

Woolgoolga to Glenugie Pacific Highway upgrade

Operational noise compliance report

Roads and Maritime Services | July 2019

Quality Information

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Glossary of Acoustic Terminology

The following is a brief description of acoustic terminology used in this report.

<i>Sound power level</i>	The total sound emitted by a source.																						
<i>Sound pressure level</i>	The amount of sound at a specified point.																						
<i>Decibel [dB]</i>	The measurement unit of sound.																						
<i>A Weighted decibels [dB(A)]</i>	The A weighting is a frequency filter applied to measured noise levels to represent how humans hear sounds. The A-weighting filter emphasises frequencies in the speech range (between 1kHz and 4 kHz) which the human ear is most sensitive to, and places less emphasis on low frequencies at which the human ear is not so sensitive. When an overall sound level is A-weighted it is expressed in units of dB(A).																						
<i>Decibel scale</i>	<p>The decibel scale is logarithmic in order to produce a better representation of the response of the human ear. A 3 dB increase in the sound pressure level corresponds to a doubling in the sound energy. A 10 dB increase in the sound pressure level corresponds to a perceived doubling in volume. Examples of decibel levels of common sounds are as follows:</p> <table> <tr> <td>0dB(A)</td><td>Threshold of human hearing</td></tr> <tr> <td>30dB(A)</td><td>A quiet country park</td></tr> <tr> <td>40dB(A)</td><td>Whisper in a library</td></tr> <tr> <td>50dB(A)</td><td>Open office space</td></tr> <tr> <td>70dB(A)</td><td>Inside a car on a freeway</td></tr> <tr> <td>80dB(A)</td><td>Outboard motor</td></tr> <tr> <td>90dB(A)</td><td>Heavy truck pass-by</td></tr> <tr> <td>100dB(A)</td><td>Jackhammer/Subway train</td></tr> <tr> <td>110 dB(A)</td><td>Rock Concert</td></tr> <tr> <td>115dB(A)</td><td>Limit of sound permitted in industry</td></tr> <tr> <td>120dB(A)</td><td>747 take off at 250 metres</td></tr> </table>	0dB(A)	Threshold of human hearing	30dB(A)	A quiet country park	40dB(A)	Whisper in a library	50dB(A)	Open office space	70dB(A)	Inside a car on a freeway	80dB(A)	Outboard motor	90dB(A)	Heavy truck pass-by	100dB(A)	Jackhammer/Subway train	110 dB(A)	Rock Concert	115dB(A)	Limit of sound permitted in industry	120dB(A)	747 take off at 250 metres
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<i>Frequency [f]</i>	The repetition rate of the cycle measured in Hertz (Hz). The frequency corresponds to the pitch of the sound. A high frequency corresponds to a high pitched sound and a low frequency to a low pitched sound.																						
<i>Equivalent continuous sound level [L_{eq}]</i>	The constant sound level which, when occurring over the same period of time, would result in the receiver experiencing the same amount of sound energy.																						
L_{max}	The maximum sound pressure level measured over the measurement period.																						
L_{min}	The minimum sound pressure level measured over the measurement period.																						
L_{10}	The sound pressure level exceeded for 10% of the measurement period. For 10% of the measurement period it was louder than the L_{10} .																						

L_{90}	The sound pressure level exceeded for 90% of the measurement period. For 90% of the measurement period it was louder than the L_{90} .
<i>Ambient noise</i>	The all-encompassing noise at a point composed of sound from all sources near and far.
<i>Background noise</i>	The underlying level of noise present in the ambient noise when extraneous noise (such as transient traffic and dogs barking) is removed. The L_{90} sound pressure level is used to quantify background noise.
<i>Traffic noise</i>	The total noise resulting from road traffic. The L_{eq} sound pressure level is used to quantify traffic noise.
<i>Day</i>	The period from 0700 to 1800 h Monday to Saturday and 0800 to 1800 h Sundays and Public Holidays.
<i>Evening</i>	The period from 1800 to 2200 h Monday to Sunday and Public Holidays.
<i>Night</i>	The period from 2200 to 0700 h Monday to Saturday and 2200 to 0800 h Sundays and Public Holidays.
<i>Assessment background level [ABL]</i>	The overall background level for each day, evening and night period for each day of the noise monitoring.
<i>Rating background level [RBL]</i>	The overall background level for each day, evening and night period for the entire length of noise monitoring.
Existing road traffic noise model	A model of the project as it was built that calculates existing road traffic noise levels. This is used for model validation purposes with concurrently measured road traffic noise levels and traffic counts.
<i>Operational noise compliance model</i>	A model of the project as it was built, that calculates road traffic noise levels.
<i>Design noise model</i>	A model of the project as it was designed, that calculates road traffic noise levels.
<i>Year of opening</i>	The year that the project opens (2018).
<i>Design year</i>	Ten years after the project opens (2028).
<i>Operational noise management report (ONMR)</i>	A report detailing the results of an operational noise assessment based upon the road design.
<i>Operational noise compliance assessment (ONCA)</i>	An assessment of whether the predicted noise levels in the ONMR have been met or exceeded after project opening.
<i>Operational noise compliance report (ONCR)</i>	A report detailing the results of the ONCA.

*Definitions of a number of terms have been adapted from Australian Standard AS1633:1985 “Acoustics – Glossary of terms and related symbols”, the EPA’s NSW Industrial Noise Policy and the EPA’s Road Noise Policy.

Executive Summary

The Woolgoolga to Glenugie Pacific Highway upgrade involves the construction of about 20 kilometres of new dual carriageway highway between Arrawarra Interchange, north of Woolgoolga and Wells Crossing Creek, south of Glenugie. This upgrade also provides about six kilometres of new southbound carriageway between Wells Crossing Creek and Franklins Road, south of Glenugie. Other key features include a rest area at Arrawarra, a Heavy Vehicle Inspection Station at Halfway Creek and two U-turn bays at Rediger Close and Lemon Tree Road, Halfway Creek.

Construction occurred as two projects, Woolgoolga to Halfway Creek (constructed by OHL and York) and Halfway Creek to Glenugie (constructed by Civil Mining Construction). Major works started in May 2015 and the upgrade opened to traffic progressively between August and December 2017. The speed limit was increased to 110 km/h between November 2017 and April 2018. The northbound lane from Wells Crossing to Franklins Road utilises the existing Pacific Highway and the speed limit is currently 100 km/h on this section of road.

Predictive modelling was undertaken to determine the likely road traffic noise levels expected from the project during the detailed design phase of the upgrade. The results of modelling for the Woolgoolga to Glenugie upgrade are detailed in the Operational Noise Management Report (October 2015).

Roads and Maritime Services (Roads and Maritime) engaged AECOM Australia Pty Ltd (AECOM) to carry out an Operational Compliance Noise Assessment of the Woolgoolga to Glenugie upgrade, which is presented in this Operational Noise Compliance Report (ONCR).

Noise criteria

Operational noise requirements for the Woolgoolga to Glenugie upgrade are in accordance with the Minister's Conditions of Approval (MCoA), the Environment Protection Authority's (EPA) Road Noise Policy (RNP) and Industrial Noise Policy (INP).

Noise modelling

Road traffic noise levels for the Woolgoolga to Glenugie upgrade were calculated using SoundPLAN software, which implements the Calculation of Road Traffic Noise (CoRTN) algorithm. The UK Department of Transport devised the CoRTN algorithm, and with suitable corrections this method has been shown to give accurate predictions of traffic noise levels under Australian conditions. All modelling inputs and methodology used in the Woolgoolga to Glenugie noise assessments are in accordance with the requirements of the RNP, the MCoA and the Roads and Maritime Model Validation Guideline (MVG).

Scenarios modelled for the Woolgoolga to Glenugie noise assessments include 'existing' (2018), 'year of opening' (2018) and 'design year' (2028) for both daytime and night-time periods. The different road surface types used along this section of the highway have also been incorporated into the modelling.

Noise modelling elements as part of this assessment report included:

- day and night traffic flows;
- ground and air absorption;
- travel speed;
- heavy and light vehicle percentages;
- surface corrections;
- road alignment gradients; and
- topography.

Traffic counts

TTM Consulting Pty Ltd (TTM) was engaged by AECOM to undertake traffic counting at seven locations along the alignment. Traffic was also counted at an additional five locations close to the Arrawarra Rest Area, Rediger Close U-Turn Bay, Lemon Tree Road U-Turn Bay and the Heavy Vehicle Inspection Bay to provide data for the noise assessment of these facilities. Traffic counting was carried out simultaneously with noise logging for validation of the existing traffic noise model.

Unattended noise measurements

Unattended noise monitoring, whereby an automated noise logger is placed at a location for approximately two weeks to record road traffic noise data, was conducted at ten locations. The results of the unattended noise monitoring have been processed in accordance with the procedures contained in the RNP and are presented in this report.

In addition, noise loggers were placed at four locations to monitor noise from the Arrawarra Rest Area, Rediger Close U-Turn Bay, Lemon Tree Road U-Turn Bay and the Heavy Vehicle Inspection Bay. These unattended noise measurements have been assessed in accordance with the procedures contained in the INP and are presented in this report.

Attended noise measurements

Attended noise measurements, whereby a technician manually operates a sound level meter at each location, allows for real-time identification of noise sources. Attended monitoring was completed at each of the unattended noise monitoring locations to qualify noise present at each receiver location.

Model validation and additional noise mitigation requirements

The results of noise measurements undertaken following the opening of the Woolgoolga to Glenugie upgrade have correlated well with the predicted noise levels using the 'existing road traffic noise model'.

All modelled predictions for locations dominated by road traffic noise from Woolgoolga to Glenugie upgrade were within ± 2 dB of measured results, aside from one anomaly which is discussed in Section 5.2.

A road traffic noise model for the 'year of opening' and 'design year' were then created using predicted 2018 and 2028 traffic flows from the design stage. Road traffic noise levels modelled for these years were compared against the previously determined noise levels, as detailed in the Operational Noise Management Report (ONMR) October 2015.

This was completed to determine if the design stage noise modelling was accurate and subsequently confirm if the previously recommended noise mitigation measures are adequate.

Details of complaints received

Roads and Maritime have received a total of 12 enquiries and complaints from residents in relation to road traffic noise on the Woolgoolga to Glenugie upgrade since the project opened to traffic.

The complaints raised by residents were similar in nature and were received via email, letter, phone or in person. The complaints and enquiries related to road traffic noise after opening the upgrade to traffic and the timing and process of the operational noise compliance assessment.

Some monitoring points were located nearby to where complaints were received.

Roads and Maritime contacted each person making the complaint or enquiry to discuss their concerns and answer questions. This response was made either in person, by phone, letter or email.

Conclusion

The review has carried out long-term unattended noise monitoring and short-term attended noise monitoring at 14 locations, during the period 22 May to 6 June 2018.

The noise levels predicted using the 'existing road traffic noise model' were generally in close agreement (within two decibels) with the measured levels for the majority at the noise logging locations, therefore the noise model was considered validated.

Where road traffic noise levels determined in the operational noise compliance model were significantly higher (more than two decibels) than the design noise model the receivers were re-evaluated for eligibility of treatment.

It was found that three receivers were eligible for consideration of noise mitigation measures to reduce road traffic noise levels. One of these receivers has already been treated and is now eligible for additional noise mitigation measures, another was previously offered treatment but declined and the third receiver was planned to be demolished during the design stage and so no treatment was installed.

In addition, three properties near Wells Crossing have been identified for reassessment after the northbound carriageway in this area has been upgraded.

The overall outcome of the operational noise compliance assessment was that generally the design stage recommended noise mitigation measures are considered appropriate, with a total of three receivers identified as being eligible for consideration of additional noise mitigation measures to mitigate road traffic noise levels.

For more information about this assessment see Section 5.3.4 and Section 5.3.7.

1.0 Introduction

1.1 Overview

The Woolgoolga to Glenugie Pacific Highway upgrade involves the construction of about 20 kilometres of new dual carriageway highway between Arrawarra Interchange, north of Woolgoolga and Wells Crossing Creek, south of Glenugie. This upgrade also provides about six kilometres of new southbound carriageway between Wells Crossing Creek and Franklins Road, south of Glenugie. Other key features include a rest area at Arrawarra, a Heavy Vehicle Inspection Station at Halfway Creek and two U-turn bays at Rediger Close and Lemon Tree Road, Halfway Creek.

Construction occurred as two projects, Woolgoolga to Halfway Creek (constructed by OHL and York) and Halfway Creek to Glenugie (constructed by Civil Mining Construction). Major works started in May 2015 and opened to traffic progressively between August and December 2017. The speed limit was increased to 110 km/h between November 2017 and April 2018. The northbound lane from Wells Crossing to Franklins Road utilises the existing Pacific Highway and the speed limit is 100 km/h on this section of road.

Indicative noise mitigation measures were identified at the Environmental Assessment stage in the "Woolgoolga to Ballina – Upgrading the Pacific Highway Working Paper: Noise & Vibration Assessment" prepared by SKM and dated December 2012. The noise mitigation measures were then reviewed during the detailed design stage and presented in the Operational Noise Management Report (ONMR) prepared by Wilkinson Murray in "Final Draft Design 100%" (W2G-ONMR-RPT-001[G] FINAL DRAFT DESIGN – 100%, October 2015).

Roads and Maritime Services (Roads and Maritime) engaged AECOM Australia Pty Ltd (AECOM) to undertake an Operational Noise Compliance Assessment of the Woolgoolga to Glenugie upgrade and prepare an Operational Noise Compliance Report.

Acoustic terminologies are explained in the glossary before the executive summary.

1.2 Purpose

The purpose of this assessment is to review operational noise levels from the Woolgoolga to Glenugie Pacific Highway upgrade, compare them against the predicted noise levels from the design stage and assess if the previously recommended and installed road traffic noise mitigation measures were adequate and satisfy the requirements of the Minister's Conditions of Approval (MCoA).

1.3 Assessment approach

This assessment has been undertaken in accordance with the following documents:

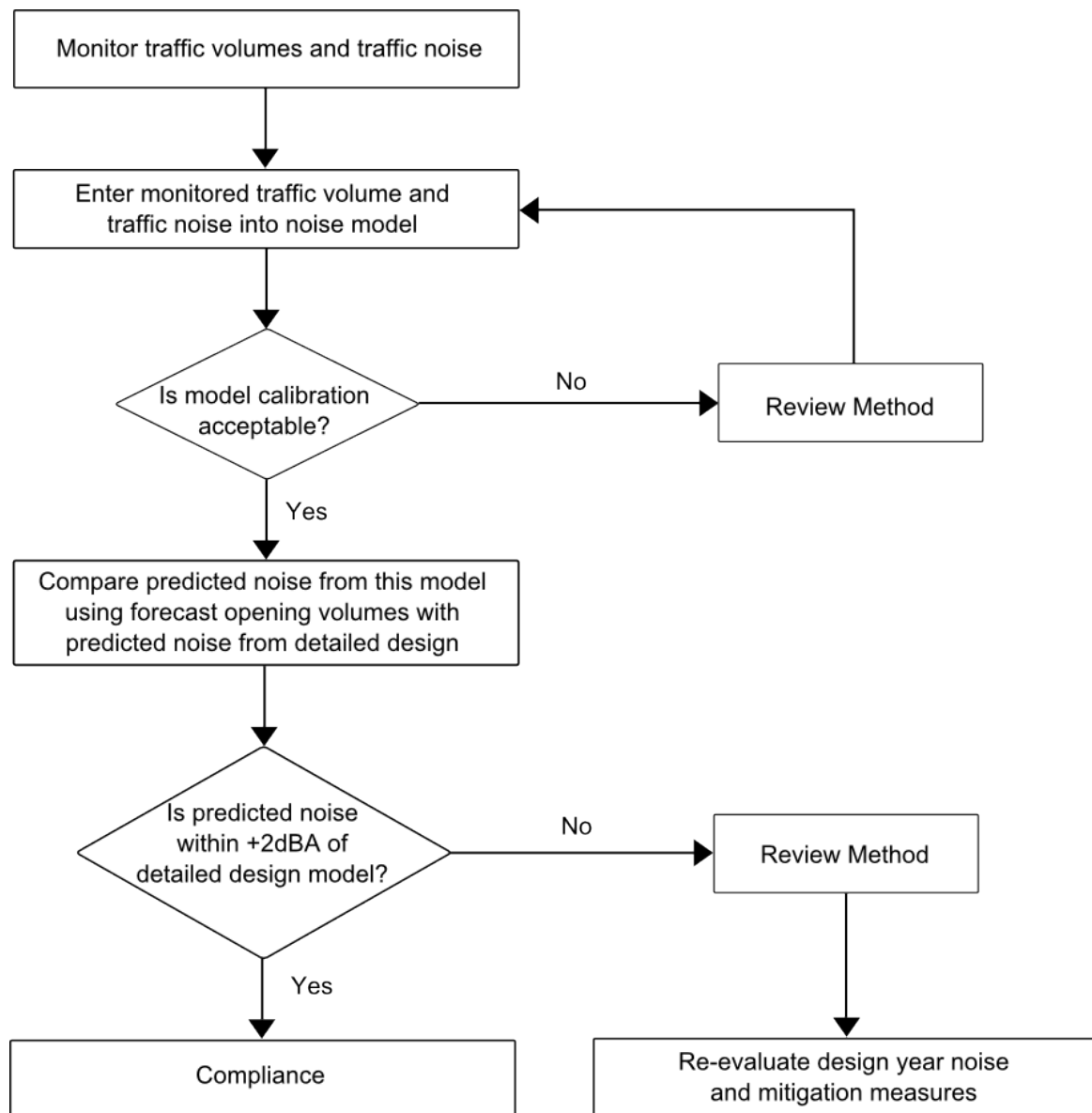
- D28 of the Minister's Condition of Approval (MCoA) (24 June 2014);
- Road Noise Policy (RNP) (EPA, 2011);
- Industrial Noise Policy (INP) (EPA, 2000)
- Environmental Noise Management Manual (ENMM) (RMS, 2001);
- Roads and Maritime Procedure - Preparing a Post Construction Noise Assessment Report (PCNA) (RMS, 2014);
- Austroads: An Approach to the Validation of Road Traffic Noise Models (Austroads, 2002);
- Australian Standard AS 2702 1984 - Acoustic Methods of Measurement of Road Traffic Noise; and
- Pacific Highway Upgrade – Woolgoolga to Glenugie – Operational Noise Management Report (WM, October 2015).

Provided below in Figure 1 is a summary of the assessment approach which outlines the steps adopted to assess operational noise compliance. The approach adopts a combination of

measurement and modelling as it is not considered practicable to establish compliance by measurement at all potentially affected noise sensitive land uses.

The flow chart is to be read in conjunction with Roads and Maritime's Environmental Noise Management Manual (ENMM) and the procedure for preparing a post construction noise assessment report (PCNA).

Figure 1 Operational noise compliance assessment methodology



Firstly, traffic classification counts and noise monitoring are completed simultaneously. Secondly, a road traffic noise prediction model is developed based on the as-built road design and the traffic counts. Road traffic noise levels are predicted and compared with the measured road traffic noise levels. Figure 1 requires the model to be further refined if the discrepancy between predicted and measured noise levels is found outside the industry accepted tolerance.

If good correlation is found between the predicted and measured noise levels the as-built road traffic noise prediction model can be said to be validated. Next the detailed design forecasted traffic volumes are entered into the as-built road traffic noise prediction model and the resultant noise levels are compared with those presented in the Operational Noise Management Report.

Where the as-built road traffic noise model predicted noise levels exceed those of the detailed design model by more than 2 dB(A) at any receiver, the effectiveness of applied noise mitigation is reviewed at that receiver, and if necessary, reassessment of feasible and reasonable mitigation measures is undertaken. Otherwise, the noise mitigation strategy recommended in the Operational Noise Management Report is considered acceptable.

However, where the as-built road design has changed significantly from the detailed design and is likely to result in higher noise levels, then all noise mitigation triggers and noise mitigation measures identified in the Operational Noise Management Report are re-evaluated.

2.0 Operational noise criteria

2.1 Minister's Conditions of Approval

Operational noise requirements are detailed in the Minister's Conditions. Details of the relevant Condition are presented below.

Operational Noise Compliance

D28 The Applicant shall undertake operational noise monitoring, to compare actual noise performance of the SSI against noise performance predicted in the review of noise mitigation measures required by condition D 11, within 12 months of the commencement of operation of the SSI, or as otherwise agreed by the Secretary.

The Applicant shall subsequently prepare an Operational Noise Compliance Report to document this monitoring. The Report shall include, but not necessarily be limited to:

- a. noise monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under condition D 11 and documents listed in condition A2;*
- b. a review of the operational noise levels in terms of criteria and noise goals established in the NSW Road Noise Policy 2011;*
- c. methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which SSI noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers;*
- d. details of any complaints and enquiries received in relation to operational noise generated by the SSI between the date of commencement of operation and the date the report was prepared;*
- e. any required recalibrations of the noise model taking into consideration factors such as noise monitoring and actual traffic numbers and proportions;*
- f. an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of feasible and reasonable mitigation measures; and*
- g. identification of additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by condition D 11, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Noise Policy 2011, when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA.*

The Applicant shall provide the Secretary and the EPA with a copy of the Operational Noise Report within 60 days of completing the operational noise monitoring referred to in (a) above or as otherwise agreed by the Secretary.

2.2 Road Noise Policy

During the detailed design phase the project was assessed in accordance with the Road Noise Policy (RNP). The criteria which apply to a project depend on how the road functions within the road network. The Woolgoolga to Glenugie functions as a freeway in the overall road network in this area.

Provided in Table 1 is the road traffic noise criteria for existing residential land use developments affected by noise from the new freeway/arterial roads and redevelopments of existing freeways/arterial roads. The external noise criteria are applied at 1 metre from the facade and at a height of 1.5 m from the floor level. The criteria include an allowance for noise reflected from the facade.

Table 1 Residential road traffic noise criteria for new and redeveloped freeways, RNP

Road category	Type of project/land use	Assessment criteria dB(A)	
		Day (7 am – 10 pm)	Night (10 pm – 7 am)
Freeway/arterial/sub-arterial	1. Existing residences affected by noise from new freeways/arterial/sub-arterial road corridors ¹	L _{Aeq} (15 hr) 55 (external)	L _{Aeq} (9 hr) 50 (external)
	2. Existing residences affected by noise from redevelopment of existing freeway/arterial/sub-arterial roads	L _{Aeq} (15 hr) 60 (external)	L _{Aeq} (9 hr) 55 (external)
	3. Existing residences affected by additional traffic on existing freeways/arterial/sub-arterial roads generated by land use developments		
	4. Existing residences affected by noise from existing freeway/arterial/sub-arterial roads where no redevelopment is taking place		
	5. Existing residences affected by increases in traffic noise of 12 dB(A) or more from new freeway/arterial/sub-arterial roads	Between L _{Aeq} (15 hr) 42-55 (external)	Between L _{Aeq} (15 hr) 42-50 (external)

Notes:

1. The RNP states "The contribution from the new road project refers to the noise from the new road project alone and not the total level of road traffic noise."

Table 2 presents the road traffic noise criteria applicable to noise sensitive receivers other than residential.

Table 2 Road traffic noise criteria for sensitive land uses, RNP

Existing sensitive land use	Assessment criteria		Additional considerations
	Day (7am – 10pm)	Night (10pm – 7am)	
1. School classrooms	L _{Aeq} (1 hr) 40 (internal)	-	In the case of buildings used for education or health care, noise level criteria for spaces other than classrooms and wards may be obtained by interpolation from the 'maximum' levels shown in Australian Standard 2107:2000 (Standards Australia 2000)
2. Hospital wards	L _{Aeq} (1 hr) 35 (internal)	L _{Aeq} (1 hr) 35 (internal)	

Existing sensitive land use	Assessment criteria		Additional considerations
	Day (7am – 10pm)	Night (10pm – 7am)	
3. Places of worship	$L_{Aeq(1\text{ hr})}$ 40 (internal)	$L_{Aeq(1\text{ hr})}$ 40 (internal)	The criteria are internal, i.e. the inside of a church. Areas outside the place of worship, such as a churchyard or cemetery, may also be a place of worship. Therefore, in determining appropriate criteria for such external areas, it should be established what in these areas may be affected by road traffic noise. For example, if there is a church car park between a church and the road, compliance with the internal criteria inside the church may be sufficient. If, however, there are areas between the church and the road where outdoor services may take place such as weddings and funerals, external criteria for these areas are appropriate. As issues such as speech intelligibility may be a consideration in these cases, the passive recreation criteria (see row 5 Open space (passive use) of this table) may be applied.
4. Open space (active use)	$L_{Aeq(15\text{ hr})}$ 60	-	Active recreation is characterised by sporting activities and activities which generate their own noise or focus for participants, making them less sensitive to external noise intrusion.
5. Open space (passive use)	$L_{Aeq(15\text{ hr})}$ 55	-	Passive recreation is characterised by contemplative activities that generate little noise and where benefits are compromised by external noise intrusion, e.g. playing chess, reading. In determining whether areas are used for active or passive recreation, the type of activity that occurs in that area and its sensitivity to noise intrusion should be established. For areas where there may be a mix of passive and active recreation, e.g. school playgrounds, the more stringent criteria apply. Open space may also be used as a buffer zone for more sensitive land uses.
8. Child care facilities	Sleeping rooms $L_{Aeq(1\text{ hr})}$ 35 Indoor play areas $L_{Aeq(1\text{ hr})}$ 40 (internal) Outdoor play areas $L_{Aeq(1\text{ hr})}$ 55 (external)		Multi-purpose spaces, e.g. shared indoor play/sleeping rooms should meet the lower of the respective criteria. Measurements for sleeping rooms should be taken during designated sleeping times for the facility, or if these are not known, during the highest hourly traffic noise level during the opening hours of the facility.
9. Aged care facilities	-	-	Residential land use noise assessment criteria should be applied to these facilities.

2.3 Preparing a Post Construction Noise Assessment Report

The Roads and Maritime Procedure – Preparing a Post Construction Noise Assessment Report (PCNA) provides a guideline for undertaking an operational noise compliance assessment and report. This procedure considers:

- noise monitoring;
- noise modelling and model validation;
- assessment of predicted noise levels; and
- reviewing predictions and mitigation options.

The procedure requires comparison of the predicted noise levels from the operational noise compliance model at all identified noise sensitive receivers using forecast opening volumes with the predicted noise levels from the Operational Noise Management Report. This is completed for both the year of opening and the design year. Where operational noise compliance levels exceed predicted design year levels by more than 2 dB(A) the adequacy of mitigation measures must be reviewed and identified problems should be rectified. Additional treatments may be required where assessed to be feasible and reasonable.

2.4 The Environmental Noise Management Manual

2.4.1 Additional noise mitigation

The Environmental Noise Management Manual (ENMM) discusses what is deemed to be feasible and reasonable in terms of additional noise mitigation where the RNP base criteria are exceeded and all “feasible and reasonable” traffic management and other road design opportunities have been exhausted. Additional noise mitigation measures may include noise barriers/mounds, quieter pavement surfaces and architectural treatment of private dwellings.

It is generally not reasonable to take action to reduce noise levels to the target noise levels if the noise levels with the proposal are predicted to be:

- Within 2 dB(A) of ‘No Build’ noise levels (The RNP states that an increase of up to 2 dB(A) represents a minor impact that is considered barely perceptible to the average person); and
- Not ‘acute’ (i.e. the noise levels are predicted to be less than 65 dB(A) $L_{eq(15hr)}$ and 60 dB(A) $L_{eq(9hr)}$).
- If this situation exists then no further consideration of additional noise mitigations is required.

For new road corridors and redevelopments, the road traffic noise level is evaluated at the year of opening and for a design year at ten years after opening. For each timeframe, a comparison is made between the road traffic noise levels after the upgrade and the pre-existing situation (without the road project). The comparison at the year of opening is aimed at indicating the potential for any noise issues at the commencement of the project. The comparison at ten years after opening is aimed at indicating the potential for longer-term noise impact once the project is well established and the surrounding network has stabilised.

2.4.2 Maximum noise levels

The ENMM also considers a maximum noise level event as a vehicle pass-by event for which the L_{Amax} noise level is equal to or greater than 15 dB(A) above the $L_{Aeq(1hr)}$. Maximum noise levels are generally dependent on truck engine braking events but can also be due to vehicle acceleration events. Maximum noise events are less likely further away from the alignment, as maximum noise levels decrease at a faster rate with distance than is the case for L_{Aeq} road traffic noise levels.

Impacts of the use of the U-turn bays on nearby residential receivers have been assessed by considering the number of maximum noise events.

2.5 Industrial Noise Policy

The Industrial Noise Policy (INP) provides guidance and recommendations on the assessment of noise impacts from industrial and commercial facilities. The rest area at Arrawarra and the heavy vehicle inspection bay at Halfway Creek are considered to be industrial noise sources.

The assessment procedure for industrial noise sources has two components that must be satisfied:

- Controlling intrusive noise impacts in the short term for residences; and
- Maintaining noise level amenity for residences and other land uses.

2.5.1 Intrusive noise impacts

The INP states that the noise from any single source should not intrude greatly above the prevailing background noise level. Industrial noises are generally considered acceptable if the equivalent continuous (energy-average) A-weighted level of noise from the source (L_{Aeq}), measured over a 15 minute period, does not exceed the background noise level measured in the absence of the source by more than 5 dB. This is termed the Intrusiveness Criterion. The rating background level (RBL) is the background noise level to be used for assessment purposes and is determined by the methods given in Section 3.1 of the INP. Adjustments are to be applied to the level of noise produced if the noise at the receiver contains annoying characteristics such as tonality or impulsiveness.

2.5.2 Protecting noise amenity

To limit continuing increases in noise levels, the maximum ambient noise level resulting from industrial noise sources should not normally exceed the acceptable noise levels specified in Table 2.1 of the INP. That is, the background noise level should not exceed the level appropriate for the particular locality and land use. This is termed the Amenity criterion.

As per the definitions of receiver types within the INP, residences within this area are classified as being in a suburban noise amenity area (an area that has local traffic with characteristically intermittent traffic flows). For residential receivers, the amenity criteria are shown in Table 3. Amenity criteria for other nearby receiver types are also presented in Table 3.

Table 3 Recommended L_{Aeq} noise levels from industrial noise sources

Type of Receiver	Indicative Noise Amenity Area	Time of Day	Recommended $L_{Aeq(15min)}$ Noise Level dB(A)	
			Acceptable	Recommended Maximum
Residence	Suburban	Day – 07:00-18:00	55	60
		Evening – 18:00-22:00	45	50
		Night – 22:00-07:00	40	45

Provided in Table 4 are the appropriate criteria for the assessment locations in close proximity to the Rest Area (Arrawarra) and the Truck Inspection Bay (Halfway Creek). Table 4 presents the Project Specific Noise levels for the day, evening and night-time periods, which are the most stringent of the Intrusive and Amenity criteria. The rating background noise levels (RBL) are presented in Table 9 in Section 4.6.

Table 4 Operational noise criteria

Location	Assessment Period	RBL (L_{A90}), dB(A)	Intrusive Criteria $L_{Aeq}(15 \text{ min})$	Amenity Criteria $L_{Aeq}(15 \text{ min})$	Project Specific Noise Levels $L_{Aeq}(15 \text{ min})$
Residences - Arrawarra	Day – 07:00-18:00	45	50	58	50
	Evening – 18:00-22:00	43	48	48	48
	Night – 22:00-07:00	39	44	43	43
Residences - Halfway Creek	Day – 07:00-18:00	41	46	58	46
	Evening – 18:00-22:00	41	46	48	46
	Night – 22:00-07:00	37	42	43	43

Notes:

1 The amenity criteria have been adjusted to $L_{Aeq}(15 \text{ min})$ criteria by adding 3 dB, in accordance with the Noise Policy for Industry (EPA, 2017).

2.5.3 Sleep disturbance criteria

Application notes to the INP discuss sleep disturbance and its objective assessment.

To minimise the risk of sleep disturbance as a result of industrial type operations during the night-time period, the INP application notes recommend that, the $L_{A1(1 \text{ minute})}$ noise level outside a bedroom window should not exceed the L_{A90} background noise level by more than 15 dB(A) during the night-time period (10.00 pm to 7.00 am). The EPA considers it appropriate to use this metric as a screening criterion to assess the likelihood of sleep disturbance. If this screening criterion is found to be exceeded then a more detailed analysis must be undertaken and include the extent that the maximum noise level exceeds the background noise level and the number of times this is likely to happen during the night-time period.

The INP application notes reference the RNP for some guidance in assessing the potential for sleep disturbance. The RNP contains a review of research into sleep disturbance which represents NSW EPA advice on the subject of sleep disturbance due to noise events. It concludes that having considered the results of research to date that, '*Maximum internal noise levels below 50-55 dB(A) are unlikely to cause awakening reactions*'. Therefore, given that an open window provides 10 dB(A) noise attenuation from outside to inside, external noise levels of 60-65 dB(A) are unlikely to result in awakening reactions.

Based on the measured background noise levels during the night, the sleep disturbance criteria for the nearest noise sensitive residential receivers are presented in Table 5. The rating background noise levels (RBL) are presented in section 4.6.

Table 5 Night-time sleep disturbance criteria

Location	Measured Night-time RBL, L _{A90} , 15 mins dB(A)	Sleep Disturbance Criteria L _{A1} (1 minute) dB(A)	
		Screening Level	Awakening Reaction
Residences – Arrawarra Beach Road, Arrawarra	41	56	60 - 65
Residences – Luthers Road, Halfway Creek	38	53	60 - 65

3.0 Review of mitigation measures

Where feasible and reasonable, road traffic noise levels from the operation of redeveloped and new roads should be reduced to meet the noise criteria. In many cases this may be achieved through long-term strategies such as improved planning, design and construction of adjoining land-use developments, reduced vehicle emission levels through new vehicle standards and regulation of in-service vehicles, greater use of public transport, and alternative methods of freight haulage.

Noise mitigation may also be achieved through the road design process. The hierarchy of noise mitigation is firstly to consider 'at-source' noise mitigation measures such as road design and traffic management, then the use of quieter pavements. If these measures cannot be implemented in such a way as to meet the noise criteria the use of 'in-corridor' mitigation measures should be considered, such as noise barriers and mounds. Finally, if the applicable noise criteria cannot be met by using a combination of all these methods, 'at-receiver' mitigation measures can be considered such as architectural treatments and property boundary walls.

Roads and Maritime carried out extensive investigations into the noise impacts of the project as part of the Environmental Assessment and the Detailed Design stages. These mitigation measures included:

At-source treatments

- Low noise pavement;
- Minimising road gradients; and
- Low noise bridge joints.
- Reduced number of at-grade intersections.

In-corridor treatments

- Roadside noise walls.

At-receivers treatments

- Architectural treatment.

Throughout the design stage Roads and Maritime conducted extensive consultation with affected residents to determine suitable architectural treatment.

The mitigation measures adopted have been included in this operational noise compliance assessment. Summaries of the noise mitigation measures are provided below.

3.1 Low noise pavements

For modern, well maintained cars, at speeds greater than 40 km/h, noise from the tyre rolling on the road surface is dominant over other sources of light vehicle noise. The selection of the road surface is therefore an important factor in controlling road noise. For Woolgoolga to Glenugie the following road types have been selected for the main alignment:

- Plain Concrete Pavement (PCP); and
- Stone Mastic Asphalt (SMA).

Typically SMA is up to 5 dB quieter when compared to PCP. SMA has been used on the following sections of the main alignment:

- Chainage 74 to 1800 Northbound;
- Chainage 51 to 1800 Southbound; and
- All bridges and interchange access ramps.

3.2 Minimising road gradients

Minimising the road gradient can reduce noise by reducing the need for acceleration and engine braking, particularly for heavy vehicles. The project design has minimised road gradients as much as practically possible, particularly in the area of Dirty Creek and Halfway Creek.

3.3 Low noise bridge joints

The Woolgoolga to Glenugie alignment includes bridges over the Corindi flood plain, Halfway Creek and Wells Crossing Creek. The joints were designed in accordance with the Roads and Maritime's Bridge Technical Direction BT2008/10 which considers noise from bridge joints. The joints were designed to provide a smooth transition to and from the bridge deck in order to reduce the noise and vibration caused by vehicles running over the joints.

3.4 Roadside noise walls and berms

Noise barriers and berms can provide a reduction in traffic noise to receivers however for the barrier to be effective it must block line of sight. Barriers have been constructed around the Arrawarra rest area.

3.5 Architectural treatment

Where the noise criteria cannot be met through the use of the above mentioned treatments or where these treatments are impractical or not cost effective, architectural treatment may be appropriate. The ONMR specifies three treatment types:

- Type 1 – Mechanical ventilation only – applied where external noise levels are less than 5 dB above the RNP base criteria;
- Type 2 – Mechanical ventilation and sealing of wall vents – applied where external noise levels are less than 10 dB above the RNP base criteria; and
- Type 3 – Mechanical ventilation, updated windows glazing and doors – applied where external noise levels are greater than 10 dB above the RNP base criteria.

Roads and Maritime identified a number of properties requiring architectural treatment as part of the Environmental Assessment and the Detailed Design stages. This ONCR further considers the need for architectural treatment (as discussed in section 5.3).

4.0 Operational noise monitoring

Noise monitoring was undertaken to provide data for validation of the 'existing road traffic noise model'. Simultaneous traffic counting was completed and these traffic counts were used in the 'existing road traffic noise model'.

4.1 Noise monitoring overview

Road traffic noise monitoring was undertaken by AECOM at 10 locations within the period 22 May 2018 to 6 June 2018. Noise measurements were undertaken in accordance with AS2702 Acoustics - Methods for the Measurement of Road Traffic Noise and the PCNA Procedure.

Simultaneous traffic counting was also undertaken by TTM from 23 May 2018 to 5 June 2018 at seven locations during the measurement period. These traffic numbers are provided in Section 4.8.

The measured noise levels have been used in this assessment, with consideration of the existing road traffic flows, to validate the road traffic noise model.

The noise logging locations were predominantly chosen based on previous locations used during the project environmental assessment and design stages to maintain consistency. These locations were initially determined as the most suitable to validate the noise model. All logging locations are presented in Table 6. Both the noise logging and traffic counting locations are presented in Appendix A.

The noise logging results are provided in Appendix B. A noise logger measures the noise level over the sample period and then determines L_{A1} , L_{A10} , L_{A90} , L_{Amax} and L_{Aeq} levels of the noise environment. The L_{A1} , L_{A10} and L_{A90} levels are the levels exceeded for 1%, 10% and 90% of the sample period respectively. The L_{Amax} is indicative of maximum noise levels due to individual noise events. The L_{A90} is taken as the background noise level. The L_{Aeq} is the energy averaged noise level over a defined period.

Noise recording and 1/3 octave measurements have been made at each logging location. The noise measurements have been analysed by listening back to periods of the recordings, and excluding periods that are not dominated by traffic noise.

4.2 Noise monitoring instrumentation

All noise monitoring equipment used was of Type 1 or Type 2 instrumentation standard as described in Australian Standard IEC 61672.1 2004 "Electroacoustics - sound level meters" and calibrated to NATA standards that are traceable to Australian Physical Standards held by the National Measurement Laboratory (CSIRO Division of Applied Physics). All loggers were calibrated before and after measurement periods to ensure significant drift had not occurred. All equipment has current calibration certification. The make, model and serial numbers of all equipment used in the monitoring are given below in Table 6.

4.3 Weather monitoring

Weather data recorded during the noise monitoring survey periods were obtained from two weather stations located at Halfway Creek and Corindi. These weather stations were operated as part of the Woolgoolga to Glenugie upgrade. Wind speeds and rainfall at these locations is considered to be representative of the Woolgoolga to Glenugie project area.

The results of the noise monitoring have been processed in accordance with the procedures contained in the RNP. The RNP requires noise measurements affected by wind and rain to be omitted from the calculations.

4.4 Noise monitoring locations

Details of each noise logging location and the equipment are provided in Table 6 overleaf. The noise logging locations are presented on a map in Appendix A.

Table 6 Noise logging locations, measurement periods and instrumentation

ID	Address	Logger type / Serial number	Measurement period	Days of data retrieved
L1	18 Post Office Lane, Corindi Beach	Rion NL52 175537	22/05/18 - 01/06/18	10
L2	4028 Pacific Highway, Dirty Creek	Rion NL42 947012	24/05/18 - 06/06/18	13
L3	11 Dunmar Lane, Halfway Creek	Rion NL52 876010	22/05/18 - 06/06/18	15
L4	5092 Pacific Highway, Halfway Creek	Ngara 87807D	23/05/18 - 05/06/18	13
L5	Near Kungala Road, Halfway Creek	Cirrus 171 G061710	22/05/18 - 06/06/18	15
L6	5631 Pacific Highway, Wells Crossing	Rion NL52 386741	24/05/18 - 06/06/18	13
L7	Darlington Beach Holiday Resort 2564 Solitary Islands Way, Arrawarra	Rion NL52 1043455	22/05/18 - 06/06/18	15
L8	5092 Pacific Highway, Halfway Creek	Ngara 878007	23/05/18 - 30/05/18	7
L9	Near Sherwood Creek Road, Corindi Beach	Rion NL52 164396	22/05/18 - 06/06/18	15
L10	34 Kangaroo Trail Road, Corindi Beach	Rion NL52 164395	22/05/18 - 06/06/18	15

4.5 Operational road noise monitoring results

Provided in Table 7 are the $L_{Aeq(15hr)}$ and $L_{Aeq(9hr)}$ noise levels measured at each monitoring location for the period 22 May – 6 June 2018.

Table 7 Unattended road noise monitoring results

ID	Noise logging location	Measured noise level dB(A)	
		Day: 7:00 – 22:00 L _{Aeq} , (15 hr)	Night: 22:00 – 7:00 L _{Aeq} , (9 hr)
L1	18 Post Office Lane, Corindi Beach	62	60
L2	4028 Pacific Highway, Dirty Creek	50	48
L3	11 Dunmar Lane, Halfway Creek	69	68
L4	5092 Pacific Highway, Halfway Creek	58	57
L5	Near Kungala Road, Halfway Creek	70	68
L6	5631 Pacific Highway, Wells Crossing	71	69
L7	Darlington Beach Holiday Resort 2564 Solitary Islands Way, Arrawarra	62	58
L8	5092 Pacific Highway, Halfway Creek	60	59
L9	Near Sherwood Creek Road, Corindi Beach	63	62
L10	34 Kangaroo Trail Road, Corindi Beach	69	68

4.6 U-turn bays, rest area and truck inspection bay noise monitoring results

Noise monitoring was undertaken at locations representative of the nearest receivers to the U-turn bays, the rest area and the truck inspection bay. The monitoring captured background noise levels and noise from activities within the bays and rest area. Provided in Table 9 are the ambient noise levels measured at each monitoring location during the period 22 May – 6 June 2018.

Table 8 Noise logging locations, measurement periods and instrumentation

ID	Address	Logger type / Serial number	Measurement period	Days of data retrieved
L11	1 Arrawarra Beach Road, Arrawarra	Rion NL52 5553967	22/05/18 - 06/06/18	15
L12	Near Rediger Close, Halfway Creek	Rion NL52 164394	22/05/18 - 06/06/18	15
L13	5034 Pacific Highway, Halfway Creek	Rion NL52 1265386	22/05/18 - 06/06/18	15
L14	109 Luthers Road, Halfway Creek	Rion NL52 164393	22/05/18 - 06/06/18	15

Table 9 Unattended ambient noise monitoring results

ID	Noise logging location		Measured noise level, dB(A)		
			Day: 7:00 – 18:00	Evening: 18:00 – 22:00	Night: 22:00 – 7:00
L11	1 Arrawarra Beach Road, Arrawarra	L _{Aeq}	56	53	52
		RBL	45	43	39
L12	Near Rediger Close, Halfway Creek	L _{Aeq}	72	70	70
		RBL	51	44	38
L13	5034 Pacific Highway, Halfway Creek	L _{Aeq}	54	54	53
		RBL	44	42	37
L14	109 Luthers Road, Halfway Creek	L _{Aeq}	54	52	52
		RBL	41	41 ¹	37

Notes:

1. Application notes to the NPfI indicate that the community generally expects a greater control of noise during the evening and night as compared to the day time. Therefore the rating background level for the evening is set to no more than that for the daytime and the night-time to no more than the evening.

4.7 Attended noise monitoring

Attended noise measurements were undertaken by AECOM between 22 May 2018 and 7 June 2018 at 14 locations. The noise measurements were conducted over a 15 minute period in order to qualify noise present at each receiver location. The results of the attended measurements, along with comments are presented in Table 10.

Table 10 Attended short-term noise monitoring results

ID	Noise monitoring location	Measurement start	Meas ured level	noise dB(A)	Comments regarding noise sources
			L _{Aeq} , (15 min) level	L _{A90} , (15 min) level	
Daytime					
L1	18 Post Office Lane, Corindi Beach	22/05/2018 15:42	63	49	Dominant noise source: traffic on the Pacific Highway. Other noise sources: bird noise audible in absence of traffic. Typical truck pass-by noise level: 72-74 dB(A) max. Typical car pass-by noise levels: 56-65 dB(A) max.
L2	4028 Pacific Highway, Dirty Creek	24/05/2018 13:10	51	33	Dominant noise source: traffic on the Pacific Highway. Other noise sources: farm yard animals 40 dB(A) max. Typical truck pass-by noise level: 69 dB(A) max. Typical car pass-by noise levels: 60 dB(A) max.

ID	Noise monitoring location	Measurement start	Measured level noise dB(A)		Comments regarding noise sources
			L _{Aeq} , (15 min) level	L _{A90} , (15 min) level	
L3	11 Dunmar Lane, Halfway Creek	22/05/2018 16:49	71	58	Dominant noise source: traffic on the Pacific Highway. Other noise sources: some plant equipment operating across the road, only audible in absence of traffic 54 dB(A) max. Typical truck pass-by noise level: 74-82 dB(A) max, Typical car pass-by noise levels: 65-75 dB(A) max.
L4	5092 Pacific Highway, Halfway Creek	23/05/2018 10:27	60	53	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Bird noise inaudible over road traffic. Typical traffic pass-by noise level: 60-65 dB(A) max.
L5	Near Kungala Road, Halfway Creek	22/05/2018 10:02	69	54	Dominant noise source: traffic on the Pacific Highway. Other noise sources: bird noise audible in absence of traffic. Typical truck pass-by noise level: 80 dB(A) max. Typical car pass-by noise levels: 70 dB(A) max.
L6	5631 Pacific Highway, Wells Crossing	24/05/2018 12:19	72	54	Dominant noise source: traffic on the Pacific Highway. Other noise sources: bird chirping in trees behind logger 53 dB(A). Typical truck pass-by noise level: 85 dB(A) max. Typical car pass-by noise levels: 72-78 dB(A) max.
L7	Darlington Beach Holiday Resort 2564 Solitary Islands Way, Arrawarra	22/05/2018 10:59	61	51	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Bird noise audible. Typical truck pass-by noise level: 65 dB(A) max – Pacific Highway. Typical car pass-by noise levels: 69 dB(A) max – Solitary Islands Way.
L8	5092 Pacific Highway, Halfway Creek	23/05/2018 10:55	59	50	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Light insect noise as well as light winds causing rustling in long grass. Typical car pass-by noise levels: 62 dB(A) max.

ID	Noise monitoring location	Measurement start	Measured level	noise dB(A)	Comments regarding noise sources
			L _{Aeq} , (15 min) level	L _{A90} , (15 min) level	
L9	Near Sherwood Creek Road, Corindi Beach	22/05/2018 14:03	62	49	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Bird noise audible in absence of traffic Typical truck pass-by noise level: 72-74 dB(A) max. Typical car pass-by noise levels: 63-65 dB(A) max.
L10	34 Kangaroo Trail Road, Corindi Beach	22/05/2018 13:11	68	51	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Cricket noise audible. Typical truck pass-by noise level: 74-82 dB(A) max. Typical car pass-by noise levels: 66-75 dB(A) max.
L11	1 Arrawarra Beach Road, Arrawarra	22/05/2018 10:11	54	43	Dominant noise source: traffic on the Pacific Highway. Other noise sources: bird noise audible when no cars on road. Typical truck pass-by noise level: trucks along Pacific Highway audible and there is line of site of them through the rest area. Typical car pass-by noise levels: 63 dB(A) max.
L12	Near Rediger Close, Halfway Creek	22/05/2018 12:08	70	53	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Lawn mower audible. Typical vehicle U-turn noise levels: 70 dB(A) max - Car
L13	5034 Pacific Highway, Halfway Creek	22/05/2018 11:22	48	43	Dominant noise source: traffic on the Pacific Highway, 48-50 dB(A). Other noise sources: Birds in also audible, 42 dB(A). Distant compression brakes can be heard occasionally on southern extent of road.
L14	109 Luthers Road, Halfway Creek	22/05/2018 15:09	50	42	Dominant noise source: traffic on the Pacific Highway. Other noise sources: bird noise audible. No road traffic visible from logging location.

ID	Noise monitoring location	Measurement start	Meas ured level	noise dB(A)	Comments regarding noise sources
			L _{Aeq} , (15 min) level	L _{A90} , (15 min) level	
Night-time					
L1	18 Post Office Lane, Corindi Beach	24/05/2018 22:04	62	43	Dominant noise source: traffic on the Pacific Highway. Typical truck pass-by noise level: 66-75 dB(A) max. Typical car pass-by noise levels: 58-66 dB(A) max.
L2	4028 Pacific Highway, Dirty Creek	24/05/2018 22:29	45	36	Dominant noise source: traffic on the Pacific Highway. No pass bys on the old Pacific Highway.
L3	11 Dunmar Lane, Halfway Creek	25/05/2018 0:16	69	47	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Insect noise audible. Typical truck pass-by noise level: 72-83 dB(A) max. Typical car pass-by noise levels: 75 dB(A) max.
L4	5092 Pacific Highway, Halfway Creek	24/05/2018 22:25	59	47	Dominant noise source: traffic on the Pacific Highway. Some trucks audibly running over cats eyes.
L5	Near Kungala Road, Halfway Creek	24/05/2018 22:55	66	44	Dominant noise source: traffic on the Pacific Highway. Constant hum from vehicles approaching and passing.
L6	5631 Pacific Highway, Wells Crossing	24/05/2018 23:19	68	44	Dominant noise source: traffic on the Pacific Highway. Constant hum from vehicles approaching and passing.
L7	Darlington Beach Holiday Resort 2564 Solitary Islands Way, Arrawarra	24/05/2018 23:46	56	42	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Insect noise audible. Typical truck pass-by noise level: 68 dB(A) max. Typical car pass-by noise levels: 51 dB(A) max.
L8	5092 Pacific Highway, Halfway Creek	24/05/2018 21:59	62	47	Dominant noise source: traffic on the Pacific Highway. Very distant compression brakes barely audible from the south.

ID	Noise monitoring location	Measurement start	Measured level	noise dB(A)	Comments regarding noise sources
			L _{Aeq} , (15 min) level	L _{A90} , (15 min) level	
L9	Near Sherwood Creek Road, Corindi Beach	24/05/2018 23:25	61	46	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Insect noise audible. Typical truck pass-by noise level: 73 dB(A) max. Typical car pass-by noise levels: 68 dB(A) max.
L10	34 Kangaroo Trail Road, Corindi Beach	24/05/2018 22:59	68	52	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Insect noise audible. Typical truck pass-by noise level: 72-85 dB(A) max. Typical car pass-by noise levels: 62-68 dB(A) max.
L11	1 Arrawarra Beach Road, Arrawarra	7/06/2018 23:17	51	46	Dominant noise source: traffic on the Pacific Highway. Constant hum from vehicles approaching and passing.
L12	Near Rediger Close, Halfway Creek	7/06/2018 22:00	68	45	Dominant noise source: traffic on the Pacific Highway. Other noise sources: Insect noise just audible. Typical truck pass-by noise level: 73 dB(A) max. Typical car pass-by noise levels: 65 dB(A) max.
L13	5034 Pacific Highway, Halfway Creek	7/06/2018 22:44	59	47	Dominant noise source: traffic on the Pacific Highway. Constant hum from vehicles approaching and passing.
L14	109 Luthers Road, Halfway Creek	7/06/2018 22:23	49	44	Dominant noise source: traffic on the Pacific Highway. Constant whine from trucks tyre noise 48-52 dB(A). Other noise sources: Insect noise audible.

4.8 Traffic Counting

Concurrent traffic counting was undertaken at seven (7) locations on the main alignment across the extent of the project. Traffic was counted at an additional five (5) locations on side roads. Provided below is a summary of the traffic counts. The traffic summaries are seven day averages, generally consistent with the noise logging period (22 May-6 June 2018) and in accordance with EPA requirements. The week of the 23-29 May has been used for the purposes of calibrating the operational noise model (see section 5.2). The daytime period is defined as 7 am to 10 pm and night-time from 10 pm to 7 am in accordance with the RNP.

Table 11 Traffic counting results, (23-29 May 2018)

Location	ID ¹	Direction	Day: 7:00 – 22:00			Night: 22:00 – 7:00		
			Average Traffic vol.	Average Vehicle Speed, km/h	Average Heavy Vehicle Percentage	Average Traffic vol.	Average Vehicle Speed, km/h	Average Heavy Vehicle Percentage
Main alignment								
New Pacific Hwy	1	Northbound	4,541	98	18%	1,209	96	35%
South of Range Rd	2	Southbound	5,015	99	17%	624	97	38%
New Pacific Hwy	3	Northbound	4,709	102	18%	1,110	102	38%
North of Grays Rd	4	Southbound	5,074	104	20%	652	101	44%
New Pacific Hwy	5	Northbound	4,693	101	19%	1,059	100	43%
Lemon Tree Rd	6	Southbound	5,073	104	20%	691	102	36%
Old Pacific Hwy	7	Northbound	4,416	93	21%	691	95	40%
North of Parker Rd	8	Southbound	4,712	102	21%	574	100	46%
Side roads								
Solitary Islands Way (formerly Eggins Dr)	9	Northbound	2,007	74	4%	91	78	6%
South of Sherwood Ck Rd	10	Southbound	1,969	71	4%	165	75	5%
Old Pacific Hwy	11	Northbound	398	91	6%	35	94	5%
South of Coral Rd	12	Southbound	442	91	9%	30	91	13%
Range Rd	13	Northbound	309	87	7%	138	90	4%
To Old Pacific Hwy	14	Southbound	458	82	4%	21	83	10%
Arrawarra Rest Area								
West	15	Entry	45	37	22%	5	30	40%
West	16	Exit	114	38	20%	17	33	41%
East	17	Entry	79	20	9%	15	19	20%
U-turn bays								
Lemon Tree Road	18	NB to SB	134	70	15%	45	73	18%
Rediger Close	19	SB to NB	183	53	11%	47	52	21%

Notes:

1. Traffic counting locations are shown in Appendix B.

5.0 Operational noise modelling

The 'Work As Executed' (WAE) road design model for the project provided by Roads and Maritime was reviewed and used as the basis of the road traffic noise model for the Woolgoolga to Glenugie alignment. The WAE model includes the as-built road design based on the works survey (including road elevations, road surface and road speeds). The monitored traffic flows (23-29 May 2018) from Section 4.8 were then included in the model to facilitate validation of the model against the actual road traffic noise measurements (23-29 May 2018) from Table 7. This model is referred to as the 'existing road traffic noise model'. The noise monitoring and traffic monitoring periods included in the existing road traffic model were chosen to coincide (23-29 May 2018) to reduce error in the validation.

The basis of road traffic noise modelling is that if it can be proven that the predicted road traffic noise levels are accurate at discrete locations across the extent of a project, then it is reasonable to assume that the road traffic noise levels are accurate at all modelled receivers.

After successful validation using the existing road traffic volumes the forecast opening and design volumes (2018 and 2028) were then entered into the model to predict 'Year of Opening' and 'Design Year' noise levels. These noise levels were compared with predicted 'Year of Opening' and 'Design Year' noise levels from the Operational Noise Management Report.

5.1 Road traffic noise modelling methodology

The road traffic model was processed using SoundPLAN v 7.3 software, which implements the Calculation of Road Traffic Noise (CoRTN) algorithm. The UK Department of Transport devised the CoRTN algorithm and with suitable corrections, this method has been shown to give accurate predictions of road traffic noise under Australian conditions.

The modelling parameters which are included in the model are detailed in Table 12.

Table 12 Modelling noise parameters

Parameter	Comment
Road design	The WAE road design was used to model operational noise throughout the project area.
Traffic volumes and mix	<p>The number of vehicles using the road and the percentage of heavy vehicles. A higher percentage of heavy vehicles would increase the road traffic noise levels.</p> <p>Existing traffic volumes were obtained from traffic count data recorded at various locations along the proposed alignment, provided in Section 4.8.</p> <p>'Year of Opening' and 'Design Year' traffic volumes were obtained from the Operational Noise Management Report (W2G-ONMR-RPT-001[G] Final Draft Design – 100%, October 2015), and are provided in Section 5.3.1, with the exception of Solitary Islands Way. For Solitary Islands Way (formerly Eggins Dr) the 2018 design volumes are based on 2018 measured traffic counts, 2028 design volumes are extrapolated from 2018 measured traffic counts assuming a 1.2% annual growth rate, further details are provided in Section 5.3.3.</p> <p>It should be noted that the ONMR assumed the 'Year of Opening' to be 2016 and the 'Design Year' to be 2026, however due to a two year delay the actual 'Year of Opening' was 2018. The ONMR 'Year of Opening' and the 'Design Year' traffic volumes have therefore been adjusted assuming a 1.5% annual growth rate from 2016 to 2018 and 2026 to 2028.</p> <p>The 1.2% annual growth rate for Solitary Islands Way (formerly Eggins Dr) and 1.5% annual growth rate for the rest of the project alignment is based upon the Traffic Data Summary report (APBJV, 5/3/2013).</p>

Parameter	Comment															
Traffic speeds	An increase in speed generally causes an increase in road traffic noise. Traffic speeds for the existing road traffic noise model have been based on speeds measured during the traffic counts. Traffic speeds for the 'Year of Opening' and 'Design Year' model were as detailed in the Roads and Maritime Tender brief.															
Traffic noise source heights	<p>In accordance with the Roads and Maritime Tender three noise sources at various heights have been included in the road traffic noise model:</p> <ul style="list-style-type: none">• Light vehicles: 0.5 metres.• Heavy vehicle tyres and engines: 1.5 metres.• Heavy vehicle exhausts: 3.6 metres. <p>Corrections were made to the road traffic noise model to take account of the relative source contributions of the truck tyres and engines (-0.6 dB(A)) and truck exhausts (-8.6 dB(A)) compared with light vehicle sources. The relative source contribution corrections are based upon information provided in the Transportation Noise Reference Book by Paul Nelson (1987, Butterworths).</p>															
Roadway gradient	<p>Road traffic noise levels vary dependent on the gradient of the roadway compared with a flat roadway. CoRTN calculates this variation, but does not predict maximum noise levels from the use of engine brakes.</p> <p>According to literature, similar A-weighted noise levels would be generated when heavy vehicles, with appropriately fitted OEM mufflers, use engine brakes as when under full throttle conditions. However engine braking noise emitted from heavy vehicles without appropriate mufflers would be significantly higher than A-weighted levels emitted under full throttle conditions.</p> <p>Given that all heavy vehicles should be fitted with OEM mufflers (Roads and Maritime estimate 95% of trucks are) the noise levels predicted by CoRTN are considered to adequately represent typical road traffic noise levels.</p>															
Road surface	<p>Road surfaces would determine the level of road / tyre interfacial noise created. Dense graded asphalt (DGA) is accepted as the standard road surface with other road surfaces such as stone mastic asphalt (SMA) being considered 'low noise' surfaces.</p> <p>Corrections were applied to the road traffic noise model to account for the existing road surfaces in accordance with the Roads and Maritime Tender brief.</p> <p>The following road surface corrections were applied. These are consistent with the corrections used in the Operational Noise Management Report.</p> <table><tr><th>Surface</th><th>Light vehicles</th><th>Heavy vehicles</th></tr><tr><td>DGA</td><td>0</td><td>0</td></tr><tr><td>Concrete</td><td>+3</td><td>+3</td></tr><tr><td>SMA</td><td>-2</td><td>-2</td></tr><tr><td>Chip</td><td>+4</td><td>+4</td></tr></table> <p>Wearing course types used along Woolgoolga to Glenugie are outlined in Table 13.</p>	Surface	Light vehicles	Heavy vehicles	DGA	0	0	Concrete	+3	+3	SMA	-2	-2	Chip	+4	+4
Surface	Light vehicles	Heavy vehicles														
DGA	0	0														
Concrete	+3	+3														
SMA	-2	-2														
Chip	+4	+4														
Ground absorption	Road traffic noise levels reduce with increasing distance from the noise source along the ground. A ground absorption factor of 0.6 was used as specified by the Roads and Maritime Tender brief.															
Terrain	Natural topographical features such as hills and valleys can shield sensitive receivers from road traffic noise. These effects are taken account of in the model which incorporates one metre terrain contours.															

Parameter	Comment
Buildings	Existing buildings were included as provided in the WAE models. A number of additional buildings were also included in the model based on site inspections during the logger deployment.
Facade	A correction of 2.5 dB(A) was added to road traffic noise levels, where appropriate, to take account of facade reflection effects in accordance with the RNP.
Road network	Major roads included in the WAE models were included in the model, including interchange roads. For this project noise levels at sensitive receiver locations are predominantly controlled by the main alignment. This was verified by attended noise measurements throughout the extent of the project.
Standard corrections	CoRTN provides L_{A10} road traffic noise levels. The industry standard correction of -3 dB(A) was applied to convert the L_{A10} levels to L_{Aeq} road traffic noise levels to allow assessment of the results against the RNP criteria. A -1.7 dB correction for Australian conditions has been applied to all modelled results at 1 m from a facade and a -0.7 dB correction has been applied to free field conditions. This is from the Australian Road Research Board (ARRB) Transport Research (Saunders et al 1983) and referred to in Austroads Research Report (ARR), "An Approach to the Validation of Road Traffic Noise Models" (2002). It is also consistent with the Operational Noise Management Report.
Risk Allowance	A risk allowance of one standard deviation for the data set obtained by comparing the measured existing noise levels with the noise levels modelled using the concurrently collected traffic and noise data has been applied in accordance with the Roads and Maritime Tender brief.

5.1.1 Wearing course types

The wearing course types and chainage locations along the Woolgoolga to Glenugie alignment are detailed in Table 13.

Table 13 Wearing course types and locations

Chainage location Woolgoolga to Glenugie	Main carriageway pavement type	Wearing course type	Comments / Notes
74 to 1800 (NB) -51 to 1800 (SB)	LMC and asphalt	30 mm SMA10	Noise sensitive area – Arrawarra
1800 to 14320 (NB) 1800 to 14320 (SB)	PCP	Concrete	-
14320 to 17100 (NB) 14320 to 17070 (SB)	Existing	30 mm SMA10	Existing alignment – Halfway Creek area
17100 to 22240 (NB), 17070 to 28410 (SB)	PCP	Concrete	-
Old Pacific Highway Wells Crossing Bridge to Parker Road (NB)	Existing	Chip	Existing alignment – Northbound lanes only
Old Pacific Highway at Parker Road (NB)	Existing	DGA10	Existing alignment – Northbound lanes only
Old Pacific Highway 700 m north of Parker Road (NB)	Existing	Chip	Existing alignment – Northbound lanes only
Wells Crossing Bridge to 23270 (NB),	PCP	Concrete	Modelled only for the future Option 2A
23270 to Old Pacific Highway at Parker Road (NB)	LMC and asphalt	30 mm SMA10	Modelled only for the future Option 2A

Notes:

- PCP – Plain Concrete Pavement
- LMC – Lean Mix Concrete
- SMA10 – Stone Mastic Asphalt with 10 mm aggregate
- DGA10 – Dense Graded Asphalt with 10 mm aggregate
- Chip – 14/7mm Chip Seal.

All bridges and access ramps along the alignment have 30 mm SMA10 as their wearing course type.
Service roads have DGA10 as their wearing course type.

5.2 Existing road traffic noise model

As discussed in Section 5.1, the CoRTN algorithm was utilised to calculate road traffic noise. For a project corridor of 600 metres either side of the road, this algorithm has a well-documented accuracy of ± 2 dB. If the differences between measured and predicted road traffic noise levels fall within this factor, then the model is considered to have a suitable level of accuracy for that location. Attention should be given to noise measurements that fall outside this range. Common reasons for poor validation of noise logger measurements include extraneous noise sources and poor logger placement. These issues can be minimised during the logger deployment, however they can still occur.

Provided below in Table 14 is a summary of the road traffic noise model validation results at locations suitable for use in model validation.

Logger graphs are presented in Appendix B. The results provided below in Table 14 indicate that at all locations the noise levels fall within the noise modelling accuracy of ± 2 dB, with the exception of location L8 (5092 Pacific Highway, Halfway Creek) during the daytime.

The microphone height at assessment location L8 is approximately 2 m below the height of the road surface. This may have given rise to some noise dispersion effects that are not being accounted for in the noise model causing the slight over prediction at location L8. Given the good correlation of predicted and measured road traffic noise levels at all the other locations, as presented in Table 14, the road traffic noise model is considered accurate and validated.

Table 14 Road traffic noise model validation - loggers affected by noise dominated by the Woolgoolga to Glenugie

ID	Address	Day: 7:00 – 22:00			Night: 22:00 – 7:00		
		Measured L _{Aeq} (15hr), dB(A)	Predicted with standard correction L _{Aeq} (15hr), dB(A)	Difference dB	Measured L _{Aeq} (9hr), dB(A)	Predicted with standard correction L _{Aeq} (9hr), dB(A)	Difference dB
L1	18 Post Office Lane, Corindi Beach	61.9	63.8	1.9	59.6	60.3	0.7
L2	4028 Pacific Highway, Dirty Creek	50.3	51.5	1.2	47.9	48.4	0.5
L3	11 Dunmar Lane, Halfway Creek	69.1	70.1	1.0	67.8	67.2	-0.6
L4	5092 Pacific Highway, Halfway Creek	57.8	59.4	1.6	57.1	55.8	-1.3
L5	Near Kungala Road, Halfway Creek	69.7	70.1	0.4	68.4	67.1	-1.3
L6	5631 Pacific Highway, Wells Crossing	70.6	70.0	-0.6	69.0	67.8	-1.2
L7	Darlington Beach Holiday Resort 2564 Solitary Islands Way, Arararra	61.6	63.4	1.8	58.2	57.4	-0.8
L8	5092 Pacific Highway, Halfway Creek	60.5	63.7	3.2	59.1	60.0	0.9
L9	Near Sherwood Creek Road, Corindi Beach	63.0	63.3	0.3	61.8	60.1	-1.7
L10	34 Kangaroo Trail Road, Corindi Beach	68.7	69.1	0.4	67.5	66.3	-1.2
		Median		1.1	Median		-1.0
		Standard Dev		1.0	Standard Dev		0.9

5.3 Traffic noise model

The 'Year of Opening' and 'Design Year' traffic flows presented in the detailed design ONMR assessment and adjusted for the two year delay were input into the road traffic noise model, validated in the previous section to provide the 'Year of Opening' and 'Design Year' road traffic noise models. These models are used to assess the accuracy of the design modelling and the adequacy of mitigation recommended in the ONMR. This road traffic noise model is called the 'operational noise compliance model' in this report.

It should be noted that the ONMR assessed 2016 as the 'Year of Opening' and 2026 as the 'Design Year'. As the alignment was opened in 2018 the traffic flows from the ONMR have been corrected to 2018 and 2028 respectively assuming a 1.5% annual traffic growth rate for the majority of the project and a 1.2 % annual growth rate for Solitary Islands Way (formerly Eggins Drive).

5.3.1 Traffic volumes Year of Opening

The 'Year of Opening' (2018) traffic volumes which were used are presented in Table 15 below.

Table 15 Year of Opening predicted traffic flows

Location	Direction	Day: 7:00 – 22:00	Night: 22:00 – 7:00				
		Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage	Design Traffic Volume.	Design Vehicle. Speed, km/h	Design Heavy Vehicle Percentage
Main alignment							
Coral Street to	NB	3,563	115	23%	649	120	63%
Range Road	SB	3,855	115	21%	703	120	57%
Range Road to	NB	3,711	115	23%	677	120	62%
McPhillips Road	SB	4,021	115	21%	732	120	57%
McPhillips Road to	NB	3,748	115	23%	683	120	62%
Kungala Road	SB	4,059	115	21%	740	120	57%
Kungala Road to	NB	3,795	115	22%	691	120	61%
Parker Road	SB	4,130	115	21%	753	120	57%
Parker Road to	NB	3,858	115	22%	704	120	61%
Franklins Road	SB	4,172	115	21%	759	120	58%
Interchange							
Range Road (overpass)	Overall	151	80	20%	28	80	56%
Range Road (W off-ramp)	NB	151	80	20%	28	80	56%
Range Road (W on-ramp)	NB	151	80	20%	28	80	56%
Range Road (E off-ramp)	SB	166	80	20%	30	80	55%

Location	Direction	Day: 7:00 – 22:00			Night: 22:00 – 7:00		
		Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage	Design Traffic Volume.	Design Vehicle. Speed, km/h	Design Heavy Vehicle Percentage
Range Road (E on-ramp)	SB	166	80	20%	30	80	55%
Old Pacific Hwy							
Old Pacific Hwy	NB	225	100	21%	68	100	57%
North of Corindi	SB	253	100	21%	77	100	58%
Old Pacific Hwy	NB	756	100	6%	230	100	16%
Coral	SB	756	100	6%	230	100	16%
Solitary Islands Way ¹	NB	2,009	80	4%	230	80	16%
(formerly Eggins Dr)	SB	1,971	80	4%	230	80	16%
Side roads							
McLaughlin Road	Both	239	60	21%	73	60	58%
Range Road	Both	298	60	20%	91	60	56%
McPhillips Road	Split	75	60	18%	23	60	50%
Parker Road	Both	73	60	19%	37	60	31%
Kungala Road	Both	237	60	14%	72	60	40%

Notes:

1. The daytime design volumes for Solitary Islands Way are based on measured traffic counts for 2018, refer to section 5.3.3.

5.3.2 Traffic volumes Design Year

The 'Design Year' (2028) traffic volumes which were used are presented in Table 16 below.

Table 16 Design Year predicted traffic flows

Location	Direction	Day:	7:00 – 22:00		Night:	22:00 – 7:00	
		Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage	Design Traffic Volume.	Design Vehicle. Speed, km/h	Design Heavy Vehicle Percentage
Main alignment							
Coral Street to	NB	4162	115	26%	759	120	70%
Range Road	SB	4485	115	24%	818	120	65%
Range Road to	NB	4334	115	25%	790	120	70%
McPhillips Road	SB	4673	115	23%	852	120	65%

Location	Direction	Day: 7:00 – 22:00			Night: 22:00 – 7:00		
		Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage	Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage
McPhillips Road to Kungala Road	NB	4374	115	25%	797	120	70%
	SB	4714	115	23%	860	120	64%
Kungala Road to Parker Road	NB	4422	115	25%	806	120	69%
	SB	4795	115	24%	874	120	65%
Parker Road to Franklins Road	NB	4496	115	25%	820	120	69%
	SB	4844	115	24%	884	120	65%
Interchange							
Range Road (overpass)	Overall	173	80	22%	32	80	61%
Range Road (W off-ramp)	NB	173	80	22%	32	80	61%
Range Road (W on-ramp)	NB	173	80	22%	32	80	61%
Range Road (E off-ramp)	SB	188	80	21%	35	80	59%
Range Road (E on-ramp)	SB	188	80	21%	35	80	59%
Old Pacific Hwy							
Old Pacific Hwy North of Corindi	NB	260	100	23%	79	100	64%
	SB	289	100	22%	88	100	61%
Old Pacific Hwy Coral	NB	877	100	7%	266	100	19%
	SB	877	100	7%	266	100	19%
Solitary Islands Way ¹ (formerly Eggins Dr)	NB	2274	80	4%	266	80	19%
	SB	2232	80	4%	266	80	19%
Side roads							
McLaughlin Road	Both	275	60	23%	83	60	63%
Range Road	Both	343	60	23%	104	60	63%
McPhillips Road	Split	82	60	21%	25	60	58%
Parker Road	Both	82	60	20%	42	60	32%
Kungala Road	Both	253	60	16%	77	60	45%

Notes:

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1 The daytime design volumes for Solitary Islands Way (formerly Eggins Dr) are based on measured traffic counts for 2018 and a growth rate of 1.2%.

5.3.3 Design and measured traffic volume comparison

A comparison of the design and measured traffic volumes for 2018 are presented in Table 17 and Table 18. It can be seen that:

- During the daytime on the main alignment, the measured volumes are higher than the design volumes, however the measured speeds and heavy vehicle percentage are both lower. It is expected that the difference in noise level due to these differences is minimal (less than 1 dB).
- During the daytime on the Old Pacific Highway, the measured volumes are higher north of Corindi, the volumes are lower near Coral, the measured speeds and heavy vehicle percentage are both lower. It is expected that use of the design volumes in the noise model will slightly over predict noise levels when compared to the measured volumes.
- During the daytime on Solitary Islands Way (formerly Eggins Dr), generally the measured volumes are significantly higher, whilst the measured speeds and heavy vehicle percentage are lower. It is expected that the difference in noise level due to these differences is significant (greater than 2 dB).
- During the night-time on the main alignment, generally the measured volumes are higher than the design volumes for the NB lane, the volumes are very similar for the SB lane and the measured speeds and heavy vehicle percentage are lower. It is expected that the difference in noise levels due to these differences is minimal (less than 1 dB).
- During the night-time on Old Pacific Highway, generally the measured volumes, the measured speeds and heavy vehicle percentage are lower. It is expected that use of the design volumes in the noise model will slightly over predict noise levels when compared to the measured volumes.
- During the night-time on Solitary Islands Way (formerly Eggins Dr), generally the measured volumes are lower, the measured speeds and heavy vehicle percentage are similar. It is expected that the use of the design volumes in the noise model will slightly over predict noise levels when compared to the measured volumes.

Overall it is expected that using design volumes, the noise model would accurately reflect the actual traffic noise levels. The one exception to this is Solitary Islands Way (formerly Eggins Dr) during the daytime. For this road the actual traffic volumes are significantly higher than the design volumes, therefore the actual volumes on this road have been used in the operational noise compliance model accordingly.

Table 17 Daytime design and measured 2018 traffic volumes

Location	Direction	Day: 7:00 – 22:00			Day: 7:00 – 22:00		
		Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage	Measured Traffic Volume.	Measured Vehicle. Speed, km/h	Measured Heavy Vehicle Percentage
Main alignment							
Coral Street to	NB	3,563	115	23%	4,541	98	18%
Range Road	SB	3,855	115	21%	5,015	99	17%
Range Road to	NB	3,711	115	23%	4,709	102	18%
McPhillips Road	SB	4,021	115	21%	5,074	104	20%

Location	Direction	Day: 7:00 – 22:00			Day: 7:00 – 22:00		
		Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage	Measured Traffic Volume.	Measured Vehicle Speed, km/h	Measured Heavy Vehicle Percentage
McPhillips Road to Kungala Road	NB	3,748	115	23%	4,709	102	18%
	SB	4,059	115	21%	5,074	104	20%
Kungala Road to Parker Road	NB	3,795	115	22%	4,693	101	19%
	SB	4,130	115	21%	5,073	104	20%
Parker Road to Franklins Road	NB	3,858	115	22%	4,416	93	21%
	SB	4,172	115	21%	4,712	102	21%
Old Pacific Hwy							
Old Pacific Hwy North of Corindi	NB	225	100	21%	398	91	6%
	SB	253	100	21%	442	91	9%
Old Pacific Hwy Coral	NB	756	100	6%	309	87	7%
	SB	756	100	6%	458	82	4%
Solitary Islands Way (formerly Eggins Dr)	NB	756	80	4%	2,009	74	4%
	SB	756	80	4%	1,971	71	4%

Table 18 Night-time design and measured 2018 traffic volumes

Location	Direction	Night: 7:00 – 22:00			Night: 22:00 – 7:00		
		Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage	Measured Traffic Volume.	Measured Vehicle Speed, km/h	Measured Heavy Vehicle Percentage
Main alignment							
Coral Street to	NB	649	120	63%	1,209	96	35%
Range Road	SB	703	120	57%	624	97	38%
Range Road to	NB	677	120	62%	1,110	102	38%
McPhillips Road	SB	732	120	57%	652	101	44%
McPhillips Road to	NB	683	120	62%	1,110	102	38%
Kungala Road	SB	740	120	57%	652	101	44%
Kungala Road to	NB	691	120	61%	1,059	100	43%
Parker Road	SB	753	120	57%	691	102	36%

Location	Direction	Night: 7:00 – 22:00			Night: 22:00 – 7:00		
		Design Traffic Volume	Design Vehicle Speed, km/h	Design Heavy Vehicle Percentage	Measured Traffic Volume.	Measured Vehicle Speed, km/h	Measured Heavy Vehicle Percentage
Parker Road to	NB	704	120	61%	691	95	40%
Franklins Road	SB	759	120	58%	574	100	46%
Old Pacific Hwy							
Old Pacific Hwy	NB	68	100	57%	35	94	5%
North of Corindi	SB	77	100	58%	30	91	13%
Old Pacific Hwy	NB	230	100	16%	138	90	4%
Coral	SB	230	100	16%	21	83	10%
Solitary Islands Way	NB	230	80	16%	91	78	6%
(formerly Eggins Dr)	SB	230	80	16%	165	75	5%

5.3.4 Predicted road traffic noise levels – ONMR compared to ONCA

Noise levels were predicted at all receivers presented in the ONMR. In addition noise levels were also predicted at:

ID 451 – 4149 Pacific Highway, Dirty Creek;
 ID 649 – 5523 Pacific Hwy, Wells Crossing;
 ID 664 – 5631 Pacific Hwy, Wells Crossing;
 ID A1 – 3507 Pacific Hwy, Corindi Beach;
 ID A4 – 10 Tiffany Cl, Dirty Creek;
 ID A5 – 19 Alice Cl, Dirty Creek;
 ID A6 – 5 Alice Cl, Dirty Creek;
 ID A8 – Lot 71 Woodward Cl, Dirty Creek;
 ID A9 – Lot 70 Woodward Cl, Dirty Creek;
 ID A11 – Lot 1023 The Siding, Halfway Creek;
 ID A12 – 25 The Siding, Halfway Creek;
 ID A13 – 1 Rediger Cl, Halfway Creek;
 ID A14 – 19 Rediger Cl, Halfway Creek;
 ID A15 – 20 Grays Rd, Halfway Creek;
 ID A16 – 19 Grays Rd, Halfway Creek; and
 ID A18 – 15 Luthers Rd, Halfway Creek.

Predicted 'Year of Opening' and 'Design Year' traffic noise levels for all receivers are presented in Appendix D and E and noise contour maps are presented in Appendix F. Discrepancies between the operational compliance noise levels and design noise levels shown in the ONMR are likely to be due to the following:

- Differences between the designed topography of the road used in the operational noise management assessment and the as-built topography of the road used in the operational compliance noise model. These differences have affected all of the assessed receivers listed in Table 19 and Table 20;
- Increased design volumes during the daytime on Solitary Islands Way (formerly Eggins Dr). These differences have primarily affected receivers on Solitary Islands Way (formerly Eggins Drive), 100 Eggins Drive (ID 7), 104 Eggins Drive (IDs 42-228) and 210 Eggins Drive (IDs 245-314); and

Results show that the operational noise compliance modelling results are more than 2 dB higher than detailed design modelling results at 65 receivers. This includes 61 receivers where the operational noise compliance noise levels are more than 2 dB higher than the detailed design noise levels at the 'Year of Opening' and 62 receivers where the operational noise compliance noise levels are more than 2 dB higher than the detailed design noise levels at the 'Design Year'¹. Table 19 and Table 20 present these results for both the 'Year of Opening' and the 'Design Year' respectively.

¹ 58 receivers appear in both the 'Year of Opening' and 'Design Year' tables. Three additional receivers only appear in the 'Year of Opening' table (61 in total). Four additional receivers only appear in the 'Design Year' table (62 in total). 65 individual receivers in total appear in either one or the other or both tables.

Table 19 Receivers where operational noise compliance levels exceed design levels by more than 2 dB in the Year of Opening

Receiver number	Receiver address	Floor	Year of opening predicted level, dB(A)				Operational noise compliance level minus Design level, dB	
			Design model ¹		Operational noise compliance model			
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)
7	100 Eggins Drive Arrawarra	GF	55	53	57	55	2.4	2.4
42	104 Eggins Drive Arrawarra	GF	54	52	56	54	2.1	2.1
57	104 Eggins Drive Arrawarra	GF	57	55	59	57	2.3	2.1
65	104 Eggins Drive Arrawarra	GF	56	54	59	57	2.8	2.7
76	104 Eggins Drive Arrawarra	GF	56	54	59	57	2.9	2.8
87	104 Eggins Drive Arrawarra	GF	56	54	59	57	2.8	2.7
95	104 Eggins Drive Arrawarra	GF	56	54	58	56	2.2	2.0
113	104 Eggins Drive Arrawarra	GF	52	50	54	52	2.3	2.2
120	104 Eggins Drive Arrawarra	GF	48	46	50	48	2.1	2.4
123	104 Eggins Drive Arrawarra	GF	50	47	51	49	1.2	2.2
144	104 Eggins Drive Arrawarra	GF	52	50	54	52	2.4	2.4
154	104 Eggins Drive Arrawarra	GF	54	52	56	54	2.2	2.1
159	104 Eggins Drive Arrawarra	GF	52	50	54	52	2.2	2.2
176	104 Eggins Drive Arrawarra	GF	53	51	56	54	2.6	2.5
183	104 Eggins Drive Arrawarra	GF	53	51	55	53	2.4	2.3
194	104 Eggins Drive Arrawarra	GF	52	50	54	52	2.1	2.0
201	104 Eggins Drive Arrawarra	GF	46	44	48	46	1.7	2.1
204	104 Eggins Drive Arrawarra	GF	54	52	56	54	2.1	1.8
208	104 Eggins Drive Arrawarra	GF	51	49	53	51	2.1	2.0
209	104 Eggins Drive Arrawarra	GF	55	53	57	55	2.4	2.2
212	104 Eggins Drive Arrawarra	GF	49	47	52	49	2.6	2.2
218	104 Eggins Drive Arrawarra	GF	55	53	58	55	2.6	2.2
221	104 Eggins Drive Arrawarra	GF	57	55	60	57	2.8	2.4
222	104 Eggins Drive Arrawarra	GF	54	52	57	54	2.6	2.2
223	104 Eggins Drive Arrawarra	GF	53	51	56	54	3.3	3.0
224	104 Eggins Drive Arrawarra	GF	50	48	52	50	2.4	2.2
225	104 Eggins Drive Arrawarra	GF	53	51	56	54	3.3	2.9
227	104 Eggins Drive Arrawarra	GF	53	51	56	54	3.3	2.9
228	104 Eggins Drive Arrawarra	GF	52	50	55	52	2.5	2.3
245	210 Eggins Drive Arrawarra	GF	51	49	53	52	2.2	2.5
257	210 Eggins Drive Arrawarra	GF	51	49	53	52	2.3	2.7
264	210 Eggins Drive Arrawarra	GF	50	48	53	51	2.5	2.6
268	210 Eggins Drive Arrawarra	GF	52	50	54	52	1.9	2.4
271	210 Eggins Drive Arrawarra	GF	52	49	53	52	0.9	2.6
272	210 Eggins Drive Arrawarra	GF	52	50	54	53	2.1	2.8
274	210 Eggins Drive Arrawarra	GF	55	53	57	56	2.2	3.3
275	210 Eggins Drive Arrawarra	GF	47	45	49	48	1.8	2.6
283	210 Eggins Drive Arrawarra	GF	46	43	49	47	2.6	4.4
286	210 Eggins Drive Arrawarra	GF	49	47	51	50	1.6	2.6
287	210 Eggins Drive Arrawarra	GF	51	49	52	51	1.3	2.3
289	210 Eggins Drive Arrawarra	GF	54	52	57	56	2.6	3.7

Receiver number	Receiver address	Floor	Year of opening predicted level, dB(A)				Operational noise compliance level minus Design level, dB	
			Design model ¹		Operational noise compliance model			
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)
292	210 Eggins Drive Arrawarra	GF	51	49	52	51	1.1	2.1
296	210 Eggins Drive Arrawarra	GF	49	47	50	49	1.3	2.2
300	210 Eggins Drive Arrawarra	GF	50	48	52	51	1.6	2.7
301	210 Eggins Drive Arrawarra	GF	52	50	53	52	1.2	2.1
302	210 Eggins Drive Arrawarra	GF	50	48	52	51	1.9	2.9
305	210 Eggins Drive Arrawarra	GF	57	55	59	58	1.8	3.1
309	210 Eggins Drive Arrawarra	GF	57	55	59	58	1.9	3.2
310	210 Eggins Drive Arrawarra	GF	53	51	54	53	1.0	2.1
311	210 Eggins Drive Arrawarra	GF	54	51	55	54	1.2	3.3
312	210 Eggins Drive Arrawarra	GF	54	52	56	55	1.8	2.9
313	210 Eggins Drive Arrawarra	GF	56	53	57	56	1.1	3.2
314	210 Eggins Drive Arrawarra	GF	57	55	59	58	2.0	3.2
323	28 Tasman Street Corindi Beach	GF	55	53	56	55	0.9	2.1
324	26 Tasman Street Corindi Beach	GF	51	49	52	51	1.2	2.3
330	20 Tasman Street Corindi Beach	GF	54	52	55	54	1.0	2.1
414	3674 Pacific Highway Corindi Beach	GF	48	46	52	51.4	3.8	5.4
455	12 Flinty Road, Dirty Creek	GF	41	39	56	55	15.1 ¹	15.9 ¹
464	1 Flinty Road Dirty Creek	GF	52	50	54	54	1.7	3.6
645	5521 Pacific Highway Wells Crossing	GF	58	56	62	61	4.1	4.8
651	5559 Pacific Highway Wells Crossing	GF	59	57	61	60	1.8	2.7

Notes:

1. This difference is likely due to a typographical error in the ONMR.

Table 20 Receivers where operational noise compliance levels exceed design levels by more than 2 dB in the Design Year

Receiver number	Receiver address	Floor	Design year predicted level, dB(A)				Operational noise compliance level minus Design level, dB	
			Design model ¹		Operational noise compliance model			
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)
7	100 Eggins Drive Arrawarra	GF	56	54	58	57	2.2	2.5
42	104 Eggins Drive Arrawarra	GF	55	53	57	55	1.9	2.1
57	104 Eggins Drive Arrawarra	GF	58	56	60	58	2.0	2.2
65	104 Eggins Drive Arrawarra	GF	57	55	60	58	2.6	2.7
76	104 Eggins Drive Arrawarra	GF	57	55	60	58	2.7	2.8
87	104 Eggins Drive Arrawarra	GF	57	55	60	58	2.6	2.8
95	104 Eggins Drive Arrawarra	GF	57	55	59	57	2.0	2.1
113	104 Eggins Drive Arrawarra	GF	53	51	55	53	2.1	2.2
120	104 Eggins Drive Arrawarra	GF	49	47	51	50	1.9	2.5
123	104 Eggins Drive Arrawarra	GF	51	48	52	50	1.0	2.2
144	104 Eggins Drive Arrawarra	GF	53	51	55	54	2.2	2.5
154	104 Eggins Drive Arrawarra	GF	55	53	57	55	2.0	2.2
159	104 Eggins Drive Arrawarra	GF	53	51	55	53	2.0	2.3
167	104 Eggins Drive Arrawarra	GF	53	51	55	53	1.8	2.1
176	104 Eggins Drive Arrawarra	GF	54	52	56	55	2.3	2.5
183	104 Eggins Drive Arrawarra	GF	54	52	56	54	2.1	2.3
194	104 Eggins Drive Arrawarra	GF	53	51	55	53	1.9	2.1
201	104 Eggins Drive Arrawarra	GF	47	45	49	47	1.5	2.1
208	104 Eggins Drive Arrawarra	GF	52	50	54	52	1.9	2.1
209	104 Eggins Drive Arrawarra	GF	56	54	58	56	2.1	2.2
212	104 Eggins Drive Arrawarra	GF	50	48	52	50	2.3	2.2
218	104 Eggins Drive Arrawarra	GF	56	54	58	56	2.3	2.2
221	104 Eggins Drive Arrawarra	GF	58	56	61	58	2.5	2.4
222	104 Eggins Drive Arrawarra	GF	55	53	57	55	2.3	2.2
223	104 Eggins Drive Arrawarra	GF	54	52	57	55	3.1	3.0
224	104 Eggins Drive Arrawarra	GF	51	49	53	51	2.2	2.2
225	104 Eggins Drive Arrawarra	GF	54	52	57	55	3.0	2.9
227	104 Eggins Drive Arrawarra	GF	54	52	57	55	3.0	2.9
228	104 Eggins Drive Arrawarra	GF	53	51	55	53	2.2	2.3
245	210 Eggins Drive Arrawarra	GF	52	50	54	53	2.0	2.6
255	210 Eggins Drive Arrawarra	GF	52	50	54	52	1.5	2.1
257	210 Eggins Drive Arrawarra	GF	52	50	54	53	2.1	2.7
264	210 Eggins Drive Arrawarra	GF	51	49	53	52	2.3	2.7
268	210 Eggins Drive Arrawarra	GF	53	51	55	54	1.7	2.5
271	210 Eggins Drive Arrawarra	GF	52	50	54	53	1.7	2.6
272	210 Eggins Drive Arrawarra	GF	53	51	55	54	1.9	2.8
274	210 Eggins Drive Arrawarra	GF	56	54	58	57	2.0	3.3
275	210 Eggins Drive Arrawarra	GF	48	46	50	49	1.6	2.6
283	210 Eggins Drive Arrawarra	GF	47	44	50	48	2.5	4.4
286	210 Eggins Drive Arrawarra	GF	50	48	51	51	1.4	2.6
287	210 Eggins Drive Arrawarra	GF	52	50	53	52	1.2	2.3
289	210 Eggins Drive Arrawarra	GF	55	53	58	57	2.5	3.7

Receiver number	Receiver address	Floor	Design year predicted level, dB(A)				Operational noise compliance level minus Design level, dB	
			Design model ¹		Operational noise compliance model			
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)
292	210 Eggins Drive Arrawarra	GF	52	50	53	52	1.0	2.1
296	210 Eggins Drive Arrawarra	GF	50	48	51	50	1.2	2.2
300	210 Eggins Drive Arrawarra	GF	51	49	53	52	1.5	2.7
301	210 Eggins Drive Arrawarra	GF	53	51	54	53	1.1	2.1
302	210 Eggins Drive Arrawarra	GF	51	49	53	52	1.7	2.9
305	210 Eggins Drive Arrawarra	GF	58	56	60	59	1.7	3.1
309	210 Eggins Drive Arrawarra	GF	58	56	60	59	1.8	3.2
310	210 Eggins Drive Arrawarra	GF	54	52	55	54	0.9	2.1
311	210 Eggins Drive Arrawarra	GF	54	53	56	55	2.1	2.3
313	210 Eggins Drive Arrawarra	GF	56	55	58	57	1.9	2.2
314	210 Eggins Drive Arrawarra	GF	58	56	60	59	1.8	3.2
323	28 Tasman Street Corindi Beach	GF	56	54	57	56	0.8	2.1
324	26 Tasman Street Corindi Beach	GF	52	50	53	52	1.1	2.3
327	28 Lomandra Court Corindi Beach	GF	52	50	53	52	1.0	2.1
330	20 Tasman Street Corindi Beach	GF	55	53	56	55	0.9	2.1
403	13 Post Office Lane Corindi Beach	GF	53	51	56	55	2.6	3.7
414	3674 Pacific Highway Corindi Beach	GF	51	49	53	52	1.7	3.3 ¹
464	1 Flinty Road Dirty Creek	GF	53	51	55	55	1.6	3.6
645	5521 Pacific Highway Wells Crossing	GF	59	57	63	62	4.0	4.8
651	5559 Pacific Highway Wells Crossing	GF	60	58	62	61	1.7	2.7

Notes:

1. This difference is likely due to a typographical error in the ONMR.

5.3.5 Treatment eligibility

The 65 properties where modelled operational noise compliance levels are more than 2 dB higher than detailed design levels (refer to Table 19 and Table 20) are to be re-evaluated for eligibility of treatment.

In addition the 16 properties which were not identified in the ONMR (refer section 5.3.4) are to be evaluated for eligibility for treatment.

Eligibility for consideration of architectural treatment is determined by noise levels at a property which exceed the RNP criteria and either:

- Exceed the 'No Build' noise levels by more than 2 dB; or
- Are 'acute' (i.e. exceed 65 dB(A) $L_{Aeq\ 15hr}$ or 60 dB(A) $L_{Aeq\ 9hr}$).

For new road corridor and redevelopment, the road traffic noise level is evaluated at the year of opening and for a design year at ten years after opening. For each timeframe, a comparison is made between the road traffic noise levels after the upgrade and the pre-existing situation (without the road project). The comparison at the year of opening is aimed at indicating the potential for any noise issues at the commencement of the project. The comparison at ten years after opening is aimed at indicating the potential for longer-term noise impact once the project is well established and the surrounding network has stabilised.

In order to undertake the eligibility evaluation the no-build noise levels have been determined for the year of opening (2018) and the design year (2028). These levels and the evaluation are presented in Table 21 and Table 22 for the 65 properties identified in section 5.3.4 and the additional 16 properties which were not assessed in the ONMR.

Of the 65 receivers identified in section 5.3.4 one property has been identified as being eligible for treatment (ID 455). In addition four of the 16 properties which were not assessed in the ONMR have been identified as being eligible for consideration of treatment (ID 451, ID 664, ID A1, ID A5).

In summary, five receivers are identified in Table 21 and Table 22 as being eligible for consideration of treatment on the basis that noise levels exceed the RNP criteria and they exceed the 'No Build' noise levels by more than 2 dB. These 5 properties are discussed further in Section 5.3.7.

Three receivers were identified in Table 21 and Table 22 as eligible for consideration of treatment (ID 645, ID 649 and ID 651), on the basis of being exposed to acute noise levels. These receivers are located north of Wells Crossing where a temporary alignment is currently in place. For the temporary alignment the year of opening (2018) noise levels are predicted to be between 2.0 and 2.8 dB less than the no build case for the same year.

An upgrade to the northbound alignment is planned to be constructed by 2021, with the proposed alignment moving further away from these three receivers. This revised design including alignment, pavements and speed limits has been modelled with results presented in Table 23. Based on this model it is predicted that these three receivers will no longer be exposed to acute noise levels after construction of final northbound alignment. It is predicted that the proposed alignment noise levels will be between 4.1 and 5.6 dB less than the no build noise levels. Once this revised alignment is constructed an operational noise compliance assessment should be undertaken and the results presented as an addendum to this report.

Table 21 Eligibility of treatment for receivers where operational noise compliance levels exceed design levels by more than 2 dB in the Year of Opening

Receiv er number	Receiver address	Floor	Year of opening predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model – ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
7	100 Eggins Drive Arrawarra	GF	58	56	57	55	-0.9	-0.6	No	No	No	No
42	104 Eggins Drive Arrawarra	GF	57	55	56	54	-0.8	-0.6	No	No	No	No
57	104 Eggins Drive Arrawarra	GF	61	58	59	57	-1.2	-1.1	No	No	No	No
65	104 Eggins Drive Arrawarra	GF	60	58	59	57	-1.6	-1.4	No	No	No	No
76	104 Eggins Drive Arrawarra	GF	60	58	59	57	-1.5	-1.3	No	No	No	No
87	104 Eggins Drive Arrawarra	GF	60	58	59	57	-1.5	-1.3	No	No	No	No
95	104 Eggins Drive Arrawarra	GF	60	58	58	56	-2.0	-1.9	No	No	No	No
113	104 Eggins Drive Arrawarra	GF	57	54	54	52	-2.3	-2.0	No	No	No	No
120	104 Eggins Drive Arrawarra	GF	51	49	50	48	-1.2	-0.5	No	No	No	No
123	104 Eggins Drive Arrawarra	GF	54	51	51	49	-2.3	-1.8	No	No	No	No
144	104 Eggins Drive Arrawarra	GF	57	54	54	52	-2.2	-1.9	No	No	No	No
154	104 Eggins Drive Arrawarra	GF	58	56	56	54	-2.1	-1.8	No	No	No	No
159	104 Eggins Drive Arrawarra	GF	57	54	54	52	-2.4	-2.0	No	No	No	No
167	104 Eggins Drive Arrawarra	GF	56	54	54	52	-2.3	-1.9	No	No	No	No
176	104 Eggins Drive Arrawarra	GF	58	55	56	54	-2.1	-1.8	No	No	No	No
183	104 Eggins Drive Arrawarra	GF	57	55	55	53	-1.8	-1.5	No	No	No	No
194	104 Eggins Drive Arrawarra	GF	56	54	54	52	-1.8	-1.6	No	No	No	No
201	104 Eggins Drive Arrawarra	GF	50	48	48	46	-2.4	-1.7	No	No	No	No
204	104 Eggins Drive Arrawarra	GF	56	54	56	54	-0.2	-0.1	No	No	No	No
208	104 Eggins Drive Arrawarra	GF	56	53	53	51	-2.4	-2.1	No	No	No	No
209	104 Eggins Drive Arrawarra	GF	59	57	57	55	-2.0	-1.8	No	No	No	No

Receiv er number	Receiver address	Floor	Year of opening predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model – ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
212	104 Eggins Drive Arrawarra	GF	53	50	52	49	-1.3	-1.2	No	No	No	No
218	104 Eggins Drive Arrawarra	GF	58	56	58	55	-0.8	-0.9	No	No	No	No
221	104 Eggins Drive Arrawarra	GF	61	59	60	57	-1.1	-1.1	No	No	No	No
222	104 Eggins Drive Arrawarra	GF	58	55	57	54	-1.2	-1.2	No	No	No	No
223	104 Eggins Drive Arrawarra	GF	58	55	56	54	-1.2	-1.0	No	No	No	No
224	104 Eggins Drive Arrawarra	GF	53	50	52	50	-0.1	0.2	No	No	No	No
225	104 Eggins Drive Arrawarra	GF	57	55	56	54	-1.1	-1.1	No	No	No	No
227	104 Eggins Drive Arrawarra	GF	57	55	56	54	-0.9	-0.9	No	No	No	No
228	104 Eggins Drive Arrawarra	GF	55	53	55	52	-0.7	-0.5	No	No	No	No
245	210 Eggins Drive Arrawarra	GF	55	52	53	52	-1.3	-0.5	No	No	No	No
255	210 Eggins Drive Arrawarra	GF	54	51	53	51	-1.1	-0.3	No	No	No	No
257	210 Eggins Drive Arrawarra	GF	54	51	53	52	-0.5	0.3	No	No	No	No
264	210 Eggins Drive Arrawarra	GF	53	50	53	51	-0.2	0.2	No	No	No	No
268	210 Eggins Drive Arrawarra	GF	54	52	54	52	-0.3	0.6	No	No	No	No
271	210 Eggins Drive Arrawarra	GF	54	52	53	52	-1.3	-0.1	No	No	No	No
272	210 Eggins Drive Arrawarra	GF	54	52	54	53	0.1	1.2	No	No	No	No
274	210 Eggins Drive Arrawarra	GF	58	55	57	56	-0.8	0.9	No	No	No	No
275	210 Eggins Drive Arrawarra	GF	51	48	49	48	-2.1	-0.7	No	No	No	No
283	210 Eggins Drive Arrawarra	GF	51	49	49	47	-2.7	-1.5	No	No	No	No
286	210 Eggins Drive Arrawarra	GF	52	49	51	50	-1.0	0.5	No	No	No	No
287	210 Eggins Drive Arrawarra	GF	54	52	52	51	-2.1	-0.6	No	No	No	No
289	210 Eggins Drive Arrawarra	GF	58	55	57	56	-1.1	0.5	No	No	No	No

Receiv er number	Receiver address	Floor	Year of opening predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model – ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
292	210 Eggins Drive Arrawarra	GF	55	52	52	51	-2.4	-1.0	No	No	No	No
296	210 Eggins Drive Arrawarra	GF	52	50	50	49	-1.9	-0.5	No	No	No	No
300	210 Eggins Drive Arrawarra	GF	53	51	52	51	-1.6	0.0	No	No	No	No
301	210 Eggins Drive Arrawarra	GF	55	52	53	52	-1.5	-0.1	No	No	No	No
302	210 Eggins Drive Arrawarra	GF	52	49	52	51	0.2	1.7	No	No	No	No
305	210 Eggins Drive Arrawarra	GF	60	57	59	58	-0.8	1.0	No	No	No	No
309	210 Eggins Drive Arrawarra	GF	60	57	59	58	-1.0	0.9	No	No	No	No
310	210 Eggins Drive Arrawarra	GF	57	54	54	53	-2.5	-0.9	No	No	No	No
311	210 Eggins Drive Arrawarra	GF	57	55	55	54	-2.1	-0.5	No	No	No	No
312	210 Eggins Drive Arrawarra	GF	58	56	56	55	-2.3	-0.7	No	No	No	No
313	210 Eggins Drive Arrawarra	GF	59	57	57	56	-2.1	-0.5	No	No	No	No
314	210 Eggins Drive Arrawarra	GF	60	57	59	58	-0.9	0.9	No	No	No	No
323	28 Tasman Street Corindi Beach	GF	62	59	56	55	-5.6	-4.1	No	No	No	No
324	26 Tasman Street Corindi Beach	GF	58	55	52	51	-5.4	-4.0	No	No	No	No
327	28 Lomandra Court Corindi Beach	GF	56	53	52	51	-3.6	-2.3	No	No	No	No
330	20 Tasman Street Corindi Beach	GF	60	58	55	54	-5.1	-3.6	No	No	No	No
403	13 Post Office Lane Corindi Beach	GF	56	54	55	54	-1.5	-0.1	No	No	Yes	No

Receiv er number	Receiver address	Floor	Year of opening predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model – ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
414	3674 Pacific Highway Corindi Beach	GF	61	59	52	51	-9.0	-7.1	No	No	No	No
451	4149 Pacific Highway, Dirty Creek	GF	60	58	65	64	5.5	6.5	Yes	Yes	-	Yes
455	12 Flinty Road, Dirty Creek	GF	49	47	56	55	7.0	7.9	Yes	No	Yes	Yes
464	1 Flinty Road Dirty Creek	GF	64	62	54	54	-10.3	-8.1	No	No	No	No
645	5521 Pacific Highway Wells Crossing	GF	64	63	62	61	-2.1	-2.0	No	Yes ¹	No	No
649	5523 Pacific Hwy, Wells Crossing	GF	64	63	61	60	-2.8	-2.8	No	Yes ¹	-	No
651	5559 Pacific Highway Wells Crossing	GF	64	62	61	60	-2.8	-2.6	No	Yes ¹	No	No
664	5631 Pacific Hwy, Wells Crossing	GF	76	74	73	72	-3.0	-2.3	No	Yes	-	Yes
A1	3507 Pacific Hwy, Corindi Beach	GF	54	52	56	55	1.3	2.6	Yes	No	-	Yes
A4	10 Tiffany Cl, Dirty Creek	GF	48	45	49	48	1.4	2.6	No	No	No	No
A5	19 Alice Cl, Dirty Creek	GF	51	49	55	54	4.0	5.2	Yes	No	-	Yes
A6	5 Alice Cl, Dirty Creek	GF	46	44	47	46	1.4	2.5	No	No	No	No
A8	Lot 71 Woodward Cl, Dirty Creek	GF	45	43	47	46	2.2	3.4	No	No	No	No
A9	Lot 70 Woodward Cl, Dirty Creek	GF	46	44	49	47	2.5	3.6	No	No	No	No
A11	Lot 1023 The Siding, Halfway	GF	55	52	55	53	-0.1	1.3	No	No	No	No

Receiv er number	Receiver address	Floor	Year of opening predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model – ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
	Creek											
A12	25 The Siding, Halfway Creek	GF	57	55	57	56	-0.1	1.1	No	No	No	No
A13	1 Rediger Close Halfway Creek	GF	62	61	56	56	-5.7	-5.2	No	No	No	No
A14	19 Rediger Close Halfway Creek	GF	57	56	52	51	-5.7	-4.9	No	No	No	No
A15	56 Grays Road Halfway Creek	GF	58	57	52	51	-5.7	-5.2	No	No	No	No
A16	19 Grays Rd, Halfway Creek	GF	61	59	56	55	-5.2	-4.6	No	No	No	No
A18	15 Luthers Rd, Halfway Creek	GF	60	58	59	58	-0.9	-0.6	No	No	No	No

Notes:

- As discussed in Section 5.3.5 when Option 2A is constructed noise levels at this receiver will no longer be acute, see Table 23.

Table 22 Eligibility of treatment for receivers where operational noise compliance levels exceed design levels by more than 2 dB in the Design Year

Receiver number	Receiver address	Floor	Design year predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model - ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
7	100 Eggins Drive Arrawarra	GF	59	58	58	57	-0.8	-1.3	No	No	No	No
42	104 Eggins Drive Arrawarra	GF	58	57	57	55	-0.7	-1.4	No	No	No	No
57	104 Eggins Drive Arrawarra	GF	61	60	60	58	-1.2	-1.8	No	No	No	No
65	104 Eggins Drive Arrawarra	GF	61	60	60	58	-1.5	-2.2	No	No	No	No
76	104 Eggins Drive Arrawarra	GF	61	60	60	58	-1.4	-2.1	No	No	No	No
87	104 Eggins Drive Arrawarra	GF	61	60	60	58	-1.5	-2.0	No	No	No	No
95	104 Eggins Drive Arrawarra	GF	61	60	59	57	-2.0	-2.6	No	No	No	No
113	104 Eggins Drive Arrawarra	GF	57	56	55	53	-2.2	-2.7	No	No	No	No
120	104 Eggins Drive Arrawarra	GF	52	51	51	50	-1.1	-1.2	No	No	No	No
123	104 Eggins Drive Arrawarra	GF	54	53	52	50	-2.2	-2.6	No	No	No	No
144	104 Eggins Drive Arrawarra	GF	57	56	55	54	-2.2	-2.5	No	No	No	No
154	104 Eggins Drive Arrawarra	GF	59	58	57	55	-2.0	-2.5	No	No	No	No
159	104 Eggins Drive Arrawarra	GF	57	56	55	53	-2.3	-2.7	No	No	No	No
167	104 Eggins Drive Arrawarra	GF	57	56	55	53	-2.2	-2.6	No	No	No	No
176	104 Eggins Drive Arrawarra	GF	59	57	56	55	-2.2	-2.6	No	No	No	No
183	104 Eggins Drive Arrawarra	GF	58	57	56	54	-2.0	-2.5	No	No	No	No
194	104 Eggins Drive Arrawarra	GF	57	55	55	53	-1.7	-2.2	No	No	No	No
201	104 Eggins Drive Arrawarra	GF	51	50	49	47	-2.3	-2.5	No	No	No	No

Recei ver numb er	Receiver address	Floor	Design year predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model - ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
204	104 Eggins Drive Arrawarra	GF	57	56	57	55	-0.2	-0.9	No	No	No	No
208	104 Eggins Drive Arrawarra	GF	56	55	54	52	-2.3	-2.8	No	No	No	No
209	104 Eggins Drive Arrawarra	GF	60	59	58	56	-2.0	-2.6	No	No	No	No
212	104 Eggins Drive Arrawarra	GF	54	52	52	50	-1.3	-2.0	No	No	No	No
218	104 Eggins Drive Arrawarra	GF	59	58	58	56	-0.9	-1.7	No	No	No	No
221	104 Eggins Drive Arrawarra	GF	62	60	61	58	-1.2	-1.9	No	No	No	No
222	104 Eggins Drive Arrawarra	GF	59	57	57	55	-1.2	-2.0	No	No	No	No
223	104 Eggins Drive Arrawarra	GF	58	57	57	55	-1.1	-1.8	No	No	No	No
224	104 Eggins Drive Arrawarra	GF	53	52	53	51	0.0	-0.6	No	No	No	No
225	104 Eggins Drive Arrawarra	GF	58	57	57	55	-1.1	-1.8	No	No	No	No
227	104 Eggins Drive Arrawarra	GF	58	57	57	55	-0.9	-1.6	No	No	No	No
228	104 Eggins Drive Arrawarra	GF	56	55	55	53	-0.7	-1.3	No	No	No	No
245	210 Eggins Drive Arrawarra	GF	55	54	54	53	-1.2	-1.2	No	No	No	No
255	210 Eggins Drive Arrawarra	GF	55	53	54	52	-1.0	-1.0	No	No	No	No
257	210 Eggins Drive Arrawarra	GF	55	53	54	53	-0.4	-0.5	No	No	No	No
264	210 Eggins Drive Arrawarra	GF	54	52	53	52	-0.2	-0.5	No	No	No	No
268	210 Eggins Drive Arrawarra	GF	55	54	55	54	-0.2	-0.1	No	No	No	No
271	210 Eggins Drive Arrawarra	GF	55	54	54	53	-1.2	-1.0	No	No	No	No
272	210 Eggins Drive Arrawarra	GF	55	53	55	54	0.2	0.4	No	No	No	No

Recei ver numb er	Receiver address	Floor	Design year predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model - ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
274	210 Eggins Drive Arrawarra	GF	59	57	58	57	-0.7	0.1	No	No	No	No
275	210 Eggins Drive Arrawarra	GF	52	50	50	49	-1.9	-1.5	No	No	No	No
283	210 Eggins Drive Arrawarra	GF	52	51	50	48	-2.5	-2.2	No	No	No	No
286	210 Eggins Drive Arrawarra	GF	52	51	51	51	-0.9	-0.3	No	No	No	No
287	210 Eggins Drive Arrawarra	GF	55	54	53	52	-1.9	-1.4	No	No	No	No
289	210 Eggins Drive Arrawarra	GF	58	57	58	57	-0.9	-0.3	No	No	No	No
292	210 Eggins Drive Arrawarra	GF	55	54	53	52	-2.2	-1.7	No	No	No	No
296	210 Eggins Drive Arrawarra	GF	53	52	51	50	-1.7	-1.3	No	No	No	No
300	210 Eggins Drive Arrawarra	GF	54	53	53	52	-1.4	-0.8	No	No	No	No
301	210 Eggins Drive Arrawarra	GF	55	54	54	53	-1.3	-0.9	No	No	No	No
302	210 Eggins Drive Arrawarra	GF	52	51	53	52	0.3	0.8	No	No	No	No
305	210 Eggins Drive Arrawarra	GF	60	59	60	59	-0.6	0.2	No	No	No	No
309	210 Eggins Drive Arrawarra	GF	61	59	60	59	-0.8	0.1	No	No	No	No
310	210 Eggins Drive Arrawarra	GF	57	56	55	54	-2.3	-1.6	No	No	No	No
311	210 Eggins Drive Arrawarra	GF	58	57	56	55	-1.9	-1.3	No	No	No	No
312	210 Eggins Drive Arrawarra	GF	59	57	57	56	-2.1	-1.4	No	No	No	No
313	210 Eggins Drive Arrawarra	GF	60	59	58	57	-2.1	-1.3	No	No	No	No
314	210 Eggins Drive Arrawarra	GF	61	59	60	59	-0.7	0.1	No	No	No	No

Recei ver numb er	Receiver address	Floor	Design year predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model - ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
323	28 Tasman Street Corindi Beach	GF	62	61	57	56	-5.5	-4.8	No	No	No	No
324	26 Tasman Street Corindi Beach	GF	58	57	53	52	-5.3	-4.7	No	No	No	No
327	28 Lomandra Court Corindi Beach	GF	56	55	53	52	-3.4	-2.9	No	No	No	No
330	20 Tasman Street Corindi Beach	GF	61	59	56	55	-4.9	-4.3	No	No	No	No
403	13 Post Office Lane Corindi Beach	GF	57	55	56	55	-1.2	-0.7	No	No	Yes	No
414	3674 Pacific Highway Corindi Beach	GF	61	60	53	52	-8.7	-7.8	No	No	No	No
451	4149 Pacific Highway, Dirty Creek	GF	61	59	66	65	5.8	6.1	Yes	Yes	No	Yes
455	12 Flinty Road, Dirty Creek	GF	50	49	57	56	7.2	7.4	Yes	No	Yes	Yes
464	1 Flinty Road Dirty Creek	GF	65	63	55	55	-10.0	-8.7	No	No	No	No
645	5521 Pacific Highway Wells Crossing	GF	64	63	63	62	-1.2	-1.0	No	Yes ¹	No	No
649	5523 Pacific Hwy, Wells Crossing	GF	64	63	62	61	-1.9	-1.7	No	Yes ¹	No	No

Recei ver numb er	Receiver address	Floor	Design year predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model - ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
651	5559 Pacific Highway Wells Crossing	GF	64	62	62	61	-1.9	-1.6	No	Yes ¹	No	No
664	5631 Pacific Hwy, Wells Crossing	GF	77	75	74	73	-3.0	-2.7	No	Yes	No	Yes
A1	3507 Pacific Hwy, Corindi Beach	GF	55	54	57	56	1.6	2.1	Yes	No	No	Yes
A4	10 Tiffany Cl, Dirty Creek	GF	48	47	50	49	1.7	2.0	No	No	No	No
A5	19 Alice Cl, Dirty Creek	GF	52	51	56	55	4.5	4.7	Yes	No	No	Yes
A6	5 Alice Cl, Dirty Creek	GF	47	45	48	47	1.6	1.9	No	No	No	No
A8	Lot 71 Woodward Cl, Dirty Creek	GF	46	44	48	47	2.5	2.8	No	No	No	No
A9	Lot 70 Woodward Cl, Dirty Creek	GF	47	45	50	48	2.8	3.0	No	No	No	No
A11	Lot 1023 The Siding, Halfway Creek	GF	55	54	56	54	0.2	0.4	No	No	No	No
A12	25 The Siding, Halfway Creek	GF	58	56	58	57	0.2	0.4	No	No	No	No
A13	1 Rediger Close Halfway Creek	GF	62	61	57	57	-4.8	-4.4	No	No	No	No
A14	19 Rediger Close Halfway Creek	GF	58	56	53	52	-5.0	-4.6	No	No	No	No
A15	56 Grays Road Halfway	GF	58	57	53	52	-5.1	-4.7	No	No	No	No

Receiver number	Receiver address	Floor	Design year predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model - ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
	Creek											
A16	19 Grays Rd, Halfway Creek	GF	61	60	57	56	-4.5	-4.1	No	No	No	No
A18	15 Luthers Rd, Halfway Creek	GF	60	59	60	59	-0.1	0.0	No	No	No	No

Notes:

1 As discussed in Section 5.3.5 when Option 2A is constructed noise levels at this receiver will no longer be acute, see Table 23.

Table 23 Eligibility of treatment for receivers near Option 2A in the Design Year – comparison of build and no build levels

Recei ver numb er	Receiver address	Floor	Design Year predicted level, dB(A)				Operational noise compliance level minus no build level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model - ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
645	5521 Pacific Highway Wells Crossing	GF	64	63	60	59	-4.3	-4.1	No	No	No	No
649	5523 Pacific Hwy, Wells Crossing	GF	64	63	58	57	-5.6	-5.4	No	No	No	No
651	5559 Pacific Highway Wells Crossing	GF	64	62	58	57	-5.3	-4.9	No	No	No	No

5.3.6 Assessed receivers - Solitary Islands Way (formerly Eggins Dr)

As the design traffic volumes on Solitary Islands Way (formerly Eggins Dr) have changed significantly from those presented in the ONMR, receivers in the vicinity of this road have been re-evaluated for eligibility for treatment. It was found that no receivers in the vicinity of Solitary Islands Way (formerly Eggins Dr) are eligible for treatment. Results for all receivers in the vicinity of Solitary Islands Way (formerly Eggins Dr) have been provided in Appendix D and E. Results for the closest receivers ID 4, ID 5, ID 7, ID 204 and ID 311 are presented in Table 24 for the design year (2028).

Table 24 Receivers near Solitary Islands Way (formerly Eggins Drive) in the Design Year – comparison of build and no build levels

Recei ver numb er	Receiver address	Floor	Design Year predicted level, dB(A)				Operational noise compliance level minus Design level, dB		Exceeds the RNP criteria and increase > 2 dB over no build noise levels	Acute noise levels	Consideration of Mitigation	
			No build noise model (existing noise levels)		Operational noise compliance model						Design model - ONMR	Operational noise compliance model
			Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)	Day L _{Aeq} (15hr)	Night L _{Aeq} (9hr)				
4	1 Arrawarra Beach Road Arrawarra	GF	55	54	57	55	1.6	1.2	No	No	No	No
5	74 Eggins Drive Arrawarra	GF	57	56	57	56	0.3	-0.1	No	No	No	No
7	100 Eggins Drive Arrawarra	GF	59	58	58	57	-0.8	-1.3	No	No	No	No
204	104 Eggins Drive Arrawarra	GF	57	56	57	55	-0.2	-0.9	No	No	No	No
311	210 Eggins Drive Arrawarra	GF	58	57	56	55	-1.9	-1.3	No	No	No	No

5.3.7 Review of the adequacy of mitigation measures

Table 25 presents the recommended treatments for each of the properties identified in Section 5.3.5 and details of any treatments that were installed. Table 25 only presents noise levels at the facade most affected by the project, noise levels at all facades are presented in Appendix G.

Table 25 Properties where consideration of mitigation is recommended

Receiver number	Receiver address	Criteria (day/night)	Predicted Design Year level, dB(A)	Exceedance, dB	Treatment Installed	ONCA Treatment Recommendation
451	4149 Pacific Highway, Dirty Creek	60/55	66/65	6.3/10.3	No treatment installed	Type 3
455	12 Flinty Road, Dirty Creek	55/50	57/56	2.0/6.0	Type 2	Type 2
664	5631 Pacific Highway, Wells Crossing	60/55	74/73	13.8/17.7	Type 3 ¹	Type 3
A1	3507 Pacific Highway, Corindi Beach	55/50	57/56	1.8/6.0	Treatment declined ²	Type 2
A5	19 Alice Close, Dirty Creek	55/50	56/55	1.3/5.2	Type 1 ²	Type 2

Notes:

1. This property was included in Road and Maritime's Noise Abatement Program in 2011.
2. Whilst these properties were not included in the ONMR they were deemed eligible for consideration of mitigation and were included in Roads and Maritime's W2G At House Noise Treatment Program.

Properties that were recommended for consideration of mitigation in the ONMR were included in the Woolgoolga to Glenugie At House Noise Treatment Program, undertaken in 2017/18.

At the time the ONMR was prepared the residential property located at 4149 Pacific Highway, Dirty Creek (ID 451) was planned to be demolished, therefore no treatment was installed. The residential property at 12 Flinty Road, Dirty Creek (ID 455) was identified in the ONMR as being eligible for treatment. Treatment was installed as part of the W2G At House Noise Treatment Program.

Whilst not listed specifically in the ONMR, residential receivers at 3507 Pacific Highway, Corindi Beach and 19 Alice Close, Dirty Creek (ID A1 and ID A5 respectively) were identified during construction and were offered treatment accordingly under the W2G At House Noise Treatment Program.

The residential property at 5631 Pacific Highway, Wells Crossing (ID 664) was treated in June 2011 as part of the Roads and Maritime's Noise Abatement Program, based on noise monitoring undertaken in 2009.

Details of installed treatments and review of the adequacy of treatment for properties identified in Table 25 are provided below.

ID 451 - At the time the ONMR was prepared the residential property located at 4149 Pacific Highway, Dirty Creek (ID 451) was planned to be demolished, therefore no treatment was installed.

The operational noise compliance assessment for ID 451 indicates that the facade most affected by the project experiences a 10.3 dB exceedance of the night time RNP criteria. This would trigger type 3

(> 10 dB exceedance) treatment for this property. Treatment of this property should be considered as per the facade treatment levels in Appendix G.

ID 455 - The residential property located at 12 Flinty Road, Dirty Creek is a single level house with metal sheet walls and roof. The following treatments were installed:

- Split-wall mounted air conditioning to the living areas and bedrooms; and
- Seals around the front and back doors.

The operational noise compliance assessment for 12 Flinty Road indicates that the facade most affected by the project experiences a 6.2 dB exceedance of the night time RNP criteria. This would trigger type 2 (≤ 10 dB exceedance) treatment for this property. Type 2 treatment has already been installed at the residence and is appropriate.

ID 664 - The residential property at 5631 Pacific Hwy, Wells Crossing was treated in June 2011. The following treatments were installed:

- Air conditioning;
- Replacement windows and doors; and
- Seals around the windows and doors.

The operational noise compliance assessment for ID 664 indicates that the facade most affected by the project experiences a 17.7 dB exceedance of the night time RNP criteria. This would trigger type 3 (> 10 dB exceedance) treatment for this property. The treatment already installed at the residence appears appropriate, however it should be noted that at the time of writing the report details of which facades the treatments were applied to were not available.

ID A1 - The residential property at 3507 Pacific Highway, Corindi Beach was identified during construction. Roads and Maritime made an assessment based on ONMR noise contours and the property was included in the Woolgoolga to Glenugie At House Noise Treatment program.

The operational noise compliance assessment for 3507 Pacific Hwy indicates that the facade most affected by the project experiences a 6.0 dB exceedance of the night time RNP criteria. This would trigger type 2 (> 5 dB exceedance) treatment for this property.

The owner was offered treatment as part of the Woolgoolga to Glenugie At House Noise Treatment program, however treatment was declined.

ID A5 - The residential property located at 19 Alice Close, Dirty Creek is a single level brick veneer house with a pitch tile roof. During construction, Roads and Maritime made an assessment based on ONMR noise contours and the property was included in the Woolgoolga to Glenugie At House Noise Treatment program. The following treatments were installed:

- Ducted air conditioning to the bedrooms.

The operational noise compliance assessment for 19 Alice Close indicates that the facade most affected by the project experiences a 5.2 dB exceedance above the night time RNP criteria. This would trigger type 2 (≤ 10 dB exceedance) treatment for this property however a type 1 (≤ 5 dB exceedance) treatment has been installed. Due to the marginal nature of the exceedance and considering the treatment already installed, sealing off wall vents in this property is not recommended. However mechanical ventilation into the living area should be considered.

Details of the treatment types recommended to specific facades have been provided in Appendix G.

In summary, of these five receivers it was found that three receivers were eligible for consideration of noise mitigation measures to reduce road traffic noise levels. One of these receivers has already been treated and is now eligible for additional noise mitigation measures and another eligible receiver has declined the offer.

5.4 Noise complaints

Roads and Maritime have received a total of 12 enquiries and complaints from residents in relation to road traffic noise on the Woolgoolga to Glenugie upgrade since the project opened to traffic.

The complaints raised by residents were similar in nature and were received via email, letter, phone or in person. The complaints and enquiries related to road traffic noise after opening the upgrade to traffic and the timing and process of the operational noise compliance assessment.

Some monitoring points were located nearby to where complaints were received.

Roads and Maritime contacted each person making the complaint or enquiry to discuss their concerns and answer questions. This response was made either in person, by phone, letter or email.

Complaints and enquiries received in relation to operational noise generated by the project between the date of commencement of operation and the date the report are included in Table 26.

Table 26 Complaints received

Address	Nearest operational noise monitoring location
54 Saltwater Crescent, Corindi	34 Kangaroo Trail Road, Corrindi Beach
1 Golden Penda, Corindi	34 Kangaroo Trail Road, Corrindi Beach
1 Kangaroo Trail Road, Corindi	34 Kangaroo Trail Road, Corrindi Beach
31 Kangaroo Trail Road, Corindi	34 Kangaroo Trail Road, Corrindi Beach
Darlington Beach Holiday Park	Darlington Beach Holiday Park, 2564 Solitary Islands Way Arrawarra
Lorikeet Gateway Lifestyle Park	Darlington Beach Holiday Park, 2564 Solitary Islands Way Arrawarra
109 Luthers Road, Wells Crossing	Near Kungala Road, Halfway Creek
100 Eggins Drive, Arrawarra	Darlington Beach Holiday Park, 2564 Solitary Islands Way Arrawarra
6 Arrawarra Beach Road, Arrawarra	Darlington Beach Holiday Park, 2564 Solitary Islands Way Arrawarra
Corindi resident – address not given	34 Kangaroo Trail Road, Corrindi Beach
Kungala resident – address not given	Near Kungala Road, Halfway Creek
1 Arrawarra Beach Road, Arrawarra	Darlington Beach Holiday Park, 2564 Solitary Islands Way Arrawarra

5.5 Arrawarra rest area

5.5.1 Environmental noise model

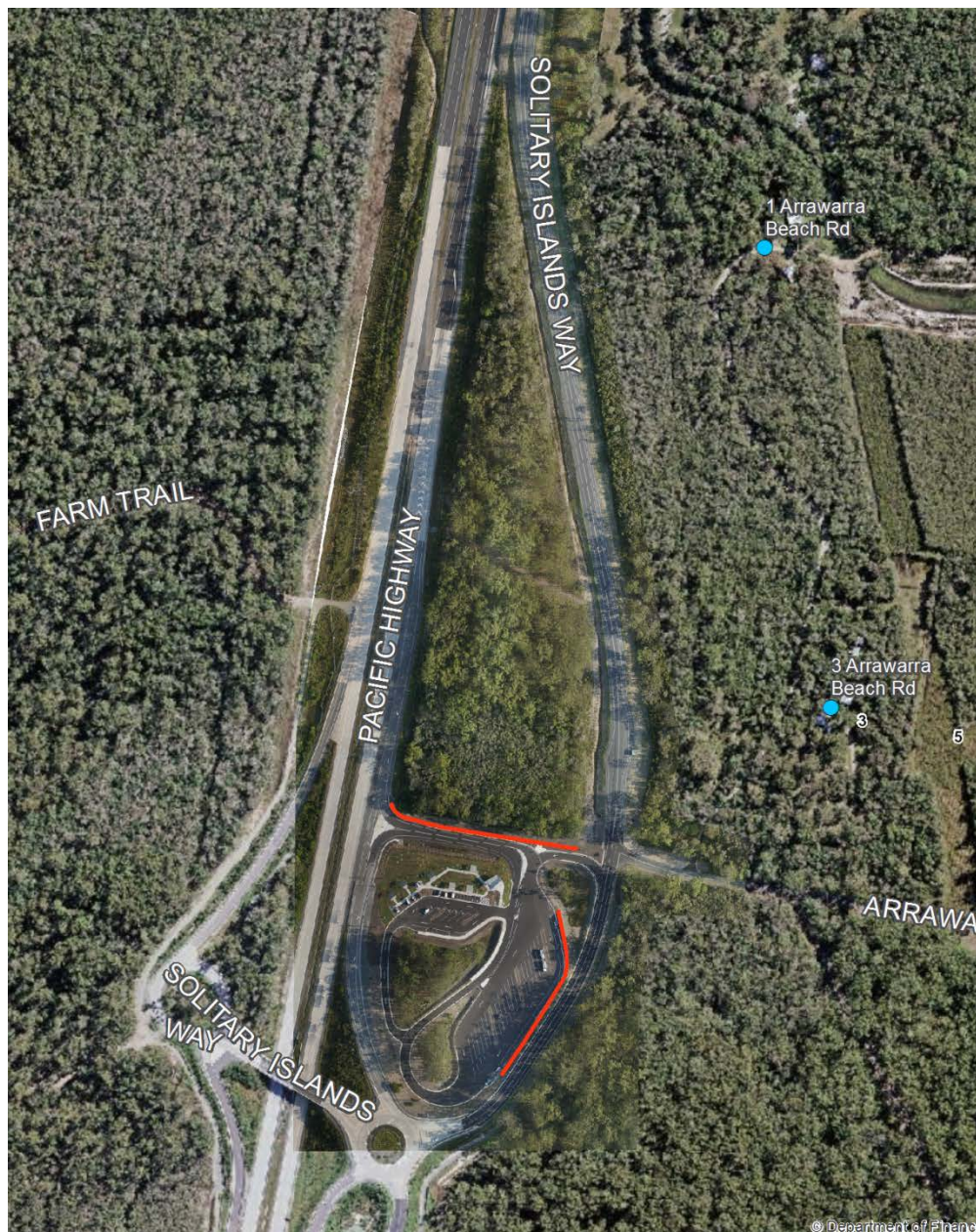
The Arrawarra rest area will operate during the day, evening and night-time periods. Light and heavy vehicles enter and exit from the Pacific Highway and Solitary Islands Way (formerly Eggins Dr) and stop within the parking bays. Noisy activities include vehicles driving within the rest area and door slams. The operational noise levels were predicted using an implementation of CONCAWE² algorithms in the SoundPLAN noise propagation software.

The noise model takes into account significant noise source sound level emissions and locations, screening effects, receiver locations, ground topography and noise attenuation due to geometrical spreading air absorption, ground absorption and the effects of the prevailing weather conditions.

All residential receivers were modelled at a height of 1.5 m above ground level. Noise predictions were carried out at the nearest residential receiver surrounding the site.

² CONCAWE – The oil companies' international study group for conservation of clean air and water – Europe Report 4/81 "The propagation of noise from petroleum and petrochemical complexes to neighbouring communities".

Figure 2 Arrawarra Rest Area (noise wall – red, nearest receivers – blue dots)



5.5.2 Rest area assessment assumptions

The following assumptions were used for the assessment of the environmental noise emission. These assumptions are based upon the traffic counting undertaken at the Rest Area (section 4.8) and represent a worst case 15 minute period.

- Up to 8 light vehicles will enter and exit the rest area in a 15 minute period during the day;
- Up to 5 light vehicles will enter and exit the rest area in a 15 minute period during the night;
- Up to 3 heavy vehicles will enter and exit the rest area in a 15 minute period during the day;
- Up to 3 heavy vehicles will enter and exit the rest area in a 15 minute period during the night; and
- Speeds in the rest area are approximately 30 km/h.

Measurements were undertaken of light vehicles driving within the rest area. Noise measurements were also taken of door slams. A summary of the measured sound power levels for various vehicle activities are provided in Table 27. The vehicle pass by measurements included acceleration. The sound power levels for heavy vehicles has been taken from “Acoustic Beamforming: Mapping Sources of Truck Noise” (Transportation Research Board, 2009).

Table 27 Sound power levels

Noise Source	Sound Power Level, $L_{Aeq(15min)}$ dB(A) (per vehicle)	Sound Power Level, L_{Amax} dB(A)
Light vehicle – pass by	93	102
Heavy vehicle – pass by	99	108
Door slam	96	103

5.5.3 Rest area assessment results

Based on the assumptions and modelling parameters as set out in the previous sections, the normal operational noise levels were predicted at the receiver most likely to be adversely affected under neutral and adverse meteorological conditions. The results of the modelling are presented in Table 28.

Noise contour plots for normal operational scenarios are presented in Appendix F for night-time neutral and adverse weather conditions (wind 3 m/s source to receiver and an F class inversion).

Table 28 Predicted operational noise levels (night-time for residential) – Normal operation, neutral weather and adverse weather conditions

Location	Weather Conditions	Distance from Rest Area (m)	Sound Pressure Level, L_{Aeq} dB(A)		
			Result	Criterion	Exceedance
Day					
1 Arrawarra Beach Road	Neutral	510	32	50	-
	Wind 3 m/s		37	50	-
3 Arrawarra Beach Road	Neutral	235	37	50	-
	Wind 3 m/s		42	50	-
Night					
1 Arrawarra Beach Road	Neutral	510	32	43	-
	Wind 3 m/s		37	43	-
	F class inversion		37	43	-
3 Arrawarra Beach Road	Neutral	235	37	43	-
	Wind 3 m/s		42	43	-
	F class inversion		42	43	-

5.5.4 Sleep disturbance

The sleep disturbance noise levels associated with the normal operation of the rest area were predicted at nearby receivers under neutral meteorological conditions and are presented in Table 29. No exceedance of the sleep disturbance criterion is predicted.

Table 29 Predicted L_{Amax} operational noise levels and sleep disturbance criteria - Normal operation, neutral weather conditions

Location	Distance from Rest Area (m)	Sound Pressure Level, L_{Amax} dB(A)		
		Result	Criterion	Exceedance
1 Arrawarra Beach Road	510	38	56	-
3 Arrawarra Beach Road	235	46	56	-

5.5.5 Discussion

Normal operational noise levels from the rest area, under neutral and adverse weather conditions are expected to comply with the site specific operational noise criteria at all nearby residential receivers during the daytime and night-time periods.

5.6 Heavy vehicle inspection bay

5.6.1 Environmental noise model

The heavy vehicle inspection bay will operate during the day, evening and night-time periods with a similar capacity during these periods. Trucks enter the inspection bay from the southbound lane of the Pacific Highway and slow to a stop in a dedicated parking bay. Trucks may be stopped for between five minutes and five hours depending on the type of inspection. Up to 30 trucks per shift (eight hours) may be inspected. Typically there will be one to two inspection shifts per week and up to four 24 hr inspections per year. Dominant noise sources include trucks accelerating and braking (including the use of engine brakes), air brake pressure release and idling noise.

Based on the Project Specific Noise Levels presented in Section 2.5 for the day, evening and night-time periods, the night-time criterion is the most stringent criterion. Compliance with the night-time criterion will therefore ensure compliance with the day and evening criteria.

The operational noise levels were predicted using an implementation of the well established CONCAWE algorithms in the SoundPLAN noise propagation software.

The noise model takes into account significant noise emissions (which are based upon accurate noise measurements completed on site, these noise sources are presented in section 5.6.2) and locations, screening effects, receiver locations, ground topography and noise attenuation due to geometrical spreading air absorption, ground absorption and the effects of the prevailing weather conditions.

All residential receivers were modelled at a height of 1.5 m above ground level. Noise predictions were carried out at the nearest residential receiver surrounding the site.

Figure 3 Truck inspection bay (110 Luthers Road – blue dot)



5.6.2 Heavy vehicle inspection bay assessment assumptions

The following assumptions were utilised for the assessment of the environmental noise emission.

- Up to 30 heavy vehicles will enter and exit the inspection bay during a typical shift (8 hours). In a worst case 15 minute period 2 trucks may enter and exit the inspection bay;
- Varying speeds have been modelled in the inspection bay, in line with site observations. Trucks begin to slow before entering the inspection bay off ramp, come to a complete stop in the inspection bay and accelerate on the on ramp to merge into the through traffic on the Pacific Highway; and
- The night time period has been assessed as this period has the most stringent criterion.

Measurements were undertaken of heavy vehicles within the inspection bay. A summary of the measured sound power levels for idling and air brake release are provided in Table 30. The sound power levels for accelerating and decelerating trucks has been taken from “Acoustic Beamforming: Mapping Sources of Truck Noise” (Transportation Research Board, 2009).

Table 30 Heavy vehicle inspection bay typical sound power levels

Noise Source	Sound Power Level, $L_{Aeq\ 15min}$ dB(A) (per vehicle)	Sound Power Level, L_{Amax} dB(A)
Acceleration-	96 at speeds < 60 km/h, 99 at speeds > 60 km/h	110 at speeds < 60 km/h, 114 at speeds > 60 km/h
Deceleration	99	113
Idling	88	98
Air brake release	94	107

5.6.3 Heavy vehicle inspection bay assessment results

Based on the assumptions and modelling parameters as set out in the previous sections, the normal operational noise levels were predicted at the receivers most likely to be adversely affected under neutral and adverse meteorological conditions. The results of the modelling are presented in Table 31.

Noise contour plots for normal operational scenarios are presented in Appendix F for night-time neutral and adverse weather conditions (wind 3 m/s source to receiver and an F class inversion).

Table 31 Predicted operational noise levels (night-time for residential) – Normal operation

Location	Weather Conditions	Distance from Inspection Bay (m)	Sound Pressure Level, L_{Aeq} dB(A)		
			Result	Criterion	Exceedance
Night					
110 Luthers Road	Neutral	350	43	43	-
	Wind 3 m/s		43	43	-
	F class inversion		43	43	-
5092 Pacific Highway	Neutral	800	39	43	-
	Wind 3 m/s		40	43	-
	F class inversion		40	43	-

5.6.4 Heavy vehicle inspection bay sleep disturbance assessment

The sleep disturbance noise levels associated with the normal operation of the inspection bay were predicted at nearby receivers under neutral meteorological conditions and are presented in Table 32. No exceedance of the sleep disturbance criterion is predicted at 110 Luthers Road however a 5 dB exceedance is predicted at 5092 Pacific Highway.

Table 32 Predicted L_{Amax} operational noise levels and sleep disturbance criteria - Normal operation, neutral weather conditions

Location	Distance from Inspection Bay (m)	Sound Pressure Level, L_{Amax} dB(A)		
		Result	Criterion	Exceedance
110 Luthers Road	350	53	53	-
5092 Pacific Highway	800	58	53	5

5.6.5 Discussion

Normal operational noise levels from the inspection bay, under neutral and adverse weather conditions are expected to comply with the site specific operational noise criteria at all nearby residential receivers during the daytime, evening and night-time periods, with the exception of 5092 Pacific Highway. At this receiver a 5 dB exceedance of the maximum noise level criteria is expected. This property has received type 1 treatment (installation of air conditioning to the bedrooms). The treatment already installed at the residence is considered appropriate to adequately mitigate the 5 dB maximum noise level exceedance.

5.7 U-turn Bay – Rediger Close

The ENMM (section 2.4.2) considers a maximum noise level event as a vehicle pass-by for which the L_{Amax} noise level is equal to or greater than 15 dB above the $L_{Aeq(1hr)}$. Maximum noise levels are generally dependent on truck engine braking events.

Presented in Table 33 are observed maximum noise levels due to vehicles completing U-turns at 1 Rediger Close. The maximum noise levels are compared to the $L_{Aeq 1hr}$ noise level for each period. The noise levels were measured at logger L12 and were corrected to provide an indicative level at 1 Rediger Close. A total of 34 U-turns were observed by reviewing the traffic counts at the U-turn bay and listening back to audio recordings at the logger location. Other U-turns were completed during the monitoring period however these could not be distinguished above the general traffic noise in the area.

For the observed U-turns the maximum noise levels only once exceed the $L_{Aeq 1hr}$ by more than 15 dB. The loudest L_{Amax} level identified was 70 dB(A). This level correlates well with the observations provided in the report “1 Rediger Close, Halfway Creek Operational Noise Review” (W2G-17079-001_A May 2017) which identified maximum noise levels from the U-Turn bay of up to 70-75 dB(A).

Figure 4 U-turn bay south (logger green dot)



Table 33 Measured noise levels at the southern U-turn bay during the period 22/5- 1/6 2018

Time	$L_{Aeq\ 1hr}$ noise level, dB(A)	L_{Amax} noise level, dB(A)	$L_{Amax}-L_{Aeq\ 1hr}$, dB	Comment
24/05/2018 0:22	58	66	8	Truck U-turn
24/05/2018 1:33	57	51	-7	Car U-turn
24/05/2018 2:04	58	53	-5	Car U-turn
24/05/2018 2:28	57	55	-2	Car U-turn
24/05/2018 2:42	58	65	7	Truck U-turn
25/05/2018 0:19	57	69	11	Truck U-turn
25/05/2018 0:42	58	70	11	Truck U-turn
25/05/2018 2:10	58	70	12	Truck U-turn
25/05/2018 4:34	58	67	9	Truck U-turn
25/05/2018 4:43	58	50	-8	Car U-turn
25/05/2018 5:20	57	66	8	Truck U-turn
26/05/2018 0:43	56	69	13	Truck U-turn
26/05/2018 0:47	56	54	-3	Car U-turn
26/05/2018 1:06	56	55	-1	Car U-turn
26/05/2018 1:49	56	69	12	Truck U-turn
26/05/2018 1:52	56	48	-9	Car U-turn
26/05/2018 4:35	56	51	-5	Car U-turn
26/05/2018 5:01	55	64	9	Truck U-turn
26/05/2018 5:10	55	46	-10	Car U-turn
26/05/2018 5:32	56	56	0	Car U-turn
26/05/2018 5:50	56	55	-1	Car U-turn
28/05/2018 0:05	53	50	-4	Car U-turn
28/05/2018 0:00	53	63	9	Truck U-turn
28/05/2018 1:05	52	54	2	Car U-turn
28/05/2018 2:22	51	52	1	Car U-turn
28/05/2018 4:42	53	70	16	Truck U-turn
29/05/2018 1:50	58	63	5	Truck U-turn
30/05/2018 0:05	57	64	6	Truck U-turn
31/05/2018 0:03	58	65	6	Truck U-turn
31/05/2018 1:34	58	66	8	Truck U-turn
31/05/2018 3:33	57	66	8	Truck U-turn
1/06/2018 0:45	58	69	11	Truck U-turn
1/06/2018 2:17	58	62	3	Truck U-turn
1/06/2018 4:34	58	63	5	Truck U-turn
Median	-	63	-	-
Maximum	-	70	16	-

Notes:

1. *Measured levels corrected to the nearest residence.*

5.8 U-turn Bay – Lemon Tree Road

Presented in Table 34 are observed maximum noise levels due to vehicles completing U-turns at the Lemon Tree Road U-turn bay. The maximum noise levels are compared to the $L_{Aeq\ 1hr}$ noise level for each period. The noise levels were measured at L13 - 5034 Pacific Highway. A total of 8 U-turns were observed by reviewing the traffic counts at the U-turn bay and listening back to audio recordings at the logger location. Other U-turns were completed during the monitoring period however these could not be distinguished above the general traffic noise in the area.

Table 34 indicates eight maximum noise level events due to vehicle pass-bys over a 10 day period however for the observed U-turns the maximum noise levels do not exceed the $L_{Aeq\ 1hr}$ by more than 4 dB. It is therefore likely that the maximum noise level events at 5034 Pacific Highway (L_{10}) are being controlled by through traffic and not vehicles using the U-turn bay.

Figure 5 U-turn bay north (logger L13 green dot)



Table 34 Measured sound pressure levels at the northern U-turn bay during the period 22/5- 1/6 2018

Time	Sound Pressure Level, L_{Aeq} dB(A)	Sound Pressure Level, L_{Amax} dB(A)	$L_{Amax}-L_{Aeq}$ 1hr, dB	Comment
24/05/2018 2:29	53	50	-3	Truck U-turn
25/05/2018 0:25	53	55	2	Truck U-turn
25/05/2018 4:17	53	56	3	Truck U-turn
26/05/2018 1:09	53	47	-6	Truck U-turn
26/05/2018 1:20	53	46	-7	Truck U-turn
26/05/2018 4:16	53	47	-6	Truck U-turn
28/05/2018 4:15	50	47	-3	Truck U-turn
29/05/2018 4:24	50	54	4	Truck U-turn
Median	-	49	-	-
Maximum	-	56	4	-

6.0 Conclusion

The review has carried out long-term unattended noise monitoring and short-term attended noise monitoring at 14 locations, during the period 22 May to 6 June 2018.

The noise levels predicted using the 'existing road traffic noise model' were generally in close agreement (within two decibels) with the measured levels at the majority of logging locations, therefore the noise model was considered validated.

Where road traffic noise levels determined in the operational noise compliance model were significantly higher (more than two decibels) than the design noise model the receivers were re-evaluated for eligibility of treatment.

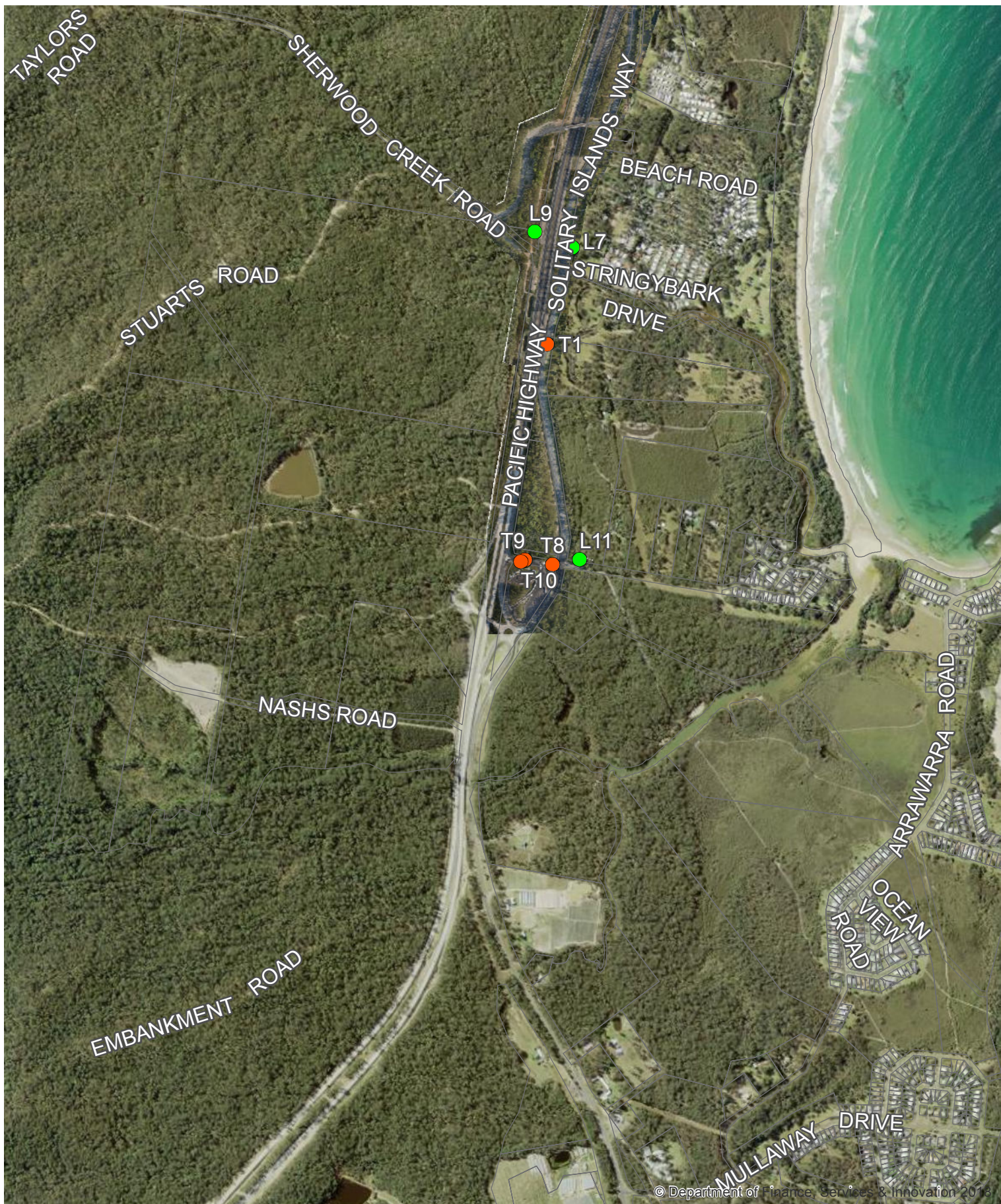
It was found that three receivers were eligible for consideration of noise mitigation measures to reduce road traffic noise levels. One of these receivers has already been treated and is now eligible for additional noise mitigation measures, another was previously offered treatment but declined and the third receiver was planned to be demolished during the design stage and so no treatment was installed.

In addition, three properties near Wells Crossing have been identified for reassessment after the northbound carriageway in this area has been upgraded.

The overall outcome of the operational noise compliance assessment was that generally the design stage recommended noise mitigation measures are considered appropriate, with a total of three receivers identified as being eligible for consideration of additional noise mitigation measures to mitigate road traffic noise levels.

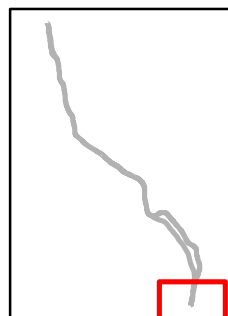
Appendix A

Logging and Traffic Counting Locations



W2G - Logger and Tube Count Map

- Tube Counts
- Loggers



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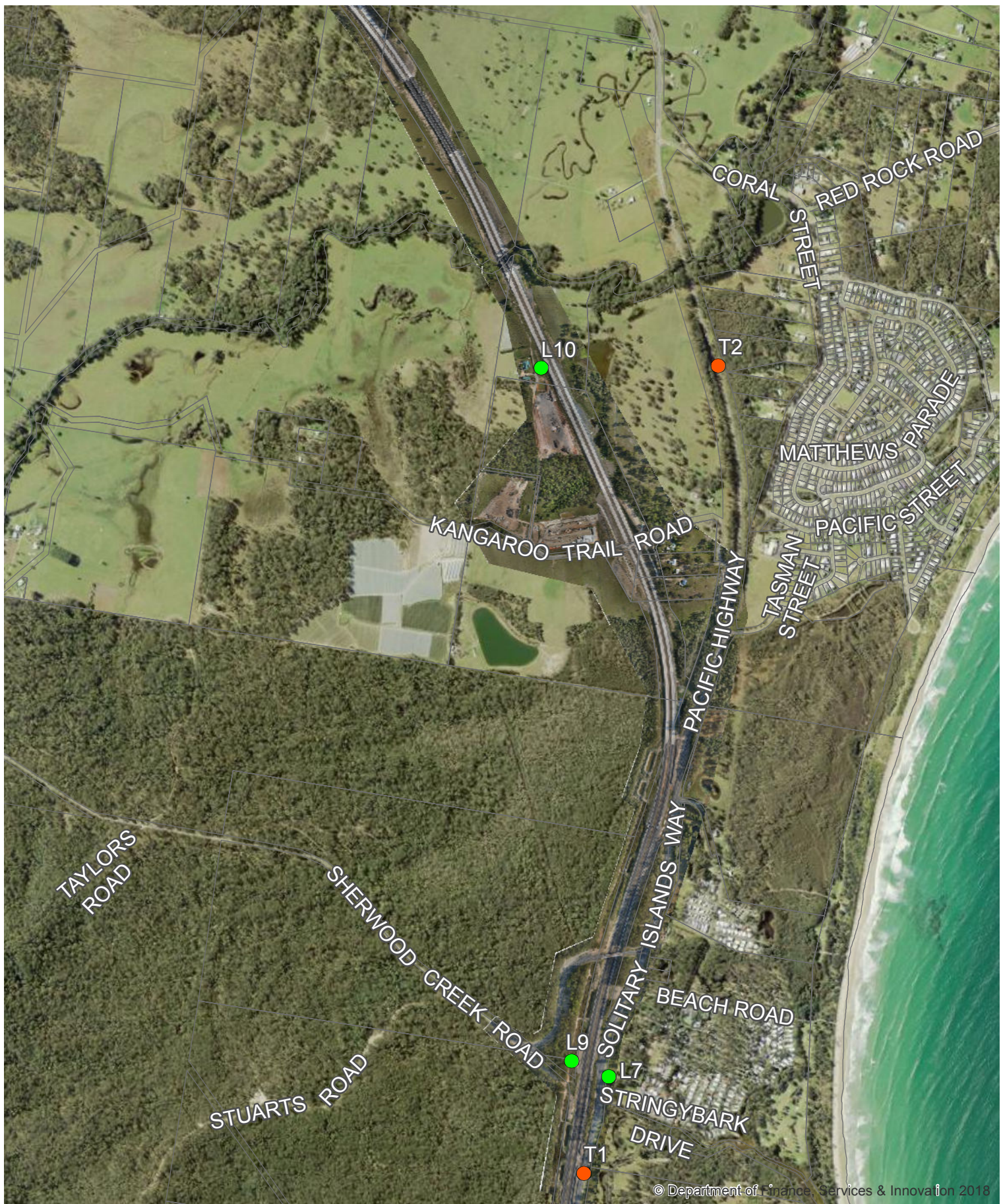
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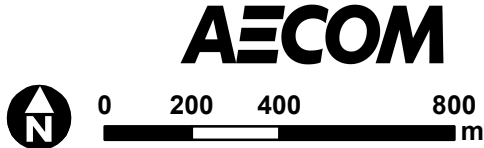
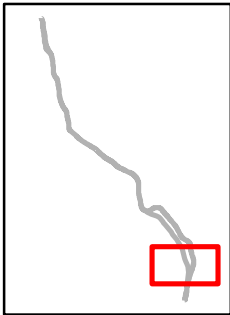
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W2G - Logger and Tube Count Map

- Tube Counts
- Loggers



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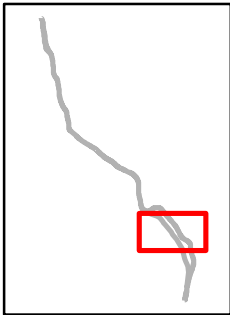
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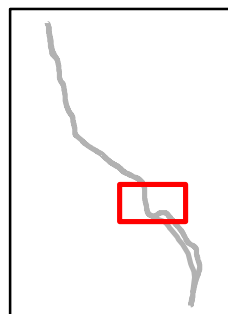
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W2G - Logger and Tube Count Map

- Tube Counts
- Loggers



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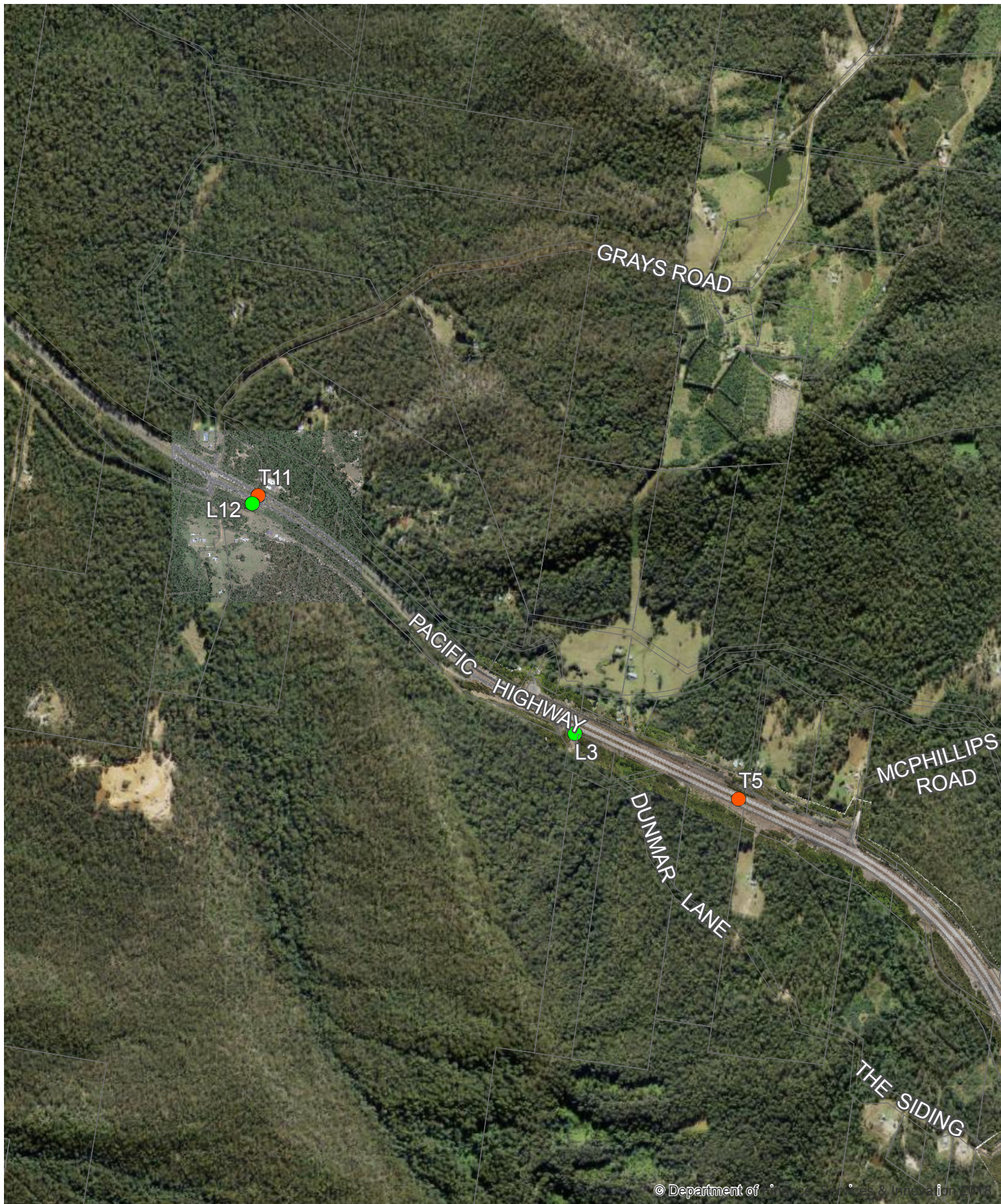
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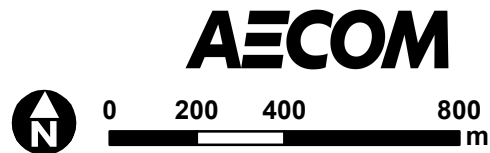
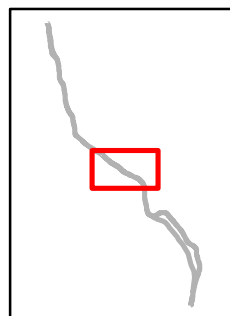
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W2G - Logger and Tube Count Map

- Tube Counts
- Loggers



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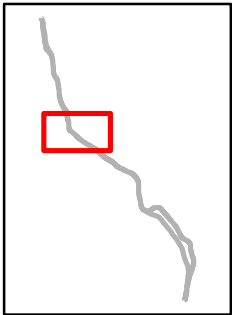
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W2G - Logger and Tube Count Map

- Tube Counts
- Loggers



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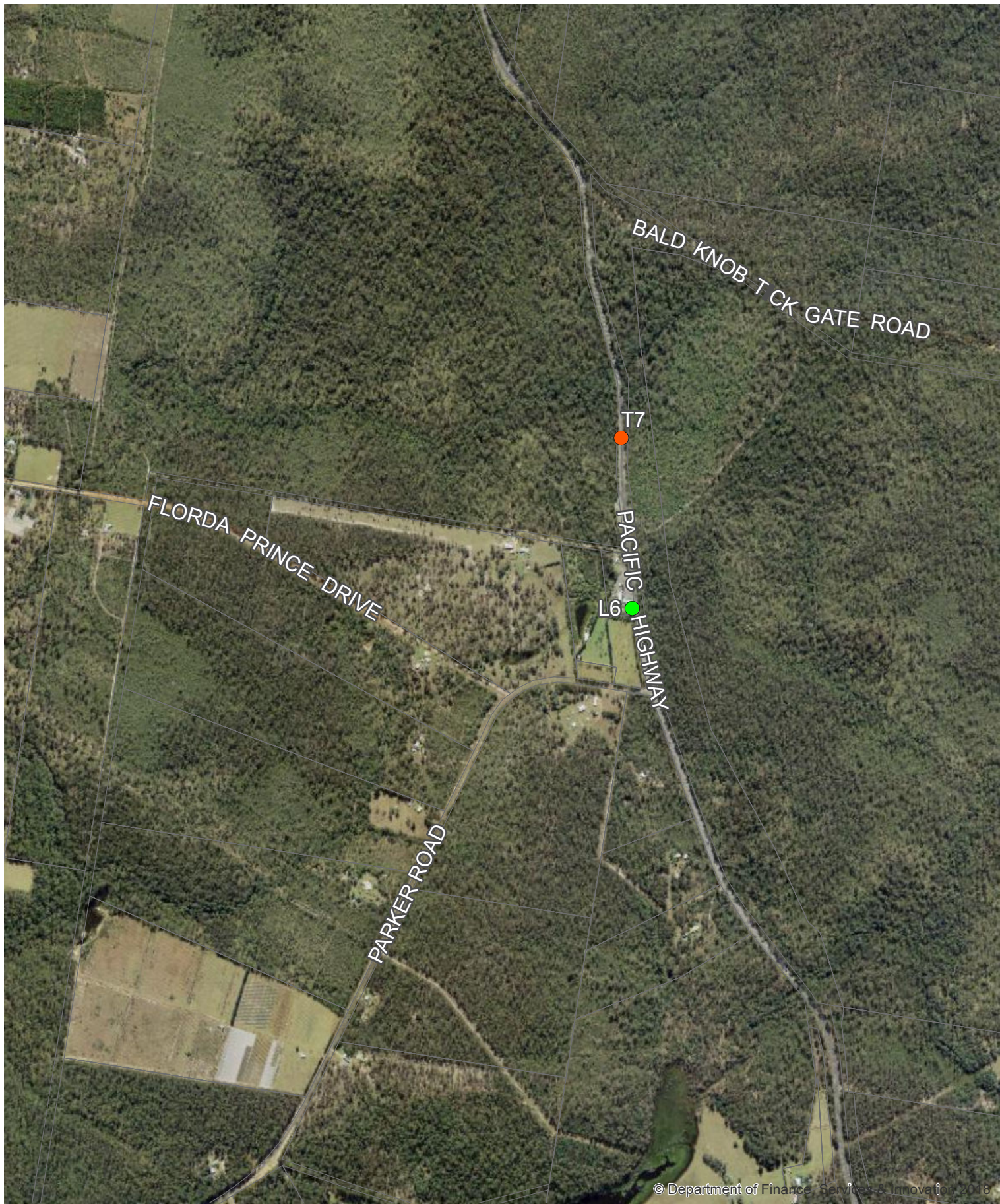
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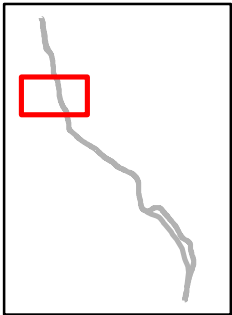
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W2G - Logger and Tube Count Map

- Tube Counts
- Loggers



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Appendix B

Logger Photos and Results

L1 - 22/05/18 - 01/06/18

Logger Setup

Logger Type: Rion NL52

Serial No : 00175537

Address: L1 18 Post Office Lane, Corindi Beach

Location: Field

Facade / Free Field: Free Field

Environment: Dominant noise source: traffic on the Pacific Highway. Other noise sources: bird noise audible in absence of traffic. Typical truck pass-by noise level: 72-74 dB(A) max. Typical car pass-by noise levels: 56-65 dB(A) max.

Logger Setup Photo



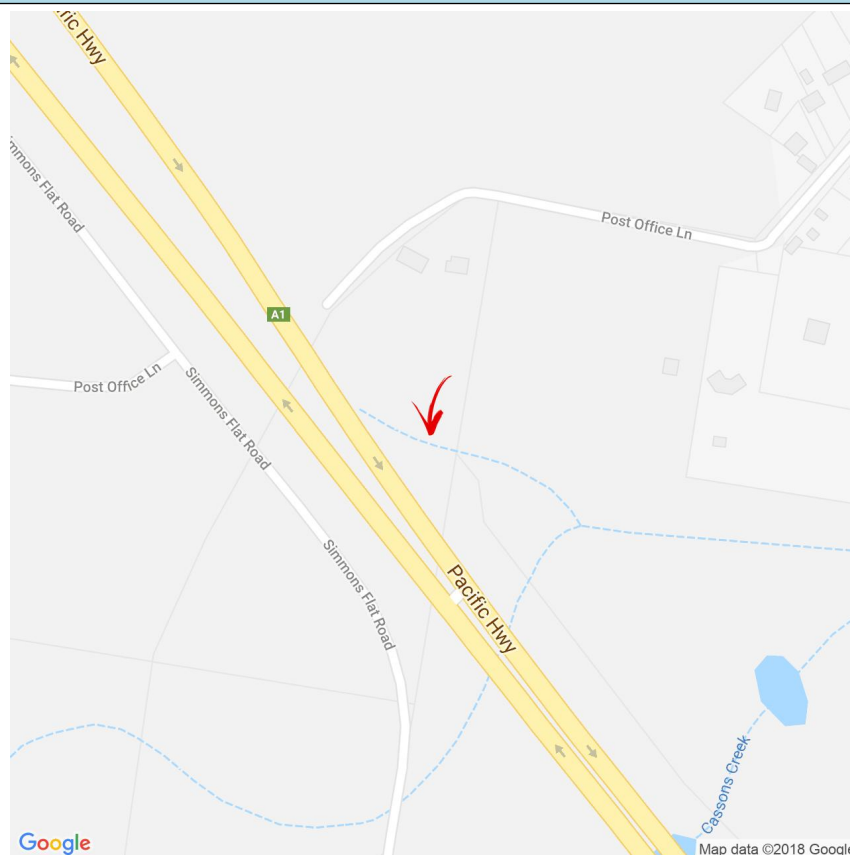
INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

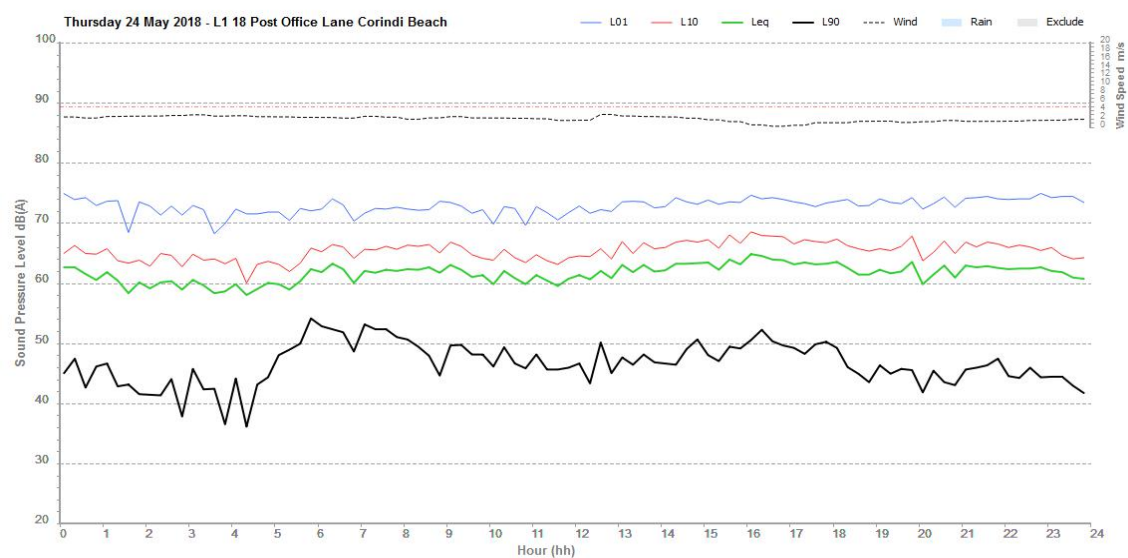
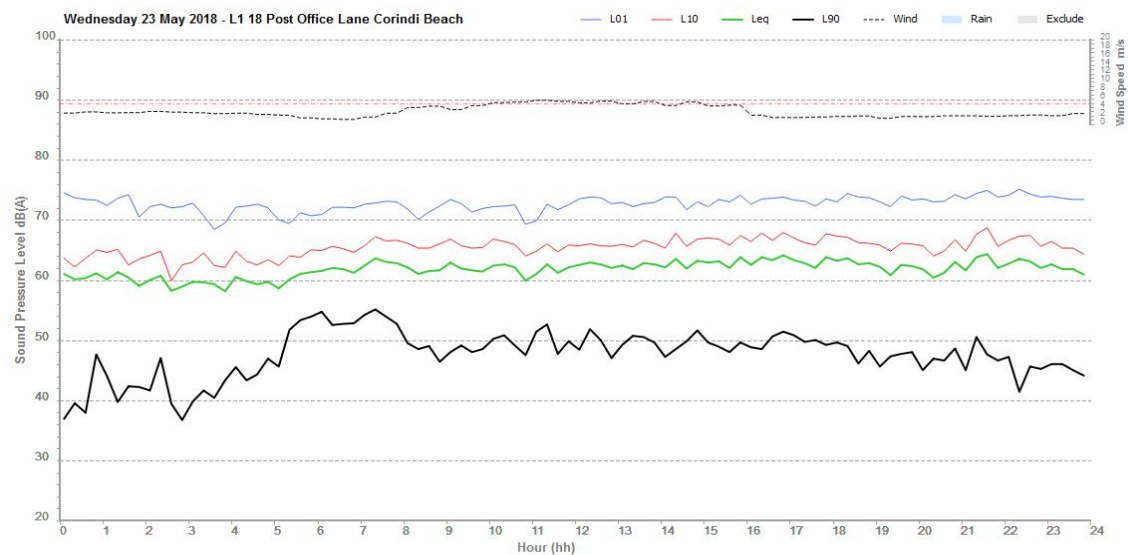
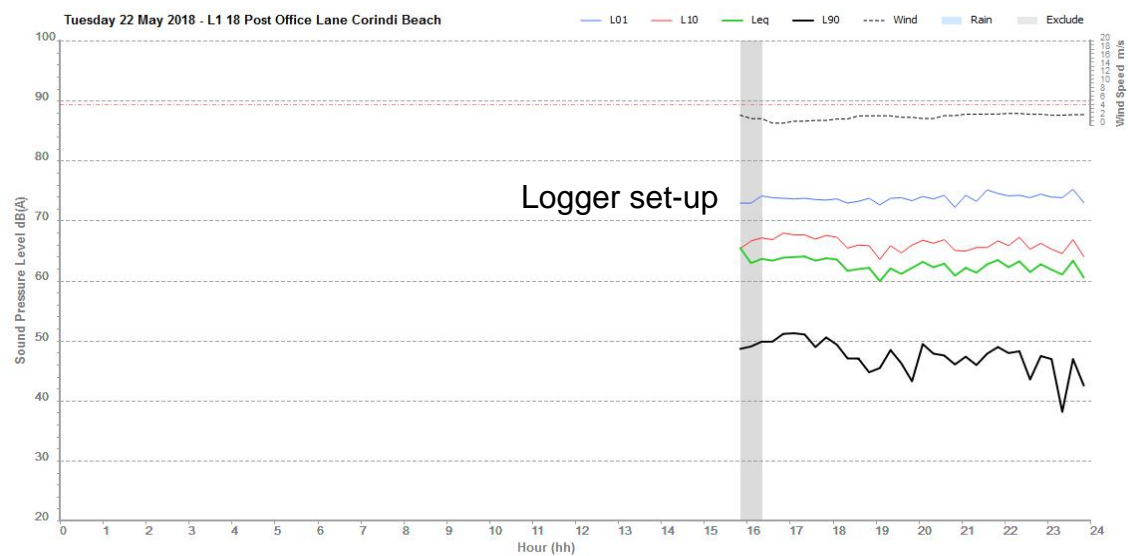
RNP Noise Level, dB(A)

	$L_{Aeq(1hr)}$	$L_{Aeq(period)}$
Day (7am - 10 pm)	63.3	62.1
Night (10pm - 7am)	62.1	60.2

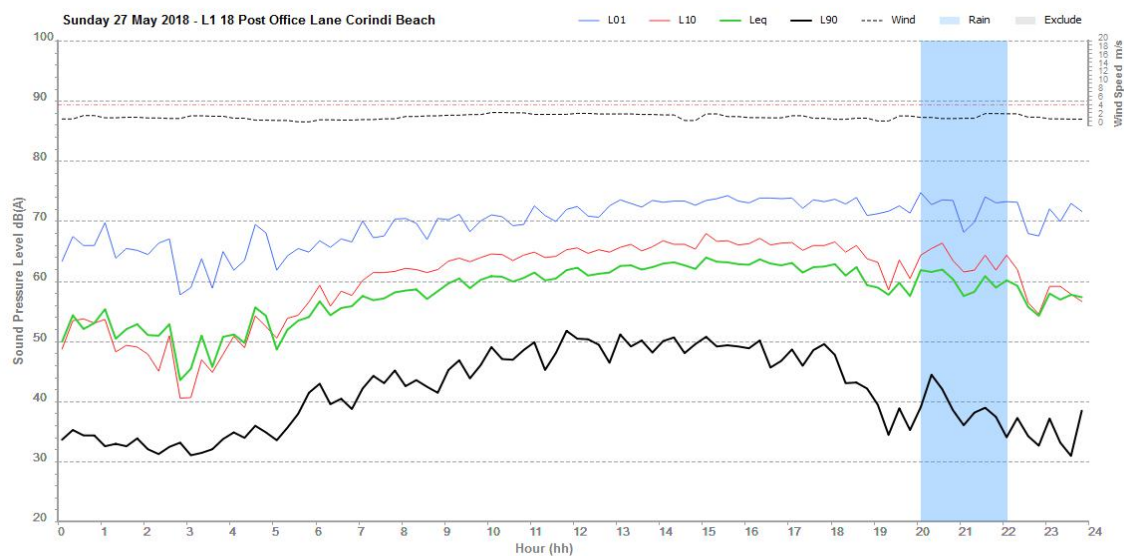
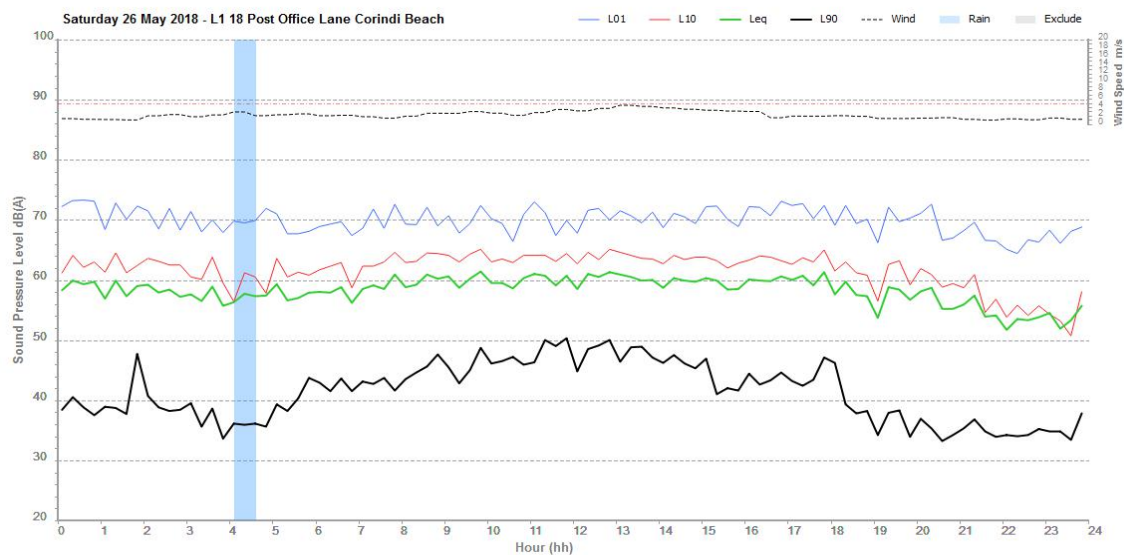
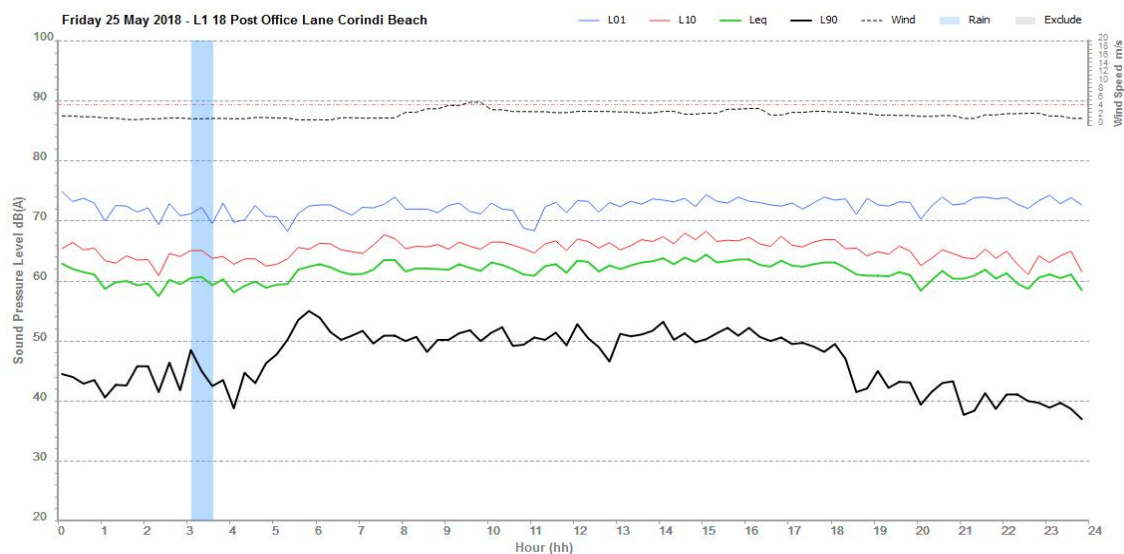
Logger Location Map



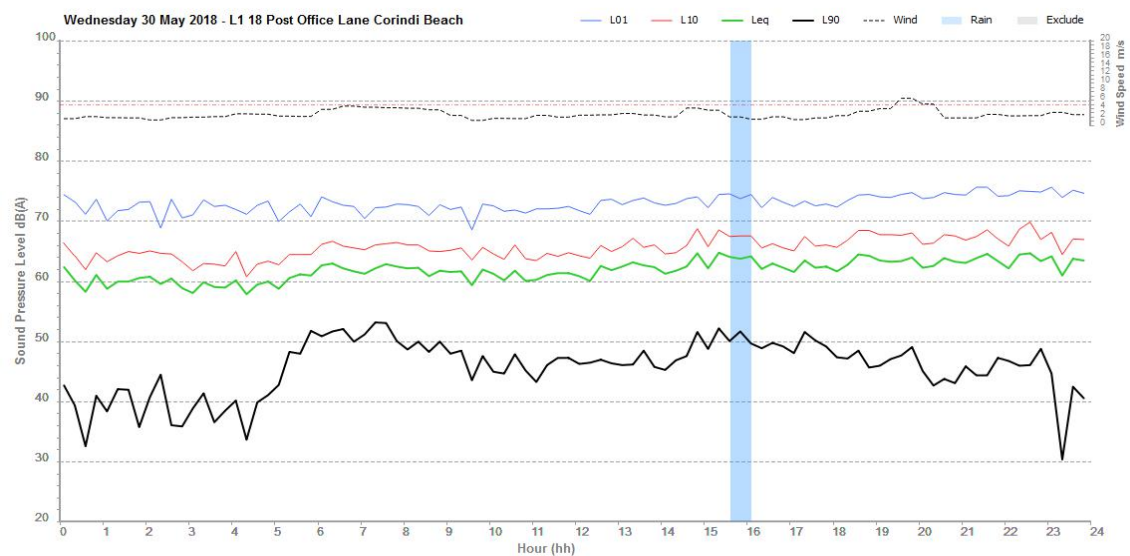
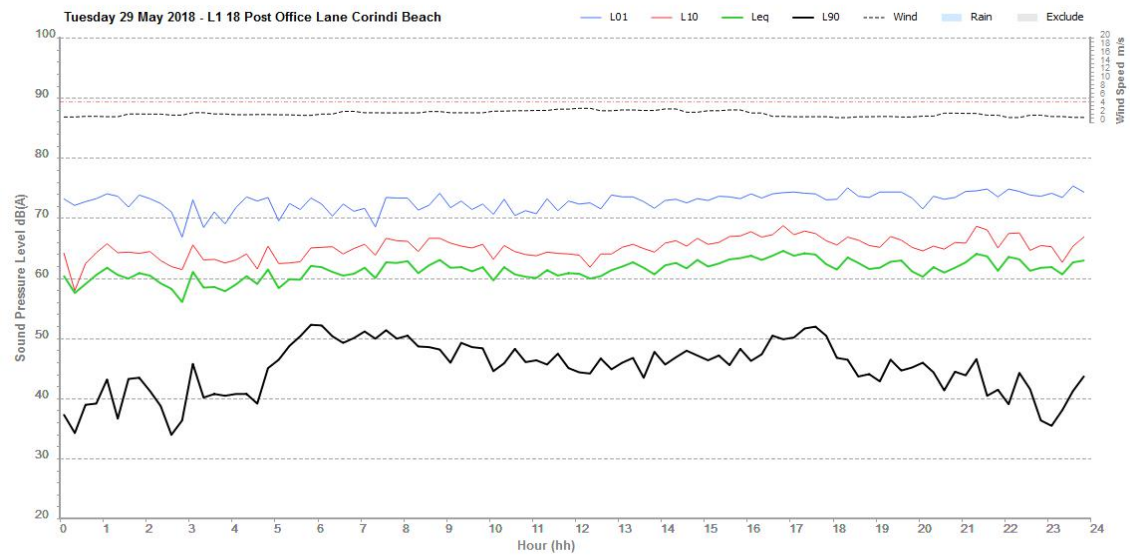
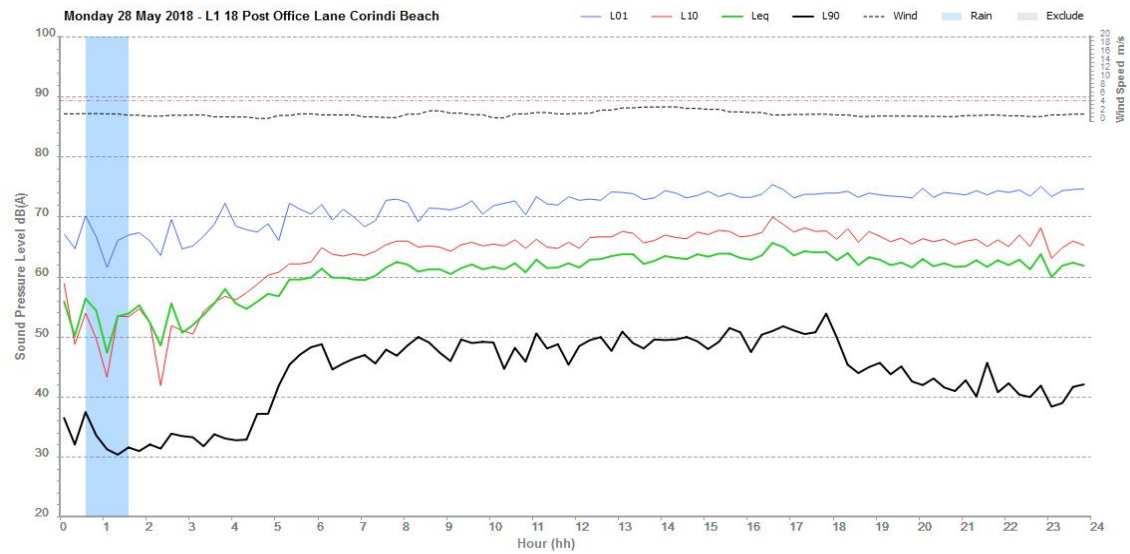
Logger Graphs



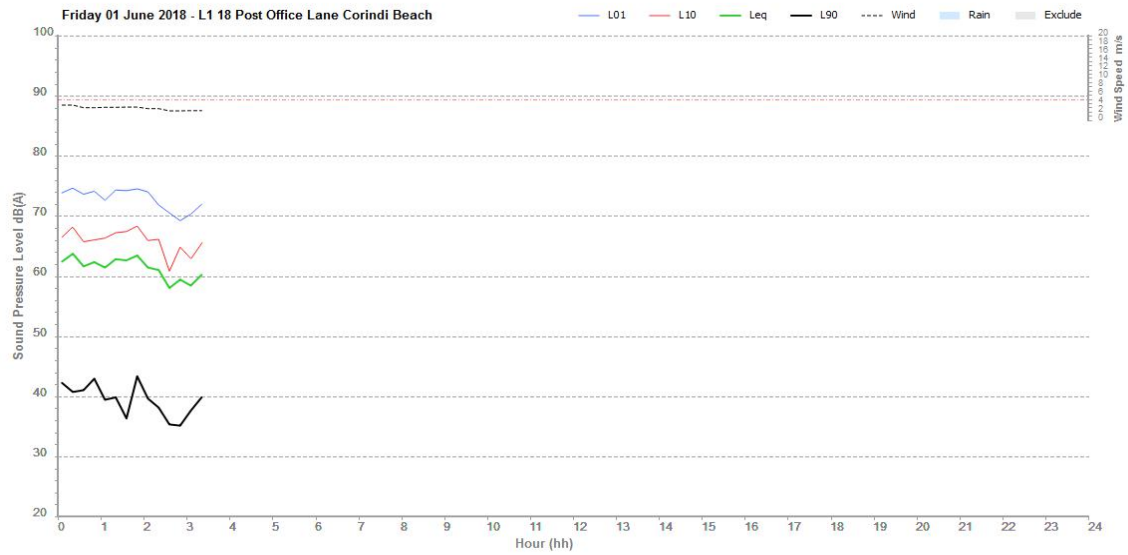
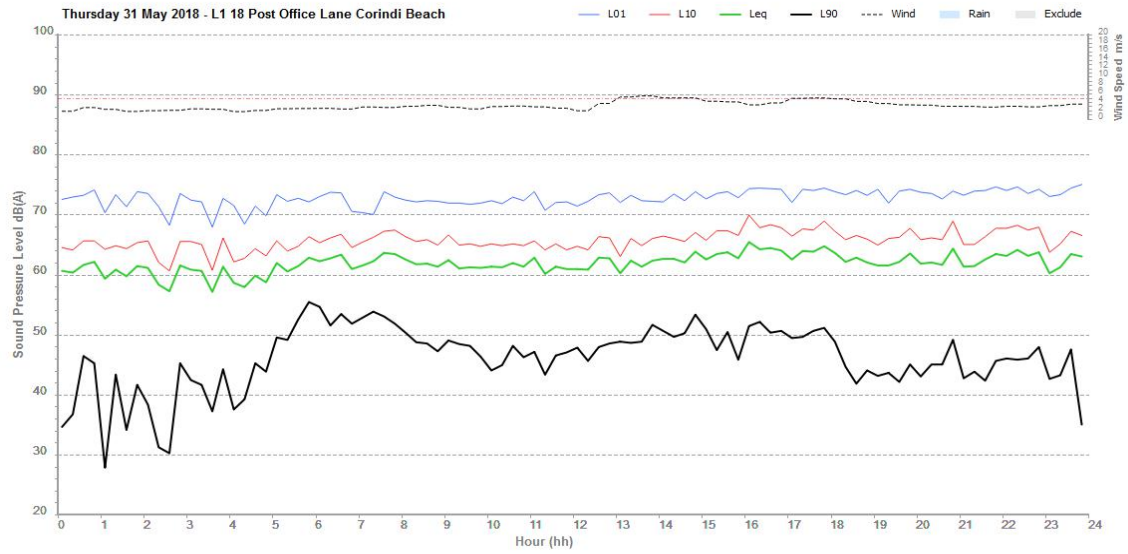
Logger Graphs



Logger Graphs



Logger Graphs



L2 - 24/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL42
 Serial No : 00947012
 Address: L2 4028 Pacific Highway, Dirty Creek
 Location: Front Yard
 Facade / Free Field: Free Field
 Environment: Dominant noise source: traffic on the Pacific Highway. Other noise sources: farm yard animals 40 dB(A) max. Typical truck pass-by noise level: 69 dB(A) max. Typical car pass-by noise levels: 60 dB(A) max.

Logger Setup Photo



INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

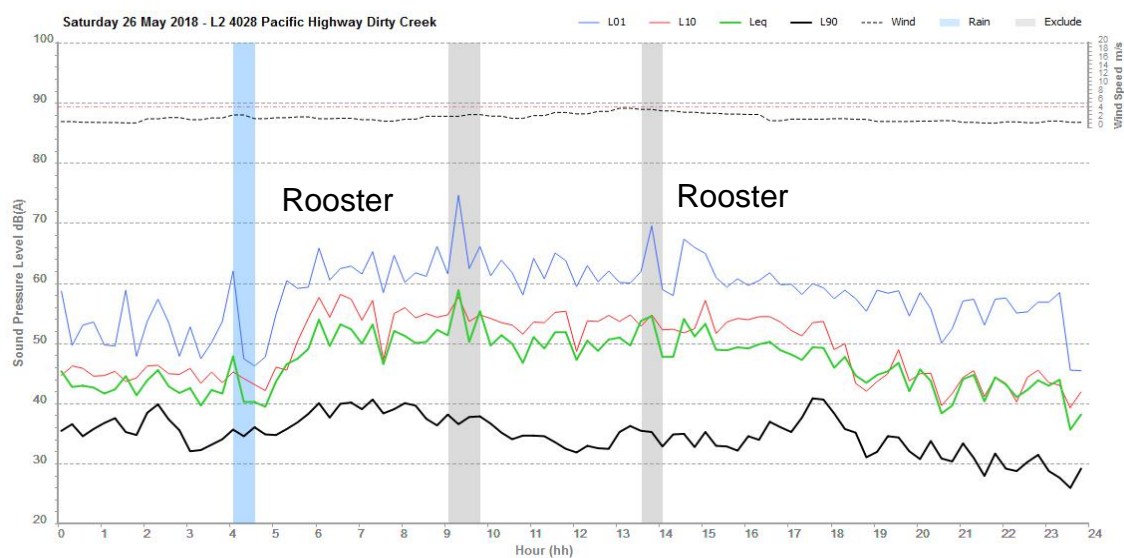
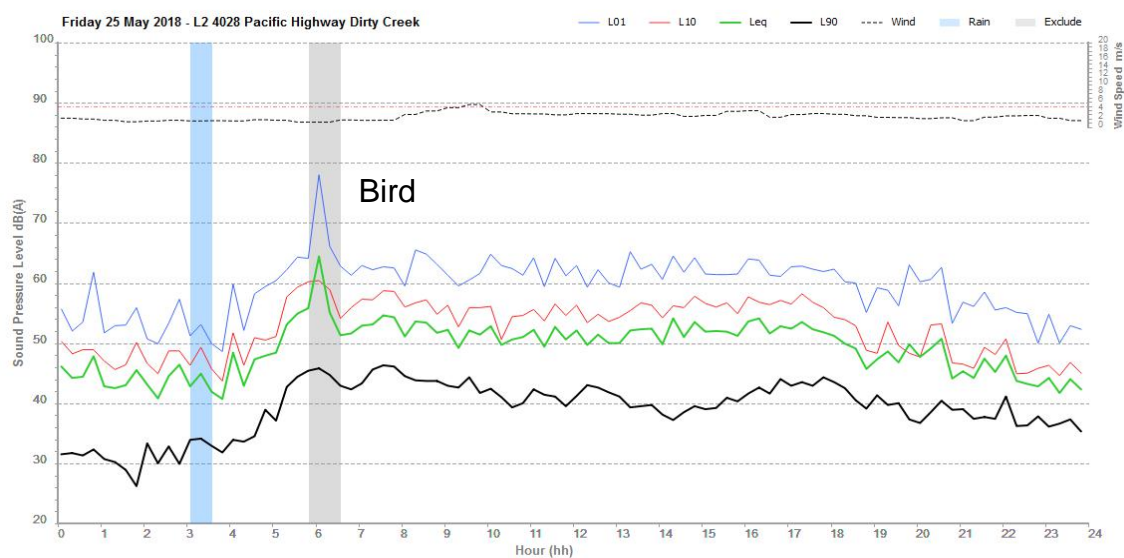
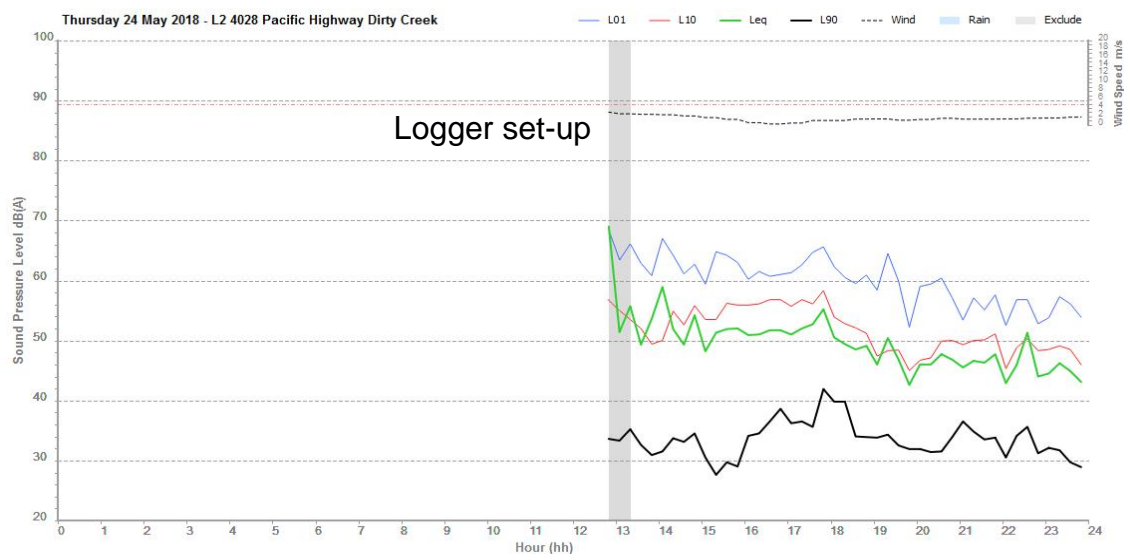
RNP Noise Level, dB(A)

	L _{Aeq(1hr)}	L _{Aeq(period)}
Day (7am - 10 pm)	53	50
Night (10pm - 7am)	53	48

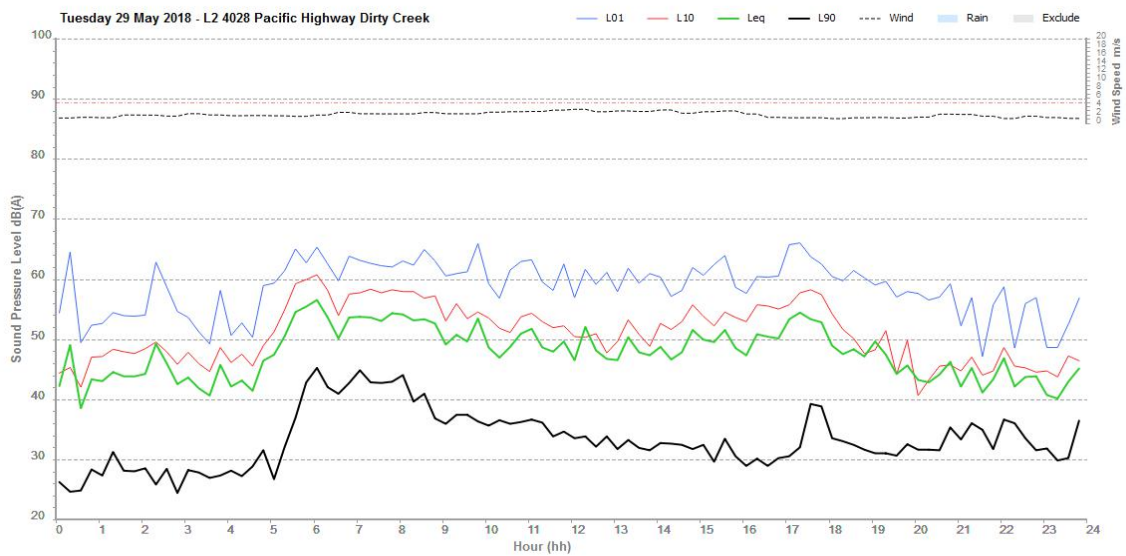
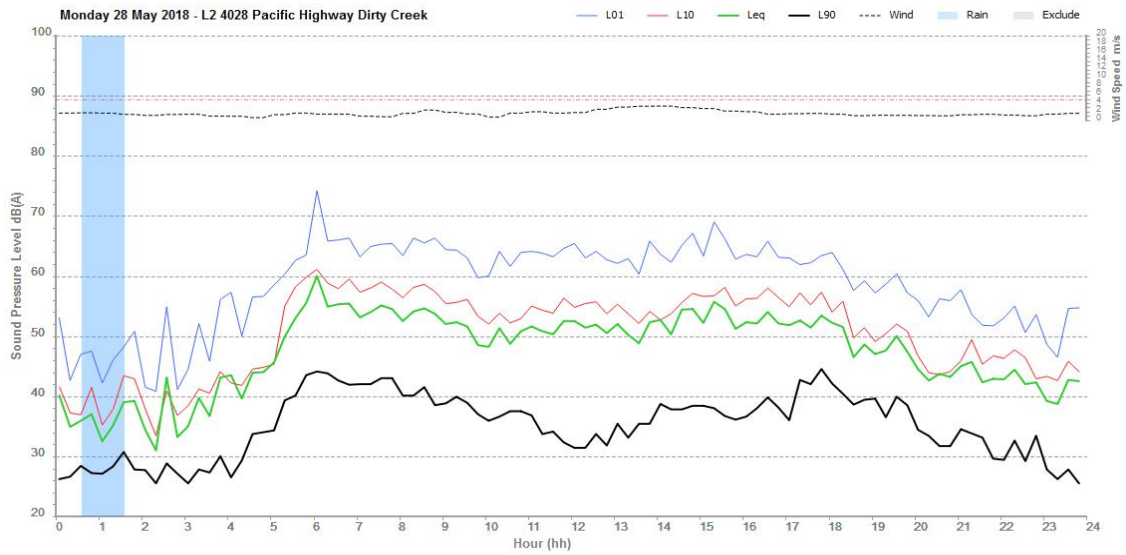
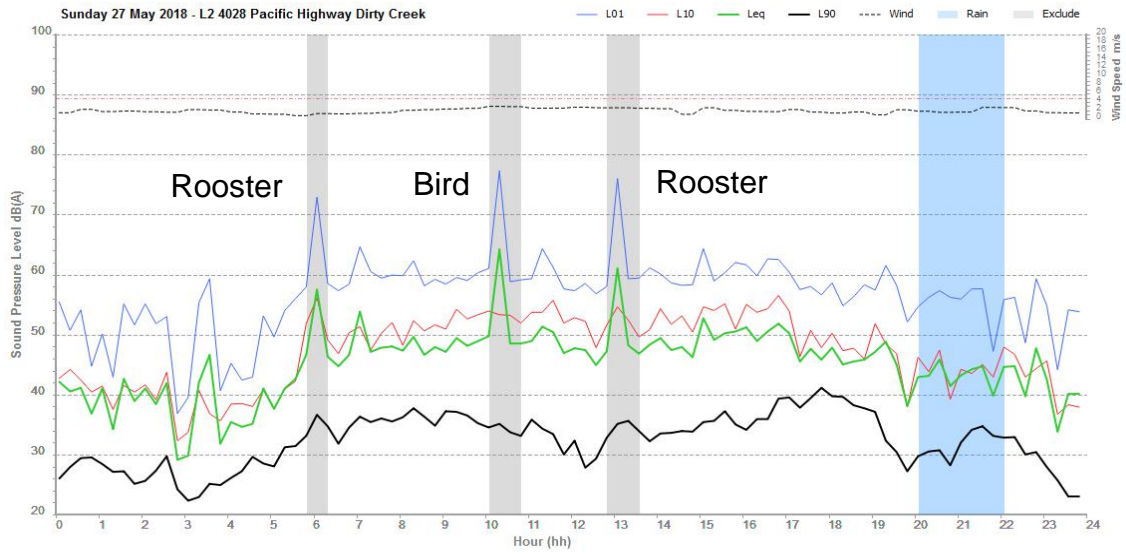
Logger Location Map



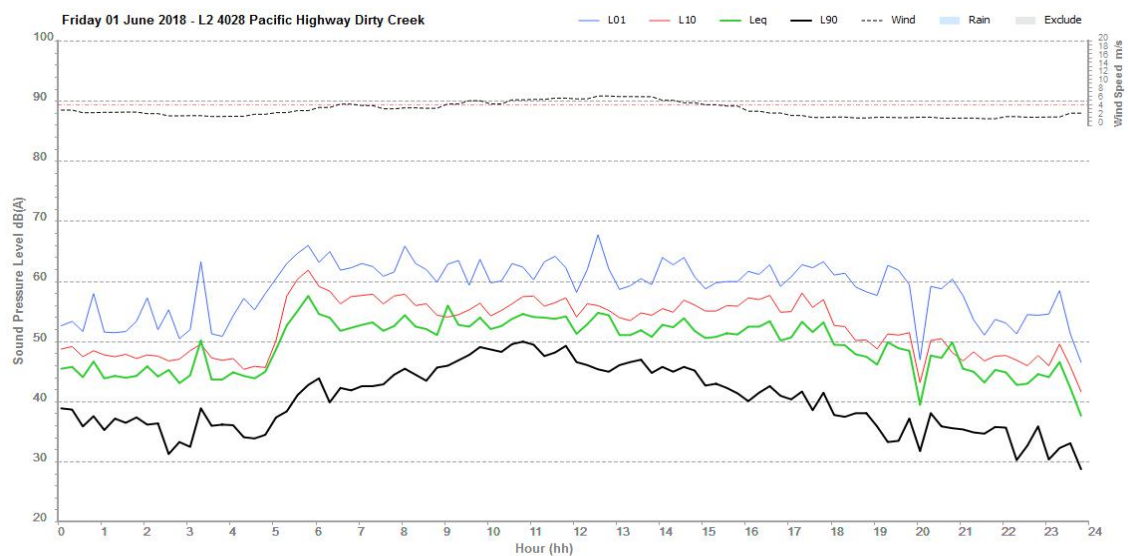
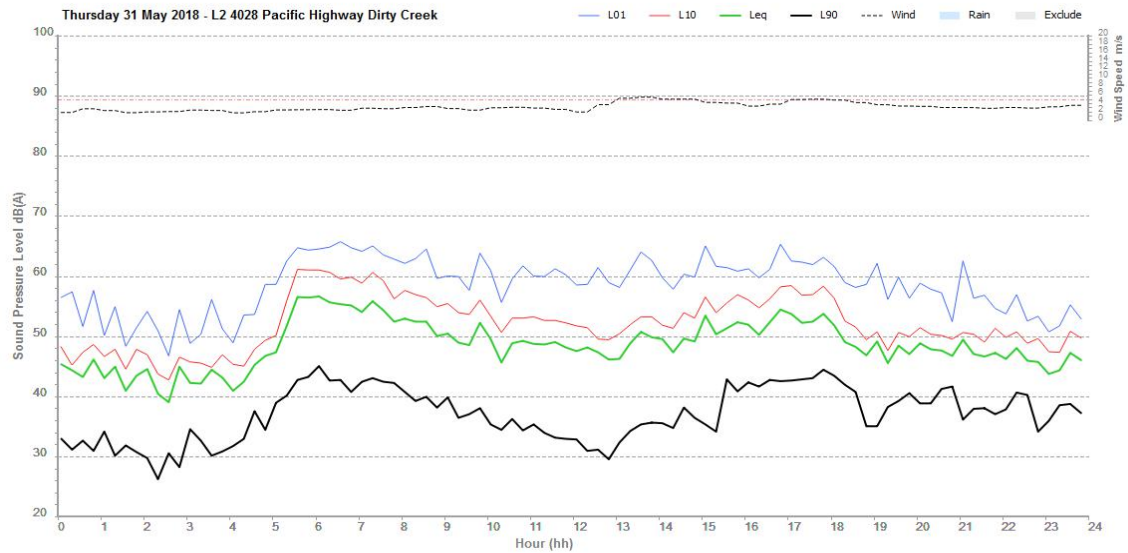
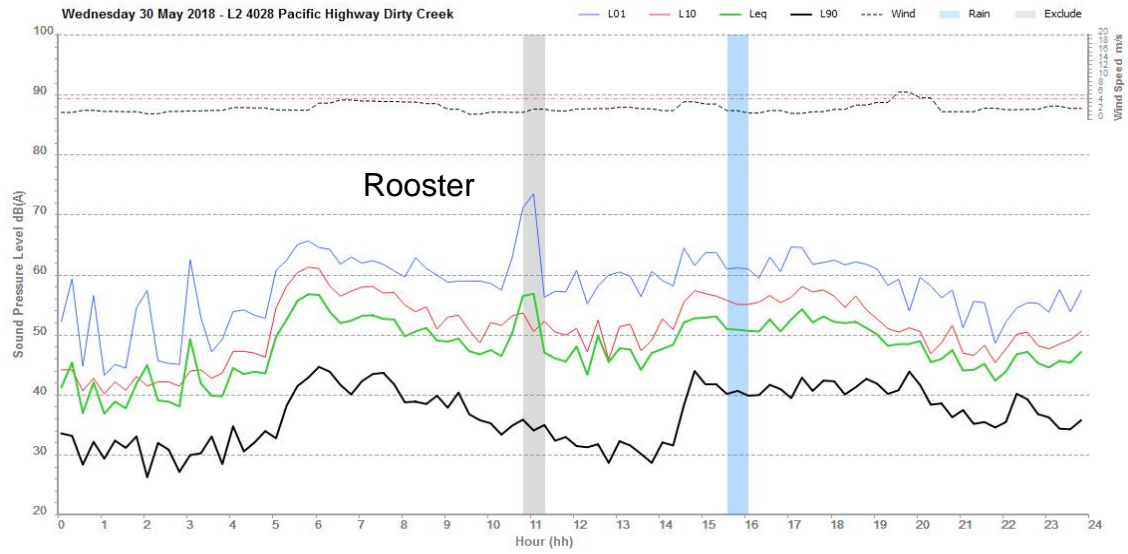
Logger Graphs



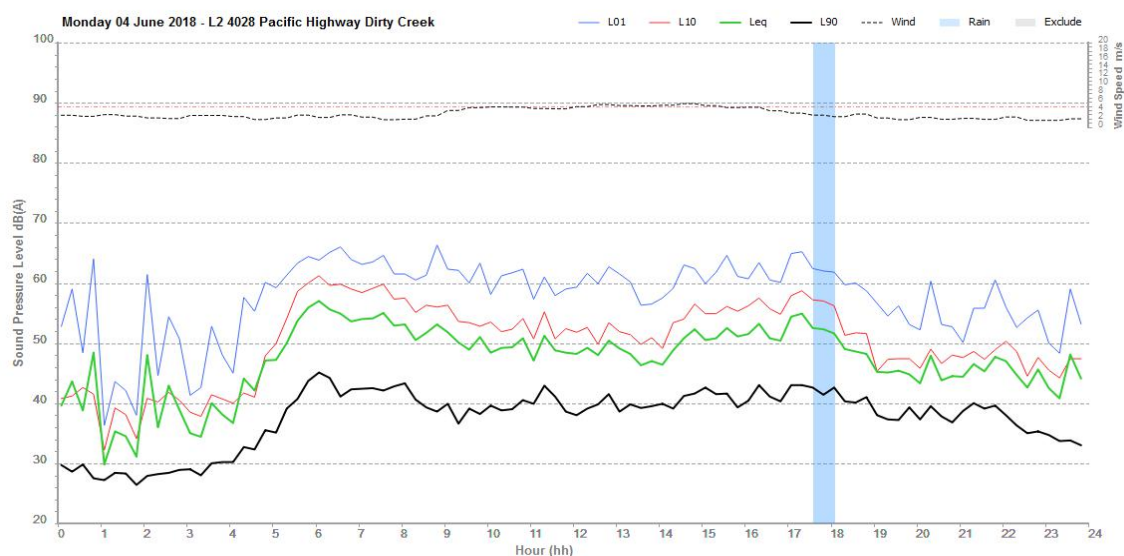
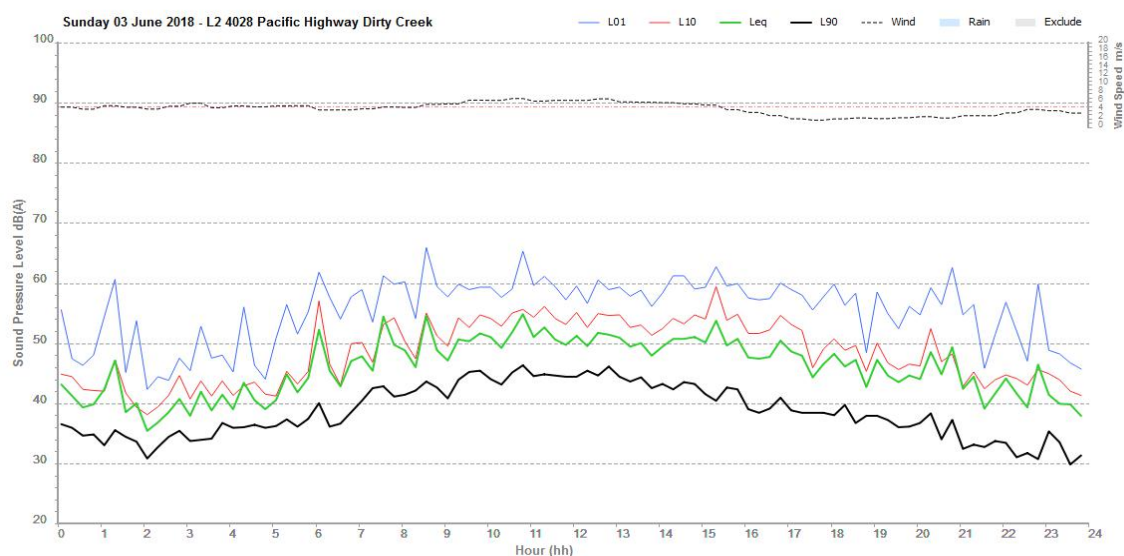
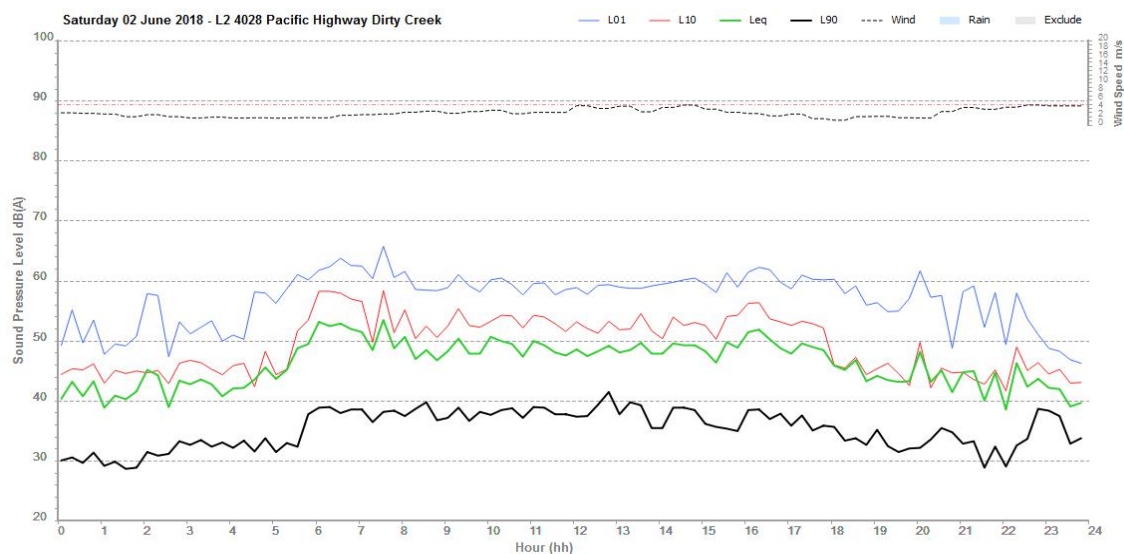
Logger Graphs



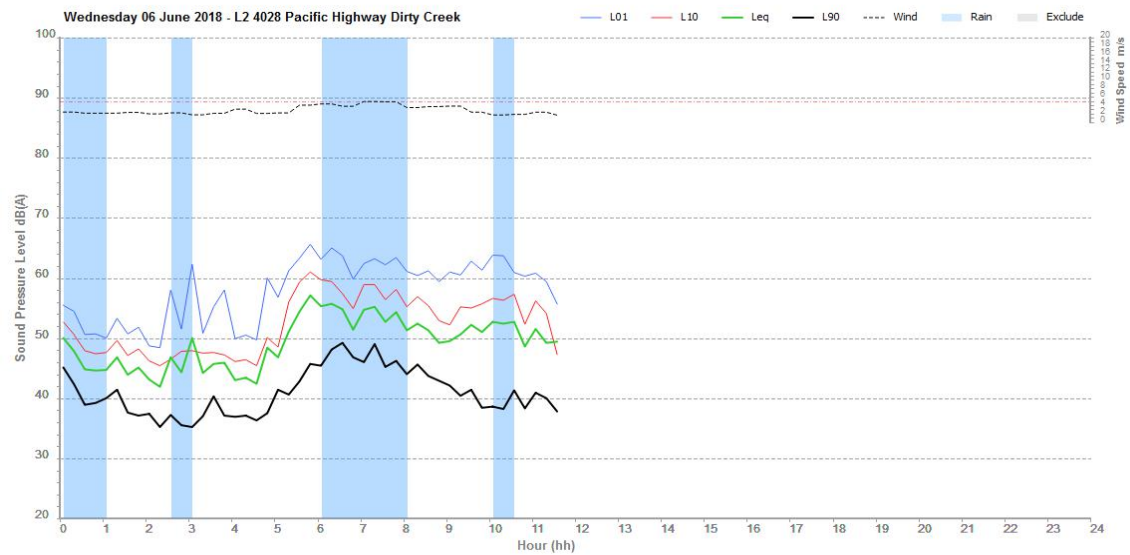
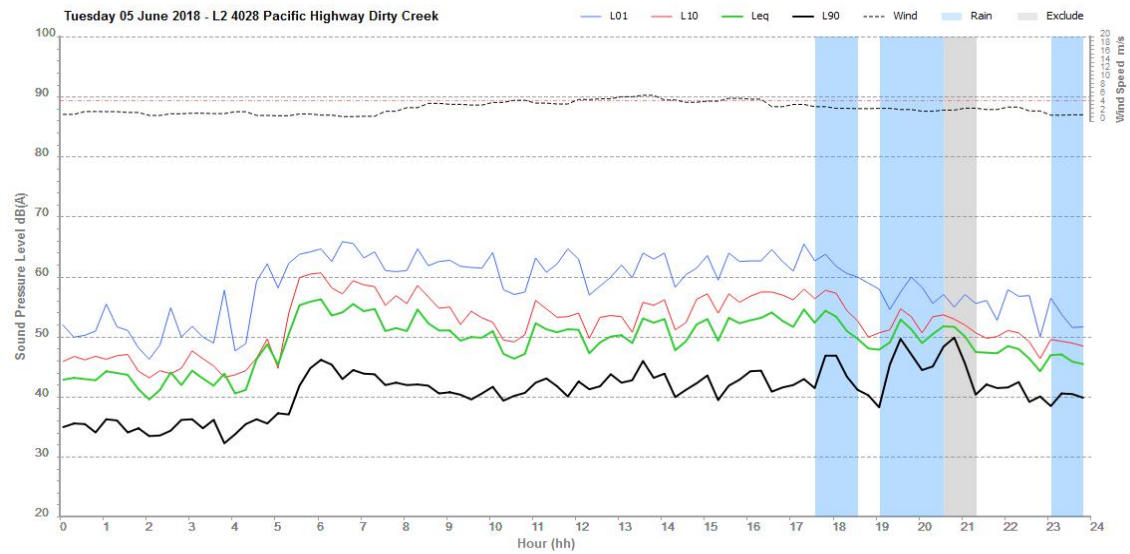
Logger Graphs



Logger Graphs



Logger Graphs



L3 - 22/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL52
 Serial No : 00876010
 Address: L3 11 Dunmar Lane, Halfway Creek
 Location: Side of Road
 Facade / Free Field: Free Field
 Environment: Dominant noise source: traffic on the Pacific Hwy. Other noise sources: some plant equipment operating across the road, only audible in absence of traffic 54 dB(A) max. Typical truck pass-by noise level: 74-82 dB(A) max, Typical car pass-by noise levels: 65-75 dB(A) max.

Logger Setup Photo



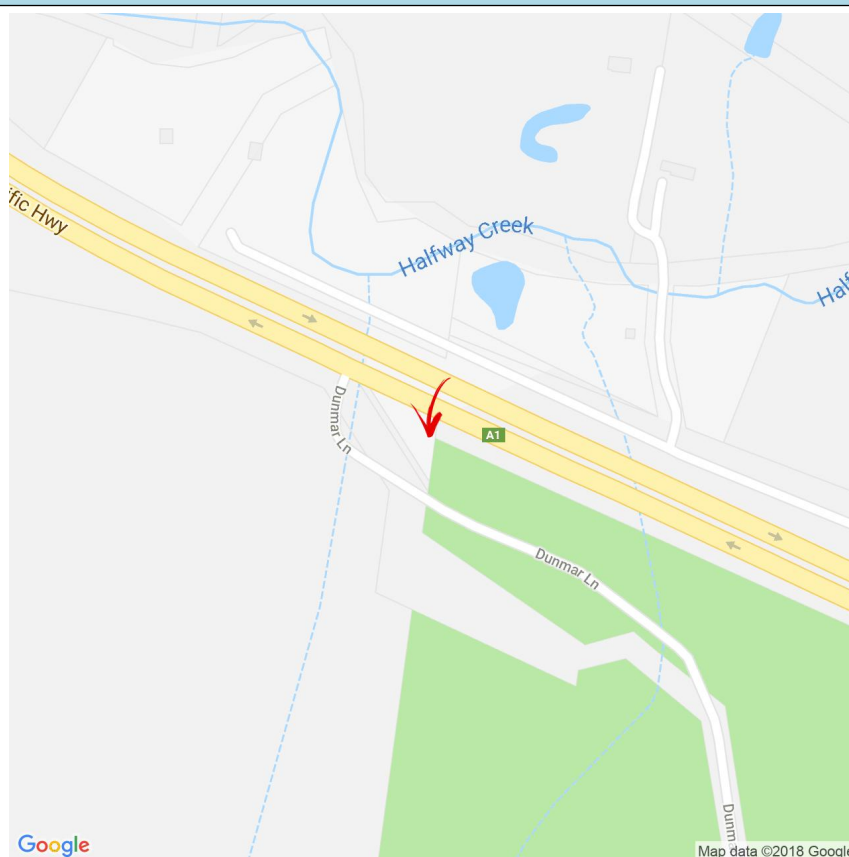
INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

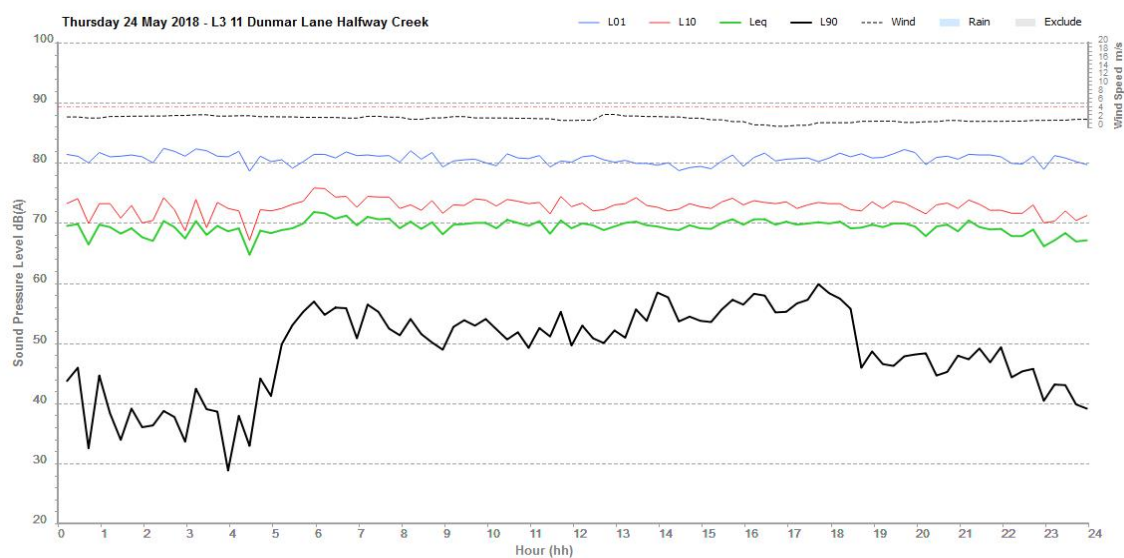
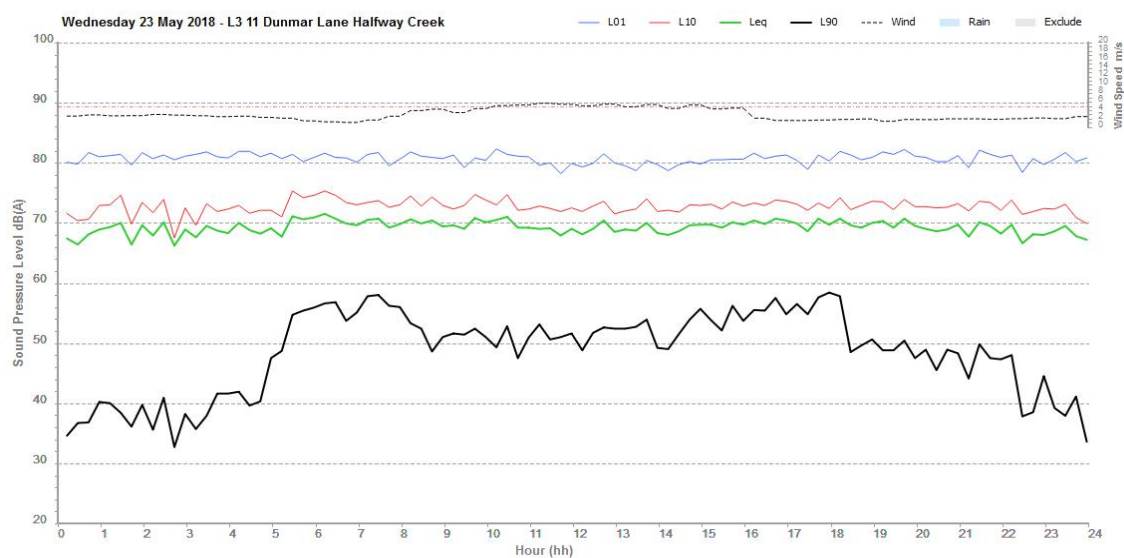
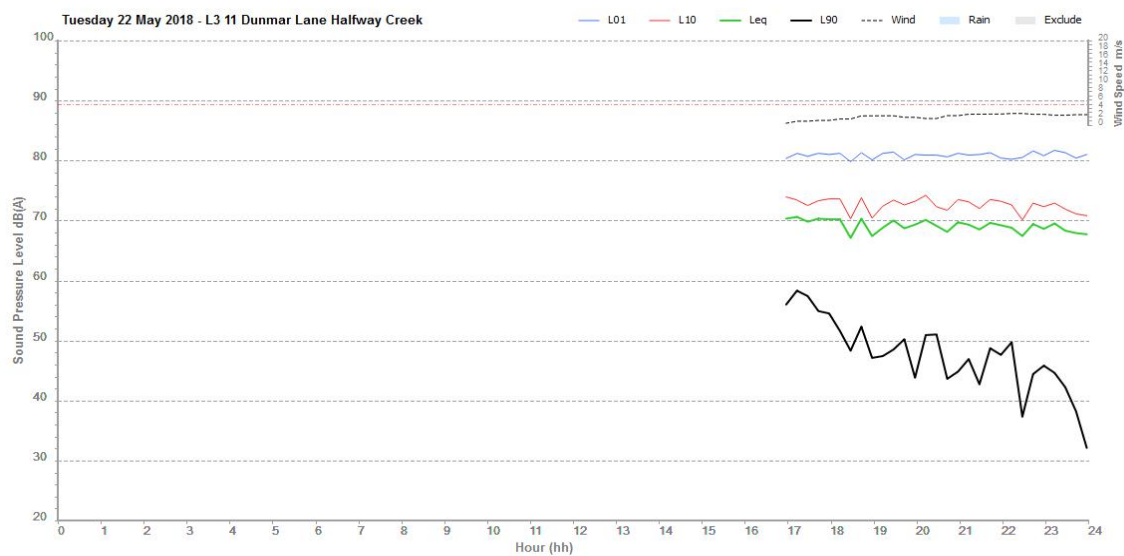
RNP Noise Level, dB(A)

	L _{Aeq(1hr)}	L _{Aeq(period)}
Day (7am - 10 pm)	70	69
Night (10pm - 7am)	70	68

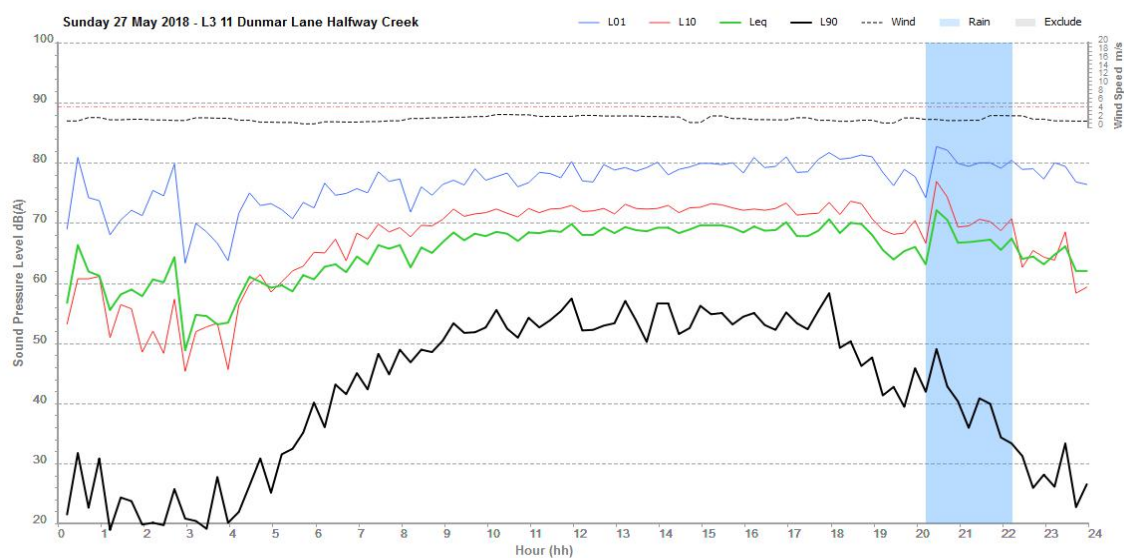
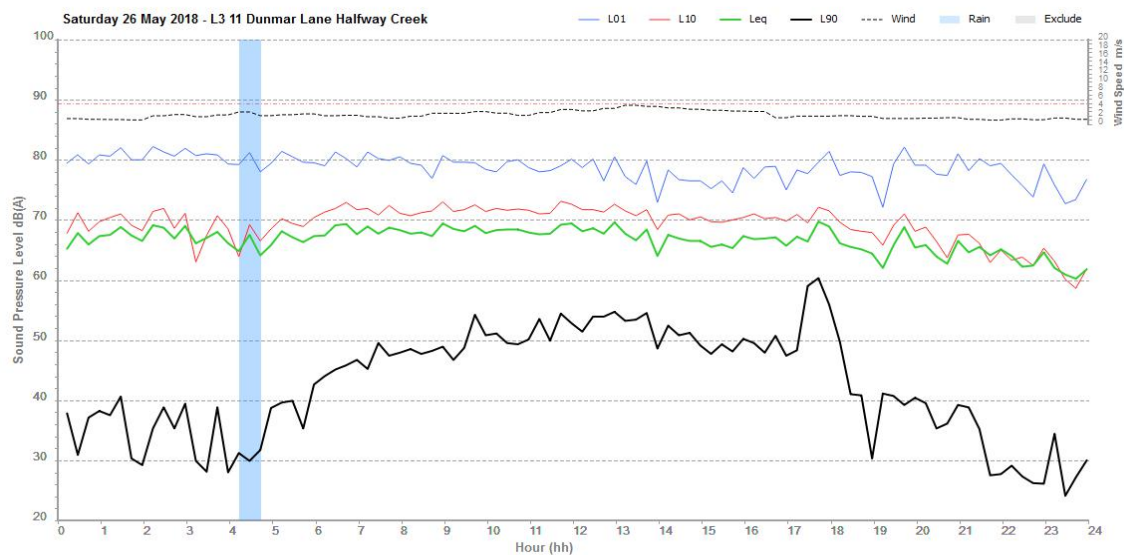
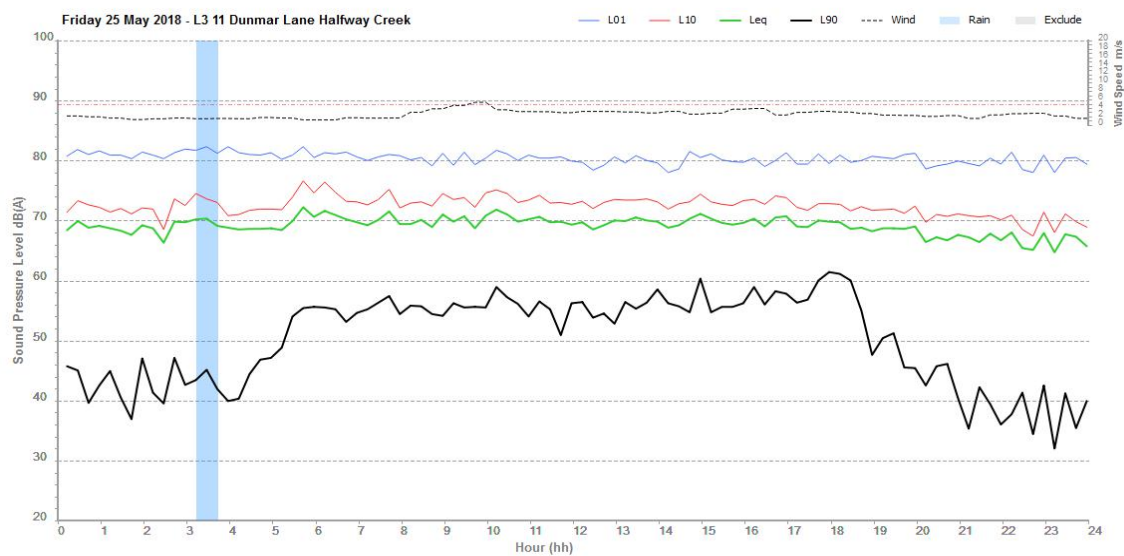
Logger Location Map



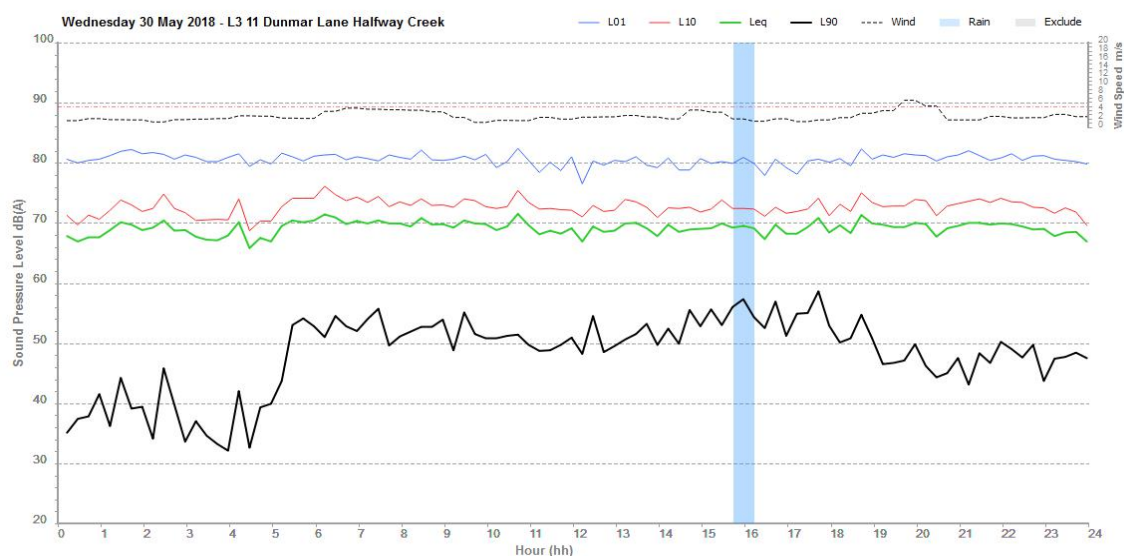
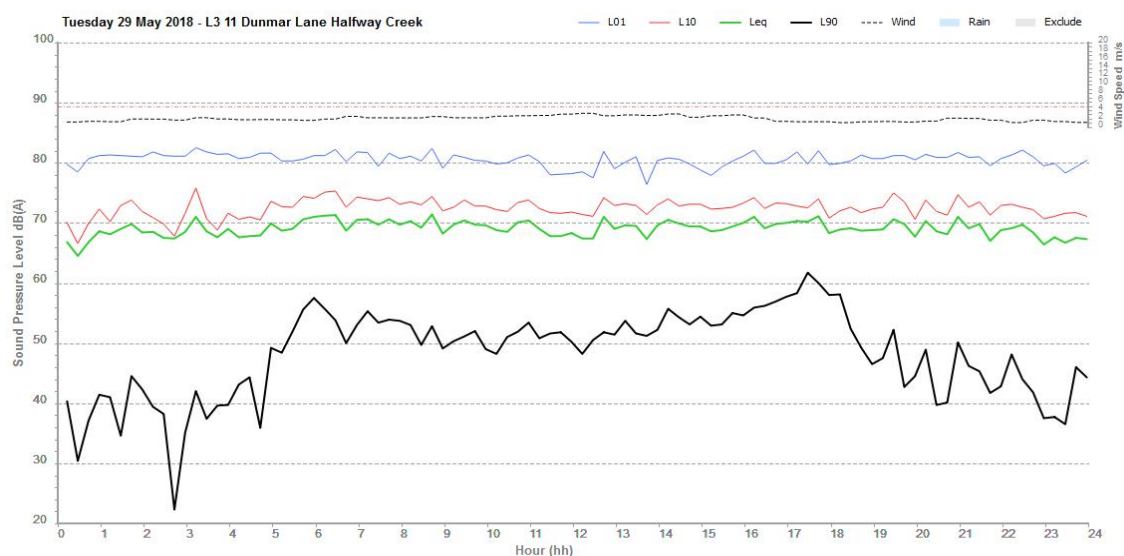
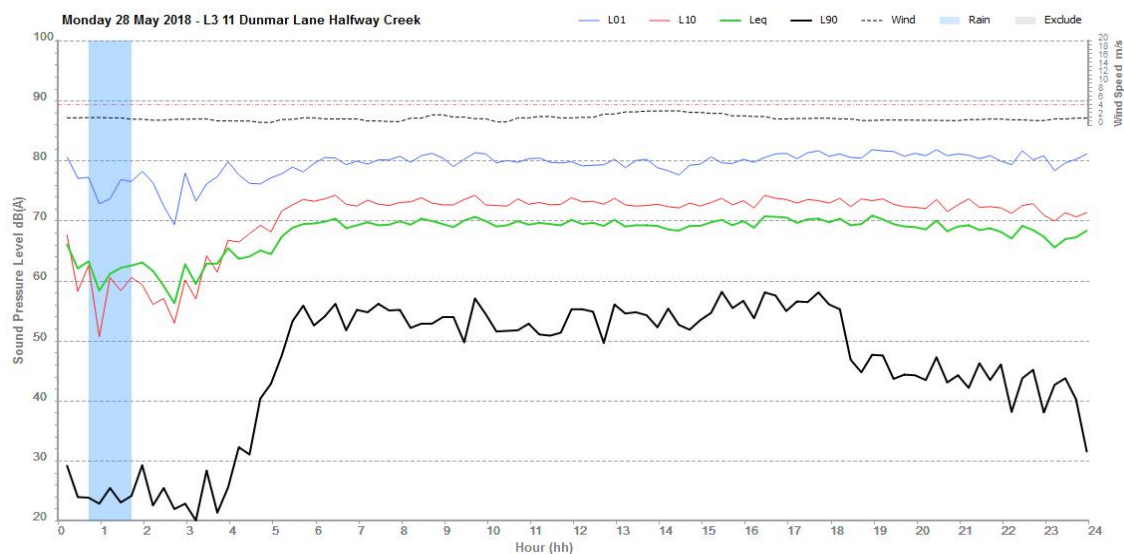
Logger Graphs



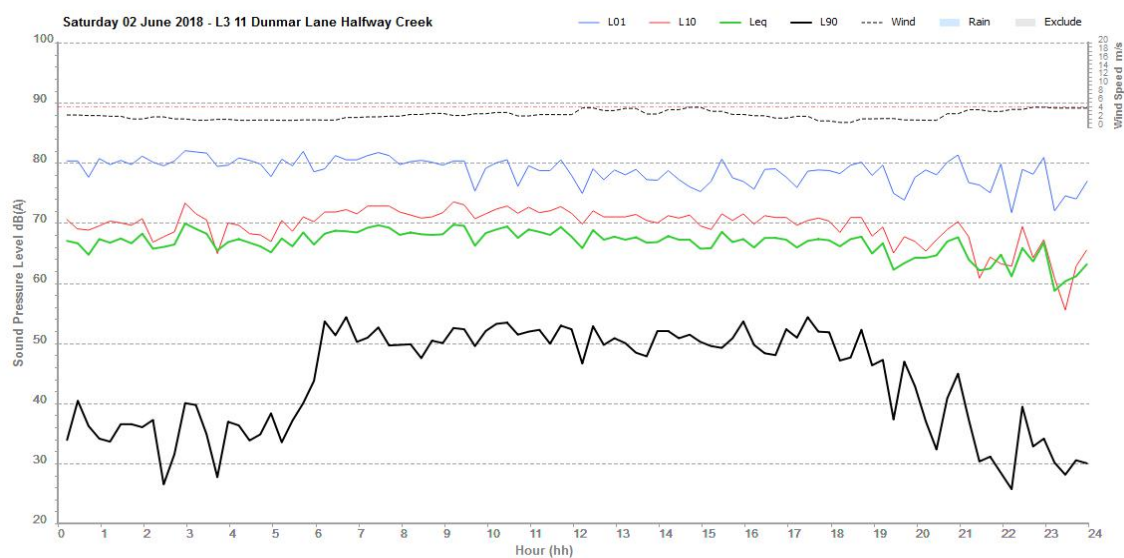
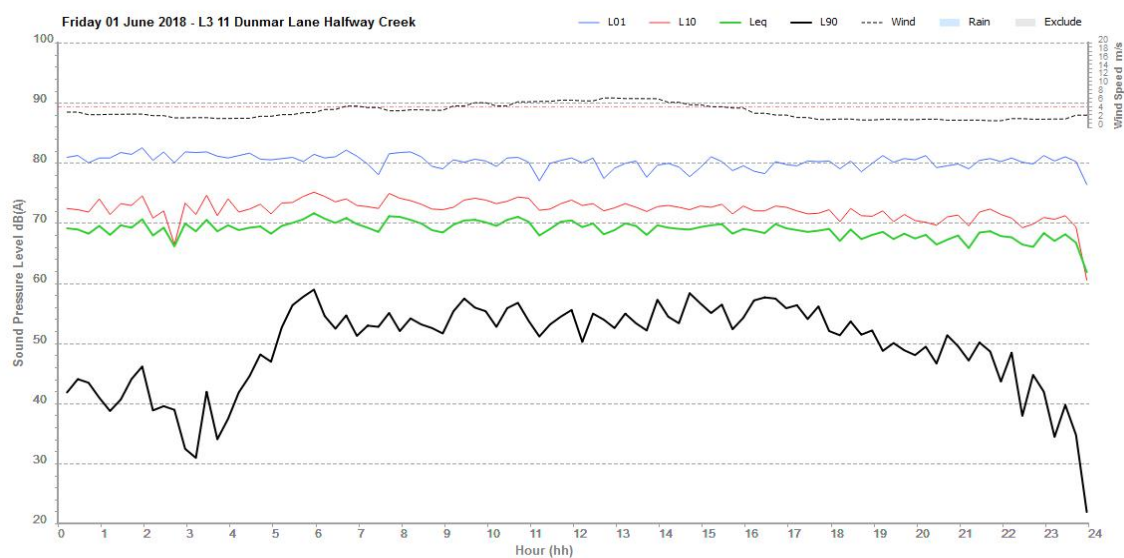
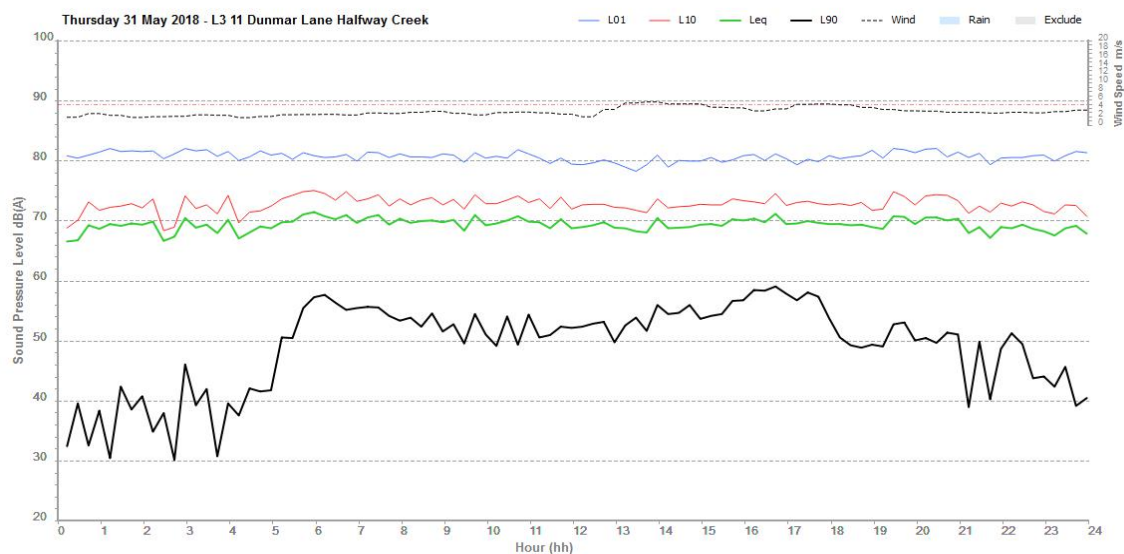
Logger Graphs



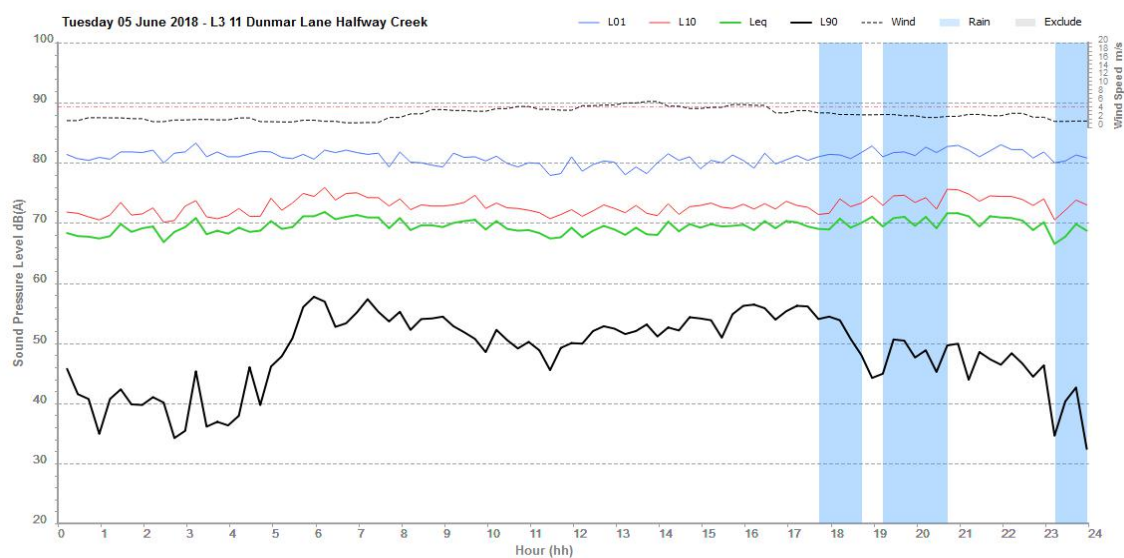
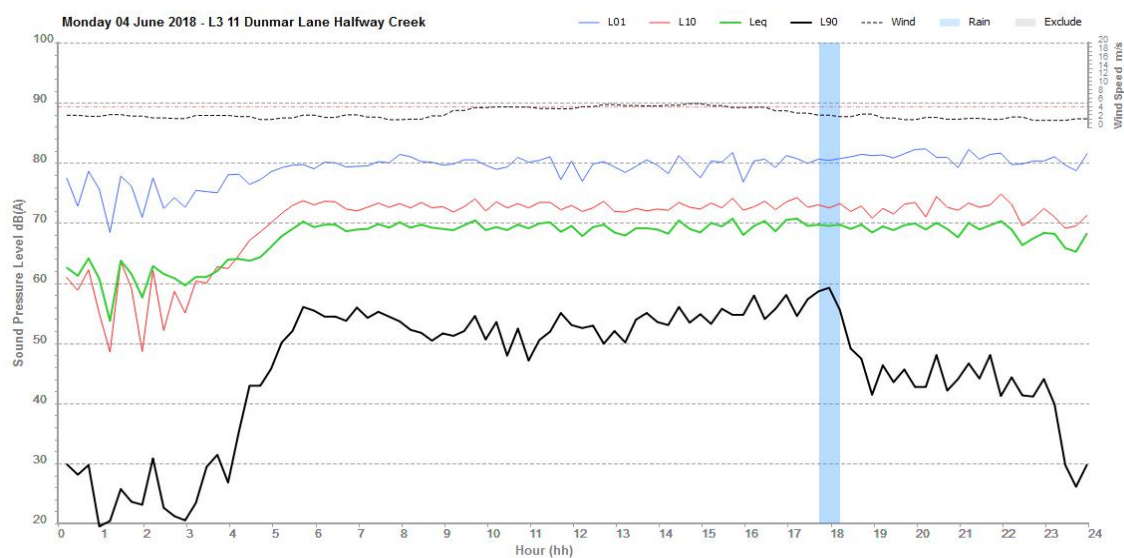
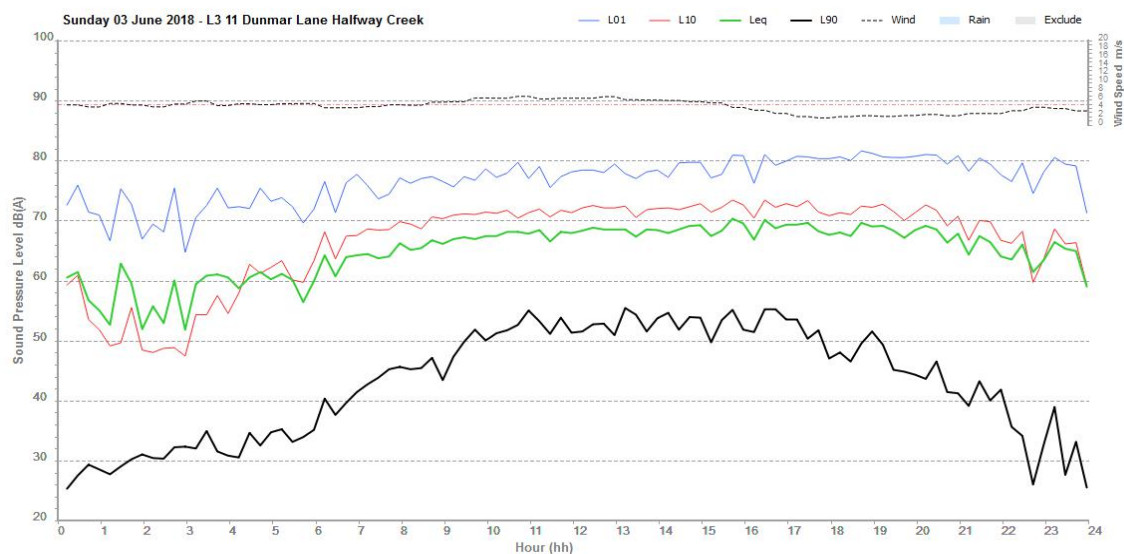
Logger Graphs



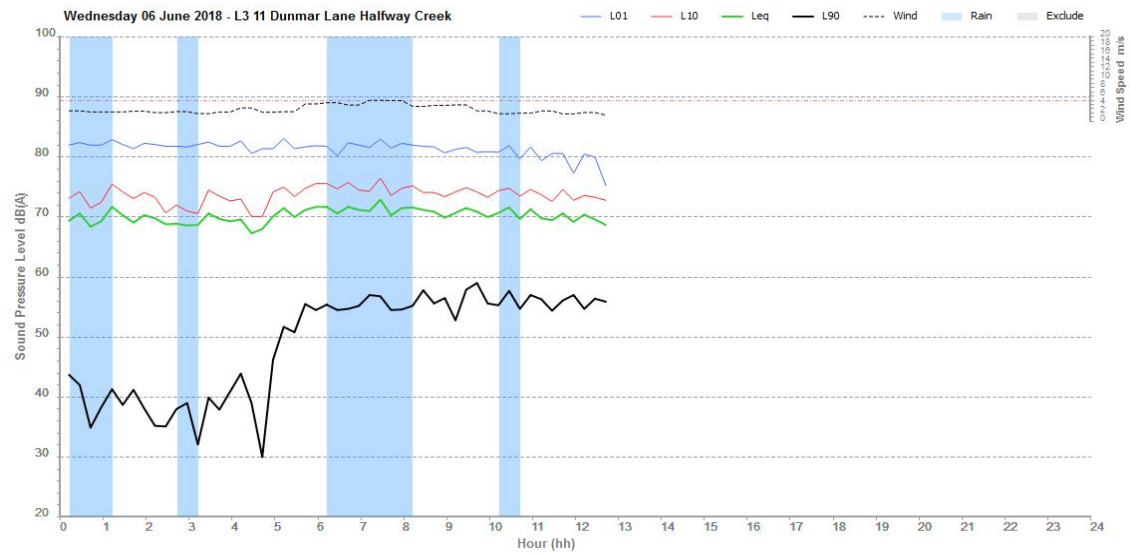
Logger Graphs



Logger Graphs



Logger Graphs



L4 - 23/05/18 - 05/06/18

Logger Setup

Logger Type: Ngara

Serial No : 87807D

Address: L4 5092 Pacific Highway, Halfway Creek

Location: In Field

Facade / Free Field: Free Field

Environment: Dominant noise source: traffic on the Pacific Highway. Other noise sources: Bird noise inaudible over road traffic. Typical traffic pass-by noise level: 60-65 dB(A) max.

Logger Setup Photo



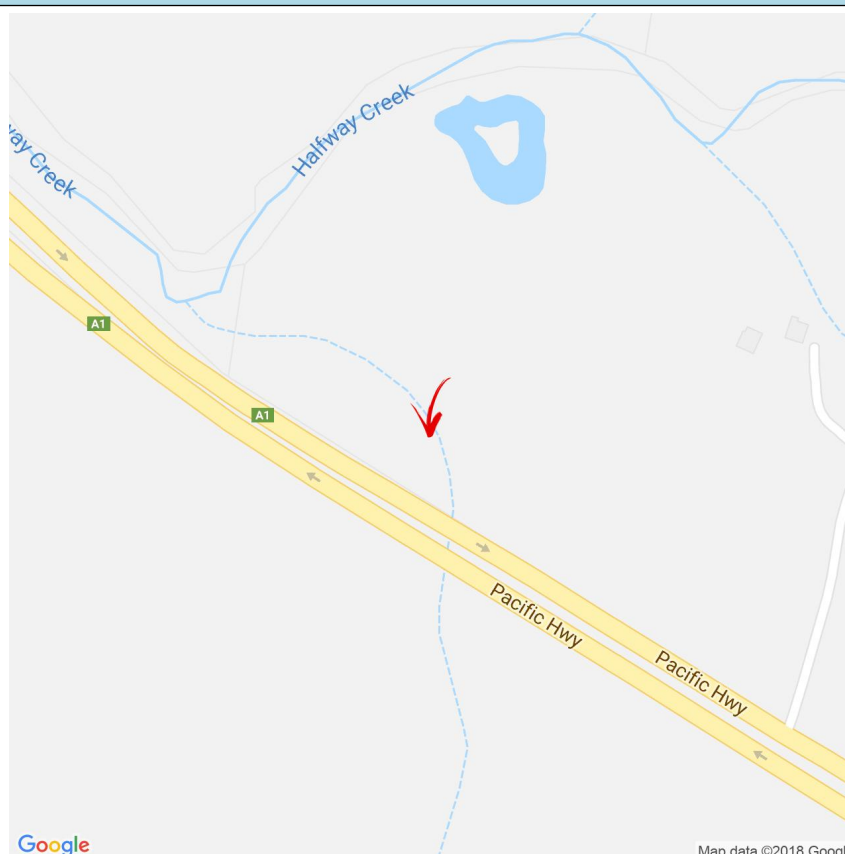
INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

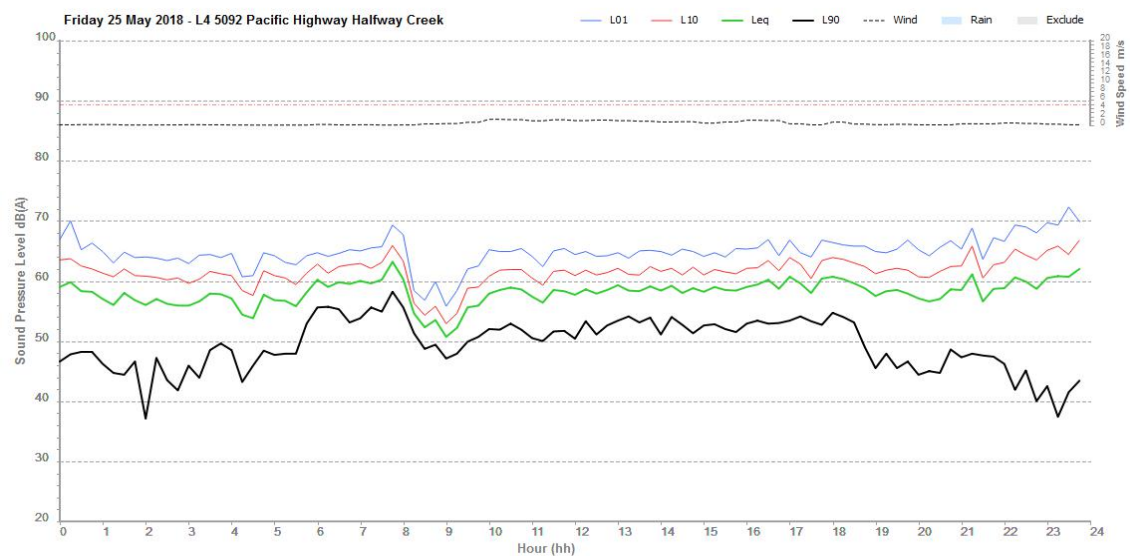
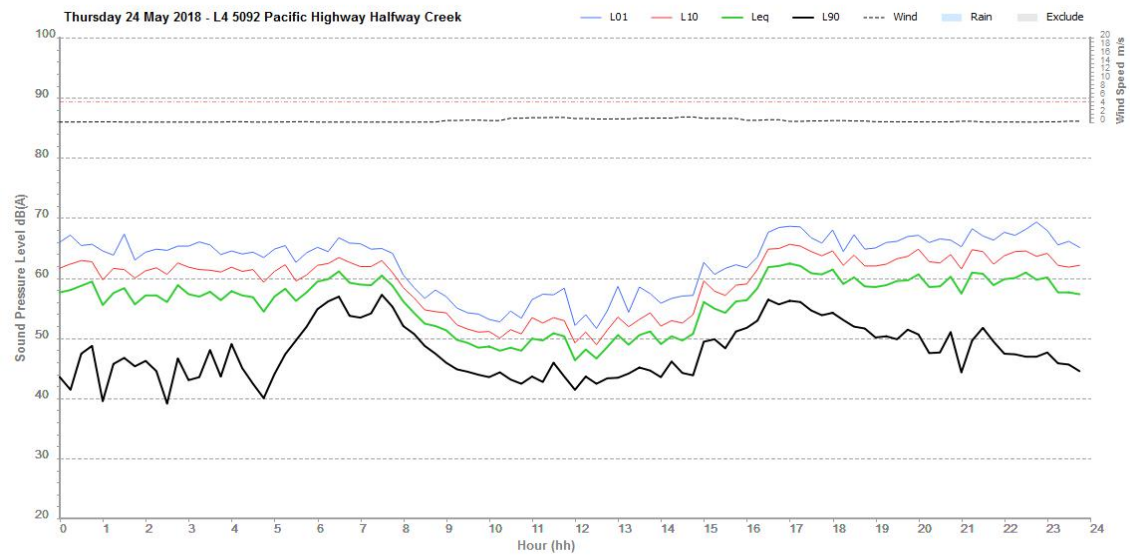
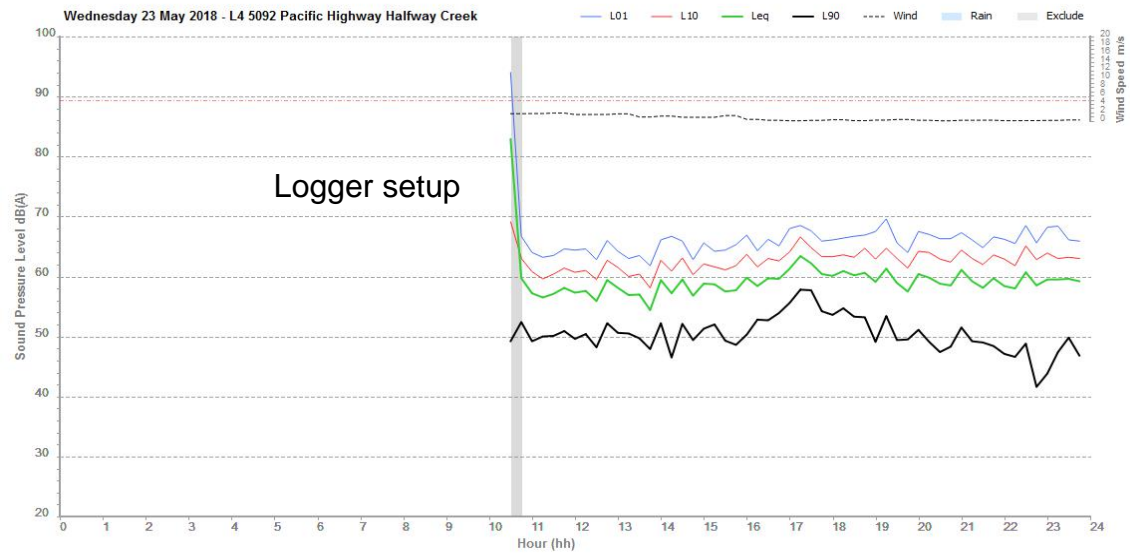
RNP Noise Level, dB(A)

	$L_{Aeq(1hr)}$	$L_{Aeq(period)}$
Day (7am - 10 pm)	60	58
Night (10pm - 7am)	59	57

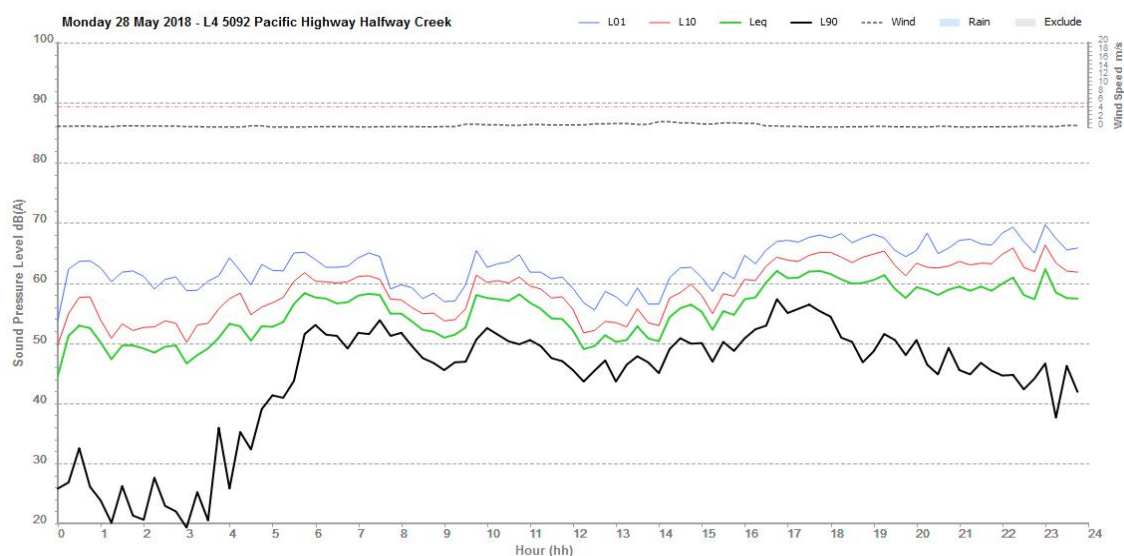
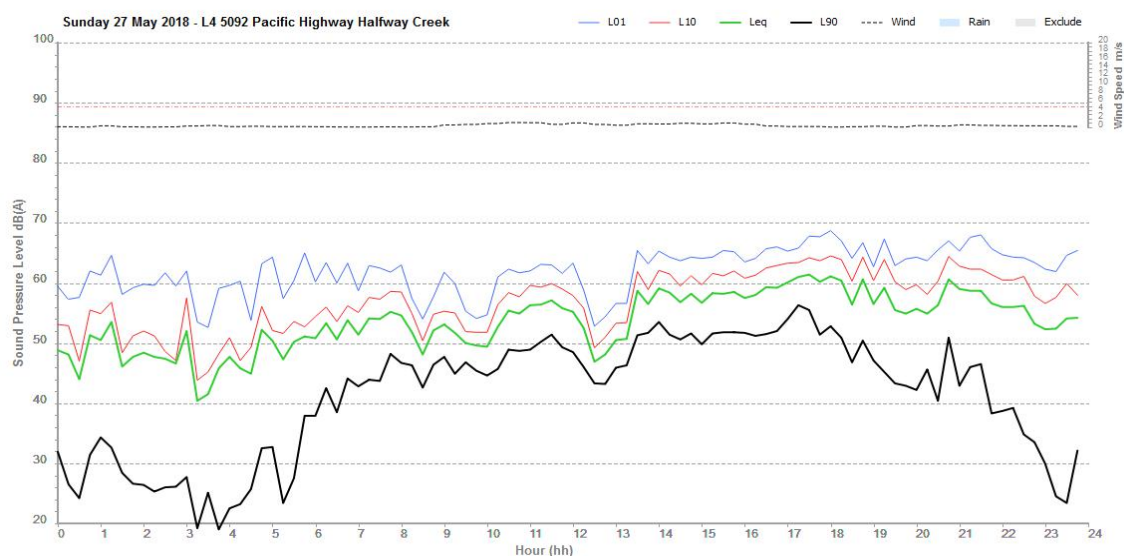
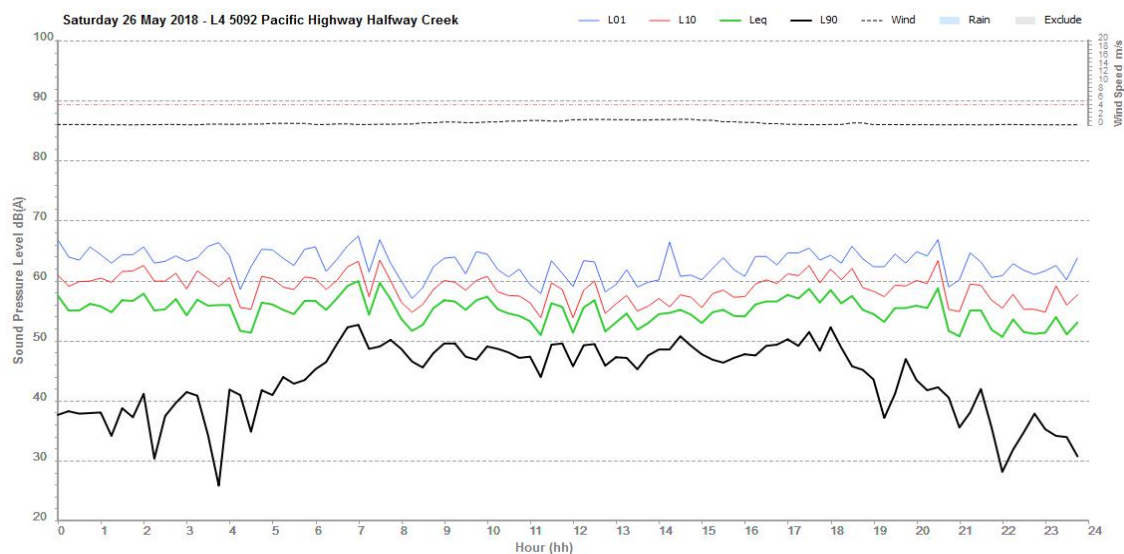
Logger Location Map



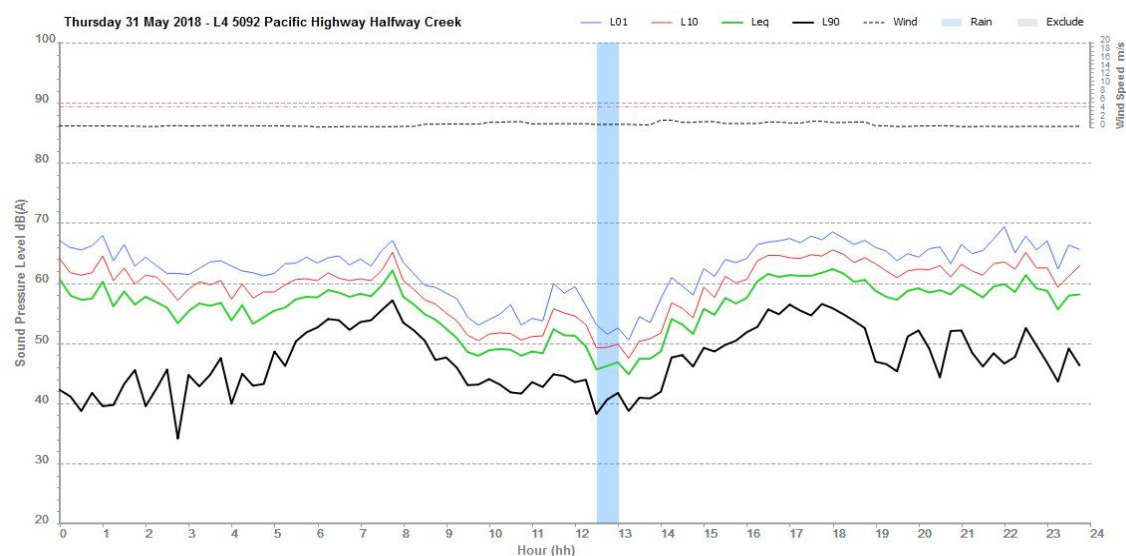
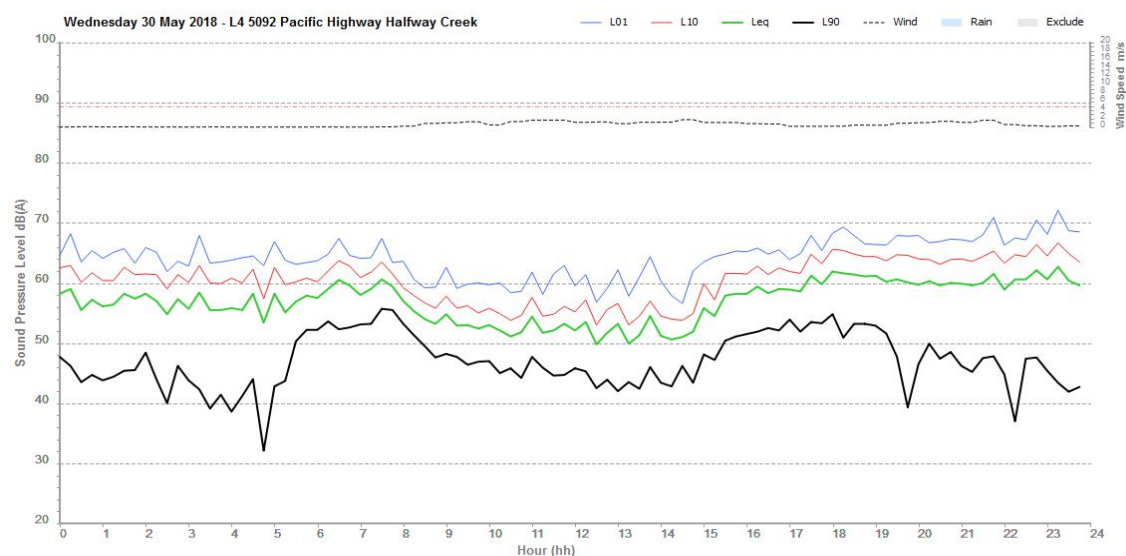
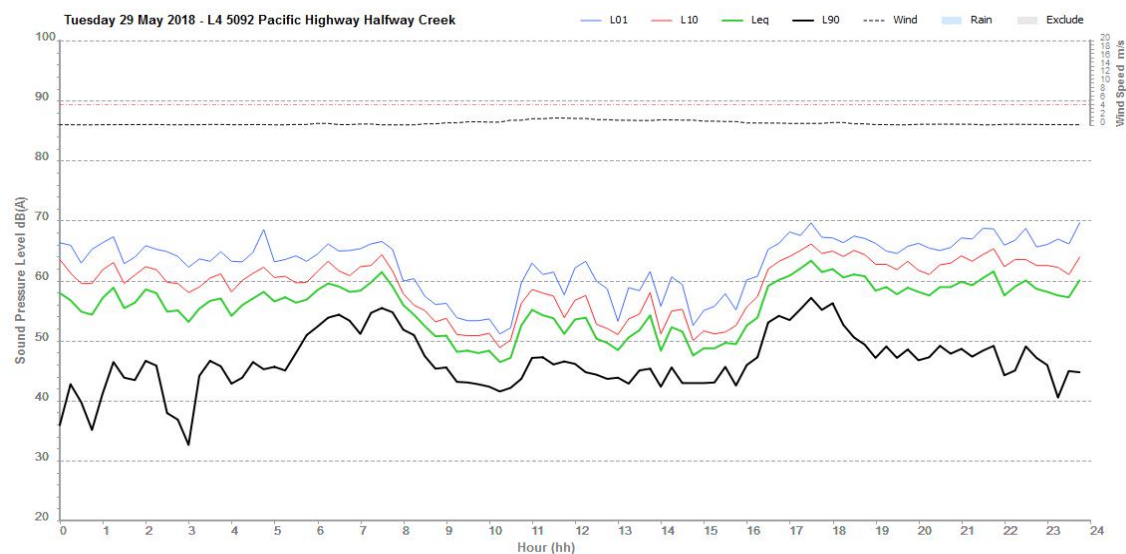
Logger Graphs



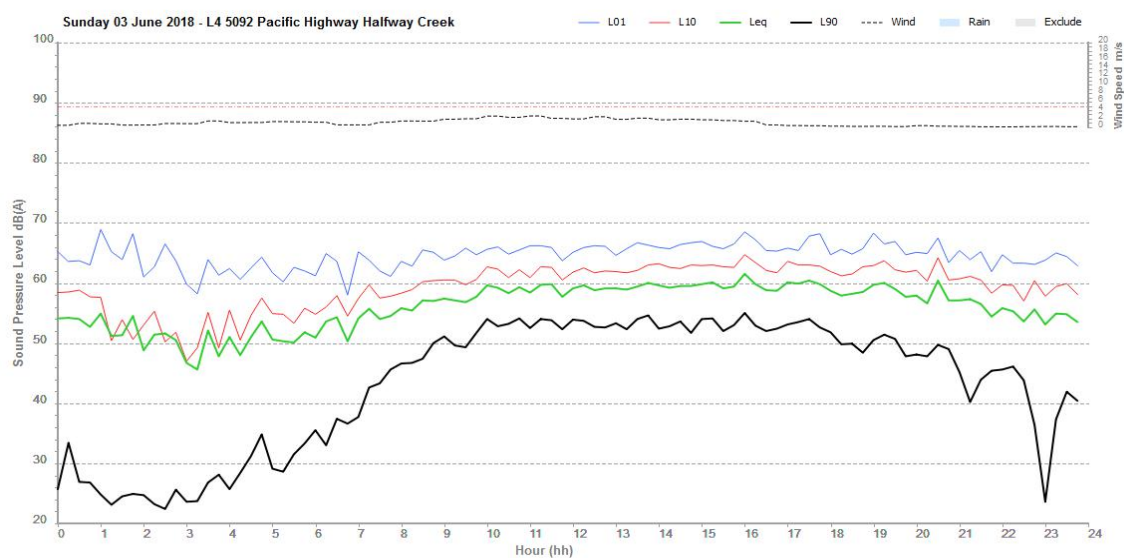
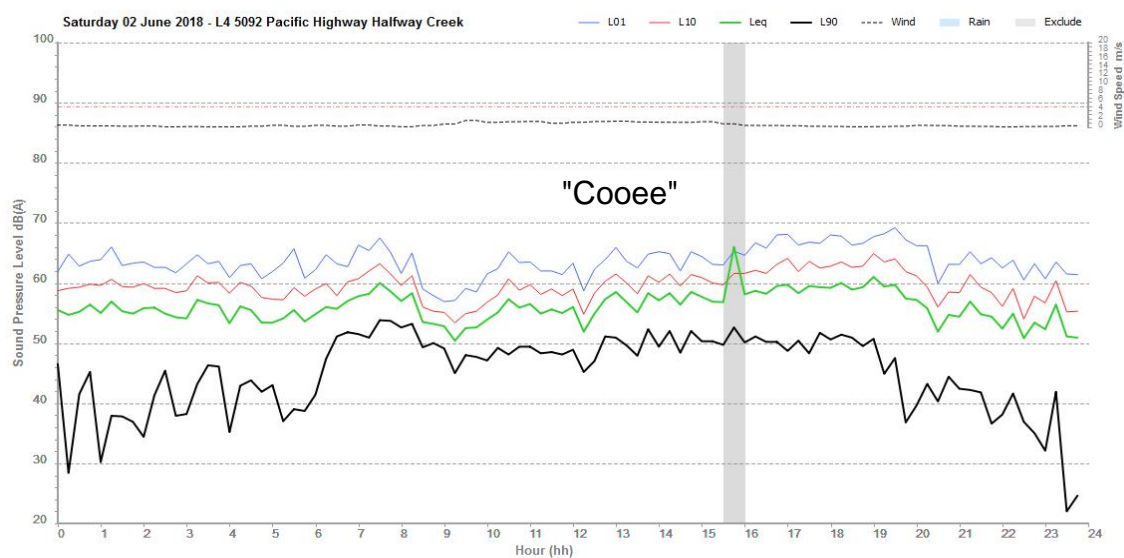
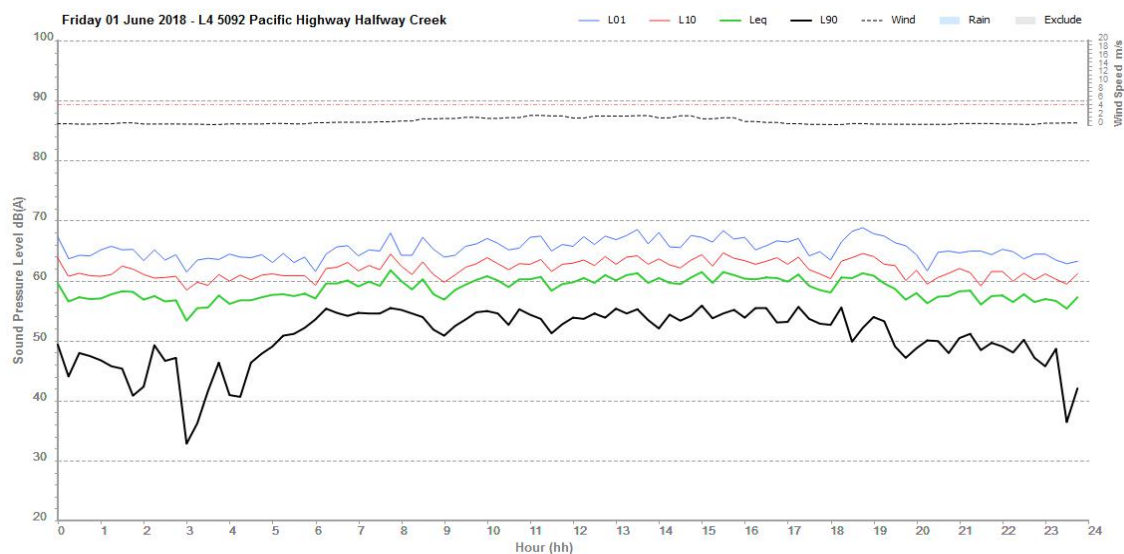
Logger Graphs



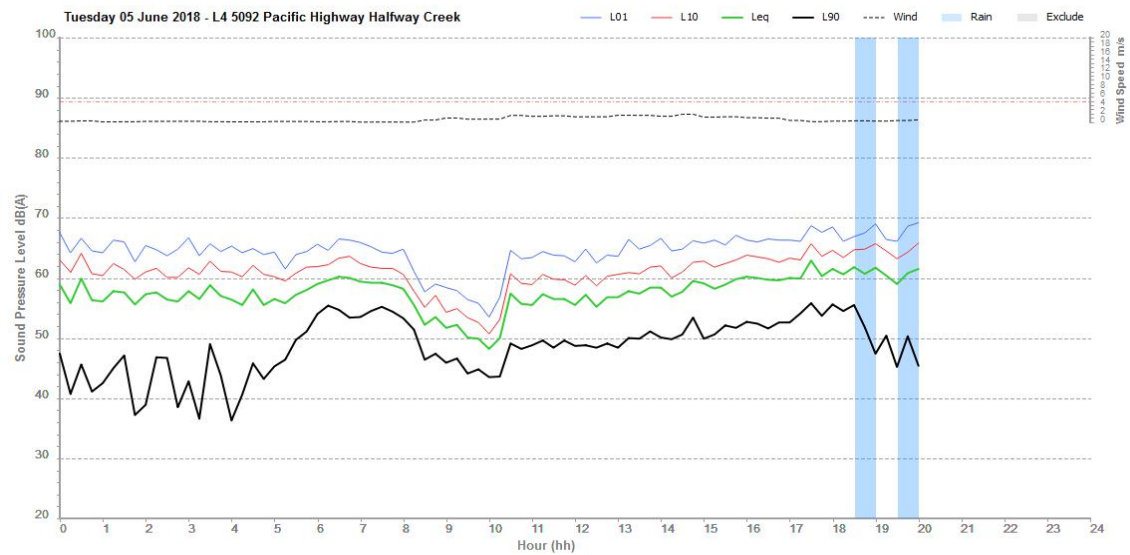
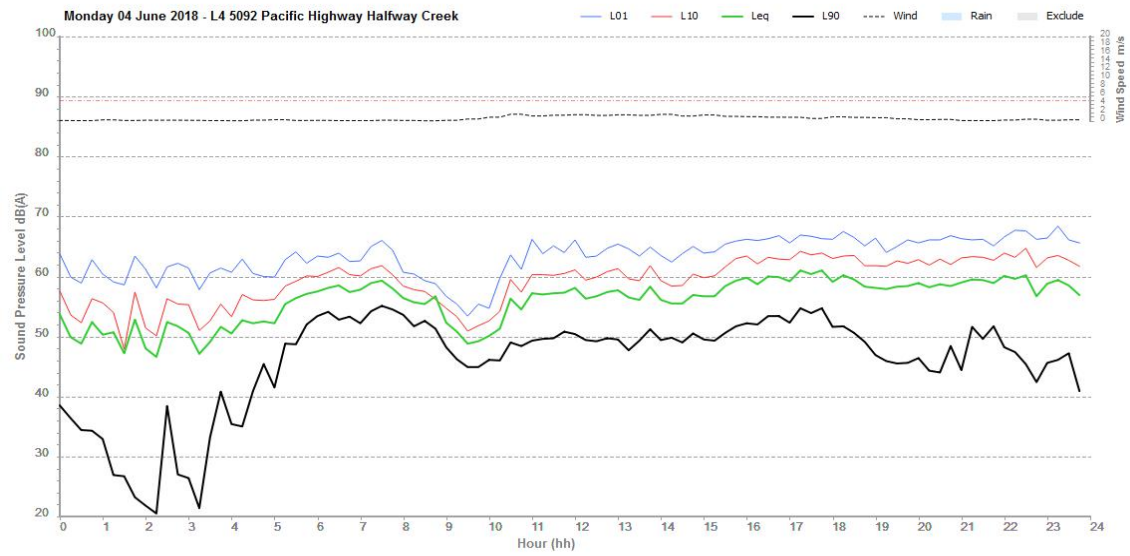
Logger Graphs



Logger Graphs



Logger Graphs



L5 - 22/05/18 - 06/06/18

Logger Setup

Logger Type: Cirrus 171
 Serial No : G061710
 Address: L5 Near Kungala Road, Halfway Creek
 Location: Side of Road
 Facade / Free Field: Free Field
 Environment: Dominant noise source: traffic on the Pacific Highway. Other noise sources: bird noise audible in absence of traffic. Typical truck pass-by noise level: 80 dB(A) max. Typical car pass-by noise levels: 70 dB(A) max.

Logger Setup Photo



INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

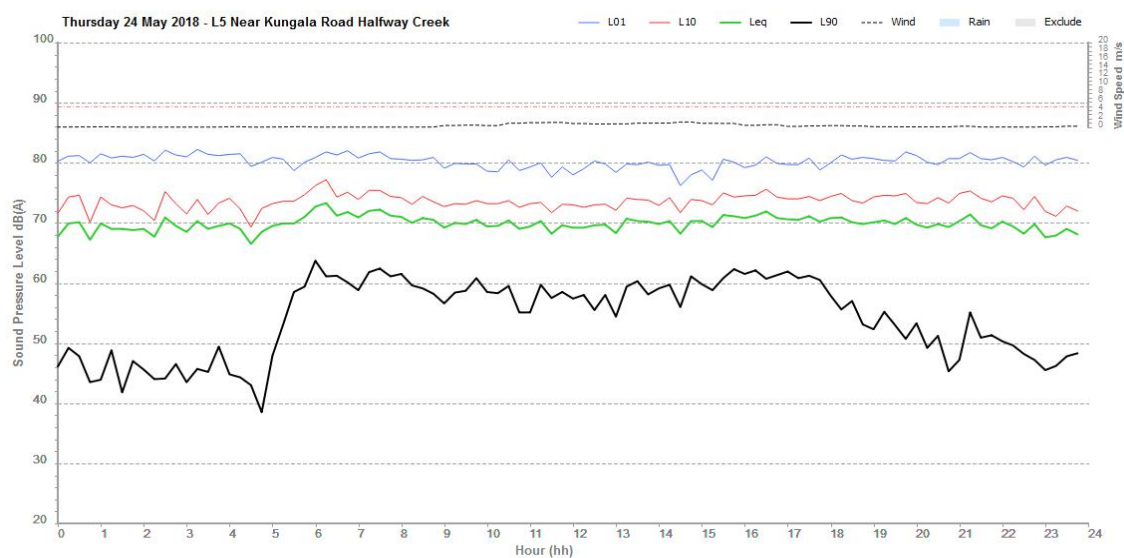
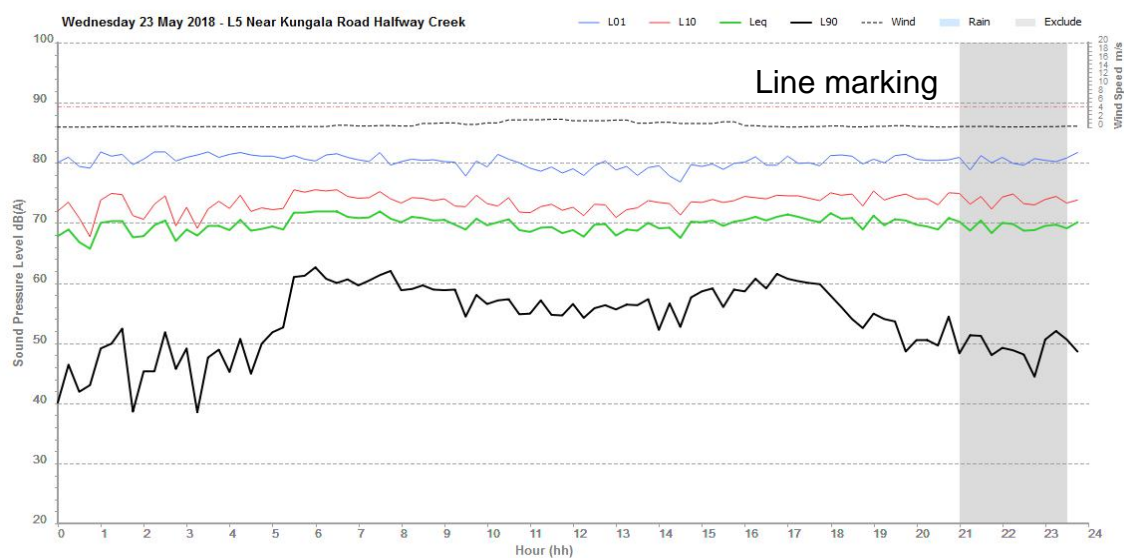
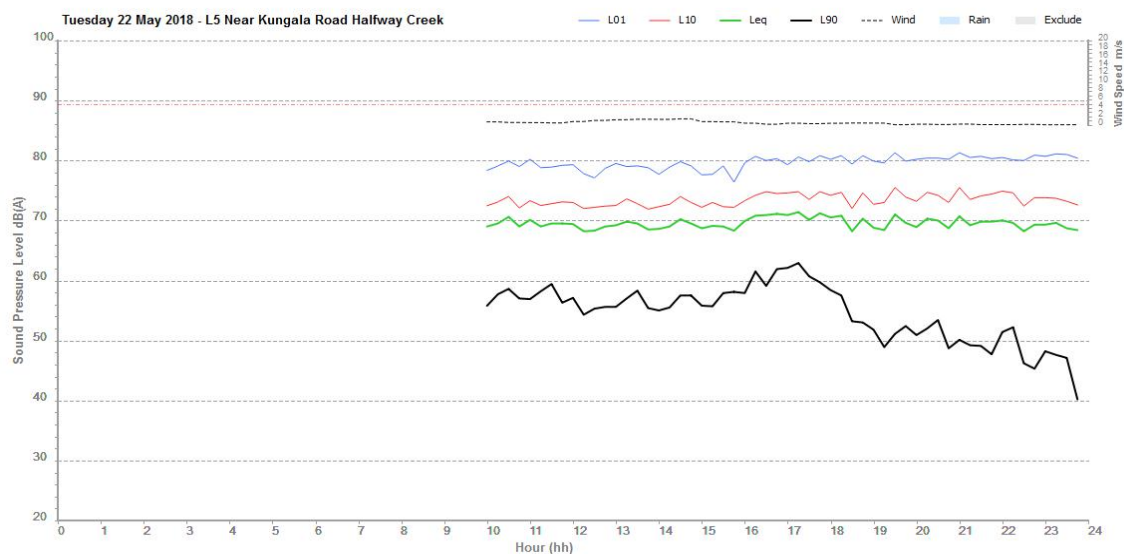
RNP Noise Level, dB(A)

	L _{Aeq(1hr)}	L _{Aeq(period)}
Day (7am - 10 pm)	71	70
Night (10pm - 7am)	71	68

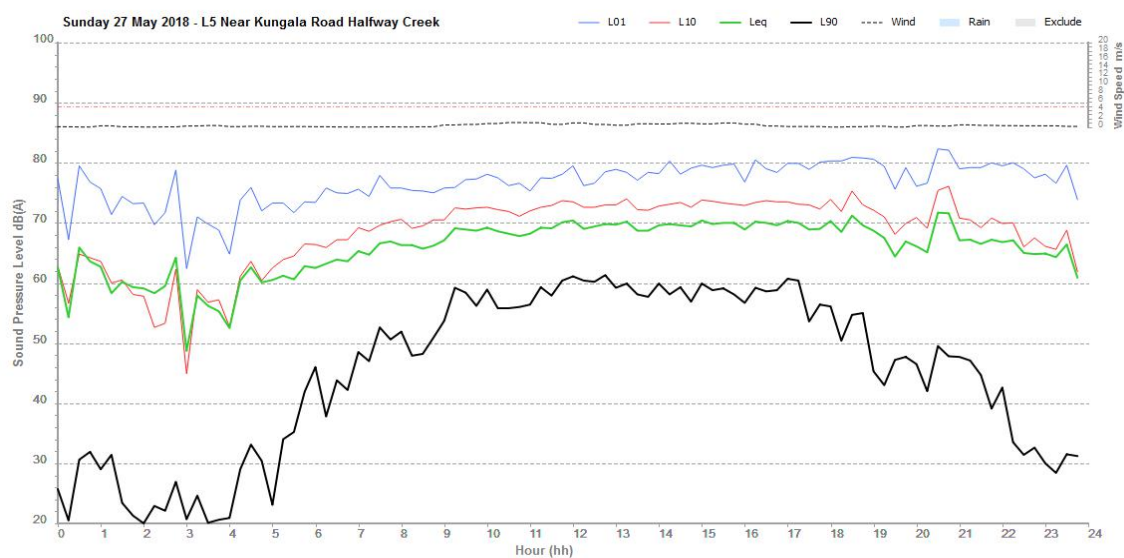
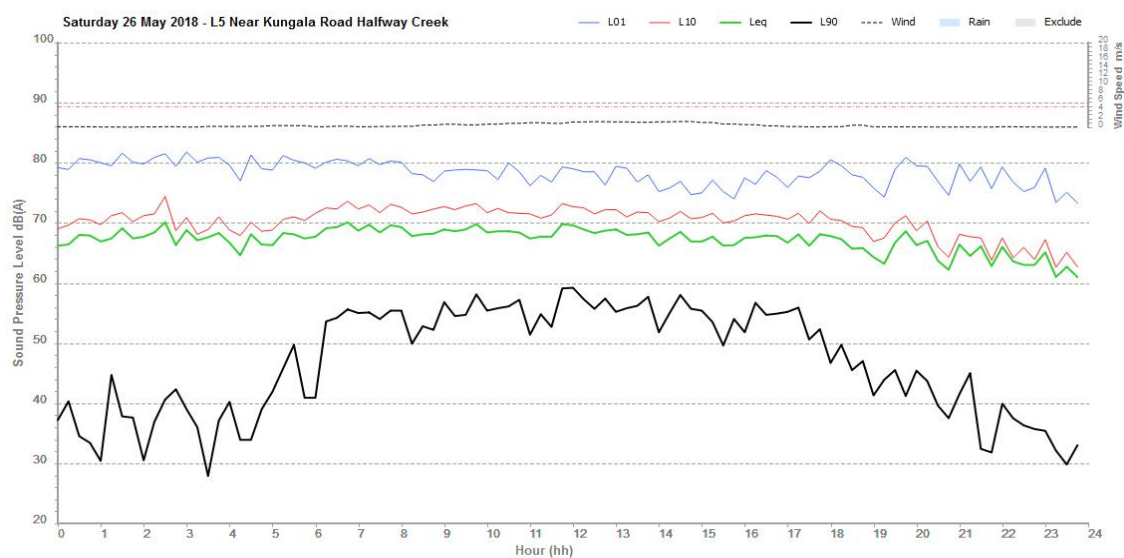
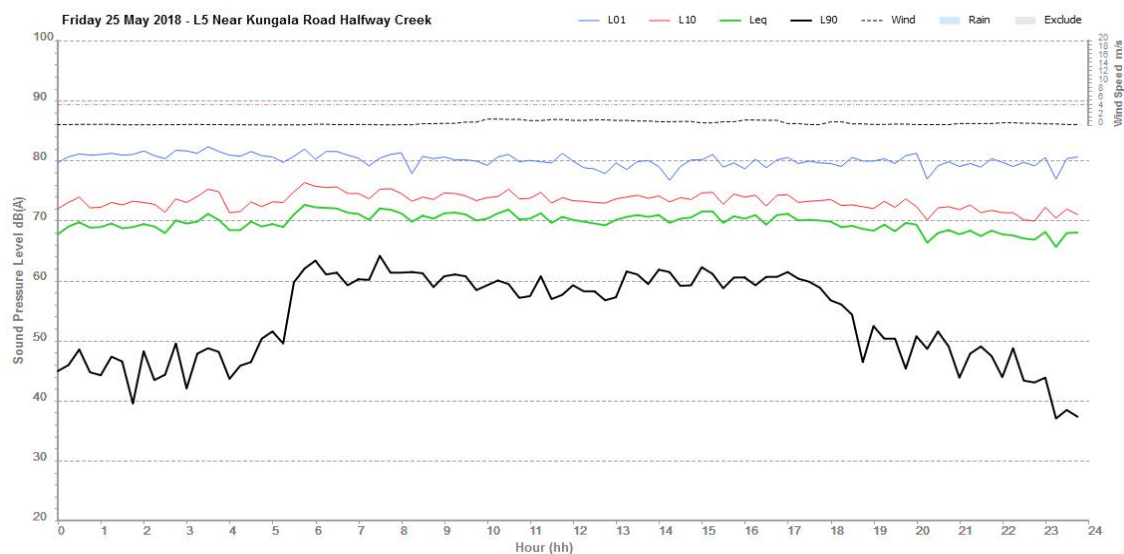
Logger Location Map



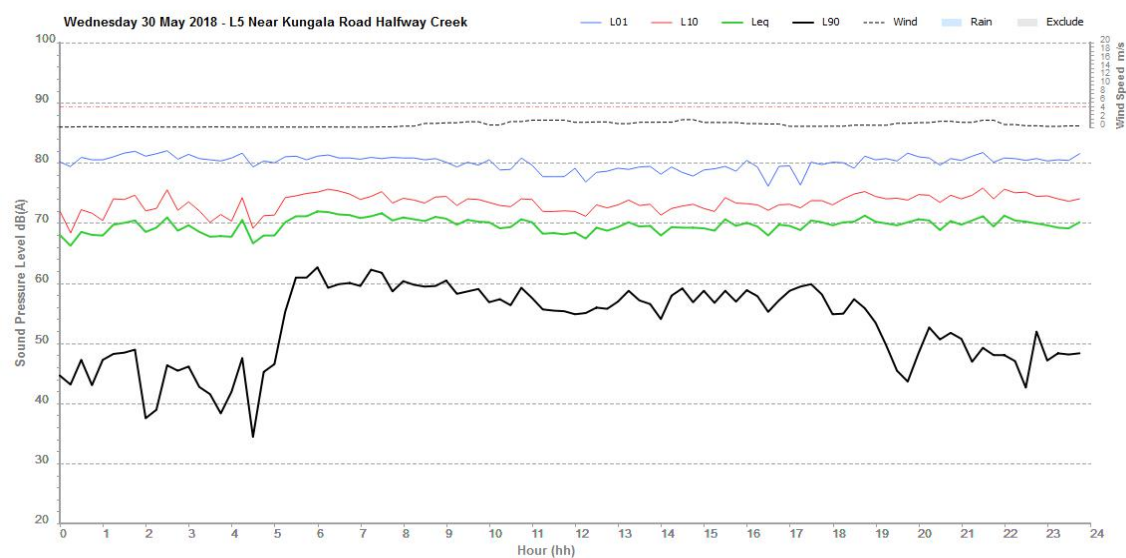
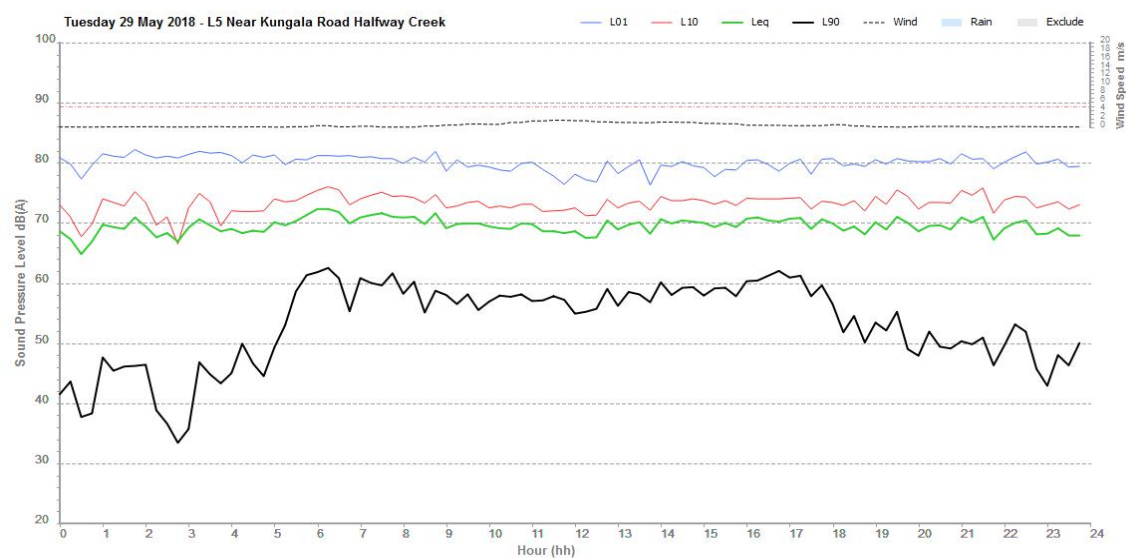
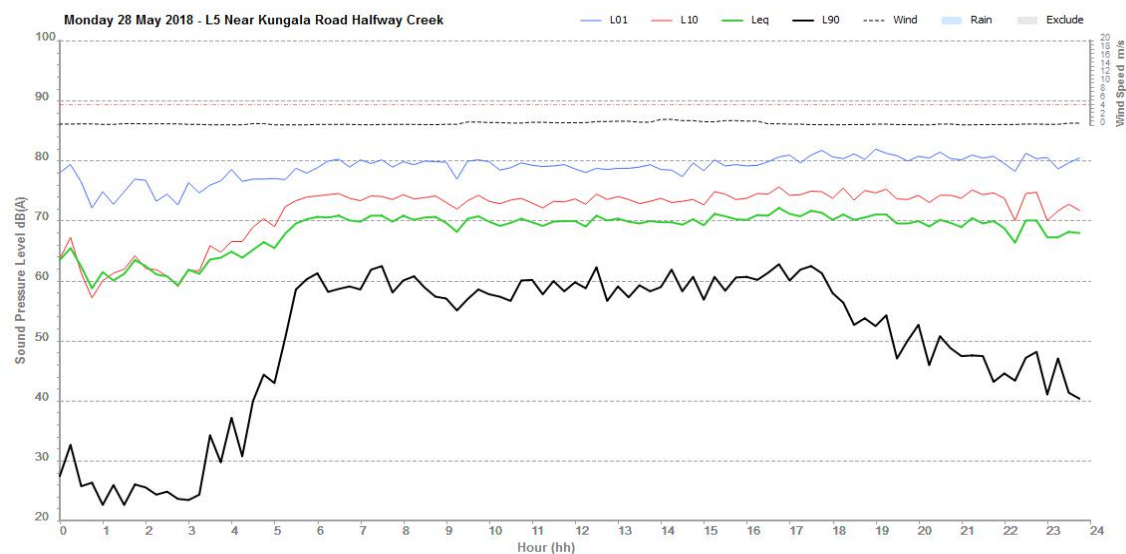
Logger Graphs



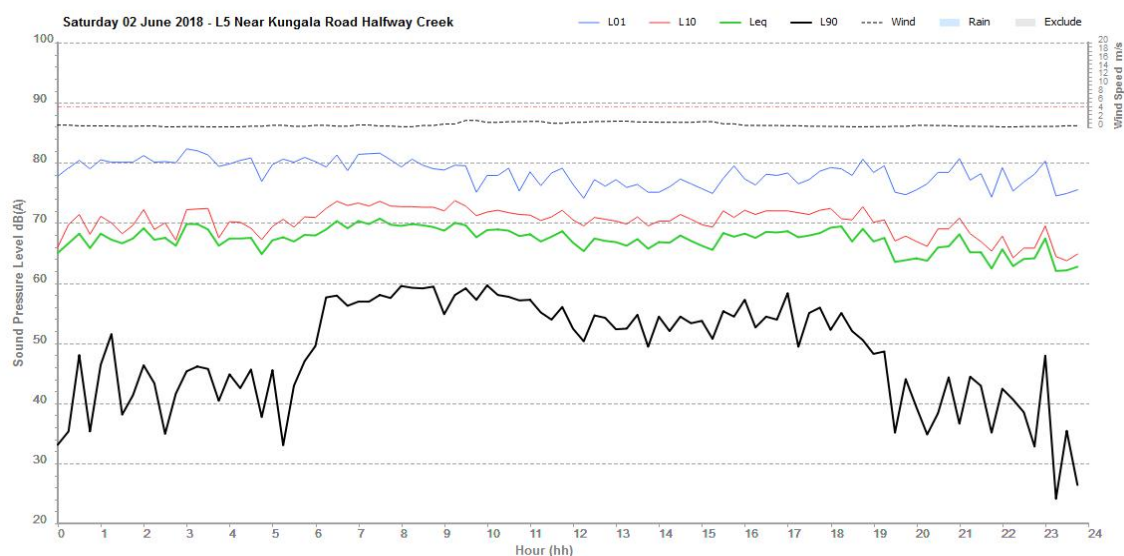
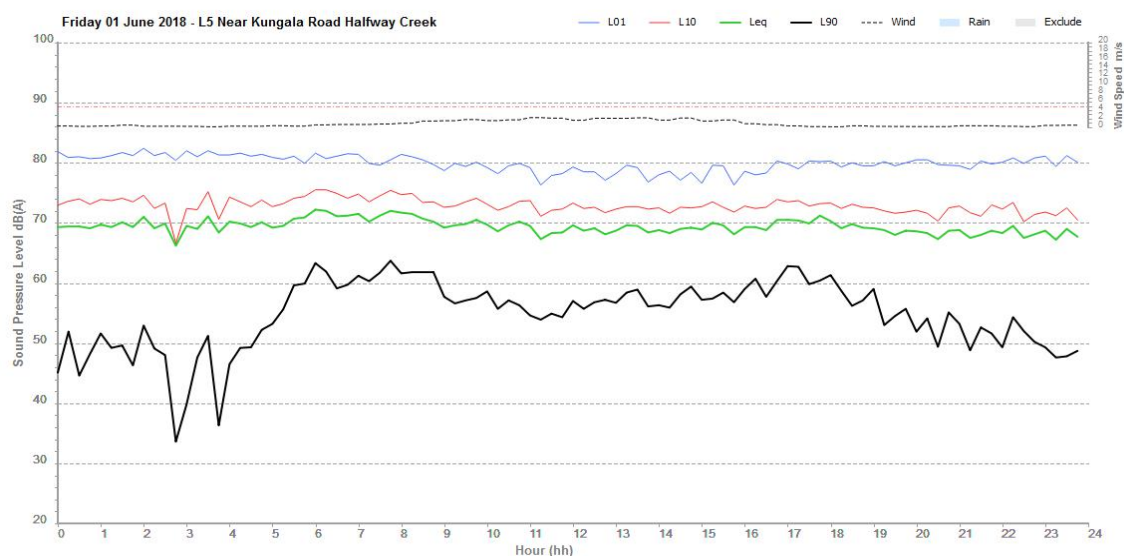
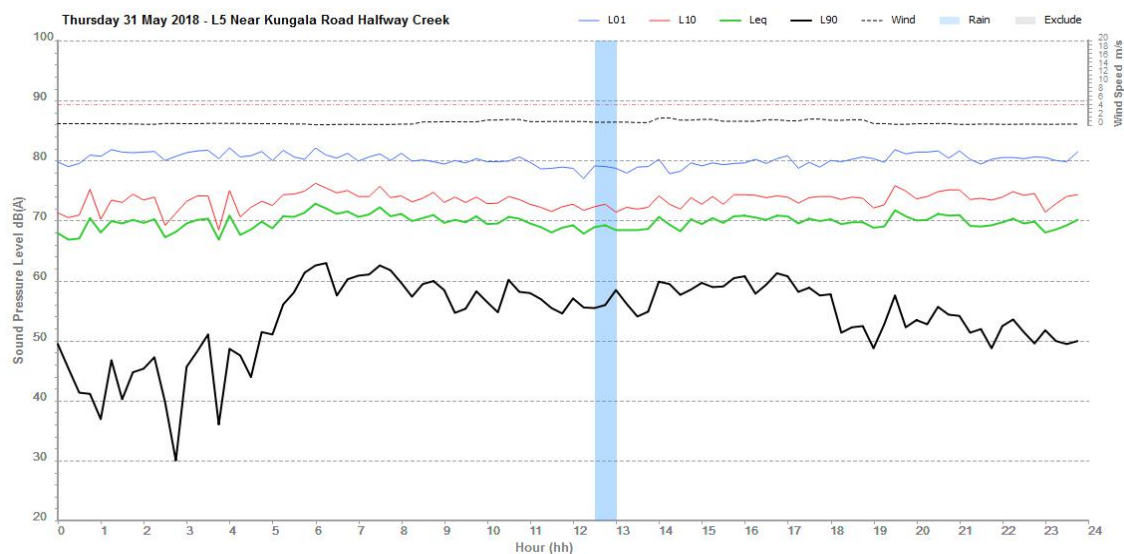
Logger Graphs



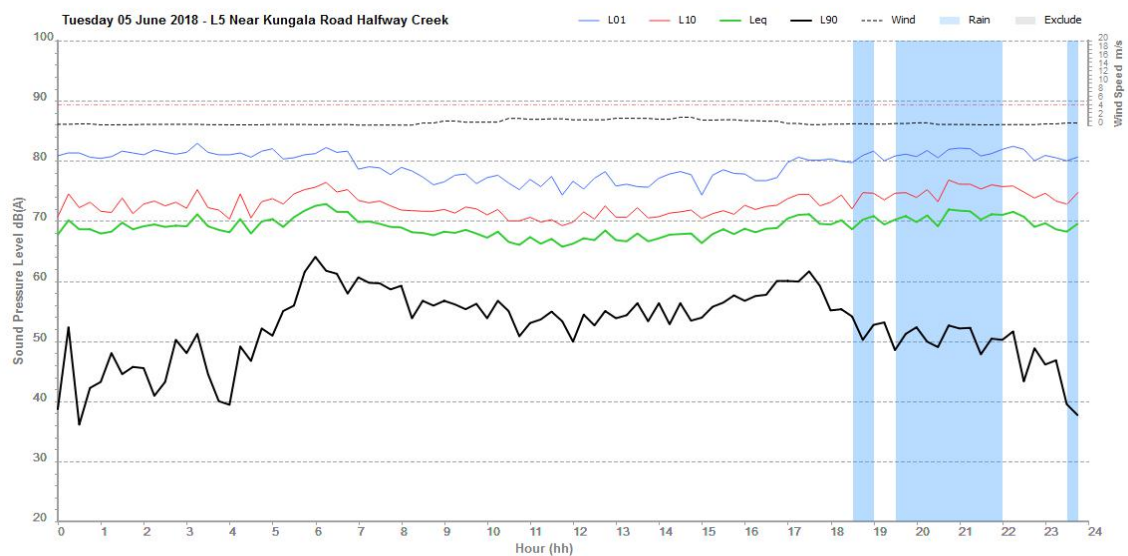
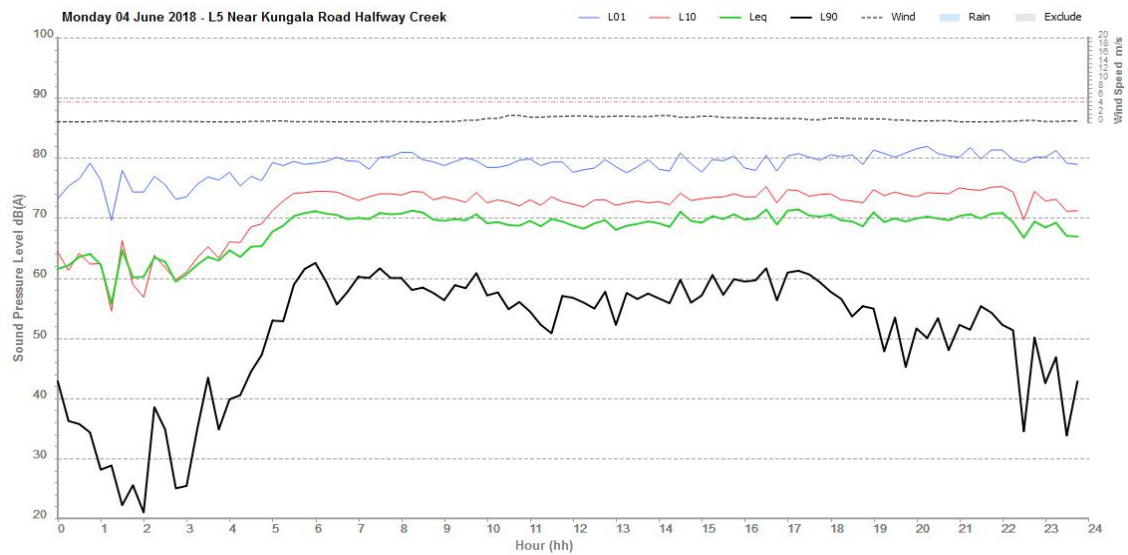
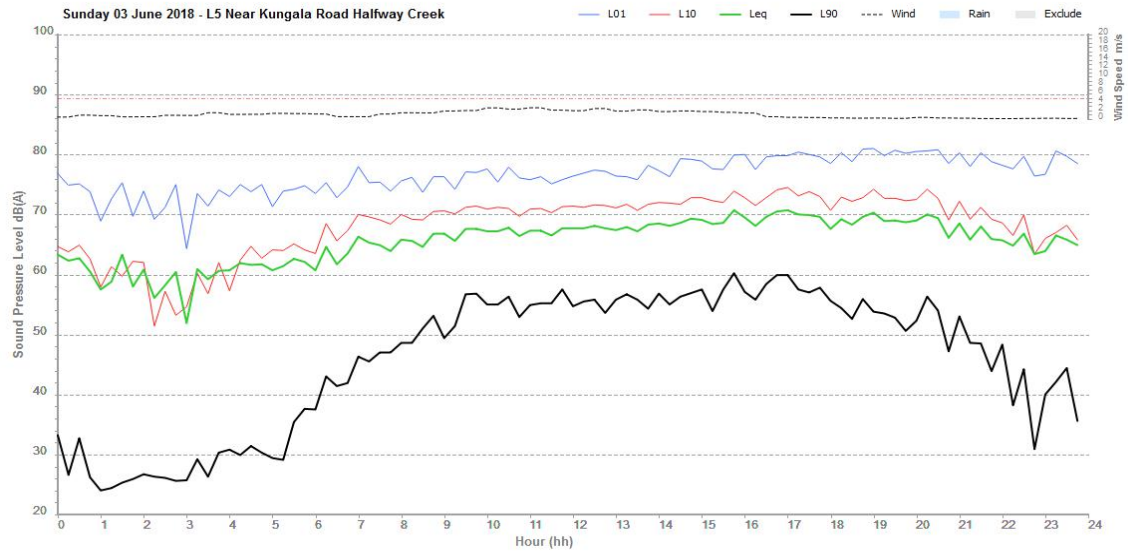
Logger Graphs



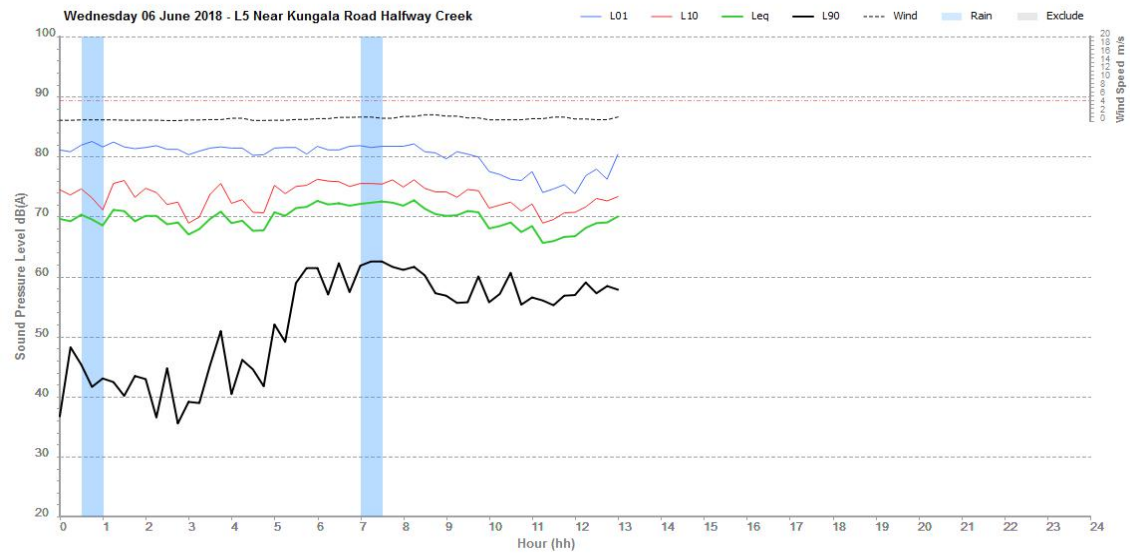
Logger Graphs



Logger Graphs



Logger Graphs



L6 - 24/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL52
 Serial No : 00386741
 Address: L6 5631 Pacific Highway, Wells Crossing
 Location: Front Yard
 Facade / Free Field: Free Field
 Environment: Dominant noise source: traffic on the Pacific Highway. Other noise sources: bird chirping in trees behind logger 53 dB(A). Typical truck pass-by noise level: 85 dB(A) max. Typical car pass-by noise levels: 72-78 dB(A) max.

Logger Setup Photo



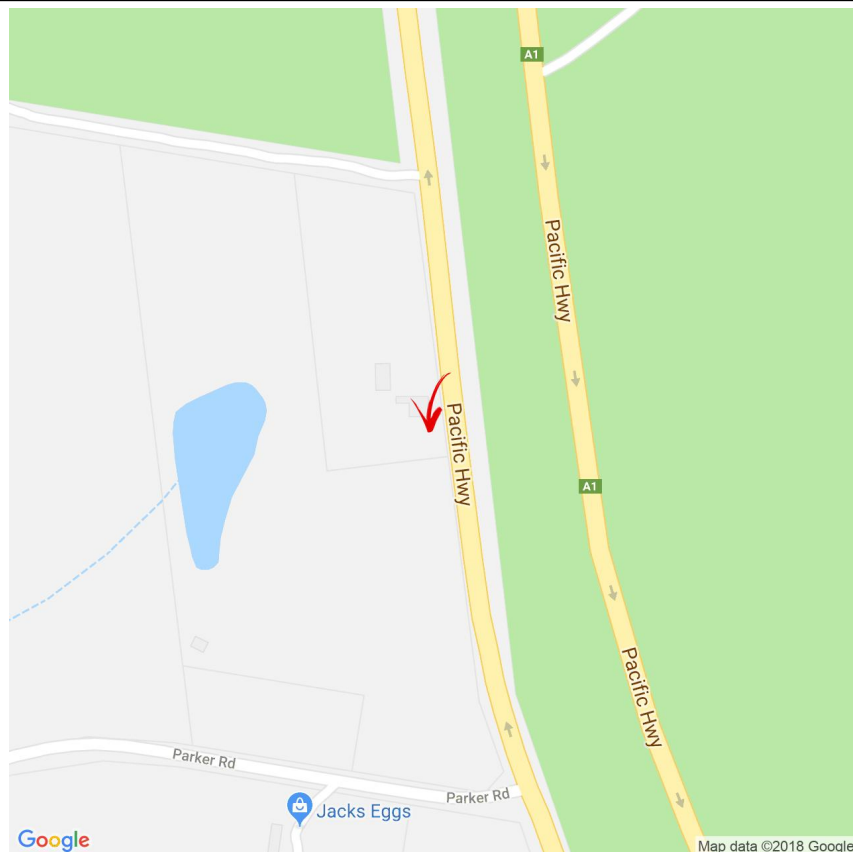
INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

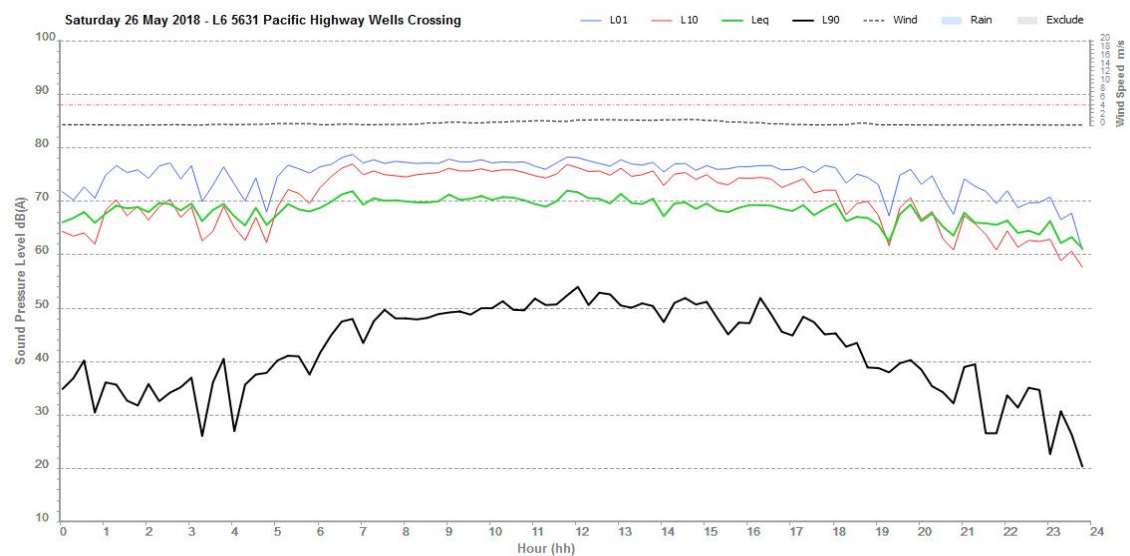
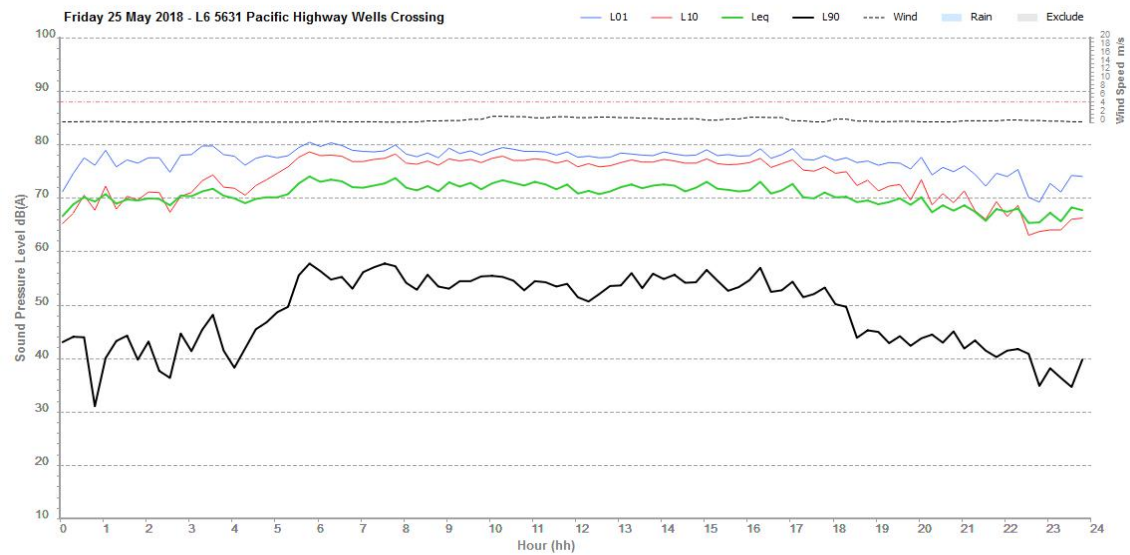
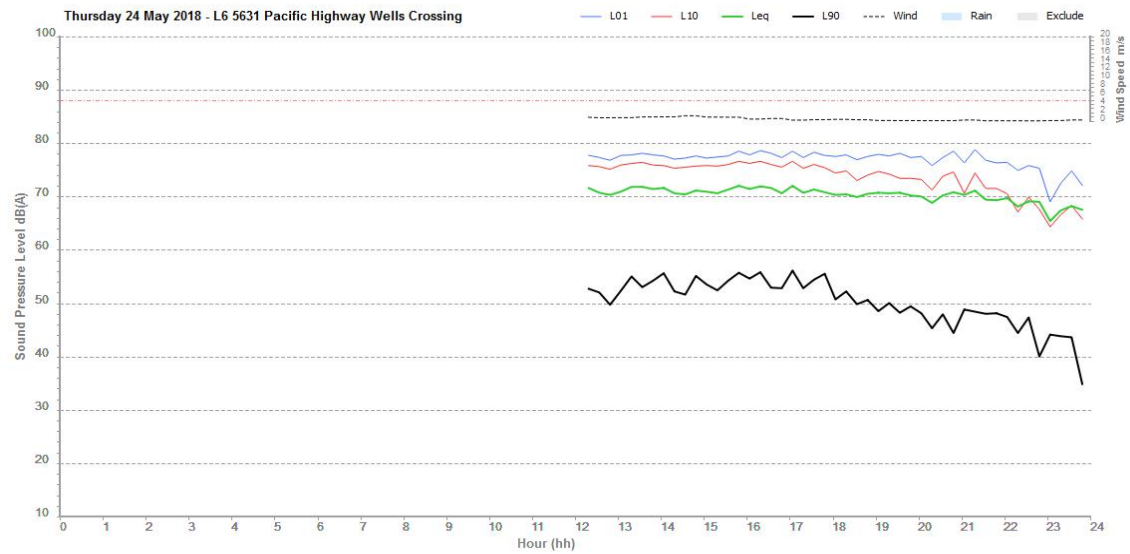
RNP Noise Level, dB(A)

	$L_{Aeq(1hr)}$	$L_{Aeq(period)}$
Day (7am - 10 pm)	72	71
Night (10pm - 7am)	72	69

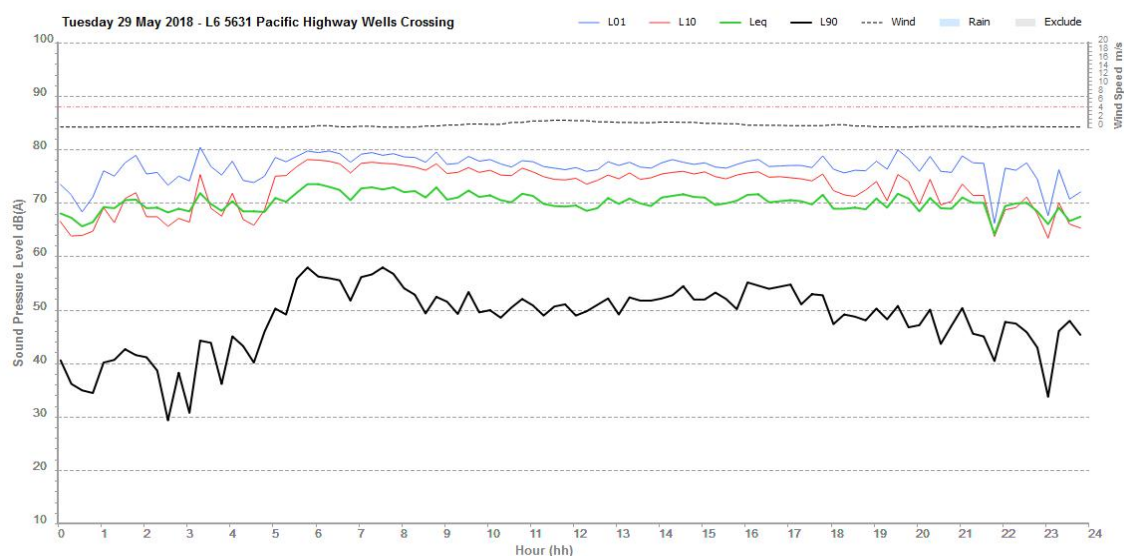
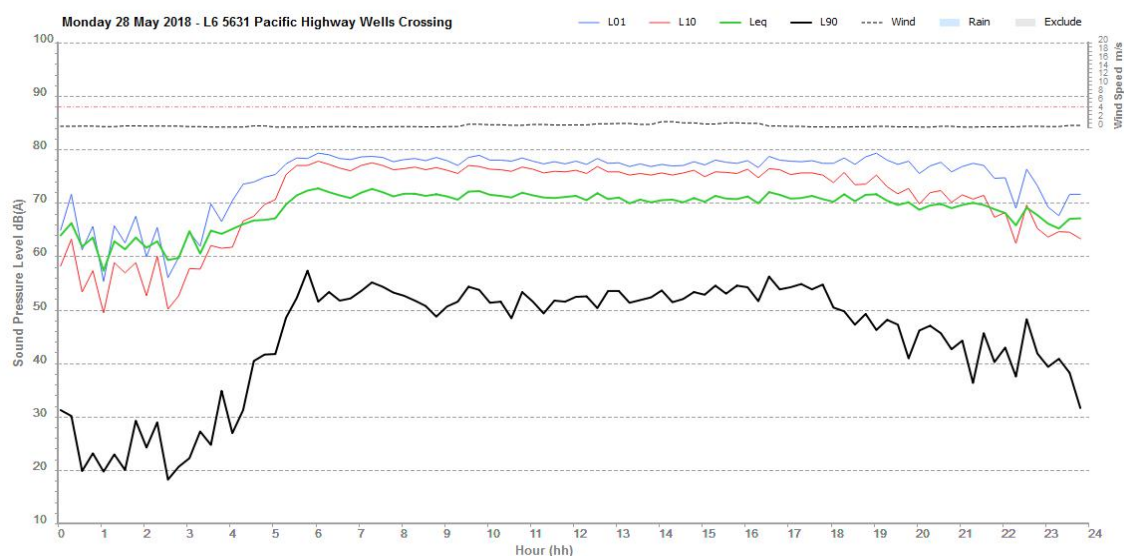
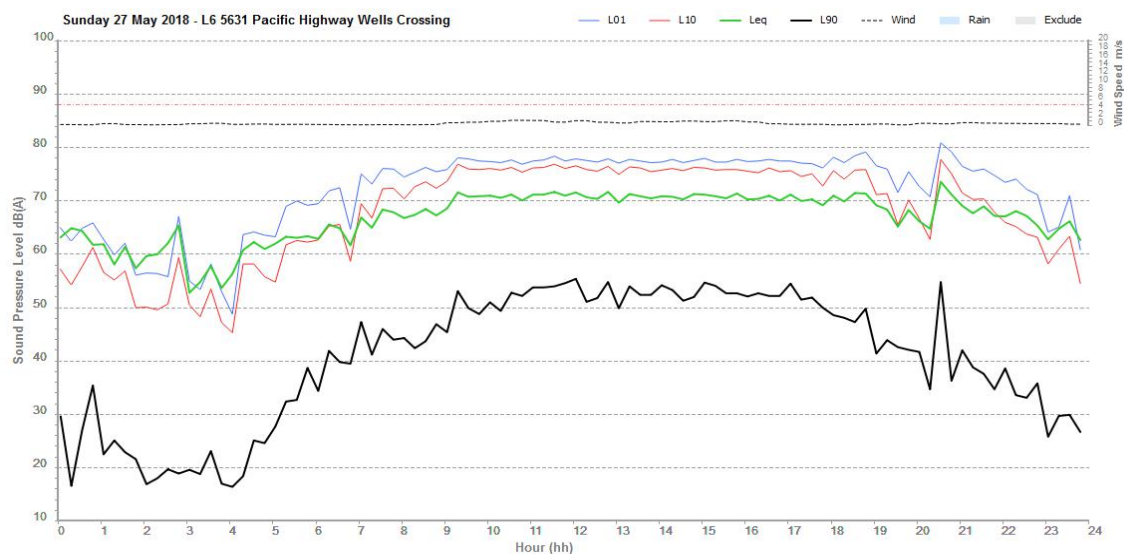
Logger Location Map



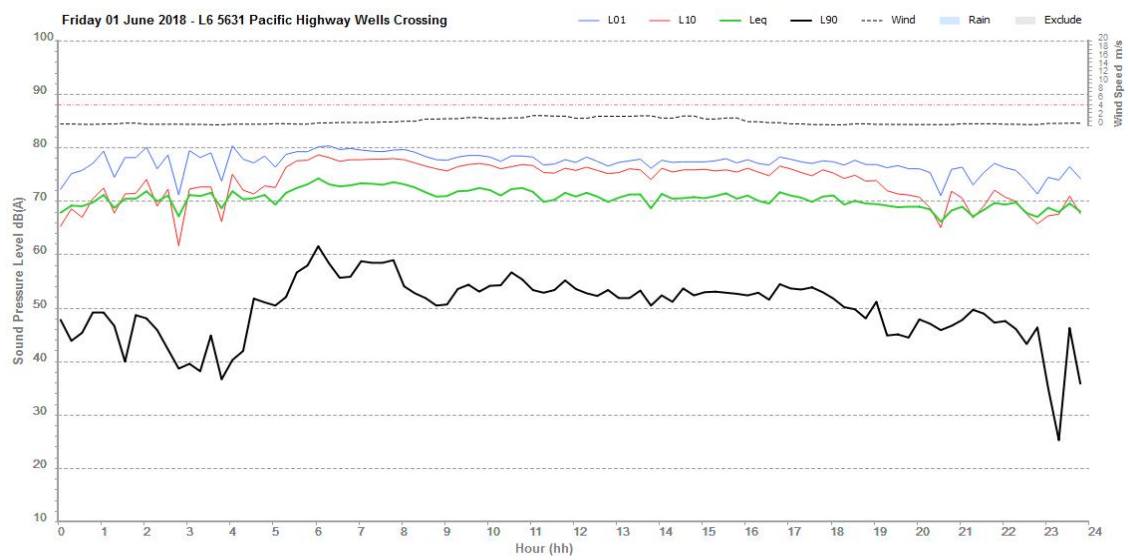
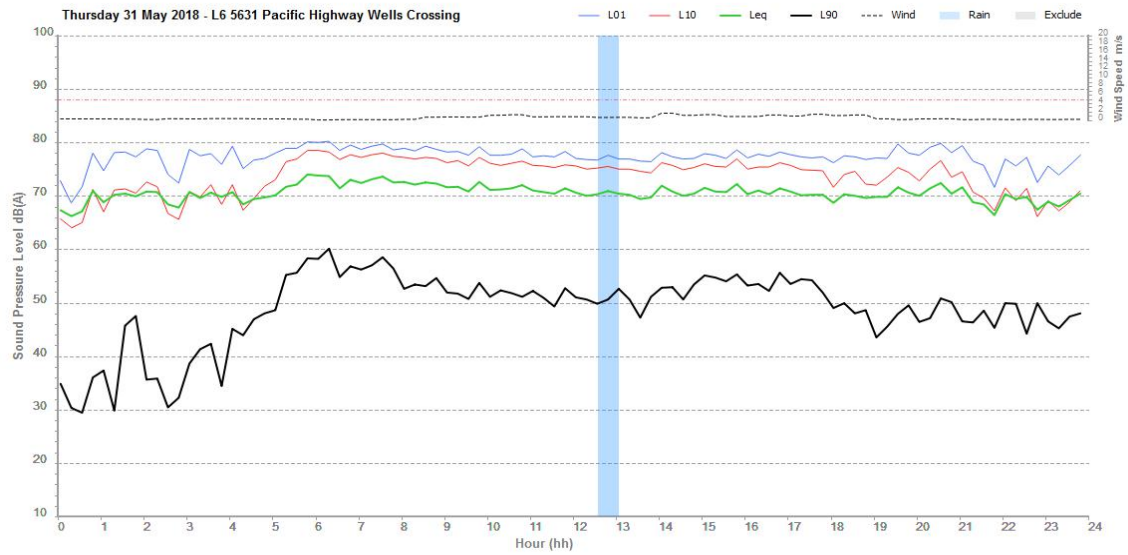
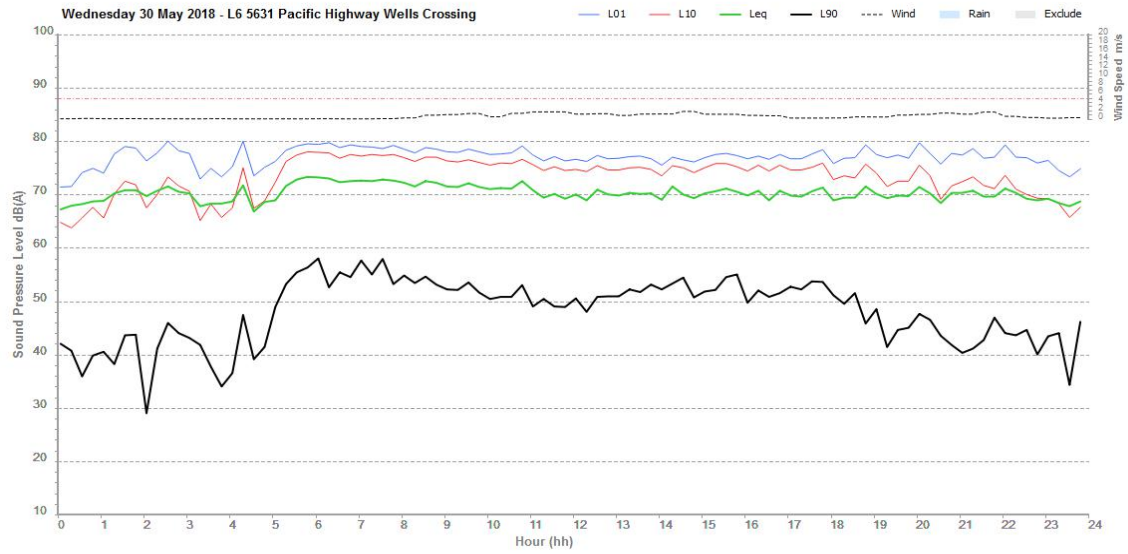
Logger Graphs



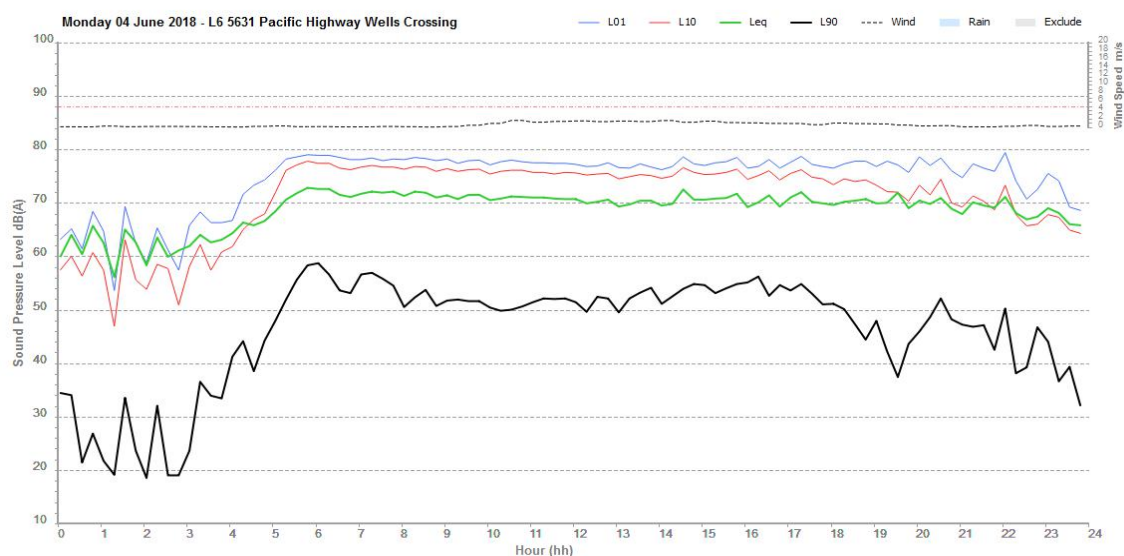
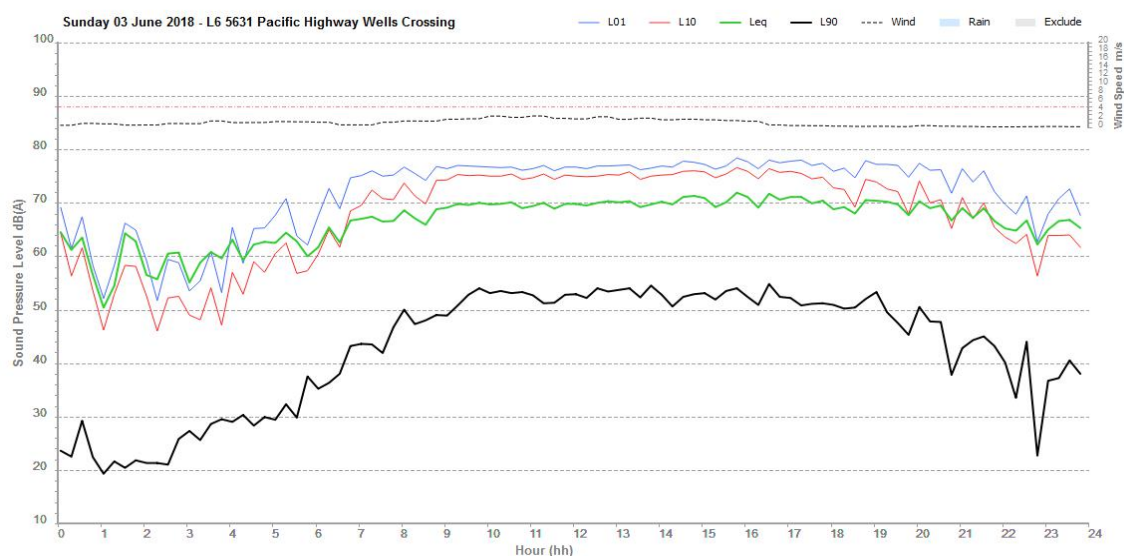
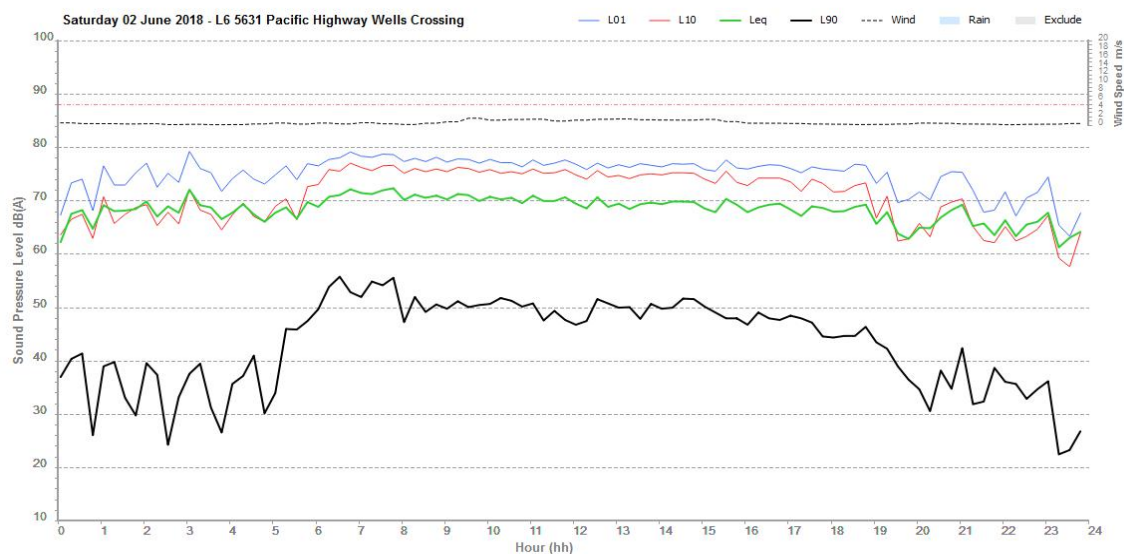
Logger Graphs



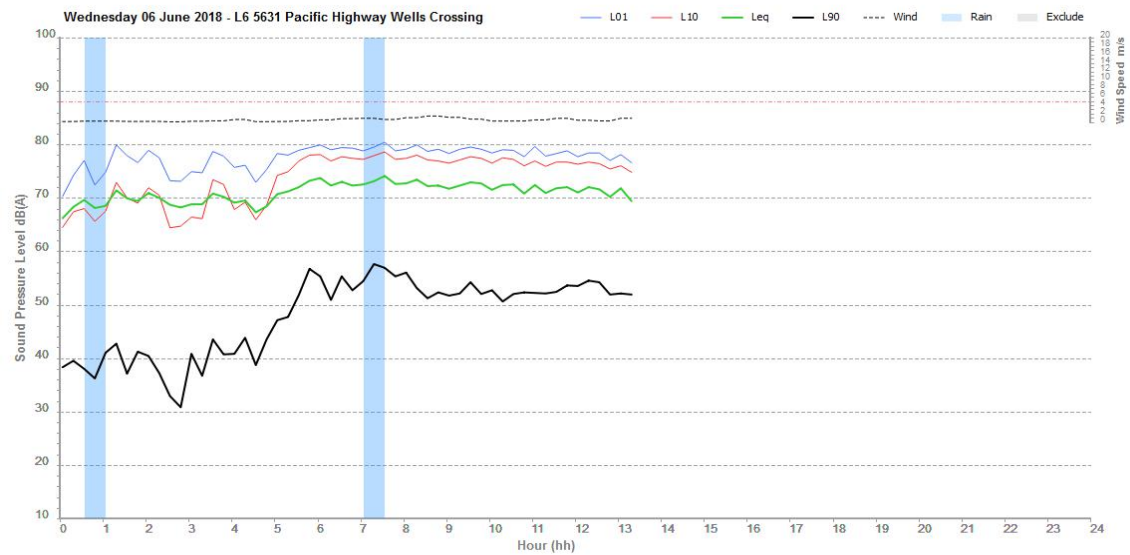
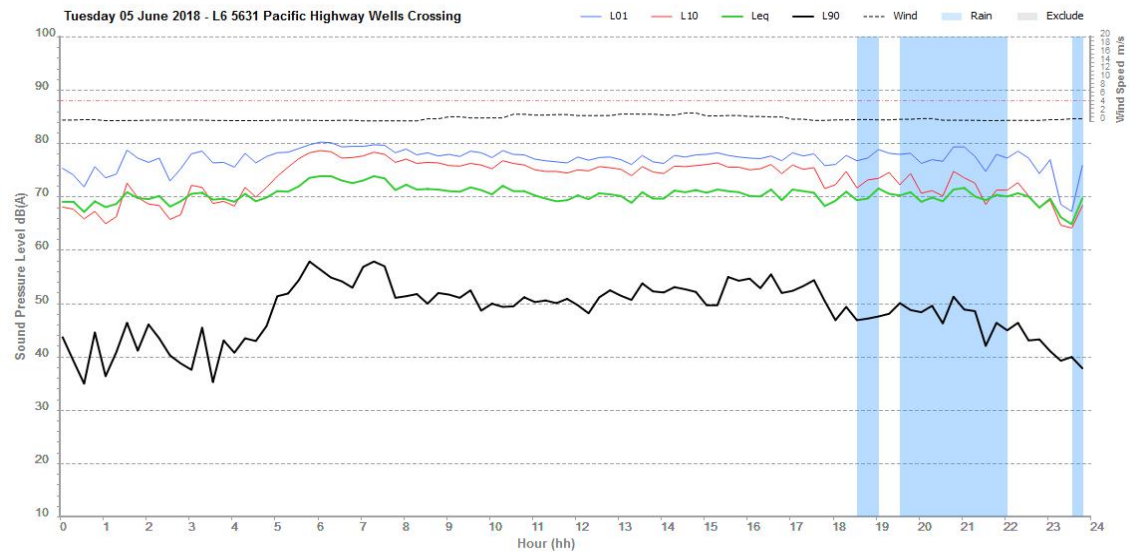
Logger Graphs



Logger Graphs



Logger Graphs



L7 - 22/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL52

Serial No : 01043455

Address: L7 Darlington Beach Holiday Park,
Arrawarra

Location: Front Yard

Facade / Free Field: Free Field

Environment: Dominant noise source: traffic
on the Pacific Highway. Other noise sources:
Bird noise audible. Typical truck pass-by noise
level: 65 dB(A) max Pacific Highway. Typical
car pass-by noise levels: 69 dB(A) max Eggins
Drive.

Logger Setup Photo



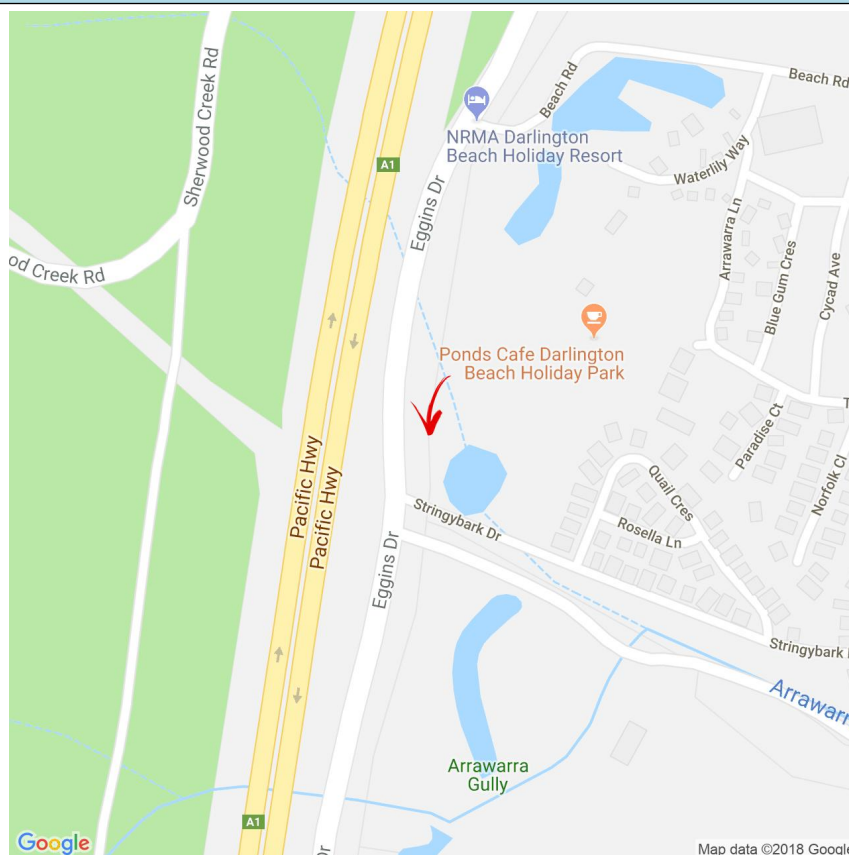
INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

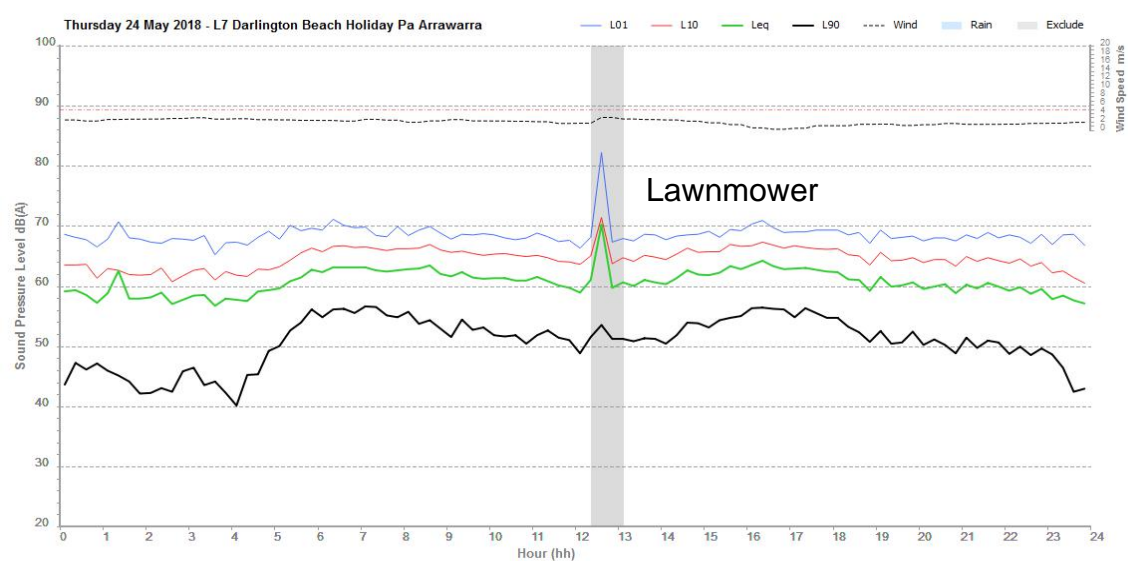
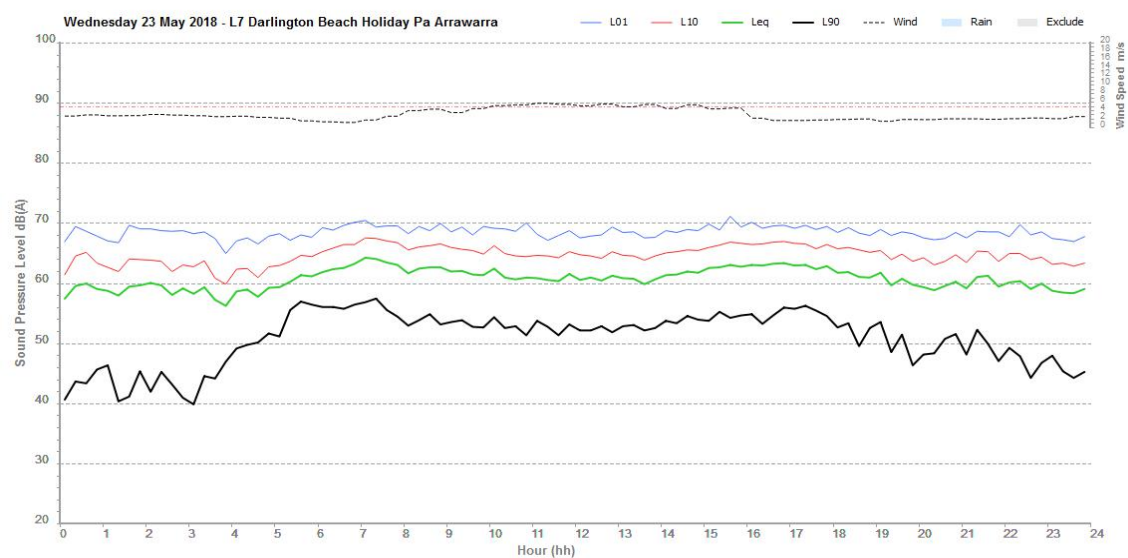
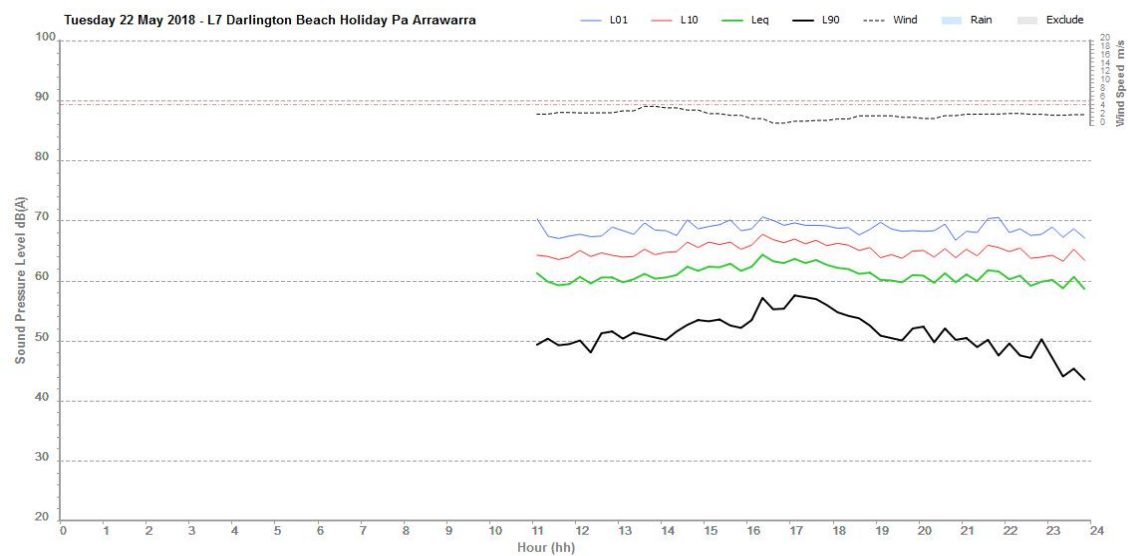
RNP Noise Level, dB(A)

	L _{Aeq(1hr)}	L _{Aeq(period)}
Day (7am - 10 pm)	63	62
Night (10pm - 7am)	61	58

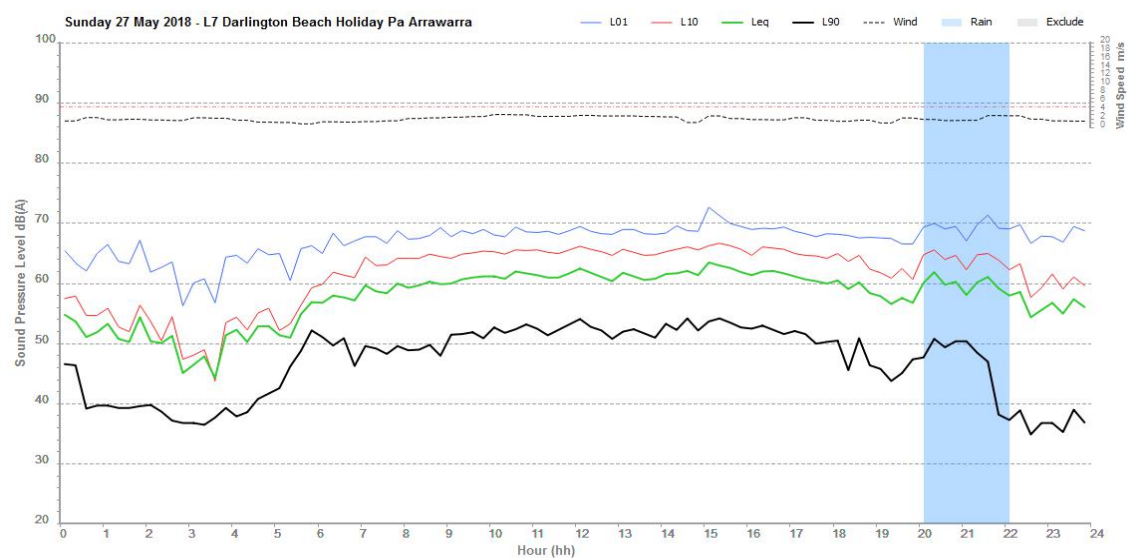
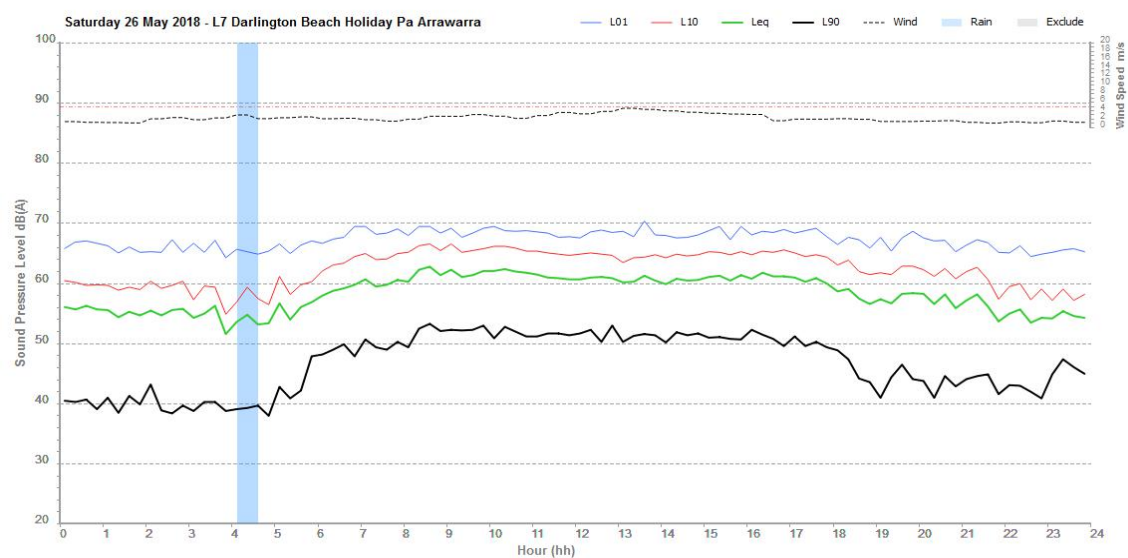
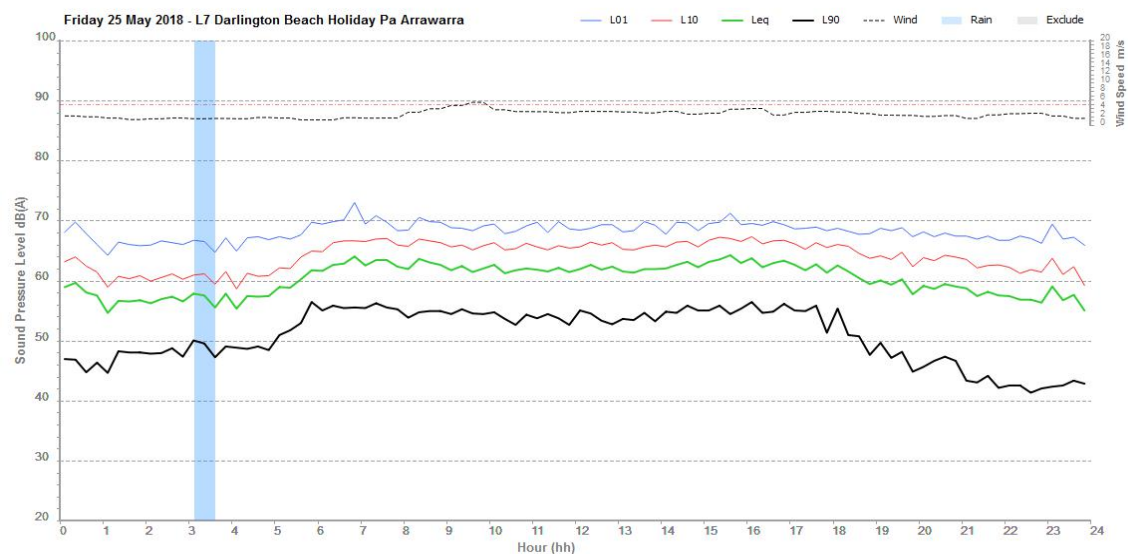
Logger Location Map



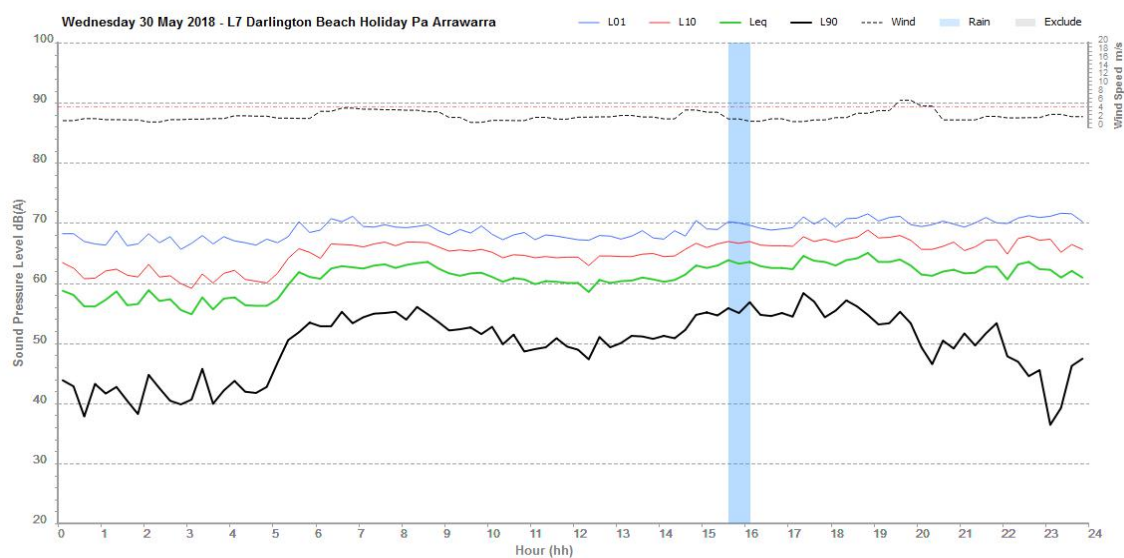
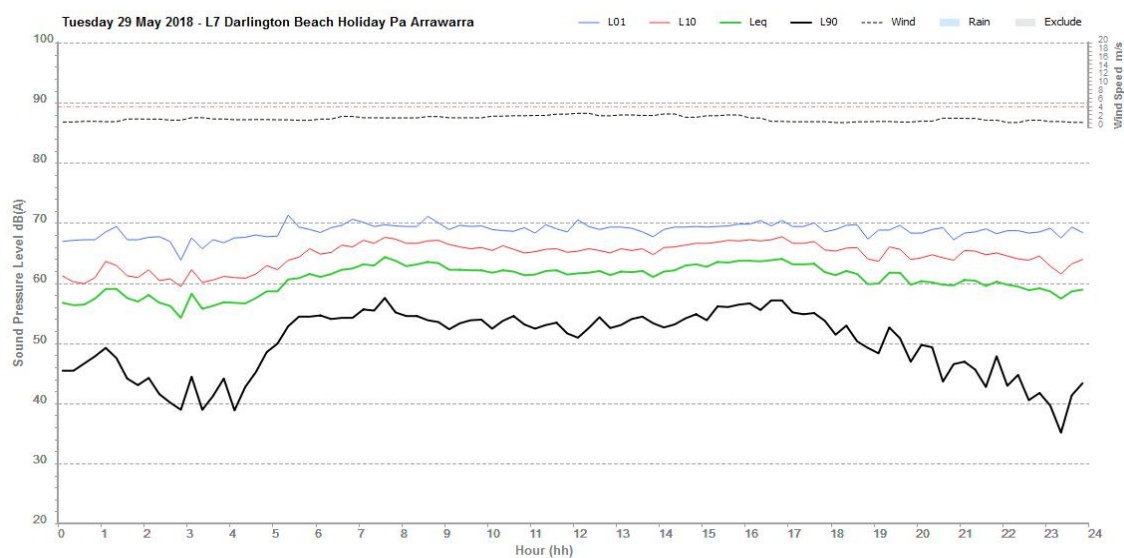
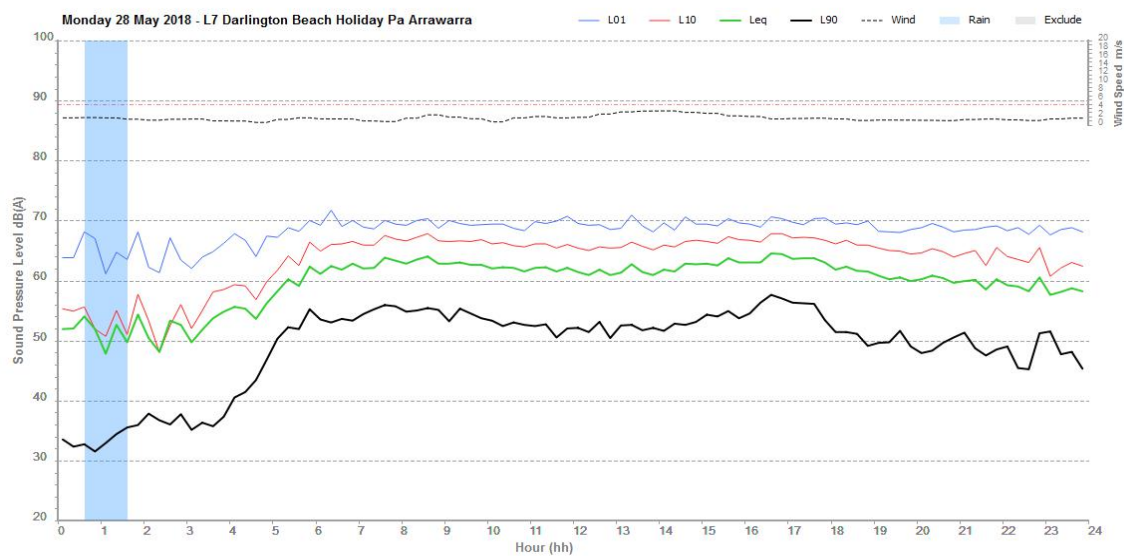
Logger Graphs



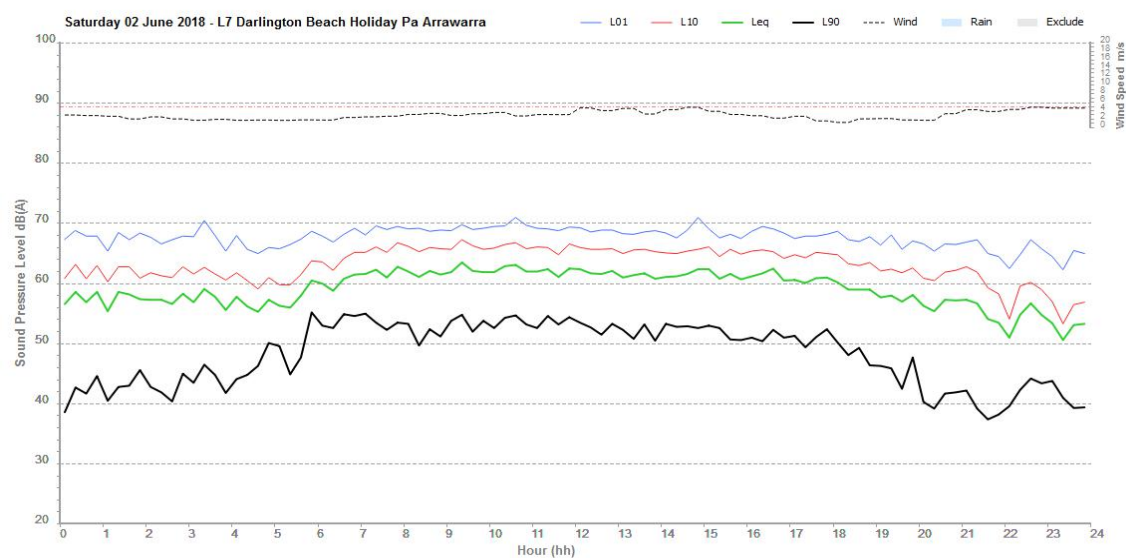
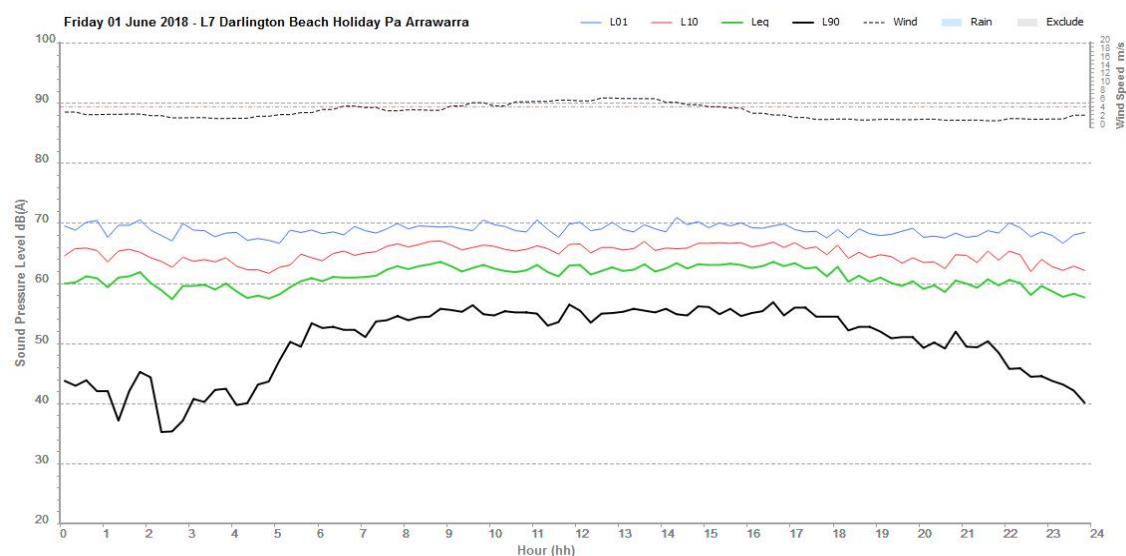
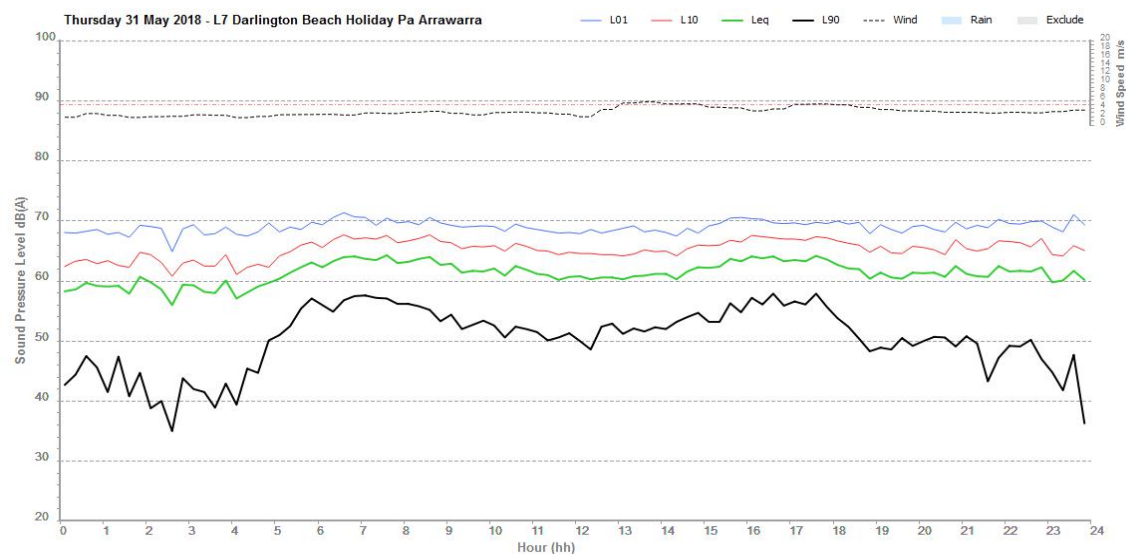
Logger Graphs



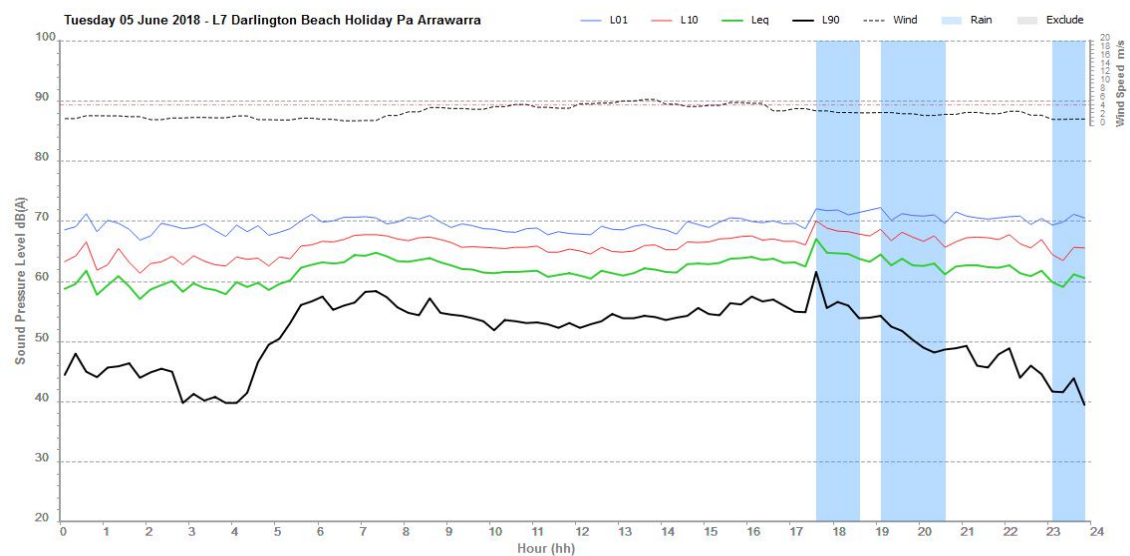
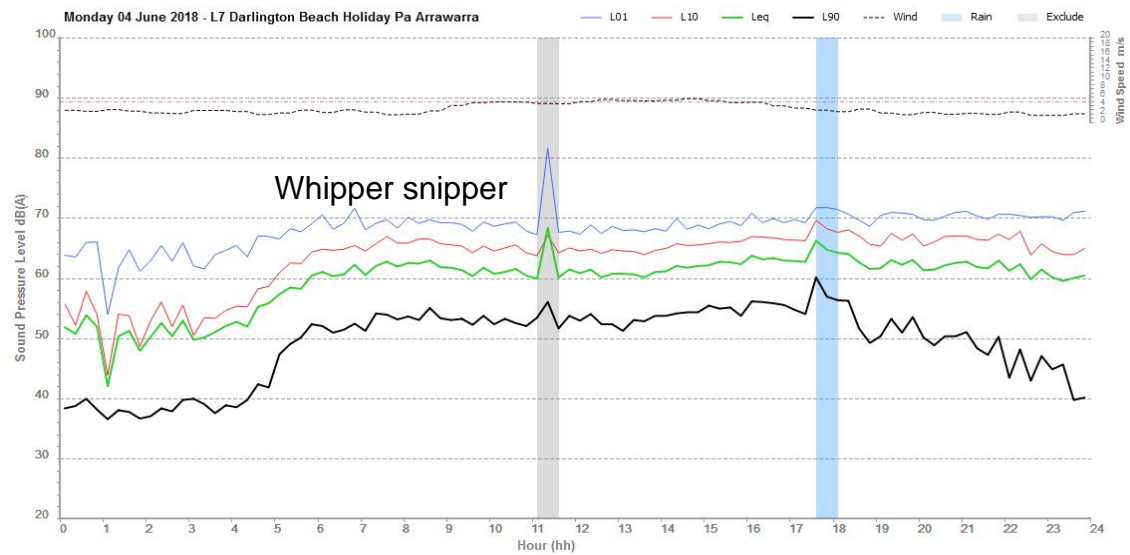
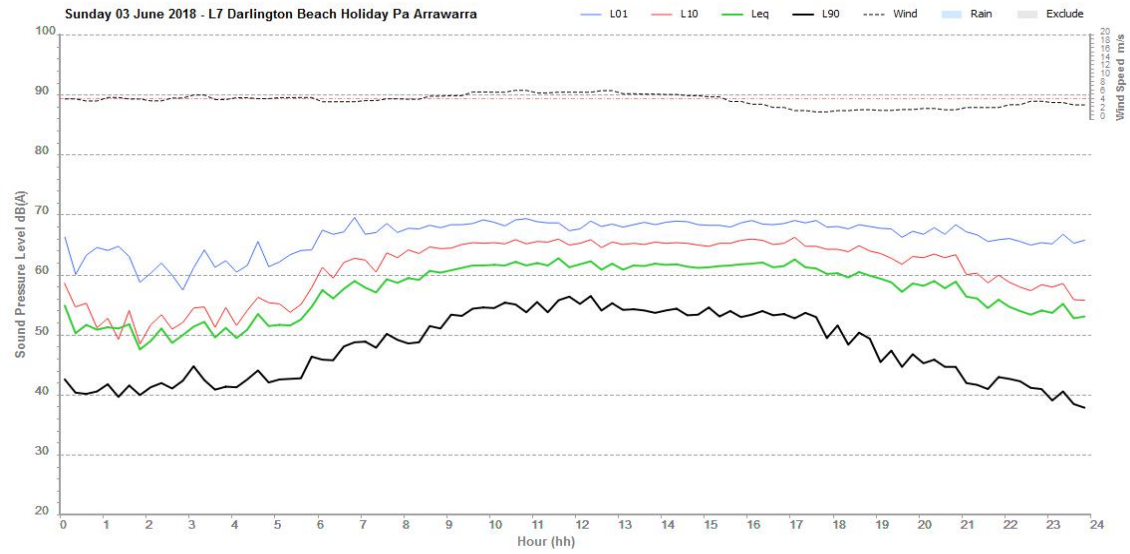
Logger Graphs



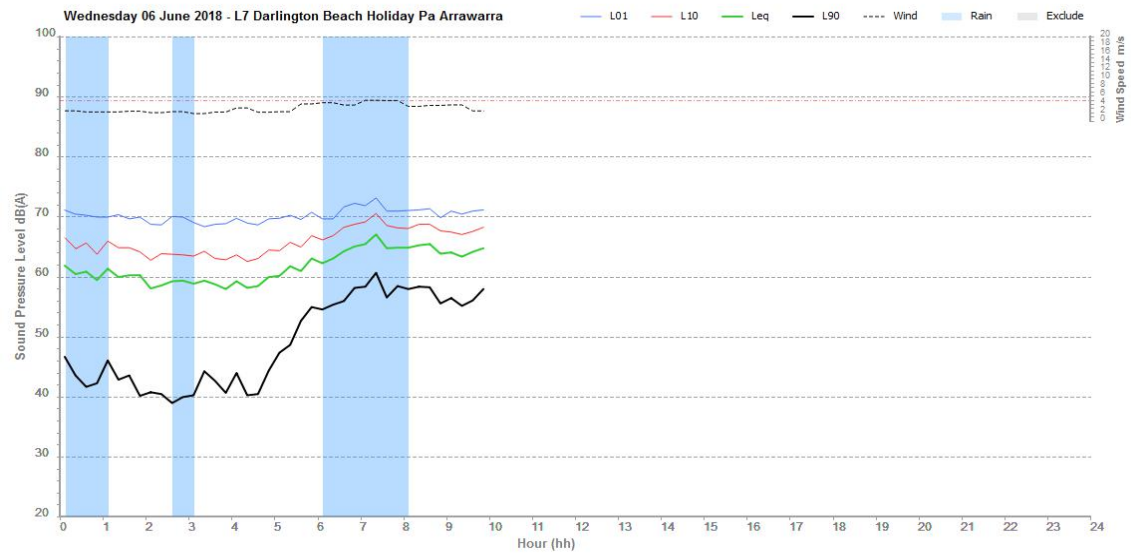
Logger Graphs



Logger Graphs



Logger Graphs



L8 - 23/05/18 - 30/05/18

Logger Setup

Logger Type: Ngara

Serial No : 878007

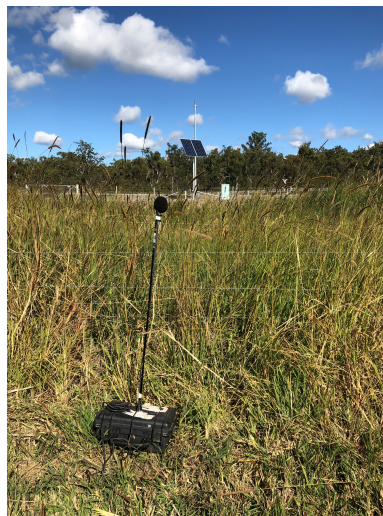
Address: L8 5092 Pacific Highway, Halfway Creek

Location: In Field

Facade / Free Field: Free Field

Environment: Dominant noise source: traffic on the Pacific Highway. Other noise sources: Light insect noise as well as light winds causing rustling in long grass. Typical car pass-by noise levels: 62 dB(A) max.

Logger Setup Photo



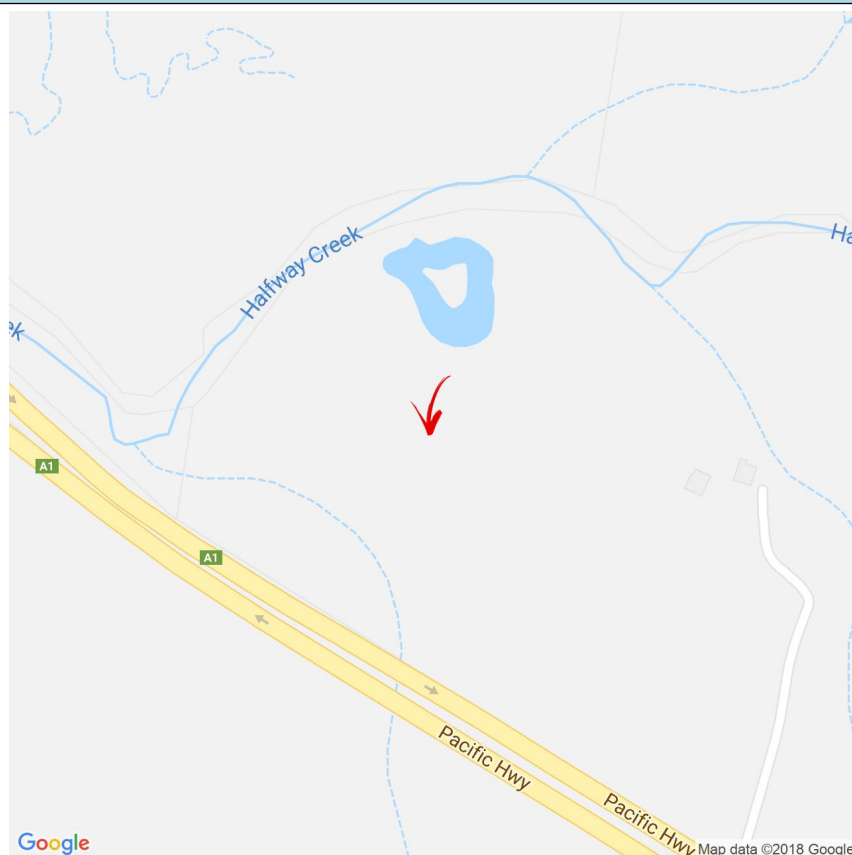
INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

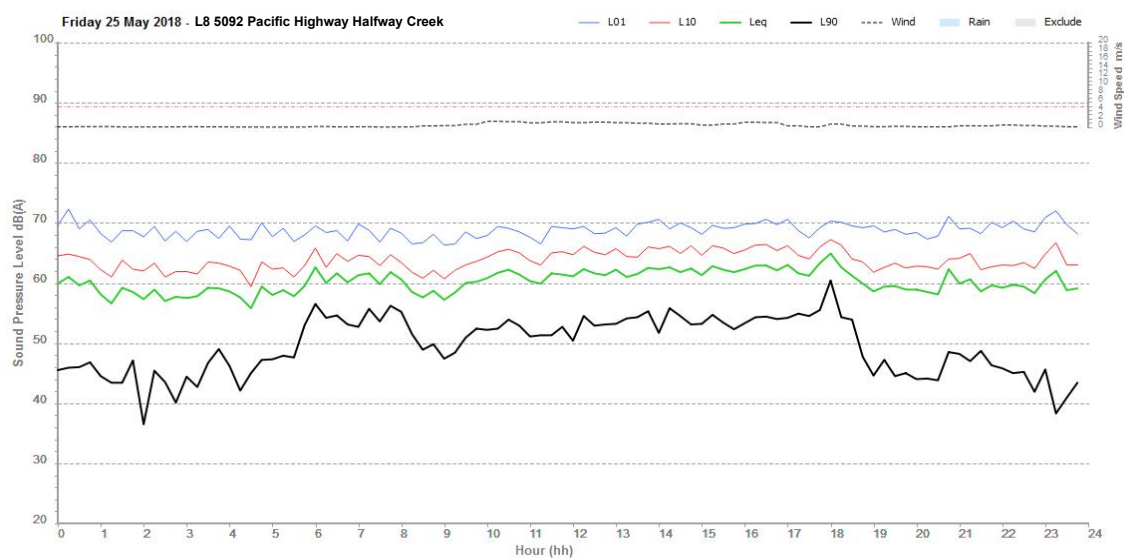
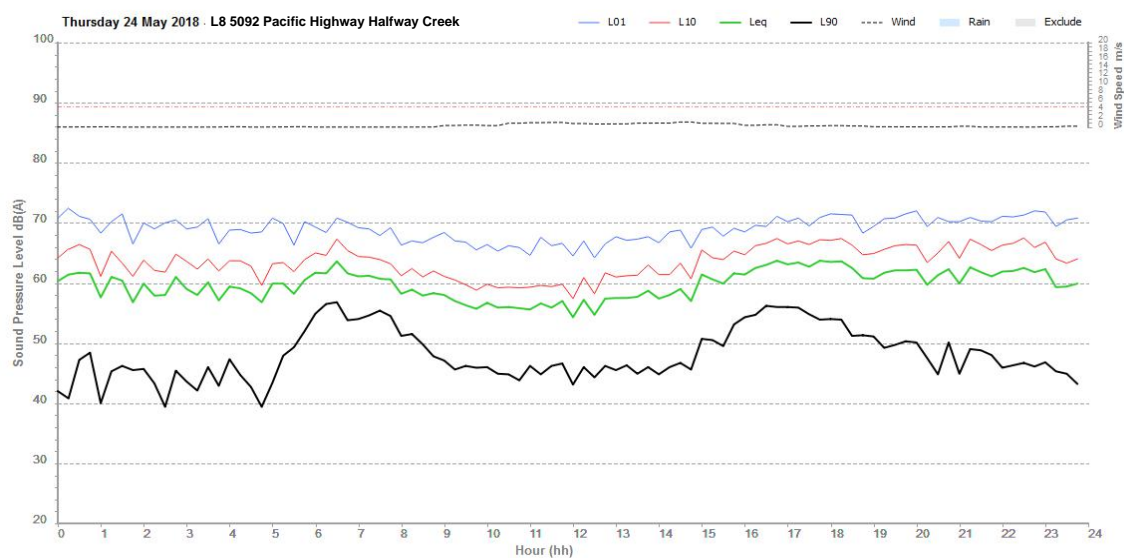
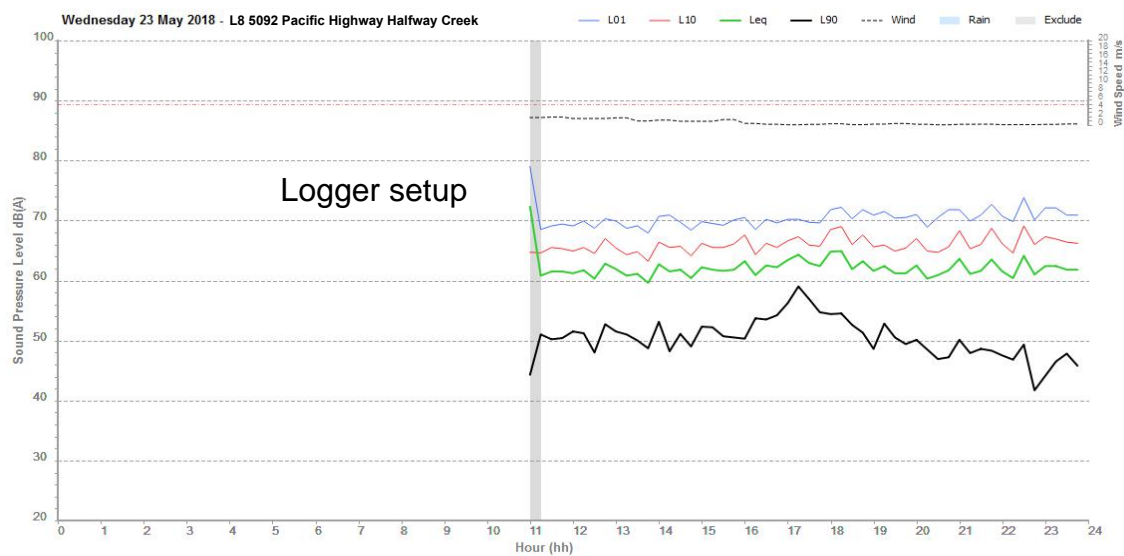
RNP Noise Level, dB(A)

	$L_{Aeq(1hr)}$	$L_{Aeq(period)}$
Day (7am - 10 pm)	63	60
Night (10pm - 7am)	61	59

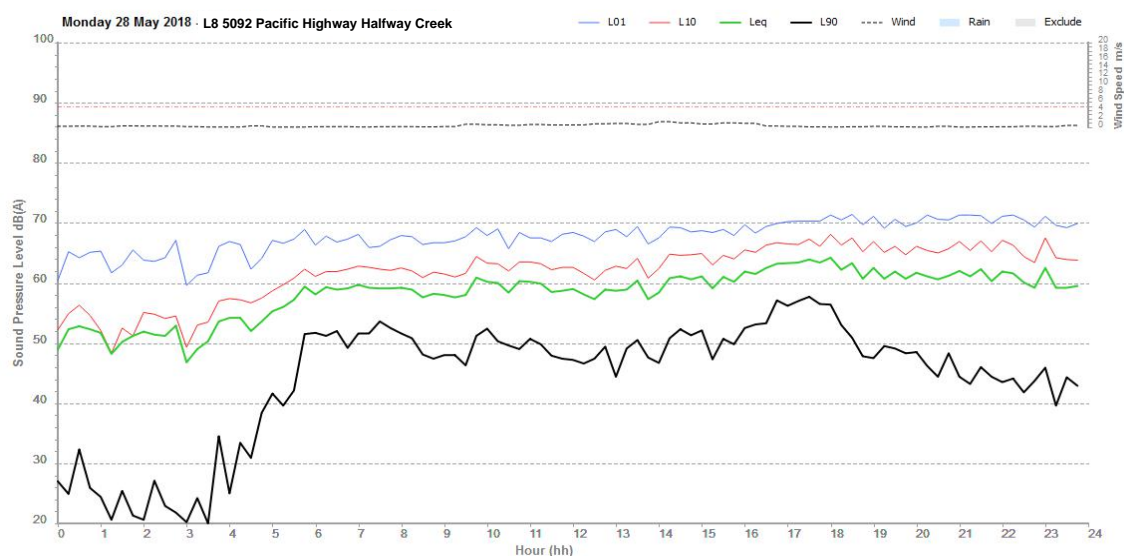
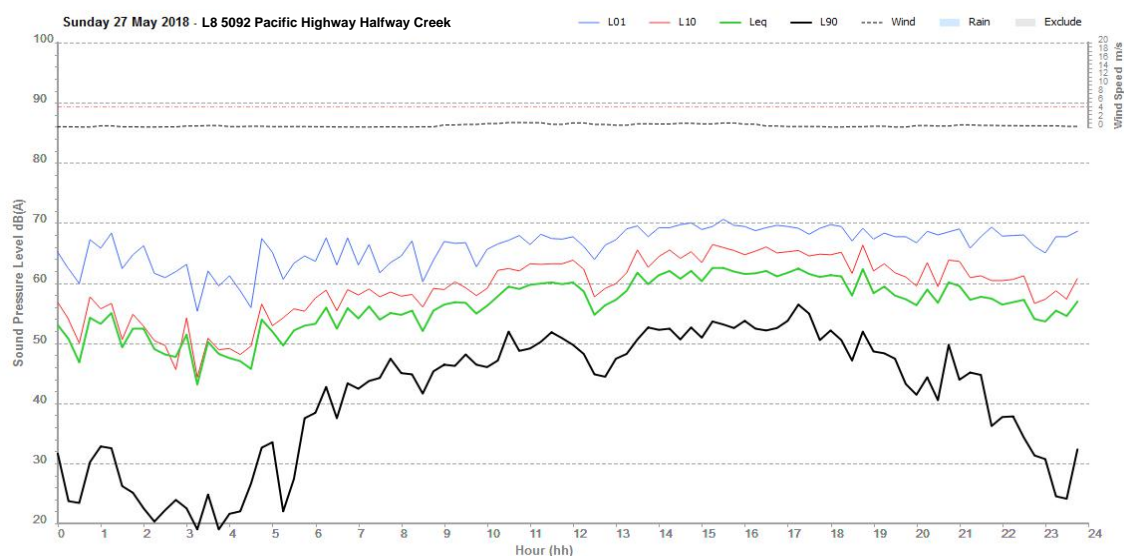
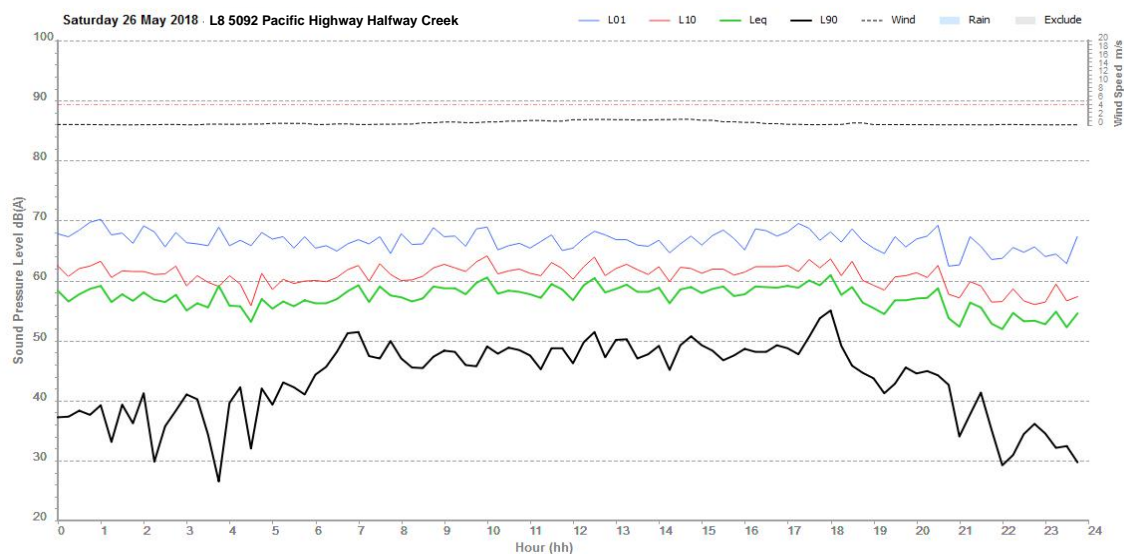
Logger Location Map



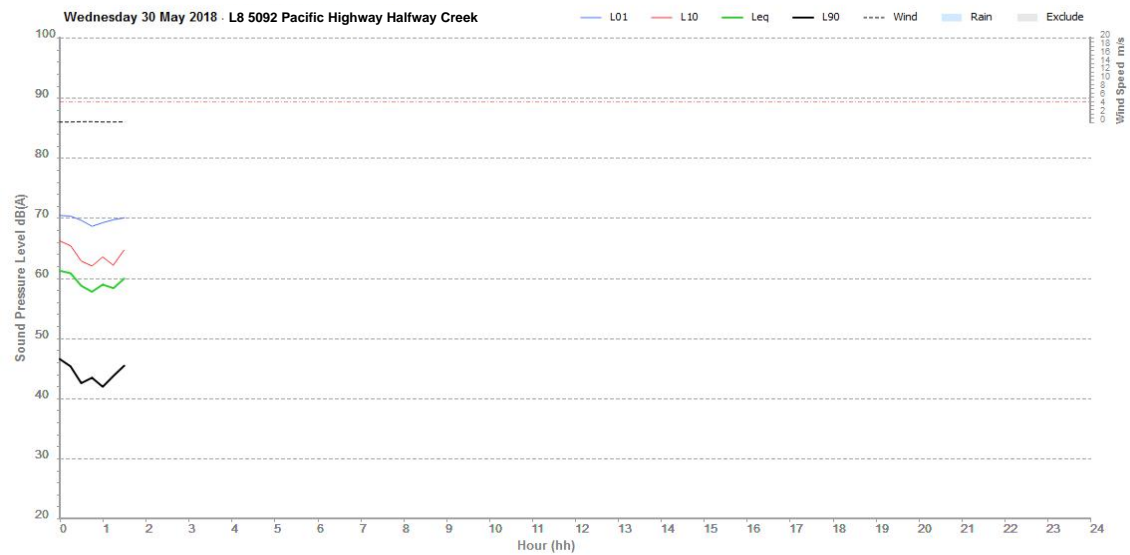
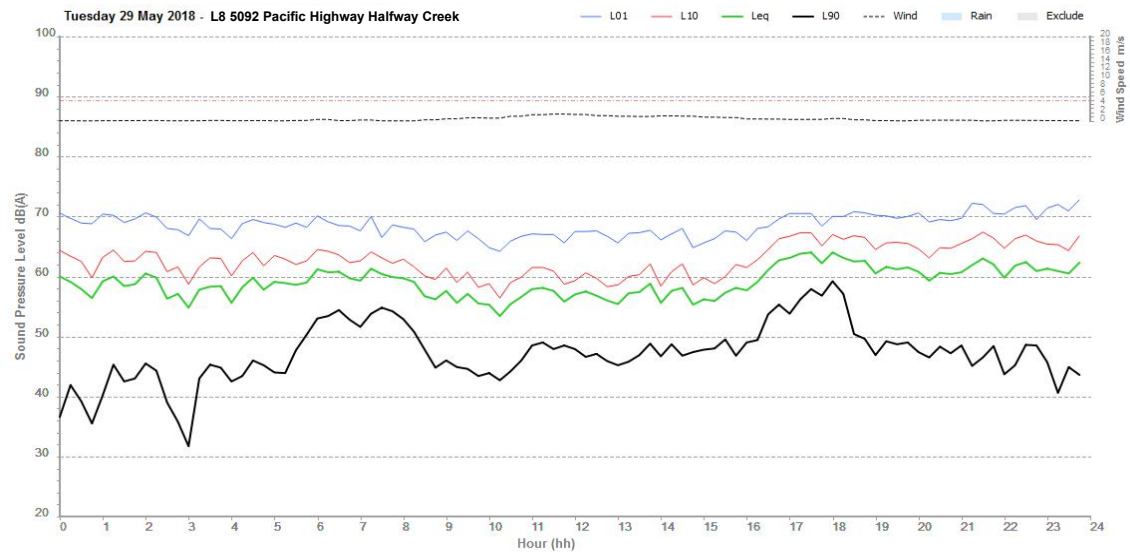
Logger Graphs



Logger Graphs



Logger Graphs



L9 - 22/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL52
 Serial No : 00164396
 Address: L9 Near Sherwood Creek Rd,
 Corindi Beach
 Location: Side of Road
 Facade / Free Field: Free Field
 Environment: Dominant noise source: traffic
 on the Pacific Highway. Other noise sources:
 Bird noise audible in absence of traffic Typical
 truck pass-by noise level: 72-74 dB(A) max.
 Typical car pass-by noise levels: 63-65 dB(A)
 max.

Logger Setup Photo



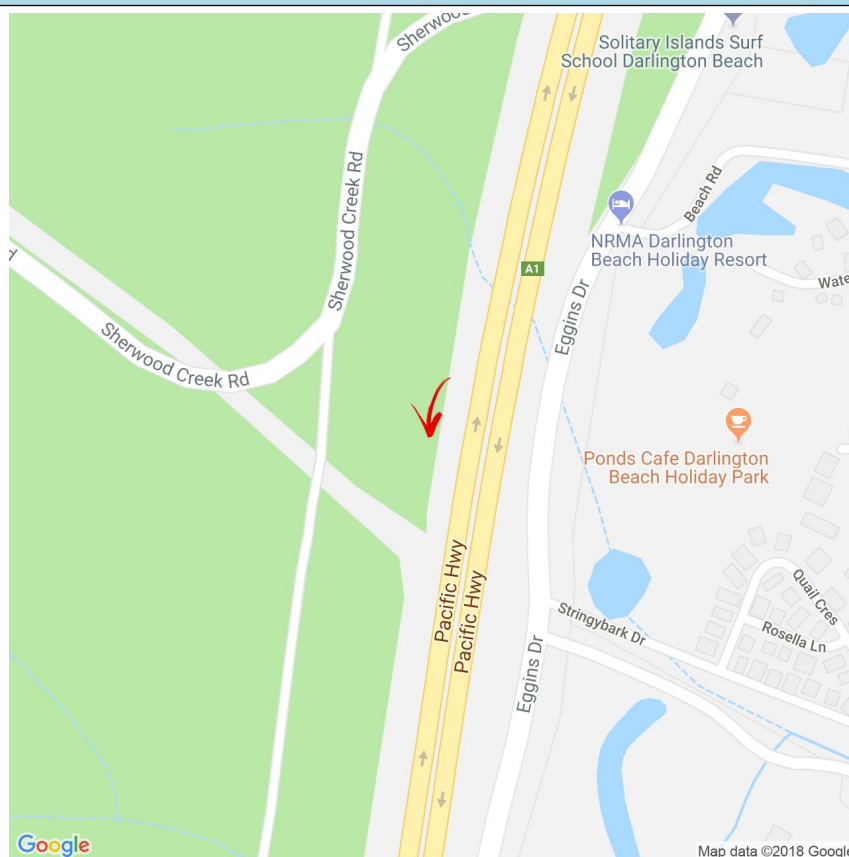
INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

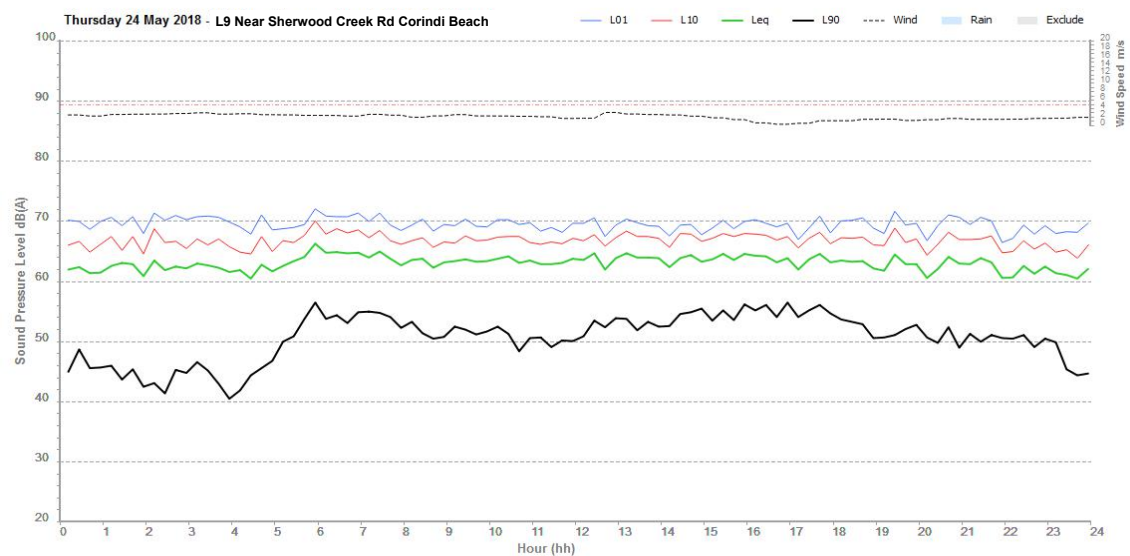
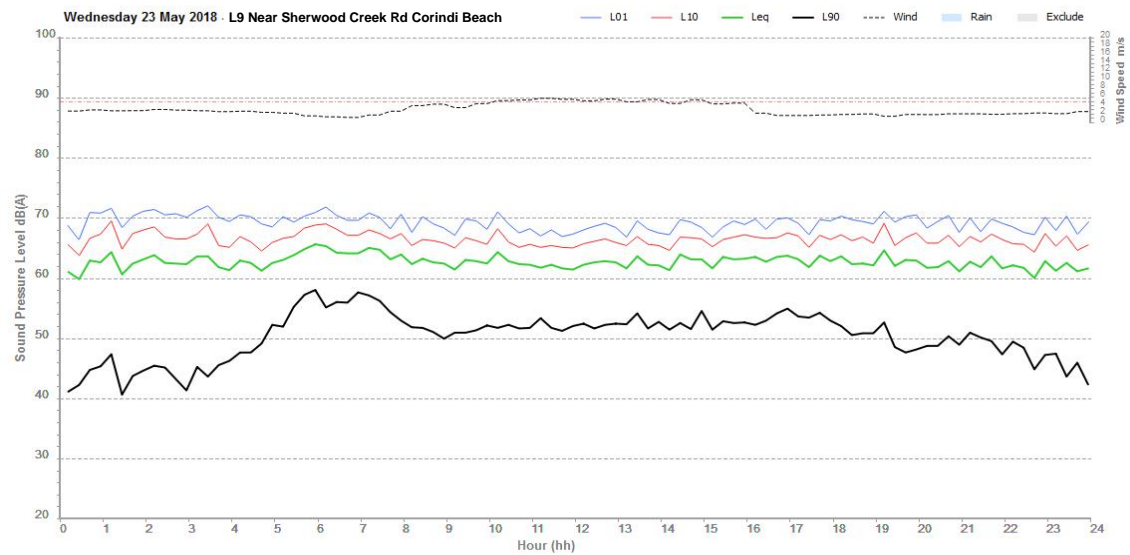
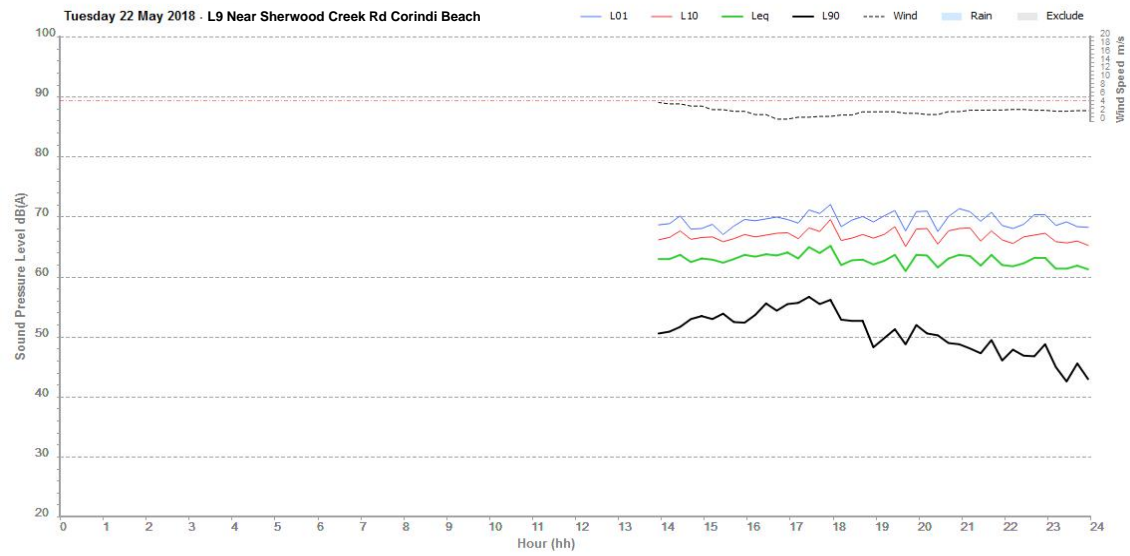
RNP Noise Level, dB(A)

	L _{Aeq(1hr)}	L _{Aeq(period)}
Day (7am - 10 pm)	64	63
Night (10pm - 7am)	64	62

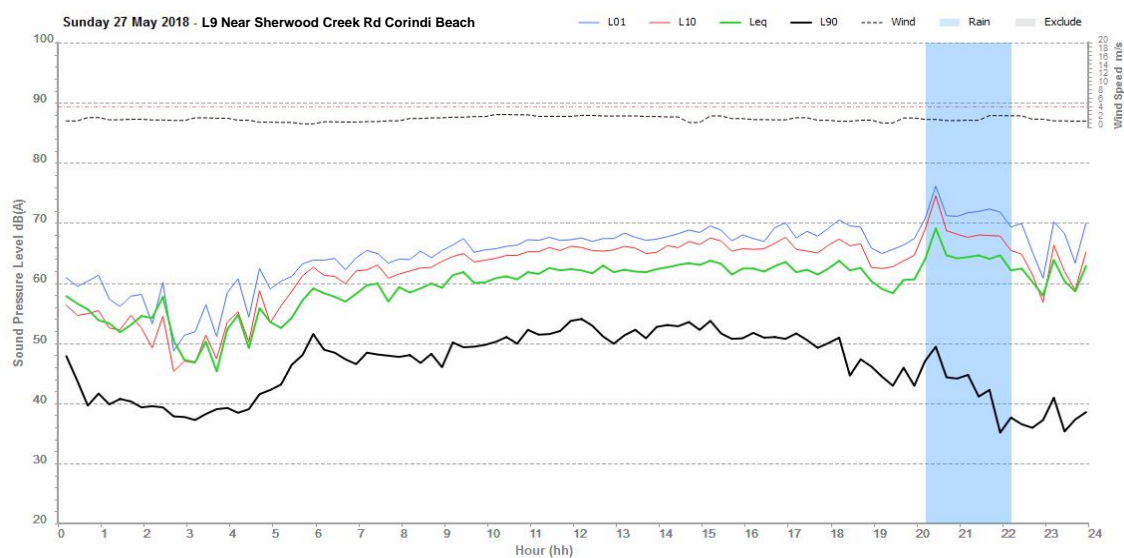
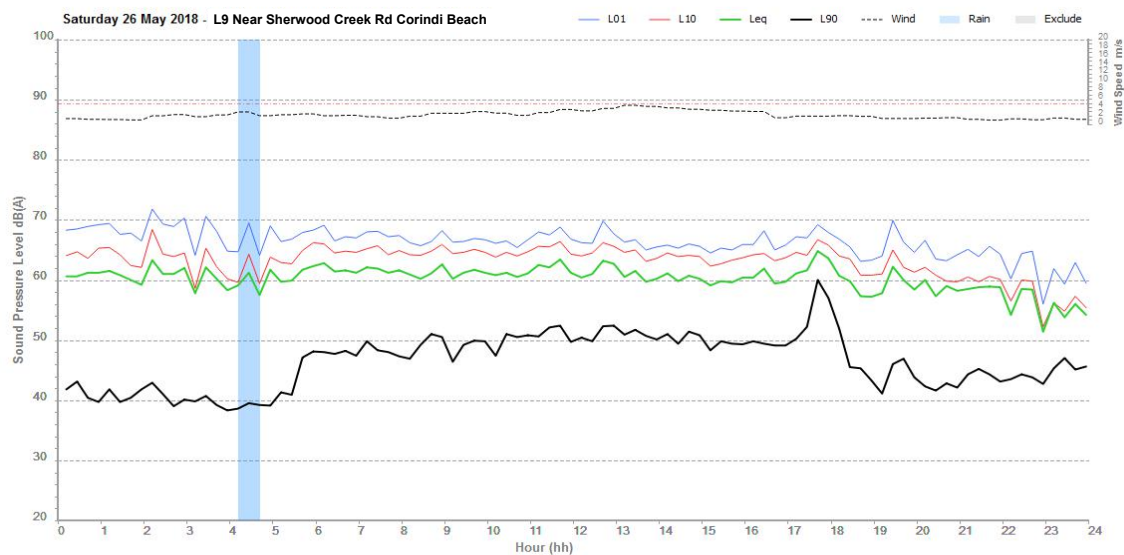
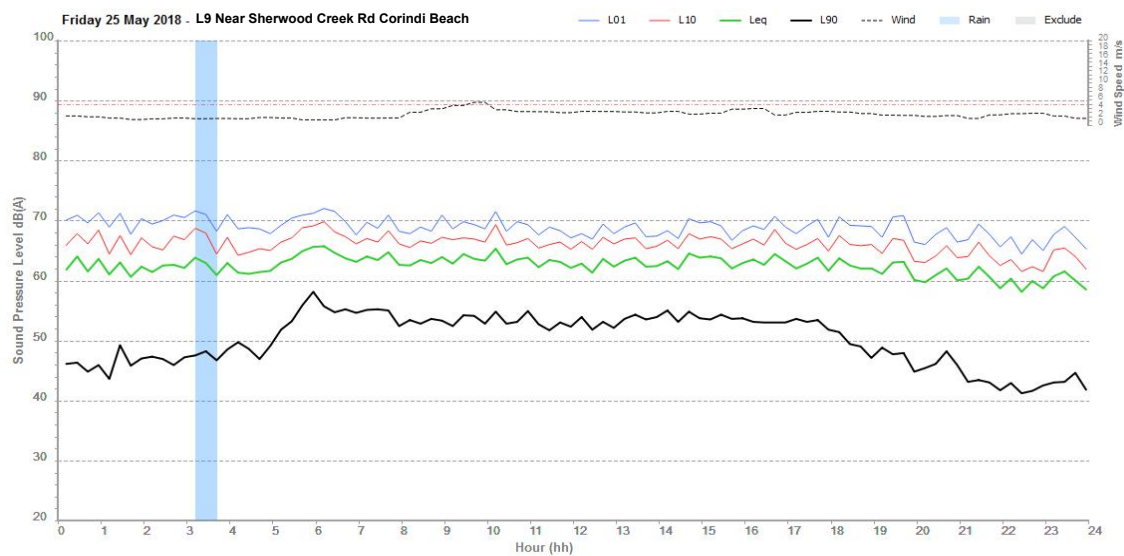
Logger Location Map



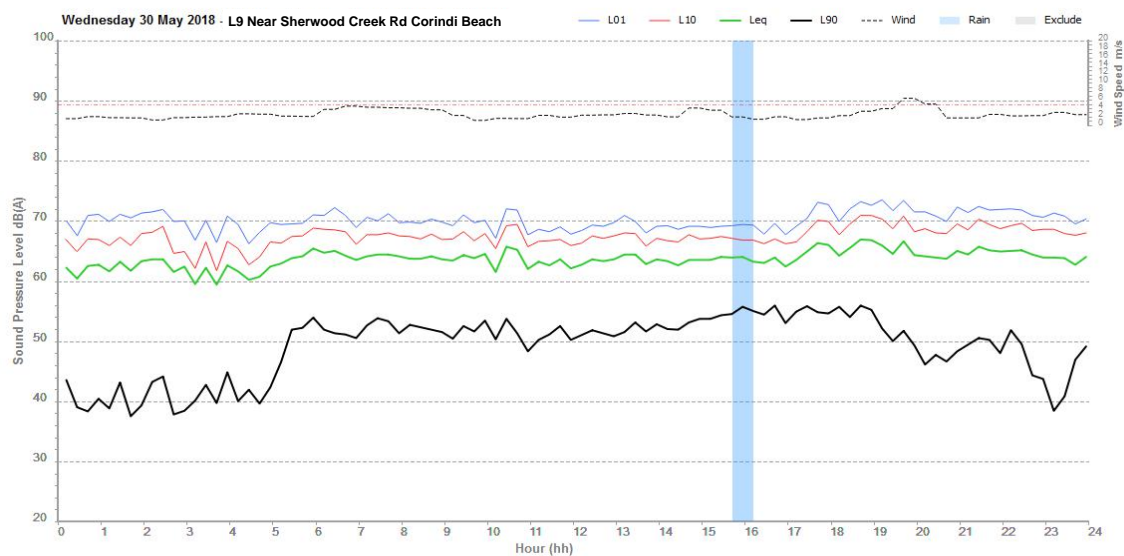
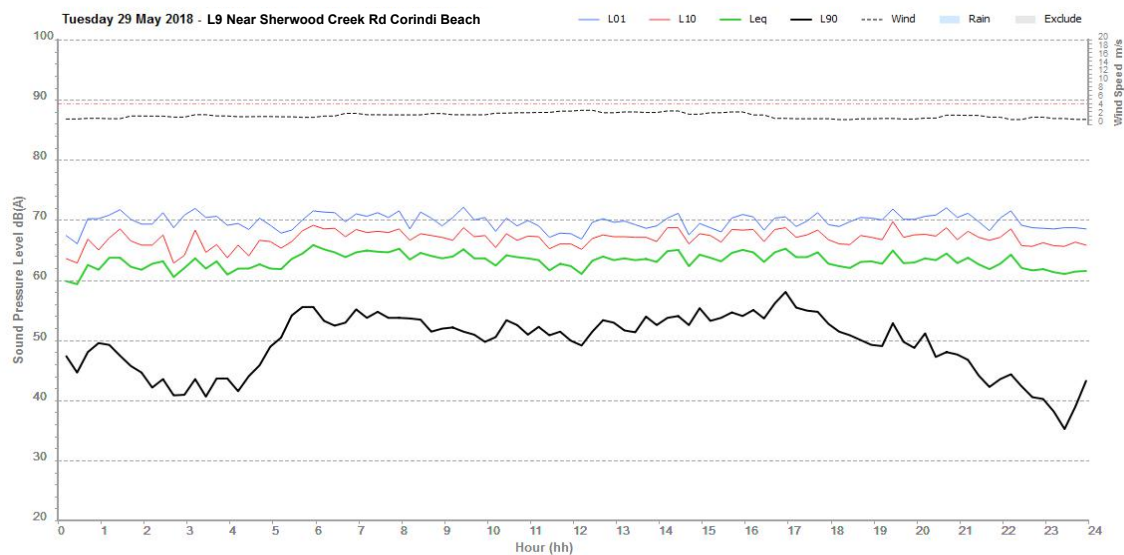
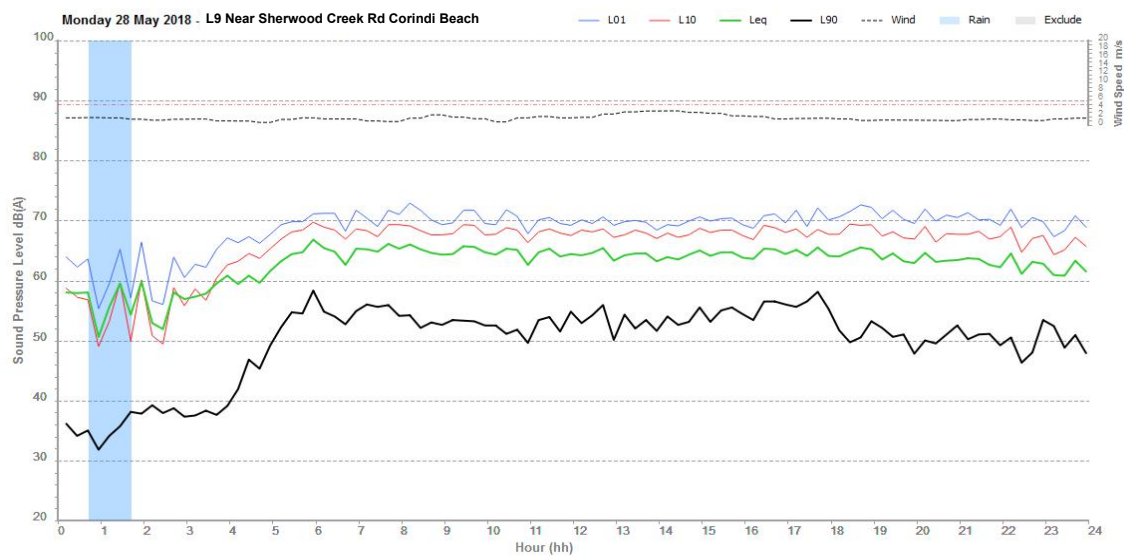
Logger Graphs



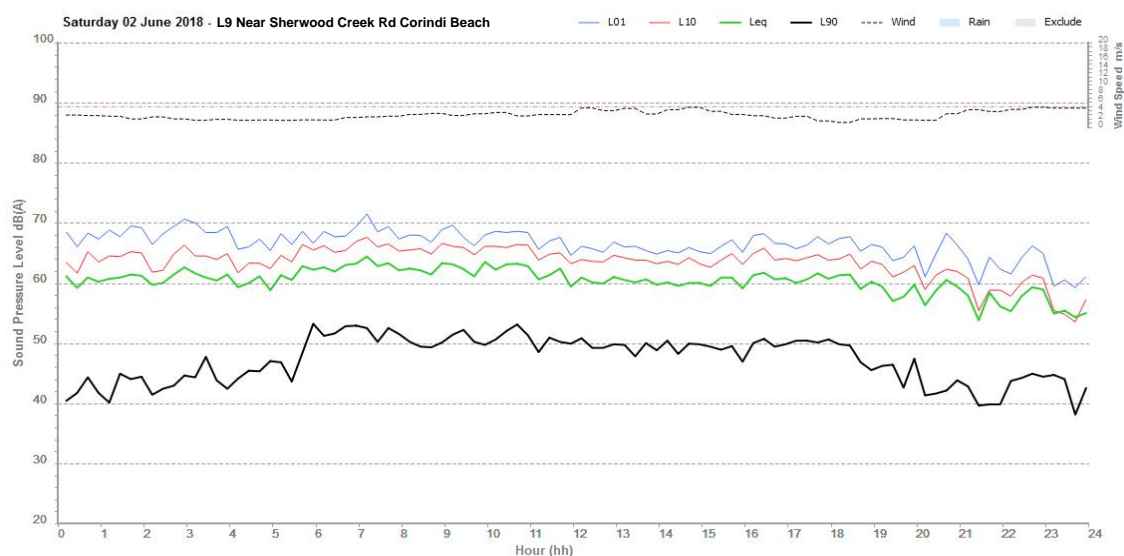
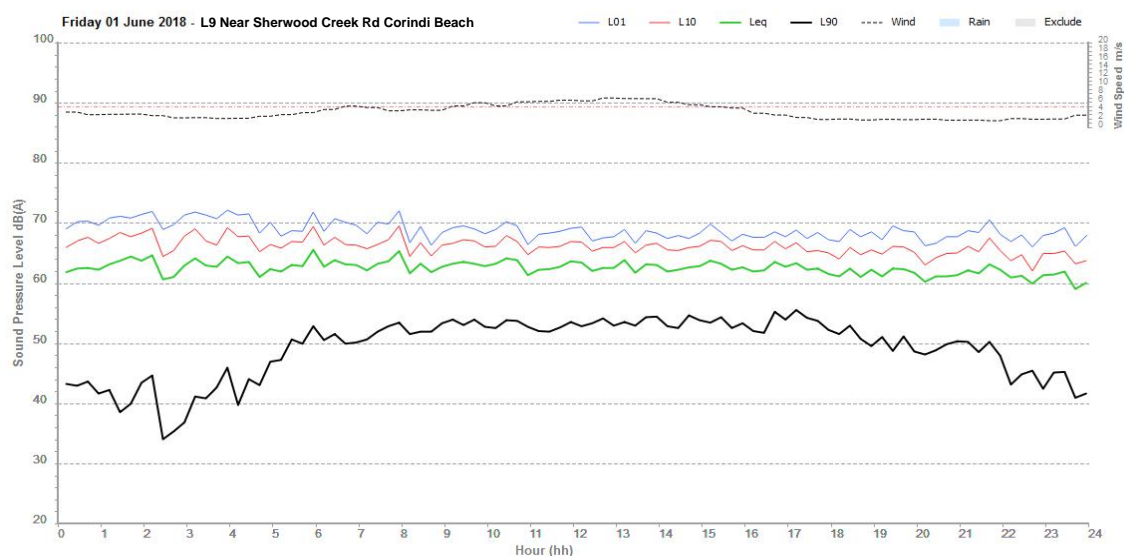
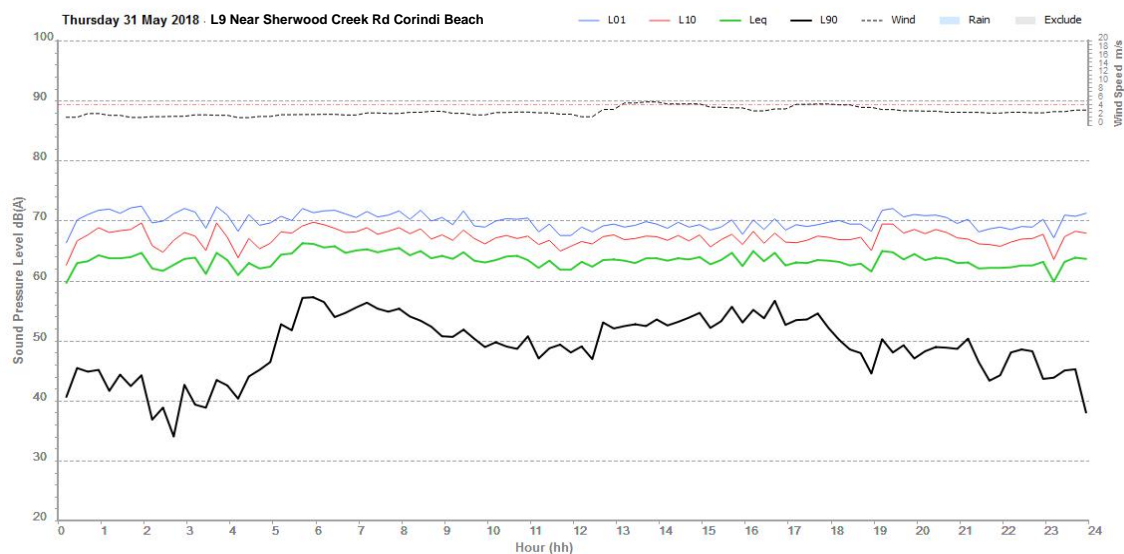
Logger Graphs



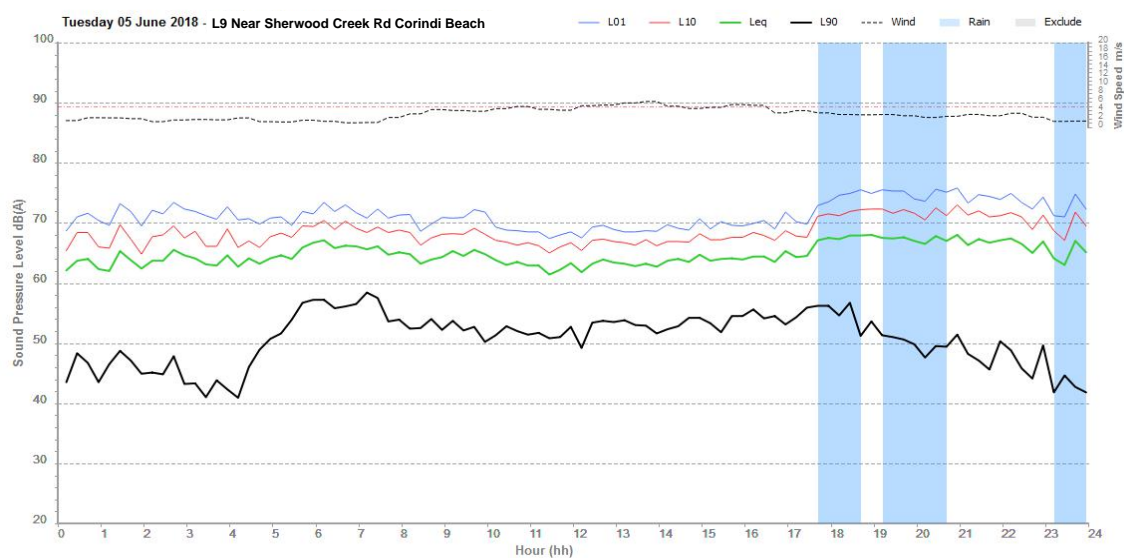
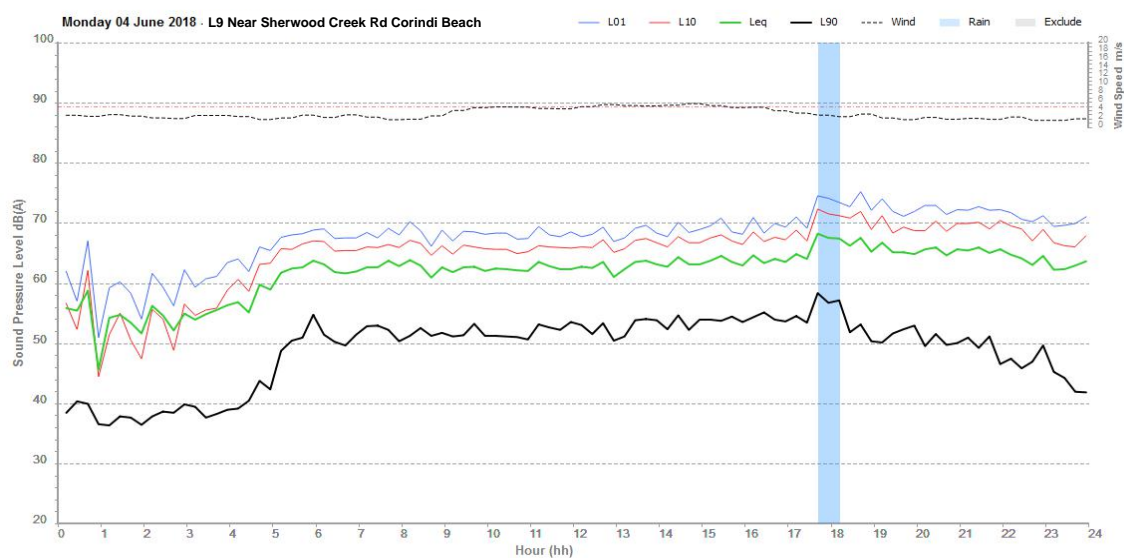
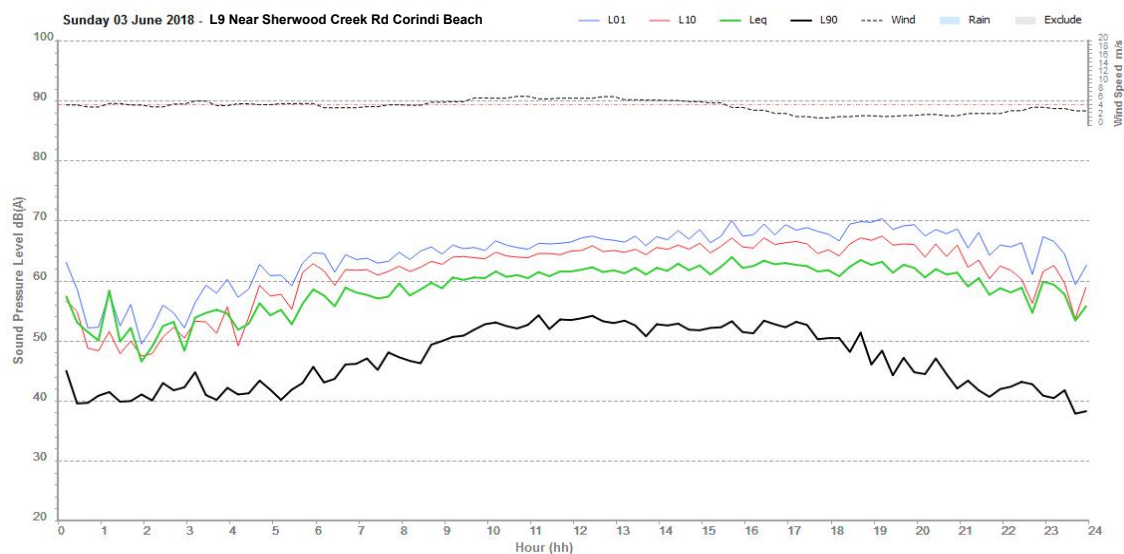
Logger Graphs



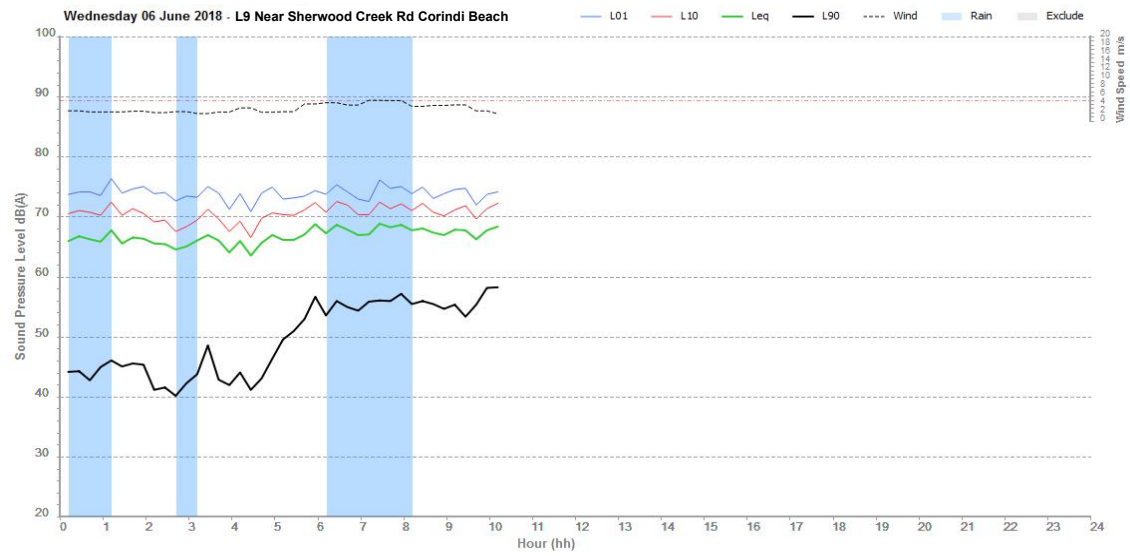
Logger Graphs



Logger Graphs



Logger Graphs



L10 - 22/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL52
Serial No : 00164395
Address: L10 34 Kangaroo Trail Road,
Corindi Beach
Location: Front Yard
Facade / Free Field: Free Field
Environment: Dominant noise source: traffic
on the Pacific Highway. Other noise sources:
Cricket noise audible. Typical truck pass-by
noise level: 74-82 dB(A) max. Typical car
pass-by noise levels: 66-75 dB(A) max.

Logger Setup Photo



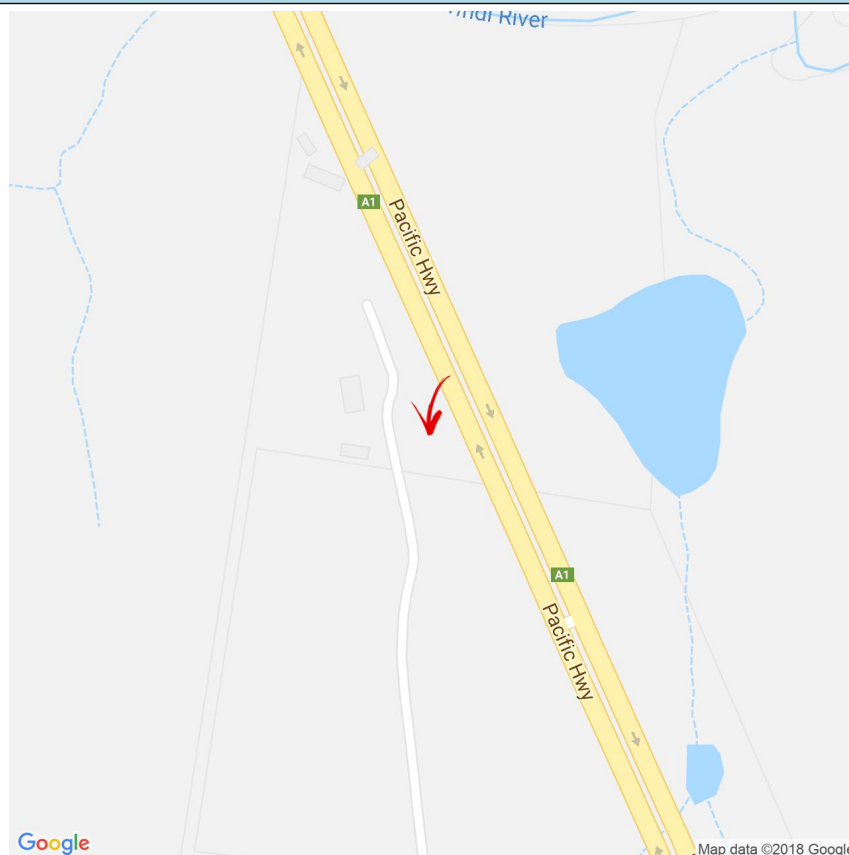
INP Noise Level, dB(A)

	Log Average	RBL
Day	-	-
Evening	-	-
Night	-	-

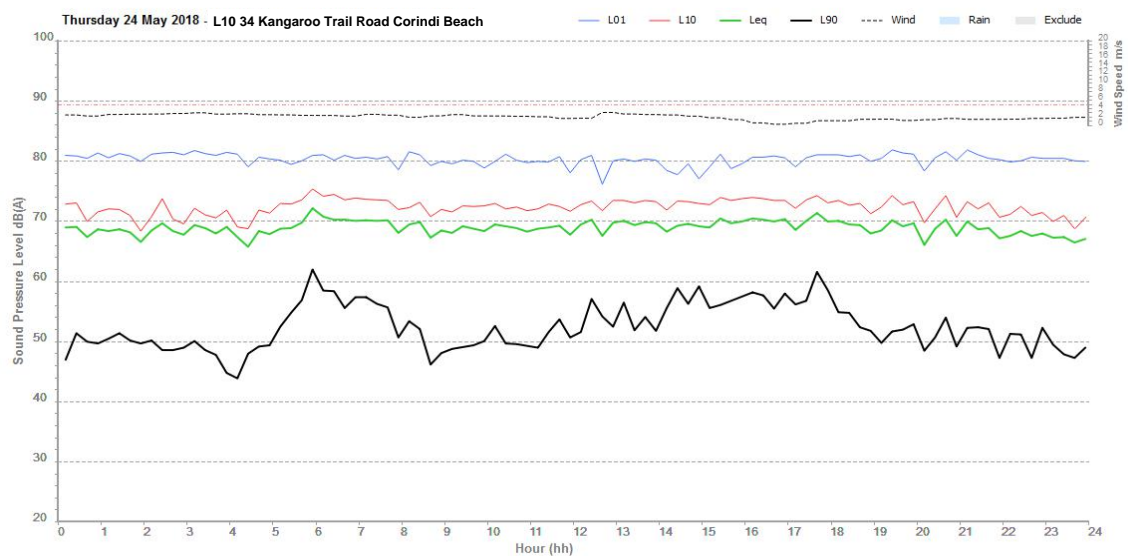
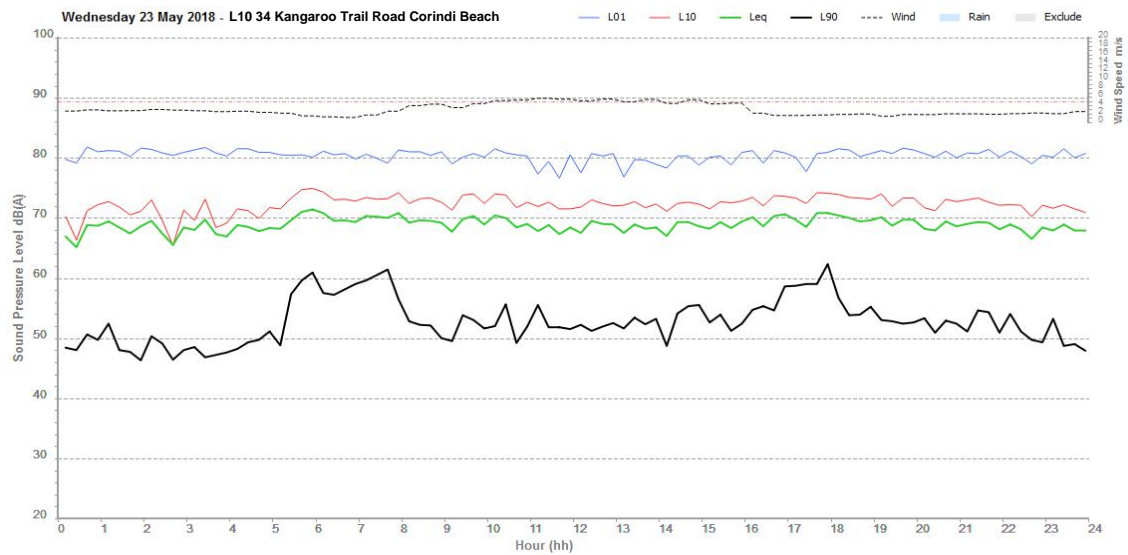
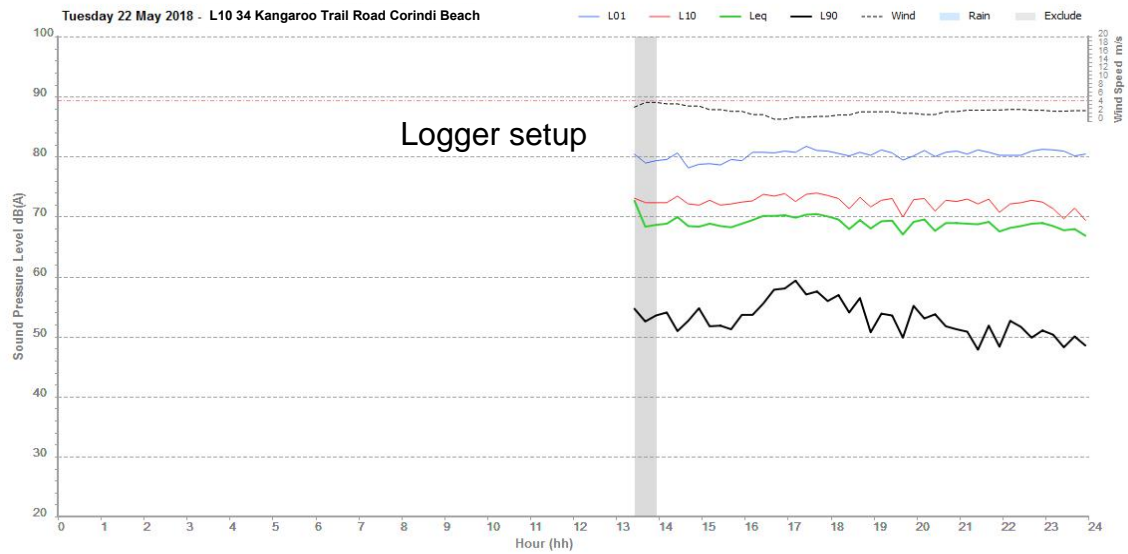
RNP Noise Level, dB(A)

	$L_{Aeq(1hr)}$	$L_{Aeq(period)}$
Day (7am - 10 pm)	70	69
Night (10pm - 7am)	70	68

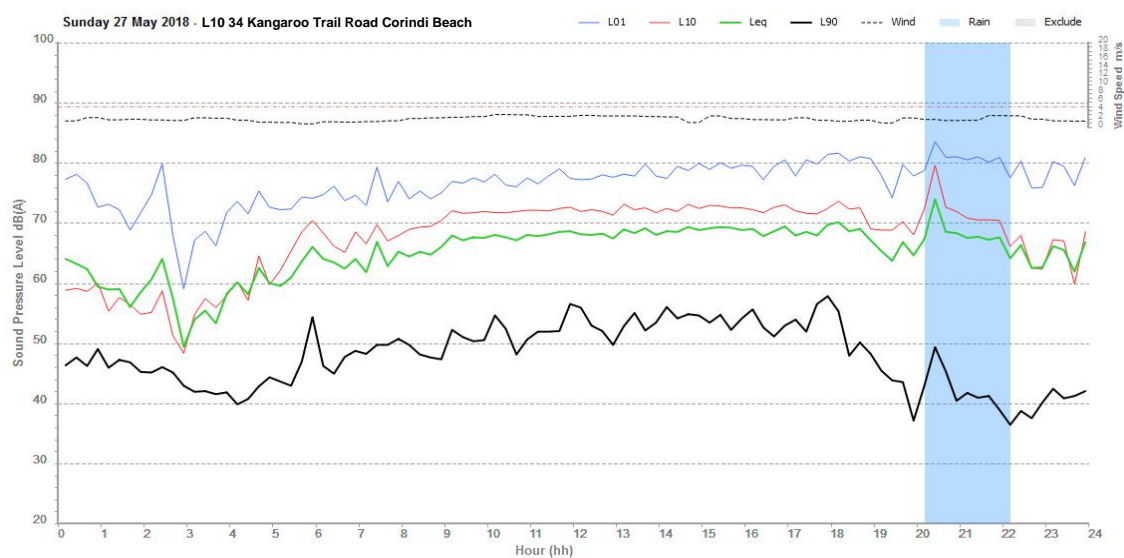
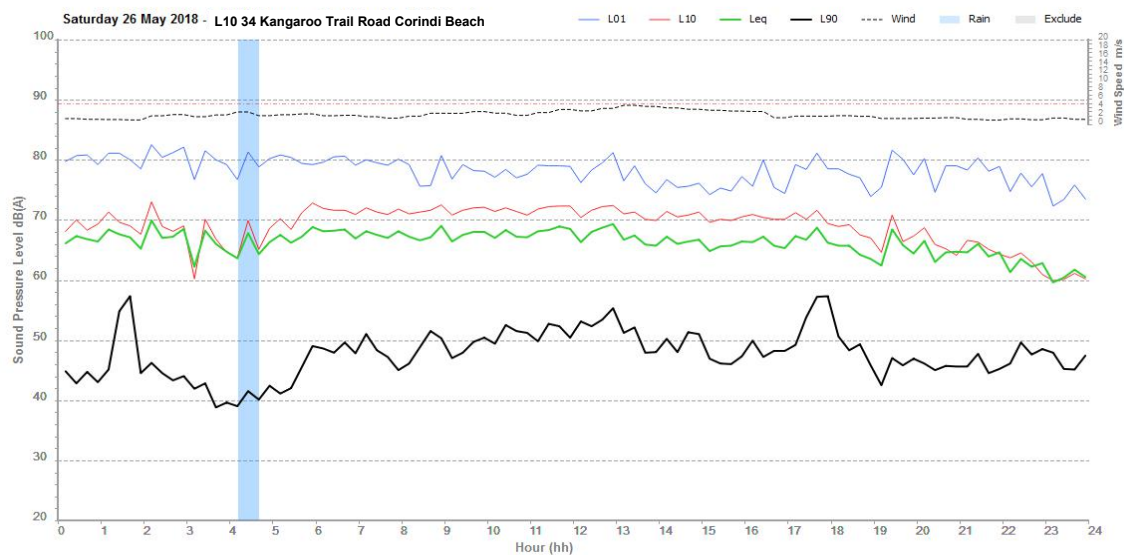
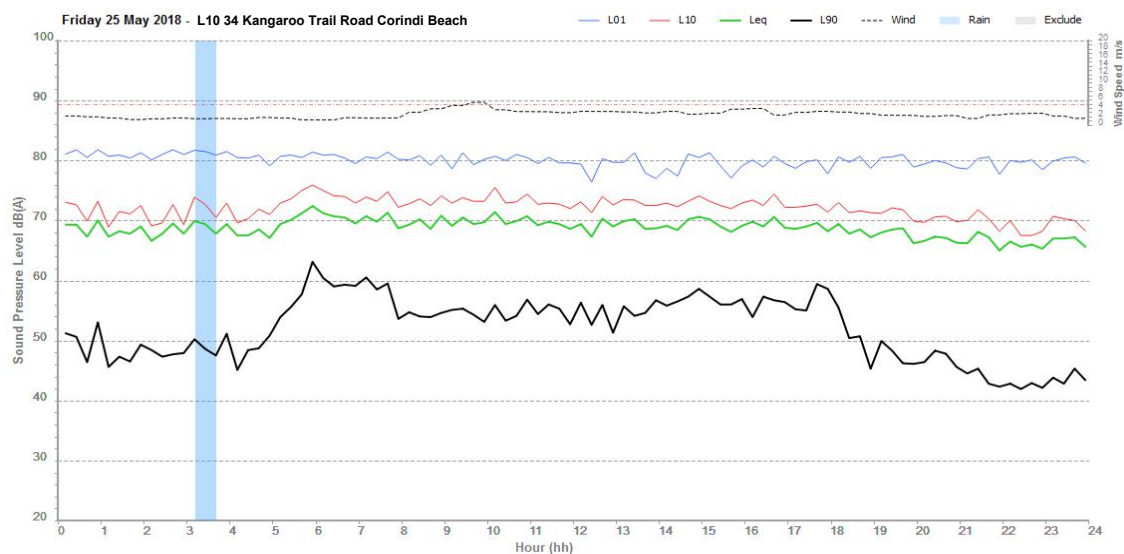
Logger Location Map



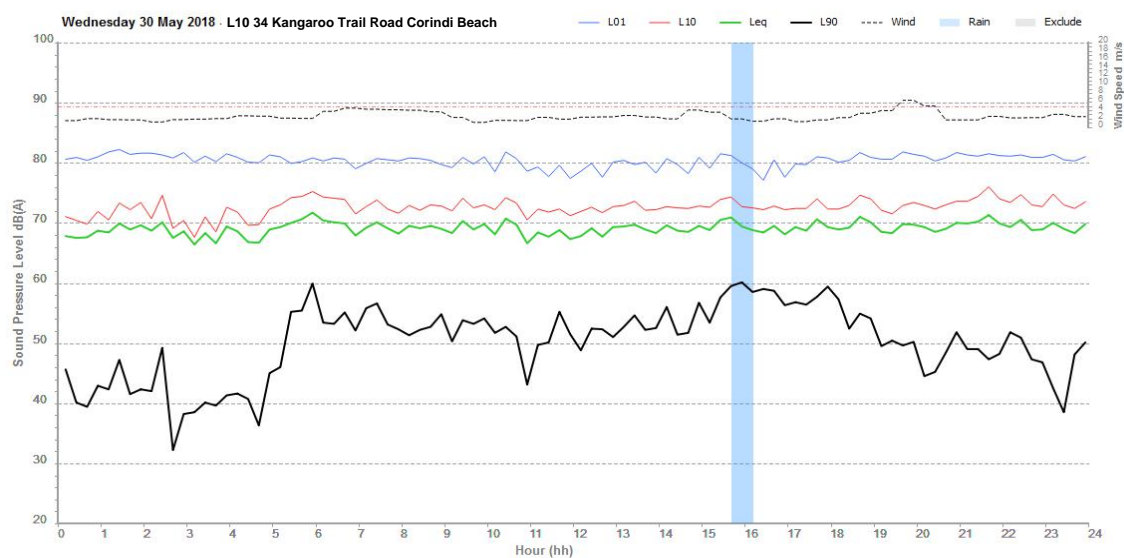
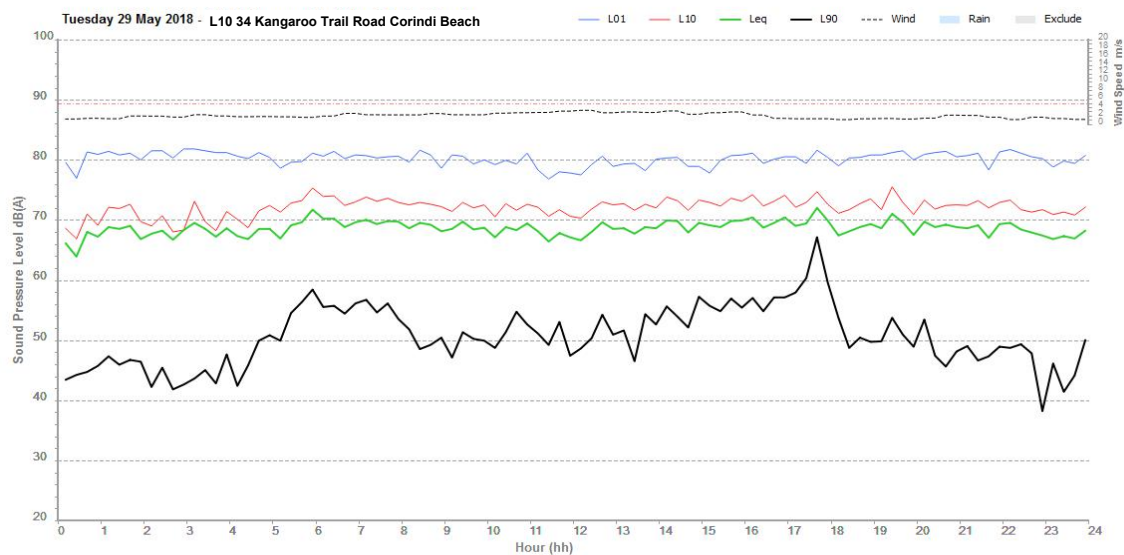
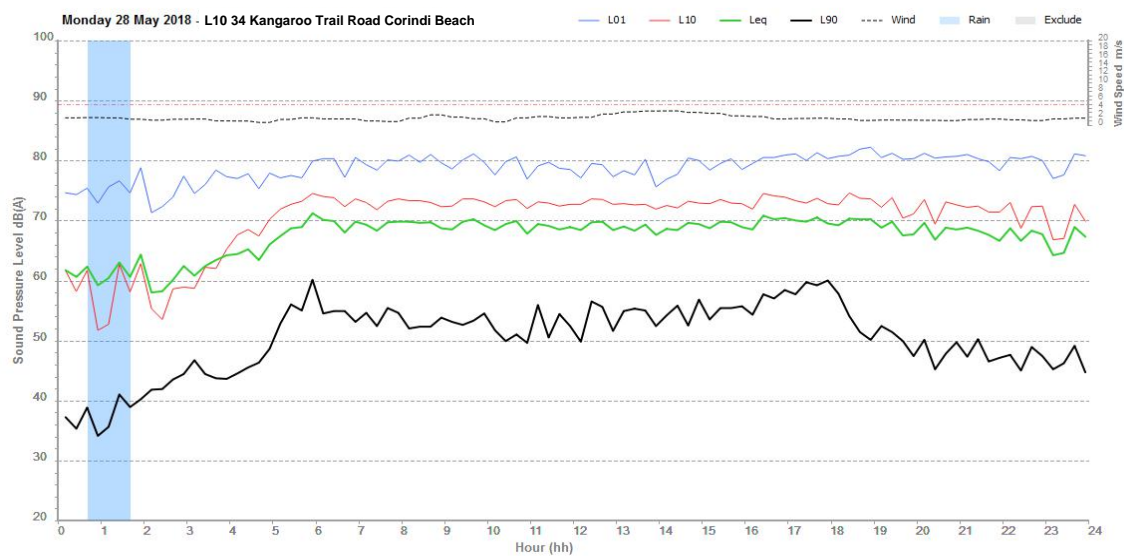
Logger Graphs



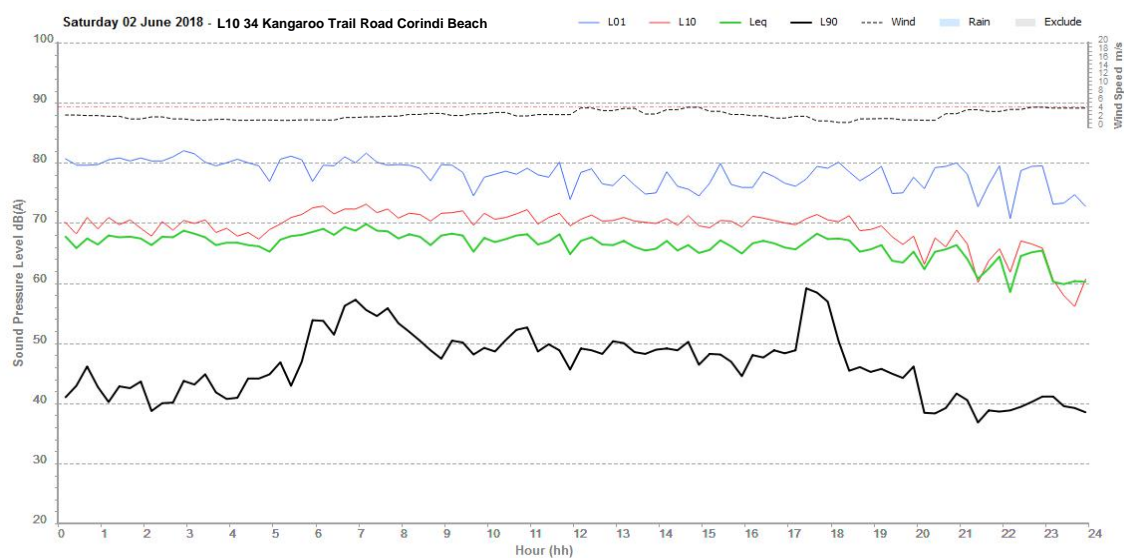
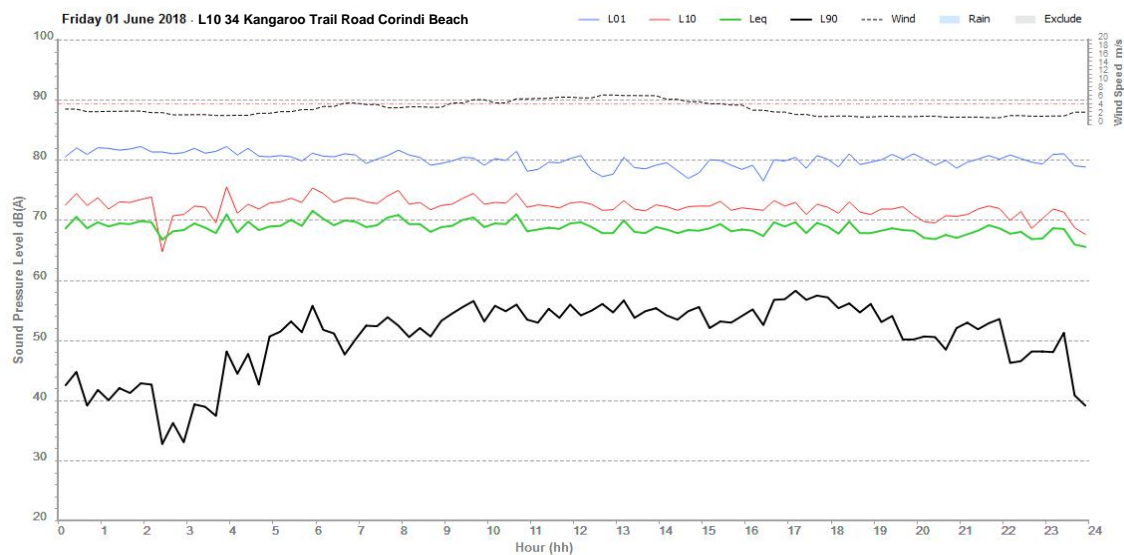
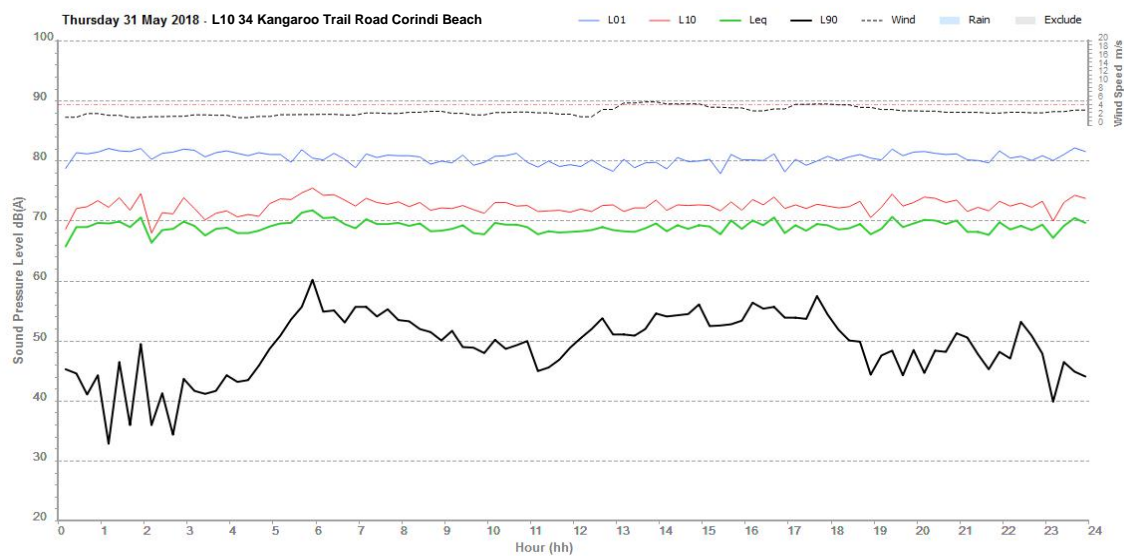
Logger Graphs



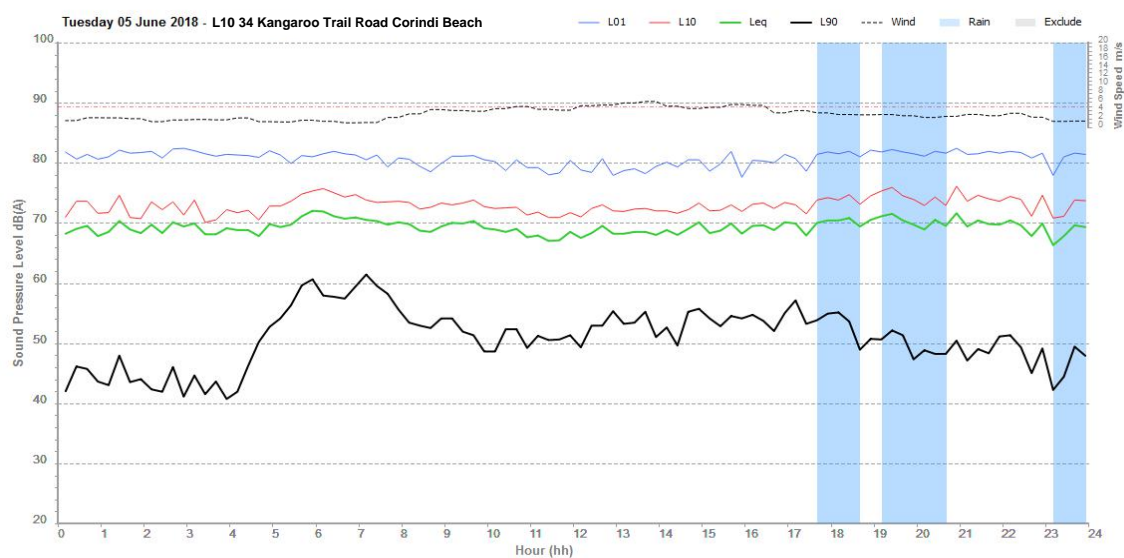
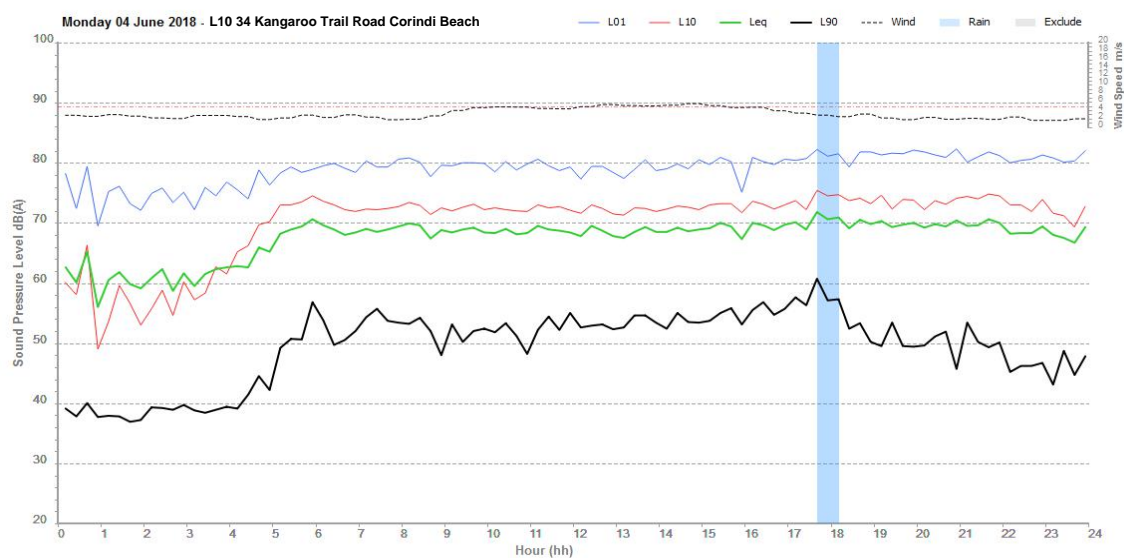
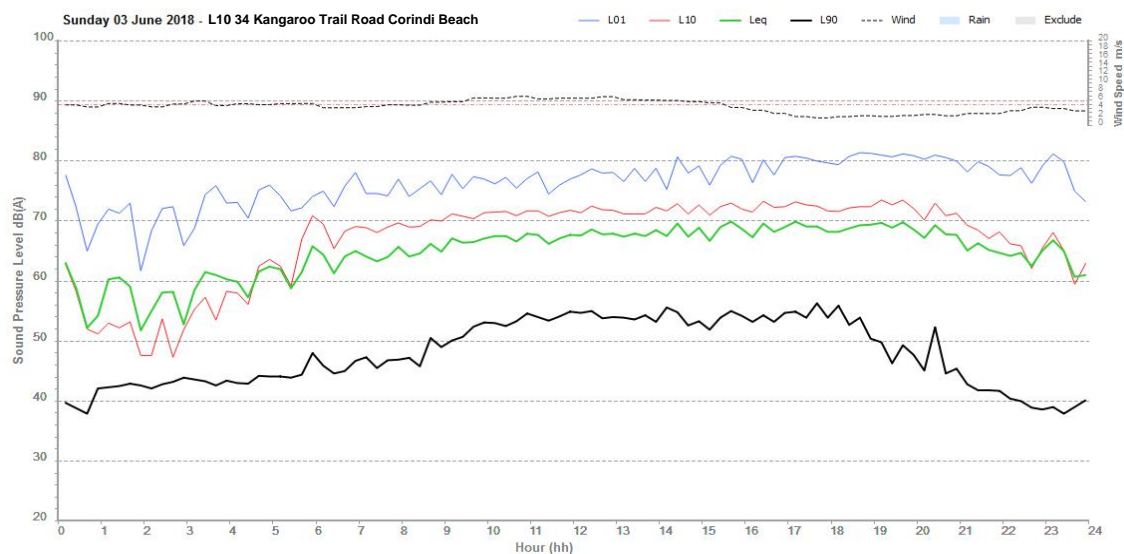
Logger Graphs



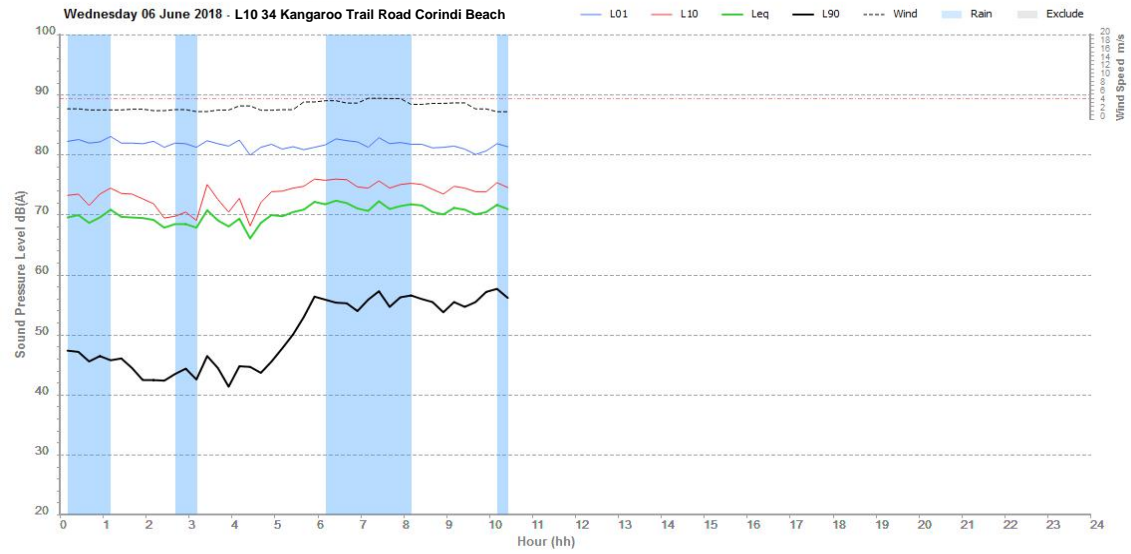
Logger Graphs



Logger Graphs



Logger Graphs



L11 - 22/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL52
 Serial No : 005553967
 Address: L11 1 Arrawarra Beach Road,
 Arrawarra
 Location: Side of Road
 Facade / Free Field: Free Field
 Environment: Dominant noise source: traffic
 on the Pacific Highway. Other noise sources:
 bird noise audible when no cars on road.
 Typical truck pass-by noise level: trucks along
 Pacific Highway audible and there is line of
 site of them through the rest area. Typical car
 pass-by noise levels: 63 dB(A) max.

Logger Setup Photo



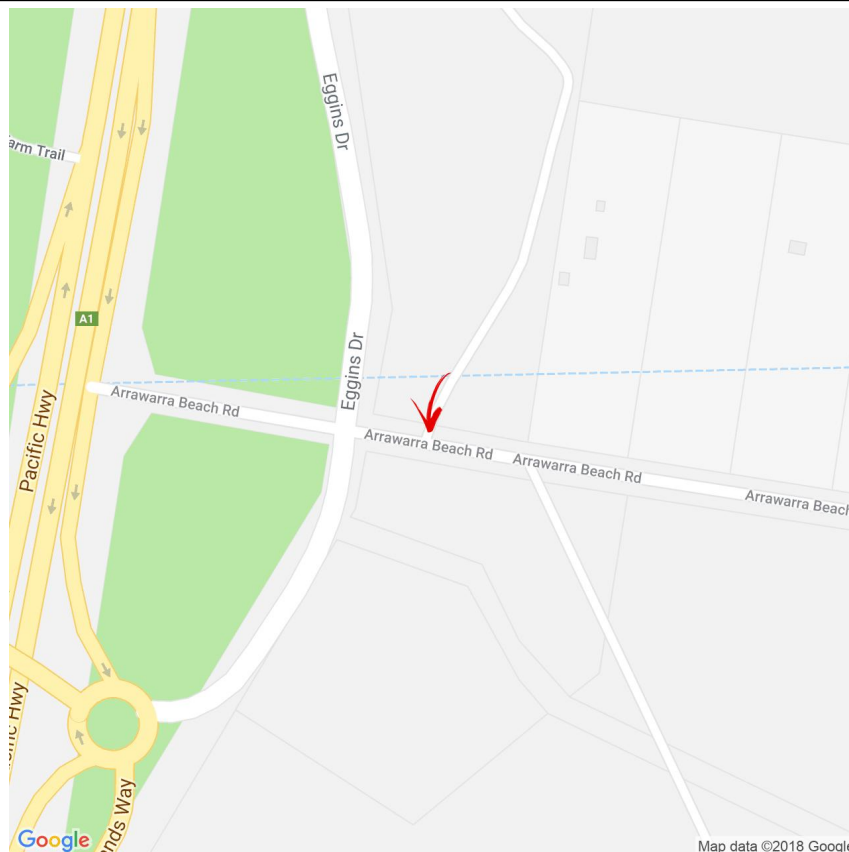
INP Noise Level, dB(A)

	Log Average	RBL
Day	56	45
Evening	53	47
Night	52	39

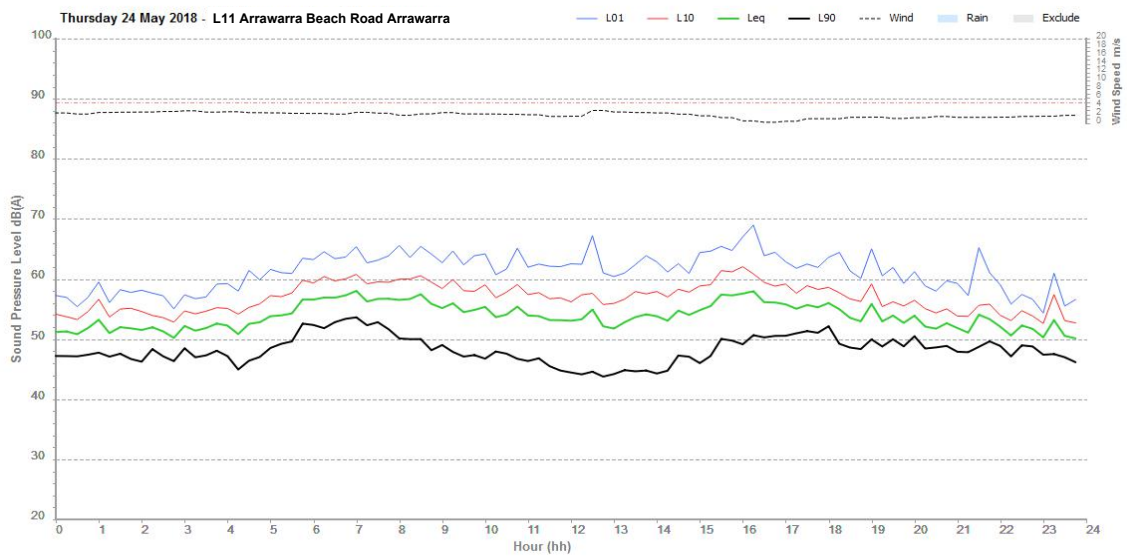
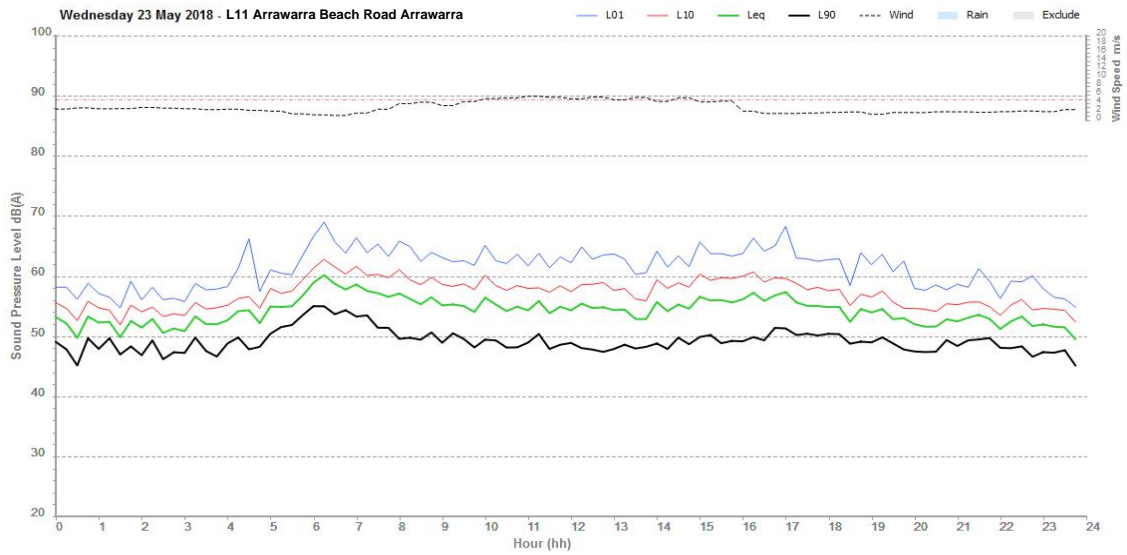
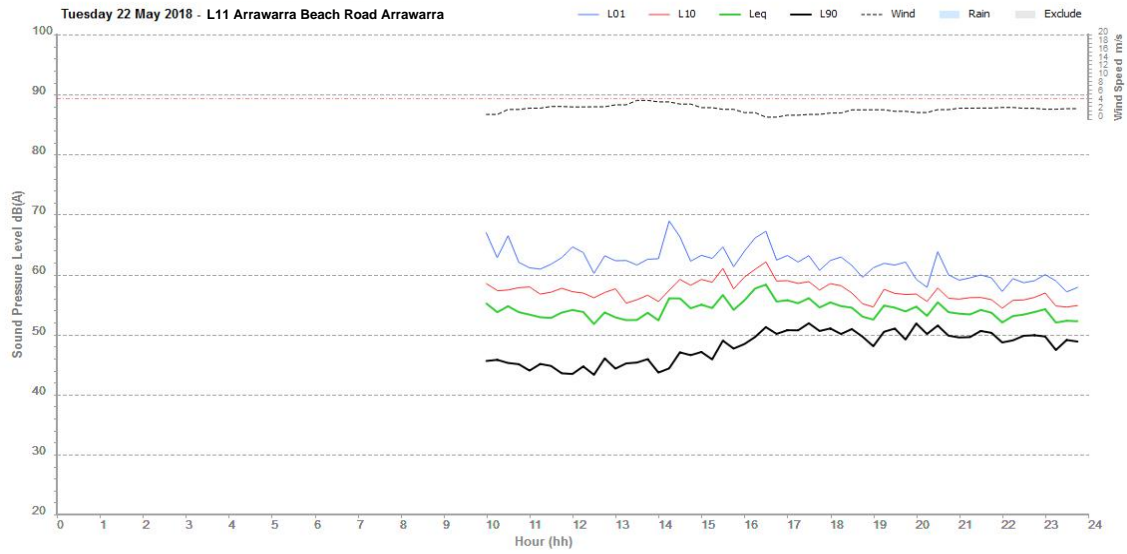
RNP Noise Level, dB(A)

	$L_{Aeq(1hr)}$	$L_{Aeq(period)}$
Day (7am - 10 pm)	-	-
Night (10pm - 7am)	-	-

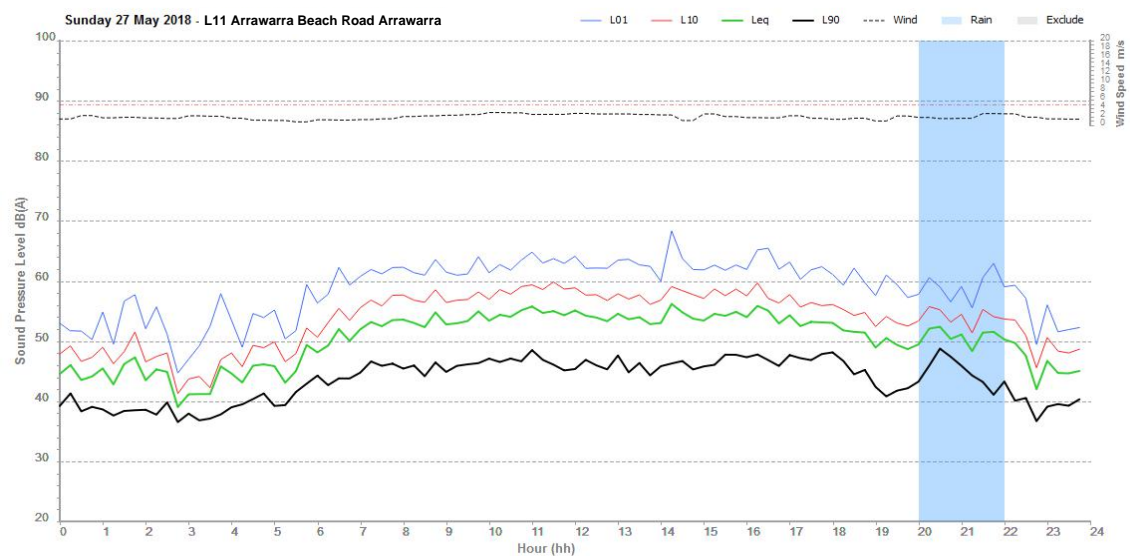
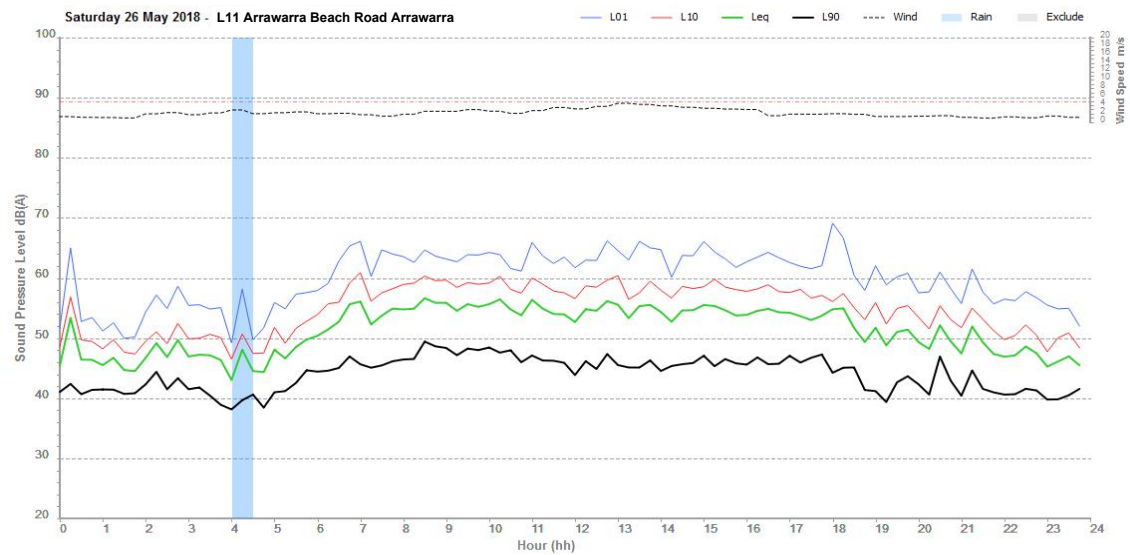
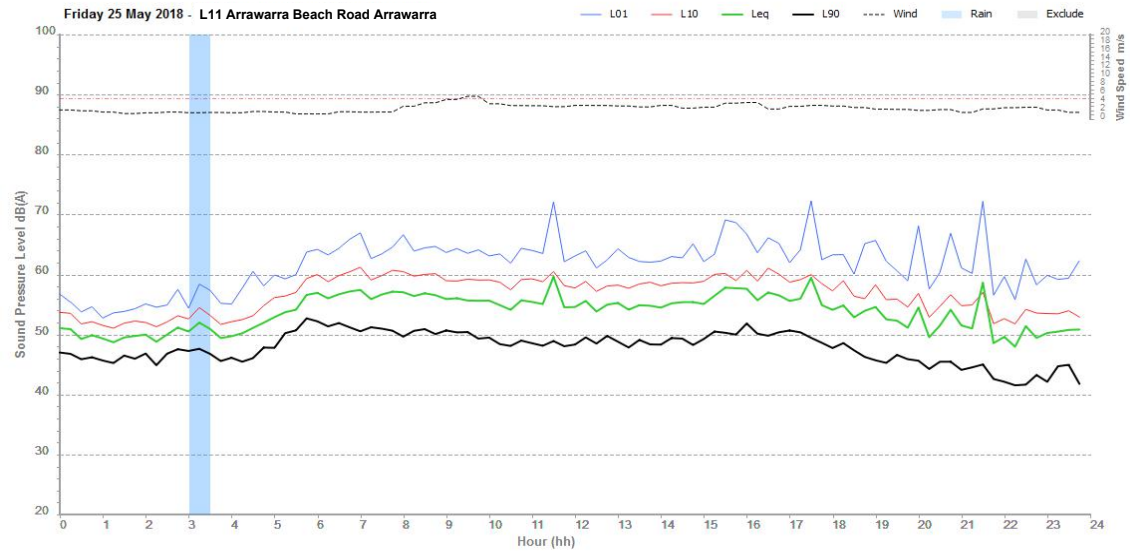
Logger Location Map



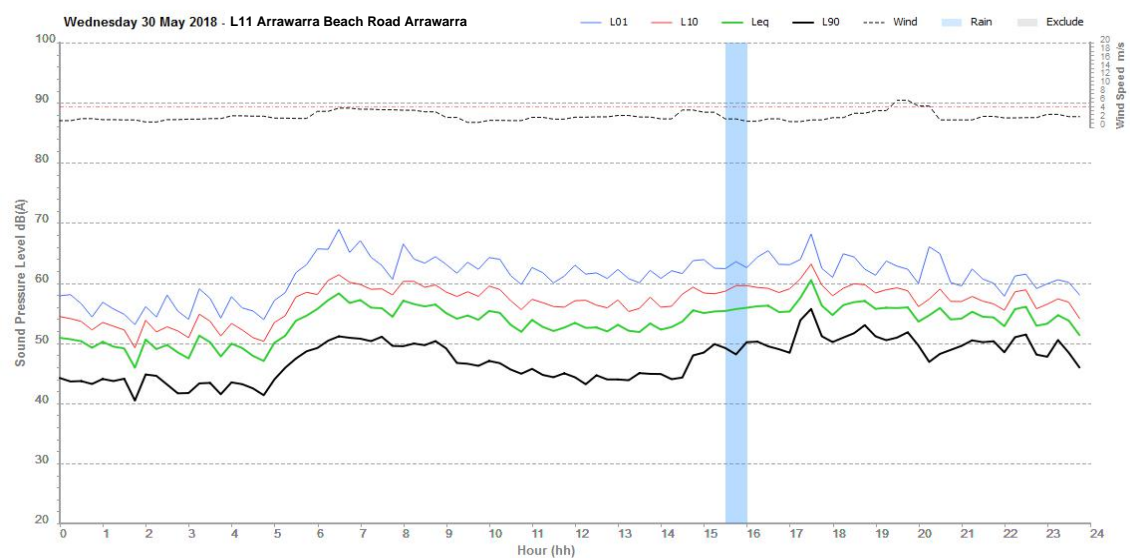
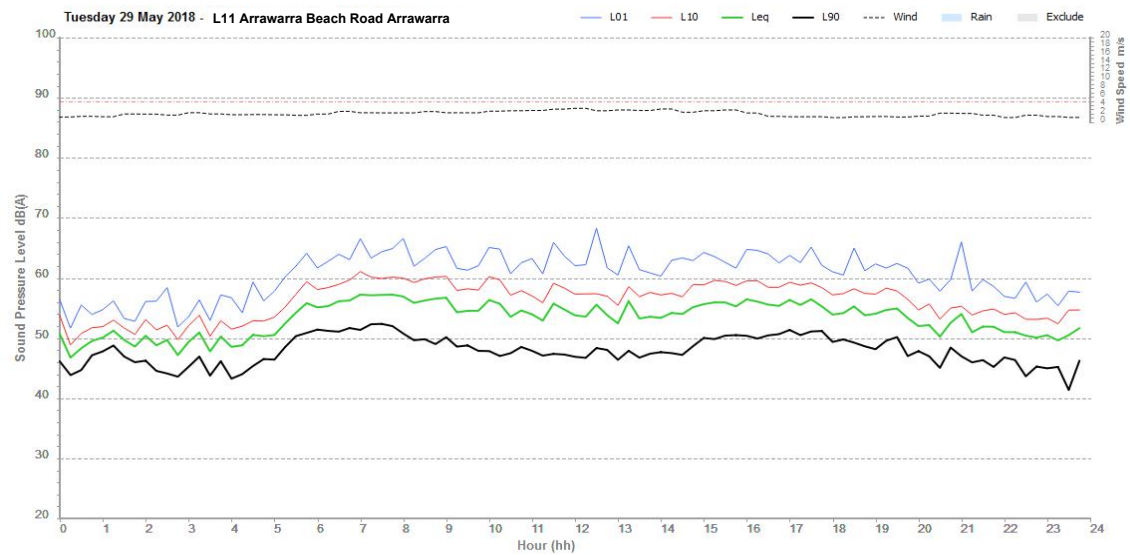
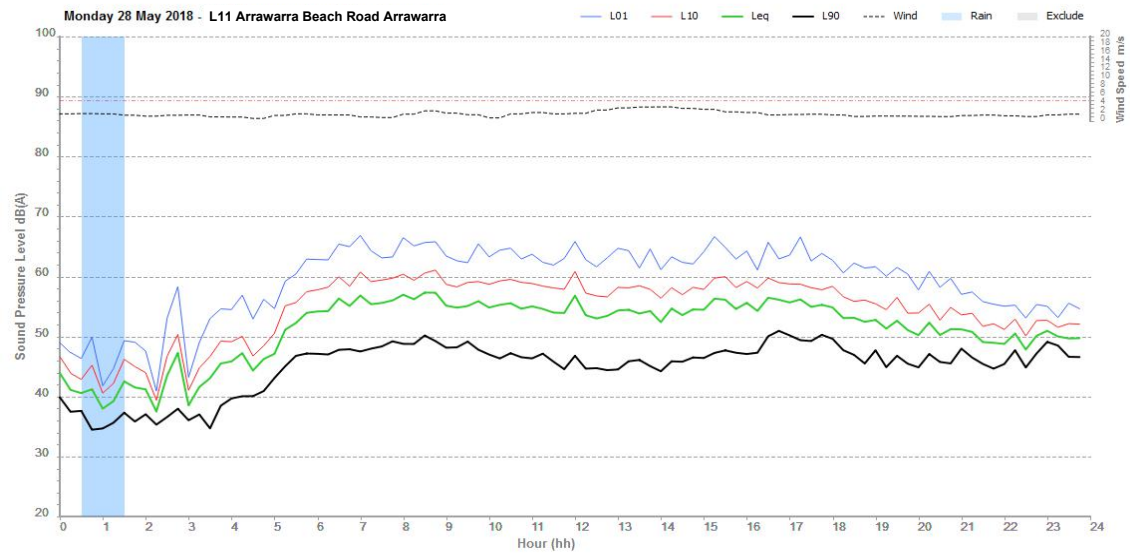
Logger Graphs



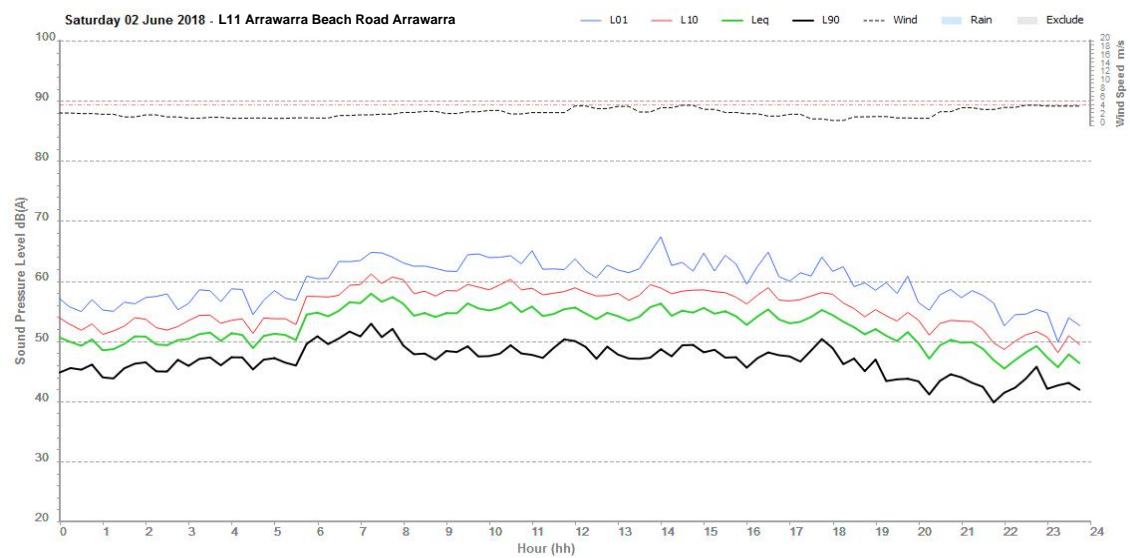
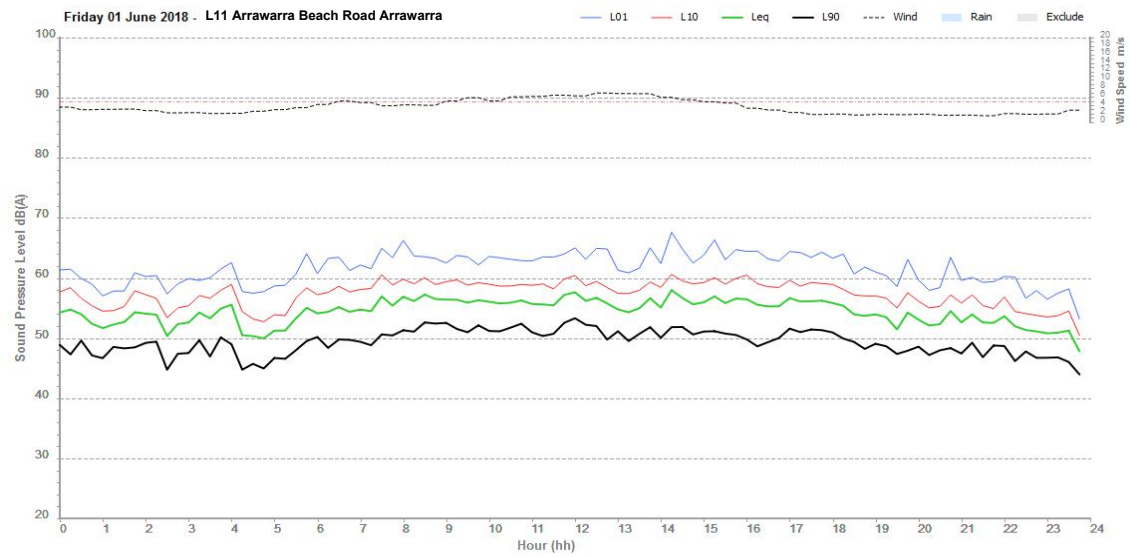
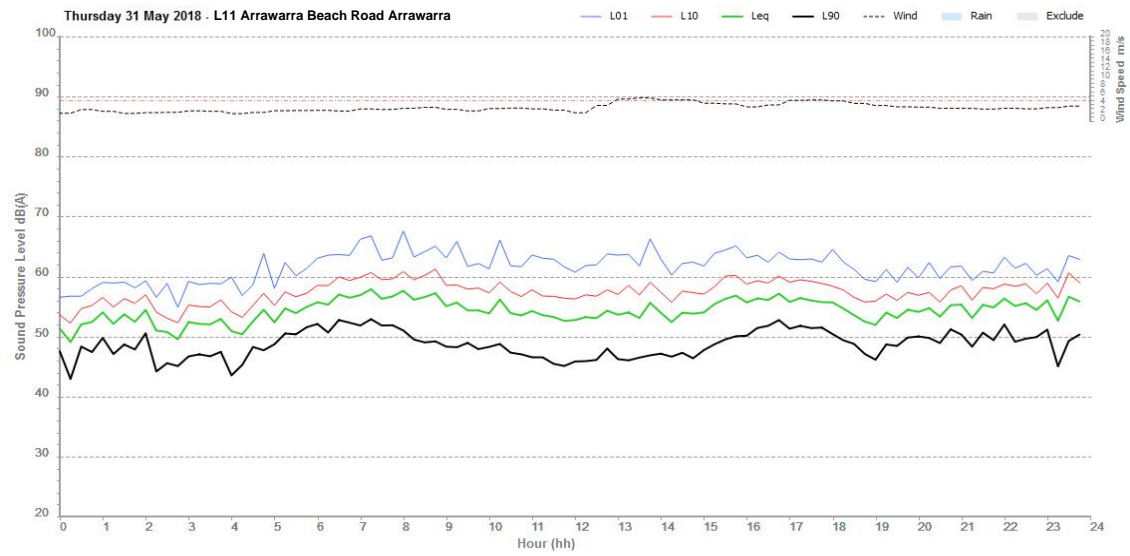
Logger Graphs



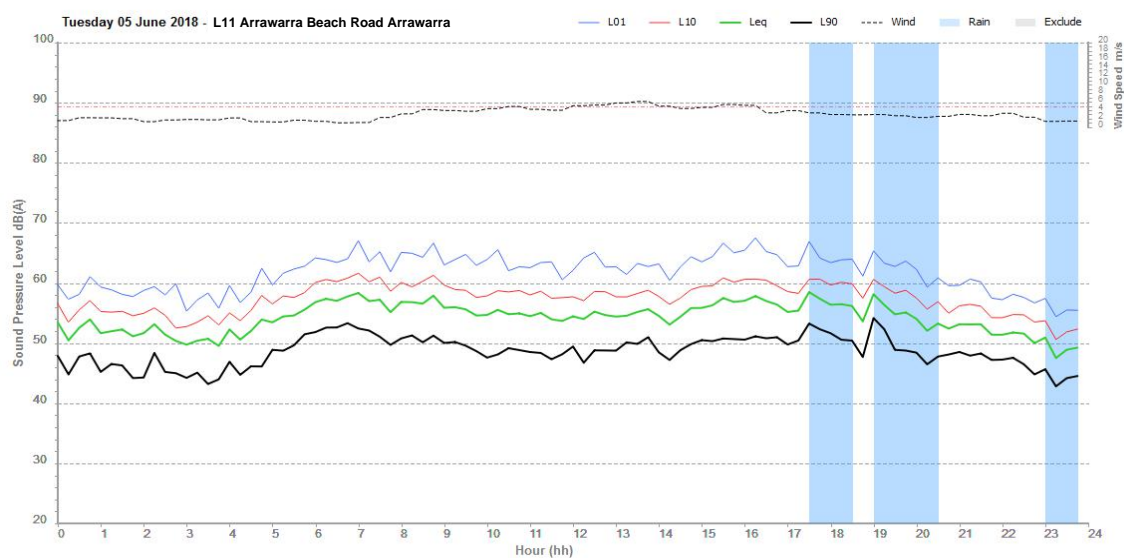
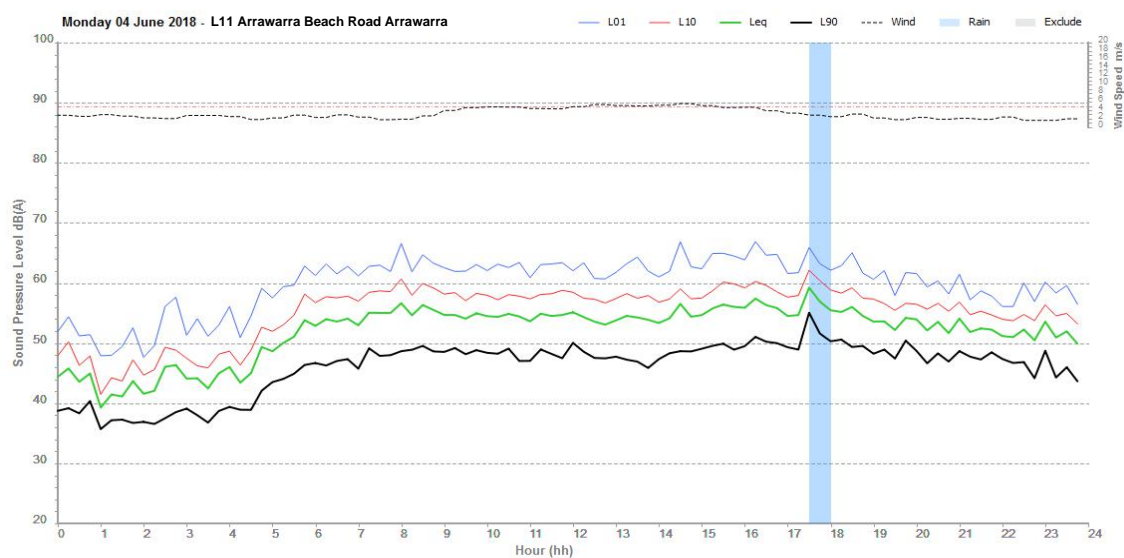
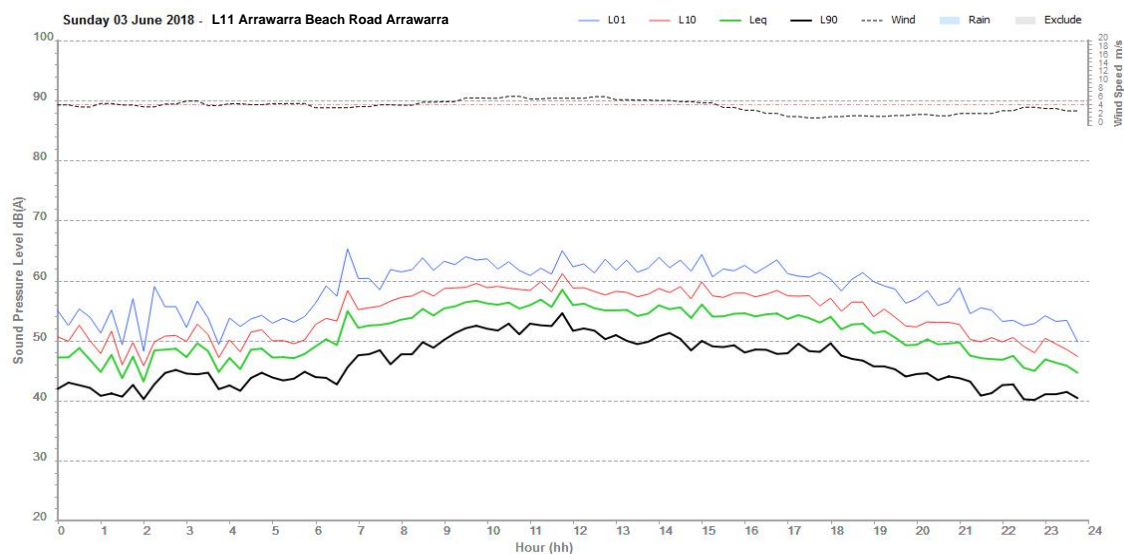
Logger Graphs



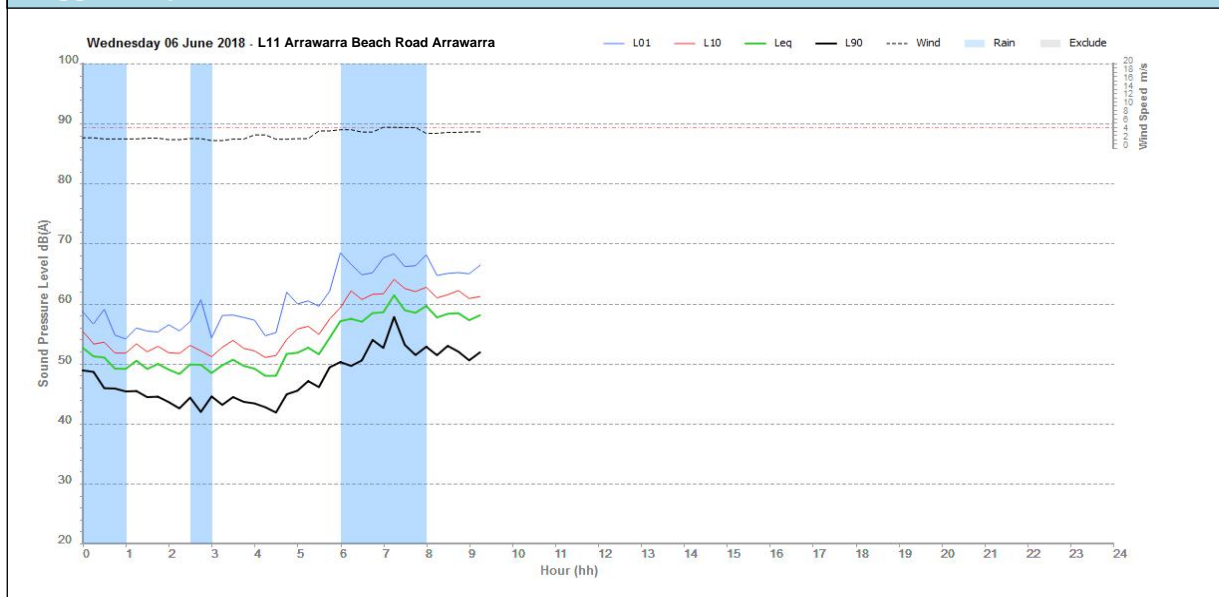
Logger Graphs



Logger Graphs



Logger Graphs



L12 - 22/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL52
 Serial No : 0164394
 Address: L12 Rediger Close, Halfway Creek
 Location: Side of Road
 Facade / Free Field: Free Field
 Environment: Dominant noise source: traffic on the Pacific Highway. Other noise sources: Lawn mower audible. Typical vehicle U-turn noise levels: 70 dB(A) max

Logger Setup Photo



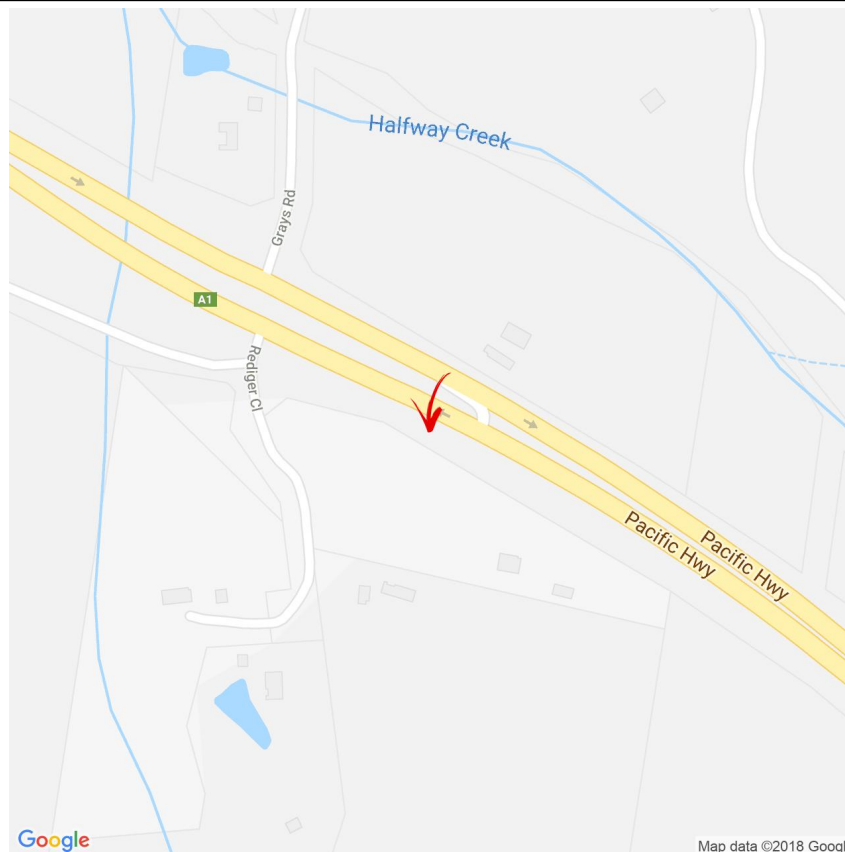
INP Noise Level, dB(A)

	Log Average	RBL
Day	72	51
Evening	70	44
Night	70	38

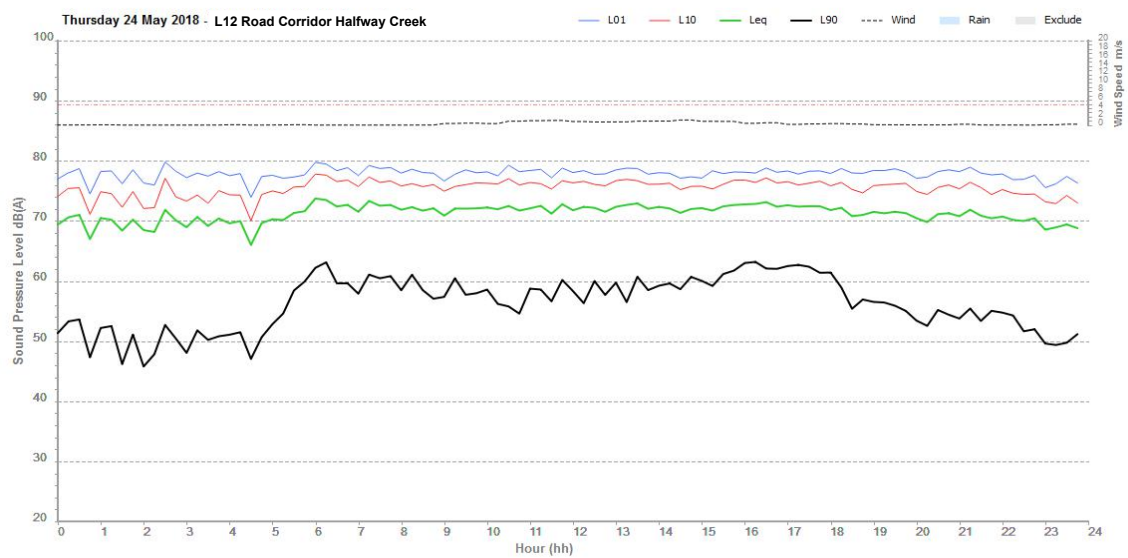
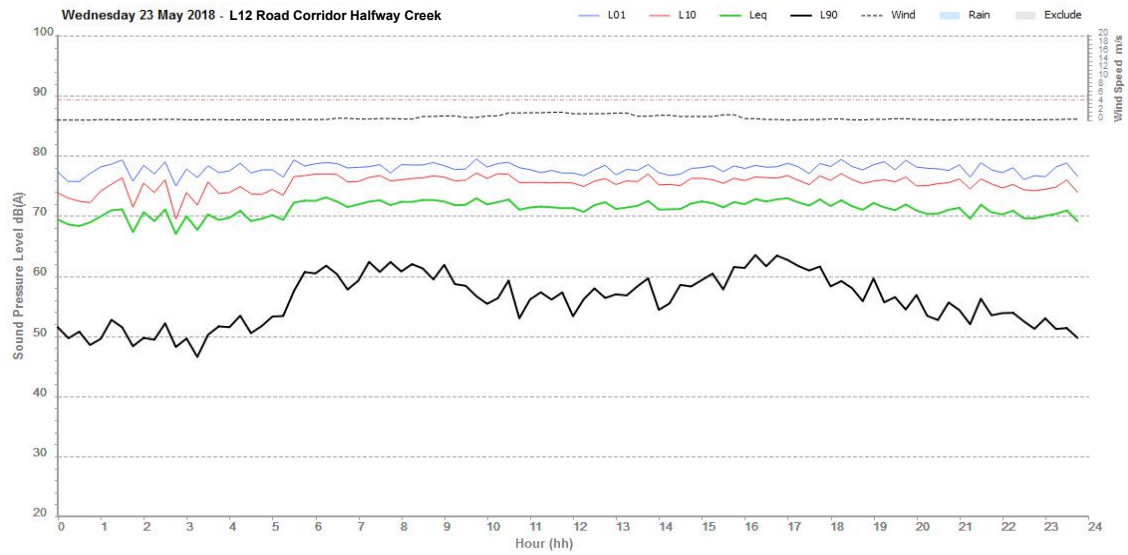
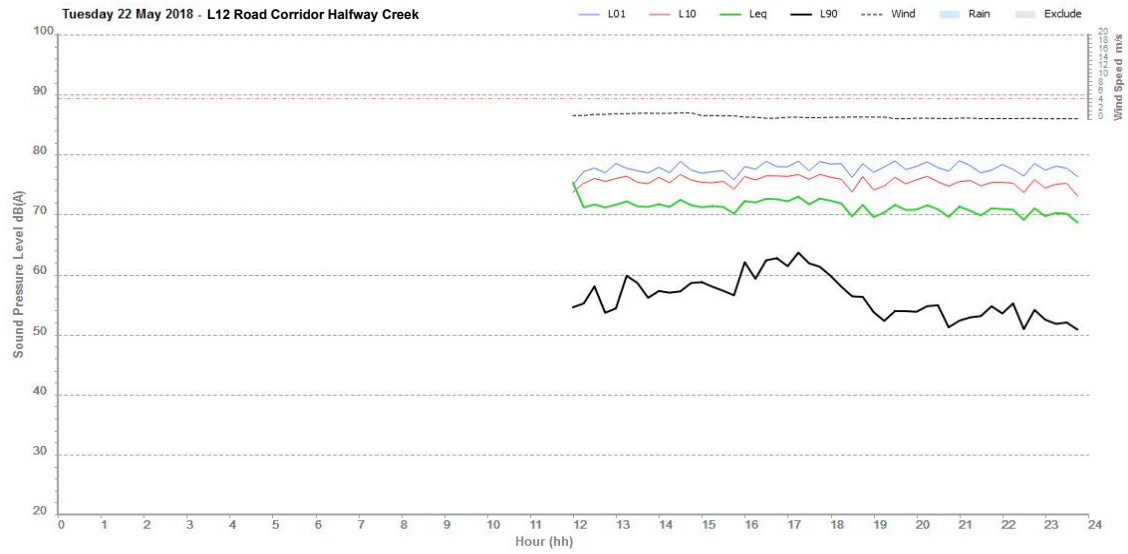
RNP Noise Level, dB(A)

	L _{Aeq(1hr)}	L _{Aeq(period)}
Day (7am - 10 pm)	-	-
Night (10pm - 7am)	-	-

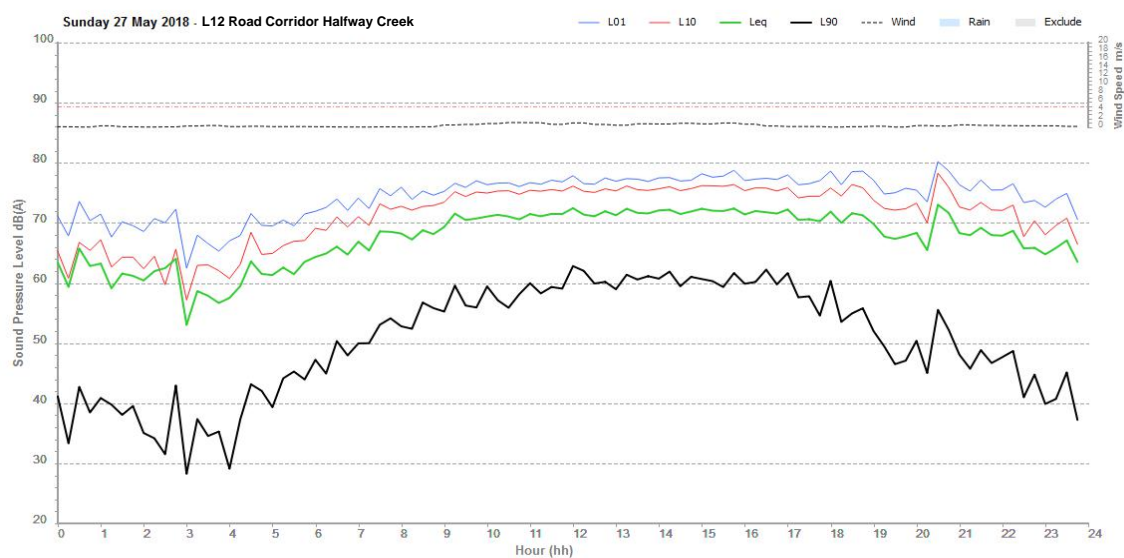
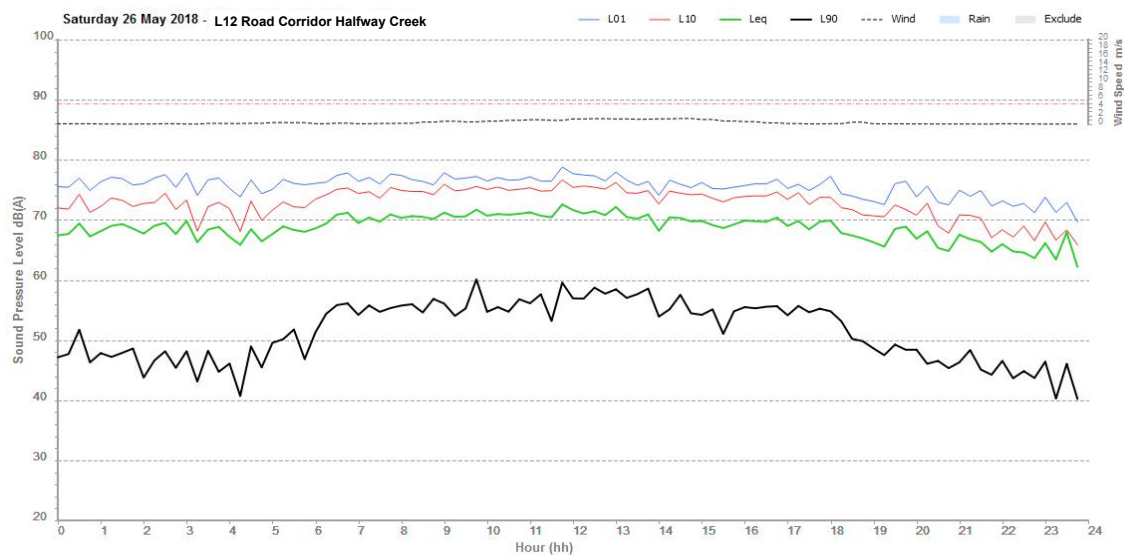
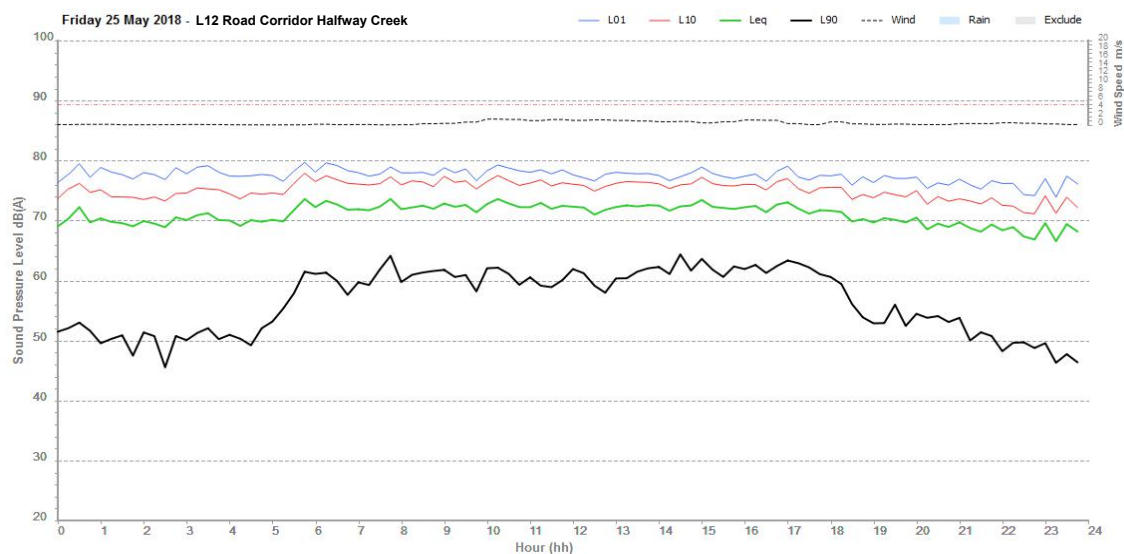
Logger Location Map



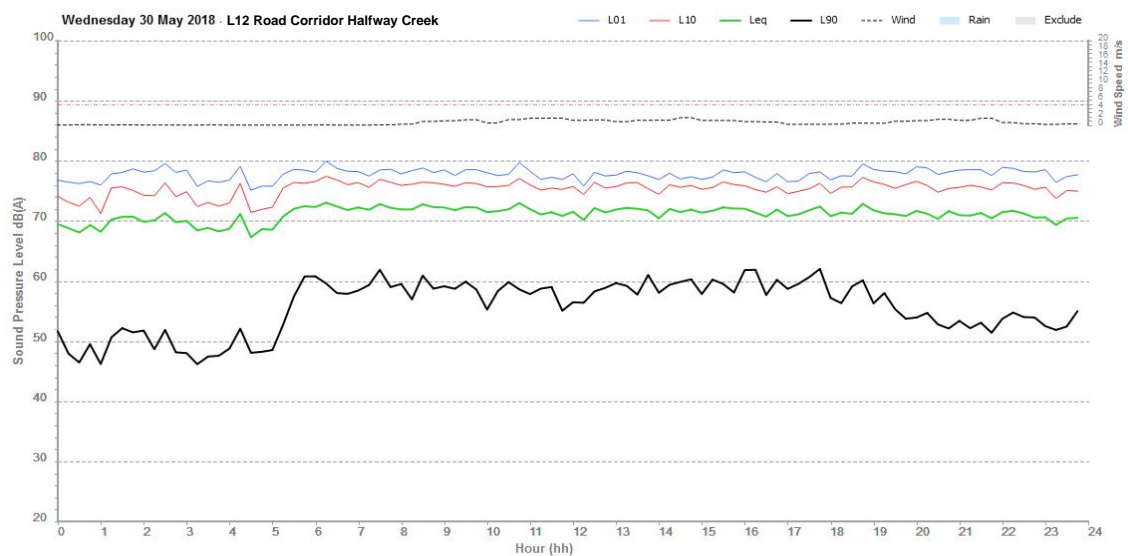
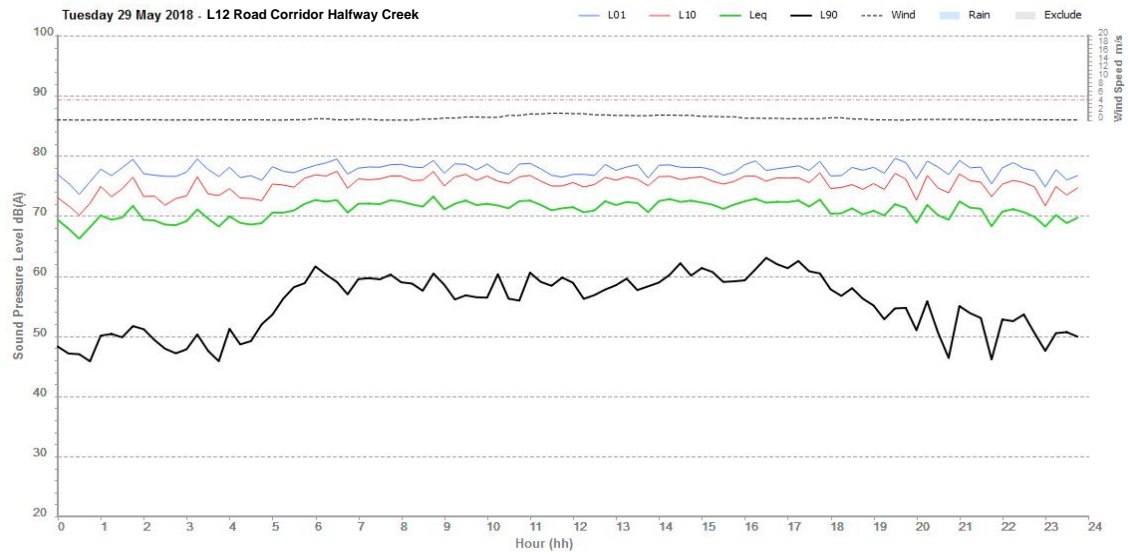
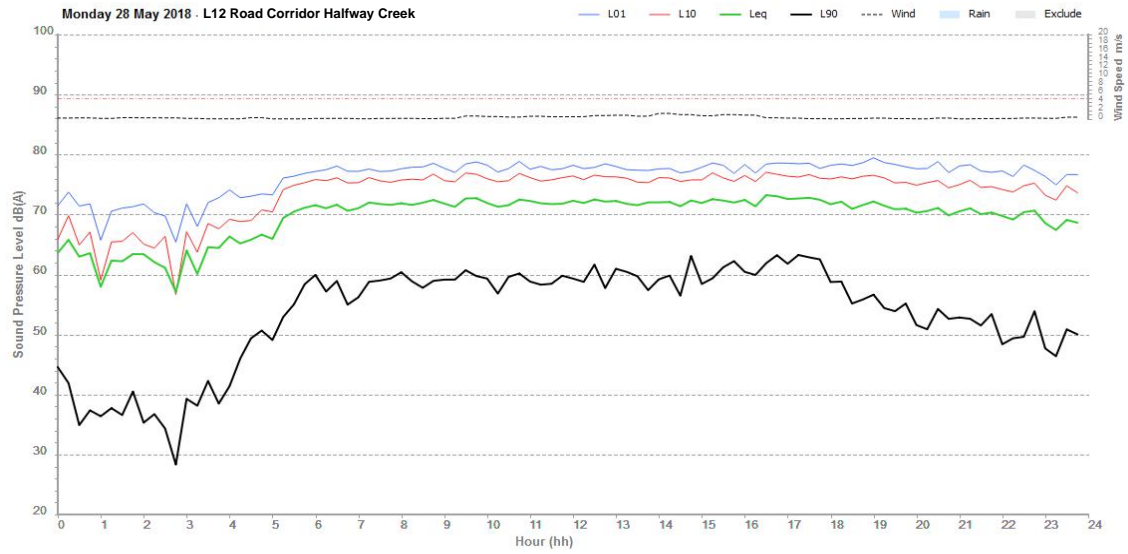
Logger Graphs



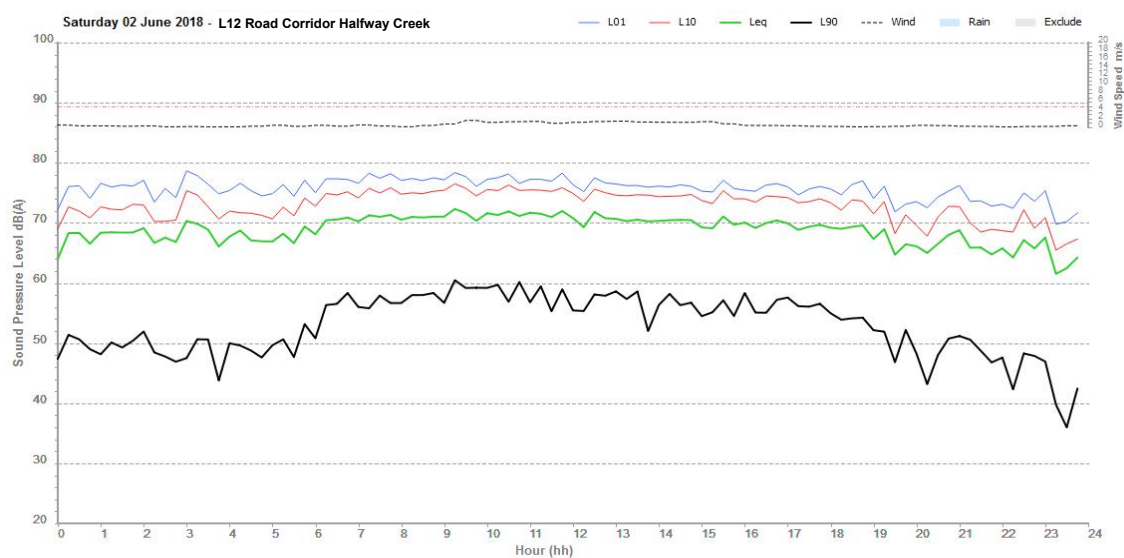
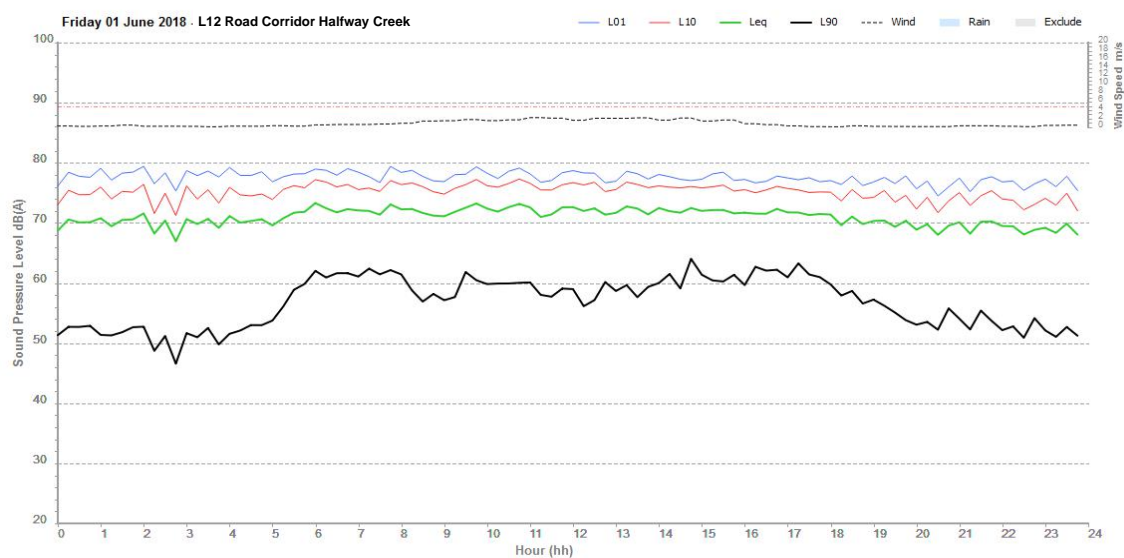
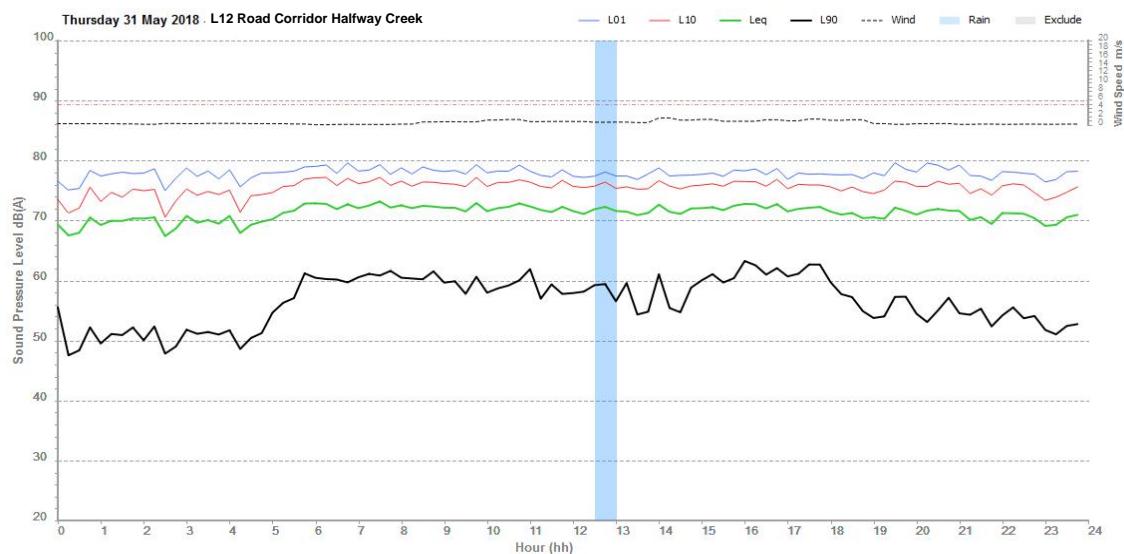
Logger Graphs



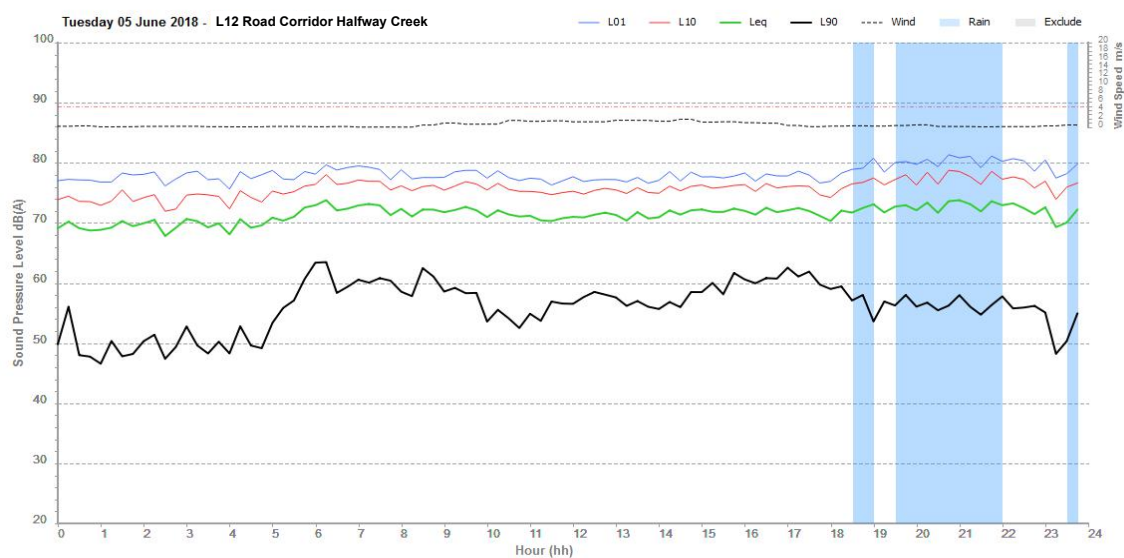
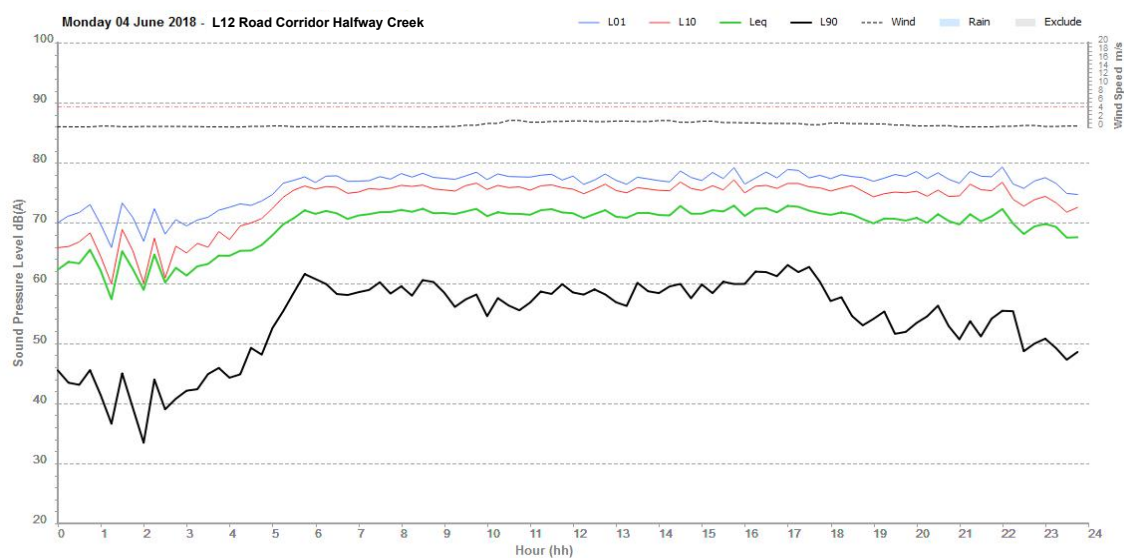
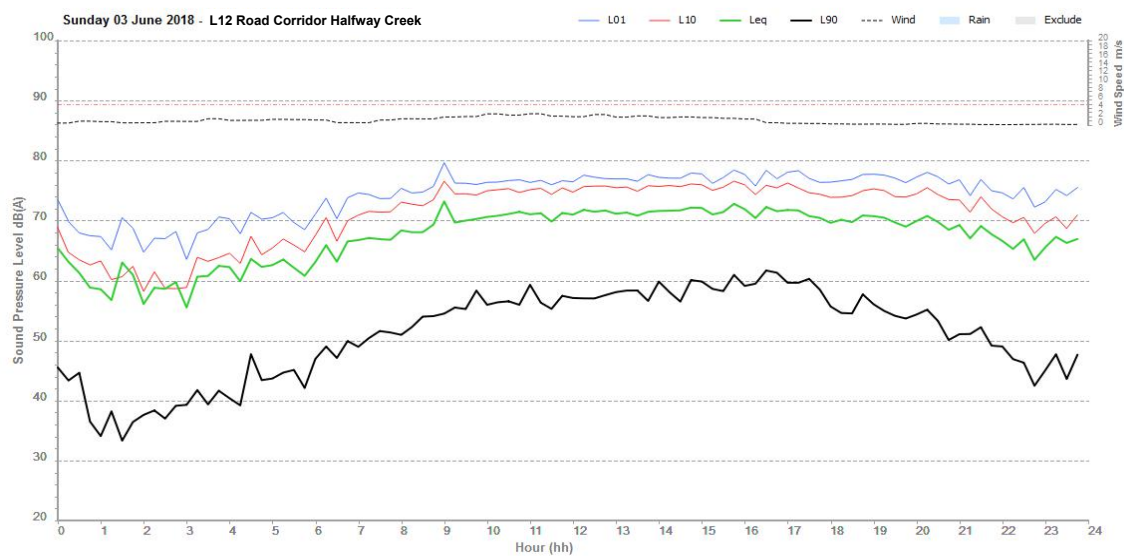
Logger Graphs



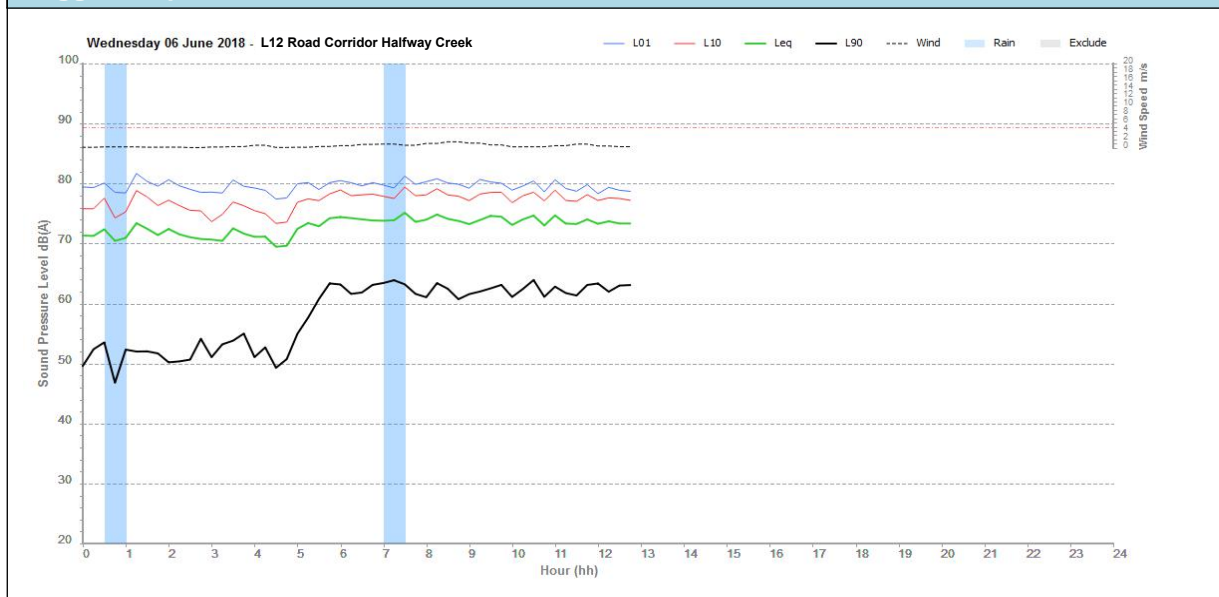
Logger Graphs



Logger Graphs



Logger Graphs



L13 - 22/05/18 - 06/06/18

Logger Setup

Logger Type: Rion NL52

Serial No : 01265386

Address: L13 5034 Pacific Highway, Halfway Creek

Location: Front Yard

Facade / Free Field: Free Field

Environment: Dominant noise source: traffic on the Pacific Highway, 48-50 dB(A). Other noise sources: Birds in also audible, 42 dB(A). Distant compression brakes can be heard occasionally on southern extent of road.

Logger Setup Photo



INP Noise Level, dB(A)

	Log Average	RBL
Day	54	44
Evening	54	42
Night	53	37

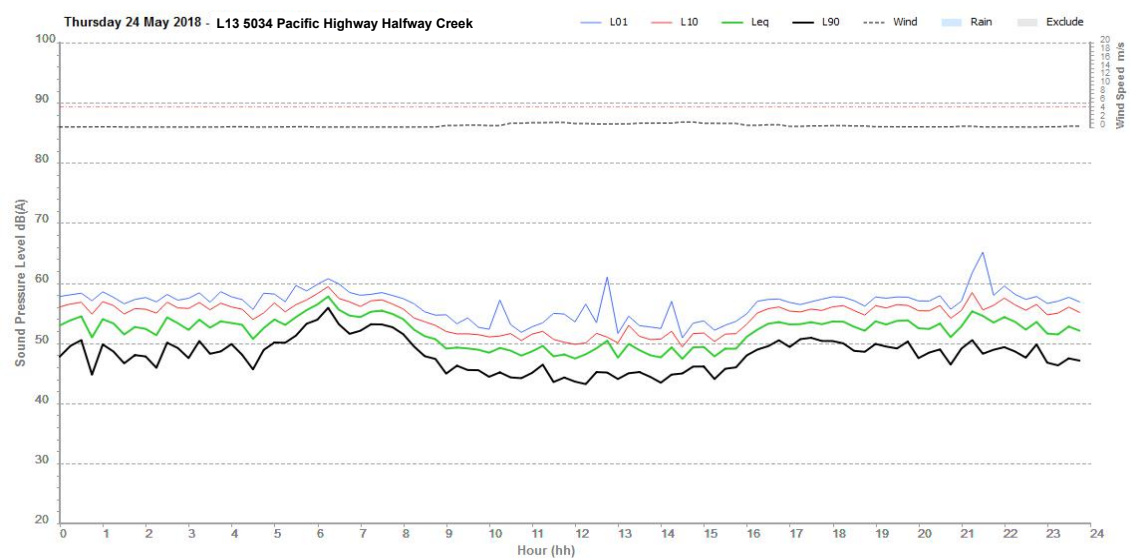
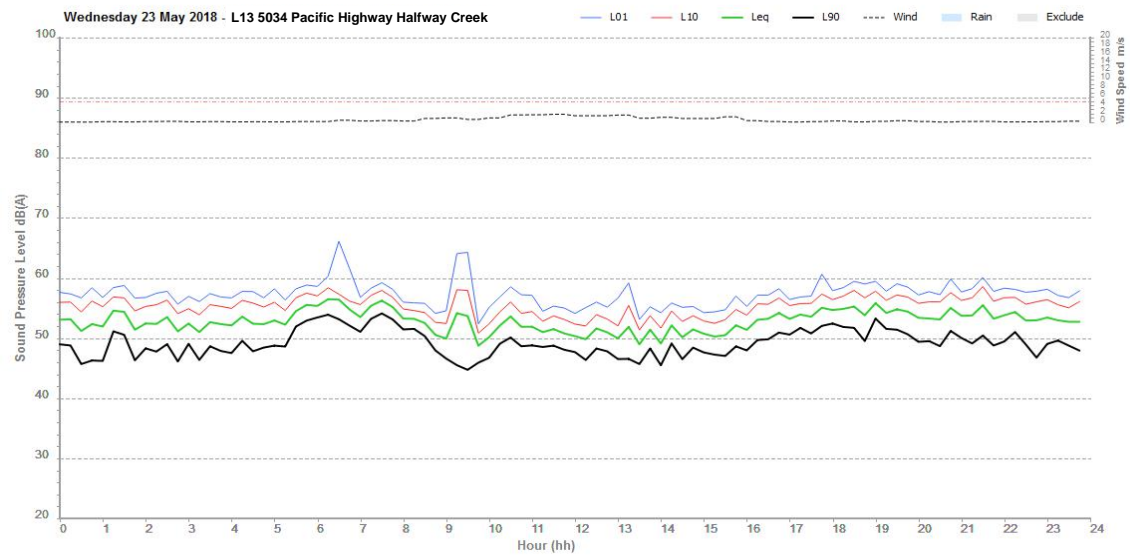
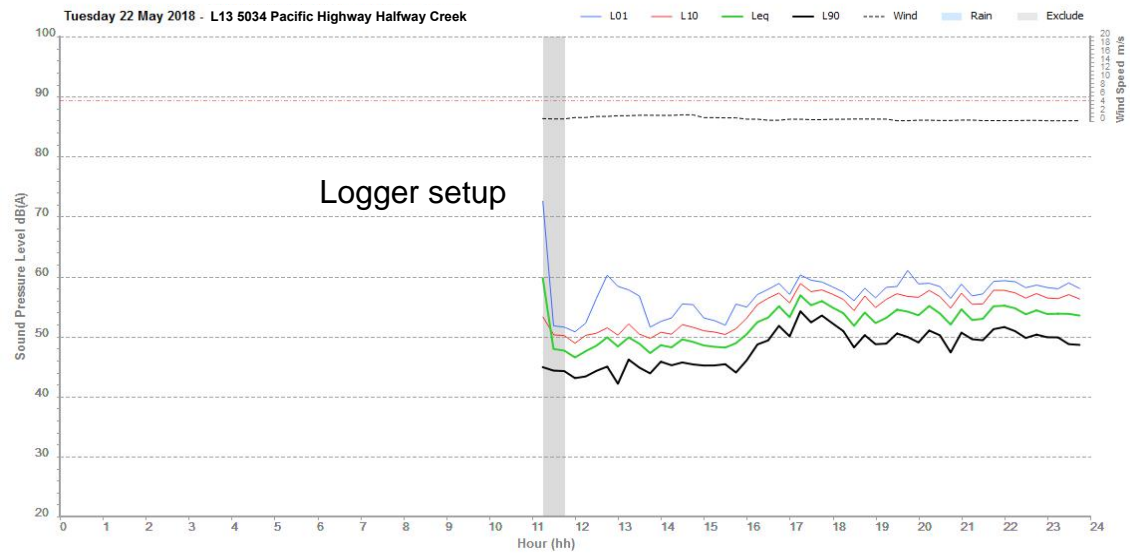
RNP Noise Level, dB(A)

	$L_{Aeq(1hr)}$	$L_{Aeq(period)}$
Day (7am - 10 pm)	-	-
Night (10pm - 7am)	-	-

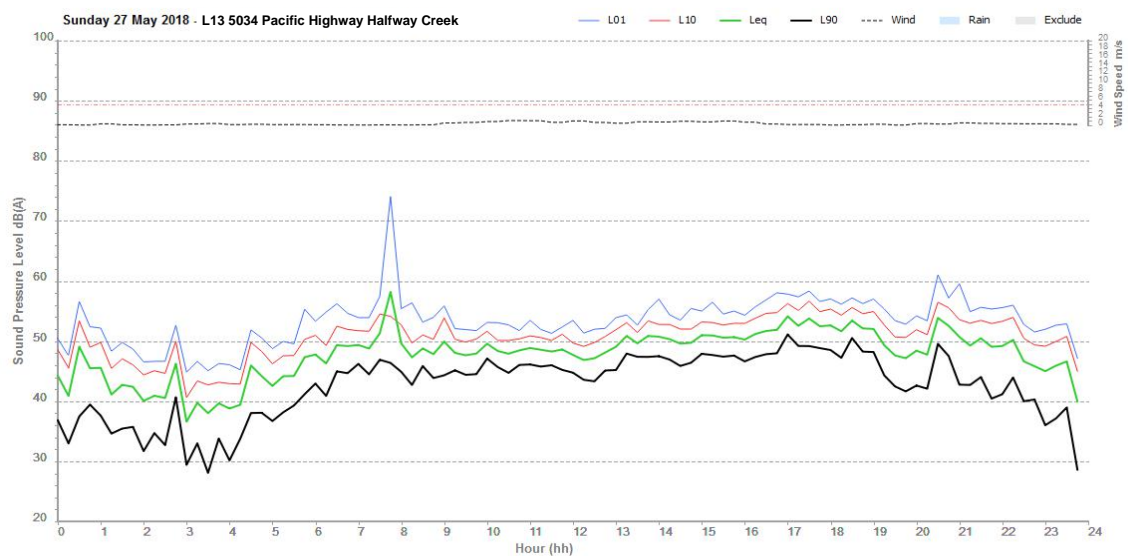
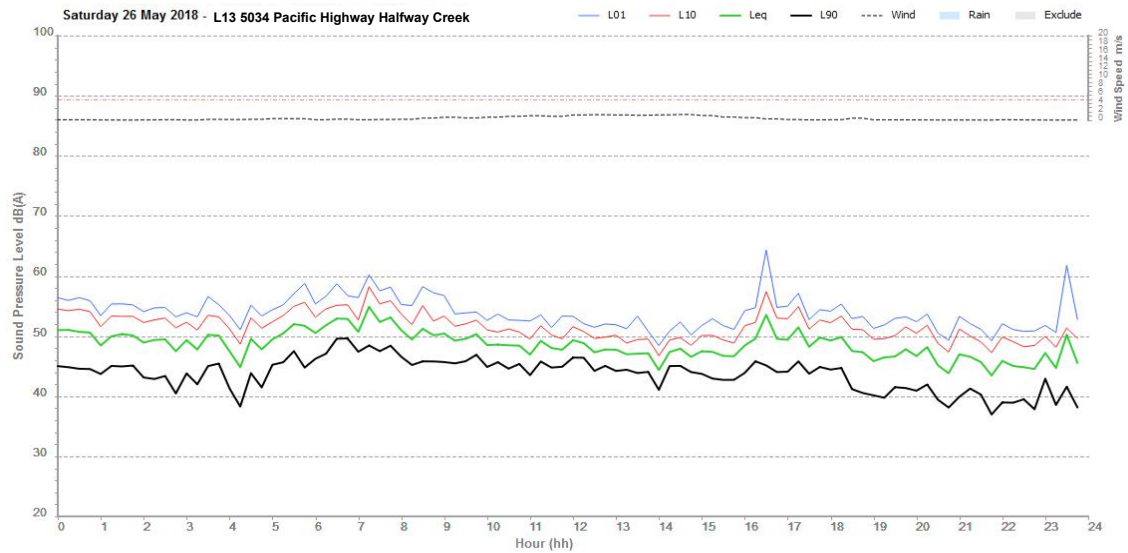
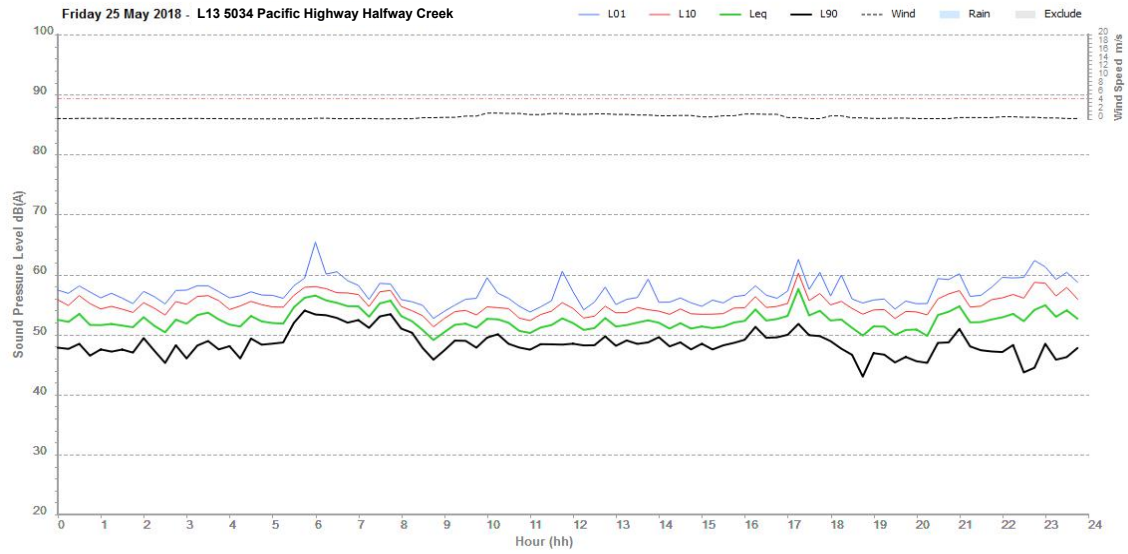
Logger Location Map



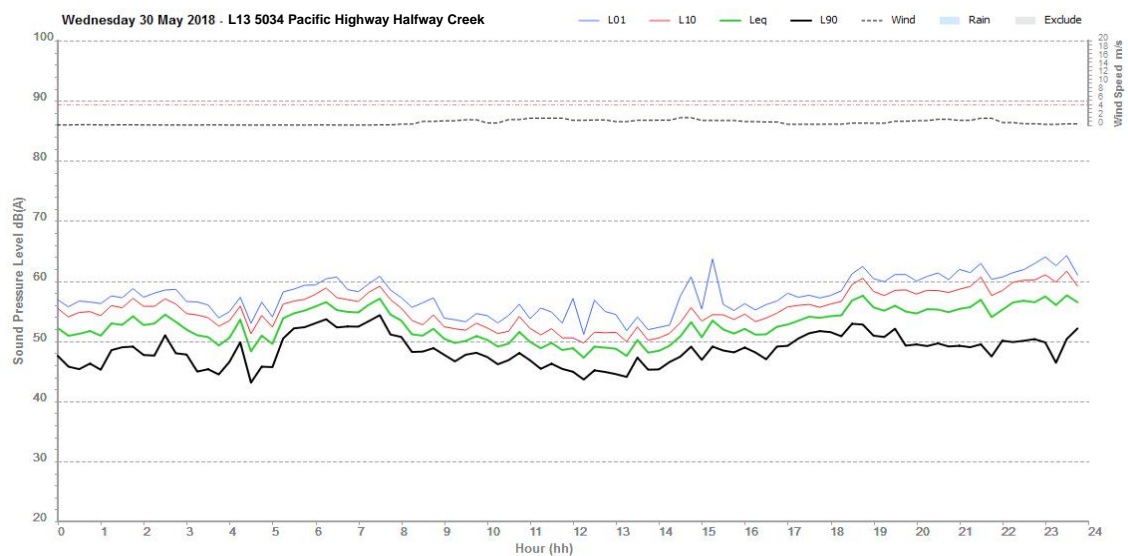
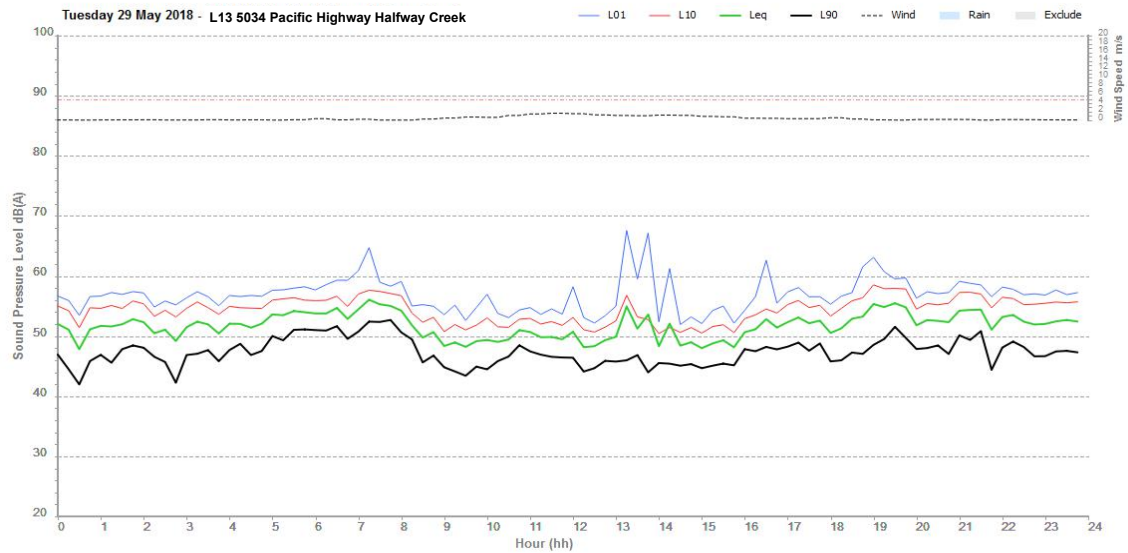
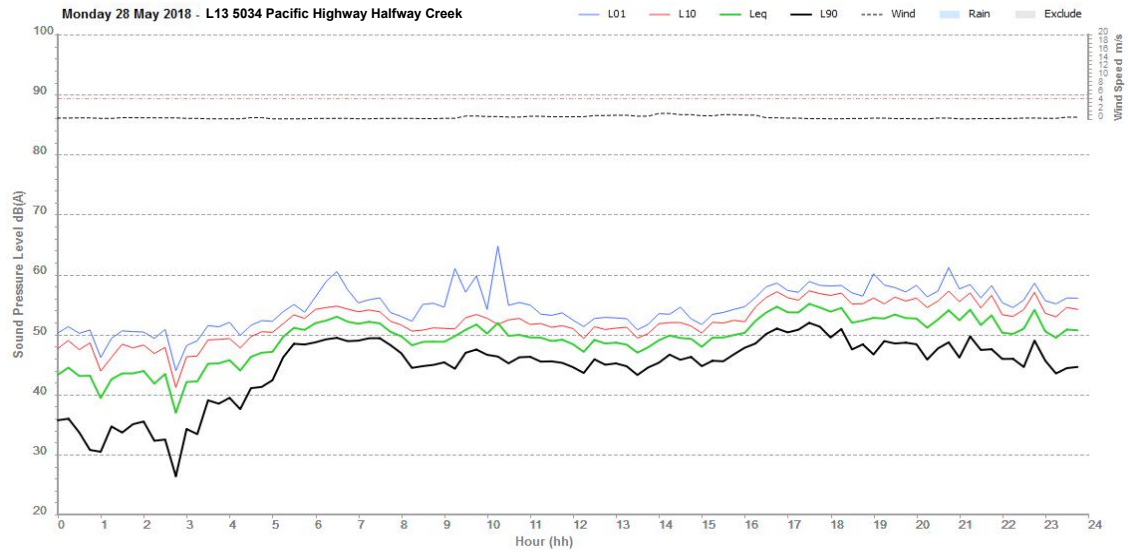
Logger Graphs



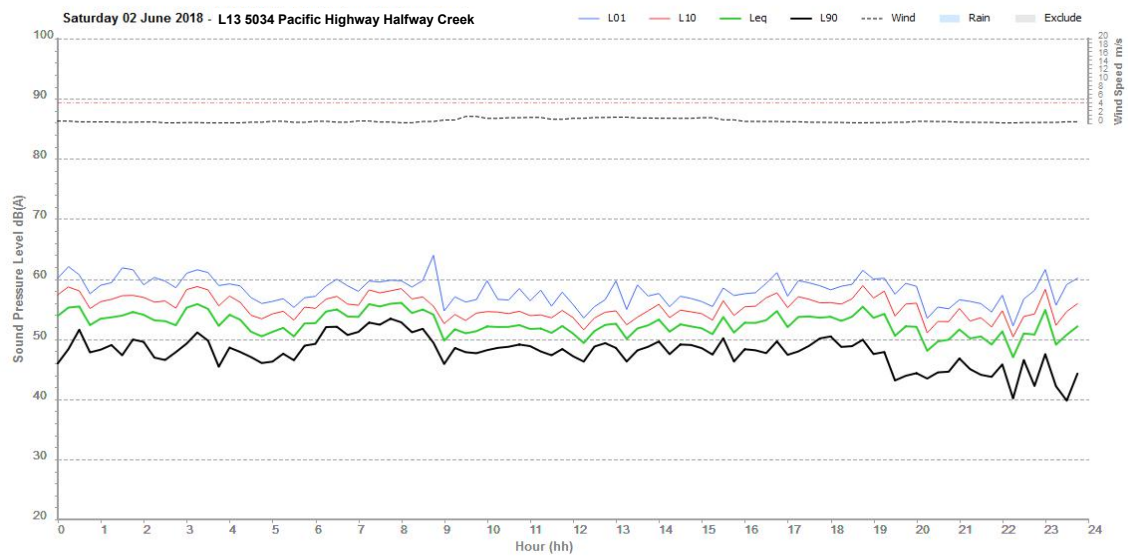
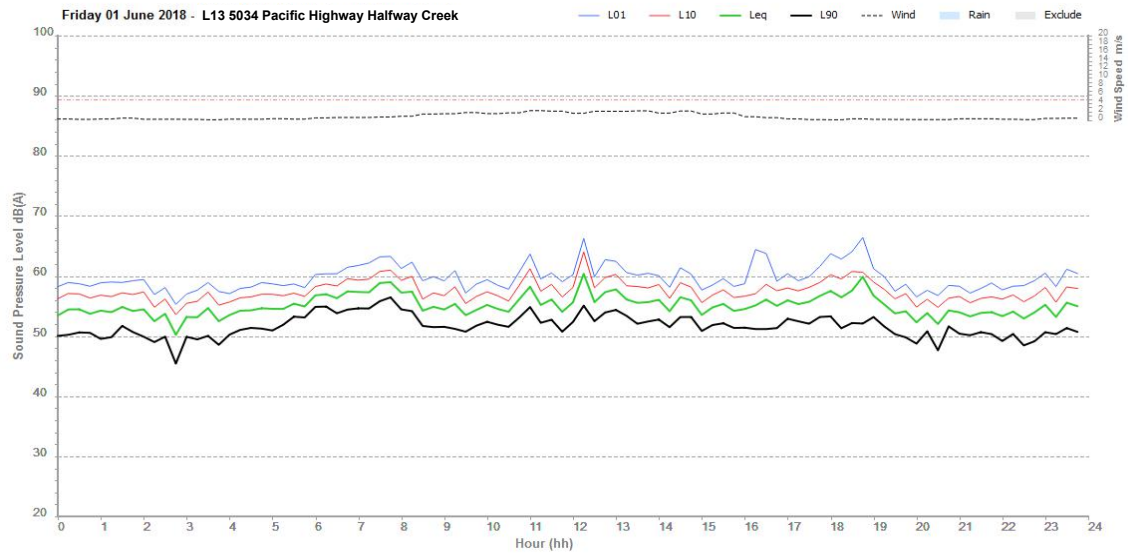
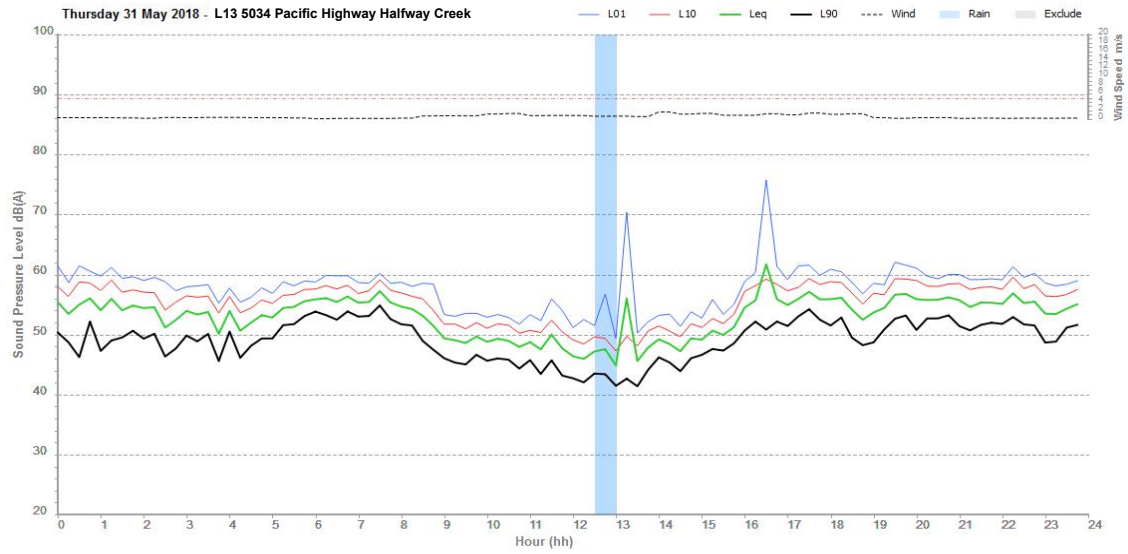
Logger Graphs



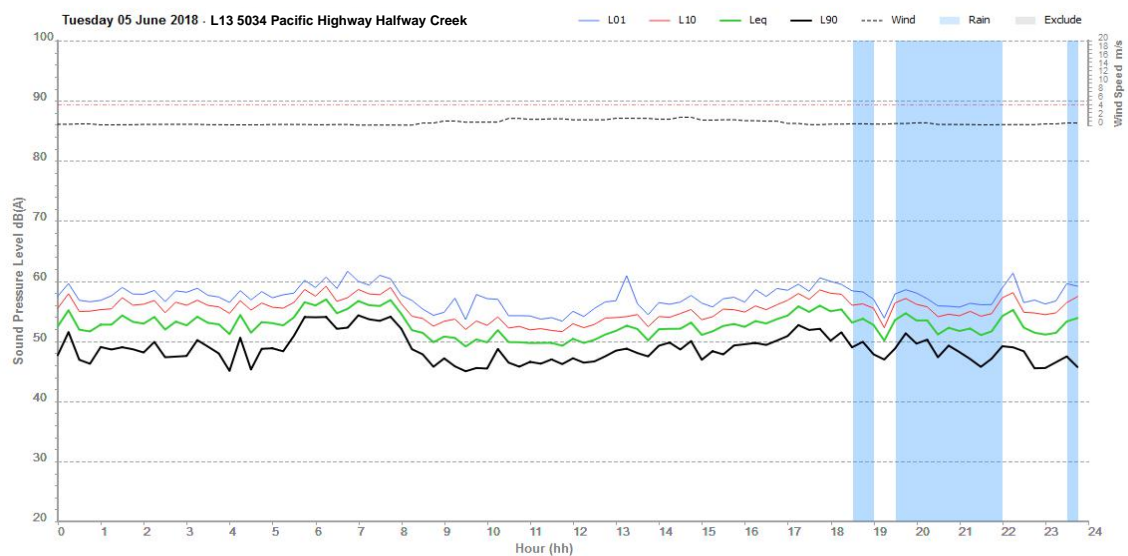
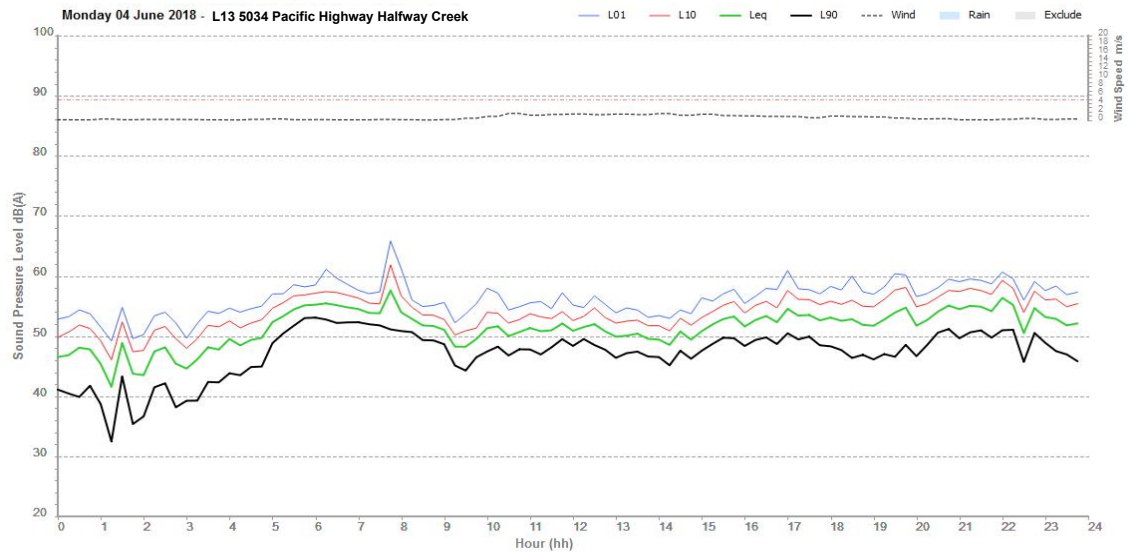
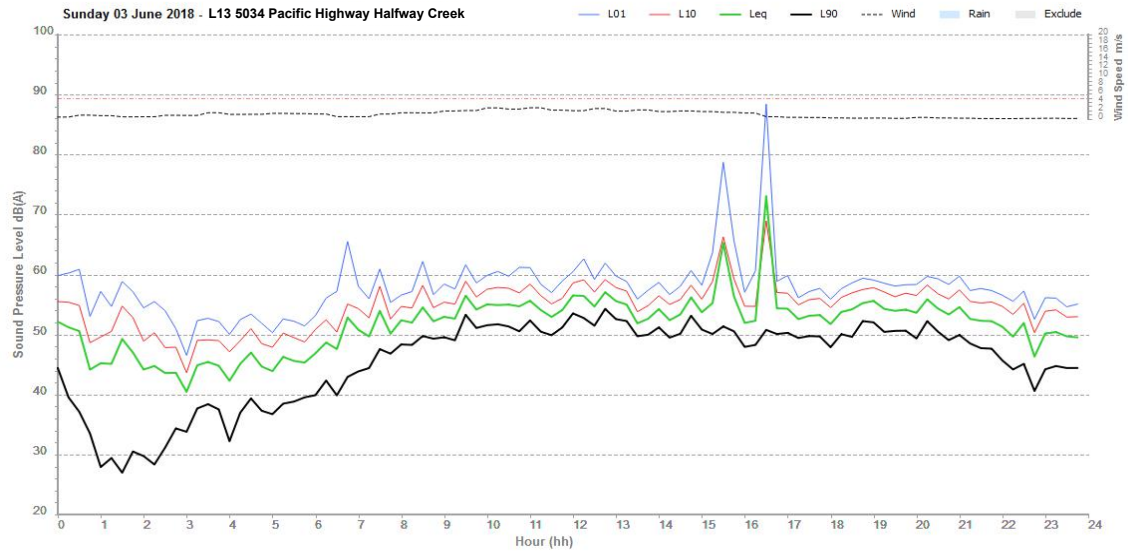
Logger Graphs



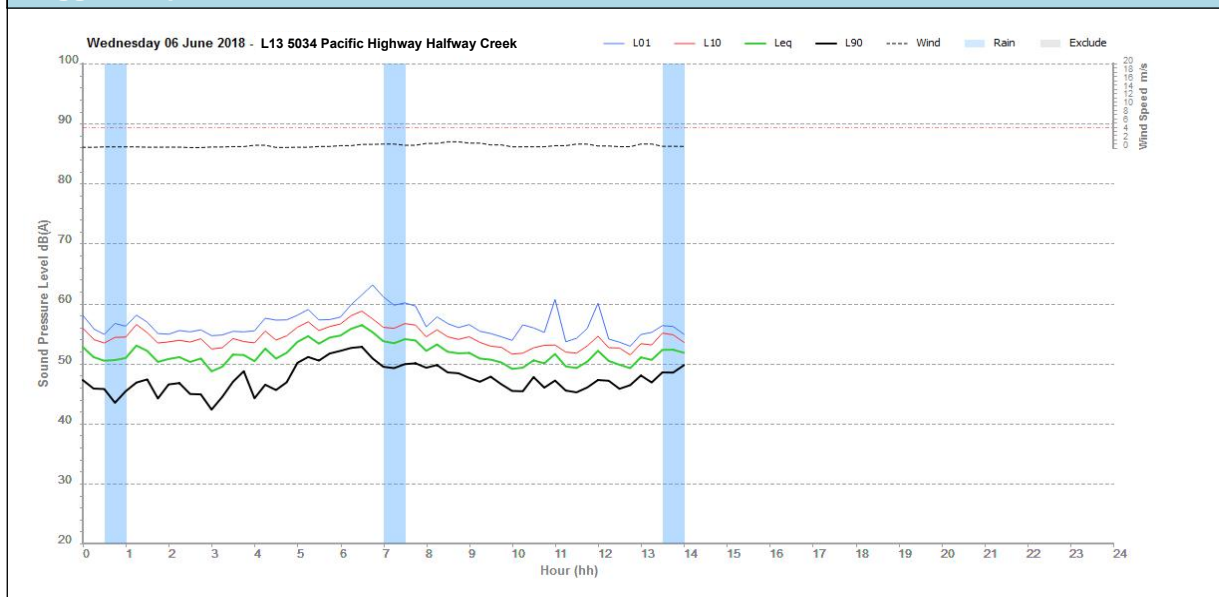
Logger Graphs



Logger Graphs



Logger Graphs



L14 - 22/05/18 - 05/06/18

Logger Setup

Logger Type: Rion NL52
 Serial No : 0164393
 Address: L14 109 Luthers Road, Halfway Creek
 Location: Front Yard
 Facade / Free Field: Free Field
 Environment: Dominant noise source: traffic on the Pacific Highway and environmental noise. Other noise sources: bird noise audible. No road traffic visible from logging location.

Logger Setup Photo



INP Noise Level, dB(A)

	Log Average	RBL
Day	54	41
Evening	52	41
Night	52	37

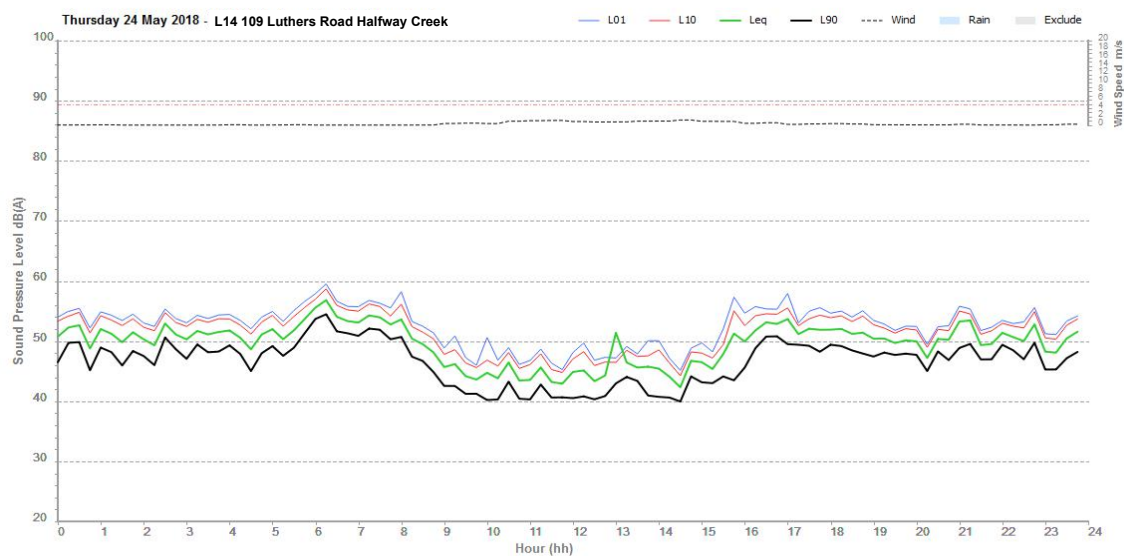
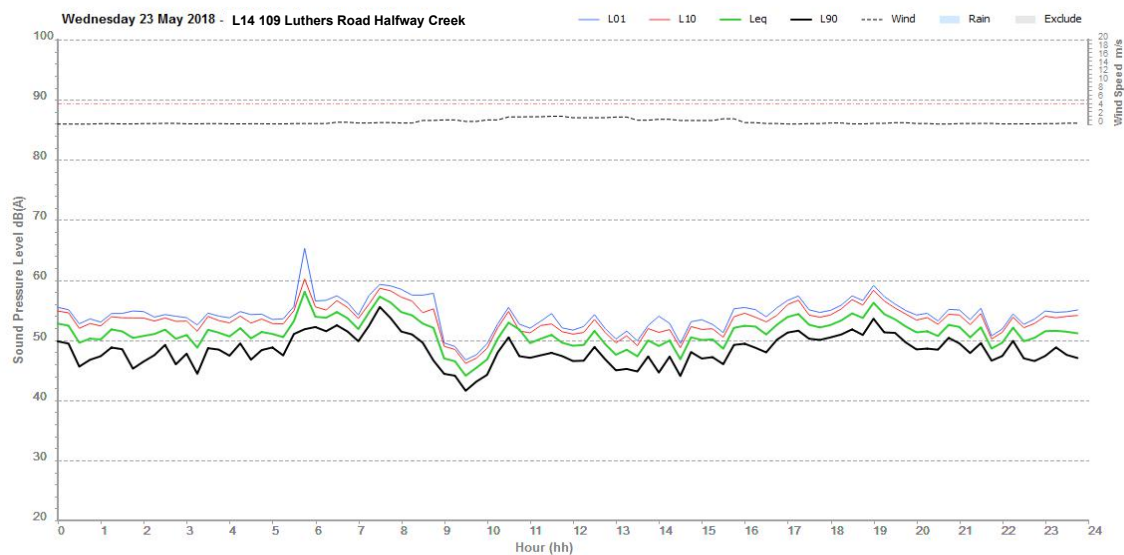
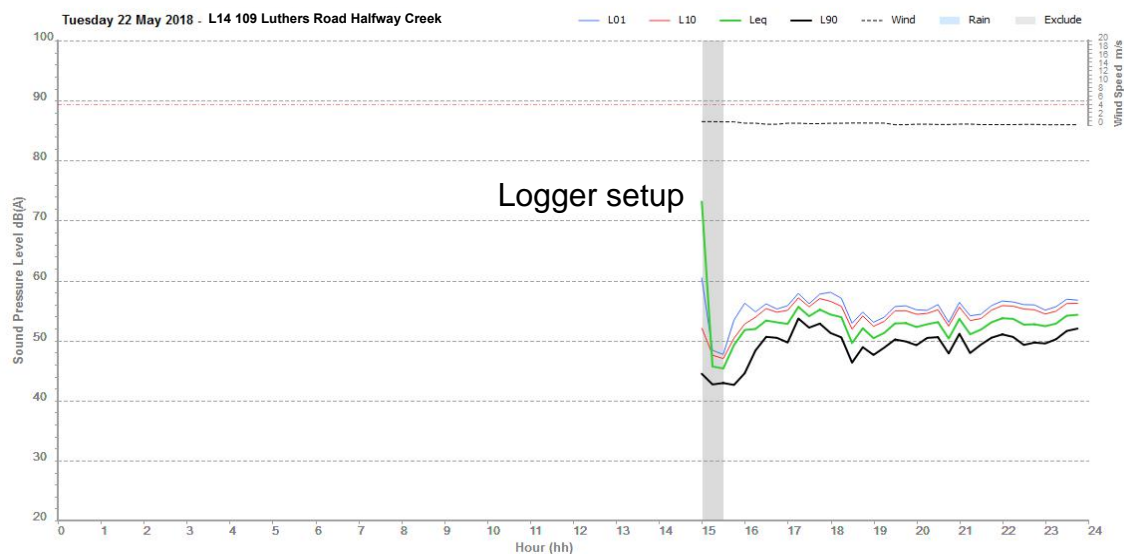
RNP Noise Level, dB(A)

	L _{Aeq(1hr)}	L _{Aeq(period)}
Day (7am - 10 pm)	-	-
Night (10pm - 7am)	-	-

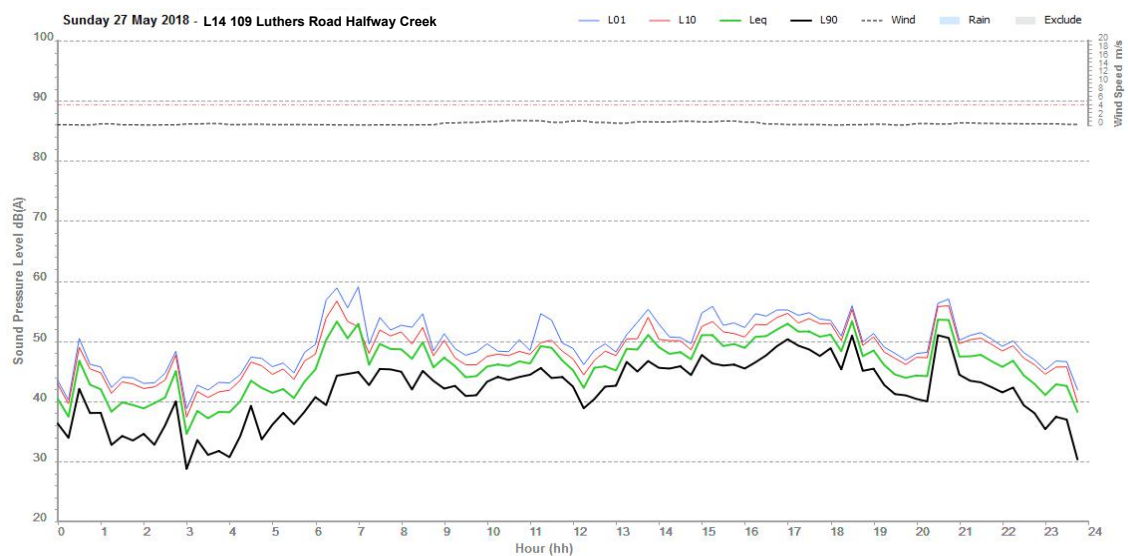
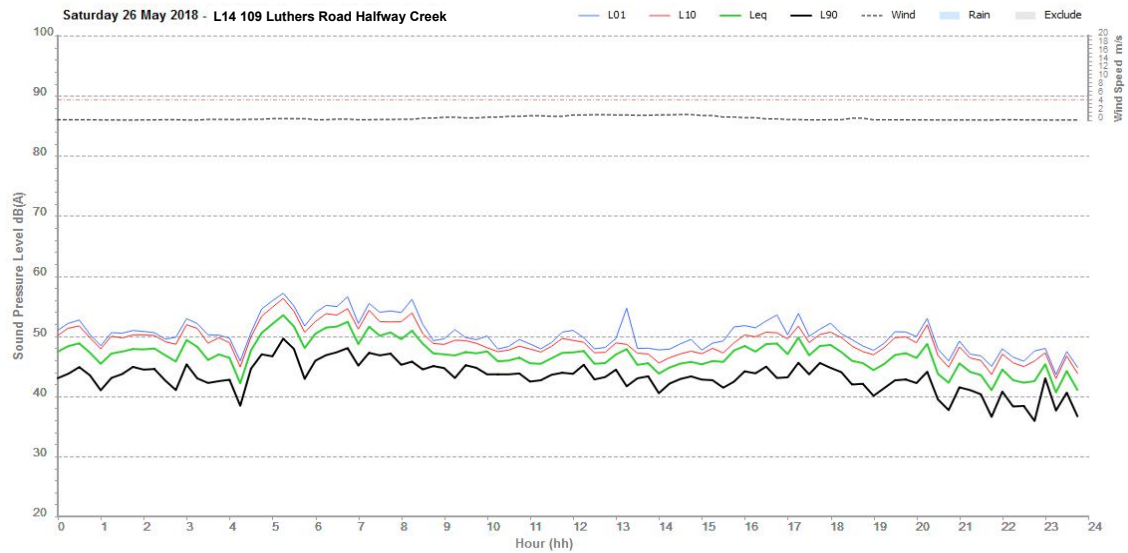
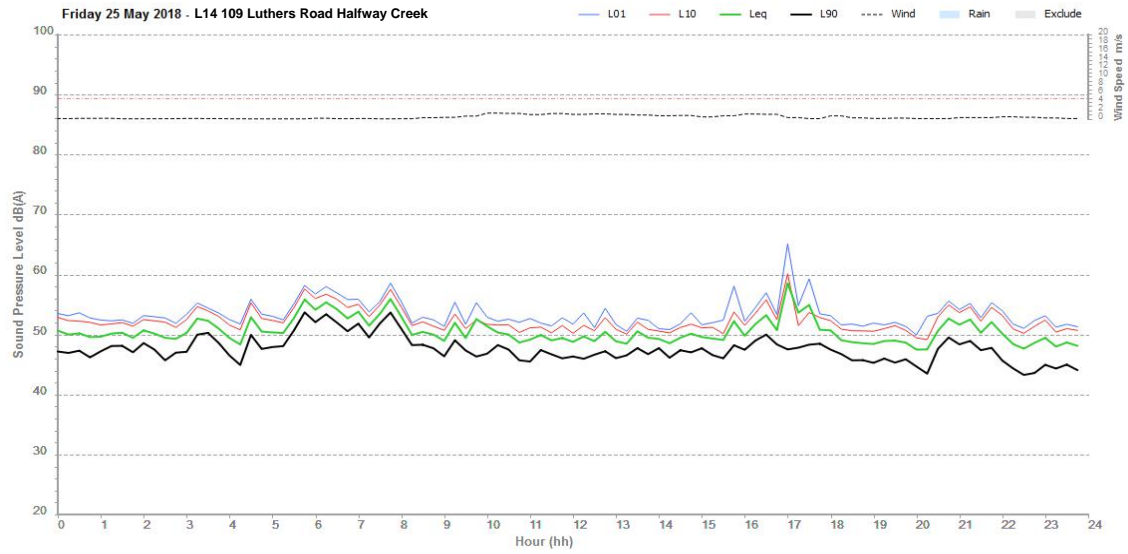
Logger Location Map



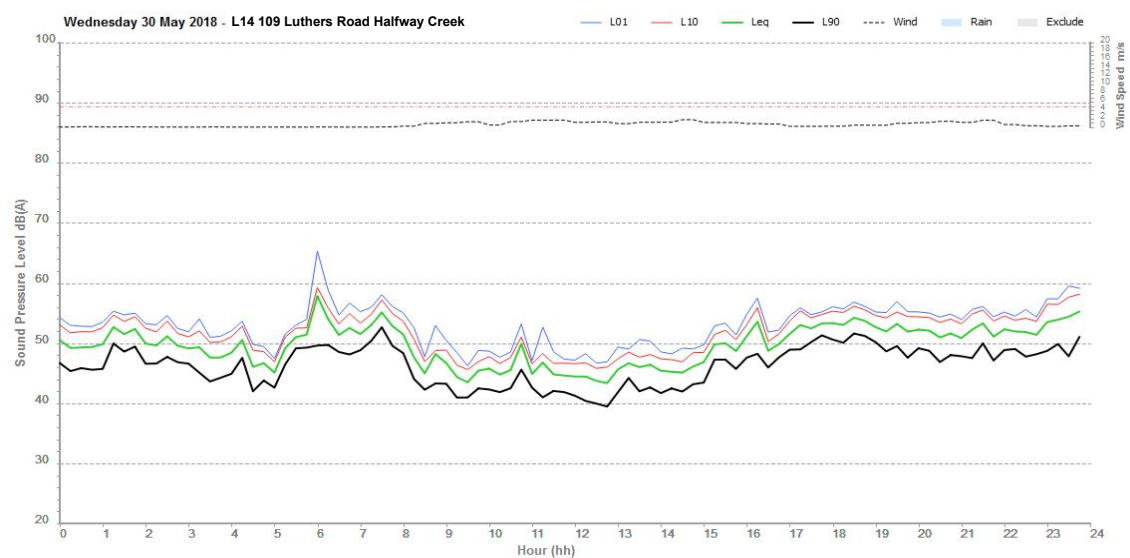
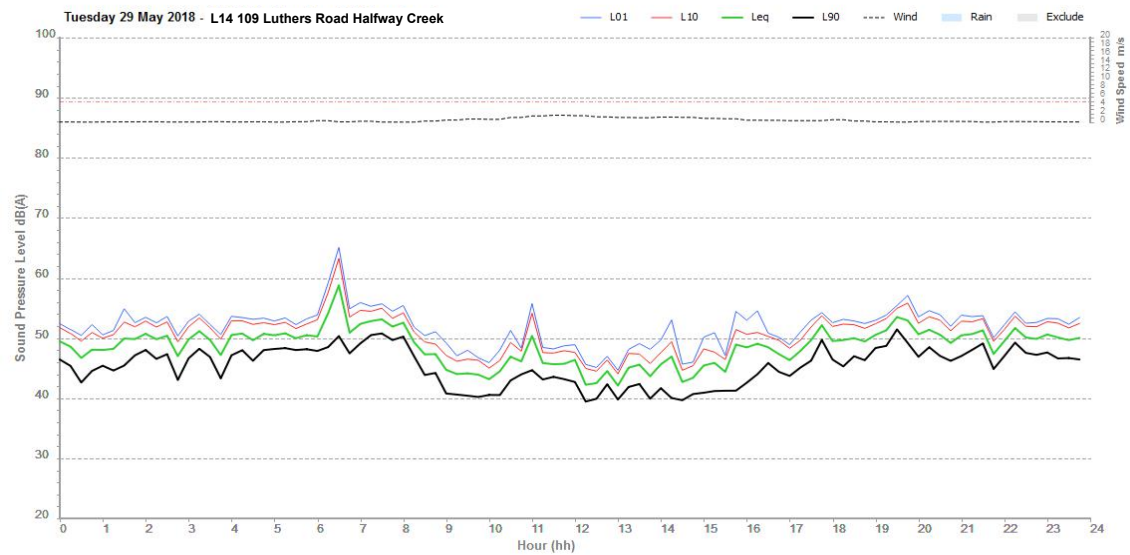
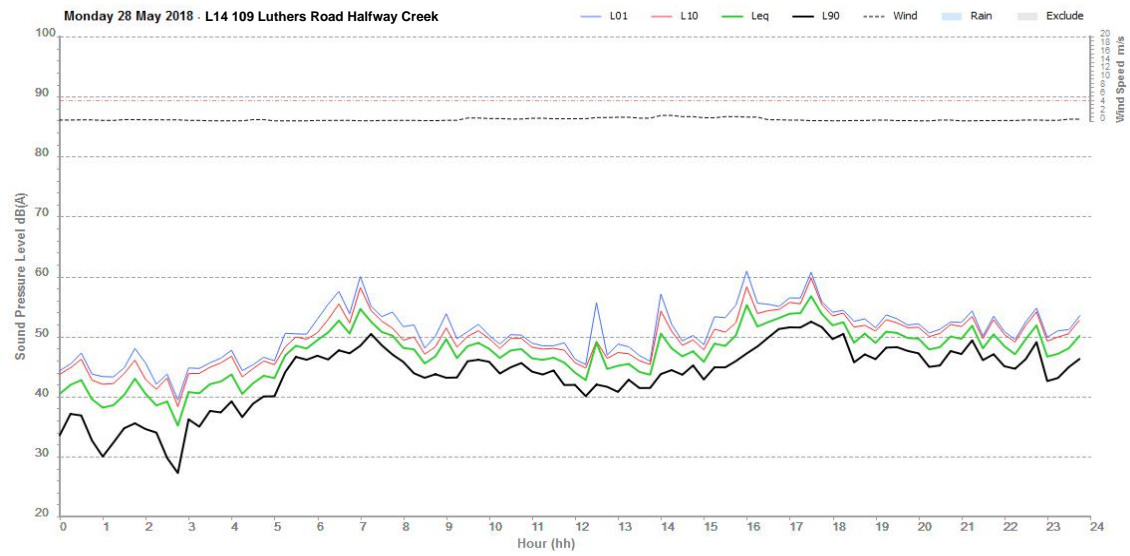
Logger Graphs



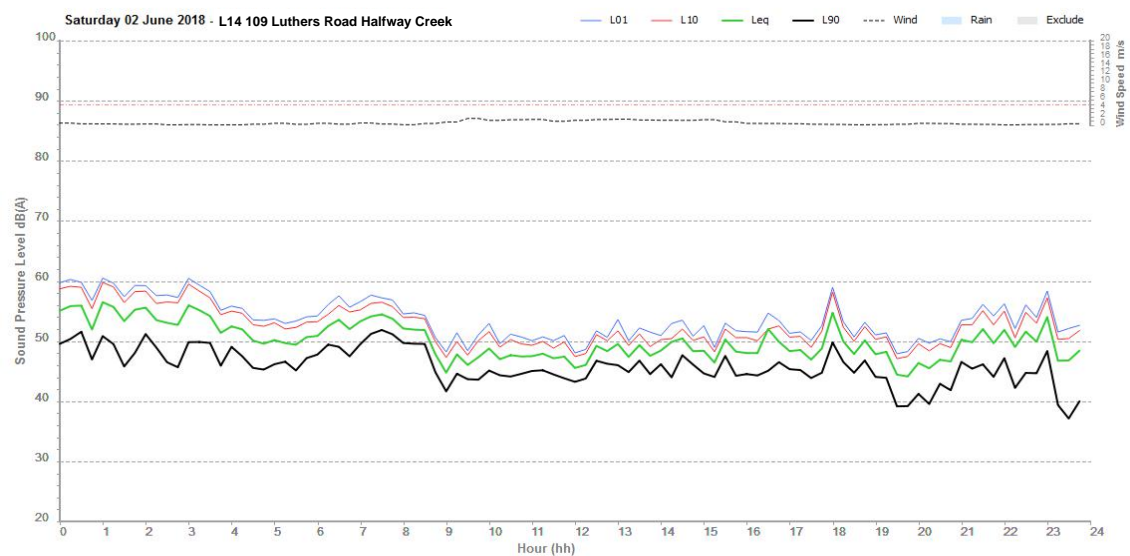
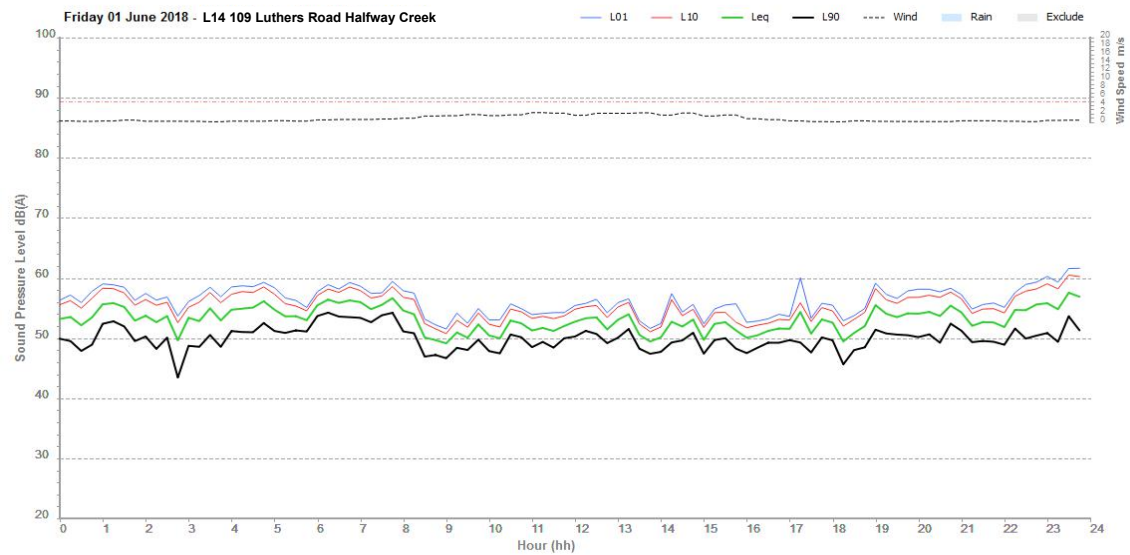
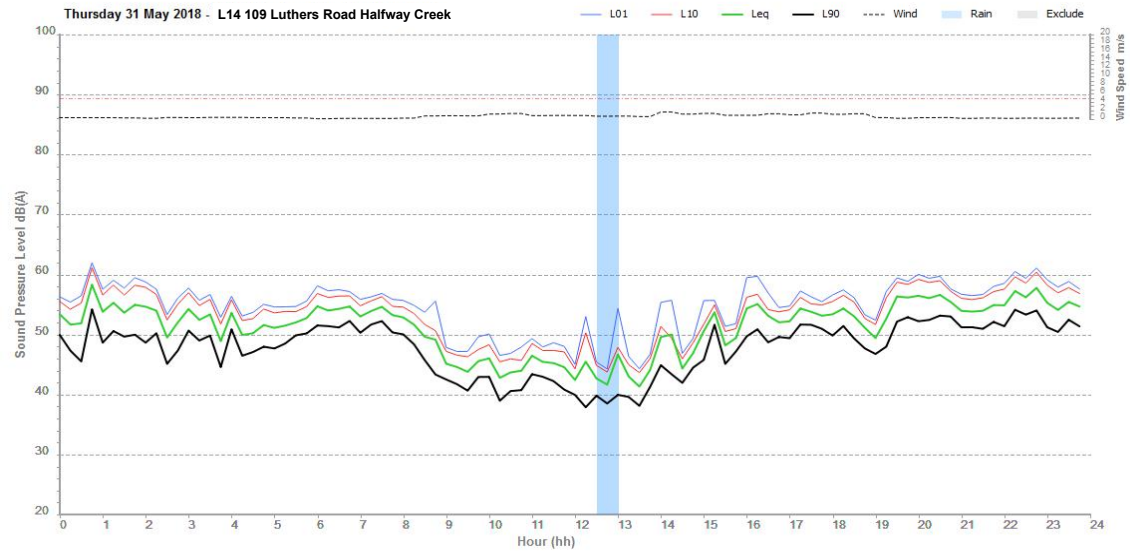
Logger Graphs



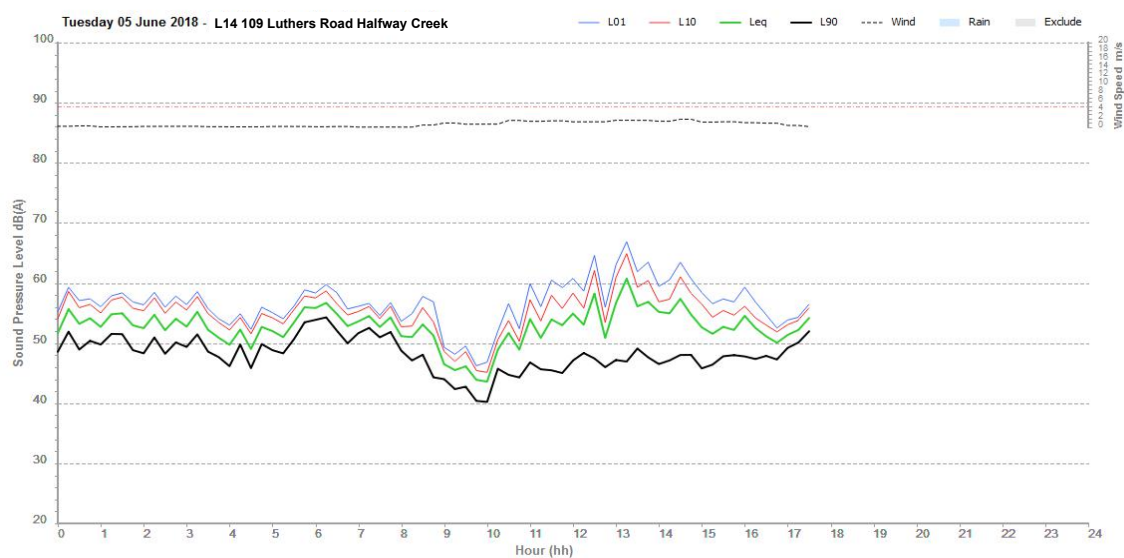
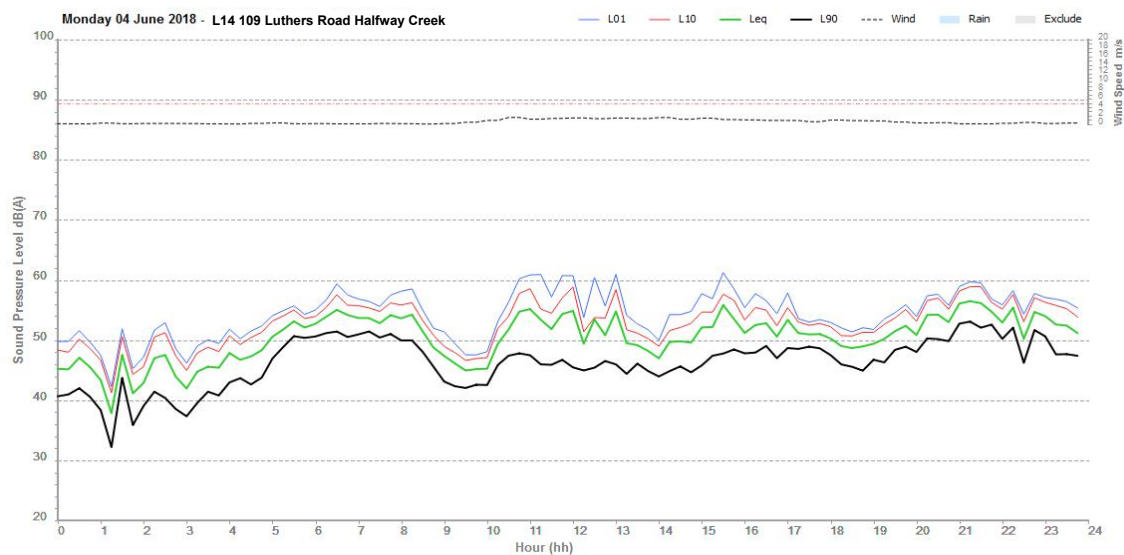
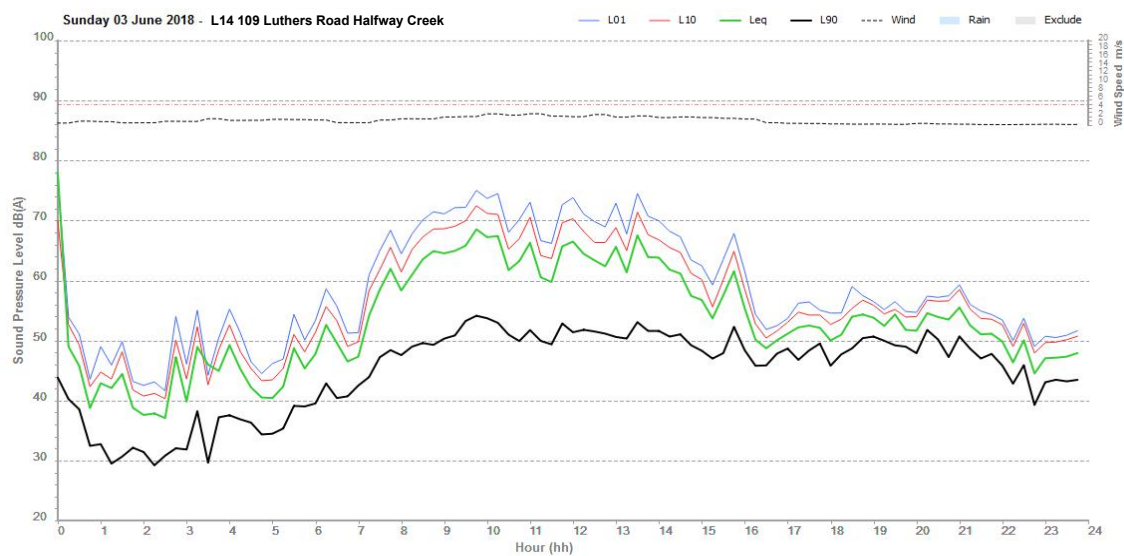
Logger Graphs



Logger Graphs

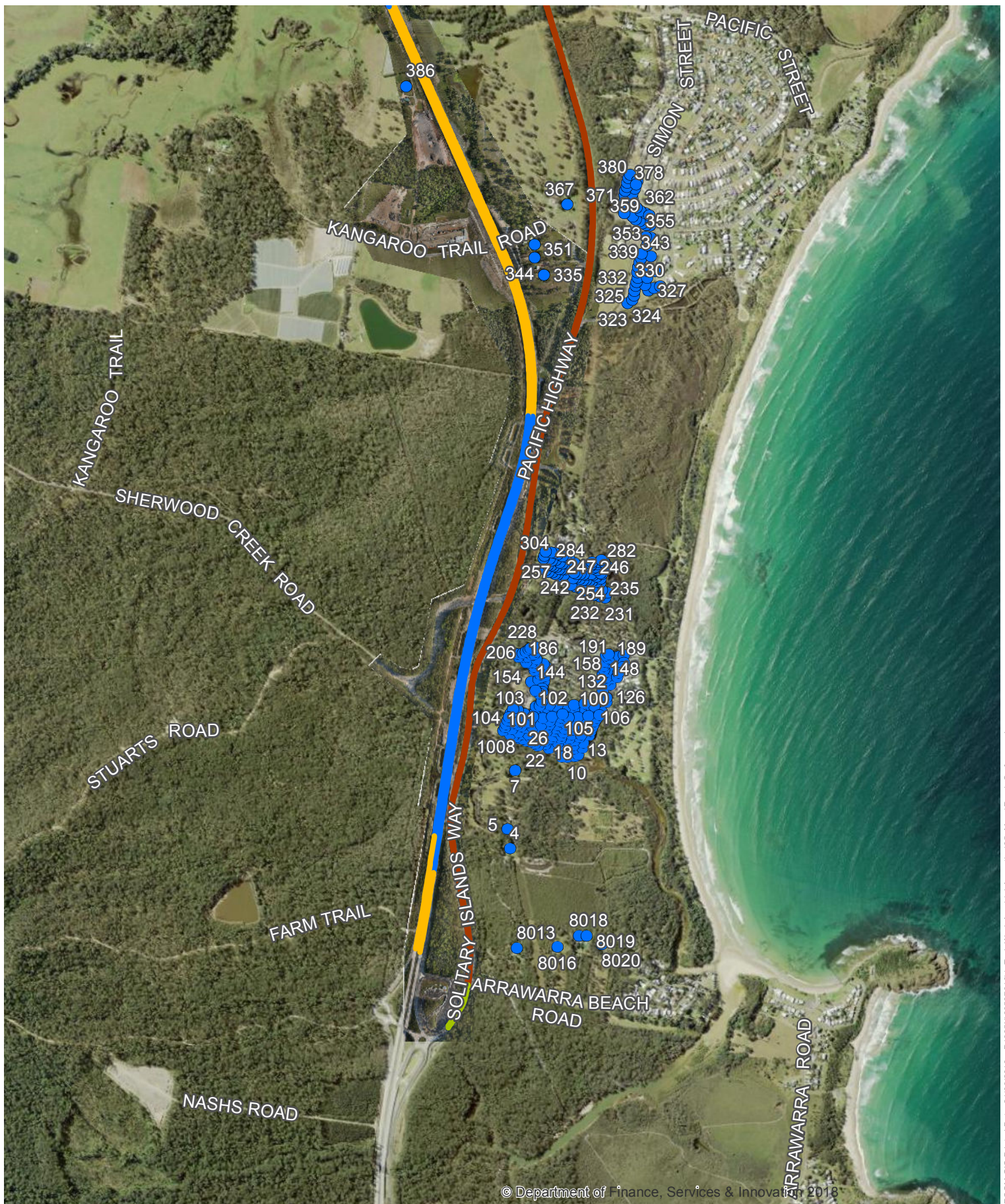


Logger Graphs



Appendix C

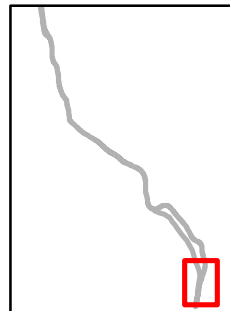
Receivers and Wearing
Surface



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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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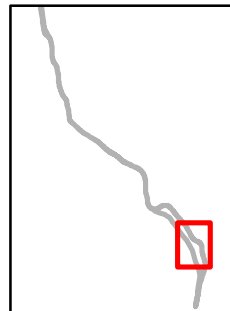
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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North Arrow

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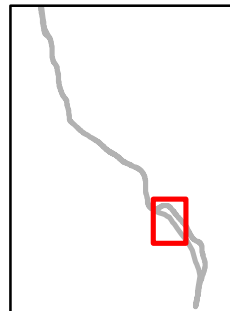
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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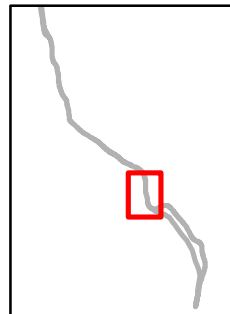
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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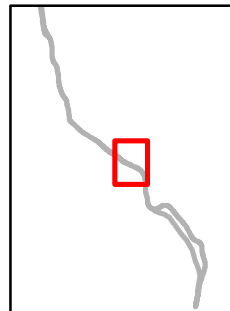
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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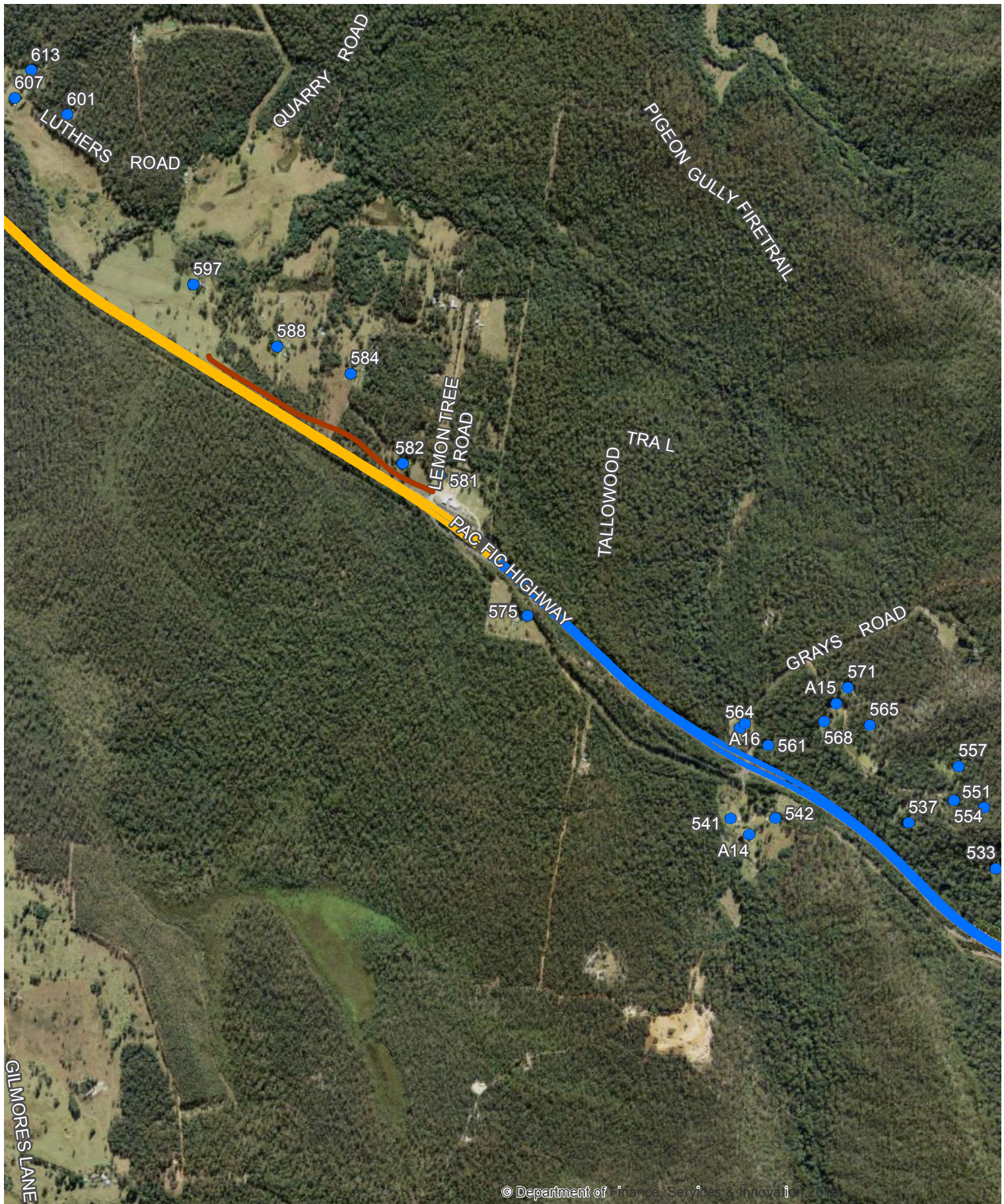
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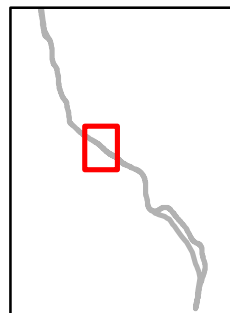
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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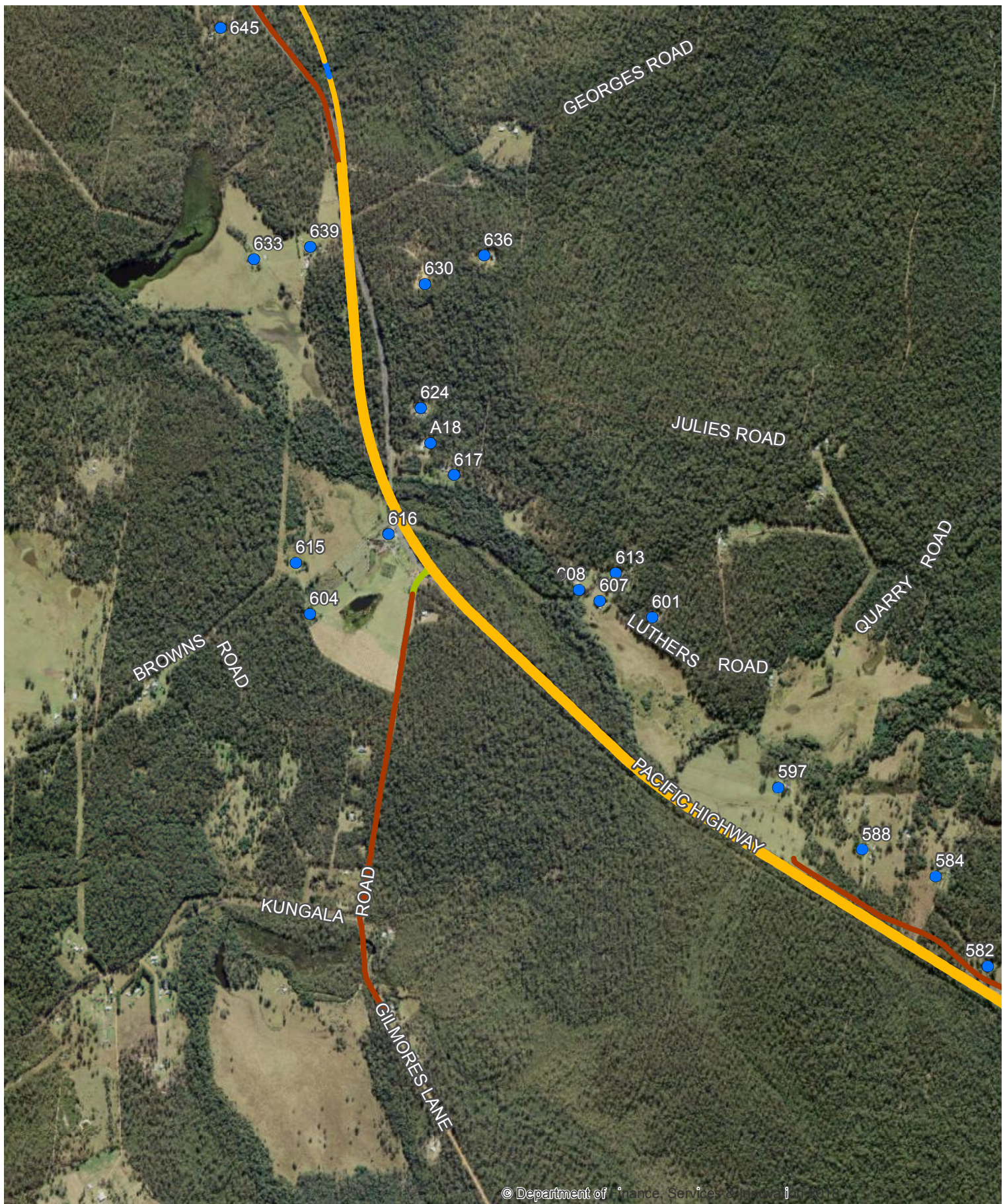
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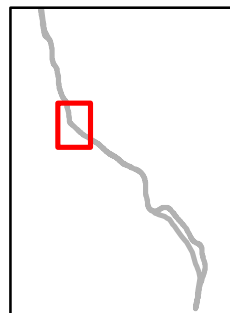
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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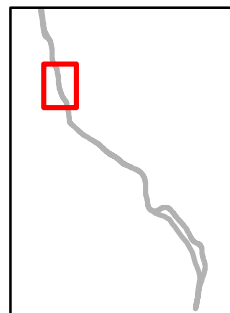
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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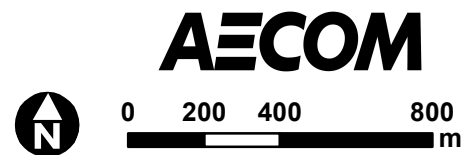
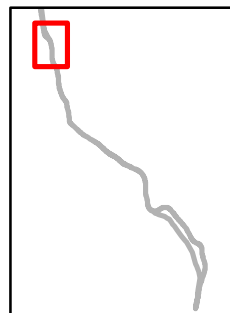
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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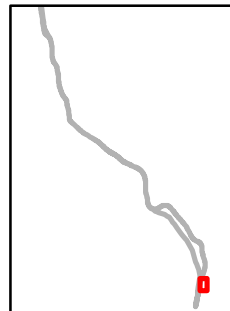
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



0 50 100 200 m

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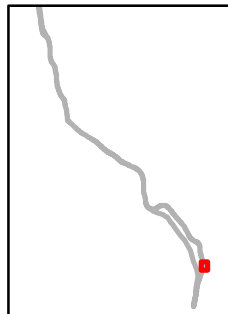
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W2G - Road Surface and Receivers

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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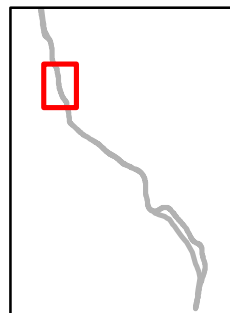
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W2G - Road Surface and Receivers Option 2A

- Receivers
- Road Surface**
- SMA
- DGA
- Concrete
- Chip



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Appendix D

Year of Opening Traffic
Noise Levels

Appendix D Year of Opening Traffic Noise Levels

Table 35 Year of Opening predicted noise levels

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
4	1 Arrawarra Beach Road Arrawarra	Residential	3	DP25 5457	GF	56	54	56	54	0.2	0.3	55	53	60	55	No	No	1.3	1.8	No	No
5	74 Eggins Drive Arrawarra	Residential	2	DP25 5457	GF	57	54	57	55	-0.4	0.7	56	54	60	55	No	No	0.2	0.7	No	No
7	100 Eggins Drive Arrawarra	Residential	1	DP25 5457	GF	55	53	57	55	2.4	2.4	58	56	60	55	No	Yes	-0.9	-0.6	No	No
9	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	53	51	0.8	1	53	51	60	55	No	No	-0.4	0.1	No	No
10	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.4	0.6	49	47	60	55	No	No	1.3	1.9	No	No
11	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	0	0.3	48	46	60	55	No	No	1.8	2.5	No	No
12	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	-0.3	0	48	45	60	55	No	No	2.1	2.8	No	No
13	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	-0.5	-0.2	47	45	60	55	No	No	2.5	3.2	No	No
14	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	52	50	0.2	0.4	52	50	60	55	No	No	-0.2	0.3	No	No
15	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.3	0.5	51	48	60	55	No	No	-1.3	-0.7	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
16	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	47	45	-0.2	0	48	45	60	55	No	No	-0.8	-0.1	No	No
17	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	53	51	0.9	1	54	51	60	55	No	No	-0.6	-0.1	No	No
18	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	45	48	46	-0.2	1	49	47	60	55	No	No	-1.3	-0.6	No	No
19	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	-0.4	0.7	50	47	60	55	No	No	-1.3	-0.6	No	No
20	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	47	45	0.6	0.7	48	45	60	55	No	No	-1.4	-0.7	No	No
21	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	1.1	1.3	51	49	60	55	No	No	-0.1	0.6	No	No
22	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	50	0.9	1.1	52	50	60	55	No	No	-0.1	0.5	No	No
23	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	53	51	1.4	1.4	54	51	60	55	No	No	-0.3	0.0	No	No
24	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	-0.1	0.1	49	47	60	55	No	No	-1.4	-0.6	No	No
25	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	1.6	1.6	54	52	60	55	No	No	-0.5	-0.2	No	No
26	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.9	0.9	51	48	60	55	No	No	-0.9	-0.4	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
27	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	0.5	50	47	60	55	No	No	-1.4	-0.8	No	No
28	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	-0.5	-0.4	50	47	60	55	No	No	-0.4	0.2	No	No
29	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	52	1	1	55	53	60	55	No	No	-0.9	-0.7	No	No
30	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	47	45	0.5	0.6	48	46	60	55	No	No	-1.5	-0.9	No	No
31	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	1.6	1.6	55	53	60	55	No	No	-0.7	-0.5	No	No
32	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	0.1	1.2	51	49	60	55	No	No	-1.9	-1.3	No	No
33	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.3	0.4	50	47	60	55	No	No	-1.3	-0.7	No	No
34	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.6	0.7	50	48	60	55	No	No	-1.6	-1.0	No	No
35	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	49	47	1.8	1.8	50	47	60	55	No	No	-0.9	-0.4	No	No
36	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	56	54	1.5	1.5	56	54	60	55	No	No	-0.8	-0.6	No	No
37	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	47	45	0.5	0.6	48	46	60	55	No	No	-1.7	-1.0	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
38	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	52	0.9	1	54	52	60	55	No	No	-0.5	-0.2	No	No
39	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	0.1	1.3	51	48	60	55	No	No	-1.8	-1.1	No	No
40	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	56	54	1.6	1.6	56	54	60	55	No	No	-0.8	-0.6	No	No
41	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.7	0.8	50	48	60	55	No	No	-1.5	-0.9	No	No
42	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	56	54	2.1	2.1	57	55	60	55	No	No	-0.8	-0.6	No	No
43	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.7	0.9	50	48	60	55	No	No	-1.3	-0.6	No	No
44	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.1	0.3	49	47	60	55	No	No	-1.2	-0.5	No	No
45	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	0.6	50	47	60	55	No	No	-1.2	-0.5	No	No
46	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	48	46	0.5	0.7	49	47	60	55	No	No	-1.5	-0.8	No	No
47	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	57	55	1.5	1.5	57	55	60	55	No	No	-0.9	-0.6	No	No
48	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.4	0.4	51	49	60	55	No	No	-2.7	-2.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
49	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	45	49	47	0.5	1.7	50	48	60	55	No	No	-1.5	-0.8	No	No
50	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	48	0.4	1.5	51	48	60	55	No	No	-1.6	-0.9	No	No
51	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.2	0.4	49	47	60	55	No	No	-1.0	-0.3	No	No
52	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.8	1	50	48	60	55	No	No	-1.2	-0.5	No	No
53	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	48	46	-0.9	-1	51	48	60	55	No	No	-2.5	-2.2	No	No
54	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0	0	51	49	60	55	No	No	-2.1	-1.6	No	No
55	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	45	48	46	-0.1	1.1	49	47	60	55	No	No	-1.3	-0.6	No	No
56	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	0.6	50	47	60	55	No	No	-1.3	-0.6	No	No
57	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	57	55	59	57	2.3	2.1	61	58	60	55	No	Yes	-1.2	-1.1	No	No
58	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	54	52	0.4	0.4	55	52	60	55	No	No	-0.4	0.0	No	No
59	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.1	0.1	50	48	60	55	No	No	-2.3	-1.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
60	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	0	1.2	51	48	60	55	No	No	-1.6	-0.9	No	No
61	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.1	0.3	49	47	60	55	No	No	-1.0	-0.3	No	No
62	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	-0.1	1.1	50	48	60	55	No	No	-1.1	-0.4	No	No
63	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.1	0	50	48	60	55	No	No	-2.3	-1.9	No	No
64	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0.4	0.4	51	49	60	55	No	No	-1.8	-1.3	No	No
65	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	59	57	2.8	2.7	60	58	60	55	No	Yes	-1.6	-1.4	No	No
66	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	45	48	46	0.1	1.3	50	47	60	55	No	No	-1.4	-0.7	No	No
67	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.3	0.5	50	47	60	55	No	No	-1.3	-0.6	No	No
68	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.2	-0.3	51	49	60	55	No	No	-2.4	-2.1	No	No
69	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0.2	0.4	51	48	60	55	No	No	-1.4	-0.7	No	No
70	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.5	0.5	51	48	60	55	No	No	-2.3	-1.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
71	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0	0.2	49	46	60	55	No	No	-0.9	-0.2	No	No
72	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.4	0.3	51	48	60	55	No	No	-2.3	-1.9	No	No
73	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	1	1.2	50	48	60	55	No	No	-1.2	-0.5	No	No
74	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	1	1.1	52	50	60	55	No	No	-2.1	-1.5	No	No
75	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.8	0.9	52	49	60	55	No	No	-2.1	-1.5	No	No
76	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	59	57	2.9	2.8	60	58	60	55	No	Yes	-1.5	-1.3	No	No
77	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	50	53	51	-0.2	1	53	51	60	55	No	No	-0.5	0.1	No	No
78	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	45	48	46	0	1.3	49	47	60	55	No	No	-1.4	-0.6	No	No
80	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.3	0.5	51	48	60	55	No	No	-1.4	-0.7	No	No
81	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.5	0.7	50	47	60	55	No	No	-1.2	-0.5	No	No
82	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0	0	52	49	60	55	No	No	-2.7	-2.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
83	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.5	0.6	51	49	60	55	No	No	-1.7	-1.1	No	No
84	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.1	0.3	49	47	60	55	No	No	-0.9	-0.2	No	No
85	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	0.5	50	47	60	55	No	No	-1.2	-0.6	No	No
86	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	48	46	0.6	0.5	50	48	60	55	No	No	-2.4	-2.0	No	No
87	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	59	57	2.8	2.7	60	58	60	55	No	Yes	-1.5	-1.3	No	No
88	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	45	48	46	-0.3	0.9	49	46	60	55	No	No	-1.2	-0.4	No	No
89	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	45	48	46	0	1.2	49	46	60	55	No	No	-0.9	-0.2	No	No
90	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.5	0.7	51	48	60	55	No	No	-1.2	-0.5	No	No
91	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	0.6	50	47	60	55	No	No	-1.4	-0.7	No	No
92	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	49	1.4	1.5	53	50	60	55	No	No	-2.1	-1.5	No	No
93	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0.2	0.4	50	47	60	55	No	No	-1.3	-0.6	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
94	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	1	1.1	51	48	60	55	No	No	-1.5	-0.8	No	No
95	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	58	56	2.2	2	60	58	60	55	No	Yes	-2.0	-1.9	No	No
96	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	48	46	0.8	1	50	47	60	55	No	No	-1.7	-1.0	No	No
97	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	1.1	1.1	54	51	60	55	No	No	-2.4	-1.9	No	No
98	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	0	0.2	50	47	60	55	No	No	-1.7	-1.0	No	No
99	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	1	1.2	51	48	60	55	No	No	-1.9	-1.2	No	No
100	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.5	0.8	50	48	60	55	No	No	-1.8	-1.0	No	No
101	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	1.3	1.4	53	50	60	55	No	No	-2.4	-1.9	No	No
102	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	0.1	1.2	51	48	60	55	No	No	-1.6	-1.0	No	No
103	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	50	0.9	0.8	54	52	60	55	No	No	-2.3	-2.0	No	No
104	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	58	56	1.9	1.7	60	58	60	55	No	Yes	-2.1	-2.0	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
105	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.7	1	51	48	60	55	No	No	-1.9	-1.1	No	No
106	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	0.6	50	48	60	55	No	No	-1.8	-1.2	No	No
107	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	50	1.2	1.3	55	52	60	55	No	No	-2.4	-1.8	No	No
108	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.3	0.8	50	47	60	55	No	No	-1.5	-0.5	No	No
109	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.8	1	51	48	60	55	No	No	-0.9	-0.2	No	No
110	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	1.3	1.3	52	50	60	55	No	No	-2.0	-1.5	No	No
111	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	50	48	0.5	1.8	51	48	60	55	No	No	-1.2	-0.4	No	No
112	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.7	0.9	51	49	60	55	No	No	-2.3	-1.6	No	No
113	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	2.3	2.2	57	54	60	55	No	No	-2.3	-2.0	No	No
114	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	48	1.1	1.5	51	48	60	55	No	No	-1.4	-0.5	No	No
115	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.8	1.1	51	49	60	55	No	No	-1.2	-0.4	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
116	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	57	55	1.9	1.8	59	57	60	55	No	No	-2.2	-2.0	No	No
117	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.4	0.5	51	49	60	55	No	No	-1.8	-1.2	No	No
118	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.9	1.1	52	49	60	55	No	No	-2.0	-1.3	No	No
119	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	51	49	0.5	1.7	52	50	60	55	No	No	-1.6	-0.9	No	No
120	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	50	48	2.1	2.4	51	49	60	55	No	No	-1.2	-0.5	No	No
121	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	50	1	1.1	54	52	60	55	No	No	-2.1	-1.5	No	No
122	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.7	0.9	52	49	60	55	No	No	-2.0	-1.3	No	No
123	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	51	49	1.2	2.2	54	51	60	55	No	No	-2.3	-1.8	No	No
124	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	51	49	1.6	1.9	52	50	60	55	No	No	-1.6	-0.8	No	No
125	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	51	49	0.6	1.9	52	50	60	55	No	No	-1.4	-0.7	No	No
126	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.9	1.1	50	48	60	55	No	No	-1.4	-0.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
127	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	52	50	1.7	1.7	54	52	60	55	No	No	-2.6	-2.2	No	No
132	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	45	48	46	0.1	1.4	49	46	60	55	No	No	-0.6	0.1	No	No
134	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	49	1.4	1.8	53	50	60	55	No	No	-2.1	-1.3	No	No
140	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.2	1.6	53	50	60	55	No	No	-1.3	-0.5	No	No
144	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	2.4	2.4	57	54	60	55	No	No	-2.2	-1.9	No	No
146	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.9	0.9	53	50	60	55	No	No	-2.0	-1.5	No	No
148	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	0.7	51	48	60	55	No	No	-2.3	-1.6	No	No
150	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	2	2	56	54	60	55	No	No	-1.9	-1.6	No	No
154	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	56	54	2.2	2.1	58	56	60	55	No	No	-2.1	-1.8	No	No
155	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	1	1.3	51	48	60	55	No	No	-1.6	-0.9	No	No
156	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.6	0.6	52	50	60	55	No	No	-2.5	-2.0	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
158	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.2	1.6	53	50	60	55	No	No	-1.5	-0.7	No	No
159	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	2.2	2.2	57	54	60	55	No	No	-2.4	-2.0	No	No
161	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	47	45	0.5	0.7	48	45	60	55	No	No	-1.3	-0.6	No	No
164	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	47	45	-0.1	-0.1	49	46	60	55	No	No	-1.7	-1.4	No	No
166	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	0	0.1	52	49	60	55	No	No	-1.8	-1.2	No	No
167	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	2	2	56	54	60	55	No	No	-2.3	-1.9	No	No
168	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.1	1.6	52	50	60	55	No	No	-1.3	-0.5	No	No
171	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	47	45	0.6	1	48	46	60	55	No	No	-1.4	-0.5	No	No
172	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0.1	0.2	51	48	60	55	No	No	-1.8	-1.2	No	No
173	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	47	45	0.9	1.2	49	47	60	55	No	No	-2.5	-1.9	No	No
174	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	49	53	51	0.9	1.8	55	53	60	55	No	No	-2.0	-1.7	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
175	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	44	47	45	-0.3	1.1	49	47	60	55	No	No	-2.4	-1.6	No	No
176	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	56	54	2.6	2.5	58	55	60	55	No	No	-2.1	-1.8	No	No
177	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.5	1	52	50	60	55	No	No	-1.8	-1.0	No	No
180	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	-0.3	0.8	51	48	60	55	No	No	-2.2	-1.6	No	No
182	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	52	50	1.6	1.7	54	52	60	55	No	No	-2.3	-1.8	No	No
183	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	2.4	2.3	57	55	60	55	No	No	-1.8	-1.5	No	No
184	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.3	1.8	53	50	60	55	No	No	-1.2	-0.4	No	No
186	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	51	49	0.8	1.9	53	50	60	55	No	No	-2.0	-1.4	No	No
189	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	47	45	0.7	1	49	46	60	55	No	No	-1.9	-1.1	No	No
190	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	53	51	1.1	1	55	53	60	55	No	No	-1.8	-1.6	No	No
191	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	45	43	47	45	1.5	1.9	47	45	60	55	No	No	-0.9	0.0	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
193	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	1.7	1.7	56	54	60	55	No	No	-1.7	-1.3	No	No
194	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	2.1	2	56	54	60	55	No	No	-1.8	-1.6	No	No
195	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	57	55	2	1.9	59	57	60	55	No	No	-2.0	-1.6	No	No
197	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1	1.5	52	50	60	55	No	No	-1.3	-0.4	No	No
198	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	-0.2	0.4	49	47	60	55	No	No	-1.5	-0.4	No	No
199	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	44	42	45	43	1	1.4	46	44	60	55	No	No	-1.1	-0.2	No	No
200	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	53	51	1.9	1.8	55	52	60	55	No	No	-1.9	-1.6	No	No
201	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	48	46	1.7	2.1	50	48	60	55	No	No	-2.4	-1.7	No	No
204	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	56	54	2.1	1.8	56	54	60	55	No	No	-0.2	-0.1	No	No
205	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	1.1	50	48	60	55	No	No	-2.0	-0.8	No	No
206	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	52	0.9	1	55	53	60	55	No	No	-1.5	-1.0	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
207	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	48	1.1	1.7	51	48	60	55	No	No	-1.6	-0.6	No	No
208	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	53	51	2.1	2	56	53	60	55	No	No	-2.4	-2.1	No	No
209	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	57	55	2.4	2.2	59	57	60	55	No	Yes	-2.0	-1.8	No	No
210	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.8	1.2	52	50	60	55	No	No	-1.5	-0.7	No	No
211	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.5	0.5	52	49	60	55	No	No	-2.1	-1.7	No	No
212	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	52	49	2.6	2.2	53	50	60	55	No	No	-1.3	-1.2	No	No
214	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	49	1.1	1.6	52	49	60	55	No	No	-1.5	-0.6	No	No
217	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	49	1.4	1.7	52	50	60	55	No	No	-1.6	-0.8	No	No
218	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	58	55	2.6	2.2	58	56	60	55	No	Yes	-0.8	-0.9	No	No
221	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	57	55	60	57	2.8	2.4	61	59	60	55	No	Yes	-1.1	-1.1	No	No
222	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	57	54	2.6	2.2	58	55	60	55	No	No	-1.2	-1.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
223	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	56	54	3.3	3	58	55	60	55	No	No	-1.2	-1.0	No	No
224	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	52	50	2.4	2.2	53	50	60	55	No	No	-0.1	0.2	No	No
225	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	56	54	3.3	2.9	57	55	60	55	No	No	-1.1	-1.1	No	No
227	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	56	54	3.3	2.9	57	55	60	55	No	No	-0.9	-0.9	No	No
228	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	55	52	2.5	2.3	55	53	60	55	No	No	-0.7	-0.5	No	No
231	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	50	48	1	1	51	48	60	55	No	No	-0.6	-0.2	No	No
232	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	51	49	1.5	1.6	51	49	60	55	No	No	-0.5	0.0	No	No
233	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	51	49	1.8	1.9	52	49	60	55	No	No	-0.7	-0.2	No	No
234	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	51	49	-	-	52	50	60	55	No	No	-0.8	-0.3	No	No
235	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	47	1.1	1.5	49	47	60	55	No	No	-1.2	-0.3	No	No
236	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	46	45	0.3	1.1	49	46	60	55	No	No	-2.6	-1.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
237	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	47	46	0.2	0.7	49	46	60	55	No	No	-1.7	-0.7	No	No
238	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	52	50	-	-	53	50	60	55	No	No	-1.0	-0.5	No	No
239	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	48	47	0.3	1	50	47	60	55	No	No	-1.5	-0.2	No	No
240	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	48	46	-	-	50	47	60	55	No	No	-2.5	-1.4	No	No
241	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	47	0.8	1.5	50	47	60	55	No	No	-1.9	-0.7	No	No
242	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	52	50	1.8	2	53	50	60	55	No	No	-0.8	-0.2	No	No
243	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	48	47	-	-	50	47	60	55	No	No	-1.9	-0.7	No	No
244	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	52	50	1.8	1.9	52	50	60	55	No	No	-0.6	-0.1	No	No
245	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	53	52	2.2	2.5	55	52	60	55	No	No	-1.3	-0.5	No	No
246	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	44	46	44	-0.9	0.4	48	46	60	55	No	No	-2.0	-1.2	No	No
247	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	45	44	-0.6	-0.3	47	45	60	55	No	No	-1.8	-1.0	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
248	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	46	45	0.4	1	48	46	60	55	No	No	-1.6	-0.5	No	No
249	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	46	1.1	1.6	47	45	60	55	No	No	-0.2	0.7	No	No
250	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	45	43	46	45	0.7	1.7	48	46	60	55	No	No	-2.4	-0.8	No	No
251	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	45	0.8	1.3	48	45	60	55	No	No	-1.1	-0.1	No	No
252	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	43	46	45	-0.2	1.7	49	46	60	55	No	No	-2.8	-1.3	No	No
253	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	46	1.4	2	48	45	60	55	No	No	-0.5	0.6	No	No
254	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	49	47	1.6	1.6	49	46	60	55	No	No	-0.1	0.4	No	No
255	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	53	51	1.7	2	54	51	60	55	No	No	-1.1	-0.3	No	No
256	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	45	43	46	45	0.7	1.5	49	46	60	55	No	No	-3.0	-1.6	No	No
257	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	53	52	2.3	2.7	54	51	60	55	No	No	-0.5	0.3	No	No
258	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	46	45	0.4	1.3	49	47	60	55	No	No	-2.7	-1.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
260	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	50	48	1.2	1.4	52	49	60	55	No	No	-1.4	-0.8	No	No
261	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	51	50	0.3	1.3	52	50	60	55	No	No	-1.0	0.5	No	No
262	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	49	48	-1.3	-0.3	51	49	60	55	No	No	-2.6	-1.0	No	No
263	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	51	50	0.3	1.2	52	50	60	55	No	No	-0.7	0.7	No	No
264	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	53	51	2.5	2.6	53	50	60	55	No	No	-0.2	0.2	No	No
265	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	46	45	0	0.9	50	47	60	55	No	No	-3.7	-2.3	No	No
266	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	46	45	0.4	1.1	49	46	60	55	No	No	-2.5	-1.2	No	No
267	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	46	0.5	1.2	50	48	60	55	No	No	-2.6	-1.3	No	No
268	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	54	52	1.9	2.4	54	52	60	55	No	No	-0.3	0.6	No	No
269	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	52	50	1.1	1.4	54	52	60	55	No	No	-2.2	-1.5	No	No
270	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	46	1	1.7	49	47	60	55	No	No	-2.1	-0.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
271	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	49	53	52	0.9	2.6	54	52	60	55	No	No	-1.3	-0.1	No	No
272	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	54	53	2.1	2.8	54	52	60	55	No	No	0.1	1.2	No	No
273	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	46	0.7	1.5	49	47	60	55	No	No	-2.3	-1.0	No	No
274	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	55	53	57	56	2.2	3.3	58	55	60	55	No	Yes	-0.8	0.9	No	No
275	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	49	48	1.8	2.6	51	48	60	55	No	No	-2.1	-0.7	No	No
276	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	46	0.9	1.6	49	47	60	55	No	No	-2.2	-1.0	No	No
277	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	49	48	1	1.9	50	48	60	55	No	No	-1.3	0.2	No	No
278	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	50	48	0.5	1.4	51	49	60	55	No	No	-1.8	-0.3	No	No
280	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	50	48	0.5	1.4	51	48	60	55	No	No	-1.4	0.0	No	No
281	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	52	51	0.3	1.3	54	52	60	55	No	No	-1.9	-0.4	No	No
282	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	52	51	0.7	1.6	52	50	60	55	No	No	-0.6	0.7	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
283	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	43	49	47	2.6	4.4	51	49	60	55	No	No	-2.7	-1.5	No	No
284	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	51	50	0.1	1.1	52	50	60	55	No	No	-1.1	0.3	No	No
285	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	50	49	0.4	1.3	52	49	60	55	No	No	-1.2	0.1	No	No
286	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	51	50	1.6	2.6	52	49	60	55	No	No	-1.0	0.5	No	No
287	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	52	51	1.3	2.3	54	52	60	55	No	No	-2.1	-0.6	No	No
288	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	49	48	0.7	1.8	51	49	60	55	No	No	-2.7	-1.1	No	No
289	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	54	52	57	56	2.6	3.7	58	55	60	55	No	Yes	-1.1	0.5	No	No
290	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	52	51	-0.3	0.7	52	49	60	55	No	No	-0.2	1.3	No	No
291	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	50	49	0.6	1.6	52	49	60	55	No	No	-2.4	-0.8	No	No
292	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	52	51	1.1	2.1	55	52	60	55	No	No	-2.4	-1.0	No	No
293	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	51	50	0.2	1	52	49	60	55	No	No	-0.4	0.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
294	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	48	51	50	-0.1	1.7	54	51	60	55	No	No	-2.6	-1.3	No	No
295	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	53	52	0.8	1.8	55	52	60	55	No	No	-1.8	-0.3	No	No
296	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	50	49	1.3	2.2	52	50	60	55	No	No	-1.9	-0.5	No	No
297	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	52	51	1.1	1.9	53	51	60	55	No	No	-0.9	0.3	No	No
299	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	52	51	0.1	1.1	55	52	60	55	No	No	-2.4	-1.0	No	No
300	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	52	51	1.6	2.7	53	51	60	55	No	No	-1.6	0.0	No	No
301	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	53	52	1.2	2.1	55	52	60	55	No	No	-1.5	-0.1	No	No
302	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	52	51	1.9	2.9	52	49	60	55	No	No	0.2	1.7	No	No
304	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	53	52	0.8	2	53	50	60	55	No	No	0.3	2.0	No	No
305	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	57	55	59	58	1.8	3.1	60	57	60	55	No	Yes	-0.8	1.0	No	No
306	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	54	53	0.5	1.5	55	52	60	55	No	No	-1.2	0.3	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
307	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	54	53	0.8	1.9	56	53	60	55	No	No	-2.0	-0.4	No	No
309	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	57	55	59	58	1.9	3.2	60	57	60	55	No	Yes	-1.0	0.9	No	No
310	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	54	53	1	2.1	57	54	60	55	No	No	-2.5	-0.9	No	No
311	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	54	51	55	54	1.2	3.3	57	55	60	55	No	No	-2.1	-0.5	No	No
312	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	54	52	56	55	1.8	2.9	58	56	60	55	No	No	-2.3	-0.7	No	No
313	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	56	53	57	56	1.1	3.2	59	57	60	55	No	Yes	-2.1	-0.5	No	No
314	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	57	55	59	58	2	3.2	60	57	60	55	No	Yes	-0.9	0.9	No	No
323	28 Tasman Street Corindi Beach	Residential	56	DP10 59403	GF	55	53	56	55	0.9	2.1	62	59	60	55	No	Yes	-5.6	-4.1	No	No
324	26 Tasman Street Corindi Beach	Residential	55	DP10 59403	GF	51	49	52	51	1.2	2.3	58	55	60	55	No	No	-5.4	-4.0	No	No
325	24 Tasman Street Corindi Beach	Residential	54	DP10 59403	GF	53	51	54	53	0.7	1.8	59	57	60	55	No	No	-5.1	-3.7	No	No
326	22 Tasman Street Corindi Beach	Residential	53	DP10 59403	GF	54	52	55	54	0.7	1.8	60	58	60	55	No	No	-5.3	-3.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
327	28 Lomandra Court Corindi Beach	Residential	29	DP10 59403	GF	52	49	52	51	0.1	2	56	53	60	55	No	No	-3.6	-2.3	No	No
328	26 Lomandra Court Corindi Beach	Residential	28	DP10 59403	GF	51	49	51	50	0.4	1.4	55	52	60	55	No	No	-3.3	-1.8	No	No
329	24 Lomandra Court Corindi Beach	Residential	27	DP10 59403	GF	50	48	51	50	0.5	1.5	54	51	60	55	No	No	-3.2	-1.8	No	No
330	20 Tasman Street Corindi Beach	Residential	52	DP10 59403	GF	54	52	55	54	1	2.1	60	58	60	55	No	No	-5.1	-3.6	No	No
331	17 Lomandra Court Corindi Beach	Residential	30	DP10 59403	GF	51	49	51	50	0.2	1.1	55	52	60	55	No	No	-3.6	-2.2	No	No
332	18 Tasman Street Corindi Beach	Residential	51	DP10 59403	GF	54	52	55	54	0.8	1.9	60	57	60	55	No	No	-5.0	-3.5	No	No
333	16 Tasman Street Corindi Beach	Residential	50	DP10 59403	GF	54	52	55	54	0.5	1.6	59	57	60	55	No	No	-4.8	-3.3	No	No
334	15 Lomandra Court Corindi Beach	Residential	31	DP10 59403	GF	49	47	49	48	0.1	1	53	51	60	55	No	No	-3.8	-2.5	No	No
335	2 Zulu Place Corindi Beach	Residential	21	DP11 96296	GF	64	62	63	62	-0.7	0.1	60	57	55	50	Yes	Yes	3.5	4.8	No	Yes
336	14 Tasman Street Corindi Beach	Residential	49	DP10 59403	GF	54	52	55	54	0.7	1.8	60	57	60	55	No	No	-5.1	-3.6	No	No
337	13 Lomandra Court Corindi Beach	Residential	32	DP10 59403	GF	49	46	49	48	0	1.9	52	50	60	55	No	No	-2.9	-1.6	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
338	11 Lomandra Court Corindi Beach	Residential	33	DP10 59403	GF	48	46	48	47	-0.1	0.7	51	48	60	55	No	No	-2.8	-1.5	No	No
339	12 Tasman Street Corindi Beach	Residential	48	DP10 59403	GF	53	51	54	53	0.5	1.5	58	56	60	55	No	No	-4.8	-3.4	No	No
341	10 Tasman Street Corindi Beach	Residential	47	DP10 59403	GF	53	51	53	52	-0.1	0.9	58	55	60	55	No	No	-4.6	-3.1	No	No
343	8 Tasman Street Corindi Beach	Residential	46	DP10 59403	GF	52	50	52	51	0.2	1.2	57	54	60	55	No	No	-4.5	-3.0	No	No
344	1 Kangaroo Trail Road Corindi Beach	Residential	20	DP11 96296	GF	64	62	63	61	-1.4	-0.7	58	55	55	50	Yes	Yes	4.8	6.0	No	Yes
345	1 Golden Penda Drive Corindi Beach	Residential	40	DP10 59403	GF	48	46	48	47	-0.1	0.7	51	48	60	55	No	No	-2.8	-1.6	No	No
346	6 Tasman Street Corindi Beach	Residential	45	DP10 59403	GF	53	51	54	53	0.8	1.8	58	56	60	55	No	No	-4.4	-3.0	No	No
350	4 Tasman Street Corindi Beach	Residential	44	DP10 59403	GF	51	49	51	50	-0.2	0.8	54	52	60	55	No	No	-3.0	-1.7	No	No
351	31 Kangaroo Trail Road Corindi Beach	Residential	100	DP11 68898	GF	63	60	60	59	-2.9	-1.1	52	49	55	50	Yes	Yes	8.3	9.7	No	No
353	17 Pacific Street Corindi Beach	Residential	2	DP73 0305	GF	51	49	52	51	0.6	1.5	55	52	60	55	No	No	-2.9	-1.6	No	No
355	15 Pacific Street Corindi Beach	Residential	1	DP73 0305	GF	52	50	53	52	0.9	1.8	57	54	60	55	No	No	-3.6	-2.3	No	No

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						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
356	16 Pacific Street Corindi Beach	Residential	13	DP21 9711	GF	51	48	51	50	-0.4	1.5	54	52	60	55	No	No	-3.6	-2.3	No	No
357	14 Pacific Street Corindi Beach	Residential	12	DP21 9711	GF	51	49	51	50	0.2	1.1	55	53	60	55	No	No	-3.8	-2.5	No	No
358	12 Pacific Street Corindi Beach	Residential	11	DP21 9711	GF	51	48	51	50	-0.2	1.8	55	52	60	55	No	No	-4.0	-2.6	No	No
359	10 Pacific Street Corindi Beach	Residential	10	DP21 9711	GF	50	48	50	49	0	1	54	51	60	55	No	No	-3.8	-2.4	No	No
360	8 Pacific Street Corindi Beach	Residential	9	DP21 9711	GF	49	47	49	48	0.1	1	52	50	60	55	No	No	-3.3	-2.1	No	No
361	4 Pacific Street Corindi Beach	Residential	8	DP21 9711	GF	50	48	50	49	-0.5	0.5	54	51	60	55	No	No	-4.0	-2.7	No	No
362	55 Saltwater Crescent Corindi Beach	Residential	205	DP11 33380	GF	47	45	47	46	0	0.9	51	49	60	55	No	No	-3.9	-2.6	No	No
363	2 Pacific Street Corindi Beach	Residential	6	DP21 9711	GF	50	48	50	49	0	1	55	53	60	55	No	No	-4.8	-3.6	No	No
364	57 Saltwater Crescent Corindi Beach	Residential	206	DP11 33380	GF	47	45	47	46	0.2	1.2	51	49	60	55	No	No	-3.7	-2.4	No	No
365	59 Saltwater Crescent Corindi Beach	Residential	207	DP11 33380	GF	48	46	48	47	-0.3	0.6	51	49	60	55	No	No	-3.5	-2.3	No	No
366	125 Coral Street Corindi Beach	Residential	224	DP11 33380	GF	50	47	50	49	-0.3	1.7	54	52	60	55	No	No	-4.6	-3.4	No	No

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						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
367	32 Kangaroo Trail Road Corindi Beach	Residential	10	DP11 52234	GF	56	54	56	55	-0.2	0.6	57	55	55	50	Yes	Yes	-1.3	-0.1	No	No
368	61 Saltwater Crescent Corindi Beach	Residential	208	DP11 33380	GF	47	45	47	46	-0.3	0.6	51	48	60	55	No	No	-4.0	-2.7	No	No
371	123 Coral Street Corindi Beach	Residential	223	DP11 33380	GF	49	47	50	49	0.6	1.6	54	52	60	55	No	No	-4.4	-3.2	No	No
372	63 Saltwater Crescent Corindi Beach	Residential	209	DP11 33380	GF	46	44	45	44	-0.7	0.3	50	47	60	55	No	No	-4.5	-3.1	No	No
374	121 Coral Street Corindi Beach	Residential	222	DP11 33380	GF	50	47	50	49	-0.4	1.6	54	52	60	55	No	No	-4.4	-3.1	No	No
375	65 Saltwater Crescent Corindi Beach	Residential	210	DP11 33380	GF	46	43	45	44	-0.6	1.3	50	48	60	55	No	No	-4.5	-3.2	No	No
377	119 Coral Street Corindi Beach	Residential	221	DP11 33380	GF	50	47	50	49	-0.2	1.8	54	52	60	55	No	No	-4.2	-3.0	No	No
378	67 Saltwater Crescent Corindi Beach	Residential	211	DP11 33380	GF	46	44	46	45	-0.1	0.8	50	48	60	55	No	No	-4.1	-2.8	No	No
379	117 Coral Street Corindi Beach	Residential	220	DP11 33380	GF	50	48	50	49	0.1	1.1	54	52	60	55	No	No	-4.0	-2.8	No	No
380	115 Coral Street Corindi Beach	Residential	219	DP11 33380	GF	50	48	50	49	0.3	1.3	54	52	60	55	No	No	-3.7	-2.5	No	No
381	113 Coral Street Corindi Beach	Residential	218	DP11 33380	GF	50	48	50	49	0	1	54	52	60	55	No	No	-3.9	-2.6	No	No

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						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
382	111 Coral Street Corindi Beach	Residential	217	DP11 33380	GF	48	45	48	47	-0.4	1.5	52	49	60	55	No	No	-4.2	-2.9	No	No
383	90 Coral Street Corindi Beach	Residential	9	DP26 0192	GF	54	52	55	54	0.9	1.9	59	57	60	55	No	No	-4.3	-3.0	No	No
386	34 Kangaroo Trail Road Corindi Beach	Residential	51	DP85 1056	GF	68	66	67	65	-1.4	-0.6	53	51	55	50	Yes	Yes	13.4	14.7	Yes	Yes
393	3509 Pacific Highway Corindi Beach	Residential	5	DP82 8411	GF	56	54	57	55	0.6	1.4	51	49	55	50	Yes	Yes	5.2	6.4	No	No
396	21 Post Office Lane Corindi Beach	Residential	3	DP81 5051	GF	59	57	59	58	0.1	0.9	48	45	55	50	Yes	Yes	11.6	12.9	No	No
399	15 Post Office Lane Corindi Beach	Residential	12	DP58 3175	GF	56	54	56	55	0.4	1.3	56	54	55	50	Yes	Yes	0.0	1.3	No	No
402	18 Post Office Lane Corindi Beach	Residential	13	DP11 82256	GF	63	61	61	60	-1.8	-0.9	48	45	55	50	Yes	Yes	13.5	14.9	No	Yes
403	13 Post Office Lane Corindi Beach	Residential	4	DP52 4113	GF	55	53	55	54	-0.3	0.7	56	54	55	50	No	Yes	-1.5	-0.1	No	No
404	20 Post Office Lane Corindi Beach	Residential	12	DP11 82256	GF	59	57	58	57	-1.1	-0.2	53	50	55	50	Yes	Yes	5.4	6.6	No	No
411	9 Post Office Lane Corindi Beach	Residential	2	DP51 9232	GF	52	50	50	49	-2.2	-1.3	50	49	55	50	No	No	0.2	0	No	No
414	3674 Pacific Highway Corindi Beach	Residential	2	DP61 9732	GF	48	46	52	51	3.8	5.4	61	59	55	50	No	Yes	-9	-7.1	No	No

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						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
415	8 Post Office Lane Corindi Beach	Residential	3	DP86 5228	GF	55	53	54	53	-1.1	-0.3	49	46	55	50	No	Yes	5.3	6.6	No	No
416	3 Post Office Lane Corindi Beach	Residential	1	DP61 9732	GF	53	50	53	51	-0.5	1.4	54	53	55	50	No	Yes	-1	-1.1	No	No
419	10 Post Office Lane Corindi Beach	Residential	2	DP21 1641	GF	55	53	54	53	-1.4	-0.1	58	56	55	50	No	Yes	-4.6	-2.9	No	No
420	6 Post Office Lane Corindi Beach	Residential	4	DP86 5228	GF	52	50	51	50	-0.6	0.3	51	49	55	50	No	Yes	0.2	1.5	No	No
422	4 Post Office Lane Corindi Beach	Residential	5	DP86 5228	GF	52	50	53	52	0.7	1.7	55	53	55	50	No	Yes	-2.3	-1	No	No
423	2 Post Office Lane Corindi Beach	Residential	6	DP86 5228	GF	53	51	52	51	-0.9	0.3	58	55	55	50	No	Yes	-5.5	-4	No	No
429	3727 Pacific Highway Corindi Beach	Residential	2	DP62 3588	GF	54	52	54	53	0.2	1.2	54	51	55	50	No	Yes	0.7	2.1	No	No
431	13 Alice Close Dirty Creek	Residential	68	DP73 1384	GF	55	53	53	52	-2.3	-1.5	51	48	55	50	No	Yes	2.2	3.4	No	No
432	11 Bottle Brush Drive Corindi Beach	Residential	2	DP62 9984	GF	52	50	53	52	0.6	1.8	57	55	55	50	No	Yes	-4.4	-2.9	No	No
434	10 Bottle Brush Drive Corindi Beach	Residential	552	DP11 81369	GF	54	52	54	53	-0.3	0.6	48	45	55	50	No	Yes	6.1	7.4	No	No
435	3875 Pacific Highway Corindi Beach	Residential	109	DP75 2820	GF	57	55	56	55	-0.8	0.2	52	50	55	50	Yes	Yes	3.8	5.1	No	No

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						Design model		Post-construction noise compliance model													
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439	17 Bonita Drive Dirty Creek	Residential	44	DP73 1384	GF	52	50	51	49	-1.4	-0.6	47	45	55	50	No	No	3.7	4.8	No	No
446	153 Kathleen Drive Dirty Creek	Residential	38	DP73 1384	GF	58	56	57	56	-0.8	0	52	50	55	50	Yes	Yes	4.8	5.9	No	No
448	17 Hawthorn Close Corindi Beach	Residential	551	DP11 81369	GF	55	53	54	54	-0.7	0.5	58	56	55	50	No	Yes	-3.8	-2.2	No	No
449	15 Hawthorn Close Corindi Beach	Residential	1101	DP80 3773	GF	58	56	56	56	-1.8	-0.4	52	49	55	50	Yes	Yes	4.5	6.2	No	No
451	4149 Pacific Highway Dirty Creek	Residential	2	DP71 0318	GF	-	-	65	64	-	-	60	58	60	55	Yes	Yes	5.5	6.5	Yes	Yes
453	27 Flinty Road Dirty Creek	Residential	101	DP11 50718	GF	54	52	53	52	-0.6	0.4	56	54	55	50	No	Yes	-2.5	-1.1	No	No
455	12 Flinty Road, Dirty Creek	Residential	201	DP11 83461	GF	41	39	56	55	15.1	15.9	49	47	55	50	Yes	Yes	7	7.9	No	No
464	1 Flinty Road Dirty Creek	Residential	10	DP62 9129	GF	52	50	54	54	1.7	3.6	64	62	55	50	No	Yes	-10.3	-8.1	No	No
468	7 Dirty Creek Road Dirty Creek	Residential	201	DP11 83461	GF	54	53	54	54	-0.1	0.5	62	60	60	55	No	No	-7.8	-6.1	No	No
474	53 Range Road Dirty Creek	Residential	10	DP11 95255	GF	55	53	55	54	-0.2	0.7	55	53	60	55	No	No	-0.5	0.7	No	No
476	1 Dundoo Reach Dirty Creek	Residential	13	DP11 95255	GF	58	56	57	56	-0.8	-0.1	56	54	60	55	No	Yes	0.8	1.8	No	No

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						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
481	319 Dirty Creek Road Dirty Creek	Residential	1	DP12 06893	GF	65	63	64	62	-1.4	-0.7	65	63	60	55	Yes	Yes	-1.1	-0.2	No	Yes
484	80 Falconers Lane Dirty Creek	Residential	1	DP11 88448	GF	59	56	58	57	-1.2	0.5	59	56	60	55	No	Yes	-0.9	0.3	No	No
491	25 The Siding, Halfway Creek	Residential	1022	DP82 9290	GF	-	-	56	55	-	-	56	54	60	55	No	No	-0.1	1.1	No	No
493	4905 Pacific Highway Halfway Creek	Residential	1024	DP82 9290	GF	56	53	56	54	-0.3	1.3	56	53	60	55	No	No	-0.2	0.9	No	No
495	4470 Pacific Highway Halfway Creek	Residential	3	DP11 90631	GF	72	70	70	69	-1.7	-0.8	74	71	60	55	Yes	Yes	-3.3	-2.0	Yes	Yes
502	4577 Pacific Highway Halfway Creek	Residential	3	DP11 78416	GF	61	59	61	59	-0.4	0.2	61	58	60	55	Yes	Yes	-0.2	0.9	No	No
506	17 McPhillips Road Halfway Creek	Residential	2	DP11 78416	GF	61	59	59	58	-1.8	-0.8	59	57	60	55	No	Yes	0.3	1.6	No	No
510	4612 Pacific Highway Halfway Creek	Residential	1	DP11 78416	GF	62	60	59	58	-2.6	-1.6	59	57	60	55	No	Yes	0.5	1.8	No	No
512	4614 Pacific Highway Halfway Creek	Residential	1252	DP77 7419	GF	64	62	60	59	-3.7	-2.7	61	58	60	55	Yes	Yes	-0.4	0.9	No	No
522	4650 Pacific Highway Halfway Creek	Residential	7000	DP11 31214	GF	67	65	61	60	-6	-5	62	60	60	55	Yes	Yes	-1.4	-0.3	No	Yes
526	4644 Pacific Highway Halfway Creek	Residential	81	DP61 2750	GF	61	59	59	58	-2.5	-1.5	60	58	60	55	No	Yes	-1.6	-0.4	No	No

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529	4688 Pacific Highway Halfway Creek	Residential	3	DP11 98956	GF	62	60	59	58	-3	-1.8	63	61	60	55	No	Yes	-3.8	-2.3	No	No
531	4648 Pacific Highway Halfway Creek	Residential	7	DP75 1368	GF	60	58	58	57	-1.6	-0.8	60	58	60	55	No	Yes	-2.0	-0.9	No	No
533	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	62	60	59	57	-3.4	-2.6	63	61	60	55	No	Yes	-4.4	-3.4	No	No
537	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	65	63	60	59	-5.1	-4.2	66	64	60	55	No	Yes	-5.8	-4.9	No	No
541	20 Rediger Close Halfway Creek	Residential	5	DP11 78944	GF	58	56	53	52	-4.9	-3.9	59	57	60	55	No	No	-5.7	-4.9	No	No
542	11 Rediger Close Halfway Creek	Residential	9	DP71 3824	GF	60	58	54	53	-5.7	-4.7	60	59	60	55	No	No	-5.9	-5.2	No	No
551	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	56	54	52	51	-3.9	-3.1	57	56	60	55	No	No	-5.3	-4.7	No	No
554	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	59	57	54	53	-5.3	-4.4	60	58	60	55	No	No	-5.9	-5.2	No	No
557	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	55	53	51	50	-3.8	-2.9	57	55	60	55	No	No	-5.8	-5.3	No	No
561	20 Grays Road Halfway Creek	Residential	8	DP11 98956	GF	-	-	58	57	-	-	63	61	60	55	No	Yes	-5.4	-4.8	No	No
564	19 Grays Road Halfway Creek	Residential	10	DP10 66648	GF	65	63	60	59	-5	-4	65	63	60	55	No	Yes	-5.3	-4.4	No	No

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565	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	59	57	54	53	-4.9	-4	60	58	60	55	No	No	-5.6	-5.0	No	No
568	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	58	56	54	53	-4	-2.9	60	58	60	55	No	No	-5.8	-5.1	No	No
571	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	57	55	52	51	-4.7	-3.8	58	56	60	55	No	No	-5.8	-5.1	No	No
575	4925 Pacific Highway Halfway Creek	Residential	4	DP11 78944	GF	64	62	61	60	-3.1	-2	66	64	60	55	Yes	Yes	-4.6	-3.5	No	Yes
581	4982 Pacific Highway Halfway Creek	Residential	312	DP87 7257	GF	64	62	63	62	-0.9	0	64	62	60	55	Yes	Yes	-1.3	-0.2	No	Yes
582	9 Lemon Tree Road Halfway Creek	Residential	3	DP11 78944	GF	67	65	66	65	-1.3	-0.5	66	64	60	55	Yes	Yes	-0.3	0.8	Yes	Yes
584	5034 Pacific Highway Halfway Creek	Residential	2	DP11 78944	GF	59	57	57	56	-1.6	-0.8	58	56	60	55	No	Yes	-0.4	0.7	No	No
588	5062 Pacific Highway Halfway Creek	Residential	2	DP11 98039	GF	62	59	60	59	-2.1	-0.4	60	58	60	55	No	Yes	-0.3	0.8	No	No
597	5092 Pacific Highway Halfway Creek	Residential	1	DP11 98039	GF	61	59	59	58	-1.9	-1.2	60	57	60	55	No	Yes	-0.4	0.6	No	No
601	127 Luthers Road Halfway Creek	Residential	4	DP59 3325	GF	58	56	56	55	-2.2	-1.5	57	54	60	55	No	No	-0.7	0.4	No	No
604	50 Kungala Road Halfway Creek	Residential	414	DP12 23294	GF	56	54	56	55	0.3	1	57	55	60	55	No	No	-0.2	0.4	No	No

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						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
607	110 Luthers Road Halfway Creek	Residential	6	DP58 7878	GF	-	-	58	57	-	-	58	56	60	55	No	Yes	-0.4	0.6	No	No
608	104 Luthers Road Halfway Creek	Residential	5	DP58 7878	GF	59	57	58	57	-1	-0.3	58	56	60	55	No	Yes	-0.2	0.7	No	No
613	109 Luthers Road Halfway Creek	Residential	3	DP57 9136	GF	57	55	56	55	-1.1	-0.5	56	54	60	55	No	No	-0.4	0.5	No	No
615	88 Browns Road Halfway Creek	Residential	40	DP60 2517	GF	57	55	57	56	0.2	0.9	57	55	60	55	No	Yes	-0.1	0.5	No	No
616	Pacific Highway Halfway Creek	Residential	413	DP12 23294	GF	70	68	68	67	-2.2	-0.9	75	73	60	55	Yes	Yes	-6.9	-5.7	Yes	Yes
617	24 Luthers Road Halfway Creek	Residential	121	DP75 1368	GF	61	59	60	59	-0.7	0	61	59	60	55	Yes	Yes	-0.3	0.0	No	No
624	7 Luthers Road Halfway Creek	Residential	14	DP78 7246	GF	60	58	60	59	-0.1	0.6	63	61	60	55	No	Yes	-2.6	-2.5	No	No
630	5410 Pacific Hwy, Halfway Creek	Residential	131	DP48 274	GF	56	54	54	53	-2.3	-1.4	57	56	60	55	No	No	-3.7	-3.5	No	No
633	5413 Pacific Highway Wells Crossing	Residential	1	DP11 75298	GF	56	54	56	55	0	0.8	58	56	60	55	No	No	-1.5	-1.4	No	No
636	5410 Pacific Highway Halfway Creek	Residential	1261	DP11 57925	GF	53	51	52	50	-1.5	-0.7	54	52	60	55	No	No	-2.1	-2.0	No	No
639	5415 Pacific Highway Halfway Creek	Residential	101	DP11 83088	GF	59	57	58	57	-0.8	0	62	61	60	55	No	Yes	-3.6	-3.7	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
645	5521 Pacific Highway Wells Crossing	Residential	4	DP61 1242	GF	58	56	62	61	4.1	4.8	64	63	60	55	Yes	Yes	-2.1	-2.0	No	Yes
649	5523 Pacific Highway Wells Crossing	Residential	3	DP61 1242	GF	-	-	61	60	-	-	64	63	60	55	Yes	Yes	-2.8	-2.8	No	Yes
651	5559 Pacific Highway Wells Crossing	Residential	1	DP58 6161	GF	59	57	61	60	1.8	2.7	64	62	60	55	Yes	Yes	-2.8	-2.6	No	Yes
658	11 Parker Road Wells Crossing	Residential	11	DP25 8764	GF	58	56	59	58	0.8	1.6	60	59	60	55	No	Yes	-1.4	-1.2	No	No
662	10 Parker Road Wells Crossing	Residential	162	DP73 6670	GF	58	56	59	58	0.8	1.6	60	58	60	55	No	Yes	-0.8	-0.4	No	No
664	5631 Pacific Highway Wells Crossing	Residential	76	DP75 1380	GF	-	-	73	72	-	-	76	74	60	55	Yes	Yes	-3.0	-2.3	Yes	Yes
668	5645 Pacific Highway Wells Crossing	Residential	15	DP25 8764	GF	55	53	56	55	1.1	1.9	57	55	60	55	No	No	-1.0	-0.4	No	No
1008	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	49	47	-	-	49	46	60	55	No	No	-0.1	0.8	No	No
4001	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	49	47	-	-	51	49	60	55	No	No	-2.2	-1.6	No	No
4002	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	49	47	-	-	51	49	60	55	No	No	-2.4	-1.9	No	No
4003	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	51	49	-	-	53	51	60	55	No	No	-2.1	-1.6	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
4004	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	55	53	-	-	57	55	60	55	No	No	-2.3	-1.9	No	No
4007	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	50	48	-	-	53	50	60	55	No	No	-2.2	-1.7	No	No
4009	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	50	48	-	-	48	45	60	55	No	No	2.0	3.0	No	No
4010	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	47	45	-	-	50	47	60	55	No	No	-2.4	-1.9	No	No
8000	36 Dirty Creek Road Dirty Creek	Residential	127	DP75 2820	GF	-	-	53	52	-	-	54	52	60	55	No	No	-1.6	-0.5	No	No
8001	7 Bottle Brush Drive Corindi Beach	Residential	1	DP62 9984	GF	-	-	53	53	-	-	60	58	55	50	No	Yes	-6.9	-5.0	No	No
8002	7 Bottle Brush Drive Corindi Beach	Residential	1	DP62 9984	GF	-	-	54	55	-	-	66	63	55	50	No	Yes	-11.4	-8.8	No	No
8004	71 Saltwater Crescent Corindi Beach	Residential	213	DP11 33380	GF	-	-	46	45	-	-	50	48	60	55	No	No	-4.1	-2.7	No	No
8005	69 Saltwater Crescent Corindi Beach	Residential	212	DP11 33380	GF	-	-	46	45	-	-	50	47	60	55	No	No	-4.1	-2.8	No	No
8006	53 Saltwater Crescent Corindi Beach	Residential	204	DP11 33380	GF	-	-	46	45	-	-	50	47	60	55	No	No	-3.6	-2.4	No	No
8007	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	45	43	-	-	46	44	60	55	No	No	-1.1	-0.5	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
8008	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	49	48	-	-	51	49	60	55	No	No	-1.9	-1.1	No	No
8009	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	47	45	-	-	48	46	60	55	No	No	-1.4	-0.2	No	No
8010	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	47	45	-	-	49	46	60	55	No	No	-2.0	-1.2	No	No
8011	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	45	44	-	-	47	45	60	55	No	No	-2.0	-1.1	No	No
8013	3 Arrawarra Beach Road Arrawarra	Residential	16	DP24 4089	GF	-	-	55	53	-	-	50	47	60	55	No	No	5.6	5.7	No	No
8016	7 Arrawarra Beach Road Arrawarra	Residential	18	DP24 4089	GF	-	-	53	51	-	-	49	47	60	55	No	No	4.0	4.5	No	No
8018	9 Arrawarra Beach Road Arrawarra	Residential	19	DP24 4089	GF	-	-	52	51	-	-	49	47	60	55	No	No	3.1	3.6	No	No
8019	9 Arrawarra Beach Road Arrawarra	Residential	19	DP24 4089	GF	-	-	50	48	-	-	49	47	60	55	No	No	1.0	1.6	No	No
8020	11 Arrawarra Beach Road Arrawarra	Residential	20	DP24 4089	GF	-	-	51	49	-	-	48	46	60	55	No	No	2.7	3.4	No	No
A1	3507 Pacific Hwy, Corindi Beach	Residential	6	DP82 8411	GF	-	-	56	55	-	-	54	52	55	50	Yes	Yes	1.3	2.6	No	No
A4	10 Tiffany Cl, Dirty Creek	Residential	66	DP73 1384	GF	-	-	49	48	-	-	48	45	55	50	No	No	1.4	2.6	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Year of Opening predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
A5	19 Alice Cl, Dirty Creek	Residential	67	DP73 1384	GF	-	-	55	54	-	-	51	49	55	50	Yes	Yes	4.0	5.2	No	No
A6	5 Alice Cl, Dirty Creek	Residential	70	DP73 1384	GF	-	-	47	46	-	-	46	44	55	50	No	No	1.4	2.5	No	No
A8	Lot 71 Woodward Cl, Dirty Creek	Residential	71	DP73 1384	GF	-	-	47	46	-	-	45	43	55	50	No	No	2.2	3.4	No	No
A9	Lot 70 Woodward Cl, Dirty Creek	Residential	72	DP73 1384	GF	-	-	49	47	-	-	46	44	55	50	No	No	2.5	3.6	No	No
A11	Lot 1023 The Siding, Halfway Creek	Residential	1023	DP82 9290	GF	-	-	55	53	-	-	55	52	60	55	No	No	-0.1	1.3	No	No
A12	25 The Siding, Halfway Creek	Residential	1021	DP82 9290	GF	-	-	57	56	-	-	57	55	60	55	No	Yes	-0.1	1.1	No	No
A13	1 Rediger Close Halfway Creek	Residential	34	DP87 8969	GF	-	-	56	56	-	-	62	61	0	0	Yes	Yes	-5.7	-5.2	No	No
A14	19 Rediger Close Halfway Creek	Residential	10	DP71 3824	GF	-	-	52	51	-	-	57	56	60	55	No	No	-5.7	-4.9	No	No
A15	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	-	-	52	51	-	-	58	57	60	55	No	No	-5.7	-5.2	No	No
A16	19 Grays Rd, Halfway Creek	Residential	10	DP10 66648	GF	-	-	56	55	-	-	61	59	60	55	No	No	-5.2	-4.6	No	No
A18	15 Luthers Rd, Halfway Creek	Residential	1	DP73 6915	GF	-	-	59	58	-	-	60	58	60	55	No	Yes	-0.9	-0.6	No	No

Appendix E

Design Year Traffic
Noise Levels

Table 36 Design year predicted noise levels

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
4	1 Arrawarra Beach Road Arrawarra	Residential	3	DP25 5457	GF	57	55	57	55	0	0.4	55	54	60	55	No	Yes	1.6	1.2	No	No
5	74 Eggins Drive Arrawarra	Residential	2	DP25 5457	GF	57	55	57	56	0.4	0.7	57	56	60	55	No	Yes	0.3	-0.1	No	No
7	100 Eggins Drive Arrawarra	Residential	1	DP25 5457	GF	56	54	58	57	2.2	2.5	59	58	60	55	No	Yes	-0.8	-1.3	No	No
9	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	52	0.7	1.1	54	53	60	55	No	No	-0.2	-0.6	No	No
10	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	51	50	0.3	0.7	50	49	60	55	No	No	1.4	1.1	No	No
11	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	51	49	-0.2	0.3	49	48	60	55	No	No	1.9	1.6	No	No
12	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	51	49	-0.5	0	48	47	60	55	No	No	2.2	1.9	No	No
13	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	50	49	-0.6	-0.1	48	47	60	55	No	No	2.7	2.4	No	No
14	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	53	52	0	0.5	53	52	60	55	No	No	-0.2	-0.4	No	No
15	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.1	0.6	51	50	60	55	No	No	-1.2	-1.4	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
16	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	-0.4	0	48	47	60	55	No	No	-0.7	-0.9	No	No
17	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	52	0.7	1	54	53	60	55	No	No	-0.5	-0.9	No	No
18	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	-0.4	1	50	48	60	55	No	No	-1.2	-1.4	No	No
19	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	49	48	-0.6	0.8	51	49	60	55	No	No	-1.2	-1.3	No	No
20	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	47	46	0.4	0.7	49	47	60	55	No	No	-1.3	-1.5	No	No
21	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	50	0.9	1.4	52	51	60	55	No	No	0.0	-0.1	No	No
22	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	53	51	0.7	1.1	53	51	60	55	No	No	0.0	-0.3	No	No
23	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	53	1.2	1.5	54	53	60	55	No	No	-0.2	-0.7	No	No
24	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	-0.2	1.2	50	49	60	55	No	No	-1.2	-1.3	No	No
25	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	53	1.4	1.7	55	54	60	55	No	No	-0.4	-0.9	No	No
26	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.7	1	52	50	60	55	No	No	-0.8	-1.1	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
27	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.2	0.6	51	49	60	55	No	No	-1.3	-1.5	No	No
28	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	50	49	-0.7	-0.3	51	49	60	55	No	No	-0.3	-0.5	No	No
29	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	55	53	0.8	1.1	56	55	60	55	No	No	-0.9	-1.4	No	No
30	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	47	46	0.3	0.7	49	47	60	55	No	No	-1.4	-1.6	No	No
31	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	55	54	1.4	1.7	56	55	60	55	No	No	-0.7	-1.2	No	No
32	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	50	48	-0.1	1.2	52	50	60	55	No	No	-1.8	-2.1	No	No
33	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0.1	0.4	50	49	60	55	No	No	-1.2	-1.5	No	No
34	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.4	0.8	51	50	60	55	No	No	-1.5	-1.7	No	No
35	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	50	48	1.6	1.9	50	49	60	55	No	No	-0.8	-1.1	No	No
36	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	56	55	1.3	1.6	57	56	60	55	No	No	-0.7	-1.3	No	No
37	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	47	46	0.3	0.7	49	47	60	55	No	No	-1.6	-1.7	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
38	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	55	53	0.7	1.1	55	54	60	55	No	No	-0.5	-0.8	No	No
39	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	50	48	0	1.3	52	50	60	55	No	No	-1.6	-1.9	No	No
40	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	56	55	1.4	1.7	57	56	60	55	No	No	-0.7	-1.3	No	No
41	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.5	0.8	51	50	60	55	No	No	-1.4	-1.7	No	No
42	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	57	55	1.9	2.1	58	57	60	55	No	Yes	-0.7	-1.4	No	No
43	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.5	0.9	51	49	60	55	No	No	-1.2	-1.4	No	No
44	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.1	0.3	50	49	60	55	No	No	-1.1	-1.3	No	No
45	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.2	0.6	50	49	60	55	No	No	-1.1	-1.3	No	No
46	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.3	0.7	50	48	60	55	No	No	-1.4	-1.6	No	No
47	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	57	56	1.3	1.5	58	57	60	55	No	Yes	-0.8	-1.5	No	No
48	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.2	0.5	52	50	60	55	No	No	-2.6	-2.9	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
49	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	48	0.3	1.8	51	49	60	55	No	No	-1.4	-1.5	No	No
50	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	50	49	0.2	1.6	52	50	60	55	No	No	-1.5	-1.7	No	No
51	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0	0.5	50	49	60	55	No	No	-0.9	-1.0	No	No
52	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.6	1	51	49	60	55	No	No	-1.1	-1.3	No	No
53	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	49	47	-1.2	-0.9	51	50	60	55	No	No	-2.5	-2.9	No	No
54	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	-0.2	0.1	52	50	60	55	No	No	-2.0	-2.3	No	No
55	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	-0.3	1.1	50	49	60	55	No	No	-1.2	-1.4	No	No
56	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.3	0.6	50	49	60	55	No	No	-1.1	-1.4	No	No
57	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	58	56	60	58	2	2.2	61	60	60	55	No	Yes	-1.2	-1.8	No	No
58	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	55	54	0.2	0.5	56	54	60	55	No	No	-0.3	-0.7	No	No
59	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.1	0.1	51	50	60	55	No	No	-2.2	-2.6	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
60	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.9	1.2	51	50	60	55	No	No	-1.4	-1.7	No	No
61	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.1	0.4	50	48	60	55	No	No	-0.9	-1.0	No	No
62	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.7	1.1	51	49	60	55	No	No	-1.1	-1.2	No	No
63	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.1	0.1	51	50	60	55	No	No	-2.2	-2.6	No	No
64	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.2	0.5	52	51	60	55	No	No	-1.7	-2.0	No	No
65	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	57	55	60	58	2.6	2.7	61	60	60	55	No	Yes	-1.5	-2.2	No	No
66	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	-0.1	1.3	50	49	60	55	No	No	-1.3	-1.5	No	No
67	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.2	0.6	50	49	60	55	No	No	-1.1	-1.3	No	No
68	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	-0.5	-0.2	52	51	60	55	No	No	-2.5	-2.8	No	No
69	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	0	0.4	51	50	60	55	No	No	-1.3	-1.5	No	No
70	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.3	0.6	52	50	60	55	No	No	-2.2	-2.5	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
71	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.2	0.2	50	48	60	55	No	No	-0.8	-1.0	No	No
72	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0.2	0.4	51	50	60	55	No	No	-2.2	-2.6	No	No
73	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.8	1.2	51	50	60	55	No	No	-1.1	-1.3	No	No
74	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.9	1.2	53	51	60	55	No	No	-1.9	-2.2	No	No
75	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.6	1	53	51	60	55	No	No	-2.0	-2.2	No	No
76	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	57	55	60	58	2.7	2.8	61	60	60	55	No	Yes	-1.4	-2.1	No	No
77	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	52	54	52	0.6	0.1	54	53	60	55	No	No	-0.4	-0.6	No	No
78	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.1	0.3	50	49	60	55	No	No	-1.2	-1.4	No	No
80	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.1	0.5	51	50	60	55	No	No	-1.3	-1.5	No	No
81	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.3	0.7	50	49	60	55	No	No	-1.1	-1.3	No	No
82	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	-0.3	0	52	51	60	55	No	No	-2.7	-3.0	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
83	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.3	0.6	52	51	60	55	No	No	-1.6	-1.9	No	No
84	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0	0.3	50	48	60	55	No	No	-0.7	-1.0	No	No
85	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.2	0.6	50	49	60	55	No	No	-1.1	-1.3	No	No
86	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	47	0.4	0.5	51	49	60	55	No	No	-2.3	-2.8	No	No
87	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	57	55	60	58	2.6	2.8	61	60	60	55	No	Yes	-1.5	-2.0	No	No
88	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.5	0.9	50	48	60	55	No	No	-1.1	-1.2	No	No
89	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	46	49	47	-0.2	1.3	50	48	60	55	No	No	-0.8	-0.9	No	No
90	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.3	0.7	51	50	60	55	No	No	-1.1	-1.3	No	No
91	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.2	0.6	51	49	60	55	No	No	-1.3	-1.5	No	No
92	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.2	1.5	53	52	60	55	No	No	-2.0	-2.3	No	No
93	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	0.1	0.4	50	49	60	55	No	No	-1.1	-1.4	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
94	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.8	1.2	51	50	60	55	No	No	-1.4	-1.5	No	No
95	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	57	55	59	57	2	2.1	61	60	60	55	No	Yes	-2.0	-2.6	No	No
96	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.6	1.1	50	49	60	55	No	No	-1.6	-1.7	No	No
97	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	50	0.9	1.2	54	53	60	55	No	No	-2.3	-2.6	No	No
98	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.2	0.2	50	49	60	55	No	No	-1.6	-1.8	No	No
99	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.9	1.3	52	50	60	55	No	No	-1.7	-1.9	No	No
100	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.4	0.8	51	50	60	55	No	No	-1.6	-1.8	No	No
101	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	1.1	1.4	54	52	60	55	No	No	-2.4	-2.6	No	No
102	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	50	48	-0.1	1.3	51	50	60	55	No	No	-1.5	-1.7	No	No
103	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	53	51	0.7	0.9	55	54	60	55	No	No	-2.3	-2.7	No	No
104	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	57	55	59	57	1.6	1.8	61	59	60	55	No	Yes	-2.1	-2.6	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
105	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.5	1.1	51	50	60	55	No	No	-1.8	-1.8	No	No
106	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.2	0.7	51	50	60	55	No	No	-1.7	-1.9	No	No
107	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	53	51	1	1.3	55	54	60	55	No	No	-2.3	-2.6	No	No
108	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.1	0.9	51	49	60	55	No	No	-1.4	-1.2	No	No
109	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.6	1	51	50	60	55	No	No	-0.8	-1.0	No	No
110	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	1.1	1.3	53	52	60	55	No	No	-1.9	-2.3	No	No
111	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	50	49	0.3	1.8	51	50	60	55	No	No	-1.1	-1.2	No	No
112	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.6	1	52	50	60	55	No	No	-2.1	-2.3	No	No
113	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	2.1	2.2	57	56	60	55	No	No	-2.2	-2.7	No	No
114	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	49	1	1.6	51	50	60	55	No	No	-1.2	-1.2	No	No
115	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.6	1.1	52	50	60	55	No	No	-1.1	-1.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
116	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	58	56	1.7	1.8	60	59	60	55	No	Yes	-2.2	-2.7	No	No
117	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.2	0.5	52	51	60	55	No	No	-1.7	-2.0	No	No
118	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.7	1.2	53	51	60	55	No	No	-1.9	-2.0	No	No
119	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.3	1.7	53	51	60	55	No	No	-1.5	-1.7	No	No
120	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	51	50	1.9	2.5	52	51	60	55	No	No	-1.1	-1.2	No	No
121	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	53	51	0.8	1.1	55	53	60	55	No	No	-2.0	-2.3	No	No
122	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	49	0.5	1	52	51	60	55	No	No	-1.9	-2.0	No	No
123	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	48	52	50	1	2.2	54	53	60	55	No	No	-2.2	-2.6	No	No
124	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.4	1.9	53	52	60	55	No	No	-1.5	-1.6	No	No
125	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	51	50	0.4	1	53	51	60	55	No	No	-1.3	-1.4	No	No
126	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.7	1.1	51	50	60	55	No	No	-1.3	-1.6	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
127	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	53	51	1.5	1.8	55	54	60	55	No	No	-2.5	-2.8	No	No
132	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	49	47	0.9	1.4	50	48	60	55	No	No	-0.6	-0.7	No	No
134	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.2	1.8	53	52	60	55	No	No	-2.0	-2.1	No	No
140	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	51	1	1.6	53	52	60	55	No	No	-1.2	-1.3	No	No
144	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	54	2.2	2.5	57	56	60	55	No	No	-2.2	-2.5	No	No
146	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	50	0.7	1	54	52	60	55	No	No	-1.9	-2.2	No	No
148	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.3	0.8	51	50	60	55	No	No	-2.1	-2.3	No	No
150	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	1.8	2	57	55	60	55	No	No	-1.8	-2.3	No	No
154	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	57	55	2	2.2	59	58	60	55	No	Yes	-2.0	-2.5	No	No
155	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	48	0.9	1.3	51	50	60	55	No	No	-1.4	-1.8	No	No
156	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.4	0.6	53	51	60	55	No	No	-2.4	-2.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
158	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	51	1	1.7	53	52	60	55	No	No	-1.4	-1.4	No	No
159	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	2	2.3	57	56	60	55	No	No	-2.3	-2.7	No	No
161	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	47	46	0.3	0.8	49	47	60	55	No	No	-1.2	-1.3	No	No
164	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	48	46	48	46	-0.3	0	49	48	60	55	No	No	-1.6	-2.1	No	No
166	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	51	49	-0.2	0.1	53	51	60	55	No	No	-1.7	-2.0	No	No
167	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	1.8	2.1	57	56	60	55	No	No	-2.2	-2.6	No	No
168	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	51	1	1.6	53	52	60	55	No	No	-1.2	-1.3	No	No
171	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	47	46	0.4	1	49	47	60	55	No	No	-1.3	-1.2	No	No
172	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	48	-0.1	0.3	52	50	60	55	No	No	-1.7	-1.9	No	No
173	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	48	46	0.7	1.3	50	49	60	55	No	No	-2.5	-2.6	No	No
174	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	52	0.6	0.9	56	54	60	55	No	No	-2.0	-2.3	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
175	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	48	46	0.5	1.1	50	49	60	55	No	No	-2.3	-2.4	No	No
176	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	56	55	2.3	2.5	59	57	60	55	No	No	-2.2	-2.6	No	No
177	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	51	50	0.3	1.1	53	52	60	55	No	No	-1.8	-1.7	No	No
180	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	47	50	48	-0.5	0.8	52	50	60	55	No	No	-2.1	-2.4	No	No
182	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	51	1.4	1.8	55	53	60	55	No	No	-2.2	-2.5	No	No
183	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	56	54	2.1	2.3	58	57	60	55	No	No	-2.0	-2.5	No	No
184	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	51	1.1	1.8	53	52	60	55	No	No	-1.1	-1.2	No	No
186	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	52	50	1.6	2	54	52	60	55	No	No	-1.9	-2.1	No	No
189	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	48	46	0.6	1	49	48	60	55	No	No	-1.7	-1.9	No	No
190	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	54	52	0.8	1.1	56	54	60	55	No	No	-1.9	-2.3	No	No
191	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	46	44	47	46	1.3	1.9	48	47	60	55	No	No	-0.8	-0.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
193	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	56	54	1.5	1.7	57	56	60	55	No	No	-1.6	-2.1	No	No
194	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	1.9	2.1	57	55	60	55	No	No	-1.7	-2.2	No	No
195	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	58	56	1.8	2	60	58	60	55	No	Yes	-1.9	-2.3	No	No
197	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	51	0.9	1.5	53	52	60	55	No	No	-1.1	-1.2	No	No
198	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	47	-0.3	0.4	50	49	60	55	No	No	-1.3	-1.2	No	No
199	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	45	43	46	44	0.9	1.4	47	45	60	55	No	No	-0.9	-1.0	No	No
200	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	1.6	1.8	56	54	60	55	No	No	-1.9	-2.3	No	No
201	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	47	45	49	47	1.5	2.1	51	50	60	55	No	No	-2.3	-2.5	No	No
204	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	57	55	1.8	1.8	57	56	60	55	No	No	-0.2	-0.9	No	No
205	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	49	48	0.2	1.1	51	50	60	55	No	No	-1.9	-1.6	No	No
206	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	55	53	0.7	1	56	55	60	55	No	No	-1.4	-1.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
207	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	49	47	50	49	1	1.7	51	50	60	55	No	No	-1.4	-1.4	No	No
208	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	52	50	54	52	1.9	2.1	56	55	60	55	No	No	-2.3	-2.8	No	No
209	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	58	56	2.1	2.2	60	59	60	55	No	Yes	-2.0	-2.6	No	No
210	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	52	50	0.6	1.3	53	52	60	55	No	No	-1.4	-1.4	No	No
211	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	50	49	0.3	0.5	52	51	60	55	No	No	-2.0	-2.4	No	No
212	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	52	50	2.3	2.2	54	52	60	55	No	No	-1.3	-2.0	No	No
214	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	0.9	1.6	52	51	60	55	No	No	-1.4	-1.4	No	No
217	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	50	48	51	50	1.2	1.8	53	51	60	55	No	No	-1.5	-1.5	No	No
218	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	56	54	58	56	2.3	2.2	59	58	60	55	No	Yes	-0.9	-1.7	No	No
221	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	58	56	61	58	2.5	2.4	62	60	60	55	Yes	Yes	-1.2	-1.9	No	No
222	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	55	53	57	55	2.3	2.2	59	57	60	55	No	Yes	-1.2	-2.0	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
223	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	57	55	3.1	3	58	57	60	55	No	No	-1.1	-1.8	No	No
224	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	51	49	53	51	2.2	2.2	53	52	60	55	No	No	0.0	-0.6	No	No
225	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	57	55	3	2.9	58	57	60	55	No	No	-1.1	-1.8	No	No
227	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	54	52	57	55	3	2.9	58	57	60	55	No	No	-0.9	-1.6	No	No
228	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	53	51	55	53	2.2	2.3	56	55	60	55	No	No	-0.7	-1.3	No	No
231	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	51	49	0.8	1	51	50	60	55	No	No	-0.5	-1.0	No	No
232	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	51	50	1.3	1.7	52	50	60	55	No	No	-0.5	-0.7	No	No
233	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	52	50	-	-	52	51	60	55	No	No	-0.6	-0.9	No	No
234	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	52	50	-	-	53	52	60	55	No	No	-0.8	-1.2	No	No
235	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	49	48	0.9	1.5	50	49	60	55	No	No	-1.1	-1.1	No	No
236	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	47	46	0.2	1.2	50	48	60	55	No	No	-2.4	-1.9	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
237	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	48	47	0	0.7	50	48	60	55	No	No	-1.6	-1.5	No	No
238	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	52	51	-	-	53	52	60	55	No	No	-0.9	-1.3	No	No
239	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	49	48	0.2	1	51	49	60	55	No	No	-1.3	-1.0	No	No
240	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	48	47	-	-	51	49	60	55	No	No	-2.3	-2.2	No	No
241	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	49	48	0.7	1.5	50	49	60	55	No	No	-1.7	-1.5	No	No
242	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	53	51	1.5	2	53	52	60	55	No	No	-0.8	-0.9	No	No
243	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	-	-	49	48	-	-	50	49	60	55	No	No	-1.8	-1.4	No	No
244	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	53	51	1.5	1.9	53	52	60	55	No	No	-0.6	-0.9	No	No
245	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	54	53	2	2.6	55	54	60	55	No	No	-1.2	-1.2	No	No
246	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	45	47	45	-1.1	0.4	49	47	60	55	No	No	-1.9	-2.0	No	No
247	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	46	45	-0.8	-0.3	48	47	60	55	No	No	-1.7	-1.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
248	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	47	46	0.2	1	49	47	60	55	No	No	-1.5	-1.3	No	No
249	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	47	0.9	1.6	48	47	60	55	No	No	-0.1	-0.1	No	No
250	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	46	0.6	1.7	49	47	60	55	No	No	-2.2	-1.6	No	No
251	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	46	0.6	1.3	49	47	60	55	No	No	-1.0	-0.9	No	No
252	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	46	0.7	1.7	49	48	60	55	No	No	-2.5	-2.1	No	No
253	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	47	1.2	2	49	47	60	55	No	No	-0.4	-0.2	No	No
254	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	49	48	1.4	1.6	49	48	60	55	No	No	0.0	-0.4	No	No
255	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	54	52	1.5	2.1	55	53	60	55	No	No	-1.0	-1.0	No	No
256	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	46	44	47	46	0.5	1.5	49	48	60	55	No	No	-2.8	-2.3	No	No
257	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	54	53	2.1	2.7	55	53	60	55	No	No	-0.4	-0.5	No	No
258	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	47	46	0.2	1.4	50	48	60	55	No	No	-2.5	-1.9	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
260	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	51	49	1.1	1.4	52	51	60	55	No	No	-1.2	-1.5	No	No
261	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	52	51	0.3	1.3	53	52	60	55	No	No	-0.7	-0.3	No	No
262	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	50	49	-1.4	-0.3	52	51	60	55	No	No	-2.4	-1.8	No	No
263	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	52	51	0.2	1.3	53	51	60	55	No	No	-0.5	0.1	No	No
264	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	53	52	2.3	2.7	54	52	60	55	No	No	-0.2	-0.5	No	No
265	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	47	46	-0.1	1	50	49	60	55	No	No	-3.5	-3.0	No	No
266	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	47	46	0.3	1.1	50	48	60	55	No	No	-2.3	-2.0	No	No
267	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	48	47	0.3	1.3	51	49	60	55	No	No	-2.5	-2.0	No	No
268	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	55	54	1.7	2.5	55	54	60	55	No	No	-0.2	-0.1	No	No
269	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	53	52	0.9	1.5	55	54	60	55	No	No	-2.1	-2.2	No	No
270	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	47	0.9	1.7	50	48	60	55	No	No	-1.9	-1.6	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
271	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	54	53	1.7	2.6	55	54	60	55	No	No	-1.2	-1.0	No	No
272	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	55	54	1.9	2.8	55	53	60	55	No	No	0.2	0.4	No	No
273	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	47	0.6	1.5	50	48	60	55	No	No	-2.1	-1.8	No	No
274	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	56	54	58	57	2	3.3	59	57	60	55	No	Yes	-0.7	0.1	No	No
275	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	48	46	50	49	1.6	2.6	52	50	60	55	No	No	-1.9	-1.5	No	No
276	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	45	48	47	0.7	1.6	50	48	60	55	No	No	-2.1	-1.8	No	No
277	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	50	49	0.8	1.9	51	50	60	55	No	No	-1.2	-0.7	No	No
278	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	50	49	0.3	1.4	52	51	60	55	No	No	-1.7	-1.1	No	No
280	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	50	49	0.4	1.4	52	50	60	55	No	No	-1.2	-0.8	No	No
281	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	53	52	0.2	1.3	55	54	60	55	No	No	-1.7	-1.2	No	No
282	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	53	52	0.6	1.7	53	52	60	55	No	No	-0.4	0.1	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
283	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	47	44	50	48	2.5	4.4	52	51	60	55	No	No	-2.5	-2.2	No	No
284	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	52	51	0	1.1	53	52	60	55	No	No	-1.0	-0.5	No	No
285	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	51	50	0.2	1.3	52	51	60	55	No	No	-1.1	-0.7	No	No
286	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	51	51	1.4	2.6	52	51	60	55	No	No	-0.9	-0.3	No	No
287	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	53	52	1.2	2.3	55	54	60	55	No	No	-1.9	-1.4	No	No
288	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	49	47	50	49	0.6	1.8	52	51	60	55	No	No	-2.5	-1.9	No	No
289	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	55	53	58	57	2.5	3.7	58	57	60	55	No	Yes	-0.9	-0.3	No	No
290	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	53	52	-0.3	0.7	53	51	60	55	No	No	0.1	0.6	No	No
291	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	50	50	0.4	1.6	53	51	60	55	No	No	-2.3	-1.6	No	No
292	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	53	52	1	2.1	55	54	60	55	No	No	-2.2	-1.7	No	No
293	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	52	51	0.1	1.1	52	51	60	55	No	No	-0.2	0.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
294	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	52	51	0.8	1.8	54	53	60	55	No	No	-2.4	-2.0	No	No
295	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	54	53	0.8	1.8	55	54	60	55	No	No	-1.5	-1.0	No	No
296	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	50	48	51	50	1.2	2.2	53	52	60	55	No	No	-1.7	-1.3	No	No
297	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	52	50	53	52	1	2	54	52	60	55	No	No	-0.7	-0.3	No	No
299	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	53	52	0	1.1	55	54	60	55	No	No	-2.3	-1.8	No	No
300	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	53	52	1.5	2.7	54	53	60	55	No	No	-1.4	-0.8	No	No
301	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	51	54	53	1.1	2.1	55	54	60	55	No	No	-1.3	-0.9	No	No
302	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	51	49	53	52	1.7	2.9	52	51	60	55	No	No	0.3	0.8	No	No
304	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	53	52	54	53	0.6	1	53	52	60	55	No	No	0.4	1.2	No	No
305	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	58	56	60	59	1.7	3.1	60	59	60	55	No	Yes	-0.6	0.2	No	No
306	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	54	52	54	54	0.4	1.5	55	54	60	55	No	No	-1.0	-0.4	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
307	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	54	52	55	54	0.7	1.9	57	55	60	55	No	No	-1.8	-1.2	No	No
309	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	58	56	60	59	1.8	3.2	61	59	60	55	No	Yes	-0.8	0.1	No	No
310	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	54	52	55	54	0.9	2.1	57	56	60	55	No	No	-2.3	-1.6	No	No
311	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	54	53	56	55	2.1	2.3	58	57	60	55	No	Yes	-1.9	-1.3	No	No
312	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	55	54	57	56	1.7	2	59	57	60	55	No	Yes	-2.1	-1.4	No	No
313	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	56	55	58	57	1.9	2.2	60	59	60	55	No	Yes	-2.1	-1.3	No	No
314	210 Eggins Drive Arrawarra	Residential	34	DP60 0591	GF	58	56	60	59	1.8	3.2	61	59	60	55	No	Yes	-0.7	0.1	No	No
323	28 Tasman Street Corindi Beach	Residential	56	DP10 59403	GF	56	54	57	56	0.8	2.1	62	61	60	55	No	Yes	-5.5	-4.8	No	No
324	26 Tasman Street Corindi Beach	Residential	55	DP10 59403	GF	52	50	53	52	1.1	2.3	58	57	60	55	No	No	-5.3	-4.7	No	No
325	24 Tasman Street Corindi Beach	Residential	54	DP10 59403	GF	54	52	55	54	0.6	1.8	60	58	60	55	No	No	-4.9	-4.4	No	No
326	22 Tasman Street Corindi Beach	Residential	53	DP10 59403	GF	55	53	56	55	0.6	1.8	61	59	60	55	No	No	-5.1	-4.5	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
327	28 Lomandra Court Corindi Beach	Residential	29	DP10 59403	GF	52	50	53	52	1	2.1	56	55	60	55	No	No	-3.4	-2.9	No	No
328	26 Lomandra Court Corindi Beach	Residential	28	DP10 59403	GF	52	50	52	51	0.3	1.4	55	54	60	55	No	No	-3.1	-2.6	No	No
329	24 Lomandra Court Corindi Beach	Residential	27	DP10 59403	GF	51	49	51	51	0.4	1.5	54	53	60	55	No	No	-3.0	-2.5	No	No
330	20 Tasman Street Corindi Beach	Residential	52	DP10 59403	GF	55	53	56	55	0.9	2.1	61	59	60	55	No	Yes	-4.9	-4.3	No	No
331	17 Lomandra Court Corindi Beach	Residential	30	DP10 59403	GF	52	50	52	51	0.1	1.2	56	54	60	55	No	No	-3.4	-2.9	No	No
332	18 Tasman Street Corindi Beach	Residential	51	DP10 59403	GF	55	53	56	55	0.7	1.9	61	59	60	55	No	No	-4.8	-4.2	No	No
333	16 Tasman Street Corindi Beach	Residential	50	DP10 59403	GF	55	53	55	55	0.4	1.6	60	59	60	55	No	No	-4.6	-4.1	No	No
334	15 Lomandra Court Corindi Beach	Residential	31	DP10 59403	GF	50	48	50	49	0	1.1	54	52	60	55	No	No	-3.6	-3.1	No	No
335	2 Zulu Place Corindi Beach	Residential	21	DP11 96296	GF	65	63	64	63	-0.7	0.1	61	59	55	50	Yes	Yes	3.8	4.0	No	Yes
336	14 Tasman Street Corindi Beach	Residential	49	DP10 59403	GF	55	53	56	55	0.6	1.8	61	59	60	55	No	No	-4.9	-4.4	No	No
337	13 Lomandra Court Corindi Beach	Residential	32	DP10 59403	GF	50	47	50	49	-0.1	2	53	51	60	55	No	No	-2.7	-2.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
338	11 Lomandra Court Corindi Beach	Residential	33	DP10 59403	GF	49	47	49	48	-0.2	0.7	51	50	60	55	No	No	-2.6	-2.2	No	No
339	12 Tasman Street Corindi Beach	Residential	48	DP10 59403	GF	54	52	54	54	0.4	1.6	59	58	60	55	No	No	-4.7	-4.1	No	No
341	10 Tasman Street Corindi Beach	Residential	47	DP10 59403	GF	54	52	54	53	-0.2	0.9	58	57	60	55	No	No	-4.4	-3.9	No	No
343	8 Tasman Street Corindi Beach	Residential	46	DP10 59403	GF	53	51	53	52	0.1	1.2	57	56	60	55	No	No	-4.3	-3.8	No	No
344	1 Kangaroo Trail Road Corindi Beach	Residential	20	DP11 96296	GF	65	63	64	62	-1.5	-0.6	59	57	55	50	Yes	Yes	5.0	5.3	No	Yes
345	1 Golden Penda Drive Corindi Beach	Residential	40	DP10 59403	GF	49	47	49	48	-0.3	0.7	51	50	60	55	No	No	-2.7	-2.3	No	No
346	6 Tasman Street Corindi Beach	Residential	45	DP10 59403	GF	54	52	55	54	0.7	1.8	59	58	60	55	No	No	-4.2	-3.7	No	No
350	4 Tasman Street Corindi Beach	Residential	44	DP10 59403	GF	52	50	52	51	-0.3	0.8	55	53	60	55	No	No	-2.8	-2.4	No	No
351	31 Kangaroo Trail Road Corindi Beach	Residential	100	DP11 68898	GF	63	62	61	60	-2	-2.1	53	51	55	50	Yes	Yes	8.5	8.9	No	Yes
353	17 Pacific Street Corindi Beach	Residential	2	DP73 0305	GF	52	50	53	52	0.5	1.5	55	54	60	55	No	No	-2.7	-2.4	No	No
355	15 Pacific Street Corindi Beach	Residential	1	DP73 0305	GF	53	51	54	53	0.7	1.8	57	56	60	55	No	No	-3.5	-3.1	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
356	16 Pacific Street Corindi Beach	Residential	13	DP21 9711	GF	52	49	52	51	-0.5	1.5	55	54	60	55	No	No	-3.4	-3.1	No	No
357	14 Pacific Street Corindi Beach	Residential	12	DP21 9711	GF	52	50	52	51	0.1	1.2	56	54	60	55	No	No	-3.6	-3.2	No	No
358	12 Pacific Street Corindi Beach	Residential	11	DP21 9711	GF	51	49	52	51	0.7	1.8	56	54	60	55	No	No	-3.8	-3.4	No	No
359	10 Pacific Street Corindi Beach	Residential	10	DP21 9711	GF	51	49	51	50	-0.1	1	55	53	60	55	No	No	-3.6	-3.2	No	No
360	8 Pacific Street Corindi Beach	Residential	9	DP21 9711	GF	50	48	50	49	0	1	53	52	60	55	No	No	-3.1	-2.9	No	No
361	4 Pacific Street Corindi Beach	Residential	8	DP21 9711	GF	51	49	50	50	-0.6	0.5	54	53	60	55	No	No	-3.8	-3.5	No	No
362	55 Saltwater Crescent Corindi Beach	Residential	205	DP11 33380	GF	48	46	48	47	-0.1	0.9	52	50	60	55	No	No	-3.7	-3.4	No	No
363	2 Pacific Street Corindi Beach	Residential	6	DP21 9711	GF	51	49	51	50	-0.1	1.1	56	54	60	55	No	No	-4.7	-4.3	No	No
364	57 Saltwater Crescent Corindi Beach	Residential	206	DP11 33380	GF	48	46	48	47	0.1	1.2	52	50	60	55	No	No	-3.5	-3.2	No	No
365	59 Saltwater Crescent Corindi Beach	Residential	207	DP11 33380	GF	49	47	49	48	-0.4	0.7	52	51	60	55	No	No	-3.4	-3.0	No	No
366	125 Coral Street Corindi Beach	Residential	224	DP11 33380	GF	51	48	51	50	-0.5	1.7	55	54	60	55	No	No	-4.5	-4.2	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
367	32 Kangaroo Trail Road Corindi Beach	Residential	10	DP11 52234	GF	57	55	57	56	-0.3	0.7	58	56	55	50	Yes	Yes	-1.1	-0.7	No	No
368	61 Saltwater Crescent Corindi Beach	Residential	208	DP11 33380	GF	48	46	48	47	-0.4	0.6	52	50	60	55	No	No	-3.9	-3.5	No	No
371	123 Coral Street Corindi Beach	Residential	223	DP11 33380	GF	50	48	51	50	0.5	1.6	55	54	60	55	No	No	-4.2	-4.0	No	No
372	63 Saltwater Crescent Corindi Beach	Residential	209	DP11 33380	GF	47	44	46	45	-0.8	1.3	51	49	60	55	No	No	-4.3	-3.9	No	No
374	121 Coral Street Corindi Beach	Residential	222	DP11 33380	GF	50	48	50	50	0.4	1.6	55	54	60	55	No	No	-4.3	-3.9	No	No
375	65 Saltwater Crescent Corindi Beach	Residential	210	DP11 33380	GF	47	44	46	45	-0.7	1.3	51	49	60	55	No	No	-4.3	-3.9	No	No
377	119 Coral Street Corindi Beach	Residential	221	DP11 33380	GF	51	48	51	50	-0.3	1.8	55	54	60	55	No	No	-4.1	-3.8	No	No
378	67 Saltwater Crescent Corindi Beach	Residential	211	DP11 33380	GF	47	45	47	46	-0.3	0.8	51	49	60	55	No	No	-4.0	-3.6	No	No
379	117 Coral Street Corindi Beach	Residential	220	DP11 33380	GF	51	49	51	50	0	1.2	55	54	60	55	No	No	-3.9	-3.5	No	No
380	115 Coral Street Corindi Beach	Residential	219	DP11 33380	GF	51	49	51	50	0.2	1.4	55	54	60	55	No	No	-3.6	-3.2	No	No
381	113 Coral Street Corindi Beach	Residential	218	DP11 33380	GF	51	49	51	50	-0.1	1	55	53	60	55	No	No	-3.7	-3.4	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
382	111 Coral Street Corindi Beach	Residential	217	DP11 33380	GF	49	46	48	48	-0.6	1.5	53	51	60	55	No	No	-4.1	-3.7	No	No
383	90 Coral Street Corindi Beach	Residential	9	DP26 0192	GF	55	53	56	55	0.8	1.9	60	59	60	55	No	No	-4.1	-3.8	No	No
386	34 Kangaroo Trail Road Corindi Beach	Residential	51	DP85 1056	GF	69	67	68	66	-1.5	-0.6	54	52	55	50	Yes	Yes	13.7	14.0	Yes	Yes
393	3509 Pacific Highway Corindi Beach	Residential	5	DP82 8411	GF	57	55	58	56	0.5	1.4	52	51	55	50	Yes	Yes	5.5	5.7	No	No
396	21 Post Office Lane Corindi Beach	Residential	3	DP81 5051	GF	60	58	60	59	0	0.9	48	47	55	50	Yes	Yes	11.9	12.2	No	No
399	15 Post Office Lane Corindi Beach	Residential	12	DP58 3175	GF	57	55	57	56	0.3	1.3	57	56	55	50	Yes	Yes	0.3	0.7	No	No
402	18 Post Office Lane Corindi Beach	Residential	13	DP11 82256	GF	64	62	62	61	-1.8	-0.8	48	47	55	50	Yes	Yes	13.8	14.2	No	Yes
403	13 Post Office Lane Corindi Beach	Residential	4	DP52 4113	GF	53	51	56	55	2.6	3.7	57	55	55	50	Yes	Yes	-1.2	-0.7	No	No
404	20 Post Office Lane Corindi Beach	Residential	12	DP11 82256	GF	60	58	59	58	-1.1	-0.2	53	52	55	50	Yes	Yes	5.8	6.0	No	No
411	9 Post Office Lane Corindi Beach	Residential	2	DP51 9232	GF	53	51	51	50	-2.3	-1.3	50	49	55	50	No	No	0.5	0.9	No	No
414	3674 Pacific Highway Corindi Beach	Residential	2	DP61 9732	GF	51	49	53	52	1.7	3.3	61	60	55	50	No	Yes	-8.7	-7.8	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
415	8 Post Office Lane Corindi Beach	Residential	3	DP86 5228	GF	56	54	55	54	-1.2	-0.2	49	48	55	50	No	Yes	5.6	6.0	No	No
416	3 Post Office Lane Corindi Beach	Residential	1	DP61 9732	GF	53	51	53	52	0.4	1.4	54	53	55	50	No	Yes	-0.7	-0.5	No	No
419	10 Post Office Lane Corindi Beach	Residential	2	DP21 1641	GF	56	54	55	54	-1.5	-0.1	59	58	55	50	No	Yes	-4.3	-3.6	No	No
420	6 Post Office Lane Corindi Beach	Residential	4	DP86 5228	GF	53	52	52	51	-0.7	-0.7	52	51	55	50	No	Yes	0.5	0.8	No	No
422	4 Post Office Lane Corindi Beach	Residential	5	DP86 5228	GF	54	52	54	53	-0.4	0.7	56	54	55	50	No	Yes	-2	-1.6	No	No
423	2 Post Office Lane Corindi Beach	Residential	6	DP86 5228	GF	54	52	53	52	-1	0.3	58	57	55	50	No	Yes	-5.2	-4.6	No	No
429	3727 Pacific Highway Corindi Beach	Residential	2	DP62 3588	GF	55	54	55	54	0.1	0.2	54	53	55	50	Yes	Yes	1.0	1.4	No	No
431	13 Alice Close Dirty Creek	Residential	68	DP73 1384	GF	56	54	54	53	-2.3	-1.5	51	50	55	50	No	Yes	2.6	2.7	No	No
432	11 Bottle Brush Drive Corindi Beach	Residential	2	DP62 9984	GF	53	51	54	53	0.5	1.8	58	56	55	50	No	Yes	-4.1	-3.5	No	No
434	10 Bottle Brush Drive Corindi Beach	Residential	552	DP11 81369	GF	55	53	55	54	-0.3	0.6	48	47	55	50	No	Yes	6.5	6.8	No	No
435	3875 Pacific Highway Corindi Beach	Residential	109	DP75 2820	GF	58	56	57	56	-0.9	0.2	53	52	55	50	Yes	Yes	4.1	4.4	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
439	17 Bonita Drive Dirty Creek	Residential	44	DP73 1384	GF	53	51	52	50	-1.5	-0.6	48	46	55	50	No	Yes	3.9	4.2	No	No
446	153 Kathleen Drive Dirty Creek	Residential	38	DP73 1384	GF	59	57	58	57	-0.9	0	53	52	55	50	Yes	Yes	5.1	5.3	No	No
448	17 Hawthorn Close Corindi Beach	Residential	551	DP11 81369	GF	56	54	55	55	-0.8	0.5	59	57	55	50	Yes	Yes	-3.4	-2.8	No	No
449	15 Hawthorn Close Corindi Beach	Residential	1101	DP80 3773	GF	59	57	57	57	-1.8	-0.4	52	51	55	50	Yes	Yes	4.9	5.6	No	No
451	4149 Pacific Highway Dirty Creek	Residential	2	DP71 0318	GF	-	-	66	65	-	-	61	59	60	55	Yes	Yes	5.8	6.1	Yes	Yes
453	27 Flinty Road Dirty Creek	Residential	101	DP11 50718	GF	55	53	54	53	-0.7	0.4	56	55	55	50	No	Yes	-2.1	-1.7	No	No
455	12 Flinty Road, Dirty Creek	Residential	201	DP11 83461	GF	58	56	57	56	-1.0	0.0	50	49	55	50	Yes	Yes	7.2	7.4	No	No
464	1 Flinty Road Dirty Creek	Residential	10	DP62 9129	GF	53	51	55	55	1.6	3.6	65	63	55	50	No	Yes	-10.0	-8.7	No	No
468	7 Dirty Creek Road Dirty Creek	Residential	201	DP11 83461	GF	55	53	55	55	-0.1	1.5	62	61	60	55	No	No	-7.4	-6.8	No	No
474	53 Range Road Dirty Creek	Residential	10	DP11 95255	GF	56	54	56	55	-0.3	0.7	56	55	60	55	No	No	-0.2	0.1	No	No
476	1 Dundoo Reach Dirty Creek	Residential	13	DP11 95255	GF	59	57	58	57	-0.9	0	57	56	60	55	No	Yes	1.0	1.1	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
481	319 Dirty Creek Road Dirty Creek	Residential	1	DP12 06893	GF	66	64	65	63	-1.5	-0.7	65	64	60	55	Yes	Yes	-0.9	-0.8	No	Yes
484	80 Falconers Lane Dirty Creek	Residential	1	DP11 88448	GF	60	57	59	58	-1.3	0.5	59	58	60	55	No	Yes	-0.7	-0.5	No	No
491	25 The Siding, Halfway Creek	Residential	1022	DP82 9290	GF	-	-	57	56	-	-	57	55	60	55	No	Yes	0.1	0.4	No	No
493	4905 Pacific Highway Halfway Creek	Residential	1024	DP82 9290	GF	56	54	57	55	0.6	1.3	57	55	60	55	No	Yes	0.0	0.1	No	No
495	4470 Pacific Highway Halfway Creek	Residential	3	DP11 90631	GF	73	71	71	70	-1.8	-0.7	74	73	60	55	Yes	Yes	-3.1	-2.7	Yes	Yes
502	4577 Pacific Highway Halfway Creek	Residential	3	DP11 78416	GF	62	60	62	60	-0.5	0.3	62	60	60	55	Yes	Yes	0.0	0.2	No	Yes
506	17 McPhillips Road Halfway Creek	Residential	2	DP11 78416	GF	62	60	60	59	-1.8	-0.8	60	58	60	55	Yes	Yes	0.6	0.8	No	No
510	4612 Pacific Highway Halfway Creek	Residential	1	DP11 78416	GF	63	61	60	60	-2.6	-1.5	60	58	60	55	Yes	Yes	0.8	1.2	No	No
512	4614 Pacific Highway Halfway Creek	Residential	1252	DP77 7419	GF	65	63	61	60	-3.7	-2.7	61	60	60	55	Yes	Yes	-0.1	0.2	No	Yes
522	4650 Pacific Highway Halfway Creek	Residential	7000	DP11 31214	GF	67	66	62	61	-5.1	-5	63	62	60	55	Yes	Yes	-1.2	-1.0	No	Yes
526	4644 Pacific Highway Halfway Creek	Residential	81	DP61 2750	GF	62	60	60	59	-2.5	-1.5	61	60	60	55	No	Yes	-1.4	-1.1	No	No

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						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
529	4688 Pacific Highway Halfway Creek	Residential	3	DP11 98956	GF	63	61	60	59	-3	-1.7	64	62	60	55	No	Yes	-3.5	-3.1	No	No
531	4648 Pacific Highway Halfway Creek	Residential	7	DP75 1368	GF	61	59	59	58	-1.7	-0.7	61	60	60	55	No	Yes	-1.8	-1.5	No	No
533	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	63	61	60	58	-3.5	-2.6	64	62	60	55	No	Yes	-4.1	-3.9	No	No
537	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	66	64	61	60	-5.1	-4.1	66	65	60	55	Yes	Yes	-5.3	-4.9	No	Yes
541	20 Rediger Close Halfway Creek	Residential	5	DP11 78944	GF	59	57	54	53	-5	-3.8	59	58	60	55	No	No	-5.0	-4.5	No	No
542	11 Rediger Close Halfway Creek	Residential	9	DP71 3824	GF	61	58	55	54	-5.7	-3.6	60	59	60	55	No	No	-5.1	-4.7	No	No
551	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	57	55	53	52	-4	-3	58	56	60	55	No	No	-4.7	-4.3	No	No
554	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	60	58	55	54	-5.3	-4.4	60	59	60	55	No	No	-5.3	-5.0	No	No
557	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	56	54	52	51	-3.9	-2.9	57	56	60	55	No	No	-5.1	-4.7	No	No
558	4903 Pacific Highway Halfway Creek	Residential	75	DP75 1368	GF	56	54	53	52	-2.7	-1.6	58	56	60	55	No	No	-4.4	-4.0	No	No
561	20 Grays Road Halfway	Residential	8	DP11	GF	-	-	58	58	-	-	63	62	60	55	No	Yes	-4.7	-4.2	No	No

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						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
	Creek	entail		98956																	
564	19 Grays Road Halfway Creek	Residential	10	DP10 66648	GF	66	64	61	60	-5.1	-3.9	66	64	60	55	Yes	Yes	-4.6	-4.1	No	Yes
565	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	60	58	55	54	-5	-4	60	59	60	55	No	No	-5.0	-4.6	No	No
568	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	59	57	55	54	-4	-2.9	60	59	60	55	No	No	-5.1	-4.7	No	No
571	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	58	56	53	52	-4.8	-3.8	58	57	60	55	No	No	-5.2	-4.8	No	No
575	4925 Pacific Highway Halfway Creek	Residential	4	DP11 78944	GF	65	63	62	61	-3.1	-1.9	66	65	60	55	Yes	Yes	-4.3	-4.1	No	Yes
581	4982 Pacific Highway Halfway Creek	Residential	312	DP87 7257	GF	65	63	64	63	-0.9	0	65	64	60	55	Yes	Yes	-1.0	-0.9	No	Yes
582	9 Lemon Tree Road Halfway Creek	Residential	3	DP11 78944	GF	68	66	67	66	-1.4	-0.5	67	66	60	55	Yes	Yes	-0.1	0.0	Yes	Yes
584	5034 Pacific Highway Halfway Creek	Residential	2	DP11 78944	GF	60	58	58	57	-1.7	-0.8	59	57	60	55	No	Yes	-0.2	0.1	No	No
588	5062 Pacific Highway Halfway Creek	Residential	2	DP11 98039	GF	62	60	61	60	-1.2	-0.3	61	60	60	55	Yes	Yes	0.0	0.2	No	Yes
597	5092 Pacific Highway Halfway Creek	Residential	1	DP11 98039	GF	62	60	60	59	-2	-1.1	60	59	60	55	No	Yes	-0.1	0.2	No	No

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						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
601	127 Luthers Road Halfway Creek	Residential	4	DP59 3325	GF	59	57	57	56	-2.3	-1.5	57	56	60	55	No	Yes	-0.3	-0.1	No	No
604	50 Kungala Road Halfway Creek	Residential	414	DP12 23294	GF	57	55	57	56	0.2	1	57	56	60	55	No	Yes	0.3	0.5	No	No
607	110 Luthers Road Halfway Creek	Residential	6	DP58 7878	GF	-	-	59	58	-	-	59	57	60	55	No	Yes	-0.1	0.1	No	No
608	104 Luthers Road Halfway Creek	Residential	5	DP58 7878	GF	60	58	59	58	-1.1	-0.3	59	57	60	55	No	Yes	0.1	0.3	No	No
613	109 Luthers Road Halfway Creek	Residential	3	DP57 9136	GF	58	56	57	56	-1.2	-0.4	57	56	60	55	No	Yes	-0.1	0.1	No	No
615	88 Browns Road Halfway Creek	Residential	40	DP60 2517	GF	58	56	58	57	0.1	1	58	56	60	55	No	Yes	0.5	0.8	No	No
616	Pacific Highway Halfway Creek	Residential	413	DP12 23294	GF	71	69	69	68	-2.2	-0.8	76	74	60	55	Yes	Yes	-6.7	-6.1	Yes	Yes
617	24 Luthers Road Halfway Creek	Residential	121	DP75 1368	GF	62	60	61	60	-0.8	0	61	59	60	55	Yes	Yes	0.4	0.6	No	Yes
624	7 Luthers Road Halfway Creek	Residential	14	DP78 7246	GF	61	59	61	60	-0.2	0.6	63	61	60	55	Yes	Yes	-1.7	-1.6	No	Yes
630	5410 Pacific Hwy, Halfway Creek	Residential	131	DP48 274	GF	57	55	55	54	-2.3	-1.4	58	56	60	55	No	No	-2.8	-2.6	No	No
633	5413 Pacific Highway Wells Crossing	Residential	1	DP11 75298	GF	57	55	57	56	-0.1	0.9	58	56	60	55	No	Yes	-0.7	-0.4	No	No

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						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
636	5410 Pacific Highway Halfway Creek	Residential	1261	DP11 57925	GF	54	52	52	51	-1.6	-0.7	54	52	60	55	No	No	-1.3	-1.1	No	No
639	5415 Pacific Highway Halfway Creek	Residential	101	DP11 83088	GF	60	58	59	58	-0.8	0.1	62	61	60	55	No	Yes	-2.6	-2.6	No	No
645	5521 Pacific Highway Wells Crossing	Residential	4	DP61 1242	GF	59	57	63	62	4	4.8	64	63	60	55	Yes	Yes	-1.2	-1.0	No	Yes
649	5523 Pacific Highway Wells Crossing	Residential	3	DP61 1242	GF	-	-	62	61	-	-	64	63	60	55	Yes	Yes	-1.9	-1.7	No	Yes
651	5559 Pacific Highway Wells Crossing	Residential	1	DP58 6161	GF	60	58	62	61	1.7	2.7	64	62	60	55	Yes	Yes	-1.9	-1.6	No	Yes
658	11 Parker Road Wells Crossing	Residential	11	DP25 8764	GF	59	57	60	59	0.7	1.7	60	59	60	55	No	Yes	-0.7	-0.4	No	No
662	10 Parker Road Wells Crossing	Residential	162	DP73 6670	GF	59	57	60	59	0.7	1.7	60	59	60	55	No	Yes	-0.5	-0.2	No	No
664	5631 Pacific Highway Wells Crossing	Residential	76	DP75 1380	GF	-	-	74	73	-	-	77	75	60	55	Yes	Yes	-3.0	-2.7	Yes	Yes
668	5645 Pacific Highway Wells Crossing	Residential	15	DP25 8764	GF	56	54	57	56	1	2	58	57	60	55	No	Yes	-0.8	-0.5	No	No
1008	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	50	48	-	-	50	48	60	55	No	No	0.1	0.1	No	No
4001	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	50	48	-	-	52	50	60	55	No	No	-2.1	-2.4	No	No

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						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
4002	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	49	48	-	-	52	50	60	55	No	No	-2.4	-2.6	No	No
4003	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	52	50	-	-	54	53	60	55	No	No	-2.0	-2.3	No	No
4004	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	55	54	-	-	58	56	60	55	No	No	-2.2	-2.5	No	No
4007	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	51	49	-	-	53	52	60	55	No	No	-2.1	-2.4	No	No
4009	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	50	49	-	-	48	47	60	55	No	No	2.1	2.2	No	No
4010	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	48	46	-	-	50	49	60	55	No	No	-2.3	-2.7	No	No
8000	36 Dirty Creek Road Dirty Creek	Residential	127	DP75 2820	GF	-	-	53	53	-	-	55	54	60	55	No	No	-1.3	-1.0	No	No
8001	7 Bottle Brush Drive Corindi Beach	Residential	1	DP62 9984	GF	-	-	54	54	-	-	61	59	55	50	No	Yes	-6.6	-5.6	No	No
8002	7 Bottle Brush Drive Corindi Beach	Residential	1	DP62 9984	GF	-	-	55	56	-	-	66	65	55	50	No	Yes	-11.2	-9.4	No	No
8004	71 Saltwater Crescent Corindi Beach	Residential	213	DP11 33380	GF	-	-	47	46	-	-	51	50	60	55	No	No	-3.9	-3.5	No	No
8005	69 Saltwater Crescent Corindi Beach	Residential	212	DP11 33380	GF	-	-	47	46	-	-	51	49	60	55	No	No	-3.9	-3.5	No	No

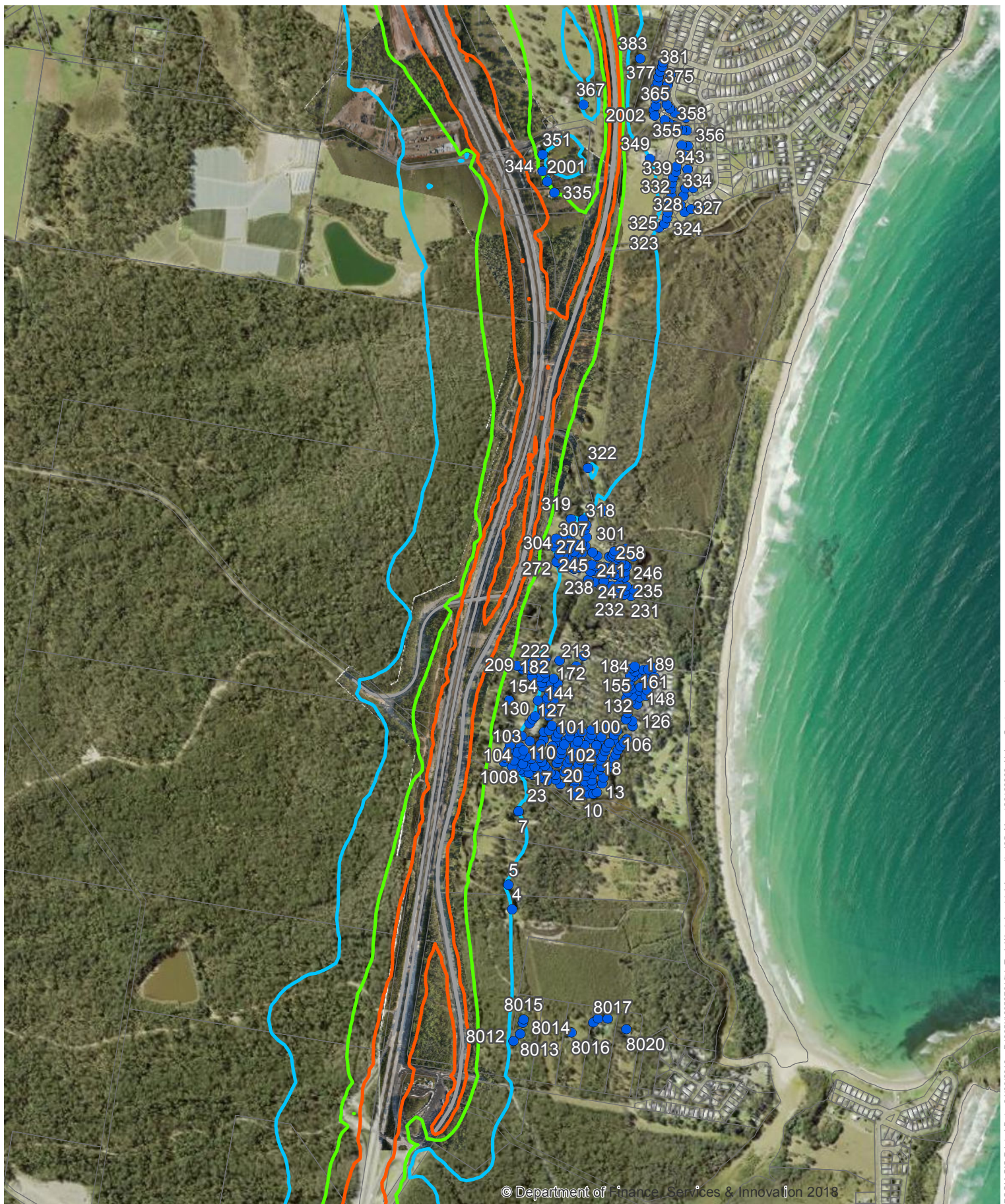
Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
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8006	53 Saltwater Crescent Corindi Beach	Residential	204	DP11 33380	GF	-	-	47	46	-	-	50	49	60	55	No	No	-3.4	-3.0	No	No
8007	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	46	44	-	-	47	45	60	55	No	No	-0.9	-1.1	No	No
8008	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	50	49	-	-	52	51	60	55	No	No	-1.8	-1.8	No	No
8009	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	48	46	-	-	49	47	60	55	No	No	-1.2	-1.0	No	No
8010	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	47	46	-	-	49	48	60	55	No	No	-1.9	-2.0	No	No
8011	104 Eggins Drive Arrawarra	Residential	351	DP70 3698	GF	-	-	46	45	-	-	48	47	60	55	No	No	-1.9	-1.8	No	No
8013	3 Arrawarra Beach Road Arrawarra	Residential	16	DP24 4089	GF	-	-	56	54	-	-	50	49	60	55	No	No	5.6	5.0	No	No
8016	7 Arrawarra Beach Road Arrawarra	Residential	18	DP24 4089	GF	-	-	54	53	-	-	50	49	60	55	No	No	4.1	3.8	No	No
8018	9 Arrawarra Beach Road Arrawarra	Residential	19	DP24 4089	GF	-	-	53	52	-	-	50	49	60	55	No	No	3.2	2.9	No	No
8019	9 Arrawarra Beach Road Arrawarra	Residential	19	DP24 4089	GF	-	-	51	49	-	-	50	49	60	55	No	No	1.0	0.8	No	No
8020	11 Arrawarra Beach Road Arrawarra	Residential	20	DP24 4089	GF	-	-	52	50	-	-	49	48	60	55	No	No	2.8	2.6	No	No

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						Design model		Post-construction noise compliance model													
						Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr	Day L _{eq} 15hr	Night L _{eq} 9hr
A1	3507 Pacific Hwy, Corindi Beach	Residential	6	DP82 8411	GF	-	-	57	56	-	-	55	54	55	50	Yes	Yes	1.6	2.1	No	No
A4	10 Tiffany Cl, Dirty Creek	Residential	66	DP73 1384	GF	-	-	50	49	-	-	48	47	55	50	No	No	1.7	2.0	No	No
A5	19 Alice Cl, Dirty Creek	Residential	67	DP73 1384	GF	-	-	56	55	-	-	52	51	55	50	Yes	Yes	4.5	4.7	No	No
A6	5 Alice Cl, Dirty Creek	Residential	70	DP73 1384	GF	-	-	48	47	-	-	47	45	55	50	No	No	1.6	1.9	No	No
A8	Lot 71 Woodward Cl, Dirty Creek	Residential	71	DP73 1384	GF	-	-	48	47	-	-	46	44	55	50	No	No	2.5	2.8	No	No
A9	Lot 70 Woodward Cl, Dirty Creek	Residential	72	DP73 1384	GF	-	-	50	48	-	-	47	45	55	50	No	No	2.8	3.0	No	No
A11	Lot 1023 The Siding, Halfway Creek	Residential	1023	DP82 9290	GF	-	-	56	54	-	-	55	54	60	55	No	No	0.2	0.4	No	No
A12	25 The Siding, Halfway Creek	Residential	1021	DP82 9290	GF	-	-	58	57	-	-	58	56	60	55	No	Yes	0.2	0.4	No	No
A13	1 Rediger Close Halfway Creek	Residential	34	DP87 8969	GF	-	-	57	57	-	-	62	61	60	55	No	Yes	-4.8	-4.4	No	No
A14	19 Rediger Close Halfway Creek	Residential	10	DP71 3824	GF	-	-	53	52	-	-	58	56	60	55	No	No	-5.0	-4.6	No	No
A15	56 Grays Road Halfway Creek	Residential	4	DP70 0717	GF	-	-	53	52	-	-	58	57	60	55	No	No	-5.1	-4.7	No	No

Receiver name from Design model	Address	Use	Lot	DP	Floor	Design Year predicted levels, dB(A)				Post-construction level minus Design level, dB		No build predicted level, dB(A)		RNP criteria		RNP criteria exceeded		Change in noise levels		Acute	
						Design model		Post-construction noise compliance model													
						Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr	Day Leq 15hr	Night Leq 9hr
A16	19 Grays Rd, Halfway Creek	Residential	10	DP10 66648	GF	-	-	57	56	-	-	61	60	60	55	No	Yes	-4.5	-4.1	No	No
A18	15 Luthers Rd, Halfway Creek	Residential	1	DP73 6915	GF	-	-	60	59	-	-	60	59	60	55	No	Yes	-0.1	0.0	No	No

Appendix F

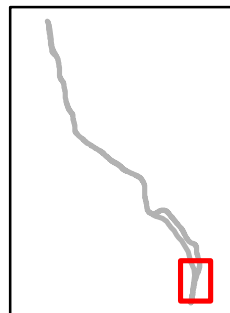
Noise Contour Maps



W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



0 200 400 800 m

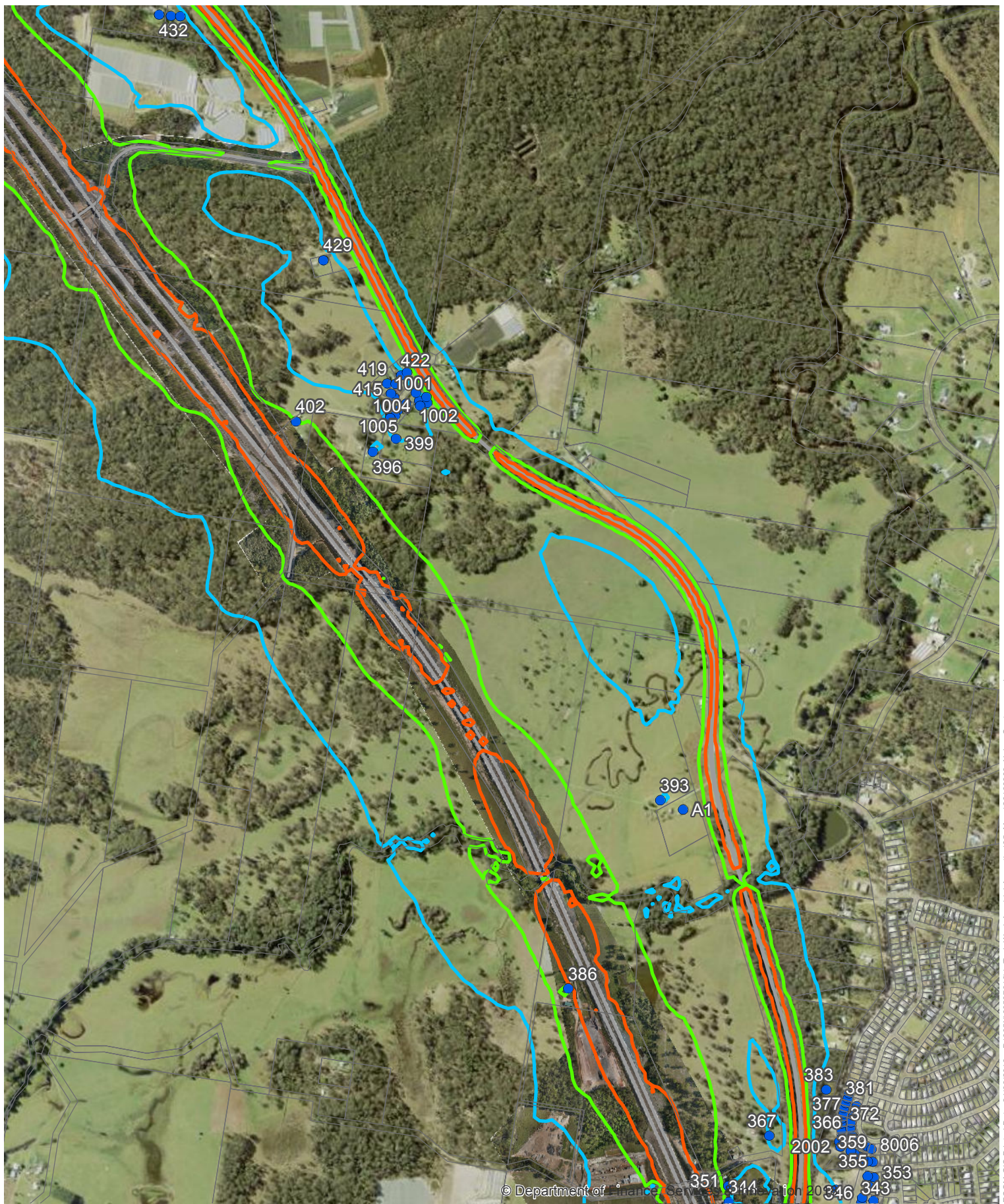
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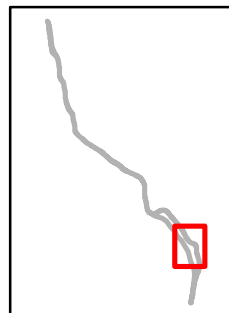
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W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



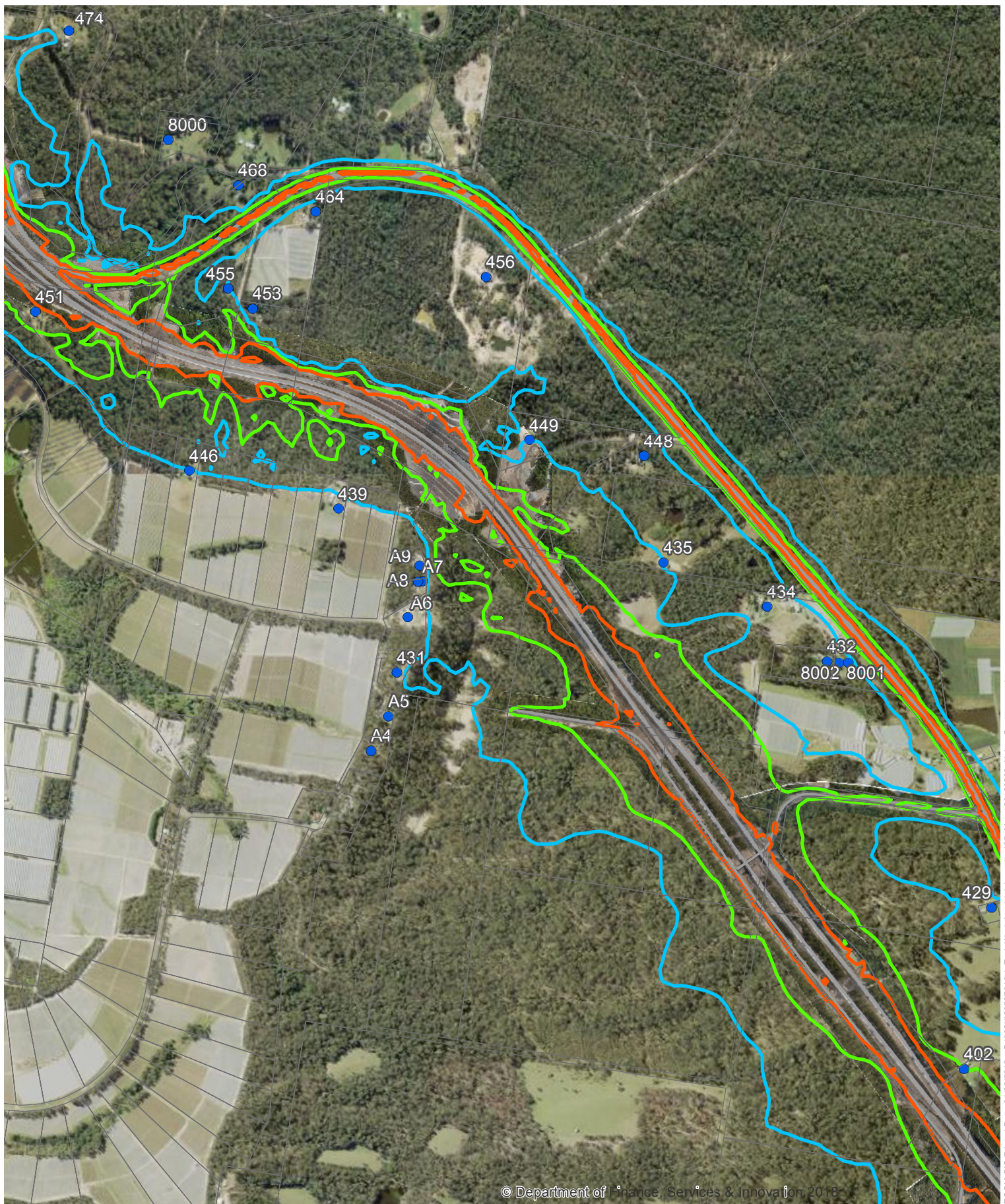
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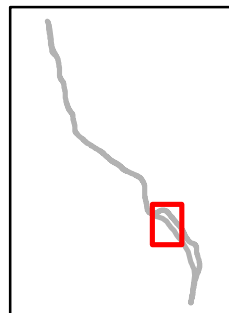
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W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



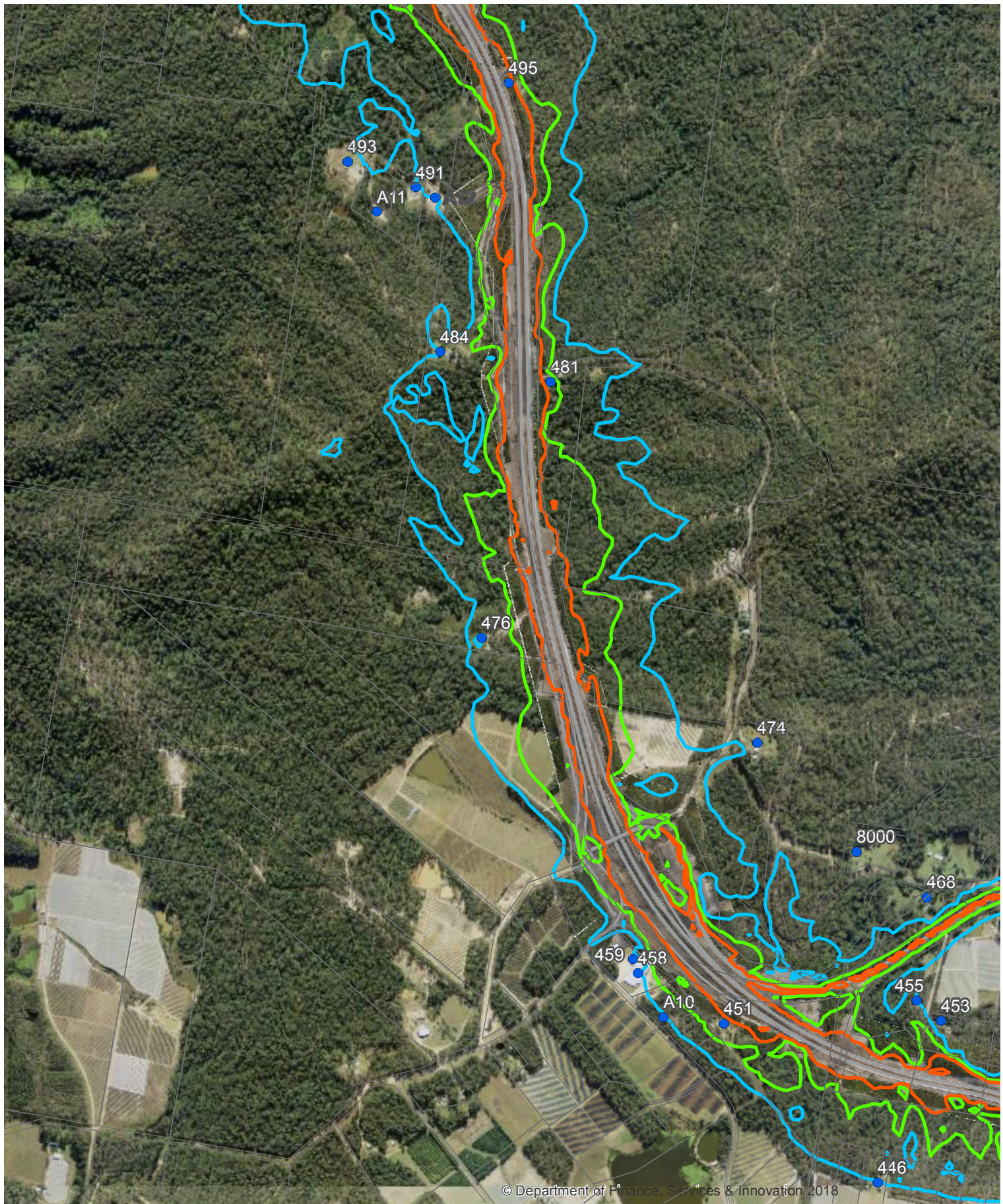
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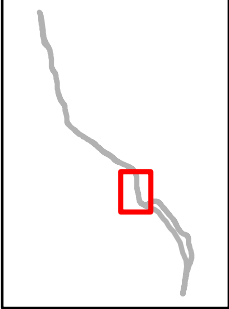
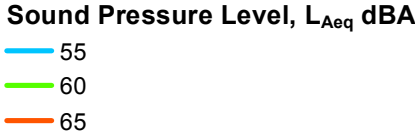
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W2G - Noise Contours - Day 2016



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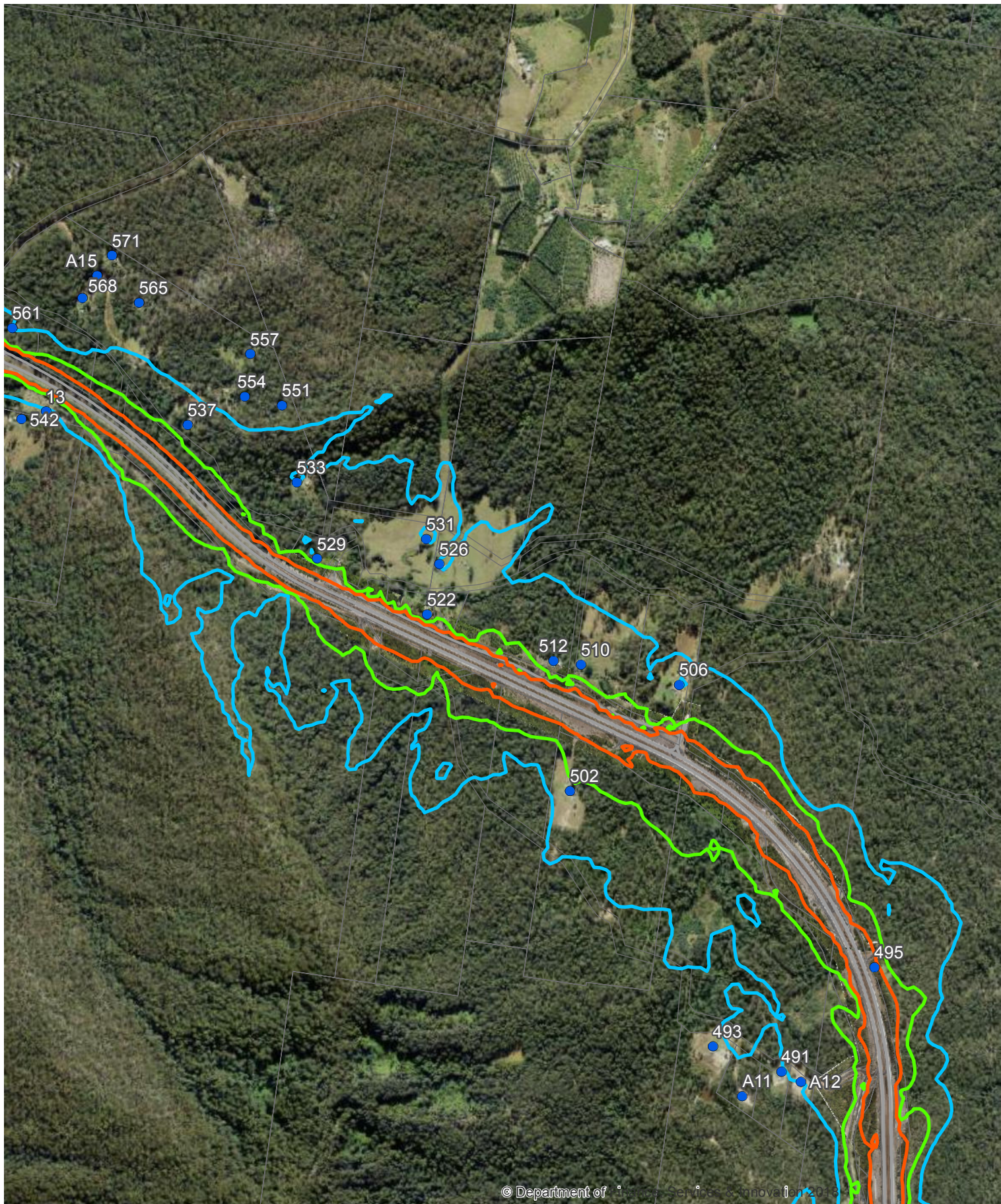
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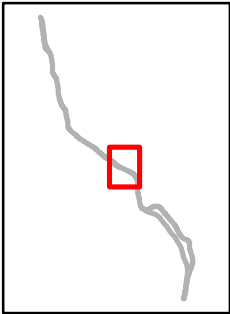
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W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65

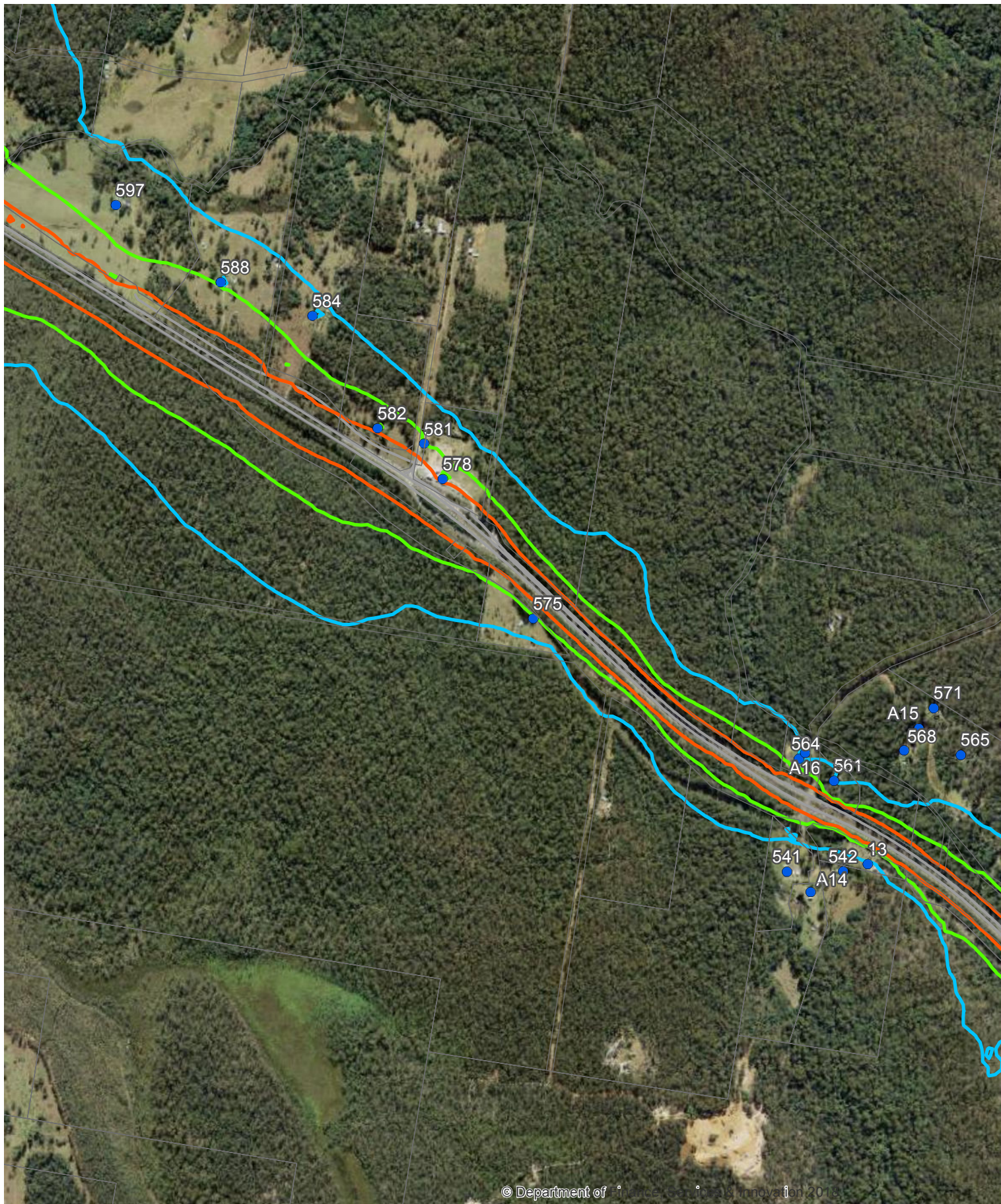


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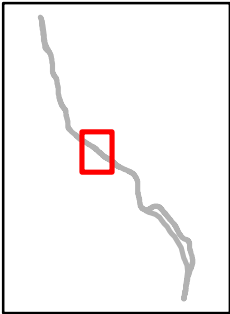
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W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65

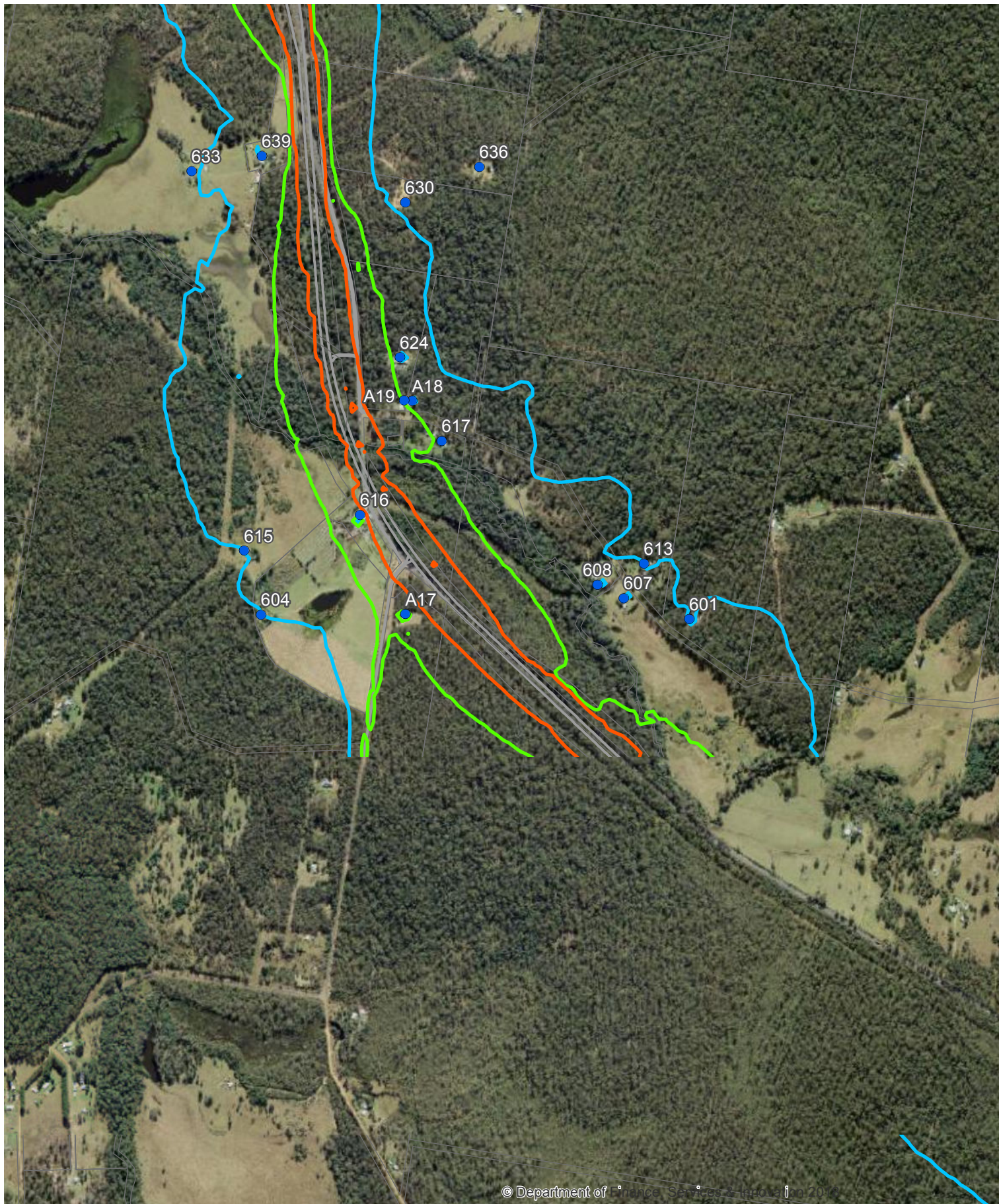


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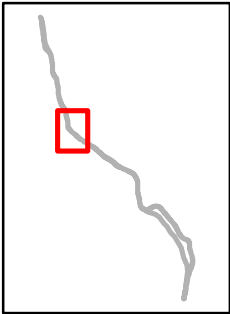
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W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



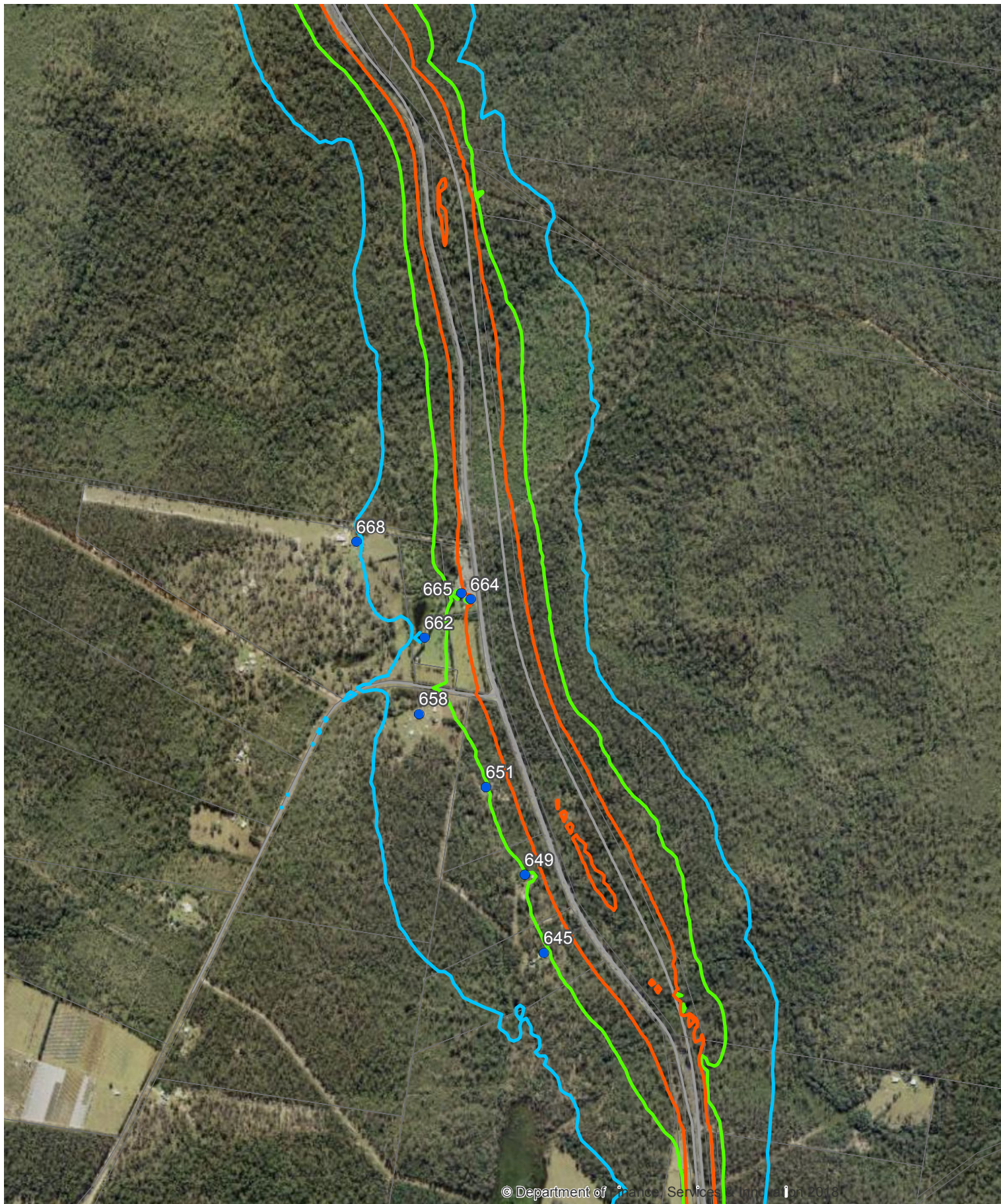
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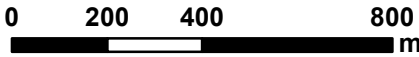
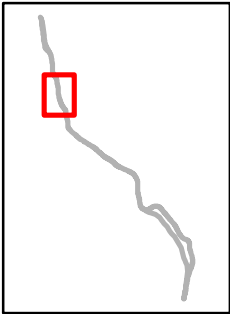
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W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65

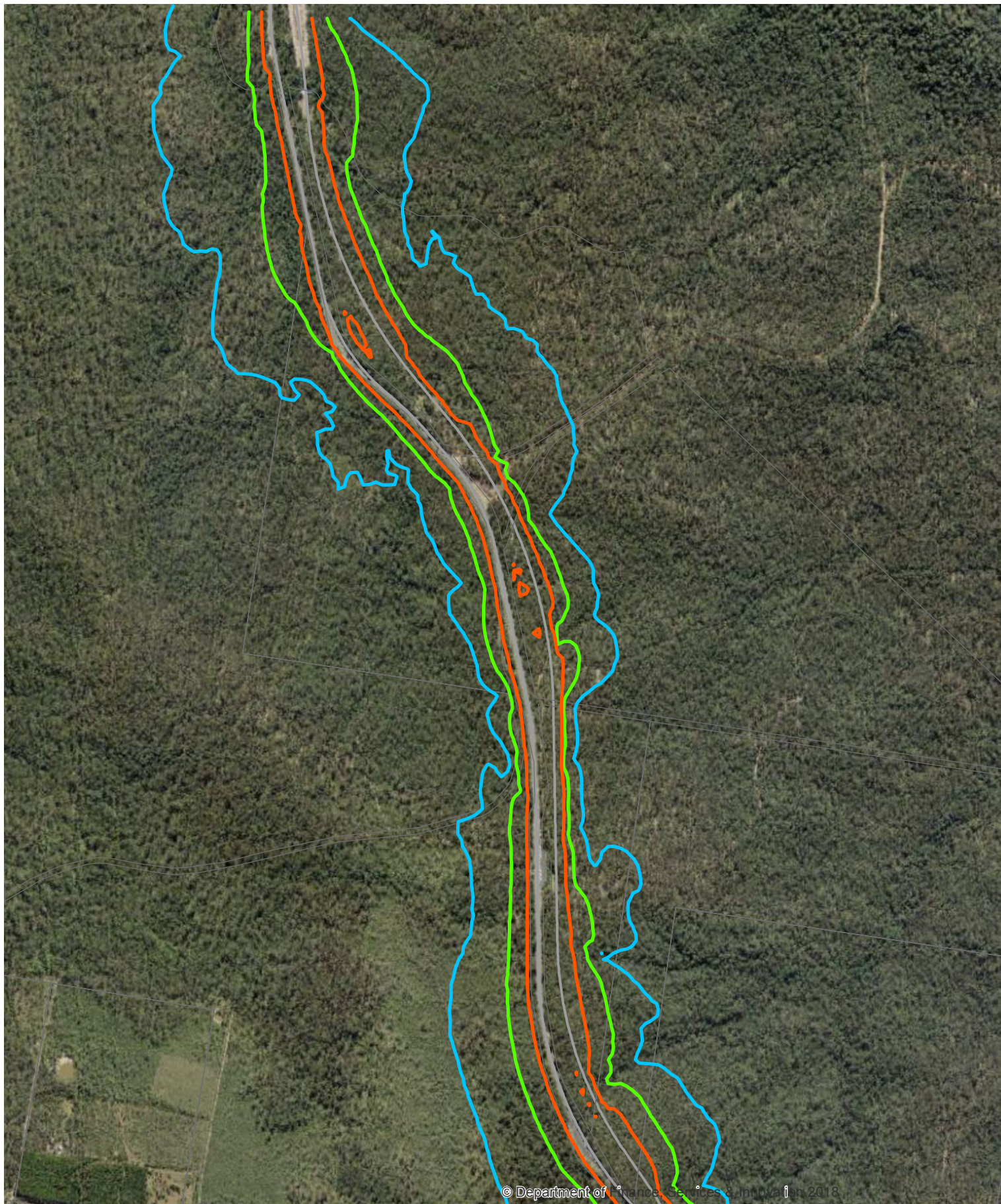


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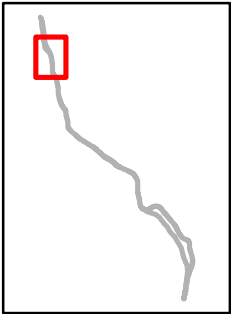
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W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

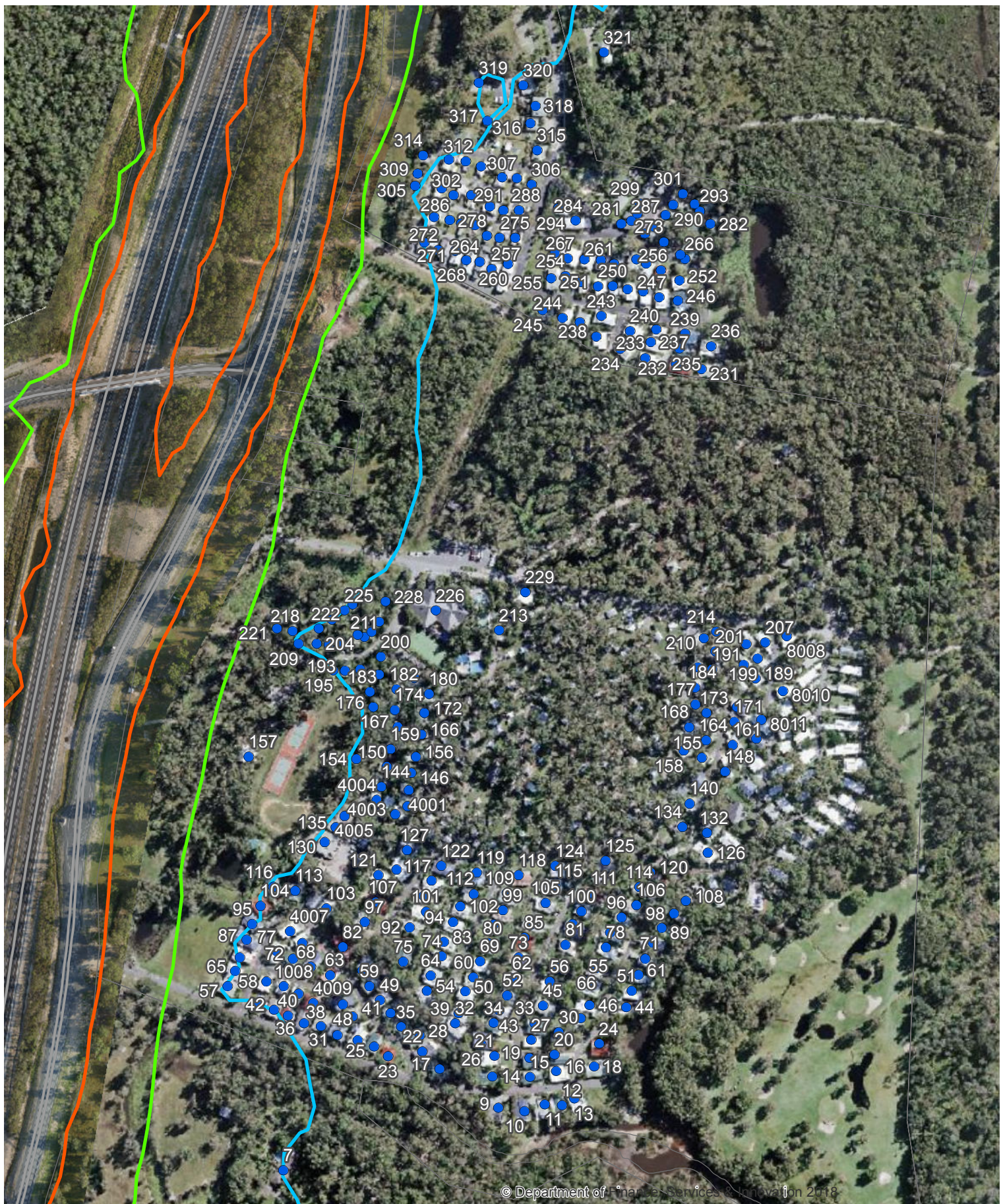
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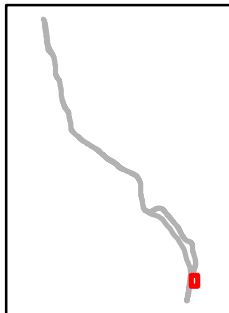
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W2G - Noise Contours - Day 2016

Sound Pressure Level, L_{Aeq} dBA

- 55
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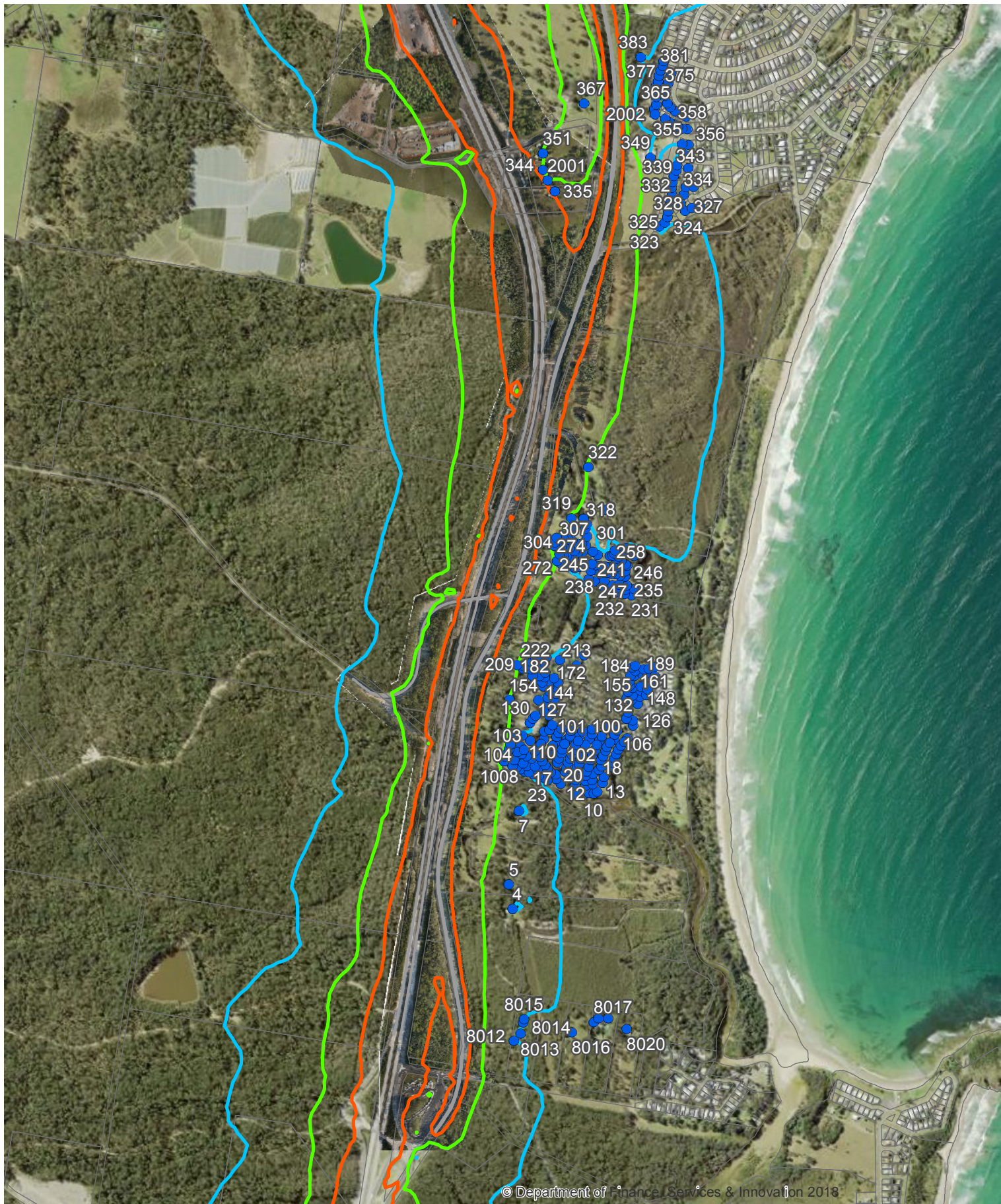


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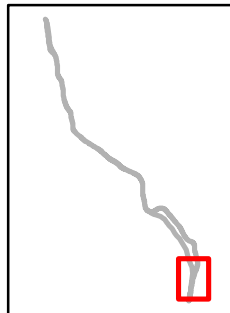
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W2G - Noise Contours - Night 2016

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



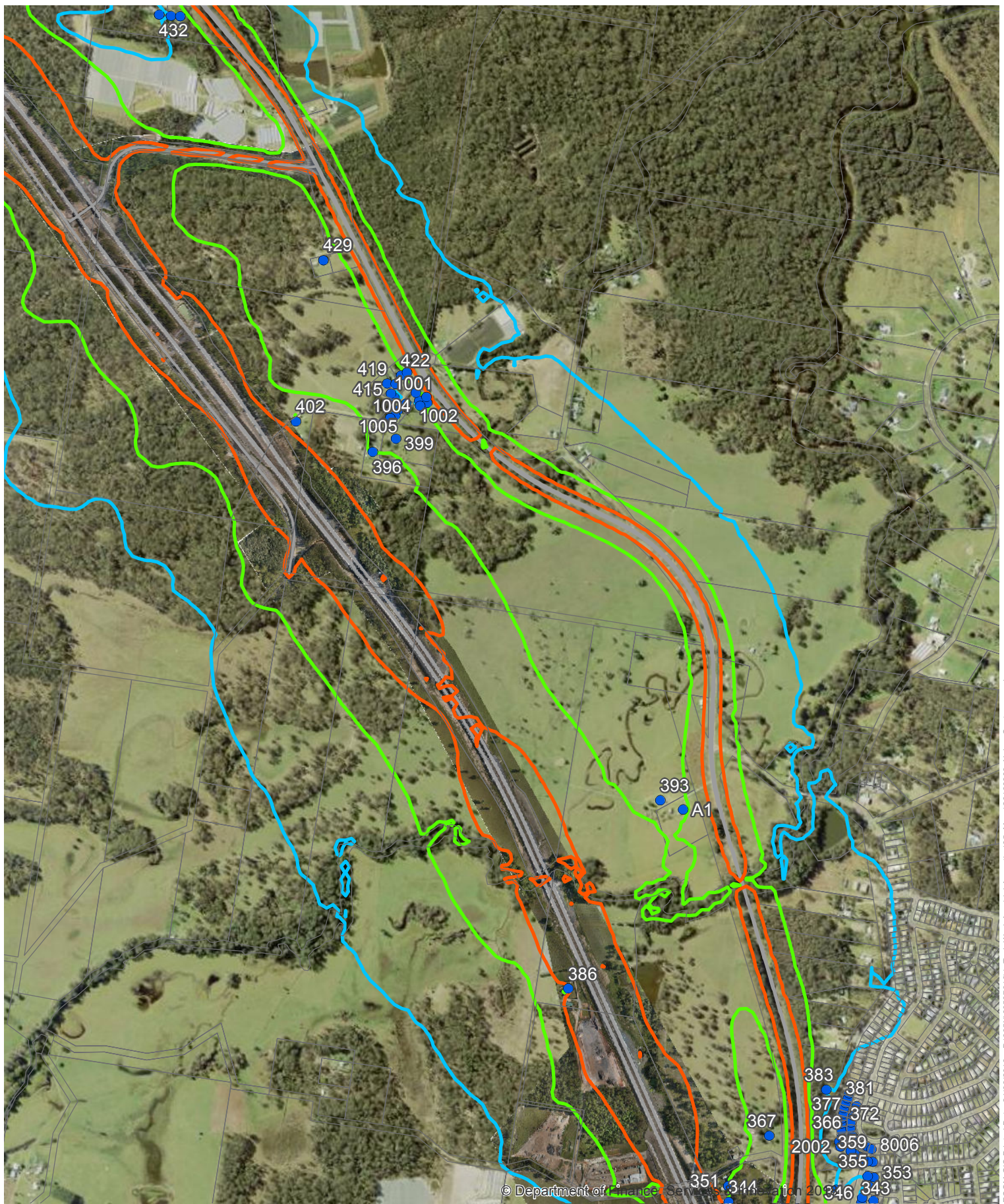
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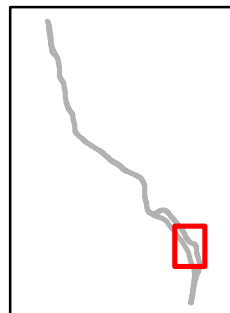
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W2G - Noise Contours - Night 2016

Sound Pressure Level, L_{Aeq} dBA

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- 55
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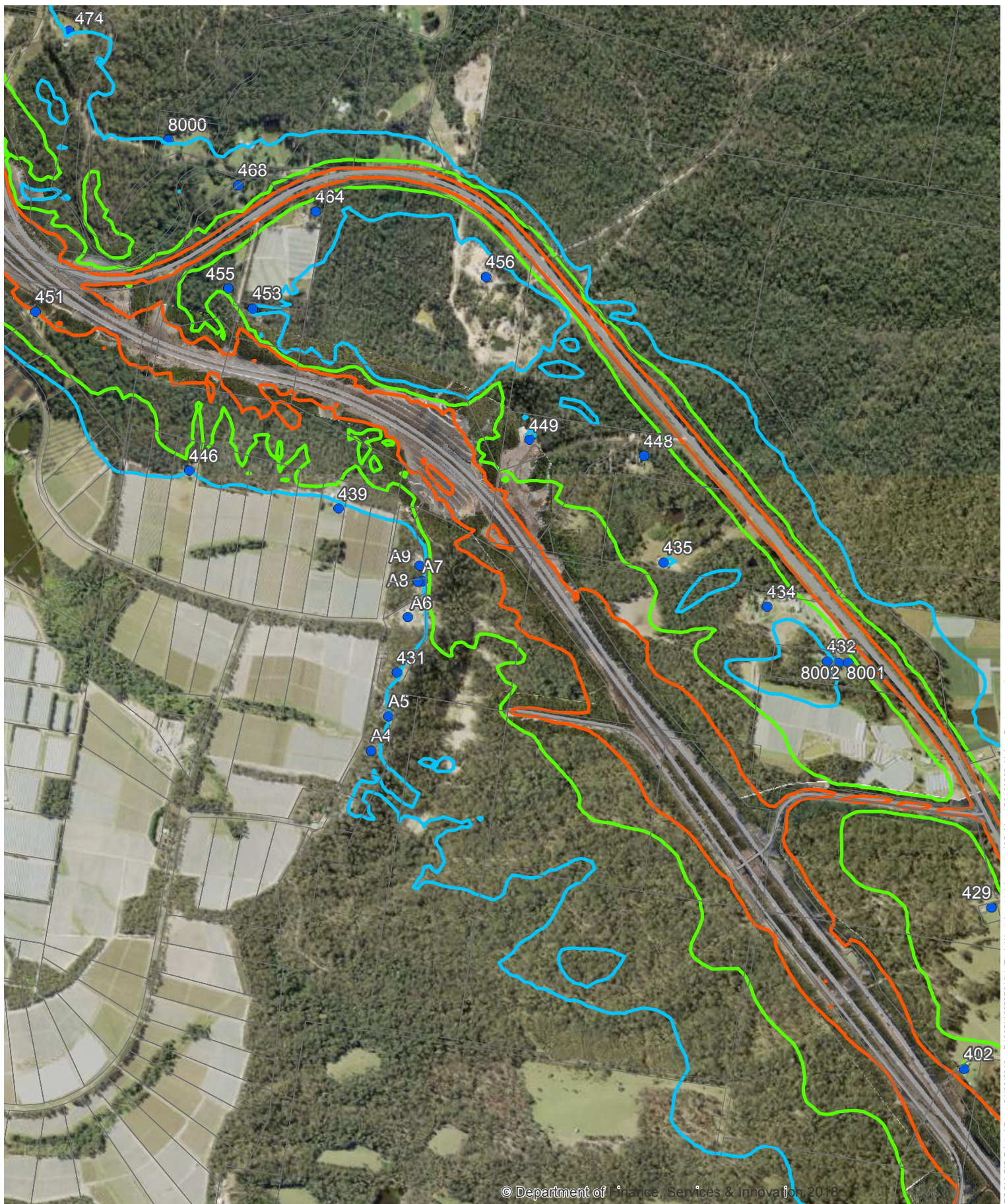
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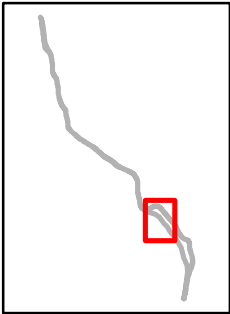
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- 55
- 60

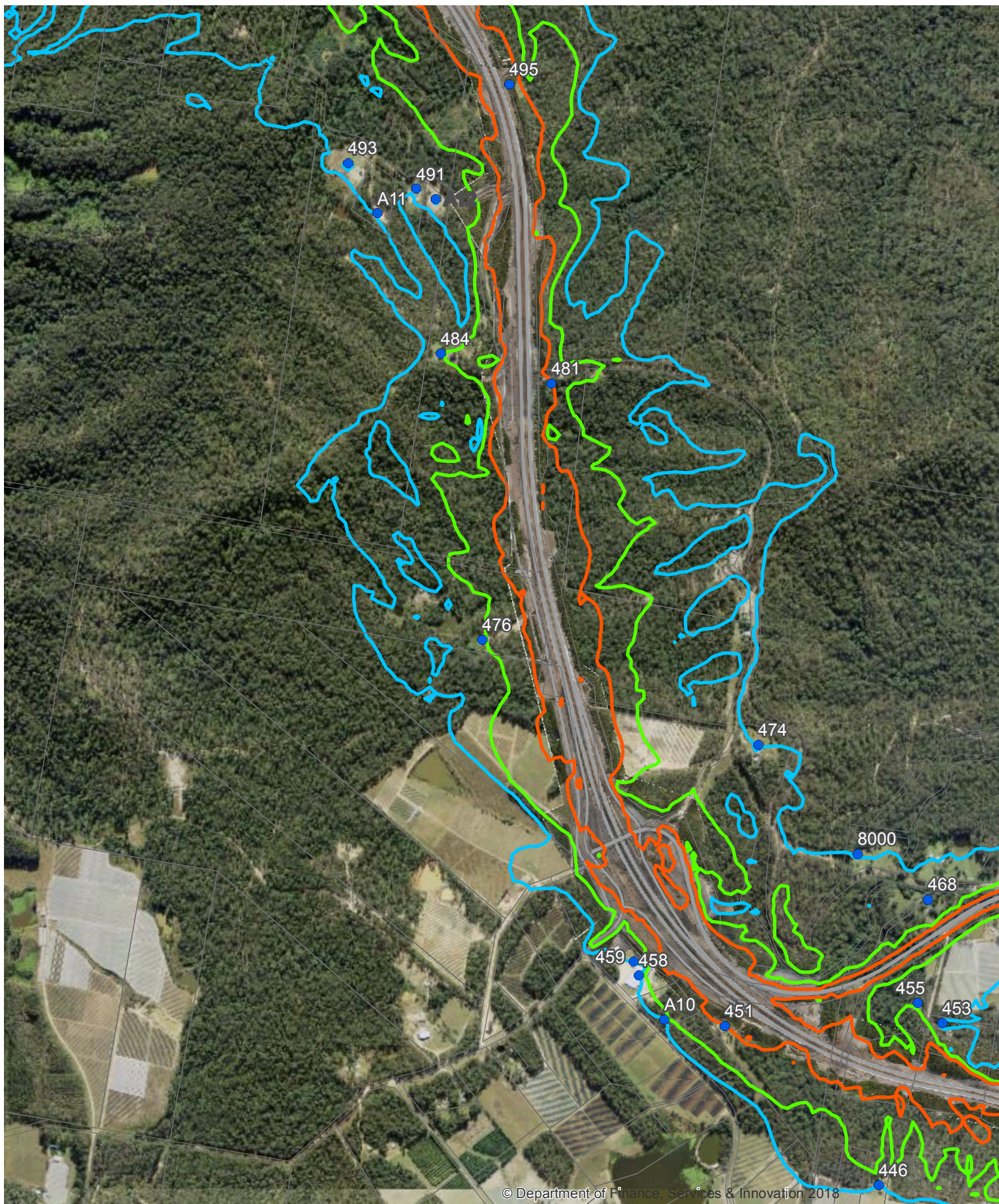


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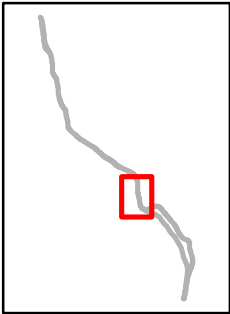
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W2G - Noise Contours - Night 2016

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60

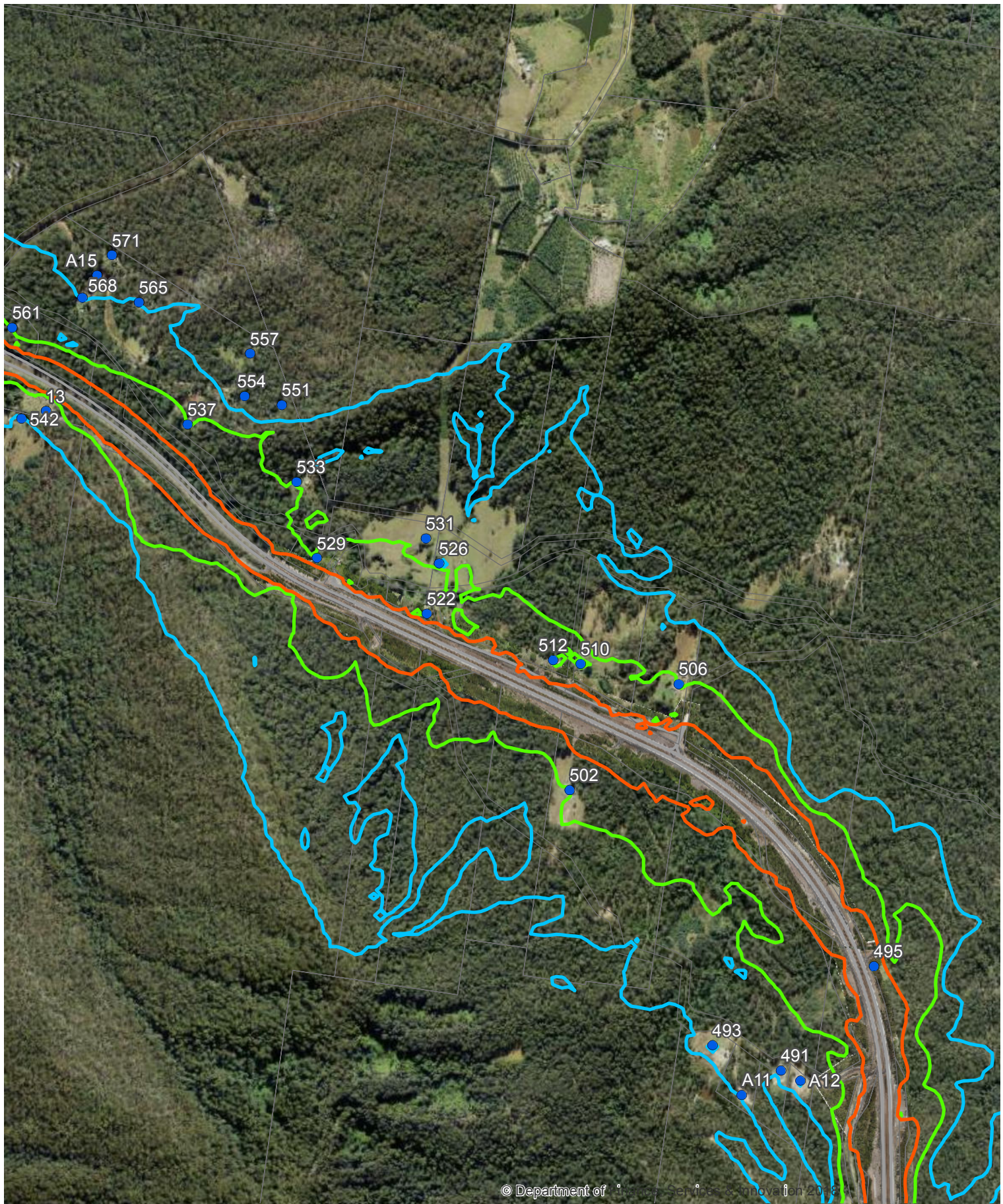


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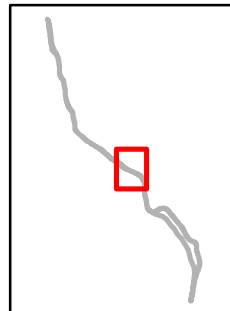
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W2G - Noise Contours - Night 2016

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- 50
- 55
- 60



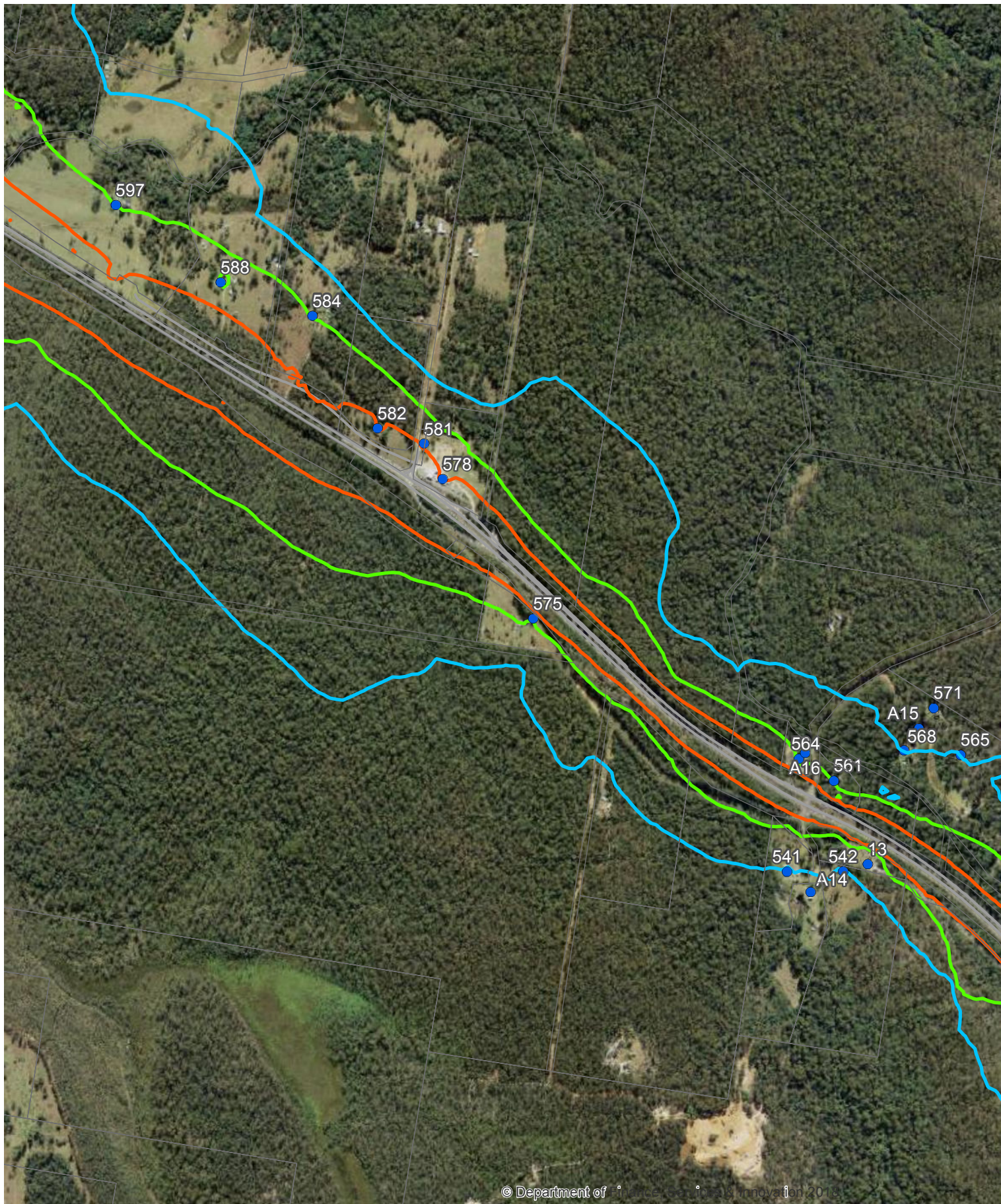
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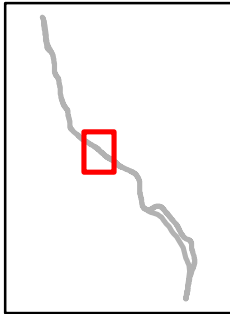
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W2G - Noise Contours - Night 2016

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60

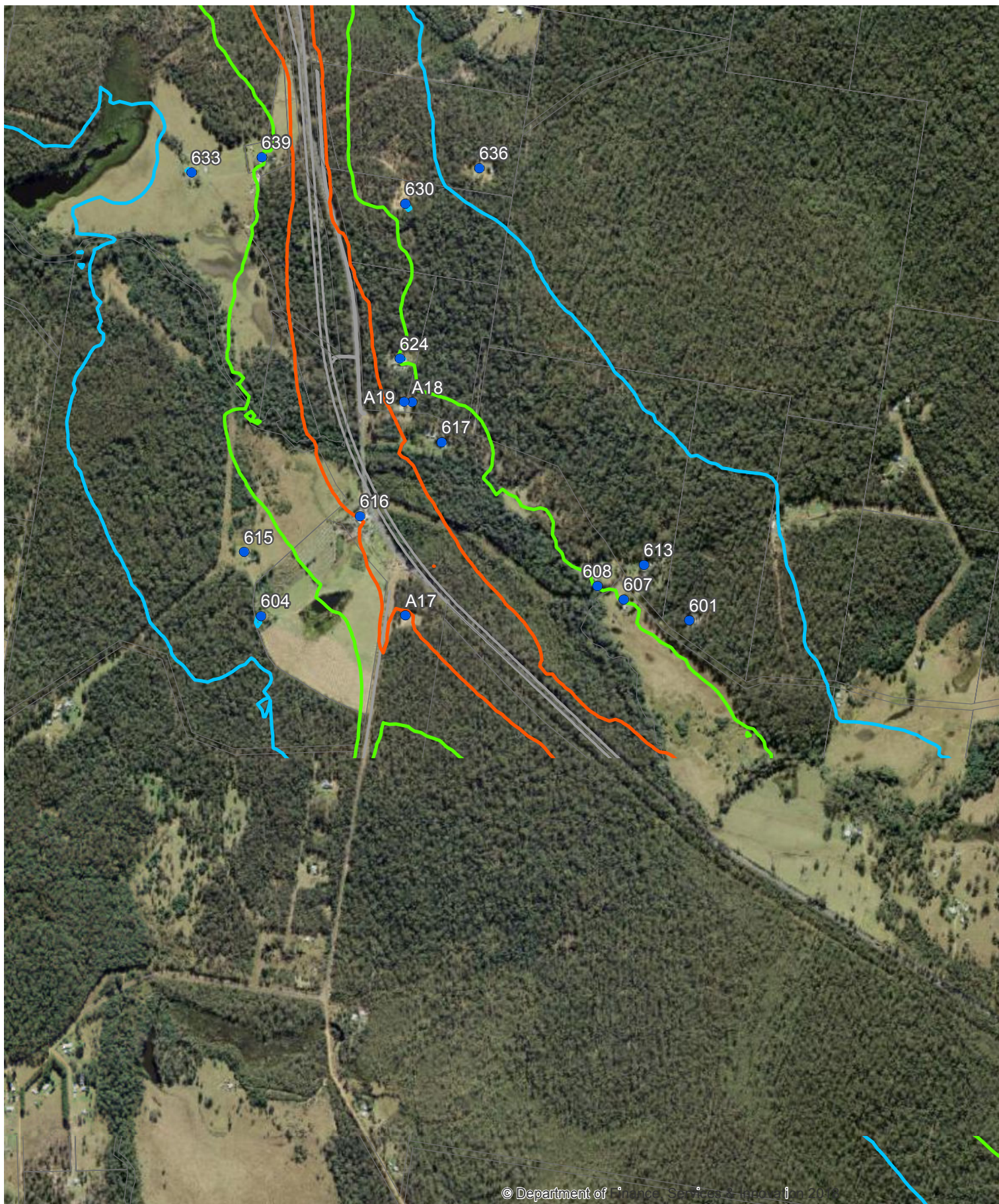


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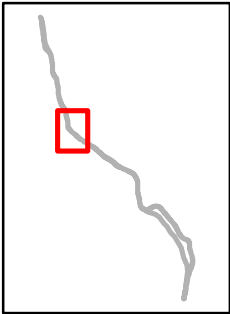
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W2G - Noise Contours - Night 2016

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



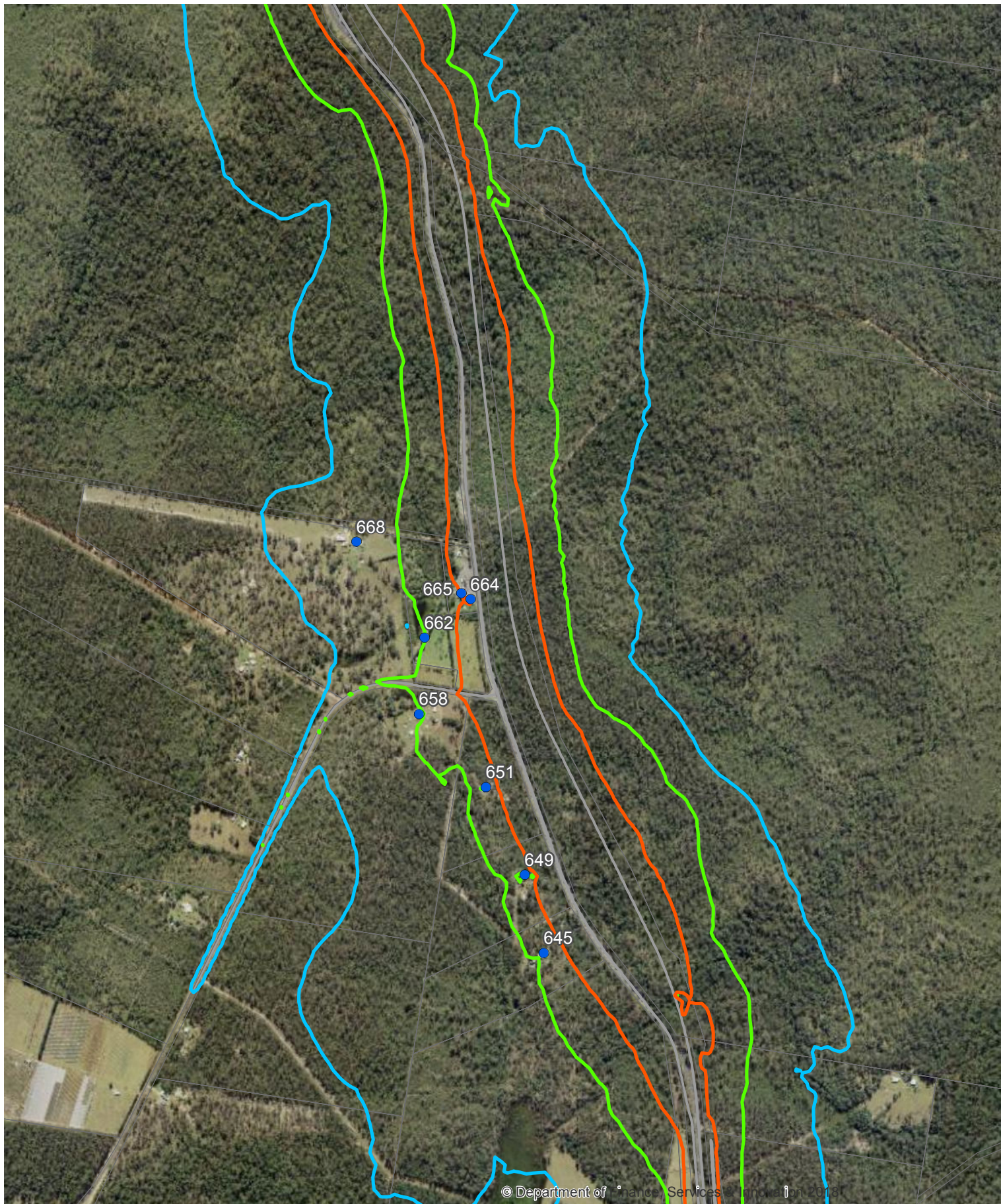
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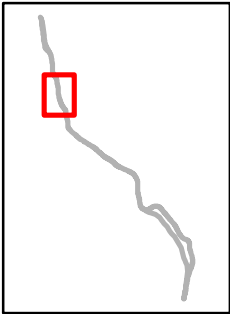
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W2G - Noise Contours - Night 2016

Sound Pressure Level, L_{Aeq} dBA

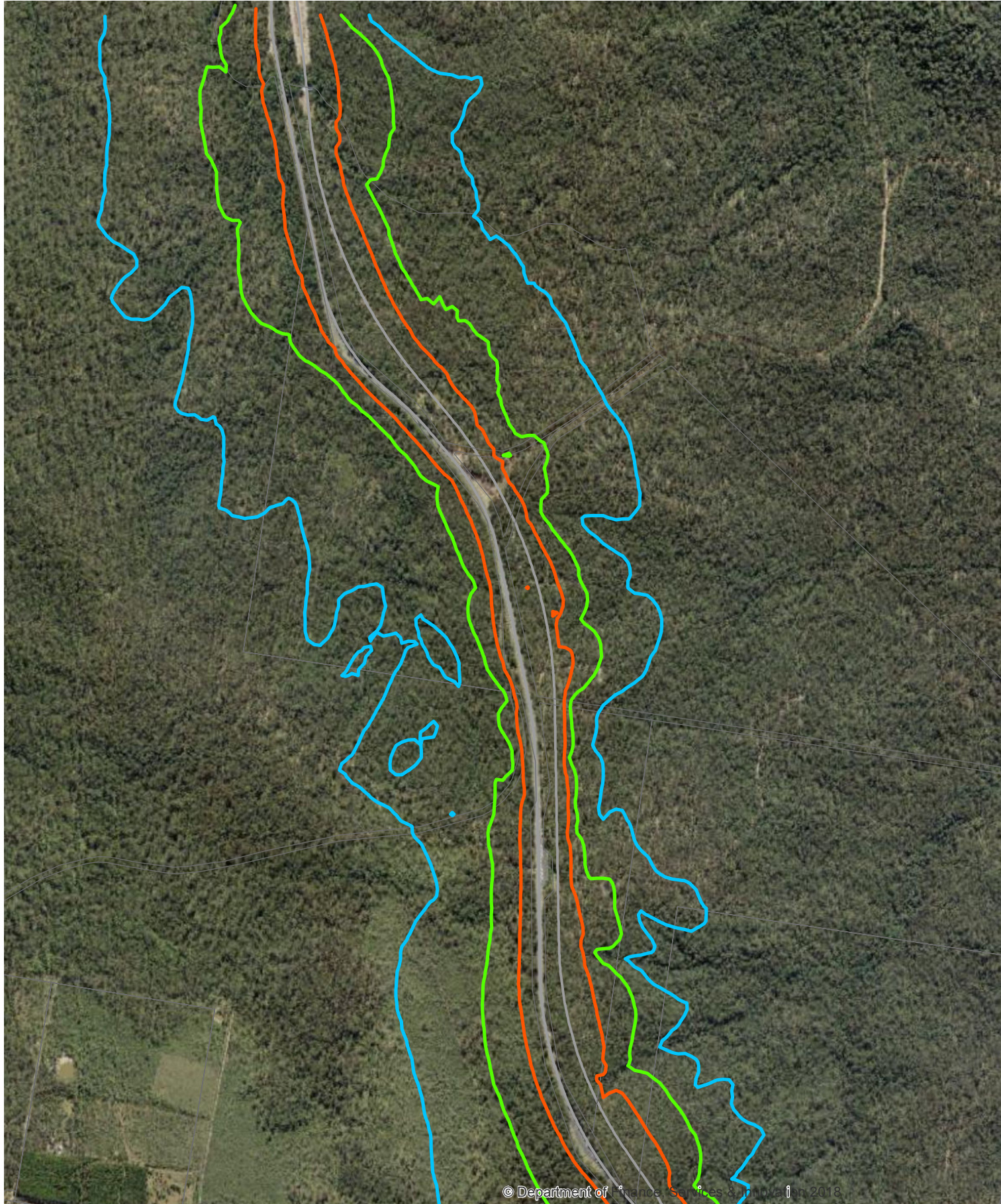
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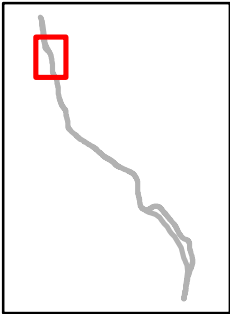
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W2G - Noise Contours - Night 2016

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



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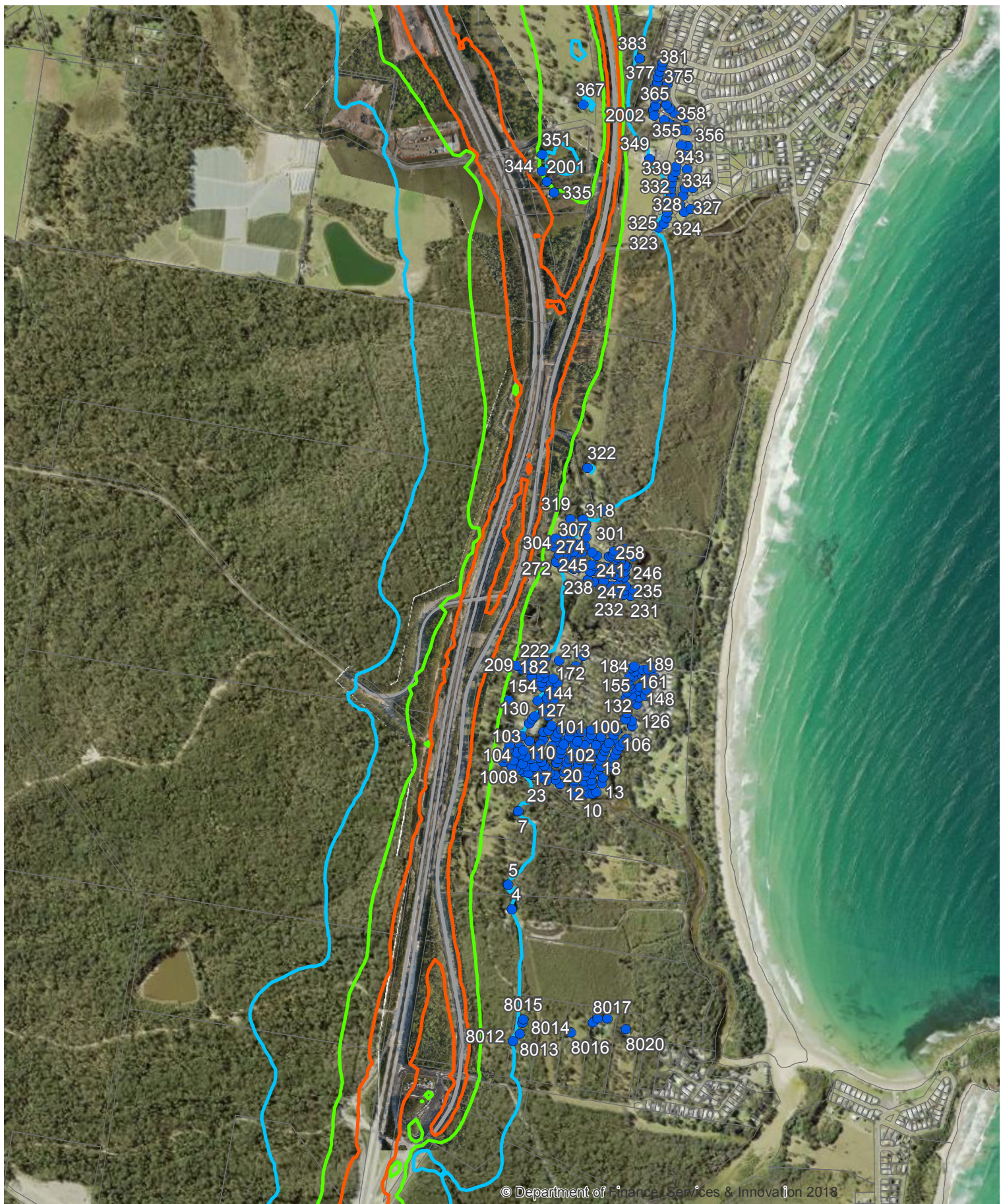


A horizontal scale bar with markings at 0, 50, 100, and 200 meters. The bar is black with white markings and numbers.

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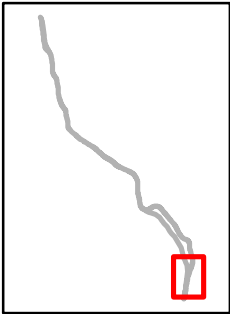
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65

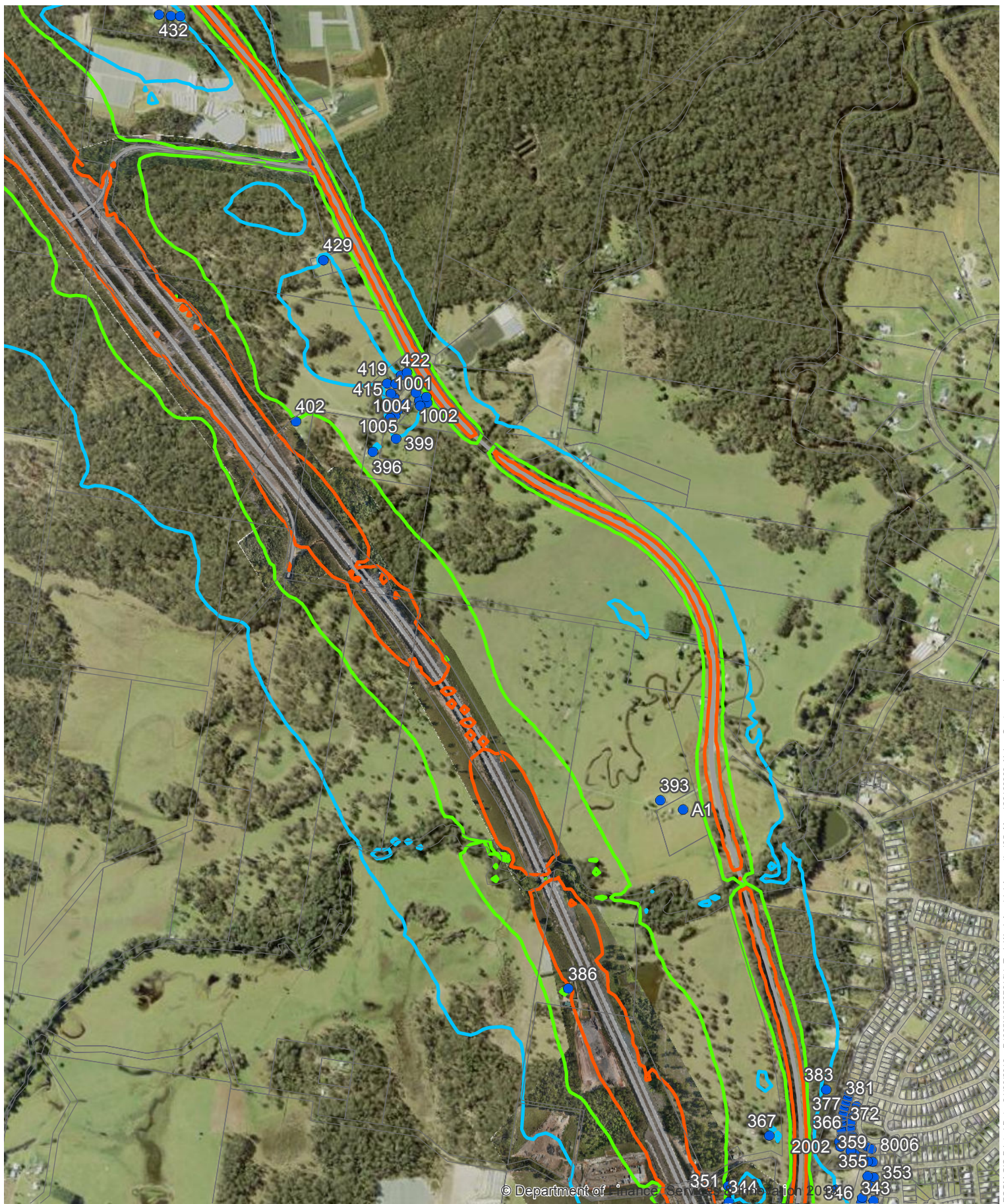


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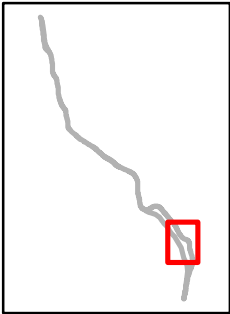
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65

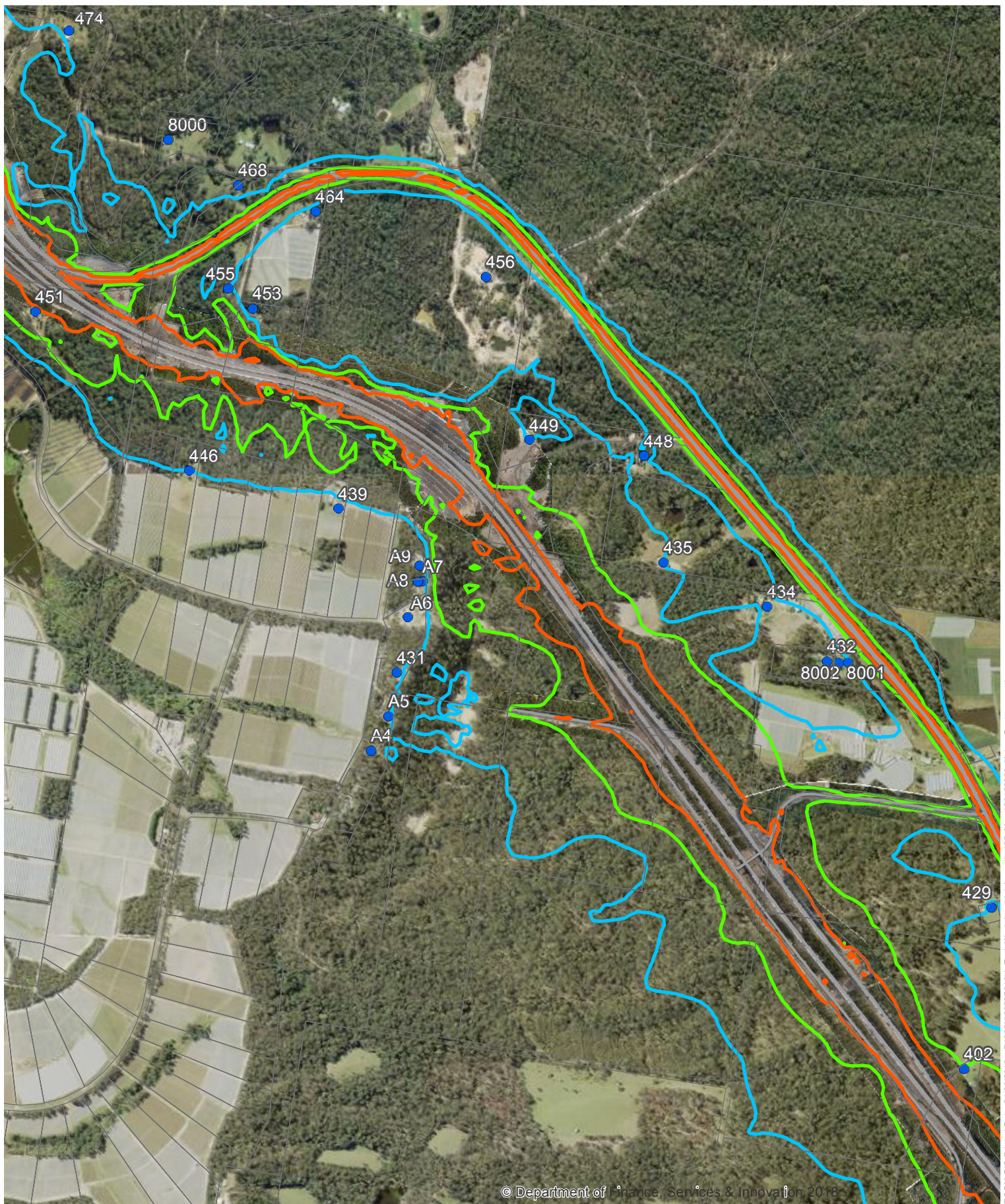


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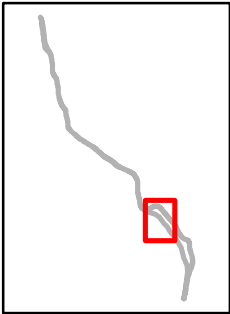
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65

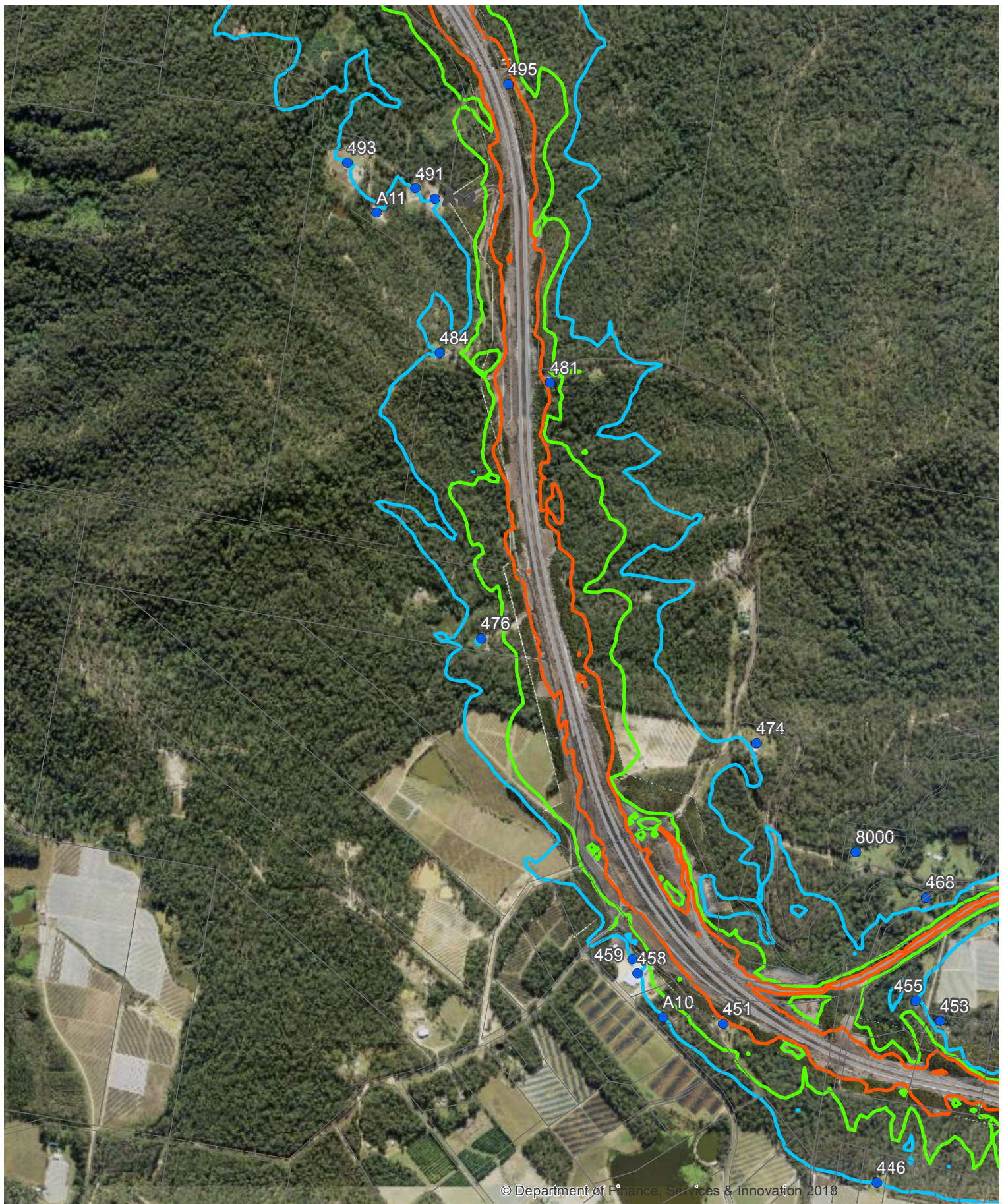


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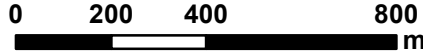
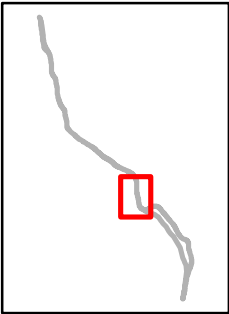
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



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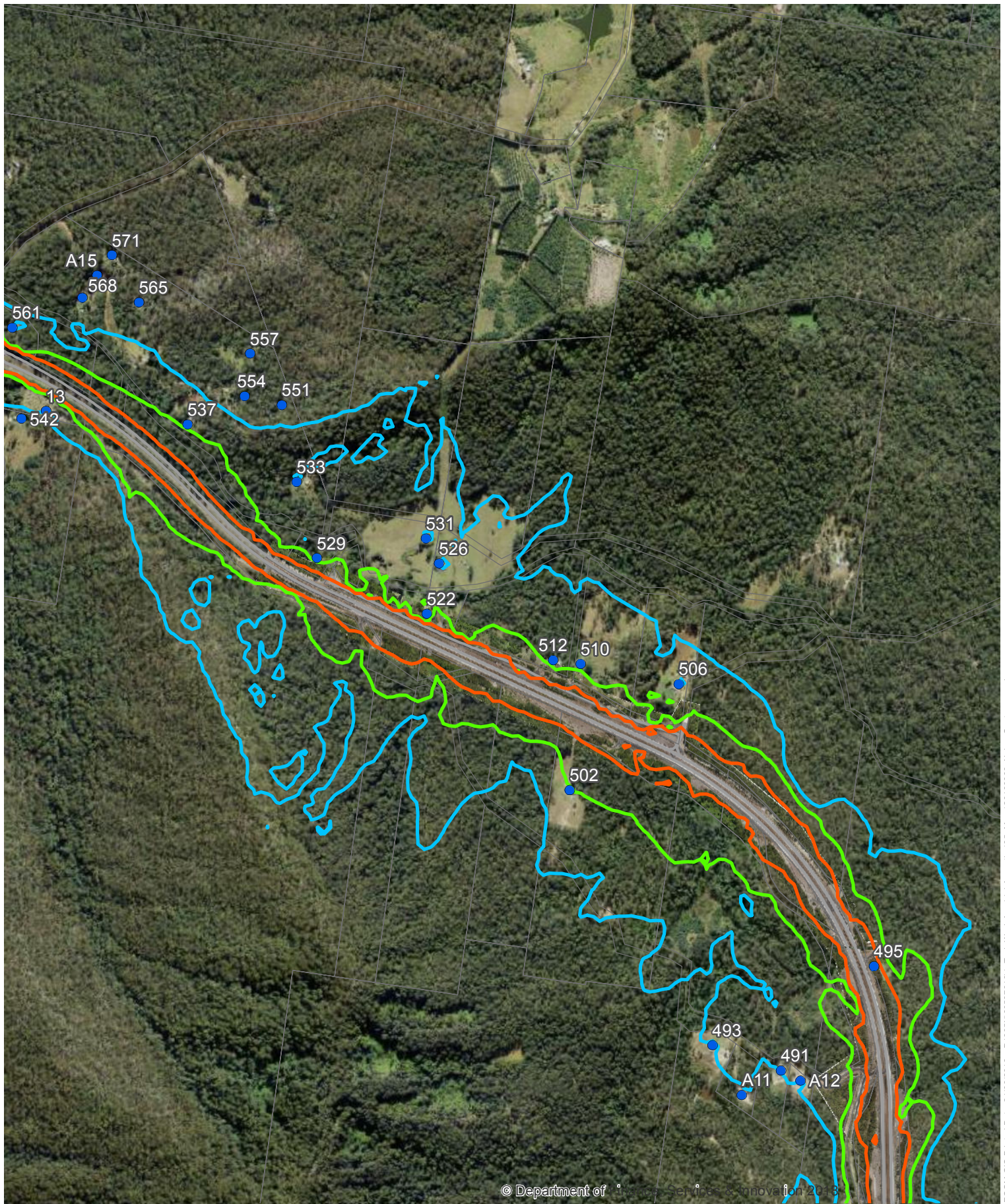
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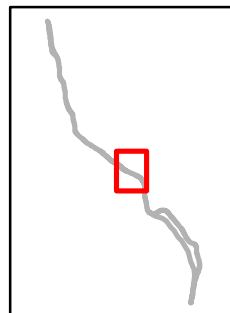
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



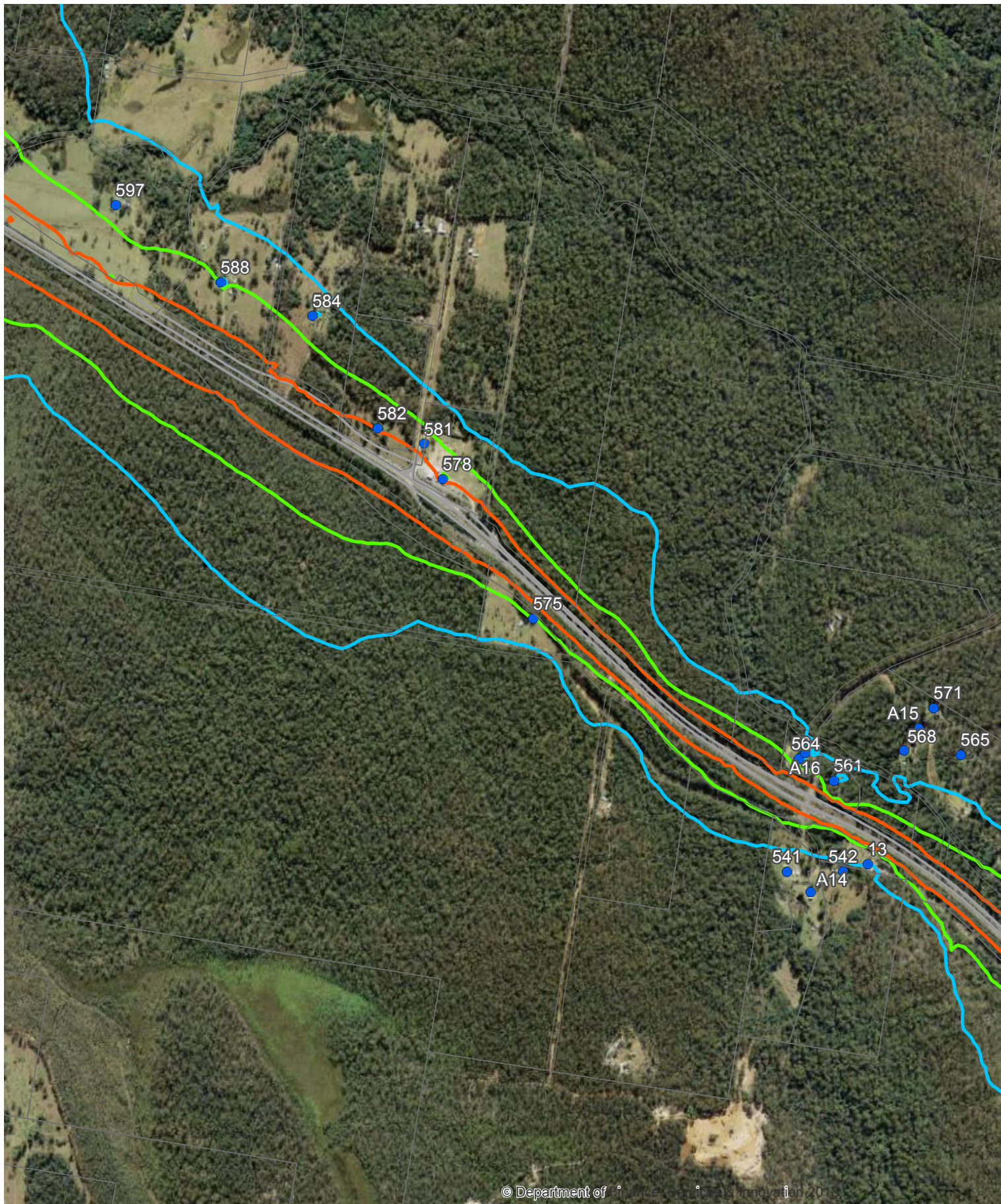
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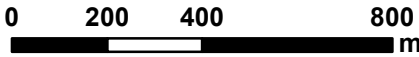
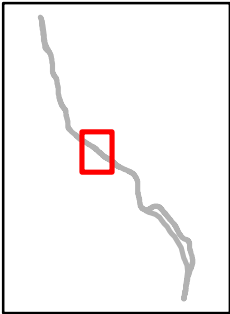
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65

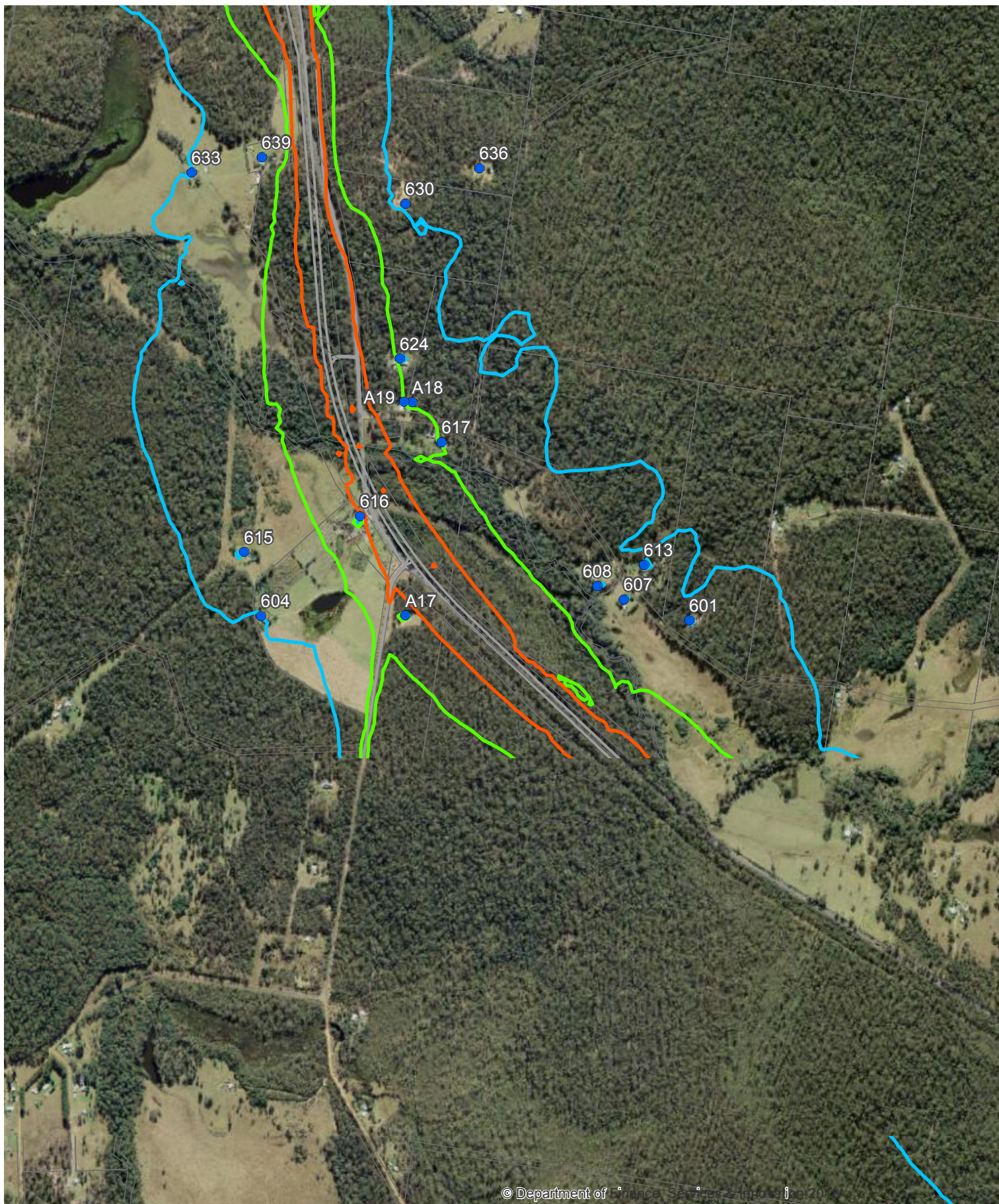


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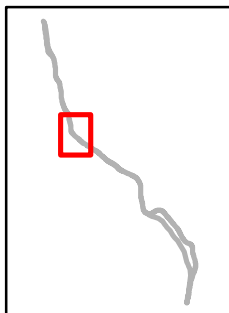
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



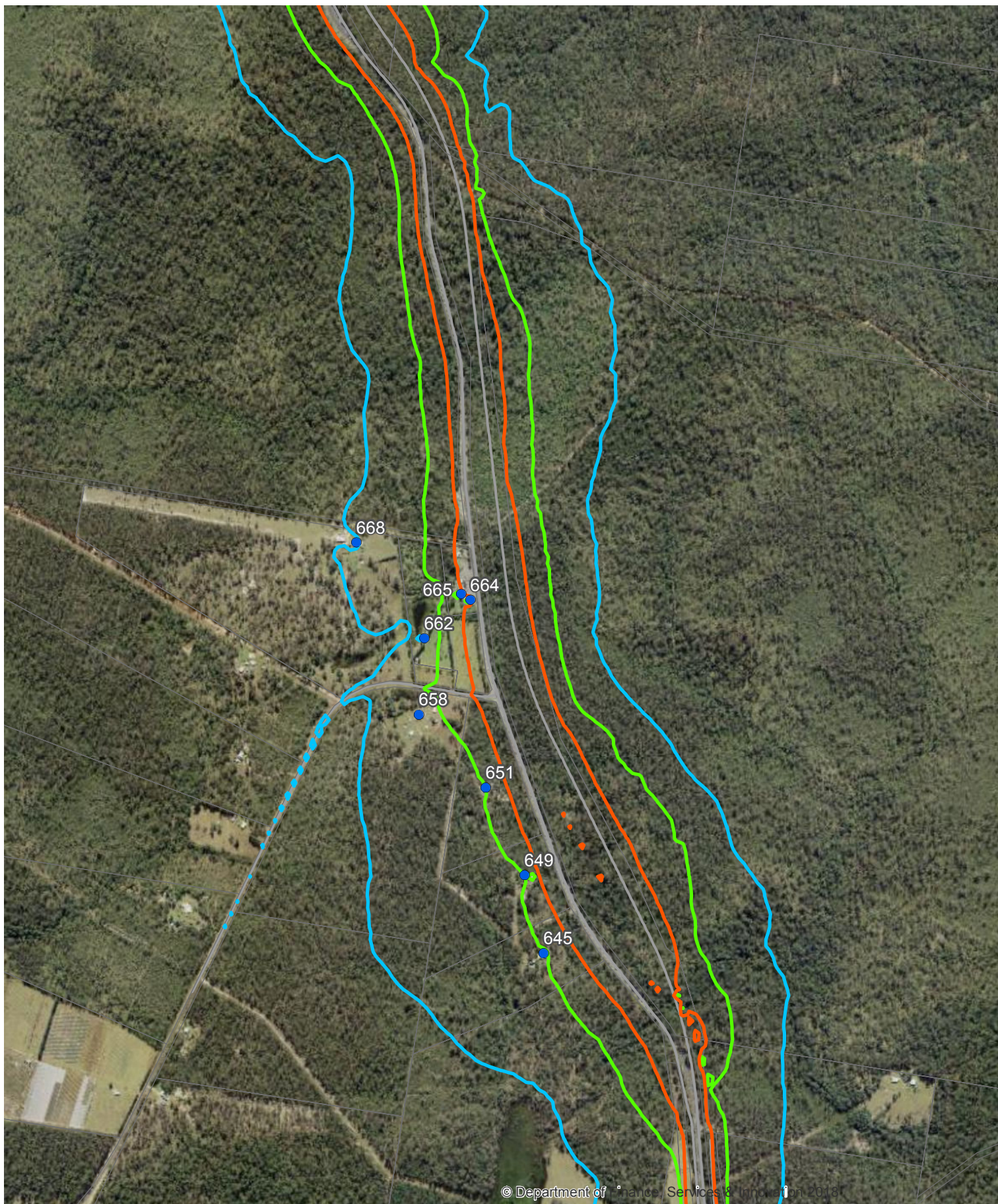
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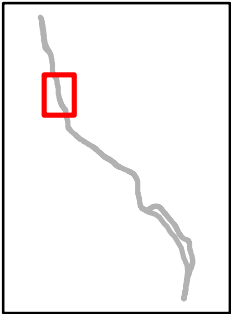
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



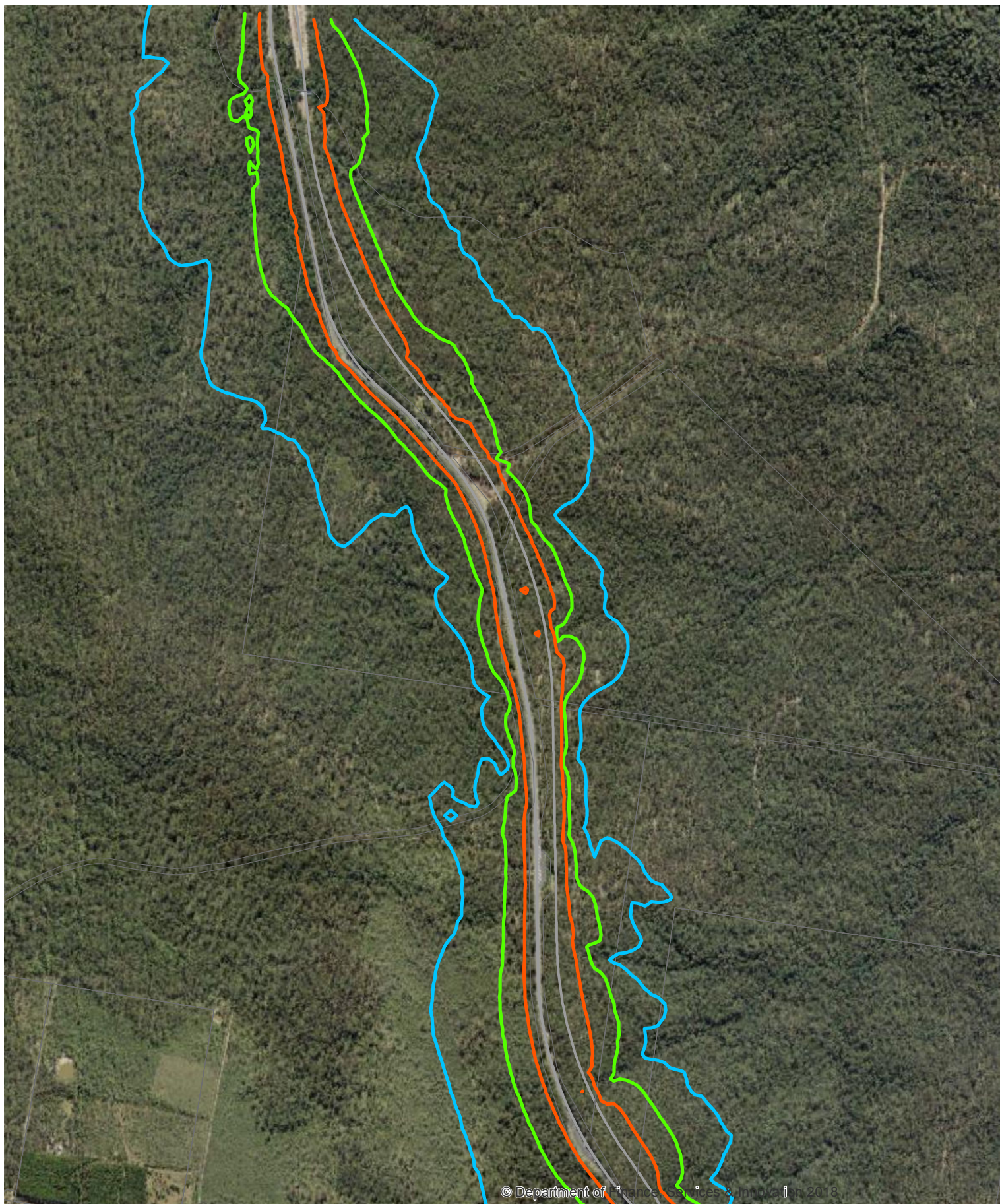
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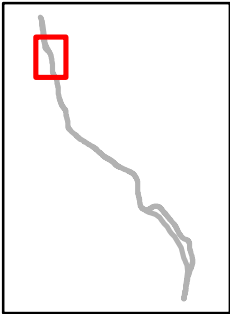
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



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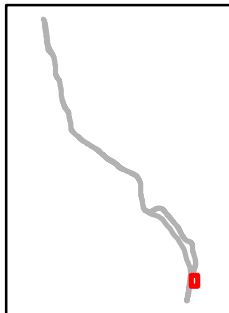
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

- 55
- 60
- 65



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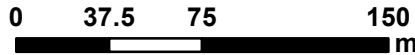
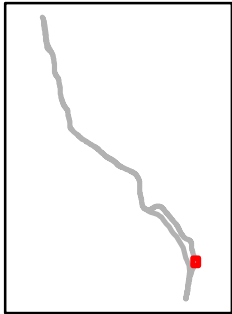
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W2G - Noise Contours - Day 2026

Sound Pressure Level, L_{Aeq} dBA

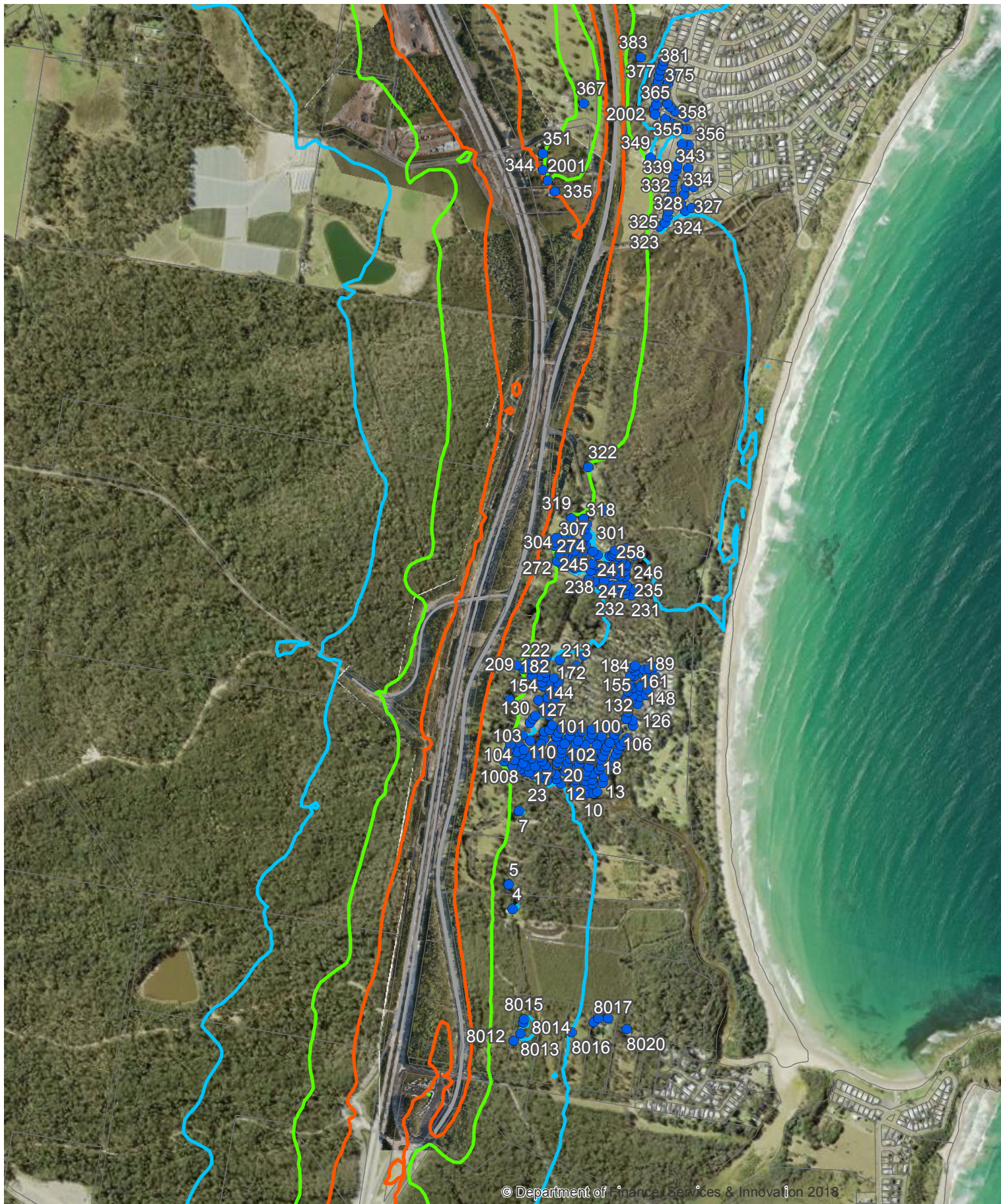
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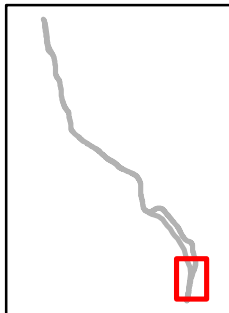
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



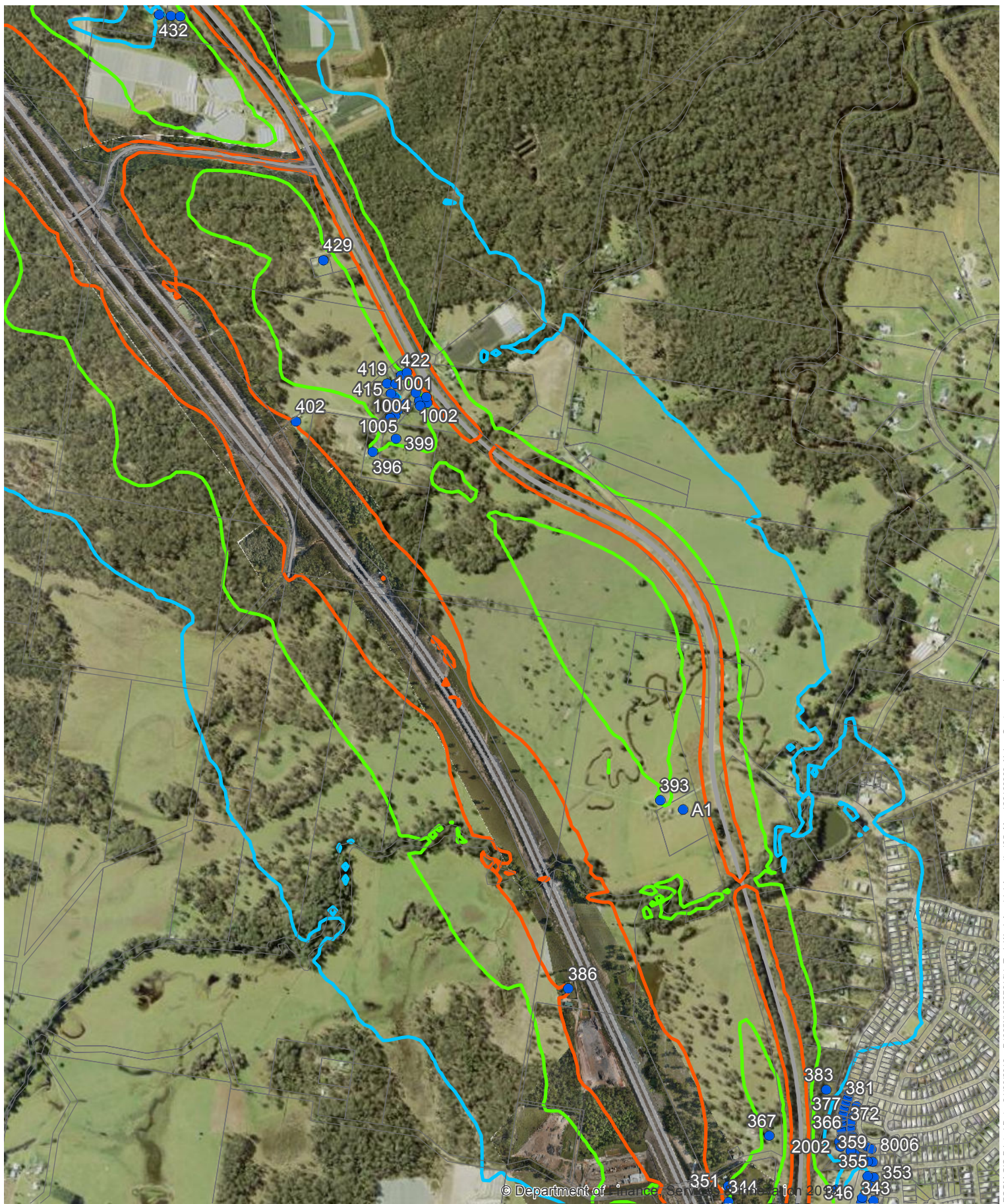
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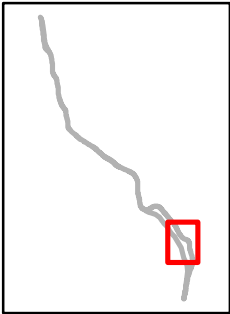
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



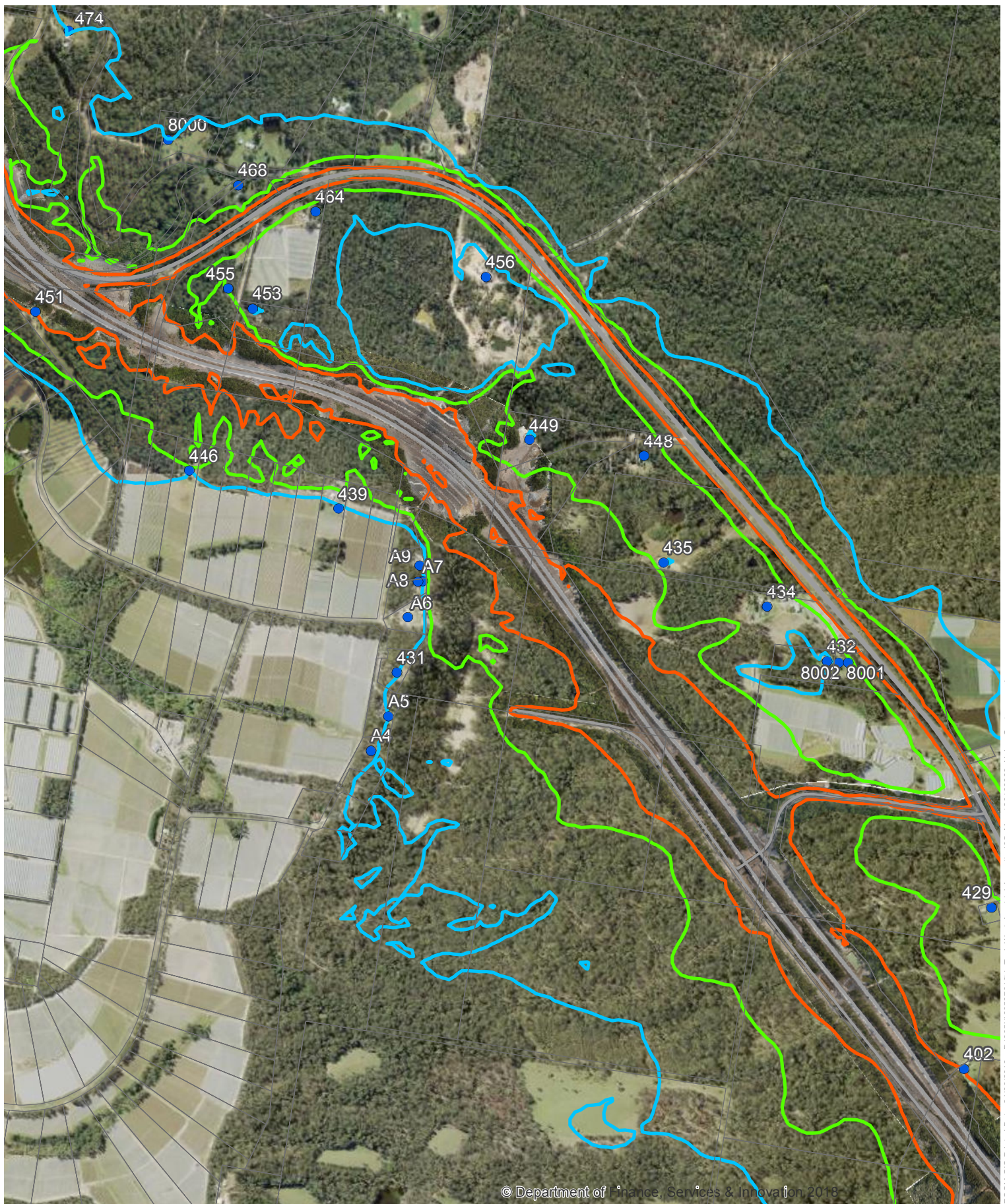
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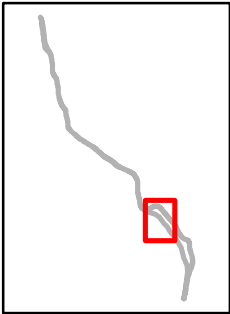
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



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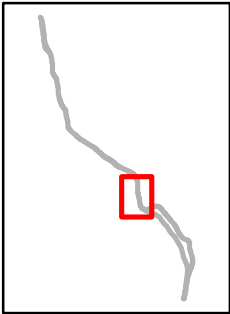
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60

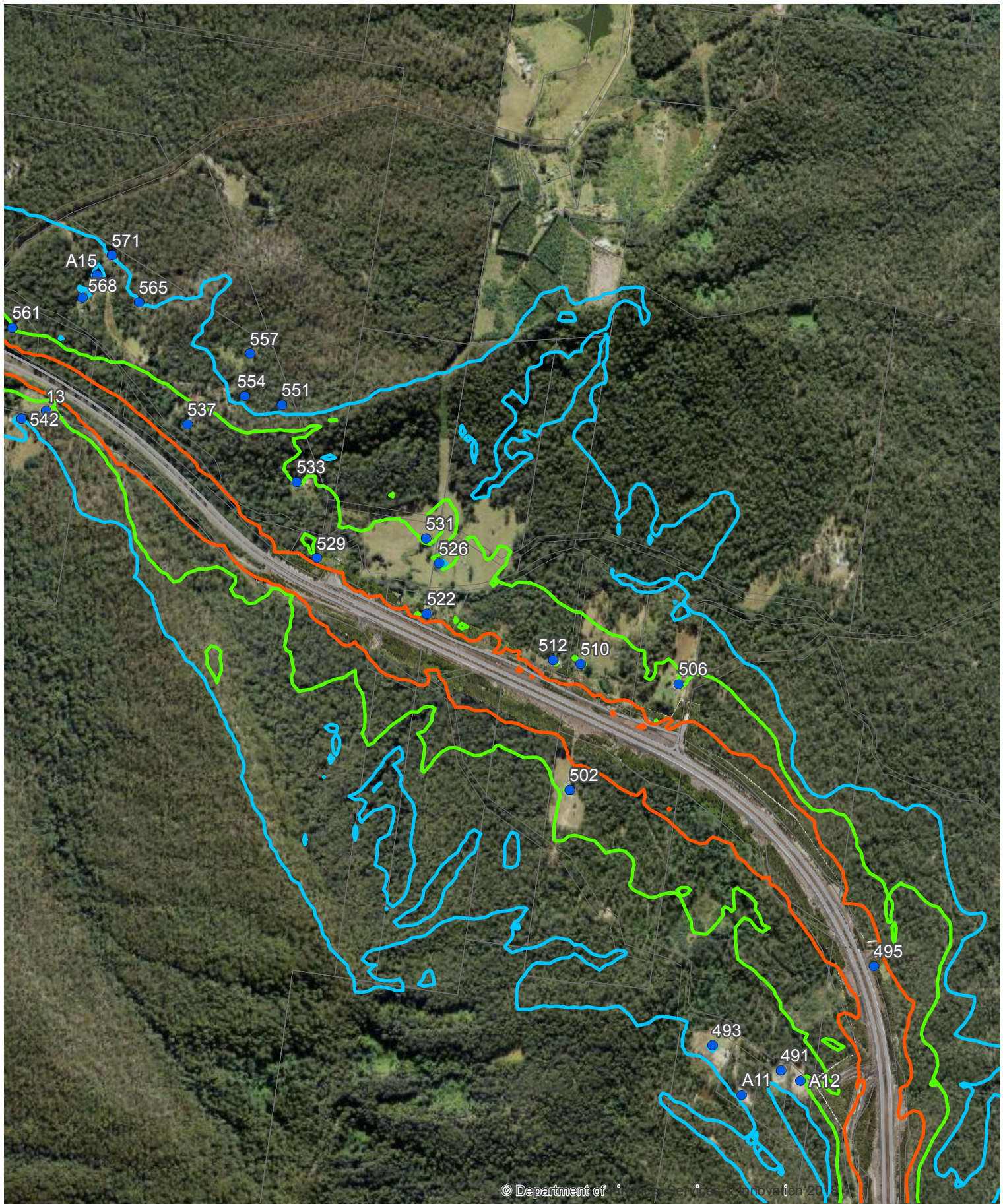


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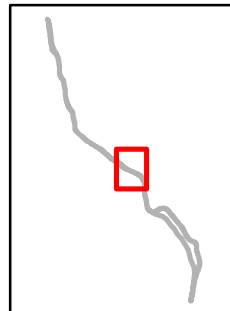
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

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- 55
- 60



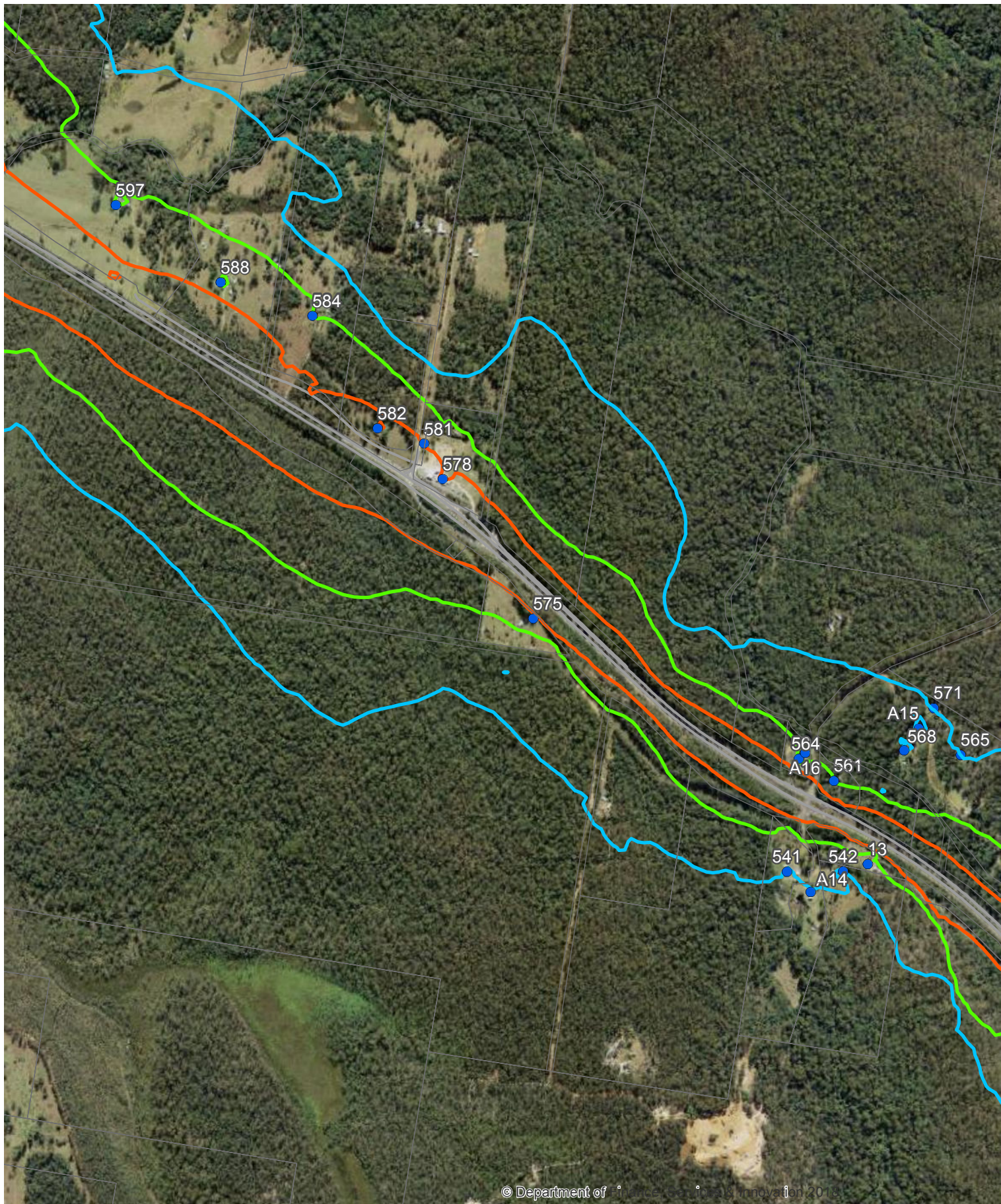
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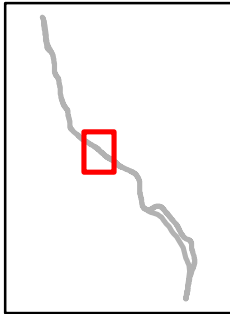
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



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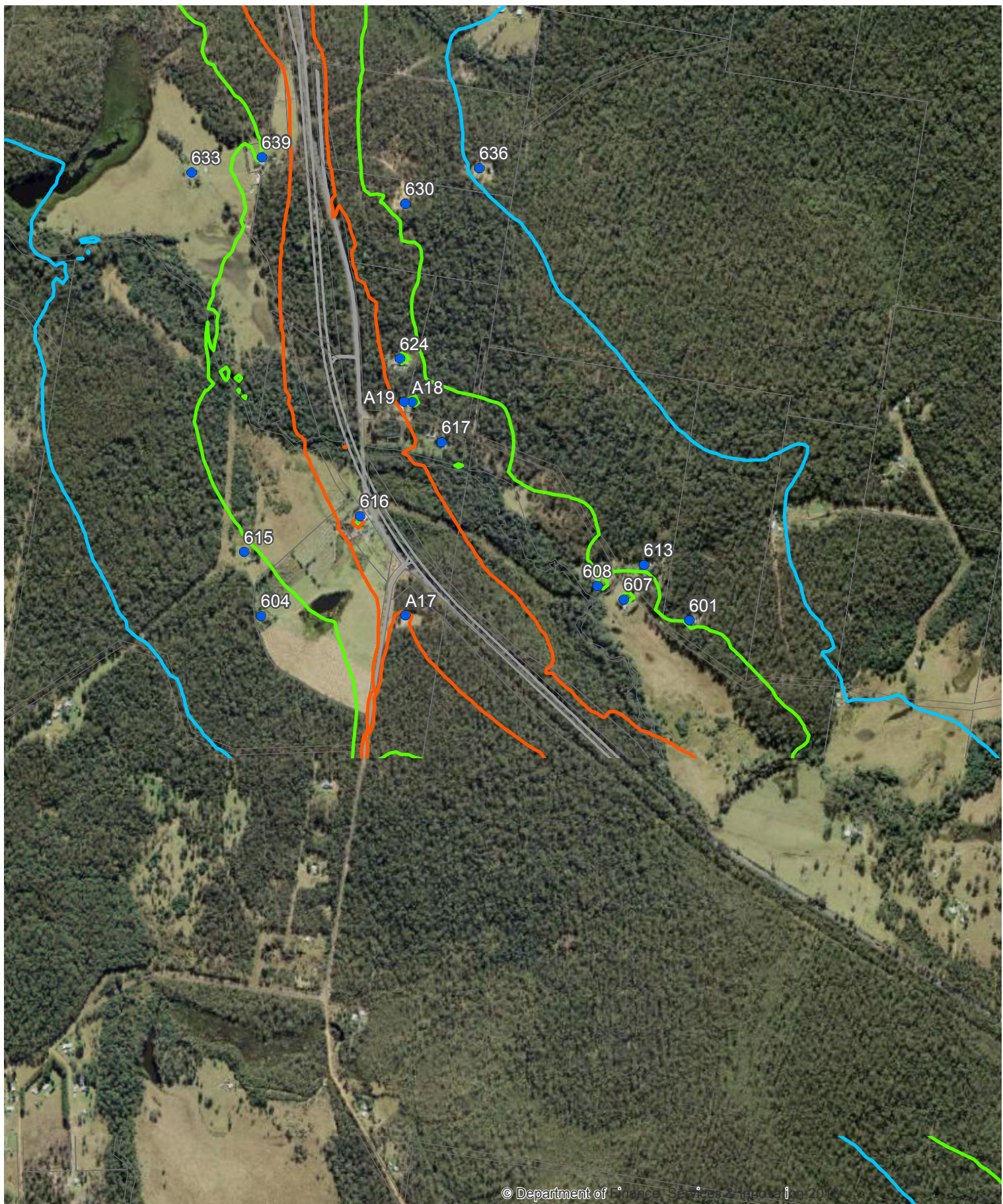
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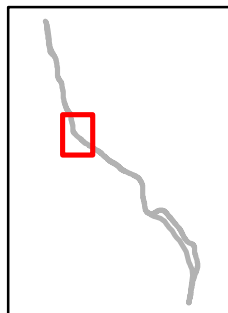
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



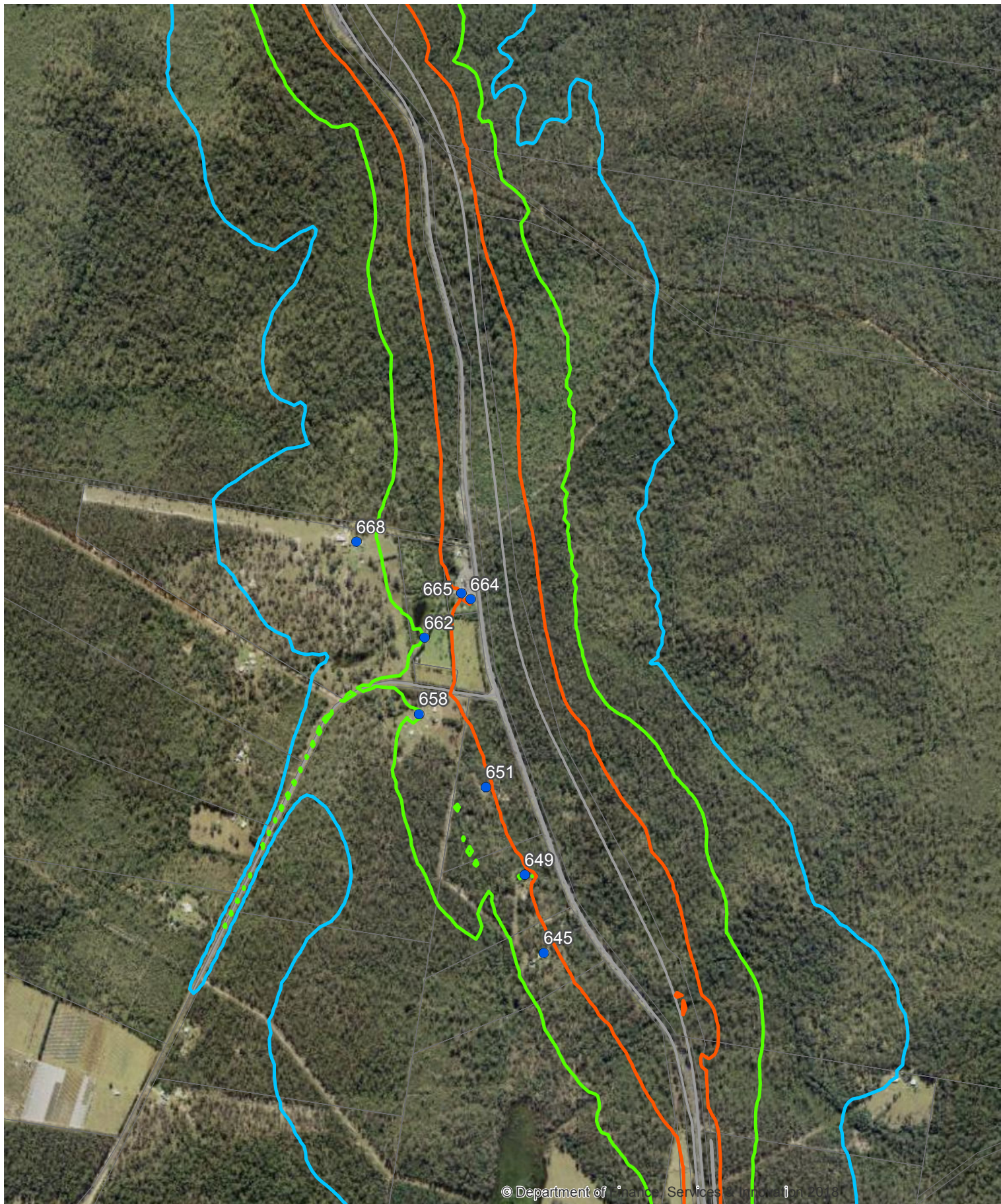
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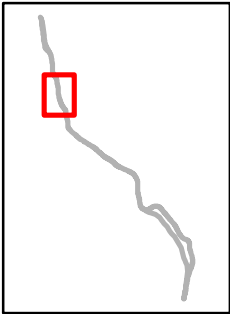
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60



0 200 400 800 m

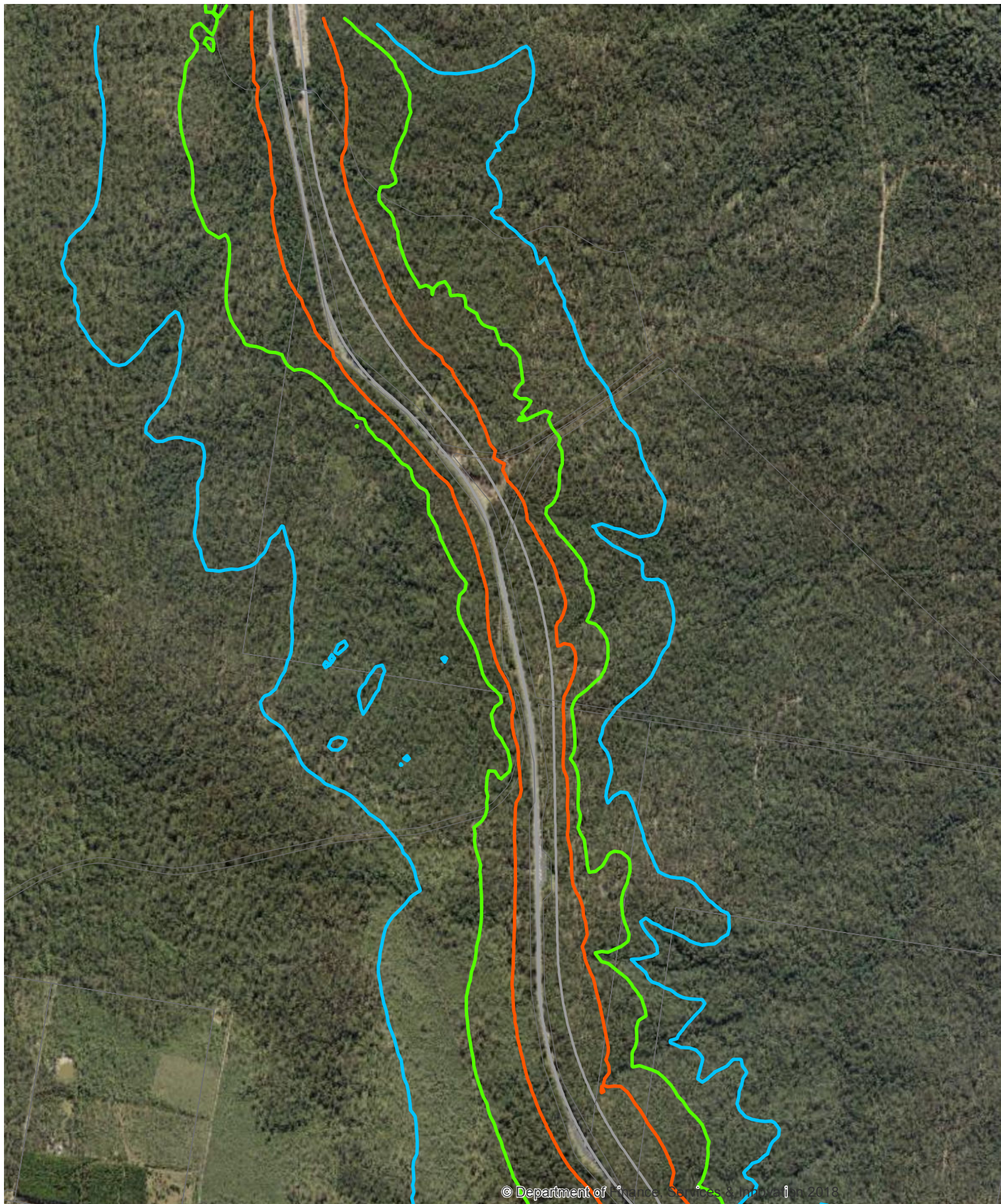
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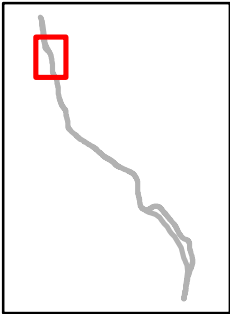
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60

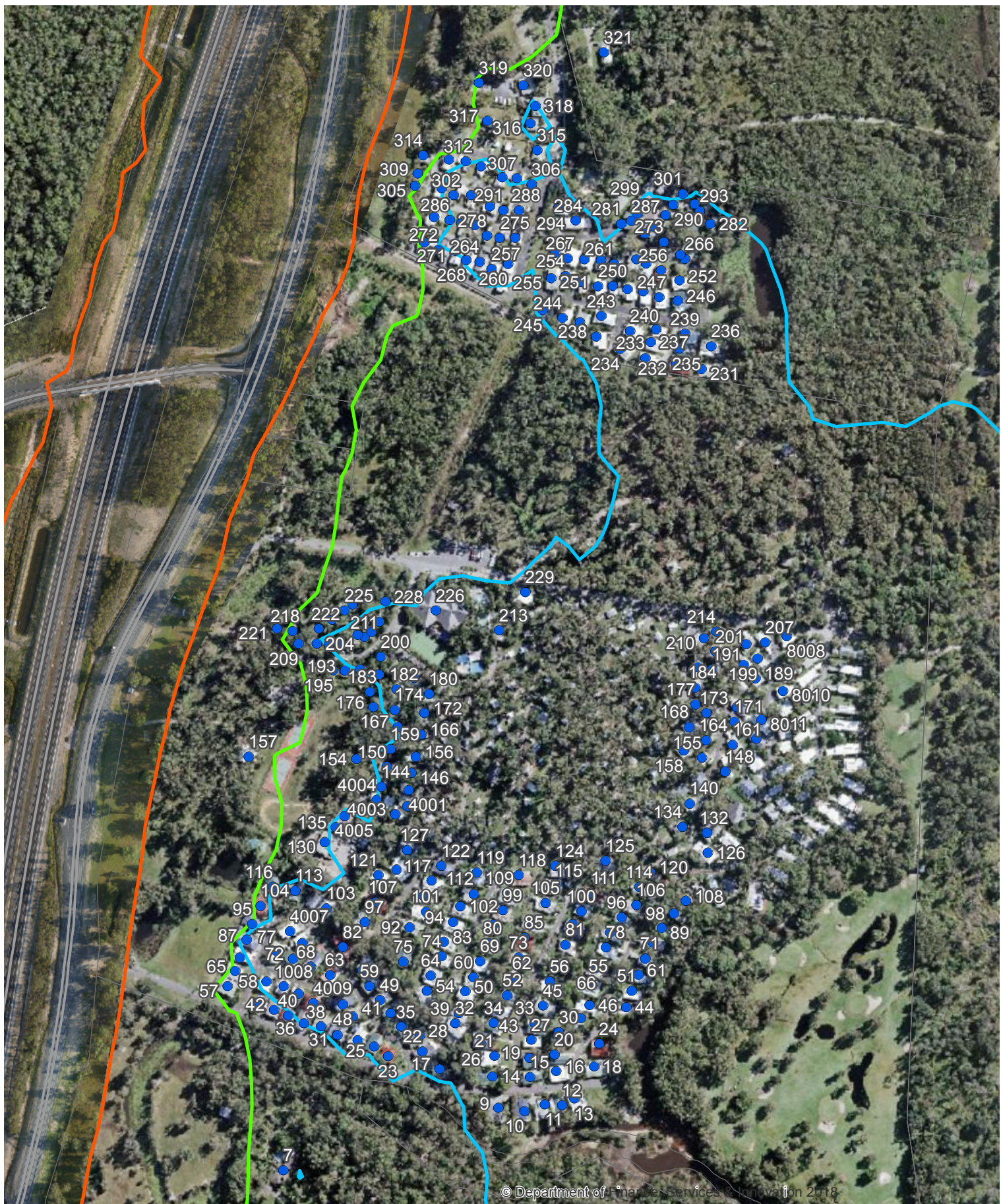


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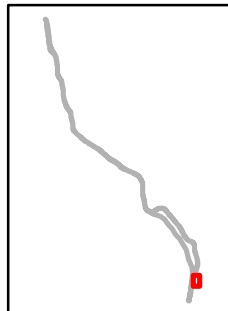
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W2G - Noise Contours - Night 2026

Sound Pressure Level, L_{Aeq} dBA

- 50
- 55
- 60

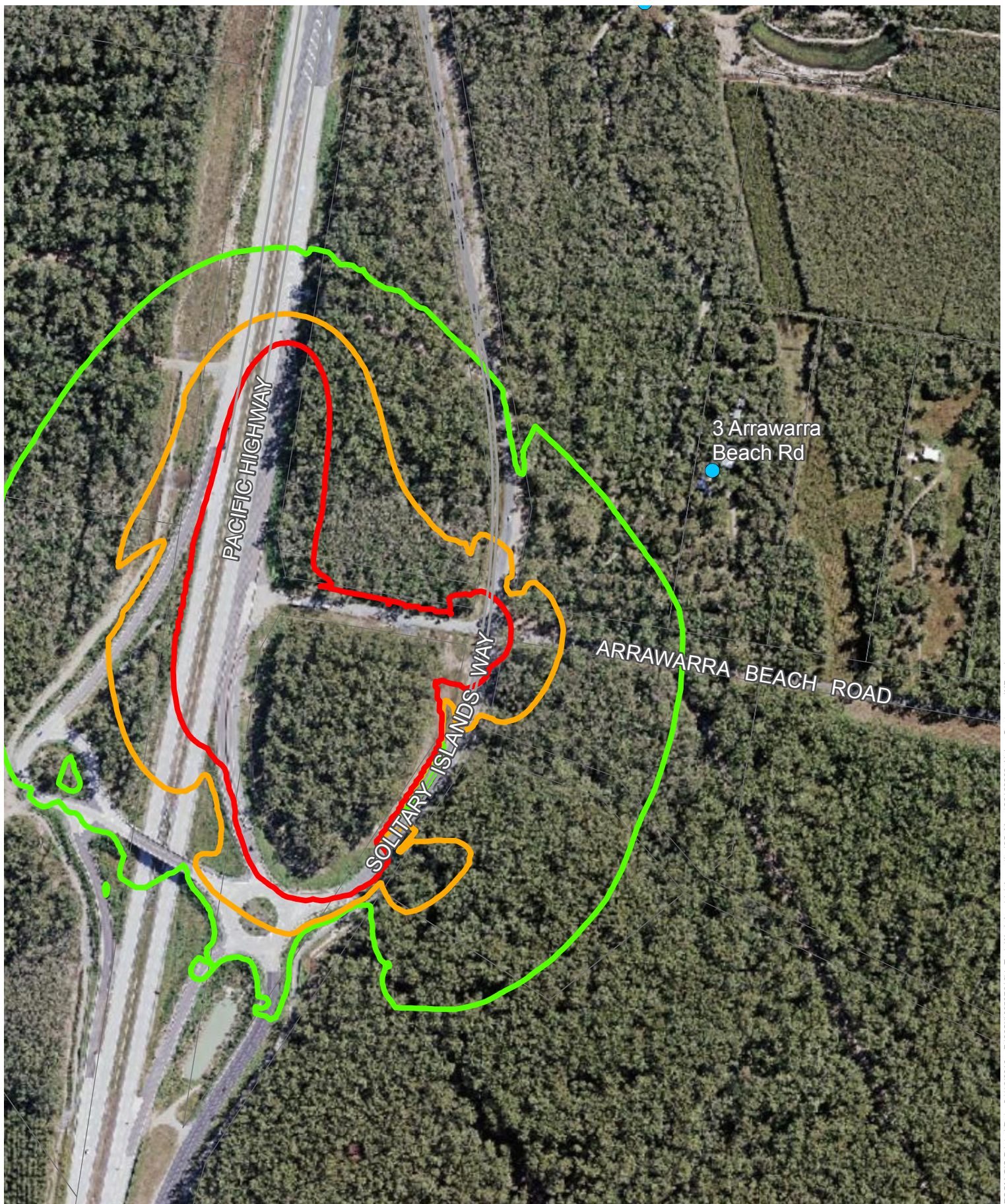


0 50 100 200 m

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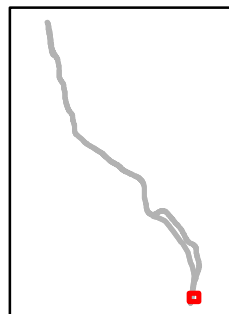
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W2G - Arrawarra Rest Area - Daytime - Neutral

Sound Pressure Level, L_{Aeq} dB(A)

- 40
- 45
- 50



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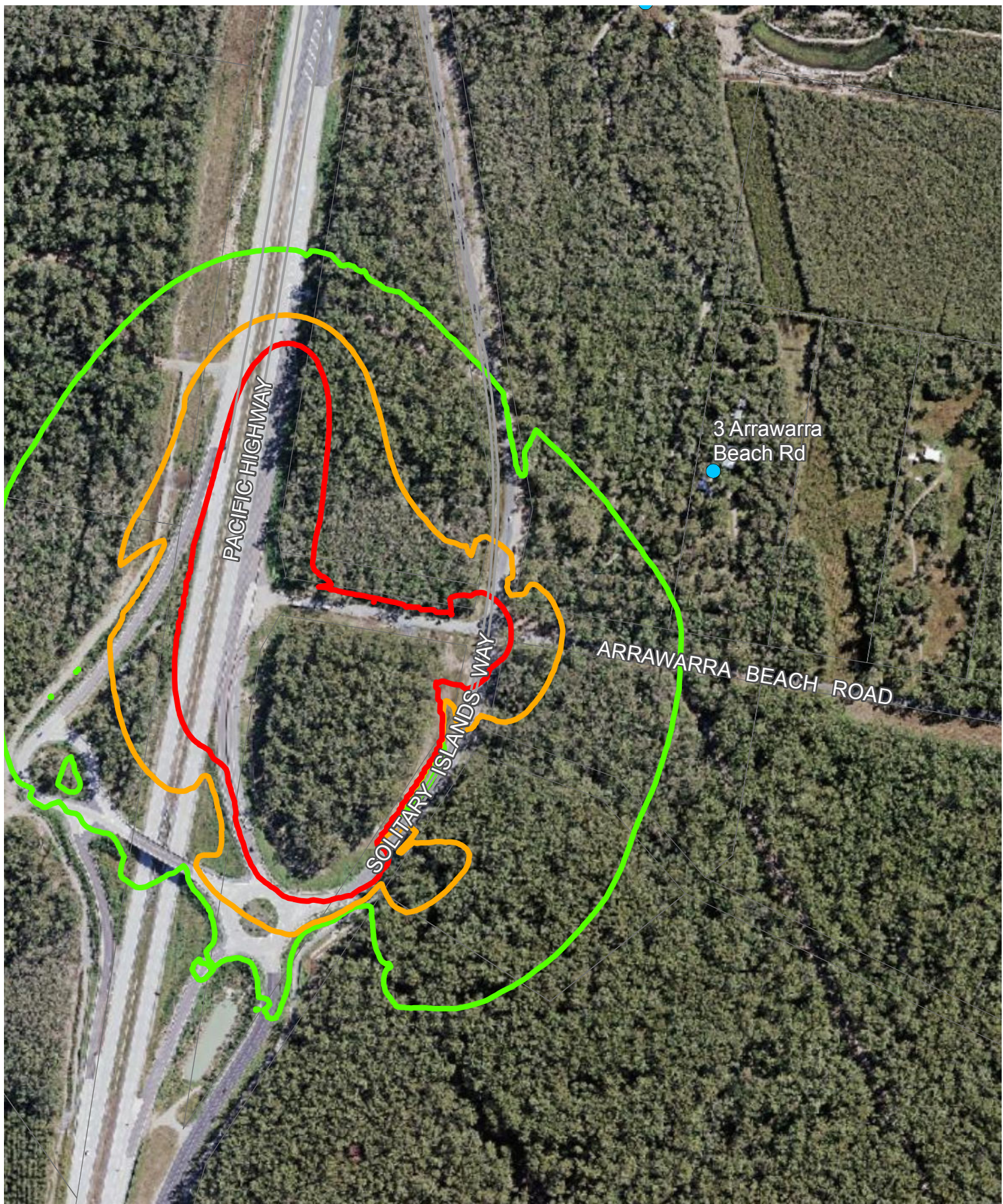
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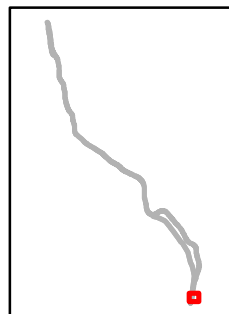
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W2G - Arrawarra Rest Area - Night-time - Neutral

Sound Pressure Level, L_{Aeq} dB(A)

- 40
- 45
- 50



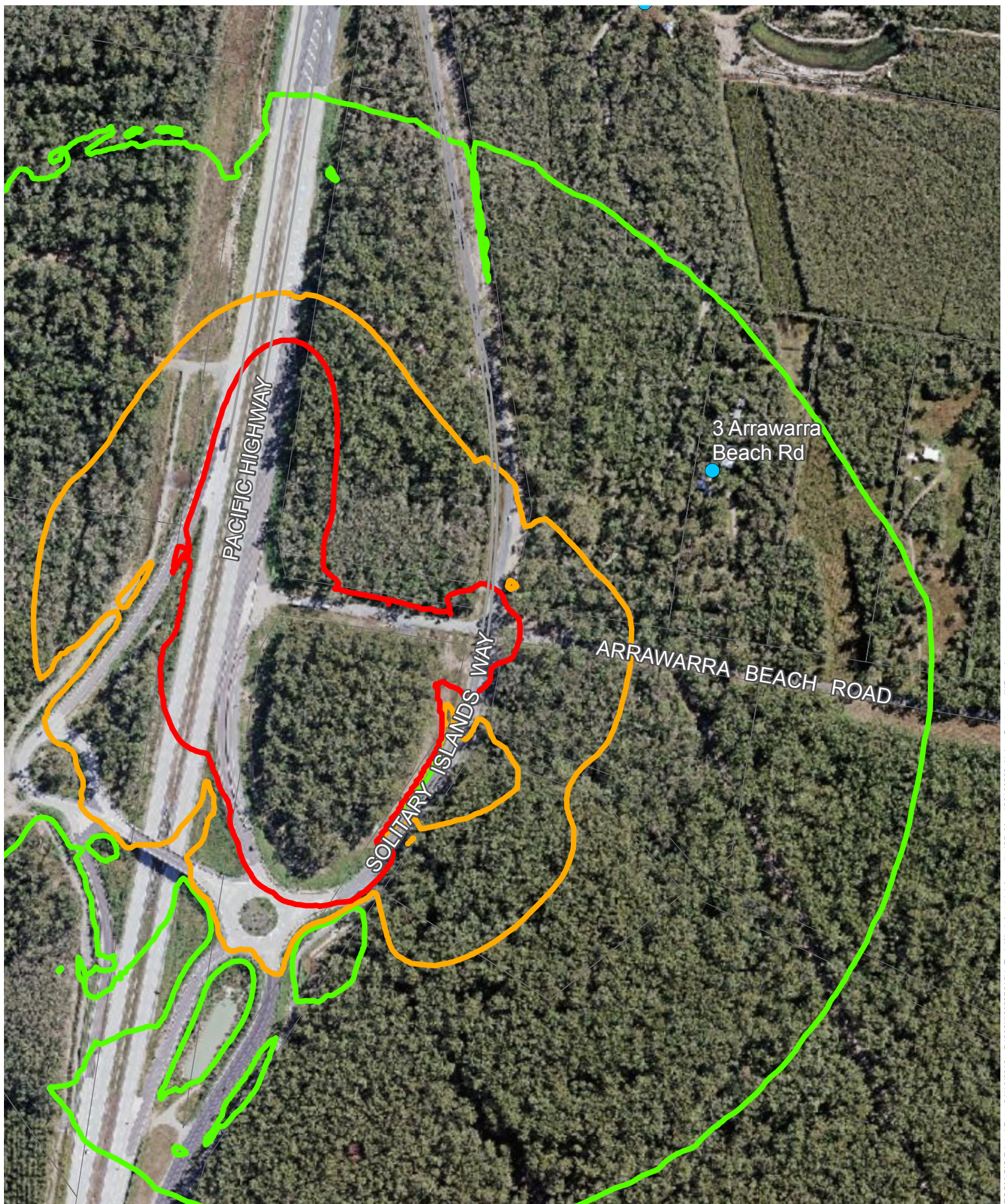
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0 50 100 200 m

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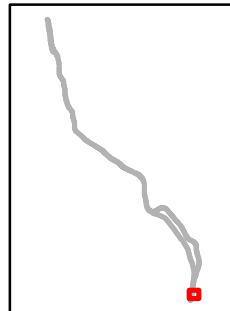
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W2G - Arrawarra Rest Area - Daytime - Wind 3m/s

Sound Pressure Level, L_{Aeq} dB(A)

- 40
- 45
- 50



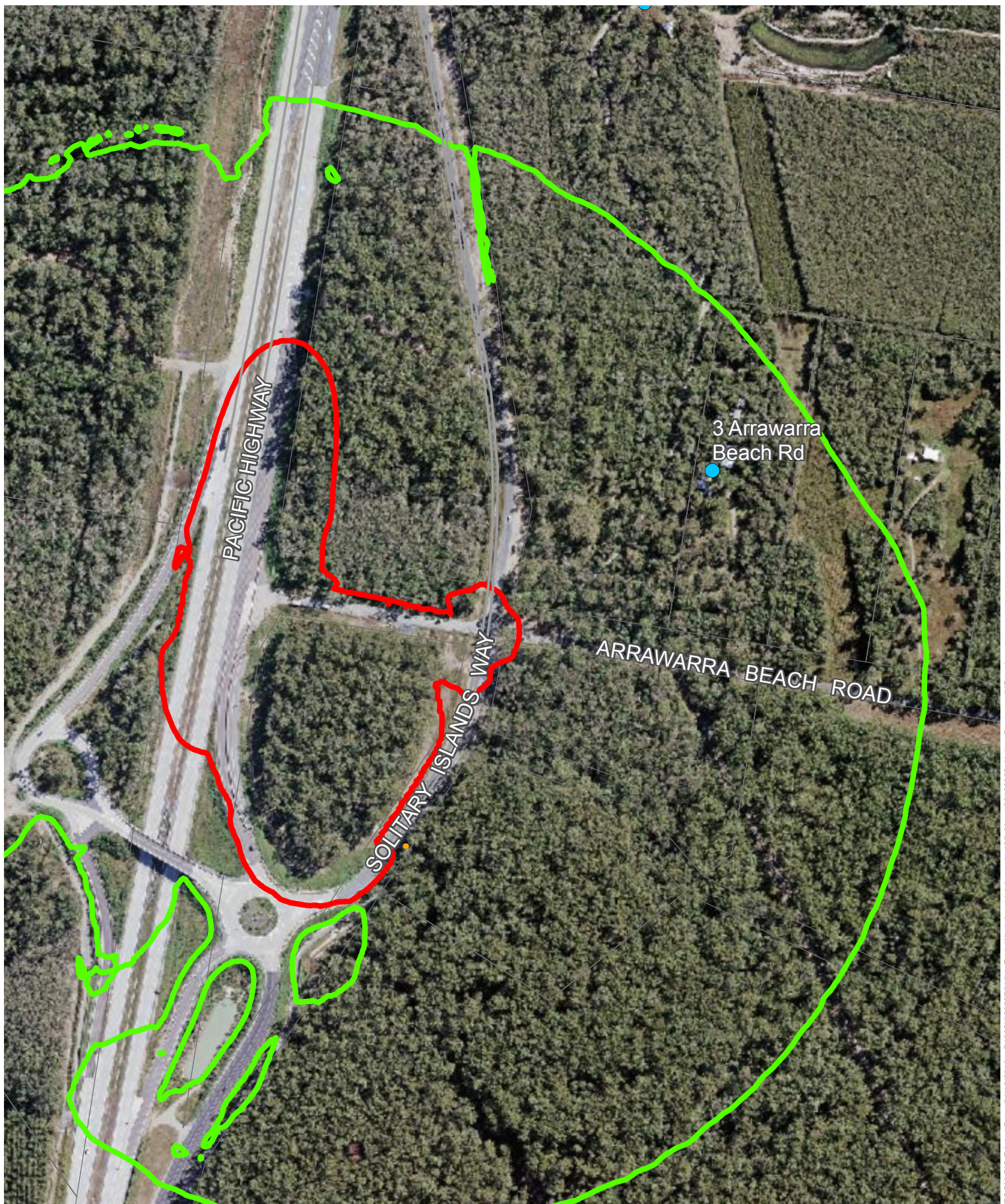
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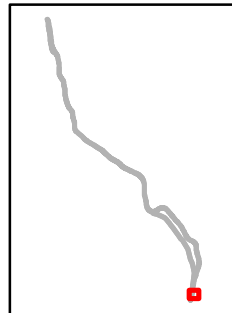
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W2G - Arrawarra Rest Area - Night-time - Wind 3m/s

Sound Pressure Level, L_{Aeq} dB(A)

- 40
- 45
- 50



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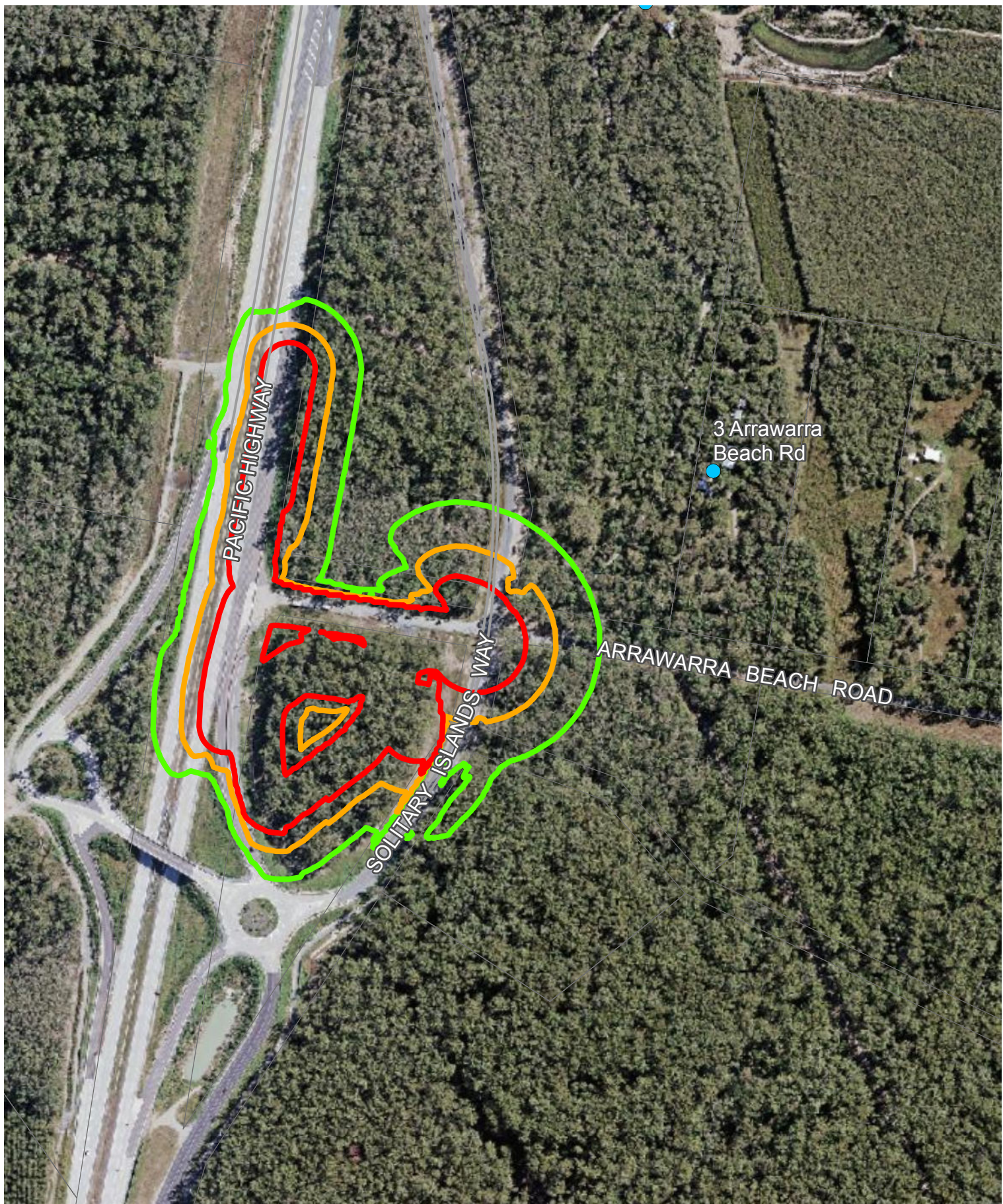
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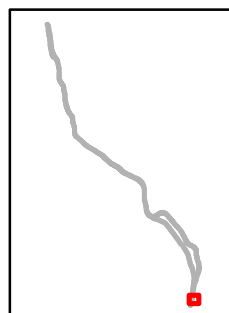
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W2G - Arrawarra Rest Area - Night-time - Max Noise

Sound Pressure Level, $L_{A\text{Max}}$ dB(A)

- 55
- 60
- 65



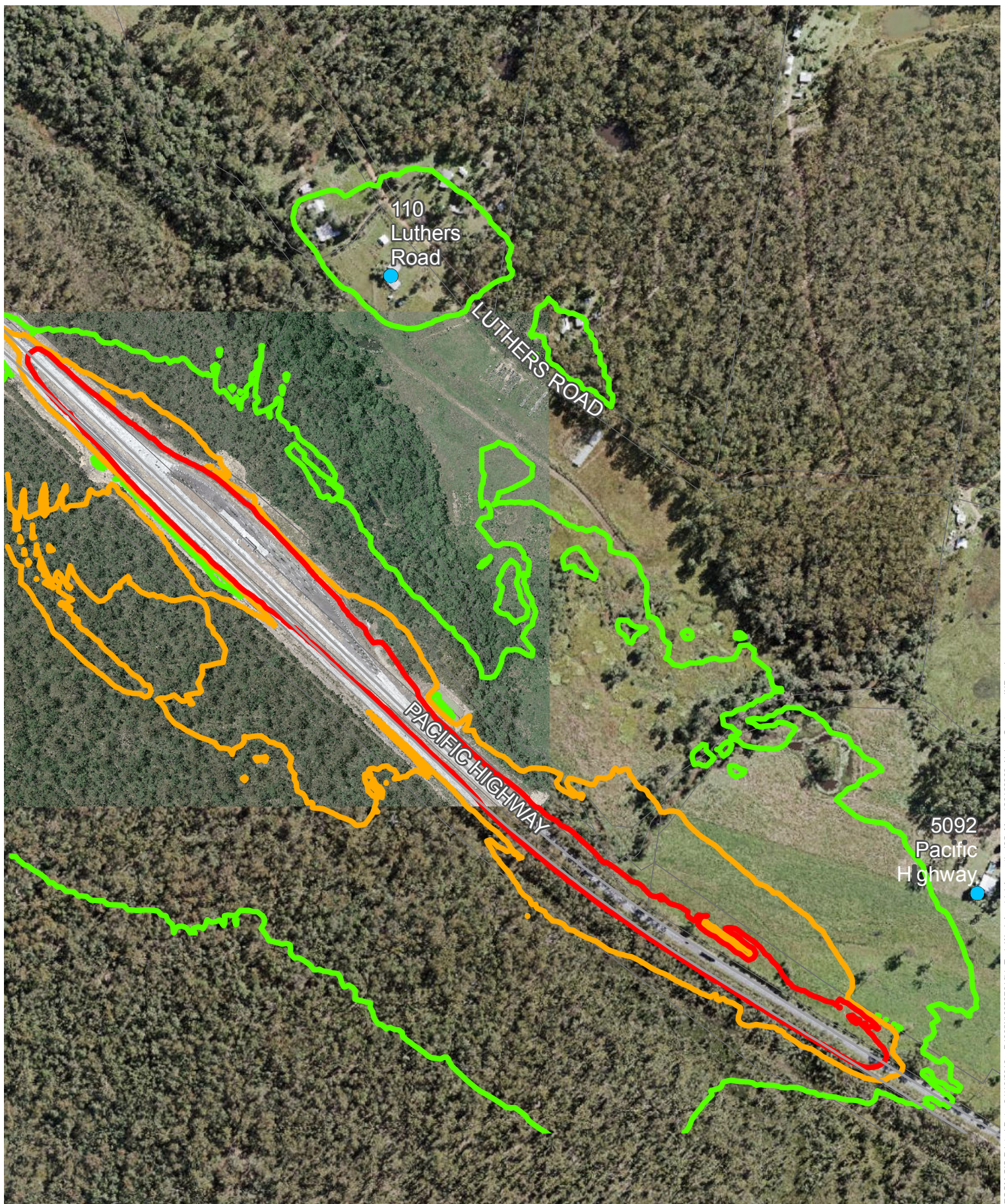
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0 50 100 200 m

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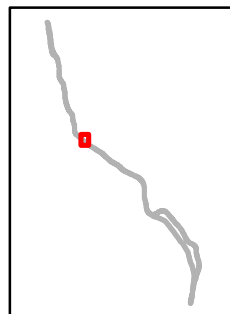
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W2G - Truck Inspection Bay - Night-time - Neutral

Sound Pressure Level, L_{Aeq} dB(A)

- 40
- 45
- 50



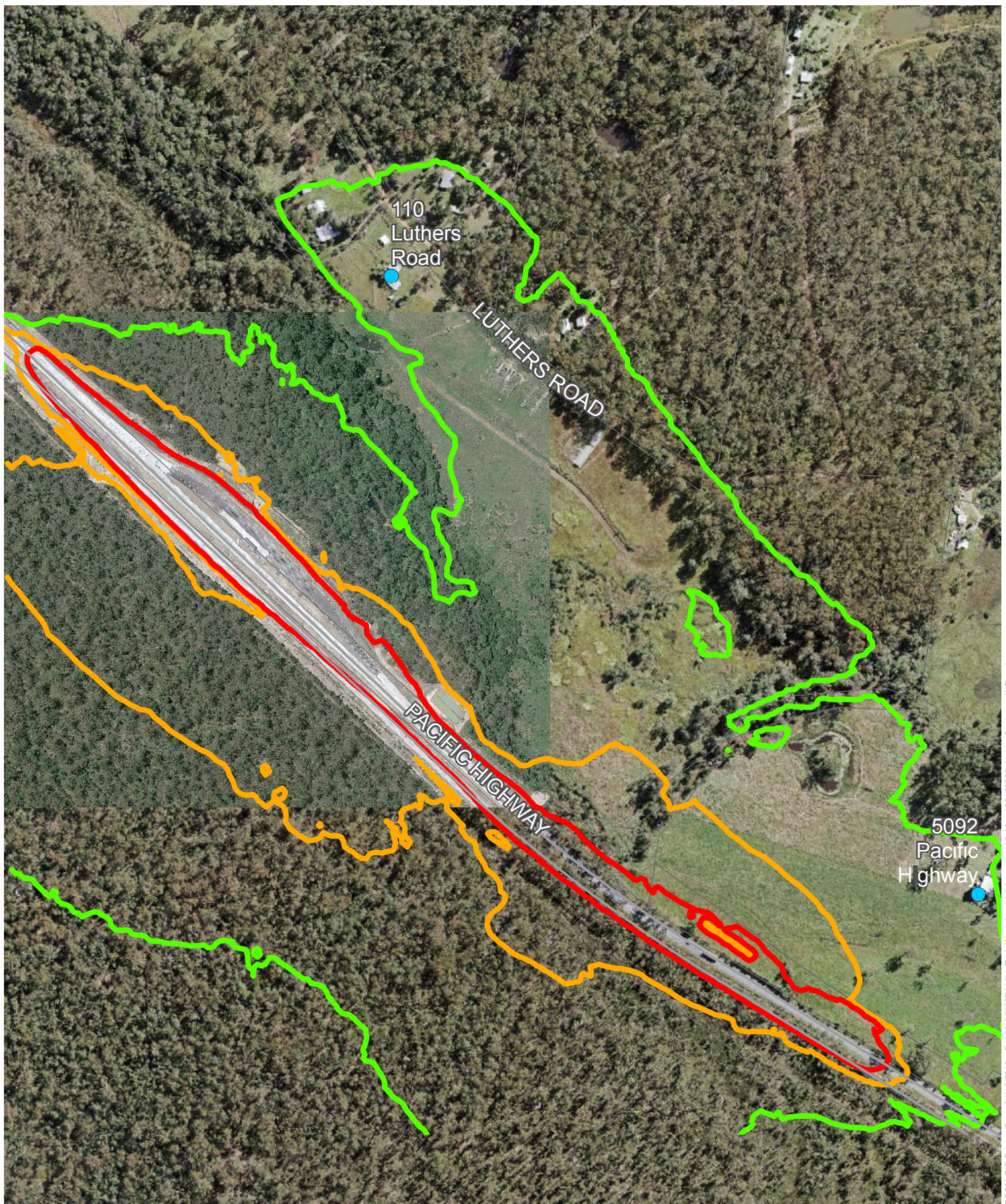
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0 75 150 300 m

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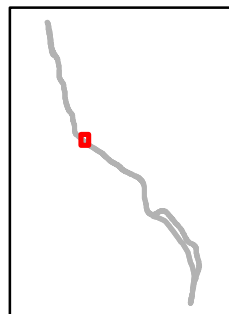
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W2G - Truck Inspection Bay - Night-time - Wind 3 m/s

Sound Pressure Level, L_{Aeq} dB(A)

- 40
- 45
- 50



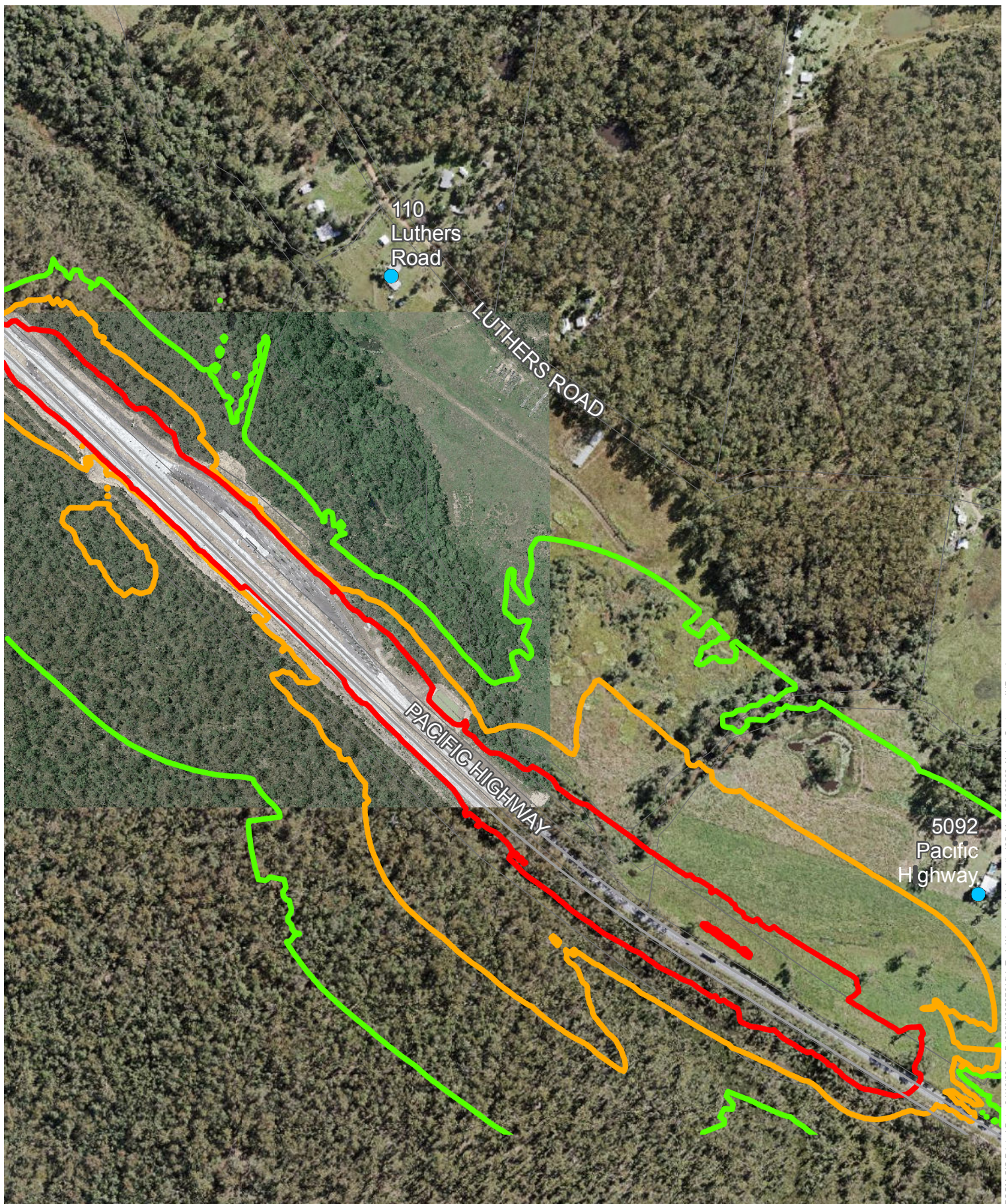
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0 75 150 300
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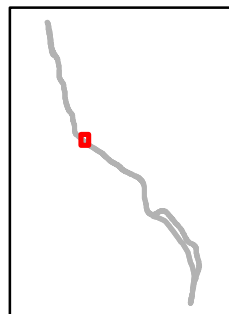
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W2G - Truck Inspection Bay - Night-time - Max Noise

Sound Pressure Level, $L_{A_{Max}}$ dB(A)

- 55
- 60
- 65



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0 75 150 300 m

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Appendix G

Recommended Property Treatments

Appendix G Recommended Property Treatments

Receiver	Address / Lot DP	Facade	RNP criteria exceeded	Increase > 2 dB over existing noise levels	Acute noise levels	Consid-eration of Mitigation	Treatment Type
451	4149 Pacific Highway Dirty Creek Lot 2 DP710318	SW	No	No	No	No	-
		SE	Yes	Yes	Yes	Yes	Type 2
		NE	Yes	Yes	Yes	Yes	Type 3
		NW	Yes	Yes	Yes	Yes	Type 2
455	12 Flinty Rd, Dirty Creek Lot 201 DP1183461	S	Yes	Yes	No	Yes	Type 2
		E	Yes	No	No	No	-
		N	Yes	No	No	No	-
		W	Yes	No	No	No	-
664	5631 Pacific Highway Wells Crossing Lot 76 DP751380	N	Yes	No	Yes	Yes	Type 3
		N	Yes	No	Yes	Yes	Type 3
		W	No	No	No	No	-
		S	Yes	No	Yes	Yes	Type 2
		W	No	No	No	No	-
		S	Yes	No	Yes	Yes	Type 3
		E	Yes	No	Yes	Yes	Type 3
A1	3507 Pacific Hwy, Corindi Beach Lot 6 DP828411	W	Yes	Yes	No	Yes	Type 2
		S	Yes	No	No	No	-
		E	No	No	No	No	-
		N	Yes	No	No	No	-
A5	19 Alice Cl, Dirty Creek Lot 67 DP731384	SW	No	Yes	No	No	-
		SE	Yes	Yes	No	Yes	Type 2
		NE	Yes	Yes	No	Yes	Type 1
		NW	No	Yes	No	No	-



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