero Cr, Glenmore Park	RES	1	48	53	56	48	55	56	52	55	48	48	51	51	55	51
F1	NCA 1_NCA09.RES.0129.01	15 Boldero Cr, Glenmore Park	RES	1	49	53	56	48	55	56	52	55	48	48	51	51	55	51
GF	NCA 1_NCA09.RES.0130.01	12 Boldero Cr, Glenmore Park	RES	1	50	55	57	50	56	57	53	56	50	50	52	53	56	53
GF	NCA 1_NCA09.RES.0131.01	14 Boldero Cr, Glenmore Park	RES	1	49	53	55	48	54	55	51	54	48	48	50	51	54	51
F1	NCA 1_NCA09.RES.0131.01	14 Boldero Cr, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0132.01	16 Boldero Cr, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
F1	NCA 1_NCA09.RES.0132.01	16 Boldero Cr, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0133.01	18 Boldero Cr, Glenmore Park	RES	1	49	54	56	49	55	56	52	55	49	49	51	52	55	52
F1	NCA 1_NCA09.RES.0133.01	18 Boldero Cr, Glenmore Park	RES	1	50	55	57	48	56	57	53	56	48	48	52	51	56	51
GF	NCA 1_NCA09.RES.0134.01	20 Boldero Cr, Glenmore Park	RES	1	49	53	55	49	54	55	51	54	49	49	50	52	54	52
F1	NCA 1_NCA09.RES.0134.01	20 Boldero Cr, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0135.01	22 Boldero Cr, Glenmore Park	RES	1	47	52	54	46	53	54	50	53	46	46	49	49	53	49
F1	NCA 1_NCA09.RES.0135.01	22 Boldero Cr, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0136.01	27 Boldero Cr, Glenmore Park	RES	1	51	56	58	50	57	58	54	57	50	50	53	53	57	53
GF	NCA 1_NCA09.RES.0137.01	13 Boldero Cr, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
F1	NCA 1_NCA09.RES.0137.01	13 Boldero Cr, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0138.01	11 Boldero Cr, Glenmore Park	RES	1	48	52	54	48	53	54	50	53	48	48	49	51	53	51
F1	NCA 1_NCA09.RES.0138.01	11 Boldero Cr, Glenmore Park	RES	1	48	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 1_NCA09.RES.0139.01	9 Boldero Cr, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
F1	NCA 1_NCA09.RES.0139.01	9 Boldero Cr, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
GF	NCA 1_NCA09.RES.0140.01	10 Boldero Cr, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
F1	NCA 1_NCA09.RES.0140.01	10 Boldero Cr, Glenmore Park	RES	1	51	53	56	50	55	56	52	55	50	50	51	53	55	53
GF	NCA 1_NCA09.RES.0141.01	8 Boldero Cr, Glenmore Park	RES	1	47	52	54	45	53	54	50	53	45	45	49	48	53	48

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 1_NCA09.RES.0141.01	8 Boldero Cr, Glenmore Park	RES	1	47	52	54	46	53	54	50	53	46	46	49	49	53	49
GF	NCA 1_NCA09.RES.0142.01	6 Boldero Cr, Glenmore Park	RES	1	46	51	53	42	52	53	49	52	42	42	48	45	52	45
F1	NCA 1_NCA09.RES.0142.01	6 Boldero Cr, Glenmore Park	RES	1	47	52	54	45	53	54	50	53	45	45	49	48	53	48
GF	NCA 1_NCA09.RES.0143.01	4 Briarwood Ave, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
GF	NCA 1_NCA09.RES.0144.01	6 Briarwood Ave, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
F1	NCA 1_NCA09.RES.0144.01	6 Briarwood Ave, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
GF	NCA 1_NCA09.RES.0145.01	8 Briarwood Ave, Glenmore Park	RES	1	46	51	53	37	52	53	49	52	37	37	48	40	52	40
F1	NCA 1_NCA09.RES.0145.01	8 Briarwood Ave, Glenmore Park	RES	1	47	52	54	41	53	54	50	53	41	41	49	44	53	44
GF	NCA 1_NCA09.RES.0146.01	10 Briarwood Ave, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
F1	NCA 1_NCA09.RES.0146.01	10 Briarwood Ave, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
GF	NCA 1_NCA09.RES.0147.01	26 Boldero Cr, Glenmore Park	RES	1	46	51	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 1_NCA09.RES.0148.01	24 Boldero Cr, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0149.01	33 Boldero Cr, Glenmore Park	RES	1	49	54	56	46	55	56	52	55	46	46	51	49	55	49
GF	NCA 1_NCA09.RES.0150.01	31 Boldero Cr, Glenmore Park	RES	1	49	54	56	47	55	56	52	55	47	47	51	50	55	50
F1	NCA 1_NCA09.RES.0150.01	31 Boldero Cr, Glenmore Park	RES	1	49	54	56	47	55	56	52	55	47	47	51	50	55	50
GF	NCA 1_NCA09.RES.0151.01	29 Boldero Cr, Glenmore Park	RES	1	47	52	54	47	53	54	50	53	47	47	49	50	53	50
F1	NCA 1_NCA09.RES.0151.01	29 Boldero Cr, Glenmore Park	RES	1	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 1_NCA09.RES.0152.01	12 Windorra Ave, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA09.RES.0153.01	14 Windorra Ave, Glenmore Park	RES	1	43	48	50	40	49	50	46	49	40	40	45	43	49	43
F1	NCA 1_NCA09.RES.0153.01	14 Windorra Ave, Glenmore Park	RES	1	45	50	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0154.01	16 Windorra Ave, Glenmore Park	RES	1	43	47	50	43	49	50	46	49	43	43	45	46	49	46
F1	NCA 1_NCA09.RES.0154.01	16 Windorra Ave, Glenmore Park	RES	1	46	50	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0155.01	18 Windorra Ave, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
F1	NCA 1_NCA09.RES.0155.01	18 Windorra Ave, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0156.01	20 Windorra Ave, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA09.RES.0156.01	20 Windorra Ave, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0157.01	3 Boldero Cr, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA09.RES.0158.01	3 Briarwood Ave, Glenmore Park	RES	1	46	51	53	46	52	53	49	52	46	46	48	49	52	49
GF	NCA 1_NCA09.RES.0159.01	5 Briarwood Ave, Glenmore Park	RES	1	41	46	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA09.RES.0160.01	13 Briarwood Ave, Glenmore Park	RES	1	46	51	53	43	52	53	49	52	43	43	48	46	52	46
GF	NCA 1_NCA09.RES.0161.01	11 Briarwood Ave, Glenmore Park	RES	1	44	49	51	41	50	51	47	50	41	41	46	44	50	44
GF	NCA 1_NCA09.RES.0162.01	9 Briarwood Ave, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA09.RES.0163.01	35 Boldero Cr, Glenmore Park	RES	1	46	51	53	46	52	53	49	52	46	46	48	49	52	49
GF	NCA 1_NCA09.RES.0164.01	37 Boldero Cr, Glenmore Park	RES	1	48	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 1_NCA09.RES.0165.01	39 Boldero Cr, Glenmore Park	RES	1	46	51	53	46	52	53	49	52	46	46	48	49	52	49
GF	NCA 1_NCA09.RES.0166.01	41 Boldero Cr, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA09.RES.0167.01	1 Briarwood Ave, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
F1	NCA 1_NCA09.RES.0167.01	1 Briarwood Ave, Glenmore Park	RES	1	47	51	53	47	52	53	49	52	47	47	48	50	52	50
GF	NCA 1_NCA09.RES.0168.01	7 Briarwood Ave, Glenmore Park	RES	1	46	51	53	43	52	53	49	52	43	43	48	46	52	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 1_NCA09.RES.0168.01	7 Briarwood Ave, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0169.01	43 Boldero Cr, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
F1	NCA 1_NCA09.RES.0169.01	43 Boldero Cr, Glenmore Park	RES	1	47	52	54	46	53	54	50	53	46	46	49	49	53	49
GF	NCA 1_NCA09.RES.0170.01	5 Boldero Cr, Glenmore Park	RES	1	46	51	53	36	52	53	49	52	36	36	48	39	52	39
F1	NCA 1_NCA09.RES.0170.01	5 Boldero Cr, Glenmore Park	RES	1	46	51	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 1_NCA09.RES.0171.01	1 Kyarra Tce, Glenmore Park	RES	1	47	52	54	46	53	54	50	53	46	46	49	49	53	49
F1	NCA 1_NCA09.RES.0171.01	1 Kyarra Tce, Glenmore Park	RES	1	48	53	55	47	54	55	51	54	47	47	50	50	54	50
GF	NCA 1_NCA09.RES.0172.01	30 Boldero Cr, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
F1	NCA 1_NCA09.RES.0172.01	30 Boldero Cr, Glenmore Park	RES	1	48	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 1_NCA09.RES.0173.01	3 Saddler Way, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
F1	NCA 1_NCA09.RES.0173.01	3 Saddler Way, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA09.RES.0174.01	5 Saddler Way, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA09.RES.0174.01	5 Saddler Way, Glenmore Park	RES	1	44	49	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA09.RES.0175.01	9 Saddler Way, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
F1	NCA 1_NCA09.RES.0175.01	9 Saddler Way, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA09.RES.0176.01	11 Saddler Way, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
F1	NCA 1_NCA09.RES.0176.01	11 Saddler Way, Glenmore Park	RES	1	46	51	54	45	53	54	50	53	45	45	49	48	53	48
GF	NCA 1_NCA09.RES.0177.01	13 Saddler Way, Glenmore Park	RES	1	45	49	52	45	51	52	48	51	45	45	47	48	51	48
F1	NCA 1_NCA09.RES.0177.01	13 Saddler Way, Glenmore Park	RES	1	47	52	54	45	53	54	50	53	45	45	49	48	53	48
GF	NCA 1_NCA09.RES.0178.01	3 Suntop Pl, Glenmore Park	RES	1	46	51	53	41	52	53	49	52	41	41	48	44	52	44
F1	NCA 1_NCA09.RES.0178.01	3 Suntop Pl, Glenmore Park	RES	1	47	52	54	44	53	54	50	53	44	44	49	47	53	47
GF	NCA 1_NCA09.RES.0179.01	4 Suntop Pl, Glenmore Park	RES	1	45	50	52	39	51	52	48	51	39	39	47	42	51	42
F1	NCA 1_NCA09.RES.0179.01	4 Suntop Pl, Glenmore Park	RES	1	45	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA09.RES.0180.01	5 Suntop Pl, Glenmore Park	RES	1	46	51	54	43	53	54	50	53	43	43	49	46	53	46
F1	NCA 1_NCA09.RES.0180.01	5 Suntop Pl, Glenmore Park	RES	1	48	53	55	47	54	55	51	54	47	47	50	50	54	50
GF	NCA 1_NCA09.RES.0181.01	8 Suntop Pl, Glenmore Park	RES	1	39	44	48	39	47	48	44	47	39	39	43	42	47	42
F1	NCA 1_NCA09.RES.0181.01	8 Suntop Pl, Glenmore Park	RES	1	44	48	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA09.RES.0182.01	48 Glengarry Dr, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
F1	NCA 1_NCA09.RES.0182.01	48 Glengarry Dr, Glenmore Park	RES	1	45	50	52	42	51	52	48	51	42	42	47	45	51	45
GF	NCA 1_NCA09.RES.0183.01	7 Suntop Pl, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
GF	NCA 1_NCA09.RES.0184.01	6 Suntop Pl, Glenmore Park	RES	1	46	51	53	40	52	53	49	52	40	40	48	43	52	43
GF	NCA 1_NCA09.RES.0185.01	50 Glengarry Dr, Glenmore Park	RES	1	44	47	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA09.RES.0186.01	2 Suntop Pl, Glenmore Park	RES	1	43	48	52	42	51	52	48	51	42	42	47	45	51	45
GF	NCA 1_NCA09.RES.0187.01	7 Saddler Way, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0188.01	15 Saddler Way, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0189.01	46 Glengarry Dr, Glenmore Park	RES	1	42	47	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 1_NCA09.RES.0190.01	108 Glengarry Dr, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA09.RES.0191.01	116 Glengarry Dr, Glenmore Park	RES	1	42	47	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 1_NCA09.RES.0192.01	118 Glengarry Dr, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0193.01	128 Glengarry Dr, Glenmore Park	RES	1	50	55	56	44	55	56	52	55	44	44	51	47	55	47
GF	NCA 1_NCA09.RES.0194.01	126 Glengarry Dr, Glenmore Park	RES	1	48	53	54	46	53	54	50	53	46	46	49	49	53	49
GF	NCA 1_NCA09.RES.0195.01	124 Glengarry Dr, Glenmore Park	RES	1	46	51	53	46	52	53	49	52	46	46	48	49	52	49
F1	NCA 1_NCA09.RES.0195.01	124 Glengarry Dr, Glenmore Park	RES	1	50	55	56	46	55	56	52	55	46	46	51	49	55	49
GF	NCA 1_NCA09.RES.0196.01	122 Glengarry Dr, Glenmore Park	RES	1	47	52	53	43	52	53	49	52	43	43	48	46	52	46
F1	NCA 1_NCA09.RES.0196.01	122 Glengarry Dr, Glenmore Park	RES	1	51	56	57	43	56	57	53	56	43	43	52	46	56	46
GF	NCA 1_NCA09.RES.0197.01	120 Glengarry Dr, Glenmore Park	RES	1	45	50	52	43	51	52	48	51	43	43	47	46	51	46
F1	NCA 1_NCA09.RES.0197.01	120 Glengarry Dr, Glenmore Park	RES	1	46	51	54	46	53	54	50	53	46	46	49	49	53	49
GF	NCA 1_NCA09.RES.0198.01	114 Glengarry Dr, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
F1	NCA 1_NCA09.RES.0198.01	114 Glengarry Dr, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA09.RES.0199.01	112 Glengarry Dr, Glenmore Park	RES	1	40	45	48	40	47	48	44	47	40	40	43	43	47	43
F1	NCA 1_NCA09.RES.0199.01	112 Glengarry Dr, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA09.RES.0200.01	110 Glengarry Dr, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA09.RES.0200.01	110 Glengarry Dr, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA09.RES.0201.01	5 Karingal Ct, Glenmore Park	RES	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
F1	NCA 1_NCA09.RES.0201.01	5 Karingal Ct, Glenmore Park	RES	1	50	55	57	44	56	57	53	56	44	44	52	47	56	47
GF	NCA 1_NCA09.RES.0202.01	6 Karingal Ct, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
F1	NCA 1_NCA09.RES.0202.01	6 Karingal Ct, Glenmore Park	RES	1	48	53	55	45	54	55	51	54	45	45	50	48	54	48
GF	NCA 1_NCA09.RES.0203.01	7 Karingal Ct, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
F1	NCA 1_NCA09.RES.0203.01	7 Karingal Ct, Glenmore Park	RES	1	52	57	58	45	57	58	54	57	45	45	53	48	57	48
GF	NCA 1_NCA09.RES.0204.01	11 Karingal Ct, Glenmore Park	RES	1	42	47	50	39	49	50	46	49	39	39	45	42	49	42
F1	NCA 1_NCA09.RES.0204.01	11 Karingal Ct, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA09.RES.0205.01	12 Karingal Ct, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
F1	NCA 1_NCA09.RES.0205.01	12 Karingal Ct, Glenmore Park	RES	1	45	50	53	43	52	53	49	52	43	43	48	46	52	46
GF	NCA 1_NCA09.RES.0206.01	13 Karingal Ct, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
F1	NCA 1_NCA09.RES.0206.01	13 Karingal Ct, Glenmore Park	RES	1	47	52	54	45	53	54	50	53	45	45	49	48	53	48
GF	NCA 1_NCA09.RES.0207.01	14 Karingal Ct, Glenmore Park	RES	1	41	45	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA09.RES.0207.01	14 Karingal Ct, Glenmore Park	RES	1	43	47	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA09.RES.0208.01	15 Karingal Ct, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
F1	NCA 1_NCA09.RES.0208.01	15 Karingal Ct, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA09.RES.0209.01	17 Karingal Ct, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA09.RES.0209.01	17 Karingal Ct, Glenmore Park	RES	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 1_NCA09.RES.0210.01	2 Karingal Ct, Glenmore Park	RES	1	41	46	48	35	47	48	44	47	35	35	43	38	47	38
F1	NCA 1_NCA09.RES.0210.01	2 Karingal Ct, Glenmore Park	RES	1	44	49	51	41	50	51	47	50	41	41	46	44	50	44
GF	NCA 1_NCA09.RES.0211.01	3 Karingal Ct, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
F1	NCA 1_NCA09.RES.0211.01	3 Karingal Ct, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA09.RES.0212.01	4 Karingal Ct, Glenmore Park	RES	1	46	51	53	43	52	53	49	52	43	43	48	46	52	46
F1	NCA 1_NCA09.RES.0212.01	4 Karingal Ct, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA09.RES.0213.01	8 Karingal Ct, Glenmore Park	RES	1	47	51	53	47	52	53	49	52	47	47	48	50	52	50

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 1_NCA09.RES.0213.01	8 Karingal Ct, Glenmore Park	RES	1	49	54	55	47	54	55	51	54	47	47	50	50	54	50
GF	NCA 1_NCA09.RES.0214.01	9 Karingal Ct, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
F1	NCA 1_NCA09.RES.0214.01	9 Karingal Ct, Glenmore Park	RES	1	47	52	55	47	54	55	51	54	47	47	50	50	54	50
GF	NCA 1_NCA09.RES.0215.01	18 Bangalla Pde, Glenmore Park	RES	1	43	48	50	37	49	50	46	49	37	37	45	40	49	40
F1	NCA 1_NCA09.RES.0215.01	18 Bangalla Pde, Glenmore Park	RES	1	45	50	52	41	51	52	48	51	41	41	47	44	51	44
GF	NCA 1_NCA09.RES.0216.01	16 Bangalla Pde, Glenmore Park	RES	1	40	45	47	37	46	47	43	46	37	37	42	40	46	40
F1	NCA 1_NCA09.RES.0216.01	16 Bangalla Pde, Glenmore Park	RES	1	42	47	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 1_NCA09.RES.0217.01	14 Bangalla Pde, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA09.RES.0217.01	14 Bangalla Pde, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA09.RES.0218.01	12 Bangalla Pde, Glenmore Park	RES	1	40	45	47	34	46	47	43	46	34	34	42	37	46	37
F1	NCA 1_NCA09.RES.0218.01	12 Bangalla Pde, Glenmore Park	RES	1	41	46	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA09.RES.0219.01	9 Bangalla Pde, Glenmore Park	RES	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
F1	NCA 1_NCA09.RES.0219.01	9 Bangalla Pde, Glenmore Park	RES	1	44	49	51	39	50	51	47	50	39	39	46	42	50	42
GF	NCA 1_NCA09.RES.0220.01	3 Bangalla Pde, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
F1	NCA 1_NCA09.RES.0220.01	3 Bangalla Pde, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA09.RES.0221.01	10 Bangalla Pde, Glenmore Park	RES	1	40	45	47	37	46	47	43	46	37	37	42	40	46	40
F1	NCA 1_NCA09.RES.0221.01	10 Bangalla Pde, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
GF	NCA 1_NCA09.RES.0222.01	8 Bangalla Pde, Glenmore Park	RES	1	41	46	49	36	48	49	45	48	36	36	44	39	48	39
F1	NCA 1_NCA09.RES.0222.01	8 Bangalla Pde, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA09.RES.0223.01	6 Bangalla Pde, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA09.RES.0223.01	6 Bangalla Pde, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA09.RES.0224.01	4 Bangalla Pde, Glenmore Park	RES	1	38	43	46	35	45	46	42	45	35	35	41	38	45	38
F1	NCA 1_NCA09.RES.0224.01	4 Bangalla Pde, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA09.RES.0225.01	5 Bangalla Pde, Glenmore Park	RES	1	40	45	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA09.RES.0226.01	1 Bangalla Pde, Glenmore Park	RES	1	41	46	47	37	46	47	43	46	37	37	42	40	46	40
GF	NCA 1_NCA09.RES.0227.01	106 Glengarry Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
F1	NCA 1_NCA09.RES.0227.01	106 Glengarry Dr, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA09.RES.0228.01	102 Glengarry Dr, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
F1	NCA 1_NCA09.RES.0228.01	102 Glengarry Dr, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA09.RES.0229.01	100 Glengarry Dr, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA09.RES.0229.01	100 Glengarry Dr, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA09.RES.0230.01	98 Glengarry Dr, Glenmore Park	RES	1	40	44	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA09.RES.0231.01	104 Glengarry Dr, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA09.RES.0232.01	1 Warrawong St, Glenmore Park	RES	1	38	43	45	38	44	45	41	44	38	38	40	41	44	41
F1	NCA 1_NCA09.RES.0232.01	1 Warrawong St, Glenmore Park	RES	1	41	46	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA09.RES.0233.01	94 Glengarry Dr, Glenmore Park	RES	1	40	45	47	32	46	47	43	46	32	32	42	35	46	35
GF	NCA 1_NCA09.RES.0234.01	96 Glengarry Dr, Glenmore Park	RES	1	41	46	47	37	46	47	43	46	37	37	42	40	46	40
GF	NCA 1_NCA09.RES.0235.01	29 Bangalla Pde, Glenmore Park	RES	1	48	53	55	44	54	55	51	54	44	44	50	47	54	47
GF	NCA 1_NCA09.RES.0236.01	10 Karingal Ct, Glenmore Park	RES	1	45	50	52	39	51	52	48	51	39	39	47	42	51	42

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0237.01	76 Glengarry Dr, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
GF	NCA 1_NCA09.RES.0238.01	82 Glengarry Dr, Glenmore Park	RES	1	34	39	42	34	41	42	38	41	34	34	37	37	41	37
GF	NCA 1_NCA09.RES.0239.01	86 Glengarry Dr, Glenmore Park	RES	1	39	43	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA09.RES.0240.01	90 Glengarry Dr, Glenmore Park	RES	1	41	42	44	41	43	44	41	43	41	41	41	44	44	44
F1	NCA 1_NCA09.RES.0240.01	90 Glengarry Dr, Glenmore Park	RES	1	42	44	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA09.RES.0241.01	88 Glengarry Dr, Glenmore Park	RES	1	39	42	44	39	43	44	40	43	39	39	39	42	43	42
F1	NCA 1_NCA09.RES.0241.01	88 Glengarry Dr, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA09.RES.0242.01	84 Glengarry Dr, Glenmore Park	RES	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
F1	NCA 1_NCA09.RES.0242.01	84 Glengarry Dr, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0243.01	80 Glengarry Dr, Glenmore Park	RES	1	39	40	43	39	42	43	39	42	39	39	39	42	42	42
F1	NCA 1_NCA09.RES.0243.01	80 Glengarry Dr, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA09.RES.0244.01	78 Glengarry Dr, Glenmore Park	RES	1	39	41	44	39	43	44	40	43	39	39	39	42	43	42
F1	NCA 1_NCA09.RES.0244.01	78 Glengarry Dr, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA09.RES.0245.01	74 Glengarry Dr, Glenmore Park	RES	1	38	42	45	38	44	45	41	44	38	38	40	41	44	41
F1	NCA 1_NCA09.RES.0245.01	74 Glengarry Dr, Glenmore Park	RES	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	NCA 1_NCA09.RES.0246.01	72 Glengarry Dr, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41
F1	NCA 1_NCA09.RES.0246.01	72 Glengarry Dr, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA09.RES.0247.01	70 Glengarry Dr, Glenmore Park	RES	1	40	44	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA09.RES.0247.01	70 Glengarry Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0248.01	68 Glengarry Dr, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
F1	NCA 1_NCA09.RES.0248.01	68 Glengarry Dr, Glenmore Park	RES	1	39	44	47	38	46	47	43	46	38	38	42	41	46	41
GF	NCA 1_NCA09.RES.0249.01	65 Glengarry Dr, Glenmore Park	RES	1	41	44	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA09.RES.0250.01	63 Glengarry Dr, Glenmore Park	RES	1	40	43	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA09.RES.0251.01	61 Glengarry Dr, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA09.RES.0252.01	59 Glengarry Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0253.01	66 Glengarry Dr, Glenmore Park	RES	1	38	43	45	34	44	45	41	44	34	34	40	37	44	37
GF	NCA 1_NCA09.RES.0254.01	64 Glengarry Dr, Glenmore Park	RES	1	42	45	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 1_NCA09.RES.0255.01	60 Glengarry Dr, Glenmore Park	RES	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
F1	NCA 1_NCA09.RES.0255.01	60 Glengarry Dr, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA09.RES.0256.01	62 Glengarry Dr, Glenmore Park	RES	1	39	44	47	38	46	47	43	46	38	38	42	41	46	41
F1	NCA 1_NCA09.RES.0256.01	62 Glengarry Dr, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA09.RES.0257.01	57 Glengarry Dr, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
F1	NCA 1_NCA09.RES.0257.01	57 Glengarry Dr, Glenmore Park	RES	1	45	50	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA09.RES.0258.01	55 Glengarry Dr, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
F1	NCA 1_NCA09.RES.0258.01	55 Glengarry Dr, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA09.RES.0259.01	53 Glengarry Dr, Glenmore Park	RES	1	41	45	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 1_NCA09.RES.0259.01	53 Glengarry Dr, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA09.RES.0260.01	49 Glengarry Dr, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
F1	NCA 1_NCA09.RES.0260.01	49 Glengarry Dr, Glenmore Park	RES	1	45	50	52	43	51	52	48	51	43	43	47	46	51	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0261.01	47 Glengarry Dr, Glenmore Park	RES	1	40	45	47	39	46	47	43	46	39	39	42	42	46	42
F1	NCA 1_NCA09.RES.0261.01	47 Glengarry Dr, Glenmore Park	RES	1	42	47	49	40	48	49	45	48	40	40	44	43	48	43
GF	NCA 1_NCA09.RES.0262.01	1 Saddler Way, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
F1	NCA 1_NCA09.RES.0262.01	1 Saddler Way, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA09.RES.0263.01	44 Glengarry Dr, Glenmore Park	RES	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
F1	NCA 1_NCA09.RES.0263.01	44 Glengarry Dr, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA09.RES.0264.01	45 Glengarry Dr, Glenmore Park	RES	1	39	44	46	38	45	46	42	45	38	38	41	41	45	41
GF	NCA 1_NCA09.RES.0265.01	51 Glengarry Dr, Glenmore Park	RES	1	40	45	48	38	47	48	44	47	38	38	43	41	47	41
GF	NCA 1_NCA09.RES.0266.01	15 Bangaroo Ave, Glenmore Park	RES	1	38	42	45	38	44	45	41	44	38	38	40	41	44	41
GF	NCA 1_NCA09.RES.0267.01	13 Bangaroo Ave, Glenmore Park	RES	1	38	43	45	37	44	45	41	44	37	37	40	40	44	40
GF	NCA 1_NCA09.RES.0268.01	7 Kyarra Tce, Glenmore Park	RES	1	40	45	48	36	47	48	44	47	36	36	43	39	47	39
F1	NCA 1_NCA09.RES.0268.01	7 Kyarra Tce, Glenmore Park	RES	1	45	50	52	42	51	52	48	51	42	42	47	45	51	45
GF	NCA 1_NCA09.RES.0269.01	2 Windorra Ave, Glenmore Park	RES	1	42	47	49	36	48	49	45	48	36	36	44	39	48	39
F1	NCA 1_NCA09.RES.0269.01	2 Windorra Ave, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA09.RES.0270.01	4 Windorra Ave, Glenmore Park	RES	1	46	47	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 1_NCA09.RES.0271.01	6 Windorra Ave, Glenmore Park	RES	1	41	46	48	36	47	48	44	47	36	36	43	39	47	39
F1	NCA 1_NCA09.RES.0271.01	6 Windorra Ave, Glenmore Park	RES	1	45	50	52	41	51	52	48	51	41	41	47	44	51	44
GF	NCA 1_NCA09.RES.0272.01	8 Windorra Ave, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
F1	NCA 1_NCA09.RES.0272.01	8 Windorra Ave, Glenmore Park	RES	1	47	50	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0273.01	10 Windorra Ave, Glenmore Park	RES	1	45	50	52	43	51	52	48	51	43	43	47	46	51	46
F1	NCA 1_NCA09.RES.0273.01	10 Windorra Ave, Glenmore Park	RES	1	46	51	54	45	53	54	50	53	45	45	49	48	53	48
GF	NCA 1_NCA09.RES.0274.01	1 Windorra Ave, Glenmore Park	RES	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
F1	NCA 1_NCA09.RES.0274.01	1 Windorra Ave, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA09.RES.0275.01	3 Windorra Ave, Glenmore Park	RES	1	45	47	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA09.RES.0275.01	3 Windorra Ave, Glenmore Park	RES	1	47	51	53	46	52	53	49	52	46	46	48	49	52	49
GF	NCA 1_NCA09.RES.0276.01	5 Windorra Ave, Glenmore Park	RES	1	43	48	50	38	49	50	46	49	38	38	45	41	49	41
F1	NCA 1_NCA09.RES.0276.01	5 Windorra Ave, Glenmore Park	RES	1	44	49	51	42	50	51	47	50	42	42	46	45	50	45
GF	NCA 1_NCA09.RES.0277.01	7 Windorra Ave, Glenmore Park	RES	1	44	45	48	44	47	48	44	47	44	44	44	47	47	47
GF	NCA 1_NCA09.RES.0278.01	9 Windorra Ave, Glenmore Park	RES	1	43	48	51	39	50	51	47	50	39	39	46	42	50	42
GF	NCA 1_NCA09.RES.0279.01	11 Windorra Ave, Glenmore Park	RES	1	40	45	47	40	46	47	43	46	40	40	42	43	46	43
F1	NCA 1_NCA09.RES.0279.01	11 Windorra Ave, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0280.01	13 Windorra Ave, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
F1	NCA 1_NCA09.RES.0280.01	13 Windorra Ave, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0281.01	22 Windorra Ave, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
F1	NCA 1_NCA09.RES.0281.01	22 Windorra Ave, Glenmore Park	RES	1	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 1_NCA09.RES.0282.01	24 Windorra Ave, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
F1	NCA 1_NCA09.RES.0282.01	24 Windorra Ave, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0283.01	26 Windorra Ave, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA09.RES.0284.01	28 Windorra Ave, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0285.01	30 Windorra Ave, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA09.RES.0286.01	32 Windorra Ave, Glenmore Park	RES	1	45	50	52	43	51	52	48	51	43	43	47	46	51	46
GF	NCA 1_NCA09.RES.0287.01	17 Roseville Tce, Glenmore Park	RES	1	44	49	51	35	50	51	47	50	35	35	46	38	50	38
F1	NCA 1_NCA09.RES.0287.01	17 Roseville Tce, Glenmore Park	RES	1	45	50	52	43	51	52	48	51	43	43	47	46	51	46
GF	NCA 1_NCA09.RES.0288.01	15 Roseville Tce, Glenmore Park	RES	1	42	47	49	36	48	49	45	48	36	36	44	39	48	39
F1	NCA 1_NCA09.RES.0288.01	15 Roseville Tce, Glenmore Park	RES	1	44	49	51	42	50	51	47	50	42	42	46	45	50	45
GF	NCA 1_NCA09.RES.0289.01	13 Roseville Tce, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
F1	NCA 1_NCA09.RES.0289.01	13 Roseville Tce, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 1_NCA09.RES.0290.01	11 Roseville Tce, Glenmore Park	RES	1	43	47	50	40	49	50	46	49	40	40	45	43	49	43
F1	NCA 1_NCA09.RES.0290.01	11 Roseville Tce, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA09.RES.0291.01	9 Roseville Tce, Glenmore Park	RES	1	44	46	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA09.RES.0291.01	9 Roseville Tce, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA09.RES.0292.01	7 Roseville Tce, Glenmore Park	RES	1	44	48	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA09.RES.0292.01	7 Roseville Tce, Glenmore Park	RES	1	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 1_NCA09.RES.0293.01	3 Roseville Tce, Glenmore Park	RES	1	43	47	49	40	48	49	45	48	40	40	44	43	48	43
F1	NCA 1_NCA09.RES.0293.01	3 Roseville Tce, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA09.RES.0294.01	5 Roseville Tce, Glenmore Park	RES	1	44	49	51	42	50	51	47	50	42	42	46	45	50	45
GF	NCA 1_NCA09.RES.0295.01	4 Roseville Tce, Glenmore Park	RES	1	41	46	49	38	48	49	45	48	38	38	44	41	48	41
F1	NCA 1_NCA09.RES.0295.01	4 Roseville Tce, Glenmore Park	RES	1	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA09.RES.0296.01	6 Roseville Tce, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0297.01	2 Isca Pl, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
F1	NCA 1_NCA09.RES.0297.01	2 Isca Pl, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA09.RES.0298.01	8 Roseville Tce, Glenmore Park	RES	1	45	47	50	45	49	50	46	49	45	45	45	48	49	48
F1	NCA 1_NCA09.RES.0298.01	8 Roseville Tce, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	NCA 1_NCA09.RES.0299.01	2 Westerly Way, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0300.01	39 Glengarry Dr, Glenmore Park	RES	1	42	47	49	39	48	49	45	48	39	39	44	42	48	42
GF	NCA 1_NCA09.RES.0301.01	41 Glengarry Dr, Glenmore Park	RES	1	40	45	48	37	47	48	44	47	37	37	43	40	47	40
GF	NCA 1_NCA09.RES.0302.01	43 Glengarry Dr, Glenmore Park	RES	1	40	45	48	37	47	48	44	47	37	37	43	40	47	40
GF	NCA 1_NCA09.RES.0303.01	3 Isca Pl, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
F1	NCA 1_NCA09.RES.0303.01	3 Isca Pl, Glenmore Park	RES	1	46	50	53	46	52	53	49	52	46	46	48	49	52	49
GF	NCA 1_NCA09.RES.0304.01	4 Isca Pl, Glenmore Park	RES	1	44	49	51	39	50	51	47	50	39	39	46	42	50	42
GF	NCA 1_NCA09.RES.0305.01	15 Windorra Ave Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
F1	NCA 1_NCA09.RES.0305.01	15 Windorra Ave Glenmore Park	RES	1	46	49	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA09.RES.0306.01	17 Windorra Ave, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
F1	NCA 1_NCA09.RES.0306.01	17 Windorra Ave, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0307.01	19 Windorra Ave, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA09.RES.0311.01	8 Glengarry Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0312.01	10 Glengarry Dr, Glenmore Park	RES	1	45	48	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0313.01	12 Glengarry Dr, Glenmore Park	RES	1	45	48	51	45	50	51	47	50	45	45	46	48	50	48

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0314.01	14 Glengarry Dr, Glenmore Park	RES	1	44	49	51	42	50	51	47	50	42	42	46	45	50	45
F1	NCA 1_NCA09.RES.0314.01	14 Glengarry Dr, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA09.RES.0315.01	16 Glengarry Dr, Glenmore Park	RES	1	42	43	47	42	46	47	43	46	42	42	42	45	46	45
F1	NCA 1_NCA09.RES.0315.01	16 Glengarry Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0316.01	18 Glengarry Dr, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0317.01	20 Glengarry Dr, Glenmore Park	RES	1	43	47	50	43	49	50	46	49	43	43	45	46	49	46
F1	NCA 1_NCA09.RES.0317.01	20 Glengarry Dr, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0318.01	22 Glengarry Dr, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
F1	NCA 1_NCA09.RES.0318.01	22 Glengarry Dr, Glenmore Park	RES	1	45	49	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA09.RES.0319.01	24 Glengarry Dr, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA09.RES.0320.01	26 Glengarry Dr, Glenmore Park	RES	1	44	49	51	41	50	51	47	50	41	41	46	44	50	44
F1	NCA 1_NCA09.RES.0320.01	26 Glengarry Dr, Glenmore Park	RES	1	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA09.RES.0321.01	20 Roseville Tce, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
F1	NCA 1_NCA09.RES.0321.01	20 Roseville Tce, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0322.01	18 Roseville Tce, Glenmore Park	RES	1	43	46	49	40	48	49	45	48	40	40	44	43	48	43
F1	NCA 1_NCA09.RES.0322.01	18 Roseville Tce, Glenmore Park	RES	1	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 1_NCA09.RES.0323.01	16 Roseville Tce, Glenmore Park	RES	1	44	46	49	41	48	49	45	48	41	41	44	44	48	44
GF	NCA 1_NCA09.RES.0324.01	14 Roseville Tce, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 1_NCA09.RES.0325.01	12 Roseville Tce, Glenmore Park	RES	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
F1	NCA 1_NCA09.RES.0325.01	12 Roseville Tce, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 1_NCA09.RES.0326.01	10 Roseville Tce, Glenmore Park	RES	1	44	49	51	41	50	51	47	50	41	41	46	44	50	44
GF	NCA 1_NCA09.RES.0327.01	8 Isca Pl, Glenmore Park	RES	1	44	47	50	44	49	50	46	49	44	44	45	47	49	47
F1	NCA 1_NCA09.RES.0327.01	8 Isca Pl, Glenmore Park	RES	1	46	49	51	46	50	51	47	50	46	46	46	49	50	49
GF	NCA 1_NCA09.RES.0328.01	7 Isca Pl, Glenmore Park	RES	1	45	50	52	44	51	52	48	51	44	44	47	47	51	47
F1	NCA 1_NCA09.RES.0328.01	7 Isca Pl, Glenmore Park	RES	1	46	50	53	46	52	53	49	52	46	46	48	49	52	49
GF	NCA 1_NCA09.RES.0329.01	6 Isca Pl, Glenmore Park	RES	1	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 1_NCA09.RES.0330.01	7 Isca Pl_1, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
F1	NCA 1_NCA09.RES.0330.01	7 Isca Pl_1, Glenmore Park	RES	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	NCA 1_NCA09.RES.0331.01	27 Windorra Ave, Glenmore Park	RES	1	45	49	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 1_NCA09.RES.0332.01	25 Windorra Ave, Glenmore Park	RES	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 1_NCA09.RES.0333.01	23 Windorra Ave, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA09.RES.0334.01	21 Windorra Ave, Glenmore Park	RES	1	44	49	51	43	50	51	47	50	43	43	46	46	50	46
F1	NCA 1_NCA09.RES.0334.01	21 Windorra Ave, Glenmore Park	RES	1	47	51	53	47	52	53	49	52	47	47	48	50	52	50
GF	NCA 1_NCA09.RES.0335.01	36 Windorra Ave, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
F1	NCA 1_NCA09.RES.0335.01	36 Windorra Ave, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA09.RES.0336.01	34 Windorra Ave, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA09.RES.0339.01	21 Glengarry Dr, Glenmore Park	RES	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
F1	NCA 1_NCA09.RES.0339.01	21 Glengarry Dr, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA09.RES.0340.01	23 Glengarry Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 1_NCA09.RES.0340.01	23 Glengarry Dr, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0341.01	25 Glengarry Dr, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA09.RES.0373.01	2 Brigadoon Ave, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
F1	NCA 1_NCA09.RES.0373.01	2 Brigadoon Ave, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0374.01	4 Brigadoon Ave, Glenmore Park	RES	1	43	48	50	35	49	50	46	49	35	35	45	38	49	38
GF	NCA 1_NCA09.RES.0398.01	10 Ormonde Cl, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
GF	NCA 1_NCA09.RES.0399.01	11 Ormonde Cl, Glenmore Park	RES	1	41	46	49	39	48	49	45	48	39	39	44	42	48	42
GF	NCA 1_NCA09.RES.0400.01	12 Ormonde Cl, Glenmore Park	RES	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
GF	NCA 1_NCA09.RES.0407.01	4 Westerly Way, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0408.01	6 Westerly Way, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA09.RES.0409.01	8 Westerly Way, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
GF	NCA 1_NCA09.RES.0410.01	10 Westerly Way, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA09.RES.0411.01	2 Torquay Tce, Glenmore Park	RES	1	37	42	44	37	43	44	40	43	37	37	39	40	43	40
F1	NCA 1_NCA09.RES.0411.01	2 Torquay Tce, Glenmore Park	RES	1	40	44	47	40	46	47	43	46	40	40	42	43	46	43
GF	NCA 1_NCA09.RES.0412.01	4 Torquay Tce, Glenmore Park	RES	1	39	44	47	38	46	47	43	46	38	38	42	41	46	41
F1	NCA 1_NCA09.RES.0412.01	4 Torquay Tce, Glenmore Park	RES	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 1_NCA09.RES.0413.01	6 Torquay Tce, Glenmore Park	RES	1	37	42	44	37	43	44	40	43	37	37	39	40	43	40
GF	NCA 1_NCA09.RES.0414.01	8 Torquay Tce, Glenmore Park	RES	1	38	43	46	36	45	46	42	45	36	36	41	39	45	39
F1	NCA 1_NCA09.RES.0414.01	8 Torquay Tce, Glenmore Park	RES	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 1_NCA09.RES.0415.01	10 Torquay Tce, Glenmore Park	RES	1	39	44	46	37	45	46	42	45	37	37	41	40	45	40
GF	NCA 1_NCA09.RES.0416.01	12 Torquay Tce, Glenmore Park	RES	1	39	44	47	38	46	47	43	46	38	38	42	41	46	41
F1	NCA 1_NCA09.RES.0416.01	12 Torquay Tce, Glenmore Park	RES	1	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 1_NCA09.RES.0417.01	14 Torquay Tce, Glenmore Park	RES	1	41	44	46	41	45	46	42	45	41	41	41	44	45	44
F1	NCA 1_NCA09.RES.0417.01	14 Torquay Tce, Glenmore Park	RES	1	44	48	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 1_NCA09.RES.0418.01	16 Torquay Tce, Glenmore Park	RES	1	39	44	46	37	45	46	42	45	37	37	41	40	45	40
GF	NCA 1_NCA09.RES.0419.01	18 Torquay Tce, Glenmore Park	RES	1	38	43	45	37	44	45	41	44	37	37	40	40	44	40
GF	NCA 1_NCA09.RES.0420.01	20 Torquay Tce, Glenmore Park	RES	1	35	40	42	35	41	42	38	41	35	35	37	38	41	38
GF	NCA 1_NCA09.RES.0421.01	22 Torquay Tce, Glenmore Park	RES	1	38	41	44	38	43	44	40	43	38	38	39	41	43	41
F1	NCA 1_NCA09.RES.0421.01	22 Torquay Tce, Glenmore Park	RES	1	39	43	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA09.RES.0422.01	24 Torquay Tce, Glenmore Park	RES	1	39	42	44	39	43	44	40	43	39	39	39	42	43	42
GF	NCA 1_NCA09.RES.0423.01	26 Torquay Tce, Glenmore Park	RES	1	40	45	47	38	46	47	43	46	38	38	42	41	46	41
GF	NCA 1_NCA09.RES.0424.01	28 Torquay Tce, Glenmore Park	RES	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
F1	NCA 1_NCA09.RES.0424.01	28 Torquay Tce, Glenmore Park	RES	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	NCA 1_NCA09.RES.0425.01	30 Torquay Tce, Glenmore Park	RES	1	44	49	51	41	50	51	47	50	41	41	46	44	50	44
F1	NCA 1_NCA09.RES.0425.01	30 Torquay Tce, Glenmore Park	RES	1	45	50	53	43	52	53	49	52	43	43	48	46	52	46
GF	NCA 1_NCA09.RES.0426.01	32 Torquay Tce, Glenmore Park	RES	1	37	42	44	36	43	44	40	43	36	36	39	39	43	39
GF	NCA 1_NCA09.RES.0427.01	34 Torquay Tce, Glenmore Park	RES	1	37	41	43	37	42	43	39	42	37	37	38	40	42	40
F1	NCA 1_NCA09.RES.0427.01	34 Torquay Tce, Glenmore Park	RES	1	42	45	47	42	46	47	43	46	42	42	42	45	46	45
GF	NCA 1_NCA09.RES.0428.01	17 Torquay Tce, Glenmore Park	RES	1	38	42	44	38	43	44	40	43	38	38	39	41	43	41

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA09.RES.0429.01	15 Torquay Tce, Glenmore Park	RES	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	NCA 1_NCA09.RES.0430.01	13 Torquay Tce, Glenmore Park	RES	1	37	41	44	37	43	44	40	43	37	37	39	40	43	40
GF	NCA 1_NCA09.RES.0431.01	11 Torquay Tce, Glenmore Park	RES	1	38	43	45	37	44	45	41	44	37	37	40	40	44	40
GF	NCA 1_NCA09.RES.0432.01	9 Torquay Tce, Glenmore Park	RES	1	38	43	45	35	44	45	41	44	35	35	40	38	44	38
F1	NCA 1_NCA09.RES.0432.01	9 Torquay Tce, Glenmore Park	RES	1	39	44	48	38	47	48	44	47	38	38	43	41	47	41
GF	NCA 1_NCA09.RES.0433.01	7 Torquay Tce, Glenmore Park	RES	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	NCA 1_NCA09.RES.0434.01	27 Torquay Tce, Glenmore Park	RES	1	39	44	46	35	45	46	42	45	35	35	41	38	45	38
GF	NCA 1_NCA09.RES.0435.01	25 Torquay Tce, Glenmore Park	RES	1	38	43	45	36	44	45	41	44	36	36	40	39	44	39
GF	NCA 1_NCA09.RES.0436.01	23 Torquay Tce, Glenmore Park	RES	1	40	45	47	36	46	47	43	46	36	36	42	39	46	39
F1	NCA 1_NCA09.RES.0436.01	23 Torquay Tce, Glenmore Park	RES	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	NCA 1_NCA09.RES.0437.01	21 Torquay Tce, Glenmore Park	RES	1	40	45	47	37	46	47	43	46	37	37	42	40	46	40
GF	NCA 1_NCA09.RES.0438.01	19 Torquay Tce, Glenmore Park	RES	1	39	44	46	37	45	46	42	45	37	37	41	40	45	40
GF	NCA 1_NCA10.GAR.0001.01	2035-2037 The Northern Road_2, Glenmore	GAR	1	55	60	62	53	61	62	58	61	53	53	57	56	61	56
GF	NCA 1_NCA10.GAR.0002.01	2029-2031 The Northern Road_2, Glenmore	GAR	1	54	59	61	53	60	61	57	60	53	53	56	56	60	56
GF	NCA 1_NCA10.GAR.0003.01	2059 The Northern Road_2, Glenmore Park	GAR	1	56	61	63	53	62	63	59	62	53	53	58	56	62	56
GF	NCA 1_NCA10.GAR.0004.01	2051-2053 The Northern Road, Glenmore Pa	GAR	1	55	60	62	53	61	62	58	61	53	53	57	56	61	56
GF	NCA 1_NCA10.RES.0001.01	343 Bradley St, Glenmore Park	RES	1	77	82	84	44	83	84	80	83	44	44	79	47	83	47
GF	NCA 1_NCA10.RES.0002.01	2051-2053 The Northern Road, Glenmore Pa	RES	1	58	63	65	58	64	65	61	64	58	58	60	61	64	61
GF	NCA 1_NCA10.RES.0003.01	2059 The Northern Road_1, Glenmore Park	RES	1	61	62	65	61	64	65	61	64	61	61	61	64	64	64
GF	NCA 1_NCA10.RES.0004.01	2021 The Northern Road_2, Glenmore Park	RES	1	59	64	66	55	65	66	62	65	55	55	61	58	65	58
GF	NCA 1_NCA10.RES.0005.01	2029-2031 The Northern Road_1, Glenmore	RES	1	57	62	64	54	63	64	60	63	54	54	59	57	63	57
GF	NCA 1_NCA10.RES.0006.01	2035-2037 The Northern Road_1, Glenmore	RES	1	56	61	63	53	62	63	59	62	53	53	58	56	62	56
GF	NCA 1_NCA10.RES.0007.01	2021 The Northern Road_1, Glenmore Park	RES	1	54	59	61	53	60	61	57	60	53	53	56	56	60	56
GF	NCA 1_NCA11.GAR.0001.01	2023 The Northern Road_2, Glenmore Park	GAR	1	58	63	65	51	64	65	61	64	51	51	60	54	64	54
GF	NCA 1_NCA11.GAR.0002.01	2023 The Northern Road_3, Glenmore Park	GAR	1	64	69	71	58	70	71	67	70	58	58	66	61	70	61
GF	NCA 1_NCA11.RES.0001.01	2019 The Northern Road, Glenmore Park	RES	1	65	70	72	61	71	72	68	71	61	61	67	64	71	64
GF	NCA 1_NCA11.RES.0002.01	2023 The Northern Road_1, Glenmore Park	RES	1	65	70	72	58	71	72	68	71	58	58	67	61	71	61
GF	NCA 1_NCA11.RES.0003.01	2017 The Northern Road_1, Orchard Hills	RES	1	60	65	67	59	66	67	63	66	59	59	62	62	66	62
GF	NCA 1_NCA11.RES.0004.01	1 Bradley St, Glenmore Park	RES	1	66	71	73	47	72	73	69	72	47	47	68	50	72	50
GF	NCA 1_NCA12.GAR.0001.01	2014 The Northern Road_2, Orchard Hills	GAR	1	60	60	60	60	60	60	60	60	60	60	60	63	63	63
F1	NCA 1_NCA12.GAR.0001.01	2014 The Northern Road_2, Orchard Hills	GAR	1	61	61	61	60	60	61	60	60	60	60	60	63	63	63
GF	NCA 1_NCA12.GAR.0002.01	2032 The Northern Road_2, Orchard Hills	GAR	1	60	60	63	60	62	63	60	62	60	60	60	63	63	63
GF	NCA 1_NCA12.RES.0001.01	2032 The Northern Road_1, Orchard Park	RES	1	63	63	65	63	64	65	63	64	63	63	63	66	66	66
GF	NCA 1_NCA12.RES.0002.01	2014 The Northern Road_1, Orchard Hills	RES	1	62	62	61	61	61	61	61	61	61	61	61	64	64	64
GF	NCA 1_NCA12.RES.0003.01	384 Wentworth Rd, Orchard Hills	RES	1	58	58	60	58	59	60	58	59	58	58	58	61	61	61
F1	NCA 1_NCA12.RES.0003.01	384 Wentworth Rd, Orchard Hills	RES	1	58	58	60	58	59	60	58	59	58	58	58	61	61	61
GF	NCA 1_NCA13.GAR.0001.01	66 Carolyn Chase_2, Orchard Hills	GAR	1	58	58	59	58	58	59	58	58	58	58	58	61	61	61
GF	NCA 1_NCA13.GAR.0002.01	64 Carolyn Chase_2, Orchard Hills	GAR	1	54	55	57	54	56	57	54	56	54	54	54	57	57	57
GF	NCA 1_NCA13.GAR.0003.01	55 Carolyn Chase_2, Orchard Hills	GAR	1	51	53	55	51	54	55	51	54	51	51	51	54	54	54

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 1_NCA13.GAR.0004.01	49 Carolyn Chase_2, Orchard Hills	GAR	1	51	52	54	51	53	54	51	53	51	51	51	54	54	54
GF	NCA 1_NCA13.GAR.0005.01	49 Carolyn Chase_3, Orchard Hills	GAR	1	49	54	56	46	55	56	52	55	46	46	51	49	55	49
GF	NCA 1_NCA13.GAR.0006.01	49 Carolyn Chase_4, Orchard Hills	GAR	1	49	51	53	49	52	53	49	52	49	49	49	52	52	52
GF	NCA 1_NCA13.GAR.0007.01	12 Carolyn Chase_2, Orchard Hills	GAR	1	53	53	55	53	54	55	53	54	53	53	53	56	56	56
GF	NCA 1_NCA13.GAR.0008.01	44 Carolyn Chase_2, Orchard Hills	GAR	1	50	50	53	50	52	53	50	52	50	50	50	53	53	53
GF	NCA 1_NCA13.OED.0001.01	Penrith Anglican College_1	OED	1	42	44	46	42	45	46	42	45	42	42	42	45	45	45
F1	NCA 1_NCA13.OED.0001.01	Penrith Anglican College_1	OED	1	45	46	48	45	47	48	45	47	45	45	45	48	48	48
GF	NCA 1_NCA13.OED.0005.01	Penrith Anglican College_5	OED	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
F1	NCA 1_NCA13.OED.0005.01	Penrith Anglican College_5	OED	1	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 1_NCA13.OED.0006.01	Penrith Anglican College_6	OED	1	48	49	51	48	50	51	48	50	48	48	48	51	51	51
F1	NCA 1_NCA13.OED.0006.01	Penrith Anglican College_6	OED	1	48	49	51	48	50	51	48	50	48	48	48	51	51	51
GF	NCA 1_NCA13.OED.0007.01	Penrith Anglican College_7	OED	1	44	44	44	44	44	44	44	44	44	44	44	47	47	47
F1	NCA 1_NCA13.OED.0007.01	Penrith Anglican College_7	OED	1	47	47	47	47	47	47	47	47	47	47	47	50	50	50
GF	NCA 1_NCA13.RES.0001.01	70 Carolyn Chase Orchard Hills	RES	1	57	57	58	57	57	58	57	57	57	57	57	60	60	60
GF	NCA 1_NCA13.RES.0002.01	66 Carolyn Chase_1, Orchard Hills	RES	1	58	58	59	58	58	59	58	58	58	58	58	61	61	61
GF	NCA 1_NCA13.RES.0003.01	64 Carolyn Chase_1, Orchard Hills	RES	1	55	55	57	55	56	57	55	56	55	55	55	58	58	58
GF	NCA 1_NCA13.RES.0004.01	55 Carolyn Chase_1, Orchard Hills	RES	1	53	53	55	53	54	55	53	54	53	53	53	56	56	56
GF	NCA 1_NCA13.RES.0005.01	12 Carolyn Chase_1, Orchard Hills	RES	1	54	54	56	54	55	56	54	55	54	54	54	57	57	57
GF	NCA 1_NCA13.RES.0006.01	374 Wentworth Road Orhcard Hills	RES	1	53	53	56	53	55	56	53	55	53	53	53	56	56	56
GF	NCA 1_NCA13.RES.0007.01	366 Wentworth Road Orhcard Hills	RES	1	51	51	53	51	52	53	51	52	51	51	51	54	54	54
GF	NCA 1_NCA13.RES.0008.01	358 Wentworth Road Orhcard Hills	RES	1	49	49	52	49	51	52	49	51	49	49	49	52	52	52
GF	NCA 1_NCA13.RES.0009.01	30 Carolyn Chase Orchard Hills	RES	1	47	52	54	46	53	54	50	53	46	46	49	49	53	49
GF	NCA 1_NCA13.RES.0010.01	42 Carolyn Chase Orchard Hills	RES	1	49	50	52	49	51	52	49	51	49	49	49	52	52	52
GF	NCA 1_NCA13.RES.0011.01	44 Carolyn Chase_1, Orchard Hills	RES	1	50	50	53	50	52	53	50	52	50	50	50	53	53	53
GF	NCA 1_NCA13.RES.0012.01	49 Carolyn Chase_1, Orchard Hills	RES	1	50	52	54	50	53	54	50	53	50	50	50	53	53	53
GF	NCA 1_NCA14.IND.0001.01	Water Filtration Plant_2	IND	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
F1	NCA 1_NCA14.IND.0001.01	Water Filtration Plant_2	IND	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	NCA 2_NCA15.GAR.0001.01	87 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	41	46	48	37	47	48	44	47	37	37	43	40	47	40
GF	NCA 2_NCA15.GAR.0004.01	92 Kings Hill Rd_2, Mulgoa	GAR	2	44	49	52	40	51	52	48	51	40	40	47	43	51	43
GF	NCA 2_NCA15.RES.0002.01	101 Chain-O-Ponds Rd, Mulgoa	RES	2	40	45	47	36	46	47	43	46	36	36	42	39	46	39
GF	NCA 2_NCA15.RES.0003.01	100 Chain-O-Ponds Rd, Mulgoa	RES	2	40	45	47	36	46	47	43	46	36	36	42	39	46	39
GF	NCA 2_NCA15.RES.0009.01	97A Kings Hill Rd, Mulgoa	RES	2	46	51	53	41	52	53	49	52	41	41	48	44	52	44
GF	NCA 2_NCA15.RES.0010.01	92 Kings Hill Rd_1, Mulgoa	RES	2	45	50	52	40	51	52	48	51	40	40	47	43	51	43
GF	NCA 2_NCA16.GAR.0001.01	20-32 Littlefields Rd_2, Luddenham	GAR	2	50	55	57	50	56	57	53	56	50	50	52	53	56	53
GF	NCA 3_NCA16.GAR.0002.01	2859 The Northern Road_3 Luddenham	GAR	3	50	55	57	49	56	57	53	56	49	49	52	52	56	52
GF	NCA 3_NCA16.GAR.0003.01	2859 The Northern Road_4, Luddenham	GAR	3	49	54	56	49	55	56	52	55	49	49	51	52	55	52
GF	NCA 2_NCA16.GAR.0004.01	2825-2841 The Northern Road_1, Luddenham	GAR	2	48	50	52	48	51	52	48	51	48	48	48	51	51	51
GF	NCA 2_NCA16.RES.0005.01	35-41 Littlefields Rd_2, Luddenham	RES	2	58	63	65	45	64	65	61	64	45	45	60	48	64	48
GF	NCA 2_NCA16.GAR.0006.01	43-49 Littlefields Rd_3, Luddenham	GAR	2	50	55	57	44	56	57	53	56	44	44	52	47	56	47

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 2_NCA16.GAR.0007.01	51-57 Littlefields Rd_4, Mulgoa	GAR	2	49	54	56	43	55	56	52	55	43	43	51	46	55	46
GF	NCA 2_NCA16.GAR.0008.01	51-57 Littlefields Rd_2, Mulgoa	GAR	2	49	54	56	43	55	56	52	55	43	43	51	46	55	46
GF	NCA 2_NCA16.GAR.0057.01	51-57 Littlefields Rd_3, Mulgoa	GAR	2	48	53	55	43	54	55	51	54	43	43	50	46	54	46
GF	NCA 2_NCA16.GAR.0010.01	73-79 Littlefields Rd_2, Mulgoa	GAR	2	49	54	56	43	55	56	52	55	43	43	51	46	55	46
F1	NCA 2_NCA16.GAR.0010.01	73-79 Littlefields Rd_2, Mulgoa	GAR	2	49	54	56	43	55	56	52	55	43	43	51	46	55	46
GF	NCA 2_NCA16.GAR.0011.01	43-49 Littlefields Rd_1, Luddenham	GAR	2	53	58	60	44	59	60	56	59	44	44	55	47	59	47
GF	NCA 2_NCA16.GAR.0012.01	35-41 Littlefields Rd_1, Luddenham	GAR	2	54	59	61	44	60	61	57	60	44	44	56	47	60	47
GF	NCA 2_NCA16.GAR.0013.01	35-41 Littlefields Rd_4, Luddenham	GAR	2	53	58	60	44	59	60	56	59	44	44	55	47	59	47
GF	NCA 2_NCA16.GAR.0014.01	89-101 Littlefields Rd_2, Mulgoa	GAR	2	46	51	53	43	52	53	49	52	43	43	48	46	52	46
GF	NCA 2_NCA16.GAR.0015.01	89-101 Littlefields Rd_3, Mulgoa	GAR	2	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 2_NCA16.GAR.0016.01	106-116 Vineyard Rd_2, Mulgoa	GAR	2	48	53	55	43	54	55	51	54	43	43	50	46	54	46
GF	NCA 2_NCA16.GAR.0017.01	96-104 Vineyard Rd_2, Mulgoa	GAR	2	52	57	59	47	58	59	55	58	47	47	54	50	58	50
GF	NCA 2_NCA16.GAR.0018.01	86-94 Vineyard Rd_2, Mulgoa	GAR	2	54	59	61	53	60	61	57	60	53	53	56	56	60	56
GF	NCA 2_NCA16.GAR.0019.01	66-74 Vineyard Rd_4, Mulgoa	GAR	2	49	54	56	49	55	56	52	55	49	49	51	52	55	52
GF	NCA 2_NCA16.GAR.0020.01	66-74 Vineyard Rd_3, Mulgoa	GAR	2	50	55	57	50	56	57	53	56	50	50	52	53	56	53
GF	NCA 2_NCA16.GAR.0021.01	66-74 Vineyard Rd_2, Mulgoa	GAR	2	52	56	57	52	56	57	53	56	52	52	52	55	56	55
GF	NCA 2_NCA16.GAR.0022.01	1 Longview Rd_2, Mulgoa	GAR	2	63	68	70	53	69	70	66	69	53	53	65	56	69	56
GF	NCA 2_NCA16.GAR.0023.01	1 Longview Rd_3, Mulgoa	GAR	2	62	67	69	53	68	69	65	68	53	53	64	56	68	56
GF	NCA 2_NCA16.GAR.0024.01	23-33 Longview Rd_2, Mulgoa	GAR	2	66	71	74	52	73	74	70	73	52	52	69	55	73	55
GF	NCA 2_NCA16.GAR.0025.01	20-32 Kings Hill Rd_2, Mulgoa	GAR	2	80	85	87	54	86	87	83	86	54	54	82	57	86	57
GF	NCA 2_NCA16.GAR.0026.01	2 Kings Hill Rd_2, Mulgoa	GAR	2	70	75	75	58	74	75	71	74	58	58	70	61	74	61
GF	NCA 2_NCA16.GAR.0027.01	1 Kings Hill Rd_2, Mulgoa	GAR	2	64	69	71	55	70	71	67	70	55	55	66	58	70	58
GF	NCA 2_NCA16.GAR.0028.01	33-41 Kings Hill Rd_2, Mulgoa	GAR	2	65	70	72	53	71	72	68	71	53	53	67	56	71	56
GF	NCA 2_NCA16.GAR.0029.01	4 Grover Cr_2, Mulgoa	GAR	2	55	60	62	50	61	62	58	61	50	50	57	53	61	53
GF	NCA 2_NCA16.GAR.0030.01	5 Grover Cr_2, Mulgoa	GAR	2	55	60	62	51	61	62	58	61	51	51	57	54	61	54
GF	NCA 2_NCA16.GAR.0031.01	3 Grover Cr_3, Mulgoa	GAR	2	53	58	61	48	60	61	57	60	48	48	56	51	60	51
GF	NCA 2_NCA16.GAR.0032.01	55 Kings Hill Rd_3, Mulgoa	GAR	2	52	57	59	39	58	59	55	58	39	39	54	42	58	42
GF	NCA 2_NCA16.GAR.0033.01	43 Kings Hill Rd_4, Mulgoa	GAR	2	56	61	63	48	62	63	59	62	48	48	58	51	62	51
GF	NCA 2_NCA16.GAR.0034.01	43 Kings Hill Rd_3, Mulgoa	GAR	2	53	58	60	37	59	60	56	59	37	37	55	40	59	40
GF	NCA 2_NCA16.GAR.0035.01	45 Kings Hill Rd_2, Mulgoa	GAR	2	55	60	62	48	61	62	58	61	48	48	57	51	61	51
GF	NCA 2_NCA16.GAR.0036.01	45 Kings Hill Rd_4, Mulgoa	GAR	2	58	63	65	48	64	65	61	64	48	48	60	51	64	51
GF	NCA 2_NCA16.GAR.0037.01	45 Kings Hill Rd_3, Mulgoa	GAR	2	53	58	60	33	59	60	56	59	33	33	55	36	59	36
GF	NCA 2_NCA16.GAR.0038.01	43 Kings Hill Rd_5, Mulgoa	GAR	2	50	55	57	47	56	57	53	56	47	47	52	50	56	50
GF	NCA 2_NCA16.GAR.0039.01	55 Kings Hill Rd_2, Mulgoa	GAR	2	54	59	61	45	60	61	57	60	45	45	56	48	60	48
GF	NCA 2_NCA16.GAR.0040.01	53 Kings Hill Rd_2, Mulgoa	GAR	2	52	57	59	46	58	59	55	58	46	46	54	49	58	49
GF	NCA 2_NCA16.GAR.0041.01	4 Grover Cr_3, Mulgoa	GAR	2	53	58	60	49	59	60	56	59	49	49	55	52	59	52
GF	NCA 2_NCA16.GAR.0042.01	43 Kings Hill Rd_2, Mulgoa	GAR	2	49	54	56	46	55	56	52	55	46	46	51	49	55	49
GF	NCA 2_NCA16.GAR.0043.01	3 Grover Cr_2, Mulgoa	GAR	2	55	60	62	44	61	62	58	61	44	44	57	47	61	47
GF	NCA 2_NCA16.GAR.0044.01	1 Grover Cr_4, Mulgoa	GAR	2	59	64	66	44	65	66	62	65	44	44	61	47	65	47

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 2_NCA16.GAR.0045.01	2367-2371 The Northern Road_2, Mulgoa	GAR	2	55	60	62	42	61	62	58	61	42	42	57	45	61	45
GF	NCA 2_NCA16.GAR.0046.01	34 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	54	59	61	44	60	61	57	60	44	44	56	47	60	47
GF	NCA 2_NCA16.GAR.0047.01	35-53 Chain-O-Ponds Rd_3, Mulgoa	GAR	2	48	53	55	39	54	55	51	54	39	39	50	42	54	42
GF	NCA 2_NCA16.GAR.0048.01	35-53 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	48	53	55	39	54	55	51	54	39	39	50	42	54	42
GF	NCA 2_NCA16.GAR.0049.01	55 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	45	50	53	39	52	53	49	52	39	39	48	42	52	42
GF	NCA 2_NCA16.GAR.0050.01	55 Chain-O-Ponds Rd_1, Mulgoa	GAR	2	47	52	54	39	53	54	50	53	39	39	49	42	53	42
GF	NCA 2_NCA16.GAR.0051.01	2205 The Northern Road_4, Mulgoa	GAR	2	56	57	59	56	58	59	56	58	56	56	56	59	59	59
GF	NCA 2_NCA16.GAR.0052.01	2205 The Northern Road_5, Mulgoa	GAR	2	57	57	59	57	58	59	57	58	57	57	57	60	60	60
GF	NCA 2_NCA16.GAR.0053.01	2205 The Northern Road_2, Mulgoa	GAR	2	56	56	57	56	56	57	56	56	56	56	56	59	59	59
GF	NCA 2_NCA16.GAR.0054.01	2205 The Northern Road_1, Mulgoa	GAR	2	57	57	57	57	57	57	57	57	57	57	57	60	60	60
GF	NCA 2_NCA16.GAR.0055.01	2205 The Northern Road_3, Mulgoa	GAR	2	53	54	56	53	55	56	53	55	53	53	53	56	56	56
GF	NCA 2_NCA16.GAR.0056.01	71 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	45	50	52	38	51	52	48	51	38	38	47	41	51	41
GF	NCA 2_NCA16.RES.0063.01	48 Chain-O-Ponds Rd_1, Mulgoa	RES	2	47	52	54	41	53	54	50	53	41	41	49	44	53	44
GF	NCA 2_NCA16.RES.0064.01	63 Kings Hill Rd_1, Mulgoa	RES	2	50	55	57	45	56	57	53	56	45	45	52	48	56	48
GF	NCA 2_NCA16.GAR.0059.01	63 Kings Hill Rd_2, Mulgoa	GAR	2	50	55	57	44	56	57	53	56	44	44	52	47	56	47
GF	NCA 2_NCA16.GAR.0060.01	65 Kings Hill Rd_3, Mulgoa	GAR	2	54	59	61	47	60	61	57	60	47	47	56	50	60	50
GF	NCA 2_NCA16.GAR.0061.01	65 Kings Hill Rd_2, Mulgoa	GAR	2	54	59	61	45	60	61	57	60	45	45	56	48	60	48
GF	NCA 2_NCA16.GAR.0062.01	73 Kings Hill Rd_2, Mulgoa	GAR	2	49	54	56	43	55	56	52	55	43	43	51	46	55	46
GF	NCA 2_NCA16.GAR.0063.01	73 Kings Hill Rd_3, Mulgoa	GAR	2	54	59	61	44	60	61	57	60	44	44	56	47	60	47
GF	NCA 2_NCA16.RES.0040.01	95 Kings Hill Rd_1, Mulgoa	RES	2	45	50	52	42	51	52	48	51	42	42	47	45	51	45
GF	NCA 2_NCA16.GAR.0071.01	103 Littlefields Rd_2, Mulgoa	GAR	2	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 2_NCA16.GAR.0072.01	70-86 Littlefields Rd_2, Mulgoa	GAR	2	45	50	52	43	51	52	48	51	43	43	47	46	51	46
GF	NCA 2_NCA16.GAR.0073.01	70-86 Littlefields Rd, Mulgoa	GAR	2	46	51	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 2_NCA16.GAR.0074.01	61 Queenshill Dr_2, Luddenham	GAR	2	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 2_NCA16.GAR.0076.01	24 Queenshill Dr_2, Luddenham	GAR	2	48	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 2_NCA16.GAR.0077.01	24 Queenshill Dr_3, Luddenham	GAR	2	47	51	53	47	52	53	49	52	47	47	48	50	52	50
GF	NCA 2_NCA16.GAR.0081.01	34 Chain-O-Ponds Rd_3, Mulgoa	GAR	2	48	53	55	37	54	55	51	54	37	37	50	40	54	40
GF	NCA 2_NCA16.GAR.0082.01	34 Chain-O-Ponds Rd_4, Mulgoa	GAR	2	54	59	61	41	60	61	57	60	41	41	56	44	60	44
GF	NCA 2_NCA16.GAR.0083.01	34 Chain-O-Ponds Rd_5, Mulgoa	GAR	2	52	57	59	41	58	59	55	58	41	41	54	44	58	44
GF	NCA 2_NCA16.GAR.0084.01	34 Chain-O-Ponds Rd_6, Mulgoa	GAR	2	48	53	55	41	54	55	51	54	41	41	50	44	54	44
GF	NCA 2_NCA16.GAR.0085.01	34 Chain-O-Ponds Rd_7, Mulgoa	GAR	2	50	55	57	44	56	57	53	56	44	44	52	47	56	47
GF	NCA 2_NCA16.GAR.0086.01	34 Chain-O-Ponds Rd_8, Mulgoa	GAR	2	53	58	60	42	59	60	56	59	42	42	55	45	59	45
GF	NCA 2_NCA16.GAR.0087.01	2 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	60	65	67	41	66	67	63	66	41	41	62	44	66	44
GF	NCA 2_NCA16.GAR.0088.01	48 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	46	51	53	41	52	53	49	52	41	41	48	44	52	44
GF	NCA 2_NCA16.GAR.0089.01	53 Kings Hill Rd_3, Mulgoa	GAR	2	49	54	55	44	54	55	51	54	44	44	50	47	54	47
GF	NCA 2_NCA16.GAR.0090.01	53 Kings Hill Rd_4, Mulgoa	GAR	2	47	52	54	38	53	54	50	53	38	38	49	41	53	41
GF	NCA 2_NCA16.GAR.0091.01	2567-2573 The Northern Road_4, Mulgoa	GAR	2	53	58	59	48	58	59	55	58	48	48	54	51	58	51
GF	NCA 2_NCA16.RES.0001.01	20-32 Littlefields Rd_1, Luddenham	RES	2	54	59	61	52	60	61	57	60	52	52	56	55	60	55
GF	NCA 2_NCA16.RES.0002.01	2681The Northern Road, Luddenham	RES	2	50	55	57	50	56	57	53	56	50	50	52	53	56	53

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 3_NCA16.RES.0003.01	2859 The Northern Road_3, Luddenham	RES	3	50	55	57	49	56	57	53	56	49	49	52	52	56	52
GF	NCA 2_NCA16.RES.0004.01	2761-2783 The Northern Road, Luddenham	RES	2	50	55	57	48	56	57	53	56	48	48	52	51	56	51
GF	NCA 2_NCA16.RES.0049.01	34-48 Littlefields Rd, Luddenham	RES	2	52	57	59	46	58	59	55	58	46	46	54	49	58	49
GF	NCA 2_NCA16.RES.0006.01	29-33 Littlefields Rd, Luddenham	RES	2	64	69	71	46	70	71	67	70	46	46	66	49	70	49
GF	NCA 2_NCA16.RES.0007.01	43-49 Littlefields Rd_2, Luddenham	RES	2	52	57	59	44	58	59	55	58	44	44	54	47	58	47
GF	NCA 2_NCA16.RES.0008.01	51-57 Littlefields Rd_1, Mulgoa	RES	2	51	56	58	44	57	58	54	57	44	44	53	47	57	47
GF	NCA 2_NCA16.RES.0009.01	67-71 Littlefields Rd_1, Mulgoa	RES	2	48	53	55	43	54	55	51	54	43	43	50	46	54	46
F1	NCA 2_NCA16.RES.0009.01	67-71 Littlefields Rd_1, Mulgoa	RES	2	48	53	55	43	54	55	51	54	43	43	50	46	54	46
GF	NCA 2_NCA16.RES.0010.01	73-79 Littlefields Rd_1, Mulgoa	RES	2	48	53	55	41	54	55	51	54	41	41	50	44	54	44
F1	NCA 2_NCA16.RES.0010.01	73-79 Littlefields Rd_1, Mulgoa	RES	2	48	53	55	42	54	55	51	54	42	42	50	45	54	45
GF	NCA 2_NCA16.GAR.0005.01	35-41 Littlefields Rd_3, Luddenham	GAR	2	52	57	59	44	58	59	55	58	44	44	54	47	58	47
GF	NCA 2_NCA16.RES.0012.01	59-65 Littlefields Rd, Mulgoa	RES	2	51	56	57	44	56	57	53	56	44	44	52	47	56	47
GF	NCA 2_NCA16.RES.0013.01	81-87 Littlefields Rd, Mulgoa	RES	2	47	52	54	44	53	54	50	53	44	44	49	47	53	47
F1	NCA 2_NCA16.RES.0013.01	81-87 Littlefields Rd, Mulgoa	RES	2	47	52	54	44	53	54	50	53	44	44	49	47	53	47
GF	NCA 2_NCA16.RES.0014.01	96-104 Vineyard Rd_1, Mulgoa	RES	2	52	57	58	47	57	58	54	57	47	47	53	50	57	50
GF	NCA 2_NCA16.RES.0015.01	89-101 Littlefields Rd_1, Mulgoa	RES	2	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 2_NCA16.RES.0016.01	1 Vineyard Rd, Mulgoa	RES	2	46	51	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 2_NCA16.RES.0017.01	106-116 Vineyard Rd_1, Mulgoa	RES	2	51	56	58	50	57	58	54	57	50	50	53	53	57	53
GF	NCA 2_NCA16.RES.0018.01	86-94 Vineyard Rd_1, Mulgoa	RES	2	53	58	60	52	59	60	56	59	52	52	55	55	59	55
GF	NCA 2_NCA16.RES.0019.01	66-74 Vineyard Rd_1, Mulgoa	RES	2	50	54	56	50	55	56	52	55	50	50	51	53	55	53
GF	NCA 2_NCA16.RES.0020.01	2A Longview Rd, Mulgoa	RES	2	62	67	69	50	68	69	65	68	50	50	64	53	68	53
F1	NCA 2_NCA16.RES.0020.01	2A Longview Rd, Mulgoa	RES	2	63	68	70	52	69	70	66	69	52	52	65	55	69	55
GF	NCA 2_NCA16.RES.0021.01	46-54 Vineyard Rd, Mulgoa	RES	2	59	64	66	49	65	66	62	65	49	49	61	52	65	52
GF	NCA 2_NCA16.RES.0022.01	1 Vineyard Rd_1, Mulgoa	RES	2	67	72	74	49	73	74	70	73	49	49	69	52	73	52
GF	NCA 2_NCA16.RES.0023.01	1 Vineyard Rd_2, Mulgoa	RES	2	67	72	74	49	73	74	70	73	49	49	69	52	73	52
GF	NCA 2_NCA16.RES.0024.01	36-44 Vineyard Rd, Mulgoa	RES	2	72	77	79	50	78	79	75	78	50	50	74	53	78	53
F1	NCA 2_NCA16.RES.0024.01	36-44 Vineyard Rd, Mulgoa	RES	2	74	79	81	51	80	81	77	80	51	51	76	54	80	54
GF	NCA 2_NCA16.RES.0025.01	1 Longview Rd_1, Mulgoa	RES	2	63	68	70	54	69	70	66	69	54	54	65	57	69	57
GF	NCA 2_NCA16.RES.0026.01	23-33 Longview Rd_1, Mulgoa	RES	2	75	80	84	51	83	84	80	83	51	51	79	54	83	54
GF	NCA 2_NCA16.RES.0027.01	20-32 Kings Hill Rd_1, Mulgoa	RES	2	71	76	79	56	78	79	75	78	56	56	74	59	78	59
GF	NCA 2_NCA16.RES.0028.01	2465-2475 The Northern Road, Mulgoa	RES	2	58	63	64	57	63	64	60	63	57	57	59	60	63	60
GF	NCA 2_NCA16.RES.0029.01	2 Kings Hill Rd_1, Mulgoa	RES	2	73	78	76	60	75	76	72	75	60	60	71	63	75	63
GF	NCA 2_NCA16.RES.0030.01	1 Kings Hill Rd_1, Mulgoa	RES	2	68	73	75	57	74	75	71	74	57	57	70	60	74	60
GF	NCA 2_NCA16.RES.0031.01	33-41 Kings Hill Rd_1, Mulgoa	RES	2	67	72	74	51	73	74	70	73	51	51	69	54	73	54
GF	NCA 2_NCA16.RES.0032.01	45 Kings Hill Rd_1, Mulgoa	RES	2	59	64	66	50	65	66	62	65	50	50	61	53	65	53
GF	NCA 2_NCA16.RES.0033.01	55 Kings Hill Rd_1, Mulgoa	RES	2	55	60	62	46	61	62	58	61	46	46	57	49	61	49
GF	NCA 2_NCA16.RES.0034.01	53 Kings Hill Rd_1, Mulgoa	RES	2	50	55	57	45	56	57	53	56	45	45	52	48	56	48
GF	NCA 2_NCA16.RES.0035.01	43 Kings Hill Rd_1, Mulgoa	RES	2	53	58	60	48	59	60	56	59	48	48	55	51	59	51
GF	NCA 2_NCA16.RES.0036.01	2373-2379_1 The Northern Road, Mulgoa	RES	2	55	60	62	44	61	62	58	61	44	44	57	47	61	47

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 2_NCA16.RES.0037.01	2 Chain-O-Ponds Rd_1, Mulgoa	RES	2	60	65	67	41	66	67	63	66	41	41	62	44	66	44
GF	NCA 2_NCA16.RES.0038.01	34 Chain-O-Ponds Rd_1, Mulgoa	RES	2	56	61	63	41	62	63	59	62	41	41	58	44	62	44
GF	NCA 2_NCA16.RES.0039.01	3 Chain-O-Ponds Rd_1, Mulgoa	RES	2	65	70	72	40	71	72	68	71	40	40	67	43	71	43
GF	NCA 2_NCA16.GAR.0058.01	3 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	61	66	68	40	67	68	64	67	40	40	63	43	67	43
GF	NCA 2_NCA16.RES.0041.01	35-53 Chain-O-Ponds Rd_1, Mulgoa	RES	2	51	56	58	39	57	58	54	57	39	39	53	42	57	42
GF	NCA 2_NCA16.RES.0042.01	2205 The Northern Road_6, Mulgoa	RES	2	59	59	61	59	60	61	59	60	59	59	59	62	62	62
GF	NCA 2_NCA16.RES.0043.01	71 Chain-O-Ponds Rd_1, Mulgoa	RES	2	45	50	52	38	51	52	48	51	38	38	47	41	51	41
F1	NCA 2_NCA16.RES.0043.01	71 Chain-O-Ponds Rd_1, Mulgoa	RES	2	45	50	52	38	51	52	48	51	38	38	47	41	51	41
GF	NCA 2_NCA16.RES.0044.01	66 Chain-O_Ponds Rd, Mulgoa	RES	2	44	49	51	39	50	51	47	50	39	39	46	42	50	42
GF	NCA 2_NCA16.RES.0045.01	78 Chain-O-Ponds Rd_1, Mulgoa	RES	2	42	47	49	39	48	49	45	48	39	39	44	42	48	42
GF	NCA 2_NCA16.RES.0046.01	65 Kings Hill Rd_1, Mulgoa	RES	2	54	59	61	45	60	61	57	60	45	45	56	48	60	48
GF	NCA 2_NCA16.RES.0047.01	73 Kings Hill Rd_1, Mulgoa	RES	2	46	51	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 2_NCA16.RES.0048.01	73 Kings Hill Rd_4, Mulgoa	RES	2	55	60	62	47	61	62	58	61	47	47	57	50	61	50
GF	NCA 2_NCA16.GAR.0009.01	95 Kings Hill Rd_2, Mulgoa	GAR	2	46	51	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 2_NCA16.RES.0054.01	103 Littlefields Rd_1, Mulgoa	RES	2	43	48	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 2_NCA16.RES.0055.01	70-86 Littlefields Rd_1, Mulgoa	RES	2	48	53	55	41	54	55	51	54	41	41	50	44	54	44
GF	NCA 2_NCA16.RES.0056.01	61 Queenshill Dr_1, Luddenham	RES	2	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 2_NCA16.RES.0058.01	24 Queenshill Dr, Luddenham	RES	2	46	49	51	46	50	51	47	50	46	46	46	49	50	49
GF	NCA 2_NCA16.RES.0062.01	67-71 Littlefields Rd_2, Mulgoa	RES	2	49	54	56	43	55	56	52	55	43	43	51	46	55	46
GF	NCA 2_NCA17.COM.0001.01	Horse N Around_3, Mulgoa	COM	2	66	71	73	49	72	73	69	72	49	49	68	52	72	52
GF	NCA 2_NCA17.COM.0002.01	Horse N Around_2, Mulgoa	COM	2	67	72	74	49	73	74	70	73	49	49	69	52	73	52
GF	NCA 2_NCA17.COM.0003.01	Horse N Around_1, Mulgoa	COM	2	72	77	79	49	78	79	75	78	49	49	74	52	78	52
F1	NCA 2_NCA17.COM.0003.01	Horse N Around_1, Mulgoa	COM	2	74	79	81	50	80	81	77	80	50	50	76	53	80	53
GF	NCA 3_NCA17.COM.0004.01	The Honey Shed	COM	3	62	67	69	56	68	69	65	68	56	56	64	59	68	59
GF	NCA 2_NCA17.GAR.0001.01	2594-2776 The Northern Road_3, Luddenham	GAR	2	60	65	67	56	66	67	63	66	56	56	62	59	66	59
GF	NCA 2_NCA17.GAR.0002.01	2-18 Littlefields Rd_2, Luddenham	GAR	2	62	67	69	57	68	69	65	68	57	57	64	60	68	60
GF	NCA 3_NCA17.GAR.0003.01	2843-2857 The Northern Road_2, Luddenham	GAR	3	63	68	70	51	69	70	66	69	51	51	65	54	69	54
GF	NCA 3_NCA17.GAR.0004.01	2828 The Northern Road_2, Luddenham	GAR	3	69	74	75	50	74	75	71	74	50	50	70	53	74	53
GF	NCA 3_NCA17.GAR.0005.01	2843-2857 The Northern Road_1, Luddenham	GAR	3	59	64	66	52	65	66	62	65	52	52	61	55	65	55
GF	NCA 3_NCA17.GAR.0006.01	2843-2857 The Northern Road_3, Luddenham	GAR	3	62	67	69	51	68	69	65	68	51	51	64	54	68	54
GF	NCA 3_NCA17.GAR.0007.01	2825-2841 The Northern Road_3, Luddenham	GAR	3	59	60	63	59	62	63	59	62	59	59	59	62	62	62
GF	NCA 3_NCA17.GAR.0008.01	2825-2841 The Northern Road_2, Luddenham	GAR	3	60	64	67	60	66	67	63	66	60	60	62	63	66	63
GF	NCA 2_NCA17.GAR.0009.01	2539-2547 The Northern Road_2, Mulgoa	GAR	2	66	71	71	57	70	71	67	70	57	57	66	60	70	60
GF	NCA 2_NCA17.GAR.0010.01	2519-2527 The Northern Road_2, Mulgoa	GAR	2	59	64	66	58	65	66	62	65	58	58	61	61	65	61
GF	NCA 2_NCA17.GAR.0011.01	2509-2517 The Northern Road_1, Mulgoa	GAR	2	58	63	63	56	62	63	59	62	56	56	58	59	62	59
GF	NCA 2_NCA17.GAR.0012.01	2497-2507 The Northern Road_3, Mulgoa	GAR	2	64	69	71	54	70	71	67	70	54	54	66	57	70	57
GF	NCA 2_NCA17.GAR.0013.01	2497-2507 The Northern Road_2, Mulgoa	GAR	2	59	64	66	53	65	66	62	65	53	53	61	56	65	56
GF	NCA 2_NCA17.GAR.0014.01	2 Longview Rd_2, Mulgoa	GAR	2	62	67	69	49	68	69	65	68	49	49	64	52	68	52
GF	NCA 2_NCA17.GAR.0015.01	7 Grover Cr_2, Mulgoa	GAR	2	66	71	73	56	72	73	69	72	56	56	68	59	72	59

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 2_NCA17.GAR.0016.01	7 Grover Cr_3, Mulgoa	GAR	2	66	71	73	57	72	73	69	72	57	57	68	60	72	60
GF	NCA 2_NCA17.GAR.0017.01	2 Grover Cr_2, Mulgoa	GAR	2	65	70	72	50	71	72	68	71	50	50	67	53	71	53
GF	NCA 2_NCA17.GAR.0018.01	1 Grover Cr_2, Mulgoa	GAR	2	68	73	75	43	74	75	71	74	43	43	70	46	74	46
GF	NCA 2_NCA17.GAR.0019.01	1 Grover Cr_3, Mulgoa	GAR	2	69	74	75	42	74	75	71	74	42	42	70	45	74	45
GF	NCA 2_NCA17.GAR.0020.01	2381 The Northern Road_2, Mulgoa	GAR	2	59	64	67	40	66	67	63	66	40	40	62	43	66	43
GF	NCA 2_NCA17.GAR.0021.01	2373-2379_3 The Northern Road, Mulgoa	GAR	2	65	70	72	44	71	72	68	71	44	44	67	47	71	47
GF	NCA 2_NCA17.GAR.0022.01	2373-2379_2 The Northern Road, Mulgoa	GAR	2	62	67	69	45	68	69	65	68	45	45	64	48	68	48
GF	NCA 2_NCA17.GAR.0023.01	2351-2357 The Northern Road_2, Mulgoa	GAR	2	63	68	70	42	69	70	66	69	42	42	65	45	69	45
GF	NCA 2_NCA17.GAR.0024.01	2351-2357 The Northern Road_1, Mulgoa	GAR	2	65	70	72	39	71	72	68	71	39	39	67	42	71	42
GF	NCA 2_NCA17.GAR.0025.01	2351-2357 The Northern Road_5, Mulgoa	GAR	2	60	65	67	42	66	67	63	66	42	42	62	45	66	45
GF	NCA 2_NCA17.GAR.0026.01	2351-2357 The Northern Road_3, Mulgoa	GAR	2	67	72	74	42	73	74	70	73	42	42	69	45	73	45
GF	NCA 2_NCA17.GAR.0027.01	2329-2335 The Northern Road_2, Mulgoa	GAR	2	66	71	73	40	72	73	69	72	40	40	68	43	72	43
GF	NCA 2_NCA17.GAR.0028.01	2319-2327 The Northern Road_3, Mulgoa	GAR	2	59	64	66	41	65	66	62	65	41	41	61	44	65	44
GF	NCA 2_NCA17.GAR.0029.01	2319-2327 The Northern Road_2, Mulgoa	GAR	2	60	65	67	41	66	67	63	66	41	41	62	44	66	44
GF	NCA 2_NCA17.GAR.0030.01	2297-2307 The Northern Road_3, Mulgoa	GAR	2	62	67	73	42	72	73	69	72	42	42	68	45	72	45
GF	NCA 2_NCA17.GAR.0031.01	2289-2293 The Northern Road_2, Mulgoa	GAR	2	62	67	69	44	68	69	65	68	44	44	64	47	68	47
GF	NCA 2_NCA17.GAR.0032.01	2297-2307 The Northern Road_1, Mulgoa	GAR	2	63	68	71	44	70	71	67	70	44	44	66	47	70	47
GF	NCA 2_NCA17.GAR.0033.01	2265 The Northern Road_1, Mulgoa	GAR	2	62	67	69	52	68	69	65	68	52	52	64	55	68	55
GF	NCA 2_NCA17.GAR.0034.01	2265 The Northern Road_3, Mulgoa	GAR	2	65	70	72	49	71	72	68	71	49	49	67	52	71	52
GF	NCA 2_NCA17.GAR.0035.01	2309-2317 The Northern Road_3, Mulgoa	GAR	2	62	67	75	36	74	75	71	74	36	36	70	39	74	39
GF	NCA 2_NCA17.GAR.0036.01	2309-2317 The Northern Road_2, Mulgoa	GAR	2	61	66	75	37	74	75	71	74	37	37	70	40	74	40
GF	NCA 2_NCA17.GAR.0037.01	8 Grover Cr_2, Mulgoa	GAR	2	71	76	78	48	77	78	74	77	48	48	73	51	77	51
GF	NCA 2_NCA17.GAR.0038.01	1 Gates Rd_2, Mulgoa	GAR	2	64	69	71	50	70	71	67	70	50	50	66	53	70	53
GF	NCA 2_NCA17.GAR.0039.01	2581 The Northern Road_2, Luddenham	GAR	2	72	77	78	50	77	78	74	77	50	50	73	53	77	53
GF	NCA 2_NCA17.GAR.0040.01	2651 The Northern Road_3, Mulgoa	GAR	2	69	74	75	51	74	75	71	74	51	51	70	54	74	54
GF	NCA 3_NCA17.GAR.0041.01	2311-2337 Elizabeth Dr_2, Luddenham	GAR	3	66	71	73	47	72	73	69	72	46	46	68	49	72	49
GF	NCA 3_NCA17.GAR.0042.01	2311-2337 Elizabeth Dr, Luddenham	GAR	3	65	70	72	57	71	72	68	71	57	57	67	60	71	60
GF	NCA 2_NCA17.GAR.0043.01	2567-2573 The Northern Road_3, Mulgoa	GAR	2	58	63	65	48	64	65	61	64	48	48	60	51	64	51
GF	NCA 2_NCA17.IND.0001.01	Power Station 2552 The Northern Road	IND	2	70	75	77	54	76	77	73	76	54	54	72	57	76	57
GF	NCA 2_NCA17.MIL.0001.01	2042-2550 The Northern Road_28, Orchard	MIL	2	67	72	73	57	72	73	69	72	57	57	68	60	72	60
GF	NCA 2_NCA17.MIL.0002.01	2042-2550 The Northern Road_26, Orchard	MIL	2	65	70	71	57	70	71	67	70	57	57	66	60	70	60
GF	NCA 2_NCA17.MIL.0003.01	2042-2550 The Northern Road_29, Orchard	MIL	2	64	69	71	55	70	71	67	70	55	55	66	58	70	58
GF	NCA 2_NCA17.MIL.0004.01	2042-2550 The Northern Road_48, Orchard	MIL	2	67	72	74	59	73	74	70	73	59	59	69	62	73	62
GF	NCA 2_NCA17.MIL.0005.01	2042-2550 The Northern Road_12, Orchard	MIL	2	72	77	79	58	78	79	75	78	58	58	74	61	78	61
GF	NCA 2_NCA17.MIL.0006.01	2042-2550 The Northern Road_50, Orchard	MIL	2	71	76	77	58	76	77	73	76	58	58	72	61	76	61
GF	NCA 2_NCA17.RES.0001.01	2594-2776 The Northern Road_1, Luddenham	RES	2	63	68	70	55	69	70	66	69	55	55	65	58	69	58
GF	NCA 2_NCA17.RES.0002.01	2-18 Littlefields Rd_1, Luddenham	RES	2	67	72	73	56	72	73	69	72	56	56	68	59	72	59
F1	NCA 2_NCA17.RES.0002.01	2-18 Littlefields Rd_1, Luddenham	RES	2	68	73	76	56	75	76	72	75	56	56	71	59	75	59
GF	NCA 3_NCA17.RES.0003.01	2843-2857 The Northern Road_4, Luddenham	RES	3	67	72	74	51	73	74	70	73	51	51	69	54	73	54

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 3_NCA17.RES.0004.01	2825-2841 The Northern Road_5, Luddenham	RES	3	69	74	76	53	75	76	72	75	53	53	71	56	75	56
GF	NCA 2_NCA17.RES.0005.01	2785-2787 The Northern Road, Luddenham	RES	2	67	72	74	58	73	74	70	73	58	58	69	61	73	61
GF	NCA 3_NCA17.RES.0006.01	2825-2841 The Northern Road_4, Luddenham	RES	3	60	64	67	60	66	67	63	66	60	60	62	63	66	63
GF	NCA 2_NCA17.RES.0007.01	2627-2635 The Northern Road, Mulgoa	RES	2	67	72	74	55	73	74	70	73	55	55	69	58	73	58
F1	NCA 2_NCA17.RES.0007.01	2627-2635 The Northern Road, Mulgoa	RES	2	69	74	76	55	75	76	72	75	55	55	71	58	75	58
GF	NCA 2_NCA17.RES.0008.01	2575-2579 The Northern Road, Mulgoa	RES	2	64	69	71	48	70	71	67	70	48	48	66	51	70	51
GF	NCA 2_NCA17.RES.0009.01	2567-2573 The Northern Road_1, Mulgoa	RES	2	70	75	76	50	75	76	72	75	50	50	71	53	75	53
GF	NCA 2_NCA17.RES.0010.01	2561 The Northern Road_1, Mulgoa	RES	2	65	70	72	46	71	72	68	71	46	46	67	49	71	49
GF	NCA 2_NCA17.RES.0011.01	2549-2559 The Northern Road, Mulgoa	RES	2	70	75	75	49	74	75	71	74	49	49	70	52	74	52
GF	NCA 2_NCA17.RES.0012.01	2539-2547 The Northern Road_1, Mulgoa	RES	2	64	69	70	58	69	70	66	69	58	58	65	61	69	61
GF	NCA 2_NCA17.RES.0013.01	2529-2537 The Northern Road, Mulgoa	RES	2	67	72	71	59	70	71	67	70	59	59	66	62	70	62
GF	NCA 2_NCA17.RES.0014.01	2519-2527 The Northern Road_1, Mulgoa	RES	2	66	71	72	61	71	72	68	71	61	61	67	64	71	64
GF	NCA 2_NCA17.RES.0015.01	2509-2517 The Northern Road_2, Mulgoa	RES	2	66	71	71	59	70	71	67	70	59	59	66	62	70	62
GF	NCA 2_NCA17.RES.0016.01	2497-2507 The Northern Road_1, Mulgoa	RES	2	66	71	73	56	72	73	69	72	56	56	68	59	72	59
GF	NCA 2_NCA17.RES.0017.01	2 Longview Rd_1, Mulgoa	RES	2	73	78	80	52	79	80	76	79	52	52	75	55	79	55
GF	NCA 2_NCA17.RES.0018.01	2 Longview Rd_3, Mulgoa	RES	2	78	83	85	52	84	85	81	84	52	52	80	55	84	55
GF	NCA 2_NCA17.RES.0019.01	7 Grover Cr_1, Mulgoa	RES	2	74	79	81	60	80	81	77	80	60	60	76	63	80	63
GF	NCA 2_NCA17.RES.0020.01	6 Grover Cr_1, Mulgoa	RES	2	62	67	69	50	68	69	65	68	50	50	64	53	68	53
GF	NCA 2_NCA17.RES.0021.01	5 Grover Cr_1, Mulgoa	RES	2	58	63	65	49	64	65	61	64	49	49	60	52	64	52
GF	NCA 2_NCA17.RES.0022.01	4 Grover Cr_1, Mulgoa	RES	2	57	62	64	48	63	64	60	63	48	48	59	51	63	51
F1	NCA 2_NCA17.RES.0022.01	4 Grover Cr_1, Mulgoa	RES	2	57	62	65	50	64	65	61	64	50	50	60	53	64	53
GF	NCA 2_NCA17.RES.0023.01	4 Grover Cr_4, Mulgoa	RES	2	59	64	66	34	65	66	62	65	34	34	61	37	65	37
GF	NCA 2_NCA17.RES.0024.01	3 Grover Cr_1, Mulgoa	RES	2	60	65	67	48	66	67	63	66	48	48	62	51	66	51
GF	NCA 2_NCA17.RES.0025.01	1 Grover Cr_1, Mulgoa	RES	2	69	74	76	47	75	76	72	75	47	47	71	50	75	50
GF	NCA 2_NCA17.RES.0026.01	2 Grover Cr_1, Mulgoa	RES	2	67	72	74	47	73	74	70	73	47	47	69	50	73	50
GF	NCA 2_NCA17.RES.0027.01	2381 The Northern Road_1, Mulgoa	RES	2	66	71	72	46	71	72	68	71	46	46	67	49	71	49
GF	NCA 2_NCA17.RES.0028.01	2367-2371 The Northern Road_1, Mulgoa	RES	2	58	63	65	43	64	65	61	64	43	43	60	46	64	46
GF	NCA 2_NCA17.RES.0029.01	2359-2365 The Northern Road, Mulgoa	RES	2	67	72	74	42	73	74	70	73	42	42	69	45	73	45
GF	NCA 2_NCA17.RES.0030.01	2351-2357 The Northern Road_4, Mulgoa	RES	2	70	75	77	45	76	77	73	76	45	45	72	48	76	48
GF	NCA 2_NCA17.RES.0031.01	2345-2349 The Northern Road, Mulgoa	RES	2	68	73	75	40	74	75	71	74	40	40	70	43	74	43
GF	NCA 2_NCA17.RES.0032.01	2337-2339 The Northern Road_1, Mulgoa	RES	2	74	79	81	40	80	81	77	80	40	40	76	43	80	43
GF	NCA 2_NCA17.RES.0033.01	2329-2335 The Northern Road_1, Mulgoa	RES	2	63	68	71	40	70	71	67	70	40	40	66	43	70	43
GF	NCA 2_NCA17.RES.0034.01	2319-2327 The Northern Road_1, Mulgoa	RES	2	63	68	71	41	70	71	67	70	41	41	66	44	70	44
GF	NCA 2_NCA17.RES.0035.01	2309-2317 The Northern Road_1, Mulgoa	RES	2	60	65	74	43	73	74	70	73	43	43	69	46	73	46
GF	NCA 2_NCA17.RES.0036.01	2289-2293 The Northern Road_1, Mulgoa	RES	2	68	73	75	40	74	75	71	74	40	40	70	43	74	43
GF	NCA 2_NCA17.RES.0037.01	2285 The Northern Road, Mulgoa	RES	2	68	73	74	48	73	74	70	73	48	48	69	51	73	51
GF	NCA 2_NCA17.RES.0038.01	2265 The Northern Road_2, Mulgoa	RES	2	63	68	70	49	69	70	66	69	49	49	65	52	69	52
GF	NCA 2_NCA17.RES.0039.01	Lot3/DP29081	RES	2	69	74	75	46	74	75	71	74	46	46	70	49	74	49
GF	NCA 2_NCA17.RES.0040.01	2277-2283 The Northern Road, Mulgoa	RES	2	68	73	73	47	72	73	69	72	47	47	68	50	72	50

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 2_NCA17.RES.0041.01	2297-2307 The Northern Road_2, Mulgoa	RES	2	66	71	75	43	74	75	71	74	43	43	70	46	74	46
GF	NCA 2_NCA17.RES.0042.01	2373-2379_4 The Northern Road, Mulgoa	RES	2	70	75	76	45	75	76	72	75	45	45	71	48	75	48
GF	NCA 2_NCA17.RES.0043.01	8 Grover Cr_1, Mulgoa	RES	2	66	71	73	49	72	73	69	72	49	49	68	52	72	52
GF	NCA 2_NCA17.RES.0044.01	1 Gates Rd_1, Mulgoa	RES	2	66	71	73	51	72	73	69	72	51	51	68	54	72	54
GF	NCA 2_NCA17.RES.0045.01	2580-2592 The Northern Road, Mulgoa	RES	2	75	80	80	47	79	80	76	79	47	47	75	50	79	50
GF	NCA 2_NCA17.RES.0046.01	2751 The Northern Road Luddenham	RES	2	63	68	69	50	68	69	65	68	50	50	64	53	68	53
GF	NCA 2_NCA17.RES.0047.01	2751 The Northern Road_1, Luddenham	RES	2	73	78	80	48	79	80	76	79	48	48	75	51	79	51
GF	NCA 2_NCA17.RES.0048.01	2587 The Northern Road_1, Luddenham	RES	2	71	76	78	51	77	78	74	77	51	51	73	54	77	54
GF	NCA 3_NCA17.RES.0049.01	2311-2337 Elizabeth Dr_1, Luddenham	RES	3	71	76	78	60	77	78	74	77	60	60	73	63	77	63
F1	NCA 3_NCA17.RES.0049.01	2311-2337 Elizabeth Dr_1, Luddenham	RES	3	73	78	80	61	79	80	76	79	61	61	75	64	79	64
GF	NCA 2_NCA18.GAR.0001.01	2594-2776 The Northern Road_2, Luddenham	GAR	2	64	69	73	54	72	73	69	72	54	54	68	57	72	57
GF	NCA 3_NCA18.GAR.0002.01	2828 The Northern Road_1, Luddenham	GAR	3	58	63	65	50	64	65	61	64	50	50	60	53	64	53
GF	NCA 2_NCA18.GAR.0003.01	2594-2776 The Northern Road_5, Luddenham	GAR	2	54	59	61	45	60	61	57	60	45	45	56	48	60	48
GF	NCA 2_NCA18.GAR.0004.01	2594-2776 The Northern Road_6, Luddenham	GAR	2	52	57	60	44	59	60	56	59	44	44	55	47	59	47
GF	NCA 2_NCA18.GAR.0005.01	22-40 Gates Rd_2, Luddenham	GAR	2	69	74	75	50	74	75	71	74	50	50	70	53	74	53
GF	NCA 2_NCA18.GAR.0006.01	51 Gates Rd_2, Luddenham	GAR	2	57	62	64	46	63	64	60	63	46	46	59	49	63	49
GF	NCA 2_NCA18.GAR.0007.01	51 Gates Rd_3, Luddenham	GAR	2	56	61	63	45	62	63	59	62	45	45	58	48	62	48
GF	NCA 2_NCA18.GAR.0008.01	63-73 Gates Rd_2, Luddenham	GAR	2	47	52	53	45	52	53	49	52	45	45	48	48	52	48
GF	NCA 2_NCA18.GAR.0009.01	74-86 Gates Rd_1, Luddenham	GAR	2	49	53	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 2_NCA18.GAR.0010.01	42-56 Gates Rd_2, Mulgoa	GAR	2	58	63	65	54	64	65	61	64	54	54	60	57	64	57
GF	NCA 2_NCA18.GAR.0011.01	17-31 Gates Rd_3, Mulgoa	GAR	2	67	72	74	48	73	74	70	73	48	48	69	51	73	51
GF	NCA 2_NCA18.GAR.0012.01	22-40 Gates Rd_3, Mulgoa	GAR	2	66	71	73	49	72	73	69	72	49	49	68	52	72	52
GF	NCA 2_NCA18.GAR.0013.01	85-93 Gates Rd_2, Luddenham	GAR	2	46	51	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 2_NCA18.GAR.0014.01	95-99 Gates Rd_3, Luddenham	GAR	2	45	50	52	41	51	52	48	51	41	41	47	44	51	44
GF	NCA 2_NCA18.GAR.0015.01	95-99 Gates Rd_4, Luddenham	GAR	2	45	50	52	41	51	52	48	51	41	41	47	44	51	44
GF	NCA 2_NCA18.GAR.0016.01	101-111 Gates Rd_2, Luddenham	GAR	2	43	48	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 2_NCA18.GAR.0017.01	101-111 Gates Rd_3, Luddenham	GAR	2	43	48	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 2_NCA18.GAR.0018.01	108-112 Gates Rd_1, Luddenham	GAR	2	44	49	51	40	50	51	47	50	40	40	46	43	50	43
GF	NCA 2_NCA18.GAR.0019.01	108-112 Gates Rd_2, Luddenham	GAR	2	43	48	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 2_NCA18.GAR.0020.01	108-112 Gates Rd_3, Luddenham	GAR	2	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 3_NCA18.GAR.0021.01	2289-2309 Elizabeth Dr_2, Luddenham	GAR	3	67	72	74	54	73	74	70	73	54	54	69	57	73	57
GF	NCA 3_NCA18.GAR.0022.01	2289-2309 Elizabeth Dr_3, Luddenham	GAR	3	60	65	68	46	67	68	64	67	43	43	63	46	67	46
GF	NCA 2_NCA18.MIL.0001.01	2042-2550 The Northern Road_1, Orchard H	MIL	2	48	53	55	45	54	55	51	54	45	45	50	48	54	48
GF	NCA 2_NCA18.MIL.0002.01	2042-2550 The Northern Road_2, Orchard H	MIL	2	47	52	54	45	53	54	50	53	45	45	49	48	53	48
GF	NCA 2_NCA18.MIL.0003.01	2042-2550 The Northern Road_3, Orchard H	MIL	2	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 2_NCA18.MIL.0004.01	2042-2550 The Northern Road_5, Orchard H	MIL	2	52	57	60	50	59	60	56	59	50	50	55	53	59	53
GF	NCA 2_NCA18.MIL.0005.01	2042-2550 The Northern Road_10, Orchard	MIL	2	57	62	64	52	63	64	60	63	52	52	59	55	63	55
GF	NCA 2_NCA18.MIL.0006.01	2042-2550 The Northern Road_11, Orchard	MIL	2	56	61	63	51	62	63	59	62	51	51	58	54	62	54
GF	NCA 2_NCA18.MIL.0007.01	2042-2550 The Northern Road_6, Orchard H	MIL	2	59	64	66	52	65	66	62	65	52	52	61	55	65	55

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 2_NCA18.MIL.0008.01	2042-2550 The Northern Road_7, Orchard H	MIL	2	59	64	65	51	64	65	61	64	51	51	60	54	64	54
GF	NCA 2_NCA18.MIL.0009.01	2042-2550 The Northern Road_9, Orchard H	MIL	2	54	59	62	50	61	62	58	61	50	50	57	53	61	53
GF	NCA 2_NCA18.MIL.0010.01	2042-2550 The Northern Road_8, Orchard H	MIL	2	55	60	62	51	61	62	58	61	51	51	57	54	61	54
GF	NCA 2_NCA18.MIL.0011.01	2042-2550 The Northern Road_18, Orchard	MIL	2	55	60	62	50	61	62	58	61	50	50	57	53	61	53
GF	NCA 2_NCA18.MIL.0012.01	2042-2550 The Northern Road_19, Orchard	MIL	2	52	57	59	47	58	59	55	58	47	47	54	50	58	50
GF	NCA 2_NCA18.MIL.0013.01	2042-2550 The Northern Road_16, Orchard	MIL	2	55	60	62	53	61	62	58	61	53	53	57	56	61	56
GF	NCA 2_NCA18.MIL.0014.01	2042-2550 The Northern Road_13, Orchard	MIL	2	59	64	65	54	64	65	61	64	54	54	60	57	64	57
GF	NCA 2_NCA18.MIL.0015.01	2042-2550 The Northern Road_14, Orchard	MIL	2	60	65	66	54	65	66	62	65	54	54	61	57	65	57
GF	NCA 2_NCA18.MIL.0016.01	2042-2550 The Northern Road_15, Orchard	MIL	2	55	60	61	52	60	61	57	60	52	52	56	55	60	55
GF	NCA 2_NCA18.MIL.0017.01	2042-2550 The Northern Road_57, Orchard	MIL	2	59	64	66	56	65	66	62	65	56	56	61	59	65	59
GF	NCA 2_NCA18.MIL.0018.01	2042-2550 The Northern Road_55, Orchard	MIL	2	58	63	65	53	64	65	61	64	53	53	60	56	64	56
GF	NCA 2_NCA18.MIL.0019.01	2042-2550 The Northern Road_60, Orchard	MIL	2	55	60	62	52	61	62	58	61	52	52	57	55	61	55
GF	NCA 2_NCA18.MIL.0020.01	2042-2550 The Northern Road_30, Orchard	MIL	2	56	61	63	52	62	63	59	62	52	52	58	55	62	55
GF	NCA 2_NCA18.MIL.0021.01	2042-2550 The Northern Road_46, Orchard	MIL	2	53	58	60	51	59	60	56	59	51	51	55	54	59	54
GF	NCA 2_NCA18.MIL.0022.01	2042-2550 The Northern Road_40, Orchard	MIL	2	53	58	60	52	59	60	56	59	52	52	55	55	59	55
GF	NCA 2_NCA18.MIL.0023.01	2042-2550 The Northern Road_39, Orchard	MIL	2	53	58	60	52	59	60	56	59	52	52	55	55	59	55
GF	NCA 2_NCA18.MIL.0024.01	2042-2550 The Northern Road_41, Orchard	MIL	2	55	60	62	51	61	62	58	61	51	51	57	54	61	54
GF	NCA 2_NCA18.MIL.0025.01	2042-2550 The Northern Road_43, Orchard	MIL	2	52	57	59	43	58	59	55	58	43	43	54	46	58	46
GF	NCA 2_NCA18.MIL.0026.01	2042-2550 The Northern Road_42, Orchard	MIL	2	52	57	59	51	58	59	55	58	51	51	54	54	58	54
GF	NCA 2_NCA18.MIL.0027.01	2042-2550 The Northern Road_38, Orchard	MIL	2	50	55	57	44	56	57	53	56	44	44	52	47	56	47
GF	NCA 2_NCA18.MIL.0028.01	2042-2550 The Northern Road_34, Orchard	MIL	2	52	57	59	45	58	59	55	58	45	45	54	48	58	48
GF	NCA 2_NCA18.MIL.0029.01	2042-2550 The Northern Road_33, Orchard	MIL	2	54	59	61	52	60	61	57	60	52	52	56	55	60	55
GF	NCA 2_NCA18.MIL.0030.01	2042-2550 The Northern Road_35, Orchard	MIL	2	54	59	61	52	60	61	57	60	52	52	56	55	60	55
GF	NCA 2_NCA18.MIL.0031.01	2042-2550 The Northern Road_37, Orchard	MIL	2	54	59	61	51	60	61	57	60	51	51	56	54	60	54
GF	NCA 2_NCA18.MIL.0032.01	2042-2550 The Northern Road_36, Orchard	MIL	2	54	59	61	51	60	61	57	60	51	51	56	54	60	54
GF	NCA 2_NCA18.MIL.0033.01	2042-2550 The Northern Road_22, Orchard	MIL	2	53	58	60	48	59	60	56	59	48	48	55	51	59	51
GF	NCA 2_NCA18.MIL.0034.01	2042-2550 The Northern Road_20, Orchard	MIL	2	55	60	62	52	61	62	58	61	52	52	57	55	61	55
GF	NCA 2_NCA18.MIL.0035.01	2042-2550 The Northern Road_21, Orchard	MIL	2	55	60	62	52	61	62	58	61	52	52	57	55	61	55
GF	NCA 2_NCA18.MIL.0036.01	2042-2550 The Northern Road_49, Orchard	MIL	2	55	60	62	49	61	62	58	61	49	49	57	52	61	52
GF	NCA 2_NCA18.MIL.0037.01	2042-2550 The Northern Road_45, Orchard	MIL	2	55	60	62	51	61	62	58	61	51	51	57	54	61	54
GF	NCA 2_NCA18.MIL.0038.01	2042-2550 The Northern Road_44, Orchard	MIL	2	52	57	59	47	58	59	55	58	47	47	54	50	58	50
GF	NCA 2_NCA18.MIL.0039.01	2042-2550 The Northern Road_47, Orchard	MIL	2	54	59	60	48	59	60	56	59	48	48	55	51	59	51
GF	NCA 2_NCA18.MIL.0040.01	2042-2550 The Northern Road_23, Orchard	MIL	2	52	57	59	48	58	59	55	58	48	48	54	51	58	51
GF	NCA 2_NCA18.MIL.0041.01	2042-2550 The Northern Road_31, Orchard	MIL	2	52	57	59	43	58	59	55	58	43	43	54	46	58	46
GF	NCA 2_NCA18.MIL.0042.01	2042-2550 The Northern Road_32, Orchard	MIL	2	58	63	65	49	64	65	61	64	49	49	60	52	64	52
GF	NCA 2_NCA18.MIL.0043.01	2042-2550 The Northern Road_27, Orchard	MIL	2	59	64	66	52	65	66	62	65	52	52	61	55	65	55
GF	NCA 2_NCA18.MIL.0044.01	2042-2550 The Northern Road_25, Orchard	MIL	2	52	57	59	46	58	59	55	58	46	46	54	49	58	49
GF	NCA 2_NCA18.MIL.0045.01	2042-2550 The Northern Road_24, Orchard	MIL	2	52	57	59	46	58	59	55	58	46	46	54	49	58	49
GF	NCA 2_NCA18.MIL.0046.01	2042-2550 The Northern Road_56, Orchard	MIL	2	54	59	61	46	60	61	57	60	46	46	56	49	60	49

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 2_NCA18.MIL.0047.01	2042-2550 The Northern Road_138, Orchard	MIL	2	46	51	53	42	52	53	49	52	42	42	48	45	52	45
GF	NCA 2_NCA18.MIL.0048.01	2042-2550 The Northern Road_139, Orchard	MIL	2	45	50	52	41	51	52	48	51	41	41	47	44	51	44
GF	NCA 2_NCA18.MIL.0049.01	2042-2550 The Northern Road_136, Orchard	MIL	2	45	50	52	35	51	52	48	51	35	35	47	38	51	38
GF	NCA 2_NCA18.MIL.0050.01	2042-2550 The Northern Road_124, Orchard	MIL	2	48	53	55	41	54	55	51	54	41	41	50	44	54	44
GF	NCA 2_NCA18.MIL.0051.01	2042-2550 The Northern Road_128, Orchard	MIL	2	46	51	53	39	52	53	49	52	39	39	48	42	52	42
GF	NCA 2_NCA18.MIL.0052.01	2042-2550 The Northern Road_125, Orchard	MIL	2	46	51	53	40	52	53	49	52	40	40	48	43	52	43
GF	NCA 2_NCA18.MIL.0053.01	2042-2550 The Northern Road_126, Orchard	MIL	2	45	50	52	40	51	52	48	51	40	40	47	43	51	43
GF	NCA 2_NCA18.MIL.0054.01	2042-2550 The Northern Road_127, Orchard	MIL	2	46	51	53	41	52	53	49	52	41	41	48	44	52	44
GF	NCA 2_NCA18.MIL.0055.01	2042-2550 The Northern Road_130, Orchard	MIL	2	46	51	53	36	52	53	49	52	36	36	48	39	52	39
GF	NCA 2_NCA18.MIL.0056.01	2042-2550 The Northern Road_131, Orchard	MIL	2	47	52	54	41	53	54	50	53	41	41	49	44	53	44
GF	NCA 2_NCA18.MIL.0057.01	2042-2550 The Northern Road_132, Orchard	MIL	2	44	49	51	38	50	51	47	50	38	38	46	41	50	41
GF	NCA 2_NCA18.MIL.0058.01	2042-2550 The Northern Road_137, Orchard	MIL	2	45	50	52	37	51	52	48	51	37	37	47	40	51	40
GF	NCA 2_NCA18.MIL.0059.01	2042-2550 The Northern Road_133, Orchard	MIL	2	45	50	52	37	51	52	48	51	37	37	47	40	51	40
GF	NCA 2_NCA18.MIL.0060.01	2042-2550 The Northern Road_134, Orchard	MIL	2	44	49	51	34	50	51	47	50	34	34	46	37	50	37
GF	NCA 2_NCA18.MIL.0061.01	2042-2550 The Northern Road_135, Orchard	MIL	2	47	52	54	44	53	54	50	53	44	44	49	47	53	47
GF	NCA 2_NCA18.MIL.0062.01	2042-2550 The Northern Road_129, Orchard	MIL	2	49	54	55	41	54	55	51	54	41	41	50	44	54	44
GF	NCA 2_NCA18.MIL.0063.01	2042-2550 The Northern Road_123, Orchard	MIL	2	52	57	59	41	58	59	55	58	41	41	54	44	58	44
GF	NCA 2_NCA18.MIL.0064.01	2042-2550 The Northern Road_58, Orchard	MIL	2	62	67	69	50	68	69	65	68	50	50	64	53	68	53
GF	NCA 2_NCA18.MIL.0065.01	2042-2550 The Northern Road_59, Orchard	MIL	2	57	62	64	50	63	64	60	63	50	50	59	53	63	53
GF	NCA 2_NCA18.MIL.0066.01	2042-2550 The Northern Road_17, Orchard	MIL	2	61	66	68	53	67	68	64	67	53	53	63	56	67	56
GF	NCA 2_NCA18.MIL.0067.01	2042-2550 The Northern Road_52, Orchard	MIL	2	57	62	64	50	63	64	60	63	50	50	59	53	63	53
GF	NCA 2_NCA18.MIL.0068.01	2042-2550 The Northern Road_53, Orchard	MIL	2	57	62	64	51	63	64	60	63	51	51	59	54	63	54
GF	NCA 2_NCA18.MIL.0069.01	2042-2550 The Northern Road_54, Orchard	MIL	2	57	62	64	53	63	64	60	63	53	53	59	56	63	56
GF	NCA 2_NCA18.MIL.0070.01	2042-2550 The Northern Road_51, Orchard	MIL	2	57	62	64	53	63	64	60	63	53	53	59	56	63	56
GF	NCA 2_NCA18.MIL.0071.01	2042-2550 The Northern Road_4, Orchard H	MIL	2	58	63	65	51	64	65	61	64	51	51	60	54	64	54
GF	NCA 2_NCA18.MIL.0072.01	2042-2550 The Northern Road_61, Orchard	MIL	2	44	49	51	42	50	51	47	50	42	42	46	45	50	45
GF	NCA 2_NCA18.MIL.0073.01	2042-2550 The Northern Road_62, Orchard	MIL	2	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 2_NCA18.MIL.0078.01	2042-2550 The Northern Road_69, Orchard	MIL	2	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 2_NCA18.MIL.0079.01	2042-2550 The Northern Road_70, Orchard	MIL	2	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 2_NCA18.RES.0001.01	2778-2828 The Northern Road, Luddenham	RES	2	58	63	65	56	64	65	61	64	56	56	60	59	64	59
GF	NCA 2_NCA18.RES.0002.01	2594-2776 The Northern Road_4, Luddenham	RES	2	55	60	62	51	61	62	58	61	51	51	57	54	61	54
F1	NCA 2_NCA18.RES.0002.01	2594-2776 The Northern Road_4, Luddenham	RES	2	55	60	62	51	61	62	58	61	51	51	57	54	61	54
GF	NCA 2_NCA18.RES.0003.01	33-49 Gates Rd_1, Luddenham	RES	2	67	72	74	48	73	74	70	73	48	48	69	51	73	51
GF	NCA 2_NCA18.RES.0004.01	22-40 Gates Rd_1, Luddenham	RES	2	71	76	77	49	76	77	73	76	49	49	72	52	76	52
GF	NCA 2_NCA18.RES.0005.01	33-49 Gates Rd_2, Luddenham	RES	2	60	65	67	46	66	67	63	66	46	46	62	49	66	49
GF	NCA 2_NCA18.RES.0006.01	63-73 Gates Rd_1, Luddenham	RES	2	50	55	57	45	56	57	53	56	45	45	52	48	56	48
GF	NCA 2_NCA18.RES.0007.01	51 Gates Rd_1, Luddenham	RES	2	54	59	61	46	60	61	57	60	46	46	56	49	60	49
GF	NCA 2_NCA18.RES.0008.01	58-72 Gates Rd, Luddenham	RES	2	52	57	59	45	58	59	55	58	45	45	54	48	58	48
GF	NCA 2_NCA18.RES.0009.01	74-86 Gates Rd_2, Luddenham	RES	2	49	52	54	49	53	54	50	53	49	49	49	52	53	52

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 2_NCA18.RES.0009.01	74-86 Gates Rd_2, Luddenham	RES	2	49	52	54	49	53	54	50	53	49	49	49	52	53	52
GF	NCA 2_NCA18.RES.0010.01	77 Gates Rd, Mulgoa	RES	2	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 2_NCA18.RES.0011.01	42-56 Gates Rd_1, Mulgoa	RES	2	60	65	67	53	66	67	63	66	53	53	62	56	66	56
GF	NCA 2_NCA18.RES.0012.01	17-31 Gates Rd_1, Mulgoa	RES	2	77	82	81	46	80	81	77	80	46	46	76	49	80	49
GF	NCA 2_NCA18.RES.0013.01	17-31 Gates Rd_2, Mulgoa	RES	2	71	76	77	48	76	77	73	76	48	48	72	51	76	51
GF	NCA 2_NCA18.RES.0014.01	75-83 Gates Rd, Luddenham	RES	2	47	52	54	47	53	54	50	53	47	47	49	50	53	50
GF	NCA 2_NCA18.RES.0015.01	85-93 Gates Rd_1, Luddenham	RES	2	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 2_NCA18.RES.0016.01	95-99 Gates Rd_1, Luddenham	RES	2	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 2_NCA18.RES.0017.01	95-99 Gates Rd_2, Luddenham	RES	2	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 2_NCA18.RES.0018.01	101-111 Gates Rd_1, Luddenham	RES	2	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	NCA 2_NCA18.RES.0019.01	114 Gates Rd Luddenham	RES	2	41	46	48	38	47	48	44	47	38	38	43	41	47	41
GF	NCA 2_NCA18.RES.0020.01	108-112 Gates Rd_4, Luddenham	RES	2	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 2_NCA18.RES.0021.01	98-106 Gates Rd, Luddenham	RES	2	44	49	51	41	50	51	47	50	41	41	46	44	50	44
GF	NCA 3_NCA18.RES.0022.01	2289-2309 Elizabeth Dr_1, Luddenham	RES	3	69	74	76	55	75	76	72	75	55	55	71	58	75	58
F1	NCA 3_NCA18.RES.0022.01	2289-2309 Elizabeth Dr_1, Luddenham	RES	3	70	75	77	56	76	77	73	76	56	56	72	59	76	59
GF	NCA 3_NCA21.COM.0001.01	Sydney Society of Model Engineers_4	COM	3	43	48	50	42	49	50	46	49	35	35	45	38	49	38
GF	NCA 3_NCA21.GAR.0001.01	2207-2223 Elizabeth Dr_2, Luddenham	GAR	3	55	60	62	45	61	62	58	61	36	36	57	39	61	39
GF	NCA 3_NCA21.GAR.0002.01	2207-2223 Elizabeth Dr_3, Luddenham	GAR	3	55	60	62	45	61	62	58	61	40	40	57	43	61	43
GF	NCA 3_NCA21.GAR.0003.01	2179 Elizabeth Dr_3, Luddenham	GAR	3	47	52	54	43	53	54	50	53	34	34	49	37	53	37
GF	NCA 3_NCA21.GAR.0004.01	2179 Elizabeth Dr_4, Luddenham	GAR	3	49	54	56	44	55	56	52	55	37	37	51	40	55	40
GF	NCA 3_NCA21.GAR.0005.01	2179 Elizabeth Dr_5, Luddenham	GAR	3	50	55	57	44	56	57	53	56	37	37	52	40	56	40
GF	NCA 3_NCA21.GAR.0006.01	2179 Elizabeth Dr_6, Luddenham	GAR	3	50	55	57	44	56	57	53	56	38	38	52	41	56	41
GF	NCA 3_NCA21.GAR.0007.01	2179 Elizabeth Dr_7, Luddenham	GAR	3	50	55	57	47	56	57	53	56	38	38	52	41	56	41
GF	NCA 3_NCA21.GAR.0008.01	2179 Elizabeth Dr_8, Luddenham	GAR	3	51	56	58	45	57	58	54	57	38	38	53	41	57	41
GF	NCA 3_NCA21.GAR.0009.01	2179 Elizabeth Dr_9, Luddenham	GAR	3	50	55	57	47	56	57	53	56	38	38	52	41	56	41
GF	NCA 3_NCA21.GAR.0010.01	2179 Elizabeth Dr_10, Luddenham	GAR	3	48	53	55	44	54	55	51	54	37	37	50	40	54	40
GF	NCA 3_NCA21.GAR.0011.01	2161 Luddenham Rd_1, Luddenham	GAR	3	46	51	53	45	52	53	49	52	36	36	48	39	52	39
GF	NCA 3_NCA21.GAR.0012.01	Sydney Society of Model Engineers_1	GAR	3	44	49	51	43	50	51	47	50	35	35	46	38	50	38
GF	NCA 3_NCA21.GAR.0013.01	Sydney Society of Model Engineers_2	GAR	3	45	50	52	43	51	52	48	51	36	36	47	39	51	39
GF	NCA 3_NCA21.GAR.0014.01	Sydney Society of Model Engineers_3	GAR	3	43	48	50	43	49	50	46	49	35	35	45	38	49	38
GF	NCA 3_NCA21.RES.0001.01	2225-2239 Elizabeth Dr_1, Luddenham	RES	3	51	56	58	44	57	58	54	57	41	41	53	44	57	44
GF	NCA 3_NCA21.RES.0002.01	2225-2239 Elizabeth Dr_2, Luddenham	RES	3	52	57	59	45	58	59	55	58	40	40	54	43	58	43
GF	NCA 3_NCA21.RES.0003.01	2207-2223 Elizabeth Dr_1, Luddenham	RES	3	57	62	64	45	63	64	60	63	40	40	59	43	63	43
GF	NCA 3_NCA21.RES.0004.01	2179 Elizabeth Dr_1, Luddenham	RES	3	48	53	55	44	54	55	51	54	37	37	50	40	54	40
GF	NCA 3_NCA21.RES.0005.01	2179 Elizabeth Dr_2, Luddenham	RES	3	47	52	54	44	53	54	50	53	37	37	49	40	53	40
GF	NCA 3_NCA21.RES.0006.01	2161_2 Luddenham Rd, Luddenham	RES	3	43	48	50	43	49	50	46	49	35	35	45	38	49	38
GF	NCA 3_NCA21.RES.0007.01	2161 Luddenham Rd_3, Luddenham	RES	3	44	49	51	46	50	51	47	50	36	36	46	39	50	39
GF	NCA 7_NCA22.GAR.0044.01	230A Willowdene Ave_2, Luddenham	GAR	7	44	49	51	43	50	51	47	50	41	41	46	44	50	44
GF	NCA 5_NCA22.RES.0001.01	385 Park Rd, Luddenham	RES	5	39	43	45	47	44	45	41	44	39	39	40	42	44	42

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 7_NCA22.RES.0027.01	230A Willowdene Ave_1, Luddenham	RES	7	43	48	50	43	49	50	46	49	41	41	45	44	49	44
GF	NCA 5_NCA23.COM.0001.01	2903 The Northern Road_24, Luddenham	COM	5	64	66	69	64	68	69	65	68	64	64	64	67	68	67
GF	NCA 5_NCA23.COM.0002.01	Caltex Service Station	COM	5	44	47	49	52	48	49	45	48	44	44	44	47	48	47
F1	NCA 5_NCA23.COM.0002.01	Caltex Service Station	COM	5	44	47	49	52	48	49	45	48	44	44	44	47	48	47
GF	NCA 5_NCA23.COM.0003.01	2903 The Northern Road_30, Luddenham	COM	5	49	54	56	49	55	56	52	55	49	49	51	52	55	52
GF	NCA 5_NCA23.COM.0004.01	Quality Meats Butcher	COM	5	44	49	51	53	50	51	47	50	42	42	46	45	50	45
GF	NCA 5_NCA23.COM.0005.01	Luddenham Auto Repairs	COM	5	42	47	49	51	48	49	45	48	40	40	44	43	48	43
GF	NCA 5_NCA23.COM.0006.01	Ali's Bakery	COM	5	46	51	53	54	52	53	49	52	44	44	48	47	52	47
GF	NCA 5_NCA23.COM.0007.01	Shell Service Station, Luddenham	COM	5	80	85	87	57	86	87	83	86	55	55	82	58	86	58
GF	NCA 5_NCA23.COM.0008.01	IGA Luddenham	COM	5	73	78	80	59	79	80	76	79	52	52	75	55	79	55
F1	NCA 5_NCA23.COM.0008.01	IGA Luddenham	COM	5	75	80	82	59	81	82	78	81	52	52	77	55	81	55
GF	NCA 5_NCA23.COM.0009.01	David's Stall Fruit and Veg	COM	5	48	53	55	57	54	55	51	54	44	44	50	47	54	47
GF	NCA 5_NCA23.COM.0010.01	Luddenham Progress Hall	COM	5	49	54	56	54	55	56	52	55	43	43	51	46	55	46
GF	NCA 5_NCA23.GAR.0001.01	2320-2390 The Northern Road_3, Luddenham	GAR	5	61	66	69	55	68	69	65	68	55	55	64	58	68	58
GF	NCA 5_NCA23.GAR.0002.01	2320-2390 The Northern Road_1, Luddenham	GAR	5	64	69	71	55	70	71	67	70	55	55	66	58	70	58
GF	NCA 3_NCA23.GAR.0003.01	2859 The Northern Road_6, Luddenham	GAR	3	50	55	57	50	56	57	53	56	50	50	52	53	56	53
GF	NCA 5_NCA23.GAR.0004.01	2903 The Northern Road_21, Luddenham	GAR	5	63	63	64	63	63	64	63	63	63	63	63	66	66	66
GF	NCA 5_NCA23.RES.0188.01	2903 The Northern Road_22, Luddenham	RES	5	69	69	69	69	69	69	69	69	69	69	69	72	72	72
GF	NCA 5_NCA23.GAR.0006.01	2903 The Northern Road_23, Luddenham	GAR	5	69	69	69	69	69	69	69	69	69	69	69	72	72	72
GF	NCA 5_NCA23.GAR.0007.01	2903 The Northern Road_25, Luddenham	GAR	5	66	66	67	66	66	67	66	66	66	66	66	69	69	69
GF	NCA 5_NCA23.GAR.0008.01	2903 The Northern Road_29, Luddenham	GAR	5	58	58	59	58	58	59	58	58	58	58	58	61	61	61
GF	NCA 5_NCA23.RES.0140.01	2903 The Northern Road_28, Luddenham	RES	5	57	62	65	56	64	65	61	64	56	56	60	59	64	59
GF	NCA 5_NCA23.GAR.0010.01	2392-2398 The Northern Road_2, Luddenham	GAR	5	63	68	70	59	69	70	66	69	59	59	65	62	69	62
GF	NCA 5_NCA23.GAR.0011.01	2300 The Northern Road_2, Luddenham	GAR	5	49	54	56	52	55	56	52	55	47	47	51	50	55	50
GF	NCA 5_NCA23.GAR.0012.01	2300 The Northern Road_3, Luddenham	GAR	5	52	57	59	53	58	59	55	58	47	47	54	50	58	50
GF	NCA 5_NCA23.GAR.0013.01	2903 The Northern Road_27, Luddenham	GAR	5	59	64	67	59	66	67	63	66	59	59	62	62	66	62
GF	NCA 5_NCA23.GAR.0014.01	2230 The Northern Road_5, Luddenham	GAR	5	48	49	51	55	50	51	48	50	48	48	48	51	51	51
GF	NCA 5_NCA23.GAR.0015.01	2230 The Northern Road_4, Luddenham	GAR	5	47	50	52	54	51	52	48	51	47	47	47	50	51	50
GF	NCA 5_NCA23.GAR.0016.01	2230 The Northern Road_3, Luddenham	GAR	5	46	48	50	53	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.GAR.0017.01	2230 The Northern Road_2, Luddenham	GAR	5	46	49	51	53	50	51	47	50	46	46	46	49	50	49
GF	NCA 5_NCA23.GAR.0018.01	3037 The Northern Road_2, Luddenham	GAR	5	44	46	48	52	47	48	44	47	44	44	44	47	47	47
GF	NCA 5_NCA23.GAR.0019.01	2903 The Northern Road_31, Luddenham	GAR	5	50	55	57	50	56	57	53	56	49	49	52	52	56	52
GF	NCA 5_NCA23.GAR.0020.01	2903 The Northern Road_32, Luddenham	GAR	5	49	54	56	51	55	56	52	55	49	49	51	52	55	52
GF	NCA 5_NCA23.GAR.0021.01	2903 The Northern Road_33, Luddenham	GAR	5	47	52	54	50	53	54	50	53	47	47	49	50	53	50
GF	NCA 5_NCA23.RES.0026.01	2903 The Northern Road_34, Luddenham	RES	5	48	53	55	51	54	55	51	54	48	48	50	51	54	51
GF	NCA 5_NCA23.GAR.0023.01	Luddenham Showground_1	GAR	5	40	45	47	49	46	47	43	46	40	40	42	43	46	43
GF	NCA 5_NCA23.GAR.0024.01	2903 The Northern Road_20, Luddenham	GAR	5	57	57	58	57	57	58	57	57	57	57	57	60	60	60
GF	NCA 5_NCA23.GAR.0025.01	2903 The Northern Road_5, Luddenham	GAR	5	54	54	56	54	55	56	54	55	54	54	54	57	57	57
GF	NCA 5_NCA23.GAR.0026.01	2903 The Northern Road_4, Luddenham	GAR	5	49	53	55	49	54	55	51	54	49	49	50	52	54	52

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 5_NCA23.GAR.0027.01	2903 The Northern Road_3, Luddenham	GAR	5	49	53	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 5_NCA23.GAR.0028.01	2903 The Northern Road_2, Luddenham	GAR	5	49	52	54	49	53	54	50	53	49	49	49	52	53	52
GF	NCA 5_NCA23.GAR.0029.01	2903 The Northern Road_1, Luddenham	GAR	5	48	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 5_NCA23.GAR.0030.01	2903 The Northern Road_7, Luddenham	GAR	5	51	53	56	51	55	56	52	55	51	51	51	54	55	54
GF	NCA 5_NCA23.GAR.0031.01	2903 The Northern Road_6, Luddenham	GAR	5	46	51	52	46	51	52	48	51	42	42	47	45	51	45
GF	NCA 5_NCA23.GAR.0032.01	2903 The Northern Road_8, Luddenham	GAR	5	47	49	50	48	49	50	47	49	47	47	47	50	50	50
GF	NCA 5_NCA23.GAR.0033.01	2903 The Northern Road_9, Luddenham	GAR	5	47	50	52	48	51	52	48	51	47	47	47	50	51	50
GF	NCA 5_NCA23.GAR.0034.01	2903 The Northern Road_10, Luddenham	GAR	5	48	50	52	48	51	52	48	51	48	48	48	51	51	51
GF	NCA 5_NCA23.GAR.0035.01	2903 The Northern Road_11, Luddenham	GAR	5	48	51	53	49	52	53	49	52	48	48	48	51	52	51
GF	NCA 5_NCA23.GAR.0036.01	2903 The Northern Road_12, Luddenham	GAR	5	49	51	53	49	52	53	49	52	49	49	49	52	52	52
GF	NCA 5_NCA23.GAR.0037.01	2903 The Northern Road_13, Luddenham	GAR	5	50	54	56	50	55	56	52	55	50	50	51	53	55	53
GF	NCA 5_NCA23.GAR.0038.01	2903 The Northern Road_16, Luddenham	GAR	5	47	51	53	49	52	53	49	52	47	47	48	50	52	50
GF	NCA 5_NCA23.GAR.0039.01	2903 The Northern Road_15, Luddenham	GAR	5	46	51	53	48	52	53	49	52	46	46	48	49	52	49
GF	NCA 5_NCA23.GAR.0040.01	2903 The Northern Road_14, Luddenham	GAR	5	46	50	52	48	51	52	48	51	46	46	47	49	51	49
GF	NCA 5_NCA23.GAR.0041.01	2903 The Northern Road_17, Luddenham	GAR	5	45	49	51	49	50	51	47	50	45	45	46	48	50	48
GF	NCA 5_NCA23.GAR.0042.01	2903 The Northern Road_18, Luddenham	GAR	5	45	49	51	49	50	51	47	50	45	45	46	48	50	48
GF	NCA 5_NCA23.GAR.0043.01	2903 The Northern Road_19, Luddenham	GAR	5	45	50	52	49	51	52	48	51	45	45	47	48	51	48
GF	NCA 5_NCA23.GAR.0044.01	50-80 Adams Rd_3, Luddenham	GAR	5	45	50	52	58	51	52	48	51	44	45	47	48	51	47
GF	NCA 5_NCA23.GAR.0045.01	50-80 Adams Rd_4, Luddenham	GAR	5	50	51	53	57	52	53	50	52	50	50	50	53	53	53
GF	NCA 5_NCA23.GAR.0046.01	50-80 Adams Rd_5, Luddenham	GAR	5	58	58	58	61	58	58	58	58	58	58	58	61	61	61
GF	NCA 5_NCA23.GAR.0047.01	57-73 Campbell St_2, Luddenham	GAR	5	43	48	50	50	49	50	46	49	40	40	45	43	49	43
GF	NCA 5_NCA23.GAR.0048.01	58 Campbell St_2, Luddenham	GAR	5	43	48	50	52	49	50	46	49	42	42	45	45	49	45
GF	NCA 5_NCA23.GAR.0049.01	3077 The Northern Road_2, Luddenham	GAR	5	42	47	49	52	48	49	45	48	38	39	44	42	48	41
GF	NCA 5_NCA23.GAR.0050.01	2198 The Northern Road_2, Luddenham	GAR	5	43	48	50	54	49	50	46	49	43	43	45	45	49	45
GF	NCA 5_NCA23.GAR.0051.01	14 Hawkins Ave_2, Luddenham	GAR	5	43	48	50	54	49	50	46	49	43	43	45	46	49	46
GF	NCA 5_NCA23.GAR.0052.01	39 Blaxland Ave_2, Luddenham	GAR	5	48	49	51	56	50	51	48	50	48	48	48	51	51	51
GF	NCA 5_NCA23.GAR.0053.01	3081 The Northern Road_2, Luddenham	GAR	5	44	49	52	52	51	52	48	51	43	43	47	46	51	46
GF	NCA 5_NCA23.RES.0014.01	57-73 Campbell St_3, Luddenham	RES	5	45	50	52	50	51	52	48	51	40	40	47	43	51	43
GF	NCA 5_NCA23.GAR.0055.01	429 Park Rd_2, Luddenham	GAR	5	42	46	48	48	47	48	44	47	42	42	43	45	47	45
GF	NCA 5_NCA23.GAR.0056.01	417 Park Rd_2, Luddenham	GAR	5	41	45	47	47	46	47	43	46	41	41	42	44	46	44
GF	NCA 5_NCA23.GAR.0057.01	78 Campbell St_2, Luddenham	GAR	5	44	49	51	49	50	51	47	50	41	41	46	44	50	44
GF	NCA 5_NCA23.GAR.0058.01	2 Willowdene Ave_2, Luddenham	GAR	5	43	48	50	49	49	50	46	49	41	41	45	44	49	44
GF	NCA 5_NCA23.GAR.0059.01	7 Adams Rd_2, Luddenham	GAR	5	60	65	67	57	66	67	63	66	50	50	62	53	66	53
GF	NCA 5_NCA23.GAR.0060.01	15 Adams Rd_2, Luddenham	GAR	5	56	61	63	58	62	63	59	62	50	50	58	53	62	53
GF	NCA 5_NCA23.GAR.0061.01	45 Adams Rd_2, Luddenham	GAR	5	58	63	65	67	64	65	61	64	52	54	60	57	64	54
GF	NCA 5_NCA23.GAR.0062.01	10 Wade Cl_2, Luddenham	GAR	5	48	53	55	55	54	55	51	54	47	47	50	50	54	50
GF	NCA 5_NCA23.GAR.0063.01	1 Adams Rd_2, Luddenham	GAR	5	49	53	55	60	54	55	51	54	49	49	50	52	54	52
GF	NCA 5_NCA23.GAR.0064.01	34 Jamison St_2, Luddenham	GAR	5	47	52	54	55	53	54	50	53	45	45	49	48	53	48
GF	NCA 5_NCA23.GAR.0065.01	2215 The Northern Road_3, Luddenham	GAR	5	63	68	70	54	69	70	66	69	54	54	65	57	69	57

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 5_NCA23.GAR.0066.01	2215 The Northern Road_2, Luddenham	GAR	5	64	69	71	52	70	71	67	70	52	52	66	55	70	55
GF	NCA 5_NCA23.GAR.0054.01	3061-3063 The Northern Road_2, Luddenham	GAR	5	43	48	50	52	49	50	46	49	43	43	45	46	49	46
F1	NCA 5_NCA23.GAR.0054.01	3061-3063 The Northern Road_2, Luddenham	GAR	5	45	50	52	52	51	52	48	51	43	43	47	46	51	46
GF	NCA 5_NCA23.GAR.0022.01	2180 The Northern Road_2, Luddenham	GAR	5	49	54	56	54	55	56	52	55	45	45	51	48	55	48
GF	NCA 5_NCA23.OED.0001.01	Luddenham Public School_2	OED	5	47	52	55	58	54	55	51	54	45	45	50	48	54	48
GF	NCA 5_NCA23.OED.0002.01	Luddenham Public School_3	OED	5	47	52	54	57	53	54	50	53	45	45	49	48	53	48
GF	NCA 5_NCA23.OED.0003.01	Luddenham Public School 5	OED	5	52	57	59	55	58	59	55	58	44	44	54	47	58	47
GF	NCA 5_NCA23.OED.0004.01	Luddenham Public School_4	OED	5	51	56	58	53	57	58	54	57	44	44	53	47	57	47
GF	NCA 5_NCA23.OED.0005.01	Luddenham Public School_1	OED	5	49	54	56	56	55	56	52	55	45	45	51	48	55	48
GF	NCA 5_NCA23.OED.0006.01	Holy Family Catholic Primary School_1	OED	5	46	51	53	52	52	53	49	52	43	43	48	46	52	46
F1	NCA 5_NCA23.OED.0006.01	Holy Family Catholic Primary School_1	OED	5	46	51	53	52	52	53	49	52	43	43	48	46	52	46
GF	NCA 5_NCA23.OPW.0001.01	St James Anglican Church	OPW	5	59	64	66	55	65	66	62	65	47	47	61	50	65	50
GF	NCA 5_NCA23.OPW.0002.01	Sacred Heart Parish	OPW	5	45	50	52	50	51	52	48	51	41	41	47	43	51	43
GF	NCA 5_NCA23.OPW.0003.01	Luddenham Uniting Church_1	OPW	5	50	55	57	54	56	57	53	56	44	44	52	47	56	47
GF	NCA 5_NCA23.OPW.0004.01	Luddenham Uniting Church_2	OPW	5	50	55	57	53	56	57	53	56	43	43	52	46	56	46
GF	NCA 5_NCA23.OST.0001.01	Luddenham Showground_2	OST	5	42	45	47	50	46	47	43	46	42	42	42	45	46	45
GF	NCA 5_NCA23.RES.0001.01	2320-2390 The Northern Road_2, Luddenham	RES	5	65	70	72	59	71	72	68	71	59	59	67	62	71	62
GF	NCA 3_NCA23.RES.0002.01	2859 The Northern Road_1, Luddenham	RES	3	60	65	66	53	65	66	62	65	53	53	61	56	65	56
GF	NCA 3_NCA23.RES.0003.01	2859 The Northern Road_2, Luddenham	RES	3	55	60	62	51	61	62	58	61	51	51	57	54	61	54
GF	NCA 5_NCA23.RES.0004.01	2392-2398 The Northern Road_1, Luddenham	RES	5	65	70	72	57	71	72	68	71	57	57	67	60	71	60
F1	NCA 5_NCA23.RES.0004.01	2392-2398 The Northern Road_1, Luddenham	RES	5	66	71	73	58	72	73	69	72	58	58	68	61	72	61
GF	NCA 5_NCA23.RES.0005.01	2300 The Northern Road_1, Luddenham	RES	5	55	60	62	52	61	62	58	61	52	52	57	55	61	55
GF	NCA 5_NCA23.RES.0006.01	2230 The Northern Road_1, Luddenham	RES	5	46	48	50	55	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0007.01	3037 The Northern Road_1, Luddenham	RES	5	44	46	48	52	47	48	44	47	44	44	44	47	47	47
GF	NCA 5_NCA23.RES.0008.01	2210 The Northern Road, Luddenham	RES	5	45	46	48	53	47	48	45	47	45	45	45	48	48	48
GF	NCA 5_NCA23.RES.0009.01	3039 The Northern Road, Luddenham	RES	5	43	46	48	52	47	48	44	47	43	43	43	46	47	46
GF	NCA 5_NCA23.RES.0010.01	Lot1/DP931631	RES	5	42	45	47	50	46	47	43	46	42	42	42	45	46	45
GF	NCA 5_NCA23.RES.0011.01	50-80 Adams Rd_2, Luddenham	RES	5	51	51	53	59	52	53	51	52	51	51	51	54	54	54
GF	NCA 5_NCA23.RES.0012.01	50-80 Adams Rd_1, Luddenham	RES	5	57	57	57	61	57	57	57	57	57	57	57	60	60	60
GF	NCA 5_NCA23.RES.0013.01	2292 The Northern Road_1, Luddenham	RES	5	51	56	58	57	57	58	54	57	50	50	53	53	57	53
GF	NCA 5_NCA23.GAR.0005.01	2292 The Northern Road_2, Luddenham	GAR	5	53	58	60	56	59	60	56	59	46	46	55	49	59	49
GF	NCA 5_NCA23.RES.0015.01	70 Campbell St, Luddenham	RES	5	44	49	51	51	50	51	47	50	41	41	46	44	50	44
GF	NCA 5_NCA23.RES.0016.01	68 Campbell St, Luddenham	RES	5	43	48	50	51	49	50	46	49	39	39	45	42	49	42
GF	NCA 5_NCA23.RES.0017.01	66 Campbell St, Luddenham	RES	5	44	49	51	50	50	51	47	50	40	40	46	43	50	43
GF	NCA 5_NCA23.RES.0018.01	64 Campbell St, Luddenham	RES	5	44	49	51	51	50	51	47	50	39	39	46	41	50	41
GF	NCA 5_NCA23.RES.0019.01	60 Campbell St, Luddenham	RES	5	45	50	52	50	51	52	48	51	41	41	47	44	51	44
GF	NCA 5_NCA23.RES.0020.01	58 Campbell St_1, Luddenham	RES	5	43	48	50	45	49	50	46	49	38	38	45	41	49	41
GF	NCA 5_NCA23.RES.0021.01	3077 The Northern Road_1, Luddenham	RES	5	45	50	52	53	51	52	48	51	43	43	47	46	51	46
F1	NCA 5_NCA23.RES.0021.01	3077 The Northern Road_1, Luddenham	RES	5	45	50	52	53	51	52	48	51	43	43	47	46	51	46

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 5_NCA23.RES.0022.01	3081 The Northern Road_1, Luddenham	RES	5	46	51	53	53	52	53	49	52	43	43	48	46	52	46
GF	NCA 5_NCA23.RES.0023.01	56 Campbell St, Luddenham	RES	5	41	44	46	51	45	46	42	45	41	41	41	44	45	44
GF	NCA 5_NCA23.RES.0024.01	3083 The Northern Road, Luddenham	RES	5	46	51	53	53	52	53	49	52	45	45	48	48	52	48
F1	NCA 5_NCA23.RES.0024.01	3083 The Northern Road, Luddenham	RES	5	49	54	56	54	55	56	52	55	46	46	51	49	55	49
GF	NCA 5_NCA23.RES.0025.01	Lot4/DP1655	RES	5	47	52	54	55	53	54	50	53	45	45	49	48	53	48
GF	NCA 5_NCA23.GAR.0067.01	Lot4/DP1655	GAR	5	46	51	53	53	52	53	49	52	42	42	48	45	52	45
GF	NCA 5_NCA23.RES.0027.01	3075 The Northern Road, Luddenham	RES	5	45	50	52	53	51	52	48	51	43	43	47	46	51	46
GF	NCA 5_NCA23.RES.0028.01	21-55 Campbell St, Luddenham	RES	5	41	46	48	51	47	48	44	47	40	40	43	43	47	43
GF	NCA 5_NCA23.RES.0029.01	3061-3063 The Northern Road_1, Luddenham	RES	5	43	48	50	53	49	50	46	49	43	43	45	45	49	45
F1	NCA 5_NCA23.RES.0029.01	3061-3063 The Northern Road_1, Luddenham	RES	5	44	48	50	53	49	50	46	49	44	44	45	47	49	47
GF	NCA 5_NCA23.RES.0030.01	3059 The Northern Road_1, Luddenham	RES	5	41	46	48	53	47	48	44	47	41	41	43	44	47	44
GF	NCA 5_NCA23.RES.0031.01	3053 The Northern Road, Luddenham	RES	5	43	47	49	55	48	49	45	48	43	43	44	45	48	45
GF	NCA 5_NCA23.RES.0032.01	3055 The Northern Road, Luddenham	RES	5	42	46	48	55	47	48	44	47	42	42	43	45	47	45
GF	NCA 5_NCA23.RES.0033.01	3057 The Northern Road, Luddenham	RES	5	40	45	47	52	46	47	43	46	39	39	42	42	46	42
GF	NCA 5_NCA23.RES.0034.01	3059 The Northern Road_2, Luddenham	RES	5	42	46	48	51	47	48	44	47	42	42	43	45	47	45
GF	NCA 5_NCA23.RES.0035.01	3047 The Northern Road, Luddenham	RES	5	44	47	49	55	48	49	45	48	44	44	44	47	48	47
F1	NCA 5_NCA23.RES.0035.01	3047 The Northern Road, Luddenham	RES	5	44	48	51	55	50	51	47	50	44	44	46	47	50	47
GF	NCA 5_NCA23.RES.0036.01	3051 The Northern Road, Luddenham	RES	5	45	48	50	55	49	50	46	49	45	45	45	48	49	48
GF	NCA 5_NCA23.RES.0037.01	3045 The Northern Road, Luddenham	RES	5	46	48	50	55	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0038.01	3043 The Northern Road, Luddenham	RES	5	43	46	48	52	47	48	44	47	43	43	43	46	47	46
GF	NCA 5_NCA23.RES.0039.01	2208 The Northern Road, Luddenham	RES	5	43	48	50	52	49	50	46	49	42	42	45	45	49	45
F1	NCA 5_NCA23.RES.0039.01	2208 The Northern Road, Luddenham	RES	5	45	48	50	53	49	50	46	49	45	45	45	48	49	48
GF	NCA 5_NCA23.RES.0040.01	2206 The Northern Road, Luddenham	RES	5	43	48	50	48	49	50	46	49	41	41	45	44	49	44
GF	NCA 5_NCA23.RES.0041.01	2204 The Northern Road, Luddenham	RES	5	44	46	48	53	47	48	44	47	44	44	44	47	47	47
F1	NCA 5_NCA23.RES.0041.01	2204 The Northern Road, Luddenham	RES	5	45	47	49	53	48	49	45	48	45	45	45	48	48	48
GF	NCA 5_NCA23.RES.0042.01	2202 The Northern Road, Luddenham	RES	5	41	46	48	53	47	48	44	47	41	41	43	43	47	43
GF	NCA 5_NCA23.RES.0043.01	2200 The Northern Road, Luddenham	RES	5	41	46	48	53	47	48	44	47	41	41	43	43	47	43
GF	NCA 5_NCA23.RES.0044.01	2198 The Northern Road_1, Luddenham	RES	5	44	46	48	53	47	48	44	47	44	44	44	47	47	47
F1	NCA 5_NCA23.RES.0044.01	2198 The Northern Road_1, Luddenham	RES	5	45	47	51	53	50	51	47	50	45	45	46	48	50	48
GF	NCA 5_NCA23.RES.0045.01	2196 The Northern Road, Luddenham	RES	5	43	47	49	55	48	49	45	48	43	43	44	45	48	45
GF	NCA 5_NCA23.RES.0046.01	2194 The Northern Road, Luddenham	RES	5	44	47	49	55	48	49	45	48	44	44	44	47	48	47
GF	NCA 5_NCA23.RES.0047.01	2192 The Northern Road, Luddenham	RES	5	44	48	50	54	49	50	46	49	44	44	45	46	49	46
GF	NCA 5_NCA23.RES.0048.01	2186 The Northern Road, Luddenham	RES	5	45	50	52	54	51	52	48	51	43	43	47	46	51	46
GF	NCA 5_NCA23.RES.0049.01	2184 The Northern Road, Luddenham	RES	5	44	47	49	54	48	49	45	48	44	44	44	47	48	47
GF	NCA 5_NCA23.RES.0050.01	2188 The Northern Road, Luddenham	RES	5	45	50	52	54	51	52	48	51	42	42	47	45	51	45
GF	NCA 5_NCA23.RES.0051.01	2190 The Northern Road, Luddenham	RES	5	46	48	50	56	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0052.01	25 Blaxland Ave, Luddenham	RES	5	47	50	52	57	51	52	48	51	47	47	47	50	51	50
GF	NCA 5_NCA23.RES.0053.01	27 Blaxland Ave, Luddenham	RES	5	47	51	53	59	52	53	49	52	47	47	48	50	52	50
F1	NCA 5_NCA23.RES.0053.01	27 Blaxland Ave, Luddenham	RES	5	47	51	53	59	52	53	49	52	47	47	48	50	52	50

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 5_NCA23.RES.0054.01	29 Blaxland Ave, Luddenham	RES	5	47	49	52	58	51	52	48	51	47	47	47	50	51	50
GF	NCA 5_NCA23.RES.0055.01	31 Blaxland Ave, Luddenham	RES	5	47	49	51	56	50	51	47	50	47	47	47	50	50	50
GF	NCA 5_NCA23.RES.0056.01	33 Blaxland Ave, Luddenham	RES	5	45	49	51	55	50	51	47	50	45	45	46	48	50	48
GF	NCA 5_NCA23.RES.0057.01	35 Blaxland Ave, Luddenham	RES	5	48	49	51	55	50	51	48	50	48	48	48	51	51	51
GF	NCA 5_NCA23.RES.0058.01	37 Blaxland Ave, Luddenham	RES	5	48	48	50	55	49	50	48	49	48	48	48	51	51	51
GF	NCA 5_NCA23.RES.0059.01	39 Blaxland Ave_1, Luddenham	RES	5	49	49	51	57	50	51	49	50	49	49	49	52	52	52
GF	NCA 5_NCA23.RES.0060.01	41 Blaxland Ave, Luddenham	RES	5	49	49	50	56	49	50	49	49	49	49	49	52	52	52
GF	NCA 5_NCA23.RES.0061.01	3 Hawkins Ave, Luddenham	RES	5	46	48	50	54	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0062.01	1 Hawkins Ave, Luddenham	RES	5	47	48	50	55	49	50	47	49	47	47	47	50	50	50
GF	NCA 5_NCA23.RES.0063.01	45 Blaxland Ave, Luddenham	RES	5	48	48	50	56	49	50	48	49	48	48	48	51	51	51
GF	NCA 5_NCA23.RES.0064.01	43 Blaxland Ave, Luddenham	RES	5	48	49	51	55	50	51	48	50	48	48	48	51	51	51
F1	NCA 5_NCA23.RES.0064.01	43 Blaxland Ave, Luddenham	RES	5	48	49	51	55	50	51	48	50	48	48	48	51	51	51
GF	NCA 5_NCA23.RES.0065.01	30 Blaxland Ave, Luddenham	RES	5	46	48	50	55	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0066.01	11 Hawkins Ave, Luddenham	RES	5	47	50	52	56	51	52	48	51	47	47	47	50	51	50
F1	NCA 5_NCA23.RES.0066.01	11 Hawkins Ave, Luddenham	RES	5	47	50	52	57	51	52	48	51	47	47	47	50	51	50
GF	NCA 5_NCA23.RES.0067.01	28 Blaxland Ave, Luddenham	RES	5	44	48	50	54	49	50	46	49	44	44	45	47	49	47
GF	NCA 5_NCA23.RES.0068.01	9 Hawkins Ave, Luddenham	RES	5	47	47	49	54	48	49	47	48	47	47	47	50	50	50
GF	NCA 5_NCA23.RES.0069.01	7 Hawkins Ave, Luddenham	RES	5	42	47	49	54	48	49	45	48	42	42	44	45	48	45
F1	NCA 5_NCA23.RES.0069.01	7 Hawkins Ave, Luddenham	RES	5	46	48	50	54	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0070.01	5 Hawkins Ave, Luddenham	RES	5	46	47	50	54	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0071.01	13 Hawkins Ave, Luddenham	RES	5	50	50	51	55	50	51	50	50	50	50	50	53	53	53
GF	NCA 5_NCA23.RES.0072.01	15 Hawkins Ave, Luddenham	RES	5	49	49	51	57	50	51	49	50	49	49	49	52	52	52
GF	NCA 5_NCA23.RES.0073.01	17 Hawkins Ave, Luddenham	RES	5	50	50	51	55	50	51	50	50	50	50	50	53	53	53
GF	NCA 5_NCA23.RES.0074.01	28 Hawkins Ave, Luddenham	RES	5	48	49	51	55	50	51	48	50	48	48	48	51	51	51
GF	NCA 5_NCA23.RES.0075.01	26 Hawkins Ave, Luddenham	RES	5	47	47	49	54	48	49	47	48	47	47	47	50	50	50
F1	NCA 5_NCA23.RES.0075.01	26 Hawkins Ave, Luddenham	RES	5	47	48	50	54	49	50	47	49	47	47	47	50	50	50
GF	NCA 5_NCA23.RES.0076.01	24 Hawkins Ave, Luddenham	RES	5	47	48	50	54	49	50	47	49	47	47	47	50	50	50
GF	NCA 5_NCA23.RES.0077.01	22 Hawkins Ave, Luddenham	RES	5	46	47	49	54	48	49	46	48	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0078.01	20 Hawkins Ave, Luddenham	RES	5	42	46	48	53	47	48	44	47	42	42	43	45	47	45
GF	NCA 5_NCA23.RES.0079.01	18 Hawkins Ave, Luddenham	RES	5	46	49	51	53	50	51	47	50	46	46	46	49	50	49
GF	NCA 5_NCA23.RES.0080.01	16 Hawkins Ave, Luddenham	RES	5	46	48	50	56	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0081.01	14 Hawkins Ave_1, Luddenham	RES	5	44	48	50	55	49	50	46	49	44	44	45	47	49	47
GF	NCA 5_NCA23.RES.0082.01	2 Hawkins Ave, Luddenham	RES	5	44	47	50	55	49	50	46	49	44	44	45	47	49	47
F1	NCA 5_NCA23.RES.0082.01	2 Hawkins Ave, Luddenham	RES	5	47	50	52	55	51	52	48	51	47	47	47	50	51	50
GF	NCA 5_NCA23.RES.0083.01	12 Hawkins Ave, Luddenham	RES	5	48	48	50	55	49	50	48	49	48	48	48	51	51	51
GF	NCA 5_NCA23.RES.0084.01	10 Hawkins Ave, Luddenham	RES	5	46	47	49	54	48	49	46	48	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0085.01	8 Hawkins Ave, Luddenham	RES	5	45	45	47	45	46	47	45	46	45	45	45	48	48	48
F1	NCA 5_NCA23.RES.0085.01	8 Hawkins Ave, Luddenham	RES	5	46	48	50	53	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0086.01	22 Blaxland Ave, Luddenham	RES	5	44	49	51	56	50	51	47	50	44	44	46	47	50	47

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 5_NCA23.RES.0087.01	3 Michael Ave, Luddenham	RES	5	44	49	51	54	50	51	47	50	43	43	46	46	50	46
GF	NCA 5_NCA23.RES.0088.01	20 Blaxland Ave, Luddenham	RES	5	44	49	51	57	50	51	47	50	42	44	46	47	50	45
GF	NCA 5_NCA23.RES.0089.01	5 Michael Ave, Luddenham	RES	5	44	49	51	54	50	51	47	50	44	44	46	47	50	47
GF	NCA 5_NCA23.RES.0090.01	4 Hawkins Ave, Luddenham	RES	5	45	48	50	54	49	50	46	49	45	45	45	48	49	48
F1	NCA 5_NCA23.RES.0090.01	4 Hawkins Ave, Luddenham	RES	5	46	51	53	54	52	53	49	52	46	46	48	49	52	49
GF	NCA 5_NCA23.RES.0091.01	6 Hawkins Ave, Luddenham	RES	5	46	48	50	56	49	50	46	49	46	46	46	49	49	49
GF	NCA 5_NCA23.RES.0092.01	7 Michael Ave, Luddenham	RES	5	45	48	51	54	50	51	47	50	45	45	46	48	50	48
GF	NCA 5_NCA23.RES.0093.01	11 Michael Ave, Luddenham	RES	5	45	48	50	54	49	50	46	49	45	45	45	48	49	48
GF	NCA 5_NCA23.RES.0094.01	4 Michael Ave, Luddenham	RES	5	42	47	49	54	48	49	45	48	42	42	44	45	48	45
GF	NCA 5_NCA23.RES.0095.01	6 Michael Ave, Luddenham	RES	5	44	48	50	56	49	50	46	49	44	44	45	46	49	46
GF	NCA 5_NCA23.RES.0096.01	14 Blaxland Ave, Luddenham	RES	5	43	48	51	57	50	51	47	50	42	44	46	47	50	44
GF	NCA 5_NCA23.RES.0097.01	8 Michael Ave, Luddenham	RES	5	45	50	52	54	51	52	48	51	42	42	47	44	51	44
GF	NCA 5_NCA23.RES.0098.01	18 Blaxland Ave, Luddenham	RES	5	43	48	50	55	49	50	46	49	43	43	45	46	49	46
GF	NCA 5_NCA23.RES.0099.01	16 Blaxland Ave, Luddenham	RES	5	44	49	50	57	50	51	46	49	42	44	46	47	49	44
GF	NCA 5_NCA23.RES.0100.01	12 Blaxland Ave, Luddenham	RES	5	45	47	49	55	48	49	45	48	45	45	45	48	48	48
F1	NCA 5_NCA23.RES.0100.01	12 Blaxland Ave, Luddenham	RES	5	46	49	51	55	50	51	47	50	46	46	46	49	50	49
GF	NCA 5_NCA23.RES.0101.01	10 Michael Ave, Luddenham	RES	5	44	48	50	55	49	50	46	49	44	44	45	46	49	46
GF	NCA 5_NCA23.RES.0102.01	13 Michael Ave, Luddenham	RES	5	44	49	51	54	50	51	47	50	43	43	46	46	50	46
GF	NCA 5_NCA23.RES.0103.01	15 Michael Ave, Luddenham	RES	5	47	52	54	57	53	54	50	53	44	44	49	47	53	47
GF	NCA 5_NCA23.RES.0104.01	21 Michael Ave, Luddenham	RES	5	45	49	51	54	50	51	47	50	45	45	46	48	50	48
GF	NCA 5_NCA23.RES.0105.01	19 Michael Ave, Luddenham	RES	5	45	49	51	56	50	51	47	50	45	45	46	48	50	48
GF	NCA 5_NCA23.RES.0106.01	17 Michael Ave, Luddenham	RES	5	47	50	52	56	51	52	48	51	47	47	47	50	51	50
GF	NCA 5_NCA23.RES.0107.01	9 Michael Ave, Luddenham	RES	5	43	48	50	54	49	50	46	49	42	42	45	45	49	45
GF	NCA 5_NCA23.RES.0108.01	57-73 Campbell St_1, Luddenham	RES	5	43	48	50	50	49	50	46	49	40	40	45	43	49	43
GF	NCA 5_NCA23.RES.0109.01	406 Park Rd_2, Luddenham	RES	5	41	45	47	48	46	47	43	46	41	41	42	44	46	44
GF	NCA 5_NCA23.RES.0110.01	406 Park Rd_1, Luddenham	RES	5	40	44	46	47	45	46	42	45	40	40	41	43	45	43
GF	NCA 5_NCA23.RES.0111.01	429 Park Rd_1, Luddenham	RES	5	41	45	47	48	46	47	43	46	41	41	42	44	46	44
GF	NCA 5_NCA23.RES.0112.01	417 Park Rd_1, Luddenham	RES	5	41	45	47	47	46	47	43	46	41	41	42	44	46	44
GF	NCA 5_NCA23.RES.0113.01	3065-3067 The Northern Road, Luddenham	RES	5	42	47	50	53	49	50	46	49	42	42	45	45	49	45
GF	NCA 5_NCA23.RES.0114.01	10 Blaxland Ave, Luddenham	RES	5	45	47	49	55	48	49	45	48	45	45	45	48	48	48
GF	NCA 5_NCA23.RES.0115.01	2392-2398 The Northern Road_3, Luddenham	RES	5	63	68	70	59	69	70	66	69	59	59	65	62	69	62
GF	NCA 5_NCA23.RES.0116.01	78 Campbell St_1, Luddenham	RES	5	46	51	53	50	52	53	49	52	43	43	48	46	52	46
GF	NCA 5_NCA23.RES.0117.01	2 Willowdene Ave_1, Luddenham	RES	5	44	49	51	50	50	51	47	50	41	41	46	44	50	44
GF	NCA 5_NCA23.RES.0118.01	16 Eaton Rd, Luddenham	RES	5	82	87	89	59	88	89	85	88	55	55	84	58	88	58
GF	NCA 5_NCA23.RES.0119.01	14 Eaton Rd, Luddenham	RES	5	81	86	88	59	87	88	84	87	57	57	83	60	87	60
GF	NCA 5_NCA23.RES.0120.01	12 Eaton Rd, Luddenham	RES	5	83	88	90	58	89	90	86	89	55	55	85	58	89	58
GF	NCA 5_NCA23.RES.0121.01	5 Adams Rd, Luddenham	RES	5	70	75	77	56	76	77	73	76	48	48	72	51	76	51
GF	NCA 5_NCA23.RES.0122.01	7 Adams Rd_1, Luddenham	RES	5	62	67	69	57	68	69	65	68	50	50	64	53	68	53
F1	NCA 5_NCA23.RES.0122.01	7 Adams Rd_1, Luddenham	RES	5	63	68	70	57	69	70	66	69	50	50	65	53	69	53

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 5_NCA23.RES.0123.01	15 Adams Rd_1, Luddenham	RES	5	55	60	62	60	61	62	58	61	49	49	57	52	61	52
GF	NCA 5_NCA23.RES.0124.01	2 Jamison St, Luddenham	RES	5	61	66	68	57	67	68	64	67	48	48	63	51	67	51
GF	NCA 5_NCA23.RES.0125.01	10 Adams Rd, Luddenham	RES	5	56	61	63	58	62	63	59	62	47	47	58	50	62	50
GF	NCA 5_NCA23.RES.0126.01	2142 The Northern Road, Luddenham	RES	5	66	71	73	56	72	73	69	72	46	46	68	49	72	49
GF	NCA 5_NCA23.RES.0127.01	6 Jamison St, Luddenham	RES	5	59	64	66	56	65	66	62	65	46	46	61	49	65	49
GF	NCA 5_NCA23.RES.0128.01	18 Adams Rd, Luddenham	RES	5	54	59	61	59	60	61	57	60	49	49	56	51	60	51
F1	NCA 5_NCA23.RES.0128.01	18 Adams Rd, Luddenham	RES	5	54	59	61	58	60	61	57	60	49	49	56	51	60	51
GF	NCA 5_NCA23.RES.0129.01	16 Adams Rd, Luddenham	RES	5	51	56	58	58	57	58	54	57	46	46	53	49	57	49
F1	NCA 5_NCA23.RES.0129.01	16 Adams Rd, Luddenham	RES	5	52	57	61	59	60	61	57	60	47	47	56	49	60	49
GF	NCA 5_NCA23.RES.0130.01	1 Wade Cl, Luddenham	RES	5	57	62	64	56	63	64	60	63	47	47	59	50	63	50
GF	NCA 5_NCA23.RES.0131.01	3 Wade Cl, Luddenham	RES	5	54	59	61	61	60	61	57	60	46	48	56	51	60	49
GF	NCA 5_NCA23.RES.0132.01	5 Jamison St, Luddenham	RES	5	54	59	61	58	60	61	57	60	45	45	56	48	60	48
F1	NCA 5_NCA23.RES.0132.01	5 Jamison St, Luddenham	RES	5	55	60	62	59	61	62	58	61	47	47	57	50	61	50
GF	NCA 5_NCA23.RES.0133.01	4 Wade Cl, Luddenham	RES	5	53	58	60	58	59	60	56	59	46	46	55	49	59	49
GF	NCA 5_NCA23.RES.0134.01	7 Jamison St, Luddenham	RES	5	54	59	61	59	60	61	57	60	48	48	56	51	60	51
GF	NCA 5_NCA23.RES.0135.01	6 Wade Cl, Luddenham	RES	5	51	56	58	57	57	58	54	57	50	50	53	53	57	53
F1	NCA 5_NCA23.RES.0135.01	6 Wade Cl, Luddenham	RES	5	55	60	62	60	61	62	58	61	50	50	57	53	61	53
GF	NCA 5_NCA23.RES.0136.01	7 Wade Cl, Luddenham	RES	5	52	57	59	60	58	59	55	58	50	50	54	53	58	53
F1	NCA 5_NCA23.RES.0136.01	7 Wade Cl, Luddenham	RES	5	53	58	60	61	59	60	56	59	50	50	55	53	59	53
GF	NCA 5_NCA23.RES.0137.01	11 Jamison St, Luddenham	RES	5	53	58	60	55	59	60	56	59	46	46	55	49	59	49
F1	NCA 5_NCA23.RES.0137.01	11 Jamison St, Luddenham	RES	5	53	58	60	57	59	60	56	59	48	48	55	51	59	51
GF	NCA 5_NCA23.RES.0138.01	1 Adams Rd_1, Luddenham	RES	5	49	54	56	59	55	56	52	55	48	48	51	51	55	51
GF	NCA 5_NCA23.RES.0139.01	9 Wade Cl, Luddenham	RES	5	51	56	58	59	57	58	54	57	49	49	53	51	57	51
GF	NCA 5_NCA23.GAR.0009.01	17 Jamison St, Luddenham	GAR	5	51	56	58	57	57	58	54	57	47	47	53	50	57	50
GF	NCA 5_NCA23.RES.0141.01	8 Wade Cl, Luddenham	RES	5	51	56	58	57	57	58	54	57	46	46	53	49	57	49
F1	NCA 5_NCA23.RES.0141.01	8 Wade Cl, Luddenham	RES	5	53	58	60	57	59	60	56	59	46	46	55	49	59	49
GF	NCA 5_NCA23.RES.0142.01	11 Wade Cl, Luddenham	RES	5	49	54	56	58	55	56	52	55	47	47	51	50	55	50
GF	NCA 5_NCA23.RES.0143.01	10 Wade Cl_1, Luddenham	RES	5	49	54	56	57	55	56	52	55	44	44	51	47	55	47
F1	NCA 5_NCA23.RES.0143.01	10 Wade Cl_1, Luddenham	RES	5	49	54	56	57	55	56	52	55	48	48	51	51	55	51
GF	NCA 5_NCA23.RES.0144.01	2144 The Northern Road, Luddenham	RES	5	61	66	68	56	67	68	64	67	48	48	63	51	67	51
GF	NCA 5_NCA23.RES.0145.01	2146 The Northern Road, Luddenham	RES	5	60	65	67	56	66	67	63	66	47	47	62	50	66	50
GF	NCA 5_NCA23.RES.0146.01	12 Jamison St, Luddenham	RES	5	55	60	62	56	61	62	58	61	47	47	57	50	61	50
F1	NCA 5_NCA23.RES.0146.01	12 Jamison St, Luddenham	RES	5	56	61	63	57	62	63	59	62	48	48	58	51	62	51
GF	NCA 5_NCA23.RES.0147.01	14 Jamison St, Luddenham	RES	5	54	59	61	56	60	61	57	60	49	49	56	52	60	52
F1	NCA 5_NCA23.RES.0147.01	14 Jamison St, Luddenham	RES	5	55	60	62	57	61	62	58	61	50	50	57	53	61	53
GF	NCA 5_NCA23.RES.0148.01	2154 The Northern Road, Luddenham	RES	5	58	63	65	56	64	65	61	64	44	44	60	47	64	47
F1	NCA 5_NCA23.RES.0148.01	2154 The Northern Road, Luddenham	RES	5	58	63	65	57	64	65	61	64	45	45	60	48	64	48
GF	NCA 5_NCA23.RES.0149.01	16 Jamison St, Luddenham	RES	5	51	56	58	56	57	58	54	57	46	46	53	49	57	49
GF	NCA 5_NCA23.RES.0150.01	18 Jamison St, Luddenham	RES	5	49	54	56	56	55	56	52	55	45	45	51	48	55	48

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
F1	NCA 5_NCA23.RES.0150.01	18 Jamison St, Luddenham	RES	5	51	56	58	57	57	58	54	57	46	46	53	49	57	49
GF	NCA 5_NCA23.RES.0151.01	2156 The Northern Road, Luddenham	RES	5	55	60	62	55	61	62	58	61	44	44	57	47	61	47
GF	NCA 5_NCA23.RES.0152.01	2150 The Northern Road, Luddenham	RES	5	52	57	59	57	58	59	55	58	47	47	54	50	58	50
GF	NCA 5_NCA23.RES.0153.01	2148 The Northern Road, Luddenham	RES	5	59	64	66	56	65	66	62	65	45	45	61	47	65	47
GF	NCA 5_NCA23.RES.0154.01	21 Jamison St, Luddenham	RES	5	48	53	55	58	54	55	51	54	46	46	50	49	54	49
F1	NCA 5_NCA23.RES.0154.01	21 Jamison St, Luddenham	RES	5	49	54	56	58	55	56	52	55	46	46	51	49	55	49
GF	NCA 5_NCA23.RES.0155.01	5 Ethan Cl, Luddenham	RES	5	48	53	55	56	54	55	51	54	46	46	50	49	54	49
F1	NCA 5_NCA23.RES.0155.01	5 Ethan Cl, Luddenham	RES	5	48	53	55	59	54	55	51	54	46	46	50	49	54	49
GF	NCA 5_NCA23.RES.0156.01	16 Ethan Cl, Luddenham	RES	5	47	51	53	57	52	53	49	52	47	47	48	50	52	50
GF	NCA 5_NCA23.RES.0157.01	7 Ethan Cl, Luddenham	RES	5	49	54	56	57	55	56	52	55	44	44	51	47	55	47
F1	NCA 5_NCA23.RES.0157.01	7 Ethan Cl, Luddenham	RES	5	50	55	57	57	56	57	53	56	47	47	52	50	56	50
GF	NCA 5_NCA23.RES.0158.01	23 Jamison St, Luddenham	RES	5	48	53	53	56	52	53	49	52	45	45	48	48	52	48
GF	NCA 5_NCA23.RES.0159.01	25 Jamison St, Luddenham	RES	5	46	51	53	56	52	53	49	52	46	46	48	49	52	49
F1	NCA 5_NCA23.RES.0159.01	25 Jamison St, Luddenham	RES	5	47	52	54	56	53	54	50	53	46	46	49	49	53	49
GF	NCA 5_NCA23.RES.0160.01	2 Ethan Cl, Luddenham	RES	5	46	51	54	56	53	54	50	53	45	45	49	48	53	48
GF	NCA 5_NCA23.RES.0161.01	8 Ethan Cl, Luddenham	RES	5	45	49	52	58	51	52	48	51	45	45	47	48	51	48
GF	NCA 5_NCA23.RES.0162.01	10 Ethan Cl, Luddenham	RES	5	49	52	54	58	53	54	50	53	49	49	49	52	53	52
GF	NCA 5_NCA23.RES.0163.01	4 Ethan Cl, Luddenham	RES	5	46	50	52	56	51	52	48	51	46	46	47	49	51	49
F1	NCA 5_NCA23.RES.0163.01	4 Ethan Cl, Luddenham	RES	5	46	51	53	56	52	53	49	52	46	46	48	49	52	49
GF	NCA 5_NCA23.RES.0164.01	6 Ethan Cl, Luddenham	RES	5	45	49	51	56	50	51	47	50	45	45	46	48	50	48
F1	NCA 5_NCA23.RES.0164.01	6 Ethan Cl, Luddenham	RES	5	46	50	52	56	51	52	48	51	46	46	47	49	51	49
GF	NCA 5_NCA23.RES.0165.01	12 Ethan Cl, Luddenham	RES	5	47	50	54	57	53	54	50	53	47	47	49	50	53	50
GF	NCA 5_NCA23.RES.0166.01	9 Blaxland Ave, Luddenham	RES	5	47	52	54	55	53	54	50	53	45	45	49	48	53	48
F1	NCA 5_NCA23.RES.0166.01	9 Blaxland Ave, Luddenham	RES	5	47	52	54	55	53	54	50	53	45	45	49	48	53	48
GF	NCA 5_NCA23.RES.0167.01	11 Blaxland Ave, Luddenham	RES	5	46	51	53	55	52	53	49	52	46	46	48	49	52	49
GF	NCA 5_NCA23.RES.0168.01	15 Blaxland Ave, Luddenham	RES	5	46	50	52	56	51	52	48	51	46	46	47	49	51	49
GF	NCA 5_NCA23.RES.0169.01	13 Blaxland Ave, Luddenham	RES	5	43	48	50	56	49	50	46	49	43	43	45	46	49	45
GF	NCA 5_NCA23.RES.0170.01	17 Blaxland Ave, Luddenham	RES	5	47	51	53	56	52	53	49	52	47	47	48	50	52	50
GF	NCA 5_NCA23.RES.0171.01	19 Blaxland Ave, Luddenham	RES	5	48	53	55	58	54	55	51	54	47	47	50	50	54	50
GF	NCA 5_NCA23.RES.0172.01	21 Blaxland Ave, Luddenham	RES	5	47	50	53	57	52	53	49	52	47	47	48	50	52	50
GF	NCA 5_NCA23.RES.0173.01	23 Blaxland Ave, Luddenham	RES	5	48	50	52	57	51	52	48	51	48	48	48	51	51	51
GF	NCA 5_NCA23.RES.0174.01	2166 The Northern Road, Luddenham	RES	5	52	57	59	55	58	59	55	58	44	44	54	47	58	47
GF	NCA 5_NCA23.RES.0175.01	34 Jamison St_1, Luddenham	RES	5	47	52	54	55	53	54	50	53	45	45	49	48	53	48
GF	NCA 5_NCA23.RES.0176.01	2168 The Northern Road, Luddenham	RES	5	50	55	57	54	56	57	53	56	44	44	52	47	56	47
GF	NCA 5_NCA23.RES.0177.01	2170 The Northern Road, Luddenham	RES	5	50	55	57	56	56	57	53	56	44	44	52	47	56	47
GF	NCA 5_NCA23.RES.0178.01	38 Jamison St, Luddenham	RES	5	47	52	54	57	53	54	50	53	45	45	49	48	53	48
GF	NCA 5_NCA23.RES.0179.01	2172 The Northern Road, Luddenham	RES	5	51	56	58	54	57	58	54	57	44	44	53	47	57	47
GF	NCA 5_NCA23.RES.0180.01	40 Jamison St, Luddenham	RES	5	45	49	51	55	50	51	47	50	45	45	46	48	50	48
GF	NCA 5_NCA23.RES.0181.01	42 Jamison St, Luddenham	RES	5	44	49	51	54	50	51	47	50	42	42	46	45	50	45

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 5_NCA23.RES.0182.01	2176 The Northern Road, Luddenham	RES	5	44	47	49	54	48	49	45	48	44	44	44	47	48	47
GF	NCA 5_NCA23.RES.0183.01	2215 The Northern Road_1, Luddenham	RES	5	65	70	72	54	71	72	68	71	51	51	67	54	71	54
GF	NCA 5_NCA23.RES.0184.01	45 Adams Rd_1, Luddenham	RES	5	62	67	70	72	69	70	66	69	53	59	65	62	69	55
GF	NCA 5_NCA23.RES.0185.01	18 Eaton Road Luddenham	RES	5	80	85	87	61	86	87	83	86	55	55	82	58	86	58
GF	NCA 5_NCA23.RES.0186.01	Sacred Heart Parish - Residence	RES	5	43	48	50	52	49	50	46	49	41	41	45	43	49	43
GF	NCA 5_NCA23.RES.0187.01	2180 The Northern Road_1, Luddenham	RES	5	47	52	54	54	53	54	50	53	44	44	49	47	53	47
GF	NCA 4_NCA24.GAR.0001.01	140 Adams Rd_4, Luddenham	GAR	4	60	61	61	64	60	61	60	60	60	60	60	63	63	63
GF	NCA 4_NCA24.GAR.0002.01	140 Adams Rd_3, Luddenham	GAR	4	61	63	63	64	62	63	61	62	61	61	61	64	64	64
GF	NCA 4_NCA24.GAR.0003.01	140 Adams Rd_2, Luddenham	GAR	4	65	70	69	66	68	69	65	68	60	60	64	63	68	63
GF	NCA 4_NCA24.GAR.0004.01	2422-2430 The Northern Road_5, Luddenham	GAR	4	52	57	60	53	59	60	56	59	49	49	55	52	59	52
GF	NCA 4_NCA24.GAR.0005.01	2422-2430 The Northern Road_4, Luddenham	GAR	4	54	59	61	52	60	61	57	60	50	50	56	53	60	53
GF	NCA 4_NCA24.GAR.0006.01	2422-2430 The Northern Road_2, Luddenham	GAR	4	57	62	64	52	63	64	60	63	50	50	59	53	63	53
GF	NCA 4_NCA24.GAR.0007.01	2422-2430 The Northern Road_1, Luddenham	GAR	4	57	62	65	52	64	65	61	64	52	52	60	55	64	55
GF	NCA 3_NCA24.GAR.0008.01	2650 Elizabeth Dr_1, Luddenham	GAR	3	68	73	75	50	74	75	71	74	50	50	70	53	74	53
GF	NCA 3_NCA24.GAR.0009.01	2650 Elizabeth Dr_2, Luddenham	GAR	3	68	73	75	50	74	75	71	74	50	50	70	53	74	53
GF	NCA 4_NCA24.RES.0004.01	2420 The Northern Road_2, Luddenham	RES	4	57	62	64	56	63	64	60	63	46	46	59	49	63	49
GF	NCA 4_NCA24.GAR.0011.01	2420 The Northern Road_5, Luddenham	GAR	4	57	62	64	58	63	64	60	63	48	48	59	51	63	51
GF	NCA 4_NCA24.GAR.0012.01	2420 The Northern Road_3, Luddenham	GAR	4	57	62	64	54	63	64	60	63	45	45	59	48	63	48
GF	NCA 4_NCA24.GAR.0013.01	2420 The Northern Road_4, Luddenham	GAR	4	51	56	58	55	57	58	54	57	46	46	53	49	57	49
GF	NCA 3_NCA24.GAR.0014.01	2650 Elizabeth Rd_2, Luddenham	GAR	3	68	73	75	48	74	75	71	74	47	47	70	50	74	50
GF	NCA 3_NCA24.GAR.0015.01	2620 Elizabeth Dr_2, Luddenham	GAR	3	59	64	67	46	66	67	63	66	43	43	62	46	66	46
GF	NCA 3_NCA24.GAR.0016.01	2550 Elizabeth Dr_2, Luddenham	GAR	3	62	67	69	47	68	69	65	68	40	40	64	43	68	43
GF	NCA 3_NCA24.GAR.0017.01	2550 Elizabeth Dr_4, Luddenham	GAR	3	57	62	64	47	63	64	60	63	40	40	59	43	63	43
GF	NCA 3_NCA24.GAR.0018.01	2550 Elizabeth Dr_5, Luddenham	GAR	3	56	61	63	47	62	63	59	62	40	40	58	43	62	43
GF	NCA 3_NCA24.GAR.0019.01	2550 Elizabeth Dr_6, Luddenham	GAR	3	54	59	61	48	60	61	57	60	39	39	56	42	60	42
GF	NCA 3_NCA24.GAR.0020.01	2550 Elizabeth Dr_7, Luddenham	GAR	3	51	56	58	48	57	58	54	57	39	39	53	42	57	42
GF	NCA 3_NCA24.GAR.0022.01	2550 Elizabeth Dr_8, Luddenham	GAR	3	51	56	58	47	57	58	54	57	38	38	53	41	57	41
GF	NCA 3_NCA24.GAR.0023.01	2550 Elizabeth Dr_9, Luddenham	GAR	3	50	55	57	47	56	57	53	56	38	38	52	41	56	41
GF	NCA 3_NCA24.GAR.0024.01	2550 Elizabeth Dr_10, Luddenham	GAR	3	49	54	56	47	55	56	52	55	38	38	51	41	55	41
GF	NCA 3_NCA24.GAR.0025.01	2550 Elizabeth Dr_11, Luddenham	GAR	3	48	53	55	47	54	55	51	54	37	37	50	40	54	40
GF	NCA 4_NCA24.RES.0001.01	140 Adams Rd_1, Luddenham	RES	4	63	68	67	65	66	67	63	66	60	60	62	63	68	63
GF	NCA 4_NCA24.RES.0002.01	2422-2430 The Northern Road_3, Luddenham	RES	4	57	62	64	52	63	64	60	63	50	50	59	53	63	53
GF	NCA 3_NCA24.RES.0003.01	2650 Elizabeth Dr_3. Luddenham	RES	3	68	73	75	51	74	75	71	74	50	50	70	53	74	53
GF	NCA 4_NCA24.GAR.0010.01	2420 The Northern Road_1, Luddenham	GAR	4	54	59	61	47	60	61	57	60	46	46	56	49	60	49
GF	NCA 3_NCA24.RES.0005.01	2650 Elizabeth Dr_5, Luddenham	RES	3	68	73	75	48	74	75	71	74	43	43	70	46	74	46
GF	NCA 3_NCA24.RES.0006.01	2620 Elizabeth Dr_1, Luddenham	RES	3	59	64	67	46	66	67	63	66	43	43	62	46	66	46
GF	NCA 3_NCA24.RES.0007.01	2620 Elizabeth Dr_3, Luddenham	RES	3	53	58	60	49	59	60	56	59	44	44	55	47	59	47
GF	NCA 3_NCA24.RES.0008.01	2550 Elizabeth Dr_1, Luddenham	RES	3	61	66	68	47	67	68	64	67	40	40	63	43	67	43
GF	NCA 3_NCA24.RES.0009.01	2550 Elizabeth Dr_3, Luddenham	RES	3	56	61	63	47	62	63	59	62	39	39	58	42	62	42

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 7_NCA26.GAR.0001.01	405 Willowdene Ave_3, Luddenham	GAR	7	50	55	56	43	55	56	52	55	43	43	51	45	55	45
GF	NCA 7_NCA26.GAR.0002.01	405 Willowdene Ave_4, Luddenham	GAR	7	51	56	57	36	56	57	53	56	35	35	52	37	56	37
GF	NCA 7_NCA26.GAR.0003.01	405 Willowdene Ave_2, Luddenham	GAR	7	49	54	53	35	52	53	49	52	35	35	48	38	52	38
GF	NCA 7_NCA26.GAR.0004.01	365 Willowdene Ave_2, Luddenham	GAR	7	57	62	63	40	62	63	59	62	40	40	58	43	62	43
GF	NCA 7_NCA26.GAR.0005.01	325 Willowdene Ave_2, Luddenham	GAR	7	51	56	56	41	55	56	52	55	41	41	51	44	55	44
GF	NCA 7_NCA26.GAR.0006.01	295 Willowdene Ave_2, Luddenham	GAR	7	46	51	52	41	51	52	48	51	41	41	47	44	51	44
GF	NCA 7_NCA26.GAR.0007.01	350 Willowdene Ave_1, Luddenham	GAR	7	58	63	64	42	63	64	60	63	41	41	59	44	63	44
GF	NCA 7_NCA26.GAR.0008.01	320 Willowdene Ave_2, Luddenham	GAR	7	52	57	59	46	58	59	55	58	36	36	54	39	58	39
GF	NCA 7_NCA26.GAR.0009.01	Lot1/DP838361	GAR	7	50	55	57	45	56	57	53	56	45	45	52	47	56	47
GF	NCA 7_NCA26.GAR.0010.01	460 Willowdene Ave_1, Luddenham	GAR	7	70	75	77	44	76	77	73	76	44	44	72	46	76	46
GF	NCA 7_NCA26.GAR.0011.01	265 Willowdene Ave_2, Luddenham	GAR	7	44	49	51	41	50	51	47	50	40	40	46	43	50	43
GF	NCA 7_NCA26.GAR.0012.01	435 Willowdene Ave_2, Luddenham	GAR	7	44	49	51	40	50	51	47	50	40	40	46	42	50	42
GF	NCA 7_NCA26.GAR.0013.01	500 Willowdene Ave_2, Luddenham	GAR	7	54	59	61	50	60	61	57	60	50	50	56	52	60	52
GF	NCA 7_NCA26.RES.0001.01	500 Willowdene Ave_1, Luddenham	RES	7	54	59	61	49	60	61	57	60	49	49	56	51	60	51
GF	NCA 7_NCA26.RES.0002.01	405 Willowdene Ave_1, Luddenham	RES	7	52	57	59	43	58	59	55	58	43	43	54	45	58	45
GF	NCA 7_NCA26.RES.0003.01	365 Willowdene Ave_1, Luddenham	RES	7	57	62	64	46	63	64	60	63	46	46	59	48	63	48
GF	NCA 7_NCA26.RES.0004.01	365 Willowdene Ave_3, Luddenham	RES	7	53	58	60	40	59	60	56	59	40	40	55	43	59	43
GF	NCA 7_NCA26.RES.0005.01	325 Willowdene Ave_1, Luddenham	RES	7	51	56	57	42	56	57	53	56	42	42	52	45	56	45
GF	NCA 7_NCA26.RES.0006.01	295 Willowdene Ave_1, Luddenham	RES	7	46	51	53	41	52	53	49	52	41	41	48	44	52	44
GF	NCA 7_NCA26.RES.0007.01	350 Willowdene Ave_2, Luddenham	RES	7	54	59	61	42	60	61	57	60	41	41	56	44	60	44
GF	NCA 7_NCA26.RES.0008.01	260 Willowdene Ave, Luddenham	RES	7	47	52	54	44	53	54	50	53	42	42	49	45	53	45
GF	NCA 7_NCA26.RES.0009.01	320 Willowdene Ave_1, Luddenham	RES	7	54	59	61	46	60	61	57	60	42	42	56	45	60	45
GF	NCA 7_NCA26.RES.0010.01	Lot1/DP838361	RES	7	52	57	59	48	58	59	55	58	48	48	54	50	58	50
GF	NCA 7_NCA26.RES.0011.01	Lot1/DP838361	RES	7	52	57	59	45	58	59	55	58	45	45	54	47	58	47
GF	NCA 7_NCA26.RES.0012.01	Lot1/DP838361	RES	7	52	57	59	45	58	59	55	58	45	45	54	47	58	47
GF	NCA 7_NCA26.RES.0013.01	5 Vicar Park Lane, Luddenham	RES	7	55	60	61	47	60	61	57	60	47	47	56	50	60	50
GF	NCA 7_NCA26.RES.0014.01	400 Willowdene Ave, Luddenham	RES	7	60	65	66	47	65	66	62	65	47	47	61	50	65	50
GF	NCA 6_NCA26.GAR.0014.01	Lot1/DP838361	GAR	6	48	53	55	50	54	55	51	54	47	47	50	50	54	50
GF	NCA 6_NCA26.RES.0016.01	Lot1/DP838361	RES	6	47	52	54	50	53	54	50	53	47	47	49	50	53	50
GF	NCA 7_NCA26.RES.0017.01	460 Willowdene Ave_2, Luddenham	RES	7	64	69	71	44	70	71	67	70	44	44	66	46	70	46
GF	NCA 7_NCA26.RES.0018.01	300-315 Willowdene Ave, Luddenham	RES	7	54	59	60	41	59	60	56	59	40	40	55	43	59	43
GF	NCA 7_NCA26.RES.0019.01	265 Willowdene Ave_1, Luddenham	RES	7	44	49	51	41	50	51	47	50	40	40	46	43	50	43
GF	NCA 7_NCA26.RES.0015.01	435 Willowdene Ave_1, Luddenham	RES	7	45	50	51	42	50	51	47	50	42	42	46	44	50	44
GF	NCA 7_NCA27.GAR.0001.01	1935 The Northern Road_8, Luddenham	GAR	7	49	54	56	45	55	56	52	55	45	45	51	47	55	47
GF	NCA 6_NCA27.GAR.0002.01	1935 The Northern Rd_3, Luddenham	GAR	6	46	51	53	43	52	53	49	52	42	42	48	45	52	45
GF	NCA 6_NCA27.GAR.0003.01	1935 The Northern Rd_4, Luddenham	GAR	6	49	54	56	45	55	56	52	55	45	45	51	47	55	47
GF	NCA 6_NCA27.GAR.0004.01	1935 The Northern Road_7, Luddenham	GAR	6	50	55	57	46	56	57	53	56	46	46	52	48	56	48
GF	NCA 6_NCA27.GAR.0005.01	1935 The Northern Road_6, Luddenham	GAR	6	49	54	56	45	55	56	52	55	45	45	51	47	55	47
GF	NCA 6_NCA27.GAR.0006.01	1935 The Northern Rd_5, Luddenham	GAR	6	44	49	51	41	50	51	47	50	41	41	46	44	50	44

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 6_NCA27.RES.0001.01	1935 The Northern Road_2, Luddenham	RES	6	46	51	53	46	52	53	49	52	44	44	48	47	52	47
GF	NCA 6_NCA27.RES.0002.01	2055 The Northern Road, Luddenham	RES	6	48	53	55	51	54	55	51	54	46	46	50	49	54	49
GF	NCA 6_NCA27.RES.0003.01	Lot1/DP838361	RES	6	42	46	48	46	47	48	44	47	42	42	43	45	47	45
GF	NCA 6_NCA27.RES.0004.01	1935 The Northern Road_1, Luddenham	RES	6	44	49	51	44	50	51	47	50	41	41	46	44	50	44
GF	NCA 4_NCA28.GAR.0001.01	2026 The Northern Road_4, Luddenham	GAR	4	52	55	57	52	56	57	53	56	52	52	52	55	56	55
GF	NCA 4_NCA28.GAR.0002.01	2026 The Northern Road_2, Luddenham	GAR	4	50	53	55	52	54	55	51	54	50	50	50	53	54	53
GF	NCA 4_NCA28.GAR.0003.01	2026 The Northern Road_5, Luddenham	GAR	4	49	52	54	52	53	54	50	53	49	49	49	52	53	52
GF	NCA 4_NCA28.GAR.0004.01	2026 The Northern Road_6, Luddenham	GAR	4	49	52	54	52	53	54	50	53	49	49	49	52	53	52
GF	NCA 4_NCA28.GAR.0005.01	2026 The Northern Road_8, Luddenham	GAR	4	48	52	54	52	53	54	50	53	48	48	49	51	53	51
GF	NCA 4_NCA28.GAR.0006.01	2026 The Northern Road_7, Luddenham	GAR	4	47	52	54	52	53	54	50	53	45	45	49	47	53	47
GF	NCA 4_NCA28.GAR.0007.01	2026 The Northern Road_3, Luddenham	GAR	4	49	53	55	53	54	55	51	54	49	49	50	52	54	52
GF	NCA 4_NCA28.GAR.0008.01	68 Eaton Rd_3, Luddenham	GAR	4	56	61	63	58	62	63	59	62	56	56	58	58	62	58
GF	NCA 4_NCA28.GAR.0009.01	68 Eaton Rd_2, Luddenham	GAR	4	55	60	62	57	61	62	58	61	52	52	57	55	61	55
GF	NCA 4_NCA28.GAR.0010.01	70 Eaton Rd_2, Luddenham	GAR	4	57	57	60	59	59	60	57	59	57	57	57	59	59	59
GF	NCA 8_NCA28.GAR.0011.01	1625 The Northern Road_2, Luddenham	GAR	8	47	50	52	47	51	52	48	51	47	47	47	50	51	50
F1	NCA 8_NCA28.GAR.0011.01	1625 The Northern Road_2, Luddenham	GAR	8	48	50	52	48	51	52	48	51	48	48	48	51	51	51
GF	NCA 6_NCA28.RES.0001.01	Lot1/DP838361	RES	6	41	46	48	45	47	48	44	47	39	39	43	42	47	42
GF	NCA 6_NCA28.RES.0002.01	Lot1/DP838361	RES	6	41	45	47	47	46	47	43	46	41	41	42	44	46	44
GF	NCA 6_NCA28.RES.0003.01	2059 The Northern Road, Luddenham	RES	6	42	47	49	48	48	49	45	48	42	42	44	45	48	45
GF	NCA 6_NCA28.RES.0004.01	1970 The Northern Road, Luddenham	RES	6	41	46	48	48	47	48	44	47	41	41	43	43	47	43
GF	NCA 6_NCA28.RES.0005.01	1972 The Northern Road_1, Luddenham	RES	6	43	47	49	49	48	49	45	48	43	43	44	46	48	46
GF	NCA 4_NCA28.RES.0006.01	Lot1/DP838361	RES	4	49	53	55	52	54	55	51	54	49	49	50	52	54	52
GF	NCA 4_NCA28.RES.0007.01	2026 The Northern Road_1, Luddenham	RES	4	49	53	55	52	54	55	51	54	49	49	50	52	54	52
F1	NCA 4_NCA28.RES.0007.01	2026 The Northern Road_1, Luddenham	RES	4	50	53	55	52	54	55	51	54	50	50	50	53	54	53
GF	NCA 4_NCA28.RES.0008.01	96 Eaton Rd, Luddenham	RES	4	54	59	61	56	60	61	57	60	54	54	56	57	60	57
GF	NCA 4_NCA28.RES.0009.01	70 Eaton Rd_1, Luddenham	RES	4	60	65	67	59	66	67	63	66	57	57	62	59	66	59
GF	NCA 4_NCA28.RES.0010.01	68 Eaton Rd_1, Luddenham	RES	4	56	61	63	58	62	63	59	62	55	55	58	57	62	57
GF	NCA 8_NCA28.RES.0011.01	1625 The Northern Road_1, Luddenham	RES	8	43	48	50	43	49	50	46	49	42	42	45	45	49	45
F1	NCA 8_NCA28.RES.0011.01	1625 The Northern Road_1, Luddenham	RES	8	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 6_NCA29.GAR.0001.01	1972 The Northern Road_3, Luddenham	GAR	6	43	47	49	49	48	49	45	48	43	43	44	46	48	46
GF	NCA 6_NCA29.GAR.0002.01	1972 The Norhtern Road_2, Luddenham	GAR	6	43	47	49	49	48	49	45	48	43	43	44	46	48	46
GF	NCA 4_NCA29.GAR.0003.01	68 Eaton Rd_5, Luddenham	GAR	4	55	55	56	57	55	56	55	55	55	55	55	57	57	57
GF	NCA 4_NCA29.GAR.0004.01	68 Eaton Rd_4, Luddenham	GAR	4	56	56	58	58	57	58	56	57	56	56	56	58	58	58
GF	NCA 4_NCA30.GAR.0001.01	161 Adams Rd_3, Luddenham	GAR	4	49	49	51	57	50	51	49	50	49	49	49	52	52	52
GF	NCA 4_NCA30.GAR.0002.01	161 Adams Rd_2, Luddenham	GAR	4	49	51	53	59	52	53	49	52	49	49	49	52	52	52
GF	NCA 4_NCA30.GAR.0003.01	125 Adams Rd_1, Luddenham	GAR	4	54	55	58	63	57	58	54	57	54	54	54	57	57	57
GF	NCA 4_NCA30.GAR.0004.01	125 Adams Rd_2, Luddenham	GAR	4	53	54	56	60	55	56	53	55	53	53	53	56	56	56
GF	NCA 4_NCA30.RES.0001.01	151 Adams Rd_1, Luddenham	RES	4	52	52	54	60	53	54	52	53	52	52	52	55	55	55
GF	NCA 4_NCA30.RES.0002.01	180 Adams Rd, Luddenham	RES	4	53	53	54	60	53	54	53	53	53	53	53	56	56	56

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 4_NCA30.RES.0003.01	145 Adams Rd_1, Luddenham	RES	4	52	52	53	59	52	53	52	52	52	52	52	55	55	55
GF	NCA 4_NCA30.RES.0004.01	161 Adams Rd_1, Luddenham	RES	4	50	50	52	58	51	52	50	51	50	50	50	53	53	53
GF	NCA 4_NCA30.RES.0005.01	145 Adams Rd_2, Luddenham	RES	4	50	51	53	57	52	53	50	52	50	50	50	53	53	53
GF	NCA 4_NCA30.RES.0006.01	105-115 Adams Rd, Luddenham	RES	4	57	58	59	65	58	59	56	58	56	56	56	58	58	58
GF	NCA 4_NCA30.RES.0007.01	125 Adams Rd_3, Luddenham	RES	4	53	56	59	64	58	59	54	57	53	53	54	56	57	56
GF	NCA 8_NCA32.COM.0001.01	Board My Paws_2	COM	8	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 8_NCA32.GAR.0001.01	165 Greendale Rd_7, Greendale	GAR	8	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 8_NCA32.GAR.0002.01	3 Francis St_2, Bringelly	GAR	8	45	49	51	45	50	51	47	50	45	45	46	48	50	48
GF	NCA 8_NCA32.GAR.0003.01	1675 The Northern Road_10, Bringelly	GAR	8	46	48	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 8_NCA32.GAR.0004.01	15 Dwyer Rd_2, Bringelly	GAR	8	45	50	52	44	51	52	48	51	44	44	47	49	51	49
GF	NCA 8_NCA32.GAR.0005.01	13 Dwyer Rd_3, Bringelly	GAR	8	44	48	50	44	49	50	46	49	37	44	45	47	49	40
GF	NCA 8_NCA32.GAR.0006.01	13 Dwyer Rd_4, Bringelly	GAR	8	43	48	50	42	49	50	46	49	42	42	45	48	49	48
GF	NCA 8_NCA32.GAR.0007.01	17 Dwyer Rd_2, Bringelly	GAR	8	41	46	48	41	47	48	44	47	41	41	43	45	47	45
GF	NCA 8_NCA32.GAR.0012.01	1675 The Northern Road_13, Bringelly	GAR	8	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 8_NCA32.GAR.0015.01	10 Dwyer Rd_2, Bringelly	GAR	8	45	50	52	44	51	52	48	51	44	44	47	46	51	46
GF	NCA 8_NCA32.GAR.0016.01	10 Dwyer Rd_3, Bringelly	GAR	8	44	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 8_NCA32.GAR.0017.01	10 Dwyer Rd_4, Bringelly	GAR	8	43	47	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 8_NCA32.GAR.0024.01	Board My Paws_3	GAR	8	45	50	52	43	51	52	48	51	43	43	47	46	51	46
GF	NCA 8_NCA32.GAR.0025.01	10 Francis St_2, Bringelly	GAR	8	46	51	53	46	52	53	49	52	46	46	48	49	52	49
GF	NCA 8_NCA32.GAR.0028.01	165 Avon Rd_3, Bringelly	GAR	8	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 8_NCA32.GAR.0029.01	165 Avon Rd_4, Bringelly	GAR	8	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 8_NCA32.GAR.0033.01	1675 The Northern Road_17, Bringelly	GAR	8	43	46	48	43	47	48	44	47	43	43	43	46	47	46
GF	NCA 8_NCA32.GAR.0034.01	1675 The Northern Road_18, Bringelly	GAR	8	43	48	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 8_NCA32.GAR.0035.01	1675 The Northern Road_19, Bringelly	GAR	8	43	48	49	41	48	49	45	48	41	41	44	46	48	46
GF	NCA 8_NCA32.GAR.0036.01	1675 The Northern Road_20, Bringelly	GAR	8	43	48	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 8_NCA32.GAR.0037.01	1675 The Northern Road_21, Bringelly	GAR	8	42	47	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 8_NCA32.GAR.0038.01	1675 The Northern Road_22, Bringelly	GAR	8	44	47	49	44	48	49	45	48	44	44	44	46	48	46
GF	NCA 8_NCA32.RES.0001.01	1675 The Northern Road_9, Bringelly	RES	8	48	49	51	48	50	51	48	50	48	48	48	50	50	50
F1	NCA 8_NCA32.RES.0001.01	1675 The Northern Road_9, Bringelly	RES	8	48	49	51	48	50	51	48	50	48	48	48	50	50	50
GF	NCA 8_NCA32.RES.0002.01	16 Dwyer Rd_1, Bringelly	RES	8	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 8_NCA32.RES.0003.01	3 Francis St_1, Bringelly	RES	8	47	52	54	44	53	54	50	53	44	44	49	47	53	47
GF	NCA 8_NCA32.RES.0004.01	1675 The Northern Road_11, Bringelly	RES	8	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 8_NCA32.RES.0005.01	13 Dwyer Rd_1, Bringelly	RES	8	44	49	51	42	50	51	47	50	42	42	46	45	50	45
GF	NCA 8_NCA32.RES.0006.01	13 Dwyer Rd_2, Bringelly	RES	8	43	48	50	44	49	50	46	49	44	44	45	47	49	47
GF	NCA 8_NCA32.RES.0007.01	15 Dwyer Rd_1, Bringelly	RES	8	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 8_NCA32.RES.0008.01	17 Dwyer Rd_1, Bringelly	RES	8	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 8_NCA32.RES.0011.01	10 Dwyer Rd_1, Bringelly	RES	8	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 8_NCA32.RES.0012.01	12 Dwyer Rd, Bringelly	RES	8	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 8_NCA32.RES.0022.01	Board My Paws_1	RES	8	44	48	50	44	49	50	46	49	44	44	45	47	49	47

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 8_NCA32.RES.0025.01	10 Francis St_1, Bringelly	RES	8	48	48	50	48	49	50	48	49	48	48	48	51	51	51
GF	NCA 8_NCA33.GAR.0001.01	2A Dwyer Rd_2, Bringelly	GAR	8	55	60	63	48	62	63	59	62	48	48	58	51	62	51
GF	NCA 8_NCA33.GAR.0002.01	165 Greendale Rd_8, Greendale	GAR	8	46	51	53	45	52	53	49	52	45	45	48	47	52	47
GF	NCA 8_NCA33.GAR.0003.01	1755 The Northern Road_3, Bringelly	GAR	8	56	60	62	56	61	62	58	61	56	56	57	59	61	59
GF	NCA 8_NCA33.GAR.0004.01	1755 The Northern Road_1, Bringelly	GAR	8	56	56	58	56	57	58	56	57	56	56	56	59	59	59
GF	NCA 8_NCA33.GAR.0005.01	1755 The Northern Road_5, Bringelly	GAR	8	58	63	65	58	64	65	61	64	58	58	60	61	64	61
GF	NCA 8_NCA33.GAR.0006.01	1755 The Northern Road_6, Bringelly	GAR	8	60	65	67	59	66	67	63	66	59	59	62	62	66	62
GF	NCA 8_NCA33.GAR.0007.01	1755 The Northern Road_4, Bringelly	GAR	8	58	61	63	58	62	63	59	62	58	58	58	61	62	61
GF	NCA 8_NCA33.GAR.0008.01	1755 The Northern Road_7, Bringelly	GAR	8	57	62	64	55	63	64	60	63	55	55	59	58	63	58
GF	NCA 8_NCA33.GAR.0009.01	1755 The Northern Road_8, Bringelly	GAR	8	58	63	65	56	64	65	61	64	56	56	60	59	64	59
GF	NCA 8_NCA33.GAR.0010.01	1755 The Northern Road_9, Bringelly	GAR	8	70	75	79	51	78	79	75	78	51	51	74	54	78	54
GF	NCA 8_NCA33.GAR.0011.01	1755 The Northern Road_11, Bringelly	GAR	8	68	73	75	52	74	75	71	74	52	52	70	55	74	55
GF	NCA 8_NCA33.GAR.0012.01	1675 The Northern Road_2, Bringelly	GAR	8	56	61	63	55	62	63	59	62	55	55	58	58	62	58
GF	NCA 8_NCA33.GAR.0015.01	75 Avon Rd_2, Bringelly	GAR	8	51	51	51	51	51	51	51	51	51	51	51	54	54	54
GF	NCA 8_NCA33.GAR.0017.01	85 Avon Rd_2, Bringelly	GAR	8	56	56	56	56	56	56	56	56	56	56	56	59	59	59
GF	NCA 8_NCA33.GAR.0018.01	85 Avon Rd_3, Bringelly	GAR	8	51	51	51	51	51	51	51	51	51	51	51	54	54	54
GF	NCA 8_NCA33.GAR.0020.01	95 Avon Rd_2, Bringelly	GAR	8	52	52	52	52	52	52	52	52	52	52	52	55	55	55
GF	NCA 8_NCA33.GAR.0021.01	105 Avon Rd_2, Bringelly	GAR	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA33.GAR.0022.01	105 Avon Rd_3, Bringelly	GAR	8	53	53	53	53	53	53	53	53	53	53	53	56	56	56
GF	NCA 8_NCA33.GAR.0023.01	125 Avon Rd_2, Bringelly	GAR	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA33.GAR.0024.01	110 Avon Rd_2, Bringelly	GAR	8	62	62	62	62	62	62	62	62	62	62	62	65	65	65
GF	NCA 8_NCA33.GAR.0025.01	130 Avon Rd_2, Bringelly	GAR	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA33.GAR.0026.01	140 Avon Rd_2, Bringelly	GAR	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA33.GAR.0027.01	7 Dwyer Rd_2, Bringelly	GAR	8	47	52	54	43	53	54	50	53	43	43	49	46	53	46
GF	NCA 8_NCA33.GAR.0028.01	9 Dwyer Rd_2, Bringelly	GAR	8	46	51	53	45	52	53	49	52	45	45	48	49	52	49
GF	NCA 8_NCA33.GAR.0029.01	4 Francis St_2, Bringelly	GAR	8	49	53	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 8_NCA33.GAR.0030.01	6 Francis St_2, Bringelly	GAR	8	51	54	56	51	55	56	52	55	51	51	51	54	55	54
GF	NCA 8_NCA33.GAR.0031.01	160 Avon Rd_2, Bringelly	GAR	8	53	53	55	53	54	55	53	54	53	53	53	56	56	56
GF	NCA 8_NCA33.GAR.0032.01	165 Avon Rd_2, Bringelly	GAR	8	43	48	50	40	49	50	46	49	40	40	45	43	49	43
GF	NCA 8_NCA33.GAR.0033.01	1675 The Northern Road_6, Bringelly	GAR	8	55	58	60	55	59	60	56	59	55	55	55	58	59	58
GF	NCA 8_NCA33.GAR.0034.01	1675 The Northern Road_7, Bringelly	GAR	8	55	59	61	56	60	61	57	60	56	56	56	58	60	58
GF	NCA 8_NCA33.RES.0001.01	2A Dwyer Rd_1, Bringelly	RES	8	53	58	60	48	59	60	56	59	48	48	55	51	59	51
GF	NCA 8_NCA33.RES.0002.01	3 Dwyer Rd, Bringelly	RES	8	52	57	59	46	58	59	55	58	46	46	54	49	58	49
GF	NCA 8_NCA33.RES.0003.01	1645 The Northern Road, Bringelly	RES	8	55	60	62	47	61	62	58	61	47	47	57	50	61	50
GF	NCA 8_NCA33.RES.0004.01	5 Dwyer Rd, Bringelly	RES	8	51	56	58	49	57	58	54	57	49	49	53	50	57	50
GF	NCA 8_NCA33.GAR.0036.01	1675 The Northern Road_5, Bringelly	GAR	8	54	59	61	48	60	61	57	60	48	48	56	52	60	52
GF	NCA 8_NCA33.GAR.0037.01	1675 The Northern Road_4, Bringelly	GAR	8	53	58	60	48	59	60	56	59	48	48	55	52	59	52
GF	NCA 8_NCA33.GAR.0038.01	1675 The Northern Road_3, Bringelly	GAR	8	54	59	62	48	61	62	58	61	48	48	57	52	61	52
GF	NCA 8_NCA33.RES.0008.01	1675 The Northern Road_8, Bringelly	RES	8	55	57	59	55	58	59	55	58	55	55	55	58	58	58

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 8_NCA33.RES.0009.01	165 Greendale Rd_4, Greendale	RES	8	56	61	63	54	62	63	59	62	54	54	58	57	62	57
GF	NCA 8_NCA33.RES.0010.01	165 Greendale Rd_3, Greendale	RES	8	59	64	66	56	65	66	62	65	56	56	61	59	65	59
GF	NCA 8_NCA33.RES.0011.01	1755 The Northern Road_2, Bringelly	RES	8	55	57	59	55	58	59	55	58	55	55	55	58	58	58
GF	NCA 8_NCA33.RES.0012.01	165 Greendale Rd_2, Greendale	RES	8	64	69	71	58	70	71	67	70	58	58	66	61	70	61
GF	NCA 8_NCA33.RES.0013.01	1675 The Northern Road_1, Bringelly	RES	8	56	59	61	56	60	61	57	60	56	56	56	59	60	59
GF	NCA 8_NCA33.RES.0015.01	65 Avon Rd_1, Bringelly	RES	8	53	53	53	53	53	53	53	53	53	53	53	56	56	56
GF	NCA 8_NCA33.RES.0016.01	60 Avon Rd_1, Bringelly	RES	8	57	57	57	57	57	57	57	57	57	57	57	60	60	60
GF	NCA 8_NCA33.RES.0017.01	75 Avon Rd_1, Bringelly	RES	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA33.RES.0018.01	85 Avon Rd_1, Bringelly	RES	8	57	57	57	57	57	57	57	57	57	57	57	60	60	60
GF	NCA 8_NCA33.RES.0019.01	95 Avon Rd_1, Bringelly	RES	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA33.RES.0020.01	95A Avon Rd_1, Bringelly	RES	8	51	51	51	51	51	51	51	51	51	51	51	54	54	54
GF	NCA 8_NCA33.RES.0021.01	105 Avon Rd_1, Bringelly	RES	8	55	55	55	55	55	55	55	55	55	55	55	58	58	58
GF	NCA 8_NCA33.RES.0022.01	125 Avon Rd_1, Bringelly	RES	8	55	55	55	55	55	55	55	55	55	55	55	58	58	58
F1	NCA 8_NCA33.RES.0022.01	125 Avon Rd_1, Bringelly	RES	8	55	55	55	55	55	55	55	55	55	55	55	58	58	58
GF	NCA 8_NCA33.RES.0023.01	110 Avon Rd_1, Bringelly	RES	8	58	58	58	58	58	58	58	58	58	58	58	61	61	61
F1	NCA 8_NCA33.RES.0023.01	110 Avon Rd_1, Bringelly	RES	8	59	59	59	59	59	59	59	59	59	59	59	62	62	62
GF	NCA 8_NCA33.RES.0024.01	135 Avon Rd, Bringelly	RES	8	51	51	52	51	51	52	51	51	51	51	51	54	54	54
GF	NCA 8_NCA33.RES.0025.01	130 Avon Rd_1, Bringelly	RES	8	56	56	56	56	56	56	56	56	56	56	56	59	59	59
GF	NCA 8_NCA33.RES.0026.01	140 Avon Rd_1, Bringelly	RES	8	53	53	54	53	53	54	53	53	53	53	53	56	56	56
GF	NCA 8_NCA33.RES.0027.01	7 Dwyer Rd_1, Bringelly	RES	8	47	52	54	43	53	54	50	53	43	43	49	46	53	46
GF	NCA 8_NCA33.RES.0028.01	9 Dwyer Rd_1, Bringelly	RES	8	46	51	53	45	52	53	49	52	45	45	48	49	52	49
GF	NCA 8_NCA33.RES.0029.01	11 Dwyer Rd, Bringelly	RES	8	45	50	52	45	51	52	48	51	45	45	47	49	51	49
F1	NCA 8_NCA33.RES.0029.01	11 Dwyer Rd, Bringelly	RES	8	45	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 8_NCA33.RES.0030.01	2 Francis St, Bringelly	RES	8	49	54	56	47	55	56	52	55	47	47	51	50	55	50
GF	NCA 8_NCA33.RES.0031.01	1 Francis St, Bringelly	RES	8	47	52	54	44	53	54	50	53	44	44	49	46	53	46
GF	NCA 8_NCA33.RES.0032.01	4 Francis St_1, Bringelly	RES	8	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 8_NCA33.RES.0033.01	6 Francis St_1, Bringelly	RES	8	49	52	54	49	53	54	50	53	49	49	49	52	53	52
GF	NCA 8_NCA33.RES.0034.01	8 Francis St, Bringelly	RES	8	45	50	52	45	51	52	48	51	45	45	47	48	51	48
F1	NCA 8_NCA33.RES.0034.01	8 Francis St, Bringelly	RES	8	47	50	52	47	51	52	48	51	47	47	47	50	51	50
GF	NCA 8_NCA33.RES.0035.01	8A Francis St, Bringelly	RES	8	49	51	53	49	52	53	49	52	49	49	49	52	52	52
F1	NCA 8_NCA33.RES.0035.01	8A Francis St, Bringelly	RES	8	50	51	53	50	52	53	50	52	50	50	50	53	53	53
GF	NCA 8_NCA33.RES.0036.01	160 Avon Rd_1, Bringelly	RES	8	52	52	53	52	52	53	52	52	52	52	52	55	55	55
GF	NCA 8_NCA33.RES.0037.01	150 Avon Rd, Bringelly	RES	8	55	55	55	55	55	55	55	55	55	55	55	58	58	58
GF	NCA 8_NCA33.RES.0038.01	125 Avon Rd_3, Bringelly	RES	8	52	52	52	52	52	52	52	52	52	52	52	55	55	55
GF	NCA 8_NCA33.RES.0007.01	145 Avon Rd_1, Bringelly	RES	8	49	49	51	49	50	51	49	50	49	49	49	52	52	52
GF	NCA 8_NCA33.GAR.0039.01	145 Avon Rd_2, Bringelly	GAR	8	47	50	52	47	51	52	48	51	47	47	47	50	51	50
GF	NCA 8_NCA33.RES.0006.01	155 Avon Rd_1, Bringelly	RES	8	52	52	52	52	52	52	52	52	52	52	52	55	55	55
GF	NCA 8_NCA33.GAR.0041.01	155 Avon Rd_2, Bringelly	GAR	8	51	51	51	51	51	51	51	51	51	51	51	54	54	54
GF	NCA 8_NCA33.GAR.0040.01	155 Avon Rd_3, Bringelly	GAR	8	46	46	49	46	48	49	46	48	46	46	46	49	49	49

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 8_NCA33.RES.0005.01	165 Avon Rd_1, Bringelly	RES	8	50	50	51	50	50	51	50	50	50	50	50	53	53	53
GF	NCA 8_NCA34.GAR.0001.01	1575 The Northern Road_2, Bringelly	GAR	8	61	66	68	54	67	68	64	67	54	54	63	57	67	57
GF	NCA 8_NCA34.GAR.0002.01	1555 The Northern Road_2, Bringelly	GAR	8	56	60	62	56	61	62	58	61	56	56	57	59	61	59
GF	NCA 8_NCA34.GAR.0003.01	1615 The Northern Road_3, Bringelly	GAR	8	61	66	68	50	67	68	64	67	50	50	63	53	67	53
GF	NCA 8_NCA34.GAR.0004.01	1635 The Northern Road_2, Bringelly	GAR	8	59	64	66	47	65	66	62	65	47	47	61	51	65	51
GF	NCA 8_NCA34.GAR.0005.01	1592 The Northern Road_2, Bringelly	GAR	8	62	67	69	48	68	69	65	68	48	48	64	51	68	51
GF	NCA 8_NCA34.GAR.0006.01	1602 The Northern Road_2, Bringelly	GAR	8	62	67	69	47	68	69	65	68	47	47	64	50	68	50
F1	NCA 8_NCA34.GAR.0006.01	1602 The Northern Road_2, Bringelly	GAR	8	64	69	71	50	70	71	67	70	50	50	66	53	70	53
GF	NCA 8_NCA34.GAR.0007.01	1602 The Northern Road_1, Bringelly	GAR	8	59	64	66	47	65	66	62	65	47	47	61	50	65	50
F1	NCA 8_NCA34.GAR.0007.01	1602 The Northern Road_1, Bringelly	GAR	8	60	65	67	48	66	67	63	66	48	48	62	51	66	51
GF	NCA 8_NCA34.GAR.0008.01	1602 The Northern Road_5, Bringelly	GAR	8	60	65	67	45	66	67	63	66	45	45	62	48	66	48
GF	NCA 8_NCA34.GAR.0009.01	1602 The Northern Road_4, Bringelly	GAR	8	59	64	66	41	65	66	62	65	41	41	61	44	65	44
GF	NCA 8_NCA34.GAR.0010.01	1580 The Northern Road_2, Bringelly	GAR	8	60	65	67	53	66	67	63	66	53	53	62	56	66	56
GF	NCA 8_NCA34.GAR.0011.01	1580 The Northern Road_3, Bringelly	GAR	8	62	67	69	50	68	69	65	68	50	50	64	53	68	53
GF	NCA 8_NCA34.RES.0002.01	1582 The Northern Road_1. Bringelly	RES	8	65	70	72	50	71	72	68	71	50	50	67	53	71	53
GF	NCA 8_NCA34.GAR.0013.01	1615 The Northern Road_2, Bringelly	GAR	8	66	71	73	51	72	73	69	72	51	51	68	54	72	54
GF	NCA 8_NCA34.RES.0041.01	1615 The Northern Road_1, Bringelly	RES	8	67	72	74	49	73	74	70	73	49	49	69	52	73	52
GF	NCA 8_NCA34.GAR.0015.01	1655 The Northern Road_1, Bringelly	GAR	8	68	73	75	47	74	75	71	74	47	47	70	50	74	50
GF	NCA 8_NCA34.GAR.0018.01	30 Avon Rd_2, Bringelly	GAR	8	53	53	53	53	53	53	53	53	53	53	53	56	56	56
GF	NCA 8_NCA34.GAR.0019.01	30 Avon Rd_2, Bringelly	GAR	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA34.GAR.0020.01	1500 The Northern Road_2, Bringelly	GAR	8	52	52	52	52	52	52	52	52	52	52	52	55	55	55
GF	NCA 8_NCA34.GAR.0021.01	1520 The Northern Road_2, Bringelly	GAR	8	55	55	55	55	55	55	55	55	55	55	55	58	58	58
GF	NCA 8_NCA34.GAR.0022.01	1517 The Northern Road_2, Bringelly	GAR	8	58	58	58	58	58	58	58	58	58	58	58	61	61	61
GF	NCA 8_NCA34.GAR.0023.01	1545 The Northern Road_2, Bringelly	GAR	8	57	57	58	57	57	58	57	57	57	57	57	60	60	60
GF	NCA 8_NCA34.GAR.0034.01	1615 The Northern Road_4, Bringelly	GAR	8	59	64	66	46	65	66	62	65	46	46	61	48	65	48
GF	NCA 8_NCA34.RES.0001.01	1555 The Northern Road_1, Bringelly	RES	8	59	59	61	59	60	61	59	60	59	59	59	62	62	62
GF	NCA 8_NCA34.GAR.0014.01	1582 The Northern Road_2, Bringelly	GAR	8	60	65	67	49	66	67	63	66	49	49	62	52	66	52
GF	NCA 8_NCA34.RES.0003.01	1575 The Northern Road_1, Bringelly	RES	8	58	63	65	54	64	65	61	64	54	54	60	57	64	57
GF	NCA 8_NCA34.RES.0004.01	1580 The Northern Road_1, Bringelly	RES	8	61	66	67	54	66	67	63	66	54	54	62	57	66	57
GF	NCA 8_NCA34.RES.0005.01	1592 The Northern Road_1, Bringelly	RES	8	66	71	73	50	72	73	69	72	50	50	68	53	72	53
GF	NCA 8_NCA34.RES.0006.01	1602 The Northern Road_3, Bringelly	RES	8	67	72	74	48	73	74	70	73	48	48	69	51	73	51
GF	NCA 8_NCA34.RES.0007.01	2 Dwyer Rd, Bringelly	RES	8	67	72	75	47	74	75	71	74	47	47	70	49	74	49
GF	NCA 8_NCA34.RES.0008.01	1635 The Northern Road_1, Bringelly	RES	8	64	69	72	47	71	72	68	71	47	47	67	49	71	49
GF	NCA 8_NCA34.RES.0009.01	1655 The Northern Road_2, Bringelly	RES	8	67	72	74	49	73	74	70	73	49	49	69	50	73	50
GF	NCA 8_NCA34.RES.0010.01	165 Greendale Rd_1, Greendale	RES	8	66	71	73	63	72	73	69	72	63	63	68	66	72	66
GF	NCA 8_NCA34.RES.0013.01	30 Avon Rd_1, Bringelly	RES	8	51	51	51	51	51	51	51	51	51	51	51	54	54	54
GF	NCA 8_NCA34.RES.0015.01	1500 The Northern Road_1, Bringelly	RES	8	52	52	52	52	52	52	52	52	52	52	52	55	55	55
GF	NCA 8_NCA34.RES.0016.01	1520 The Northern Road_1, Bringelly	RES	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA34.RES.0017.01	1517 The Northern Road, Bringelly	RES	8	58	58	58	58	58	58	58	58	58	58	58	61	61	61

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 8_NCA34.RES.0018.01	1540 The Northern Road_1, Bringelly	RES	8	62	62	61	61	61	61	61	61	61	61	61	64	64	64
GF	NCA 8_NCA34.RES.0019.01	1545 The Northern Road_1, Bringelly	RES	8	60	60	60	60	60	60	60	60	60	60	60	63	63	63
GF	NCA 8_NCA34.RES.0020.01	1545 The Northern Road_3, Bringelly	RES	8	66	66	66	66	66	66	66	66	66	66	66	69	69	69
GF	NCA 8_NCA34.RES.0021.01	1555 The Northern Road_3, Bringelly	RES	8	58	58	60	56	59	60	56	59	56	56	56	59	59	59
GF	NCA 8_NCA34.RES.0022.01	10 Severn Rd, Bringelly	RES	8	63	63	63	63	63	63	63	63	63	63	63	66	66	66
GF	NCA 8_NCA34.RES.0033.01	165 Greendale Rd_1, Grendale	RES	8	68	73	76	65	75	76	72	75	65	65	71	71	75	71
GF	NCA 8_NCA34.RES.0034.01	165 Greendale Rd_2, Greendale	RES	8	69	74	76	61	75	76	72	75	61	61	71	67	75	67
GF	NCA 8_NCA35.GAR.0001.01	40 Severn Rd_2, Bringelly	GAR	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA35.GAR.0002.01	40 Severn Rd_3, Bringelly	GAR	8	52	52	52	52	52	52	52	52	52	52	52	55	55	55
GF	NCA 8_NCA35.GAR.0003.01	10 Severn Rd_2, Bringelly	GAR	8	54	54	56	55	55	56	55	55	55	55	55	58	58	58
GF	NCA 8_NCA35.GAR.0004.01	25 Mersey Rd_2, Bringelly	GAR	8	55	55	57	55	56	57	55	56	55	55	55	58	58	58
GF	NCA 8_NCA35.GAR.0005.01	35 Mersey Rd, Bringelly	GAR	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA35.GAR.0006.01	60 Mersey Rd_2, Bringelly	GAR	8	52	54	56	52	55	56	52	55	52	52	52	55	55	55
GF	NCA 8_NCA35.GAR.0007.01	60 Mersey Rd_3, Bringelly	GAR	8	50	54	56	50	55	56	52	55	50	50	51	53	55	53
GF	NCA 8_NCA35.GAR.0008.01	60 Mersey Rd_4, Bringelly	GAR	8	50	55	57	50	56	57	53	56	50	50	52	53	56	53
GF	NCA 8_NCA35.GAR.0009.01	60 Mersey Rd_5, Bringelly	GAR	8	51	56	58	50	57	58	54	57	50	50	53	53	57	53
GF	NCA 8_NCA35.GAR.0010.01	63 Mersey Rd, Bringelly	GAR	8	48	50	52	48	51	52	48	51	48	48	48	51	51	51
F1	NCA 8_NCA35.GAR.0010.01	63 Mersey Rd, Bringelly	GAR	8	48	51	53	48	52	53	49	52	48	48	48	51	52	51
GF	NCA 8_NCA35.GAR.0011.01	63 Mersey Rd_3, Bringelly	GAR	8	49	51	53	49	52	53	49	52	49	49	49	52	52	52
GF	NCA 8_NCA35.GAR.0012.01	67 Mersey Rd_2, Bringelly	GAR	8	48	53	55	48	54	55	51	54	48	48	50	51	54	51
GF	NCA 8_NCA35.GAR.0013.01	67 Mersey Rd_3, Bringelly	GAR	8	45	47	49	45	48	49	45	48	45	45	45	48	48	48
GF	NCA 8_NCA35.GAR.0014.01	70 Mersey Rd_2, Bringelly	GAR	8	49	54	56	44	55	56	52	55	44	44	51	47	55	47
GF	NCA 8_NCA35.GAR.0015.01	70 Mersey Rd_3, Bringelly	GAR	8	48	53	55	46	54	55	51	54	46	46	50	49	54	49
GF	NCA 8_NCA35.GAR.0016.01	80 Mersey Rd_2, Bringelly	GAR	8	47	52	54	44	53	54	50	53	44	44	49	47	53	47
GF	NCA 8_NCA35.GAR.0017.01	73 Mersey Rd_2, Bringelly	GAR	8	46	48	50	46	49	50	46	49	46	46	46	49	49	49
GF	NCA 8_NCA35.GAR.0018.01	88 Mersey Dr, Bringelly	GAR	8	46	51	53	44	52	53	49	52	44	44	48	47	52	47
GF	NCA 8_NCA35.RES.0001.01	30 Severn Rd, Bringelly	RES	8	59	59	59	59	59	59	59	59	59	59	59	62	62	62
GF	NCA 8_NCA35.RES.0002.01	40 Severn Rd_1, Bringelly	RES	8	53	53	53	53	53	53	53	53	53	53	53	56	56	56
GF	NCA 8_NCA35.RES.0003.01	50 Severn Rd, Bringelly	RES	8	51	51	51	51	51	51	51	51	51	51	51	54	54	54
GF	NCA 8_NCA35.RES.0005.01	55 Severn Rd, Bringelly	RES	8	51	51	51	51	51	51	51	51	51	51	51	54	54	54
GF	NCA 8_NCA35.RES.0006.01	45 Severn Rd, Bringelly	RES	8	54	54	54	54	54	54	54	54	54	54	54	57	57	57
GF	NCA 8_NCA35.RES.0007.01	5 Mersey Rd, Bringelly	RES	8	54	59	61	53	60	61	57	60	53	53	56	56	60	56
GF	NCA 8_NCA35.RES.0008.01	25 Mersey Rd_1, Bringelly	RES	8	55	55	57	55	56	57	55	56	55	55	55	58	58	58
GF	NCA 8_NCA35.RES.0009.01	35 Mersey Rd_1, Bringelly	RES	8	53	53	54	53	53	54	53	53	53	53	53	56	56	56
GF	NCA 8_NCA35.RES.0010.01	60 Mersey Rd_1, Bringelly	RES	8	49	50	53	49	52	53	49	52	49	49	49	52	52	52
GF	NCA 8_NCA35.RES.0011.01	63 Mersey Rd_1, Bringelly	RES	8	49	53	55	49	54	55	51	54	49	49	50	52	54	52
GF	NCA 8_NCA35.RES.0012.01	67 Mersey Rd_1, Bringelly	RES	8	48	51	53	48	52	53	49	52	48	48	48	51	52	51
F1	NCA 8_NCA35.RES.0012.01	67 Mersey Rd_1, Bringelly	RES	8	48	51	53	48	52	53	49	52	48	48	48	51	52	51
GF	NCA 8_NCA35.RES.0013.01	70 Mersey Rd_1, Bringelly	RES	8	48	53	55	48	54	55	51	54	48	48	50	51	54	51

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 8_NCA35.RES.0014.01	80 Mersey Rd_1, Bringelly	RES	8	46	51	53	46	52	53	49	52	46	46	48	49	52	49
GF	NCA 8_NCA35.RES.0015.01	73 Mersey Rd_1, Bringelly	RES	8	45	50	52	43	51	52	48	51	43	43	47	46	51	46
GF	NCA 8_NCA36.GAR.0001.01	88 Mersey Rd_2, Bringelly	GAR	8	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	NCA 8_NCA36.GAR.0002.01	88 Mersey Rd_3, Bringelly	GAR	8	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 8_NCA36.RES.0076.01	92 Mersey Rd_1, Bringelly	RES	8	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 8_NCA36.RES.0077.01	92 Mersey Rd_2, Bringelly	RES	8	46	50	52	46	51	52	48	51	46	46	47	49	51	49
GF	NCA 8_NCA36.GAR.0005.01	92 Mersey Rd_3, Bringelly	GAR	8	45	50	52	43	51	52	48	51	43	43	47	46	51	46
GF	NCA 8_NCA36.GAR.0006.01	110 Mersey Rd_2, Bringelly	GAR	8	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	NCA 8_NCA36.GAR.0007.01	98 Mersey Rd_2, Bringelly	GAR	8	44	49	51	43	50	51	47	50	43	43	46	46	50	46
GF	NCA 8_NCA36.GAR.0008.01	120 Mersey Rd_2, Bringelly	GAR	8	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 8_NCA36.RES.0001.01	77 Mersey Rd, Bringelly	RES	8	46	49	51	46	50	51	47	50	46	46	46	49	50	49
GF	NCA 8_NCA36.RES.0002.01	82 Mersey Rd, Bringelly	RES	8	45	50	52	45	51	52	48	51	45	45	47	48	51	48
GF	NCA 8_NCA36.RES.0003.01	85 Mersey Rd, Bringelly	RES	8	44	48	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 8_NCA36.RES.0005.01	88 Mersey Rd_1, Bringelly	RES	8	45	50	52	44	51	52	48	51	44	44	47	47	51	47
GF	NCA 8_NCA36.RES.0006.01	98 Mersey Rd, Bringelly	RES	8	43	48	50	43	49	50	46	49	43	43	45	46	49	46
GF	NCA 8_NCA36.RES.0007.01	110 Mersey Rd_1, Bringelly	RES	8	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	NCA 8_NCA36.RES.0008.01	120 Mersey Rd_1, Bringelly	RES	8	41	46	48	41	47	48	44	47	41	41	43	44	47	44
F1	NCA 8_NCA36.RES.0008.01	120 Mersey Rd_1, Bringelly	RES	8	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	NCA 6_NCA29.RES.0002.01	1912 The Northern Road_1, Luddenham	RES	6	40	44	46	46	45	46	42	45	40	40	41	43	45	43
GF	NCA 6_NCA28.RES.0012.01	Lot1/DP838361	RES	6	40	45	47	46	46	47	43	46	40	40	42	43	46	43
GF	NCA 6_NCA27.RES.0006.01	1923 The Northern Road, Luddenham	RES	6	44	49	51	43	50	51	47	50	42	42	46	44	50	44
GF	NCA 2_NCA17.RES.0050.01	2295 The Northern Road, Mulgoa	RES	2	67	72	75	43	74	75	71	74	43	43	70	46	74	46
GF	NCA 2_NCA17.GAR.0044.01	2381 The Northern Road_3, Mulgoa	GAR	2	65	70	71	43	70	71	67	70	43	43	66	46	70	46
GF	NCA 2_NCA17.GAR.0045.01	2 Grover Cr_3, Mulgoa	GAR	2	63	68	70	35	69	70	66	69	35	35	65	38	69	38
GF	NCA 2_NCA17.GAR.0047.01	2 Grover Cr_4, Mulgoa	GAR	2	57	62	64	47	63	64	60	63	47	47	59	50	63	50
GF	NCA 2_NCA17.GAR.0046.01	8 Grover Cr_3, Mulgoa	GAR	2	65	70	74	49	73	74	70	73	49	49	69	52	73	52
GF	NCA 2_NCA17.GAR.0048.01	4 Grover Cr_5, Mulgoa	GAR	2	59	64	66	49	65	66	62	65	49	49	61	52	65	52
GF	NCA 2_NCA17.GAR.0049.01	2751 The Northern Road_1, Luddenham	GAR	2	63	68	70	48	69	70	66	69	48	48	65	51	69	51
GF	NCA 8_NCA34.GAR.0012.01	1540 The Northern Road_1, Bringelly	GAR	8	62	62	60	60	60	60	60	60	60	60	60	63	63	63
GF	NCA 6_NCA27.RES.0005.01	1935 The Northern Rd_9, Luddenham	RES	6	44	49	51	43	50	51	47	50	40	40	46	43	50	43
GF	NCA 4_NCA30.GAR.0007.01	151 Adams Rd_2, Luddenham	GAR	4	52	52	54	60	53	54	52	53	52	52	52	55	55	55
GF	NCA 2_NCA17.GAR.0050.01	2289-2293 The Northern Road_1, Mulgoa	GAR	2	61	66	69	45	68	69	65	68	45	45	64	48	68	48
GF	NCA 1_NCA11.GAR.0004.01	2017 The Northern Road_2, Orchard Hills	GAR	1	57	62	64	55	63	64	60	63	55	55	59	58	63	58
GF	NCA 1_NCA11.GAR.0003.01	2017 The Northern Road_3, Orchard Hills	GAR	1	56	58	61	56	60	61	57	60	56	56	56	59	60	59
GF	NCA 1_NCA10.GAR.0005.01	2029-2031 The Northern Road_3, Glenmore	GAR	1	57	62	64	53	63	64	60	63	53	53	59	56	63	56
GF	NCA 2_NCA17.GAR.0051.01	2297-2307 The Northern Road_3, Mulgoa	GAR	2	58	63	67	46	66	67	63	66	46	46	62	49	66	49
GF	NCA 2_NCA17.GAR.0052.01	2297-2307 The Northern Road_5, Mulgoa	GAR	2	55	60	67	43	66	67	63	66	43	43	62	46	66	46
GF	NCA 2_NCA17.GAR.0053.01	2337-2339 The Northern Road_2, Mulgoa	GAR	2	73	78	80	38	79	80	76	79	38	38	75	41	79	41
GF	NCA 2_NCA17.GAR.0054.01	5 Grover Cr_3, Mulgoa	GAR	2	58	63	65	52	64	65	61	64	52	52	60	55	64	55

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	NCA 2_NCA17.GAR.0055.01	6 Grover Cr_2, Mulgoa	GAR	2	62	67	69	49	68	69	65	68	49	49	64	52	68	52
GF	NCA 2_NCA16.GAR.0064.01	Galaxy Rd_3, Luddenham	GAR	2	44	49	51	44	50	51	47	50	44	44	46	47	50	47
GF	NCA 8_NCA35.RES.0039.01	65 Mersey Rd, Bringelly	RES	8	48	52	54	48	53	54	50	53	48	48	49	51	53	51
GF	NCA 2_NCA16.GAR.0092.01	78 Chain-O-Ponds Rd, Mulgoa	GAR	2	41	46	48	38	47	48	44	47	38	38	43	41	47	41
GF	NCA 2_NCA16.GAR.0093.01	78 Chain-O-Ponds Rd_3, Mulgoa	GAR	2	42	47	49	39	48	49	45	48	39	39	44	42	48	42
GF	NCA 2_NCA15.RES.0048.01	88 Chain-O-Ponds Rd_1, Mulgoa	RES	2	39	44	46	36	45	46	42	45	36	36	41	39	45	39
GF	NCA 2_NCA15.GAR.0052.01	88 Chain-O-Ponds Rd_2, Mulgoa	GAR	2	39	44	46	36	45	46	42	45	36	36	41	39	45	39
GF	NCA 2_NCA15.GAR.0050.01	88 Chain-O-Ponds Rd_3, Mulgoa	GAR	2	40	45	47	35	46	47	43	46	35	35	42	38	46	38
GF	NCA 2_NCA15.GAR.0051.01	88 Chain-O-Ponds Rd_4, Mulgoa	GAR	2	39	44	46	34	45	46	42	45	34	34	41	37	45	37
GF	Glenmore Ridge Dr Park_1	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	Glenmore Ridge Dr Park_2	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	Glenmore Ridge Dr Park_3	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	Glenmore Ridge Dr Park_4	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
GF	Glenmore Ridge Dr Park_5	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
GF	Glenmore Ridge Dr Park_6	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	Glenmore Ridge Dr Park_7	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	Glenmore Ridge Dr Park_8	Glenmore Ridge Dr, Glenmore Park	OOA	1	44	47	49	44	48	49	45	48	44	44	44	47	48	47
GF	Glenmore Ridge Dr Park_9	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	Glenmore Ridge Dr Park_10	Glenmore Ridge Dr, Glenmore Park	OOA	1	41	46	48	39	47	48	44	47	39	39	43	42	47	42
GF	Glenmore Ridge Dr Park_11	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
GF	Glenmore Ridge Dr Park_12	Glenmore Ridge Dr, Glenmore Park	OOA	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	Glenmore Ridge Dr Park_13	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	47	49	43	48	49	45	48	43	43	44	46	48	46
GF	Glenmore Ridge Dr Park_14	Glenmore Ridge Dr, Glenmore Park	OOA	1	41	46	48	38	47	48	44	47	38	38	43	41	47	41
GF	Glenmore Ridge Dr Park_15	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	50	38	49	50	46	49	38	38	45	41	49	41
GF	Glenmore Ridge Dr Park_16	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	Glenmore Ridge Dr Park_17	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	39	49	50	46	49	39	39	45	42	49	42
GF	Glenmore Ridge Dr Park_18	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	42	48	49	45	48	42	42	44	45	48	45
GF	Glenmore Ridge Dr Park_19	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	Glenmore Ridge Dr Park_20	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	Glenmore Ridge Dr Park_21	Glenmore Ridge Dr, Glenmore Park	OOA	1	39	44	46	39	45	46	42	45	39	39	41	42	45	42
GF	Glenmore Ridge Dr Park_22	Glenmore Ridge Dr, Glenmore Park	OOA	1	41	46	48	40	47	48	44	47	40	40	43	43	47	43
GF	Glenmore Ridge Dr Park_23	Glenmore Ridge Dr, Glenmore Park	OOA	1	41	44	47	41	46	47	43	46	41	41	42	44	46	44
GF	Glenmore Ridge Dr Park_24	Glenmore Ridge Dr, Glenmore Park	OOA	1	41	46	49	40	48	49	45	48	40	40	44	43	48	43
GF	Glenmore Ridge Dr Park_25	Glenmore Ridge Dr, Glenmore Park	OOA	1	40	44	46	40	45	46	42	45	40	40	41	43	45	43
GF	Glenmore Ridge Dr Park_26	Glenmore Ridge Dr, Glenmore Park	OOA	1	41	45	47	41	46	47	43	46	41	41	42	44	46	44
GF	Glenmore Ridge Dr Park_27	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	46	48	42	47	48	44	47	42	42	43	45	47	45
GF	Glenmore Ridge Dr Park_28	Glenmore Ridge Dr, Glenmore Park	OOA	1	45	48	50	45	49	50	46	49	45	45	45	48	49	48
GF	Glenmore Ridge Dr Park_29	Glenmore Ridge Dr, Glenmore Park	OOA	1	45	49	52	45	51	52	48	51	45	45	47	48	51	48
GF	Glenmore Ridge Dr Park_30	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	Glenmore Ridge Dr Park_31	Glenmore Ridge Dr, Glenmore Park	OOA	1	41	46	48	41	47	48	44	47	41	41	43	44	47	44
GF	Glenmore Ridge Dr Park_32	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	42	49	50	46	49	42	42	45	45	49	45
GF	Glenmore Ridge Dr Park_33	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	Glenmore Ridge Dr Park_34	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	Glenmore Ridge Dr Park_35	Glenmore Ridge Dr, Glenmore Park	OOA	1	43	48	50	41	49	50	46	49	41	41	45	44	49	44
GF	Glenmore Ridge Dr Park_36	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	Glenmore Ridge Dr Park_37	Glenmore Ridge Dr, Glenmore Park	OOA	1	42	47	49	41	48	49	45	48	41	41	44	44	48	44
GF	Luddenham Showground_1	Campbell St, Luddenham	OOA	5	41	46	48	49	47	48	44	47	41	41	43	44	47	44
GF	Luddenham Showground_2	Campbell St, Luddenham	OOA	5	41	46	48	49	47	48	44	47	41	41	43	44	47	44
GF	Luddenham Showground_3	Campbell St, Luddenham	OOA	5	41	46	48	49	47	48	44	47	41	41	43	44	47	44
GF	Luddenham Showground_4	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_5	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_6	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_7	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_8	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_9	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_10	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_11	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_12	Campbell St, Luddenham	OOA	5	42	46	48	49	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_13	Campbell St, Luddenham	OOA	5	42	47	49	49	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_14	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_15	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_16	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_17	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_18	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_19	Campbell St, Luddenham	OOA	5	43	47	49	50	48	49	45	48	43	43	44	46	48	46
GF	Luddenham Showground_20	Campbell St, Luddenham	OOA	5	43	47	49	50	48	49	45	48	43	43	44	46	48	46
GF	Luddenham Showground_21	Campbell St, Luddenham	OOA	5	43	47	49	50	48	49	45	48	43	43	44	46	48	46
GF	Luddenham Showground_22	Campbell St, Luddenham	OOA	5	43	47	49	50	48	49	45	48	43	43	44	46	48	46
GF	Luddenham Showground_23	Campbell St, Luddenham	OOA	5	43	47	49	50	48	49	45	48	43	43	44	46	48	46
GF	Luddenham Showground_24	Campbell St, Luddenham	OOA	5	43	47	49	50	48	49	45	48	43	43	44	46	48	46
GF	Luddenham Showground_25	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_26	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_27	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_28	Campbell St, Luddenham	OOA	5	42	47	49	50	48	49	45	48	42	42	44	45	48	45
GF	Luddenham Showground_29	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_30	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_31	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_32	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	Luddenham Showground_33	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_34	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_35	Campbell St, Luddenham	OOA	5	41	46	48	50	47	48	44	47	41	41	43	44	47	44
GF	Luddenham Showground_36	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_37	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_38	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_39	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_40	Campbell St, Luddenham	OOA	5	42	46	48	50	47	48	44	47	42	42	43	45	47	45
GF	Luddenham Showground_41	Campbell St, Luddenham	OOA	5	42	45	47	50	46	47	43	46	42	42	42	45	46	45
GF	Luddenham Showground_42	Campbell St, Luddenham	OOA	5	42	45	47	50	46	47	43	46	42	42	42	45	46	45
GF	Luddenham Showground_43	Campbell St, Luddenham	OOA	5	41	45	47	50	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_44	Campbell St, Luddenham	OOA	5	41	45	47	50	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_45	Campbell St, Luddenham	OOA	5	41	45	47	50	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_46	Campbell St, Luddenham	OOA	5	41	45	47	50	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_47	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_48	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_49	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_50	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_51	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_52	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_53	Campbell St, Luddenham	OOA	5	40	45	47	49	46	47	43	46	40	40	42	43	46	43
GF	Luddenham Showground_54	Campbell St, Luddenham	OOA	5	40	45	47	49	46	47	43	46	40	40	42	43	46	43
GF	Luddenham Showground_55	Campbell St, Luddenham	OOA	5	40	45	47	49	46	47	43	46	40	40	42	43	46	43
GF	Luddenham Showground_56	Campbell St, Luddenham	OOA	5	40	44	46	49	45	46	42	45	40	40	41	43	45	43
GF	Luddenham Showground_57	Campbell St, Luddenham	OOA	5	40	44	46	49	45	46	42	45	40	40	41	43	45	43
GF	Luddenham Showground_58	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_59	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_60	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_61	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_62	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_63	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_64	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_65	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_66	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Luddenham Showground_67	Campbell St, Luddenham	OOA	5	40	45	47	49	46	47	43	46	40	40	42	43	46	43
GF	Luddenham Showground_68	Campbell St, Luddenham	OOA	5	40	45	47	49	46	47	43	46	40	40	42	43	46	43
GF	Luddenham Showground_69	Campbell St, Luddenham	OOA	5	40	45	47	49	46	47	43	46	40	40	42	43	46	43
GF	Luddenham Showground_70	Campbell St, Luddenham	OOA	5	41	45	47	49	46	47	43	46	41	41	42	44	46	44
GF	Sales Park_1	Campbell St, Luddenham	OOA	5	47	52	54	53	53	54	50	53	43	43	49	46	53	46

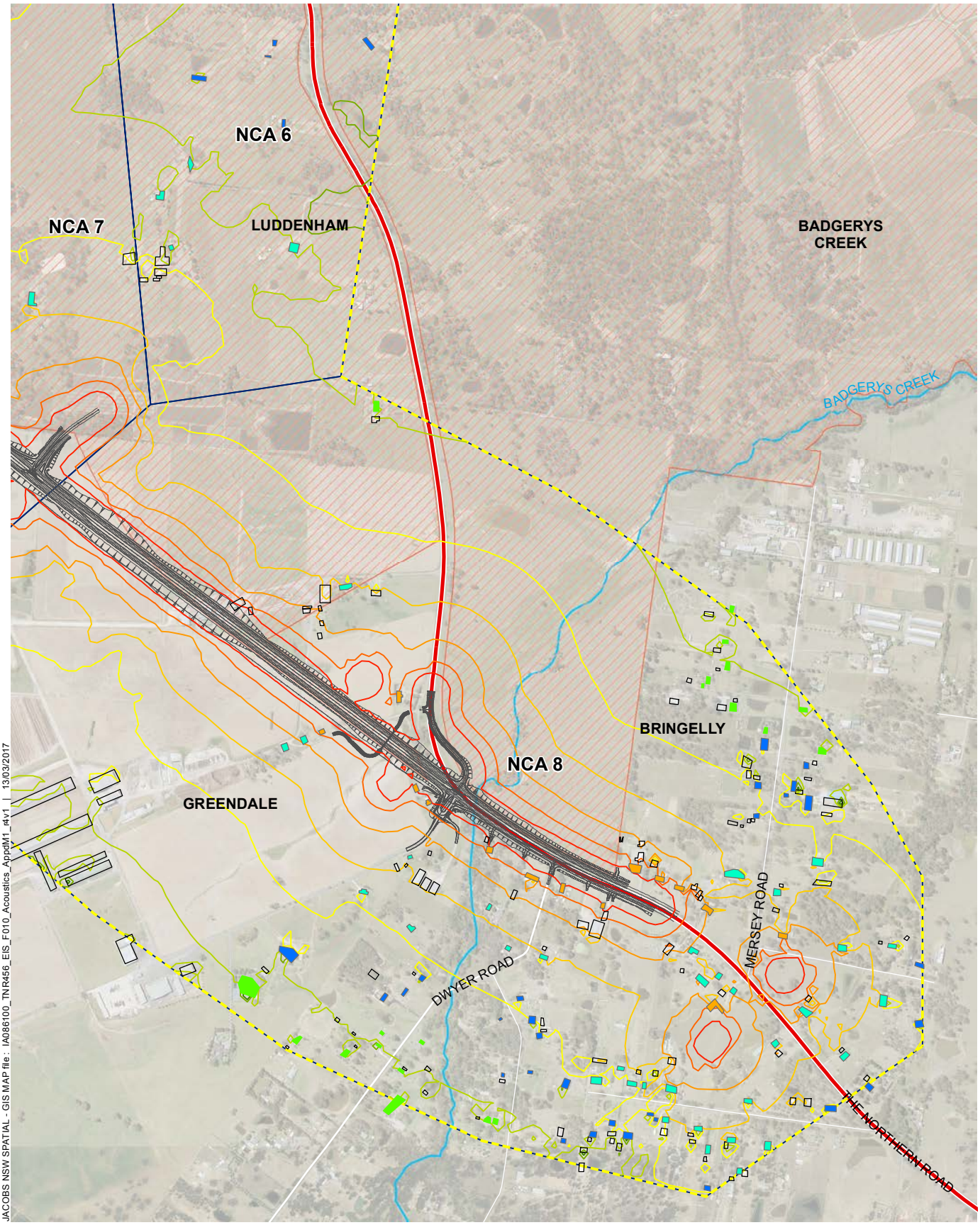
Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	Sales Park_2	Campbell St, Luddenham	OOA	5	47	52	54	53	53	54	50	53	42	42	49	45	53	45
GF	Sales Park_3	Campbell St, Luddenham	OOA	5	47	52	54	52	53	54	50	53	42	42	49	45	53	45
GF	Sales Park_4	Campbell St, Luddenham	OOA	5	48	53	55	52	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_5	Campbell St, Luddenham	OOA	5	48	53	55	53	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_6	Campbell St, Luddenham	OOA	5	48	53	55	53	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_7	Campbell St, Luddenham	OOA	5	48	53	55	52	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_8	Campbell St, Luddenham	OOA	5	48	53	55	52	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_9	Campbell St, Luddenham	OOA	5	48	53	55	53	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_10	Campbell St, Luddenham	OOA	5	48	53	55	53	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_11	Campbell St, Luddenham	OOA	5	48	53	55	52	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_12	Campbell St, Luddenham	OOA	5	48	53	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_13	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_14	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_15	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_16	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_17	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_18	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_19	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	44	44	51	47	55	47
GF	Sales Park_20	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	44	44	51	47	55	47
GF	Sales Park_21	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	44	44	51	47	55	47
GF	Sales Park_22	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	44	44	51	47	55	47
GF	Sales Park_23	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_24	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_25	Campbell St, Luddenham	OOA	5	49	54	56	52	55	56	52	55	43	43	51	46	55	46
GF	Sales Park_26	Campbell St, Luddenham	OOA	5	48	53	55	52	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_27	Campbell St, Luddenham	OOA	5	48	53	55	52	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_28	Campbell St, Luddenham	OOA	5	48	53	55	52	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_29	Campbell St, Luddenham	OOA	5	48	53	55	51	54	55	51	54	43	43	50	46	54	46
GF	Sales Park_30	Campbell St, Luddenham	OOA	5	47	52	54	51	53	54	50	53	43	43	49	46	53	46
GF	Sales Park_31	Campbell St, Luddenham	OOA	5	47	52	54	51	53	54	50	53	43	43	49	46	53	46
GF	Sales Park_32	Campbell St, Luddenham	OOA	5	47	52	54	51	53	54	50	53	42	42	49	45	53	45
GF	Sales Park_33	Campbell St, Luddenham	OOA	5	47	52	54	51	53	54	50	53	42	42	49	45	53	45
GF	Sales Park_34	Campbell St, Luddenham	OOA	5	47	52	54	51	53	54	50	53	42	42	49	45	53	45
GF	Sales Park_35	Campbell St, Luddenham	OOA	5	46	51	53	51	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_36	Campbell St, Luddenham	OOA	5	46	51	53	51	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_37	Campbell St, Luddenham	OOA	5	46	51	53	51	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_38	Campbell St, Luddenham	OOA	5	46	51	53	51	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_39	Campbell St, Luddenham	OOA	5	46	51	53	51	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_40	Campbell St, Luddenham	OOA	5	46	51	53	51	52	53	49	52	42	42	48	45	52	45

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))													
					Works during standard hours									Out of hours works		Sleep disturbance		
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	Sales Park_41	Campbell St, Luddenham	OOA	5	45	50	52	50	51	52	48	51	42	42	47	45	51	45
GF	Sales Park_42	Campbell St, Luddenham	OOA	5	45	50	52	50	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_43	Campbell St, Luddenham	OOA	5	45	50	52	50	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_44	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_45	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_46	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_47	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_48	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_49	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_50	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_51	Campbell St, Luddenham	OOA	5	45	50	52	50	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_52	Campbell St, Luddenham	OOA	5	45	50	52	50	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_53	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_54	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_55	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_56	Campbell St, Luddenham	OOA	5	44	49	51	51	50	51	47	50	41	41	46	44	50	44
GF	Sales Park_57	Campbell St, Luddenham	OOA	5	44	49	51	51	50	51	47	50	41	41	46	44	50	44
GF	Sales Park_58	Campbell St, Luddenham	OOA	5	44	49	51	51	50	51	47	50	41	41	46	44	50	44
GF	Sales Park_59	Campbell St, Luddenham	OOA	5	44	49	51	51	50	51	47	50	41	41	46	44	50	44
GF	Sales Park_60	Campbell St, Luddenham	OOA	5	44	49	51	51	50	51	47	50	41	41	46	44	50	44
GF	Sales Park_61	Campbell St, Luddenham	OOA	5	44	49	51	51	50	51	47	50	41	41	46	44	50	44
GF	Sales Park_62	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_63	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_64	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_65	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_66	Campbell St, Luddenham	OOA	5	45	50	52	51	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_67	Campbell St, Luddenham	OOA	5	44	49	51	51	50	51	47	50	41	41	46	44	50	44
GF	Sales Park_68	Campbell St, Luddenham	OOA	5	46	51	53	52	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_69	Campbell St, Luddenham	OOA	5	46	51	53	52	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_70	Campbell St, Luddenham	OOA	5	46	51	53	52	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_71	Campbell St, Luddenham	OOA	5	46	51	53	52	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_72	Campbell St, Luddenham	OOA	5	46	51	53	52	52	53	49	52	41	41	48	44	52	44
GF	Sales Park_73	Campbell St, Luddenham	OOA	5	45	50	52	52	51	52	48	51	41	41	47	44	51	44
GF	Sales Park_74	Campbell St, Luddenham	OOA	5	47	52	54	52	53	54	50	53	42	42	49	45	53	45
GF	Sales Park_75	Campbell St, Luddenham	OOA	5	46	51	53	52	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_76	Campbell St, Luddenham	OOA	5	46	51	53	52	52	53	49	52	42	42	48	45	52	45
GF	Sales Park_77	Campbell St, Luddenham	OOA	5	47	52	54	52	53	54	50	53	42	42	49	45	53	45
GF	Willmington Reserve_1	Jamison St, Luddenham	OOA	5	49	54	56	56	55	56	52	55	47	47	51	50	55	50
GF	Willmington Reserve_2	Jamison St, Luddenham	OOA	5	46	51	53	59	52	53	49	52	46	46	48	49	52	49

Floor	Building Name	Address	Usage	NCA	Construction Noise Level Impacts (dB(A))														
					Works during standard hours									Out of hours works		Sleep disturbance			
					Early works	Earthworks	Roadwork	Bridge work	Drainage	Paving	Utility Relocation	Finishing Works	Ancillary Facilities	NIGHT Bridgeworks	NIGHT Paving	LA1 Sleep Disturbance Bridgeworks	LA1 Sleep Disturbance Paving	LA1 Sleep Disturbance Ancillary Facailities
					[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]
GF	Willmington Reserve_3	Jamison St, Luddenham	OOA	5	47	52	54	59	53	54	50	53	46	46	49	49	53	49
GF	Willmington Reserve_4	Jamison St, Luddenham	OOA	5	47	52	54	59	53	54	50	53	47	47	49	50	53	50
GF	Willmington Reserve_5	Jamison St, Luddenham	OOA	5	49	54	56	57	55	56	52	55	47	47	51	50	55	50
GF	Willmington Reserve_6	Jamison St, Luddenham	OOA	5	47	52	54	58	53	54	50	53	47	47	49	50	53	50
GF	Willmington Reserve_7	Jamison St, Luddenham	OOA	5	49	54	56	61	55	56	52	55	47	48	51	51	55	50
GF	Willmington Reserve_8	Jamison St, Luddenham	OOA	5	47	52	55	57	54	55	51	54	47	47	50	50	54	50
GF	Willmington Reserve_9	Jamison St, Luddenham	OOA	5	48	53	54	57	53	54	50	53	47	47	49	50	53	50
GF	Willmington Reserve_10	Jamison St, Luddenham	OOA	5	47	52	52	58	51	52	48	51	47	47	47	50	51	50
GF	Willmington Reserve_11	Jamison St, Luddenham	OOA	5	49	54	56	57	55	56	52	55	47	47	51	50	55	50
GF	Willmington Reserve_12	Jamison St, Luddenham	OOA	5	47	52	54	57	53	54	50	53	47	47	49	50	53	50
GF	Willmington Reserve_13	Jamison St, Luddenham	OOA	5	47	51	52	57	51	52	48	51	47	47	47	50	51	50
GF	Willmington Reserve_14	Jamison St, Luddenham	OOA	5	47	51	52	58	51	52	48	51	47	47	47	50	51	50
GF	Willmington Reserve_15	Jamison St, Luddenham	OOA	5	47	51	52	58	51	52	48	51	47	47	47	50	51	50
GF	Willmington Reserve_16	Jamison St, Luddenham	OOA	5	49	49	52	58	51	52	49	51	49	49	49	52	52	52
GF	Willmington Reserve_17	Jamison St, Luddenham	OOA	5	47	50	52	59	51	52	48	51	47	47	47	50	51	50
GF	Willmington Reserve_18	Jamison St, Luddenham	OOA	5	47	49	51	57	50	51	47	50	47	47	47	50	50	50
GF	Willmington Reserve_19	Jamison St, Luddenham	OOA	5	52	57	59	57	58	59	55	58	46	46	54	49	58	49
GF	Willmington Reserve_20	Jamison St, Luddenham	OOA	5	47	50	52	57	51	52	48	51	47	47	47	50	51	50
GF	Willmington Reserve_21	Jamison St, Luddenham	OOA	5	46	49	52	58	51	52	48	51	46	46	47	49	51	49
GF	Willmington Reserve_22	Jamison St, Luddenham	OOA	5	46	50	52	58	51	52	48	51	46	46	47	49	51	49
GF	Willmington Reserve_23	Jamison St, Luddenham	OOA	5	46	49	52	58	51	52	48	51	46	46	47	49	51	49
GF	Willmington Reserve_24	Jamison St, Luddenham	OOA	5	46	51	53	56	52	53	49	52	46	46	48	49	52	49
GF	Willmington Reserve_25	Jamison St, Luddenham	OOA	5	46	50	52	56	51	52	48	51	46	46	47	49	51	49
GF	Willmington Reserve_26	Jamison St, Luddenham	OOA	5	48	53	55	56	54	55	51	54	46	46	50	49	54	49
GF	Willmington Reserve_27	Jamison St, Luddenham	OOA	5	49	54	56	56	55	56	52	55	46	46	51	49	55	49

Appendix M. Construction noise contours (with mitigation)

M.1 Paving Works and Ancillary Facilities (with mitigation) – Night time



JACOBS NSW SPATIAL - GIS MAP file: IA086100_TNR456_EIS_F010_Acoustics_AppdM1_r4v1 | 13/03/2017

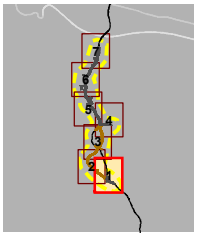
The Northern Road upgrade - Mersey Road to Glenmore Parkway
The Northern Road (Existing)
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth Lands
Study area
Noise catchment areas

Predicted noise level dB(A)
35 55
40 60
45 65
50 70

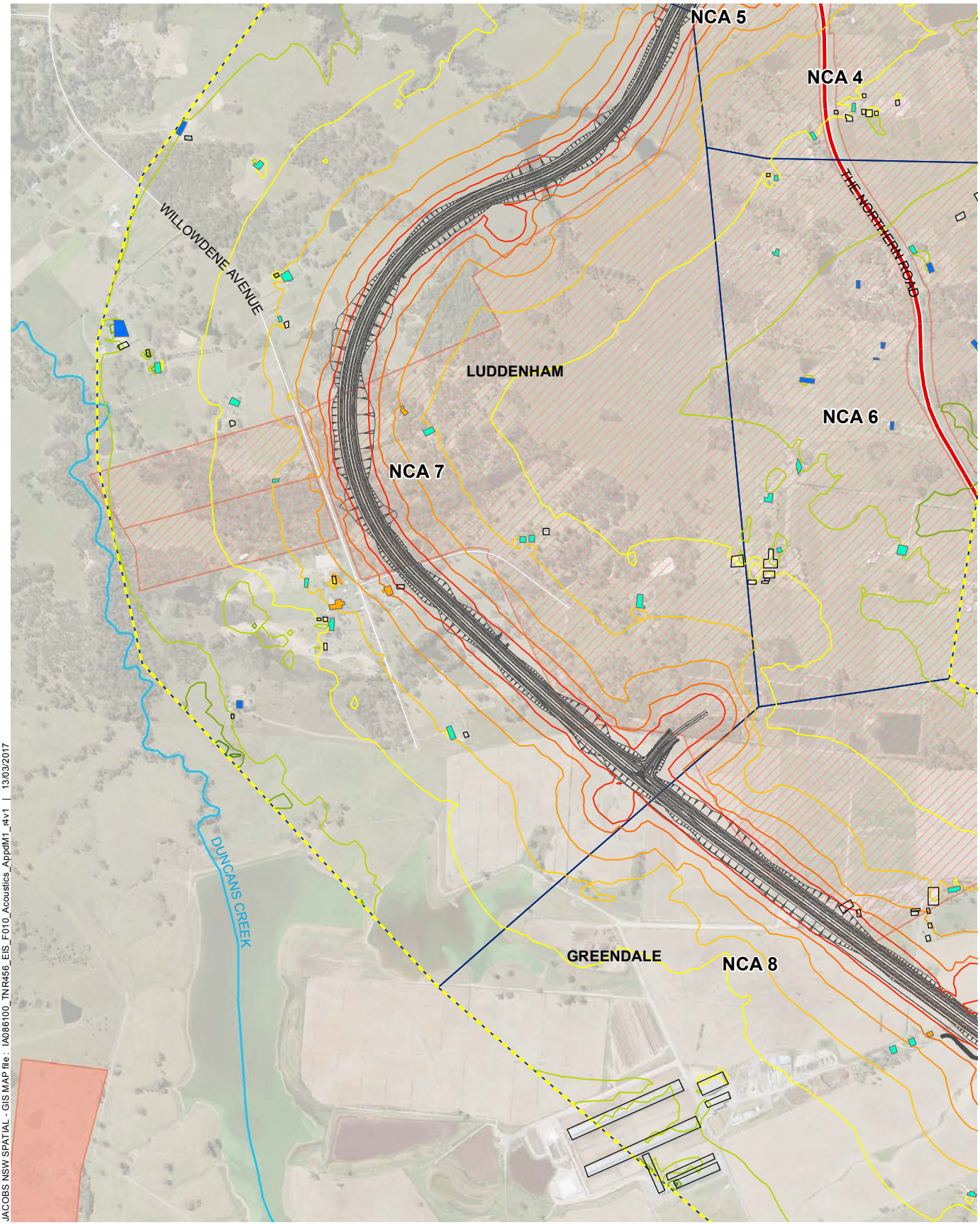
Exceedance of Noise Management level dB(A)
Complies with NML
0.1 - 5
5.1 - 15
15.1 - 25
> 25
Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.1 | Construction noise contours: Paving works and ancillary facilities (with mitigation) - Night time



JACOBS NSW SPATIAL - GIS MAP file: IA086100_TNR456_EIS_F010_Acoustics_AppdM1_r4v1 | 13/03/2017

The Northern Road upgrade - Mersey Road to Glenmore Parkway

The Northern Road (Existing)

Western Sydney Airport site (Commonwealth Land)

Defence Establishment Orchard Hills (Commonwealth Land)

Commonwealth Lands

Study area

Noise catchment areas

Predicted noise level dB(A)

35 55

40 60

45 65

50 70

Exceedance of Noise Management level dB(A)

Complies with NML

0.1 - 5

5.1 - 15

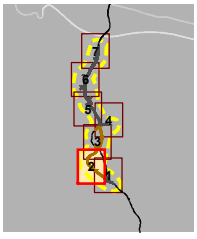
15.1 - 25

> 25

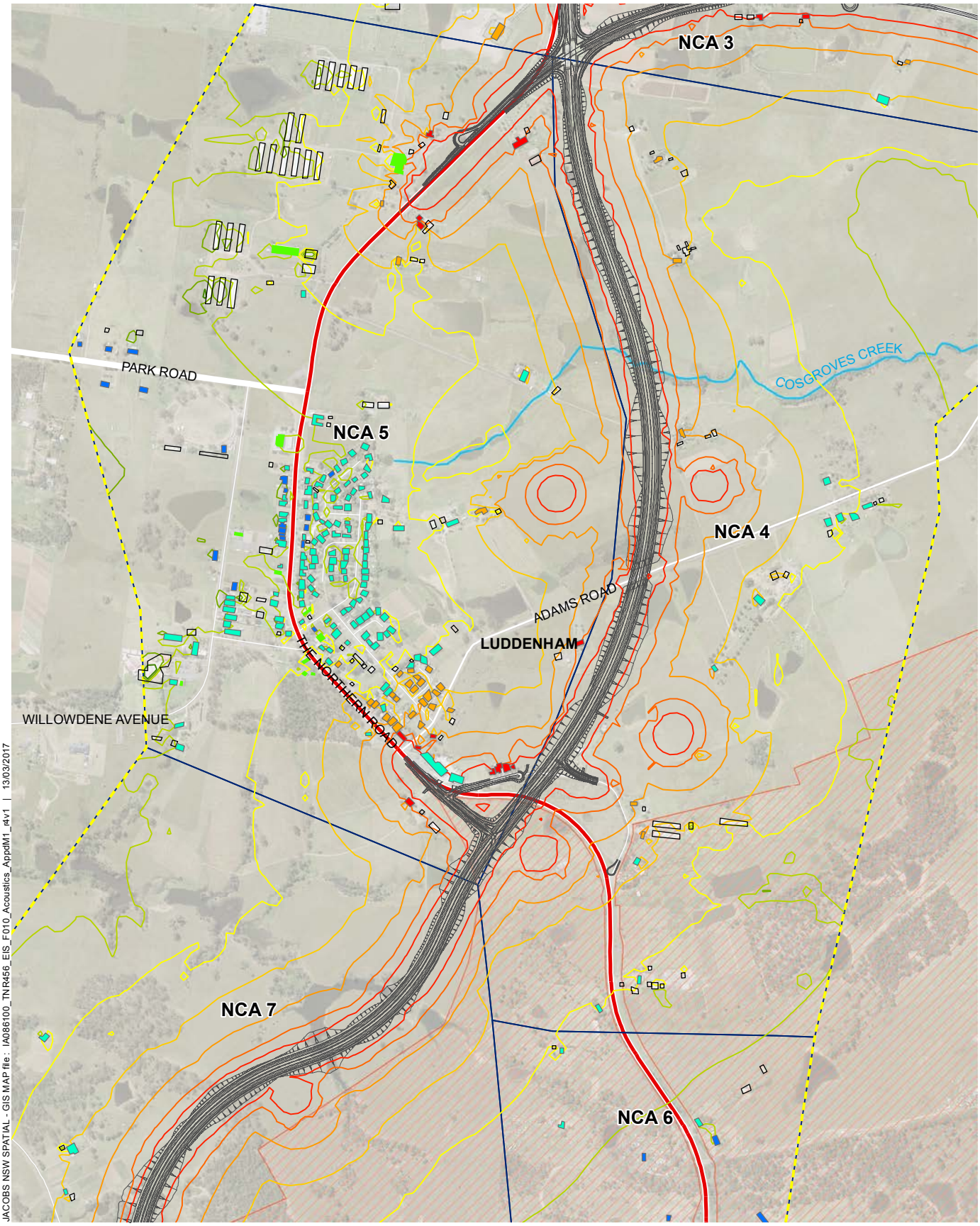
Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.1 | Construction noise contours: Paving works and ancillary facilities (with mitigation) - Night time



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F010_Acoustics_AppdM1_r4v1 | 13/03/2017

The Northern Road upgrade - Mersey Road to Glenmore Parkway
The Northern Road (Existing)
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth Lands
Study area
Noise catchment areas

Predicted noise level dB(A)

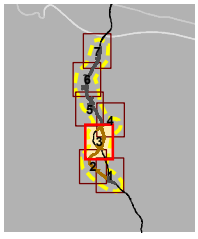
35	55
40	60
45	65
50	70

Exceedance of Noise Management level dB(A)

- Complies with NML
- 0.1 - 5
- 5.1 - 15
- 15.1 - 25
- > 25
- Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.1 | Construction noise contours: Paving works and ancillary facilities (with mitigation) - Night time



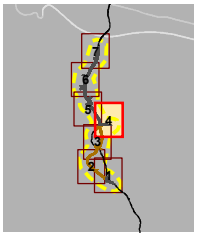
The Northern Road upgrade - Mersey Road to Glenmore Parkway
The Northern Road (Existing)
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth Lands
Study area
Noise catchment areas
WaterNSW supply pipelines

Predicted noise level dB(A)
35
40
45
50
55
60
65
70

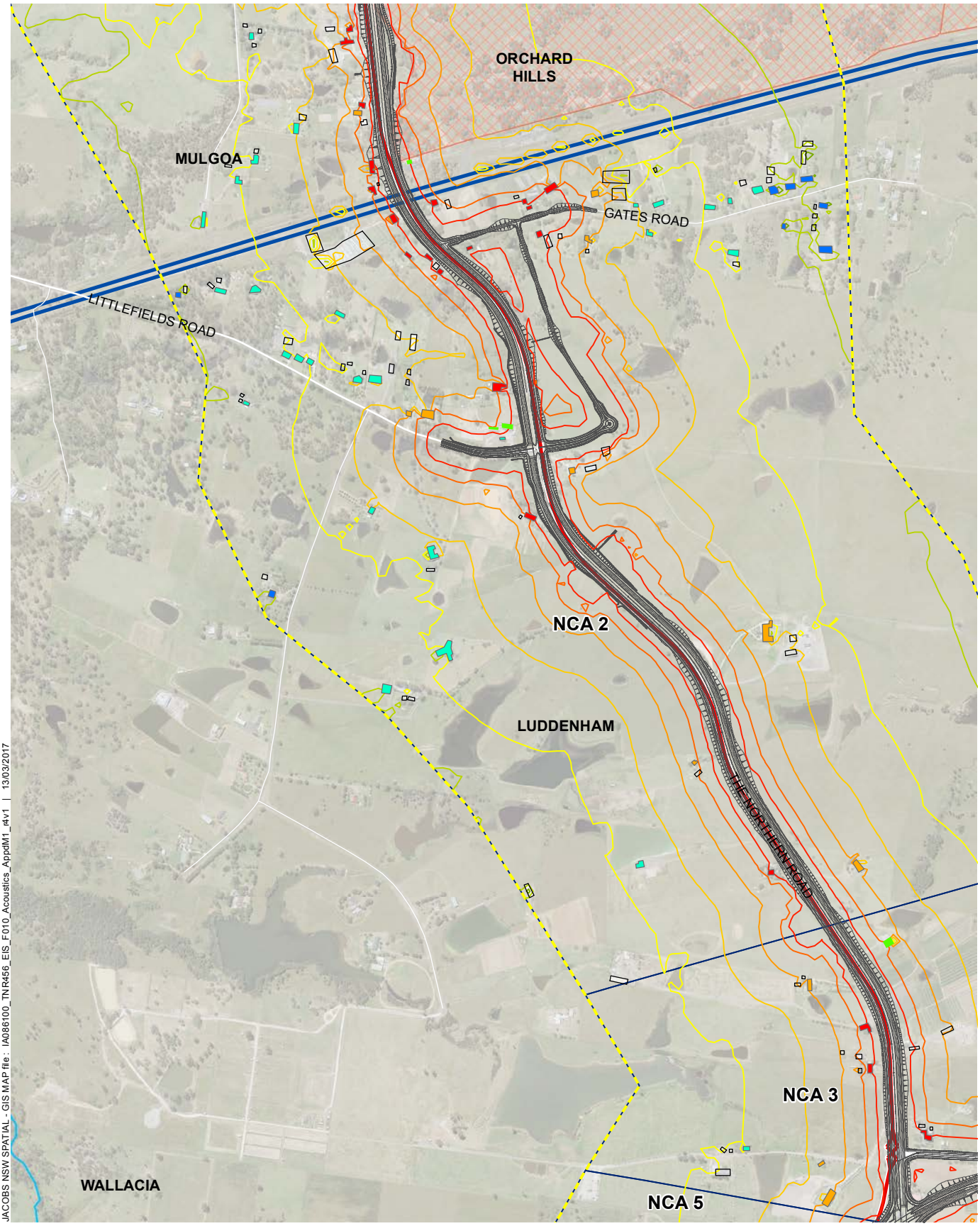
Exceedance of Noise Management level dB(A)
Complies with NML
0.1 - 5
5.1 - 15
15.1 - 25
> 25
Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.1 | Construction noise contours: Paving works and ancillary facilities (with mitigation) - Night time



JACOBS NSW SPATIAL - GIS MAP file: IA086100_TNR456_EIS_F010_Acoustics_AppdM1_r4v1 | 13/03/2017

The Northern Road upgrade - Mersey Road to Glenmore Parkway

The Northern Road (Existing)

Western Sydney Airport site (Commonwealth Land)

Defence Establishment Orchard Hills (Commonwealth Land)

Commonwealth Lands

Study area

Noise catchment areas

WaterNSW supply pipelines

Predicted noise level dB(A)

40 60

45 65

50 70

55

Exceedance of Noise Management level dB(A)

Complies with NML

0.1 - 5

5.1 - 15

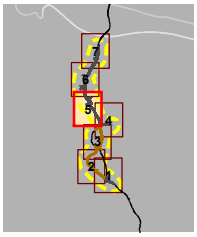
15.1 - 25

> 25

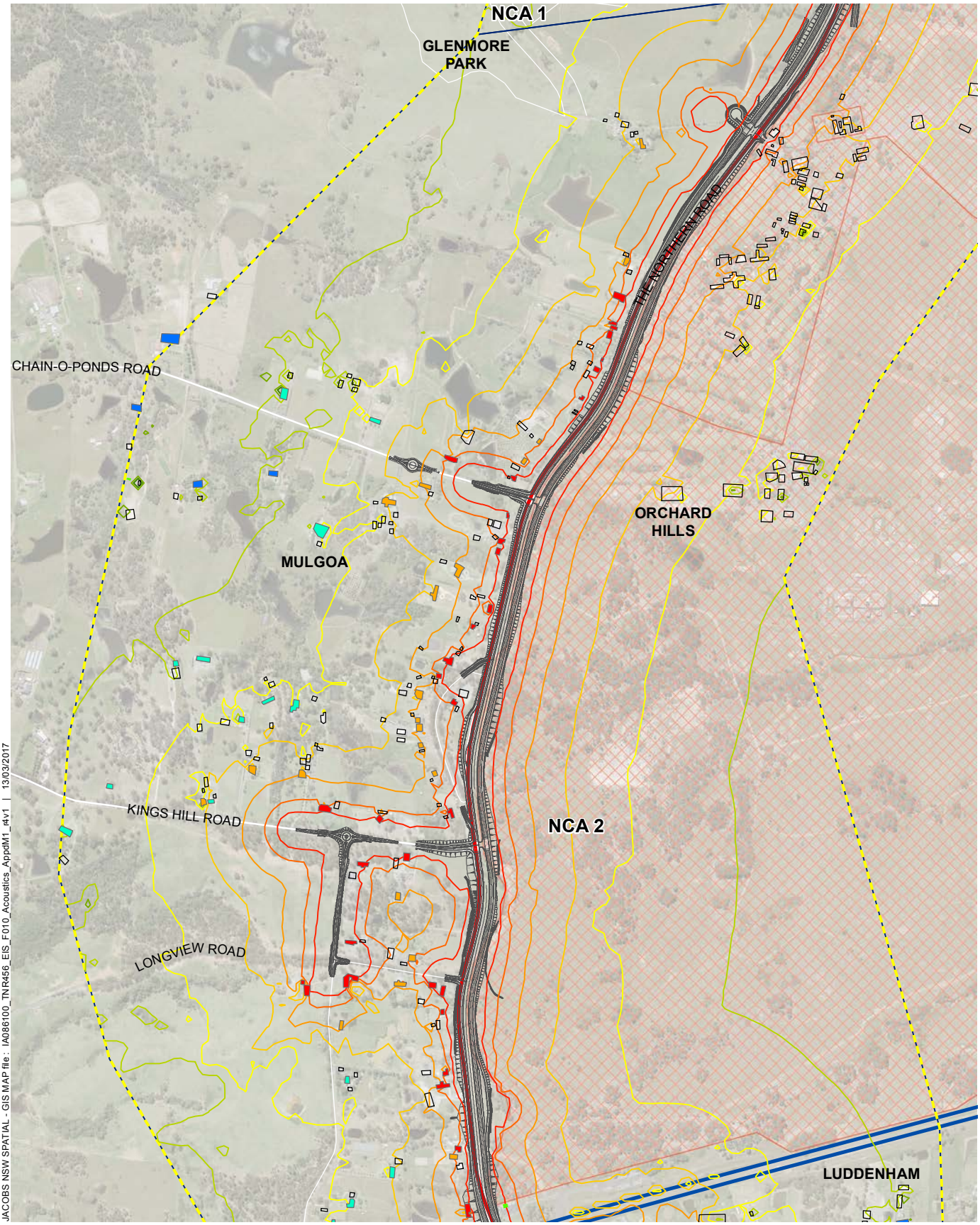
Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.1 | Construction noise contours: Paving works and ancillary facilities (with mitigation) - Night time



JACOBS NSW SPATIAL - GIS MAP file: IA086100_TNR456_EIS_F010_Acoustics_AppdM1_r4v1 | 13/03/2017

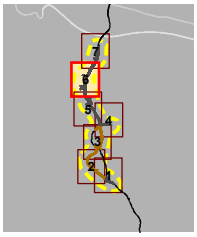
The Northern Road upgrade - Mersey Road to Glenmore Parkway
The Northern Road (Existing)
Western Sydney Airport site (Commonwealth Land)
Defence Establishment Orchard Hills (Commonwealth Land)
Commonwealth Lands
Study area
Noise catchment areas
WaterNSW supply pipelines

Predicted noise level dB(A)
35
40
45
50
55
60
65
70

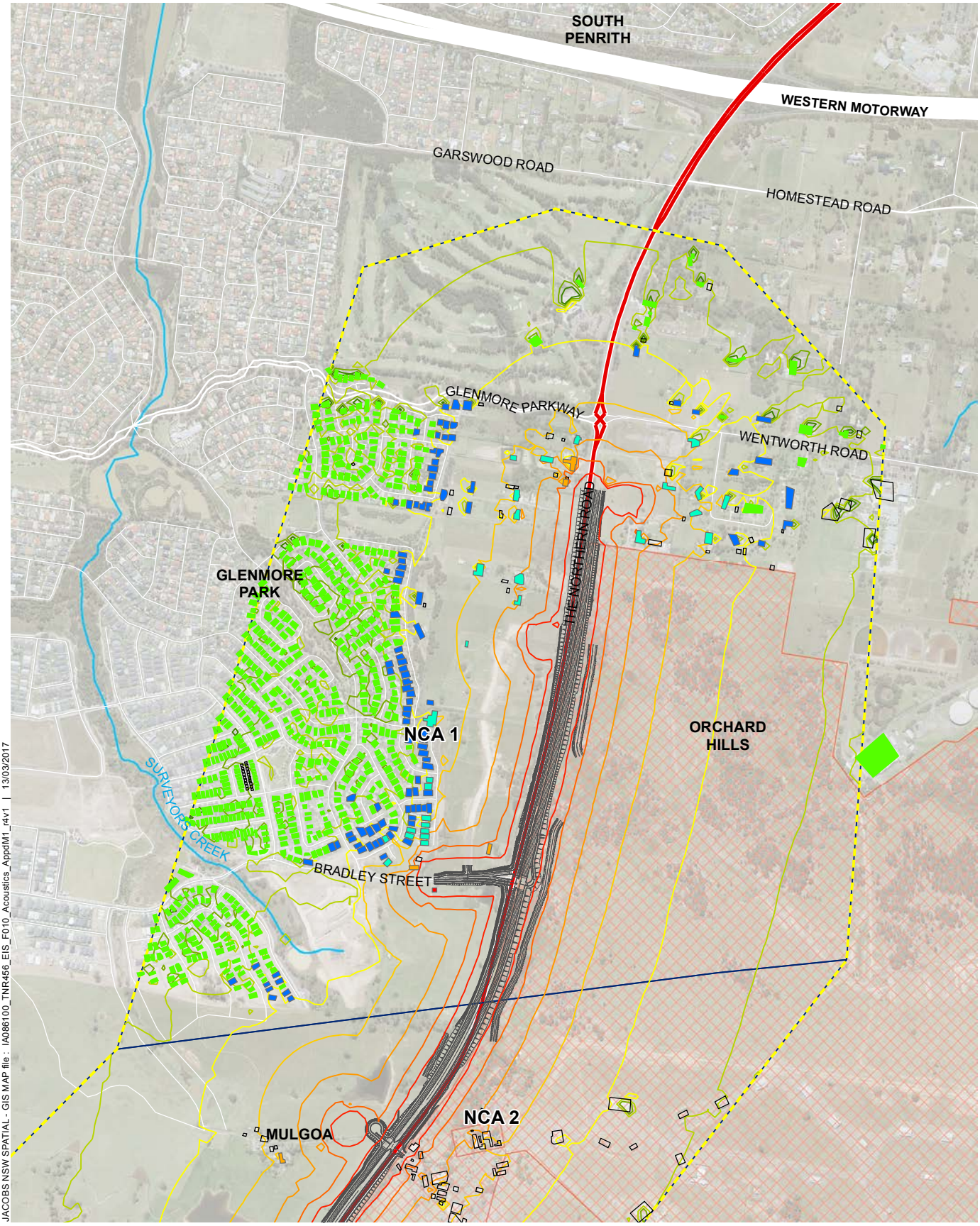
Exceedance of Noise Management level dB(A)
Complies with NML
0.1 - 5
5.1 - 15
15.1 - 25
> 25
Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.1 | Construction noise contours: Paving works and ancillary facilities (with mitigation) - Night time



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F010_Acoustics_AppdM1_r4v1 | 13/03/2017

The Northern Road upgrade - Mersey Road to Glenmore Parkway

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Western Sydney Airport site (Commonwealth Land)

Defence Establishment Orchard Hills (Commonwealth Land)

Commonwealth Lands

Study area

Noise catchment areas

Predicted noise level dB(A)

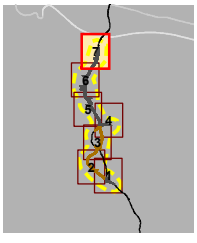
35	55
40	60
45	65
50	70

Exceedance of Noise Management level dB(A)

- Complies with NML
- 0.1 - 5
- 5.1 - 15
- 15.1 - 25
- > 25
- Not acoustically sensitive (at night)

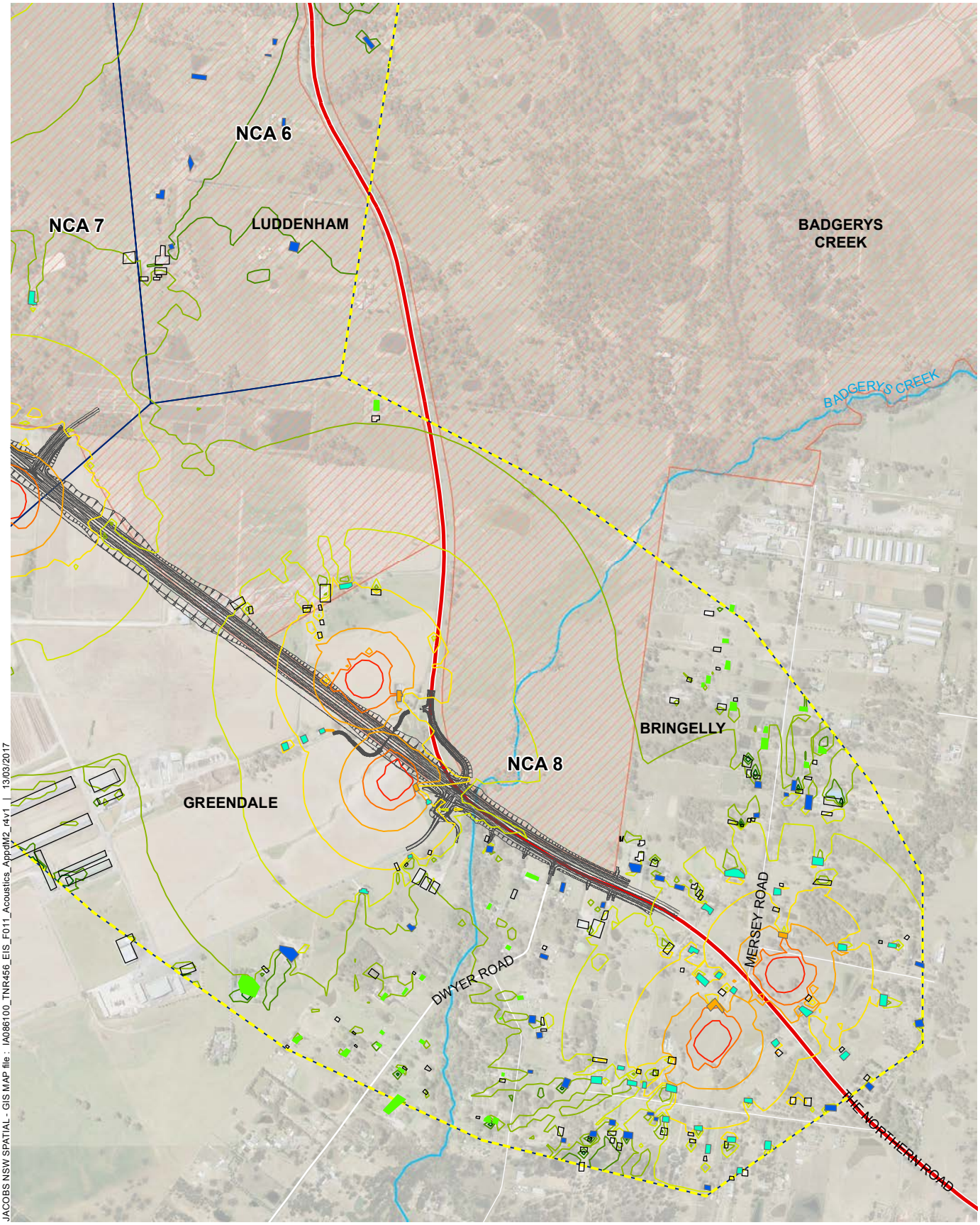
0 200 400 m

N



Appendix M.1 | Construction noise contours: Paving works and ancillary facilities (with mitigation) - Night time

M.2 Bridge Works and Ancillary Facilities (with mitigation) – Night time



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F011_Acoustics_AppdM2_r4v1 | 13/03/2017

The Northern Road upgrade - Mersey Road to Glenmore Parkway

The Northern Road (Existing)

Western Sydney Airport site (Commonwealth

Defence Establishment Orchard Hills (Commonwealth Land)

Commonwealth Lands

Noise catchment areas

Study area

Predicted noise level (dB(A))

35 55

40 60

45 65

50 70

Exceedance of Noise Management level dB(A)

Complies with NML

0.1 - 5

5.1 - 15

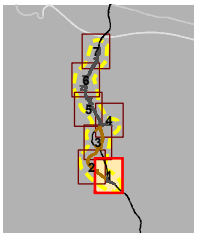
15.1 - 25

> 25

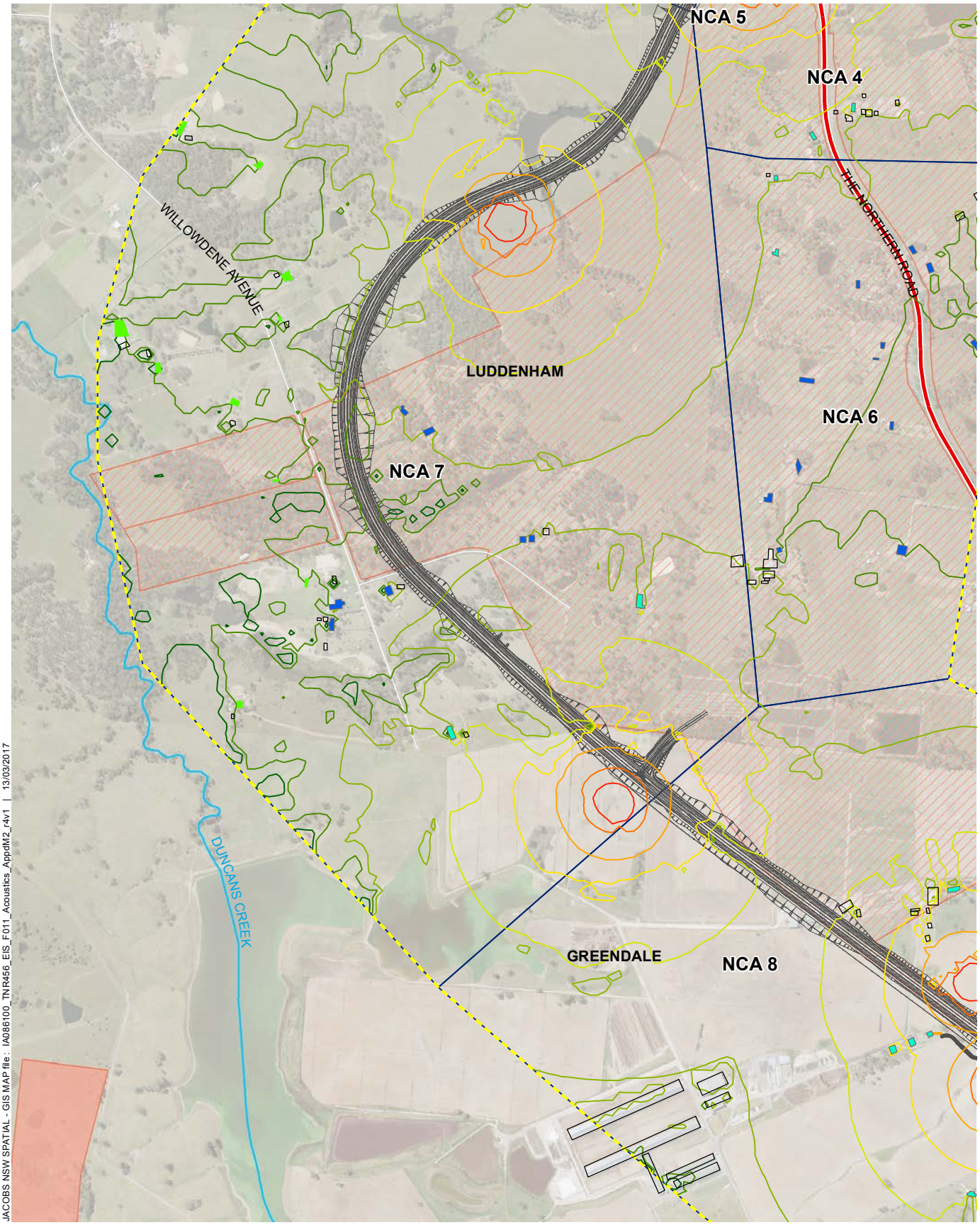
Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.2 | Construction noise contours: Bridge works and ancillary facilities (with mitigation) - Night time



JACOBS NSW SPATIAL - GIS MAP file : IA086100_TNR456_EIS_F011_Acoustics_AppdM2_r4v1 | 13/03/2017

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Commonwealth Lands

Noise catchment areas

Study area

Predicted noise level (dB(A))

35 55

40 60

45 65

50 70

Exceedance of Noise Management level dB(A)

Complies with NML

0.1 - 5

5.1 - 15

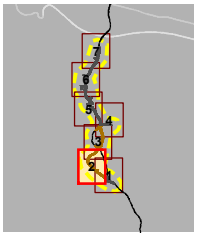
15.1 - 25

> 25

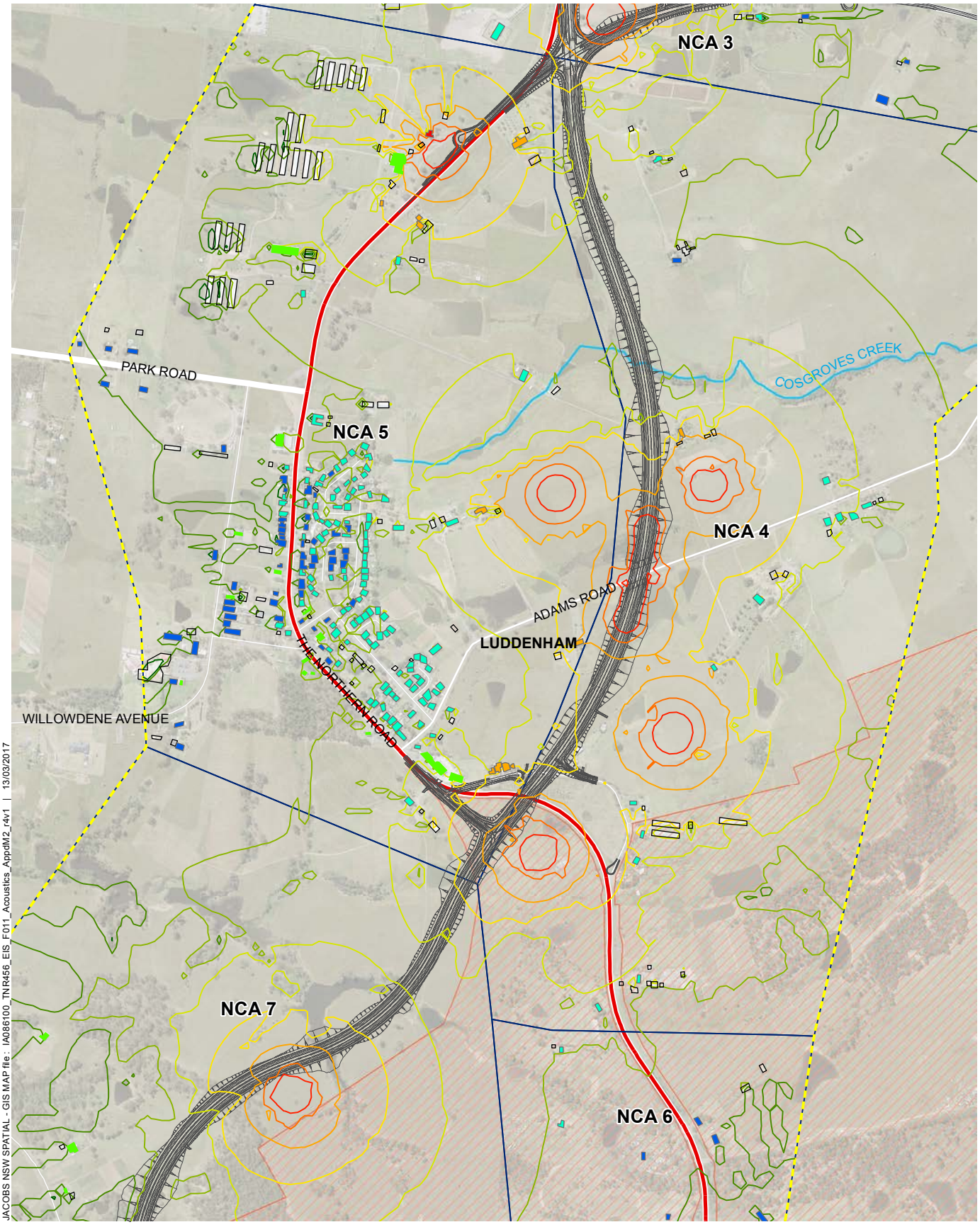
Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.2 | Construction noise contours: Bridge works and ancillary facilities (with mitigation) - Night time



JACOBS NSW SPATIAL - GIS MAP file: IA086100_TNR456_EIS_F011_Acoustics_AppdM2_r4v1 | 13/03/2017

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Exceedance of Noise Management level dB(A)

Complies with NML

0.1 - 5

5.1 - 15

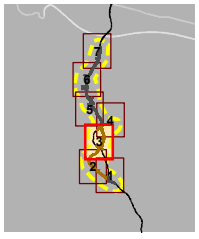
15.1 - 25

> 25

Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.2 | Construction noise contours: Bridge works and ancillary facilities (with mitigation) - Night time



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5.1 - 15

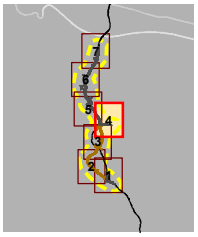
15.1 - 25

> 25

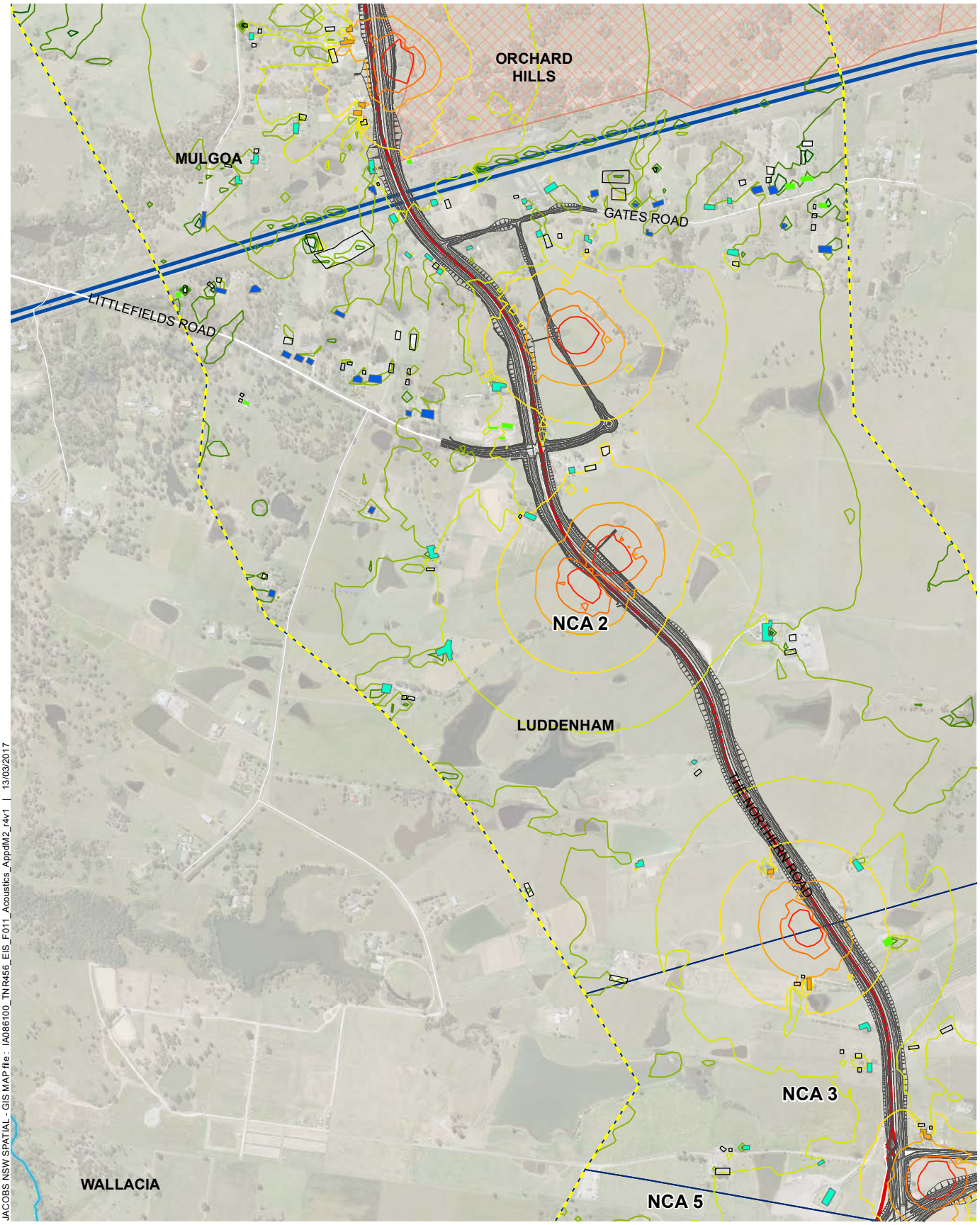
Not acoustically sensitive (at night)

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N



Appendix M.2 | Construction noise contours: Bridge works and ancillary facilities (with mitigation) - Night time



JACOBS NSW SPATIAL - GIS MAP file: : IA086100_TNR456_EIS_F011_Acoustics_AppdM2_r4v1 | 13/03/2017

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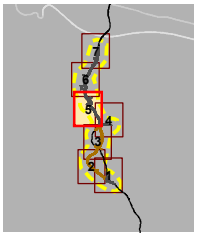
15.1 - 25

> 25

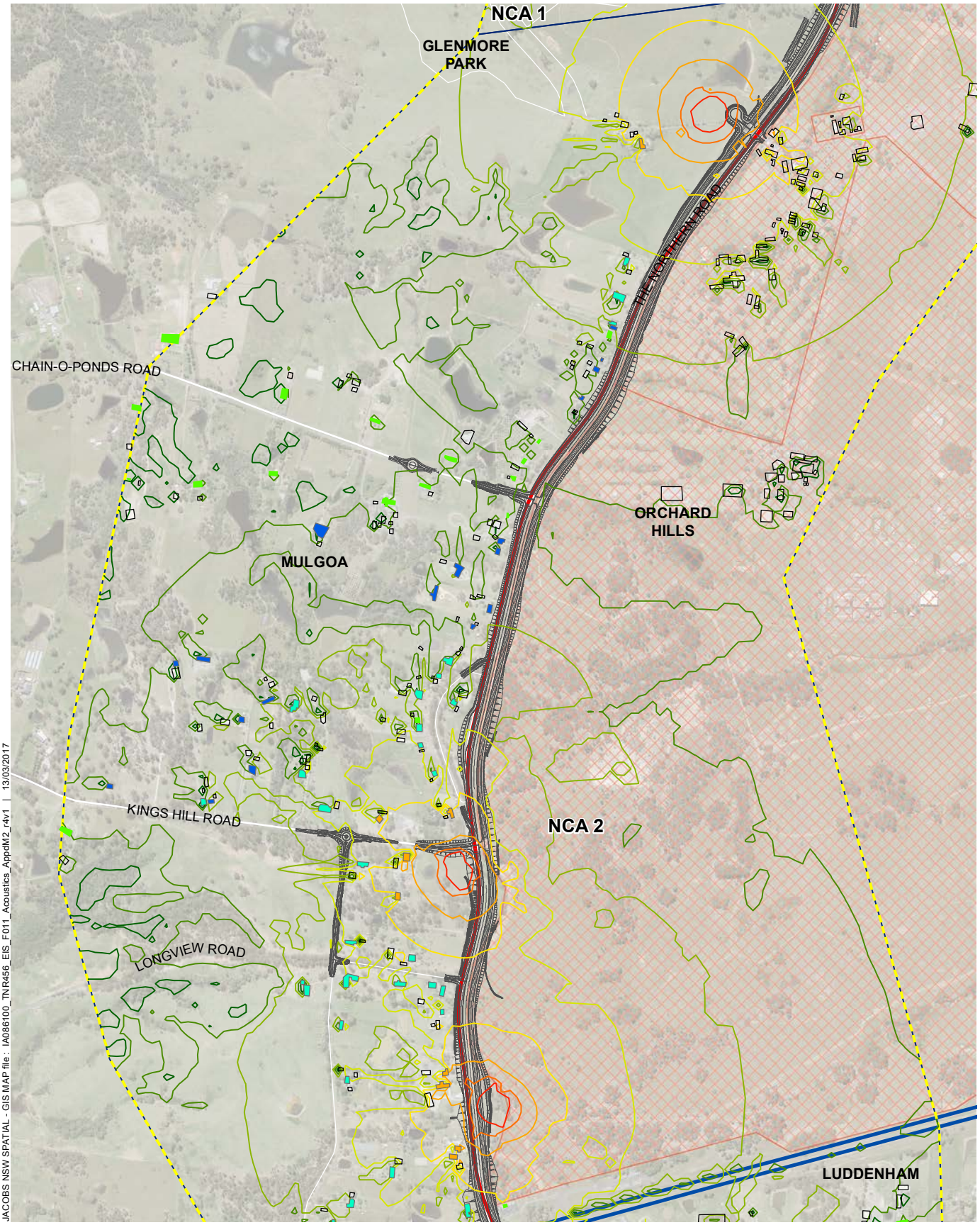
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0 200 400 m

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Appendix M.2 | Construction noise contours: Bridge works and ancillary facilities (with mitigation) - Night time



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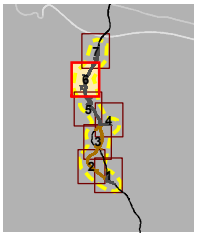
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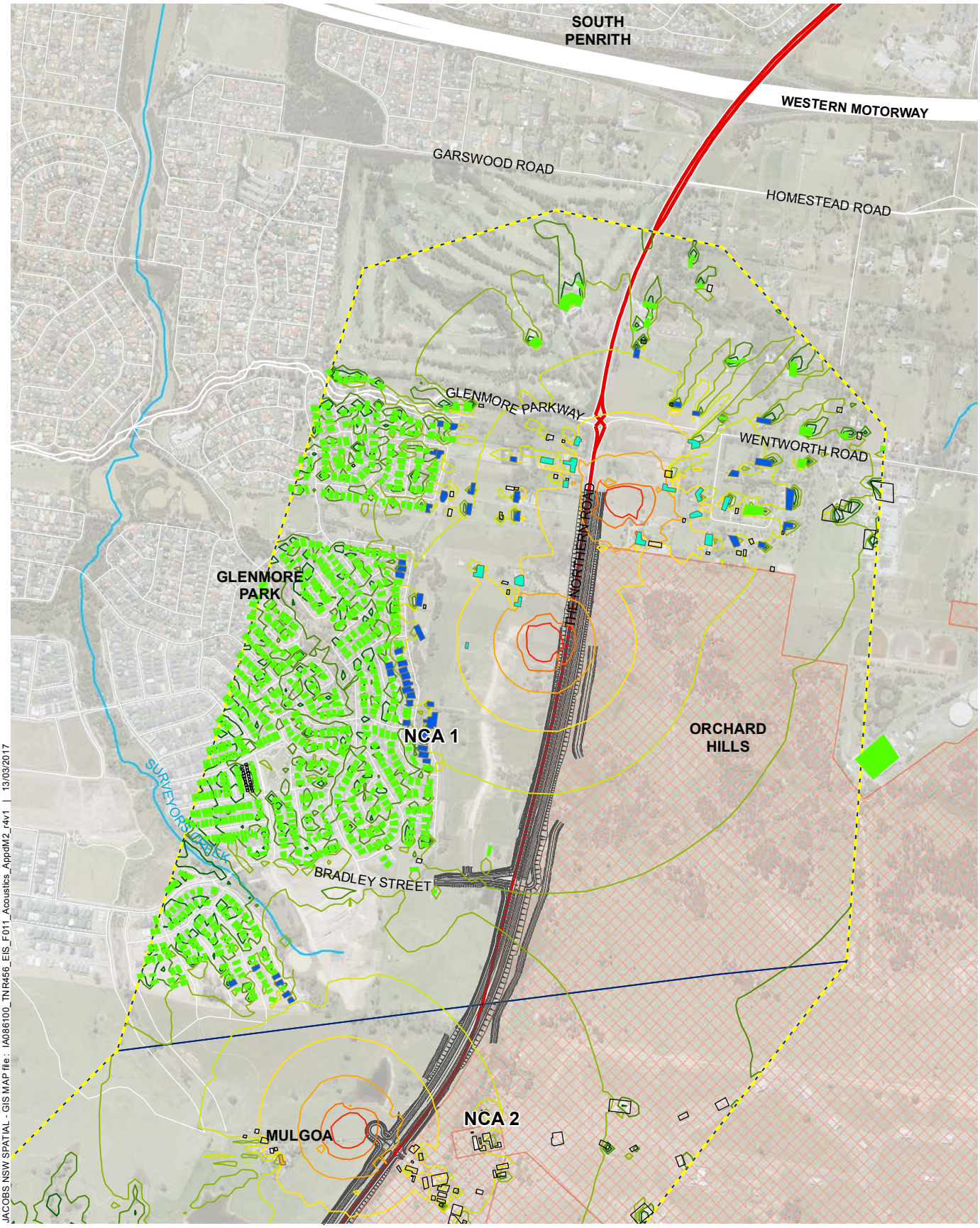
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Appendix M.2 | Construction noise contours: Bridge works and ancillary facilities (with mitigation) - Night time



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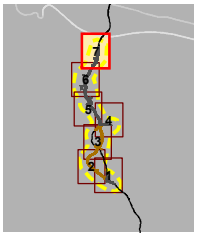
15.1 - 25

> 25

Not acoustically sensitive (at night)

0 200 400 m

N



Appendix M.2 | Construction noise contours: Bridge works and ancillary facilities (with mitigation) - Night time