Transport for NSW

TAP3 - Como Station Upgrade

Noise and Vibration impact assessment

March 2019

Table of contents

Table index

Figure index

Appendices

1. Introduction

1.1 Overview

The NSW Government is committed to facilitating and encouraging the use of public transport, such as trains, by upgrading stations to make them more accessible, and improving interchanges around stations with other modes of transport such as bicycles, buses and cars.

The Transport Access Program is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure where it is needed most.

Como Station does not currently meet key requirements of the *Disability Standards for Accessible Public Transport* (DSAPT) or the Commonwealth *Disability Discrimination Act 1992* (DDA).

The non-compliant access points and stairs to the Como Station concourse and platforms do not facilitate access for people with reduced mobility, parents/carers with prams or passengers with luggage. There are no lift facilities and inadequate amenities and tactile surfacing to stairs, platforms and interchange facilities.

The Proposal would involve upgrade works to Como Station, interchange facilities and surrounding footpaths. The station is located 20 kilometres south of the Sydney Central Business District (CBD) in the suburb of Como and is serviced by the Illawarra Line.

Platform 1 provides train services north to the CBD and Platform 2 provides train services south to Cronulla. The Proposal is located within the Sutherland Shire local government area between Railway Road and the Como Parade, Como. The key features of the Proposal are summarised as follows:

- incorporate a new paved area that connects a new lift lobby with the underpass on Como Parade
- installation of a new lift and stairs at the-commuter car park off Como Parade to connect to the existing underpass
- removal of the existing non-compliant pedestrian ramp off Como Parade and rehabilitation of the area
- installation of a new lift from the pedestrian underpass to the station platform
- relocation of the existing non-compliant DDA parking spaces within the commuter car park close to the new lift, with construction of the relocated spaces compliant to current standards
- extension of the existing access ramp on eastern side of the station (Railway Road) to provide DDA compliant pedestrian route to the underpass
- new handrails, installation of tactile ground surface indicators (TGSIs) and nosing to the existing stairs
- removal of vegetation and trees as minimally required to accommodate new infrastructure
- modification of the existing station building layout to allow for new amenities
- installation of a canopy on the platform between the station building and new lift structure
- housing of the digital communications equipment in a compliant enclosure within the existing station building

- upgrading of the existing toilets to accommodate one unisex Family Accessible toilet and Ambulant male & female toilets
- ancillary works including adjustments to lighting, Opal card readers, handrails, low voltage electrical upgrades, minor drainage works, landscaping, improvements to station communications systems including closed circuit TV (CCTV) cameras, hearing loops, wayfinding signage, emergency help points and installation of tactile ground surface indicators (TGSIs).

Subject to planning approval, construction is expected to commence in late 2019 and take around 15 months to complete.

1.2 Scope of work

The scope of work for the Noise and Vibration Impact Assessment (NVIA) includes:

- conducting long term noise monitoring at a location that is representative of the area surrounding the train station
- identification of surrounding sensitive receivers potentially impacted by construction noise
- determination of the rating background level (RBL) for the Proposal from the noise monitoring data
- a quantitative assessment of construction noise and vibration
- reviewing the potential noise impacts due to construction traffic generation
- providing construction noise and vibration mitigation measures to minimise impacts on the community.

This report has been prepared with consideration to the following documents:

- *Construction Noise and Vibration Strategy* (TfNSW, 2018) (CNVS)
- *Road Noise Policy* (DECCW, 2011) (RNP)
- *Assessing Vibration: a technical guideline* (EPA, 2006) (AVTG)
- *Interim Construction Noise Guideline* (EPA, 2009) (ICNG)
- *Noise Policy for Industry* (EPA, 2017) (NPI).

1.3 Report structure

The report is comprised of the following sections:

- **Section 1 – Introduction:** provides the background and an overview of the Proposal and the assessment
- **Section 2 – Existing environment:** summarises the existing noise conditions and details the noise monitoring methodology
- **Section 3 – Compliance criteria:** provides an overview of the construction noise, construction vibration and operational noise criteria
- **Section 4 – Construction impacts assessment:** presents a summary of the noise modelling and identifies potential noise and vibration impacts during construction
- **Section 5 – Operational impacts assessment:** presents a summary of the noise modelling and identifies potential noise impacts during operation
- **Section 6 – Mitigation measures:** provides an overview of the proposed noise and vibration mitigation measures during the construction and operational phases of the Proposal
- **Section 7 – Conclusion:** presents a summary of the NVIA findings and sets out the principal conclusions for the assessment.

1.4 Limitation

This report has been prepared by GHD for Transport for NSW and *may only be used and relied on by Transport for NSW for the purpose agreed between GHD and the Transport for NSW as set out of this report.*

GHD otherwise disclaims responsibility to any person other than Transport for NSW arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Transport for NSW and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. Existing environment

2.1 Proposal location

The Proposal is located about 20 kilometres south of the Sydney CBD. The train station runs north (towards Sydney CBD) and south (towards Wollongong) and is fronted by Como Parade on the western side and Railway Road on the eastern side.

The noise environment is typical of a suburban area with intermittent road traffic noise along local roads and rail traffic noise from the trains passing through the station. The general site and noise monitoring locations are shown in Figure 2-1.

2.2 Sensitive receivers and land uses

Noise and vibration sensitive receivers are defined by the type of occupancy and the activities performed within the land parcel. The receivers are classified within the following categories:

- residential premises
- educational institutes
- hospitals and medical facilities
- places of worship
- passive and active recreation areas
- commercial or industrial premises.

2.2.1 Residential receivers

Residential receivers in the streets listed in Table 2-1 were identified near the Proposal site and may experience noise impacts from the station upgrade.

Table 2-1 Residential receiver locations

Residential street	Approximate distance from train station (metres)
Railway Road	15 m east
Como Parade	40 m west
Warraba Street	45 m west
Yamba Road	140 m south west
Currawang Place	170 m west
Binya Place	175 m north west
Tivoli Esplanade	200 m east
Mindar Street	215 m west
Cremona Road	230 m north east
Loretta Ave	260 m north
Inelgah Road	270 m north west
Verona Range	300 m north east
Como Parade	315 m north
Wollun Street	345 m south west
Evans Street	380 m south west
Taronga Street	400 m west
Bulumin Street	400 m north
Burunda Street	410 m north west
Mulyan Street	415 m west
Taplan Street	460 m west

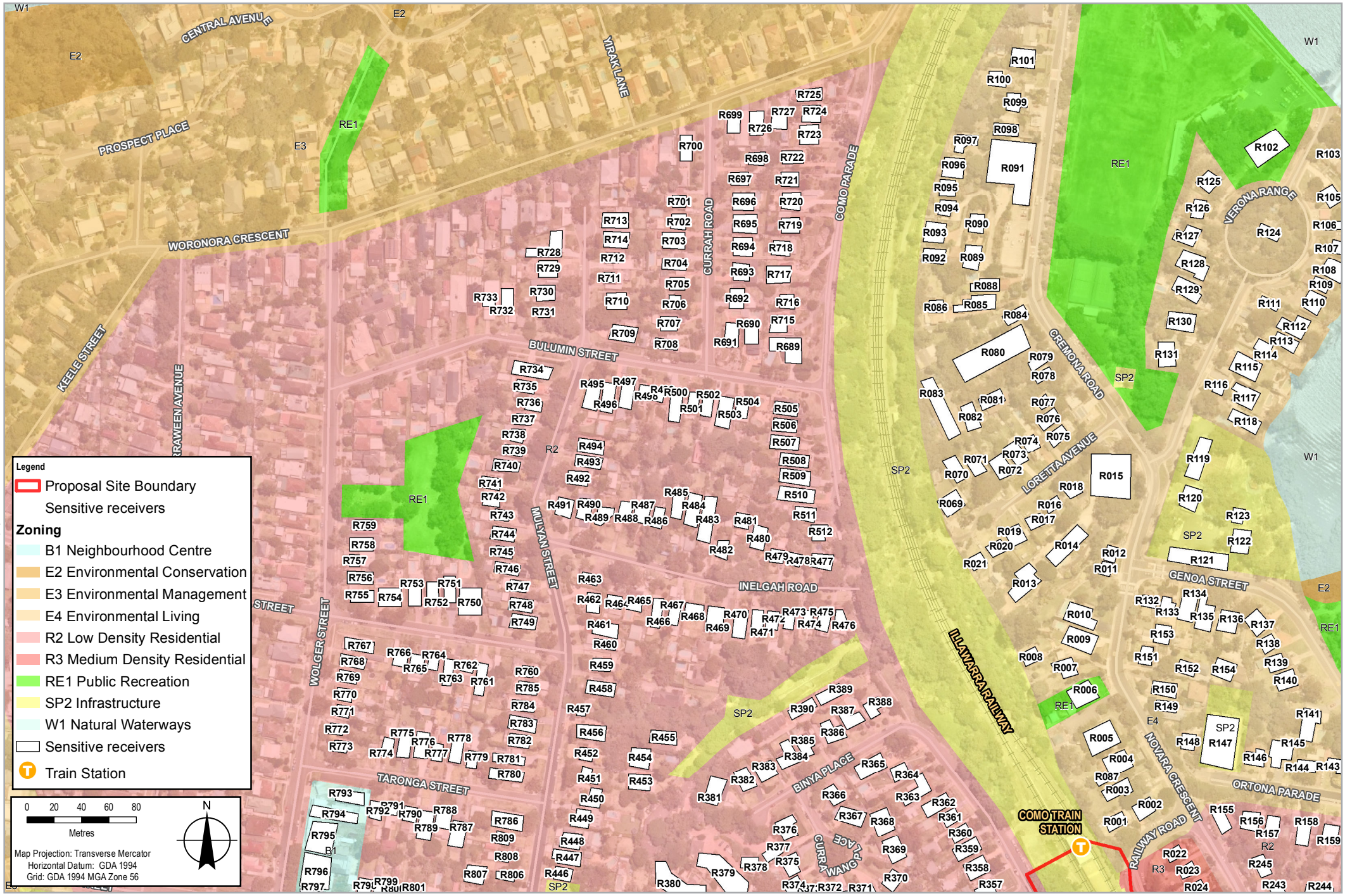
Residential street	Approximate distance from train station (metres)
Currah Road	460 m north west
Oyster Bay Road	470 m south east
Riverview Road	470 m east
Green Point Road	580 m east

2.2.2 Other sensitive land uses

Non-residential sensitive land uses in the vicinity of the Proposal area have been listed in Table 2-2.

Table 2-2 Non-residential sensitive receiver locations

Description	Address	Receiver type	Distance from station (metres)
Como School of Arts	15-17 Novara Cres	Educational	95 m north east
Como Pre-school Kindergarten	13 Novara Cres	Educational	110 m north
Como Public School	Genoa St	Educational	260 m north east
Kerry Butchery	53 Cremona Rd	Commercial	400 m north
Como Yoga	47 Warraba St	Commercial	400 m west
The Como Hotel	35 Cremona Rd	Commercial	450 m north
Vintage Beach House	13 Cremona Rd	Commercial	530 m north
Commercial precinct	57-69 Wolger St	Commercial	560 m west
St George Rowing Club	21 Verona Range	Active recreational	590 m north
Como West Public School	Wolger St	Educational	610 m west



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Data: , 2015, 2012; NSW Crown Copyright - Department of Planning and Environment; (c) State of New South Wales and Office of Environment and Heritage; (c) Commonwealth of Australia (Department of the Environment) 2013, 2014

Figure 2-1: Sensitive receivers and land use map

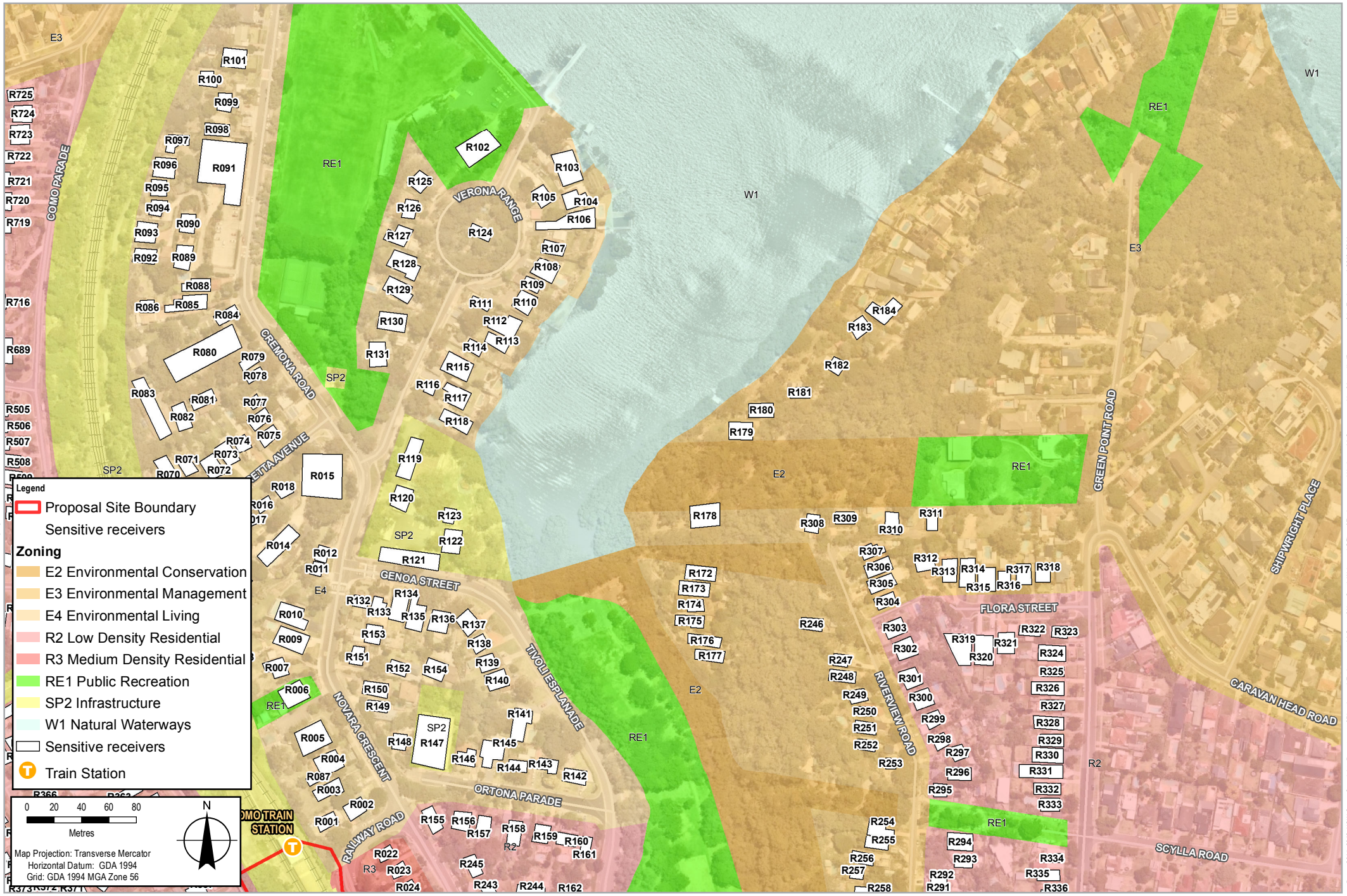


Figure 2-1: Sensitive receivers and land use map

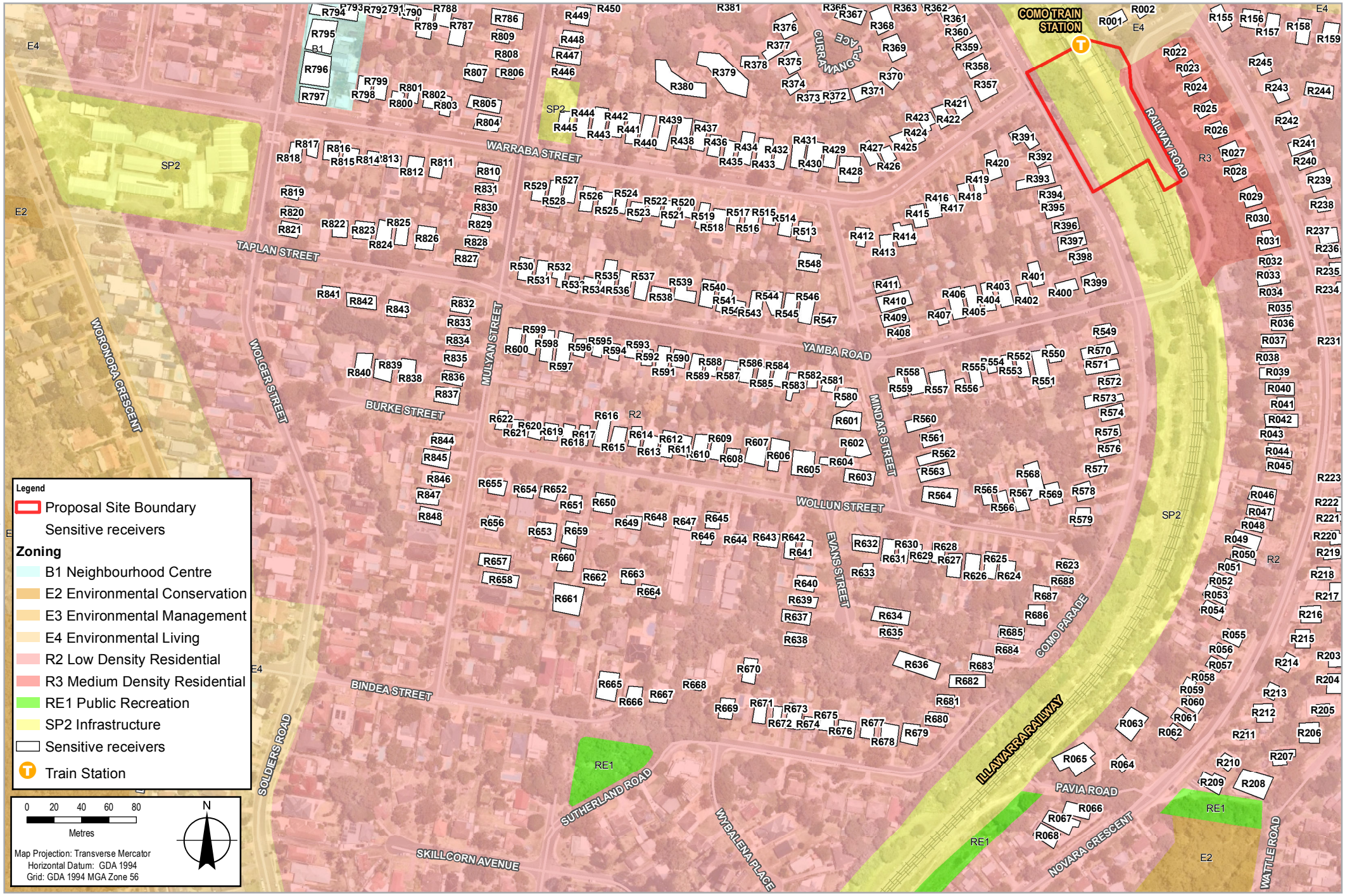


Figure 2-1: Sensitive receivers and land use map

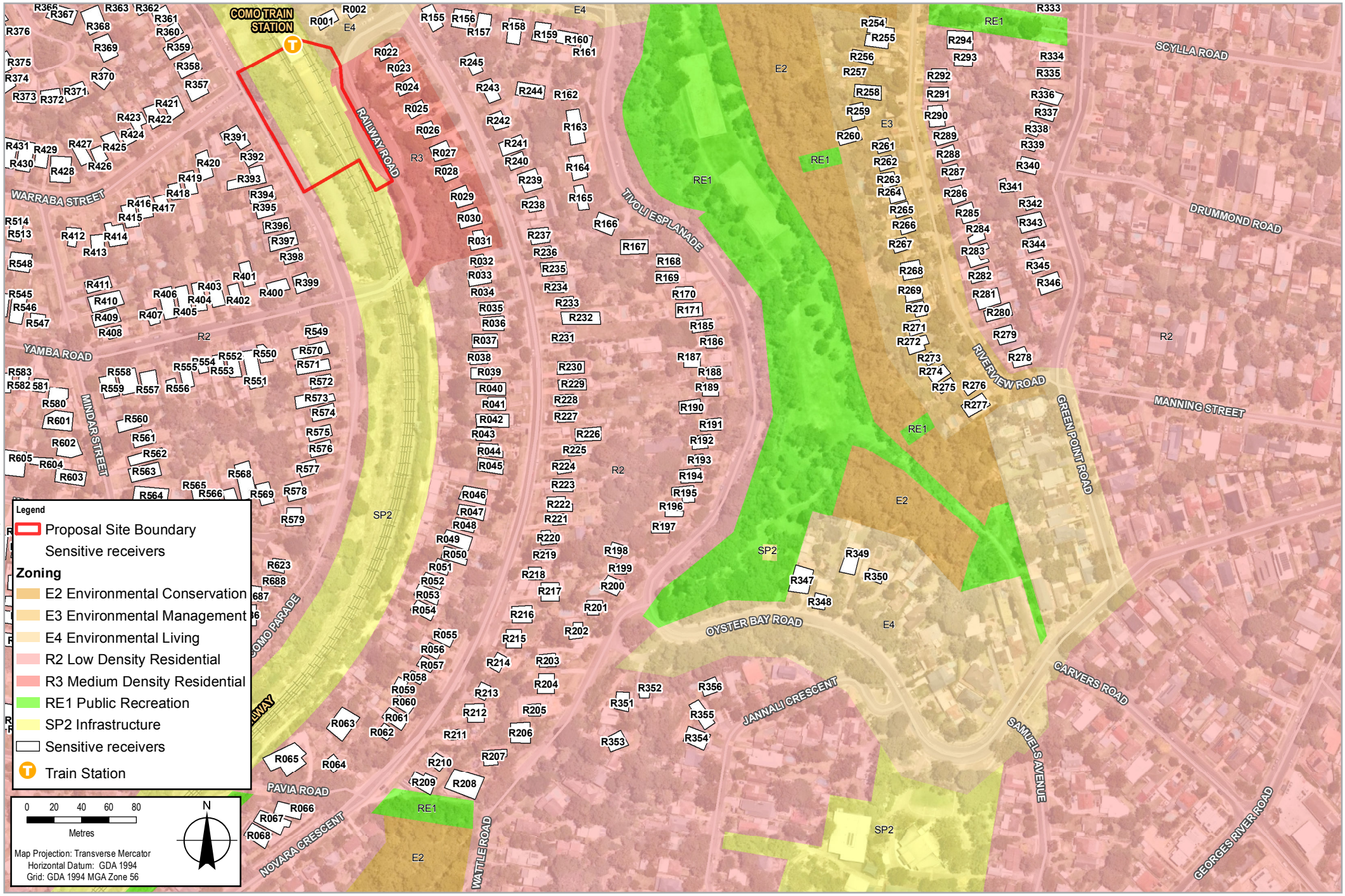


Figure 2-1: Sensitive receivers and land use map

2.3 Unattended noise monitoring

Long term monitoring was undertaken at one location for a period of 10 days between 11 December and 20 December 2018. The location is situated approximately 80 m north east of the Proposal site on Novara Crescent. It is suitably positioned to capture representative background noise levels typical of the most affected receivers. The dominant noise sources were due to local road traffic noise from Novara Crescent and Railway Road, and intermittent rail noise from the adjacent Illawarra Line.

2.3.1 Noise monitoring methodology

The methodology of the unattended noise monitoring data was:

- The noise loggers were set to record L_{A90}, L_{A10}, L_{Aeq} and L_{Amax} noise descriptors. The instrument was programmed to accumulate environmental noise data continuously over a sampling period of 15 minutes over the entire monitoring period
- A calibration check was performed on the noise monitoring equipment using a sound level calibrator with a sound pressure level of 94 dBA at 1 kHz. At completion of the measurements, the meter's calibration was re-checked to ensure the sensitivity of the noise monitoring equipment had not varied. The noise loggers were found to be within the acceptable tolerance of ± 0.5 dBA
- Meteorological data for the monitoring period was sourced from the Bureau of Meteorology (BoM) Holsworthy Aerodrome Automatic Weather Station (AWS) (station number: 066161). The AWS is located about 5.8 km north-west of the Proposal site
- Noise levels were excluded during periods of extraneous noise, periods where average wind speeds were greater than 5 m/s or when rainfall occurred.

A summary of the noise monitoring location and noise monitoring equipment details are provided in Table 2-3.

Table 2-3 Noise monitoring equipment details

Parameter	Value
Location 1	
Monitoring location	19 Novara Crescent, Como
Logger Type / Serial No.	Rion NL-52 / 131631
Measurement started	11.15am 11 December 2018
Measurement ceased	11.45am 20 December 2018
Pre/Post calibration	+0.3 / +0.3
Freq. weighting	A
Time response	Fast
Photograph	

2.3.2 Noise monitoring results

The measured noise monitoring data was used to determine the Rating Background Levels (RBL) for the assessment during the day, evening and night-time periods in accordance with the *Noise Policy for Industry* (NPI) (EPA, 2017). A summary of the measured rating background levels and ambient noise levels is provided in Table 2-4. Daily noise level charts are provided in Appendix B.

Table 2-4 Summary of measured noise levels, dBA

Location	Rating background level, L_{A90}			Ambient level, L_{Aeq}		
	Day 7 am to 6 pm	Evening 6 pm to 10 pm	Night 10 pm to 7 am	Day 7 am to 6 pm	Evening 6 pm to 10 pm	Night 10 pm to 7 am
Location 1	44	40	31	63	65	52

3. Compliance criteria

3.1 Construction noise

3.1.1 Proposed construction hours

Construction noise management levels for the Proposal are based on the *Interim Construction Noise Guideline* (ICNG) (DECCW, 2009) and the *Construction Noise and Vibration Strategy* (CNVS) (TfNSW, 2018). Construction is expected to commence in late 2019 and would take around 15 months to complete.

Construction works would be conducted during standard construction hours and out-of-hours works are anticipated for track possessions. Works outside standard construction hours should only be conducted when it is not feasible or reasonable to work within standard hours. Any decisions to work outside of the standard construction hours shall be documented and assessed in the Out of Hours Work (OOHW) Application to justify the requirement.

The construction hours for the Proposal are provided in Table 3-1.

Table 3-1 Construction hours

Construction hours	Monday to Friday	Saturday	Sunday/Public holiday
Standard hours	7 am to 6 pm	8 am to 1 pm	No work
OOHW Period 1	6 pm to 10 pm	7 am to 8 am 1 pm to 10 pm	8 am to 6 pm
OOHW Period 2	10 pm to 7 am	10 pm to 7 am	6 pm to 8 am

The ICNG acknowledges that the following activities have justification to be undertaken outside the standard construction hours assuming all feasible and reasonable mitigation measures are implemented to minimise the impacts to the surrounding sensitive land uses:

- the delivery of oversized plant, equipment and materials that police or other authorities determine require special arrangements to transport along public roads
- emergency work to avoid the loss of life or damage to property, or to prevent environmental harm
- maintenance and repair of public infrastructure where disruption to essential services or considerations of worker safety do not allow work within standard hours
- public infrastructure works that shorten the length of the Proposal and are supported by the affected community
- works where a proponent demonstrates and justifies a need to operate outside the recommended standard construction hours
- works which maintain noise levels below the noise management levels outside of the recommended standard construction hours.

Works required outside standard construction hours would be identified during construction planning and nearby residents would be notified before possession work is expected.

3.1.2 Construction noise management levels

Construction noise management levels for residential premises and other sensitive land uses are provided in the CNVS and based on the ICNG.

The method to determine the noise management levels for residential receivers in accordance with the CNVS is outlined in Table 3-2.

Table 3-2 Noise management levels for residential receivers

Time of day	Noise management level, $L_{Aeq(15\ min)}$	Application notes
Recommended standard hours	Noise affected: RBL + 10 dBA	The noise affected level represents the point above which there may be some community reaction to noise. • where the predicted or measured $L_{Aeq(15\ min)}$ 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 duration, as well as contact details.
	Highly noise affected: 75 dBA	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 proponent should consider very carefully if there is any other feasible and reasonable way to reduce noise to below this level. • If no quieter work method is feasible and reasonable, and the works proceed, the proponent should communicate with the impacted residents by clearly explaining the duration and noise level of the works, and by describing any respite periods that will be provided.
Outside recommended standard hours	Noise affected: RBL + 5 dBA	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 measures have been applied and noise is more than 5 dBA above the noise affected level, the proponent should consult with the community. For guidance on negotiating agreements see Section 7.2.2 of the *Interim Construction Noise Guideline*.

Noise management levels for other sensitive land uses are provided in Table 3-3 and only apply when the properties are in use.

Table 3-3 Noise management levels for other sensitive land uses

Land use	Noise management level, $L_{Aeq(15\ min)}$
Commercial premises	70 dBA (external)
Educational institutes	45 dBA (internal)
Hospital wards and operating theatres	45 dBA (internal)
Places of worship	45 dBA (internal)
Active recreation areas	65 dBA (external)

3.1.3 Sleep disturbance

The ICNG recommends that where construction works are planned to extend over two or more consecutive nights, the Proposal should consider maximum noise levels and the extent and frequency of maximum noise level events exceeding the RBL. The potential for both sleep disturbance and awakenings should be considered in the assessment.

The NPI provides the latest EPA guidance for the assessment of sleep disturbance. The NPI recommends a maximum noise level assessment to assess the potential for sleep disturbance impacts which include awakenings and disturbance to sleep stages. An initial screening test for the maximum noise levels events should be assessed to the following levels.

- $L_{Aeq(15\ min)}$ 40 dBA or the prevailing RBL plus 5 dB, whichever is greater, and/or
- L_{AFmax} 52 dBA or the prevailing RBL plus 15 dB, whichever is greater.

If the screening test indicates there is a potential for sleep disturbance then a detailed maximum noise level assessment should be undertaken. The detailed assessment should cover the maximum noise level, the extent to which the maximum noise level exceeds the rating background noise level, and the number of times this happens during the night-time period.

3.1.4 Proposal noise management levels

A summary of the Proposal construction noise management levels for each identified sensitive receiver type is provided in Table 3-4.

Table 3-4 Proposal construction noise management levels, dBA

Receiver Type	Time of day	Management level
Residential	Recommended standard hours	Noise affected: 54
		Highly affected: 75
	Outside recommended standard hours[1]	Day: 49
		Evening: 45
		Night: 36
Commercial	When in use	70 dBA (external)
Educational institutes		45 dBA (internal)
Hospital wards and operating theatres		45 dBA (internal)
Places of worship		45 dBA (internal)
Active recreation areas		65 dBA (external)

Note 1: The *Noise Policy for Industry* (EPA, 2017) defines day, evening and night time periods as:

- Day: the period from 7 am to 6 pm Monday to Saturday or 8 am to 6 pm on Sundays and public holidays.
- Evening: the period from 6 pm to 10 pm.
- Night: the remaining periods.

3.2 Construction traffic

The *Road Noise Policy* (RNP) (DECCW, 2011) provides road traffic noise criteria for residential land uses affected by construction traffic on the public road network.

The Section 3.4.1 of the RNP pertaining to the its application state that any increase in the total noise level at existing residences and other sensitive land uses affected by traffic generation on existing roads should be limited to 2 dBA above current levels. This limit only applies when the noise level without the development is within 2 dBA or exceeds the road traffic noise criterion provided in the RNP.

This has been used to identify potential impacts as a result of noise produced by construction traffic. If road traffic noise increases as a result of construction works within 2 dBA of current levels then the objectives of the RNP are considered to be met and no specific mitigation measures would be required.

Where construction traffic increases the existing road traffic noise levels by more than 2 dBA then further assessment against the road traffic noise criteria in Table 3-5 is required.

Table 3-5 Road traffic noise criteria, dBA

Type of development	Day 7 am to 10 pm	Night 10 pm to 7 am
Existing residence affected by additional traffic on arterial roads generated by land use developments	60 $L_{Aeq(15\ hour)}$	55 $L_{Aeq(9\ hour)}$
Existing residence affected by additional traffic on local roads generated by land use developments	55 $L_{Aeq(1\ hour)}$	50 $L_{Aeq(1\ hour)}$

3.3 Construction vibration

3.3.1 Human comfort

Acceptable vibration levels for human comfort have been set with consideration to *Assessing Vibration: a technical guideline* (DEC, 2006) which is based on the guidelines contained in British Standard *BS 6472 – 1992, Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)*.

Typically, construction activities generate ground vibration of an intermittent nature. Intermittent vibration is assessed using the vibration dose value. Acceptable values of vibration dose are presented in Table 3-6 for sensitive receivers.

Table 3-6 Human comfort intermittent vibration limits

Receiver type	Period	Intermittent vibration dose value ($m/s^{1.75}$)	
		Preferred value	Maximum value
Residential	Day (7 am and 10 pm)	0.2	0.4
	Night (10 pm and 7 am)	0.13	0.26
Offices, schools, educational institutes and places of worship	When in use	0.4	0.8

Whilst the assessment of response to vibration in *BS 6472:1992* is based on vibration dose value and weighted acceleration, for construction related vibration, it is considered more appropriate to provide guidance in terms of a peak value, since this parameter is likely to be more routinely measured based on the more usual concern over potential building damage.

Humans are capable of detecting vibration at levels which are well below those causing risk of damage to a building. The degrees of perception for humans are suggested by the vibration level categories given in British Standard, *BS 5228.2 – 2009, Code of Practice Part 2 Vibration for noise and vibration on construction and open sites – Part 2: Vibration* and are shown below in Table 3-7.

Table 3-7 Guidance on effects of vibration levels for human comfort

Vibration level	Effect
0.14 mm/s	Vibration might be just perceptible in the most sensitive situations for most vibration frequencies associated with construction.
0.3 mm/s	Vibration might be just perceptible in residential environments.
1.0 mm/s	It is likely that vibration at this level in residential environments will cause complaints, but can be tolerated if prior warning and explanation has been given to residents.
10 mm/s	Vibration is likely to be intolerable for any more than a very brief exposure.

3.3.2 Guidelines for general structures

The effects of transient vibration on structures is considered in *BS 7385 Part 2 – 1993 Evaluation and measurement for vibration in buildings*. The criteria provided in BS 7385 are presented in Table 3-8.

Table 3-8 Transient vibration guide values – minimal risk of cosmetic damage

Type of building	Peak component particle velocity in frequency range of predominant pulse	
	4 Hz to 15 Hz	15 Hz and above
Reinforced or framed structures. Industrial and heavy commercial buildings	50 mm/s at 4 Hz and above	50 mm/s at 4 Hz and above
Unreinforced or light framed structures. Residential or light commercial type buildings	15 mm/s at 4 Hz increasing to 20 mm/s at 15 Hz	20 mm/s at 15 Hz increasing to 50 mm/s at 40 Hz and above.

The guide values in Table 3-8 relate predominantly to transient vibration which does not give rise to resonant responses in structures and low-rise buildings. Where the dynamic loading caused by continuous vibration may give rise to dynamic magnification due to resonance, especially at lower frequencies, then the guide values may need to be reduced by up to 50 per cent.

The predominant vibration for most construction activities involving intermittent vibration sources such as rock breakers, piling rigs, vibratory rollers and excavators occurs at frequencies greater than 4 Hz (and usually in the 10 Hz to 100 Hz range). However, a conservative vibration damage screening level per receiver type is given below:

- Reinforced or framed structures: 25.0 mm/s
- Unreinforced or light framed structures: 7.5 mm/s

3.3.3 Guidelines for vibration sensitive structures

Heritage buildings and structures would be assessed using the guide values in Table 3-8. A heritage building or structure should not be assumed to be more sensitive to vibration unless they are found to be structurally unsound. If a heritage building or structure is found to be structurally unsound (following inspection) a more conservative cosmetic damage criterion of 2.5 mm/s peak component particle velocity (from DIN 4150) should be considered.

3.4 Operational noise criteria

Operational noise emanating from fixed facilities such as railway stations are assessed to the project trigger noise levels (PTNL) in the *Noise Policy for Industry* (NPI) (EPA, 2017). The project noise trigger level is the lower value of the intrusiveness noise level and the amenity noise level. The intrusiveness noise aims to protect against significant changes in noise levels and the amenity noise level aims to protect against cumulative noise impacts from existing industry.

The intrusiveness noise levels are provided in Table 3-9 and the amenity noise levels are provided in Table 3-10.

Table 3-9 NPI Noise intrusiveness criteria

Time of Day	RBL ($L_{A90,15min}$), dBA	Intrusiveness trigger level
7 am to 6 pm (daytime)	44	49 (BG + 5 dB)
6 pm to 10 pm (evening)	40	45 (BG + 5 dB)
10 pm to 7 am (night time)	31	36 (BG + 5 dB)

Table 3-10 presents the recommended amenity noise levels from the NPI.

Table 3-10 Amenity noise levels

Receiver	Noise amenity area	Time of day	L_{Aeq}, dBA
Residential	Suburban	Day	55
		Evening	45
		Night	40
Commercial	All	When in use	65
Industrial	All	When in use	70
Educational	All	Noisiest 1 hour	35 (internal)
Hospital/Medical	All	When in use	35 (internal) 50 (external)
Place of Worship	All	When in use	40 (internal)
Passive recreation	All	When in use	50
Active recreation	All	When in use	55

4. Construction impacts assessment

4.1 Construction noise assessment

4.1.1 Construction works program

The plant and equipment likely to be required throughout each proposed stage of construction have been used to predict the noise levels that would be expected during construction works. The predicted noise levels were assessed against the construction noise management levels identified in Section 3.1.

Construction scenarios have been created based on construction equipment operating simultaneously at any given time. All works are located within or adjacent to the Proposal site. It is unlikely that construction machinery would be operating at the same time (as the modelling assumes), but analysing the 'worse-case' scenario helps to identify where noise impacts could be a concern and assists in the formulation of mitigation areas.

Construction activities

The Proposal is anticipated to follow the following work methodology and staging provided in Table 4-1. These construction scenarios have been modelled to determine the potential construction noise impacts on the environment.

Table 4-1 Construction staging

Construction scenario	Construction phase	Time frame
CS01	Site establishment and relocation of services	Standard hours OOHW Period 1 OOHW Period 2
CS02	Vegetation removal	Standard hours
CS03	Piling works	Standard hours
CS04	Stairs, ramps and lift upgrades	Standard hours OOHW Period 1 OOHW Period 2
CS05	Station fit out and systems Underpass construction Car park construction	Standard hours OOHW Period 1 OOHW Period 2
CS06	Platform level works Furniture installations	Standard hours OOHW Period 1 OOHW Period 2
CS07	Compound operations	Standard hours OOHW Period 1 OOHW Period 2

Noise generating equipment

Plant and equipment needed for the Proposal would be determined during the construction planning phase. Noise level data has been obtained from the Australian Standards *AS2436 – Guide to noise and vibration control on construction, demolition and maintenance sites* and the *Construction Noise and Vibration Strategy* (CNVS) (TfNSW, 2018). Other equipment may be used, however, it is anticipated that they would produce similar net noise emissions when used concurrently with the equipment listed.

The magnitude of off-site noise impacts associated with construction is dependent upon a number of factors:

- the intensity and location of construction activities
- the type of equipment used
- existing background noise levels
- intervening terrain and structures
- prevailing weather conditions.

Construction machinery would likely move about the Proposal site altering the received noise for individual receivers. During any given period, the machinery items to be used would operate at maximum sound power levels for only brief stages. At other times, the machinery would produce lower sound levels while carrying out activities not requiring full power. It is highly unlikely that all construction equipment would be operating at their maximum sound power levels at any one time. Certain types of construction machinery would be present in the study area for only brief periods during construction. Therefore, noise predictions are considered conservative.

Table 4-2 below presents the number of construction equipment proposed for each construction scenario. The activity sound power level has been calculated based on the two noisiest plant to determine the worst-case noise impacts during construction. The activity noise levels have been used to predict the noise levels that would be expected during construction works.

Table 4-2 Construction equipment and sound power levels, dBA

Plant description	Sound power level	Construction scenario						
		CS01	CS02	CS03	CS04	CS05	CS06	CS07
Activity Sound Power Level		110	109	113	112	117	118	109
Cherry picker	105		✓					
Concrete agitator truck	109			✓	✓			
Concrete pump truck	108			✓	✓			
Concrete saw (5 mins)	117					✓	✓	
Crane (mobile)	104	✓	✓	✓	✓			✓
Crane (tower)	105				✓			
Excavator	107	✓	✓	✓	✓		✓	
Excavator with rockbreaker	115					✓		
Hand tools (electric)	102	✓			✓	✓	✓	
Piling Rig (bored)	111			✓				
Roller	107						✓	
Truck (> 20 tonne)	107	✓		✓				✓
Truck (dump)	117						✓	
Welder	105					✓	✓	

4.1.2 Noise modelling inputs

Noise modelling was undertaken using SoundPlan Version 7.4. SoundPlan is a computer program for the calculation, assessment and prognosis of noise exposure. SoundPlan calculates environmental noise propagation according to *ISO 9613-2 'Acoustics – Attenuation of sound during propagation outdoors'.*

The following noise modelling assumptions were made:

- surrounding land was modelled assuming a mix of 50 per cent soft and 50 per cent hard ground with a ground absorption coefficient of 0.5
- atmospheric absorption was based on an average temperature of 10°C and an average humidity of 70%
- atmospheric propagation conditions were modelled with noise enhancing wind conditions for noise propagation (downwind conditions) or an equivalently well-developed moderate ground based temperature inversions
- modelled scenarios take into account the shielding effect from surrounding buildings and structures on and adjacent to the site
- noise sources for each scenario are in some cases modelled at different locations. As such the noise modelling assesses the noise source at multiple locations and takes the maximum L_{Aeq} received noise level.

4.1.3 Construction noise impacts

Predicted noise levels from the construction scenarios outlined in Table 4-1 are presented in Appendix C. Construction noise contours for each modelled scenario is provided in Appendix D. A summary of the number of exceedances of the noise management levels for sensitive receivers is presented in Table 4-3 for residential receivers and Table 4-4 for non-residential receivers. Exceedances of the construction noise management levels are typical for construction projects of this scale. The noise impacts would be limited to the construction period only and would not have lasting effects on the community. The maximum noise impacts would be expected during underpass construction and works at the platform level involving the use of a concrete saw.

Impacts during standard hours

Residences located within 400 metres of the Proposal site are expected to be noise impacted at some point during construction. The noise management level is predicted to be exceeded by up to 30 dBA due to the low background noise levels and the receiver's proximity to the proposed construction. The CNVS considers this level of exceedance as 'highly intrusive' and the additional mitigation measures discussed in Section 6.1.2 should be implemented at the affected receivers.

The highly noise affected level of 75 dBA is expected to be exceeded at 11 residential receivers. This exceedance is due to the receivers' proximity to the proposed construction works.

Non-residential receivers would only be noise impacted if they are in use during the time of construction. This is considered likely for works during standard construction hours. Non-residential sensitive receivers within 350 m of the construction works are predicted to experience noise levels above the noise management levels during construction. Non-residential receivers identified include:

- Como Public School, located 260 m north-east of the proposal area
- Como School of Arts, located 95 m north-east of the proposal area

- Como Pre-school Kindergarten, located 110 m north of the proposal area.

Impacts outside standard hours

Works outside standard construction hours are expected during rail possessions to complete installation works for the lift, stairs, ramps and roofing. Works during the rail possession have been assessed for all modelled scenarios during the day, evening and night-time assessment periods. The rail possessions would be required to limit the effect on normal rail operations and to improve worker safety.

Residences located within 900 metres to the west and 1,100 metres to the east of the Proposal site are expected to be noise impacted at some stage during construction. The noise impacts would be experienced over a short term period limited to the proposed rail possession periods.

The predicted exceedance of the OOHW noise management levels are:

- 35 dBA during OOHW Period 1 (day)
- 39 dBA during OOHW Period 1 (evening)
- 48 dBA during OOHW Period 2 (night).

The CNVS considers the level of exceedances as ‘highly intrusive’ and the additional mitigation measures discussed in Section 6.1.2 should be implemented at the affected receivers.

No construction noise impacts are anticipated for non-residential receivers as they are not expected to be in use outside standard hours.

Table 4-3 Residential exceedance summary

	Construction scenario						
	CS01	CS02	CS03	CS04	CS05	CS06	CS07
Summary during standard construction hours							
Number of exceedances	53	54	146	79	281	359	21
Highest noise level	76	79	72	77	81	84	66
Highest exceedance	22	25	18	23	27	30	12
Worst affected receiver	R001	R001	R358	R391	R001	R001	R393
Summary during OOHW Period 1 (Day)							
Number of exceedances	155	140	367	254	549	596	36
Highest noise level	76	79	72	77	81	84	66
Highest exceedance	27	30	23	28	32	35	17
Worst affected receiver	R001	R001	R358	R391	R001	R001	R393
Summary during OOHW Period 1 (Evening)							
Number of exceedances	425	385	573	505	687	716	80
Highest noise level	76	79	72	77	81	84	66
Highest exceedance	31	34	27	32	36	39	21
Worst affected receiver	R001	R001	R358	R391	R001	R001	R393
Summary during OOHW Period 2 (Night)							
Number of exceedances	721	710	772	748	801	810	528
Highest noise level	76	79	72	77	81	84	66
Highest exceedance	40	43	36	41	45	48	30
Worst affected receiver	R001	R001	R358	R391	R001	R001	R393

Table 4-4 Non-residential receiver summary

	Construction scenario						
	CS01	CS02	CS03	CS04	CS05	CS06	CS07
Commercial							
Number of exceedances	0	0	0	0	0	0	0
Highest noise level	45	44	47	46	51	52	38
Highest exceedance	-	-	-	-	-	-	-
Worst affected receiver	R796	R796	R793	R796	R796	R091	R796
Educational institute							
Number of exceedances	2	2	2	2	4	4	0
Highest noise level	62	62	64	58	67	73	50
Highest exceedance	7	7	9	3	12	18	-
Worst affected receiver	R005	R005	R005	R005	R005	R005	R005
Place of worship							
Number of exceedances	0	0	0	0	0	0	0
Highest noise level	45	44	48	47	52	52	39
Highest exceedance	-	-	-	-	-	-	-
Worst affected receiver	R806	R806	R806	R806	R806	R806	R806
Active recreation							
Number of exceedances	0	0	0	0	0	0	0
Highest noise level	37	36	41	39	44	44	31
Highest exceedance	-	-	-	-	-	-	-
Worst affected receiver	R102	R102	R102	R102	R102	R102	R102

4.1.4 Sleep disturbance impacts

Construction activities are expected outside standard construction hours to minimise the impacts on rail traffic during construction. There is the potential for maximum noise level events if the predicted maximum noise level is above the screening criteria of 52 dBA.

The screening criteria of 52 dBA is exceeded at 452 residential receivers. Therefore a detailed maximum noise level assessment has been undertaken. The RNP states that maximum internal noise levels between 50 to 55 dBA are unlikely to awaken people from sleep. Typically a window will provide a 10 dBA reduction when partially open and a 20 dBA reduction when closed. For a conservative assessment, the windows have been assumed to be partially open to assess sleep disturbance impacts.

Based on this assessment 38 properties identified in Appendix E have the potential to experience sleep disturbance impacts.

Community consultation and consideration of the additional mitigation measures in Section 6.1.2 should be applied if the sleep disturbance criteria is anticipated to be exceeded for more than two consecutive nights and cannot be avoided due to reasonable and feasible justification.

4.2 Construction traffic impacts

The RNP recommends that "*any increase in the total traffic noise level should be limited to 2 dB above that of the corresponding 'without construction' scenario."* Construction would generate heavy vehicle movements associated with the transportation of construction machinery,

equipment and materials to the site. Light vehicle movements would be associated with employees and smaller deliveries. Access to the construction site would be along Old Princes Highway and Toronto Parade/Railway Crescent/Novara Crescent. The site access route road classifications are as follows:

- Old Princes Highway: Arterial/sub-arterial road
- Toronto Parade, Railway Crescent, Novara Crescent: Local road

A significant increase in traffic volumes would be required along Old Princes Highway in order to increase road traffic noise by 2 dBA (a doubling in traffic roughly corresponds to a 3 dBA increase). Due to the existing traffic volumes along Old Princes Highway, it is considered unlikely that construction traffic generation along these roads would cause construction traffic noise impacts. Therefore no further assessment is required along this route.

Access to Como Station would be along Toronto Parade, Railway Crescent and Novara Crescent. These roads are local roads and would likely experience construction road traffic noise impacts as the existing heavy vehicle traffic volumes would be low. Construction traffic should be scheduled during less sensitive time periods during the day. Construction traffic mitigation measures are provided in Section 6.1.1.

4.3 Construction vibration assessment

4.3.1 Assessment methodology

The methodology for the construction vibration assessment included:

- vibration from surface construction plant and equipment was predicted and assessed with consideration to *Assessing Vibration: a Technical Guideline* and German Standard *DIN 4150-3: 1999 Structural Vibration – Part 3: Effects of vibration on structures*
- where noise and vibration levels were predicted to exceed the construction noise management levels, appropriate construction noise and vibration mitigation measures were provided to minimise impacts from each construction phase.

Energy from construction equipment is transmitted into the ground and transformed into vibrations, which attenuates with distance. The magnitude and attenuation of ground vibration is dependent on the following:

- the efficiency of the energy transfer mechanism of the equipment (impulsive; reciprocating, rolling or rotating equipment)
- the frequency content
- the impact medium stiffness
- the type of wave (surface or body)
- the ground type and topography.

Construction and demolition works have the potential to impact human comfort and / or cause structural damage to buildings. Potential vibration inducing activities identified during construction and demolition works include:

- piling, grinding and cutting will generate impulsive vibration emissions
- bulk earthworks, construction traffic movements and demolition works will be a source of intermittent or continuous vibration.

Safe working buffer distances to comply with the human comfort, cosmetic damage and heritage structural damage criteria were taken from the CNVS and are provided in Table 4-5.

Safe working buffer distances for heritage buildings were estimated by doubling the buffer distance for standard structures.

Table 4-5 Vibration safe working buffer distances, metres

Activity	Human comfort	Structural damage	
		Heritage building/structure	Standard dwellings
Piling rig – Bored	N/A	4 m (nominal)	2 m (nominal)
Piling rig–Hammer	50 m	30 m	15 m
Vibratory roller (>18 tonnes)	100 m	50 m	25 m
Vibratory roller (13-18 tonnes)	100 m	40 m	20 m
Vibratory roller (7-13 tonnes)	100 m	30 m	15 m
Vibratory roller (4-6 tonnes)	40 m	24 m	12 m
Vibratory roller (2-4 tonnes)	20 m	12 m	6 m
Vibratory roller (1-2 tonnes)	15 m	10 m	5 m
Large hydraulic hammer	73 m	44 m	22 m
Jackhammer	Avoid contact with structure	2 m (nominal)	1 m (nominal)

4.3.2 Construction vibration impacts

Impacts for standard structures

The CNVS specifies a safe working buffer distance of 22 metres for standard structures. The following standard structures have been identified within 22 metres of the construction area:

- 3 Railway Road
- 101 to 111 Como Parade.

The following residential structures have been identified within 100 metres of the construction activities and could potentially experience human comfort impacts:

- 95 – 117 Como Parade
- 1A – 12 Warraba Street
- 15 – 39 Novara Crescent.

Section 6.2 provides mitigation measures for potential construction vibration impacts.

5. Operation impact assessment

The proposed station upgrades will not increase the operations of the rail line and there will be no increase from the rail noise of Como Station due to the operation of the station upgrades. All other operational noise impacts from the station (lift, plant, PA systems) are not expected to increase noise levels past the operational noise criteria presented in Section 3.4.

6. Mitigation measures

6.1 Construction noise

6.1.1 Standard mitigation measures

The following mitigation recommendations are provided in Table 6-1 to reduce the noise levels from the construction activities.

Table 6-1 Construction noise mitigation measures

Action required	Details
Management measures	
Implementation of any Proposal specific mitigation measures required	In addition to the measures set out in this table, any Proposal specific mitigation measures identified in the EIA documentation (e.g. REF, submissions or representations report) or approval or licence conditions must be implemented.
Implement stakeholder consultation measures	Periodic notification (monthly letterbox drop and website notification) detailing all upcoming construction activities delivered to sensitive receivers at least 7 days prior to commencement of relevant works. In addition to Periodic Notification, the following strategies may be adopted on a case-by-case basis: • Proposal specific Website • Proposal Infoline • Construction Response Line • Email Distribution List • Web-based Surveys • Social Media • Community and Stakeholder Meetings and • Community Based Forums (if required by approval conditions)
Register of noise and vibration sensitive receivers	A register of most affected noise and vibration sensitive receivers (NVSRs) would be kept on site. The register would include the following details for each NVSR: • Address of receiver • Category of receiver • Contact name and phone number The register may be included as part of the Proposal's Community Liaison Plan or similar document and maintained in accordance with the requirements of this plan.
Construction hours and scheduling	Where feasible and reasonable, construction should be carried out during the standard daytime working hours. Work generating noise with special audible characteristics and/or vibration levels should be scheduled during less sensitive time periods.

Action required	Details
Construction respite period	Noise with special audible characteristics and vibration generating activities (including jack and rock hammering, sheet and pile driving, rock breaking and vibratory rolling) may only be carried out in continuous blocks, not exceeding 3 hours each, with a minimum respite period of one hour between each block. 'Continuous' includes any period during which there is less than 1 hour respite between ceasing and recommencing any of the work. No more than two consecutive nights of noise with special audible characteristics and/or vibration generating work may be undertaken in the same Noise Catchment Area (NCA) over any 7-day period, unless otherwise approved by the relevant authority.
Site inductions	All employees, contractors and subcontractors are to receive an environmental induction. The induction must at least include: • All relevant Proposal specific and standard noise and vibration mitigation measures • Relevant licence and approval conditions • Permissible hours of work • Any limitations on noise generating activities with special audible characteristics • Location of nearest sensitive receivers • Construction employee parking areas • Designated loading/unloading areas and procedures • Site opening/closing times (including deliveries) • Environmental incident procedures.
Behavioural practices	No swearing or unnecessary shouting or loud stereos/radios on site. No dropping of materials from height, throwing of metal items and slamming of doors. No excessive revving of plant and vehicle engines. Controlled release of compressed air.
Monitoring	A noise monitoring program should be carried out for the duration of works in accordance with the Construction Noise and Vibration Management Plan and any approval and licence conditions.
Attended vibration measurements	Attended vibration measurements shall be undertaken at all buildings within 25 m of vibration generating activities when these activities commence to confirm that vibration levels are within the acceptable range to prevent cosmetic building damage.
Update Construction Environmental Management Plans	The Construction Environmental Management Plan (CEMP) must be regularly updated to account for changes in noise and vibration management issues and strategies.
Building condition surveys	Undertake building dilapidation surveys on all buildings located within the buffer zone prior to major Proposal construction activities with the potential to cause property damage.
Source control measures	
Plan worksites and activities to minimise noise and vibration	Plan traffic flow, parking and loading/unloading areas to minimise reversing movements within the site.

Action required	Details
Equipment selection	Use quieter and less vibration emitting construction methods where feasible and reasonable. For example, when piling is required, bored piles rather than impact-driven piles will minimise noise and vibration impacts. Similarly, diaphragm wall construction techniques, in lieu of sheet piling, will have significant noise and vibration benefits.
Maximum noise levels	The noise of plant and equipment must have operating Sound Power or Sound Pressure Levels compliant with the allowable noise levels in Section 4.1 or Appendix C of the CNVS (TfNSW, 2018).
Use and siting of plant	Simultaneous operation of noisy plant within discernible range of a sensitive receiver is to be avoided. The offset distance between noisy plant and adjacent sensitive receivers is to be maximised. Plant used intermittently to be throttled down or shut down. Noise-emitting plant to be directed away from sensitive receivers.
Non-tonal reversing alarms	Non-tonal reversing beepers (or an equivalent mechanism) must be fitted and used on all construction vehicles and mobile plant regularly used on site and for any out of hours work, including delivery vehicles.
Minimise disturbance arising from delivery of goods to construction sites	Loading and unloading of materials/deliveries is to occur as far as possible from sensitive receivers. Select site access points and roads as far as possible away from sensitive receivers. Dedicated loading/unloading areas to be shielded if close to sensitive receivers. Delivery vehicles to be fitted with straps rather than chains for unloading, wherever possible.
Construction related traffic	Schedule and route vehicle movements away from sensitive receivers and during less sensitive times. Limit the speed of vehicles and avoid the use of engine compression brakes. Maximise on-site storage capacity to reduce the need for truck movements during sensitive times.
Silencers on mobile plant	Where possible reduce noise from mobile plant through additional fittings including: • Residential grade mufflers • Damped hammers such as “City” Model Rammer Hammers • Air parking brake engagement is silenced.
Prefabrication of materials off-site	Where practicable, pre-fabricate and/or prepare materials off-site to reduce noise with special audible characteristics occurring on site. Materials can then be delivered to site for installation.
Engine compression brakes	Limit the use of engine compression brakes at night and in residential areas. Ensure vehicles are fitted with a maintained original equipment manufacturer exhaust silencer that complies with the National Transport Commissions ‘in-service test procedure’ and standard.

Action required	Details
Path control measures	
Shield stationary noise sources such as pumps	Stationary noise sources should be enclosed or shielded whilst ensuring that the occupational health and safety of workers is maintained. Appendix F of AS 2436:1981 lists materials suitable for shielding
Shield sensitive receivers from noisy activities	Use structures to shield residential receivers from noise such as site shed placement; earth bunds; fencing; erection of operational stage noise barriers (where practicable) and consideration of site topography when situating plant.

6.1.2 Additional mitigation measures

The CNVS (TfNSW) provides the following information regarding further mitigation measures for certain receivers exceeding noise management levels, and are presented below in Table 6-2. The Additional Mitigation Measures Matrices (AMMM) would be used to determine the additional measures after the application of standard mitigation measures where reasonable and feasible.

Table 6-2 Additional management measures

Measure	Description	Abbreviation
Periodic Notification	For each TfNSW Infrastructure and Services Division (I&S) project, a notification entitled 'Project Update' or 'Construction Update' is produced and distributed to stakeholders via letterbox drop and distributed to the Proposal postal and/or email mailing lists. Periodic notifications provide an overview of current and upcoming works across the Proposal and other topics of interest. The objective is to engage, inform and provide Proposal-specific messages. Advanced warning of potential disruptions (e.g. traffic changes or noisy works) can assist in reducing the impact on stakeholders. The approval conditions for projects specify requirements for notification to sensitive receivers where works may impact on them. Content and length is determined on a project-by-project basis and must be approved by TfNSW prior to distribution. Most projects distribute notifications on a monthly basis. Each notification is graphically designed within a branded template. In certain circumstances media advertising may also be used to supplement Periodic Notifications, where considered effective. Periodic Notification may be advised by the I&S Community Engagement Team in cases where AMMM are not triggered as shown in Tables 9 to 11, for example where community impacts extend beyond noise and vibration (traffic, light spill, parking etc). In these circumstances the I&S Community Engagement Team will determine the community engagement strategy on a case-by-case basis.	PN
Verification Monitoring	Verification monitoring of noise and/or vibration during construction may be conducted at the affected receiver(s) or a nominated representative location (typically the nearest receiver where more than one receiver has been identified). Monitoring can be in the form of either unattended logging (i.e. for vibration provided there is an immediate feedback mechanism such as SMS capabilities) or operator attended surveys (i.e. for specific periods of construction noise).	V

Measure	Description	Abbreviation
	The purpose of monitoring is to confirm that: • Construction noise and vibration from the Proposal are consistent with the predictions in the noise assessment • Mitigation and management of construction noise and vibration is appropriate for receivers affected by the works Where noise monitoring finds that the actual noise levels exceed those predicted in the noise assessment then immediate refinement of mitigation measures may be required and the Construction Noise and Vibration Impact Statement (CNVIS) amended.	
Specific Notification	Specific notifications are in the form of a personalised letter or phone call to identified stakeholders no later than seven calendar days ahead of construction activities that are likely to exceed the noise objectives. Alternatively (or in addition to), communications representatives from the contractor would visit identified stakeholders at least 48 hours ahead of potentially disturbing construction activities and provide an individual briefing. • Letters may be letterbox dropped or hand distributed • Phone calls provide affected stakeholders with personalised contact and tailored advice, with the opportunity to provide comments on the proposed work and their specific needs • Individual briefings are used to inform stakeholders about the impacts of noisy activities and mitigation measures that will be implemented. Individual briefings provide affected stakeholders with personalised contact and tailored advice, with the opportunity to comment on the Proposal Specific notifications are used to support periodic notifications, or to advertise unscheduled works and must be approved by TfNSW prior to implementation/distribution.	SN
Respite Offer	The purpose of a Proposal specific respite offer is to provide residents subjected to lengthy periods of noise or vibration respite from an ongoing impact. The offer could comprise prepurchased movie tickets, bowling activities, meal vouchers or similar offer. This measure is determined on a case-by-case basis, and may not be applicable to all I&S projects.	RO
Alternative Accommodation	Alternative accommodation options may be provided for residents living in close proximity to construction works that are likely to incur unreasonably high impacts. Alternative accommodation will be determined on a case-by-case basis and should provide a like-for-like replacement for permanent residents, including provisions for pets, where reasonable and feasible.	AA
Alternative construction methodology	Where the vibration assessment identifies that the proposed construction method has a high risk of causing structural damage to buildings near the works, the proponent will need to consider alternative construction options that achieve compliance with the Vibration Management Level (VMLs) for building damage. For example, replace large rock breaker with smaller rock breakers or rock saws.	AC

Measure	Description	Abbreviation
Respite Period	OOHW during evening and night periods will be restricted so that receivers are impacted for no more than 3 consecutive evenings and no more than 2 consecutive nights in the same NCA in any one week. A minimum respite period of 4 evenings/5 nights shall be implemented between periods of consecutive evening and/or night works. Strong justification must be provided where it is not reasonable and feasible to implement these period restrictions (e.g. to minimise impacts to rail operations), and approval must be given by TfNSW through the OOHW Approval Protocol. Note; this management measure does not apply to OOHW Period 1 – Days.	RP
Duration Reduction	Where Respite Periods (see management measure above) are considered to be counterproductive to reducing noise and vibration impacts to the community it may be beneficial to increase the number of consecutive evenings and/or nights through Duration Reduction to minimise the duration of the activity. This measure is determined on a project-by-project basis, and may not be applicable to all I&S projects. Impacted receivers must be consulted and evidence of community support for the Duration Reduction must be provided as justification for the Duration Reduction. A community engagement strategy must be agreed with and implemented in consultation with I&S Community Engagement Representatives.	DR

The CNVS outlines the various trigger levels to warrant these mitigation measures, and such is presented below in Table 6-3.

The predicted noise levels for each receiver, and hence any additional noise mitigation measures, are presented in Appendix C. Construction noise management zones have been mapped and are provided in Appendix F to Appendix I.

The predicted construction noise levels in Appendix C have been categorised into the noise perception categories to determine the additional mitigation measures required in accordance with the CNVS. The number of residential receivers that require additional mitigation measures for each modelled construction scenario is provided in Table 6-4.

Table 6-3 Triggers for Additional Mitigation Measures - Airborne Noise

Construction hours	Receiver perception	dBA above RBL	dBA above NML	Additional management measures
Standard hours Monday – Friday (7 am – 6 pm) Saturday (8 am – 1 pm)	Noticeable	5 to 10	0	-
	Clearly audible	> 10 to 20	< 10	-
	Moderately intrusive	> 20 to 30	> 10 to 20	PN, V
	Highly intrusive	> 30	> 0	PN, V
	75 dBA or greater	N/A	N/A	PN, V, SN
OOHW Period 1 Monday – Friday (6 pm – 10 pm) Saturday (7 am – 8 am, 1 pm – 10 pm) Sunday/PH (8 am – 6 pm)	Noticeable	0 to 10	< 5	-
	Clearly audible	> 10 to 20	5 to 15	PN
	Moderately intrusive	> 20 to 30	> 15 to 25	PN, V, SN, RO
	Highly intrusive	> 30	> 25	PN, V, SN, RO, RP[1], DR[1]
OOHW Period 2 Monday – Saturday (12 am – 7 am, 10 pm – 12 am) Sunday/PH (12 am – 8 am, 6 pm – 12 am)	Noticeable	0 to 10	< 5	PN
	Clearly audible	> 10 to 20	5 to 15	PN, V
	Moderately intrusive	> 20 to 30	> 15 to 25	PN, V, SN, RP, DR
	Highly intrusive	> 30	> 25	PN, V, SN, AA, RP, DR

Note 1: Respite periods and duration reduction are not applicable when works are carried out during OOHW Period 1 Day only.

Table 6-4 Number of receivers identified for additional mitigation measures

ID	Description	Standard construction hours			OOHW Period 1						OOHW Period 2			
					Day			Evening			Night			
		MI	HI	HNA	CA	MI	HI	CA	MI	HI	N	CA	MI	HI
		11-20 dBA	> 20 dBA	≥ 75 dBA	6-15 dBA	16-25 dBA	> 25 dBA	6-15 dBA	16-25 dBA	> 25 dBA	0-5 dBA	6-15 dBA	16-25 dBA	> 25 dBA
CS01	Site establishment Services relocation	12	1	1	26	12	1	62	14	6	182	472	47	17
CS02	Vegetation removal	13	1	1	29	13	1	61	14	6	202	445	49	20
CS03	Piling works	20	0	0	80	20	0	186	28	3	105	471	161	28
CS04	Stairs, ramps and lift upgrades	15	1	1	42	15	1	106	21	3	144	496	89	21
CS05	Station fit out and systems Underpass construction Car park construction	15	9	9	155	15	9	403	29	15	69	346	359	37
CS06	Footpath works Furniture installations	30	3	3	215	30	3	429	51	15	53	323	386	51
CS07	Platform level works	3	0	0	13	3	0	21	6	0	361	130	18	5

Notes:
N refers to Noticeable
CA refers to Clearly Audible
MI refers to Moderately Intrusive
HI refers to Highly Intrusive
HNA refers to Highly Noise Affected

6.2 Construction vibration

Where construction is required within the safe working buffer distance alternative work methods are required, such as using smaller equipment. If no alternative work method is feasible or reasonable, then compliance vibration monitoring should be undertaken where works are required within the safe working buffer distance and include:

- Site tests to review the measured frequency content in order to determine the structural damage criteria as per Table 3-8 for standard dwellings.
- Continuous vibration monitoring with a visual alarm installed to warn the equipment operator when the structural damage vibration criteria (considering frequency content) is exceeded.

These mitigation measures pertain to the structures identified within the safe working buffer distance as outlined in Section 4.3.2.

6.3 Operational noise

Operational noise levels are expected to comply with the operational noise criteria at the worst affected receiver. No specific operational mitigation measures are recommended.

7. Conclusion

Noise and vibration impacts for the construction and operational phases of the Proposal have been assessed. Existing noise levels were identified through unattended noise measurements and used to establish construction and operational noise management levels.

7.1 Construction noise

Construction for the proposal is expected to commence in late 2019 and would take around 15 months to complete. Construction activities are proposed to be undertaken during and outside standard construction hours and have been developed based on the Proposal construction staging.

The predicted noise levels are expected to exceed the noise management levels during standard construction hours, and some residential receivers are expected to experience noise levels above the highly affected noise level of 75 dBA during these hours. Any construction activities undertaken outside standard construction hours would impact the surrounding environment due to low existing background noise levels.

Traffic noise impacts due to construction are not expected as noise levels along the construction traffic routes are not predicted to significantly increase road traffic noise levels.

It is typical for construction projects to exceed the construction noise management levels. Any impacts due to construction works are temporary in nature and would not represent a permanent impact on the community and surrounding environment. The predicted noise levels are generally conservative and would only be experienced for limited periods during construction. Impacts may be reduced through the introduction of feasible and reasonable mitigation measures which have been recommended. However, these mitigation measures are unlikely to reduce noise levels below the construction noise management levels.

7.2 Construction vibration

Safe working distances for vibration activities have been identified for standard structures and heritage listed structures. Site specific safe working distances are to be established on-site prior to vibration generating works commencing.

Residential buildings have been identified within the safe working distances. A dilapidation survey and vibration monitoring is recommended for any structure that is located within the safe working distances.

No heritage listed structures have been identified in the vicinity of the site.

7.3 Operational noise

As stated in Section 6.3 the operation of the upgraded station is expected to comply with the operational noise criteria at the worst affected receiver, and therefore no operational specific mitigation measures are recommended.

8. References

Australian Standards (1997), *AS1055.1:1997 Acoustics – Description and measurement of environmental noise*

Australian Standards (2010), *AS2436:2010 Guide to noise and vibration control on construction, demolition and maintenance sites*

British Standards (1993), *BS7385-2:1993 Evaluation and measurement for vibration in buildings*

DECC (2009), *Interim Construction Noise Guideline*

DECCW (2011), *Road Noise Policy*

EPA (2017), *Noise Policy for Industry*

EPA (2013), *Rail Infrastructure Noise Guideline*

German Standards (1999), *DIN 4155-3 Structural Vibration Part 3: Effects of vibration on structures*

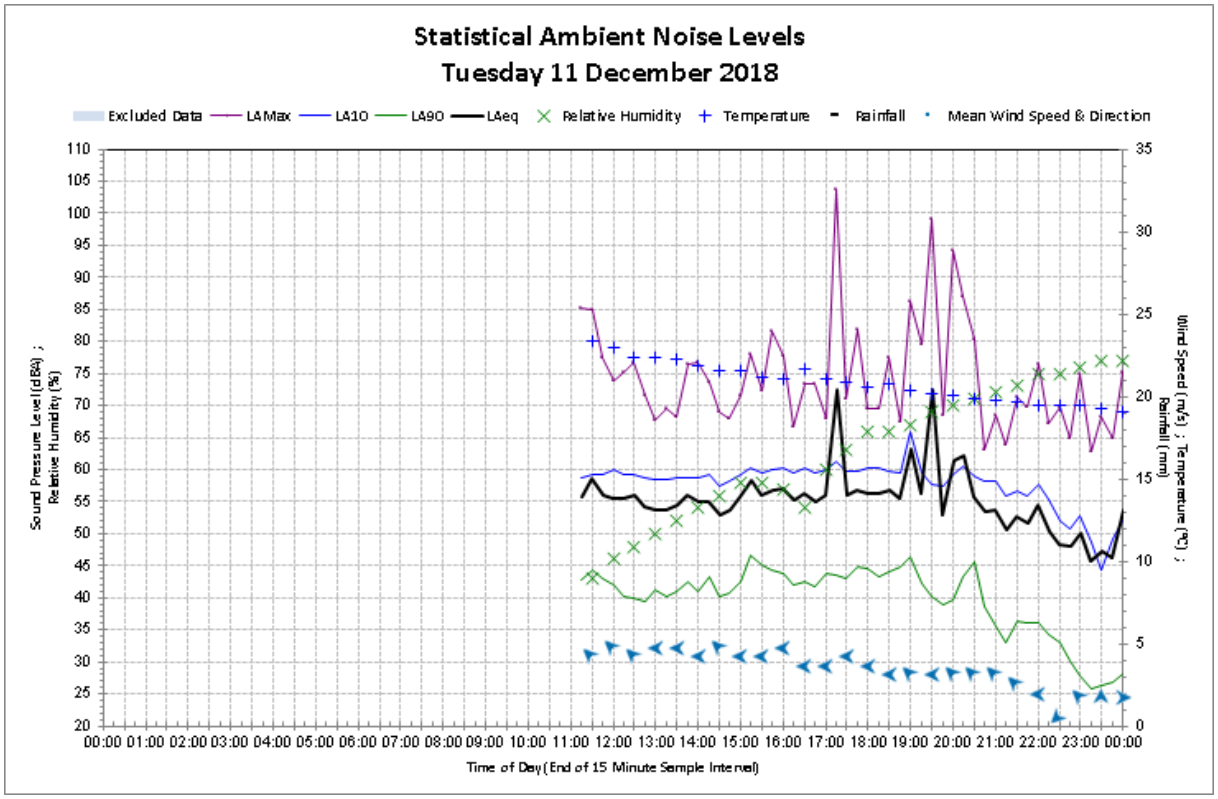
Transport for NSW (2018), *Construction Noise and Vibration Strategy*

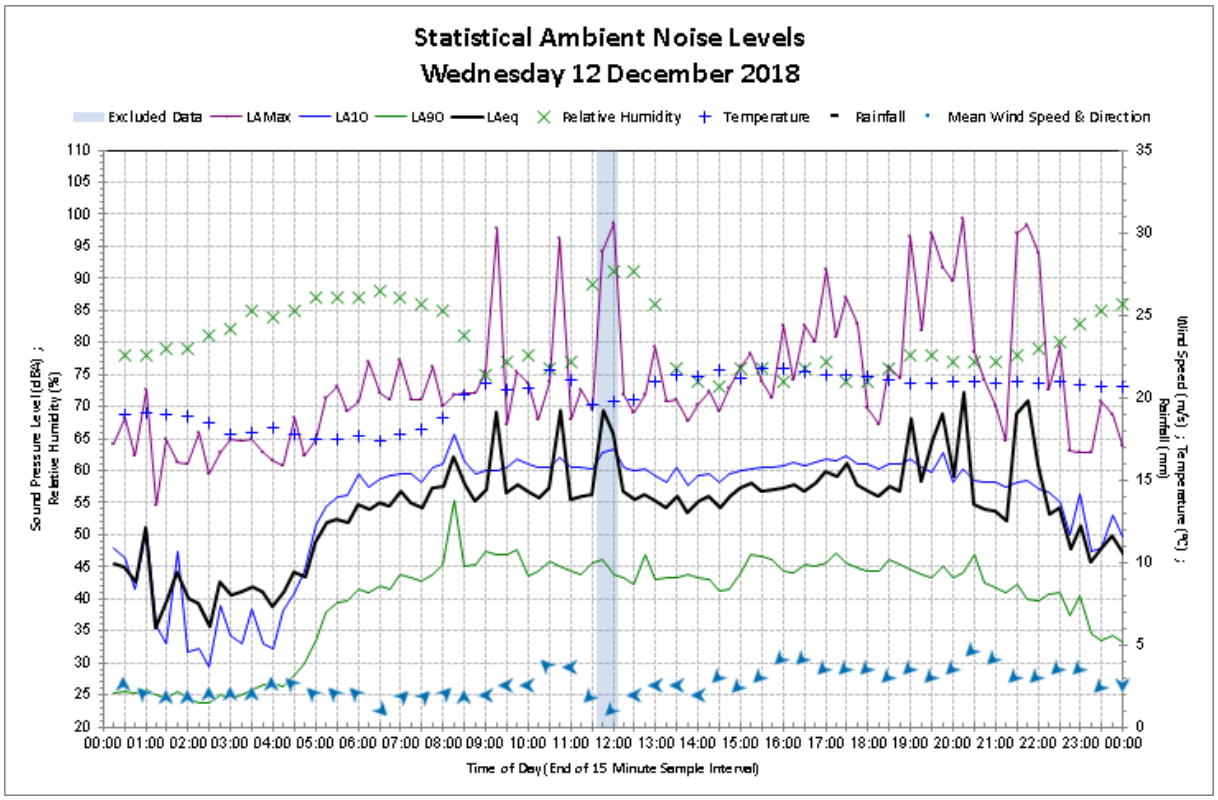
Appendices

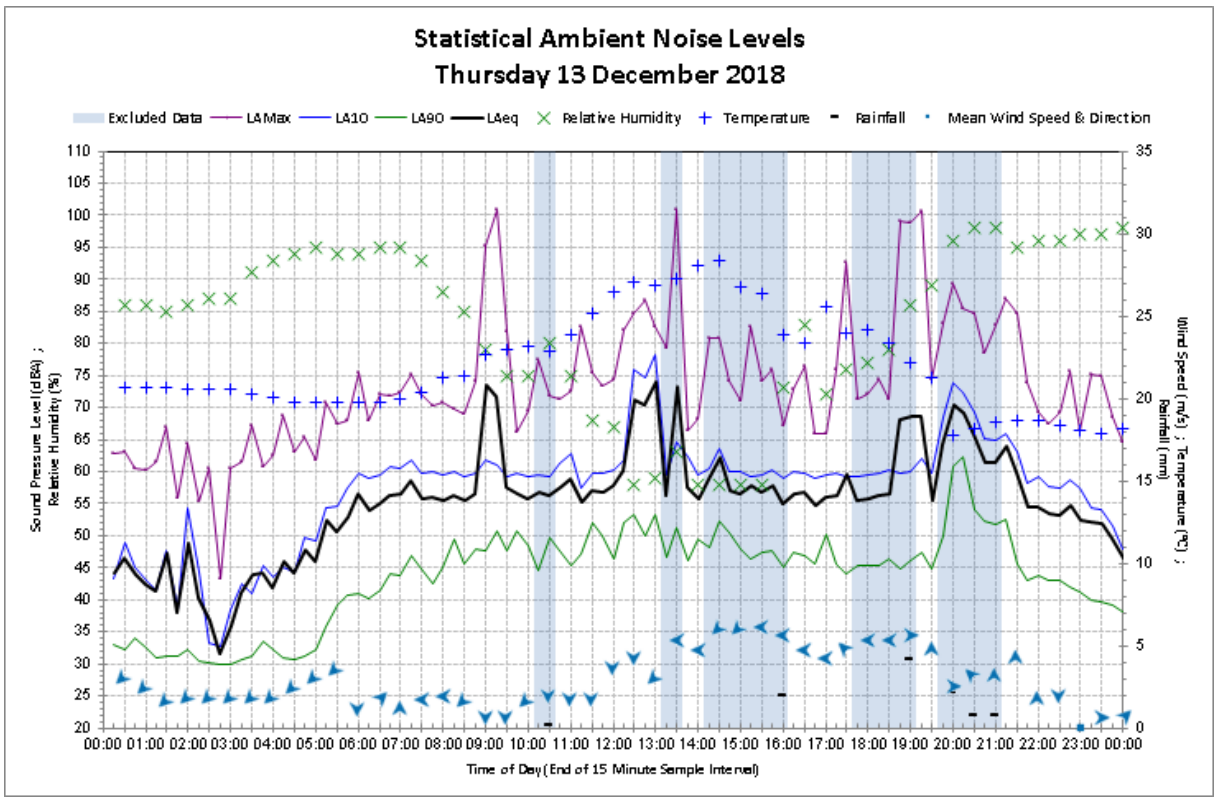
Appendix A - Glossary

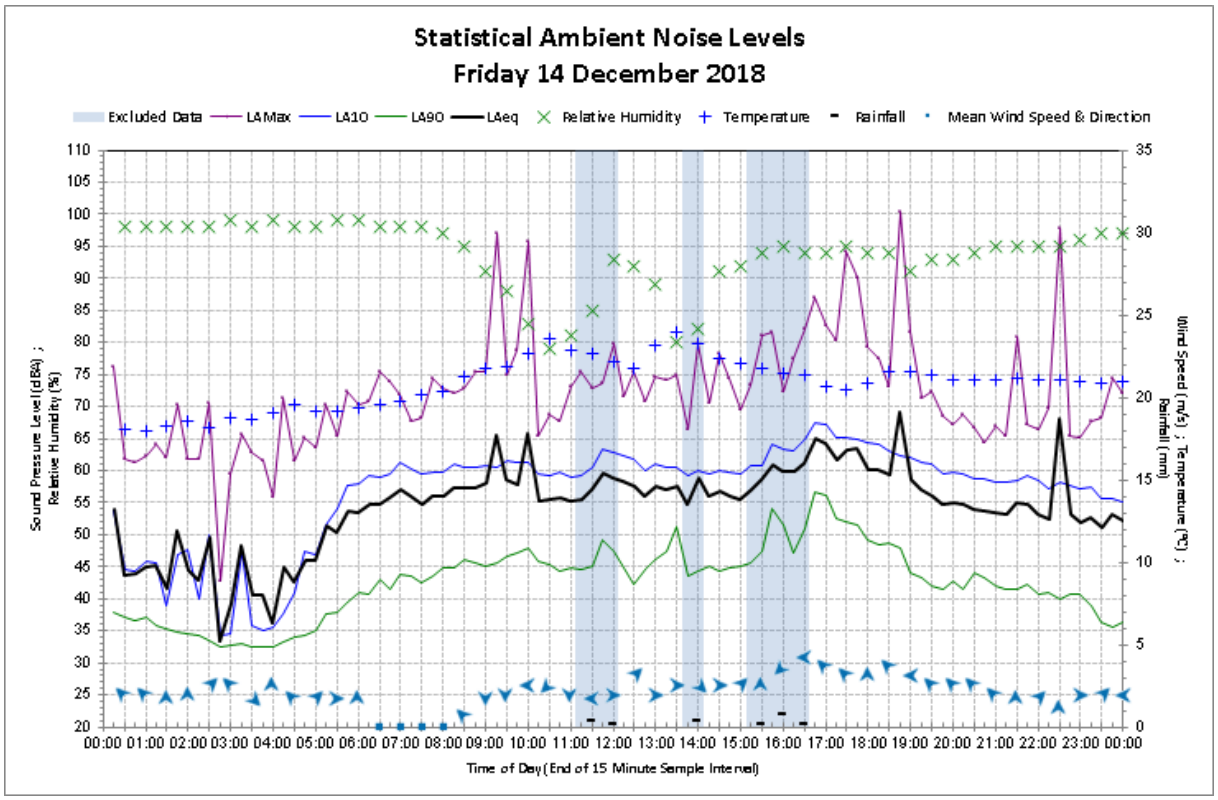
Abbreviation	Definition
Ambient noise	The all-encompassing noise associated within a given environment. It is the composite of sounds from many sources, both near and far.
ANMM	Additional Mitigation Measures Matrices
Background noise	The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is described using the L_{A90} descriptor.
CNVS	*Construction Noise and Vibration Strategy* (TfNSW, 2018)
dB	Decibel is the logarithmic unit used for expressing the sound pressure level (SPL) or power level (SWL) in acoustics.
dB(A)	Frequency weighting filter used to measure 'A-weighted' sound pressure levels, which conforms approximately to the human ear response, as our hearing is less sensitive at very low and very high frequencies.
dB(C)	Frequency weighting filter used to measure 'C-weighted' sound pressure levels, which is designed to be more response to low frequency noise
DECCW	Department of Environment, Climate Change and Water
EPA	Environment Protection Authority
I&S	Infrastructure and Services
ICNG	*Interim Construction Noise Guideline* (DECCW, 2009)
L_{Aeq}(period)	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.
$L_{A90(period)}$	The sound pressure level exceeded for 90% of the measurement period.
L_{Amax}	The maximum sound level recorded during the measurement period.
$L_{Aeq(15hr)}$	The L_{Aeq} noise level for the period 7 am to 10 pm.
$L_{Aeq(9hr)}$	The L_{Aeq} noise level for the period 10 pm to 7 am.
$L_{Aeq(1hr)}$	The highest hourly L_{Aeq} noise level during the day and night periods.
Noise sensitive receiver	An area or place potentially affected by noise including residential dwellings, schools, child care centres, places of worship, health care institutions and active or passive recreational areas.
NPI	*Noise Policy for Industry* (EPA, 2017)
Rating background level (RBL)	The overall single-figure background level representing each assessment period (day/evening/night) over the whole monitoring period.
RNP	*Road Noise Policy* (DECWW, 2011)
TfNSW	Transport for New South Wales

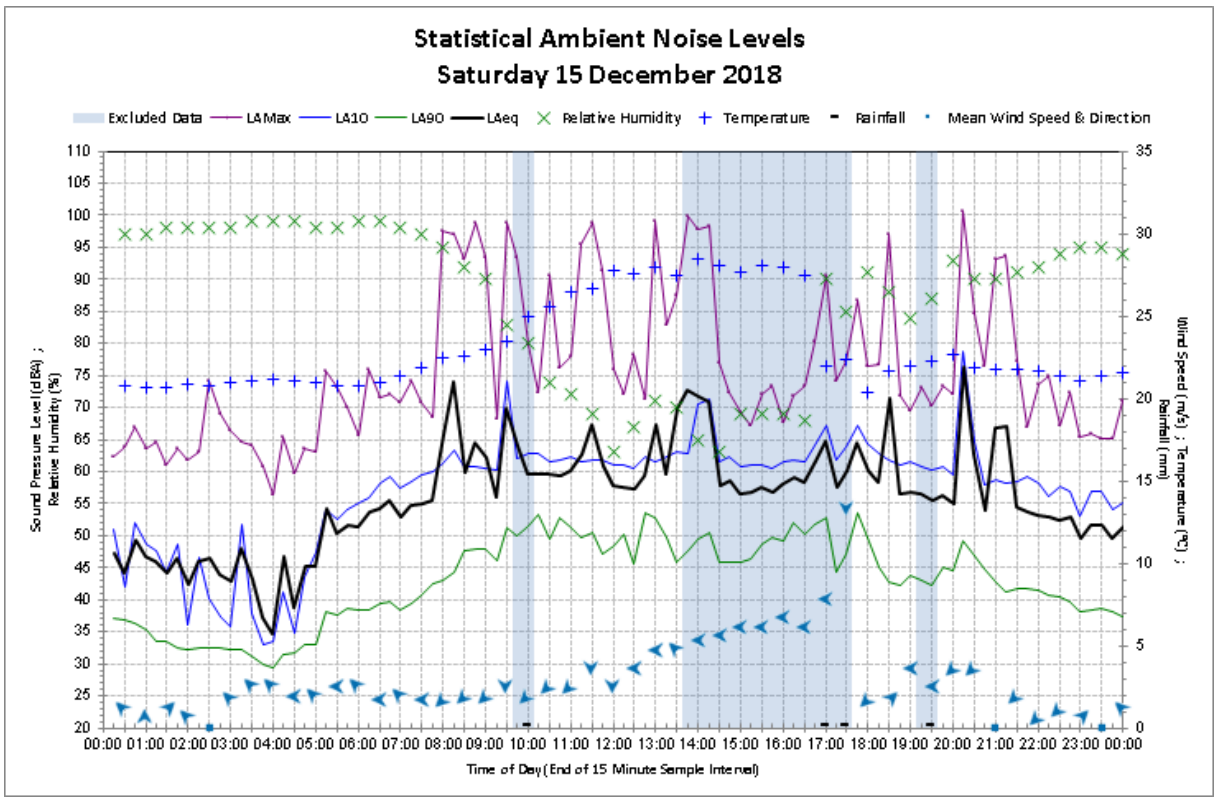
Appendix B – Daily noise level charts

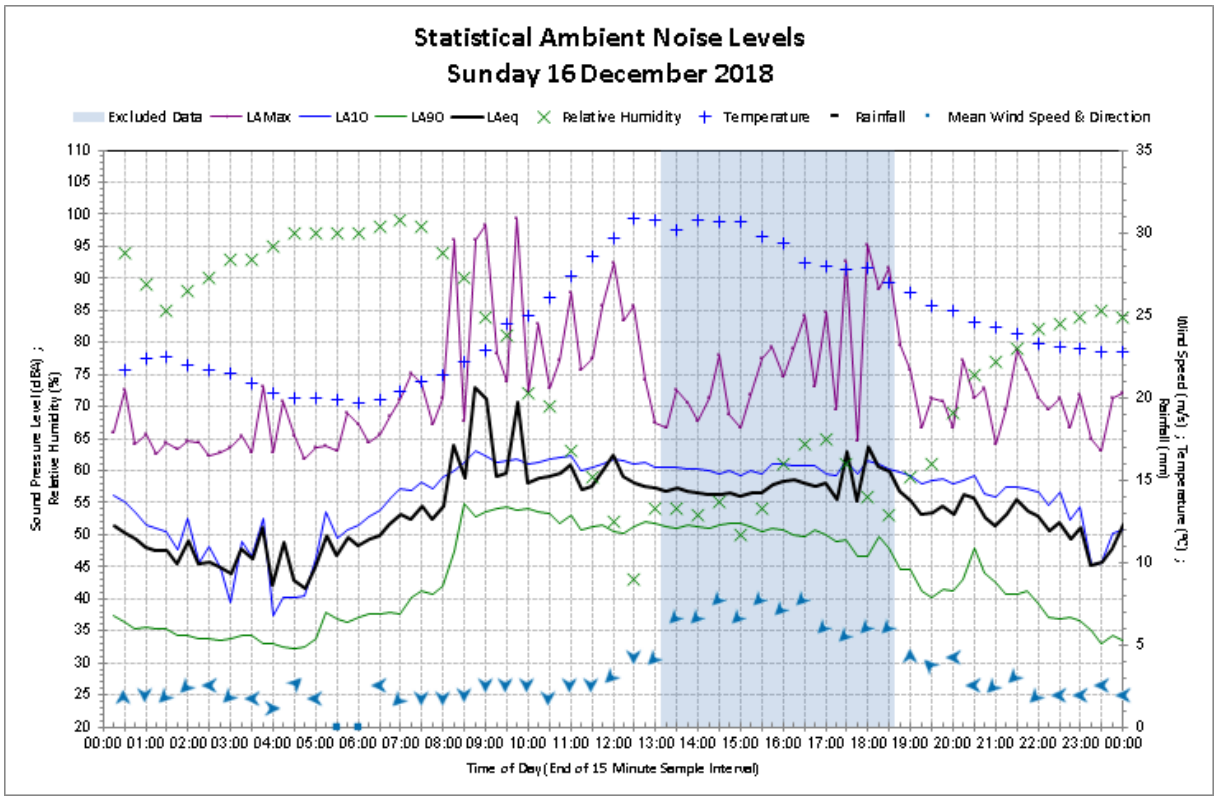


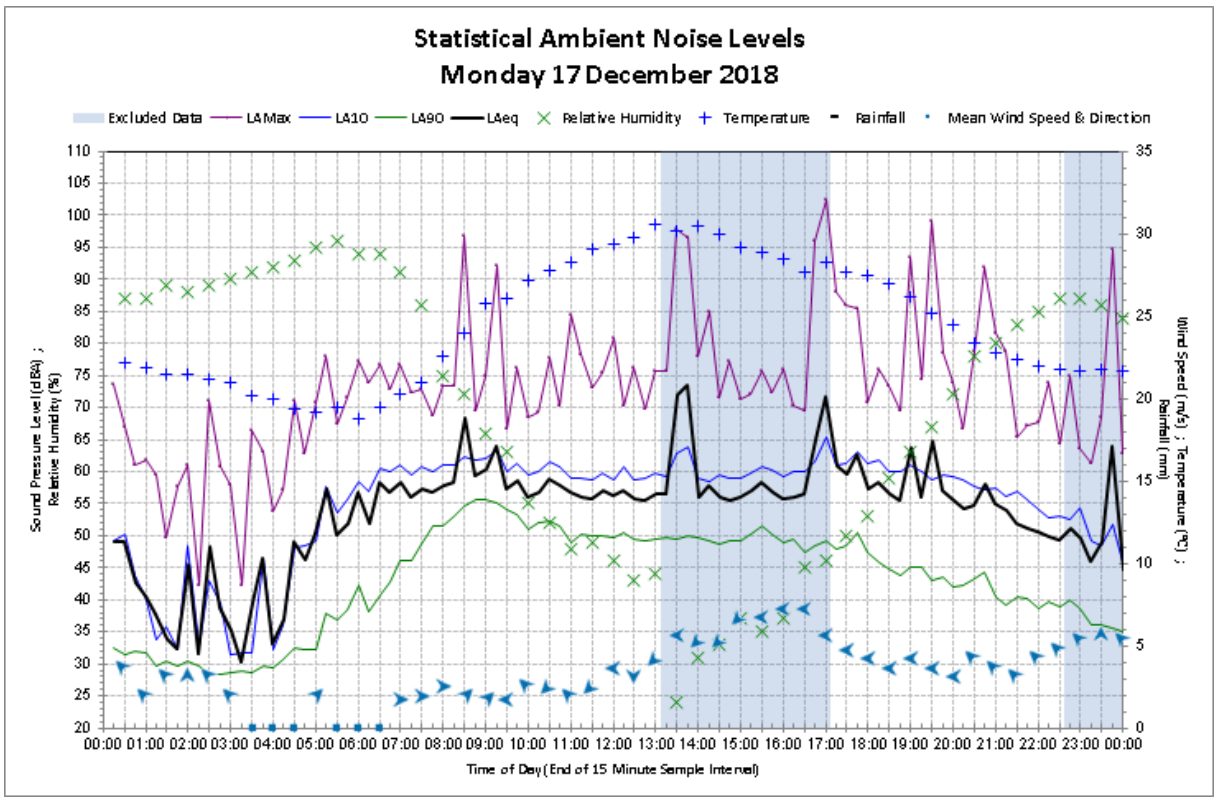


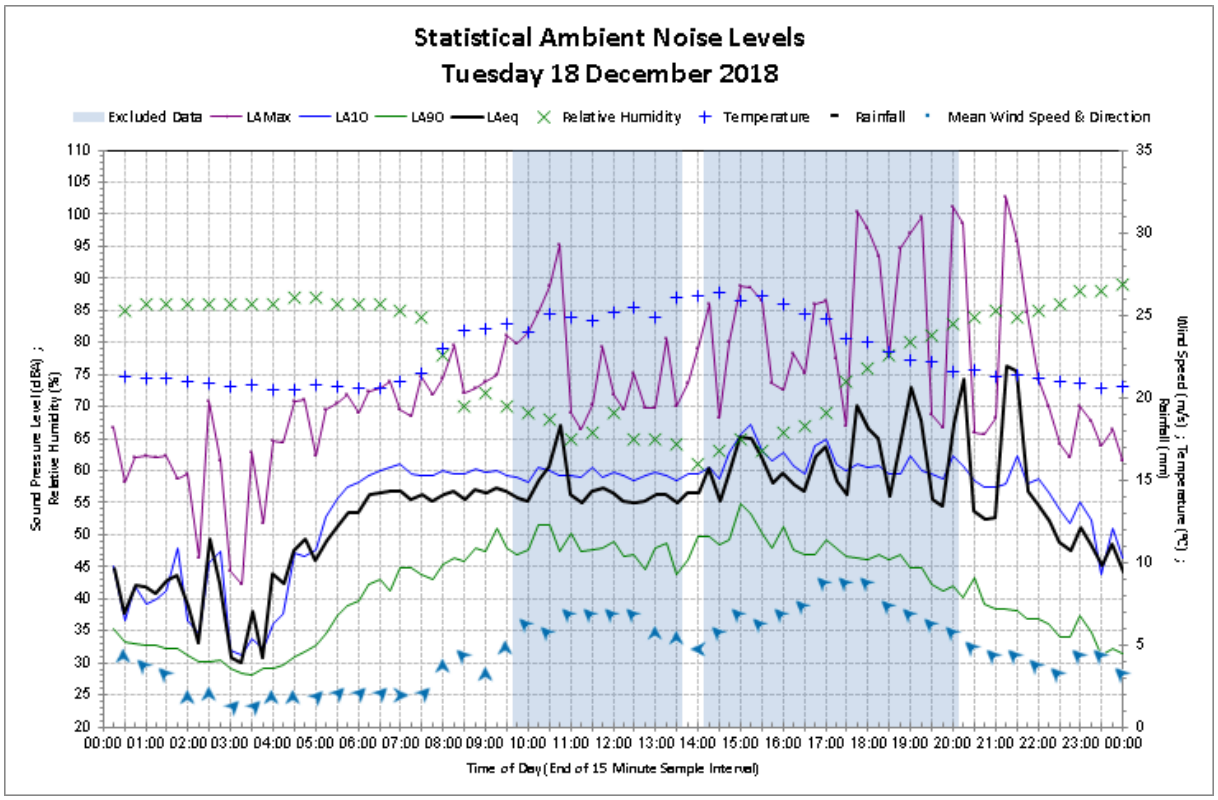

Statistical Ambient Noise Levels
Thursday 13 December 2018
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

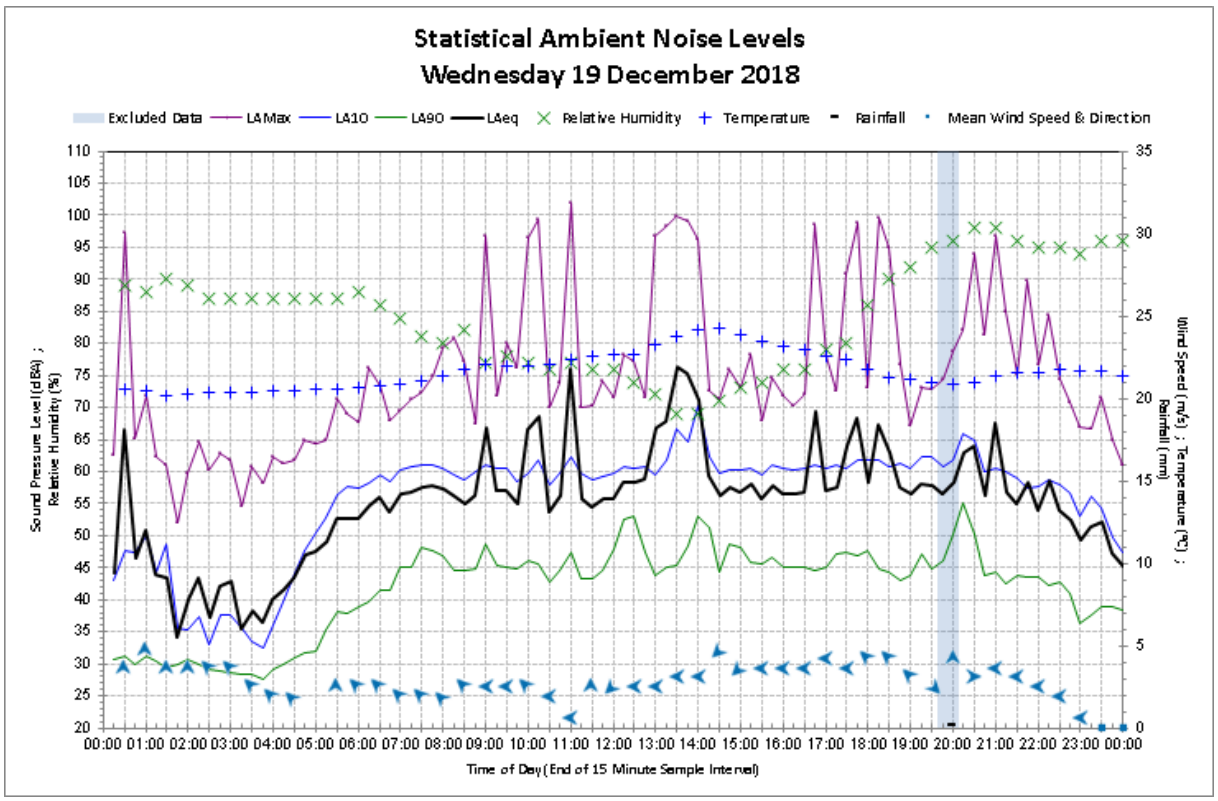

Statistical Ambient Noise Levels
Friday 14 December 2018
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

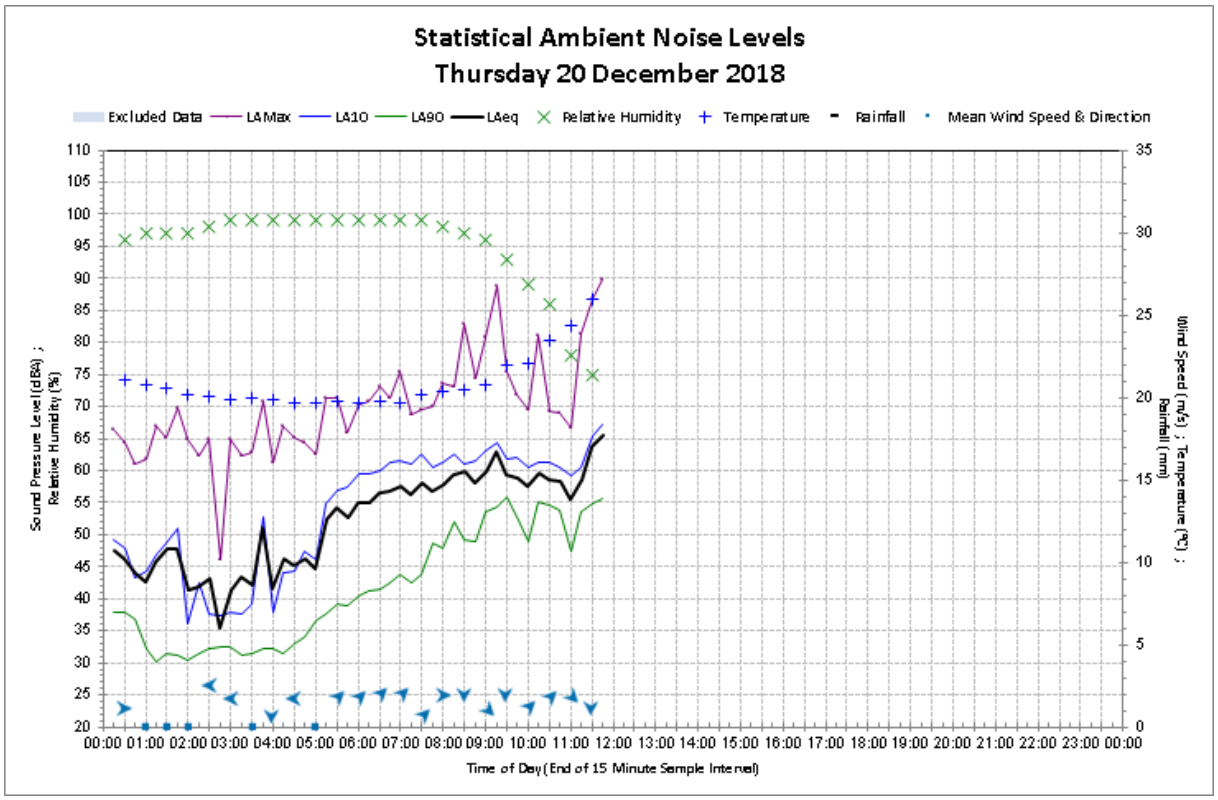

Statistical Ambient Noise Levels
Saturday 15 December 2018
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)


Statistical Ambient Noise Levels
Sunday 16 December 2018
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)


Statistical Ambient Noise Levels
Monday 17 December 2018
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)


Statistical Ambient Noise Levels
Tuesday 18 December 2018
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)


Statistical Ambient Noise Levels
Wednesday 19 December 2018
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)


Statistical Ambient Noise Levels
Thursday 20 December 2018
Excluded Data
LAMax
LA10
LA90
LAeq
Relative Humidity
Temperature
Rainfall
Mean Wind Speed & Direction
Sound Pressure Level (dBA) ; Relative Humidity (%)
Wind Speed (m/s) ; Temperature (°C) ; Rainfall (mm)
Time of Day (End of 15 Minute Sample Interval)

Appendix C – Predicted construction noise levels, dBA

Predicted construction noise levels: Standard construction hours

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R002	Residential	NCA01	72	74	66	65	**78**	71	55	N, V
R003	Residential	NCA01	66	70	69	61	69	**79**	52	N, V
R004	Residential	NCA01	53	54	64	54	60	70	43	N, V
R005	Educational institute	NCA01	62	62	64	58	67	73	50	-
R006	Educational institute	NCA01	58	58	61	56	64	69	47	-
R007	Residential	NCA01	54	54	60	55	61	66	46	N, V
R008	Residential	NCA01	54	54	56	53	61	63	43	-
R009	Residential	NCA01	46	47	52	49	53	58	40	-
R010	Residential	NCA01	46	45	49	46	53	58	38	-
R011	Residential	NCA01	45	44	50	47	52	55	39	-
R012	Residential	NCA01	45	45	51	48	52	54	40	-
R013	Residential	NCA01	50	50	53	50	57	60	41	-
R014	Residential	NCA01	45	48	55	51	51	56	38	-
R015	Residential	NCA01	44	44	50	47	50	55	38	-
R016	Residential	NCA01	48	47	54	50	55	58	41	-
R017	Residential	NCA01	49	48	54	50	56	60	42	-
R018	Residential	NCA01	48	47	53	50	54	58	42	-
R019	Residential	NCA01	50	49	54	51	56	59	42	-
R020	Residential	NCA01	51	50	54	51	58	61	42	-
R021	Residential	NCA01	54	53	54	51	59	60	42	-
R022	Residential	NCA01	73	72	69	69	**78**	74	58	N, V
R023	Residential	NCA01	70	69	69	69	**77**	**75**	58	N, V
R024	Residential	NCA01	69	67	69	69	**76**	**75**	58	N, V
R025	Residential	NCA01	66	64	68	67	73	73	56	N, V
R026	Residential	NCA01	61	60	64	63	68	70	54	N, V
R027	Residential	NCA01	58	57	61	60	65	67	52	N, V
R028	Residential	NCA01	56	55	58	57	63	64	49	N, V
R029	Residential	NCA01	54	53	55	54	61	60	47	-
R030	Residential	NCA01	52	52	53	52	58	58	44	-
R031	Residential	NCA01	50	49	52	51	56	57	45	-
R032	Residential	NCA01	49	49	51	50	55	56	42	-
R033	Residential	NCA01	50	49	52	51	55	57	43	-
R034	Residential	NCA01	45	45	48	47	54	54	42	-
R035	Residential	NCA01	49	47	50	49	55	55	43	-
R036	Residential	NCA01	50	49	53	52	58	58	45	-
R037	Residential	NCA01	50	50	53	52	58	58	46	-
R038	Residential	NCA01	51	50	54	53	58	58	46	-
R039	Residential	NCA01	50	50	53	53	58	59	46	-
R040	Residential	NCA01	50	49	52	52	57	57	45	-
R041	Residential	NCA01	45	44	48	47	52	53	40	-
R042	Residential	NCA01	49	48	52	51	56	57	44	-
R043	Residential	NCA01	49	49	53	52	57	58	44	-
R044	Residential	NCA01	48	48	51	51	56	55	43	-
R045	Residential	NCA01	48	47	51	50	55	56	43	-
R046	Residential	NCA01	47	46	51	50	54	56	42	-
R047	Residential	NCA01	46	45	49	48	53	54	39	-
R048	Residential	NCA01	45	44	47	47	52	53	38	-
R049	Residential	NCA01	44	43	46	45	51	51	37	-
R050	Residential	NCA01	40	39	42	41	47	48	35	-
R051	Residential	NCA01	41	40	43	42	48	49	36	-
R052	Residential	NCA01	38	38	42	41	46	47	34	-
R053	Residential	NCA01	38	37	41	40	46	46	33	-
R054	Residential	NCA01	37	36	40	39	45	45	32	-
R055	Residential	NCA01	28	27	31	30	35	37	23	-
R056	Residential	NCA01	29	28	32	31	37	37	24	-
R057	Residential	NCA01	33	32	36	35	41	41	29	-
R058	Residential	NCA01	34	33	37	36	41	43	29	-
R059	Residential	NCA01	33	32	36	35	40	42	28	-
R060	Residential	NCA01	32	31	35	34	39	40	27	-
R061	Residential	NCA01	31	31	34	34	39	40	27	-
R062	Residential	NCA01	31	30	34	33	38	39	27	-
R063	Residential	NCA01	33	32	36	35	40	41	29	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R064	Residential	NCA01	27	27	30	29	34	36	22	-
R065	Residential	NCA01	28	27	31	30	35	37	23	-
R066	Residential	NCA01	25	24	28	27	32	33	19	-
R067	Residential	NCA01	24	23	27	26	31	32	18	-
R068	Residential	NCA01	24	24	28	27	32	33	19	-
R069	Residential	NCA01	52	51	56	54	59	61	45	-
R070	Residential	NCA01	51	51	55	53	58	60	45	-
R071	Residential	NCA01	52	51	54	53	59	60	44	-
R072	Residential	NCA01	51	50	54	52	57	60	44	-
R073	Residential	NCA01	48	47	53	49	55	59	42	-
R074	Residential	NCA01	47	47	51	49	54	56	40	-
R075	Residential	NCA01	47	46	52	49	53	56	40	-
R076	Residential	NCA01	47	46	49	48	54	55	40	-
R077	Residential	NCA01	38	37	41	39	45	47	31	-
R078	Residential	NCA01	37	37	42	40	44	46	31	-
R079	Residential	NCA01	39	39	44	42	47	48	34	-
R080	Residential	NCA01	39	38	43	41	46	47	32	-
R081	Residential	NCA01	44	43	48	46	52	54	39	-
R082	Residential	NCA01	47	47	46	48	54	54	37	-
R083	Residential	NCA01	47	46	48	48	54	53	31	-
R084	Commercial	NCA01	27	27	31	29	34	37	21	-
R085	Residential	NCA01	41	40	43	42	48	48	33	-
R086	Residential	NCA01	44	43	48	45	51	52	37	-
R087	Residential	NCA01	66	66	68	60	72	**78**	51	N, V
R088	Residential	NCA01	38	37	42	40	45	46	31	-
R089	Residential	NCA01	38	38	42	40	45	47	32	-
R090	Residential	NCA01	43	42	46	45	50	52	36	-
R091	Commercial	NCA01	43	43	47	45	50	52	37	-
R092	Residential	NCA01	45	44	48	46	52	52	37	-
R093	Residential	NCA01	44	44	48	46	51	53	38	-
R094	Residential	NCA01	46	45	49	48	53	54	40	-
R095	Residential	NCA01	45	45	49	47	52	54	39	-
R096	Residential	NCA01	44	44	48	47	51	53	38	-
R097	Residential	NCA01	44	44	48	47	51	53	38	-
R098	Commercial	NCA01	33	35	40	38	40	41	26	-
R099	Residential	NCA01	37	36	40	39	44	46	31	-
R100	Residential	NCA01	40	39	43	41	47	48	33	-
R101	Residential	NCA01	41	40	44	43	48	47	35	-
R102	Active recreation	NCA01	37	36	41	39	44	44	31	-
R103	Residential	NCA01	32	31	34	33	39	40	25	-
R104	Residential	NCA01	40	40	44	43	47	49	34	-
R105	Residential	NCA01	42	41	45	44	49	50	36	-
R106	Residential	NCA01	42	41	46	43	49	50	36	-
R107	Residential	NCA01	40	38	46	45	46	51	37	-
R108	Residential	NCA01	42	42	46	45	49	52	37	-
R109	Residential	NCA01	44	44	46	48	51	54	40	-
R110	Residential	NCA01	45	44	48	49	52	55	41	-
R111	Residential	NCA01	42	42	47	44	49	50	35	-
R112	Residential	NCA01	45	44	47	48	52	54	40	-
R113	Residential	NCA01	45	44	47	47	52	55	39	-
R114	Residential	NCA01	43	42	46	46	50	52	37	-
R115	Residential	NCA01	40	39	47	42	47	51	34	-
R116	Residential	NCA01	46	45	49	47	53	53	39	-
R117	Residential	NCA01	45	45	50	47	52	54	38	-
R118	Residential	NCA01	46	46	50	47	53	55	39	-
R119	Educational institute	NCA01	46	44	51	47	53	53	40	-
R120	Educational institute	NCA01	45	45	51	47	53	54	39	-
R121	Educational institute	NCA01	48	47	48	50	56	56	41	-
R122	Educational institute	NCA01	49	47	52	53	56	58	45	-
R123	Educational institute	NCA01	40	40	44	42	47	51	34	-
R124	Residential	NCA01	46	44	49	47	52	52	39	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R125	Residential	NCA01	42	41	45	43	49	50	35	-
R126	Residential	NCA01	38	37	41	39	45	46	31	-
R127	Residential	NCA01	34	33	44	36	41	43	28	-
R128	Residential	NCA01	46	45	46	45	52	50	39	-
R129	Residential	NCA01	44	42	46	46	51	49	37	-
R130	Residential	NCA01	45	44	47	46	52	52	38	-
R131	Residential	NCA01	45	44	49	47	52	54	38	-
R132	Residential	NCA01	50	49	54	51	57	57	41	-
R133	Residential	NCA01	48	45	52	49	55	55	41	-
R134	Residential	NCA01	50	49	54	52	57	60	43	-
R135	Residential	NCA01	44	45	52	52	51	58	44	-
R136	Residential	NCA01	51	50	53	52	58	60	44	-
R137	Residential	NCA01	45	43	47	46	52	50	38	-
R138	Residential	NCA01	47	46	49	46	53	55	37	-
R139	Residential	NCA01	43	43	54	43	50	52	35	-
R140	Residential	NCA01	45	44	46	46	52	52	38	-
R141	Residential	NCA01	41	40	46	41	48	47	33	-
R142	Residential	NCA01	45	45	51	47	52	57	38	-
R143	Residential	NCA01	47	46	55	46	54	60	39	-
R144	Residential	NCA01	53	53	54	48	60	61	37	-
R145	Residential	NCA01	54	54	55	53	61	61	41	-
R146	Residential	NCA01	56	55	56	54	62	56	46	-
R147	Residential	NCA01	58	58	58	56	64	61	47	N, V
R148	Residential	NCA01	56	54	59	57	63	65	48	N, V
R149	Residential	NCA01	57	57	57	55	66	61	48	N, V
R150	Residential	NCA01	57	56	54	54	63	61	45	-
R151	Residential	NCA01	56	55	56	55	62	61	46	-
R152	Residential	NCA01	54	53	56	55	61	61	46	-
R153	Residential	NCA01	55	54	55	53	61	61	45	-
R154	Residential	NCA01	53	50	55	55	60	61	46	-
R155	Residential	NCA01	65	64	63	63	72	69	54	N, V
R156	Residential	NCA01	58	57	58	57	64	64	49	N, V
R157	Residential	NCA01	56	57	58	57	63	64	48	N, V
R158	Residential	NCA01	52	51	54	55	59	58	45	-
R159	Residential	NCA01	48	48	49	48	52	54	41	-
R160	Residential	NCA01	48	49	51	51	56	58	44	-
R161	Residential	NCA01	47	46	51	51	53	54	40	-
R162	Residential	NCA01	43	44	44	46	53	54	40	-
R163	Residential	NCA01	42	42	45	44	50	50	40	-
R164	Residential	NCA01	41	40	44	43	47	47	37	-
R165	Residential	NCA01	39	39	42	42	52	53	39	-
R166	Residential	NCA01	38	38	41	41	46	48	36	-
R167	Residential	NCA01	43	42	45	45	51	51	39	-
R168	Residential	NCA01	39	38	41	41	46	47	35	-
R169	Residential	NCA01	44	44	48	48	52	54	40	-
R170	Residential	NCA01	44	43	47	46	52	51	39	-
R171	Residential	NCA01	45	44	48	47	52	54	40	-
R172	Residential	NCA01	50	49	50	49	57	54	42	-
R173	Residential	NCA01	49	48	50	49	56	54	42	-
R174	Residential	NCA01	47	46	49	47	54	53	38	-
R175	Residential	NCA01	49	48	51	50	56	55	40	-
R176	Residential	NCA01	48	46	50	48	55	56	42	-
R177	Residential	NCA01	51	50	51	49	58	56	41	-
R178	Residential	NCA01	49	48	51	49	56	55	42	-
R179	Residential	NCA01	47	46	49	48	54	55	40	-
R180	Residential	NCA01	36	35	40	37	43	45	29	-
R181	Residential	NCA01	46	45	48	47	51	53	36	-
R182	Residential	NCA01	43	42	45	44	50	50	37	-
R183	Residential	NCA01	41	40	44	43	48	49	35	-
R184	Residential	NCA01	39	39	43	41	47	48	35	-
R185	Residential	NCA01	43	42	45	45	50	51	36	-
R186	Residential	NCA01	41	40	46	45	48	51	36	-
R187	Residential	NCA01	44	42	46	45	51	51	35	-
R188	Residential	NCA01	33	32	34	34	39	40	27	-
R189	Residential	NCA01	42	41	43	41	49	49	34	-
R190	Residential	NCA01	44	43	45	45	51	51	38	-
R191	Residential	NCA01	36	35	38	37	43	43	31	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R192	Residential	NCA01	37	37	40	39	45	45	32	-
R193	Residential	NCA01	34	33	37	36	41	42	27	-
R194	Residential	NCA01	35	33	36	35	41	41	27	-
R195	Residential	NCA01	32	31	34	33	39	39	27	-
R196	Residential	NCA01	32	31	34	33	39	40	27	-
R197	Residential	NCA01	31	31	34	33	38	39	26	-
R198	Residential	NCA01	32	31	34	33	38	39	25	-
R199	Residential	NCA01	29	28	32	31	36	36	24	-
R200	Residential	NCA01	30	29	33	32	37	38	25	-
R201	Residential	NCA01	28	28	32	31	36	37	23	-
R202	Residential	NCA01	28	27	31	30	35	36	22	-
R203	Residential	NCA01	27	26	30	29	33	35	21	-
R204	Residential	NCA01	28	27	32	31	35	37	22	-
R205	Residential	NCA01	29	28	31	30	36	37	22	-
R206	Residential	NCA01	31	29	33	32	38	38	25	-
R207	Residential	NCA01	27	27	30	29	34	35	21	-
R208	Residential	NCA01	31	29	33	33	38	35	25	-
R209	Residential	NCA01	29	28	31	31	36	37	23	-
R210	Residential	NCA01	29	27	32	31	37	37	24	-
R211	Residential	NCA01	28	27	31	30	36	36	23	-
R212	Residential	NCA01	30	29	33	32	37	38	24	-
R213	Residential	NCA01	30	29	33	32	37	38	25	-
R214	Residential	NCA01	31	30	33	32	38	38	25	-
R215	Residential	NCA01	31	30	35	34	38	40	24	-
R216	Residential	NCA01	33	32	36	35	40	41	24	-
R217	Residential	NCA01	28	27	32	31	35	37	23	-
R218	Residential	NCA01	33	33	38	37	43	43	27	-
R219	Residential	NCA01	33	32	38	37	42	42	29	-
R220	Residential	NCA01	34	33	38	38	42	45	29	-
R221	Residential	NCA01	33	35	40	38	44	43	28	-
R222	Residential	NCA01	37	34	38	39	45	43	32	-
R223	Residential	NCA01	36	35	39	38	43	43	31	-
R224	Residential	NCA01	40	39	42	41	47	47	34	-
R225	Residential	NCA01	41	41	42	43	49	47	37	-
R226	Residential	NCA01	38	37	40	39	45	45	33	-
R227	Residential	NCA01	43	42	45	44	49	49	36	-
R228	Residential	NCA01	44	44	45	44	50	50	37	-
R229	Residential	NCA01	46	45	44	43	51	51	37	-
R230	Residential	NCA01	49	48	48	47	53	53	38	-
R231	Residential	NCA01	49	49	51	50	56	56	41	-
R232	Residential	NCA01	49	48	51	51	56	57	42	-
R233	Residential	NCA01	48	47	50	49	55	54	43	-
R234	Residential	NCA01	47	47	49	49	55	55	43	-
R235	Residential	NCA01	47	47	49	48	54	55	40	-
R236	Residential	NCA01	46	45	48	47	54	53	40	-
R237	Residential	NCA01	47	45	49	48	54	54	40	-
R238	Residential	NCA01	46	45	51	50	53	56	42	-
R239	Residential	NCA01	46	46	49	49	54	56	42	-
R240	Residential	NCA01	47	47	49	48	53	54	47	-
R241	Residential	NCA01	46	49	49	49	58	55	45	-
R242	Residential	NCA01	54	53	57	57	62	63	48	-
R243	Residential	NCA01	55	54	58	56	62	61	49	-
R244	Residential	NCA01	52	50	54	53	59	60	46	-
R245	Residential	NCA01	58	56	59	58	67	66	52	N, V
R246	Residential	NCA01	48	48	51	50	55	56	42	-
R247	Residential	NCA01	49	48	52	51	56	56	43	-
R248	Residential	NCA01	49	47	51	50	56	56	42	-
R249	Residential	NCA01	49	47	51	50	56	56	42	-
R250	Residential	NCA01	49	47	50	50	56	56	42	-
R251	Residential	NCA01	49	47	51	50	56	56	42	-
R252	Residential	NCA01	48	47	51	50	56	57	42	-
R253	Residential	NCA01	49	49	52	51	56	57	43	-
R254	Residential	NCA01	48	48	51	49	55	56	42	-
R255	Residential	NCA01	48	48	51	50	55	57	42	-
R256	Residential	NCA01	48	48	51	51	56	57	43	-
R257	Residential	NCA01	49	48	50	51	56	57	43	-
R258	Residential	NCA01	49	48	51	51	56	57	43	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R259	Residential	NCA01	48	47	52	51	55	54	43	-
R260	Residential	NCA01	48	47	49	49	55	53	42	-
R261	Residential	NCA01	47	47	49	48	55	54	43	-
R262	Residential	NCA01	47	46	49	49	54	54	43	-
R263	Residential	NCA01	47	46	49	48	53	54	43	-
R264	Residential	NCA01	46	46	48	47	53	53	42	-
R265	Residential	NCA01	46	46	48	47	53	53	42	-
R266	Residential	NCA01	46	46	48	47	54	53	42	-
R267	Residential	NCA01	46	47	49	48	56	54	43	-
R268	Residential	NCA01	47	46	47	46	54	52	41	-
R269	Residential	NCA01	45	45	47	47	54	52	41	-
R270	Residential	NCA01	44	43	47	46	52	52	40	-
R271	Residential	NCA01	45	44	48	47	53	53	41	-
R272	Residential	NCA01	44	42	46	45	51	51	37	-
R273	Residential	NCA01	43	42	46	45	50	51	38	-
R274	Residential	NCA01	44	42	46	45	51	51	38	-
R275	Residential	NCA01	43	42	46	45	51	51	38	-
R276	Residential	NCA01	45	44	48	47	52	52	40	-
R277	Residential	NCA01	44	44	46	46	52	51	40	-
R278	Residential	NCA01	45	44	48	47	53	53	40	-
R279	Residential	NCA01	46	45	48	48	53	54	40	-
R280	Residential	NCA01	46	45	49	48	53	54	41	-
R281	Residential	NCA01	46	45	48	48	53	52	41	-
R282	Residential	NCA01	46	45	48	47	53	52	41	-
R283	Residential	NCA01	46	45	48	47	54	53	41	-
R284	Residential	NCA01	47	47	49	49	55	55	42	-
R285	Residential	NCA01	46	45	48	48	53	53	41	-
R286	Residential	NCA01	46	45	48	48	53	54	41	-
R287	Residential	NCA01	46	46	48	48	53	54	42	-
R288	Residential	NCA01	47	46	48	48	54	54	41	-
R289	Residential	NCA01	47	46	48	49	54	54	41	-
R290	Residential	NCA01	47	46	50	50	54	54	41	-
R291	Residential	NCA01	47	46	50	50	54	56	41	-
R292	Residential	NCA01	47	47	50	50	54	56	41	-
R293	Residential	NCA01	47	47	49	49	54	55	41	-
R294	Residential	NCA01	47	47	49	49	54	55	41	-
R295	Residential	NCA01	47	48	50	49	54	55	41	-
R296	Residential	NCA01	47	47	50	49	54	55	41	-
R297	Residential	NCA01	47	47	50	49	54	54	41	-
R298	Residential	NCA01	47	47	50	49	54	55	40	-
R299	Residential	NCA01	48	46	50	49	54	55	41	-
R300	Residential	NCA01	47	46	49	49	54	55	41	-
R301	Residential	NCA01	46	45	49	48	53	54	40	-
R302	Residential	NCA01	47	46	49	48	54	55	40	-
R303	Residential	NCA01	48	47	50	47	55	55	38	-
R304	Residential	NCA01	47	47	50	49	54	55	41	-
R305	Residential	NCA01	47	47	50	49	54	54	41	-
R306	Residential	NCA01	48	47	50	49	54	55	41	-
R307	Residential	NCA01	48	47	50	49	54	55	41	-
R308	Residential	NCA01	48	47	51	49	55	56	41	-
R309	Residential	NCA01	48	47	50	49	54	55	40	-
R310	Residential	NCA01	47	46	49	48	54	54	40	-
R311	Residential	NCA01	43	44	48	45	50	50	36	-
R312	Residential	NCA01	45	44	47	47	52	51	39	-
R313	Residential	NCA01	46	46	49	48	53	54	41	-
R314	Residential	NCA01	46	45	48	47	53	53	40	-
R315	Residential	NCA01	46	45	48	48	53	53	40	-
R316	Residential	NCA01	42	42	46	45	50	51	37	-
R317	Residential	NCA01	45	44	48	47	52	53	39	-
R318	Residential	NCA01	45	44	47	46	52	53	38	-
R319	Residential	NCA01	45	45	49	48	53	54	40	-
R320	Residential	NCA01	46	45	49	48	53	54	40	-
R321	Residential	NCA01	35	34	38	37	42	43	29	-
R322	Residential	NCA01	33	32	36	35	40	42	28	-
R323	Residential	NCA01	38	37	42	41	46	47	32	-
R324	Residential	NCA01	45	44	48	47	52	53	39	-
R325	Residential	NCA01	45	44	48	47	52	53	39	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R326	Residential	NCA01	46	45	49	48	53	54	40	-
R327	Residential	NCA01	45	44	48	47	53	53	40	-
R328	Residential	NCA01	46	45	48	48	53	53	39	-
R329	Residential	NCA01	45	45	48	48	52	53	39	-
R330	Residential	NCA01	45	46	48	47	52	53	39	-
R331	Residential	NCA01	46	46	49	48	53	53	40	-
R332	Residential	NCA01	46	46	49	48	53	53	40	-
R333	Residential	NCA01	46	46	48	47	53	54	39	-
R334	Residential	NCA01	46	46	49	48	53	54	40	-
R335	Residential	NCA01	46	46	49	48	53	54	40	-
R336	Residential	NCA01	45	46	48	48	53	53	40	-
R337	Residential	NCA01	46	46	49	48	53	53	40	-
R338	Residential	NCA01	47	46	48	47	54	53	40	-
R339	Residential	NCA01	47	46	49	47	54	53	40	-
R340	Residential	NCA01	46	46	48	47	54	54	40	-
R341	Residential	NCA01	46	46	48	48	53	54	40	-
R342	Residential	NCA01	46	45	48	47	52	54	40	-
R343	Residential	NCA01	46	45	48	48	53	54	40	-
R344	Residential	NCA01	46	45	49	48	53	54	41	-
R345	Residential	NCA01	45	44	48	47	52	53	39	-
R346	Residential	NCA01	43	42	46	45	50	51	37	-
R347	Residential	NCA01	36	35	37	37	43	44	29	-
R348	Residential	NCA01	32	32	34	32	39	39	26	-
R349	Residential	NCA01	38	37	39	40	45	44	33	-
R350	Residential	NCA01	39	38	42	41	47	45	34	-
R351	Residential	NCA01	29	28	32	31	37	37	24	-
R352	Residential	NCA01	31	30	35	33	39	39	26	-
R353	Residential	NCA01	32	31	34	33	40	40	24	-
R354	Residential	NCA01	41	39	43	42	48	46	35	-
R355	Residential	NCA01	40	40	42	41	48	47	36	-
R356	Residential	NCA01	38	37	40	38	45	45	31	-
R357	Residential	NCA01	65	69	70	72	71	74	58	N, V
R358	Residential	NCA01	62	66	72	69	68	74	54	N, V
R359	Residential	NCA01	59	64	71	67	65	73	52	N, V
R360	Residential	NCA01	57	59	70	61	63	70	50	N, V
R361	Residential	NCA01	55	58	68	60	61	67	48	N, V
R362	Residential	NCA01	53	56	65	59	60	66	47	N, V
R363	Residential	NCA01	50	50	62	51	57	64	40	N, V
R364	Residential	NCA01	45	46	58	47	52	61	37	-
R365	Residential	NCA01	45	45	52	47	51	55	37	-
R366	Residential	NCA01	48	47	56	47	55	60	38	-
R367	Residential	NCA01	46	45	53	40	52	56	34	-
R368	Residential	NCA01	47	47	57	47	54	59	37	-
R369	Residential	NCA01	46	47	56	49	54	56	41	-
R370	Residential	NCA01	47	47	59	49	55	56	41	-
R371	Residential	NCA01	50	51	56	50	55	51	39	-
R372	Residential	NCA01	46	45	49	48	53	52	40	-
R373	Residential	NCA01	45	45	51	48	52	52	39	-
R374	Residential	NCA01	41	41	54	44	49	58	34	-
R375	Residential	NCA01	45	45	55	48	52	57	39	-
R376	Residential	NCA01	48	49	54	49	56	58	43	-
R377	Residential	NCA01	46	46	56	50	52	58	39	-
R378	Residential	NCA01	47	46	54	49	54	58	41	-
R379	Residential	NCA01	50	49	56	52	57	60	43	-
R380	Residential	NCA01	48	47	51	51	55	56	42	-
R381	Residential	NCA01	48	48	53	48	55	58	41	-
R382	Residential	NCA01	48	47	55	47	55	59	42	-
R383	Residential	NCA01	46	46	54	45	53	58	38	-
R384	Residential	NCA01	49	48	55	44	55	59	36	-
R385	Residential	NCA01	47	48	55	49	53	58	40	-
R386	Residential	NCA01	47	48	58	47	55	60	38	-
R387	Residential	NCA01	48	49	57	50	55	60	41	-
R388	Residential	NCA01	51	51	57	54	57	61	44	-
R389	Residential	NCA01	48	47	56	52	54	60	41	-
R390	Residential	NCA01	48	46	55	48	54	59	38	-
R391	Residential	NCA01	72	73	70	**77**	**78**	73	65	N, V
R392	Residential	NCA01	72	73	71	73	**79**	74	65	N, V

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R393	Residential	NCA01	71	72	71	71	**79**	73	66	N, V
R394	Residential	NCA01	69	70	70	69	**77**	73	65	N, V
R395	Residential	NCA01	64	65	67	67	74	71	63	N, V
R396	Residential	NCA01	64	64	65	65	72	69	62	N, V
R397	Residential	NCA01	60	60	62	62	69	67	60	N, V
R398	Residential	NCA01	58	58	60	60	66	66	58	N, V
R399	Residential	NCA01	56	56	59	58	64	65	55	N, V
R400	Residential	NCA01	46	46	50	50	54	57	45	-
R401	Residential	NCA01	48	48	52	51	57	57	47	-
R402	Residential	NCA01	42	44	50	46	49	52	38	-
R403	Residential	NCA01	47	47	52	48	54	55	47	-
R404	Residential	NCA01	48	47	54	48	55	56	43	-
R405	Residential	NCA01	47	49	54	52	55	60	43	-
R406	Residential	NCA01	47	51	55	54	55	60	43	-
R407	Residential	NCA01	41	43	49	46	47	50	33	-
R408	Residential	NCA01	46	50	53	52	54	56	41	-
R409	Residential	NCA01	49	50	54	53	55	55	40	-
R410	Residential	NCA01	51	50	54	53	56	54	41	-
R411	Residential	NCA01	53	51	53	54	57	54	41	-
R412	Residential	NCA01	54	55	58	58	60	63	37	-
R413	Residential	NCA01	48	49	53	53	54	58	36	-
R414	Residential	NCA01	48	53	57	54	60	53	48	-
R415	Residential	NCA01	49	56	60	59	56	65	46	N, V
R416	Residential	NCA01	50	59	61	62	56	66	38	N, V
R417	Residential	NCA01	46	54	61	57	63	64	50	N, V
R418	Residential	NCA01	51	53	62	56	50	65	44	N, V
R419	Residential	NCA01	51	51	61	56	55	53	45	-
R420	Residential	NCA01	65	65	65	66	72	70	58	N, V
R421	Residential	NCA01	61	65	65	68	67	68	54	N, V
R422	Residential	NCA01	58	60	61	65	62	63	51	N, V
R423	Residential	NCA01	57	57	59	60	60	63	51	-
R424	Residential	NCA01	56	56	58	60	60	57	49	-
R425	Residential	NCA01	54	54	55	58	57	56	43	-
R426	Residential	NCA01	54	58	61	61	61	66	43	N, V
R427	Residential	NCA01	52	51	58	50	58	62	38	-
R428	Residential	NCA01	49	51	53	53	56	53	40	-
R429	Residential	NCA01	51	53	59	56	58	64	36	N, V
R430	Residential	NCA01	51	52	58	56	57	63	45	-
R431	Residential	NCA01	51	52	59	55	57	63	44	-
R432	Residential	NCA01	45	44	54	42	52	58	31	-
R433	Residential	NCA01	49	49	57	54	56	59	42	-
R434	Residential	NCA01	51	51	57	53	56	58	43	-
R435	Residential	NCA01	42	41	47	45	47	47	35	-
R436	Residential	NCA01	49	51	56	52	55	58	41	-
R437	Residential	NCA01	49	49	55	51	56	57	42	-
R438	Residential	NCA01	49	48	54	48	56	57	41	-
R439	Residential	NCA01	49	48	54	48	56	58	41	-
R440	Residential	NCA01	48	48	53	48	56	57	41	-
R441	Residential	NCA01	48	46	51	48	53	55	40	-
R442	Residential	NCA01	46	45	51	46	53	52	39	-
R443	Residential	NCA01	47	46	50	47	53	53	40	-
R444	Residential	NCA01	37	36	41	40	44	43	30	-
R445	Commercial	NCA01	38	40	46	40	45	51	31	-
R446	Residential	NCA01	45	45	49	48	52	54	39	-
R447	Residential	NCA01	46	45	53	47	52	54	39	-
R448	Residential	NCA01	47	47	53	48	53	58	40	-
R449	Residential	NCA01	48	48	53	49	55	58	42	-
R450	Residential	NCA01	49	48	54	49	55	58	41	-
R451	Residential	NCA01	47	47	51	49	55	55	41	-
R452	Residential	NCA01	47	46	51	49	54	56	40	-
R453	Residential	NCA01	48	48	54	49	55	59	41	-
R454	Residential	NCA01	49	48	55	49	55	59	40	-
R455	Residential	NCA01	49	48	55	49	55	60	40	-
R456	Residential	NCA01	48	47	54	48	55	58	42	-
R457	Residential	NCA01	48	48	53	48	55	57	41	-
R458	Residential	NCA01	48	49	54	49	55	58	42	-
R459	Residential	NCA01	49	48	54	50	56	58	42	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R460	Residential	NCA01	48	48	53	50	55	58	42	-
R461	Residential	NCA01	48	48	53	51	55	58	42	-
R462	Residential	NCA01	46	45	50	48	52	54	40	-
R463	Residential	NCA01	37	36	40	39	44	45	31	-
R464	Residential	NCA01	48	48	52	51	55	55	42	-
R465	Residential	NCA01	42	41	44	44	49	49	37	-
R466	Residential	NCA01	49	48	53	51	55	58	42	-
R467	Residential	NCA01	49	49	54	52	56	58	43	-
R468	Residential	NCA01	47	47	51	50	54	55	42	-
R469	Residential	NCA01	49	50	55	52	56	59	43	-
R470	Residential	NCA01	50	50	55	53	57	60	44	-
R471	Residential	NCA01	51	51	56	53	57	62	44	-
R472	Residential	NCA01	51	51	57	54	58	61	45	-
R473	Residential	NCA01	51	51	57	54	58	61	45	-
R474	Residential	NCA01	51	52	57	55	58	61	46	-
R475	Residential	NCA01	52	52	58	55	59	62	46	-
R476	Residential	NCA01	52	52	58	55	59	63	46	-
R477	Residential	NCA01	52	52	57	54	58	61	45	-
R478	Residential	NCA01	50	50	56	53	57	60	44	-
R479	Residential	NCA01	50	50	55	53	57	59	44	-
R480	Residential	NCA01	50	50	53	53	57	57	44	-
R481	Residential	NCA01	44	43	44	43	47	49	34	-
R482	Residential	NCA01	50	49	54	52	56	59	43	-
R483	Residential	NCA01	49	49	54	51	56	58	43	-
R484	Residential	NCA01	36	35	39	39	43	43	30	-
R485	Residential	NCA01	48	48	51	51	55	54	42	-
R486	Residential	NCA01	48	48	53	51	55	57	42	-
R487	Residential	NCA01	48	48	53	50	55	57	42	-
R488	Residential	NCA01	48	47	52	50	54	56	41	-
R489	Residential	NCA01	48	48	53	49	55	57	41	-
R490	Residential	NCA01	46	47	51	47	53	55	39	-
R491	Residential	NCA01	45	46	49	47	52	55	38	-
R492	Residential	NCA01	42	41	44	44	49	49	36	-
R493	Residential	NCA01	43	43	47	45	50	52	37	-
R494	Residential	NCA01	44	43	47	47	51	52	38	-
R495	Residential	NCA01	44	43	47	46	51	51	39	-
R496	Residential	NCA01	45	44	47	47	52	52	39	-
R497	Residential	NCA01	46	47	48	48	54	54	40	-
R498	Residential	NCA01	47	47	50	47	54	56	40	-
R499	Residential	NCA01	38	37	41	40	44	45	32	-
R500	Residential	NCA01	47	46	51	49	54	56	41	-
R501	Residential	NCA01	48	48	51	51	55	56	42	-
R502	Residential	NCA01	46	46	47	47	54	52	41	-
R503	Residential	NCA01	43	43	47	46	51	52	38	-
R504	Residential	NCA01	43	43	47	46	50	52	38	-
R505	Residential	NCA01	49	48	53	51	56	57	42	-
R506	Residential	NCA01	49	48	53	51	56	58	42	-
R507	Residential	NCA01	45	45	40	40	52	44	31	-
R508	Residential	NCA01	49	48	53	51	56	58	42	-
R509	Residential	NCA01	50	49	54	52	57	59	43	-
R510	Residential	NCA01	51	50	55	52	57	59	44	-
R511	Residential	NCA01	47	47	51	49	54	56	40	-
R512	Residential	NCA01	52	52	57	54	59	61	46	-
R513	Residential	NCA01	52	54	57	57	58	62	41	-
R514	Residential	NCA01	51	53	55	57	58	53	41	-
R515	Residential	NCA01	49	50	51	54	54	53	41	-
R516	Residential	NCA01	45	45	48	48	51	53	39	-
R517	Residential	NCA01	46	47	51	50	53	56	38	-
R518	Residential	NCA01	46	46	51	50	53	56	36	-
R519	Residential	NCA01	46	46	50	49	53	55	36	-
R520	Residential	NCA01	46	46	50	49	53	55	36	-
R521	Residential	NCA01	46	46	50	49	53	55	35	-
R522	Residential	NCA01	46	46	50	48	52	54	36	-
R523	Residential	NCA01	45	45	49	48	52	54	34	-
R524	Residential	NCA01	45	46	50	49	52	54	38	-
R525	Residential	NCA01	43	44	49	47	50	53	37	-
R526	Residential	NCA01	45	46	49	49	52	53	38	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R527	Residential	NCA01	44	45	48	47	51	52	36	-
R528	Residential	NCA01	43	43	48	46	49	52	36	-
R529	Residential	NCA01	42	43	48	46	49	50	36	-
R530	Residential	NCA01	39	39	43	42	46	48	31	-
R531	Residential	NCA01	39	39	43	40	46	48	30	-
R532	Residential	NCA01	40	40	45	42	47	50	34	-
R533	Residential	NCA01	39	38	42	41	46	47	30	-
R534	Residential	NCA01	34	34	37	37	41	42	27	-
R535	Residential	NCA01	40	39	46	42	47	50	34	-
R536	Residential	NCA01	45	45	49	48	52	50	38	-
R537	Residential	NCA01	45	46	49	49	52	53	38	-
R538	Residential	NCA01	42	42	47	46	49	51	33	-
R539	Residential	NCA01	46	47	50	50	53	55	38	-
R540	Residential	NCA01	47	47	51	51	54	55	38	-
R541	Residential	NCA01	50	50	52	53	56	57	37	-
R542	Residential	NCA01	46	47	51	51	53	55	34	-
R543	Residential	NCA01	43	43	51	46	50	53	38	-
R544	Residential	NCA01	42	41	44	44	48	49	41	-
R545	Residential	NCA01	46	48	49	51	51	51	41	-
R546	Residential	NCA01	48	46	56	49	54	57	41	-
R547	Residential	NCA01	45	43	51	46	51	53	39	-
R548	Residential	NCA01	51	52	56	55	58	61	38	-
R549	Residential	NCA01	54	53	57	56	62	64	51	N, V
R550	Residential	NCA01	47	47	49	49	55	55	42	-
R551	Residential	NCA01	47	47	49	49	55	54	42	-
R552	Residential	NCA01	47	46	50	49	54	54	42	-
R553	Residential	NCA01	46	43	46	46	53	52	41	-
R554	Residential	NCA01	45	43	49	48	54	51	40	-
R555	Residential	NCA01	45	44	48	48	51	54	42	-
R556	Residential	NCA01	43	42	48	44	50	51	37	-
R557	Residential	NCA01	45	44	48	47	52	52	40	-
R558	Residential	NCA01	40	39	45	42	47	50	35	-
R559	Residential	NCA01	42	47	52	50	49	56	34	-
R560	Residential	NCA01	41	41	43	43	49	50	37	-
R561	Residential	NCA01	45	44	50	45	52	53	38	-
R562	Residential	NCA01	44	44	48	48	53	54	41	-
R563	Residential	NCA01	43	42	47	46	51	52	38	-
R564	Residential	NCA01	46	45	49	48	53	51	40	-
R565	Residential	NCA01	46	45	49	46	53	54	39	-
R566	Residential	NCA01	45	45	49	46	52	54	38	-
R567	Residential	NCA01	46	44	49	48	53	54	39	-
R568	Residential	NCA01	49	48	52	52	57	58	45	-
R569	Residential	NCA01	48	47	52	51	56	57	44	-
R570	Residential	NCA01	53	52	55	55	60	61	49	-
R571	Residential	NCA01	48	49	53	52	58	58	46	-
R572	Residential	NCA01	48	49	52	51	57	58	45	-
R573	Residential	NCA01	49	48	52	51	56	57	44	-
R574	Residential	NCA01	47	47	51	50	55	57	43	-
R575	Residential	NCA01	40	39	43	42	48	47	35	-
R576	Residential	NCA01	39	38	43	42	47	48	33	-
R577	Residential	NCA01	42	42	45	44	50	50	37	-
R578	Residential	NCA01	45	44	48	47	52	53	40	-
R579	Residential	NCA01	42	42	46	44	43	51	36	-
R580	Residential	NCA01	41	42	46	44	48	51	33	-
R581	Residential	NCA01	43	43	48	44	50	50	32	-
R582	Residential	NCA01	45	44	48	46	52	50	32	-
R583	Residential	NCA01	45	45	49	47	52	54	33	-
R584	Residential	NCA01	42	41	48	43	49	51	32	-
R585	Residential	NCA01	41	41	49	42	48	53	35	-
R586	Residential	NCA01	40	41	49	43	47	54	34	-
R587	Residential	NCA01	44	41	49	44	48	54	33	-
R588	Residential	NCA01	41	44	48	47	52	52	37	-
R589	Residential	NCA01	42	44	46	46	52	51	39	-
R590	Residential	NCA01	41	41	44	44	48	48	37	-
R591	Residential	NCA01	38	37	41	40	46	47	34	-
R592	Residential	NCA01	39	38	42	41	46	46	34	-
R593	Residential	NCA01	38	38	42	41	45	47	34	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R594	Residential	NCA01	39	38	43	41	46	48	32	-
R595	Residential	NCA01	39	39	45	42	46	49	31	-
R596	Residential	NCA01	41	41	45	44	48	48	28	-
R597	Residential	NCA01	42	41	44	44	49	47	30	-
R598	Residential	NCA01	40	40	43	43	47	44	31	-
R599	Residential	NCA01	38	38	42	41	45	45	30	-
R600	Residential	NCA01	39	38	42	41	46	45	29	-
R601	Residential	NCA01	43	42	47	45	50	54	34	-
R602	Residential	NCA01	36	38	44	39	43	50	32	-
R603	Residential	NCA01	36	37	41	39	43	48	33	-
R604	Residential	NCA01	36	38	42	41	43	48	30	-
R605	Residential	NCA01	38	39	43	41	45	48	29	-
R606	Residential	NCA01	40	39	43	41	47	48	30	-
R607	Residential	NCA01	36	35	42	38	43	46	29	-
R608	Residential	NCA01	38	37	44	39	45	47	28	-
R609	Residential	NCA01	38	37	44	40	46	47	28	-
R610	Residential	NCA01	35	34	41	37	42	44	28	-
R611	Residential	NCA01	35	34	41	37	42	46	29	-
R612	Residential	NCA01	34	34	41	37	41	46	28	-
R613	Residential	NCA01	34	34	43	37	41	47	28	-
R614	Residential	NCA01	35	39	43	42	42	48	28	-
R615	Residential	NCA01	37	40	43	42	47	48	32	-
R616	Residential	NCA01	40	39	43	42	47	47	34	-
R617	Residential	NCA01	38	37	45	40	45	50	28	-
R618	Residential	NCA01	39	39	44	42	47	50	34	-
R619	Residential	NCA01	39	40	44	41	46	48	31	-
R620	Residential	NCA01	41	40	44	43	48	48	33	-
R621	Residential	NCA01	39	39	44	42	46	49	35	-
R622	Residential	NCA01	41	40	44	43	48	49	35	-
R623	Residential	NCA01	45	45	48	47	53	53	40	-
R624	Residential	NCA01	36	35	42	41	49	46	33	-
R625	Residential	NCA01	36	35	41	38	43	48	30	-
R626	Residential	NCA01	36	36	45	39	43	49	30	-
R627	Residential	NCA01	44	44	48	44	52	52	38	-
R628	Residential	NCA01	44	43	45	45	51	50	38	-
R629	Residential	NCA01	41	39	45	42	48	47	35	-
R630	Residential	NCA01	37	37	43	40	45	46	33	-
R631	Residential	NCA01	36	37	44	40	44	50	32	-
R632	Residential	NCA01	38	37	44	40	45	50	33	-
R633	Residential	NCA01	33	35	37	35	40	41	28	-
R634	Residential	NCA01	31	32	36	34	38	42	25	-
R635	Residential	NCA01	27	26	30	29	35	35	22	-
R636	Residential	NCA01	29	30	34	33	37	40	24	-
R637	Residential	NCA01	28	31	36	34	35	43	25	-
R638	Residential	NCA01	27	27	33	30	35	37	23	-
R639	Residential	NCA01	29	34	39	37	36	47	25	-
R640	Residential	NCA01	36	36	41	38	43	47	32	-
R641	Residential	NCA01	35	35	44	37	42	47	31	-
R642	Residential	NCA01	37	38	43	40	44	49	30	-
R643	Residential	NCA01	37	38	43	41	44	48	31	-
R644	Residential	NCA01	34	34	39	36	40	43	27	-
R645	Residential	NCA01	33	33	37	35	40	42	26	-
R646	Residential	NCA01	33	32	36	35	39	41	26	-
R647	Residential	NCA01	34	33	41	37	42	44	25	-
R648	Residential	NCA01	36	34	40	37	42	44	25	-
R649	Residential	NCA01	35	34	40	37	42	44	26	-
R650	Residential	NCA01	34	33	39	36	40	44	26	-
R651	Residential	NCA01	34	34	41	37	41	46	27	-
R652	Residential	NCA01	35	35	39	38	42	44	26	-
R653	Residential	NCA01	29	29	36	32	36	39	23	-
R654	Residential	NCA01	36	36	40	40	42	45	28	-
R655	Residential	NCA01	35	35	40	38	45	43	30	-
R656	Residential	NCA01	32	34	39	37	39	43	25	-
R657	Residential	NCA01	34	35	40	37	41	45	25	-
R658	Residential	NCA01	31	30	36	33	38	41	24	-
R659	Residential	NCA01	32	31	37	34	39	42	25	-
R660	Residential	NCA01	36	35	40	36	43	47	24	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R661	Residential	NCA01	28	27	37	30	35	36	21	-
R662	Residential	NCA01	34	33	38	35	41	42	25	-
R663	Residential	NCA01	33	34	38	35	40	43	24	-
R664	Residential	NCA01	33	32	37	34	39	43	25	-
R665	Residential	NCA01	35	35	39	36	41	44	25	-
R666	Residential	NCA01	33	33	39	35	40	42	26	-
R667	Residential	NCA01	30	29	36	32	37	39	24	-
R668	Residential	NCA01	29	29	34	32	36	39	24	-
R669	Residential	NCA01	24	23	27	26	31	32	18	-
R670	Residential	NCA01	28	29	34	32	35	39	22	-
R671	Residential	NCA01	25	24	28	28	32	34	20	-
R672	Residential	NCA01	25	24	28	28	32	34	20	-
R673	Residential	NCA01	25	25	29	28	33	34	20	-
R674	Residential	NCA01	26	25	29	28	33	34	21	-
R675	Residential	NCA01	26	25	29	28	33	34	20	-
R676	Residential	NCA01	25	24	29	27	32	33	19	-
R677	Residential	NCA01	25	24	28	27	32	33	20	-
R678	Residential	NCA01	26	25	28	27	33	33	20	-
R679	Residential	NCA01	25	24	28	27	32	33	19	-
R680	Residential	NCA01	25	24	28	27	32	33	19	-
R681	Residential	NCA01	25	24	30	28	32	33	19	-
R682	Residential	NCA01	28	27	31	30	35	35	22	-
R683	Residential	NCA01	31	30	34	34	38	39	25	-
R684	Residential	NCA01	30	29	33	32	37	38	24	-
R685	Residential	NCA01	42	41	41	40	45	46	32	-
R686	Residential	NCA01	37	36	40	39	44	46	31	-
R687	Residential	NCA01	42	41	45	45	49	52	36	-
R688	Residential	NCA01	42	41	45	44	49	51	37	-
R689	Residential	NCA01	48	47	52	50	55	57	41	-
R690	Residential	NCA01	45	44	49	47	52	54	37	-
R691	Residential	NCA01	43	43	47	45	50	52	37	-
R692	Residential	NCA01	43	42	45	43	48	50	35	-
R693	Residential	NCA01	43	42	47	45	50	52	36	-
R694	Residential	NCA01	39	39	42	41	46	47	32	-
R695	Residential	NCA01	38	37	40	39	44	43	31	-
R696	Residential	NCA01	37	36	40	39	44	45	31	-
R697	Residential	NCA01	40	39	41	40	47	46	32	-
R698	Residential	NCA01	39	39	43	42	47	47	33	-
R699	Residential	NCA01	39	38	42	41	46	46	33	-
R700	Residential	NCA01	39	39	42	42	46	47	34	-
R701	Residential	NCA01	39	38	41	40	45	46	32	-
R702	Residential	NCA01	38	38	41	40	45	45	32	-
R703	Residential	NCA01	39	38	43	41	46	48	33	-
R704	Residential	NCA01	39	38	41	41	46	46	33	-
R705	Residential	NCA01	41	41	43	44	47	48	34	-
R706	Residential	NCA01	42	42	46	44	50	51	36	-
R707	Residential	NCA01	42	42	46	45	50	51	36	-
R708	Residential	NCA01	42	41	46	44	49	51	36	-
R709	Residential	NCA01	42	42	46	44	49	51	36	-
R710	Residential	NCA01	38	38	41	40	45	45	32	-
R711	Residential	NCA01	40	39	43	42	47	48	34	-
R712	Residential	NCA01	41	40	44	43	48	49	35	-
R713	Residential	NCA01	39	38	41	41	46	46	33	-
R714	Residential	NCA01	41	41	45	43	48	50	35	-
R715	Residential	NCA01	43	43	41	41	50	49	32	-
R716	Residential	NCA01	47	46	51	48	54	56	40	-
R717	Residential	NCA01	47	46	51	48	53	55	40	-
R718	Residential	NCA01	48	47	52	49	55	56	41	-
R719	Residential	NCA01	46	45	50	48	53	55	39	-
R720	Residential	NCA01	46	45	49	48	53	54	39	-
R721	Residential	NCA01	46	45	49	47	53	54	39	-
R722	Residential	NCA01	46	45	50	48	53	55	40	-
R723	Residential	NCA01	45	44	48	46	52	53	38	-
R724	Residential	NCA01	45	44	48	46	51	53	38	-
R725	Residential	NCA01	44	43	48	46	51	52	37	-
R726	Residential	NCA01	37	36	40	39	44	45	32	-
R727	Residential	NCA01	39	39	41	40	46	47	31	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R728	Residential	NCA01	40	40	44	43	47	49	34	-
R729	Residential	NCA01	41	40	44	43	47	49	34	-
R730	Residential	NCA01	41	41	45	43	48	50	35	-
R731	Residential	NCA01	41	41	45	43	48	50	34	-
R732	Residential	NCA01	41	40	44	43	47	49	34	-
R733	Residential	NCA01	40	40	44	41	47	49	33	-
R734	Residential	NCA01	42	43	45	45	49	50	37	-
R735	Residential	NCA01	43	43	46	44	50	51	36	-
R736	Residential	NCA01	43	42	47	45	50	51	37	-
R737	Residential	NCA01	44	44	47	46	51	51	38	-
R738	Residential	NCA01	44	43	46	46	51	51	38	-
R739	Residential	NCA01	42	42	46	44	49	50	36	-
R740	Residential	NCA01	43	42	46	46	50	51	37	-
R741	Residential	NCA01	46	45	50	47	52	54	39	-
R742	Residential	NCA01	45	45	49	46	52	54	36	-
R743	Residential	NCA01	44	43	47	46	51	51	38	-
R744	Residential	NCA01	44	43	47	46	50	51	37	-
R745	Residential	NCA01	43	43	46	45	50	51	37	-
R746	Residential	NCA01	43	42	46	45	50	50	37	-
R747	Residential	NCA01	43	43	48	45	50	52	37	-
R748	Residential	NCA01	44	43	48	46	51	52	38	-
R749	Residential	NCA01	47	46	51	46	53	56	38	-
R750	Residential	NCA01	44	44	48	46	51	51	39	-
R751	Residential	NCA01	34	33	36	35	41	40	30	-
R752	Residential	NCA01	45	44	47	45	52	50	39	-
R753	Residential	NCA01	45	44	49	45	52	54	39	-
R754	Residential	NCA01	43	43	49	44	50	54	36	-
R755	Residential	NCA01	43	42	47	44	50	51	36	-
R756	Residential	NCA01	36	36	39	38	43	44	30	-
R757	Residential	NCA01	39	39	41	41	46	46	33	-
R758	Residential	NCA01	41	41	45	43	48	50	35	-
R759	Residential	NCA01	43	42	46	44	50	51	36	-
R760	Residential	NCA01	47	47	50	47	54	54	41	-
R761	Residential	NCA01	44	43	47	46	51	51	38	-
R762	Residential	NCA01	35	34	39	36	42	44	28	-
R763	Residential	NCA01	43	42	45	45	50	50	37	-
R764	Residential	NCA01	38	37	42	34	45	47	27	-
R765	Residential	NCA01	34	33	37	36	41	41	32	-
R766	Residential	NCA01	40	39	42	42	47	47	35	-
R767	Residential	NCA01	42	41	44	43	48	48	35	-
R768	Residential	NCA01	43	42	46	44	49	50	37	-
R769	Residential	NCA01	43	42	46	45	50	51	37	-
R770	Residential	NCA01	44	43	47	45	51	52	38	-
R771	Residential	NCA01	42	41	46	42	49	51	33	-
R772	Residential	NCA01	37	36	41	39	44	45	31	-
R773	Residential	NCA01	45	44	45	45	52	50	39	-
R774	Residential	NCA01	43	42	45	44	50	50	37	-
R775	Residential	NCA01	43	42	46	45	50	51	37	-
R776	Residential	NCA01	42	41	44	44	49	49	35	-
R777	Residential	NCA01	41	41	43	43	48	48	35	-
R778	Residential	NCA01	42	42	45	44	49	49	36	-
R779	Residential	NCA01	44	44	50	47	51	54	38	-
R780	Residential	NCA01	47	46	51	45	54	57	37	-
R781	Residential	NCA01	45	44	49	47	52	54	39	-
R782	Residential	NCA01	47	46	49	48	54	54	41	-
R783	Residential	NCA01	47	45	51	48	54	54	39	-
R784	Residential	NCA01	45	46	52	47	52	57	39	-
R785	Residential	NCA01	47	46	52	47	54	57	39	-
R786	Residential	NCA01	46	44	48	47	51	53	39	-
R787	Residential	NCA01	42	42	46	43	49	51	36	-
R788	Residential	NCA01	41	41	46	44	48	50	35	-
R789	Residential	NCA01	38	37	40	40	45	45	32	-
R790	Residential	NCA01	41	40	46	39	47	50	28	-
R791	Residential	NCA01	41	40	46	40	47	50	30	-
R792	Residential	NCA01	42	42	47	42	48	51	35	-
R793	Commercial	NCA01	42	42	47	43	49	51	34	-
R794	Commercial	NCA01	42	41	44	44	48	49	35	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable / Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	N, V
R795	Commercial	NCA01	42	41	45	44	49	50	36	-
R796	Commercial	NCA01	45	44	47	46	51	51	38	-
R797	Commercial	NCA01	36	36	38	38	44	44	32	-
R798	Residential	NCA01	43	42	45	44	49	49	36	-
R799	Residential	NCA01	43	42	45	44	49	49	37	-
R800	Residential	NCA01	38	38	41	41	45	46	32	-
R801	Residential	NCA01	43	42	45	45	49	50	37	-
R802	Residential	NCA01	45	44	46	46	51	51	38	-
R803	Residential	NCA01	42	43	47	46	49	51	35	-
R804	Residential	NCA01	42	42	46	45	49	50	36	-
R805	Residential	NCA01	46	45	48	48	51	52	40	-
R806	Place of worship	NCA01	45	44	48	47	52	52	39	-
R807	Residential	NCA01	44	43	47	46	51	52	38	-
R808	Residential	NCA01	44	43	47	46	51	52	38	-
R809	Residential	NCA01	44	43	46	46	51	51	38	-
R810	Residential	NCA01	44	44	47	47	50	52	38	-
R811	Residential	NCA01	41	42	46	44	48	49	34	-
R812	Residential	NCA01	42	42	46	45	49	50	35	-
R813	Residential	NCA01	41	41	45	43	48	49	35	-
R814	Residential	NCA01	41	40	45	43	48	50	34	-
R815	Residential	NCA01	42	42	46	46	49	51	36	-
R816	Residential	NCA01	39	39	43	43	46	48	33	-
R817	Residential	NCA01	39	39	42	43	46	47	33	-
R818	Residential	NCA01	38	37	42	33	45	46	29	-
R819	Residential	NCA01	41	41	44	44	48	48	34	-
R820	Residential	NCA01	41	41	44	44	49	47	35	-
R821	Residential	NCA01	41	41	44	44	48	47	35	-
R822	Residential	NCA01	41	41	45	44	47	49	35	-
R823	Residential	NCA01	40	40	45	43	47	49	33	-
R824	Residential	NCA01	42	42	45	45	49	50	35	-
R825	Residential	NCA01	41	41	45	44	48	49	35	-
R826	Residential	NCA01	41	40	45	43	48	49	33	-
R827	Residential	NCA01	41	40	45	42	48	50	31	-
R828	Residential	NCA01	40	39	43	42	47	48	31	-
R829	Residential	NCA01	39	40	44	42	46	48	32	-
R830	Residential	NCA01	41	41	45	43	48	48	34	-
R831	Residential	NCA01	43	42	47	44	50	52	34	-
R832	Residential	NCA01	38	38	41	41	45	44	30	-
R833	Residential	NCA01	39	40	44	43	47	48	29	-
R834	Residential	NCA01	40	39	43	42	47	48	29	-
R835	Residential	NCA01	37	36	40	39	44	45	29	-
R836	Residential	NCA01	39	38	42	41	46	44	27	-
R837	Residential	NCA01	40	40	43	43	47	47	31	-
R838	Residential	NCA01	37	37	40	40	44	45	28	-
R839	Residential	NCA01	38	37	41	40	45	46	29	-
R840	Residential	NCA01	37	36	43	39	44	48	28	-
R841	Residential	NCA01	41	40	44	43	48	49	33	-
R842	Residential	NCA01	41	40	45	43	48	49	32	-
R843	Residential	NCA01	40	39	44	42	47	50	30	-
R844	Residential	NCA01	40	40	44	43	47	48	32	-
R845	Residential	NCA01	35	35	39	38	42	44	30	-
R846	Residential	NCA01	37	36	40	39	44	45	29	-
R847	Residential	NCA01	36	35	40	38	43	45	28	-
R848	Residential	NCA01	33	32	36	35	41	41	28	-

Predicted construction noise levels: OOHW Period 1 (day)

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	PN, V, SN, RO, RP, DR
R002	Residential	NCA01	72	74	66	65	**78**	71	55	PN, V, SN, RO, RP, DR
R003	Residential	NCA01	66	70	69	61	69	**79**	52	PN, V, SN, RO, RP, DR
R004	Residential	NCA01	53	54	64	54	60	70	43	PN, V, SN, RO
R005	Educational institute	NCA01	62	62	64	58	67	73	50	-
R006	Educational institute	NCA01	58	58	61	56	64	69	47	-
R007	Residential	NCA01	54	54	60	55	61	66	46	PN, V, SN, RO
R008	Residential	NCA01	54	54	56	53	61	63	43	PN
R009	Residential	NCA01	46	47	52	49	53	58	40	PN
R010	Residential	NCA01	46	45	49	46	53	58	38	PN
R011	Residential	NCA01	45	44	50	47	52	55	39	PN
R012	Residential	NCA01	45	45	51	48	52	54	40	PN
R013	Residential	NCA01	50	50	53	50	57	60	41	PN
R014	Residential	NCA01	45	48	55	51	51	56	38	PN
R015	Residential	NCA01	44	44	50	47	50	55	38	PN
R016	Residential	NCA01	48	47	54	50	55	58	41	PN
R017	Residential	NCA01	49	48	54	50	56	60	42	PN
R018	Residential	NCA01	48	47	53	50	54	58	42	PN
R019	Residential	NCA01	50	49	54	51	56	59	42	PN
R020	Residential	NCA01	51	50	54	51	58	61	42	PN
R021	Residential	NCA01	54	53	54	51	59	60	42	PN
R022	Residential	NCA01	73	72	69	69	**78**	74	58	PN, V, SN, RO, RP, DR
R023	Residential	NCA01	70	69	69	69	**77**	**75**	58	PN, V, SN, RO, RP, DR
R024	Residential	NCA01	69	67	69	69	**76**	**75**	58	PN, V, SN, RO, RP, DR
R025	Residential	NCA01	66	64	68	67	73	73	56	PN, V, SN, RO
R026	Residential	NCA01	61	60	64	63	68	70	54	PN, V, SN, RO
R027	Residential	NCA01	58	57	61	60	65	67	52	PN, V, SN, RO
R028	Residential	NCA01	56	55	58	57	63	64	49	PN, V, SN, RO
R029	Residential	NCA01	54	53	55	54	61	60	47	PN
R030	Residential	NCA01	52	52	53	52	58	58	44	PN
R031	Residential	NCA01	50	49	52	51	56	57	45	PN
R032	Residential	NCA01	49	49	51	50	55	56	42	PN
R033	Residential	NCA01	50	49	52	51	55	57	43	PN
R034	Residential	NCA01	45	45	48	47	54	54	42	PN
R035	Residential	NCA01	49	47	50	49	55	55	43	PN
R036	Residential	NCA01	50	49	53	52	58	58	45	PN
R037	Residential	NCA01	50	50	53	52	58	58	46	PN
R038	Residential	NCA01	51	50	54	53	58	58	46	PN
R039	Residential	NCA01	50	50	53	53	58	59	46	PN
R040	Residential	NCA01	50	49	52	52	57	57	45	PN
R041	Residential	NCA01	45	44	48	47	52	53	40	-
R042	Residential	NCA01	49	48	52	51	56	57	44	PN
R043	Residential	NCA01	49	49	53	52	57	58	44	PN
R044	Residential	NCA01	48	48	51	51	56	55	43	PN
R045	Residential	NCA01	48	47	51	50	55	56	43	PN
R046	Residential	NCA01	47	46	51	50	54	56	42	PN
R047	Residential	NCA01	46	45	49	48	53	54	39	PN
R048	Residential	NCA01	45	44	47	47	52	53	38	-
R049	Residential	NCA01	44	43	46	45	51	51	37	-
R050	Residential	NCA01	40	39	42	41	47	48	35	-
R051	Residential	NCA01	41	40	43	42	48	49	36	-
R052	Residential	NCA01	38	38	42	41	46	47	34	-
R053	Residential	NCA01	38	37	41	40	46	46	33	-
R054	Residential	NCA01	37	36	40	39	45	45	32	-
R055	Residential	NCA01	28	27	31	30	35	37	23	-
R056	Residential	NCA01	29	28	32	31	37	37	24	-
R057	Residential	NCA01	33	32	36	35	41	41	29	-
R058	Residential	NCA01	34	33	37	36	41	43	29	-
R059	Residential	NCA01	33	32	36	35	40	42	28	-
R060	Residential	NCA01	32	31	35	34	39	40	27	-
R061	Residential	NCA01	31	31	34	34	39	40	27	-
R062	Residential	NCA01	31	30	34	33	38	39	27	-
R063	Residential	NCA01	33	32	36	35	40	41	29	-
R064	Residential	NCA01	27	27	30	29	34	36	22	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected Non-residential: Exceeds noise management level										
R065	Residential	NCA01	28	27	31	30	35	37	23	-
R066	Residential	NCA01	25	24	28	27	32	33	19	-
R067	Residential	NCA01	24	23	27	26	31	32	18	-
R068	Residential	NCA01	24	24	28	27	32	33	19	-
R069	Residential	NCA01	52	51	56	54	59	61	45	PN
R070	Residential	NCA01	51	51	55	53	58	60	45	PN
R071	Residential	NCA01	52	51	54	53	59	60	44	PN
R072	Residential	NCA01	51	50	54	52	57	60	44	PN
R073	Residential	NCA01	48	47	53	49	55	59	42	PN
R074	Residential	NCA01	47	47	51	49	54	56	40	PN
R075	Residential	NCA01	47	46	52	49	53	56	40	PN
R076	Residential	NCA01	47	46	49	48	54	55	40	PN
R077	Residential	NCA01	38	37	41	39	45	47	31	-
R078	Residential	NCA01	37	37	42	40	44	46	31	-
R079	Residential	NCA01	39	39	44	42	47	48	34	-
R080	Residential	NCA01	39	38	43	41	46	47	32	-
R081	Residential	NCA01	44	43	48	46	52	54	39	PN
R082	Residential	NCA01	47	47	46	48	54	54	37	PN
R083	Residential	NCA01	47	46	48	48	54	53	31	PN
R084	Commercial	NCA01	27	27	31	29	34	37	21	-
R085	Residential	NCA01	41	40	43	42	48	48	33	-
R086	Residential	NCA01	44	43	48	45	51	52	37	-
R087	Residential	NCA01	66	66	68	60	72	**78**	51	PN, V, SN, RO, RP, DR
R088	Residential	NCA01	38	37	42	40	45	46	31	-
R089	Residential	NCA01	38	38	42	40	45	47	32	-
R090	Residential	NCA01	43	42	46	45	50	52	36	-
R091	Commercial	NCA01	43	43	47	45	50	52	37	-
R092	Residential	NCA01	45	44	48	46	52	52	37	-
R093	Residential	NCA01	44	44	48	46	51	53	38	-
R094	Residential	NCA01	46	45	49	48	53	54	40	PN
R095	Residential	NCA01	45	45	49	47	52	54	39	PN
R096	Residential	NCA01	44	44	48	47	51	53	38	-
R097	Residential	NCA01	44	44	48	47	51	53	38	-
R098	Commercial	NCA01	33	35	40	38	40	41	26	-
R099	Residential	NCA01	37	36	40	39	44	46	31	-
R100	Residential	NCA01	40	39	43	41	47	48	33	-
R101	Residential	NCA01	41	40	44	43	48	47	35	-
R102	Active recreation	NCA01	37	36	41	39	44	44	31	-
R103	Residential	NCA01	32	31	34	33	39	40	25	-
R104	Residential	NCA01	40	40	44	43	47	49	34	-
R105	Residential	NCA01	42	41	45	44	49	50	36	-
R106	Residential	NCA01	42	41	46	43	49	50	36	-
R107	Residential	NCA01	40	38	46	45	46	51	37	-
R108	Residential	NCA01	42	42	46	45	49	52	37	-
R109	Residential	NCA01	44	44	46	48	51	54	40	PN
R110	Residential	NCA01	45	44	48	49	52	55	41	PN
R111	Residential	NCA01	42	42	47	44	49	50	35	-
R112	Residential	NCA01	45	44	47	48	52	54	40	PN
R113	Residential	NCA01	45	44	47	47	52	55	39	PN
R114	Residential	NCA01	43	42	46	46	50	52	37	-
R115	Residential	NCA01	40	39	47	42	47	51	34	-
R116	Residential	NCA01	46	45	49	47	53	53	39	-
R117	Residential	NCA01	45	45	50	47	52	54	38	PN
R118	Residential	NCA01	46	46	50	47	53	55	39	PN
R119	Educational institute	NCA01	46	44	51	47	53	53	40	-
R120	Educational institute	NCA01	45	45	51	47	53	54	39	-
R121	Educational institute	NCA01	48	47	48	50	56	56	41	-
R122	Educational institute	NCA01	49	47	52	53	56	58	45	-
R123	Educational institute	NCA01	40	40	44	42	47	51	34	-
R124	Residential	NCA01	46	44	49	47	52	52	39	-
R125	Residential	NCA01	42	41	45	43	49	50	35	-
R126	Residential	NCA01	38	37	41	39	45	46	31	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R127	Residential	NCA01	34	33	44	36	41	43	28	-
R128	Residential	NCA01	46	45	46	45	52	50	39	-
R129	Residential	NCA01	44	42	46	46	51	49	37	-
R130	Residential	NCA01	45	44	47	46	52	52	38	-
R131	Residential	NCA01	45	44	49	47	52	54	38	PN
R132	Residential	NCA01	50	49	54	51	57	57	41	PN
R133	Residential	NCA01	48	45	52	49	55	55	41	PN
R134	Residential	NCA01	50	49	54	52	57	60	43	PN
R135	Residential	NCA01	44	45	52	52	51	58	44	PN
R136	Residential	NCA01	51	50	53	52	58	60	44	PN
R137	Residential	NCA01	45	43	47	46	52	50	38	-
R138	Residential	NCA01	47	46	49	46	53	55	37	PN
R139	Residential	NCA01	43	43	54	43	50	52	35	PN
R140	Residential	NCA01	45	44	46	46	52	52	38	-
R141	Residential	NCA01	41	40	46	41	48	47	33	-
R142	Residential	NCA01	45	45	51	47	52	57	38	PN
R143	Residential	NCA01	47	46	55	46	54	60	39	PN
R144	Residential	NCA01	53	53	54	48	60	61	37	PN
R145	Residential	NCA01	54	54	55	53	61	61	41	PN
R146	Residential	NCA01	56	55	56	54	62	56	46	PN
R147	Residential	NCA01	58	58	58	56	64	61	47	PN, V, SN, RO
R148	Residential	NCA01	56	54	59	57	63	65	48	PN, V, SN, RO
R149	Residential	NCA01	57	57	57	55	66	61	48	PN, V, SN, RO
R150	Residential	NCA01	57	56	54	54	63	61	45	PN
R151	Residential	NCA01	56	55	56	55	62	61	46	PN
R152	Residential	NCA01	54	53	56	55	61	61	46	PN
R153	Residential	NCA01	55	54	55	53	61	61	45	PN
R154	Residential	NCA01	53	50	55	55	60	61	46	PN
R155	Residential	NCA01	65	64	63	63	72	69	54	PN, V, SN, RO
R156	Residential	NCA01	58	57	58	57	64	64	49	PN, V, SN, RO
R157	Residential	NCA01	56	57	58	57	63	64	48	PN, V, SN, RO
R158	Residential	NCA01	52	51	54	55	59	58	45	PN
R159	Residential	NCA01	48	48	49	48	52	54	41	PN
R160	Residential	NCA01	48	49	51	51	56	58	44	PN
R161	Residential	NCA01	47	46	51	51	53	54	40	PN
R162	Residential	NCA01	43	44	44	46	53	54	40	PN
R163	Residential	NCA01	42	42	45	44	50	50	40	-
R164	Residential	NCA01	41	40	44	43	47	47	37	-
R165	Residential	NCA01	39	39	42	42	52	53	39	-
R166	Residential	NCA01	38	38	41	41	46	48	36	-
R167	Residential	NCA01	43	42	45	45	51	51	39	-
R168	Residential	NCA01	39	38	41	41	46	47	35	-
R169	Residential	NCA01	44	44	48	48	52	54	40	PN
R170	Residential	NCA01	44	43	47	46	52	51	39	-
R171	Residential	NCA01	45	44	48	47	52	54	40	PN
R172	Residential	NCA01	50	49	50	49	57	54	42	PN
R173	Residential	NCA01	49	48	50	49	56	54	42	PN
R174	Residential	NCA01	47	46	49	47	54	53	38	PN
R175	Residential	NCA01	49	48	51	50	56	55	40	PN
R176	Residential	NCA01	48	46	50	48	55	56	42	PN
R177	Residential	NCA01	51	50	51	49	58	56	41	PN
R178	Residential	NCA01	49	48	51	49	56	55	42	PN
R179	Residential	NCA01	47	46	49	48	54	55	40	PN
R180	Residential	NCA01	36	35	40	37	43	45	29	-
R181	Residential	NCA01	46	45	48	47	51	53	36	-
R182	Residential	NCA01	43	42	45	44	50	50	37	-
R183	Residential	NCA01	41	40	44	43	48	49	35	-
R184	Residential	NCA01	39	39	43	41	47	48	35	-
R185	Residential	NCA01	43	42	45	45	50	51	36	-
R186	Residential	NCA01	41	40	46	45	48	51	36	-
R187	Residential	NCA01	44	42	46	45	51	51	35	-
R188	Residential	NCA01	33	32	34	34	39	40	27	-
R189	Residential	NCA01	42	41	43	41	49	49	34	-
R190	Residential	NCA01	44	43	45	45	51	51	38	-
R191	Residential	NCA01	36	35	38	37	43	43	31	-
R192	Residential	NCA01	37	37	40	39	45	45	32	-
R193	Residential	NCA01	34	33	37	36	41	42	27	-
R194	Residential	NCA01	35	33	36	35	41	41	27	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected Non-residential: Exceeds noise management level										
R195	Residential	NCA01	32	31	34	33	39	39	27	-
R196	Residential	NCA01	32	31	34	33	39	40	27	-
R197	Residential	NCA01	31	31	34	33	38	39	26	-
R198	Residential	NCA01	32	31	34	33	38	39	25	-
R199	Residential	NCA01	29	28	32	31	36	36	24	-
R200	Residential	NCA01	30	29	33	32	37	38	25	-
R201	Residential	NCA01	28	28	32	31	36	37	23	-
R202	Residential	NCA01	28	27	31	30	35	36	22	-
R203	Residential	NCA01	27	26	30	29	33	35	21	-
R204	Residential	NCA01	28	27	32	31	35	37	22	-
R205	Residential	NCA01	29	28	31	30	36	37	22	-
R206	Residential	NCA01	31	29	33	32	38	38	25	-
R207	Residential	NCA01	27	27	30	29	34	35	21	-
R208	Residential	NCA01	31	29	33	33	38	35	25	-
R209	Residential	NCA01	29	28	31	31	36	37	23	-
R210	Residential	NCA01	29	27	32	31	37	37	24	-
R211	Residential	NCA01	28	27	31	30	36	36	23	-
R212	Residential	NCA01	30	29	33	32	37	38	24	-
R213	Residential	NCA01	30	29	33	32	37	38	25	-
R214	Residential	NCA01	31	30	33	32	38	38	25	-
R215	Residential	NCA01	31	30	35	34	38	40	24	-
R216	Residential	NCA01	33	32	36	35	40	41	24	-
R217	Residential	NCA01	28	27	32	31	35	37	23	-
R218	Residential	NCA01	33	33	38	37	43	43	27	-
R219	Residential	NCA01	33	32	38	37	42	42	29	-
R220	Residential	NCA01	34	33	38	38	42	45	29	-
R221	Residential	NCA01	33	35	40	38	44	43	28	-
R222	Residential	NCA01	37	34	38	39	45	43	32	-
R223	Residential	NCA01	36	35	39	38	43	43	31	-
R224	Residential	NCA01	40	39	42	41	47	47	34	-
R225	Residential	NCA01	41	41	42	43	49	47	37	-
R226	Residential	NCA01	38	37	40	39	45	45	33	-
R227	Residential	NCA01	43	42	45	44	49	49	36	-
R228	Residential	NCA01	44	44	45	44	50	50	37	-
R229	Residential	NCA01	46	45	44	43	51	51	37	-
R230	Residential	NCA01	49	48	48	47	53	53	38	-
R231	Residential	NCA01	49	49	51	50	56	56	41	PN
R232	Residential	NCA01	49	48	51	51	56	57	42	PN
R233	Residential	NCA01	48	47	50	49	55	54	43	PN
R234	Residential	NCA01	47	47	49	49	55	55	43	PN
R235	Residential	NCA01	47	47	49	48	54	55	40	PN
R236	Residential	NCA01	46	45	48	47	54	53	40	PN
R237	Residential	NCA01	47	45	49	48	54	54	40	PN
R238	Residential	NCA01	46	45	51	50	53	56	42	PN
R239	Residential	NCA01	46	46	49	49	54	56	42	PN
R240	Residential	NCA01	47	47	49	48	53	54	47	PN
R241	Residential	NCA01	46	49	49	49	58	55	45	PN
R242	Residential	NCA01	54	53	57	57	62	63	48	PN
R243	Residential	NCA01	55	54	58	56	62	61	49	PN
R244	Residential	NCA01	52	50	54	53	59	60	46	PN
R245	Residential	NCA01	58	56	59	58	67	66	52	PN, V, SN, RO
R246	Residential	NCA01	48	48	51	50	55	56	42	PN
R247	Residential	NCA01	49	48	52	51	56	56	43	PN
R248	Residential	NCA01	49	47	51	50	56	56	42	PN
R249	Residential	NCA01	49	47	51	50	56	56	42	PN
R250	Residential	NCA01	49	47	50	50	56	56	42	PN
R251	Residential	NCA01	49	47	51	50	56	56	42	PN
R252	Residential	NCA01	48	47	51	50	56	57	42	PN
R253	Residential	NCA01	49	49	52	51	56	57	43	PN
R254	Residential	NCA01	48	48	51	49	55	56	42	PN
R255	Residential	NCA01	48	48	51	50	55	57	42	PN
R256	Residential	NCA01	48	48	51	51	56	57	43	PN
R257	Residential	NCA01	49	48	50	51	56	57	43	PN
R258	Residential	NCA01	49	48	51	51	56	57	43	PN
R259	Residential	NCA01	48	47	52	51	55	54	43	PN
R260	Residential	NCA01	48	47	49	49	55	53	42	PN
R261	Residential	NCA01	47	47	49	48	55	54	43	PN
R262	Residential	NCA01	47	46	49	49	54	54	43	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R263	Residential	NCA01	47	46	49	48	53	54	43	PN
R264	Residential	NCA01	46	46	48	47	53	53	42	-
R265	Residential	NCA01	46	46	48	47	53	53	42	-
R266	Residential	NCA01	46	46	48	47	54	53	42	PN
R267	Residential	NCA01	46	47	49	48	56	54	43	PN
R268	Residential	NCA01	47	46	47	46	54	52	41	PN
R269	Residential	NCA01	45	45	47	47	54	52	41	PN
R270	Residential	NCA01	44	43	47	46	52	52	40	-
R271	Residential	NCA01	45	44	48	47	53	53	41	-
R272	Residential	NCA01	44	42	46	45	51	51	37	-
R273	Residential	NCA01	43	42	46	45	50	51	38	-
R274	Residential	NCA01	44	42	46	45	51	51	38	-
R275	Residential	NCA01	43	42	46	45	51	51	38	-
R276	Residential	NCA01	45	44	48	47	52	52	40	-
R277	Residential	NCA01	44	44	46	46	52	51	40	-
R278	Residential	NCA01	45	44	48	47	53	53	40	-
R279	Residential	NCA01	46	45	48	48	53	54	40	PN
R280	Residential	NCA01	46	45	49	48	53	54	41	PN
R281	Residential	NCA01	46	45	48	48	53	52	41	-
R282	Residential	NCA01	46	45	48	47	53	52	41	-
R283	Residential	NCA01	46	45	48	47	54	53	41	PN
R284	Residential	NCA01	47	47	49	49	55	55	42	PN
R285	Residential	NCA01	46	45	48	48	53	53	41	-
R286	Residential	NCA01	46	45	48	48	53	54	41	PN
R287	Residential	NCA01	46	46	48	48	53	54	42	PN
R288	Residential	NCA01	47	46	48	48	54	54	41	PN
R289	Residential	NCA01	47	46	48	49	54	54	41	PN
R290	Residential	NCA01	47	46	50	50	54	54	41	PN
R291	Residential	NCA01	47	46	50	50	54	56	41	PN
R292	Residential	NCA01	47	47	50	50	54	56	41	PN
R293	Residential	NCA01	47	47	49	49	54	55	41	PN
R294	Residential	NCA01	47	47	49	49	54	55	41	PN
R295	Residential	NCA01	47	48	50	49	54	55	41	PN
R296	Residential	NCA01	47	47	50	49	54	55	41	PN
R297	Residential	NCA01	47	47	50	49	54	54	41	PN
R298	Residential	NCA01	47	47	50	49	54	55	40	PN
R299	Residential	NCA01	48	46	50	49	54	55	41	PN
R300	Residential	NCA01	47	46	49	49	54	55	41	PN
R301	Residential	NCA01	46	45	49	48	53	54	40	PN
R302	Residential	NCA01	47	46	49	48	54	55	40	PN
R303	Residential	NCA01	48	47	50	47	55	55	38	PN
R304	Residential	NCA01	47	47	50	49	54	55	41	PN
R305	Residential	NCA01	47	47	50	49	54	54	41	PN
R306	Residential	NCA01	48	47	50	49	54	55	41	PN
R307	Residential	NCA01	48	47	50	49	54	55	41	PN
R308	Residential	NCA01	48	47	51	49	55	56	41	PN
R309	Residential	NCA01	48	47	50	49	54	55	40	PN
R310	Residential	NCA01	47	46	49	48	54	54	40	PN
R311	Residential	NCA01	43	44	48	45	50	50	36	-
R312	Residential	NCA01	45	44	47	47	52	51	39	-
R313	Residential	NCA01	46	46	49	48	53	54	41	PN
R314	Residential	NCA01	46	45	48	47	53	53	40	-
R315	Residential	NCA01	46	45	48	48	53	53	40	-
R316	Residential	NCA01	42	42	46	45	50	51	37	-
R317	Residential	NCA01	45	44	48	47	52	53	39	-
R318	Residential	NCA01	45	44	47	46	52	53	38	-
R319	Residential	NCA01	45	45	49	48	53	54	40	PN
R320	Residential	NCA01	46	45	49	48	53	54	40	PN
R321	Residential	NCA01	35	34	38	37	42	43	29	-
R322	Residential	NCA01	33	32	36	35	40	42	28	-
R323	Residential	NCA01	38	37	42	41	46	47	32	-
R324	Residential	NCA01	45	44	48	47	52	53	39	-
R325	Residential	NCA01	45	44	48	47	52	53	39	-
R326	Residential	NCA01	46	45	49	48	53	54	40	PN
R327	Residential	NCA01	45	44	48	47	53	53	40	-
R328	Residential	NCA01	46	45	48	48	53	53	39	-
R329	Residential	NCA01	45	45	48	48	52	53	39	-
R330	Residential	NCA01	45	46	48	47	52	53	39	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected Non-residential: Exceeds noise management level										
R331	Residential	NCA01	46	46	49	48	53	53	40	-
R332	Residential	NCA01	46	46	49	48	53	53	40	-
R333	Residential	NCA01	46	46	48	47	53	54	39	PN
R334	Residential	NCA01	46	46	49	48	53	54	40	PN
R335	Residential	NCA01	46	46	49	48	53	54	40	PN
R336	Residential	NCA01	45	46	48	48	53	53	40	-
R337	Residential	NCA01	46	46	49	48	53	53	40	-
R338	Residential	NCA01	47	46	48	47	54	53	40	PN
R339	Residential	NCA01	47	46	49	47	54	53	40	PN
R340	Residential	NCA01	46	46	48	47	54	54	40	PN
R341	Residential	NCA01	46	46	48	48	53	54	40	PN
R342	Residential	NCA01	46	45	48	47	52	54	40	PN
R343	Residential	NCA01	46	45	48	48	53	54	40	PN
R344	Residential	NCA01	46	45	49	48	53	54	41	PN
R345	Residential	NCA01	45	44	48	47	52	53	39	-
R346	Residential	NCA01	43	42	46	45	50	51	37	-
R347	Residential	NCA01	36	35	37	37	43	44	29	-
R348	Residential	NCA01	32	32	34	32	39	39	26	-
R349	Residential	NCA01	38	37	39	40	45	44	33	-
R350	Residential	NCA01	39	38	42	41	47	45	34	-
R351	Residential	NCA01	29	28	32	31	37	37	24	-
R352	Residential	NCA01	31	30	35	33	39	39	26	-
R353	Residential	NCA01	32	31	34	33	40	40	24	-
R354	Residential	NCA01	41	39	43	42	48	46	35	-
R355	Residential	NCA01	40	40	42	41	48	47	36	-
R356	Residential	NCA01	38	37	40	38	45	45	31	-
R357	Residential	NCA01	65	69	70	72	71	74	58	PN, V, SN, RO, RP, DR
R358	Residential	NCA01	62	66	72	69	68	74	54	PN, V, SN, RO, RP, DR
R359	Residential	NCA01	59	64	71	67	65	73	52	PN, V, SN, RO
R360	Residential	NCA01	57	59	70	61	63	70	50	PN, V, SN, RO
R361	Residential	NCA01	55	58	68	60	61	67	48	PN, V, SN, RO
R362	Residential	NCA01	53	56	65	59	60	66	47	PN, V, SN, RO
R363	Residential	NCA01	50	50	62	51	57	64	40	PN, V, SN, RO
R364	Residential	NCA01	45	46	58	47	52	61	37	PN
R365	Residential	NCA01	45	45	52	47	51	55	37	PN
R366	Residential	NCA01	48	47	56	47	55	60	38	PN
R367	Residential	NCA01	46	45	53	40	52	56	34	PN
R368	Residential	NCA01	47	47	57	47	54	59	37	PN
R369	Residential	NCA01	46	47	56	49	54	56	41	PN
R370	Residential	NCA01	47	47	59	49	55	56	41	PN
R371	Residential	NCA01	50	51	56	50	55	51	39	PN
R372	Residential	NCA01	46	45	49	48	53	52	40	-
R373	Residential	NCA01	45	45	51	48	52	52	39	-
R374	Residential	NCA01	41	41	54	44	49	58	34	PN
R375	Residential	NCA01	45	45	55	48	52	57	39	PN
R376	Residential	NCA01	48	49	54	49	56	58	43	PN
R377	Residential	NCA01	46	46	56	50	52	58	39	PN
R378	Residential	NCA01	47	46	54	49	54	58	41	PN
R379	Residential	NCA01	50	49	56	52	57	60	43	PN
R380	Residential	NCA01	48	47	51	51	55	56	42	PN
R381	Residential	NCA01	48	48	53	48	55	58	41	PN
R382	Residential	NCA01	48	47	55	47	55	59	42	PN
R383	Residential	NCA01	46	46	54	45	53	58	38	PN
R384	Residential	NCA01	49	48	55	44	55	59	36	PN
R385	Residential	NCA01	47	48	55	49	53	58	40	PN
R386	Residential	NCA01	47	48	58	47	55	60	38	PN
R387	Residential	NCA01	48	49	57	50	55	60	41	PN
R388	Residential	NCA01	51	51	57	54	57	61	44	PN
R389	Residential	NCA01	48	47	56	52	54	60	41	PN
R390	Residential	NCA01	48	46	55	48	54	59	38	PN
R391	Residential	NCA01	72	73	70	**77**	**78**	73	65	PN, V, SN, RO, RP, DR
R392	Residential	NCA01	72	73	71	73	**79**	74	65	PN, V, SN, RO, RP, DR
R393	Residential	NCA01	71	72	71	71	**79**	73	66	PN, V, SN, RO, RP, DR
R394	Residential	NCA01	69	70	70	69	**77**	73	65	PN, V, SN, RO, RP, DR
R395	Residential	NCA01	64	65	67	67	74	71	63	PN, V, SN, RO, RP, DR
R396	Residential	NCA01	64	64	65	65	72	69	62	PN, V, SN, RO
R397	Residential	NCA01	60	60	62	62	69	67	60	PN, V, SN, RO
R398	Residential	NCA01	58	58	60	60	66	66	58	PN, V, SN, RO

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected **Non-residential:** Exceeds noise management level										
R399	Residential	NCA01	56	56	59	58	64	65	55	PN, V, SN, RO
R400	Residential	NCA01	46	46	50	50	54	57	45	PN
R401	Residential	NCA01	48	48	52	51	57	57	47	PN
R402	Residential	NCA01	42	44	50	46	49	52	38	-
R403	Residential	NCA01	47	47	52	48	54	55	47	PN
R404	Residential	NCA01	48	47	54	48	55	56	43	PN
R405	Residential	NCA01	47	49	54	52	55	60	43	PN
R406	Residential	NCA01	47	51	55	54	55	60	43	PN
R407	Residential	NCA01	41	43	49	46	47	50	33	-
R408	Residential	NCA01	46	50	53	52	54	56	41	PN
R409	Residential	NCA01	49	50	54	53	55	55	40	PN
R410	Residential	NCA01	51	50	54	53	56	54	41	PN
R411	Residential	NCA01	53	51	53	54	57	54	41	PN
R412	Residential	NCA01	54	55	58	58	60	63	37	PN
R413	Residential	NCA01	48	49	53	53	54	58	36	PN
R414	Residential	NCA01	48	53	57	54	60	53	48	PN
R415	Residential	NCA01	49	56	60	59	56	65	46	PN, V, SN, RO
R416	Residential	NCA01	50	59	61	62	56	66	38	PN, V, SN, RO
R417	Residential	NCA01	46	54	61	57	63	64	50	PN, V, SN, RO
R418	Residential	NCA01	51	53	62	56	50	65	44	PN, V, SN, RO
R419	Residential	NCA01	51	51	61	56	55	53	45	PN
R420	Residential	NCA01	65	65	65	66	72	70	58	PN, V, SN, RO
R421	Residential	NCA01	61	65	65	68	67	68	54	PN, V, SN, RO
R422	Residential	NCA01	58	60	61	65	62	63	51	PN, V, SN, RO
R423	Residential	NCA01	57	57	59	60	60	63	51	PN
R424	Residential	NCA01	56	56	58	60	60	57	49	PN
R425	Residential	NCA01	54	54	55	58	57	56	43	PN
R426	Residential	NCA01	54	58	61	61	61	66	43	PN, V, SN, RO
R427	Residential	NCA01	52	51	58	50	58	62	38	PN
R428	Residential	NCA01	49	51	53	53	56	53	40	PN
R429	Residential	NCA01	51	53	59	56	58	64	36	PN, V, SN, RO
R430	Residential	NCA01	51	52	58	56	57	63	45	PN
R431	Residential	NCA01	51	52	59	55	57	63	44	PN
R432	Residential	NCA01	45	44	54	42	52	58	31	PN
R433	Residential	NCA01	49	49	57	54	56	59	42	PN
R434	Residential	NCA01	51	51	57	53	56	58	43	PN
R435	Residential	NCA01	42	41	47	45	47	47	35	-
R436	Residential	NCA01	49	51	56	52	55	58	41	PN
R437	Residential	NCA01	49	49	55	51	56	57	42	PN
R438	Residential	NCA01	49	48	54	48	56	57	41	PN
R439	Residential	NCA01	49	48	54	48	56	58	41	PN
R440	Residential	NCA01	48	48	53	48	56	57	41	PN
R441	Residential	NCA01	48	46	51	48	53	55	40	PN
R442	Residential	NCA01	46	45	51	46	53	52	39	-
R443	Residential	NCA01	47	46	50	47	53	53	40	-
R444	Residential	NCA01	37	36	41	40	44	43	30	-
R445	Commercial	NCA01	38	40	46	40	45	51	31	-
R446	Residential	NCA01	45	45	49	48	52	54	39	PN
R447	Residential	NCA01	46	45	53	47	52	54	39	PN
R448	Residential	NCA01	47	47	53	48	53	58	40	PN
R449	Residential	NCA01	48	48	53	49	55	58	42	PN
R450	Residential	NCA01	49	48	54	49	55	58	41	PN
R451	Residential	NCA01	47	47	51	49	55	55	41	PN
R452	Residential	NCA01	47	46	51	49	54	56	40	PN
R453	Residential	NCA01	48	48	54	49	55	59	41	PN
R454	Residential	NCA01	49	48	55	49	55	59	40	PN
R455	Residential	NCA01	49	48	55	49	55	60	40	PN
R456	Residential	NCA01	48	47	54	48	55	58	42	PN
R457	Residential	NCA01	48	48	53	48	55	57	41	PN
R458	Residential	NCA01	48	49	54	49	55	58	42	PN
R459	Residential	NCA01	49	48	54	50	56	58	42	PN
R460	Residential	NCA01	48	48	53	50	55	58	42	PN
R461	Residential	NCA01	48	48	53	51	55	58	42	PN
R462	Residential	NCA01	46	45	50	48	52	54	40	PN
R463	Residential	NCA01	37	36	40	39	44	45	31	-
R464	Residential	NCA01	48	48	52	51	55	55	42	PN
R465	Residential	NCA01	42	41	44	44	49	49	37	-
R466	Residential	NCA01	49	48	53	51	55	58	42	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected Non-residential: Exceeds noise management level										
R467	Residential	NCA01	49	49	54	52	56	58	43	PN
R468	Residential	NCA01	47	47	51	50	54	55	42	PN
R469	Residential	NCA01	49	50	55	52	56	59	43	PN
R470	Residential	NCA01	50	50	55	53	57	60	44	PN
R471	Residential	NCA01	51	51	56	53	57	62	44	PN
R472	Residential	NCA01	51	51	57	54	58	61	45	PN
R473	Residential	NCA01	51	51	57	54	58	61	45	PN
R474	Residential	NCA01	51	52	57	55	58	61	46	PN
R475	Residential	NCA01	52	52	58	55	59	62	46	PN
R476	Residential	NCA01	52	52	58	55	59	63	46	PN
R477	Residential	NCA01	52	52	57	54	58	61	45	PN
R478	Residential	NCA01	50	50	56	53	57	60	44	PN
R479	Residential	NCA01	50	50	55	53	57	59	44	PN
R480	Residential	NCA01	50	50	53	53	57	57	44	PN
R481	Residential	NCA01	44	43	44	43	47	49	34	-
R482	Residential	NCA01	50	49	54	52	56	59	43	PN
R483	Residential	NCA01	49	49	54	51	56	58	43	PN
R484	Residential	NCA01	36	35	39	39	43	43	30	-
R485	Residential	NCA01	48	48	51	51	55	54	42	PN
R486	Residential	NCA01	48	48	53	51	55	57	42	PN
R487	Residential	NCA01	48	48	53	50	55	57	42	PN
R488	Residential	NCA01	48	47	52	50	54	56	41	PN
R489	Residential	NCA01	48	48	53	49	55	57	41	PN
R490	Residential	NCA01	46	47	51	47	53	55	39	PN
R491	Residential	NCA01	45	46	49	47	52	55	38	PN
R492	Residential	NCA01	42	41	44	44	49	49	36	-
R493	Residential	NCA01	43	43	47	45	50	52	37	-
R494	Residential	NCA01	44	43	47	47	51	52	38	-
R495	Residential	NCA01	44	43	47	46	51	51	39	-
R496	Residential	NCA01	45	44	47	47	52	52	39	-
R497	Residential	NCA01	46	47	48	48	54	54	40	PN
R498	Residential	NCA01	47	47	50	47	54	56	40	PN
R499	Residential	NCA01	38	37	41	40	44	45	32	-
R500	Residential	NCA01	47	46	51	49	54	56	41	PN
R501	Residential	NCA01	48	48	51	51	55	56	42	PN
R502	Residential	NCA01	46	46	47	47	54	52	41	PN
R503	Residential	NCA01	43	43	47	46	51	52	38	-
R504	Residential	NCA01	43	43	47	46	50	52	38	-
R505	Residential	NCA01	49	48	53	51	56	57	42	PN
R506	Residential	NCA01	49	48	53	51	56	58	42	PN
R507	Residential	NCA01	45	45	40	40	52	44	31	-
R508	Residential	NCA01	49	48	53	51	56	58	42	PN
R509	Residential	NCA01	50	49	54	52	57	59	43	PN
R510	Residential	NCA01	51	50	55	52	57	59	44	PN
R511	Residential	NCA01	47	47	51	49	54	56	40	PN
R512	Residential	NCA01	52	52	57	54	59	61	46	PN
R513	Residential	NCA01	52	54	57	57	58	62	41	PN
R514	Residential	NCA01	51	53	55	57	58	53	41	PN
R515	Residential	NCA01	49	50	51	54	54	53	41	PN
R516	Residential	NCA01	45	45	48	48	51	53	39	-
R517	Residential	NCA01	46	47	51	50	53	56	38	PN
R518	Residential	NCA01	46	46	51	50	53	56	36	PN
R519	Residential	NCA01	46	46	50	49	53	55	36	PN
R520	Residential	NCA01	46	46	50	49	53	55	36	PN
R521	Residential	NCA01	46	46	50	49	53	55	35	PN
R522	Residential	NCA01	46	46	50	48	52	54	36	PN
R523	Residential	NCA01	45	45	49	48	52	54	34	PN
R524	Residential	NCA01	45	46	50	49	52	54	38	PN
R525	Residential	NCA01	43	44	49	47	50	53	37	-
R526	Residential	NCA01	45	46	49	49	52	53	38	-
R527	Residential	NCA01	44	45	48	47	51	52	36	-
R528	Residential	NCA01	43	43	48	46	49	52	36	-
R529	Residential	NCA01	42	43	48	46	49	50	36	-
R530	Residential	NCA01	39	39	43	42	46	48	31	-
R531	Residential	NCA01	39	39	43	40	46	48	30	-
R532	Residential	NCA01	40	40	45	42	47	50	34	-
R533	Residential	NCA01	39	38	42	41	46	47	30	-
R534	Residential	NCA01	34	34	37	37	41	42	27	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R535	Residential	NCA01	40	39	46	42	47	50	34	-
R536	Residential	NCA01	45	45	49	48	52	50	38	-
R537	Residential	NCA01	45	46	49	49	52	53	38	-
R538	Residential	NCA01	42	42	47	46	49	51	33	-
R539	Residential	NCA01	46	47	50	50	53	55	38	PN
R540	Residential	NCA01	47	47	51	51	54	55	38	PN
R541	Residential	NCA01	50	50	52	53	56	57	37	PN
R542	Residential	NCA01	46	47	51	51	53	55	34	PN
R543	Residential	NCA01	43	43	51	46	50	53	38	-
R544	Residential	NCA01	42	41	44	44	48	49	41	-
R545	Residential	NCA01	46	48	49	51	51	51	41	-
R546	Residential	NCA01	48	46	56	49	54	57	41	PN
R547	Residential	NCA01	45	43	51	46	51	53	39	-
R548	Residential	NCA01	51	52	56	55	58	61	38	PN
R549	Residential	NCA01	54	53	57	56	62	64	51	PN, V, SN, RO
R550	Residential	NCA01	47	47	49	49	55	55	42	PN
R551	Residential	NCA01	47	47	49	49	55	54	42	PN
R552	Residential	NCA01	47	46	50	49	54	54	42	PN
R553	Residential	NCA01	46	43	46	46	53	52	41	-
R554	Residential	NCA01	45	43	49	48	54	51	40	PN
R555	Residential	NCA01	45	44	48	48	51	54	42	PN
R556	Residential	NCA01	43	42	48	44	50	51	37	-
R557	Residential	NCA01	45	44	48	47	52	52	40	-
R558	Residential	NCA01	40	39	45	42	47	50	35	-
R559	Residential	NCA01	42	47	52	50	49	56	34	PN
R560	Residential	NCA01	41	41	43	43	49	50	37	-
R561	Residential	NCA01	45	44	50	45	52	53	38	-
R562	Residential	NCA01	44	44	48	48	53	54	41	PN
R563	Residential	NCA01	43	42	47	46	51	52	38	-
R564	Residential	NCA01	46	45	49	48	53	51	40	-
R565	Residential	NCA01	46	45	49	46	53	54	39	PN
R566	Residential	NCA01	45	45	49	46	52	54	38	PN
R567	Residential	NCA01	46	44	49	48	53	54	39	PN
R568	Residential	NCA01	49	48	52	52	57	58	45	PN
R569	Residential	NCA01	48	47	52	51	56	57	44	PN
R570	Residential	NCA01	53	52	55	55	60	61	49	PN
R571	Residential	NCA01	48	49	53	52	58	58	46	PN
R572	Residential	NCA01	48	49	52	51	57	58	45	PN
R573	Residential	NCA01	49	48	52	51	56	57	44	PN
R574	Residential	NCA01	47	47	51	50	55	57	43	PN
R575	Residential	NCA01	40	39	43	42	48	47	35	-
R576	Residential	NCA01	39	38	43	42	47	48	33	-
R577	Residential	NCA01	42	42	45	44	50	50	37	-
R578	Residential	NCA01	45	44	48	47	52	53	40	-
R579	Residential	NCA01	42	42	46	44	43	51	36	-
R580	Residential	NCA01	41	42	46	44	48	51	33	-
R581	Residential	NCA01	43	43	48	44	50	50	32	-
R582	Residential	NCA01	45	44	48	46	52	50	32	-
R583	Residential	NCA01	45	45	49	47	52	54	33	PN
R584	Residential	NCA01	42	41	48	43	49	51	32	-
R585	Residential	NCA01	41	41	49	42	48	53	35	-
R586	Residential	NCA01	40	41	49	43	47	54	34	PN
R587	Residential	NCA01	44	41	49	44	48	54	33	PN
R588	Residential	NCA01	41	44	48	47	52	52	37	-
R589	Residential	NCA01	42	44	46	46	52	51	39	-
R590	Residential	NCA01	41	41	44	44	48	48	37	-
R591	Residential	NCA01	38	37	41	40	46	47	34	-
R592	Residential	NCA01	39	38	42	41	46	46	34	-
R593	Residential	NCA01	38	38	42	41	45	47	34	-
R594	Residential	NCA01	39	38	43	41	46	48	32	-
R595	Residential	NCA01	39	39	45	42	46	49	31	-
R596	Residential	NCA01	41	41	45	44	48	48	28	-
R597	Residential	NCA01	42	41	44	44	49	47	30	-
R598	Residential	NCA01	40	40	43	43	47	44	31	-
R599	Residential	NCA01	38	38	42	41	45	45	30	-
R600	Residential	NCA01	39	38	42	41	46	45	29	-
R601	Residential	NCA01	43	42	47	45	50	54	34	PN
R602	Residential	NCA01	36	38	44	39	43	50	32	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected Non-residential: Exceeds noise management level										
R603	Residential	NCA01	36	37	41	39	43	48	33	-
R604	Residential	NCA01	36	38	42	41	43	48	30	-
R605	Residential	NCA01	38	39	43	41	45	48	29	-
R606	Residential	NCA01	40	39	43	41	47	48	30	-
R607	Residential	NCA01	36	35	42	38	43	46	29	-
R608	Residential	NCA01	38	37	44	39	45	47	28	-
R609	Residential	NCA01	38	37	44	40	46	47	28	-
R610	Residential	NCA01	35	34	41	37	42	44	28	-
R611	Residential	NCA01	35	34	41	37	42	46	29	-
R612	Residential	NCA01	34	34	41	37	41	46	28	-
R613	Residential	NCA01	34	34	43	37	41	47	28	-
R614	Residential	NCA01	35	39	43	42	42	48	28	-
R615	Residential	NCA01	37	40	43	42	47	48	32	-
R616	Residential	NCA01	40	39	43	42	47	47	34	-
R617	Residential	NCA01	38	37	45	40	45	50	28	-
R618	Residential	NCA01	39	39	44	42	47	50	34	-
R619	Residential	NCA01	39	40	44	41	46	48	31	-
R620	Residential	NCA01	41	40	44	43	48	48	33	-
R621	Residential	NCA01	39	39	44	42	46	49	35	-
R622	Residential	NCA01	41	40	44	43	48	49	35	-
R623	Residential	NCA01	45	45	48	47	53	53	40	-
R624	Residential	NCA01	36	35	42	41	49	46	33	-
R625	Residential	NCA01	36	35	41	38	43	48	30	-
R626	Residential	NCA01	36	36	45	39	43	49	30	-
R627	Residential	NCA01	44	44	48	44	52	52	38	-
R628	Residential	NCA01	44	43	45	45	51	50	38	-
R629	Residential	NCA01	41	39	45	42	48	47	35	-
R630	Residential	NCA01	37	37	43	40	45	46	33	-
R631	Residential	NCA01	36	37	44	40	44	50	32	-
R632	Residential	NCA01	38	37	44	40	45	50	33	-
R633	Residential	NCA01	33	35	37	35	40	41	28	-
R634	Residential	NCA01	31	32	36	34	38	42	25	-
R635	Residential	NCA01	27	26	30	29	35	35	22	-
R636	Residential	NCA01	29	30	34	33	37	40	24	-
R637	Residential	NCA01	28	31	36	34	35	43	25	-
R638	Residential	NCA01	27	27	33	30	35	37	23	-
R639	Residential	NCA01	29	34	39	37	36	47	25	-
R640	Residential	NCA01	36	36	41	38	43	47	32	-
R641	Residential	NCA01	35	35	44	37	42	47	31	-
R642	Residential	NCA01	37	38	43	40	44	49	30	-
R643	Residential	NCA01	37	38	43	41	44	48	31	-
R644	Residential	NCA01	34	34	39	36	40	43	27	-
R645	Residential	NCA01	33	33	37	35	40	42	26	-
R646	Residential	NCA01	33	32	36	35	39	41	26	-
R647	Residential	NCA01	34	33	41	37	42	44	25	-
R648	Residential	NCA01	36	34	40	37	42	44	25	-
R649	Residential	NCA01	35	34	40	37	42	44	26	-
R650	Residential	NCA01	34	33	39	36	40	44	26	-
R651	Residential	NCA01	34	34	41	37	41	46	27	-
R652	Residential	NCA01	35	35	39	38	42	44	26	-
R653	Residential	NCA01	29	29	36	32	36	39	23	-
R654	Residential	NCA01	36	36	40	40	42	45	28	-
R655	Residential	NCA01	35	35	40	38	45	43	30	-
R656	Residential	NCA01	32	34	39	37	39	43	25	-
R657	Residential	NCA01	34	35	40	37	41	45	25	-
R658	Residential	NCA01	31	30	36	33	38	41	24	-
R659	Residential	NCA01	32	31	37	34	39	42	25	-
R660	Residential	NCA01	36	35	40	36	43	47	24	-
R661	Residential	NCA01	28	27	37	30	35	36	21	-
R662	Residential	NCA01	34	33	38	35	41	42	25	-
R663	Residential	NCA01	33	34	38	35	40	43	24	-
R664	Residential	NCA01	33	32	37	34	39	43	25	-
R665	Residential	NCA01	35	35	39	36	41	44	25	-
R666	Residential	NCA01	33	33	39	35	40	42	26	-
R667	Residential	NCA01	30	29	36	32	37	39	24	-
R668	Residential	NCA01	29	29	34	32	36	39	24	-
R669	Residential	NCA01	24	23	27	26	31	32	18	-
R670	Residential	NCA01	28	29	34	32	35	39	22	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected Non-residential: Exceeds noise management level										
R671	Residential	NCA01	25	24	28	28	32	34	20	-
R672	Residential	NCA01	25	24	28	28	32	34	20	-
R673	Residential	NCA01	25	25	29	28	33	34	20	-
R674	Residential	NCA01	26	25	29	28	33	34	21	-
R675	Residential	NCA01	26	25	29	28	33	34	20	-
R676	Residential	NCA01	25	24	29	27	32	33	19	-
R677	Residential	NCA01	25	24	28	27	32	33	20	-
R678	Residential	NCA01	26	25	28	27	33	33	20	-
R679	Residential	NCA01	25	24	28	27	32	33	19	-
R680	Residential	NCA01	25	24	28	27	32	33	19	-
R681	Residential	NCA01	25	24	30	28	32	33	19	-
R682	Residential	NCA01	28	27	31	30	35	35	22	-
R683	Residential	NCA01	31	30	34	34	38	39	25	-
R684	Residential	NCA01	30	29	33	32	37	38	24	-
R685	Residential	NCA01	42	41	41	40	45	46	32	-
R686	Residential	NCA01	37	36	40	39	44	46	31	-
R687	Residential	NCA01	42	41	45	45	49	52	36	-
R688	Residential	NCA01	42	41	45	44	49	51	37	-
R689	Residential	NCA01	48	47	52	50	55	57	41	PN
R690	Residential	NCA01	45	44	49	47	52	54	37	PN
R691	Residential	NCA01	43	43	47	45	50	52	37	-
R692	Residential	NCA01	43	42	45	43	48	50	35	-
R693	Residential	NCA01	43	42	47	45	50	52	36	-
R694	Residential	NCA01	39	39	42	41	46	47	32	-
R695	Residential	NCA01	38	37	40	39	44	43	31	-
R696	Residential	NCA01	37	36	40	39	44	45	31	-
R697	Residential	NCA01	40	39	41	40	47	46	32	-
R698	Residential	NCA01	39	39	43	42	47	47	33	-
R699	Residential	NCA01	39	38	42	41	46	46	33	-
R700	Residential	NCA01	39	39	42	42	46	47	34	-
R701	Residential	NCA01	39	38	41	40	45	46	32	-
R702	Residential	NCA01	38	38	41	40	45	45	32	-
R703	Residential	NCA01	39	38	43	41	46	48	33	-
R704	Residential	NCA01	39	38	41	41	46	46	33	-
R705	Residential	NCA01	41	41	43	44	47	48	34	-
R706	Residential	NCA01	42	42	46	44	50	51	36	-
R707	Residential	NCA01	42	42	46	45	50	51	36	-
R708	Residential	NCA01	42	41	46	44	49	51	36	-
R709	Residential	NCA01	42	42	46	44	49	51	36	-
R710	Residential	NCA01	38	38	41	40	45	45	32	-
R711	Residential	NCA01	40	39	43	42	47	48	34	-
R712	Residential	NCA01	41	40	44	43	48	49	35	-
R713	Residential	NCA01	39	38	41	41	46	46	33	-
R714	Residential	NCA01	41	41	45	43	48	50	35	-
R715	Residential	NCA01	43	43	41	41	50	49	32	-
R716	Residential	NCA01	47	46	51	48	54	56	40	PN
R717	Residential	NCA01	47	46	51	48	53	55	40	PN
R718	Residential	NCA01	48	47	52	49	55	56	41	PN
R719	Residential	NCA01	46	45	50	48	53	55	39	PN
R720	Residential	NCA01	46	45	49	48	53	54	39	PN
R721	Residential	NCA01	46	45	49	47	53	54	39	PN
R722	Residential	NCA01	46	45	50	48	53	55	40	PN
R723	Residential	NCA01	45	44	48	46	52	53	38	-
R724	Residential	NCA01	45	44	48	46	51	53	38	-
R725	Residential	NCA01	44	43	48	46	51	52	37	-
R726	Residential	NCA01	37	36	40	39	44	45	32	-
R727	Residential	NCA01	39	39	41	40	46	47	31	-
R728	Residential	NCA01	40	40	44	43	47	49	34	-
R729	Residential	NCA01	41	40	44	43	47	49	34	-
R730	Residential	NCA01	41	41	45	43	48	50	35	-
R731	Residential	NCA01	41	41	45	43	48	50	34	-
R732	Residential	NCA01	41	40	44	43	47	49	34	-
R733	Residential	NCA01	40	40	44	41	47	49	33	-
R734	Residential	NCA01	42	43	45	45	49	50	37	-
R735	Residential	NCA01	43	43	46	44	50	51	36	-
R736	Residential	NCA01	43	42	47	45	50	51	37	-
R737	Residential	NCA01	44	44	47	46	51	51	38	-
R738	Residential	NCA01	44	43	46	46	51	51	38	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive **Bold** Highly noise affected Non-residential: Exceeds noise management level										
R739	Residential	NCA01	42	42	46	44	49	50	36	-
R740	Residential	NCA01	43	42	46	46	50	51	37	-
R741	Residential	NCA01	46	45	50	47	52	54	39	PN
R742	Residential	NCA01	45	45	49	46	52	54	36	PN
R743	Residential	NCA01	44	43	47	46	51	51	38	-
R744	Residential	NCA01	44	43	47	46	50	51	37	-
R745	Residential	NCA01	43	43	46	45	50	51	37	-
R746	Residential	NCA01	43	42	46	45	50	50	37	-
R747	Residential	NCA01	43	43	48	45	50	52	37	-
R748	Residential	NCA01	44	43	48	46	51	52	38	-
R749	Residential	NCA01	47	46	51	46	53	56	38	PN
R750	Residential	NCA01	44	44	48	46	51	51	39	-
R751	Residential	NCA01	34	33	36	35	41	40	30	-
R752	Residential	NCA01	45	44	47	45	52	50	39	-
R753	Residential	NCA01	45	44	49	45	52	54	39	PN
R754	Residential	NCA01	43	43	49	44	50	54	36	PN
R755	Residential	NCA01	43	42	47	44	50	51	36	-
R756	Residential	NCA01	36	36	39	38	43	44	30	-
R757	Residential	NCA01	39	39	41	41	46	46	33	-
R758	Residential	NCA01	41	41	45	43	48	50	35	-
R759	Residential	NCA01	43	42	46	44	50	51	36	-
R760	Residential	NCA01	47	47	50	47	54	54	41	PN
R761	Residential	NCA01	44	43	47	46	51	51	38	-
R762	Residential	NCA01	35	34	39	36	42	44	28	-
R763	Residential	NCA01	43	42	45	45	50	50	37	-
R764	Residential	NCA01	38	37	42	34	45	47	27	-
R765	Residential	NCA01	34	33	37	36	41	41	32	-
R766	Residential	NCA01	40	39	42	42	47	47	35	-
R767	Residential	NCA01	42	41	44	43	48	48	35	-
R768	Residential	NCA01	43	42	46	44	49	50	37	-
R769	Residential	NCA01	43	42	46	45	50	51	37	-
R770	Residential	NCA01	44	43	47	45	51	52	38	-
R771	Residential	NCA01	42	41	46	42	49	51	33	-
R772	Residential	NCA01	37	36	41	39	44	45	31	-
R773	Residential	NCA01	45	44	45	45	52	50	39	-
R774	Residential	NCA01	43	42	45	44	50	50	37	-
R775	Residential	NCA01	43	42	46	45	50	51	37	-
R776	Residential	NCA01	42	41	44	44	49	49	35	-
R777	Residential	NCA01	41	41	43	43	48	48	35	-
R778	Residential	NCA01	42	42	45	44	49	49	36	-
R779	Residential	NCA01	44	44	50	47	51	54	38	PN
R780	Residential	NCA01	47	46	51	45	54	57	37	PN
R781	Residential	NCA01	45	44	49	47	52	54	39	PN
R782	Residential	NCA01	47	46	49	48	54	54	41	PN
R783	Residential	NCA01	47	45	51	48	54	54	39	PN
R784	Residential	NCA01	45	46	52	47	52	57	39	PN
R785	Residential	NCA01	47	46	52	47	54	57	39	PN
R786	Residential	NCA01	46	44	48	47	51	53	39	-
R787	Residential	NCA01	42	42	46	43	49	51	36	-
R788	Residential	NCA01	41	41	46	44	48	50	35	-
R789	Residential	NCA01	38	37	40	40	45	45	32	-
R790	Residential	NCA01	41	40	46	39	47	50	28	-
R791	Residential	NCA01	41	40	46	40	47	50	30	-
R792	Residential	NCA01	42	42	47	42	48	51	35	-
R793	Commercial	NCA01	42	42	47	43	49	51	34	-
R794	Commercial	NCA01	42	41	44	44	48	49	35	-
R795	Commercial	NCA01	42	41	45	44	49	50	36	-
R796	Commercial	NCA01	45	44	47	46	51	51	38	-
R797	Commercial	NCA01	36	36	38	38	44	44	32	-
R798	Residential	NCA01	43	42	45	44	49	49	36	-
R799	Residential	NCA01	43	42	45	44	49	49	37	-
R800	Residential	NCA01	38	38	41	41	45	46	32	-
R801	Residential	NCA01	43	42	45	45	49	50	37	-
R802	Residential	NCA01	45	44	46	46	51	51	38	-
R803	Residential	NCA01	42	43	47	46	49	51	35	-
R804	Residential	NCA01	42	42	46	45	49	50	36	-
R805	Residential	NCA01	46	45	48	48	51	52	40	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R806	Place of worship	NCA01	45	44	48	47	52	52	39	-
R807	Residential	NCA01	44	43	47	46	51	52	38	-
R808	Residential	NCA01	44	43	47	46	51	52	38	-
R809	Residential	NCA01	44	43	46	46	51	51	38	-
R810	Residential	NCA01	44	44	47	47	50	52	38	-
R811	Residential	NCA01	41	42	46	44	48	49	34	-
R812	Residential	NCA01	42	42	46	45	49	50	35	-
R813	Residential	NCA01	41	41	45	43	48	49	35	-
R814	Residential	NCA01	41	40	45	43	48	50	34	-
R815	Residential	NCA01	42	42	46	46	49	51	36	-
R816	Residential	NCA01	39	39	43	43	46	48	33	-
R817	Residential	NCA01	39	39	42	43	46	47	33	-
R818	Residential	NCA01	38	37	42	33	45	46	29	-
R819	Residential	NCA01	41	41	44	44	48	48	34	-
R820	Residential	NCA01	41	41	44	44	49	47	35	-
R821	Residential	NCA01	41	41	44	44	48	47	35	-
R822	Residential	NCA01	41	41	45	44	47	49	35	-
R823	Residential	NCA01	40	40	45	43	47	49	33	-
R824	Residential	NCA01	42	42	45	45	49	50	35	-
R825	Residential	NCA01	41	41	45	44	48	49	35	-
R826	Residential	NCA01	41	40	45	43	48	49	33	-
R827	Residential	NCA01	41	40	45	42	48	50	31	-
R828	Residential	NCA01	40	39	43	42	47	48	31	-
R829	Residential	NCA01	39	40	44	42	46	48	32	-
R830	Residential	NCA01	41	41	45	43	48	48	34	-
R831	Residential	NCA01	43	42	47	44	50	52	34	-
R832	Residential	NCA01	38	38	41	41	45	44	30	-
R833	Residential	NCA01	39	40	44	43	47	48	29	-
R834	Residential	NCA01	40	39	43	42	47	48	29	-
R835	Residential	NCA01	37	36	40	39	44	45	29	-
R836	Residential	NCA01	39	38	42	41	46	44	27	-
R837	Residential	NCA01	40	40	43	43	47	47	31	-
R838	Residential	NCA01	37	37	40	40	44	45	28	-
R839	Residential	NCA01	38	37	41	40	45	46	29	-
R840	Residential	NCA01	37	36	43	39	44	48	28	-
R841	Residential	NCA01	41	40	44	43	48	49	33	-
R842	Residential	NCA01	41	40	45	43	48	49	32	-
R843	Residential	NCA01	40	39	44	42	47	50	30	-
R844	Residential	NCA01	40	40	44	43	47	48	32	-
R845	Residential	NCA01	35	35	39	38	42	44	30	-
R846	Residential	NCA01	37	36	40	39	44	45	29	-
R847	Residential	NCA01	36	35	40	38	43	45	28	-
R848	Residential	NCA01	33	32	36	35	41	41	28	-

Predicted construction noise levels: OOHW Period 1 (evening)

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	PN, V, SN, RO, RP, DR
R002	Residential	NCA01	72	74	66	65	**78**	71	55	PN, V, SN, RO, RP, DR
R003	Residential	NCA01	66	70	69	61	69	**79**	52	PN, V, SN, RO, RP, DR
R004	Residential	NCA01	53	54	64	54	60	70	43	PN, V, SN, RO, RP, DR
R005	Educational institute	NCA01	62	62	64	58	67	73	50	-
R006	Educational institute	NCA01	58	58	61	56	64	69	47	-
R007	Residential	NCA01	54	54	60	55	61	66	46	PN, V, SN, RO
R008	Residential	NCA01	54	54	56	53	61	63	43	PN, V, SN, RO
R009	Residential	NCA01	46	47	52	49	53	58	40	PN
R010	Residential	NCA01	46	45	49	46	53	58	38	PN
R011	Residential	NCA01	45	44	50	47	52	55	39	PN
R012	Residential	NCA01	45	45	51	48	52	54	40	PN
R013	Residential	NCA01	50	50	53	50	57	60	41	PN, V, SN, RO
R014	Residential	NCA01	45	48	55	51	51	56	38	PN
R015	Residential	NCA01	44	44	50	47	50	55	38	PN
R016	Residential	NCA01	48	47	54	50	55	58	41	PN
R017	Residential	NCA01	49	48	54	50	56	60	42	PN, V, SN, RO
R018	Residential	NCA01	48	47	53	50	54	58	42	PN
R019	Residential	NCA01	50	49	54	51	56	59	42	PN
R020	Residential	NCA01	51	50	54	51	58	61	42	PN, V, SN, RO
R021	Residential	NCA01	54	53	54	51	59	60	42	PN, V, SN, RO
R022	Residential	NCA01	73	72	69	69	**78**	74	58	PN, V, SN, RO, RP, DR
R023	Residential	NCA01	70	69	69	69	**77**	**75**	58	PN, V, SN, RO, RP, DR
R024	Residential	NCA01	69	67	69	69	**76**	**75**	58	PN, V, SN, RO, RP, DR
R025	Residential	NCA01	66	64	68	67	73	73	56	PN, V, SN, RO, RP, DR
R026	Residential	NCA01	61	60	64	63	68	70	54	PN, V, SN, RO, RP, DR
R027	Residential	NCA01	58	57	61	60	65	67	52	PN, V, SN, RO
R028	Residential	NCA01	56	55	58	57	63	64	49	PN, V, SN, RO
R029	Residential	NCA01	54	53	55	54	61	60	47	PN, V, SN, RO
R030	Residential	NCA01	52	52	53	52	58	58	44	PN
R031	Residential	NCA01	50	49	52	51	56	57	45	PN
R032	Residential	NCA01	49	49	51	50	55	56	42	PN
R033	Residential	NCA01	50	49	52	51	55	57	43	PN
R034	Residential	NCA01	45	45	48	47	54	54	42	PN
R035	Residential	NCA01	49	47	50	49	55	55	43	PN
R036	Residential	NCA01	50	49	53	52	58	58	45	PN
R037	Residential	NCA01	50	50	53	52	58	58	46	PN
R038	Residential	NCA01	51	50	54	53	58	58	46	PN
R039	Residential	NCA01	50	50	53	53	58	59	46	PN
R040	Residential	NCA01	50	49	52	52	57	57	45	PN
R041	Residential	NCA01	45	44	48	47	52	53	40	PN
R042	Residential	NCA01	49	48	52	51	56	57	44	PN
R043	Residential	NCA01	49	49	53	52	57	58	44	PN
R044	Residential	NCA01	48	48	51	51	56	55	43	PN
R045	Residential	NCA01	48	47	51	50	55	56	43	PN
R046	Residential	NCA01	47	46	51	50	54	56	42	PN
R047	Residential	NCA01	46	45	49	48	53	54	39	PN
R048	Residential	NCA01	45	44	47	47	52	53	38	PN
R049	Residential	NCA01	44	43	46	45	51	51	37	PN
R050	Residential	NCA01	40	39	42	41	47	48	35	-
R051	Residential	NCA01	41	40	43	42	48	49	36	-
R052	Residential	NCA01	38	38	42	41	46	47	34	-
R053	Residential	NCA01	38	37	41	40	46	46	33	-
R054	Residential	NCA01	37	36	40	39	45	45	32	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R055	Residential	NCA01	28	27	31	30	35	37	23	-
R056	Residential	NCA01	29	28	32	31	37	37	24	-
R057	Residential	NCA01	33	32	36	35	41	41	29	-
R058	Residential	NCA01	34	33	37	36	41	43	29	-
R059	Residential	NCA01	33	32	36	35	40	42	28	-
R060	Residential	NCA01	32	31	35	34	39	40	27	-
R061	Residential	NCA01	31	31	34	34	39	40	27	-
R062	Residential	NCA01	31	30	34	33	38	39	27	-
R063	Residential	NCA01	33	32	36	35	40	41	29	-
R064	Residential	NCA01	27	27	30	29	34	36	22	-
R065	Residential	NCA01	28	27	31	30	35	37	23	-
R066	Residential	NCA01	25	24	28	27	32	33	19	-
R067	Residential	NCA01	24	23	27	26	31	32	18	-
R068	Residential	NCA01	24	24	28	27	32	33	19	-
R069	Residential	NCA01	52	51	56	54	59	61	45	PN, V, SN, RO
R070	Residential	NCA01	51	51	55	53	58	60	45	PN, V, SN, RO
R071	Residential	NCA01	52	51	54	53	59	60	44	PN, V, SN, RO
R072	Residential	NCA01	51	50	54	52	57	60	44	PN, V, SN, RO
R073	Residential	NCA01	48	47	53	49	55	59	42	PN
R074	Residential	NCA01	47	47	51	49	54	56	40	PN
R075	Residential	NCA01	47	46	52	49	53	56	40	PN
R076	Residential	NCA01	47	46	49	48	54	55	40	PN
R077	Residential	NCA01	38	37	41	39	45	47	31	-
R078	Residential	NCA01	37	37	42	40	44	46	31	-
R079	Residential	NCA01	39	39	44	42	47	48	34	-
R080	Residential	NCA01	39	38	43	41	46	47	32	-
R081	Residential	NCA01	44	43	48	46	52	54	39	PN
R082	Residential	NCA01	47	47	46	48	54	54	37	PN
R083	Residential	NCA01	47	46	48	48	54	53	31	PN
R084	Commercial	NCA01	27	27	31	29	34	37	21	-
R085	Residential	NCA01	41	40	43	42	48	48	33	-
R086	Residential	NCA01	44	43	48	45	51	52	37	PN
R087	Residential	NCA01	66	66	68	60	72	**78**	51	PN, V, SN, RO, RP, DR
R088	Residential	NCA01	38	37	42	40	45	46	31	-
R089	Residential	NCA01	38	38	42	40	45	47	32	-
R090	Residential	NCA01	43	42	46	45	50	52	36	PN
R091	Commercial	NCA01	43	43	47	45	50	52	37	-
R092	Residential	NCA01	45	44	48	46	52	52	37	PN
R093	Residential	NCA01	44	44	48	46	51	53	38	PN
R094	Residential	NCA01	46	45	49	48	53	54	40	PN
R095	Residential	NCA01	45	45	49	47	52	54	39	PN
R096	Residential	NCA01	44	44	48	47	51	53	38	PN
R097	Residential	NCA01	44	44	48	47	51	53	38	PN
R098	Commercial	NCA01	33	35	40	38	40	41	26	-
R099	Residential	NCA01	37	36	40	39	44	46	31	-
R100	Residential	NCA01	40	39	43	41	47	48	33	-
R101	Residential	NCA01	41	40	44	43	48	47	35	-
R102	Active recreation	NCA01	37	36	41	39	44	44	31	-
R103	Residential	NCA01	32	31	34	33	39	40	25	-
R104	Residential	NCA01	40	40	44	43	47	49	34	-
R105	Residential	NCA01	42	41	45	44	49	50	36	PN
R106	Residential	NCA01	42	41	46	43	49	50	36	PN
R107	Residential	NCA01	40	38	46	45	46	51	37	PN
R108	Residential	NCA01	42	42	46	45	49	52	37	PN
R109	Residential	NCA01	44	44	46	48	51	54	40	PN
R110	Residential	NCA01	45	44	48	49	52	55	41	PN
R111	Residential	NCA01	42	42	47	44	49	50	35	PN
R112	Residential	NCA01	45	44	47	48	52	54	40	PN
R113	Residential	NCA01	45	44	47	47	52	55	39	PN
R114	Residential	NCA01	43	42	46	46	50	52	37	PN
R115	Residential	NCA01	40	39	47	42	47	51	34	PN
R116	Residential	NCA01	46	45	49	47	53	53	39	PN
R117	Residential	NCA01	45	45	50	47	52	54	38	PN
R118	Residential	NCA01	46	46	50	47	53	55	39	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R119	Educational institute	NCA01	46	44	51	47	53	53	40	-
R120	Educational institute	NCA01	45	45	51	47	53	54	39	-
R121	Educational institute	NCA01	48	47	48	50	56	56	41	-
R122	Educational institute	NCA01	49	47	52	53	56	58	45	-
R123	Educational institute	NCA01	40	40	44	42	47	51	34	-
R124	Residential	NCA01	46	44	49	47	52	52	39	PN
R125	Residential	NCA01	42	41	45	43	49	50	35	PN
R126	Residential	NCA01	38	37	41	39	45	46	31	-
R127	Residential	NCA01	34	33	44	36	41	43	28	-
R128	Residential	NCA01	46	45	46	45	52	50	39	PN
R129	Residential	NCA01	44	42	46	46	51	49	37	PN
R130	Residential	NCA01	45	44	47	46	52	52	38	PN
R131	Residential	NCA01	45	44	49	47	52	54	38	PN
R132	Residential	NCA01	50	49	54	51	57	57	41	PN
R133	Residential	NCA01	48	45	52	49	55	55	41	PN
R134	Residential	NCA01	50	49	54	52	57	60	43	PN, V, SN, RO
R135	Residential	NCA01	44	45	52	52	51	58	44	PN
R136	Residential	NCA01	51	50	53	52	58	60	44	PN, V, SN, RO
R137	Residential	NCA01	45	43	47	46	52	50	38	PN
R138	Residential	NCA01	47	46	49	46	53	55	37	PN
R139	Residential	NCA01	43	43	54	43	50	52	35	PN
R140	Residential	NCA01	45	44	46	46	52	52	38	PN
R141	Residential	NCA01	41	40	46	41	48	47	33	-
R142	Residential	NCA01	45	45	51	47	52	57	38	PN
R143	Residential	NCA01	47	46	55	46	54	60	39	PN, V, SN, RO
R144	Residential	NCA01	53	53	54	48	60	61	37	PN, V, SN, RO
R145	Residential	NCA01	54	54	55	53	61	61	41	PN, V, SN, RO
R146	Residential	NCA01	56	55	56	54	62	56	46	PN, V, SN, RO
R147	Residential	NCA01	58	58	58	56	64	61	47	PN, V, SN, RO
R148	Residential	NCA01	56	54	59	57	63	65	48	PN, V, SN, RO
R149	Residential	NCA01	57	57	57	55	66	61	48	PN, V, SN, RO
R150	Residential	NCA01	57	56	54	54	63	61	45	PN, V, SN, RO
R151	Residential	NCA01	56	55	56	55	62	61	46	PN, V, SN, RO
R152	Residential	NCA01	54	53	56	55	61	61	46	PN, V, SN, RO
R153	Residential	NCA01	55	54	55	53	61	61	45	PN, V, SN, RO
R154	Residential	NCA01	53	50	55	55	60	61	46	PN, V, SN, RO
R155	Residential	NCA01	65	64	63	63	72	69	54	PN, V, SN, RO, RP, DR
R156	Residential	NCA01	58	57	58	57	64	64	49	PN, V, SN, RO
R157	Residential	NCA01	56	57	58	57	63	64	48	PN, V, SN, RO
R158	Residential	NCA01	52	51	54	55	59	58	45	PN
R159	Residential	NCA01	48	48	49	48	52	54	41	PN
R160	Residential	NCA01	48	49	51	51	56	58	44	PN
R161	Residential	NCA01	47	46	51	51	53	54	40	PN
R162	Residential	NCA01	43	44	44	46	53	54	40	PN
R163	Residential	NCA01	42	42	45	44	50	50	40	PN
R164	Residential	NCA01	41	40	44	43	47	47	37	-
R165	Residential	NCA01	39	39	42	42	52	53	39	PN
R166	Residential	NCA01	38	38	41	41	46	48	36	-
R167	Residential	NCA01	43	42	45	45	51	51	39	PN
R168	Residential	NCA01	39	38	41	41	46	47	35	-
R169	Residential	NCA01	44	44	48	48	52	54	40	PN
R170	Residential	NCA01	44	43	47	46	52	51	39	PN
R171	Residential	NCA01	45	44	48	47	52	54	40	PN
R172	Residential	NCA01	50	49	50	49	57	54	42	PN
R173	Residential	NCA01	49	48	50	49	56	54	42	PN
R174	Residential	NCA01	47	46	49	47	54	53	38	PN
R175	Residential	NCA01	49	48	51	50	56	55	40	PN
R176	Residential	NCA01	48	46	50	48	55	56	42	PN
R177	Residential	NCA01	51	50	51	49	58	56	41	PN
R178	Residential	NCA01	49	48	51	49	56	55	42	PN
R179	Residential	NCA01	47	46	49	48	54	55	40	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R180	Residential	NCA01	36	35	40	37	43	45	29	-
R181	Residential	NCA01	46	45	48	47	51	53	36	PN
R182	Residential	NCA01	43	42	45	44	50	50	37	PN
R183	Residential	NCA01	41	40	44	43	48	49	35	-
R184	Residential	NCA01	39	39	43	41	47	48	35	-
R185	Residential	NCA01	43	42	45	45	50	51	36	PN
R186	Residential	NCA01	41	40	46	45	48	51	36	PN
R187	Residential	NCA01	44	42	46	45	51	51	35	PN
R188	Residential	NCA01	33	32	34	34	39	40	27	-
R189	Residential	NCA01	42	41	43	41	49	49	34	-
R190	Residential	NCA01	44	43	45	45	51	51	38	PN
R191	Residential	NCA01	36	35	38	37	43	43	31	-
R192	Residential	NCA01	37	37	40	39	45	45	32	-
R193	Residential	NCA01	34	33	37	36	41	42	27	-
R194	Residential	NCA01	35	33	36	35	41	41	27	-
R195	Residential	NCA01	32	31	34	33	39	39	27	-
R196	Residential	NCA01	32	31	34	33	39	40	27	-
R197	Residential	NCA01	31	31	34	33	38	39	26	-
R198	Residential	NCA01	32	31	34	33	38	39	25	-
R199	Residential	NCA01	29	28	32	31	36	36	24	-
R200	Residential	NCA01	30	29	33	32	37	38	25	-
R201	Residential	NCA01	28	28	32	31	36	37	23	-
R202	Residential	NCA01	28	27	31	30	35	36	22	-
R203	Residential	NCA01	27	26	30	29	33	35	21	-
R204	Residential	NCA01	28	27	32	31	35	37	22	-
R205	Residential	NCA01	29	28	31	30	36	37	22	-
R206	Residential	NCA01	31	29	33	32	38	38	25	-
R207	Residential	NCA01	27	27	30	29	34	35	21	-
R208	Residential	NCA01	31	29	33	33	38	35	25	-
R209	Residential	NCA01	29	28	31	31	36	37	23	-
R210	Residential	NCA01	29	27	32	31	37	37	24	-
R211	Residential	NCA01	28	27	31	30	36	36	23	-
R212	Residential	NCA01	30	29	33	32	37	38	24	-
R213	Residential	NCA01	30	29	33	32	37	38	25	-
R214	Residential	NCA01	31	30	33	32	38	38	25	-
R215	Residential	NCA01	31	30	35	34	38	40	24	-
R216	Residential	NCA01	33	32	36	35	40	41	24	-
R217	Residential	NCA01	28	27	32	31	35	37	23	-
R218	Residential	NCA01	33	33	38	37	43	43	27	-
R219	Residential	NCA01	33	32	38	37	42	42	29	-
R220	Residential	NCA01	34	33	38	38	42	45	29	-
R221	Residential	NCA01	33	35	40	38	44	43	28	-
R222	Residential	NCA01	37	34	38	39	45	43	32	-
R223	Residential	NCA01	36	35	39	38	43	43	31	-
R224	Residential	NCA01	40	39	42	41	47	47	34	-
R225	Residential	NCA01	41	41	42	43	49	47	37	-
R226	Residential	NCA01	38	37	40	39	45	45	33	-
R227	Residential	NCA01	43	42	45	44	49	49	36	-
R228	Residential	NCA01	44	44	45	44	50	50	37	PN
R229	Residential	NCA01	46	45	44	43	51	51	37	PN
R230	Residential	NCA01	49	48	48	47	53	53	38	PN
R231	Residential	NCA01	49	49	51	50	56	56	41	PN
R232	Residential	NCA01	49	48	51	51	56	57	42	PN
R233	Residential	NCA01	48	47	50	49	55	54	43	PN
R234	Residential	NCA01	47	47	49	49	55	55	43	PN
R235	Residential	NCA01	47	47	49	48	54	55	40	PN
R236	Residential	NCA01	46	45	48	47	54	53	40	PN
R237	Residential	NCA01	47	45	49	48	54	54	40	PN
R238	Residential	NCA01	46	45	51	50	53	56	42	PN
R239	Residential	NCA01	46	46	49	49	54	56	42	PN
R240	Residential	NCA01	47	47	49	48	53	54	47	PN
R241	Residential	NCA01	46	49	49	49	58	55	45	PN
R242	Residential	NCA01	54	53	57	57	62	63	48	PN, V, SN, RO
R243	Residential	NCA01	55	54	58	56	62	61	49	PN, V, SN, RO
R244	Residential	NCA01	52	50	54	53	59	60	46	PN, V, SN, RO
R245	Residential	NCA01	58	56	59	58	67	66	52	PN, V, SN, RO
R246	Residential	NCA01	48	48	51	50	55	56	42	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R247	Residential	NCA01	49	48	52	51	56	56	43	PN
R248	Residential	NCA01	49	47	51	50	56	56	42	PN
R249	Residential	NCA01	49	47	51	50	56	56	42	PN
R250	Residential	NCA01	49	47	50	50	56	56	42	PN
R251	Residential	NCA01	49	47	51	50	56	56	42	PN
R252	Residential	NCA01	48	47	51	50	56	57	42	PN
R253	Residential	NCA01	49	49	52	51	56	57	43	PN
R254	Residential	NCA01	48	48	51	49	55	56	42	PN
R255	Residential	NCA01	48	48	51	50	55	57	42	PN
R256	Residential	NCA01	48	48	51	51	56	57	43	PN
R257	Residential	NCA01	49	48	50	51	56	57	43	PN
R258	Residential	NCA01	49	48	51	51	56	57	43	PN
R259	Residential	NCA01	48	47	52	51	55	54	43	PN
R260	Residential	NCA01	48	47	49	49	55	53	42	PN
R261	Residential	NCA01	47	47	49	48	55	54	43	PN
R262	Residential	NCA01	47	46	49	49	54	54	43	PN
R263	Residential	NCA01	47	46	49	48	53	54	43	PN
R264	Residential	NCA01	46	46	48	47	53	53	42	PN
R265	Residential	NCA01	46	46	48	47	53	53	42	PN
R266	Residential	NCA01	46	46	48	47	54	53	42	PN
R267	Residential	NCA01	46	47	49	48	56	54	43	PN
R268	Residential	NCA01	47	46	47	46	54	52	41	PN
R269	Residential	NCA01	45	45	47	47	54	52	41	PN
R270	Residential	NCA01	44	43	47	46	52	52	40	PN
R271	Residential	NCA01	45	44	48	47	53	53	41	PN
R272	Residential	NCA01	44	42	46	45	51	51	37	PN
R273	Residential	NCA01	43	42	46	45	50	51	38	PN
R274	Residential	NCA01	44	42	46	45	51	51	38	PN
R275	Residential	NCA01	43	42	46	45	51	51	38	PN
R276	Residential	NCA01	45	44	48	47	52	52	40	PN
R277	Residential	NCA01	44	44	46	46	52	51	40	PN
R278	Residential	NCA01	45	44	48	47	53	53	40	PN
R279	Residential	NCA01	46	45	48	48	53	54	40	PN
R280	Residential	NCA01	46	45	49	48	53	54	41	PN
R281	Residential	NCA01	46	45	48	48	53	52	41	PN
R282	Residential	NCA01	46	45	48	47	53	52	41	PN
R283	Residential	NCA01	46	45	48	47	54	53	41	PN
R284	Residential	NCA01	47	47	49	49	55	55	42	PN
R285	Residential	NCA01	46	45	48	48	53	53	41	PN
R286	Residential	NCA01	46	45	48	48	53	54	41	PN
R287	Residential	NCA01	46	46	48	48	53	54	42	PN
R288	Residential	NCA01	47	46	48	48	54	54	41	PN
R289	Residential	NCA01	47	46	48	49	54	54	41	PN
R290	Residential	NCA01	47	46	50	50	54	54	41	PN
R291	Residential	NCA01	47	46	50	50	54	56	41	PN
R292	Residential	NCA01	47	47	50	50	54	56	41	PN
R293	Residential	NCA01	47	47	49	49	54	55	41	PN
R294	Residential	NCA01	47	47	49	49	54	55	41	PN
R295	Residential	NCA01	47	48	50	49	54	55	41	PN
R296	Residential	NCA01	47	47	50	49	54	55	41	PN
R297	Residential	NCA01	47	47	50	49	54	54	41	PN
R298	Residential	NCA01	47	47	50	49	54	55	40	PN
R299	Residential	NCA01	48	46	50	49	54	55	41	PN
R300	Residential	NCA01	47	46	49	49	54	55	41	PN
R301	Residential	NCA01	46	45	49	48	53	54	40	PN
R302	Residential	NCA01	47	46	49	48	54	55	40	PN
R303	Residential	NCA01	48	47	50	47	55	55	38	PN
R304	Residential	NCA01	47	47	50	49	54	55	41	PN
R305	Residential	NCA01	47	47	50	49	54	54	41	PN
R306	Residential	NCA01	48	47	50	49	54	55	41	PN
R307	Residential	NCA01	48	47	50	49	54	55	41	PN
R308	Residential	NCA01	48	47	51	49	55	56	41	PN
R309	Residential	NCA01	48	47	50	49	54	55	40	PN
R310	Residential	NCA01	47	46	49	48	54	54	40	PN
R311	Residential	NCA01	43	44	48	45	50	50	36	PN
R312	Residential	NCA01	45	44	47	47	52	51	39	PN
R313	Residential	NCA01	46	46	49	48	53	54	41	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R314	Residential	NCA01	46	45	48	47	53	53	40	PN
R315	Residential	NCA01	46	45	48	48	53	53	40	PN
R316	Residential	NCA01	42	42	46	45	50	51	37	PN
R317	Residential	NCA01	45	44	48	47	52	53	39	PN
R318	Residential	NCA01	45	44	47	46	52	53	38	PN
R319	Residential	NCA01	45	45	49	48	53	54	40	PN
R320	Residential	NCA01	46	45	49	48	53	54	40	PN
R321	Residential	NCA01	35	34	38	37	42	43	29	-
R322	Residential	NCA01	33	32	36	35	40	42	28	-
R323	Residential	NCA01	38	37	42	41	46	47	32	-
R324	Residential	NCA01	45	44	48	47	52	53	39	PN
R325	Residential	NCA01	45	44	48	47	52	53	39	PN
R326	Residential	NCA01	46	45	49	48	53	54	40	PN
R327	Residential	NCA01	45	44	48	47	53	53	40	PN
R328	Residential	NCA01	46	45	48	48	53	53	39	PN
R329	Residential	NCA01	45	45	48	48	52	53	39	PN
R330	Residential	NCA01	45	46	48	47	52	53	39	PN
R331	Residential	NCA01	46	46	49	48	53	53	40	PN
R332	Residential	NCA01	46	46	49	48	53	53	40	PN
R333	Residential	NCA01	46	46	48	47	53	54	39	PN
R334	Residential	NCA01	46	46	49	48	53	54	40	PN
R335	Residential	NCA01	46	46	49	48	53	54	40	PN
R336	Residential	NCA01	45	46	48	48	53	53	40	PN
R337	Residential	NCA01	46	46	49	48	53	53	40	PN
R338	Residential	NCA01	47	46	48	47	54	53	40	PN
R339	Residential	NCA01	47	46	49	47	54	53	40	PN
R340	Residential	NCA01	46	46	48	47	54	54	40	PN
R341	Residential	NCA01	46	46	48	48	53	54	40	PN
R342	Residential	NCA01	46	45	48	47	52	54	40	PN
R343	Residential	NCA01	46	45	48	48	53	54	40	PN
R344	Residential	NCA01	46	45	49	48	53	54	41	PN
R345	Residential	NCA01	45	44	48	47	52	53	39	PN
R346	Residential	NCA01	43	42	46	45	50	51	37	PN
R347	Residential	NCA01	36	35	37	37	43	44	29	-
R348	Residential	NCA01	32	32	34	32	39	39	26	-
R349	Residential	NCA01	38	37	39	40	45	44	33	-
R350	Residential	NCA01	39	38	42	41	47	45	34	-
R351	Residential	NCA01	29	28	32	31	37	37	24	-
R352	Residential	NCA01	31	30	35	33	39	39	26	-
R353	Residential	NCA01	32	31	34	33	40	40	24	-
R354	Residential	NCA01	41	39	43	42	48	46	35	-
R355	Residential	NCA01	40	40	42	41	48	47	36	-
R356	Residential	NCA01	38	37	40	38	45	45	31	-
R357	Residential	NCA01	65	69	70	72	71	74	58	PN, V, SN, RO, RP, DR
R358	Residential	NCA01	62	66	72	69	68	74	54	PN, V, SN, RO, RP, DR
R359	Residential	NCA01	59	64	71	67	65	73	52	PN, V, SN, RO, RP, DR
R360	Residential	NCA01	57	59	70	61	63	70	50	PN, V, SN, RO, RP, DR
R361	Residential	NCA01	55	58	68	60	61	67	48	PN, V, SN, RO
R362	Residential	NCA01	53	56	65	59	60	66	47	PN, V, SN, RO
R363	Residential	NCA01	50	50	62	51	57	64	40	PN, V, SN, RO
R364	Residential	NCA01	45	46	58	47	52	61	37	PN, V, SN, RO
R365	Residential	NCA01	45	45	52	47	51	55	37	PN
R366	Residential	NCA01	48	47	56	47	55	60	38	PN, V, SN, RO
R367	Residential	NCA01	46	45	53	40	52	56	34	PN
R368	Residential	NCA01	47	47	57	47	54	59	37	PN
R369	Residential	NCA01	46	47	56	49	54	56	41	PN
R370	Residential	NCA01	47	47	59	49	55	56	41	PN
R371	Residential	NCA01	50	51	56	50	55	51	39	PN
R372	Residential	NCA01	46	45	49	48	53	52	40	PN
R373	Residential	NCA01	45	45	51	48	52	52	39	PN
R374	Residential	NCA01	41	41	54	44	49	58	34	PN
R375	Residential	NCA01	45	45	55	48	52	57	39	PN
R376	Residential	NCA01	48	49	54	49	56	58	43	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R377	Residential	NCA01	46	46	56	50	52	58	39	PN
R378	Residential	NCA01	47	46	54	49	54	58	41	PN
R379	Residential	NCA01	50	49	56	52	57	60	43	PN, V, SN, RO
R380	Residential	NCA01	48	47	51	51	55	56	42	PN
R381	Residential	NCA01	48	48	53	48	55	58	41	PN
R382	Residential	NCA01	48	47	55	47	55	59	42	PN
R383	Residential	NCA01	46	46	54	45	53	58	38	PN
R384	Residential	NCA01	49	48	55	44	55	59	36	PN
R385	Residential	NCA01	47	48	55	49	53	58	40	PN
R386	Residential	NCA01	47	48	58	47	55	60	38	PN, V, SN, RO
R387	Residential	NCA01	48	49	57	50	55	60	41	PN, V, SN, RO
R388	Residential	NCA01	51	51	57	54	57	61	44	PN, V, SN, RO
R389	Residential	NCA01	48	47	56	52	54	60	41	PN, V, SN, RO
R390	Residential	NCA01	48	46	55	48	54	59	38	PN
R391	Residential	NCA01	72	73	70	**77**	**78**	73	65	PN, V, SN, RO, RP, DR
R392	Residential	NCA01	72	73	71	73	**79**	74	65	PN, V, SN, RO, RP, DR
R393	Residential	NCA01	71	72	71	71	**79**	73	66	PN, V, SN, RO, RP, DR
R394	Residential	NCA01	69	70	70	69	**77**	73	65	PN, V, SN, RO, RP, DR
R395	Residential	NCA01	64	65	67	67	74	71	63	PN, V, SN, RO, RP, DR
R396	Residential	NCA01	64	64	65	65	72	69	62	PN, V, SN, RO, RP, DR
R397	Residential	NCA01	60	60	62	62	69	67	60	PN, V, SN, RO
R398	Residential	NCA01	58	58	60	60	66	66	58	PN, V, SN, RO
R399	Residential	NCA01	56	56	59	58	64	65	55	PN, V, SN, RO
R400	Residential	NCA01	46	46	50	50	54	57	45	PN
R401	Residential	NCA01	48	48	52	51	57	57	47	PN
R402	Residential	NCA01	42	44	50	46	49	52	38	PN
R403	Residential	NCA01	47	47	52	48	54	55	47	PN
R404	Residential	NCA01	48	47	54	48	55	56	43	PN
R405	Residential	NCA01	47	49	54	52	55	60	43	PN, V, SN, RO
R406	Residential	NCA01	47	51	55	54	55	60	43	PN, V, SN, RO
R407	Residential	NCA01	41	43	49	46	47	50	33	PN
R408	Residential	NCA01	46	50	53	52	54	56	41	PN
R409	Residential	NCA01	49	50	54	53	55	55	40	PN
R410	Residential	NCA01	51	50	54	53	56	54	41	PN
R411	Residential	NCA01	53	51	53	54	57	54	41	PN
R412	Residential	NCA01	54	55	58	58	60	63	37	PN, V, SN, RO
R413	Residential	NCA01	48	49	53	53	54	58	36	PN
R414	Residential	NCA01	48	53	57	54	60	53	48	PN, V, SN, RO
R415	Residential	NCA01	49	56	60	59	56	65	46	PN, V, SN, RO
R416	Residential	NCA01	50	59	61	62	56	66	38	PN, V, SN, RO
R417	Residential	NCA01	46	54	61	57	63	64	50	PN, V, SN, RO
R418	Residential	NCA01	51	53	62	56	50	65	44	PN, V, SN, RO
R419	Residential	NCA01	51	51	61	56	55	53	45	PN, V, SN, RO
R420	Residential	NCA01	65	65	65	66	72	70	58	PN, V, SN, RO, RP, DR
R421	Residential	NCA01	61	65	65	68	67	68	54	PN, V, SN, RO
R422	Residential	NCA01	58	60	61	65	62	63	51	PN, V, SN, RO
R423	Residential	NCA01	57	57	59	60	60	63	51	PN, V, SN, RO
R424	Residential	NCA01	56	56	58	60	60	57	49	PN, V, SN, RO
R425	Residential	NCA01	54	54	55	58	57	56	43	PN
R426	Residential	NCA01	54	58	61	61	61	66	43	PN, V, SN, RO
R427	Residential	NCA01	52	51	58	50	58	62	38	PN, V, SN, RO
R428	Residential	NCA01	49	51	53	53	56	53	40	PN
R429	Residential	NCA01	51	53	59	56	58	64	36	PN, V, SN, RO
R430	Residential	NCA01	51	52	58	56	57	63	45	PN, V, SN, RO
R431	Residential	NCA01	51	52	59	55	57	63	44	PN, V, SN, RO
R432	Residential	NCA01	45	44	54	42	52	58	31	PN
R433	Residential	NCA01	49	49	57	54	56	59	42	PN
R434	Residential	NCA01	51	51	57	53	56	58	43	PN
R435	Residential	NCA01	42	41	47	45	47	47	35	-
R436	Residential	NCA01	49	51	56	52	55	58	41	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R437	Residential	NCA01	49	49	55	51	56	57	42	PN
R438	Residential	NCA01	49	48	54	48	56	57	41	PN
R439	Residential	NCA01	49	48	54	48	56	58	41	PN
R440	Residential	NCA01	48	48	53	48	56	57	41	PN
R441	Residential	NCA01	48	46	51	48	53	55	40	PN
R442	Residential	NCA01	46	45	51	46	53	52	39	PN
R443	Residential	NCA01	47	46	50	47	53	53	40	PN
R444	Residential	NCA01	37	36	41	40	44	43	30	-
R445	Commercial	NCA01	38	40	46	40	45	51	31	-
R446	Residential	NCA01	45	45	49	48	52	54	39	PN
R447	Residential	NCA01	46	45	53	47	52	54	39	PN
R448	Residential	NCA01	47	47	53	48	53	58	40	PN
R449	Residential	NCA01	48	48	53	49	55	58	42	PN
R450	Residential	NCA01	49	48	54	49	55	58	41	PN
R451	Residential	NCA01	47	47	51	49	55	55	41	PN
R452	Residential	NCA01	47	46	51	49	54	56	40	PN
R453	Residential	NCA01	48	48	54	49	55	59	41	PN
R454	Residential	NCA01	49	48	55	49	55	59	40	PN
R455	Residential	NCA01	49	48	55	49	55	60	40	PN, V, SN, RO
R456	Residential	NCA01	48	47	54	48	55	58	42	PN
R457	Residential	NCA01	48	48	53	48	55	57	41	PN
R458	Residential	NCA01	48	49	54	49	55	58	42	PN
R459	Residential	NCA01	49	48	54	50	56	58	42	PN
R460	Residential	NCA01	48	48	53	50	55	58	42	PN
R461	Residential	NCA01	48	48	53	51	55	58	42	PN
R462	Residential	NCA01	46	45	50	48	52	54	40	PN
R463	Residential	NCA01	37	36	40	39	44	45	31	-
R464	Residential	NCA01	48	48	52	51	55	55	42	PN
R465	Residential	NCA01	42	41	44	44	49	49	37	-
R466	Residential	NCA01	49	48	53	51	55	58	42	PN
R467	Residential	NCA01	49	49	54	52	56	58	43	PN
R468	Residential	NCA01	47	47	51	50	54	55	42	PN
R469	Residential	NCA01	49	50	55	52	56	59	43	PN
R470	Residential	NCA01	50	50	55	53	57	60	44	PN, V, SN, RO
R471	Residential	NCA01	51	51	56	53	57	62	44	PN, V, SN, RO
R472	Residential	NCA01	51	51	57	54	58	61	45	PN, V, SN, RO
R473	Residential	NCA01	51	51	57	54	58	61	45	PN, V, SN, RO
R474	Residential	NCA01	51	52	57	55	58	61	46	PN, V, SN, RO
R475	Residential	NCA01	52	52	58	55	59	62	46	PN, V, SN, RO
R476	Residential	NCA01	52	52	58	55	59	63	46	PN, V, SN, RO
R477	Residential	NCA01	52	52	57	54	58	61	45	PN, V, SN, RO
R478	Residential	NCA01	50	50	56	53	57	60	44	PN, V, SN, RO
R479	Residential	NCA01	50	50	55	53	57	59	44	PN
R480	Residential	NCA01	50	50	53	53	57	57	44	PN
R481	Residential	NCA01	44	43	44	43	47	49	34	-
R482	Residential	NCA01	50	49	54	52	56	59	43	PN
R483	Residential	NCA01	49	49	54	51	56	58	43	PN
R484	Residential	NCA01	36	35	39	39	43	43	30	-
R485	Residential	NCA01	48	48	51	51	55	54	42	PN
R486	Residential	NCA01	48	48	53	51	55	57	42	PN
R487	Residential	NCA01	48	48	53	50	55	57	42	PN
R488	Residential	NCA01	48	47	52	50	54	56	41	PN
R489	Residential	NCA01	48	48	53	49	55	57	41	PN
R490	Residential	NCA01	46	47	51	47	53	55	39	PN
R491	Residential	NCA01	45	46	49	47	52	55	38	PN
R492	Residential	NCA01	42	41	44	44	49	49	36	-
R493	Residential	NCA01	43	43	47	45	50	52	37	PN
R494	Residential	NCA01	44	43	47	47	51	52	38	PN
R495	Residential	NCA01	44	43	47	46	51	51	39	PN
R496	Residential	NCA01	45	44	47	47	52	52	39	PN
R497	Residential	NCA01	46	47	48	48	54	54	40	PN
R498	Residential	NCA01	47	47	50	47	54	56	40	PN
R499	Residential	NCA01	38	37	41	40	44	45	32	-
R500	Residential	NCA01	47	46	51	49	54	56	41	PN
R501	Residential	NCA01	48	48	51	51	55	56	42	PN
R502	Residential	NCA01	46	46	47	47	54	52	41	PN
R503	Residential	NCA01	43	43	47	46	51	52	38	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R504	Residential	NCA01	43	43	47	46	50	52	38	PN
R505	Residential	NCA01	49	48	53	51	56	57	42	PN
R506	Residential	NCA01	49	48	53	51	56	58	42	PN
R507	Residential	NCA01	45	45	40	40	52	44	31	PN
R508	Residential	NCA01	49	48	53	51	56	58	42	PN
R509	Residential	NCA01	50	49	54	52	57	59	43	PN
R510	Residential	NCA01	51	50	55	52	57	59	44	PN
R511	Residential	NCA01	47	47	51	49	54	56	40	PN
R512	Residential	NCA01	52	52	57	54	59	61	46	PN, V, SN, RO
R513	Residential	NCA01	52	54	57	57	58	62	41	PN, V, SN, RO
R514	Residential	NCA01	51	53	55	57	58	53	41	PN
R515	Residential	NCA01	49	50	51	54	54	53	41	PN
R516	Residential	NCA01	45	45	48	48	51	53	39	PN
R517	Residential	NCA01	46	47	51	50	53	56	38	PN
R518	Residential	NCA01	46	46	51	50	53	56	36	PN
R519	Residential	NCA01	46	46	50	49	53	55	36	PN
R520	Residential	NCA01	46	46	50	49	53	55	36	PN
R521	Residential	NCA01	46	46	50	49	53	55	35	PN
R522	Residential	NCA01	46	46	50	48	52	54	36	PN
R523	Residential	NCA01	45	45	49	48	52	54	34	PN
R524	Residential	NCA01	45	46	50	49	52	54	38	PN
R525	Residential	NCA01	43	44	49	47	50	53	37	PN
R526	Residential	NCA01	45	46	49	49	52	53	38	PN
R527	Residential	NCA01	44	45	48	47	51	52	36	PN
R528	Residential	NCA01	43	43	48	46	49	52	36	PN
R529	Residential	NCA01	42	43	48	46	49	50	36	PN
R530	Residential	NCA01	39	39	43	42	46	48	31	-
R531	Residential	NCA01	39	39	43	40	46	48	30	-
R532	Residential	NCA01	40	40	45	42	47	50	34	PN
R533	Residential	NCA01	39	38	42	41	46	47	30	-
R534	Residential	NCA01	34	34	37	37	41	42	27	-
R535	Residential	NCA01	40	39	46	42	47	50	34	PN
R536	Residential	NCA01	45	45	49	48	52	50	38	PN
R537	Residential	NCA01	45	46	49	49	52	53	38	PN
R538	Residential	NCA01	42	42	47	46	49	51	33	PN
R539	Residential	NCA01	46	47	50	50	53	55	38	PN
R540	Residential	NCA01	47	47	51	51	54	55	38	PN
R541	Residential	NCA01	50	50	52	53	56	57	37	PN
R542	Residential	NCA01	46	47	51	51	53	55	34	PN
R543	Residential	NCA01	43	43	51	46	50	53	38	PN
R544	Residential	NCA01	42	41	44	44	48	49	41	-
R545	Residential	NCA01	46	48	49	51	51	51	41	PN
R546	Residential	NCA01	48	46	56	49	54	57	41	PN
R547	Residential	NCA01	45	43	51	46	51	53	39	PN
R548	Residential	NCA01	51	52	56	55	58	61	38	PN, V, SN, RO
R549	Residential	NCA01	54	53	57	56	62	64	51	PN, V, SN, RO
R550	Residential	NCA01	47	47	49	49	55	55	42	PN
R551	Residential	NCA01	47	47	49	49	55	54	42	PN
R552	Residential	NCA01	47	46	50	49	54	54	42	PN
R553	Residential	NCA01	46	43	46	46	53	52	41	PN
R554	Residential	NCA01	45	43	49	48	54	51	40	PN
R555	Residential	NCA01	45	44	48	48	51	54	42	PN
R556	Residential	NCA01	43	42	48	44	50	51	37	PN
R557	Residential	NCA01	45	44	48	47	52	52	40	PN
R558	Residential	NCA01	40	39	45	42	47	50	35	PN
R559	Residential	NCA01	42	47	52	50	49	56	34	PN
R560	Residential	NCA01	41	41	43	43	49	50	37	PN
R561	Residential	NCA01	45	44	50	45	52	53	38	PN
R562	Residential	NCA01	44	44	48	48	53	54	41	PN
R563	Residential	NCA01	43	42	47	46	51	52	38	PN
R564	Residential	NCA01	46	45	49	48	53	51	40	PN
R565	Residential	NCA01	46	45	49	46	53	54	39	PN
R566	Residential	NCA01	45	45	49	46	52	54	38	PN
R567	Residential	NCA01	46	44	49	48	53	54	39	PN
R568	Residential	NCA01	49	48	52	52	57	58	45	PN
R569	Residential	NCA01	48	47	52	51	56	57	44	PN
R570	Residential	NCA01	53	52	55	55	60	61	49	PN, V, SN, RO

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R571	Residential	NCA01	48	49	53	52	58	58	46	PN
R572	Residential	NCA01	48	49	52	51	57	58	45	PN
R573	Residential	NCA01	49	48	52	51	56	57	44	PN
R574	Residential	NCA01	47	47	51	50	55	57	43	PN
R575	Residential	NCA01	40	39	43	42	48	47	35	-
R576	Residential	NCA01	39	38	43	42	47	48	33	-
R577	Residential	NCA01	42	42	45	44	50	50	37	PN
R578	Residential	NCA01	45	44	48	47	52	53	40	PN
R579	Residential	NCA01	42	42	46	44	43	51	36	PN
R580	Residential	NCA01	41	42	46	44	48	51	33	PN
R581	Residential	NCA01	43	43	48	44	50	50	32	PN
R582	Residential	NCA01	45	44	48	46	52	50	32	PN
R583	Residential	NCA01	45	45	49	47	52	54	33	PN
R584	Residential	NCA01	42	41	48	43	49	51	32	PN
R585	Residential	NCA01	41	41	49	42	48	53	35	PN
R586	Residential	NCA01	40	41	49	43	47	54	34	PN
R587	Residential	NCA01	44	41	49	44	48	54	33	PN
R588	Residential	NCA01	41	44	48	47	52	52	37	PN
R589	Residential	NCA01	42	44	46	46	52	51	39	PN
R590	Residential	NCA01	41	41	44	44	48	48	37	-
R591	Residential	NCA01	38	37	41	40	46	47	34	-
R592	Residential	NCA01	39	38	42	41	46	46	34	-
R593	Residential	NCA01	38	38	42	41	45	47	34	-
R594	Residential	NCA01	39	38	43	41	46	48	32	-
R595	Residential	NCA01	39	39	45	42	46	49	31	-
R596	Residential	NCA01	41	41	45	44	48	48	28	-
R597	Residential	NCA01	42	41	44	44	49	47	30	-
R598	Residential	NCA01	40	40	43	43	47	44	31	-
R599	Residential	NCA01	38	38	42	41	45	45	30	-
R600	Residential	NCA01	39	38	42	41	46	45	29	-
R601	Residential	NCA01	43	42	47	45	50	54	34	PN
R602	Residential	NCA01	36	38	44	39	43	50	32	PN
R603	Residential	NCA01	36	37	41	39	43	48	33	-
R604	Residential	NCA01	36	38	42	41	43	48	30	-
R605	Residential	NCA01	38	39	43	41	45	48	29	-
R606	Residential	NCA01	40	39	43	41	47	48	30	-
R607	Residential	NCA01	36	35	42	38	43	46	29	-
R608	Residential	NCA01	38	37	44	39	45	47	28	-
R609	Residential	NCA01	38	37	44	40	46	47	28	-
R610	Residential	NCA01	35	34	41	37	42	44	28	-
R611	Residential	NCA01	35	34	41	37	42	46	29	-
R612	Residential	NCA01	34	34	41	37	41	46	28	-
R613	Residential	NCA01	34	34	43	37	41	47	28	-
R614	Residential	NCA01	35	39	43	42	42	48	28	-
R615	Residential	NCA01	37	40	43	42	47	48	32	-
R616	Residential	NCA01	40	39	43	42	47	47	34	-
R617	Residential	NCA01	38	37	45	40	45	50	28	PN
R618	Residential	NCA01	39	39	44	42	47	50	34	PN
R619	Residential	NCA01	39	40	44	41	46	48	31	-
R620	Residential	NCA01	41	40	44	43	48	48	33	-
R621	Residential	NCA01	39	39	44	42	46	49	35	-
R622	Residential	NCA01	41	40	44	43	48	49	35	-
R623	Residential	NCA01	45	45	48	47	53	53	40	PN
R624	Residential	NCA01	36	35	42	41	49	46	33	-
R625	Residential	NCA01	36	35	41	38	43	48	30	-
R626	Residential	NCA01	36	36	45	39	43	49	30	-
R627	Residential	NCA01	44	44	48	44	52	52	38	PN
R628	Residential	NCA01	44	43	45	45	51	50	38	PN
R629	Residential	NCA01	41	39	45	42	48	47	35	-
R630	Residential	NCA01	37	37	43	40	45	46	33	-
R631	Residential	NCA01	36	37	44	40	44	50	32	PN
R632	Residential	NCA01	38	37	44	40	45	50	33	PN
R633	Residential	NCA01	33	35	37	35	40	41	28	-
R634	Residential	NCA01	31	32	36	34	38	42	25	-
R635	Residential	NCA01	27	26	30	29	35	35	22	-
R636	Residential	NCA01	29	30	34	33	37	40	24	-
R637	Residential	NCA01	28	31	36	34	35	43	25	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R638	Residential	NCA01	27	27	33	30	35	37	23	-
R639	Residential	NCA01	29	34	39	37	36	47	25	-
R640	Residential	NCA01	36	36	41	38	43	47	32	-
R641	Residential	NCA01	35	35	44	37	42	47	31	-
R642	Residential	NCA01	37	38	43	40	44	49	30	-
R643	Residential	NCA01	37	38	43	41	44	48	31	-
R644	Residential	NCA01	34	34	39	36	40	43	27	-
R645	Residential	NCA01	33	33	37	35	40	42	26	-
R646	Residential	NCA01	33	32	36	35	39	41	26	-
R647	Residential	NCA01	34	33	41	37	42	44	25	-
R648	Residential	NCA01	36	34	40	37	42	44	25	-
R649	Residential	NCA01	35	34	40	37	42	44	26	-
R650	Residential	NCA01	34	33	39	36	40	44	26	-
R651	Residential	NCA01	34	34	41	37	41	46	27	-
R652	Residential	NCA01	35	35	39	38	42	44	26	-
R653	Residential	NCA01	29	29	36	32	36	39	23	-
R654	Residential	NCA01	36	36	40	40	42	45	28	-
R655	Residential	NCA01	35	35	40	38	45	43	30	-
R656	Residential	NCA01	32	34	39	37	39	43	25	-
R657	Residential	NCA01	34	35	40	37	41	45	25	-
R658	Residential	NCA01	31	30	36	33	38	41	24	-
R659	Residential	NCA01	32	31	37	34	39	42	25	-
R660	Residential	NCA01	36	35	40	36	43	47	24	-
R661	Residential	NCA01	28	27	37	30	35	36	21	-
R662	Residential	NCA01	34	33	38	35	41	42	25	-
R663	Residential	NCA01	33	34	38	35	40	43	24	-
R664	Residential	NCA01	33	32	37	34	39	43	25	-
R665	Residential	NCA01	35	35	39	36	41	44	25	-
R666	Residential	NCA01	33	33	39	35	40	42	26	-
R667	Residential	NCA01	30	29	36	32	37	39	24	-
R668	Residential	NCA01	29	29	34	32	36	39	24	-
R669	Residential	NCA01	24	23	27	26	31	32	18	-
R670	Residential	NCA01	28	29	34	32	35	39	22	-
R671	Residential	NCA01	25	24	28	28	32	34	20	-
R672	Residential	NCA01	25	24	28	28	32	34	20	-
R673	Residential	NCA01	25	25	29	28	33	34	20	-
R674	Residential	NCA01	26	25	29	28	33	34	21	-
R675	Residential	NCA01	26	25	29	28	33	34	20	-
R676	Residential	NCA01	25	24	29	27	32	33	19	-
R677	Residential	NCA01	25	24	28	27	32	33	20	-
R678	Residential	NCA01	26	25	28	27	33	33	20	-
R679	Residential	NCA01	25	24	28	27	32	33	19	-
R680	Residential	NCA01	25	24	28	27	32	33	19	-
R681	Residential	NCA01	25	24	30	28	32	33	19	-
R682	Residential	NCA01	28	27	31	30	35	35	22	-
R683	Residential	NCA01	31	30	34	34	38	39	25	-
R684	Residential	NCA01	30	29	33	32	37	38	24	-
R685	Residential	NCA01	42	41	41	40	45	46	32	-
R686	Residential	NCA01	37	36	40	39	44	46	31	-
R687	Residential	NCA01	42	41	45	45	49	52	36	PN
R688	Residential	NCA01	42	41	45	44	49	51	37	PN
R689	Residential	NCA01	48	47	52	50	55	57	41	PN
R690	Residential	NCA01	45	44	49	47	52	54	37	PN
R691	Residential	NCA01	43	43	47	45	50	52	37	PN
R692	Residential	NCA01	43	42	45	43	48	50	35	PN
R693	Residential	NCA01	43	42	47	45	50	52	36	PN
R694	Residential	NCA01	39	39	42	41	46	47	32	-
R695	Residential	NCA01	38	37	40	39	44	43	31	-
R696	Residential	NCA01	37	36	40	39	44	45	31	-
R697	Residential	NCA01	40	39	41	40	47	46	32	-
R698	Residential	NCA01	39	39	43	42	47	47	33	-
R699	Residential	NCA01	39	38	42	41	46	46	33	-
R700	Residential	NCA01	39	39	42	42	46	47	34	-
R701	Residential	NCA01	39	38	41	40	45	46	32	-
R702	Residential	NCA01	38	38	41	40	45	45	32	-
R703	Residential	NCA01	39	38	43	41	46	48	33	-
R704	Residential	NCA01	39	38	41	41	46	46	33	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R705	Residential	NCA01	41	41	43	44	47	48	34	-
R706	Residential	NCA01	42	42	46	44	50	51	36	PN
R707	Residential	NCA01	42	42	46	45	50	51	36	PN
R708	Residential	NCA01	42	41	46	44	49	51	36	PN
R709	Residential	NCA01	42	42	46	44	49	51	36	PN
R710	Residential	NCA01	38	38	41	40	45	45	32	-
R711	Residential	NCA01	40	39	43	42	47	48	34	-
R712	Residential	NCA01	41	40	44	43	48	49	35	-
R713	Residential	NCA01	39	38	41	41	46	46	33	-
R714	Residential	NCA01	41	41	45	43	48	50	35	PN
R715	Residential	NCA01	43	43	41	41	50	49	32	PN
R716	Residential	NCA01	47	46	51	48	54	56	40	PN
R717	Residential	NCA01	47	46	51	48	53	55	40	PN
R718	Residential	NCA01	48	47	52	49	55	56	41	PN
R719	Residential	NCA01	46	45	50	48	53	55	39	PN
R720	Residential	NCA01	46	45	49	48	53	54	39	PN
R721	Residential	NCA01	46	45	49	47	53	54	39	PN
R722	Residential	NCA01	46	45	50	48	53	55	40	PN
R723	Residential	NCA01	45	44	48	46	52	53	38	PN
R724	Residential	NCA01	45	44	48	46	51	53	38	PN
R725	Residential	NCA01	44	43	48	46	51	52	37	PN
R726	Residential	NCA01	37	36	40	39	44	45	32	-
R727	Residential	NCA01	39	39	41	40	46	47	31	-
R728	Residential	NCA01	40	40	44	43	47	49	34	-
R729	Residential	NCA01	41	40	44	43	47	49	34	-
R730	Residential	NCA01	41	41	45	43	48	50	35	PN
R731	Residential	NCA01	41	41	45	43	48	50	34	PN
R732	Residential	NCA01	41	40	44	43	47	49	34	-
R733	Residential	NCA01	40	40	44	41	47	49	33	-
R734	Residential	NCA01	42	43	45	45	49	50	37	PN
R735	Residential	NCA01	43	43	46	44	50	51	36	PN
R736	Residential	NCA01	43	42	47	45	50	51	37	PN
R737	Residential	NCA01	44	44	47	46	51	51	38	PN
R738	Residential	NCA01	44	43	46	46	51	51	38	PN
R739	Residential	NCA01	42	42	46	44	49	50	36	PN
R740	Residential	NCA01	43	42	46	46	50	51	37	PN
R741	Residential	NCA01	46	45	50	47	52	54	39	PN
R742	Residential	NCA01	45	45	49	46	52	54	36	PN
R743	Residential	NCA01	44	43	47	46	51	51	38	PN
R744	Residential	NCA01	44	43	47	46	50	51	37	PN
R745	Residential	NCA01	43	43	46	45	50	51	37	PN
R746	Residential	NCA01	43	42	46	45	50	50	37	PN
R747	Residential	NCA01	43	43	48	45	50	52	37	PN
R748	Residential	NCA01	44	43	48	46	51	52	38	PN
R749	Residential	NCA01	47	46	51	46	53	56	38	PN
R750	Residential	NCA01	44	44	48	46	51	51	39	PN
R751	Residential	NCA01	34	33	36	35	41	40	30	-
R752	Residential	NCA01	45	44	47	45	52	50	39	PN
R753	Residential	NCA01	45	44	49	45	52	54	39	PN
R754	Residential	NCA01	43	43	49	44	50	54	36	PN
R755	Residential	NCA01	43	42	47	44	50	51	36	PN
R756	Residential	NCA01	36	36	39	38	43	44	30	-
R757	Residential	NCA01	39	39	41	41	46	46	33	-
R758	Residential	NCA01	41	41	45	43	48	50	35	PN
R759	Residential	NCA01	43	42	46	44	50	51	36	PN
R760	Residential	NCA01	47	47	50	47	54	54	41	PN
R761	Residential	NCA01	44	43	47	46	51	51	38	PN
R762	Residential	NCA01	35	34	39	36	42	44	28	-
R763	Residential	NCA01	43	42	45	45	50	50	37	PN
R764	Residential	NCA01	38	37	42	34	45	47	27	-
R765	Residential	NCA01	34	33	37	36	41	41	32	-
R766	Residential	NCA01	40	39	42	42	47	47	35	-
R767	Residential	NCA01	42	41	44	43	48	48	35	-
R768	Residential	NCA01	43	42	46	44	49	50	37	PN
R769	Residential	NCA01	43	42	46	45	50	51	37	PN
R770	Residential	NCA01	44	43	47	45	51	52	38	PN
R771	Residential	NCA01	42	41	46	42	49	51	33	PN

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected										
Non-residential: Exceeds noise management level										
R772	Residential	NCA01	37	36	41	39	44	45	31	-
R773	Residential	NCA01	45	44	45	45	52	50	39	PN
R774	Residential	NCA01	43	42	45	44	50	50	37	PN
R775	Residential	NCA01	43	42	46	45	50	51	37	PN
R776	Residential	NCA01	42	41	44	44	49	49	35	-
R777	Residential	NCA01	41	41	43	43	48	48	35	-
R778	Residential	NCA01	42	42	45	44	49	49	36	-
R779	Residential	NCA01	44	44	50	47	51	54	38	PN
R780	Residential	NCA01	47	46	51	45	54	57	37	PN
R781	Residential	NCA01	45	44	49	47	52	54	39	PN
R782	Residential	NCA01	47	46	49	48	54	54	41	PN
R783	Residential	NCA01	47	45	51	48	54	54	39	PN
R784	Residential	NCA01	45	46	52	47	52	57	39	PN
R785	Residential	NCA01	47	46	52	47	54	57	39	PN
R786	Residential	NCA01	46	44	48	47	51	53	39	PN
R787	Residential	NCA01	42	42	46	43	49	51	36	PN
R788	Residential	NCA01	41	41	46	44	48	50	35	PN
R789	Residential	NCA01	38	37	40	40	45	45	32	-
R790	Residential	NCA01	41	40	46	39	47	50	28	PN
R791	Residential	NCA01	41	40	46	40	47	50	30	PN
R792	Residential	NCA01	42	42	47	42	48	51	35	PN
R793	Commercial	NCA01	42	42	47	43	49	51	34	-
R794	Commercial	NCA01	42	41	44	44	48	49	35	-
R795	Commercial	NCA01	42	41	45	44	49	50	36	-
R796	Commercial	NCA01	45	44	47	46	51	51	38	-
R797	Commercial	NCA01	36	36	38	38	44	44	32	-
R798	Residential	NCA01	43	42	45	44	49	49	36	-
R799	Residential	NCA01	43	42	45	44	49	49	37	-
R800	Residential	NCA01	38	38	41	41	45	46	32	-
R801	Residential	NCA01	43	42	45	45	49	50	37	PN
R802	Residential	NCA01	45	44	46	46	51	51	38	PN
R803	Residential	NCA01	42	43	47	46	49	51	35	PN
R804	Residential	NCA01	42	42	46	45	49	50	36	PN
R805	Residential	NCA01	46	45	48	48	51	52	40	PN
R806	Place of worship	NCA01	45	44	48	47	52	52	39	-
R807	Residential	NCA01	44	43	47	46	51	52	38	PN
R808	Residential	NCA01	44	43	47	46	51	52	38	PN
R809	Residential	NCA01	44	43	46	46	51	51	38	PN
R810	Residential	NCA01	44	44	47	47	50	52	38	PN
R811	Residential	NCA01	41	42	46	44	48	49	34	-
R812	Residential	NCA01	42	42	46	45	49	50	35	PN
R813	Residential	NCA01	41	41	45	43	48	49	35	-
R814	Residential	NCA01	41	40	45	43	48	50	34	PN
R815	Residential	NCA01	42	42	46	46	49	51	36	PN
R816	Residential	NCA01	39	39	43	43	46	48	33	-
R817	Residential	NCA01	39	39	42	43	46	47	33	-
R818	Residential	NCA01	38	37	42	33	45	46	29	-
R819	Residential	NCA01	41	41	44	44	48	48	34	-
R820	Residential	NCA01	41	41	44	44	49	47	35	-
R821	Residential	NCA01	41	41	44	44	48	47	35	-
R822	Residential	NCA01	41	41	45	44	47	49	35	-
R823	Residential	NCA01	40	40	45	43	47	49	33	-
R824	Residential	NCA01	42	42	45	45	49	50	35	PN
R825	Residential	NCA01	41	41	45	44	48	49	35	-
R826	Residential	NCA01	41	40	45	43	48	49	33	-
R827	Residential	NCA01	41	40	45	42	48	50	31	PN
R828	Residential	NCA01	40	39	43	42	47	48	31	-
R829	Residential	NCA01	39	40	44	42	46	48	32	-
R830	Residential	NCA01	41	41	45	43	48	48	34	-
R831	Residential	NCA01	43	42	47	44	50	52	34	PN
R832	Residential	NCA01	38	38	41	41	45	44	30	-
R833	Residential	NCA01	39	40	44	43	47	48	29	-
R834	Residential	NCA01	40	39	43	42	47	48	29	-
R835	Residential	NCA01	37	36	40	39	44	45	29	-
R836	Residential	NCA01	39	38	42	41	46	44	27	-
R837	Residential	NCA01	40	40	43	43	47	47	31	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R838	Residential	NCA01	37	37	40	40	44	45	28	-
R839	Residential	NCA01	38	37	41	40	45	46	29	-
R840	Residential	NCA01	37	36	43	39	44	48	28	-
R841	Residential	NCA01	41	40	44	43	48	49	33	-
R842	Residential	NCA01	41	40	45	43	48	49	32	-
R843	Residential	NCA01	40	39	44	42	47	50	30	PN
R844	Residential	NCA01	40	40	44	43	47	48	32	-
R845	Residential	NCA01	35	35	39	38	42	44	30	-
R846	Residential	NCA01	37	36	40	39	44	45	29	-
R847	Residential	NCA01	36	35	40	38	43	45	28	-
R848	Residential	NCA01	33	32	36	35	41	41	28	-

Predicted construction noise levels: OOHW Period 2 (night)

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R001	Residential	NCA01	**76**	**79**	70	66	**81**	**84**	55	PN, V, SN, AA, RP, DR
R002	Residential	NCA01	72	74	66	65	**78**	71	55	PN, V, SN, AA, RP, DR
R003	Residential	NCA01	66	70	69	61	69	**79**	52	PN, V, SN, AA, RP, DR
R004	Residential	NCA01	53	54	64	54	60	70	43	PN, V, SN, AA, RP, DR
R005	Educational institute	NCA01	62	62	64	58	67	73	50	-
R006	Educational institute	NCA01	58	58	61	56	64	69	47	-
R007	Residential	NCA01	54	54	60	55	61	66	46	PN, V, SN, AA, RP, DR
R008	Residential	NCA01	54	54	56	53	61	63	43	PN, V, SN, AA, RP, DR
R009	Residential	NCA01	46	47	52	49	53	58	40	PN, V, SN, RP, DR
R010	Residential	NCA01	46	45	49	46	53	58	38	PN, V, SN, RP, DR
R011	Residential	NCA01	45	44	50	47	52	55	39	PN, V, SN, RP, DR
R012	Residential	NCA01	45	45	51	48	52	54	40	PN, V, SN, RP, DR
R013	Residential	NCA01	50	50	53	50	57	60	41	PN, V, SN, RP, DR
R014	Residential	NCA01	45	48	55	51	51	56	38	PN, V, SN, RP, DR
R015	Residential	NCA01	44	44	50	47	50	55	38	PN, V, SN, RP, DR
R016	Residential	NCA01	48	47	54	50	55	58	41	PN, V, SN, RP, DR
R017	Residential	NCA01	49	48	54	50	56	60	42	PN, V, SN, RP, DR
R018	Residential	NCA01	48	47	53	50	54	58	42	PN, V, SN, RP, DR
R019	Residential	NCA01	50	49	54	51	56	59	42	PN, V, SN, RP, DR
R020	Residential	NCA01	51	50	54	51	58	61	42	PN, V, SN, RP, DR
R021	Residential	NCA01	54	53	54	51	59	60	42	PN, V, SN, RP, DR
R022	Residential	NCA01	73	72	69	69	**78**	74	58	PN, V, SN, AA, RP, DR
R023	Residential	NCA01	70	69	69	69	**77**	**75**	58	PN, V, SN, AA, RP, DR
R024	Residential	NCA01	69	67	69	69	**76**	**75**	58	PN, V, SN, AA, RP, DR
R025	Residential	NCA01	66	64	68	67	73	73	56	PN, V, SN, AA, RP, DR
R026	Residential	NCA01	61	60	64	63	68	70	54	PN, V, SN, AA, RP, DR
R027	Residential	NCA01	58	57	61	60	65	67	52	PN, V, SN, AA, RP, DR
R028	Residential	NCA01	56	55	58	57	63	64	49	PN, V, SN, AA, RP, DR
R029	Residential	NCA01	54	53	55	54	61	60	47	PN, V, SN, AA, RP, DR
R030	Residential	NCA01	52	52	53	52	58	58	44	PN, V, SN, RP, DR
R031	Residential	NCA01	50	49	52	51	56	57	45	PN, V, SN, RP, DR
R032	Residential	NCA01	49	49	51	50	55	56	42	PN, V, SN, RP, DR
R033	Residential	NCA01	50	49	52	51	55	57	43	PN, V, SN, RP, DR
R034	Residential	NCA01	45	45	48	47	54	54	42	PN, V, SN, RP, DR
R035	Residential	NCA01	49	47	50	49	55	55	43	PN, V, SN, RP, DR
R036	Residential	NCA01	50	49	53	52	58	58	45	PN, V, SN, RP, DR
R037	Residential	NCA01	50	50	53	52	58	58	46	PN, V, SN, RP, DR
R038	Residential	NCA01	51	50	54	53	58	58	46	PN, V, SN, RP, DR
R039	Residential	NCA01	50	50	53	53	58	59	46	PN, V, SN, RP, DR
R040	Residential	NCA01	50	49	52	52	57	57	45	PN, V, SN, RP, DR
R041	Residential	NCA01	45	44	48	47	52	53	40	PN, V, SN, RP, DR
R042	Residential	NCA01	49	48	52	51	56	57	44	PN, V, SN, RP, DR
R043	Residential	NCA01	49	49	53	52	57	58	44	PN, V, SN, RP, DR
R044	Residential	NCA01	48	48	51	51	56	55	43	PN, V, SN, RP, DR
R045	Residential	NCA01	48	47	51	50	55	56	43	PN, V, SN, RP, DR
R046	Residential	NCA01	47	46	51	50	54	56	42	PN, V, SN, RP, DR
R047	Residential	NCA01	46	45	49	48	53	54	39	PN, V, SN, RP, DR
R048	Residential	NCA01	45	44	47	47	52	53	38	PN, V, SN, RP, DR
R049	Residential	NCA01	44	43	46	45	51	51	37	PN, V, SN, RP, DR
R050	Residential	NCA01	40	39	42	41	47	48	35	PN, V
R051	Residential	NCA01	41	40	43	42	48	49	36	PN, V
R052	Residential	NCA01	38	38	42	41	46	47	34	PN, V
R053	Residential	NCA01	38	37	41	40	46	46	33	PN, V
R054	Residential	NCA01	37	36	40	39	45	45	32	PN, V
R055	Residential	NCA01	28	27	31	30	35	37	23	PN
R056	Residential	NCA01	29	28	32	31	37	37	24	PN
R057	Residential	NCA01	33	32	36	35	41	41	29	PN, V
R058	Residential	NCA01	34	33	37	36	41	43	29	PN, V
R059	Residential	NCA01	33	32	36	35	40	42	28	PN, V
R060	Residential	NCA01	32	31	35	34	39	40	27	PN
R061	Residential	NCA01	31	31	34	34	39	40	27	PN
R062	Residential	NCA01	31	30	34	33	38	39	27	PN
R063	Residential	NCA01	33	32	36	35	40	41	29	PN, V

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R064	Residential	NCA01	27	27	30	29	34	36	22	PN
R065	Residential	NCA01	28	27	31	30	35	37	23	PN
R066	Residential	NCA01	25	24	28	27	32	33	19	-
R067	Residential	NCA01	24	23	27	26	31	32	18	-
R068	Residential	NCA01	24	24	28	27	32	33	19	-
R069	Residential	NCA01	52	51	56	54	59	61	45	PN, V, SN, AA, RP, DR
R070	Residential	NCA01	51	51	55	53	58	60	45	PN, V, SN, RP, DR
R071	Residential	NCA01	52	51	54	53	59	60	44	PN, V, SN, RP, DR
R072	Residential	NCA01	51	50	54	52	57	60	44	PN, V, SN, RP, DR
R073	Residential	NCA01	48	47	53	49	55	59	42	PN, V, SN, RP, DR
R074	Residential	NCA01	47	47	51	49	54	56	40	PN, V, SN, RP, DR
R075	Residential	NCA01	47	46	52	49	53	56	40	PN, V, SN, RP, DR
R076	Residential	NCA01	47	46	49	48	54	55	40	PN, V, SN, RP, DR
R077	Residential	NCA01	38	37	41	39	45	47	31	PN, V
R078	Residential	NCA01	37	37	42	40	44	46	31	PN, V
R079	Residential	NCA01	39	39	44	42	47	48	34	PN, V
R080	Residential	NCA01	39	38	43	41	46	47	32	PN, V
R081	Residential	NCA01	44	43	48	46	52	54	39	PN, V, SN, RP, DR
R082	Residential	NCA01	47	47	46	48	54	54	37	PN, V, SN, RP, DR
R083	Residential	NCA01	47	46	48	48	54	53	31	PN, V, SN, RP, DR
R084	Commercial	NCA01	27	27	31	29	34	37	21	-
R085	Residential	NCA01	41	40	43	42	48	48	33	PN, V
R086	Residential	NCA01	44	43	48	45	51	52	37	PN, V, SN, RP, DR
R087	Residential	NCA01	66	66	68	60	72	**78**	51	PN, V, SN, AA, RP, DR
R088	Residential	NCA01	38	37	42	40	45	46	31	PN, V
R089	Residential	NCA01	38	38	42	40	45	47	32	PN, V
R090	Residential	NCA01	43	42	46	45	50	52	36	PN, V, SN, RP, DR
R091	Commercial	NCA01	43	43	47	45	50	52	37	-
R092	Residential	NCA01	45	44	48	46	52	52	37	PN, V, SN, RP, DR
R093	Residential	NCA01	44	44	48	46	51	53	38	PN, V, SN, RP, DR
R094	Residential	NCA01	46	45	49	48	53	54	40	PN, V, SN, RP, DR
R095	Residential	NCA01	45	45	49	47	52	54	39	PN, V, SN, RP, DR
R096	Residential	NCA01	44	44	48	47	51	53	38	PN, V, SN, RP, DR
R097	Residential	NCA01	44	44	48	47	51	53	38	PN, V, SN, RP, DR
R098	Commercial	NCA01	33	35	40	38	40	41	26	-
R099	Residential	NCA01	37	36	40	39	44	46	31	PN, V
R100	Residential	NCA01	40	39	43	41	47	48	33	PN, V
R101	Residential	NCA01	41	40	44	43	48	47	35	PN, V
R102	Active recreation	NCA01	37	36	41	39	44	44	31	-
R103	Residential	NCA01	32	31	34	33	39	40	25	PN
R104	Residential	NCA01	40	40	44	43	47	49	34	PN, V
R105	Residential	NCA01	42	41	45	44	49	50	36	PN, V
R106	Residential	NCA01	42	41	46	43	49	50	36	PN, V
R107	Residential	NCA01	40	38	46	45	46	51	37	PN, V, SN, RP, DR
R108	Residential	NCA01	42	42	46	45	49	52	37	PN, V, SN, RP, DR
R109	Residential	NCA01	44	44	46	48	51	54	40	PN, V, SN, RP, DR
R110	Residential	NCA01	45	44	48	49	52	55	41	PN, V, SN, RP, DR
R111	Residential	NCA01	42	42	47	44	49	50	35	PN, V
R112	Residential	NCA01	45	44	47	48	52	54	40	PN, V, SN, RP, DR
R113	Residential	NCA01	45	44	47	47	52	55	39	PN, V, SN, RP, DR
R114	Residential	NCA01	43	42	46	46	50	52	37	PN, V, SN, RP, DR
R115	Residential	NCA01	40	39	47	42	47	51	34	PN, V, SN, RP, DR
R116	Residential	NCA01	46	45	49	47	53	53	39	PN, V, SN, RP, DR
R117	Residential	NCA01	45	45	50	47	52	54	38	PN, V, SN, RP, DR
R118	Residential	NCA01	46	46	50	47	53	55	39	PN, V, SN, RP, DR
R119	Educational institute	NCA01	46	44	51	47	53	53	40	-
R120	Educational institute	NCA01	45	45	51	47	53	54	39	-
R121	Educational institute	NCA01	48	47	48	50	56	56	41	-
R122	Educational institute	NCA01	49	47	52	53	56	58	45	-
R123	Educational institute	NCA01	40	40	44	42	47	51	34	-
R124	Residential	NCA01	46	44	49	47	52	52	39	PN, V, SN, RP, DR

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R125	Residential	NCA01	42	41	45	43	49	50	35	PN, V
R126	Residential	NCA01	38	37	41	39	45	46	31	PN, V
R127	Residential	NCA01	34	33	44	36	41	43	28	PN, V
R128	Residential	NCA01	46	45	46	45	52	50	39	PN, V, SN, RP, DR
R129	Residential	NCA01	44	42	46	46	51	49	37	PN, V, SN, RP, DR
R130	Residential	NCA01	45	44	47	46	52	52	38	PN, V, SN, RP, DR
R131	Residential	NCA01	45	44	49	47	52	54	38	PN, V, SN, RP, DR
R132	Residential	NCA01	50	49	54	51	57	57	41	PN, V, SN, RP, DR
R133	Residential	NCA01	48	45	52	49	55	55	41	PN, V, SN, RP, DR
R134	Residential	NCA01	50	49	54	52	57	60	43	PN, V, SN, RP, DR
R135	Residential	NCA01	44	45	52	52	51	58	44	PN, V, SN, RP, DR
R136	Residential	NCA01	51	50	53	52	58	60	44	PN, V, SN, RP, DR
R137	Residential	NCA01	45	43	47	46	52	50	38	PN, V, SN, RP, DR
R138	Residential	NCA01	47	46	49	46	53	55	37	PN, V, SN, RP, DR
R139	Residential	NCA01	43	43	54	43	50	52	35	PN, V, SN, RP, DR
R140	Residential	NCA01	45	44	46	46	52	52	38	PN, V, SN, RP, DR
R141	Residential	NCA01	41	40	46	41	48	47	33	PN, V
R142	Residential	NCA01	45	45	51	47	52	57	38	PN, V, SN, RP, DR
R143	Residential	NCA01	47	46	55	46	54	60	39	PN, V, SN, RP, DR
R144	Residential	NCA01	53	53	54	48	60	61	37	PN, V, SN, AA, RP, DR
R145	Residential	NCA01	54	54	55	53	61	61	41	PN, V, SN, AA, RP, DR
R146	Residential	NCA01	56	55	56	54	62	56	46	PN, V, SN, AA, RP, DR
R147	Residential	NCA01	58	58	58	56	64	61	47	PN, V, SN, AA, RP, DR
R148	Residential	NCA01	56	54	59	57	63	65	48	PN, V, SN, AA, RP, DR
R149	Residential	NCA01	57	57	57	55	66	61	48	PN, V, SN, AA, RP, DR
R150	Residential	NCA01	57	56	54	54	63	61	45	PN, V, SN, AA, RP, DR
R151	Residential	NCA01	56	55	56	55	62	61	46	PN, V, SN, AA, RP, DR
R152	Residential	NCA01	54	53	56	55	61	61	46	PN, V, SN, AA, RP, DR
R153	Residential	NCA01	55	54	55	53	61	61	45	PN, V, SN, AA, RP, DR
R154	Residential	NCA01	53	50	55	55	60	61	46	PN, V, SN, AA, RP, DR
R155	Residential	NCA01	65	64	63	63	72	69	54	PN, V, SN, AA, RP, DR
R156	Residential	NCA01	58	57	58	57	64	64	49	PN, V, SN, AA, RP, DR
R157	Residential	NCA01	56	57	58	57	63	64	48	PN, V, SN, AA, RP, DR
R158	Residential	NCA01	52	51	54	55	59	58	45	PN, V, SN, RP, DR
R159	Residential	NCA01	48	48	49	48	52	54	41	PN, V, SN, RP, DR
R160	Residential	NCA01	48	49	51	51	56	58	44	PN, V, SN, RP, DR
R161	Residential	NCA01	47	46	51	51	53	54	40	PN, V, SN, RP, DR
R162	Residential	NCA01	43	44	44	46	53	54	40	PN, V, SN, RP, DR
R163	Residential	NCA01	42	42	45	44	50	50	40	PN, V
R164	Residential	NCA01	41	40	44	43	47	47	37	PN, V
R165	Residential	NCA01	39	39	42	42	52	53	39	PN, V, SN, RP, DR
R166	Residential	NCA01	38	38	41	41	46	48	36	PN, V
R167	Residential	NCA01	43	42	45	45	51	51	39	PN, V, SN, RP, DR
R168	Residential	NCA01	39	38	41	41	46	47	35	PN, V
R169	Residential	NCA01	44	44	48	48	52	54	40	PN, V, SN, RP, DR
R170	Residential	NCA01	44	43	47	46	52	51	39	PN, V, SN, RP, DR
R171	Residential	NCA01	45	44	48	47	52	54	40	PN, V, SN, RP, DR
R172	Residential	NCA01	50	49	50	49	57	54	42	PN, V, SN, RP, DR
R173	Residential	NCA01	49	48	50	49	56	54	42	PN, V, SN, RP, DR
R174	Residential	NCA01	47	46	49	47	54	53	38	PN, V, SN, RP, DR
R175	Residential	NCA01	49	48	51	50	56	55	40	PN, V, SN, RP, DR
R176	Residential	NCA01	48	46	50	48	55	56	42	PN, V, SN, RP, DR
R177	Residential	NCA01	51	50	51	49	58	56	41	PN, V, SN, RP, DR
R178	Residential	NCA01	49	48	51	49	56	55	42	PN, V, SN, RP, DR
R179	Residential	NCA01	47	46	49	48	54	55	40	PN, V, SN, RP, DR
R180	Residential	NCA01	36	35	40	37	43	45	29	PN, V
R181	Residential	NCA01	46	45	48	47	51	53	36	PN, V, SN, RP, DR
R182	Residential	NCA01	43	42	45	44	50	50	37	PN, V
R183	Residential	NCA01	41	40	44	43	48	49	35	PN, V
R184	Residential	NCA01	39	39	43	41	47	48	35	PN, V
R185	Residential	NCA01	43	42	45	45	50	51	36	PN, V
R186	Residential	NCA01	41	40	46	45	48	51	36	PN, V, SN, RP, DR
R187	Residential	NCA01	44	42	46	45	51	51	35	PN, V, SN, RP, DR
R188	Residential	NCA01	33	32	34	34	39	40	27	PN
R189	Residential	NCA01	42	41	43	41	49	49	34	PN, V
R190	Residential	NCA01	44	43	45	45	51	51	38	PN, V, SN, RP, DR
R191	Residential	NCA01	36	35	38	37	43	43	31	PN, V

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R192	Residential	NCA01	37	37	40	39	45	45	32	PN, V
R193	Residential	NCA01	34	33	37	36	41	42	27	PN, V
R194	Residential	NCA01	35	33	36	35	41	41	27	PN, V
R195	Residential	NCA01	32	31	34	33	39	39	27	PN
R196	Residential	NCA01	32	31	34	33	39	40	27	PN
R197	Residential	NCA01	31	31	34	33	38	39	26	PN
R198	Residential	NCA01	32	31	34	33	38	39	25	PN
R199	Residential	NCA01	29	28	32	31	36	36	24	PN
R200	Residential	NCA01	30	29	33	32	37	38	25	PN
R201	Residential	NCA01	28	28	32	31	36	37	23	PN
R202	Residential	NCA01	28	27	31	30	35	36	22	PN
R203	Residential	NCA01	27	26	30	29	33	35	21	-
R204	Residential	NCA01	28	27	32	31	35	37	22	PN
R205	Residential	NCA01	29	28	31	30	36	37	22	PN
R206	Residential	NCA01	31	29	33	32	38	38	25	PN
R207	Residential	NCA01	27	27	30	29	34	35	21	-
R208	Residential	NCA01	31	29	33	33	38	35	25	PN
R209	Residential	NCA01	29	28	31	31	36	37	23	PN
R210	Residential	NCA01	29	27	32	31	37	37	24	PN
R211	Residential	NCA01	28	27	31	30	36	36	23	PN
R212	Residential	NCA01	30	29	33	32	37	38	24	PN
R213	Residential	NCA01	30	29	33	32	37	38	25	PN
R214	Residential	NCA01	31	30	33	32	38	38	25	PN
R215	Residential	NCA01	31	30	35	34	38	40	24	PN
R216	Residential	NCA01	33	32	36	35	40	41	24	PN, V
R217	Residential	NCA01	28	27	32	31	35	37	23	PN
R218	Residential	NCA01	33	33	38	37	43	43	27	PN, V
R219	Residential	NCA01	33	32	38	37	42	42	29	PN, V
R220	Residential	NCA01	34	33	38	38	42	45	29	PN, V
R221	Residential	NCA01	33	35	40	38	44	43	28	PN, V
R222	Residential	NCA01	37	34	38	39	45	43	32	PN, V
R223	Residential	NCA01	36	35	39	38	43	43	31	PN, V
R224	Residential	NCA01	40	39	42	41	47	47	34	PN, V
R225	Residential	NCA01	41	41	42	43	49	47	37	PN, V
R226	Residential	NCA01	38	37	40	39	45	45	33	PN, V
R227	Residential	NCA01	43	42	45	44	49	49	36	PN, V
R228	Residential	NCA01	44	44	45	44	50	50	37	PN, V
R229	Residential	NCA01	46	45	44	43	51	51	37	PN, V, SN, RP, DR
R230	Residential	NCA01	49	48	48	47	53	53	38	PN, V, SN, RP, DR
R231	Residential	NCA01	49	49	51	50	56	56	41	PN, V, SN, RP, DR
R232	Residential	NCA01	49	48	51	51	56	57	42	PN, V, SN, RP, DR
R233	Residential	NCA01	48	47	50	49	55	54	43	PN, V, SN, RP, DR
R234	Residential	NCA01	47	47	49	49	55	55	43	PN, V, SN, RP, DR
R235	Residential	NCA01	47	47	49	48	54	55	40	PN, V, SN, RP, DR
R236	Residential	NCA01	46	45	48	47	54	53	40	PN, V, SN, RP, DR
R237	Residential	NCA01	47	45	49	48	54	54	40	PN, V, SN, RP, DR
R238	Residential	NCA01	46	45	51	50	53	56	42	PN, V, SN, RP, DR
R239	Residential	NCA01	46	46	49	49	54	56	42	PN, V, SN, RP, DR
R240	Residential	NCA01	47	47	49	48	53	54	47	PN, V, SN, RP, DR
R241	Residential	NCA01	46	49	49	49	58	55	45	PN, V, SN, RP, DR
R242	Residential	NCA01	54	53	57	57	62	63	48	PN, V, SN, AA, RP, DR
R243	Residential	NCA01	55	54	58	56	62	61	49	PN, V, SN, AA, RP, DR
R244	Residential	NCA01	52	50	54	53	59	60	46	PN, V, SN, RP, DR
R245	Residential	NCA01	58	56	59	58	67	66	52	PN, V, SN, AA, RP, DR
R246	Residential	NCA01	48	48	51	50	55	56	42	PN, V, SN, RP, DR
R247	Residential	NCA01	49	48	52	51	56	56	43	PN, V, SN, RP, DR
R248	Residential	NCA01	49	47	51	50	56	56	42	PN, V, SN, RP, DR
R249	Residential	NCA01	49	47	51	50	56	56	42	PN, V, SN, RP, DR
R250	Residential	NCA01	49	47	50	50	56	56	42	PN, V, SN, RP, DR
R251	Residential	NCA01	49	47	51	50	56	56	42	PN, V, SN, RP, DR
R252	Residential	NCA01	48	47	51	50	56	57	42	PN, V, SN, RP, DR
R253	Residential	NCA01	49	49	52	51	56	57	43	PN, V, SN, RP, DR
R254	Residential	NCA01	48	48	51	49	55	56	42	PN, V, SN, RP, DR
R255	Residential	NCA01	48	48	51	50	55	57	42	PN, V, SN, RP, DR
R256	Residential	NCA01	48	48	51	51	56	57	43	PN, V, SN, RP, DR
R257	Residential	NCA01	49	48	50	51	56	57	43	PN, V, SN, RP, DR
R258	Residential	NCA01	49	48	51	51	56	57	43	PN, V, SN, RP, DR

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R259	Residential	NCA01	48	47	52	51	55	54	43	PN, V, SN, RP, DR
R260	Residential	NCA01	48	47	49	49	55	53	42	PN, V, SN, RP, DR
R261	Residential	NCA01	47	47	49	48	55	54	43	PN, V, SN, RP, DR
R262	Residential	NCA01	47	46	49	49	54	54	43	PN, V, SN, RP, DR
R263	Residential	NCA01	47	46	49	48	53	54	43	PN, V, SN, RP, DR
R264	Residential	NCA01	46	46	48	47	53	53	42	PN, V, SN, RP, DR
R265	Residential	NCA01	46	46	48	47	53	53	42	PN, V, SN, RP, DR
R266	Residential	NCA01	46	46	48	47	54	53	42	PN, V, SN, RP, DR
R267	Residential	NCA01	46	47	49	48	56	54	43	PN, V, SN, RP, DR
R268	Residential	NCA01	47	46	47	46	54	52	41	PN, V, SN, RP, DR
R269	Residential	NCA01	45	45	47	47	54	52	41	PN, V, SN, RP, DR
R270	Residential	NCA01	44	43	47	46	52	52	40	PN, V, SN, RP, DR
R271	Residential	NCA01	45	44	48	47	53	53	41	PN, V, SN, RP, DR
R272	Residential	NCA01	44	42	46	45	51	51	37	PN, V, SN, RP, DR
R273	Residential	NCA01	43	42	46	45	50	51	38	PN, V, SN, RP, DR
R274	Residential	NCA01	44	42	46	45	51	51	38	PN, V, SN, RP, DR
R275	Residential	NCA01	43	42	46	45	51	51	38	PN, V, SN, RP, DR
R276	Residential	NCA01	45	44	48	47	52	52	40	PN, V, SN, RP, DR
R277	Residential	NCA01	44	44	46	46	52	51	40	PN, V, SN, RP, DR
R278	Residential	NCA01	45	44	48	47	53	53	40	PN, V, SN, RP, DR
R279	Residential	NCA01	46	45	48	48	53	54	40	PN, V, SN, RP, DR
R280	Residential	NCA01	46	45	49	48	53	54	41	PN, V, SN, RP, DR
R281	Residential	NCA01	46	45	48	48	53	52	41	PN, V, SN, RP, DR
R282	Residential	NCA01	46	45	48	47	53	52	41	PN, V, SN, RP, DR
R283	Residential	NCA01	46	45	48	47	54	53	41	PN, V, SN, RP, DR
R284	Residential	NCA01	47	47	49	49	55	55	42	PN, V, SN, RP, DR
R285	Residential	NCA01	46	45	48	48	53	53	41	PN, V, SN, RP, DR
R286	Residential	NCA01	46	45	48	48	53	54	41	PN, V, SN, RP, DR
R287	Residential	NCA01	46	46	48	48	53	54	42	PN, V, SN, RP, DR
R288	Residential	NCA01	47	46	48	48	54	54	41	PN, V, SN, RP, DR
R289	Residential	NCA01	47	46	48	49	54	54	41	PN, V, SN, RP, DR
R290	Residential	NCA01	47	46	50	50	54	54	41	PN, V, SN, RP, DR
R291	Residential	NCA01	47	46	50	50	54	56	41	PN, V, SN, RP, DR
R292	Residential	NCA01	47	47	50	50	54	56	41	PN, V, SN, RP, DR
R293	Residential	NCA01	47	47	49	49	54	55	41	PN, V, SN, RP, DR
R294	Residential	NCA01	47	47	49	49	54	55	41	PN, V, SN, RP, DR
R295	Residential	NCA01	47	48	50	49	54	55	41	PN, V, SN, RP, DR
R296	Residential	NCA01	47	47	50	49	54	55	41	PN, V, SN, RP, DR
R297	Residential	NCA01	47	47	50	49	54	54	41	PN, V, SN, RP, DR
R298	Residential	NCA01	47	47	50	49	54	55	40	PN, V, SN, RP, DR
R299	Residential	NCA01	48	46	50	49	54	55	41	PN, V, SN, RP, DR
R300	Residential	NCA01	47	46	49	49	54	55	41	PN, V, SN, RP, DR
R301	Residential	NCA01	46	45	49	48	53	54	40	PN, V, SN, RP, DR
R302	Residential	NCA01	47	46	49	48	54	55	40	PN, V, SN, RP, DR
R303	Residential	NCA01	48	47	50	47	55	55	38	PN, V, SN, RP, DR
R304	Residential	NCA01	47	47	50	49	54	55	41	PN, V, SN, RP, DR
R305	Residential	NCA01	47	47	50	49	54	54	41	PN, V, SN, RP, DR
R306	Residential	NCA01	48	47	50	49	54	55	41	PN, V, SN, RP, DR
R307	Residential	NCA01	48	47	50	49	54	55	41	PN, V, SN, RP, DR
R308	Residential	NCA01	48	47	51	49	55	56	41	PN, V, SN, RP, DR
R309	Residential	NCA01	48	47	50	49	54	55	40	PN, V, SN, RP, DR
R310	Residential	NCA01	47	46	49	48	54	54	40	PN, V, SN, RP, DR
R311	Residential	NCA01	43	44	48	45	50	50	36	PN, V
R312	Residential	NCA01	45	44	47	47	52	51	39	PN, V, SN, RP, DR
R313	Residential	NCA01	46	46	49	48	53	54	41	PN, V, SN, RP, DR
R314	Residential	NCA01	46	45	48	47	53	53	40	PN, V, SN, RP, DR
R315	Residential	NCA01	46	45	48	48	53	53	40	PN, V, SN, RP, DR
R316	Residential	NCA01	42	42	46	45	50	51	37	PN, V, SN, RP, DR
R317	Residential	NCA01	45	44	48	47	52	53	39	PN, V, SN, RP, DR
R318	Residential	NCA01	45	44	47	46	52	53	38	PN, V, SN, RP, DR
R319	Residential	NCA01	45	45	49	48	53	54	40	PN, V, SN, RP, DR
R320	Residential	NCA01	46	45	49	48	53	54	40	PN, V, SN, RP, DR
R321	Residential	NCA01	35	34	38	37	42	43	29	PN, V
R322	Residential	NCA01	33	32	36	35	40	42	28	PN, V
R323	Residential	NCA01	38	37	42	41	46	47	32	PN, V
R324	Residential	NCA01	45	44	48	47	52	53	39	PN, V, SN, RP, DR
R325	Residential	NCA01	45	44	48	47	52	53	39	PN, V, SN, RP, DR

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R326	Residential	NCA01	46	45	49	48	53	54	40	PN, V, SN, RP, DR
R327	Residential	NCA01	45	44	48	47	53	53	40	PN, V, SN, RP, DR
R328	Residential	NCA01	46	45	48	48	53	53	39	PN, V, SN, RP, DR
R329	Residential	NCA01	45	45	48	48	52	53	39	PN, V, SN, RP, DR
R330	Residential	NCA01	45	46	48	47	52	53	39	PN, V, SN, RP, DR
R331	Residential	NCA01	46	46	49	48	53	53	40	PN, V, SN, RP, DR
R332	Residential	NCA01	46	46	49	48	53	53	40	PN, V, SN, RP, DR
R333	Residential	NCA01	46	46	48	47	53	54	39	PN, V, SN, RP, DR
R334	Residential	NCA01	46	46	49	48	53	54	40	PN, V, SN, RP, DR
R335	Residential	NCA01	46	46	49	48	53	54	40	PN, V, SN, RP, DR
R336	Residential	NCA01	45	46	48	48	53	53	40	PN, V, SN, RP, DR
R337	Residential	NCA01	46	46	49	48	53	53	40	PN, V, SN, RP, DR
R338	Residential	NCA01	47	46	48	47	54	53	40	PN, V, SN, RP, DR
R339	Residential	NCA01	47	46	49	47	54	53	40	PN, V, SN, RP, DR
R340	Residential	NCA01	46	46	48	47	54	54	40	PN, V, SN, RP, DR
R341	Residential	NCA01	46	46	48	48	53	54	40	PN, V, SN, RP, DR
R342	Residential	NCA01	46	45	48	47	52	54	40	PN, V, SN, RP, DR
R343	Residential	NCA01	46	45	48	48	53	54	40	PN, V, SN, RP, DR
R344	Residential	NCA01	46	45	49	48	53	54	41	PN, V, SN, RP, DR
R345	Residential	NCA01	45	44	48	47	52	53	39	PN, V, SN, RP, DR
R346	Residential	NCA01	43	42	46	45	50	51	37	PN, V, SN, RP, DR
R347	Residential	NCA01	36	35	37	37	43	44	29	PN, V
R348	Residential	NCA01	32	32	34	32	39	39	26	PN
R349	Residential	NCA01	38	37	39	40	45	44	33	PN, V
R350	Residential	NCA01	39	38	42	41	47	45	34	PN, V
R351	Residential	NCA01	29	28	32	31	37	37	24	PN
R352	Residential	NCA01	31	30	35	33	39	39	26	PN
R353	Residential	NCA01	32	31	34	33	40	40	24	PN
R354	Residential	NCA01	41	39	43	42	48	46	35	PN, V
R355	Residential	NCA01	40	40	42	41	48	47	36	PN, V
R356	Residential	NCA01	38	37	40	38	45	45	31	PN, V
R357	Residential	NCA01	65	69	70	72	71	74	58	PN, V, SN, AA, RP, DR
R358	Residential	NCA01	62	66	72	69	68	74	54	PN, V, SN, AA, RP, DR
R359	Residential	NCA01	59	64	71	67	65	73	52	PN, V, SN, AA, RP, DR
R360	Residential	NCA01	57	59	70	61	63	70	50	PN, V, SN, AA, RP, DR
R361	Residential	NCA01	55	58	68	60	61	67	48	PN, V, SN, AA, RP, DR
R362	Residential	NCA01	53	56	65	59	60	66	47	PN, V, SN, AA, RP, DR
R363	Residential	NCA01	50	50	62	51	57	64	40	PN, V, SN, AA, RP, DR
R364	Residential	NCA01	45	46	58	47	52	61	37	PN, V, SN, AA, RP, DR
R365	Residential	NCA01	45	45	52	47	51	55	37	PN, V, SN, RP, DR
R366	Residential	NCA01	48	47	56	47	55	60	38	PN, V, SN, RP, DR
R367	Residential	NCA01	46	45	53	40	52	56	34	PN, V, SN, RP, DR
R368	Residential	NCA01	47	47	57	47	54	59	37	PN, V, SN, RP, DR
R369	Residential	NCA01	46	47	56	49	54	56	41	PN, V, SN, RP, DR
R370	Residential	NCA01	47	47	59	49	55	56	41	PN, V, SN, RP, DR
R371	Residential	NCA01	50	51	56	50	55	51	39	PN, V, SN, RP, DR
R372	Residential	NCA01	46	45	49	48	53	52	40	PN, V, SN, RP, DR
R373	Residential	NCA01	45	45	51	48	52	52	39	PN, V, SN, RP, DR
R374	Residential	NCA01	41	41	54	44	49	58	34	PN, V, SN, RP, DR
R375	Residential	NCA01	45	45	55	48	52	57	39	PN, V, SN, RP, DR
R376	Residential	NCA01	48	49	54	49	56	58	43	PN, V, SN, RP, DR
R377	Residential	NCA01	46	46	56	50	52	58	39	PN, V, SN, RP, DR
R378	Residential	NCA01	47	46	54	49	54	58	41	PN, V, SN, RP, DR
R379	Residential	NCA01	50	49	56	52	57	60	43	PN, V, SN, RP, DR
R380	Residential	NCA01	48	47	51	51	55	56	42	PN, V, SN, RP, DR
R381	Residential	NCA01	48	48	53	48	55	58	41	PN, V, SN, RP, DR
R382	Residential	NCA01	48	47	55	47	55	59	42	PN, V, SN, RP, DR
R383	Residential	NCA01	46	46	54	45	53	58	38	PN, V, SN, RP, DR
R384	Residential	NCA01	49	48	55	44	55	59	36	PN, V, SN, RP, DR
R385	Residential	NCA01	47	48	55	49	53	58	40	PN, V, SN, RP, DR
R386	Residential	NCA01	47	48	58	47	55	60	38	PN, V, SN, RP, DR
R387	Residential	NCA01	48	49	57	50	55	60	41	PN, V, SN, RP, DR
R388	Residential	NCA01	51	51	57	54	57	61	44	PN, V, SN, AA, RP, DR
R389	Residential	NCA01	48	47	56	52	54	60	41	PN, V, SN, RP, DR
R390	Residential	NCA01	48	46	55	48	54	59	38	PN, V, SN, RP, DR
R391	Residential	NCA01	72	73	70	**77**	**78**	73	65	PN, V, SN, AA, RP, DR
R392	Residential	NCA01	72	73	71	73	**79**	74	65	PN, V, SN, AA, RP, DR

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R393	Residential	NCA01	71	72	71	71	**79**	73	66	PN, V, SN, AA, RP, DR
R394	Residential	NCA01	69	70	70	69	**77**	73	65	PN, V, SN, AA, RP, DR
R395	Residential	NCA01	64	65	67	67	74	71	63	PN, V, SN, AA, RP, DR
R396	Residential	NCA01	64	64	65	65	72	69	62	PN, V, SN, AA, RP, DR
R397	Residential	NCA01	60	60	62	62	69	67	60	PN, V, SN, AA, RP, DR
R398	Residential	NCA01	58	58	60	60	66	66	58	PN, V, SN, AA, RP, DR
R399	Residential	NCA01	56	56	59	58	64	65	55	PN, V, SN, AA, RP, DR
R400	Residential	NCA01	46	46	50	50	54	57	45	PN, V, SN, RP, DR
R401	Residential	NCA01	48	48	52	51	57	57	47	PN, V, SN, RP, DR
R402	Residential	NCA01	42	44	50	46	49	52	38	PN, V, SN, RP, DR
R403	Residential	NCA01	47	47	52	48	54	55	47	PN, V, SN, RP, DR
R404	Residential	NCA01	48	47	54	48	55	56	43	PN, V, SN, RP, DR
R405	Residential	NCA01	47	49	54	52	55	60	43	PN, V, SN, RP, DR
R406	Residential	NCA01	47	51	55	54	55	60	43	PN, V, SN, RP, DR
R407	Residential	NCA01	41	43	49	46	47	50	33	PN, V
R408	Residential	NCA01	46	50	53	52	54	56	41	PN, V, SN, RP, DR
R409	Residential	NCA01	49	50	54	53	55	55	40	PN, V, SN, RP, DR
R410	Residential	NCA01	51	50	54	53	56	54	41	PN, V, SN, RP, DR
R411	Residential	NCA01	53	51	53	54	57	54	41	PN, V, SN, RP, DR
R412	Residential	NCA01	54	55	58	58	60	63	37	PN, V, SN, AA, RP, DR
R413	Residential	NCA01	48	49	53	53	54	58	36	PN, V, SN, RP, DR
R414	Residential	NCA01	48	53	57	54	60	53	48	PN, V, SN, RP, DR
R415	Residential	NCA01	49	56	60	59	56	65	46	PN, V, SN, AA, RP, DR
R416	Residential	NCA01	50	59	61	62	56	66	38	PN, V, SN, AA, RP, DR
R417	Residential	NCA01	46	54	61	57	63	64	50	PN, V, SN, AA, RP, DR
R418	Residential	NCA01	51	53	62	56	50	65	44	PN, V, SN, AA, RP, DR
R419	Residential	NCA01	51	51	61	56	55	53	45	PN, V, SN, RP, DR
R420	Residential	NCA01	65	65	65	66	72	70	58	PN, V, SN, AA, RP, DR
R421	Residential	NCA01	61	65	65	68	67	68	54	PN, V, SN, AA, RP, DR
R422	Residential	NCA01	58	60	61	65	62	63	51	PN, V, SN, AA, RP, DR
R423	Residential	NCA01	57	57	59	60	60	63	51	PN, V, SN, AA, RP, DR
R424	Residential	NCA01	56	56	58	60	60	57	49	PN, V, SN, RP, DR
R425	Residential	NCA01	54	54	55	58	57	56	43	PN, V, SN, RP, DR
R426	Residential	NCA01	54	58	61	61	61	66	43	PN, V, SN, AA, RP, DR
R427	Residential	NCA01	52	51	58	50	58	62	38	PN, V, SN, AA, RP, DR
R428	Residential	NCA01	49	51	53	53	56	53	40	PN, V, SN, RP, DR
R429	Residential	NCA01	51	53	59	56	58	64	36	PN, V, SN, AA, RP, DR
R430	Residential	NCA01	51	52	58	56	57	63	45	PN, V, SN, AA, RP, DR
R431	Residential	NCA01	51	52	59	55	57	63	44	PN, V, SN, AA, RP, DR
R432	Residential	NCA01	45	44	54	42	52	58	31	PN, V, SN, RP, DR
R433	Residential	NCA01	49	49	57	54	56	59	42	PN, V, SN, RP, DR
R434	Residential	NCA01	51	51	57	53	56	58	43	PN, V, SN, RP, DR
R435	Residential	NCA01	42	41	47	45	47	47	35	PN, V
R436	Residential	NCA01	49	51	56	52	55	58	41	PN, V, SN, RP, DR
R437	Residential	NCA01	49	49	55	51	56	57	42	PN, V, SN, RP, DR
R438	Residential	NCA01	49	48	54	48	56	57	41	PN, V, SN, RP, DR
R439	Residential	NCA01	49	48	54	48	56	58	41	PN, V, SN, RP, DR
R440	Residential	NCA01	48	48	53	48	56	57	41	PN, V, SN, RP, DR
R441	Residential	NCA01	48	46	51	48	53	55	40	PN, V, SN, RP, DR
R442	Residential	NCA01	46	45	51	46	53	52	39	PN, V, SN, RP, DR
R443	Residential	NCA01	47	46	50	47	53	53	40	PN, V, SN, RP, DR
R444	Residential	NCA01	37	36	41	40	44	43	30	PN, V
R445	Commercial	NCA01	38	40	46	40	45	51	31	-
R446	Residential	NCA01	45	45	49	48	52	54	39	PN, V, SN, RP, DR
R447	Residential	NCA01	46	45	53	47	52	54	39	PN, V, SN, RP, DR
R448	Residential	NCA01	47	47	53	48	53	58	40	PN, V, SN, RP, DR
R449	Residential	NCA01	48	48	53	49	55	58	42	PN, V, SN, RP, DR
R450	Residential	NCA01	49	48	54	49	55	58	41	PN, V, SN, RP, DR
R451	Residential	NCA01	47	47	51	49	55	55	41	PN, V, SN, RP, DR
R452	Residential	NCA01	47	46	51	49	54	56	40	PN, V, SN, RP, DR
R453	Residential	NCA01	48	48	54	49	55	59	41	PN, V, SN, RP, DR
R454	Residential	NCA01	49	48	55	49	55	59	40	PN, V, SN, RP, DR
R455	Residential	NCA01	49	48	55	49	55	60	40	PN, V, SN, RP, DR
R456	Residential	NCA01	48	47	54	48	55	58	42	PN, V, SN, RP, DR
R457	Residential	NCA01	48	48	53	48	55	57	41	PN, V, SN, RP, DR
R458	Residential	NCA01	48	49	54	49	55	58	42	PN, V, SN, RP, DR
R459	Residential	NCA01	49	48	54	50	56	58	42	PN, V, SN, RP, DR

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R460	Residential	NCA01	48	48	53	50	55	58	42	PN, V, SN, RP, DR
R461	Residential	NCA01	48	48	53	51	55	58	42	PN, V, SN, RP, DR
R462	Residential	NCA01	46	45	50	48	52	54	40	PN, V, SN, RP, DR
R463	Residential	NCA01	37	36	40	39	44	45	31	PN, V
R464	Residential	NCA01	48	48	52	51	55	55	42	PN, V, SN, RP, DR
R465	Residential	NCA01	42	41	44	44	49	49	37	PN, V
R466	Residential	NCA01	49	48	53	51	55	58	42	PN, V, SN, RP, DR
R467	Residential	NCA01	49	49	54	52	56	58	43	PN, V, SN, RP, DR
R468	Residential	NCA01	47	47	51	50	54	55	42	PN, V, SN, RP, DR
R469	Residential	NCA01	49	50	55	52	56	59	43	PN, V, SN, RP, DR
R470	Residential	NCA01	50	50	55	53	57	60	44	PN, V, SN, RP, DR
R471	Residential	NCA01	51	51	56	53	57	62	44	PN, V, SN, AA, RP, DR
R472	Residential	NCA01	51	51	57	54	58	61	45	PN, V, SN, AA, RP, DR
R473	Residential	NCA01	51	51	57	54	58	61	45	PN, V, SN, AA, RP, DR
R474	Residential	NCA01	51	52	57	55	58	61	46	PN, V, SN, AA, RP, DR
R475	Residential	NCA01	52	52	58	55	59	62	46	PN, V, SN, AA, RP, DR
R476	Residential	NCA01	52	52	58	55	59	63	46	PN, V, SN, AA, RP, DR
R477	Residential	NCA01	52	52	57	54	58	61	45	PN, V, SN, AA, RP, DR
R478	Residential	NCA01	50	50	56	53	57	60	44	PN, V, SN, RP, DR
R479	Residential	NCA01	50	50	55	53	57	59	44	PN, V, SN, RP, DR
R480	Residential	NCA01	50	50	53	53	57	57	44	PN, V, SN, RP, DR
R481	Residential	NCA01	44	43	44	43	47	49	34	PN, V
R482	Residential	NCA01	50	49	54	52	56	59	43	PN, V, SN, RP, DR
R483	Residential	NCA01	49	49	54	51	56	58	43	PN, V, SN, RP, DR
R484	Residential	NCA01	36	35	39	39	43	43	30	PN, V
R485	Residential	NCA01	48	48	51	51	55	54	42	PN, V, SN, RP, DR
R486	Residential	NCA01	48	48	53	51	55	57	42	PN, V, SN, RP, DR
R487	Residential	NCA01	48	48	53	50	55	57	42	PN, V, SN, RP, DR
R488	Residential	NCA01	48	47	52	50	54	56	41	PN, V, SN, RP, DR
R489	Residential	NCA01	48	48	53	49	55	57	41	PN, V, SN, RP, DR
R490	Residential	NCA01	46	47	51	47	53	55	39	PN, V, SN, RP, DR
R491	Residential	NCA01	45	46	49	47	52	55	38	PN, V, SN, RP, DR
R492	Residential	NCA01	42	41	44	44	49	49	36	PN, V
R493	Residential	NCA01	43	43	47	45	50	52	37	PN, V, SN, RP, DR
R494	Residential	NCA01	44	43	47	47	51	52	38	PN, V, SN, RP, DR
R495	Residential	NCA01	44	43	47	46	51	51	39	PN, V, SN, RP, DR
R496	Residential	NCA01	45	44	47	47	52	52	39	PN, V, SN, RP, DR
R497	Residential	NCA01	46	47	48	48	54	54	40	PN, V, SN, RP, DR
R498	Residential	NCA01	47	47	50	47	54	56	40	PN, V, SN, RP, DR
R499	Residential	NCA01	38	37	41	40	44	45	32	PN, V
R500	Residential	NCA01	47	46	51	49	54	56	41	PN, V, SN, RP, DR
R501	Residential	NCA01	48	48	51	51	55	56	42	PN, V, SN, RP, DR
R502	Residential	NCA01	46	46	47	47	54	52	41	PN, V, SN, RP, DR
R503	Residential	NCA01	43	43	47	46	51	52	38	PN, V, SN, RP, DR
R504	Residential	NCA01	43	43	47	46	50	52	38	PN, V, SN, RP, DR
R505	Residential	NCA01	49	48	53	51	56	57	42	PN, V, SN, RP, DR
R506	Residential	NCA01	49	48	53	51	56	58	42	PN, V, SN, RP, DR
R507	Residential	NCA01	45	45	40	40	52	44	31	PN, V, SN, RP, DR
R508	Residential	NCA01	49	48	53	51	56	58	42	PN, V, SN, RP, DR
R509	Residential	NCA01	50	49	54	52	57	59	43	PN, V, SN, RP, DR
R510	Residential	NCA01	51	50	55	52	57	59	44	PN, V, SN, RP, DR
R511	Residential	NCA01	47	47	51	49	54	56	40	PN, V, SN, RP, DR
R512	Residential	NCA01	52	52	57	54	59	61	46	PN, V, SN, AA, RP, DR
R513	Residential	NCA01	52	54	57	57	58	62	41	PN, V, SN, AA, RP, DR
R514	Residential	NCA01	51	53	55	57	58	53	41	PN, V, SN, RP, DR
R515	Residential	NCA01	49	50	51	54	54	53	41	PN, V, SN, RP, DR
R516	Residential	NCA01	45	45	48	48	51	53	39	PN, V, SN, RP, DR
R517	Residential	NCA01	46	47	51	50	53	56	38	PN, V, SN, RP, DR
R518	Residential	NCA01	46	46	51	50	53	56	36	PN, V, SN, RP, DR
R519	Residential	NCA01	46	46	50	49	53	55	36	PN, V, SN, RP, DR
R520	Residential	NCA01	46	46	50	49	53	55	36	PN, V, SN, RP, DR
R521	Residential	NCA01	46	46	50	49	53	55	35	PN, V, SN, RP, DR
R522	Residential	NCA01	46	46	50	48	52	54	36	PN, V, SN, RP, DR
R523	Residential	NCA01	45	45	49	48	52	54	34	PN, V, SN, RP, DR
R524	Residential	NCA01	45	46	50	49	52	54	38	PN, V, SN, RP, DR
R525	Residential	NCA01	43	44	49	47	50	53	37	PN, V, SN, RP, DR
R526	Residential	NCA01	45	46	49	49	52	53	38	PN, V, SN, RP, DR

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R527	Residential	NCA01	44	45	48	47	51	52	36	PN, V, SN, RP, DR
R528	Residential	NCA01	43	43	48	46	49	52	36	PN, V, SN, RP, DR
R529	Residential	NCA01	42	43	48	46	49	50	36	PN, V
R530	Residential	NCA01	39	39	43	42	46	48	31	PN, V
R531	Residential	NCA01	39	39	43	40	46	48	30	PN, V
R532	Residential	NCA01	40	40	45	42	47	50	34	PN, V
R533	Residential	NCA01	39	38	42	41	46	47	30	PN, V
R534	Residential	NCA01	34	34	37	37	41	42	27	PN, V
R535	Residential	NCA01	40	39	46	42	47	50	34	PN, V
R536	Residential	NCA01	45	45	49	48	52	50	38	PN, V, SN, RP, DR
R537	Residential	NCA01	45	46	49	49	52	53	38	PN, V, SN, RP, DR
R538	Residential	NCA01	42	42	47	46	49	51	33	PN, V, SN, RP, DR
R539	Residential	NCA01	46	47	50	50	53	55	38	PN, V, SN, RP, DR
R540	Residential	NCA01	47	47	51	51	54	55	38	PN, V, SN, RP, DR
R541	Residential	NCA01	50	50	52	53	56	57	37	PN, V, SN, RP, DR
R542	Residential	NCA01	46	47	51	51	53	55	34	PN, V, SN, RP, DR
R543	Residential	NCA01	43	43	51	46	50	53	38	PN, V, SN, RP, DR
R544	Residential	NCA01	42	41	44	44	48	49	41	PN, V
R545	Residential	NCA01	46	48	49	51	51	51	41	PN, V, SN, RP, DR
R546	Residential	NCA01	48	46	56	49	54	57	41	PN, V, SN, RP, DR
R547	Residential	NCA01	45	43	51	46	51	53	39	PN, V, SN, RP, DR
R548	Residential	NCA01	51	52	56	55	58	61	38	PN, V, SN, AA, RP, DR
R549	Residential	NCA01	54	53	57	56	62	64	51	PN, V, SN, AA, RP, DR
R550	Residential	NCA01	47	47	49	49	55	55	42	PN, V, SN, RP, DR
R551	Residential	NCA01	47	47	49	49	55	54	42	PN, V, SN, RP, DR
R552	Residential	NCA01	47	46	50	49	54	54	42	PN, V, SN, RP, DR
R553	Residential	NCA01	46	43	46	46	53	52	41	PN, V, SN, RP, DR
R554	Residential	NCA01	45	43	49	48	54	51	40	PN, V, SN, RP, DR
R555	Residential	NCA01	45	44	48	48	51	54	42	PN, V, SN, RP, DR
R556	Residential	NCA01	43	42	48	44	50	51	37	PN, V, SN, RP, DR
R557	Residential	NCA01	45	44	48	47	52	52	40	PN, V, SN, RP, DR
R558	Residential	NCA01	40	39	45	42	47	50	35	PN, V
R559	Residential	NCA01	42	47	52	50	49	56	34	PN, V, SN, RP, DR
R560	Residential	NCA01	41	41	43	43	49	50	37	PN, V
R561	Residential	NCA01	45	44	50	45	52	53	38	PN, V, SN, RP, DR
R562	Residential	NCA01	44	44	48	48	53	54	41	PN, V, SN, RP, DR
R563	Residential	NCA01	43	42	47	46	51	52	38	PN, V, SN, RP, DR
R564	Residential	NCA01	46	45	49	48	53	51	40	PN, V, SN, RP, DR
R565	Residential	NCA01	46	45	49	46	53	54	39	PN, V, SN, RP, DR
R566	Residential	NCA01	45	45	49	46	52	54	38	PN, V, SN, RP, DR
R567	Residential	NCA01	46	44	49	48	53	54	39	PN, V, SN, RP, DR
R568	Residential	NCA01	49	48	52	52	57	58	45	PN, V, SN, RP, DR
R569	Residential	NCA01	48	47	52	51	56	57	44	PN, V, SN, RP, DR
R570	Residential	NCA01	53	52	55	55	60	61	49	PN, V, SN, AA, RP, DR
R571	Residential	NCA01	48	49	53	52	58	58	46	PN, V, SN, RP, DR
R572	Residential	NCA01	48	49	52	51	57	58	45	PN, V, SN, RP, DR
R573	Residential	NCA01	49	48	52	51	56	57	44	PN, V, SN, RP, DR
R574	Residential	NCA01	47	47	51	50	55	57	43	PN, V, SN, RP, DR
R575	Residential	NCA01	40	39	43	42	48	47	35	PN, V
R576	Residential	NCA01	39	38	43	42	47	48	33	PN, V
R577	Residential	NCA01	42	42	45	44	50	50	37	PN, V
R578	Residential	NCA01	45	44	48	47	52	53	40	PN, V, SN, RP, DR
R579	Residential	NCA01	42	42	46	44	43	51	36	PN, V, SN, RP, DR
R580	Residential	NCA01	41	42	46	44	48	51	33	PN, V, SN, RP, DR
R581	Residential	NCA01	43	43	48	44	50	50	32	PN, V
R582	Residential	NCA01	45	44	48	46	52	50	32	PN, V, SN, RP, DR
R583	Residential	NCA01	45	45	49	47	52	54	33	PN, V, SN, RP, DR
R584	Residential	NCA01	42	41	48	43	49	51	32	PN, V
R585	Residential	NCA01	41	41	49	42	48	53	35	PN, V, SN, RP, DR
R586	Residential	NCA01	40	41	49	43	47	54	34	PN, V, SN, RP, DR
R587	Residential	NCA01	44	41	49	44	48	54	33	PN, V, SN, RP, DR
R588	Residential	NCA01	41	44	48	47	52	52	37	PN, V, SN, RP, DR
R589	Residential	NCA01	42	44	46	46	52	51	39	PN, V, SN, RP, DR
R590	Residential	NCA01	41	41	44	44	48	48	37	PN, V
R591	Residential	NCA01	38	37	41	40	46	47	34	PN, V
R592	Residential	NCA01	39	38	42	41	46	46	34	PN, V
R593	Residential	NCA01	38	38	42	41	45	47	34	PN, V

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected Non-residential: Exceeds noise management level										
R594	Residential	NCA01	39	38	43	41	46	48	32	PN, V
R595	Residential	NCA01	39	39	45	42	46	49	31	PN, V
R596	Residential	NCA01	41	41	45	44	48	48	28	PN, V
R597	Residential	NCA01	42	41	44	44	49	47	30	PN, V
R598	Residential	NCA01	40	40	43	43	47	44	31	PN, V
R599	Residential	NCA01	38	38	42	41	45	45	30	PN, V
R600	Residential	NCA01	39	38	42	41	46	45	29	PN, V
R601	Residential	NCA01	43	42	47	45	50	54	34	PN, V, SN, RP, DR
R602	Residential	NCA01	36	38	44	39	43	50	32	PN, V
R603	Residential	NCA01	36	37	41	39	43	48	33	PN, V
R604	Residential	NCA01	36	38	42	41	43	48	30	PN, V
R605	Residential	NCA01	38	39	43	41	45	48	29	PN, V
R606	Residential	NCA01	40	39	43	41	47	48	30	PN, V
R607	Residential	NCA01	36	35	42	38	43	46	29	PN, V
R608	Residential	NCA01	38	37	44	39	45	47	28	PN, V
R609	Residential	NCA01	38	37	44	40	46	47	28	PN, V
R610	Residential	NCA01	35	34	41	37	42	44	28	PN, V
R611	Residential	NCA01	35	34	41	37	42	46	29	PN, V
R612	Residential	NCA01	34	34	41	37	41	46	28	PN, V
R613	Residential	NCA01	34	34	43	37	41	47	28	PN, V
R614	Residential	NCA01	35	39	43	42	42	48	28	PN, V
R615	Residential	NCA01	37	40	43	42	47	48	32	PN, V
R616	Residential	NCA01	40	39	43	42	47	47	34	PN, V
R617	Residential	NCA01	38	37	45	40	45	50	28	PN, V
R618	Residential	NCA01	39	39	44	42	47	50	34	PN, V
R619	Residential	NCA01	39	40	44	41	46	48	31	PN, V
R620	Residential	NCA01	41	40	44	43	48	48	33	PN, V
R621	Residential	NCA01	39	39	44	42	46	49	35	PN, V
R622	Residential	NCA01	41	40	44	43	48	49	35	PN, V
R623	Residential	NCA01	45	45	48	47	53	53	40	PN, V, SN, RP, DR
R624	Residential	NCA01	36	35	42	41	49	46	33	PN, V
R625	Residential	NCA01	36	35	41	38	43	48	30	PN, V
R626	Residential	NCA01	36	36	45	39	43	49	30	PN, V
R627	Residential	NCA01	44	44	48	44	52	52	38	PN, V, SN, RP, DR
R628	Residential	NCA01	44	43	45	45	51	50	38	PN, V, SN, RP, DR
R629	Residential	NCA01	41	39	45	42	48	47	35	PN, V
R630	Residential	NCA01	37	37	43	40	45	46	33	PN, V
R631	Residential	NCA01	36	37	44	40	44	50	32	PN, V
R632	Residential	NCA01	38	37	44	40	45	50	33	PN, V
R633	Residential	NCA01	33	35	37	35	40	41	28	PN, V
R634	Residential	NCA01	31	32	36	34	38	42	25	PN, V
R635	Residential	NCA01	27	26	30	29	35	35	22	-
R636	Residential	NCA01	29	30	34	33	37	40	24	PN
R637	Residential	NCA01	28	31	36	34	35	43	25	PN, V
R638	Residential	NCA01	27	27	33	30	35	37	23	PN
R639	Residential	NCA01	29	34	39	37	36	47	25	PN, V
R640	Residential	NCA01	36	36	41	38	43	47	32	PN, V
R641	Residential	NCA01	35	35	44	37	42	47	31	PN, V
R642	Residential	NCA01	37	38	43	40	44	49	30	PN, V
R643	Residential	NCA01	37	38	43	41	44	48	31	PN, V
R644	Residential	NCA01	34	34	39	36	40	43	27	PN, V
R645	Residential	NCA01	33	33	37	35	40	42	26	PN, V
R646	Residential	NCA01	33	32	36	35	39	41	26	PN
R647	Residential	NCA01	34	33	41	37	42	44	25	PN, V
R648	Residential	NCA01	36	34	40	37	42	44	25	PN, V
R649	Residential	NCA01	35	34	40	37	42	44	26	PN, V
R650	Residential	NCA01	34	33	39	36	40	44	26	PN, V
R651	Residential	NCA01	34	34	41	37	41	46	27	PN, V
R652	Residential	NCA01	35	35	39	38	42	44	26	PN, V
R653	Residential	NCA01	29	29	36	32	36	39	23	PN
R654	Residential	NCA01	36	36	40	40	42	45	28	PN, V
R655	Residential	NCA01	35	35	40	38	45	43	30	PN, V
R656	Residential	NCA01	32	34	39	37	39	43	25	PN, V
R657	Residential	NCA01	34	35	40	37	41	45	25	PN, V
R658	Residential	NCA01	31	30	36	33	38	41	24	PN, V
R659	Residential	NCA01	32	31	37	34	39	42	25	PN, V
R660	Residential	NCA01	36	35	40	36	43	47	24	PN, V

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R661	Residential	NCA01	28	27	37	30	35	36	21	PN
R662	Residential	NCA01	34	33	38	35	41	42	25	PN, V
R663	Residential	NCA01	33	34	38	35	40	43	24	PN, V
R664	Residential	NCA01	33	32	37	34	39	43	25	PN, V
R665	Residential	NCA01	35	35	39	36	41	44	25	PN, V
R666	Residential	NCA01	33	33	39	35	40	42	26	PN, V
R667	Residential	NCA01	30	29	36	32	37	39	24	PN
R668	Residential	NCA01	29	29	34	32	36	39	24	PN
R669	Residential	NCA01	24	23	27	26	31	32	18	-
R670	Residential	NCA01	28	29	34	32	35	39	22	PN
R671	Residential	NCA01	25	24	28	28	32	34	20	-
R672	Residential	NCA01	25	24	28	28	32	34	20	-
R673	Residential	NCA01	25	25	29	28	33	34	20	-
R674	Residential	NCA01	26	25	29	28	33	34	21	-
R675	Residential	NCA01	26	25	29	28	33	34	20	-
R676	Residential	NCA01	25	24	29	27	32	33	19	-
R677	Residential	NCA01	25	24	28	27	32	33	20	-
R678	Residential	NCA01	26	25	28	27	33	33	20	-
R679	Residential	NCA01	25	24	28	27	32	33	19	-
R680	Residential	NCA01	25	24	28	27	32	33	19	-
R681	Residential	NCA01	25	24	30	28	32	33	19	-
R682	Residential	NCA01	28	27	31	30	35	35	22	-
R683	Residential	NCA01	31	30	34	34	38	39	25	PN
R684	Residential	NCA01	30	29	33	32	37	38	24	PN
R685	Residential	NCA01	42	41	41	40	45	46	32	PN, V
R686	Residential	NCA01	37	36	40	39	44	46	31	PN, V
R687	Residential	NCA01	42	41	45	45	49	52	36	PN, V, SN, RP, DR
R688	Residential	NCA01	42	41	45	44	49	51	37	PN, V, SN, RP, DR
R689	Residential	NCA01	48	47	52	50	55	57	41	PN, V, SN, RP, DR
R690	Residential	NCA01	45	44	49	47	52	54	37	PN, V, SN, RP, DR
R691	Residential	NCA01	43	43	47	45	50	52	37	PN, V, SN, RP, DR
R692	Residential	NCA01	43	42	45	43	48	50	35	PN, V
R693	Residential	NCA01	43	42	47	45	50	52	36	PN, V, SN, RP, DR
R694	Residential	NCA01	39	39	42	41	46	47	32	PN, V
R695	Residential	NCA01	38	37	40	39	44	43	31	PN, V
R696	Residential	NCA01	37	36	40	39	44	45	31	PN, V
R697	Residential	NCA01	40	39	41	40	47	46	32	PN, V
R698	Residential	NCA01	39	39	43	42	47	47	33	PN, V
R699	Residential	NCA01	39	38	42	41	46	46	33	PN, V
R700	Residential	NCA01	39	39	42	42	46	47	34	PN, V
R701	Residential	NCA01	39	38	41	40	45	46	32	PN, V
R702	Residential	NCA01	38	38	41	40	45	45	32	PN, V
R703	Residential	NCA01	39	38	43	41	46	48	33	PN, V
R704	Residential	NCA01	39	38	41	41	46	46	33	PN, V
R705	Residential	NCA01	41	41	43	44	47	48	34	PN, V
R706	Residential	NCA01	42	42	46	44	50	51	36	PN, V, SN, RP, DR
R707	Residential	NCA01	42	42	46	45	50	51	36	PN, V, SN, RP, DR
R708	Residential	NCA01	42	41	46	44	49	51	36	PN, V
R709	Residential	NCA01	42	42	46	44	49	51	36	PN, V, SN, RP, DR
R710	Residential	NCA01	38	38	41	40	45	45	32	PN, V
R711	Residential	NCA01	40	39	43	42	47	48	34	PN, V
R712	Residential	NCA01	41	40	44	43	48	49	35	PN, V
R713	Residential	NCA01	39	38	41	41	46	46	33	PN, V
R714	Residential	NCA01	41	41	45	43	48	50	35	PN, V
R715	Residential	NCA01	43	43	41	41	50	49	32	PN, V
R716	Residential	NCA01	47	46	51	48	54	56	40	PN, V, SN, RP, DR
R717	Residential	NCA01	47	46	51	48	53	55	40	PN, V, SN, RP, DR
R718	Residential	NCA01	48	47	52	49	55	56	41	PN, V, SN, RP, DR
R719	Residential	NCA01	46	45	50	48	53	55	39	PN, V, SN, RP, DR
R720	Residential	NCA01	46	45	49	48	53	54	39	PN, V, SN, RP, DR
R721	Residential	NCA01	46	45	49	47	53	54	39	PN, V, SN, RP, DR
R722	Residential	NCA01	46	45	50	48	53	55	40	PN, V, SN, RP, DR
R723	Residential	NCA01	45	44	48	46	52	53	38	PN, V, SN, RP, DR
R724	Residential	NCA01	45	44	48	46	51	53	38	PN, V, SN, RP, DR
R725	Residential	NCA01	44	43	48	46	51	52	37	PN, V, SN, RP, DR
R726	Residential	NCA01	37	36	40	39	44	45	32	PN, V
R727	Residential	NCA01	39	39	41	40	46	47	31	PN, V

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R728	Residential	NCA01	40	40	44	43	47	49	34	PN, V
R729	Residential	NCA01	41	40	44	43	47	49	34	PN, V
R730	Residential	NCA01	41	41	45	43	48	50	35	PN, V
R731	Residential	NCA01	41	41	45	43	48	50	34	PN, V
R732	Residential	NCA01	41	40	44	43	47	49	34	PN, V
R733	Residential	NCA01	40	40	44	41	47	49	33	PN, V
R734	Residential	NCA01	42	43	45	45	49	50	37	PN, V
R735	Residential	NCA01	43	43	46	44	50	51	36	PN, V, SN, RP, DR
R736	Residential	NCA01	43	42	47	45	50	51	37	PN, V, SN, RP, DR
R737	Residential	NCA01	44	44	47	46	51	51	38	PN, V, SN, RP, DR
R738	Residential	NCA01	44	43	46	46	51	51	38	PN, V, SN, RP, DR
R739	Residential	NCA01	42	42	46	44	49	50	36	PN, V
R740	Residential	NCA01	43	42	46	46	50	51	37	PN, V, SN, RP, DR
R741	Residential	NCA01	46	45	50	47	52	54	39	PN, V, SN, RP, DR
R742	Residential	NCA01	45	45	49	46	52	54	36	PN, V, SN, RP, DR
R743	Residential	NCA01	44	43	47	46	51	51	38	PN, V, SN, RP, DR
R744	Residential	NCA01	44	43	47	46	50	51	37	PN, V, SN, RP, DR
R745	Residential	NCA01	43	43	46	45	50	51	37	PN, V, SN, RP, DR
R746	Residential	NCA01	43	42	46	45	50	50	37	PN, V
R747	Residential	NCA01	43	43	48	45	50	52	37	PN, V, SN, RP, DR
R748	Residential	NCA01	44	43	48	46	51	52	38	PN, V, SN, RP, DR
R749	Residential	NCA01	47	46	51	46	53	56	38	PN, V, SN, RP, DR
R750	Residential	NCA01	44	44	48	46	51	51	39	PN, V, SN, RP, DR
R751	Residential	NCA01	34	33	36	35	41	40	30	PN, V
R752	Residential	NCA01	45	44	47	45	52	50	39	PN, V, SN, RP, DR
R753	Residential	NCA01	45	44	49	45	52	54	39	PN, V, SN, RP, DR
R754	Residential	NCA01	43	43	49	44	50	54	36	PN, V, SN, RP, DR
R755	Residential	NCA01	43	42	47	44	50	51	36	PN, V, SN, RP, DR
R756	Residential	NCA01	36	36	39	38	43	44	30	PN, V
R757	Residential	NCA01	39	39	41	41	46	46	33	PN, V
R758	Residential	NCA01	41	41	45	43	48	50	35	PN, V
R759	Residential	NCA01	43	42	46	44	50	51	36	PN, V, SN, RP, DR
R760	Residential	NCA01	47	47	50	47	54	54	41	PN, V, SN, RP, DR
R761	Residential	NCA01	44	43	47	46	51	51	38	PN, V, SN, RP, DR
R762	Residential	NCA01	35	34	39	36	42	44	28	PN, V
R763	Residential	NCA01	43	42	45	45	50	50	37	PN, V
R764	Residential	NCA01	38	37	42	34	45	47	27	PN, V
R765	Residential	NCA01	34	33	37	36	41	41	32	PN, V
R766	Residential	NCA01	40	39	42	42	47	47	35	PN, V
R767	Residential	NCA01	42	41	44	43	48	48	35	PN, V
R768	Residential	NCA01	43	42	46	44	49	50	37	PN, V
R769	Residential	NCA01	43	42	46	45	50	51	37	PN, V, SN, RP, DR
R770	Residential	NCA01	44	43	47	45	51	52	38	PN, V, SN, RP, DR
R771	Residential	NCA01	42	41	46	42	49	51	33	PN, V, SN, RP, DR
R772	Residential	NCA01	37	36	41	39	44	45	31	PN, V
R773	Residential	NCA01	45	44	45	45	52	50	39	PN, V, SN, RP, DR
R774	Residential	NCA01	43	42	45	44	50	50	37	PN, V
R775	Residential	NCA01	43	42	46	45	50	51	37	PN, V
R776	Residential	NCA01	42	41	44	44	49	49	35	PN, V
R777	Residential	NCA01	41	41	43	43	48	48	35	PN, V
R778	Residential	NCA01	42	42	45	44	49	49	36	PN, V
R779	Residential	NCA01	44	44	50	47	51	54	38	PN, V, SN, RP, DR
R780	Residential	NCA01	47	46	51	45	54	57	37	PN, V, SN, RP, DR
R781	Residential	NCA01	45	44	49	47	52	54	39	PN, V, SN, RP, DR
R782	Residential	NCA01	47	46	49	48	54	54	41	PN, V, SN, RP, DR
R783	Residential	NCA01	47	45	51	48	54	54	39	PN, V, SN, RP, DR
R784	Residential	NCA01	45	46	52	47	52	57	39	PN, V, SN, RP, DR
R785	Residential	NCA01	47	46	52	47	54	57	39	PN, V, SN, RP, DR
R786	Residential	NCA01	46	44	48	47	51	53	39	PN, V, SN, RP, DR
R787	Residential	NCA01	42	42	46	43	49	51	36	PN, V, SN, RP, DR
R788	Residential	NCA01	41	41	46	44	48	50	35	PN, V
R789	Residential	NCA01	38	37	40	40	45	45	32	PN, V
R790	Residential	NCA01	41	40	46	39	47	50	28	PN, V
R791	Residential	NCA01	41	40	46	40	47	50	30	PN, V
R792	Residential	NCA01	42	42	47	42	48	51	35	PN, V, SN, RP, DR
R793	Commercial	NCA01	42	42	47	43	49	51	34	-
R794	Commercial	NCA01	42	41	44	44	48	49	35	-

Receiver ID	Receiver Type	NCA	CS01	CS02	CS03	CS04	CS05	CS06	CS07	Additional management measures
Residential: Noticeable Clearly audible Moderately intrusive Highly intrusive Bold Highly noise affected **Non-residential: Exceeds noise management level**										
R795	Commercial	NCA01	42	41	45	44	49	50	36	-
R796	Commercial	NCA01	45	44	47	46	51	51	38	-
R797	Commercial	NCA01	36	36	38	38	44	44	32	-
R798	Residential	NCA01	43	42	45	44	49	49	36	PN, V
R799	Residential	NCA01	43	42	45	44	49	49	37	PN, V
R800	Residential	NCA01	38	38	41	41	45	46	32	PN, V
R801	Residential	NCA01	43	42	45	45	49	50	37	PN, V
R802	Residential	NCA01	45	44	46	46	51	51	38	PN, V, SN, RP, DR
R803	Residential	NCA01	42	43	47	46	49	51	35	PN, V, SN, RP, DR
R804	Residential	NCA01	42	42	46	45	49	50	36	PN, V
R805	Residential	NCA01	46	45	48	48	51	52	40	PN, V, SN, RP, DR
R806	Place of worship	NCA01	45	44	48	47	52	52	39	-
R807	Residential	NCA01	44	43	47	46	51	52	38	PN, V, SN, RP, DR
R808	Residential	NCA01	44	43	47	46	51	52	38	PN, V, SN, RP, DR
R809	Residential	NCA01	44	43	46	46	51	51	38	PN, V, SN, RP, DR
R810	Residential	NCA01	44	44	47	47	50	52	38	PN, V, SN, RP, DR
R811	Residential	NCA01	41	42	46	44	48	49	34	PN, V
R812	Residential	NCA01	42	42	46	45	49	50	35	PN, V
R813	Residential	NCA01	41	41	45	43	48	49	35	PN, V
R814	Residential	NCA01	41	40	45	43	48	50	34	PN, V
R815	Residential	NCA01	42	42	46	46	49	51	36	PN, V
R816	Residential	NCA01	39	39	43	43	46	48	33	PN, V
R817	Residential	NCA01	39	39	42	43	46	47	33	PN, V
R818	Residential	NCA01	38	37	42	33	45	46	29	PN, V
R819	Residential	NCA01	41	41	44	44	48	48	34	PN, V
R820	Residential	NCA01	41	41	44	44	49	47	35	PN, V
R821	Residential	NCA01	41	41	44	44	48	47	35	PN, V
R822	Residential	NCA01	41	41	45	44	47	49	35	PN, V
R823	Residential	NCA01	40	40	45	43	47	49	33	PN, V
R824	Residential	NCA01	42	42	45	45	49	50	35	PN, V
R825	Residential	NCA01	41	41	45	44	48	49	35	PN, V
R826	Residential	NCA01	41	40	45	43	48	49	33	PN, V
R827	Residential	NCA01	41	40	45	42	48	50	31	PN, V
R828	Residential	NCA01	40	39	43	42	47	48	31	PN, V
R829	Residential	NCA01	39	40	44	42	46	48	32	PN, V
R830	Residential	NCA01	41	41	45	43	48	48	34	PN, V
R831	Residential	NCA01	43	42	47	44	50	52	34	PN, V, SN, RP, DR
R832	Residential	NCA01	38	38	41	41	45	44	30	PN, V
R833	Residential	NCA01	39	40	44	43	47	48	29	PN, V
R834	Residential	NCA01	40	39	43	42	47	48	29	PN, V
R835	Residential	NCA01	37	36	40	39	44	45	29	PN, V
R836	Residential	NCA01	39	38	42	41	46	44	27	PN, V
R837	Residential	NCA01	40	40	43	43	47	47	31	PN, V
R838	Residential	NCA01	37	37	40	40	44	45	28	PN, V
R839	Residential	NCA01	38	37	41	40	45	46	29	PN, V
R840	Residential	NCA01	37	36	43	39	44	48	28	PN, V
R841	Residential	NCA01	41	40	44	43	48	49	33	PN, V
R842	Residential	NCA01	41	40	45	43	48	49	32	PN, V
R843	Residential	NCA01	40	39	44	42	47	50	30	PN, V
R844	Residential	NCA01	40	40	44	43	47	48	32	PN, V
R845	Residential	NCA01	35	35	39	38	42	44	30	PN, V
R846	Residential	NCA01	37	36	40	39	44	45	29	PN, V
R847	Residential	NCA01	36	35	40	38	43	45	28	PN, V
R848	Residential	NCA01	33	32	36	35	41	41	28	PN, V

Appendix D – Predicted construction noise contours

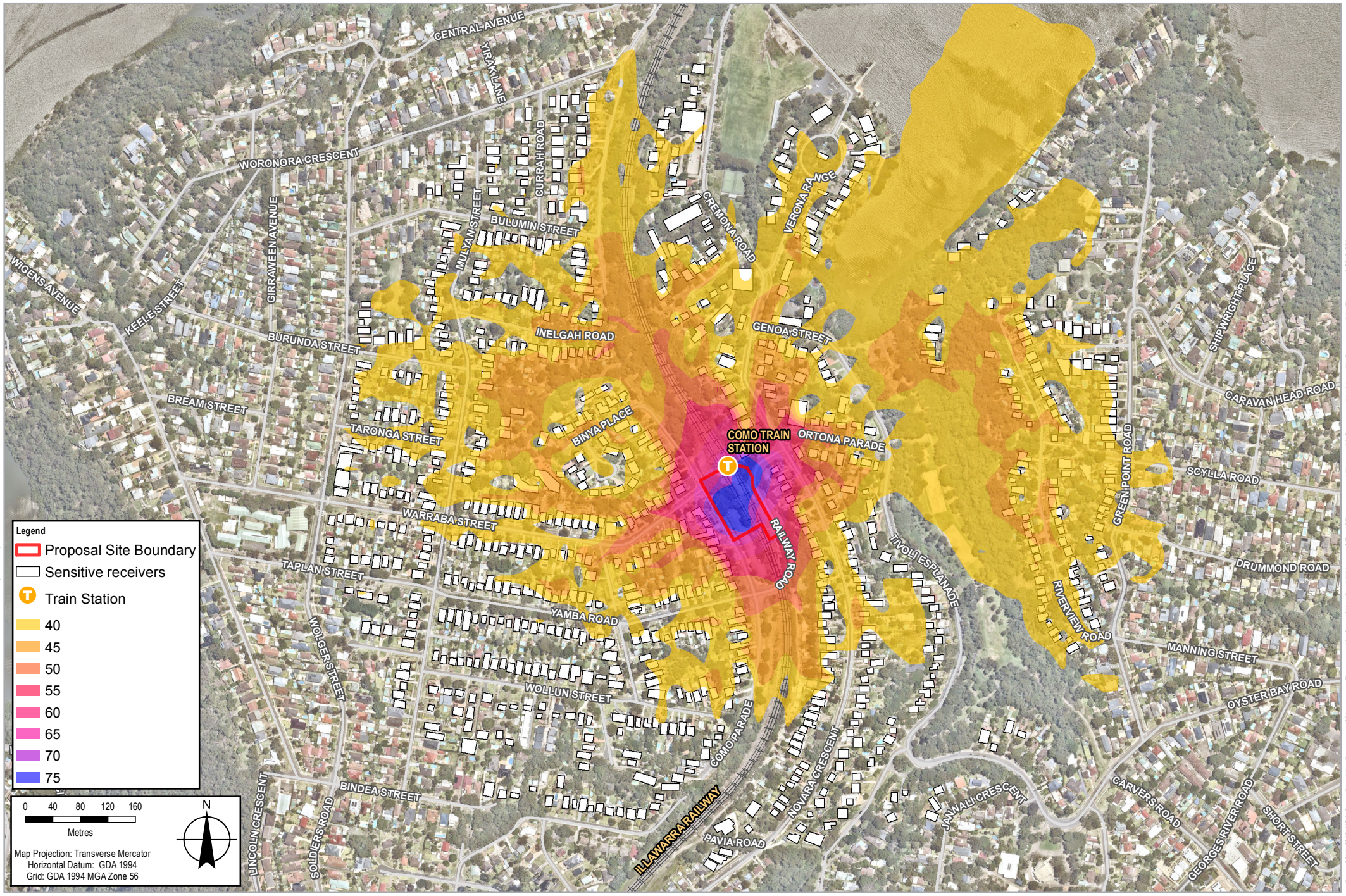


Figure D-1: Scenario 1 Predicted construction noise noise levels, dBA

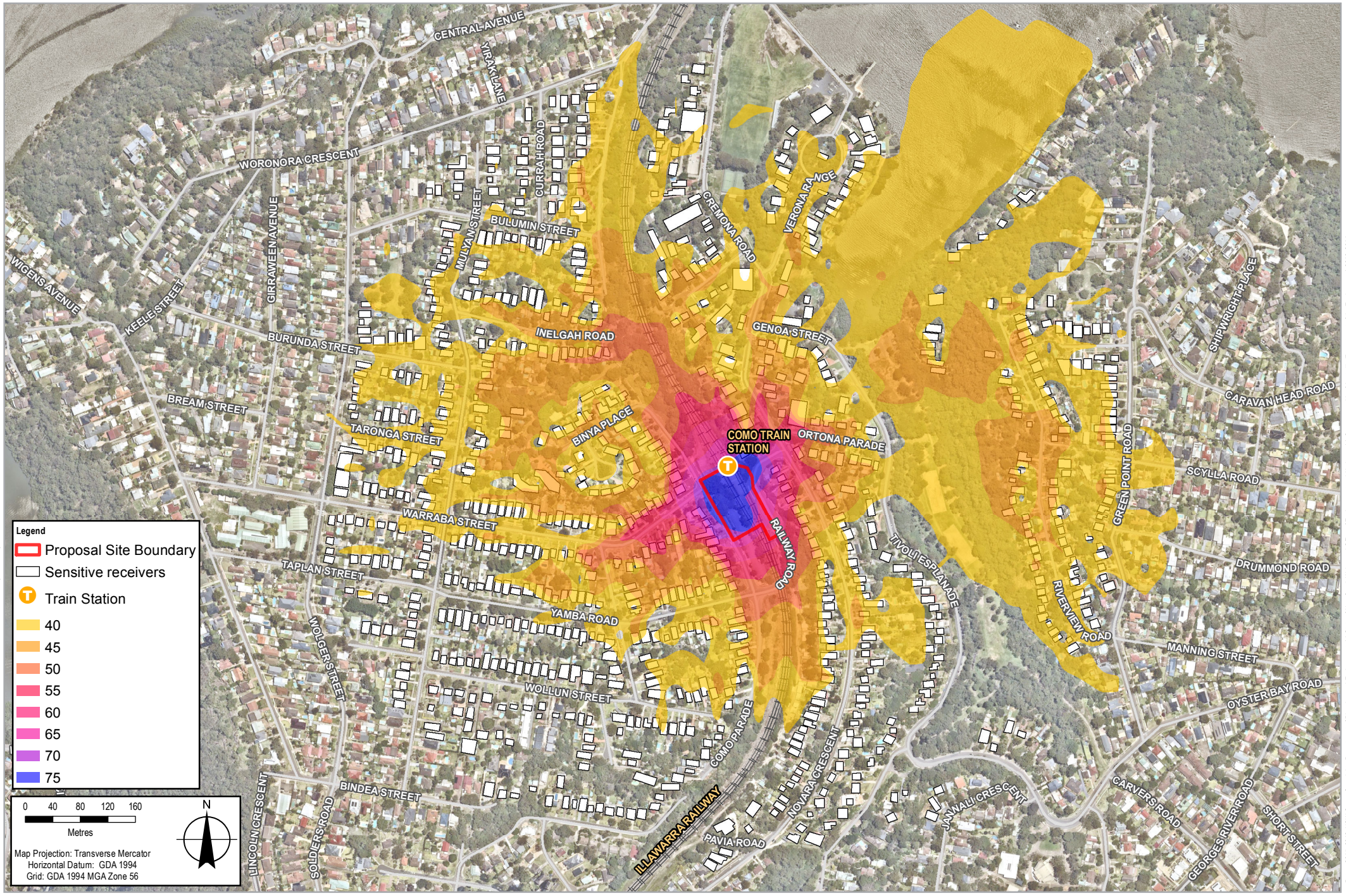


Figure D-2: Scenario 2 Predicted construction noise noise levels, dBA

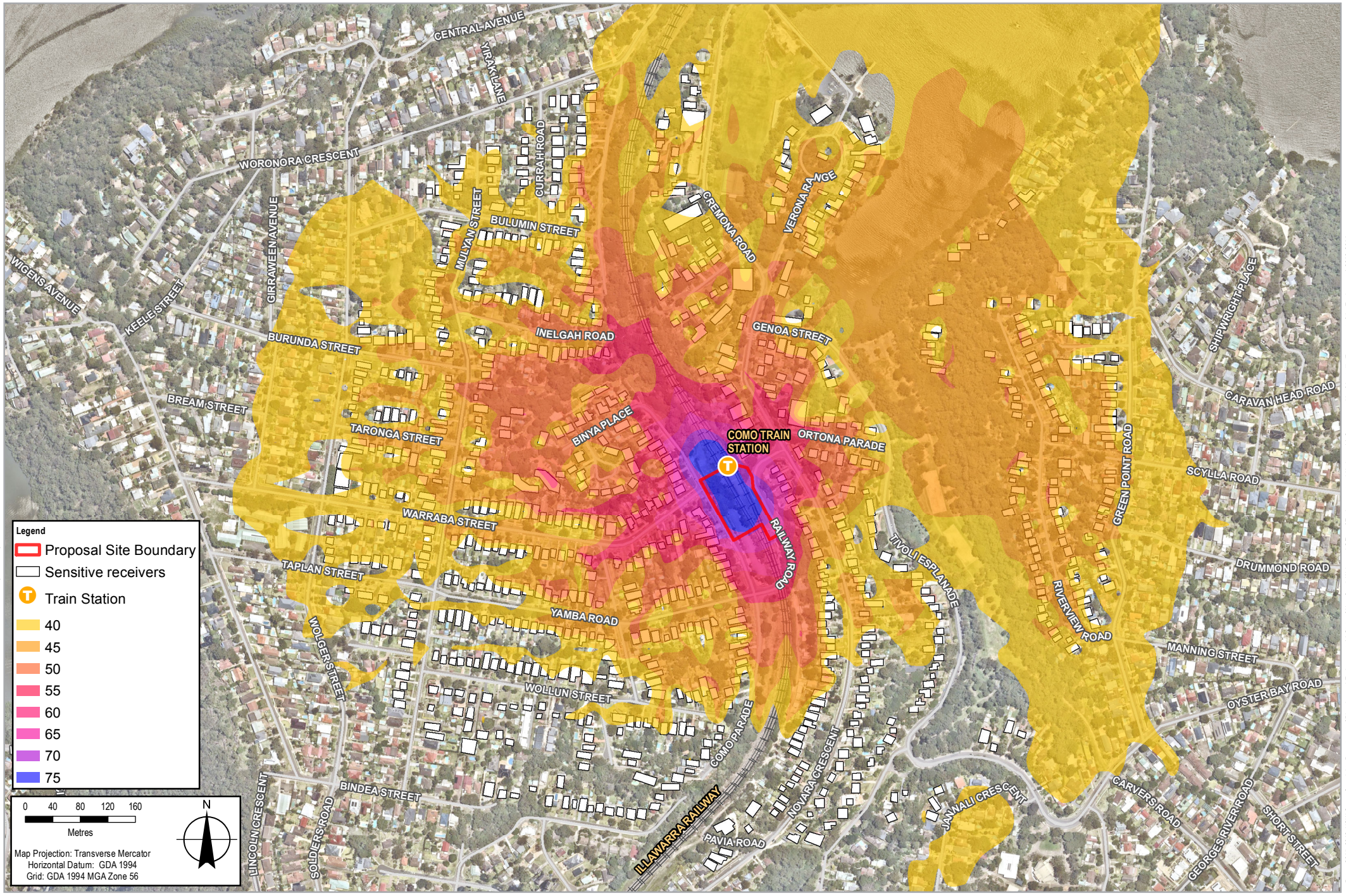


Figure D-3: Scenario 3 Predicted construction noise noise levels, dBA

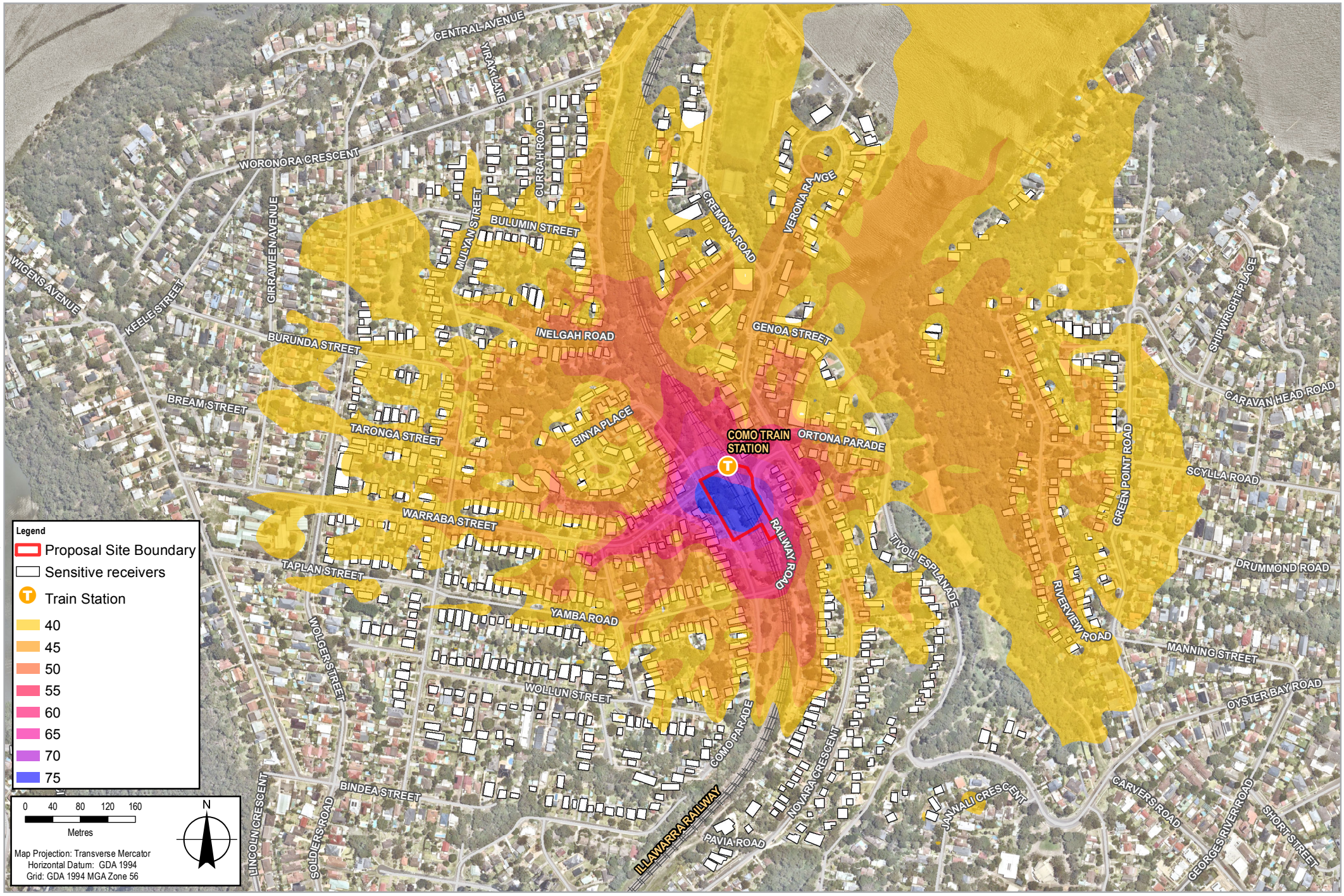


Figure D-4: Scenario 4 Predicted construction noise noise levels, dBA

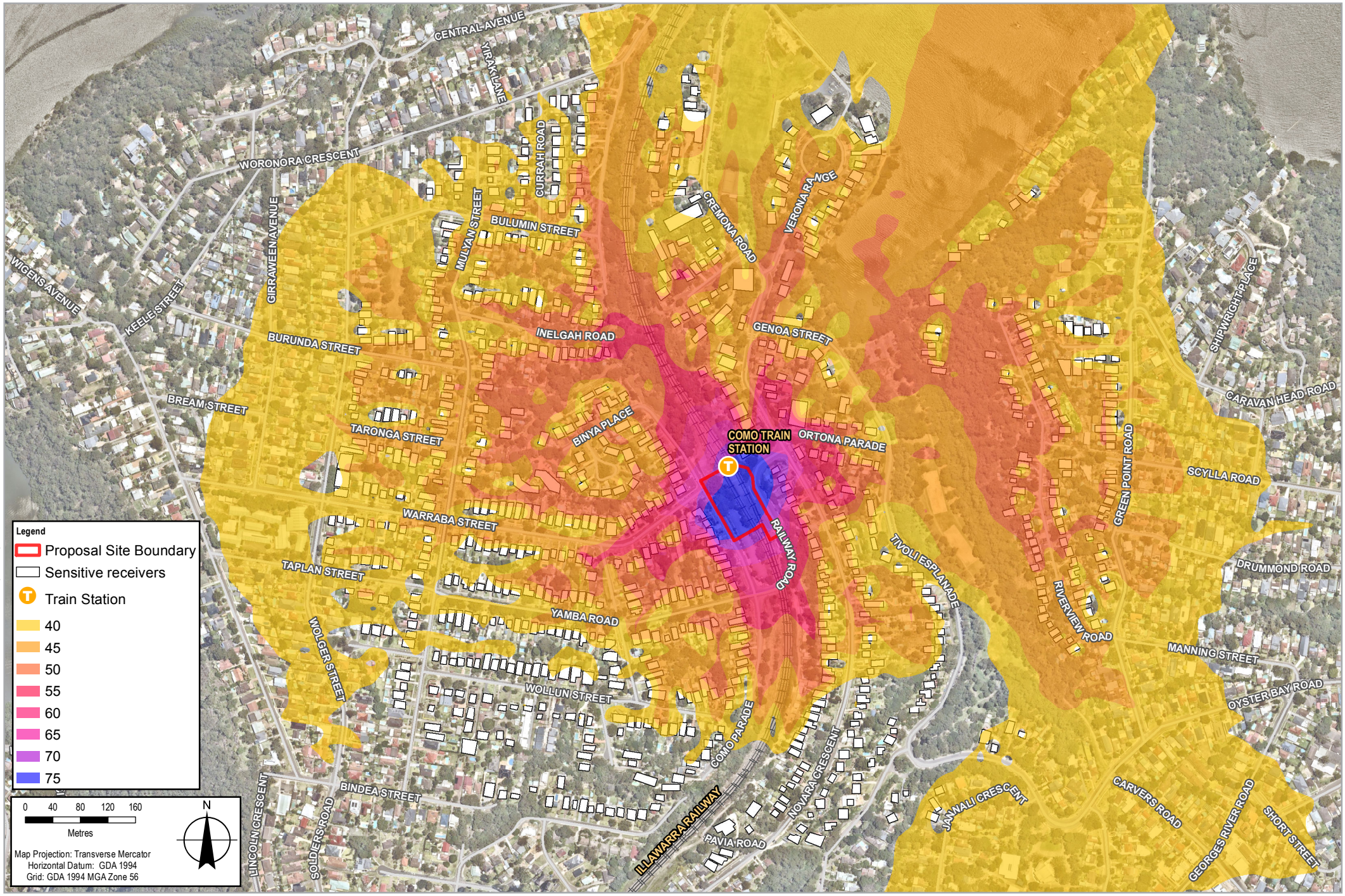


Figure D-5: Scenario 5 Predicted construction noise noise levels, dBA

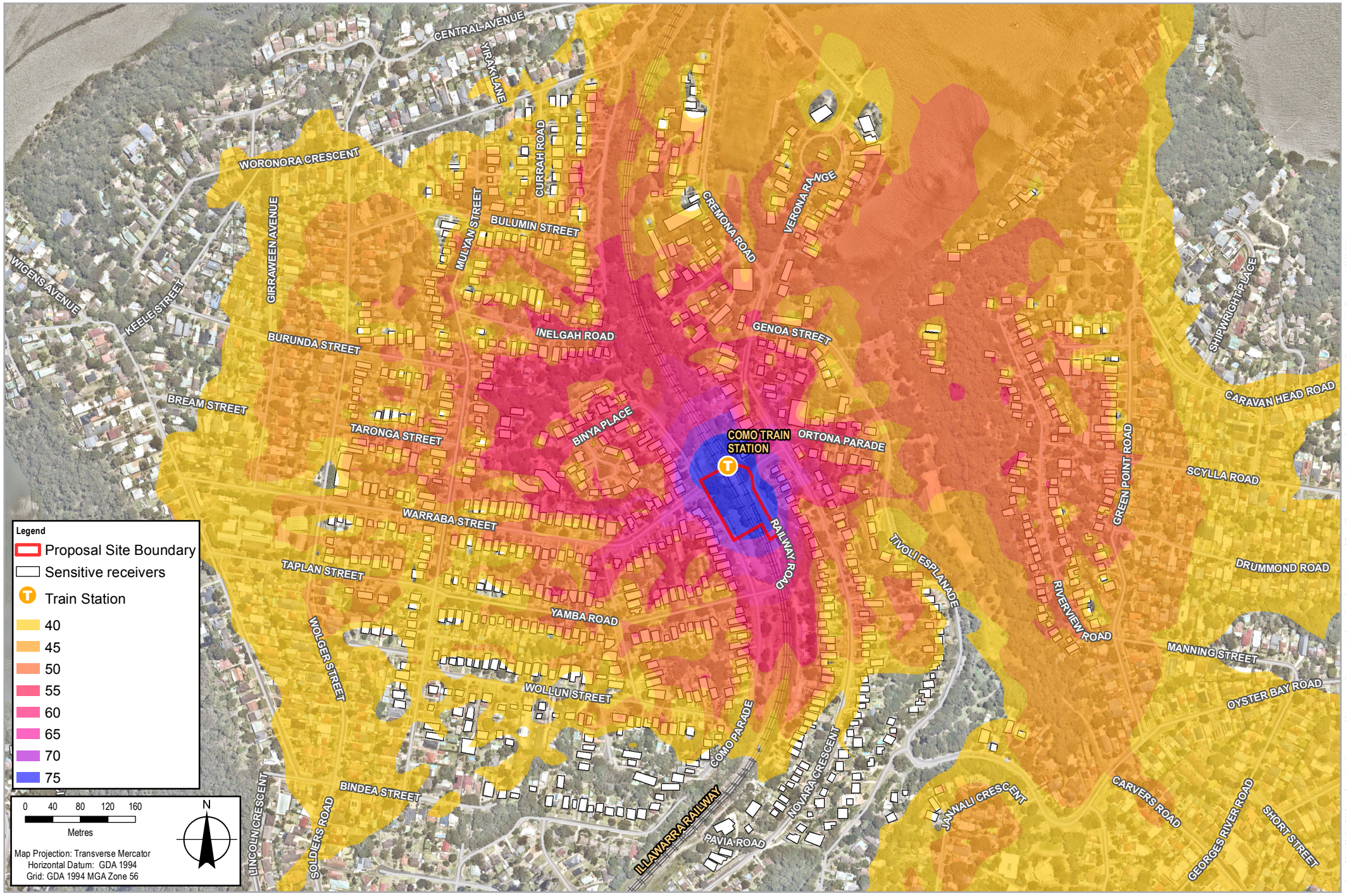


Figure D-6: Scenario 6 Predicted construction noise noise levels, dBA

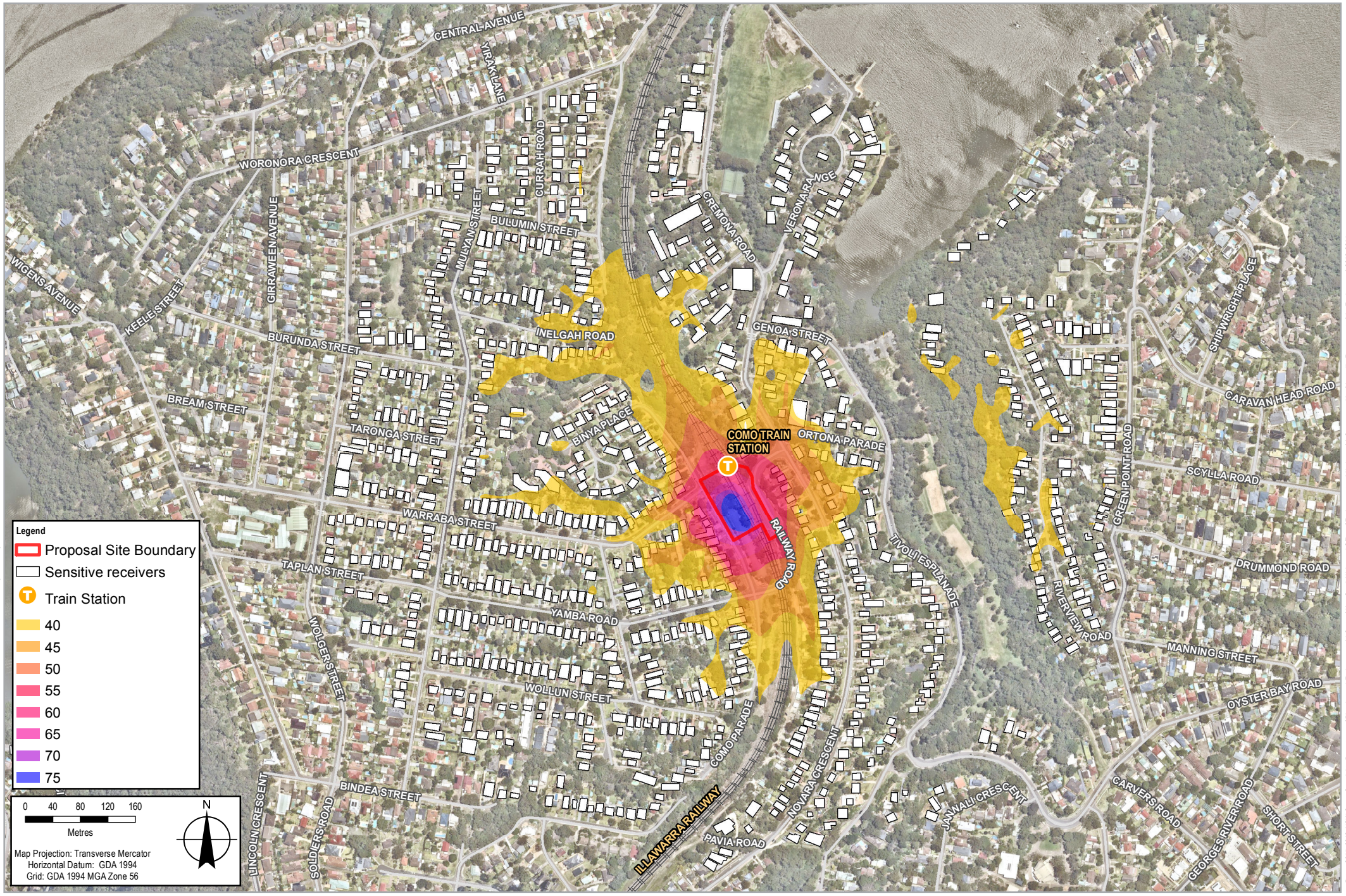


Figure D-7: Scenario 7 Predicted construction noise noise levels, dBA

Appendix E – Maximum noise level assessment

Receiver ID	Criteria	Predicted noise level (external)	Predicted noise level (internal)
R001	55 dBA internal	84	74
R002	55 dBA internal	75	65
R003	55 dBA internal	79	69
R004	55 dBA internal	70	60
R007	55 dBA internal	66	56
R022	55 dBA internal	76	66
R023	55 dBA internal	75	65
R024	55 dBA internal	75	65
R025	55 dBA internal	73	63
R026	55 dBA internal	70	60
R027	55 dBA internal	67	57
R087	55 dBA internal	78	68
R148	55 dBA internal	65	55
R149	55 dBA internal	66	56
R155	55 dBA internal	70	60
R245	55 dBA internal	66	56
R357	55 dBA internal	74	64
R358	55 dBA internal	74	64
R359	55 dBA internal	73	63
R360	55 dBA internal	70	60
R361	55 dBA internal	68	58
R362	55 dBA internal	66	56
R391	55 dBA internal	77	67
R392	55 dBA internal	77	67
R393	55 dBA internal	77	67
R394	55 dBA internal	75	65
R395	55 dBA internal	72	62
R396	55 dBA internal	70	60
R397	55 dBA internal	67	57
R398	55 dBA internal	66	56
R399	55 dBA internal	65	55
R415	55 dBA internal	65	55
R416	55 dBA internal	66	56
R418	55 dBA internal	65	55
R420	55 dBA internal	70	60
R421	55 dBA internal	68	58
R422	55 dBA internal	65	55
R426	55 dBA internal	66	56

Appendix F – Construction noise management zones, standard construction hours

Figure F-1: Scenario 1 Predicted construction noise management zones, standard construction hours

Figure F-2: Scenario 2 Predicted construction noise management zones, standard construction hours

Figure F-3: Scenario 3 Predicted construction noise management zones, standard construction hours

Figure F-4: Scenario 4 Predicted construction noise management zones, standard construction hours

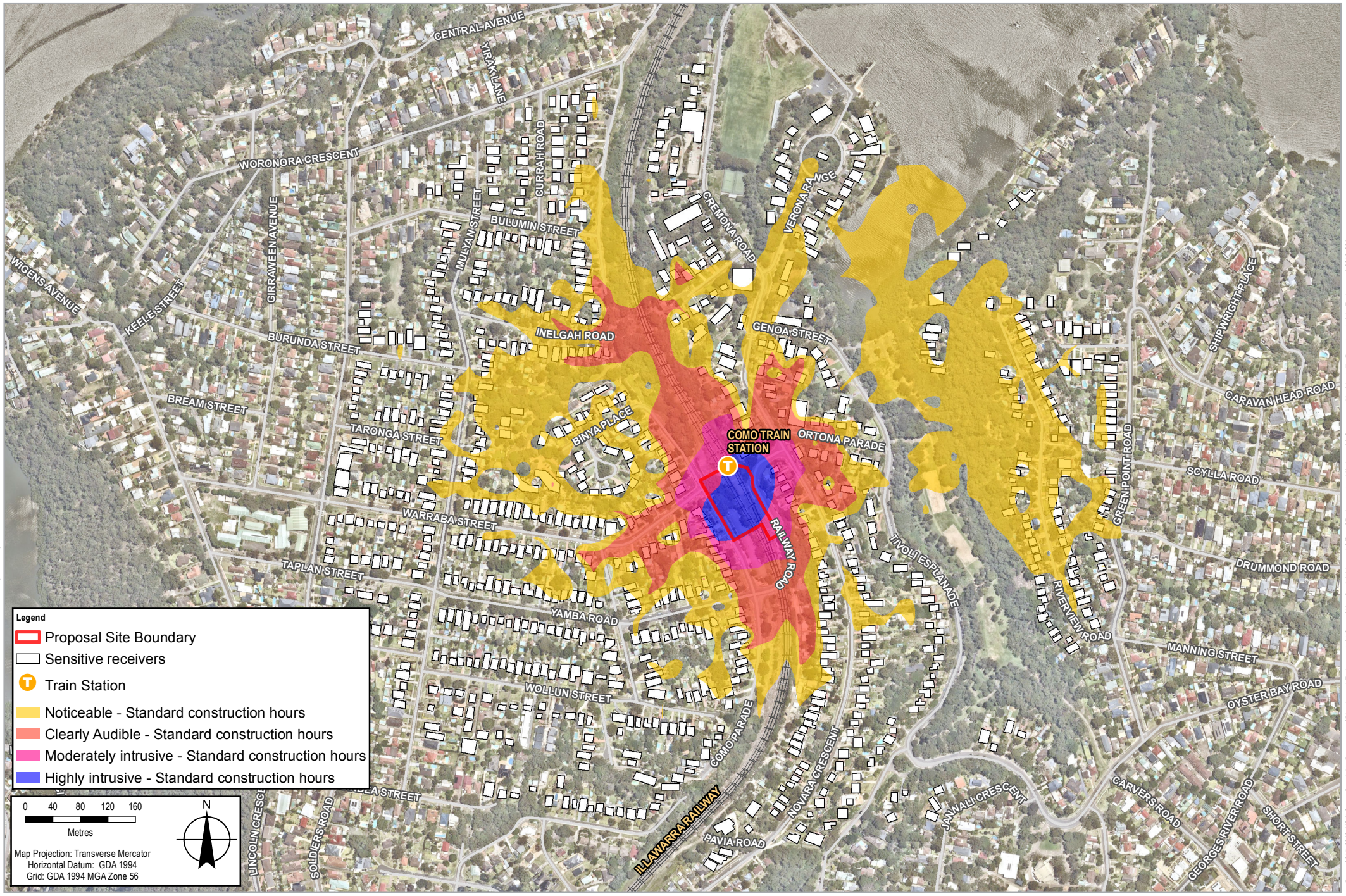


Figure F-5: Scenario 5 Predicted construction noise management zones, standard construction hours

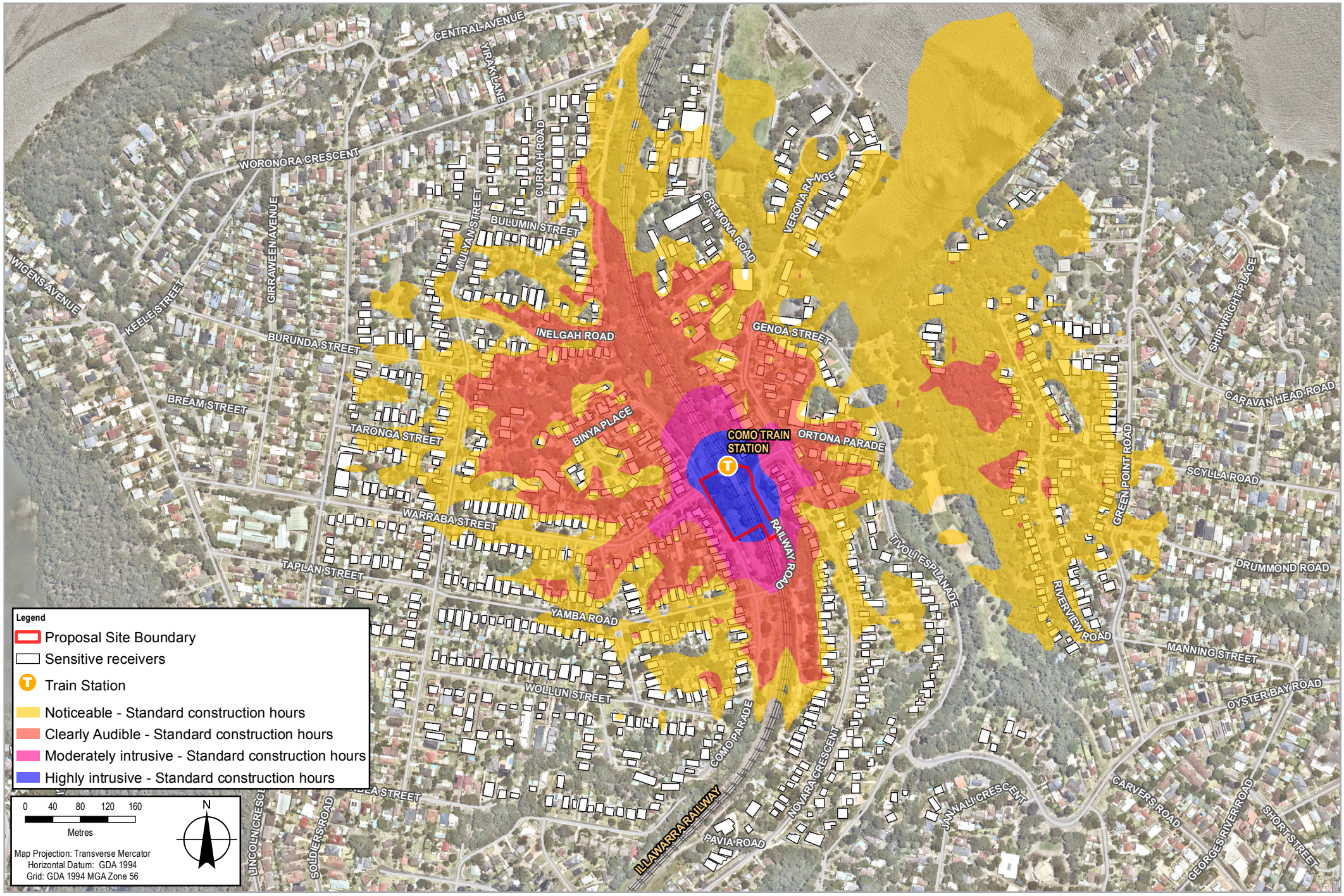


Figure F-6: Scenario 6 Predicted construction noise management zones, standard construction hours

Figure F-7: Scenario 7 Predicted construction noise management zones, standard construction hours

Appendix G – Construction noise management zones, OOHW Period 1 (Day)

Figure G-1: Scenario 1 Predicted construction noise management zones, OOHW Period 1 Day

Figure G-2: Scenario 2 Predicted construction noise management zones, OOHW Period 1 Day

Figure G-3: Scenario 3 Predicted construction noise management zones, OOHW Period 1 Day

Figure G-4: Scenario 4 Predicted construction noise management zones, OOHW Period 1 Day

Figure G-5: Scenario 5 Predicted construction noise management zones, OOHW Period 1 Day

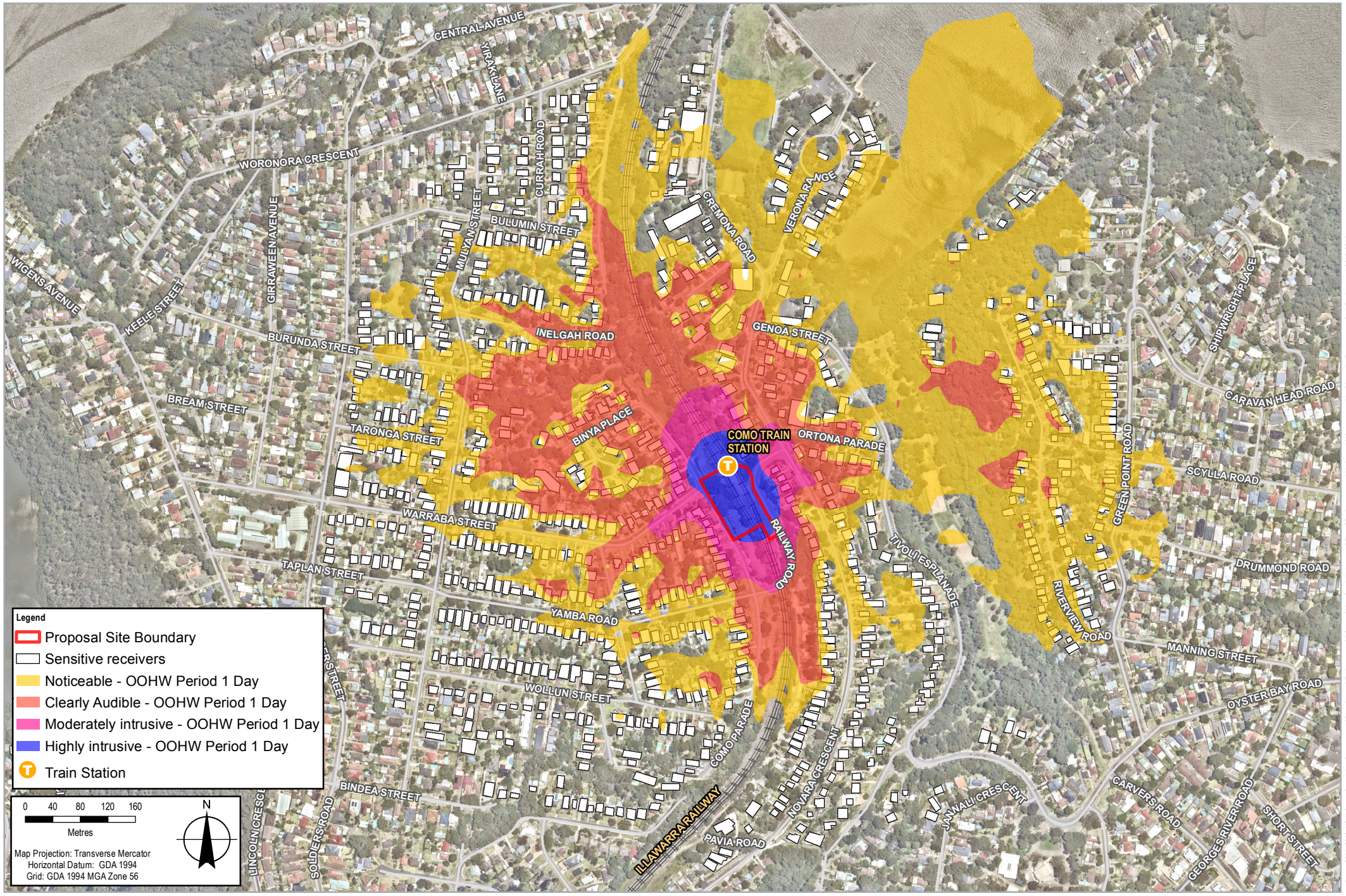


Figure G-6: Scenario 6 Predicted construction noise management zones, OOHW Period 1 Day

Figure G-7: Scenario 7 Predicted construction noise management zones, OOHW Period 1 Day

Appendix H – Construction noise management zones, OOHW Period 1 (Evening)

Figure H-1: Scenario 1 Predicted construction noise management zones, OOHW Period 1 Evening

Figure H-2: Scenario 2 Predicted construction noise management zones, OOHW Period 1 Evening

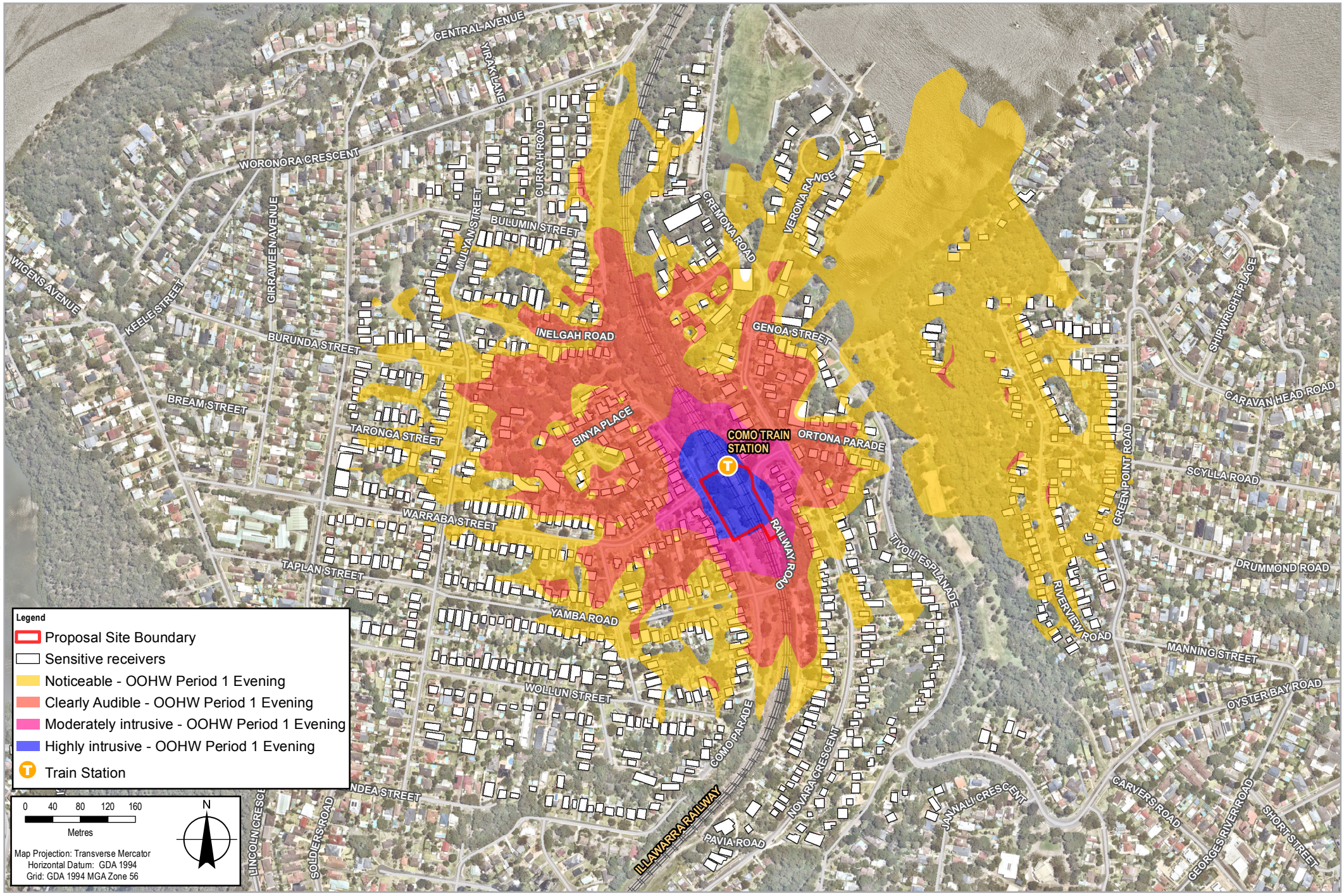


Figure H-3: Scenario 3 Predicted construction noise management zones, OOHW Period 1 Evening

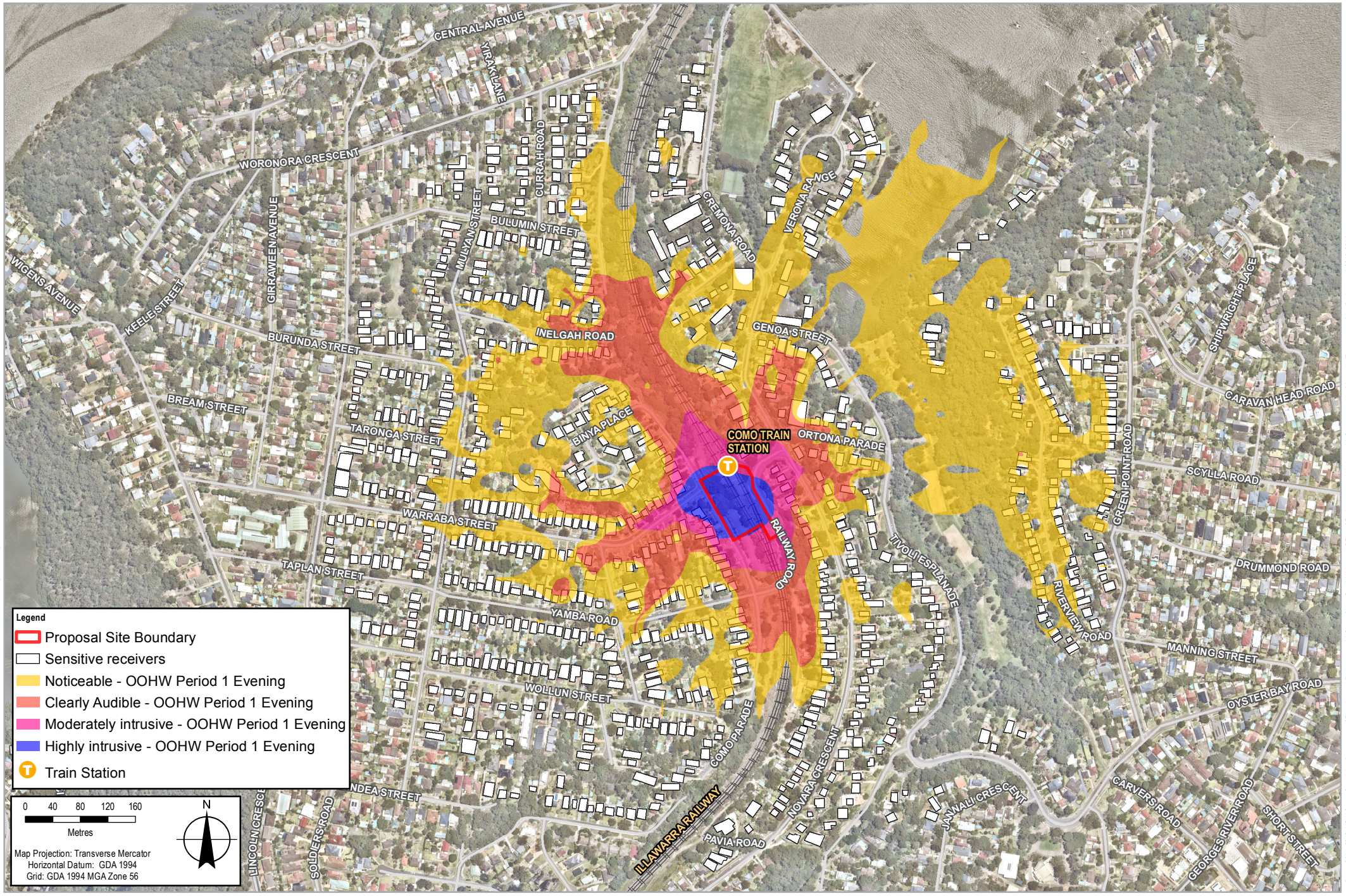


Figure H-4: Scenario 4 Predicted construction noise management zones, OOHW Period 1 Evening

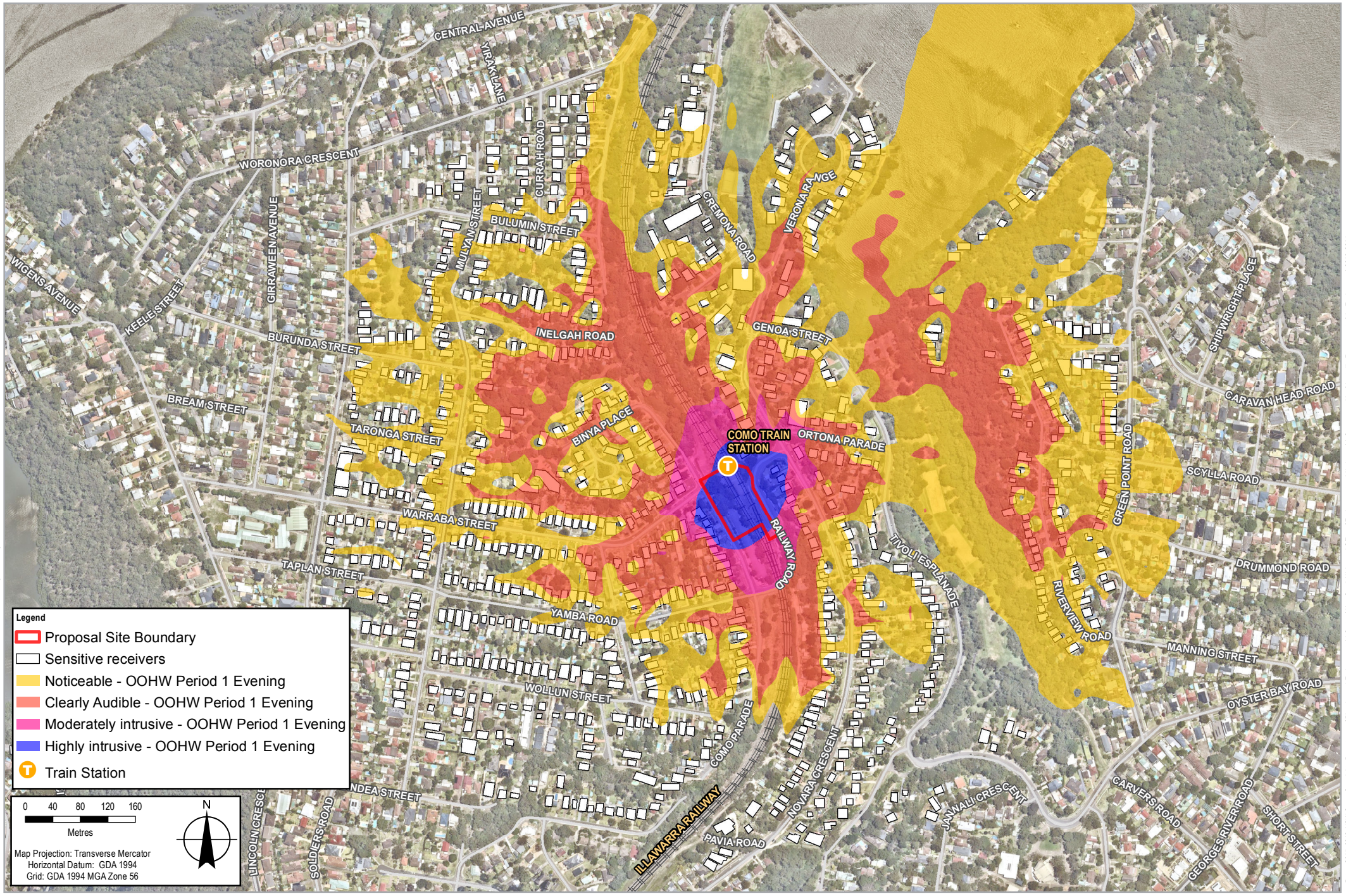


Figure H-5: Scenario 5 Predicted construction noise management zones, OOHW Period 1 Evening

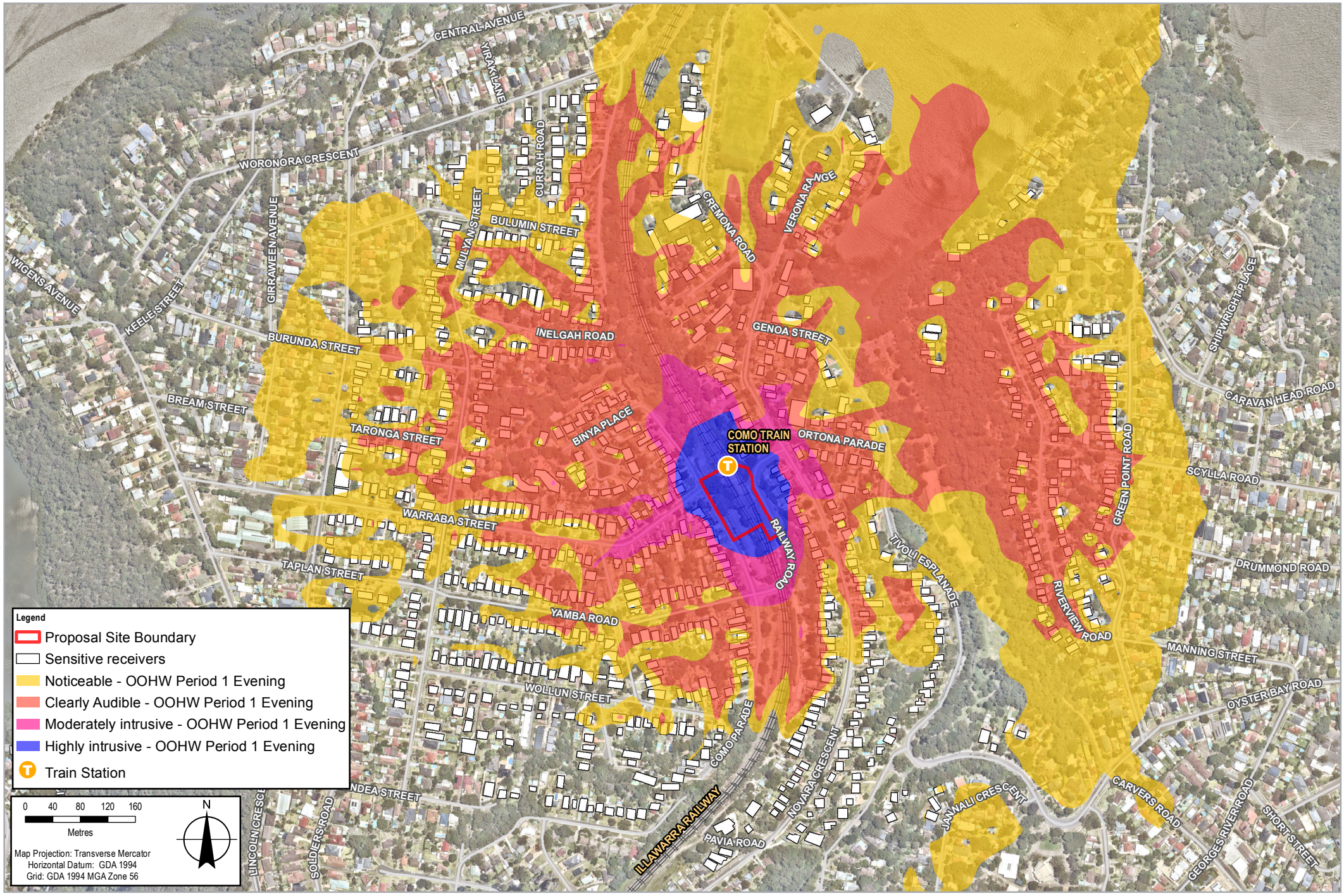


Figure H-6: Scenario 6 Predicted construction noise management zones, OOHW Period 1 Evening

Figure H-7: Scenario 7 Predicted construction noise management zones, OOHW Period 1 Evening

Appendix I – Construction noise management zones, OOHW Period 2 (Night)

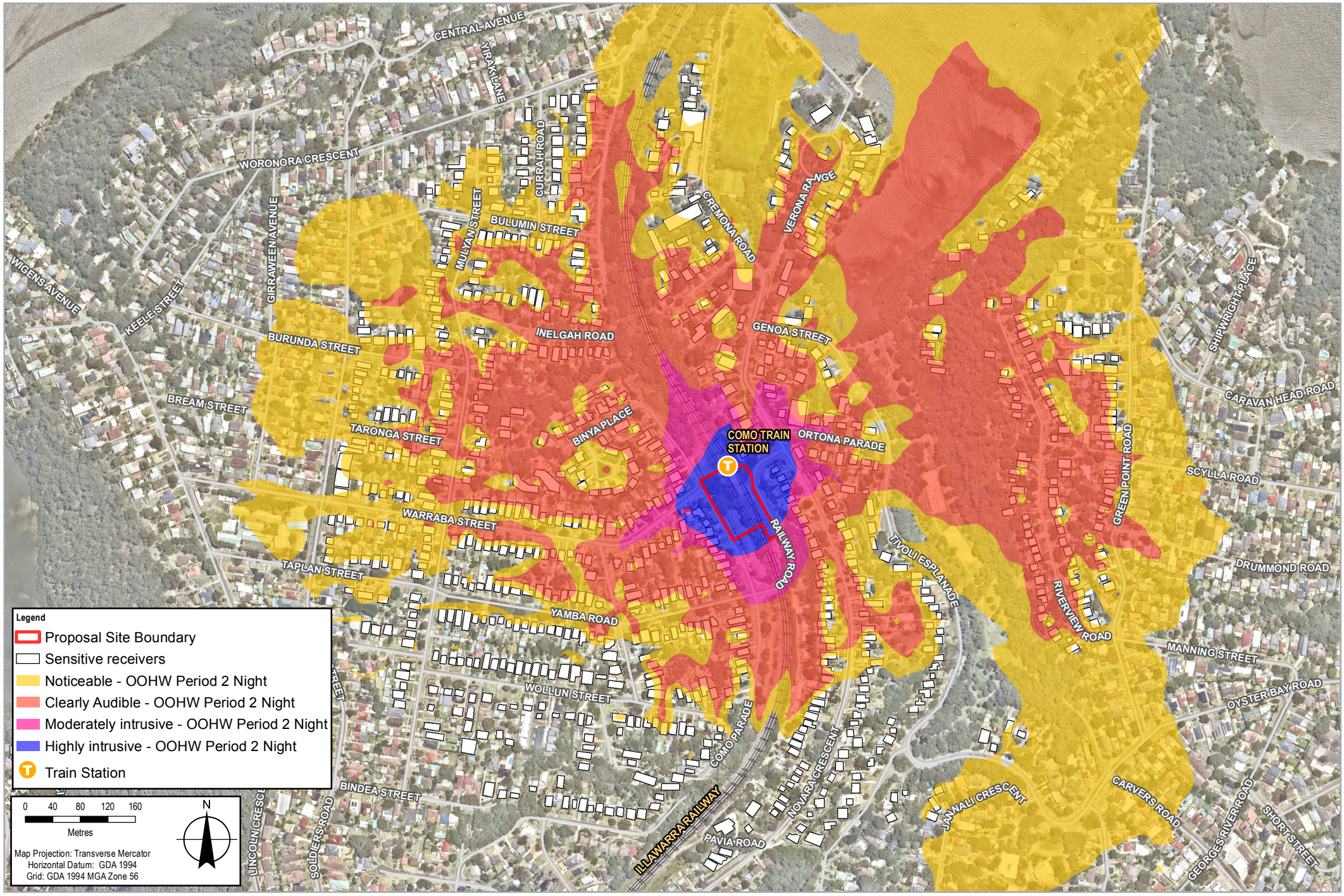


Figure I-1: Scenario 1 Predicted construction noise management zones, OOHW Period 2 Night

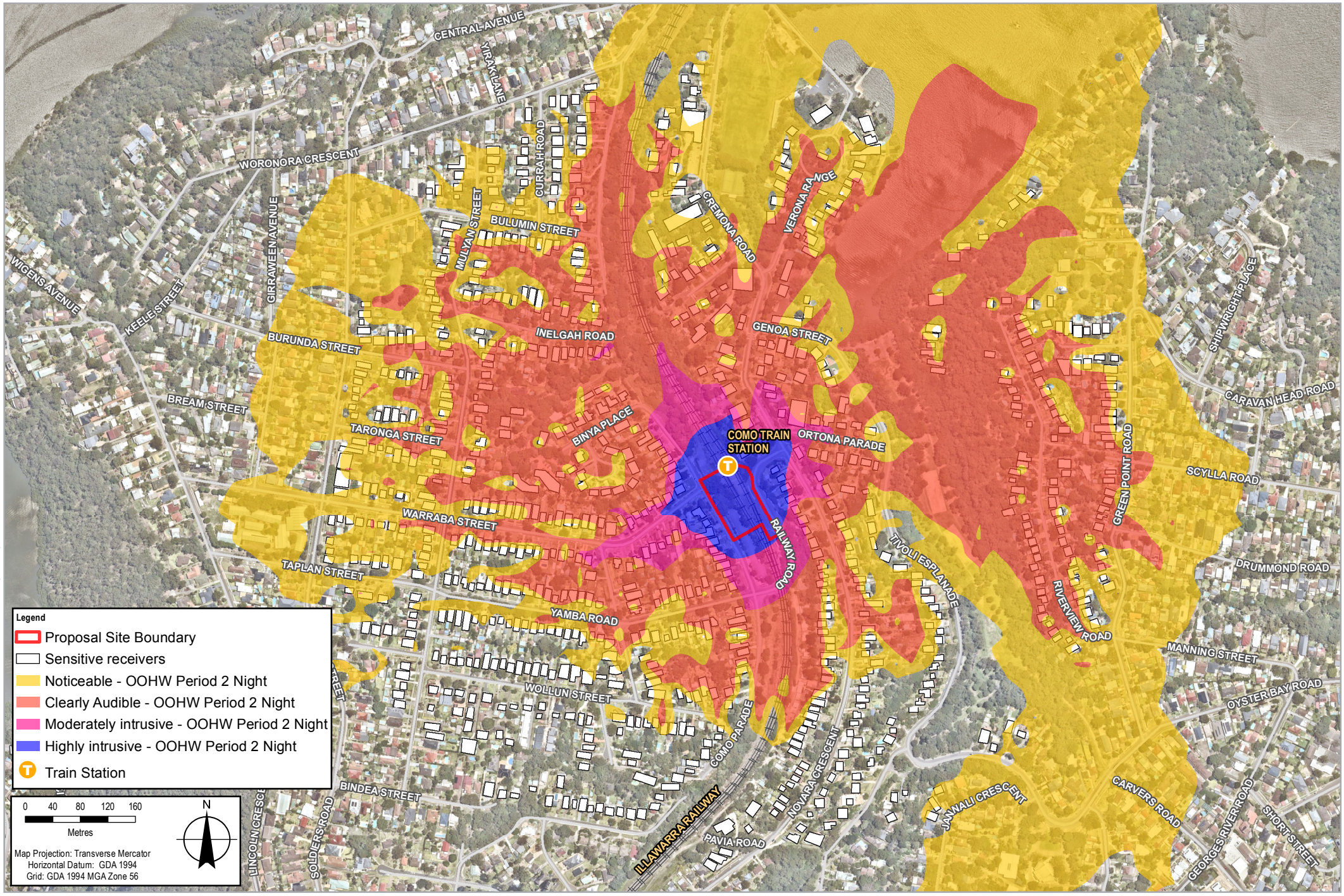


Figure I-2: Scenario 2 Predicted construction noise management zones, OOHW Period 2 Night

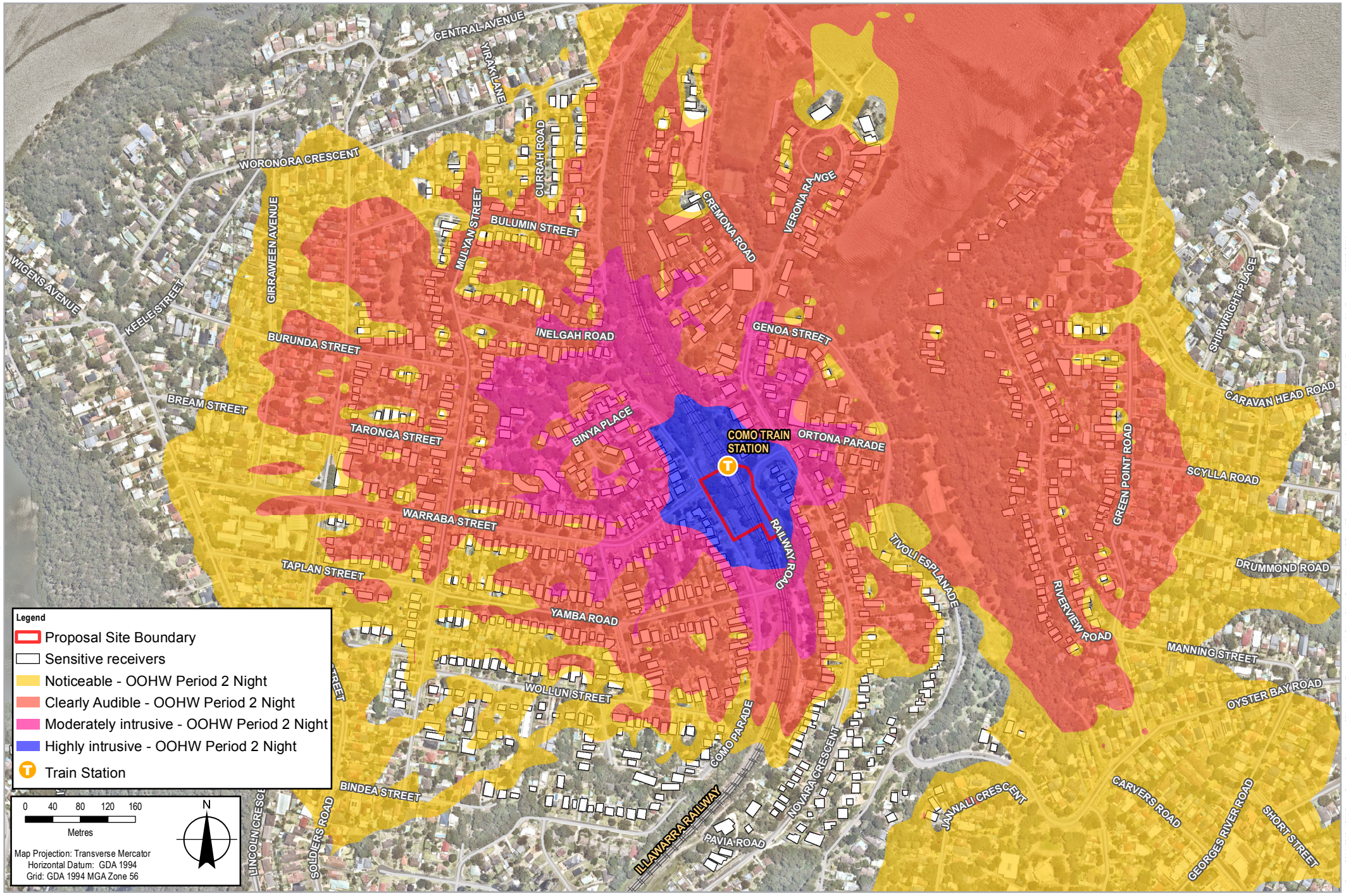


Figure I-3: Scenario 3 Predicted construction noise management zones, OOHW Period 2 Night

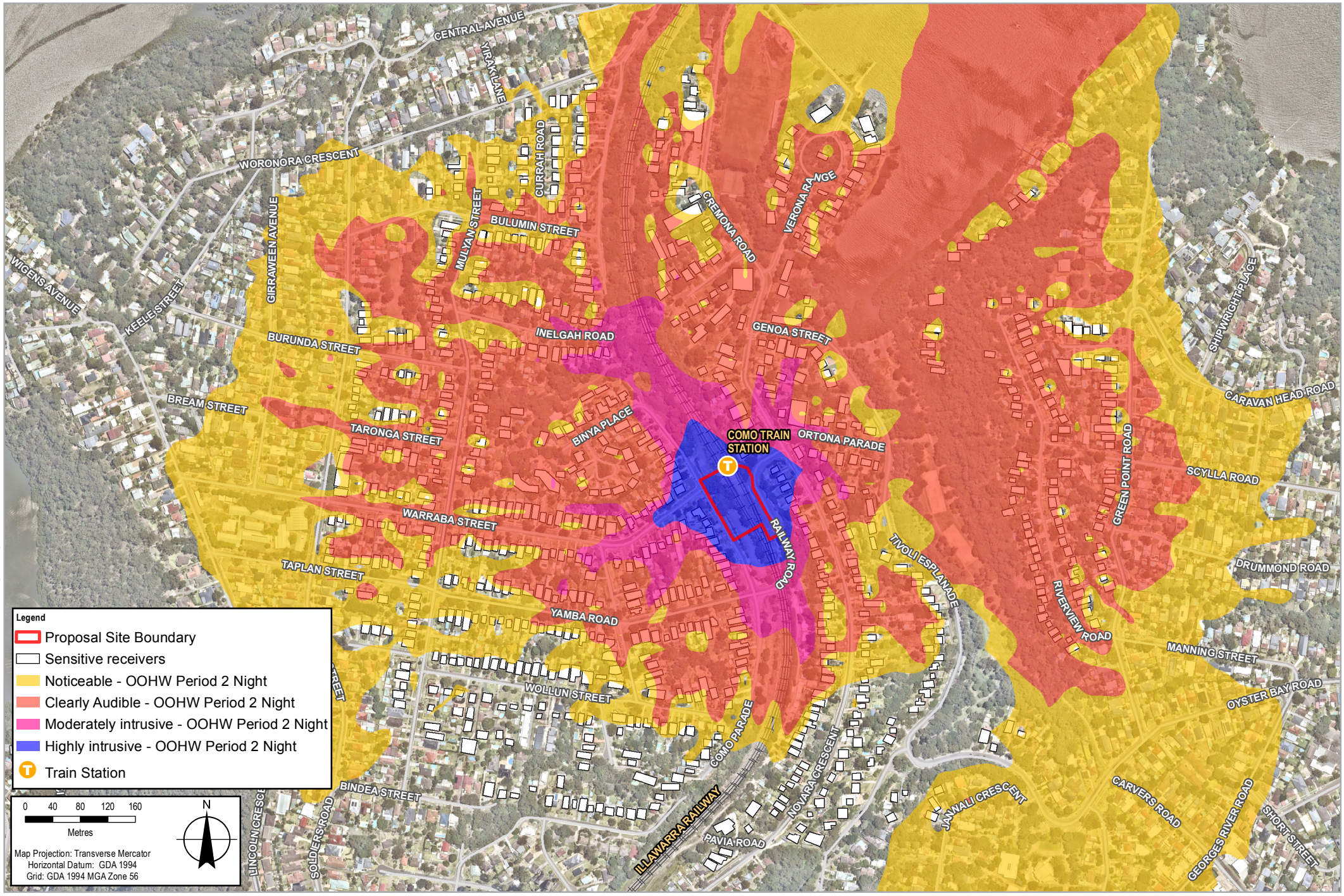


Figure I-4: Scenario 4 Predicted construction noise management zones, OOHW Period 2 Night

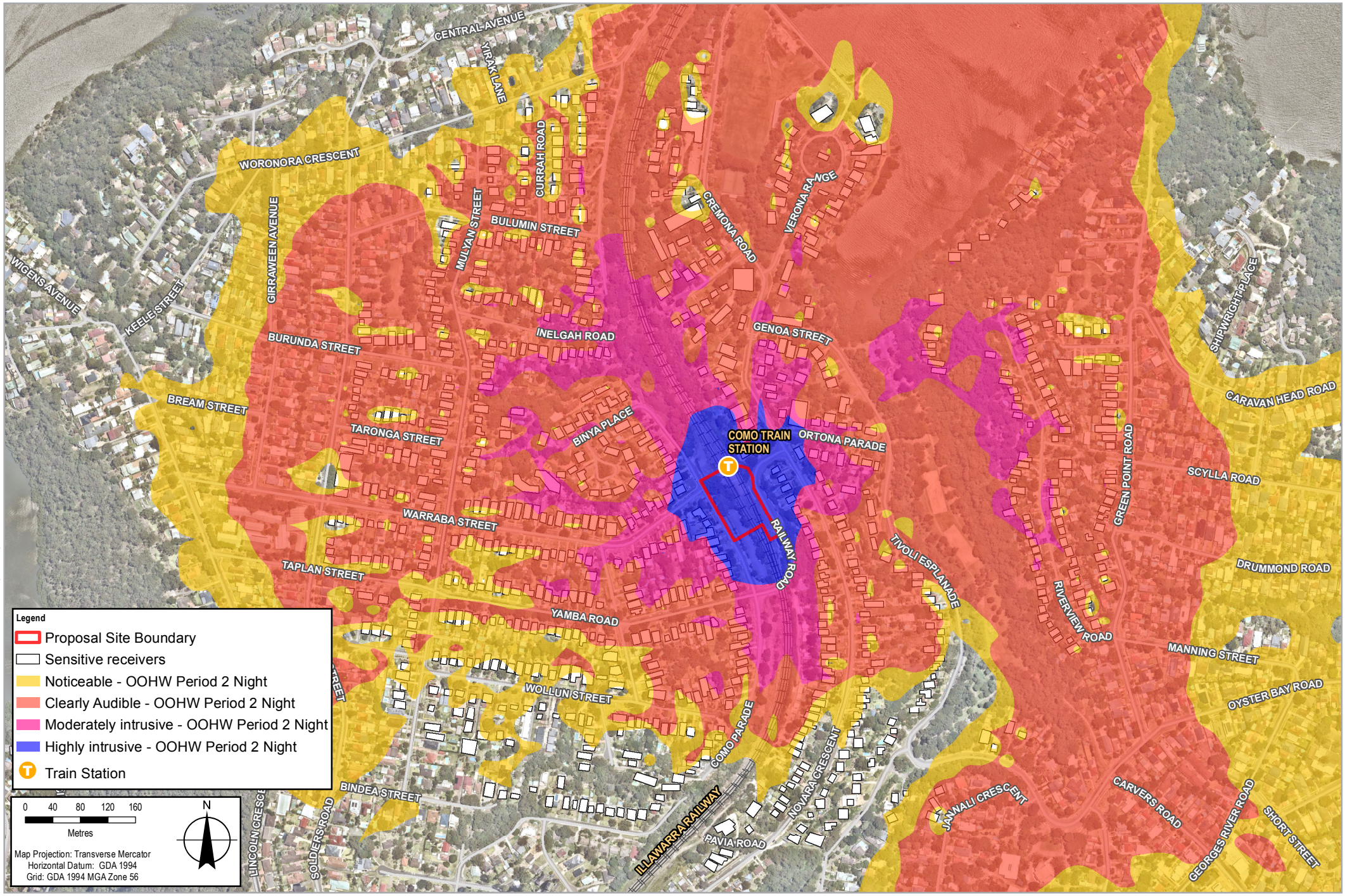


Figure I-5: Scenario 5 Predicted construction noise management zones, OOHW Period 2 Night

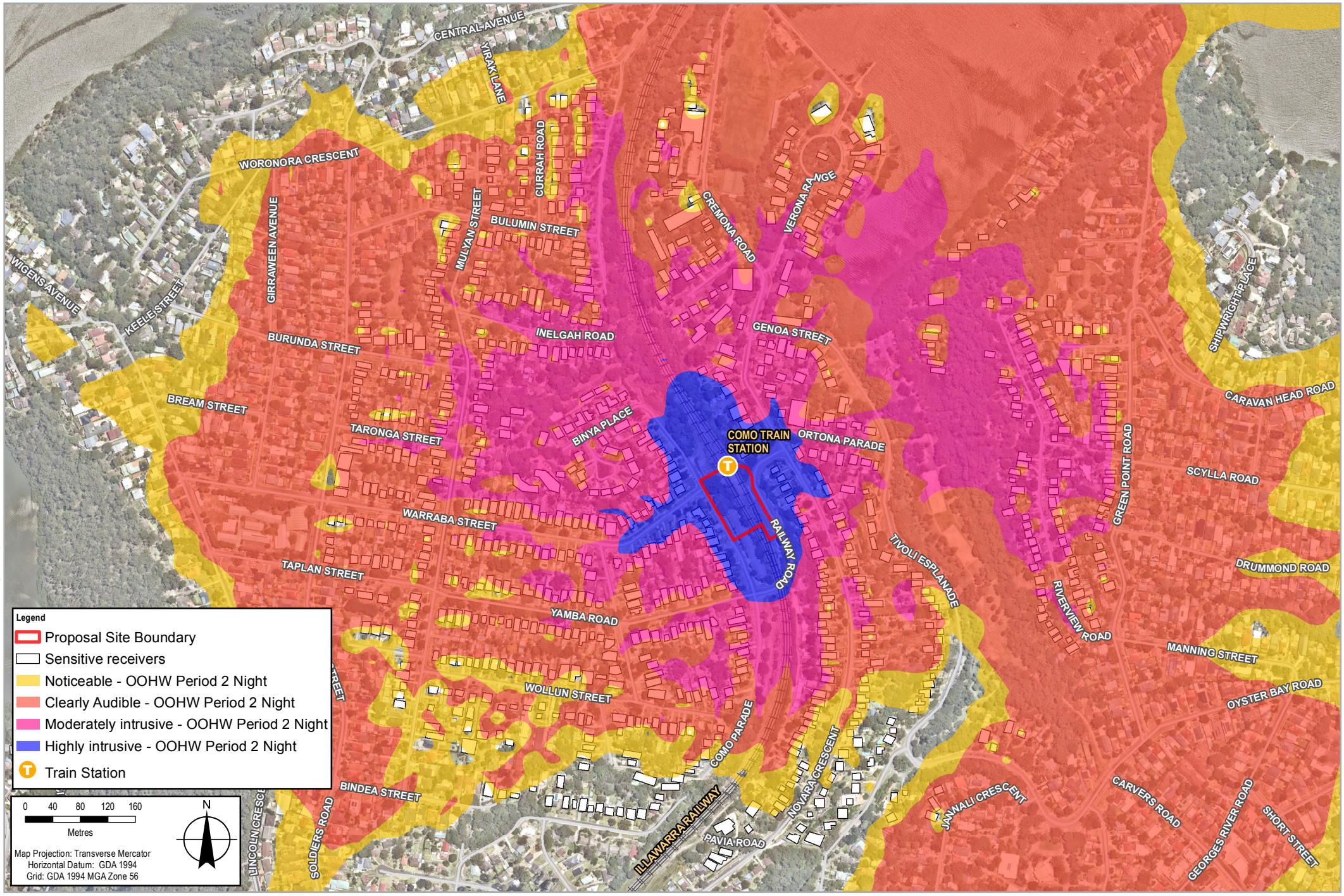


Figure I-6: Scenario 6 Predicted construction noise management zones, OOHW Period 2 Night

Figure I-7: Scenario 7 Predicted construction noise management zones, OOHW Period 2 Night

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Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
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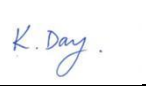
B	A Bagby	E Milton	*Record on file	K Day	*Record on file	
C	V Lau	E Milton	*Record on file	K Day	*Record on file	
0	A Bagby	V Lau		K Day		27/03/2019

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