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Mount Pleasant Operation

A JOINT VENTURE WITH JCDA Japan Coal Development Australia



Appendix A

Noise and Blasting Assessment

ACOUSTICS AND AIR

MOUNT PLEASANT OPTIMISATION PROJECT

NOISE & BLASTING ASSESSMENT

REPORT NO. 15402-H
VERSION A

DECEMBER 2020

PREPARED FOR

MACH MOUNT PLEASANT OPERATIONS
SUITE 1, LEVEL 3, 426 KING STREET
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WILKINSON MURRAY

DOCUMENT CONTROL

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1 INTRODUCTION

1.1 Overview of the Mount Pleasant Operation

The Mount Pleasant Operation is an open cut coal mine and associated infrastructure, located approximately 3 kilometres (km) north-west of Muswellbrook in the Upper Hunter Valley of New South Wales (NSW) (Figure 1-1).

MACH Mount Pleasant Operations Pty Ltd (ACN 625 627 723) is the manager of the Mount Pleasant Operation as agent for and on behalf of the unincorporated Mount Pleasant Joint Venture between MACH Energy Australia Pty Ltd (MACH Energy) (95 per cent [%] owner) and J.C.D. Australia Pty Ltd (5% owner)[1].

This Noise and Blasting Assessment forms part of an Environmental Impact Statement (EIS) prepared to accompany a Development Application made for the Mount Pleasant Optimisation Project (the Project) in accordance with Part 4 of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act).

The Project proposes extraction of additional coal reserves within Mount Pleasant Operation Mining Leases (MLs) and an increase in the rate of coal extraction without significantly increasing the total disturbance footprint. The extraction of additional Project coal reserves would be supported by the use and augmentation of existing and approved infrastructure at the Mount Pleasant Operation.

A glossary of terms and definitions is provided as Appendix A of this report.

1.2 Objectives of this Study

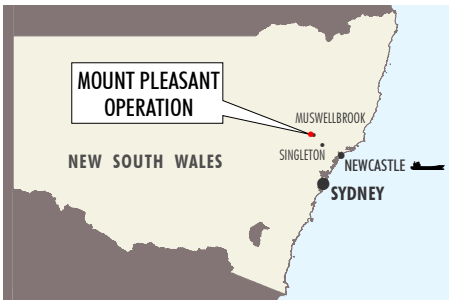
The primary objective of this study is to assess the potential noise and blasting impacts associated with the Project by addressing the Secretary's Environmental Assessment Requirements (SEARs) issued by the NSW Department of Planning, Industry and Environment (DPIE) on 17 February 2020. Relevant sections of the SEARs are outlined as follows:

- ***Noise & Blasting*** *– including:*
  - *a detailed assessment of the likely construction, operational and off- site transport noise impacts of the development in accordance with the Interim Construction Noise Guideline, NSW Noise Policy for Industry and the NSW Road Noise Policy respectively, and having regard to the Voluntary Land Acquisition and Mitigation Policy;*
  - *proposed blasting hours, frequency and methods; and*
  - *a detailed assessment of the likely blasting impacts of the development (including ground vibrations, overpressure, flyrock, visual and fumes/odour) on people, animals, buildings/structures, infrastructure and significant natural features, having regard to the relevant ANZEC guidelines;*

…

[1] Throughout this report, MACH Mount Pleasant Operations Pty Ltd and the unincorporated Mount Pleasant Joint Venture will be referred to as MACH.





LEGEND

- Mining Operation
- Proposed Mining Operation (Application Lodged)
- Railway
- Local Government Boundary
- State Forest/Reserve
- National Parks and Wildlife Estate
- Mining Lease Boundary (Mount Pleasant Operation)

Source: NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Project Location

Figure 1-1

- ***Cumulative Impacts*** *– including a detailed assessment of the cumulative impacts of the development, in combination with other existing and approved mining projects in the locality, with a particular focus on air quality, noise, traffic and social impacts, as well as impacts on water resources.*

This study also addresses comments made by the Environment Protection Authority (EPA) for input into the SEARs on 15 January 2020:

2. Noise

- *Identify the existing noise environment and identify applicable noise goals in line with relevant guidance/standards; and*
- *Identify potential noise and vibration sources and impacts during both construction and operational stages and identify best practice mitigation measures (pollution control) and strategies to be incorporated for both stages to minimise noise and vibration emissions/impacts (with proposed timing), including validation monitoring, in line with relevant guidance/standards.*

Note: this will require a detailed Noise Impact Assessment to be completed.

1.3 Policies & Guidelines

The assessment is based on the following NSW noise policies and guidelines:

- Australian and New Zealand Environment Council (1990) *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration*.
- Department of Environment, Climate Change & Water (2011) *NSW Road Noise Policy (RNP).*
- Department of Environment and Conservation (2011) *Assessing Vibration: a technical guideline.*
- EPA (2013) *Rail Infrastructure Noise Guideline (RING).*
- NSW Department of Planning & Environment (DP&E) (2018) *Voluntary Land Acquisition and Mitigation Policy (VLAMP).*
- NSW EPA (2017) *NSW Noise Policy for Industry (NPfI).*

2 PROJECT OVERVIEW

2.1 Background

The Mount Pleasant Operation currently extracts coal within MLs 1645, 1709 and 1750 using open cut mining methods (i.e. truck and shovel operations). The Mount Pleasant Operation produces thermal coal and has an approved operational capacity of up to 10.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal until 22 December 2026 under Development Consent DA 92/97 (as modified).

The approved mine includes a Coal Handling and Preparation Plant (CHPP) and a rail loop and spur, conveyor and load-out facility connecting the mine to the Muswellbrook–Ulan Rail Line. Transport of product coal to the Port of Newcastle for export or to domestic customers for use in electricity generation is then undertaken by rail.

The Project includes the extraction of additional coal, optimising mining within the existing MLs (Figure 2-1), and extension of the life of the Mount Pleasant Operation.

MACH is seeking development consent for State Significant Development application SSD-10418 under Division 4.7 of Part 4 of the EP&A Act for the Project.

2.2 Project Objectives

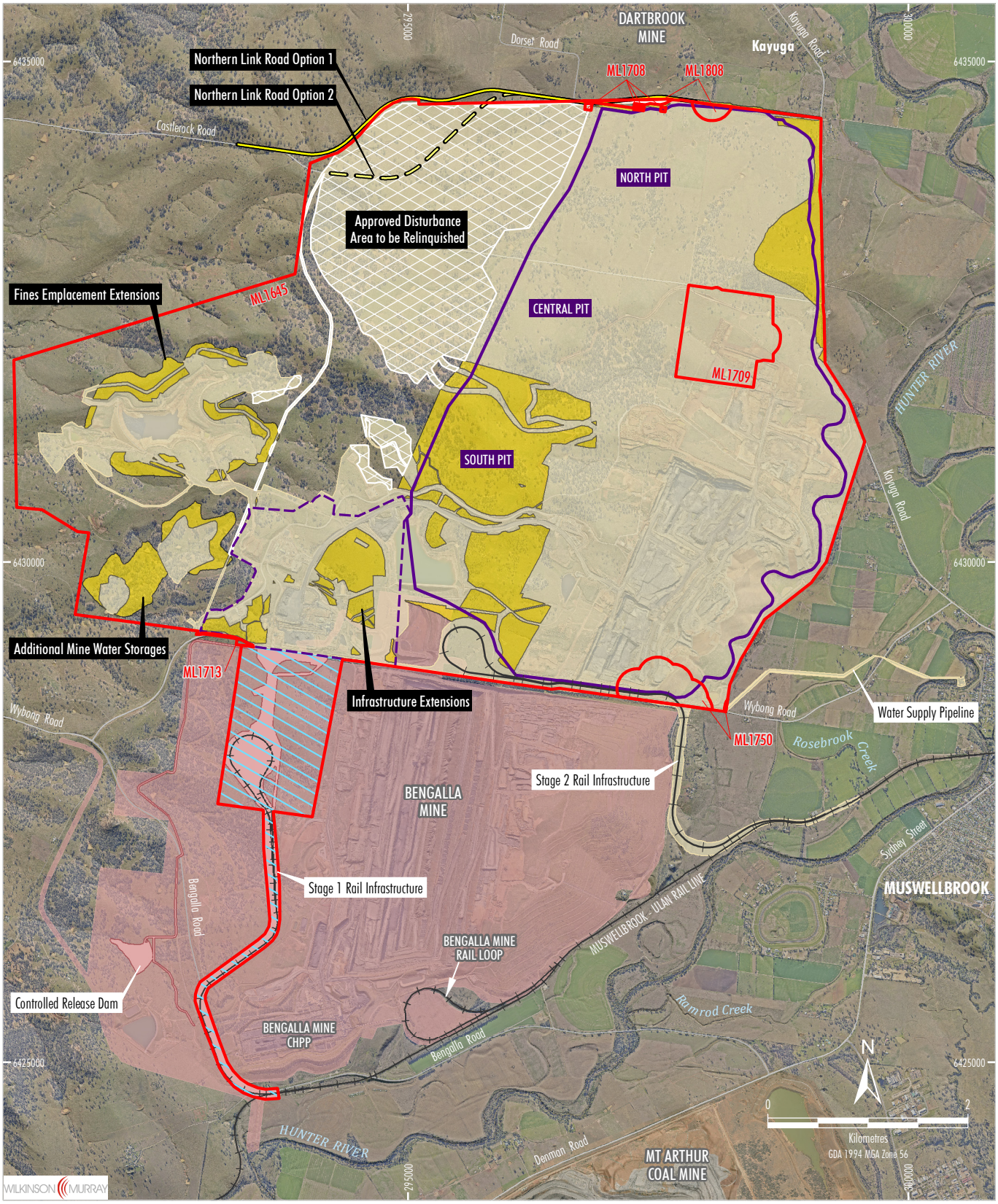
The Project would recover approximately 406 million tonnes (Mt) of ROM coal from the target coal seams, without significantly increasing the approved mine disturbance footprint. In total, the Mount Pleasant Operation incorporating the Project would recover approximately 444 Mt of ROM coal. This ROM coal would be processed at the Mount Pleasant Operation CHPP to produce thermal coal products. These products would be transported via the Muswellbrook–Ulan Rail Line to the Port of Newcastle for export, or to domestic customers for use in electricity generation.

The proposed life of the Project is approximately 26 years and would extend the life of the approved Mount Pleasant Operation by approximately 22 years (i.e. providing for open cut mining operations to 22 December 2048), maintaining continuity of open cut mining and facilitating the continuation and expansion of benefits derived from the existing approved Mount Pleasant Operation.

2.3 Project Summary

The Project would include the following development:

- increased open cut extraction within Mount Pleasant Operation MLs by mining of additional coal reserves, including lower coal seams in North Pit;
- a staged increase in extraction, handling and processing of ROM coal up to 21 Mtpa (i.e. progressive increase in ROM coal mining rate from 10.5 Mtpa over the Project life);
- staged upgrades to the existing CHPP and coal handling infrastructure to facilitate the handling and processing of additional coal;



LEGEND

Existing Mine Elements

- Mining Lease Boundary (Mount Pleasant Operation)
- Approximate Extent of Existing/Approved Surface Development (DA92/97) [1]
- Infrastructure to be removed under the Terms of Condition 37, Schedule 3 (DA92/97)
- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Existing/Approved Mount Pleasant Operation Infrastructure within Bengalla Mine Approved Disturbance Boundary (SSD-5170) [1]

Additional/Revised Project Elements

- Approved Disturbance Area to be Relinquished [2]
- Approximate Additional Disturbance of Project Extensions [1]
- Northern Link Road Option 1 Centreline [3]
- Northern Link Road Option 2 Centreline
- Approximate Extent of Project Open Cut and Waste Rock Emplacement Landforms
- Revised Infrastructure Area Envelope

NOTES

1. Excludes some incidental Project components such as water management infrastructure, access tracks, topsoil stockpiles, power supply, temporary offices, other ancillary works and construction disturbance.
2. Subject to detailed design of Northern Link Road alignment.
3. Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020); Department of Planning and Environment (2016) Orthophoto: MACH (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Project General Arrangement

Figure 2-1

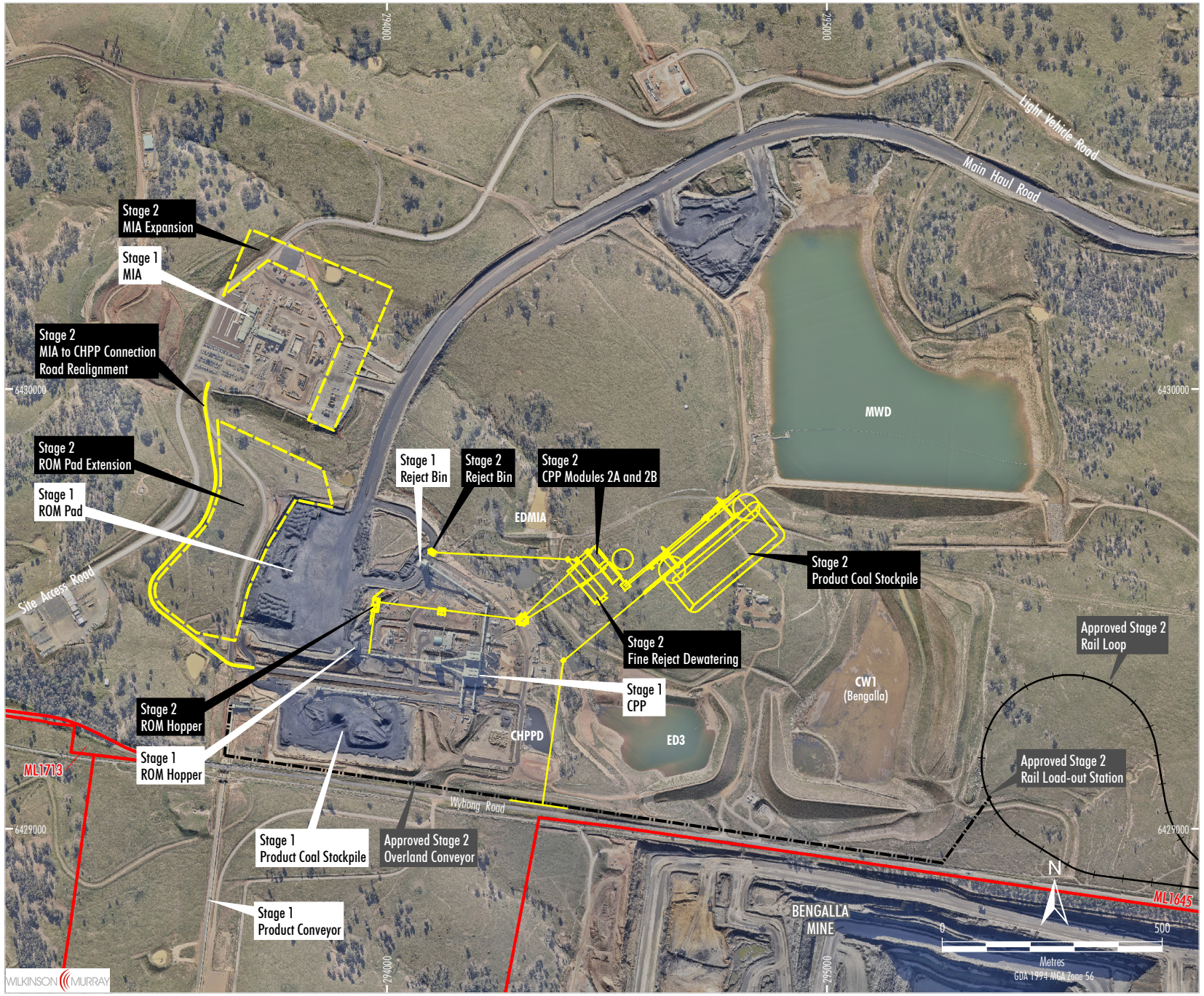
- rail transport of up to approximately 17 Mtpa of product coal to domestic and export customers;
- upgrades to workshops, electricity distribution and other ancillary infrastructure;
- existing infrastructure relocations to facilitate mining extensions (e.g. local roads, powerlines and water pipelines);
- construction and operation of new water management and water storage infrastructure in support of the mine;
- additional reject dewatering facilities to allow co-disposal of fine rejects with waste rock as part of ROM waste rock operations;
- development of an integrated waste rock emplacement landform that incorporates geomorphic drainage design principles for hydrological stability, and varying topographic relief to be more natural in exterior appearance;
- construction and operation of new ancillary infrastructure in support of mining;
- extension to the time limit on mining operations to 22 December 2048;
- an average operational workforce of approximately 600 people, with a peak of approximately 830 people;
- ongoing exploration activities; and
- other associated infrastructure, plant, equipment and activities.

2.4 Project General Arrangement

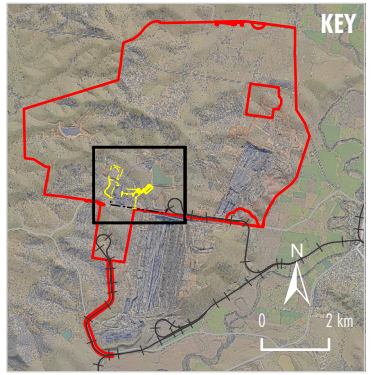
Figures 2-1 and 2-2 provide the general arrangement of the Project and the indicative material handling and mine infrastructure area layout. A detailed description of the Project is provided in Section 3 in the main text of the EIS.

Seven operational scenarios of the Project were assessed for potential noise impacts:

- 2026 – representative of the initial stage of the Project where the coal production rate is identical to that of the approved operations (i.e. 10.5 Mtpa of ROM coal). Mining occurs in the easternmost part of the Project open cut area, more proximal to the township of Muswellbrook.
- 2028 – representative of the first year with increased production rate of 15.75 Mtpa and the CHPP Stage 2a upgrade in place, with mining operations closest to the village of Aberdeen.
- 2031 – representative of the Mount Pleasant Operation with the same coal production rate as 2028, but with its active disturbance area situated further west and receivers benefiting from further shielding from the Eastern Out-of-Pit Emplacement.
- 2034 – representative of the first year with the Project's maximum production rate of 21 Mtpa, maximum rail transport rate of approximately 17 Mtpa of product coal, the CHPP Stage 2b upgrade in place and the Eastern Out-of-Pit Emplacement is extensive.



MAC-18-02_SSD_EIS_App Noise_205B



LEGEND
Mining Lease Boundary
(Mount Pleasant Operation)

Source: MACH (2020); NSW Spatial Services (2020)
Orthophoto: MACH (July 2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Indicative Materials Handling and Mine Infrastructure Area Layout

Figure 2-2

- 2041 – representative of the Mount Pleasant Operation with the same coal production rate as 2034 but with a considerable increase in waste rock removal volumes when compared with the previous assessed year.
- 2044 – representative of the first year with a reduced coal production rate when compared with the Project's maximum production rate (despite maintaining similar waste rock removal volumes when compared with 2041), with a focus on potential impacts to the south-west and north-west receivers.
- 2047 – representative of a further reduction in coal production rates when compared with 2044, with a focus on potential impacts to the south-west and north-west receivers.

The operational scenarios were selected in consideration of maximum potential noise emissions (e.g. to account for the maximum mobile equipment fleet) and the location of the active disturbance area to evaluate the potential impacts at the nearest privately-owned receivers over the life of the Project.

The selection of scenarios considered the progressive shift of the active disturbance area in the western direction and care was given to address potential noise impacts at noise-sensitive receivers in all directions, with a focus on the populated areas in and around the township of Muswellbrook and village of Aberdeen. Due to the staged nature of the increase in extraction, handling and processing of ROM coal over the Project life as the active disturbance area gradually progresses in the western direction, the selected operational scenarios include the first year of the two incremental increases in production rate, to capture the potential worst-case noise impacts at the Muswellbrook township to the east and village of Aberdeen to the north.

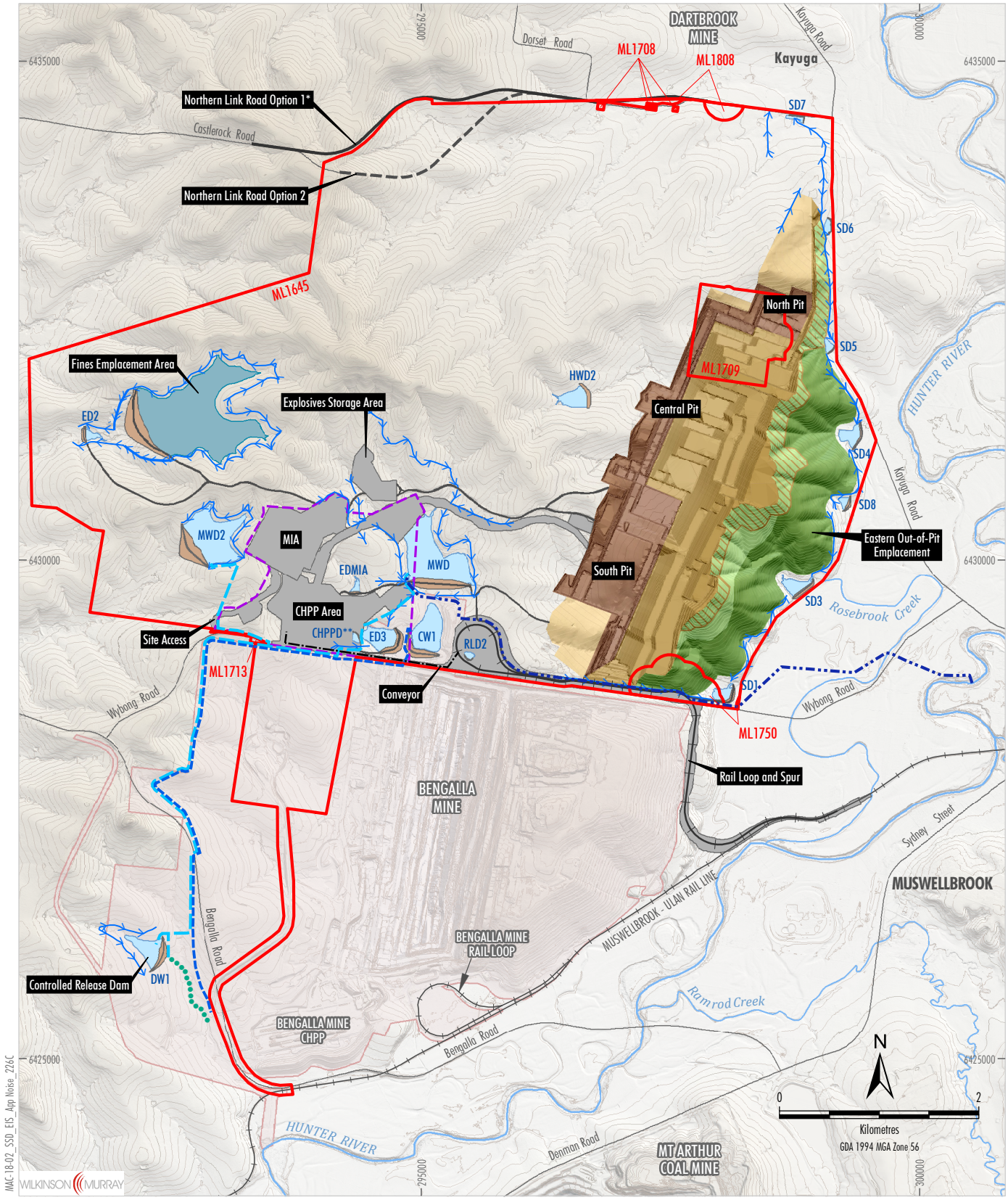
Additional description of each operational scenario is provided in Section 6.1.1. General Project arrangements for 2026, 2028, 2031, 2034, 2041, 2044 and 2047 are shown on Figures 2-3 to 2-9, respectively.

These general arrangements are based on planned maximum production and mine progression. The mining sequence and rate of mining shown may vary to take into account localised geological features, coal market quality and volume requirements, mining economics and Project detailed engineering design.

The sequence of mining and/or the general arrangement may also be modified throughout the life of the operation to maintain compliance with the applicable noise and air quality criteria for sensitive receivers specified in any Development Consent for the Project.

The detailed mining sequence for any given period would be documented in the relevant Mining Operations Plan and Rehabilitation Management Plan (MOP).

The subsections below provide an overview of the Project, with a focus on those elements that are material from a noise and blasting assessment perspective.



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Revised Infrastructure Area Envelope
- Topsoil Stripping
- Active Mining
- Active Overburden Emplacement
- Initial Rehabilitation
- Established Rehabilitation
- Topsoil Stockpile
- Infrastructure and Borrow/Stockpile
- Key Surface Water Drain (Conceptual)
- Access Road
- Northern Link Road Option 1 Centreline*
- Northern Link Road Option 2 Centreline
- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection

Indicative Water Pipeline Alignment

- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

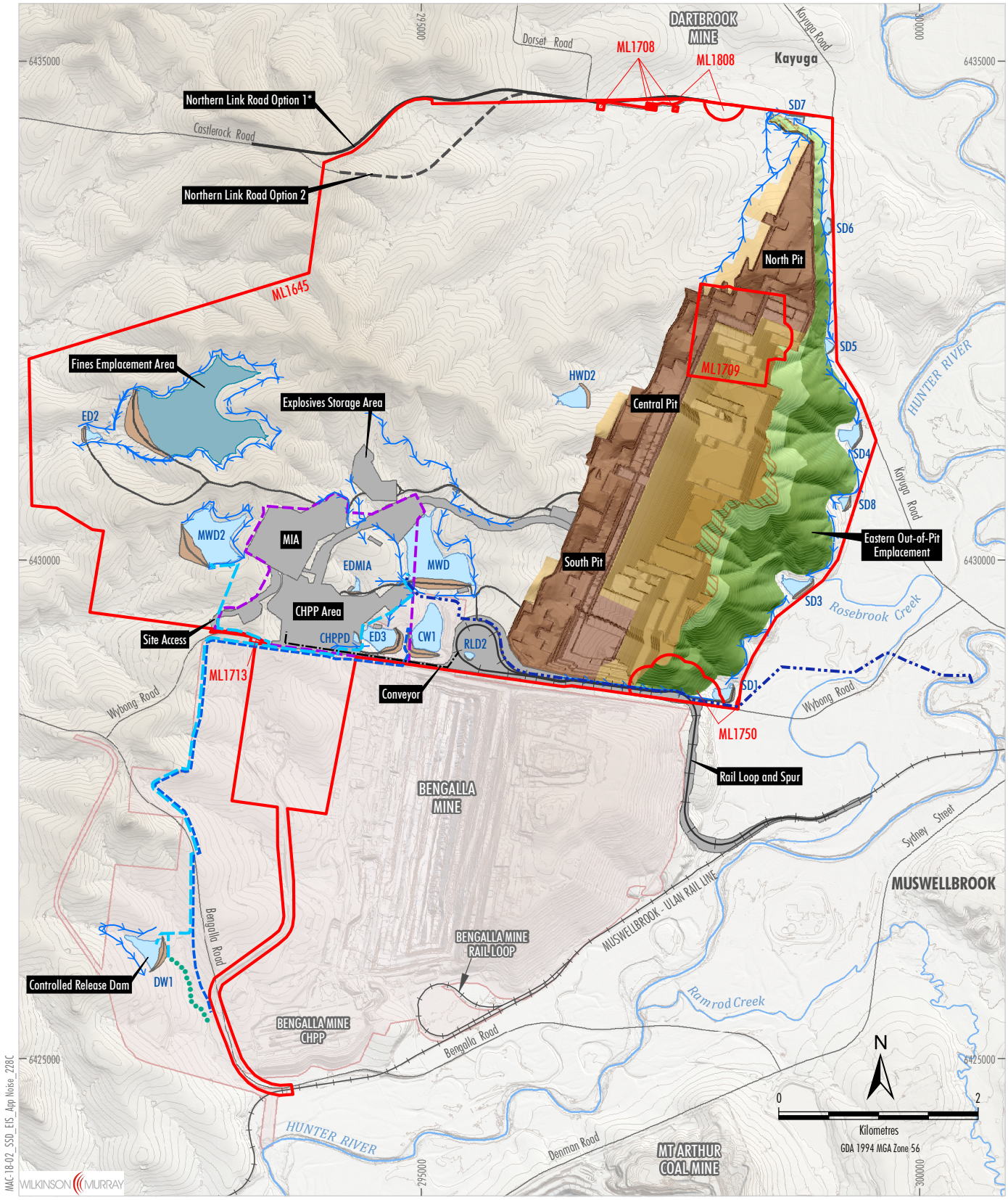
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Provisional General Arrangement 2026

Figure 2-3



MAC-18-02_SSD_EIS_App Noise_228C

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LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Revised Infrastructure Area Envelope
- Topsoil Stripping
- Active Mining
- Active Overburden Emplacement
- Initial Rehabilitation
- Established Rehabilitation
- Topsoil Stockpile
- Infrastructure and Borrow/Stockpile
- Key Surface Water Drain (Conceptual)
- Access Road
- Northern Link Road Option 1 Centreline*
- Northern Link Road Option 2 Centreline
- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection

Indicative Water Pipeline Alignment

- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

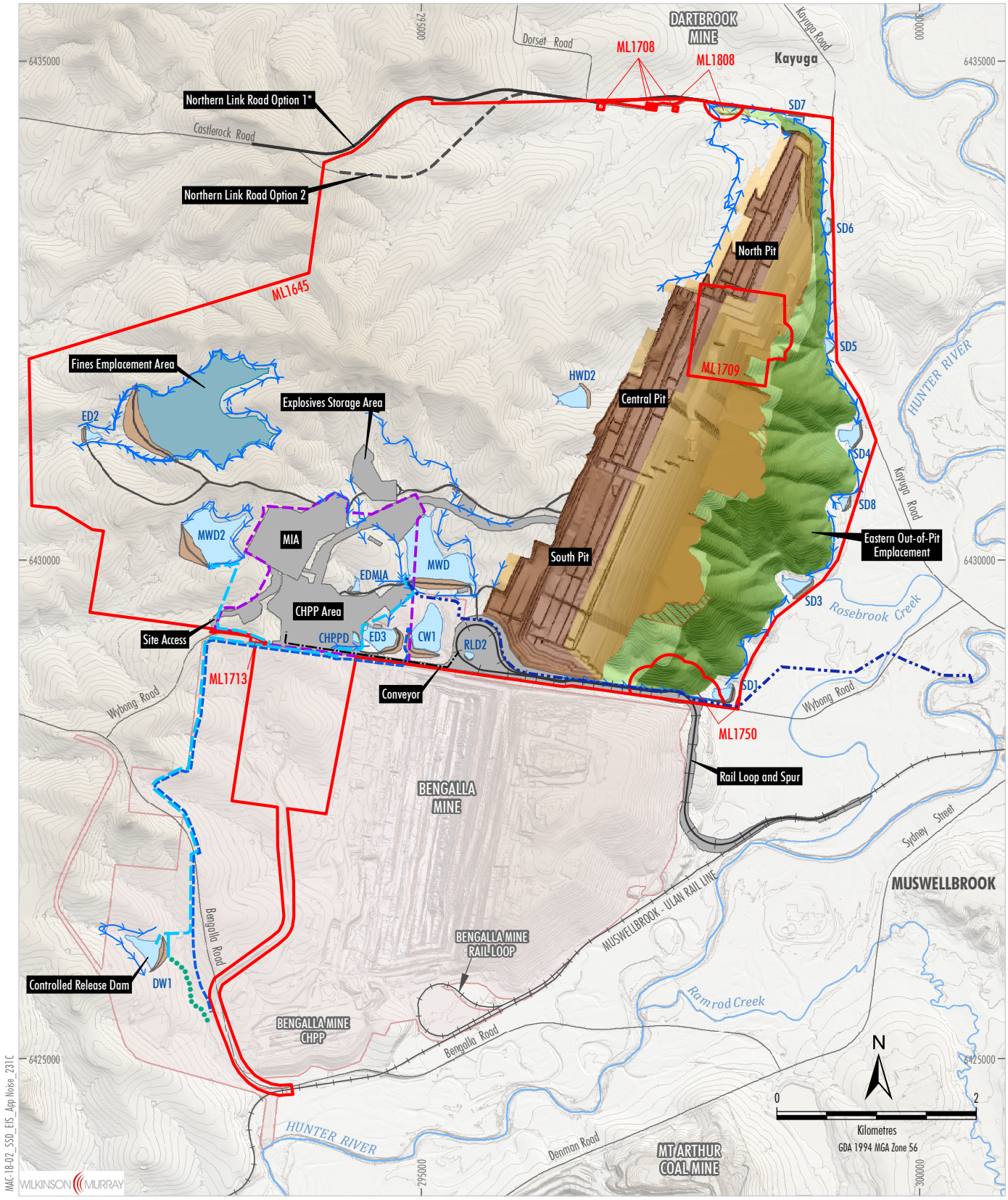
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Provisional General Arrangement 2028

Figure 2-4



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Revised Infrastructure Area Envelope
- Topsoil Stripping
- Active Mining
- Active Overburden Emplacement
- Initial Rehabilitation
- Established Rehabilitation
- Topsoil Stockpile
- Infrastructure and Borrow/Stockpile
- Key Surface Water Drain (Conceptual)
- Access Road
- Northern Link Road Option 1 Centreline*
- Northern Link Road Option 2 Centreline
- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection

Indicative Water Pipeline Alignment

- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

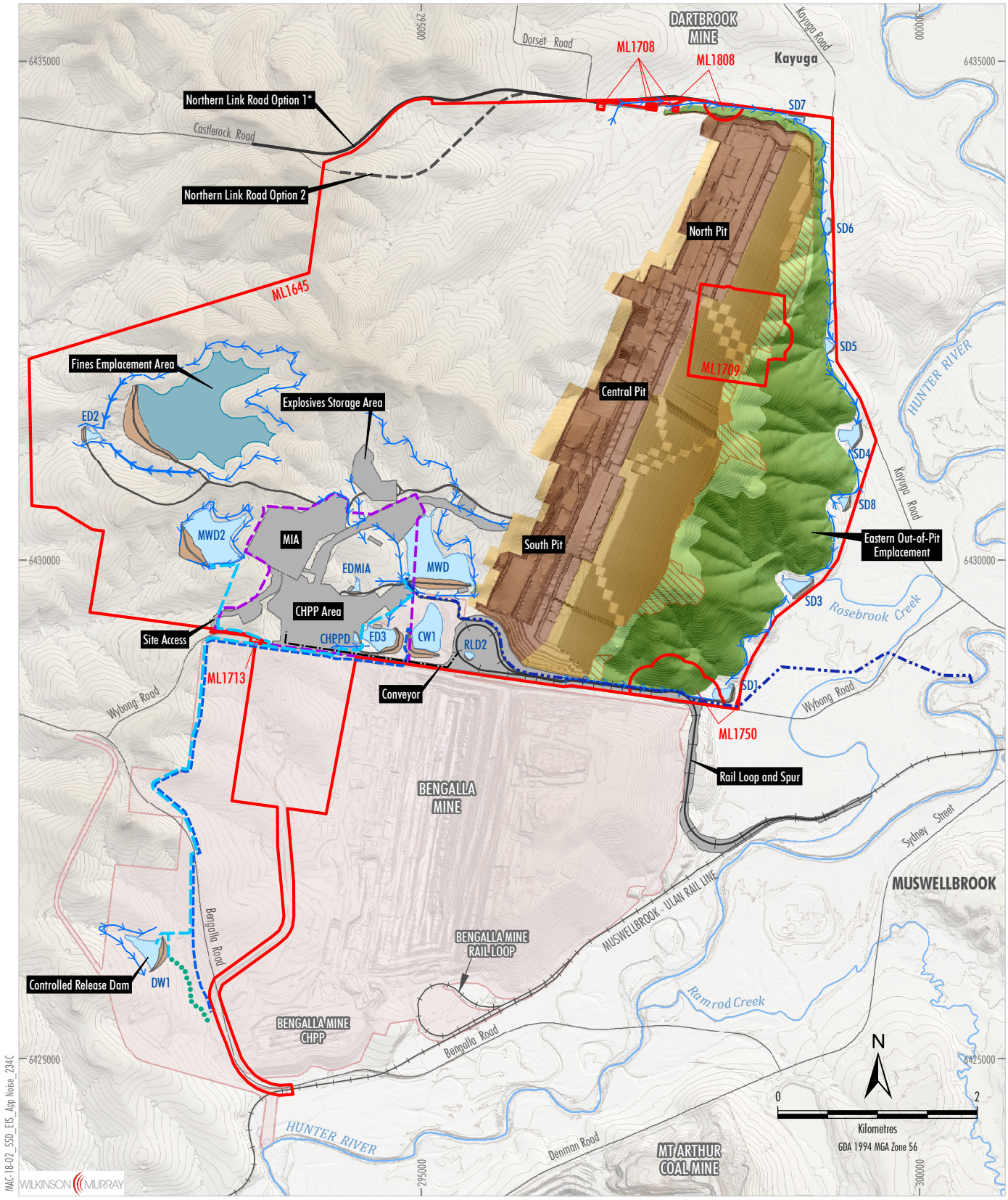
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Provisional General Arrangement 2031

Figure 2-5



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Revised Infrastructure Area Envelope
- Topsoil Stripping
- Active Mining
- Active Overburden Emplacement
- Initial Rehabilitation
- Established Rehabilitation
- Topsoil Stockpile
- Infrastructure and Borrow/Stockpile
- Key Surface Water Drain (Conceptual)
- Access Road
- Northern Link Road Option 1 Centreline*
- Northern Link Road Option 2 Centreline
- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection

Indicative Water Pipeline Alignment

- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

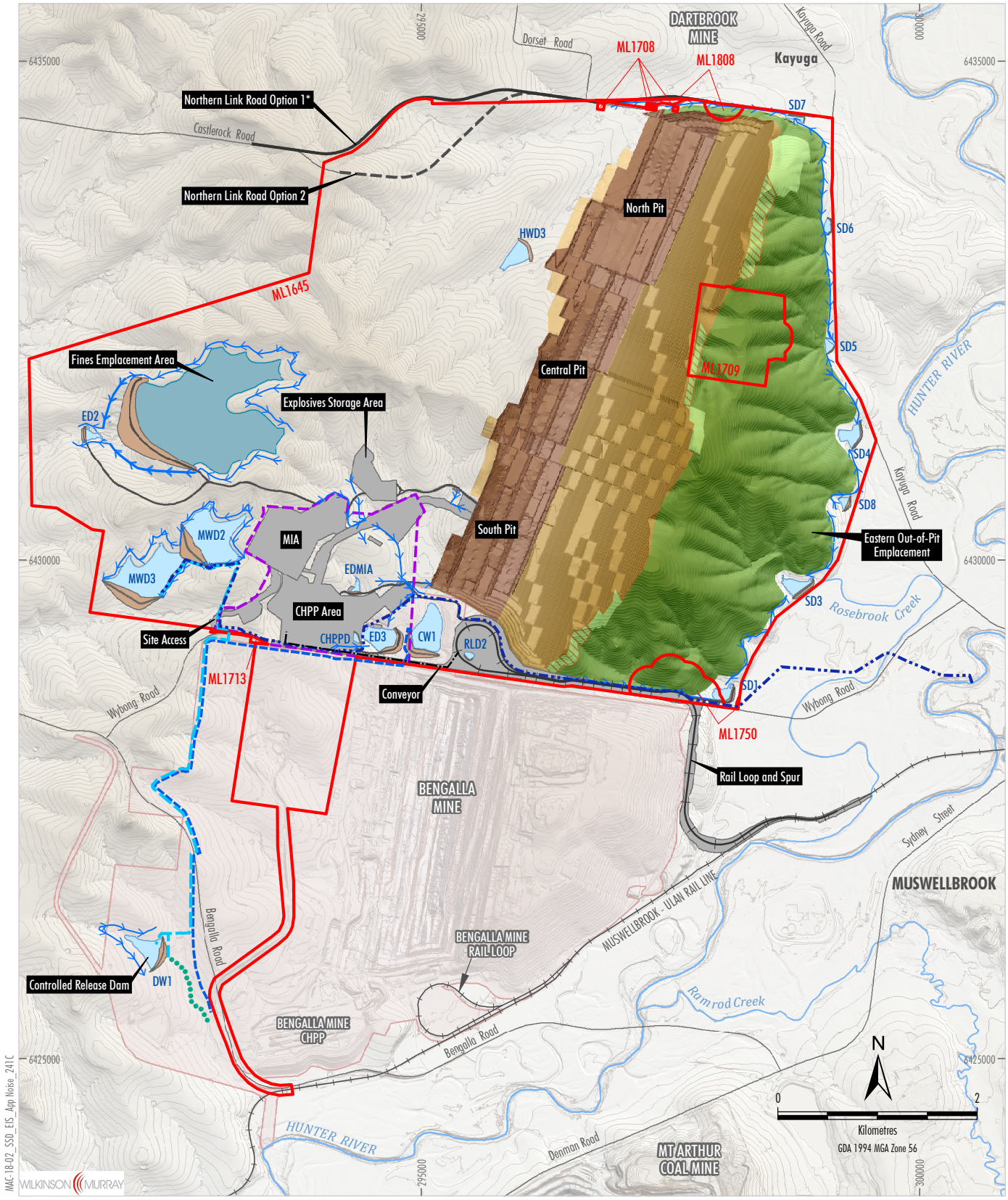
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Provisional General Arrangement 2034

Figure 2-6



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Revised Infrastructure Area Envelope
- Topsoil Stripping
- Active Mining
- Active Overburden Emplacement
- Initial Rehabilitation
- Established Rehabilitation
- Topsoil Stockpile
- Infrastructure and Borrow/Stockpile
- Key Surface Water Drain (Conceptual)
- Access Road
- Northern Link Road Option 1 Centreline*
- Northern Link Road Option 2 Centreline
- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection

Indicative Water Pipeline Alignment

- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

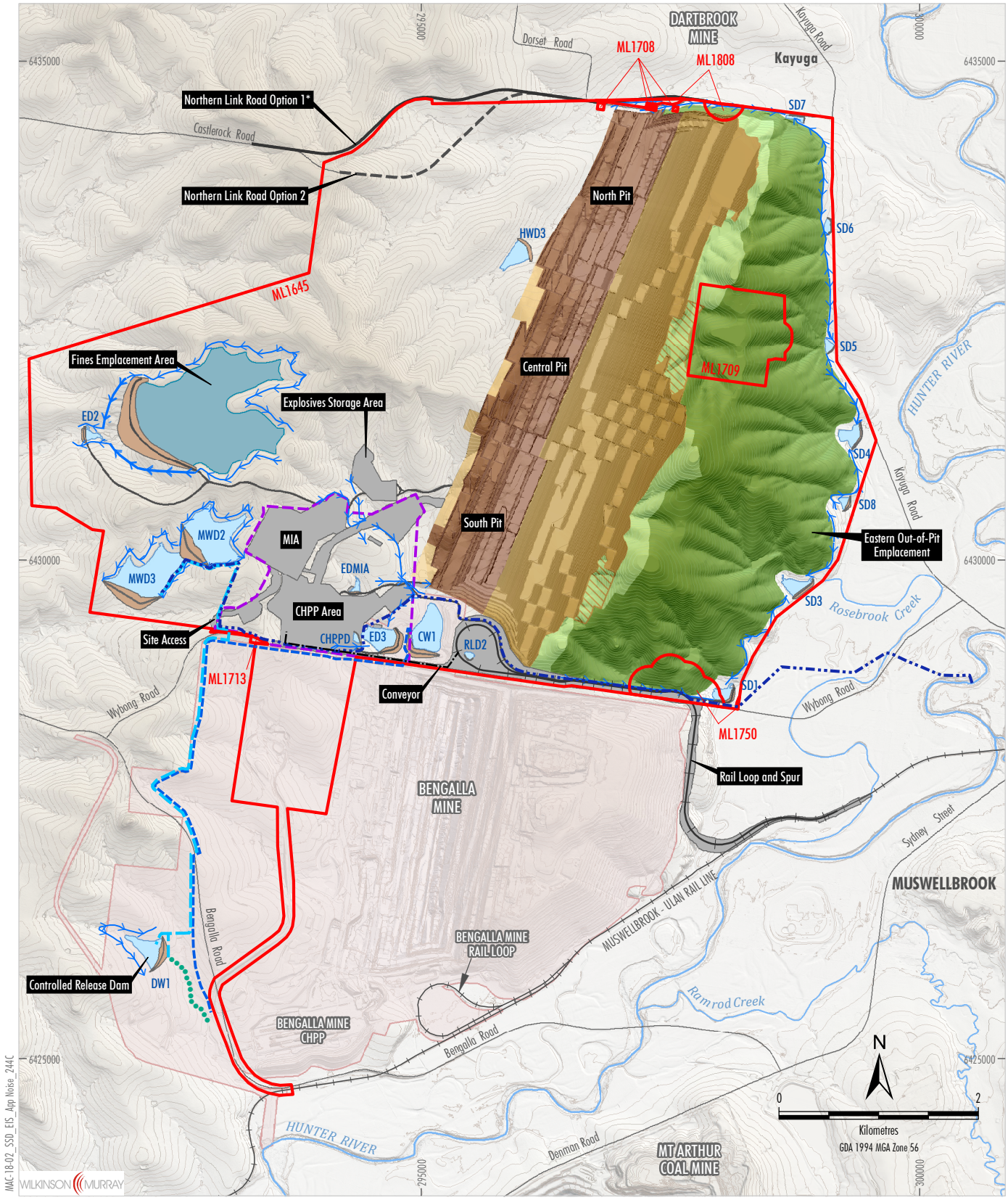
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Provisional General Arrangement 2041

Figure 2-7



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Revised Infrastructure Area Envelope
- Topsoil Stripping
- Active Mining
- Active Overburden Emplacement
- Initial Rehabilitation
- Established Rehabilitation
- Topsoil Stockpile
- Infrastructure and Borrow/Stockpile
- Key Surface Water Drain (Conceptual)
- Access Road
- Northern Link Road Option 1 Centreline*
- Northern Link Road Option 2 Centreline
- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection

Indicative Water Pipeline Alignment

- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

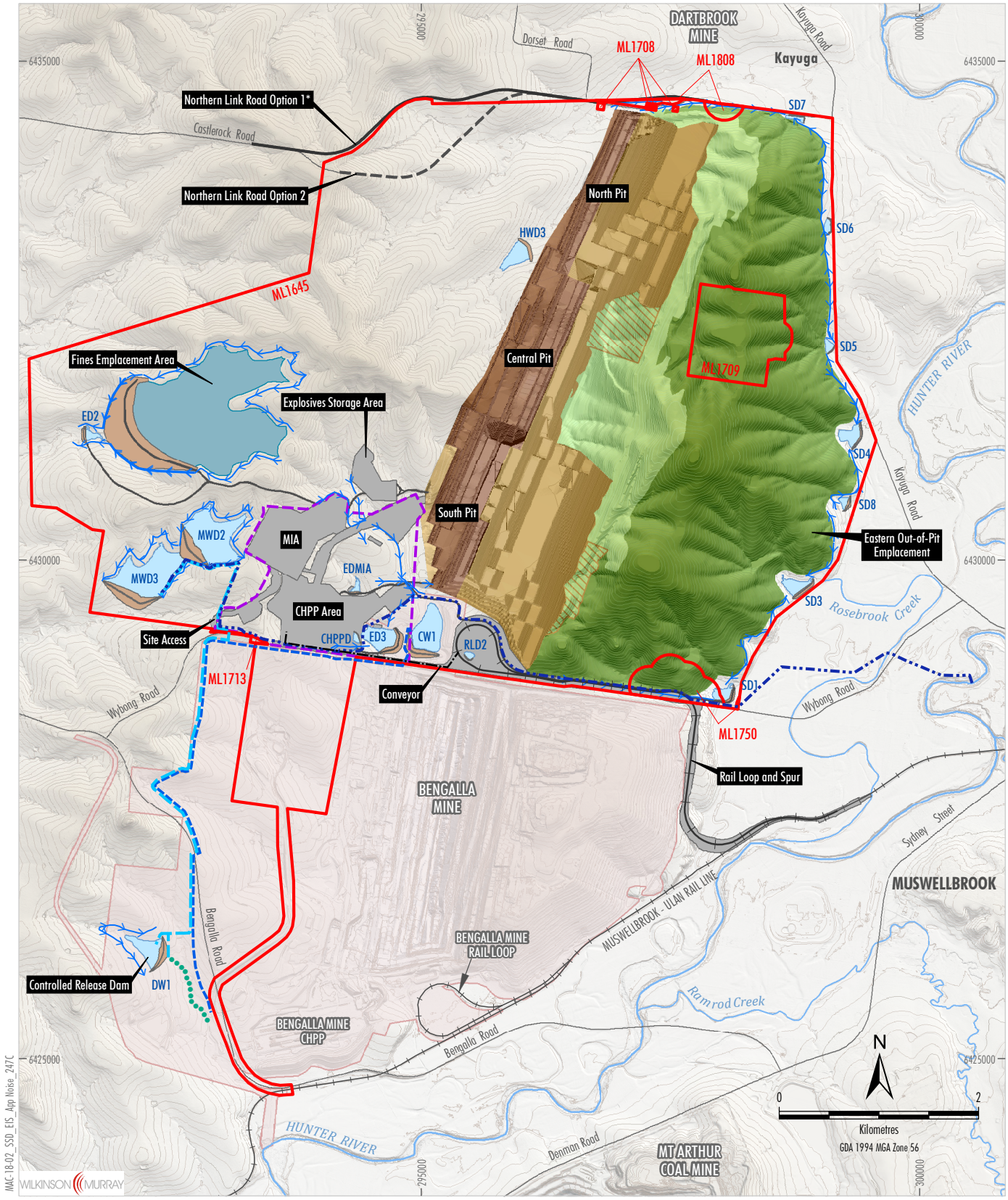
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Provisional General Arrangement 2044

Figure 2-8



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Revised Infrastructure Area Envelope
- Topsoil Stripping
- Active Mining
- Active Overburden Emplacement
- Initial Rehabilitation
- Established Rehabilitation
- Topsoil Stockpile
- Infrastructure and Borrow/Stockpile
- Key Surface Water Drain (Conceptual)
- Access Road
- Northern Link Road Option 1 Centreline*
- Northern Link Road Option 2 Centreline
- Bengalla Mine Approved Disturbance Boundary (SSD-5170)
- Fines Emplacement Area
- Water Dam
- Approximate Extent of Scour Protection

Indicative Water Pipeline Alignment

- Hunter River Supply Pipeline
- DW1 Pipeline (Bi-directional)
- Bengalla Mine CW1 Pipeline

* Preferred alignment subject to landholder access.

Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Provisional General Arrangement 2047

Figure 2-9

2.5 Project Activities

2.5.1 Project Construction and Other Development Activities

The Project would extract coal over a period of approximately 26 years. It would largely comprise open cut mining and the development of general facilities and infrastructure in support of mining, including staged upgrades to the CHPP.

Construction activities would occur throughout the life of the Project; however, key construction periods would be 2025 (Northern Link Road development), 2026 and 2027 (CHPP Stage 2a upgrade) and 2032 and 2033 (CHPP Stage 2b upgrade) (Figure 2-2).

The following provides a summary of the main construction activities associated with the Project:

- development of additional key water management infrastructure;
- development of the Northern Link Road;
- staged upgrades to the existing CHPP and coal handling infrastructure to facilitate the handling and processing of additional coal; and
- progressive Fines Emplacement Area raises.

An indicative list of mobile equipment expected to be required for key Project construction activities is included in Section 6.5. Other construction activities undertaken progressively over the life of the Project would include:

- progressive development and augmentation of dams, pumps, up-catchment diversions, pipelines, drains, storages and other water management equipment and structures;
- progressive development of haul roads, light vehicle access roads and services;
- progressive expansion of the Mine Infrastructure Area (e.g. expansion of existing workshops and fuel storage capacity);
- relocation of public infrastructure and services;
- construction of ancillary infrastructure (e.g. electricity distribution infrastructure, internal roads, potable water supply, sewage treatment facilities, site communications, remote crib huts, go-lines and security);
- replacement and/or upgrades to open cut mining and coal handling and processing machinery; and
- installation or replacement of environmental monitoring equipment.

Additional mobile equipment would be required for periods during these construction activities. The number and types of equipment would be expected to vary depending on the activity undertaken.

Construction activities located within the Mount Pleasant Operation MLs may be undertaken up to 24 hours per day, seven days per week.

Consistent with Condition 44F, Schedule 3 of Development Consent DA 92/97 for construction works outside of MACH's existing MLs (e.g. development of the Northern Link Road) would generally be undertaken between 7.00 am to 6.00 pm, Monday to Friday and 8.00 am to 1.00 pm on Saturdays. Construction activities associated with the Northern Link Road undertaken outside of these hours would include activities:

- required by NSW Police or a public authority for the delivery of vehicles, plant or materials;
- required in an emergency to avoid the loss of life, damage to property or to prevent material harm to the environment; or
- undertaken in accordance with an approved Out of Hours Work Protocol.

Development of Key Additional Water Management Infrastructure

Additional water storages would be developed west of the Infrastructure Area Envelope (Figure 2-1).

Development of Northern Link Road

The approved Mount Pleasant Operation includes the closure of a section of Castlerock Road and development of the Northern Link Road to connect Dorset Road and Castlerock Road, to the west of the Mount Pleasant Operation MLs (Figure 2-1).

The alignment of the Northern Link Road would be revised for the Project to improve the safety of the intersection between the Northern Link Road and Castlerock Road, as shown on Figure 2-1.

Staged Upgrades to the Existing Coal Handling and Preparation Plant

The existing Mount Pleasant Operation CHPP and coal handling infrastructure (hereafter referred to as the Stage 1 CHPP), which includes acoustic control features such as full cladding where reasonable and feasible, would continue to be used for the Project.

To facilitate the handling and processing of additional coal, the following upgrades would be implemented (hereafter referred to as the Stage 2 CHPP components):

- the two existing Coal Preparation Plant modules would be augmented, with one additional module constructed in approximately 2026 and 2027 (Stage 2a) and the second additional module constructed in approximately 2032 and 2033 (Stage 2b);
- the existing ROM hopper would be augmented by constructing at least one additional ROM hopper;
- CHPP fine reject dewatering facilities would be constructed;
- additional product stockpiles would be developed; and
- the main ROM stockpile would be expanded.

The upgrades to the Stage 1 CHPP would include similar best practice acoustic design and would remain within the currently approved infrastructure area. The conceptual integration of the planned Stage 2 CHPP components with the Stage 1 CHPP is shown on Figure 2-2.

While development of the Stage 2 CHPP components would generally be undertaken in two stages (i.e. approximately 2026 and 2027 for works associated with an increase in the mining rate to 15.75 Mtpa and approximately 2032 and 2033 for works associated with an increase in the mining rate to 21 Mtpa), augmentations may be made to the CHPP over the life of the Project.

2.5.2 Mining Operations

Hours of Operation

Open cut mining activities and associated mobile equipment movements would continue to be undertaken 24 hours per day, seven days per week, subject to compliance with relevant environmental management criteria (e.g. real-time air quality and noise operational trigger levels).

Open Cut Mining Areas

The open cuts for the Project would comprise three contiguous open cuts (South Pit, Central Pit and North Pit) (Figure 2-1).

The upper and middle coal seams of the Wittingham Coal Measures (i.e. the Warkworth, Mt Arthur, Piercefield, Vaux, Broonie, Bayswater, Wynn and Edderton Seams) would be recovered in each pit.

It is estimated that approximately 406 Mt of ROM coal would be mined over the life of the Project (including approximately 42 Mt of ROM coal approved to be extracted up to 22 December 2026 in accordance with Development Consent DA 92/97).

Indicative Mining Schedule

Open cut staging would be determined by factors including coal market volume and blending requirements, localised geological features and mine economics. As these requirements would likely vary over the life of the Project, the development of the open cuts and ROM coal extraction rates may also vary.

An indicative mine schedule for the Mount Pleasant Operation incorporating the Project is provided in the main text of the EIS.

Increases in coal production would be staged to provide sufficient time to establish the Eastern Out-of-Pit Emplacement and allow the focus of mining to move westwards (away from Muswellbrook) prior to peak production occurring.

In the Establishment Phase, the ROM coal extraction rate would continue at the currently approved rate of 10.5 Mtpa. Once the Eastern Out-of-Pit Emplacement has been sufficiently developed, the ROM coal extraction rate would increase to 15.75 Mtpa in the Intermediate Phase.

When the Eastern Out-of-Pit Emplacement is further developed and the open cuts have moved farther west, the Peak Production Phase would commence, with the ROM coal extraction rate increasing to 21 Mtpa. Finally, the Project would enter the Ramp Down Phase, where the ROM coal extraction rate would decrease as the coal reserves in the Project extent of the open cut are depleted and the Project final landform nears completion.

The mining schedule would continue to be reviewed and documented in the relevant MOP, as required by the Resources Regulator (within DPIE).

Open Cut Mining Activities

The open cuts at the Mount Pleasant Operation would continue to be mined using conventional open cut methods. The mining areas would include supporting infrastructure such as haul roads, hardstands, soil stockpiles and water management structures that would be designed to integrate with the existing Mount Pleasant Operation and minimise the amount of additional infrastructure and ground disturbance required.

A summary of the Project general mining activities and sequence is provided below.

1. *Vegetation Clearance*

Progressive vegetation clearance and soil clearing would be undertaken ahead of the advancing open cuts. While the Project would optimise the recovery of coal reserves, the total disturbance area would remain similar and this would be achieved in part by avoiding and minimising vegetation clearance by forgoing the clearance of some areas approved to be cleared (Figure 2-1).

2. *Topsoil Stripping*

Soil stripping would continue to be undertaken progressively by scrapers or dozers and stripped topsoil would either be used directly in progressive rehabilitation, or placed in stockpiles for later re-use.

Soil management, stockpiling and re-application procedures that are generally consistent with existing procedures at the Mount Pleasant Operation would be implemented. Soil stockpile locations and volumes would vary over the life of the Project.

3. *Drilling and Blasting*

Overburden and interburden material that cannot be efficiently ripped and excavated by mobile equipment would be drilled and blasted.

A mixture of ammonium nitrate and fuel oil (ANFO) and emulsion blend explosives would continue to be used for the Project.

Consistent with Development Consent DA 92/97, blasting for the Project would only occur between the hours of 9.00 am to 5.00 pm Monday to Saturday, inclusive. Up to two blasts per day and up to eight blasts per week, averaged over any calendar year, would occur on-site (unless additional blasts are required following misfires or for mine safety).

Consistent with Development Consent DA 92/97, small Project blasts, which generate vibration of 0.5 millimetres per second (mm/s) or less at any residence on privately-owned land, would continue to be excluded from these blasting limits.

Wybong Road, Kayuga Road and Castlerock Road would continue to be temporarily closed during blasts within 500 metres (m) of the road. Dorset Road/Northern Link Road would also be temporarily closed during blasts within 500 m of the road.

4. *Overburden and Interburden Material Removal and Handling*

Overburden and interburden material would continue to be removed with excavators, with haul trucks used to haul the material to in-pit and the out-of-pit emplacement. Draglines may also be used in the place of excavators to remove overburden and interburden material if further Project engineering studies indicate it would be reasonable and feasible to do so.

5. Coal Mining

Mining of exposed coal seams at the Mount Pleasant Operation typically involves excavators or front-end loaders ripping and pushing coal and parting material, and loading ROM coal into haul trucks for haulage directly to the ROM dump hopper or ROM pad.

Haulage of Project ROM coal would continue to use internal haul roads.

6. Landform Profiling and Rehabilitation

Hauled overburden and interburden material, and coarse rejects from the CHPP, would continue to be strategically placed within mined-out voids and the Eastern Out-of-Pit Emplacement to develop the final landform. Fine rejects would continue to be disposed of in the existing Fines Emplacement Area. Dewatered fine rejects would also be co-disposed with coarse rejects for the Project.

Overburden material would also be placed along selected boundary areas of the open cuts (e.g. the northern boundary of North Pit) in advance of mining activities to act as a safety bund (i.e. to prevent accidental access), as well as assisting in reducing direct views of the open cut workings from publicly accessible locations and/or act as a noise bund.

Landform profiling and rehabilitation of the Eastern Out-of-Pit Emplacement would continue to be undertaken progressively over the life of the Project.

7. Mining Equipment

The mobile equipment used for the Project would vary according to the requirements of the advancing open cut mining operations.

Existing mobile equipment used at the Mount Pleasant Operation would continue to be used, with replacement and additional fleet items adopted as the production rate increases. Consistent with Appendix 3 (Statement of Commitments) of Development Consent DA 92/97, noise suppression is currently fitted on all major mobile equipment where reasonable and feasible. This would continue for the Project.

Larger capacity (ultra class) haul trucks would be utilised to facilitate the increase in ROM coal extraction from approximately 2027.

An indicative list of major mobile equipment used for impact assessment purposes for the Project is provided in Section 6.5.

Throughout the life of the Project, MACH would evaluate available feasible and reasonable mining technologies, with a particular focus on improving efficiency and environmental performance (e.g. noise performance) at the Mount Pleasant Operation. There are currently no large-scale automation technologies (e.g. unmanned haul truck fleets) planned for the Project.

2.5.3 Product Coal Rail Transport

Product coal produced from the CHPP and bypass coal would continue to be stockpiled prior to being reclaimed and loaded to trains at the approved Stage 2 rail load-out facility. Product coal would be transported on the Muswellbrook-Ulan Rail Line to the Port of Newcastle for export, or to domestic customers for use in power generation.

The Stage 1 product coal stockpile currently has a capacity of approximately 0.28 Mt, and the Stage 2 product stockpile would provide additional capacity of approximately 0.5 Mt.

Product coal would be reclaimed from the product stockpiles using coal valves, which would feed onto reclaim conveyors in tunnels located beneath the product coal stockpiles. The reclaim conveyors would feed the approved Stage 2 train load-out conveyor and rail loud-out bin.

Product coal would continue to be loaded onto trains 24 hours per day, seven days per week.

As a component of the Project, the increase in transport of product coal from approximately 8.5 Mtpa to up to 17 Mtpa would require a corresponding increase in the currently approved annual average daily train movements. The annual average daily train movements would increase from the currently approved three laden trains leaving the site per day to 6.5 laden trains leaving the site per day (at peak coal production). However, the peak daily maximum number of trains would increase only marginally, from the currently approved nine laden trains leaving the site per day to 10 laden trains leaving the site per day.

The approved Stage 2 rail load-out facility, loop and spur could accommodate the increased number of trains entering and leaving the Mount Pleasant Operation (i.e. the approved Stage 2 rail infrastructure would not be required to be upgraded or duplicated for the Project).

No changes to the existing rail transport routes are proposed for the Project.

3 REVIEW OF ENVIRONMENTAL PERFORMANCE

3.1 Environmental Noise Performance

Noise management at the Mount Pleasant Operation is currently undertaken in accordance with the site *Noise Management Plan (NMP)* (MACH, 2019a), which outlines:

- Development Consent DA 92/97 noise criteria (Section 5.1);
- performance indicators;
- noise management and control measures;
- noise monitoring and reporting regimes; and
- management of exceedances and complaints.

Compliance noise monitoring conducted for the Mount Pleasant Operation includes:

- attended compliance noise monitoring undertaken on a monthly basis (and quarterly basis prior to October 2018) by an independent acoustic consultant;
- continuous real-time noise monitoring in order to actively manage noise emissions on-site; and
- sound power level monitoring for new operational mobile fleet and on an annual basis to inform ongoing servicing and maintenance of mobile equipment.

Environmental noise performance in reference to compliance noise monitoring was reviewed for the last three years of operation (i.e. 2018 to August 2020) and is summarised below.

3.1.1 Attended Operational Noise Monitoring

Monthly attended compliance noise monitoring is undertaken by an independent acoustics consultant at six different locations surrounding the Mount Pleasant Operation (shown as locations N-AT1 to N-AT6 on Figure 6 of the *NMP*). Compliance assessment addresses operational noise from the site (intrusiveness noise and maximum noise level events at night) and cumulative noise generated by the Mount Pleasant Operation and all neighbouring mining operations. Attended monitoring also includes assessment of low-frequency noise characteristics potentially warranting modifying factor corrections.

Review of attended compliance noise monitoring results from May 2018 to August 2020 (MACH, 2018-2020) indicate mostly compliance with the relevant noise criteria, with the exception of a small number of elevated noise levels recorded during the April and July 2020 monitoring at locations N-AT3 and N-AT4.

Notification with regard to these elevated levels was made to both the EPA and DPIE. Investigations of each elevated recording indicated no exceedance of relevant noise criteria occurred.

3.1.2 Real-Time Noise Monitoring

MACH implements a real-time monitoring network to ensure site responsiveness to adverse meteorological conditions and to support the proactive and reactive noise management system on-site.

In accordance with the requirements of Development Consent DA 92/97 (as modified), MACH has continued to undertake real-time noise monitoring and managed noise according to the *NMP* during the review period. Evidence of use of the system and noise management actions being implemented when the mine was the source of real-time noise is acknowledged in the latest independent environmental audit conducted in February 2020.

3.1.3 Noise Complaints

A total of 184 noise complaints were received in the period 2018 to September 2020, with 32 received in 2018, 97 in 2019, and 55 in the period January to September 2020. MACH has investigated and responded to all complaints through the complaint management process.

Most of the complaints are found to originate from the Collins Lane (where all receivers currently have acquisition upon request rights in accordance with Condition 1, Schedule 3 of Development Consent DA 92/97 for potential noise impacts) and Kayuga Road areas. It is also noted that a large number of the noise complaints are made by a small number of people, several of which have acquisition upon request rights.

3.1.4 Review of Noise Management Practices

MACH periodically reviews noise management practices to identify opportunities to improve and keep implementing best practice noise management, minimise potential noise impacts, and ensure compliance with Development Consent DA 92/97 noise criteria.

3.2 Environmental Blasting Performance

Blast management at the Mount Pleasant Operation is currently undertaken in accordance with the site *Blast Management Plan (BMP)* (MACH, 2020a), which outlines:

- Development Consent DA 92/97 blast criteria;
- performance indicators;
- blast management and control measures;
- blast monitoring and reporting regimes; and
- management of exceedances and complaints.

Compliance blast monitoring conducted for the Mount Pleasant Operation includes three permanent monitors. Other blast monitoring is conducted on-site to assist with operational management, including the use of portable monitors that can be relocated as required.

Environmental blast performance in reference to compliance blast monitoring was reviewed for the last three years of operation (i.e. 2018 to August 2020) and is summarised below.

3.2.1 Blast Compliance

Monthly blast compliance monitoring is undertaken by suitably qualified and experienced personnel at three different locations surrounding the Mount Pleasant Operation (shown as locations BVOA, BVOC and BVO2 on Figure 2 of the *BMP*).

Review of blast compliance monitoring results from May 2018 to August 2020 indicate compliance with the relevant blast criteria.

In June 2020 a blast was fired in the late afternoon (approximately 4.40 pm) that resulted in a visible plume being emitted after the blast. Notification was made to both the EPA and DPIE of the event. Three complaints were received regarding the blast's visible plume. A blast investigation was conducted and as a result the mining contractor has amended some pre-blast procedures to reduce the potential for a similar event to occur in future.

3.2.2 Blast Complaints

A total of 64 blast complaints were received in the period 2018 to September 2020, with 12 received in 2018, 43 in 2019, and 9 in the period January to September 2020. MACH has investigated and responded to all complaints through the complaint management process.

In 2019, the Mount Pleasant Operation began to record more detail in relation to the location of complaints received. Of the 23 locations recorded, 15 were located in the Sheppard Avenue/ Racecourse Road area. MACH subsequently installed a temporary blast monitor in the area. No exceedances of relevant blast criteria were recorded during that time. MACH intends to continue to relocate the mobile blast monitor to assist with the investigation of complaints.

3.2.3 Review of Blast Management Practices

MACH periodically reviews blast management practices to identify opportunities to improve and keep implementing best practice blast management, minimise potential blast impacts, and ensure compliance with Development Consent DA 92/97 blast criteria.

4 NOISE RECEIVERS & SURROUNDING LAND USES

The assessment considers all identified surrounding noise sensitive receivers potentially impacted by the Mount Pleasant Operation.

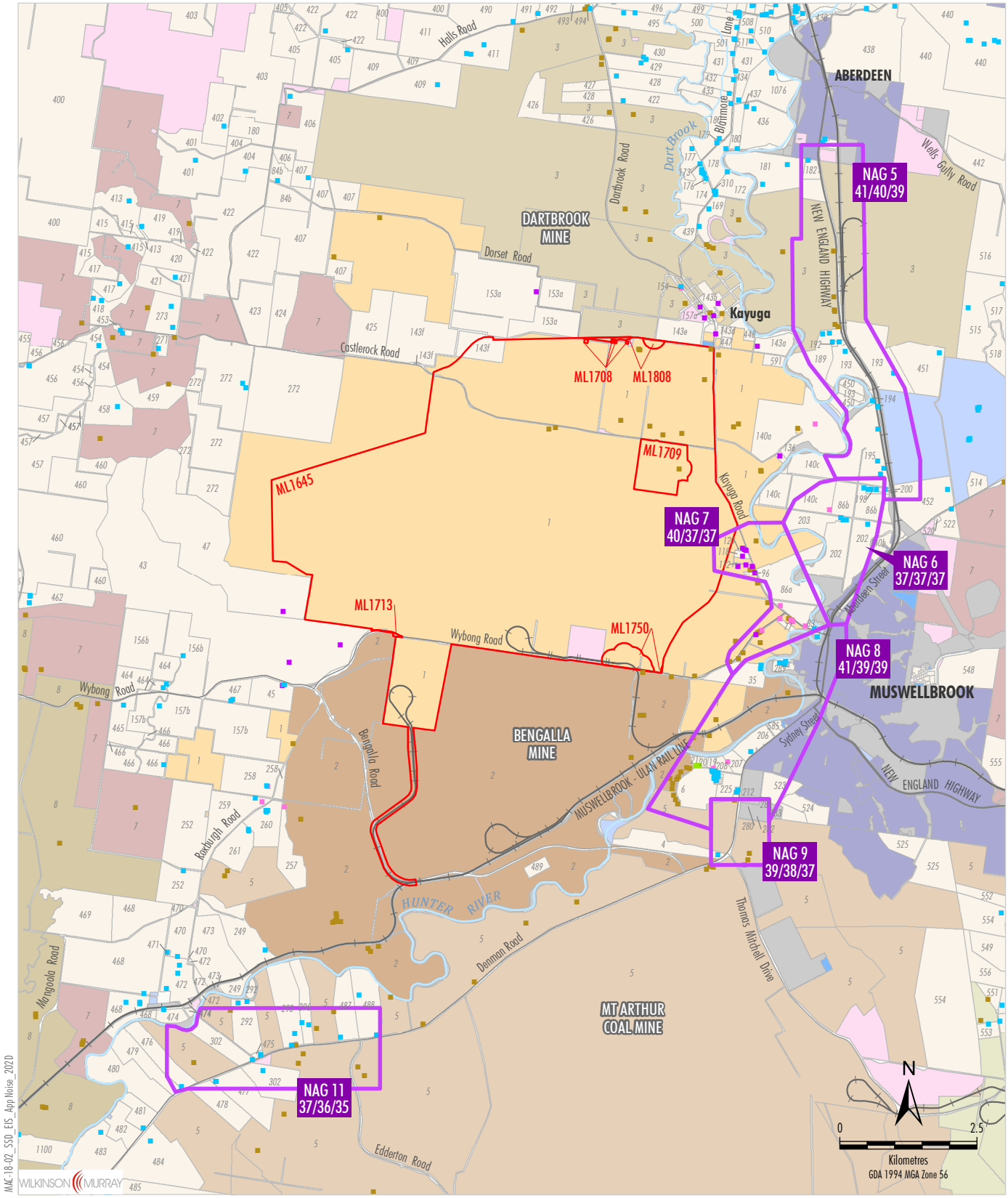
To determine the receivers of relevance to the study, a comprehensive receiver identification and verification study was completed in early 2020 by a Muswellbrook-based surveying company. LiDAR data was used to identify all structures in an area of approximately 440 square kilometres around the Mount Pleasant Operation. For practical reasons, only the western outskirts of the township of Muswellbrook and the southern outskirts of the village of Aberdeen were included in the search area. Over 4,400 structures were identified and characterised (e.g. as a dwelling, commercial building, etc.) using remote sensing, aerial imagery and ground survey.

Given the large number of structures identified, only those structures considered sensitive to potential noise impacts have been explicitly modelled. Where potential receivers could not be categorically characterised, they were conservatively assumed to be residences. Some of the more remote receivers identified to the north, as well as MACH-owned receivers within the Mount Pleasant Operation MLs, were not modelled for practical reasons. Due to the large number of structures identified at the St Heliers Correctional Centre, a selection of the identified structures was also modelled to represent the prison facilities. Due to the very close proximity of cabins and vans located within the Riverside Cabin and Van Park in Muswellbrook, only key receivers deemed representative of the most exposed parts of the park were modelled.

In total, more than 900 receivers have been modelled, including the majority of identified privately-owned dwellings, mine-owned dwellings, Council/State-owned dwellings, aged care facilities, commercial accommodation, other commercial buildings, schools, churches and heritage structures.

Seven generic receivers within Muswellbrook were also modelled to address the dwellings located further away from the Project, but higher in elevation, in order to confirm no anomalous noise results would occur in the elevated areas of the Muswellbrook township (e.g. possibly due to less shielding and ground effects).

A detailed list identifying all noise sensitive receivers considered in the assessment (including Eastings and Northings in Geocentric Datum of Australia [GDA] 2020, Map Grid of Australia [MGA] Zone 56) and figures showing the locations and identification numbers of key receivers (privately-owned and mine-owned dwellings) is provided in Appendix B. Figure 4-1 shows key noise sensitive receivers surrounding the Mount Pleasant Operation and highlights the receivers that currently have mitigation or acquisition upon request rights due to proximity to the approved Mount Pleasant Operation (Sections 5.1.1 and 5.1.2).



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 37/36/35 Default NAG Noise Criteria for Day/Evening/Night

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Current DA92/97 Noise Sensitive Receivers and Current Noise Assessment Groups

Figure 4-1

5 OPERATIONAL NOISE CRITERIA

5.1 Development Consent DA 92/97 Assessment Criteria

Development Consent DA 92/97 has set noise criteria for the Mount Pleasant Operation in accordance with the *NSW Industrial Noise Policy (INP)* (EPA, 2000) (superseded by the NPfI).

Noise-related conditions of Development Consent DA 92/97 that discuss noise criteria, acquisition criteria and additional mitigation criteria are reproduced in this section.

5.1.1 Acquisition Upon Request

Condition 1, Schedule 3 of Development Consent DA 92/97 requires MACH, upon receiving a written request for acquisition from the owner of any land listed in Table 5-1, to acquire the land in accordance with the procedures in Conditions 6 and 7 of Schedule 4.

Table 5-1 Land Subject to Acquisition Upon Request

Basis	Receiver[1]
Noise	~~23~~[2], 45, 47, 67, 96, 102, 108, 112, 118, 120, 120c, 121, 136, 143a, 143b, 143c, 143d, 143e, 147, 153a, 153b[4], 156a, 157a, ~~158~~[2], 159, 447, 448, 449
Noise & Air	43, 43b
Air	20[3], 21[3]

Source: After Development Consent DA 92/97
Notes:
1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver is owned by MACH.
3. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for Bengalla Mine.
4. Due to a change in ownership, this land is now ID 591.

5.1.2 Additional Mitigation Upon Request

Condition 2, Schedule 3 of Development Consent DA 92/97 requires MACH, upon receiving a written request from the owner of any residence on the land listed in Table 5-1 or Table 5-2, to implement additional noise and/or dust mitigation measures (such as double-glazing, insulation, air filters, first flush roof water drainage system and/or air conditioning) at the residence in consultation with the landowner. These measures must be reasonable and feasible and related to the noise and/or dust impacts on the residence. If MACH and the owner cannot agree on the measures to be implemented (within three months of receiving this request from the owner), or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

Table 5-2 Land Where Additional Noise Mitigation Measures are Available on Request

Basis	Receiver[1]
Noise	19, 20, 21, ~~68~~[2], 74, 77, 79, ~~80a~~[2], 84a, 86a, ~~139~~[2], 140a, 140c, 154, 203, 207, 257, 258, 259, 526

Source: After Development Consent DA 92/97
Notes:
1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver is owned by MACH.

5.1.3 Noise Criteria

Condition 3, Schedule 3 of Development Consent DA 92/97 requires MACH to ensure that the operational noise generated by the development does not exceed the criteria in Table 5-3 at any residence on privately-owned land.

The criteria specified in Table 5-3 do not apply to the noise-affected land subject to acquisition upon request conditions (Section 5.1.1) or if MACH has a written agreement with the relevant landowner to exceed the criteria, and MACH has advised the DPIE in writing of the terms of this agreement.

For ease of reference, residential receivers have been grouped into six Noise Assessment Groups (NAGs) during the previous assessments of the approved Mount Pleasant Operation, which are defined in Appendix 6 of Development Consent DA 92/97. The NAGs defined in Appendix 6 of Development Consent DA 92/97 are also provided on Figure 4-1.

Table 5-3 Noise Criteria (dBA)

Receiver or other location[1]	Day	Evening	Night Time	
	$L_{Aeq,15min}$	$L_{Aeq,15min}$	$L_{Aeq,15min}$	$L_{A1,1min}$
~~68~~[2], 74	43	42	42	45
86a	42	42	42	45
35, 35b, 77	42	41	41	45
79, ~~80a~~[2], 140c, 526	41	41	41	45
289	41	40	40	45
84a, ~~139~~[2], 154, 203, 257, 258a	40	40	40	45
83	40	39	39	45
86b, 140a, 202, 259	39	39	39	45
198, 202b	38	38	38	45
260, 261	37	37	37	45
169, 272	36	36	36	45
NAG 5 - All privately-owned land	41	40	39	45
NAG 6 - All privately-owned land	37	37	37	45
NAG 7 - All privately-owned land	40	37	37	45
NAG 8 - All privately-owned land	41	39	39	45
NAG 9 - All privately-owned land	39	38	37	45
NAG 11 - All privately-owned land	37	36	35	45
All other privately-owned land	35	35	35	45

Source: After Development Consent DA 92/97
Notes:
1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver is owned by MACH.
3. Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions), of the *NSW INP*, with the exception of the application of modifying factors under Fact Sheet C of the *NPfI*.
4. dBA = A weighted decibels.
5. $L_{Aeq,15min}$ = The equivalent continuous A-weighted sound level over a 15-minute period.
6. $L_{A1,1min}$ = The A-weighted sound level exceeded for 1% of a 1-minute period.
7. NAG = Noise Assessment Group.

5.1.4 Cumulative Noise Criteria

Condition 5, Schedule 3 of Development Consent DA 92/97 requires MACH to implement all reasonable and feasible measures to ensure that the operational noise generated by the development combined with the noise generated by other mines in the area does not exceed the criteria in Table 5-4 at any residence on privately-owned land. These criteria do not apply to the noise-affected land subject to acquisition upon request conditions (Section 5.1.1).

Table 5-4 Cumulative Noise Criteria (dBA)

Location[1]	Day	Evening	Night Time
	$L_{Aeq\ (period)}$	$L_{Aeq\ (period)}$	$L_{Aeq\ (period)}$
NAG 8, 9	55	45	40
All other privately-owned land	50	45	40

Source: After Development Consent DA 92/97
Notes:
1. To identify these locations, see Figures B-1 to B-11 in Appendix B.
2. Cumulative noise is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the *NSW INP*.
3. NAG = Noise Assessment Group.

5.2 Background Noise Surveys

As a State Significant Development (SSD) application, determination of new Project Noise Trigger Levels (PNTLs) based on current background noise levels was undertaken for the Project.

A background noise survey was carried out in the vicinity of the Project in late 2018 by Wilkinson Murray to establish background noise levels that would be used to define PNTLs in support of the SSD application. The survey was conducted in 2018 to inform the screening-level noise modelling assessment for the SSD application, also carried out in 2018.

A night time reconnaissance survey consisting of short-term attended spot measurements at various locations within the Muswellbrook township was also conducted in March 2020 to provide an understanding of night time background noise levels in town. The reconnaissance survey indicated potentially higher background noise levels in Muswellbrook than in the surrounding rural areas, primarily due to general noise from commercial premises in the town centre and along the main roads traversing town, namely New England Highway, Sydney Street, Bridge Street and Aberdeen Street.

A second background noise survey was conducted in 2020 to provide additional background levels along the western side of the Muswellbrook township, thus complementing the 2018 survey and augmenting background noise level measurements in the vicinity of the Project.

Although the 2020 survey was undertaken during the course of the COVID-19 pandemic, no lockdown measures were in place in regional NSW during the period of the measurements, and the pandemic is deemed to have a negligible impact on background noise levels measured as part of the survey.

A description of the monitoring methodology and summary of results for both the 2018 and 2020 surveys, and a figure showing all monitoring locations, are included in Appendix C. Appendix O provides a graphical representation of the measured levels.

Table 5-5 summarises the measured Rating Background Levels (RBLs) relevant for the Project for the day (7.00 am – 6.00 pm), evening (6.00 pm – 10.00 pm) and night time (10.00 pm – 7.00 am) assessment periods. The RBL (defined in the glossary of acoustic terms in Appendix A) provides a single figure representing background noise levels for assessment purposes.

Attended monitoring was included as part of the background noise survey. It indicated that residences to the west and north-west of the Project are subject to a natural background noise environment driven by fauna, whilst residences closer to Muswellbrook and arterial roads such as Denman Road, Sydney Street, Aberdeen Street and New England Highway are subject to background noise levels mostly affected by traffic noise. At night, residences in the town centre and along the main commercial streets of Muswellbrook are also affected to some extent by general noise associated with nearby commercial premises.

Table 5-5 Results of Background Noise Survey

Location ID	RBL (dBA)		
	Day	Evening	Night Time
2018 Background Noise Survey[1]			
L1	26	28	26
L2	37	37	27
L3	44	36	26
L4	32	33	30
L5	43	38	28
L6	31	31	26
L7	34	35	31
L9	32	30	27
L10	31	33	29
L11	38	34	27
L12	32	32	30
L13	31	30	27
L14	29	27	24
L15	25	28	22
L16	23	32	25
2020 Background Noise Survey			
L11	36	33	32
L17	38	37	32
L18	39	37	33
L19[2]	44	41	41
L20[2]	41	50	46

Notes:
1. No representative RBLs could be established for monitoring location L8 (2018 background noise survey) due to equipment failure. Further details are provided in Appendix C.
2. The RBLs determined at monitoring locations L19 and L20 (2020 background noise survey) were not considered representative due to the likely effect of extraneous noise sources. Further details are provided in Appendix C.

The *NPfI* sets minimum assumed RBLs for the different assessment periods as follows:

- Day – 35 dBA
- Evening – 30 dBA
- Night – 30 dBA.

The higher minimum assumed RBL during the day is to account for the fact that noise during the day does not usually have the same impact as noise experienced during the evening or night (i.e. residents are less sensitive to noise impacts during the day).

Table 5-6 summarises the RBLs relevant to the Project in light of the above.

Table 5-6 RBLs Relevant to the Project

Location ID	RBL (dBA)		
	Day	Evening	Night Time
2018 Background Noise Survey[1]			
L1	35	30	30
L2	37	37	30
L3	44	36	30
L4	35	33	30
L5	43	38	30
L6	35	31	30
L7	35	35	31
L9	35	30	30
L10	35	33	30
L11	38	34	30
L12	35	32	30
L13	35	30	30
L14	35	30	30
L15	35	30	30
L16	35	32	30
2020 Background Noise Survey[2]			
L11	36	33	32
L17	38	37	32
L18	39	37	33
L19[2]	44	41	41
L20[2]	41	50	46

Notes:
1. No representative RBLs could be established for monitoring location L8 (2018 background noise survey) due to equipment failure. Further details are provided in Appendix C.
2. The RBLs determined at monitoring locations L19 and L20 (2020 background noise survey) were not considered representative due to the likely effect of extraneous noise sources. Further details are provided in Appendix C.

5.3 Noise Assessment Groups

In order to assign PNTLs to all the identified privately-owned residential receivers and State or Council-owned residential receivers, new NAGs had to be defined based on findings from the background noise surveys (Section 5.2) and the location of receivers relative to surrounding ambient noise sources.

Unlike typical noise assessments for mining operations, background noise monitoring was conducted at a relatively high number of locations (20) across several surveys to allow for more representative NAGs defined in accordance with background noise trends. As a result, the NAGs established for the Project do not follow a grid layout similar to more conventional noise assessments (i.e. where fewer background noise levels are available).

Due to the very isolated and rural nature of survey location L16, its evening RBL, although measured at 32 dBA, was conservatively adjusted to 30 dBA. As a result, RBLs assigned to survey location L16 are equivalent to the minimum assumed RBLs set by the *NPfI*.

The elevated evening RBL measured at survey location L12 may be due to traffic on Denman Road, or noise associated with nearby mining operations. To be conservative, a NAG was not defined based on the elevated evening measurement at survey location L12.

While elevated evening and night RBLs were measured at survey locations L4 and L7, respectively, the measurements may have been affected by noise from the Mount Pleasant Operation. Therefore, to be conservative, these elevated RBLs have also not been used to define NAGs.

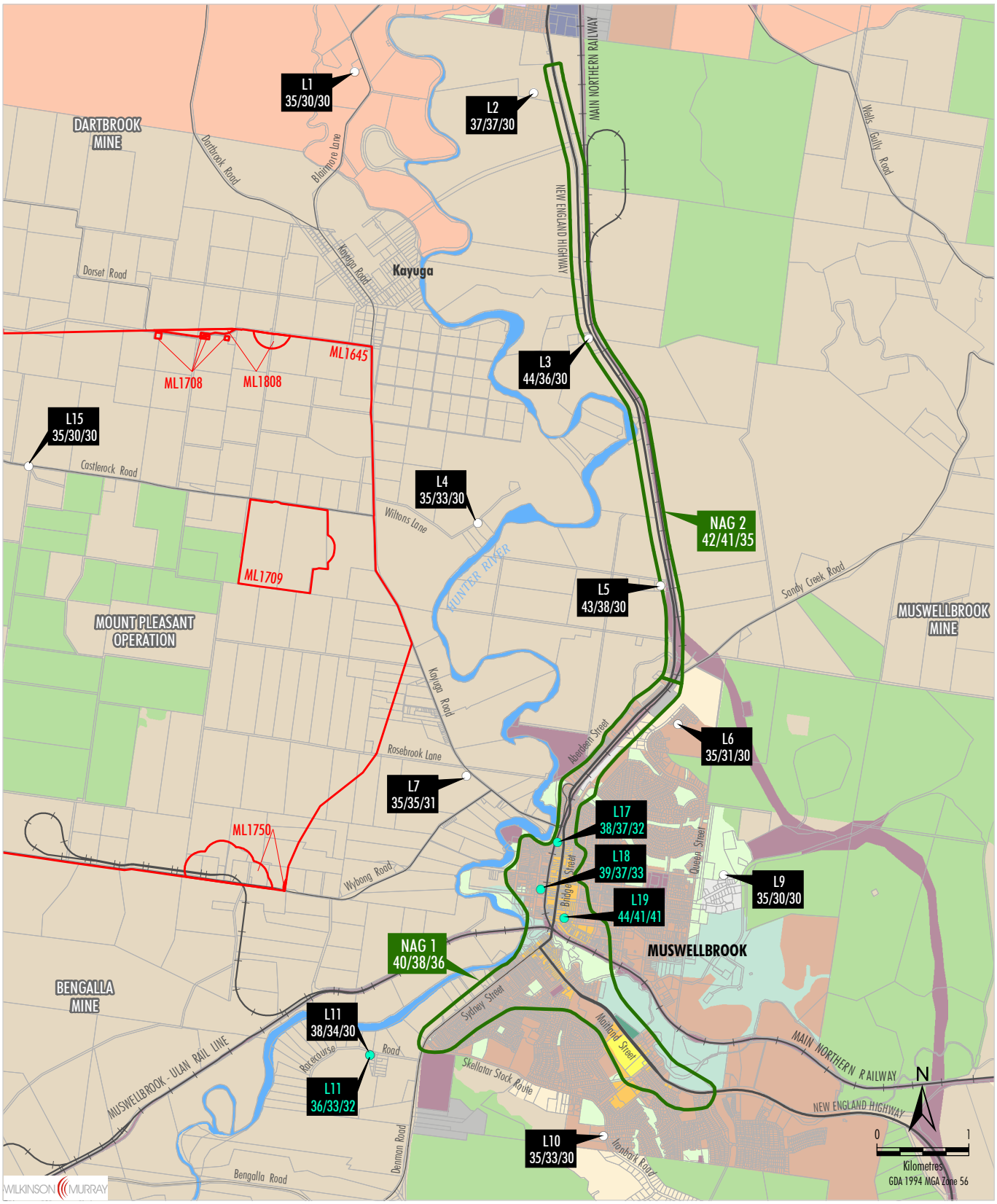
The Project NAGs defined in consideration of the measured RBLs are described in Table 5-7 and shown on Figure 5-1. Derivation of each Project NAG is provided in Section 5.3.1.

The Project NAGs are deemed representative of areas of similar background noise levels that are above the minimum assumed RBLs recommended by the *NPfI*.

All identified residential receivers located outside the Project NAGs would be subject to assessment RBLs equal to the minimum RBLs recommended by the *NPfI*, consistent with measurement results at survey locations L1, L13, L14 and L15. This is considered conservative for some receiver locations, as noted above.

Table 5-7 Summary Description of NAGs

NAG	Description	RBL (dBA)		
		Day	Evening	Night Time
NAG 1	Residences within Muswellbrook, in particular those close to the centre of town, Bridge Street, Aberdeen Street, Sydney Street and New England Highway.	35	33	31
NAG 2	Rural residences located within approximately 90 m of the New England Highway between Muswellbrook and Aberdeen.	37	36	30



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)

Land Zoning

- Local Centre
- Business Development
- Mixed Use
- General Residential
- Large Lot Residential
- General Industrial
- Light Industrial
- Primary Production
- Special Activities
- Infrastructure
- Rural Small Holdings
- Natural Waterways
- Forestry
- Environmental Management
- Public Recreation
- Private Recreation
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- 2018 Background Noise Monitoring Location
- 2020 Background Noise Monitoring Location
- 35/30/30 Rating Background Levels $L_{(Aeq, 15 min)}$ Day/Evening/Night (2018)
- 35/30/30 Rating Background Levels $L_{(Aeq, 15 min)}$ Day/Evening/Night (2020)

Source: MACH (2020); NSW Spatial Services (2020); Wilkinson Murray (2018, 2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Relevant Noise Sensitive Receivers and Project Noise Assessment Groups

Figure 5-1

5.3.1 Determination of Project Noise Assessment Group Extents

NAG 1

The background noise monitoring surveys undertaken in 2018 included a number of loggers located around the outskirts of Muswellbrook. While one logger was located on Sydney Street (L8), representative RBLs could not be established due to equipment failure (refer Appendix C).

A reconnaissance survey was completed in early 2020 to inform potential logger locations for a subsequent re-survey within Muswellbrook. The survey indicated background noise (RBLs) in the range of 31-35 dBA could be expected at night.

Results at loggers L17 and L18 confirmed the reconnaissance findings, with elevated background levels (RBLs) within Muswellbrook of 32 dBA and 33 dBA at night both in the 'Local Centre' and 'General Residential' Local Environmental Plan (LEP) zonings. These measured elevated background levels are considered representative of the area.

Another logger in Muswellbrook (L19) recorded an RBL of 41 dBA at night. To be conservative, this result (which may be affected by a local mechanical source) was not used to define the NAG.

The results suggest a NAG with an RBL of at least 32 dBA at night could be used for the main built-up area of Muswellbrook. There would be a corresponding surrounding zone with a lower background level (i.e. a RBL of 31 dBA at night) between that zone and where minimum background noise (i.e. 30 dBA) has been measured.

However, to be conservative, a single RBL of 31 dBA at night has been used for one simplified NAG representative of Muswellbrook.

The NAG boundary has been defined based on the proximity to key major roads (New England Highway, Bridge Street, Aberdeen Street and Sydney Street), the LEP zoning, the topography (i.e. the NAG is constrained to the east of Aberdeen Street and Bridge Street due to the rising terrain) and consideration of various noise logger results that recorded RBLs of 30 dBA or less at night (i.e. L6, L9 and L10) at more peripheral locations in Muswellbrook.

To be conservative, the NAG has also been defined based on the 2018 night time level recorded at survey location L11, noting that an RBL of 32 dBA was recorded at night at L11 in 2020. During the 2018 survey the Mount Pleasant Operation was still in the early stages of development, with mining occurring during day shift only (the Mount Pleasant Operation did not transition to 24-hour operations until December 2018).

The evening RBL for the NAG (33 dBA) is also considered conservative, as it has been based on the result at L10, which is 4 dB less than the evening RBL levels recorded at L17 and L18. This location is considered representative of a built-up area that is not materially affected by a major road (i.e. more peripheral areas of Muswellbrook).

The day RBL for the NAG has been conservatively set as the minimum (35 dBA).

NAG 2

Monitoring locations L2, L3 and L5 (2018 survey) are deemed representative of residences exposed to traffic noise from the New England Highway between Muswellbrook and the village of Aberdeen, where applicable speed limits are significantly higher than in Muswellbrook. They form the basis for RBLs used for this NAG.

The minimum RBLs (day 37 dBA / evening 36 dBA) measured from all three monitoring locations were conservatively used for this NAG.

Attended daytime monitoring (2018 survey) indicates L_{90} noise levels are dominated by traffic noise and not considered to be materially affected by noise from the Mount Pleasant Operation.

Due to the proximity of the highway and traffic flows in the evening, the measured evening RBLs are also not considered to be affected by noise from the Mount Pleasant Operation.

Considering the distance separating L2 and the open cut mining of the Mount Pleasant Operation (approximately 5.5 km), day and evening RBLs measured at L2 are not expected to be affected by site noise. The relatively similar day and evening RBLs measured at L2, L3 and L5 also suggest that noise from the Mount Pleasant Operation does not contribute to the measured RBLs.

L3 and L5 are located 30 m and 90 m from the highway, respectively. As such, the extent of the NAG was conservatively constrained to 90 m from the road.

Summary and Comparison to Current NAGs

A number of conservative assumptions have been made in defining the Project NAGs. In particular, the night time RBL of 31 dBA for NAG 1 would generally coincide with a reduction of 1 to 3 dBA compared to the currently approved Mount Pleasant Operation night time noise criteria for the same relevant receivers.

The Project NAGs also do not extend to areas that are currently covered by a number of existing NAGs under the Mount Pleasant Operation Development Consent DA 92/97, and therefore a significant number of receivers surrounding the Mount Pleasant Operation would have lower (i.e. more stringent) evening and night time criteria applied under the Project, than is currently the case.

Notwithstanding, the daytime criteria have increased for the majority of receivers, due to the increased minimum daytime criteria defined in the *NPfI* as opposed to the previously applicable *NSW INP*.

5.4 Project Noise Trigger Levels – Residential Receivers

5.4.1 Intrusiveness Noise Levels

The *NPfI* specifies an intrusiveness noise level that requires that the $L_{Aeq,15min}$ from a specific industrial source should not exceed the background noise level by more than 5 decibels (dB).

Table 5-8 summarises the intrusiveness noise levels relevant to the Project. The minimum assumed project intrusiveness noise levels set by the *NPfI* were adopted for all residential receivers located outside the identified NAGs.

Table 5-8 Project Intrusiveness Noise Levels – Residential Receivers

Receiver	Project Intrusiveness Noise Levels ($L_{Aeq,15min}$)		
	Day	Evening	Night Time
Project NAGs			
NAG 1	40	38	36
NAG 2	42	41	35
Outside NAGs			
Outside NAGs	40	35	35

Notes:

- Day = 7.00 am to 6.00 pm (Monday to Saturday), and 8.00 am to 6.00 pm (Sundays and public holidays).
- Evening = 6.00 pm to 10.00 pm.
- Night = the remaining periods.

5.4.2 Amenity Noise Levels and Project Amenity Noise Levels

The *NPfI* specifies an amenity noise level which aims to maintain noise amenity over the whole daytime, evening or night time period where a receiver is subjected to cumulative noise from a number of industrial sources.

The amenity noise level is relevant in the context of controlling cumulative noise impacts resulting from the concurrent operation of the Project and the other potential sources of industrial noise (for example, the Bengalla Mine and Mt Arthur Coal Mine located south of the Project [Figure 1-1]). The amenity noise level sets upper limits to control the total $L_{Aeq,Period}$ noise levels at a given receiver from all industrial sources over day, evening and night periods. In this case, the surrounding rural receivers are situated in an area which would be classified as "Rural" under the *NPfI*, and the relevant recommended $L_{Aeq,Period}$ amenity noise levels are 50 dBA, 45 dBA and 40 dBA for daytime, evening and night time periods, respectively. These amenity noise levels are considered conservative for receivers located within the township of Muswellbrook, as this area could be classified as "Urban" under the *NPfI* based on the LEP zoning.

The *NPfI* sets an amenity noise level applicable to the Project in order to ensure total industrial noise levels remain within the recommended amenity levels as follows:

Project amenity noise level = Amenity noise level – 5 dB

Table 5-9 summarises the Project amenity noise levels.

Table 5-9 Project Amenity Noise Levels – Residential Receivers

Receiver	Project Amenity Noise Levels ($L_{Aeq,Period}$)		
	Day	Evening	Night Time
All Receivers	45	40	35

Notes:

- Day = 7.00 am to 6.00 pm (Monday to Saturday), and 8.00 am to 6.00 pm (Sundays and public holidays).
- Evening = 6.00 pm to 10.00 pm.
- Night = the remaining periods.

5.4.3 Project Noise Trigger Levels

The *NPfI* describes the PNTLs as being the lower (i.e. more stringent) of the Project intrusiveness noise level and Project amenity noise levels. The policy also stipulates that PNTLs should be expressed as $L_{Aeq,15min}$ values and provides the following method to convert $L_{Aeq,Period}$ levels into $L_{Aeq,15min}$ levels:

$L_{Aeq,15min} = L_{Aeq,Period} + 3$ dB

In view of the above, the Project intrusiveness noise levels are lower in all cases and, therefore, Table 5-10 summarises the Project noise trigger levels used for all identified receivers in this assessment (i.e. the same as Table 5-8).

Table 5-10 Project Noise Trigger Levels – Residential Receivers

Receiver	Project Noise Trigger Levels ($L_{Aeq,15min}$)		
	Day	Evening	Night Time
NAG 1	40	38	36
NAG 2	42	41	35
Outside NAGs			
Outside NAGs	40	35	35

Notes:

- Day = 7.00 am to 6.00 pm (Monday to Saturday), and 8.00 am to 6.00 pm (Sundays and public holidays).
- Evening = 6.00 pm to 10.00 pm.
- Night = the remaining periods.

5.5 Modifying Factor Adjustments

Where a noise source contains certain annoying characteristics, such as low-frequency noise, the *NPfI* states that a penalty should be applied to measured or predicted noise levels before comparing to the relevant Project noise trigger levels.

The *NPfI* provides a method of low-frequency noise assessment based on:

- overall 'C' weighted and 'A' weighted predicted or measured levels; and
- one-third octave predicted or measured levels in the range 10–160 Hertz (Hz).

Two penalties are nominated in the *NPfI*:

2 dB (evening and night)	if the C- minus A-weighted noise level over the same period is 15 dB or more, and where any of the third octave noise levels in Table C2 of the *NPfI* are exceeded by up to and including 5 dB and cannot be mitigated.
2 dB (daytime) and 5 dB (evening and night)	if the C- minus A-weighted noise level over the same period is 15 dB or more, and where any of the third octave noise levels in Table C2 of the *NPfI* are exceeded by more than 5 dB and cannot be mitigated.

Table C2 of the *NPfI* is reproduced below:

Table C2: One-third octave low-frequency noise thresholds.

Hz/dB(Z)	***One-third octave $L_{Zeq,15min}$ threshold level***												
Frequency (Hz)	*10*	*12.5*	*16*	*20*	*25*	*31.5*	*40*	*50*	*63*	*80*	*100*	*125*	*160*
dB(Z)	*92*	*89*	*86*	*77*	*69*	*61*	*54*	*50*	*50*	*48*	*48*	*46*	*44*

***Note**:*

- *dB(Z) = decibel (Z frequency weighted).*

A low-frequency noise assessment for the Project is provided in Section 6.8. This assessment concludes no modifying factor correction for low-frequency noise is warranted for the Project.

5.6 Trigger Levels for Maximum Noise Level Event Assessment

To help protect residents from sleep disturbance (awakening or disturbance to sleep stages), the *NPfI* also includes the following:

> *Where the subject development/premises night-time noise levels at a residential location exceed:*
>
> - *$L_{Aeq,15min}$ 40 dB(A) or the prevailing RBL plus 5 dB, whichever is the greater, and/or*
> - *L_{AFmax} 52 dB(A) or the prevailing RBL plus 15 dB, whichever is the greater,*
>
> *a detailed maximum noise level event assessment should be undertaken.*

On the basis that the existing RBLs for the night time period range between 30 and 31 dBA depending on the receiver/NAG, the Project's trigger levels for the maximum noise level event screening assessment are:

- $L_{Aeq,15min}$ 40 dBA; and/or
- L_{AFmax} 52 dBA.

The trigger levels for the maximum noise level event assessment are only applicable to the night time (10.00 pm to 7.00 am) period.

5.7 Residual Noise Impacts

The *NPfI* recognises that where all feasible and reasonable noise mitigation measures have been applied to both the source and pathway, a proposed development might give rise to residual noise impacts.

The *VLAMP* (DP&E, 2018) describes mitigation for residual noise and air quality impacts from State significant mining, petroleum and extractive industry developments through the application of voluntary mitigation and acquisition rights.

Tables 4.1 and 4.2 of the *NPfI* quantify the significance of potential noise exceedances and provide example measures for addressing residual noise impacts, respectively. These tables are reproduced below in Tables 5-11 and 5-12. The significance categories (i.e. negligible, marginal, moderate and significant) and measures are generally consistent with the significance categories and measures described in Table 1 of the *VLAMP*.

Table 5-11 Significance of Residual Noise Impacts

If the predicted noise level minus the project noise trigger level is:	And the total cumulative industrial noise level is:	Then the significance of residual noise level is:
≤2 dBA	Not applicable	Negligible
≥3 but ≤5 dBA	< recommended amenity noise level or > recommended amenity noise level, but the increase in total cumulative industrial noise level resulting from the development is less than or equal to 1 dB	Marginal
≥3 but ≤5 dBA	> recommended amenity noise level and the increase in total cumulative industrial noise level resulting from the development is more than 1 dB	Moderate
>5 dBA	≤ recommended amenity noise level	Moderate
>5 dBA	> recommended amenity noise level	Significant

Table 5-12 Examples of Receiver-Based Treatment to Mitigate Residual Noise Impacts

Significance of residual noise level	Example of potential treatment
Negligible	The exceedance would not be discernible by the average listener and therefore would not warrant receiver-based treatment or controls.
Marginal	Provide mechanical ventilation/comfort condition systems to enable windows to be closed without compromising internal air quality/amenity.
Moderate	As for 'marginal', but also upgraded façade elements, such as windows, doors or roof insulation, to further increase the ability of the building façade to reduce noise levels.
Significant	May include suitable commercial agreement where considered feasible and reasonable.

Note in accordance with the *VLAMP*, mitigation rights are afforded to properties with predicted exceedances that are characterised as marginal, moderate or significant and acquisition rights are afforded to properties with predicted exceedances that are characterised as significant.

For privately-owned residences, Table 5-13 presents the options for addressing noise levels where they may exceed the Project noise trigger levels.

Table 5-13 Project Noise Impact Assessment Methodology

Noise Management Zone		Noise Affectation Zone
1-2 dB above Project noise trigger levels (refer Table 5-11)	**3-5 dB above Project noise trigger levels (refer Table 5-11)**	**> 5 dB Project noise trigger levels (refer Table 5-11)**
No treatment/controls required.	• Voluntary mitigation rights applicable. • Architectural treatment required if requested (incl. ventilation & upgraded façade elements).	• Voluntary mitigation rights applicable. • Architectural treatment required if requested (incl. ventilation & upgraded façade elements). • Voluntary land acquisition rights applicable.

5.8 Project Noise Trigger Levels – Other Receiver Types

As described in Section 4, a number of non-residential receivers have been identified around the Mount Pleasant Operation, including age care facilities, accommodations, schools, churches, commercial facilities and a correctional centre.

For all the above receiver types, PNTLs were developed based on recommended amenity noise levels set by the *NPfI*. These are summarised in Table 5-14 and are representative of amenity levels for "Rural" areas as defined in the *NPfI*. The nominated amenity noise levels are considered conservative for receivers located within the township of Muswellbrook, as this area could be classified as "Urban" under the *NPfI*.

Table 5-14 Amenity Noise Levels – Other Receiver Types

Receiver Type	Amenity Noise Levels ($L_{Aeq,Period}$)		
	Day	Evening	Night Time
Age Care Facility[1]	50	45	40
Accommodation	55	50	45
School[2,3,4]	45	45	n/a
Church[2,4]	50	50	50
Correctional Centre[5]	55	50	45
Commercial[2]	65	65	65

Notes:

- Day = 7.00 am to 6.00 pm (Monday to Saturday), and 8.00 am to 6.00 pm (Sundays and public holidays).
- Evening = 6.00 pm to 10.00 pm.
- Night = the remaining periods.

1. As no amenity noise levels exist for age care facilities, amenity noise levels for residential receivers were conservatively used instead. Note that the night time amenity noise level for residential receivers is consistent with the lower end of the internal design sound level range for sleeping areas in houses and apartments in suburban areas or near minor roads recommended in Australian/New Zealand Standard *AS/NZS 2107:2016 Acoustics-Recommended design sound levels and reverberation times for building interiors*.
2. Amenity noise levels only applicable when in use.
3. Amenity noise levels for schools are applicable to the noisiest one-hour period. Because of the relatively consistent nature of noise emissions from the Project, it is considered appropriate to treat $L_{eq,1hr}$ amenity noise levels as equivalent to $L_{eq,Period}$ amenity noise levels for the day, evening and night time assessment periods.
4. Amenity noise levels expressed as internal noise levels in the *NPfI*. Because Project noise trigger levels used as part of the assessment are expressed as external noise levels, equivalent external amenity noise levels were established by adding 10 dB to the internal amenity noise levels (based on an outdoor-to-indoor noise level reduction of 10 dB with windows open).
5. As no amenity noise levels exist for correctional centres, amenity noise levels for hotels, motels, caretakers' quarters, holiday accommodation and permanent resident caravan parks were used instead.

The PNTLs for other receiver types were established by converting the amenity noise levels summarised in Table 5-14 into Project amenity noise levels (i.e. by subtracting 5 dB) and expressing them as $L_{Aeq,15min}$ noise levels (i.e. by adding 3 dB to the $L_{Aeq,Period}$ noise levels). Table 5-15 presents the relevant PNTLs used for other receiver types in the assessment.

Table 5-15 Project Noise Trigger Levels – Other Receiver Types

Receiver Type	Project Noise Trigger Levels ($L_{Aeq,15min}$)		
	Day	Evening	Night Time
Age Care Facility	48	43	38
Accommodation	53	48	43
School[1]	43	43	n/a
Church[1]	48	48	48
Correctional Centre	53	48	43
Commercial[1]	63	63	63

Note:

- Day = 7.00 am to 6.00 pm (Monday to Saturday), and 8.00 am to 6.00 pm (Sundays and public holidays).
- Evening = 6.00 pm to 10.00 pm.
- Night = the remaining periods.

1. PNTLs only applicable when in use.

6 OPERATIONAL NOISE ASSESSMENT

6.1 Noise Modelling Methodology

Operational noise levels at nearby receivers have been calculated using the Environmental Noise Model (ENM) (a proprietary computer program from RTA Technology Pty Ltd). This modelling software is compatible with the *NPfI* and has been previously accepted by the EPA and the DPIE for use in environmental noise assessments. The assessment models the total noise at each receiver including the operation of the Project. Total predicted operational noise levels are then compared with the PNTLs presented in Tables 5-10 and 5-15.

6.1.1 Noise Assessment Scenarios

Noise modelling was undertaken for the daytime, evening and night operating scenarios for 2026, 2028, 2031, 2034, 2041, 2044 and 2047. These years were selected to represent operations with the greatest potential for noise impacts on differing groups of the surrounding receivers.

The selected years can be described as follows:

- 2026 considers the initial stage of the Project where the coal extraction, handling and processing rate is identical to that of the approved operations (i.e. 10.5 Mtpa of ROM coal). However, it features a considerable increase of approximately 10 million bank cubic metres (Mbcm) of waste material when compared with the first three years of the Project life. Mining occurs in the eastern part of the Project open cut area within all three pits (i.e. South Pit, Central Pit and North Pit), relatively close to the township of Muswellbrook, and benefiting from a moderate amount of shielding from the Eastern Out-of-Pit Emplacement. 2026 assumes the use of the Stage 2 rail infrastructure (i.e. rail spur and loop, train load-out bin, and product conveyor) approved as part of Modification 4. 2026 makes use of the current CHPP facilities.

- 2028 considers an active pit at the closest point to the village of Aberdeen. It represents the first year with the intermediate stage coal extraction, handling and processing rate of 15.75 Mtpa. 2028 represents the first year with the CHPP Stage 2a upgrade in place, featuring an additional Coal Preparation Plant module and associated infrastructure. Due to the new coal production rate, average rail transport movements of product coal would also increase compared with previous years.

- 2031 considers the same CHPP arrangement and coal extraction, handling and processing rate as 2028. Its active pit area is situated further west and benefits from further shielding from the Eastern Out-of-Pit Emplacement when compared with previous years, providing greater shielding of potential noise impacts at the township of Muswellbrook and the village of Aberdeen.

- 2034 considers an active pit area further west and far enough from the township of Muswellbrook and village of Aberdeen for the Mount Pleasant Operation to increase its coal extraction, handling and processing rate to the Project's maximum rate of 21 Mtpa. 2034 represents the first year with the CHPP Stage 2b upgrade in place and the proposed maximum rail transport rate of approximately 17 Mtpa of product coal.

- 2041 considers the same coal production rate as 2034. Although its active pit area has moved further away from the township of Muswellbrook and village of Aberdeen and benefits from further shielding from the emplacement landform to the east of the open cut, it features a considerable increase in waste rock removal volumes when compared with the previous assessed year.
- 2044 considers the first Project year with reduced coal production rates, despite maintaining comparable waste rock removal volumes when compared with 2041. It addresses potential noise impacts with a focus to the south-west and north-west receivers.
- 2047 considers a further reduction in coal extraction, handling and processing rates when compared with 2044, with a focus on potential impacts to the south-west and north-west receivers.

6.1.2 Meteorological Environment for Noise Assessment Purposes

Fact Sheet D of the *NPfI* defines standard meteorological conditions and noise-enhancing meteorological conditions to be considered for the assessment. The definition of those conditions is provided in Table D1 of Fact Sheet D, which is reproduced below.

Table D1: Standard and noise-enhancing meteorological conditions.

Meteorological conditions	***Meteorological parameters***
Standard meteorological conditions	*Day/evening/night: stability categories A-D with wind speed up to 0.5 m/s at 10 m AGL.*
Noise-enhancing meteorological conditions	*Daytime/evening: stability categories A-D with light winds (up to 3 m/s at 10 m AGL).* *Night-time: stability categories A-D with light winds (up to 3 m/s at 10 m AGL) and/or stability category F with winds up to 2 m/s at 10 m AGL.*

Notes: *m/s = metres per second; m = metres; AGL = above ground level; where a range of conditions is nominated, the meteorological condition delivering the highest predicted noise level should be adopted for assessment purposes. However, feasible and reasonable noise limits in consents and licences derived from this process would apply under the full range of meteorological conditions nominated under standard or noise-enhancing conditions as relevant. All wind speeds are referenced to 10m AGL. Stability categories are based on the Pasquill-Gifford stability classification scheme.*

Fact Sheet D provides two options when considering meteorological effects:

1. Conservatively adopt noise-enhancing meteorological conditions without processing meteorological data local to the site; or
2. Determine the significance of noise-enhancing meteorological conditions based on meteorological data local to the site and adopt significant noise-enhancing conditions for the assessment. Where noise-enhancing meteorological conditions are deemed non-significant, standard meteorological conditions may be adopted.

The second option was adopted for the noise assessment as it would provide a more representative estimate of potential noise impacts.

The significance of noise-enhancing meteorological conditions is based on data obtained from the Mount Pleasant Operation M-WM2 Automatic Weather Station (AWS) (approximately 1 km to the north-west of Muswellbrook) for the period 1 December 2016 to 31 August 2019. The dataset includes wind speed, wind direction and observations of sigma-theta used to determine Pasquill-Gifford stability categories (in accordance with Fact Sheet D).

In accordance with the *NPfI*, analysis of local meteorology was conducted for each season separately. As such, any season during the above nominated period where less than two months' worth of data was available was excluded from the analysis to minimise inaccurate results.

Analysis of the meteorological data in accordance with Fact Sheet D of the *NPfI* determined that no light winds are significant during the day, evening or night time assessment periods in the area surrounding the Project. Appendix D provides a summary of the methodology used to determine the significance of those noise-enhancing meteorological conditions.

Analysis of data from the M-WM2 AWS determined that the percentage of occurrence of moderate-to-strong temperature inversions in winter months was 23.8% (see Section D.2 of Appendix D). Although this percentage is below the threshold of occurrence of 30% to qualify as a significant noise-enhancing condition, given the location of the Project in the Hunter Valley, which is known for inversion conditions, moderate-to-strong inversions have conservatively been considered as part of the night time noise-enhancing conditions.

Fact Sheet D of the *NPfI* states that where moderate-to-strong inversions are relevant for an assessment, winds up to 2 m/s during such inversions should be considered. However, no guidance is provided to determine an applicable wind speed for a site if winds of that magnitude are infrequent in combination with moderate-to-strong inversions.

The meteorological data obtained from M-WM2 AWS suggests light winds up to 2 m/s occur less than 5% of the time in any single direction during moderate-to-strong inversions at night in winter (Section D.2 of Appendix D). If a 2 m/s wind in combination with a moderate-to-strong inversion were to be adopted, it would overstate the potential noise impacts of the Project. The default wind speed applicable under standard conditions, 0.5 m/s, has therefore conservatively been applied in all applicable directions (i.e. as a source-to-receiver wind).

It is noted that for some similar Projects, a less conservative approach is typically applied when the significance threshold of occurrence for temperature inversions is not met, whereby a moderate-to-strong inversion is modelled with no wind component. The approach adopted for the Project is therefore considered conservative and more representative of the range of potential local conditions when inversions occur.

Review of direct measurements of temperature lapse rate obtained from Bengalla Mine's 60 m inversion tower was conducted as Bengalla Mining Company is providing MACH access to this data for operational management purposes. At times, moderate-to-strong temperature inversions may be recorded at the inversion tower that would not be recorded in the M-WM2 AWS data, due to the sigma-theta method used for weather stations, which modifies the stability category based on prevailing wind speed. Review of the inversion tower data has not identified any changes to assessment methodology or outcomes. It is understood that MACH intends to review data obtained from Bengalla Mine's inversion tower in combination with meteorological data obtained at the Mount Pleasant Operation (e.g. from the M-WM2 AWS) when managing noise impacts (e.g. the strength of temperature inversion measured by the 60 m inversion tower may inform the magnitude of mitigation employed in response to an alert).

Very noise-enhancing meteorological conditions represent conditions outside the range of either standard or those noise-enhancing meteorological conditions deemed significant to the Project in accordance with Fact Sheet D of the *NPfI*. More specifically, very noise-enhancing meteorological conditions for the Project would include moderate-to-strong inversions combined with wind speeds greater than 0.5 m/s. Noise levels under very noise-enhancing meteorological conditions would be subject to the PNTLs plus 5 dB.

Given very noise-enhancing conditions would be infrequent, they would be managed by MACH using a pro-active noise management system with identification of modified operating scenarios (Section 6.4) to maintain compliance with relevant Project noise trigger levels in the event that adverse meteorological conditions are experienced.

The standard and noise-enhancing meteorological conditions relevant to the Project are summarised in Table 6-1.

Table 6-1 Relevant *NPfI* Meteorological Conditions

Assessment Period	*NPfI* Meteorological Condition	Description of Meteorological Parameters
Daytime	Standard meteorological conditions	0.5 m/s wind in source-to-receiver direction[1]; stability categories A-D
Evening	Standard meteorological conditions	0.5 m/s wind in source-to-receiver direction[1]; stability categories A-D
Night	Standard meteorological conditions	0.5 m/s wind in source-to-receiver direction[1]; stability categories A-D
	Noise-enhancing meteorological conditions	0.5 m/s wind in source-to-receiver direction[1]; stability category F[2]

Notes:

1. Wind in source-to-receiver direction was considered using the closest direction in a 16-direction compass to the source-to-receiver direction.
2. Stability Category F was modelled using a temperature inversion of 4 degrees Celsius per 100 m (°C/100 m) in accordance with the *NPfI*.

For each assessment period, only the highest noise predictions under the relevant *NPfI* meteorological conditions presented in Table 6-1 (including both standard and noise-enhancing meteorological conditions as described in Fact Sheet D) are reported.

The meteorological conditions assumed in the noise and blasting assessments for the Mount Pleasant Operation mine optimisation and rail modifications (Modifications 3 and 4) were determined using the 10th percentile methodology, with the reported 10th percentile exceedance level representing light source-to-receiver winds combined with a 3°C/100 m temperature inversion. As such, the noise-enhancing night time meteorological conditions presented in Table 6-1 are more conservative than those previously assumed as part of the mine optimisation and rail modifications.

6.2 Predictive Model Validation Study

The noise model developed for the Mount Pleasant Operation was validated against recent night time attended noise measurements conducted in the vicinity of the site by Wilkinson Murray for the purpose of the model validation study. The noise model was adjusted to be representative of mining operations and meteorological conditions during the measurement periods.

Attended noise monitoring was conducted on the nights of Wednesday 1 April to Thursday 2 April 2020 and Wednesday 15 April to Thursday 16 April 2020, at two different locations – one to the east of the site with a focus on mining noise, and the other on the western side of the site with a focus on noise generated by the CHPP. Both locations were strategically selected to enable the separation of noise generated by the Mount Pleasant Operation from noise generated by other nearby mining operations (i.e. originating from different directions), thus allowing for more accurate measurements of Mount Pleasant Operation-related noise. Details regarding the noise monitoring methodology and measurement results can be found in Appendix E.

Data obtained from the Mount Pleasant Operation M-WM2 AWS was reviewed to establish the exact meteorological conditions present during the attended measurements. For each monitoring location, only the relevant meteorological conditions were assumed for the purpose of the model validation study. The main meteorological conditions present during the measurement periods are summarised in Table 6-2 with the model validation study results.

Description of CHPP and mining fleet operations during both night shifts of interest (assisted by an integrated Global Positioning System [GPS]) was provided by MACH.

Table 6-2 Model Validation Study – Results

Date	Main Meteorological Conditions Present during Monitoring		Measured $L_{eq,15min}$ Level (dBA)	Predicted $L_{eq,15min}$ Level (dBA)
Eastern Location				
1-2 April 2020	Receiver-to-source wind component at times combined with weak temperature inversions (D and E Stability Categories)		< 29 [1]	24-28
15-16 April 2020	Source-to-receiver wind component at times combined with weak and moderate temperature inversions (D, E and F Stability Categories)		35-39	36-41
Western Location				
1-2 April 2020	Standard meteorological conditions	Source-to-receiver wind component at times combined with weak temperature inversions (D and E Stability Categories)	36-39	34-38
	More noise-enhancing meteorological conditions	Stronger source-to-receiver wind component combined with weak temperature inversions (E Stability Category)	41-43	44-45
15-16 April 2020	Standard meteorological conditions	Source-to-receiver wind component at times combined with weak temperature inversions (D and E Stability Categories)	40-41 [2]	41-43
	More noise-enhancing meteorological conditions	Moderate temperature inversions (F Stability Category) at times combined with source-to-receiver wind component	42-43 [3]	44-47

Notes:

1. Mount Pleasant Operation inaudible throughout monitoring period due to relatively high background noise levels masking site noise and meteorological conditions not conducive to the propagation of site noise towards the monitoring location.
2. Noise levels measured between 35 and 38 dBA from 8.00 pm to 9.00 pm; those relatively low levels are believed to have resulted from non-representative operating conditions (i.e. temporary changes in CHPP operations) and are thus not considered for the model validation study.
3. Noise levels measured at 41 dBA on two occasions under moderate temperature inversions; those relatively low levels are believed to have resulted from non-representative operating conditions (i.e. temporary changes in CHPP operations) and are thus not considered for the model validation study.

The results summarised in Table 6-2 show a generally good correlation between measured and predicted noise levels under similar meteorological conditions, with differences typically ranging within 3 dB. The model tended to overpredict (on occasion by up to 5 dB) under the more noise-enhancing meteorological conditions (i.e. stronger source-to-receiver winds and/or stronger temperature inversions).

It should be noted that the model validation study results have shown a number of inexplicable short-term fluctuations in noise levels which may be the result of a combination of factors (e.g. variations in operational conditions not accounted for in site description such as operating cycles of individual plant).

Considering the limitations of the study, the outcomes are considered suitable. As such, the noise model developed for the Mount Pleasant Operation is deemed suitable for environmental noise assessment purposes and no correction factor is required. Notwithstanding, the results indicate that the noise model may at times overpredict noise levels to a small degree, particularly during more noise-enhancing meteorological conditions (i.e. stronger source-to-receiver winds and/or stronger temperature inversions).

6.3 Investigation of Feasible & Reasonable Noise Mitigation Measures

The Mount Pleasant Operation already applies a comprehensive suite of noise mitigation and noise management measures on-site. These include:

- Contemporary technology fixed plant, including acoustic design such as full cladding where reasonable and feasible (Section 2.5.1).
- Noise suppression is currently fitted on all major mobile equipment where reasonable and feasible (Section 2.5.2).
- Mobile equipment is operated in less exposed areas during the evening and night.
- Implementation of additional pro-active and reactive mitigation measures based on the predictive modelling system and real-time monitoring.

The modelled scenarios presented in this report represent the culmination of several iterative noise modelling investigations designed to determine feasible and reasonable noise mitigation measures for the Project. The iterative steps undertaken are described below:

1. Preliminary noise modelling of scenarios representative of the maximum noise emissions from the Project to identify the potential for noise exceedances.
2. Evaluation of various combinations of noise management and mitigation measures to assess their relative effectiveness.
3. Review of the effectiveness of these measures and assessment of their feasibility by MACH.
4. Adoption by MACH of management and mitigation measures to optimise noise emissions associated with the Project.

As a result of the preliminary modelling, material alterations to the mine plan were also undertaken in order to improve acoustic performance, including:

a. Design of staged increase in extraction, handling and processing of ROM coal (i.e. progressive increase in ROM coal mining rate from 10.5 up to 21 Mtpa over the Project life) combined with mine progression in the western direction away from receivers in and around the township of Muswellbrook and village of Aberdeen. The intent of this staged increase in coal production rate is to allow for enough distance separating the populated noise-sensitive areas and the Project's active mining area.

b. Design of the integrated eastern waste rock landform area to provide shielding of operations to receivers in and around the township of Muswellbrook and village of Aberdeen during adverse meteorological conditions.

c. Continued implementation of noise suppression and acoustic design to all new major mobile equipment and fixed plant where reasonable and feasible to reduce emitted noise levels (in addition to the continued use of noise suppressed mobile equipment and acoustically designed fixed plant at the existing Mount Pleasant Operation).

d. Continued use of the pro-active noise management system (Section 6.4) with development of modified operating scenarios during very noise-enhancing meteorological conditions in the evening and night time periods. The pro-active noise management system would be described in the Mount Pleasant Operation Noise Management Plan.

Table 6-3 provides a summary of the specific mitigation measures proposed for the Project in order to reduce potential noise emissions.

Table 6-3 Specific Mitigation Measures

Specific Mitigation Measures
Progressive increase in ROM coal mining rate from 10.5 up to 21 Mtpa over the Project life, combined with mine progression west away from receivers in and around the township of Muswellbrook and village of Aberdeen.
Continued implementation of noise suppression to all new major mobile equipment where reasonable and feasible to reduce emitted noise levels (in addition to the continued use of noise suppressed mobile equipment at the existing Mount Pleasant Operation).
Continued implementation of acoustic design of fixed plant, such as full cladding where reasonable and feasible, to reduce emitted noise levels (in addition to the continued use of acoustically designed fixed plant at the existing Mount Pleasant Operation).
Implementation of a rail noise barrier within the Mount Pleasant Operation MLs if reasonable and feasible to reduce overall operational noise levels experienced at receivers to the south of the Mount Pleasant Operation.
Acoustic design incorporated into mine planning, including optimising shielding of selected haul roads, truck numbers assigned to haul roads (with more trucks using haul roads further away from receivers), and alignment of haul roads away from receivers where practical.

Specific Mitigation Measures
Continued use of the real-time monitoring and forecasting system, incorporating noise and meteorological monitoring, with the purpose of anticipating upcoming periods of very noise-enhancing meteorological conditions that may generate noise exceedances at receivers surrounding the mine. The system allows the mine operator to prepare to modify operations to reduce noise levels as far as reasonably and feasibly practical in the event that predicted adverse meteorological conditions are experienced. Details regarding the real-time monitoring and forecasting system for the Project would be provided in the Mount Pleasant Operation Noise Management Plan.

6.4 Pro-Active Noise Management During Very Noise-Enhancing Meteorological Conditions

MACH has a real-time monitoring and forecasting system in place to assist with managing noise levels during upcoming periods of very noise-enhancing meteorological conditions. This system would be used for all stages of the Project life to assist with the management of noise. Very noise-enhancing meteorological conditions would be identified by a combination of noise and meteorological monitoring and meteorological forecasting, where noise monitoring indicates the trend in actual noise levels at a location and meteorological monitoring and forecasting indicates the likelihood that the current trend would continue or intensify over the ensuing period.

In the event the real-time monitoring and meteorological forecasting system predicts elevated noise levels at some receivers may occur, mine operators should prepare to adjust operations to minimise noise impacts in the event predicted adverse meteorological conditions are experienced.

During years with the highest predicted noise impacts to the south-east (i.e. 2028 and 2031), adverse meteorological conditions would generally consist of:

- Stability Category D combined with 1.5-3 m/s source-to-receiver winds;
- Stability Category E combined with 0.5-2 m/s source-to-receiver winds; and
- Stability Category F combined with 0-0.5 m/s source-to-receiver winds.

It is important to note that MACH would maintain noise mitigation controls during very noise-enhancing meteorological conditions to minimise noise impacts. Such conditions would include:

- Stability Category E combined with 2-3 m/s source-to-receiver winds;
- Stability Category F combined with source-to-receiver winds greater than 0.5 m/s; and
- Stability Category G.

Examples of pro-active/reactive mitigation scenarios considered and adopted in the noise modelling to address identified potential exceedances at the closest privately-owned residential receivers during the modelled adverse meteorological conditions are described in Table 6-4.

Table 6-4 Example Mitigation Scenarios – Under Adverse Meteorological Conditions

Applicable Modelling Scenario	Description of Example Mitigation Scenario	Approximate Noise Reduction at Key Receivers
2028 – Evening/Night	Shutdown two overburden extraction fleets (e.g. excavator, dozer and associated haul trucks) and some ancillary equipment (e.g. some drills and support dozers)	2 - 3 dB
2034 – Evening/Night	Shutdown some ancillary equipment (e.g. some drills and support dozers)	0.5 - 1 dB
2041 – Evening/Night	Shutdown a small number of ancillary equipment (e.g. two drills)	0.3 dB

As shown in Table 6-4, the most significant additional mitigation measures adopted in the noise modelling, for evening and night operations in 2028, would reduce noise levels by approximately 3 dB at key nearby receivers under the modelled adverse meteorological conditions.

To determine whether modifications to the planned operations of this scale are feasible with regard to achieving the overall production schedule, the frequency of the potential need for these mitigation requirements has also been considered.

Analysis of the frequency of meteorological conditions resulting in exceedances at key receivers to the south-east of the Project indicates that mitigation of this scale would be required for less than 5% of the night time period in 2028.

Table 6-5 summarises indicative frequencies of meteorological conditions requiring additional mitigation measures in 2028 for receivers in the south-east, where the most intensive mitigation measures are anticipated to be required.

The modelling indicates additional mitigation measures would be required less frequently during other years (i.e. as mining proceeds to the west and the emplacement landform to the east of the open cut provides additional shielding).

Table 6-5 Indicative Frequencies of Meteorological Conditions Requiring Additional Mitigation Measures (2028)

Meteorological Condition	Mitigation Status	Receiver Group	Indicative Percentage of Night Time (based on 2028)
Standard	No mitigation	South-East	~68%
Mildly adverse	Some intermediate mitigation[1] (such as shutting less fleet and ancillary equipment than the assessed mitigation strategy [Table 6-4], temporarily pausing the use of drills or other supporting mobile equipment in exposed locations, or relocating mobile equipment)		~28%
Adverse and very adverse	Assessed mitigation strategy[2] (e.g. refer to Table 6-4 for the scenario adopted for receivers to the south-east)		~4%

Notes:
1. Intermediate mitigation measures adopted during mildly adverse meteorological conditions were not assumed in the assessment of operational noise predictions (Section 6.9).
2. Assessed mitigation strategy during adverse and very adverse meteorological conditions were assumed in the assessment of operational noise predictions (Section 6.9).

Less intensive mitigation scenarios (such as shutting down less fleet and ancillary equipment than that described in Table 6-4, temporarily pausing the use of drills or other supporting mobile equipment in exposed locations or relocating mobile equipment) would also be required under certain meteorological conditions; however, such scenarios would have a minimal impact on the Project schedule. Less intensive mitigation scenarios would also be required in other areas surrounding the Mount Pleasant Operation.

MACH has advised that the estimated frequency of additional operational noise mitigation measures can be accommodated by the Project schedule.

Details regarding the real-time monitoring and forecasting system would be provided in the Mount Pleasant Operation Noise Management Plan.

MACH has been successfully implementing and managing real-time monitoring and forecasting systems for the currently approved Mount Pleasant Operation.

6.5 Indicative Equipment List

Table 6-6 presents an indicative schedule of equipment and the period of operation of plant (i.e. day/evening/night) used for impact assessment purposes. Mining fleet would be confirmed during detailed mine design and would be subject to change throughout the life of the Project.

Based on the annual average daily train movements of 6.5 laden trains leaving the site per day (at peak coal production), the annual average daily train movements at night (10.00 pm – 7.00 am) can be estimated at 2.5 trains. The probability of two trains accessing the approved Stage 2 rail spur during the same 15-minute period at night was deemed not significant enough to warrant addressing two train movements for the purpose of the operational noise assessment, particularly in combination with the assessed adverse meteorological conditions (which would not be frequent). As such, the operational noise assessment assumes one train movement travelling on the spur section within the Mount Pleasant Operation MLs during a 15-minute period for all selected years.

6.6 Indicative Sound Power Levels

Table 6-7 presents modelled plant sound power levels (SWLs) and references for all the SWLs used in the assessment in accordance with the *NPfI*.

Most of the nominated SWLs included in Table 6-7 were established from direct measurements at the Mount Pleasant Operation and are generally indicative of leading practice mining equipment (for noise performance). Mobile fleet and acoustic designs for infrastructure items would be selected as part of the detailed mine design; however, it is expected SWLs would be generally consistent with those presented in Table 6-7.

MACH recognises the importance of input data such as SWLs as a source of variability in noise predictions and understands the importance of consistent SWLs in order to maintain the noise footprint of the Project estimated as part of the assessment. As such, MACH has committed to implement and manage proper care and maintenance of the equipment to avoid any deterioration and/or damage of noise attenuation components.

Table 6-6 Indicative Equipment List

Equipment Item	Function	Number of Equipment							Period
		2026	2028	2031	2034	2041	2044	2047	
Mobile Fleet									
CAT 793 Rigid Dump Truck	Haulage (waste rock removal)	38 (day), 32 (evening, night)	10	7	7	12	9	7	Day, evening, night
	Haulage (coal removal)	6	11	11	10	12	12	5	Day, evening, night
	Haulage (Fines Emplacement Area)	6	0	5	0	4	0	0	Day
Hitachi EH5000 Rigid Dump Truck	Haulage (waste rock removal)	0	17	17	30	38	36	21	Day, evening, night
CAT D10 Dozer	ROM stockpile	1	1	1	1	1	1	0	Day, evening, night
	Product stockpile reclaim	1	1	1	1	1	1	1	Day, evening, night
	Coal and partings preparation	2 (day), 3 (evening, night)	2	3 (day), 2 (evening, night)	4	5	5	3	Day, evening, night
CAT D11 Dozer	Coal and partings preparation	2 (day), 3 (evening, night)	3	3 (day), 2 (evening, night)	4	6	5	2	Day, evening, night
	Waste rock emplacement	2 (day), 4 (evening, night)	6 (day), 7 (evening, night)	2 (day), 6 (evening, night)	3 (day), 5 (evening, night)	4 (day), 6 (evening, night)	4 (day), 6 (evening, night)	2 (day), 4 (evening, night)	Day, evening, night
	Landform rehabilitation	2	2	2	2	2	2	2	Day
CAT D6 Dozer	Fines Emplacement Area	1	0	1	0	1	0	0	Day
CAT 854K Wheel Dozer	Excavation support	2	3	3	4	4	4	2	Day, evening, night

Equipment Item	Function	Number of Equipment							Period
		2026	2028	2031	2034	2041	2044	2047	
Liebherr R996B Excavator	Waste rock removal	2	2	2	5	5	5	3	Day, evening, night
Liebherr R9350 Excavator	Waste rock and coal removal	4 (day), 3 (evening, night)	5	4	4	5	4	3	Day, evening, night
Liebherr R9800 Excavator	Waste rock removal	1	1	1	1	2	2	1	Day, evening, night
CAT 994 Wheel Loader	Topsoil removal	1	1	0	0	1	1	1	Day
	ROM stockpile	0 (day), 1 (evening, night)	0 (day), 1 (evening, night)	1	1	0 (day), 1 (evening, night)	0 (day), 1 (evening, night)	0 (day), 1 (evening, night)	Day, evening, night
Drill	Waste rock removal	2	3	3	4	5	4	3	Day, evening, night
Komatsu HD785 Water Cart	Haul road maintenance	6	5	5	7	9	8	5	Day, evening, night
CAT 16M Grader	Haul road maintenance	5	4	4	5	7	6	4	Day, evening, night
CAT 825 Compactor	Fines Emplacement Area	1	0	1	0	1	0	0	Day
CAT 623 Scraper	Fines Emplacement Area	1	0	1	0	1	0	0	Day
25-tonne Excavator	Fines Emplacement Area	1	0	1	0	1	0	0	Day
Moxy Articulated Dump Truck	Fines Emplacement Area	4	0	4	0	4	0	0	Day
CHPP [1]									
CPP Module	Coal Processing (Stage 1)	2	2	2	2	2	2	2	Day, evening, night
	Coal Processing (Stage 2)	0	1 [2]	1 [2]	2 [3]	2 [3]	2 [3]	2 [3]	Day, evening, night
Primary Crusher	Coal Processing (Stage 1)	1	1	1	1	1	1	1	Day, evening, night

Equipment Item	Function	Number of Equipment							Period
		2026	2028	2031	2034	2041	2044	2047	
	Coal Processing (Stage 2)	0	1	1	1	1	1	1	Day, evening, night
Secondary Sizing Station	Coal Processing (Stage 1)	1	1	1	1	1	1	1	Day, evening, night
	Coal Processing (Stage 2)	0	1	1	1	1	1	1	Day, evening, night
Tertiary Sizer	Coal Processing (Stage 1)	1	1	1	1	1	1	1	Day, evening, night
	Coal Processing (Stage 2)	0	1	1	1	1	1	1	Day, evening, night
Transfer Station	Coal Handling (Stage 1)	5	5	5	5	5	5	5	Day, evening, night
	Coal Handling (Stage 2)	0	4	4	4	4	4	4	Day, evening, night
Rejects Bin	Waste Handling (Stage 1)	1	1	1	1	1	1	1	Day, evening, night
	Waste Handling (Stage 2)	0	1	1	1	1	1	1	Day, evening, night
Train Load-out Bin	Coal Handling (Stage 2)	1	1	1	1	1	1	1	Day, evening, night
Rail Transport									
Locomotive	Loading Process	3	3	3	3	3	3	3	Day, evening, night
Train movement [4] travelling along rail spur inside ML	Product Coal Transport	1	1	1	1	1	1	1	Day, evening, night

Notes:

1. CHPP equipment listed in table excludes conveyors.
2. With Stage 2a CHPP upgrade in place.
3. With Stage 2b CHPP upgrade in place.
4. Train movement consists of a train arriving or departing.

Table 6-7 Indicative Equipment Sound Power Levels

Equipment Item		Indicative Sound Power Level L_{Aeq} (dBA)	Reference
Mobile Fleet			
Rigid Dump Trucks	CAT 793	113	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	Hitachi EH5000	113	Liebherr Australia (2018)
Dozers	CAT D10	112	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	CAT D11	113	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	CAT D6	109	CPB Contractors (2017)
	CAT 854K (Wheel Dozer)	112	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
Excavators	Liebherr R996B	115	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	Liebherr R9350	111	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	Liebherr R9800	116	Manufacturer Specifications
Other	CAT 994	116	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	Drill	116	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	Komatsu HD785 Water Cart	112	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	CAT 16M Grader	108	Direct SWL measurements conducted at the Mount Pleasant Operation by Global Acoustics, Hushpak Engineering, Thearle Engineering and Minetek
	CAT 825 Compactor	108	Wilkinson Murray (2017a)
	CAT 623 Scraper	108	Wilkinson Murray (2017a)
	25-tonne Excavator	102	Roads & Maritime Services (2015)
	Moxy Articulated Dump Truck	110	Renzo Tonin & Associates (2018)

Equipment Item	Indicative Sound Power Level L_{Aeq} (dBA)	Reference
CHPP		
DMS Module	110	Direct measurements at the Mount Pleasant Operation (Wilkinson Murray, 15 April 2020)
Primary Crusher	104	Direct measurements at the Mount Pleasant Operation (Wilkinson Murray, 15 April 2020)
Secondary Sizing Station	106	Direct measurements at the Mount Pleasant Operation (Wilkinson Murray, 15 April 2020)
Tertiary Crusher	106	Direct measurements at the Mount Pleasant Operation (Wilkinson Murray, 15 April 2020)
Transfer House	100	Direct measurements at the Mount Pleasant Operation (Wilkinson Murray, 15 April 2020)
Reject Bin	98	Direct measurements at the Mount Pleasant Operation (Wilkinson Murray, 15 April 2020)
Train Load-out Facility	103	Wilkinson Murray (2017a)
Conveyors	82 / linear metre	Direct measurements at the Mount Pleasant Operation (Wilkinson Murray, 10 March 2020)
Rail Transport		
Locomotives during loading process	102	Direct measurements of locomotives during loading process at Maules Creek Coal Project (Wilkinson Murray, 15 March 2018)
Train travelling along rail spur inside ML (40 kilometres per hour [km/hr])	87.9 / linear metre [1]	NSW Rail Noise Database 2014 (Transport for NSW, 2019)

Note:

1. SWL assumes medium wheel defects on rolling stock.

6.7 Construction and Development Activities

6.7.1 Development of Northern Link Road

The development of the approved Northern Link Road with a revised alignment would provisionally occur in 2025.

As the road development works would generally occur outside of the Mount Pleasant Operation MLs, noise associated with the works may be distinct from operational mining activities, as perceived by proximal receivers.

The development of the Northern Link Road has not been explicitly modelled, as:

- The closest privately-owned residential receivers with no acquisition upon request rights in Development Consent DA 92/97 would be at a distance of approximately 4 km from the works, where construction noise is likely to be inaudible during the day.
- The revised alignment would not be significantly closer to privately-owned receivers.
- There would be no material change to the overall construction fleet that would be used for the Project.

Notwithstanding, reasonable and feasible noise mitigation measures would be implemented during construction of the approved Northern Link Road, consistent with the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009).

6.7.2 Construction of Coal Handling and Preparation Plant Stage 2a Upgrade

Construction associated with the staged upgrades to the Stage 1 CHPP and existing coal handling infrastructure has been considered in the assessment. The CHPP Stage 2a upgrades would provisionally occur in 2026 and 2027.

As perceived by receivers in the vicinity of the Project, noise associated with construction activities would largely be indistinguishable from operational mining and coal processing activities given similar plant would be deployed and construction activities would occur in the same areas as operational activities. Therefore, construction activities associated with the staged upgrades to the Stage 1 CHPP and existing coal handling infrastructure have been included in the assessed 2026 operational noise scenarios and assessed in combination with operational noise against the relevant Project noise trigger levels (Table 5-10).

Table 6-8 summarises an indicative construction fleet, and corresponding SWLs, for the Stage 2a CHPP upgrades. All SWLs relate to standard equipment.

Construction activities may be undertaken up to 24 hours per day, 7 days per week, and therefore they have been assumed during the day, evening and night time assessment periods.

Note that a correction of -5 dB was applied to the total SWL for construction activities in the modelling to account for time correction, as the entire construction fleet would not always operate concurrently (i.e. not all plant items are expected to be operating all the time).

Table 6-8 Indicative Noise Sources & Sound Power Levels for Construction Equipment

Plant Description	Number of Equipment	Indicative Sound Power Level L_{Aeq} (dBA)
CAT AD40 Articulated Haul Truck	3	113
30-tonne Excavator	1	103
45-tonne Excavator	2	110
CAT 16H Grader	1	108
18-tonne Padfoot Roller	1	109
Franna Crane / Mobile Crane	1	99
Hand Tools	1	94
Backhoe	1	102

6.7.3 Construction of Coal Handling and Preparation Plant Stage 2b Upgrade

The CHPP Stage 2b upgrades would provisionally occur in 2032 and 2033.

As perceived by receivers in the vicinity of the Project, noise associated with construction activities would largely be indistinguishable from operational mining and coal processing activities, given similar plant would be deployed and construction activities would occur in the same areas as operational activities.

While these construction activities and operational scenarios have not been explicitly modelled, it is not anticipated that the noise that would be experienced by relevant sensitive receivers would be greater than that predicted in the operational and construction scenarios modelled for the Project (e.g. 2034, which includes the peak ROM coal production rate).

6.7.4 Progressive Fines Emplacement Area Raises

The progressive Fines Emplacement Area raises would provisionally occur in 2026, 2031, 2036, 2041 and 2046.

As perceived by receivers in the vicinity of the Project, noise associated with the progressive development of the Fines Emplacement Area would largely be indistinguishable from operational mining activities given similar plant would be deployed.

Where these activities coincide with modelled scenarios (i.e. 2026, 2031 and 2041), Fines Emplacement Area construction fleets have been included in the operational noise modelling (refer Tables 6-6 and 6-7).

6.7.5 Development of Additional Key Water Management Infrastructure

The development of additional major water storage dams for the Project to the west of the Infrastructure Area Envelope would provisionally occur in 2024 and 2036.

As perceived by receivers in the vicinity of the Project, noise associated with development of these water storages would largely be indistinguishable from operational mining activities.

While these construction activities have not been explicitly modelled in combination with operational scenarios, it is not anticipated that the noise that would be experienced by relevant sensitive receivers would be greater than that predicted in the operational and construction scenarios modelled for the Project (e.g. 2026) and the nearby Fines Emplacement Area raises, which have been modelled.

6.8 Low-Frequency Noise Assessment Results

A low-frequency noise assessment was conducted to ascertain whether any of the identified receivers should be subject to a modifying factor correction due to dominant low-frequency content. Such correction would be applied to the predicted noise levels before comparing to the relevant Project noise trigger levels.

As stated in Section 5.5, the *NPfI* provides a method for assessing low-frequency noise based on:

- overall 'C' weighted and 'A' weighted predicted or measured levels; and
- one-third octave predicted or measured levels in the range 10–160 Hz.

Unbalanced Frequency Spectra

A C-weighted noise level minus A-weighted noise level assessment was carried out to determine the potential presence of unbalanced spectra containing major components within the low-frequency range of the spectrum at receivers surrounding the Project. The assessment was conducted for a selection of receivers considered to be representative of various catchment areas surrounding the Project and was based on the relevant night time *NPfI* meteorological conditions (Table 6-1) resulting in the highest noise levels.

Table 6-9 sets out the representative receivers and corresponding catchment areas. The 12 catchment areas are shown in Figure F-1 of Appendix F.

Table 6-9 Low-Frequency Noise Assessment – Assessed Receivers

Direction	Representative Receiver	Catchment Area ID
North-East	192	CA 2
South-West	258a	CA 9
North-West	272b	CA 11
North-West	401	CA 12
West	462c	CA 10
South-South-West	488b	CA 7
East	522b	CA 4
South-East	559	CA 6
South-East	578	CA 5
East-North-East	583	CA 3
North-North-East	999	CA 1
South-West	1100a	CA 8

Table 6-10 summarises the C-weighted noise level minus A-weighted noise level assessment results for all assessed years.

The results indicate that a number of receivers would be exposed to unbalanced spectra containing major components within the low-frequency range of the spectrum. This is generally the case for catchment areas located further away from the Project, noting that receivers to the east of the Mount Pleasant Operation (i.e. CA 4) would only be exposed to unbalanced spectra later in the Project life when the active pit has moved further to the west (e.g. 2041 onward) and receivers to the west of the Project (i.e. CAs 9 and 11) would be exposed to unbalanced spectra in the early stages of the Project life when most in-pit activities are concentrated near the eastern end of the site (i.e. prior to 2041). CA 10 would be subject to unbalanced spectra throughout the life of the Project as it is situated further away from the site than CAs 9 and 11.

Table 6-10 C- Minus A-Weighted Noise Levels

Representative Receiver	Catchment Area ID	$L_{Ceq,15min}$ Noise Level - $L_{Aeq,15min}$ Noise Level (dB)						
		2026	2028	2031	2034	2041	2044	2047
192	CA 2	13.3	12.5	12.5	12.9	14.1	14.5	14.9
258a	CA 9	14.8	15	15	14.8	14.5	14.9	14.6
272b	CA 11	15.6	15.1	15.2	15	14.6	14.7	14
401	CA 12	17.3	16.8	16.8	16.7	16.8	17.1	15.1
462c	CA 10	16.9	16.9	17.2	16.9	16.9	17	16.5
488b	CA 7	17	16.8	16.8	16.9	16.5	16.7	16.5
522b	CA 4	13.5	13.9	13.8	14.7	15.1	15.1	15.2
559	CA 6	18.9	18.7	19.2	19.4	19.6	19.5	19.6
578	CA 5	18.5	17.6	18.6	18.5	18.8	18.9	19.1
583	CA 3	17	16.9	17.3	17.5	17.9	18	18.2
999	CA 1	16	13.7	13.8	13.8	14.5	14.9	15.2
1100a	CA 8	18.4	18.3	18.5	18.5	18.4	18.7	18.5

Note: 1. Levels highlighted in yellow indicate differences of 15 dB or more.

The low-frequency contents of the resultant spectra are generally found to be consistent with results from other low-frequency desktop assessments of comparable operations and do not reflect uncharacteristically high energy in the low frequencies of total noise emissions or unusual sound propagation pathways resulting in highly unbalanced spectra.

Catchment areas expected to be subject to unbalanced spectra were further considered and compared with the relevant one-third octave low-frequency noise threshold levels provided in Table C2 of the *NPfI*.

Low-Frequency Noise Thresholds

All predicted operational noise levels reported in the assessment are based on octave band noise predictions ranging between 31.5 Hz to 16 kilohertz (kHz). As such, predictions do not provide third octave band levels and do not include frequency bands between 10 Hz and 160 Hz as required for comparison with the relevant low-frequency noise threshold levels. In order to estimate levels at those lower frequencies, the 63 Hz third octave band level (generally considered to be a relatively reliable component of a source spectrum) was interpolated from the predicted octave band spectra and used as the basis for the normalisation of a typical spectrum shape of past low-frequency noise measurements.

A typical low-frequency spectrum shape of long-distance mining noise in third octave bands between 10 Hz to 160 Hz was measured as part of a noise audit conducted at Bulga Village (Wilkinson Murray, 2016). The spectrum shape, shown in Table 6-11, corresponds to an average of 130 low-frequency measurements (normalised to a same broadband level) of mining noise from an open cut coal mine comparable in size and operation to the Project (i.e. using loaders and excavators and loading into trucks for haulage to the ROM pad at the mine infrastructure area via internal haul roads). The low-frequency measurements were conducted at an approximate distance of 3 to 4 km from the mine with a propagation path comparable to those surrounding the Project.

Table 6-11 Typical Measured Low-Frequency Spectrum Shape – Bulga Village Noise Audit

	Third Octave Band Centre Frequency, Hz												
	10	**12.5**	**16**	**20**	**25**	**31.5**	**40**	**50**	**63**	**80**	**100**	**125**	**160**
Measured level (dBZ)	49	54	55	52	51	51	51	52	49	50	48	45	40

The resultant normalised low-frequency spectra for all representative receivers exposed to unbalanced spectra are presented in Appendix F.

All normalised low-frequency spectra were found to be below the third-octave low-frequency noise threshold curve (Section 5.5). As such, the low-frequency noise assessment indicates that it is unlikely that any of the receivers surrounding the Project would be subject to dominant low-frequency noise. Therefore, no modifying factor correction for low-frequency noise is warranted for the Project.

This is consistent with attended monitoring at the existing Mount Pleasant Operation, which has generally indicated noise levels experienced at monitoring locations do not contain dominant low-frequency noise.

6.9 Operational Noise Levels Assessment

Predicted $L_{Aeq,15min}$ operational noise levels at all identified receivers are presented in Appendix G. Results are presented for each of Project 2026, 2028, 2031, 2034, 2041, 2044 and 2047 under Fact Sheet D meteorological conditions (Section 6.1.2). The maximum result of applicable Fact Sheet D meteorological conditions (i.e. standard conditions and noise-enhancing conditions) is presented.

Figures showing indicative noise contours of noise levels predicted under the relevant Fact Sheet D meteorological conditions (Table 6-1) for each of the seven Project years modelled are presented in Appendix N.

Within Appendix G, operational noise levels predicted under the relevant Fact Sheet D meteorological conditions (Table 6-1) at receivers in excess of the PNTLs are shown in yellow. Mine-owned receivers are included in Appendix G for the purpose of information only.

When considering the maximum noise emissions across all assessed Project years, "significant" night time exceedances (greater than 5 dB according to the *VLAMP* and *NPfI*) are predicted at 14 privately-owned residential receivers, while "moderate" night time exceedances (between 3-5 dB according to the *VLAMP* and *NPfI*) are also predicted at 14 privately-owned residential receivers. A total of 52 privately-owned residential receivers would be subject to "negligible" night time exceedances (between 1-2 dB according to the *VLAMP* and *NPfI*). As described in the *VLAMP* and *NPfI*, such "negligible" exceedances would not be discernible by the average listener.

Based on maximum noise emissions across the life of the Project, a "significant" evening exceedance (greater than 5 dB according to the *VLAMP* and *NPfI*) is predicted at one receiver, while "moderate" evening exceedances (between 3-5 dB according to the *VLAMP* and *NPfI*) are predicted at five receivers. Two privately-owned residential receivers are predicted to experience a "negligible" evening exceedance (between 1-2 dB according to the *VLAMP* and *NPfI*). Such "negligible" exceedances would not be discernible by the average listener in accordance with the *VLAMP* and *NPfI*.

One privately-owned residential receiver (receiver 156a) is predicted to experience a "negligible" day exceedance (between 1-2 dB according to the *VLAMP* and *NPfI*). Such "negligible" exceedances would not be discernible by the average listener in accordance with the *VLAMP* and *NPfI*. It should be noted that receiver 156a is currently subject to acquisition upon request rights in Development Consent DA 92/97 (as modified).

A summary of those receivers predicted to exceed the PNTLs under the relevant meteorological conditions is provided in Tables 6-12 and 6-13 for the night time and evening assessment periods, respectively. The receivers are grouped according to noise impacts as interpreted by the *VLAMP* and the *NPfI* (Section 5.7).

The exceedance level ascribed to the receivers listed in Tables 6-12 and 6-13 is reflective of the assessed Project year(s) with potentially the most impact. It is expected that those receivers may at times be subject to lesser impact and/or no impact during the life of the Project.

Review of Table 6-12 indicates that most receivers predicted to be exposed to "significant" night time exceedances are already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine, except for receivers 154 and 154b. In accordance with the *VLAMP*, both receivers would be afforded acquisition upon request rights as a result of the Project. It should be noted that receiver 154 is currently subject to mitigation upon request rights in Development Consent DA 92/97.

All receivers exposed to "moderate" night time exceedances are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise or noise/air impacts associated with the approved mine.

Table 6-12 Summary of Potential Exceedances at Privately-Owned Residential Receivers – Night Time

Zone	Exceedance Level	Privately-Owned Residential Receivers Predicted to Exceed Project Noise Trigger Levels[1]
Noise Management Zone	1 to 2 dB	Receivers 19, 77[2], 79[2], 82, 83, 84a[2], 86b, 112[3], 140c[2], 169, 171, 172, 172b, 172c, 180b, 181c, 189, 190, 191, 192, 193, 194, 195, 197, 202, 202b, 203[2], 203b, 203c, 207, 212, 212b, 213, 214, 215, 216, 216b, 217, 218, 219, 220, 221, 222, 223, 223b, 224, 225, 289, 310, 526[2], 547 and 667a[6]
	3 to 5 dB	Receivers 20[2,3], 21[2,3], 35, 35b, 43[5], 43b[5], 47[4], 67[4], 74[3], 86a[3], 96[4], 102[4], 108[4], and 140a[2]
Noise Affectation Zone	>5 dB	Receivers 118[4], 120[4], 120c[4], 121[4], 136[4], 143a[4], 143b[4], 147[4], 153a[4], 154[2], 154b, 156a[4], 157a[4], and 159[4]

Notes:
1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted air impacts. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.
4. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
5. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.
6. Five structures were identified on one land parcel, and the structures could not be characterised by ground surveys. Based on aerial imagery, it appears only one structure may be a residence.

Table 6-13 Summary of Potential Exceedances at Privately-Owned Residential Receivers - Evening

Zone	Exceedance Level	Privately-Owned Residential Receivers Predicted to Exceed Project Noise Trigger Levels[1]
Noise Management Zone	1 to 2 dB	Receivers 147[2] and 153a[2]
	3 to 5 dB	Receivers 143b[2], 154[3], 154b, 157a[2], and 159[2]
Noise Affectation Zone	>5 dB	Receiver 156a[2]

Notes:
1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the Approved Mine for predicted noise impacts.
3. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.

Table 6-13 shows that receiver 156a is predicted to be exposed to "significant" evening exceedances. As such, it would be afforded acquisition rights as a result of the Project. It should be noted that receiver 156a is currently subject to acquisition upon request rights in Development Consent DA 92/97 (as modified).

All receivers exposed to "moderate" evening exceedances are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine, except for newly identified receiver 154b, which would become eligible for additional mitigation rights (i.e. consistent with the previously identified receiver on the property, receiver 154).

The operational noise modelling results indicate the noise mitigation measures that would be implemented for the Project, including the staged increases to ROM coal extraction, would be effective in minimising potential noise impacts to the majority of receivers surrounding the Mount Pleasant Operation.

When comparing the existing Mount Pleasant Operation night time operational noise limits for all identified privately-owned residential receivers to the limits that would apply should the Project be approved, the following is of note:

- less than 5% of the identified privately-owned residential receivers would have higher noise limits under the Project;
- more than 90% of the identified privately-owned residential receivers would have Project noise limits equal to or less than the current Mount Pleasant Operation criteria; and
- for the bulk of the privately-owned residential receivers on the western outskirts of Muswellbrook, noise limits under the Project would be 1-3 dB lower.

6.10 Vacant Land Noise Assessment

A contemporary assessment of potential impacts on vacant land has been conducted in accordance with the NSW Government's *VLAMP* (DP&E, 2018). Under the policy, landowners are eligible to voluntary land acquisition rights when noise generated by the development contributes to exceedances of the acceptable noise levels plus 5 dB in Table 2.2 of the *NPfI* on more than 25% of privately-owned land where there is an existing dwelling or where a dwelling could be built under existing planning controls.

The vacant land assessment noise criteria, based on the acceptable noise levels plus 5 dB in Table 2.2 of the *NPfI*, are summarised below. Those criteria correspond to the "Rural" noise amenity area and apply to $L_{Aeq,Period}$ noise levels as opposed to $L_{Aeq,15min}$ noise levels.

- Day - 55 dBA $L_{eq,11hr}$
- Evening - 50 dBA $L_{eq,4hr}$
- Night - 45 dBA $L_{eq,9hr}$

The vacant land assessment for the Project was based on noise contours generated for the night time period, when noise levels are predicted to be higher. A correction was applied to the contours to account for the fact that the assessment is based on $L_{Aeq,Period}$ noise levels as opposed to $L_{Aeq,15min}$ noise levels (i.e. according to the *NPfI*, $L_{Aeq,period}$ noise levels are converted to $L_{Aeq,15min}$ noise levels by adding 3 dB).

Based on the methodology described above, noise generated by the Project is predicted to exceed the vacant land noise assessment criteria on more than 25% of property 143e. As such, the owner would be afforded land acquisition upon request rights in accordance with the *VLAMP*. It is noted this property has acquisition upon request rights in Development Consent DA 92/97 for potential noise impacts.

6.11 Amenity and Cumulative Noise Levels Assessment

6.11.1 Amenity Noise Levels Assessment

Predicted $L_{Aeq,15min}$ operational noise levels from the Project were compared with the Project amenity noise levels (Appendix H, Table H-1) at all identified receivers. Noise predictions exceeding the Project amenity noise levels are shown in yellow.

Predictions are presented as $L_{Aeq,15min}$ noise levels under Fact Sheet D meteorological conditions (Section 6.1.2) and as such are identical to the operational noise levels presented in Appendix G. $L_{Aeq,15min}$ Project amenity noise levels for residential receivers were obtained by adding 3 dB to the $L_{Aeq,Period}$ Project amenity noise levels summarised in Table 5-9.

When considering the maximum noise emissions across all assessed Project years, "significant" night time exceedances (greater than 5 dB according to the *VLAMP* and *NPfI*) are predicted at seven privately-owned residential receivers, while "moderate" night time exceedances (between 3-5 dB according to the *VLAMP* and *NPfI*) are predicted at eight privately-owned residential receivers. A further seven privately-owned residential receivers would be subject to "negligible" night time exceedances (between 1-2 dB according to the *VLAMP* and *NPfI*). As described in the *VLAMP* and *NPfI*, such "negligible" exceedances would not be discernible by the average listener.

All predicted noise levels from the Project only are found to comply with the Project amenity noise levels during the day and evening assessment periods.

A summary of the receivers predicted to exceed the night time Project amenity noise level under the relevant meteorological conditions is provided in Table 6-14. The receivers are grouped according to noise impacts as interpreted by the *VLAMP* and the *NPfI* (Section 5.7).

The exceedances listed in Table 6-14 are reflective of the assessed Project year(s) with potentially the most impact. It is expected that those receivers may at times be subject to lesser impact and/or no impact during the life of the Project.

Table 6-14 Summary of Potential Project Amenity Noise Level Exceedances – Night Time

Zone	Exceedance Level	Privately-Owned Residential Receivers Predicted to Exceed Project Amenity Noise Levels[1]
Noise Management Zone	**1 to 2 dB**	Receivers 43[3], 43b[3], 47[2], 96[2], 102[2], 108[2], and 140a[4]
	3 to 5 dB	Receivers 118[2], 120[2], 120c[2], 121[2], 136[2], 143a[2], 154[4], and 154b
Noise Affectation Zone	**>5 dB**	Receivers 143b[2], 147[2], 153a[2], 156a[2], 157a[2], and 159[2]

Notes:
1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts
4. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.

Table 6-14 indicates that all receivers exposed to "significant" night time exceedances are already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine.

All receivers exposed to "moderate" night time exceedances are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine, except for receiver 154b. In accordance with the *VLAMP*, it would be afforded additional mitigation rights as a result of the Project. It should be noted that receiver 154b also qualifies for additional mitigation rights as a result of the operational noise assessment (Section 6.9).

Due to the potential cumulative exceedances of the Project noise trigger levels, a cumulative noise assessment considering the Project and all neighbouring mining operations was undertaken for the privately-owned residential receivers.

6.11.2 Cumulative Noise Levels Assessment

If approved, the Project would operate concurrently with Bengalla Mine, Mt Arthur Coal Mine, Mangoola Coal and potentially Dartbrook Mine (i.e. the NSW Independent Planning Commission has granted partial approval of the application for Modification 7 of the Dartbrook Mine consent [the extension to mine life sought was not approved], which is currently being appealed by Australian Pacific Coal Limited). As such, receivers may potentially be exposed to noise from up to five industrial sources simultaneously.

Consideration was given to Muswellbrook Coal Mine, which is also located in the vicinity of the Project. Muswellbrook Coal Mine is expected to cease operation in 2020 (i.e. prior to the Project commencing) and is therefore not considered any further as part of the cumulative noise assessment.

The assessment of cumulative impacts considers the total and relative noise contributions from the Project, and the following neighbouring operations (shown on Figure 1-1):

- Bengalla Mine – Project Approval SSD-5170, approved in 2015.
- Mt Arthur Coal Mine – Project Approval 09_0062, approved in 2010.
- Mangoola Coal – Project Approval 06_0014, approved in 2007.
- Dartbrook Mine – Project Approval 231-7-2000, approved in 1991.

The contributions of noise from the above operations have been taken from predictions of noise emissions included in the following documents:

- *Bengalla Continuation of Mining Project – Environmental Impact Statement – Acoustic Impact Assessment* prepared by Bridges Acoustics (2013a).
- *Bengalla Mine – Development Consent Modification 4 – Statement of Environmental Effects* prepared by Hansen Bailey (2017).
- *Mt Arthur Coal Open Cut Modification – Noise and Blasting Assessment* prepared by Wilkinson Murray (2013).
- *Mangoola Coal Project – Modification 6 – Noise and Vibration Assessment* prepared by EMGA Mitchell McLennan (2013).

- *Dartbrook Mine – Modification 7 – Acoustic Impact Assessment* prepared by Bridges Acoustics (2018).

It should be noted that subsequent modifications for the above projects were also considered as part of the cumulative noise assessment and it was found they resulted in no material changes to the above assessments.

All noise contributions from Bengalla Mine, Mt Arthur Coal Mine, Mangoola Coal, and Dartbrook Mine for the years relevant to the cumulative assessment are provided in Table H-2 of Appendix H. It should be noted that not all privately-owned residential receivers potentially impacted by cumulative noise were included in the above assessments. For those receivers, noise levels were inferred from nearby receiver predictions in the relevant assessments.

Cumulative noise levels from all mining operations (including the Project) are summarised in Table H-3 of Appendix H. The methodology used for assessment of cumulative impacts was to logarithmically sum the predicted day, evening and night time noise levels for each mine for all identified privately-owned receivers. The overall cumulative noise levels were then assessed against the relevant recommended amenity noise levels (Section 5.4.2). Exceedances of the amenity noise levels are highlighted in yellow in Table H-3.

The cumulative noise assessment was conducted using $L_{Aeq,15min}$ noise levels. $L_{Aeq,15min}$ amenity noise levels were obtained by adding 3 dB to the recommended $L_{Aeq,Period}$ amenity noise levels summarised in Section 5.4.2.

For the purposes of cumulative assessment, the closest available corresponding noise prediction years for the four other mining projects were selected, noting that Bengalla Mine, Mt Arthur Coal Mine, Mangoola Coal, and Dartbrook Mine are approved to operate until 2038, 2026, 2029 and 2022 (though extension to 2027 is sought), respectively. The Mangoola Continued Operations Project, if approved, would involve an extension of the mine life of Mangoola Coal by one year and therefore it would still cease prior to 2031. The summation of the various noise predictions used for cumulative assessment is summarised below:

- Cumulative 2026 = Project (2026) + Bengalla Mine (Project Year 15 [2029]) + Mt Arthur Coal Mine (2026) + Mangoola Coal (Project Year 10 [2023]) + Dartbrook Mine (all years until 2022)
- Cumulative 2028 = Project (2028) + Bengalla Mine (Project Year 15 [2029]) + Mangoola Coal (Project Year 10 [2023])
- Cumulative 2031 = Project (2031) + Bengalla Mine (Project Year 15 [2029])
- Cumulative 2034 = Project (2034) + Bengalla Mine (Project Year 24 [2038])
- Cumulative 2041 = Project (2041)
- Cumulative 2044 = Project (2044)
- Cumulative 2047 = Project (2047).

When considering the maximum noise emissions across all assessed cumulative years, "moderate" night time exceedances (between 3-5 dB according to the *VLAMP* and *NPfI*) are predicted at six privately-owned residential receivers, while eight privately-owned residential receivers would be subject to "negligible" night time exceedances (between 1-2 dB according to the *VLAMP* and *NPfI*). As described in the *VLAMP* and *NPfI*, such "negligible" exceedances would not be discernible by the average listener.

All cumulative noise level predictions comply with the amenity noise levels during the day and evening assessment periods.

A summary of the receivers predicted to exceed the night time amenity noise level is provided in Table 6-15. The receivers are grouped according to noise impacts as interpreted by the *VLAMP* and the *NPfI* (Section 5.7).

The exceedances listed in Table 6-15 are reflective of the assessed cumulative year(s) with potentially the most impact. It is expected that those receivers may at times be subject to lesser impact and/or no impact during the life of the Project.

Table 6-15 Summary of Potential Cumulative Noise Level Exceedances – Night Time

Zone	Exceedance Level	Privately-Owned Residential Receivers Predicted to Exceed Amenity Noise Levels[1]
Noise Management Zone	1 to 2 dB	Receivers 147[2], 153a[2], 258a, 258c, 259[3], 259b[3], 488a and 488b
	3 to 5 dB	Receivers 43[4], 143b[2], 156a[2], 157a[2], 159[2] and 257[3]

Notes:
1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
3. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts

Table 6-15 indicates that all receivers exposed to "moderate" night time exceedances are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise or noise/air impacts associated with the approved mine.

The majority of the receivers identified in Table 6-15 are predicted to exceed the recommended amenity noise levels due to noise generated by Bengalla Mine (receivers 43, 257, 258a, 258c, 259 and 259b) or a combination of the Bengalla Mine and Mt Arthur Coal Mine (receivers 488a and 488b). For those receivers, the Project would either result a negligible 1 dB increase (receivers 257 and 488b) or no change in noise levels.

A number of the receivers listed in Table 6-15, located to the north of the Mount Pleasant Operation, would exceed due to the Project alone (receivers 143b, 147, 153a, 156a, 157a and 159). All those receivers are already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine.

For completeness, a sensitivity analysis of cumulative noise levels was conducted assuming mine activity at the Mt Arthur Coal Mine site would extend further than the current approval period ending in 2026. Noise predictions and discussion of outcomes are summarised in Appendix I.

6.12 Maximum Noise Level Event Assessment

As described in Section 5.6, the Project's trigger levels for the maximum noise level event screening assessment are:

- $L_{Aeq,15min}$ 40 dBA; and/or
- L_{AFmax} 52 dBA

6.12.1 Maximum Noise Level Event Assessment - $L_{Aeq,15min}$

Review of Appendix G indicates that night time $L_{Aeq,15min}$ noise predictions are exceeding 40 dBA at 14 privately-owned residential receivers. When considering the maximum noise emissions across all assessed Project years, "significant" night time exceedances (greater than 5 dB according to the *VLAMP* and *NPfI*) are predicted at five privately-owned residential receivers, "moderate" night time exceedances (between 3-5 dB according to the *VLAMP* and *NPfI*) at five privately-owned residential receivers, and "negligible" night time exceedances (between 1-2 dB according to the *VLAMP* and *NPfI*) at four receivers. As described in the *VLAMP* and *NPfI*, "negligible" exceedances would not be discernible by the average listener.

A summary of the receivers predicted to exceed the 40 dBA trigger level under the relevant meteorological conditions is provided in Table 6-16. The receivers are grouped according to noise impacts as interpreted by the *VLAMP* and the *NPfI* (Section 5.7).

The exceedance level ascribed to each receiver is reflective of the assessed Project year(s) with potentially the most impact. It is expected that those receivers may at times be subject to lesser impact and/or no impact during the life of the Project.

Table 6-16 Summary of Potential $L_{Aeq,15min}$ Exceedances at Privately-Owned Residential Receivers

Zone	Exceedance Level	Privately-Owned Residential Receivers Predicted to Exceed $L_{Aeq,15min}$ 40 dBA
Noise Management Zone	**1 to 2 dB**	Receivers 118[1], 120[1], 120c[1], 121[1], and 136[1]
	3 to 5 dB	Receivers 143a[1], 147[1], 153a[1], 154[2], and 154b
Noise Affectation Zone	**>5 dB**	Receivers 143b[1], 156a[1], 157a[1], and 159[1]

Notes:

1. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.

Table 6-16 indicates that all receivers exposed to "significant" $L_{Aeq,15min}$ maximum noise level exceedances are already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved Mount Pleasant Operation.

Most of the receivers exposed to "moderate" $L_{Aeq,15min}$ maximum noise level exceedances are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved Mount Pleasant Operation, except for receiver 154b. In accordance with the *VLAMP*, receiver 154b would be afforded mitigation rights as a result of the Project, noting that it would already be afforded acquisition rights in accordance with the predicted operational noise levels (Section 6.9).

All receivers exposed to "negligible" $L_{Aeq,15min}$ maximum noise level exceedances are already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved Mount Pleasant Operation.

6.12.2 Maximum Noise Level Event Assessment - L_{AFmax}

To assess compliance with the L_{AFmax} noise trigger of 52 dBA, the noise model was also used to analyse potential L_{AFmax} noise levels likely to arise from the Project's night time operations.

The instantaneous noise sources and their typical L_{AFmax} SWL (i.e. typical noise level at the point of origin rather than at the receiver location) that may have the potential to generate sleep disturbance are summarised in Table 6-17.

Table 6-17 Instantaneous Noise Sources and L_{AFmax} SWL

Instantaneous Noise Sources	Typical L_{AFmax} SWL (dBA)
Excavator dumping in empty truck bodies	115-125
Dozer track noise in 1st gear	114-124
Infrastructure area impact noise	115-125
Haul truck pass-bys	<118
Impact noise associated with truck, dozers and excavators travelling or manoeuvring	113-118
Train load-out bin	110-114
Locomotive travelling on rail spur (40 km/hr)[1,2]	116.5

Notes:

1. Maximum noise level event screening assessment only considers locomotives travelling along the rail spur section inside the MLs.
2. It was conservatively assumed that trains servicing the site would be configured with three locomotives closely grouped together at one end of the train (i.e. effectively one noise source, as opposed to three). The nominated SWL is for one locomotive only.

To be conservative the upper end of the nominated level ranges has been used for the noise predictions. The predicted night time L_{AFmax} noise levels at receivers surrounding the Project are summarised in Appendix J. L_{AFmax} noise levels were added to the operational noise levels (Appendix G) and then compared with the L_{AFmax} screening level of 52 dBA for this assessment. Mine-owned receivers are included for the purpose of information only.

The L_{AFmax} values were modelled using the same plant locations used for the modelling of operational noise impacts. Each of the event items listed in Table 6-17 was modelled separately, and the highest predicted L_{AFmax} value from any item is presented in Appendix J.

L_{AFmax} noise predictions are based on the relevant night time meteorological conditions determined in accordance with Fact Sheet D of the *NPfI* (Table 6-1). The reported levels summarised in Appendix K are conservative as the highest levels have been assumed and the resultant L_{AFmax} noise predictions were added to the highest $L_{Aeq,15min}$ predicted levels.

It is Wilkinson Murray's experience from measurements around coal mines that at a distance from a coal mine operation, instantaneous changes in noise level are typically relatively small as the perceived total noise is affected by a large number of lower-level noise sources.

Appendix J indicates that L_{AFmax} noise levels due to night operations from the Project are predicted to be below the Project's L_{AFmax} trigger level for the maximum noise level event screening assessment at most privately-owned dwellings, with only one "negligible" exceedance (between 1-2 dB according to the *VLAMP* and *NPfI*) predicted at receiver 156a in 2041. It should also be noted that receiver 156a is already subject to acquisition upon request rights in Development Consent DA 92/97 for predicted noise impacts associated with the approved mine.

7 ROAD TRANSPORTATION NOISE

7.1 Introduction

The Project would result in an increase of traffic accessing the site when compared with road traffic associated with the approved Mount Pleasant Operation. As such, road noise associated with the Project has been considered in this assessment.

The road transportation noise assessment focuses on Wybong Road and Kayuga Road, as these local roads are the most likely to be affected by noise generated by road transport movements associated with the Project as the Project's relative proportion of total traffic movements would be higher. The Project's relative contributions to total road traffic would fall off rapidly thereafter.

Impacts on the other roads surrounding the site are expected to be negligible from a road noise perspective.

7.2 Road Traffic Noise Criteria

Criteria for assessment of noise from traffic on public roads are set out in the *RNP* (NSW Department of Environment, Climate Change and Water, 2011). Wybong Road and Kayuga Road are both considered as "local" roads under this policy.

Table 3 of the *RNP* is copied in Table 7-1 with the relevant sections highlighted.

Table 7-1 Road Traffic Noise Criteria – Privately-owned Residences

Table 3 Road traffic noise assessment criteria for residential land uses

Road category	Type of project/land use	Assessment criteria – dB(A)	
		Day (7 a.m.–10 p.m.)	Night (10 p.m.–7 a.m.)
Freeway/ arterial/ sub-arterial roads	1. Existing residences affected by noise from **new** freeway/arterial/sub-arterial road corridors	$L_{Aeq, (15\ hour)}$ 55 (external)	$L_{Aeq, (9\ hour)}$ 50 (external)
	2. Existing residences affected by noise from **redevelopment** of existing freeway/arterial/sub-arterial roads 3. Existing residences affected by **additional traffic** on existing freeways/arterial/sub-arterial roads generated by land use developments	$L_{Aeq, (15\ hour)}$ 60 (external)	$L_{Aeq, (9\ hour)}$ 55 (external)
Local roads	4. Existing residences affected by noise from **new** local road corridors 5. Existing residences affected by noise from **redevelopment** of existing local roads 6. Existing residences affected by **additional traffic** on existing local roads generated by land use developments	$L_{Aeq, (1\ hour)}$ 55 (external)	$L_{Aeq, (1\ hour)}$ 50 (external)

Reference is also made to sections 3.4 and 3.4.1 of the *RNP*. Section 3.4 notes that:

> *"In assessing feasible and reasonable mitigation measures, an increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person."*

Section 3.4.1 notes:

> *"For existing residences and other sensitive land uses affected by **additional traffic on existing roads generated by land use developments**, any increase in the total traffic noise level should be limited to 2 dB above that of the corresponding 'no build option'."*

7.3 Road Traffic Volumes

Projected traffic volumes associated with the Mount Pleasant Operation are expected to have potential implications for noise on Wybong Road (between Bengalla Road and Kayuga Road) and Kayuga Road (north of Wybong Road). Impacts on the other roads surrounding the site are expected to be negligible from a road noise perspective and, therefore, only Wybong Road (between Bengalla Road and Kayuga Road) and Kayuga Road (north of Wybong Road) are addressed in the road traffic noise assessment.

Tables 7-2 and 7-3 present the non-Project, Project and total peak hour traffic volumes obtained from The Transport Planning Partnership (2020). Traffic volumes are based on forecasts for 2026 which represents the peak construction year for the Project, and 2036 when peak traffic volumes associated with the maximum production rate are expected. For both Wybong Road and Kayuga Road, the daytime peak hour with the potential for most road traffic noise impacts was found to be the hour between 4.00 pm and 5.00 pm for 2026 and 2036. The night time peak hour would be between 6.00 am and 7.00 am in 2026, and between 5.00 am and 6.00 am in 2036.

The Mount Pleasant Operation Site Access Management Plan (MACH, 2019b) currently restricts most of the traffic associated with the Mount Pleasant Operation to access the site via Bengalla Road (in particular, heavy vehicles are prohibited from using Wybong Road east of the Mount Pleasant Operation). As such, most of Project-related traffic summarised in Tables 7-2 and 7-3 travels along the Wybong Road section between Bengalla Road and the site access road.

Table 7-2 2026 Peak Hour Traffic Volumes

Scenario	Road Section	Day Peak Hour (4.00 pm – 5.00 pm)		Night Peak Hour (6.00 am – 7.00 am)	
		Light	Heavy	Light	Heavy
Non-Project	Wybong Road (between Bengalla Road & Site access)	115	15	168	20
	Wybong Road (between Site access & Kayuga Road)	96	2	78	1
	Kayuga Road (north of Wybong Road)	112	3	83	3
Project	Wybong Road (between Bengalla Road & Site access)	81	15	69	39
	Wybong Road (between Site access & Kayuga Road)	19	2	11	3
	Kayuga Road (north of Wybong Road)	19	2	11	3
Total	Wybong Road (between Bengalla Road & Site access)	196	30	237	59
	Wybong Road (between Site access & Kayuga Road)	115	4	89	4
	Kayuga Road (north of Wybong Road)	131	5	94	6

Table 7-3 2036 Peak Hour Traffic Volumes

Scenario	Road Section	Day Peak Hour (4.00 pm – 5.00 pm)		Night Peak Hour (5.00 am – 6.00 am)	
		Light	Heavy	Light	Heavy
Non-Project	Wybong Road (between Bengalla Road & Site access)	72	10	101	3
	Wybong Road (between Site access & Kayuga Road)	88	2	58	1
	Kayuga Road (north of Wybong Road)	105	3	63	4
Project	Wybong Road (between Bengalla Road & Site access)	225	11	154	14
	Wybong Road (between Site access & Kayuga Road)	58	1	53	1
	Kayuga Road (north of Wybong Road)	58	1	53	1
Total	Wybong Road (between Bengalla Road & Site access)	297	21	255	17
	Wybong Road (between Site access & Kayuga Road)	146	3	111	2
	Kayuga Road (north of Wybong Road)	163	4	116	5

7.4 Noise Prediction Methodology

Traffic noise levels have been predicted using the *Calculation of Road Traffic Noise (CoRTN)* model (United Kingdom Department of Transport, 1988). The *CoRTN* model takes into account the following factors:

- Traffic flow volumes
- Average vehicle speed
- Percentage of heavy vehicles
- Gradient of road
- Type of road pavement
- Distance from receiver location to road
- Shielding from barriers / building and intervening topography
- Reflections from barriers / buildings
- Angle of view
- Building facade reflection correction
- Ground absorption.

The *CoRTN* model has been used on a number of projects with comparable road characteristics and traffic configuration, with good correlation between noise predictions and measured noise levels.

7.5 Road Traffic Noise Impact – Wybong and Kayuga Roads

Based on the traffic data presented in Tables 7-2 and 7-3, traffic noise levels at all closest privately-owned residential receivers located within 600 m of Wybong Road and Kayuga Road have been predicted and are presented in Tables 7-4 and 7-5, respectively. Levels highlighted in yellow indicate exceedances of the relevant road traffic noise criteria at privately-owned residential receivers.

Table 7-4 Traffic Noise Predictions - 2026

Receiver ID[1]	$L_{Aeq,1hr}$ (dBA)							
	Non-Project		Total		Relative Increase		Road Noise Criteria	
	Night	Day	Night	Day	Night	Day	Night	Day
Wybong Road (Between Bengalla Road & Site Access Road)								
43[2]	48	50	51	52	2.4	2.0	50	55
45[3]	44	46	47	48	2.4	2.0	50	55
45b	45	46	47	48	2.4	2.0	50	55
45c	45	46	47	48	2.4	2.0	50	55
Wybong Road (Between Site Access Road & Kayuga Road)								
35	44	44	45	44	0.8	0.7	50	55
35b	45	44	46	45	0.8	0.7	50	55
67[3]	61	60	62	61	0.8	0.7	50	55
74[4]	61	61	62	61	0.8	0.7	50	55
77[4]	58	58	59	58	0.8	0.7	50	55
79[4]	47	46	48	47	0.8	0.7	50	55
84a[4]	43	42	44	43	0.8	0.7	50	55
526[4]	49	48	50	49	0.8	0.7	50	55
Kayuga Road (North of Wybong Road)								
86a[4]	52	50	52	51	0.7	0.7	50	55
96[3]	62	60	62	61	0.7	0.7	50	55
102[3]	62	60	62	61	0.7	0.7	50	55
108[3]	53	52	54	53	0.7	0.7	50	55
112[3]	48	47	49	48	0.7	0.7	50	55
118[3]	53	52	54	52	0.7	0.7	50	55
120[3]	62	61	63	62	0.7	0.7	50	55
120c[3]	59	58	60	58	0.7	0.7	50	55
121[3]	56	55	57	56	0.7	0.7	50	55
143b[3]	47	45	47	46	0.7	0.7	50	55
147[3]	60	58	60	59	0.7	0.7	50	55
154[4]	53	52	54	53	0.7	0.7	50	55
154b	54	52	54	53	0.7	0.7	50	55

Receiver ID[1]	$L_{Aeq,1hr}$ (dBA)							
	Non-Project		Total		Relative Increase		Road Noise Criteria	
	Night	Day	Night	Day	Night	Day	Night	Day
156a[3]	57	55	57	56	0.7	0.7	50	55
157a[3]	52	51	53	52	0.7	0.7	50	55
159[3]	56	55	57	55	0.7	0.7	50	55

Notes:

- Predictions at façade.
- Levels highlighted in yellow indicate predictions in excess of the road traffic noise criteria at privately-owned residential receivers.

1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.

Table 7-5 Traffic Noise Predictions - 2036

Receiver ID[1]	$L_{Aeq,1hr}$ (dBA)							
	Non-Project		Total		Relative Increase		Road Noise Criteria	
	Night	Day	Night	Day	Night	Day	Night	Day
Wybong Road (Between Bengalla Road & Site Access Road)								
43[2]	46	47	52	52	5.9	4.2	50	55
45[3]	42	43	48	48	5.9	4.2	50	55
45b	43	44	48	48	5.9	4.2	50	55
45c	43	44	49	48	5.9	4.2	50	55
Wybong Road (Between Site Access Road & Kayuga Road)								
35	44	42	46	45	2.2	2.8	50	55
35b	45	43	47	46	2.2	2.8	50	55
67[3]	61	59	63	62	2.2	2.8	50	55
74[4]	61	59	63	62	2.2	2.8	50	55
77[4]	58	56	60	59	2.2	2.8	50	55
79[4]	47	45	49	48	2.2	2.8	50	55
84a[4]	43	41	45	44	2.2	2.8	50	55
526[4]	48	47	51	49	2.2	2.8	50	55
Kayuga Road (North of Wybong Road)								
86a[4]	51	49	53	52	1.9	2.6	50	55
96[3]	61	59	63	62	1.9	2.6	50	55
102[3]	61	59	63	62	1.9	2.6	50	55
108[3]	53	51	55	53	1.9	2.6	50	55
112[3]	48	46	50	49	1.9	2.6	50	55
118[3]	53	51	55	53	1.9	2.6	50	55
120[3]	62	60	64	62	1.9	2.6	50	55
120c[3]	59	57	60	59	1.9	2.6	50	55

Receiver ID[1]	$L_{Aeq,1hr}$ (dBA)							
	Non-Project		Total		Relative Increase		Road Noise Criteria	
	Night	Day	Night	Day	Night	Day	Night	Day
121[3]	56	54	58	57	1.9	2.6	50	55
143b[3]	46	44	48	47	1.9	2.6	50	55
147[3]	59	57	61	60	1.9	2.6	50	55
154[4]	53	51	55	54	1.9	2.6	50	55
154b	53	51	55	54	1.9	2.6	50	55
156a[3]	56	54	58	57	1.9	2.6	50	55
157a[3]	52	50	54	53	1.9	2.6	50	55
159[3]	56	53	57	56	1.9	2.6	50	55

Notes:

- Predictions at façade.
- Levels highlighted in yellow indicate predictions in excess of the road traffic noise criteria at privately-owned residential receivers.

1. To identify the locations of these receivers, see Figures B-1 to B-11 in Appendix B.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.

Total traffic noise levels are expected to exceed the road traffic noise criteria at 18 of the identified receivers along Wybong Road and Kayuga Road in 2026, during the peak construction year. Of those 18 receivers, 15 will already experience exceedances without Project-related traffic; for those receivers the Project would not cause new exceedances.

Three receivers (43, 121 and 156a) would be exposed to "negligible" exceedances (between 1-2 dB according to the *NPfI*) due to added traffic from the Project. As described in the *NPfI*, such "negligible" exceedances would not be discernible by the average listener.

Receivers 121 and 156a would be subject to an increase in traffic noise of less than 2 dB, representing a minor impact considered barely perceptible to the average person in accordance with the *RNP*.

Furthermore, receivers 121 and 156a are already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine.

Total traffic noise levels are expected to exceed the road traffic noise criteria at 19 of the identified receivers along Wybong Road and Kayuga Road in 2036, during peak traffic volumes associated with the maximum production rate. Of those 19 receivers, 14 will already experience exceedances without Project-related traffic; for those receivers the Project would not cause new exceedances.

Five receivers (43, 121, 156a, 159 and 526) would be exposed to "negligible" exceedances (between 1-2 dB according to the *NPfI*) due to added traffic from the Project. As described in the *NPfI*, such "negligible" exceedances would not be discernible by the average listener. Furthermore, the five receivers are already subject to acquisition or mitigation upon request rights in the Development Consent DA 92/97 (as modified).

It should be noted that industrial sites generating traffic on existing roads (such as the Project) provide limited potential for noise control as they are not linked to road improvements. However, to address potential noise impacts at privately-owned receivers where road noise criteria are exceeded and the relative increase in traffic noise levels due to the Project is greater than 2 dB, MACH would continue to implement feasible and reasonable mitigation measures including the following:

- making staff and contractors aware of the potential for road transport noise impacts through site-specific inductions and staff education programs to reinforce quiet driving;
- requiring compliance with posted speed limits; and
- coordinating shift changes with the Bengalla Mine and Mangoola Coal to minimise cumulative traffic impacts.

Furthermore, most of the privately-owned receivers where road noise criteria are exceeded and the relative increase in traffic noise levels due to the Project is greater than 2 dB are already subject to acquisition or mitigation upon request rights in the Development Consent DA 92/97 (as modified).

7.6 Conclusion

Projected traffic volumes in 2026 and 2036 associated with the Project are predicted to have potential implications for noise on Wybong Road (between Bengalla Road and Kayuga Road) and Kayuga Road (north of Wybong Road).

Up to five receivers (43, 121, 156a, 159 and 526) are predicted to experience "negligible" exceedances (between 1-2 dB according to the *NPfI*) due to additional traffic associated with the Project. Those exceedances would not be discernible by the average listener according to the *NPfI*. Furthermore, the five receivers are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified).

To address potential noise impacts at privately-owned receivers where road noise criteria are exceeded and the relative increase in traffic noise levels due to the Project is greater than 2 dB, MACH would continue to implement all feasible and reasonable mitigation measures.

8 RAIL TRANSPORTATION NOISE

8.1 Introduction

Product coal from the Project would be transported by rail from the onsite CHPP via the approved Stage 2 rail load-out facility, loop and spur to the Muswellbrook-Ulan Rail Line to Muswellbrook, and via the Main Northern Railway from Muswellbrook to domestic customers and the Port of Newcastle for export.

The Project proposes to increase transport of product coal from approximately 8.5 Mtpa to up to 17 Mtpa, which would require a corresponding increase in the currently approved annual average daily train movements. The annual average daily train movements would increase from the currently approved three laden trains leaving the site per day to 6.5 laden trains leaving the site per day (at peak coal production). As such, rail noise associated with the Project has been considered in this assessment on the approved Stage 2 rail spur and the broader state rail network.

8.2 Rail Noise Criteria

8.2.1 Australian Rail Track Corporation Environment Protection Licence

The Australian Rail Track Corporation (ARTC) operates the Muswellbrook-Ulan Rail Line and Main Northern Railway. Noise emissions from railways operated by ARTC are regulated via ARTC's Environment Protection Licence (EPL) 3142. EPL 3142 Section L6 does not nominate specific environmental noise limits, but notes that:

> *It is an objective of this Licence to progressively reduce noise levels to the goals of 65 dB(A) L_{eq}, (day time from 7am – 10pm), 60 dB(A) L_{eq}, (night time from 10pm – 7am) and 85dB(A) (24 hr) max pass-by noise, at one metre from the façade of affected residential properties through the implementation of the Pollution Reduction Programs.*

Based on the information presented above, the following noise criteria have been adopted for the Project on the network rail lines:

- $L_{Aeq,9\ hour}$ = 60 dBA
- $L_{Aeq,15\ hour}$ = 65 dBA
- L_{Amax} = 85 dBA.

8.2.2 Rail Infrastructure Noise Guideline

Appendix 2 of the *RING* deals with land-use developments, other than rail projects, that are likely to generate additional rail traffic on an existing rail network. The requirements are summarised below:

> *Land-use developments other than rail projects that are likely to generate additional rail traffic on an existing rail network should be assessed against the following requirements:*
>
> - *Identify the typical offset distance/s of sensitive receivers from the rail line/s that are likely to be affected by increased rail movements.*

- *Quantify the existing level of rail noise at the offset distance/s identified above using the noise descriptors $L_{Aeq,15/9hr}$ and L_{Amax} (5^{th} percentile) dB(A).*
- *Predict the cumulative rail noise level (ie. from the existing and proposed rail movements) using a calibrated noise model (based on predicted increased rail movements) at the offset distances identified above.*
- *Compare the cumulative noise level with the rail noise assessment trigger levels: $L_{Aeq,15hr}$ 65 dB(A), $L_{Aeq,9hr}$ 60 dB(A), and L_{Amax} (95^{th} percentile) 85 dB(A).*
- *Implement all feasible and reasonable noise mitigation measures where the cumulative noise level exceeds the noise assessment trigger levels and project-related noise increases are predicted.*
- *Where the L_{Aeq} noise level increases are more than 2 dB(A), which is equivalent to approximately 60% of the total line or corridor rail traffic, and exceeds the relevant noise assessment trigger level, strong justification should be provided as to why it is not feasible or reasonable to reduce the increase.*

Notes:

1. *A project-related noise increase is an increase of more than 0.5 dB over the day or night periods.*
2. *The geographical extent of the rail noise assessment ideally should be where project-related rail noise increases are less than 0.5 dB. This roughly equates to where project-related rail traffic represents less than 10% of the total line or corridor rail traffic.*

Appendix 3 of the *RING* deals with non-network rail lines on or exclusively servicing industrial sites, and states the following:

> *Where a non-network rail line exclusively servicing one or more industrial sites extends beyond the boundary of the industrial premises, noise from this section of track should be assessed against the recommended acceptable L_{Aeq} noise level from industrial noise sources for the relevant receiver type and indicative noise amenity area in Table 2.1 of the INP...*

The most relevant part of Table 2.1 of the *INP* is reproduced below. Note that L_{Aeq} noise levels outlined in Table 2.1 of the *INP* correspond to $L_{Aeq,Period}$ noise levels.

INP Table 2.1 Recommended L_{Aeq} noise levels from industrial noise sources

Type of Receiver	*Indicative Noise Amenity*	*Time of Day*	*Acceptable L_{Aeq} Noise Level – dB(A)*
Residence	*Rural*	*Day*	*50*
		Evening	*45*
		Night	*40*

It is noted that the *INP* acceptable noise levels are consistent with the *NPfi* recommended amenity noise levels (Section 5.4.2).

8.3 Rail Noise Impacts

8.3.1 Non-network Rail Line

The approved Stage 2 rail spur section (Figures 1-1 and 2-1) extending from the Mount Pleasant Operation MLs to the rail network (Muswellbrook-Ulan Rail Line) would be subject to an increase in the number of train movements and needs to be considered in accordance with the *RING* (non-network rail line).

Project rail spur noise levels at nearby receivers have been predicted using the ENM to allow for consideration of local meteorological data consistent with the operational noise assessment (Section 6.1.2).

The noise model considered the closest and potentially most exposed receivers, all located within approximately 1,800 m of the rail spur. This includes 25 privately-owned receivers, 24 mine-owned receivers and two commercial receivers (Figure 4-1). Compliance at the 51 receivers modelled would infer compliance at all other identified receivers.

The final design for the Stage 2 rail infrastructure incorporates a 1.5 m-high noise barrier along a significant portion of the southern side of the spur section near Muswellbrook-Ulan Rail Line. The noise barrier, which would be built prior to commencement of the Project, was included in the noise model. Additional modelling indicates the barrier would reduce noise levels appreciably (by up to 4 dB) at receivers to the south and south-east of the rail spur. It should be noted that the Stage 2 rail barrier is different to the rail noise barrier within the Mount Pleasant Operation MLs mentioned in Table 6.3, which may be implemented if reasonable and feasible to reduce operational noise impacts.

Noise levels and spectra were established using the Transport for NSW (TfNSW) standard rail noise database for locomotives and freight wagons. The database levels can be adjusted for train speed, locomotive type, and wheel defects. Because wheel defects on rolling stock can significantly increase noise levels and can occur on a significant proportion of trains, noise predictions were presented for rolling stock with both low wheel defects and medium wheel defects.

Because of adverse meteorological conditions present at night and the more stringent night time noise criterion set in the *RING* for non-network rail lines (40 dBA $L_{Aeq,period}$), the Project rail spur noise assessment focuses on the night time period (10.00 pm to 7.00 am).

Noise predictions were based on the following assumptions:

- Average train movements at peak coal production of two trains (four movements) per night (10.00 pm to 7.00 am);
- Average speed of 60 km/hr on most of the rail spur, and 70 km/hr along the 515 m section closest to the Muswellbrook-Ulan Rail Line; and
- Configuration of three 82 Class locomotives and 96 wagons.

Note that the Project would also use trains which operate with only two locomotives per train (Aurizon locomotives). Therefore, rail noise impacts predicted in the assessment may at times be conservative.

Predicted night time $L_{Aeq,9hr}$ noise levels considering local meteorology at the 51 potentially most impacted receivers are presented in Appendix K.

Review of the results indicates that most predicted levels comply with the *RING* night time noise criterion for non-network rail lines, except for privately-owned receivers 20 and 21 where 2 dB exceedances are predicted. Such exceedances are considered to be "negligible" (between 1-2 dB according to the *NPfI*) and would not be discernible (when compared to compliance with the Project noise trigger levels) by the average listener, in accordance with the *NPfI*.

Both receivers 20 and 21 are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise/air impacts associated with the approved mine.

8.3.2 Network Rail Lines

Rail Movements

The Mount Pleasant Operation is approved to generate an average of three train departures (six train movements) per 24 hours (e.g. four during the day and two at night) and up to nine train departures (18 train movements) per 24 hours. The Project proposes to increase the annual average daily train movements to 13 train movements (e.g. eight during the day and five at night) and a peak daily maximum of 20 train movements per 24 hours between 2034 and 2043 (i.e. when the Project's maximum rail transport rate of approximately 17 Mtpa of product coal would be reached).

The approved life of mine of a number of existing coal mining projects using the Muswellbrook-Ulan Rail Line and Main Northern Railway (directly south of Muswellbrook) for coal transport will cease between 2034 and 2043, based on current approvals. Such projects include the Moolarben Coal Project and the Bengalla Mine. In light of this, the assessment is based on 2034 as it would have more non-Project related rail traffic than in later years (e.g. 2041), thus resulting in higher cumulative rail noise levels.

It should also be noted that 2034 allows for a more accurate assessment of rail noise predictions not possible in later years as new mining projects and/or extensions of existing mining projects unknown to date may be approved by that time. However, there is still some uncertainty associated with coal mining projects that are currently scheduled to cease prior to 2034, that may seek approval for extensions to their mine lives.

Relative increases in noise levels due to the Project may be greater in later years (e.g. 2041) as contributions from other mining projects gradually decrease. However, in consideration of climate change goals set by the NSW Government, it is expected that overall coal production in the Hunter Valley would also gradually wind down, resulting in lower cumulative rail noise levels.

To provide some context on currently approved and proposed average rail movements on the Main Northern Railway, a recent rail noise assessment for the Maxwell Project (Wilkinson Murray, 2019) described a total of approximately 140 approved and proposed rail movements on the section between the Muswellbrook junction and the Antiene Rail Spur junction (including rail movements of the approved Mount Pleasant Operation).

The peak approved/proposed train movements have not been assessed, as it is extremely unlikely the peak movements from a large number of projects would occur in the same 24-hour period.

Average daily train movements used to assess potential impacts on the Muswellbrook-Ulan Rail Line (east of the Project rail spur) in 2034 are summarised in Table 8-1.

Table 8-1 Average Daily Train Movements (Mount Pleasant Operation Rail Spur to Muswellbrook Junction) (2034)

Status	Origin	Average Daily Train Number of Train Movements [1]		
		Day	Night	24 Hour
Existing/Approved	Freight/Ore and grain[2]	4	0	4
	Moolarben Coal Project[3]	11	5	16
	Bengalla Mine[4]	6	4	10
Total (without Project)		**21**	**9**	**30**
Project (2034)		8	5	13
Total (with Project)		**29**	**14**	**43**

Notes:

- Daytime: the period from 7.00 am to 10.00 pm.
- Night: the period from 10.00 pm to 7.00 am.

1. Two movements equal one arrival and one departure of a single train.
2. ARTC (2016) *2016-25 Hunter Valley Corridor Capacity Strategy.*
3. SLR Consulting (2017) *Moolarben Coal Complex Open Cut Optimisation Modification – Noise Assessment.*
4. Bengalla Mining Company (2013) *Continuation of Bengalla Mine - Environmental Impact Statement.*

Review of Table 8-1 indicates the Project's contribution to average daily rail traffic on the eastern end of the Muswellbrook-Ulan Rail Line (from the Mount Pleasant Operation rail spur to the Muswellbrook junction) for the additional approximately eight movements during the day and five movements at night associated with the Project in 2034 would be approximately 38.1% and 55.6% of non-Mount Pleasant Operation day and night rail movements, respectively.

Percentages of Mount Pleasant Operation-related rail traffic over total rail traffic on the Muswellbrook-Ulan Rail Line indicate that rail noise associated with the Project would generate an increase of more than 0.5 dB when compared with existing rail noise, namely 1.4 dB for day $L_{Aeq,15hr}$ noise levels and 1.9 dB for night time $L_{Aeq,9hr}$ noise levels.

The *RING* (detailed in Section 8.2.2) has requirements for the geographic extent of rail noise assessments for rail traffic generating development. Specifically, assessment extends to where rail traffic associated with the Project represents less than 10% of total line/corridor rail traffic, as in this case the change in noise exposure is equivalent to less than 0.5 dB.

As such, the Main Northern Railway south-east of Muswellbrook was also considered as part of the assessment. Average daily train movements used to assess potential impacts on the Main Northern Railway south-east of Muswellbrook (north of the Antiene rail spur) in 2034 are summarised in Table 8-2.

Table 8-2 indicates the Project's contribution to average daily rail traffic on the Main Northern Railway (from the Muswellbrook junction to the Antiene rail spur) in 2034 would be approximately 14.9% and 17% of non-Mount Pleasant Operation day and night rail movements, respectively.

Table 8-2 Average Daily Train Movements – Main Northern Railway (Muswellbrook Junction to Antiene Rail Spur) (2034)

Status	Origin	Average Daily Train Number of Train Movements [1]		
		Day	Night	24 Hour
Existing / Approved	Passenger[2]	2	0	2
	Freight/Ore and grain[3]	11.6	5.4	17
	Moolarben Coal Project[4]	11	5	16
	Bengalla Mine[5]	6	4	10
	Vickery Extension Project[3]	6	4	10
	Maules Creek Coal Mine[6]	6	4	10
	Watermark Coal Project[7]	5	3	8
Proposed	Narrabri Underground Mine - Stage 3 Extension Project[8]	6	4	10
Total (without Project)		**53.6**	**29.4**	**83**
Project (2034)		8	5	13
Total (with Project)		**61.6**	**34.4**	**96**

Notes:

- Daytime: the period from 7.00 am to 10.00 pm.
- Night: the period from 10.00 pm to 7.00 am.

1. Two movements equal one arrival and one departure of a single train.
2. NSW Transport (September 2018) New South Wales Train Link Timetable for the North Western Region.
3. Wilkinson Murray (2017b) *Vickery Extension Project – Noise & Blasting Assessment.*
4. SLR Consulting (2017) *Moolarben Coal Complex Open Cut Optimisation Modification – Noise Assessment.*
5. Bengalla Mining Company (2013) *Continuation of Bengalla Mine – Environmental Impact Statement.*
6. Bridges Acoustics (2011) *Acoustic Impact Assessment Maules Creek Coal Project Environmental Assessment.*
7. Bridges Acoustics (2013b) *Watermark Coal Project Environmental Impact Statement Acoustics Impact Assessment.*
8. Whitehaven Coal (2019) *Narrabri Underground Mine – Stage 3 Extension Project – Scoping Report.*

Percentages of Mount Pleasant Operation-related rail traffic over total rail traffic on the Main Northern Railway indicate that rail noise associated with the Project would generate an increase of more than 0.5 dB when compared with existing rail noise, namely 0.6 dB for day $L_{Aeq,15hr}$ noise levels and 0.7 dB for night time $L_{Aeq,9hr}$ noise levels. Due to the approved life of mine of a large number of coal mining projects currently operating in the Hunter Valley ceasing before 2034, it is anticipated that Project-related rail noise increases would remain above 0.5 dB along a significant section of the Main Northern Railway. Notwithstanding, it is expected cumulative levels due to rail noise would be lower than during the time other projects are still operating.

The anticipated Project rail movements in 2034 would represent less than 10% of currently approved and proposed average rail movements on the Main Northern Railway between the Muswellbrook junction and the Antiene Rail Spur junction assessed for the Maxwell Project (approximately 140 rail movements) (Wilkinson Murray, 2019). Notably, the total currently approved and proposed rail movements assessed for the Maxwell Project (Wilkinson Murray, 2019) are approximately 50% more than the total rail movements (including the Project rail movements) assessed for 2034 in Table 8-2.

Cumulative Rail Noise Level Predictions & Offset Distances

Noise levels generated by total rail traffic (i.e. considering both Project- and non-Project related movements) on the Muswellbrook-Ulan Rail Line section between the Project rail spur and Muswellbrook were predicted for 2034. Predictions of day $L_{Aeq,15hr}$, night time $L_{Aeq,9hr}$ and maximum (5% exceedance) pass-by L_{Amax} noise levels have been conducted using the TfNSW standard rail noise database for locomotives and freight wagons.

Noise predictions were based on the following conservative assumptions:

- Medium wheel defects on all rolling stock;
- Average speed of 70 km/hr;
- Configuration of three 82 Class locomotives and 96 wagons for all coal trains; and
- No intervening hills and structures, and 180 degrees angle of view.

Predicted noise levels are conservative and, in some cases, likely to be higher than what would actually occur at some receiver distances.

Table 8-3 summarises the offset distances necessary to comply with the day $L_{Aeq,15hr}$, night time $L_{Aeq,9hr}$ and maximum pass-by L_{Amax} noise levels.

Table 8-3 Offset Distances

	Offset Distance to Railway Line to Achieve Compliance (m)	
	Muswellbrook Junction to Antiene Rail Spur	**Mount Pleasant Operation Rail Spur to Muswellbrook Junction**
Day $L_{Aeq,15hr}$ Noise Level	>72 m	>45 m
Night $L_{Aeq,9hr}$ Noise Level	>132 m	>83 m
Maximum pass-by L_{Amax} noise (5% exceedance)	>72 m	>72 m

Review of nearby receivers has identified four receivers within 83 m from the Muswellbrook-Ulan Rail Line where exceedances of one or more of the relevant criteria may occur. Daytime and night time equivalent continuous noise levels and maximum pass-by levels have been predicted at each of those receivers, as summarised in Table 8-4.

Table 8-4 Cumulative Rail Noise Level Predictions at Proximal Receivers (Mount Pleasant Operation Rail Spur to Muswellbrook Junction)

Receiver ID [1]	Approx. Distance to Railway Line (m)	Day $L_{Aeq,15hr}$ Noise Level (dBA)	Night $L_{Aeq,9hr}$ Noise Level (dBA)	Maximum Pass-by L_{Amax} noise (5% exceedance) (dBA)
Privately-owned Dwellings				
Rec 631	74	65	64	85
Rec 632	50	68	68	87

Receiver ID [1]	Approx. Distance to Railway Line (m)	Day $L_{Aeq,15hr}$ Noise Level (dBA)	Night $L_{Aeq,9hr}$ Noise Level (dBA)	Maximum Pass-by L_{Amax} noise (5% exceedance) (dBA)
Mine-owned Dwellings				
Rec 2aj	70	65	64	86
Rec 2d	73	65	64	85

Note:

1. Predictions at façade.

8.4 Conclusion

Along the non-network rail line section, noise levels were predicted using the ENM. It was found that compliance with the *RING* noise criteria for non-network rail lines would be achieved at most surrounding noise-sensitive receivers, except for privately-owned receivers 20 and 21 where 2 dB exceedances are predicted. Such exceedances are considered to be "negligible" (between 1-2 dB according to the *NPfI*) and would not be discernible (when compared to compliance with the Project noise trigger levels) by the average listener, in accordance with the *NPfI*. Both receivers 20 and 21 are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise/air impacts associated with the approved mine.

The network rail line noise assessment presented above indicates that the Project rail movements would result in increases in noise levels greater than 0.5 dB on the Muswellbrook-Ulan Rail Line (from the Mount Pleasant Operation rail spur to the Muswellbrook junction) and the Main Northern Railway south-east of Muswellbrook, with any increase in rail noise being less than 2 dB (which is the relevant trigger threshold in the *RING* rail noise assessment requirements).

For increases in noise greater than 0.5 dB the *RING* has a requirement to consider feasible and reasonable noise mitigation. The document recognises that the land use developer owns neither the rail corridor nor the rolling stock, so is limited in its ability to directly manage noise, although it can ensure it contracts to a rail service provider who would use best practice rolling stock, including locomotives approved to operate on the NSW rail network in accordance with environment protection licences issued by the EPA. The only feasible mitigation measure is to work with rail service providers to help in identifying wagons with audible wheel defects to remove them from the rail fleet.

It should be noted that voluntary mitigation or land acquisition does not apply to residences affected by noise from the public rail network.

The buffer distance from the rail line at which the relevant ARTC and *RING* L_{Aeq} criteria would be met would increase due to the Project. L_{Amax} pass-by noise levels would not change due to the Project.

It should be noted that the above assessment is largely academic in nature, as existing approved and proposed rail movements as assessed in a recent rail noise assessment for the Maxwell Project (Wilkinson Murray, 2019) are approximately 50% more than the total rail movements (including the Project rail movements) assessed for 2034 in Table 8-2. Therefore, rail noise levels received by nearby residences would be expected to fall materially relative to current levels (i.e. between 1 and 2 dB), inclusive of additional Project rail movements.

9 BLASTING ASSESSMENT

The removal of overburden (and interburden) material for the Project would be undertaken using a drill and blast programme.

A mixture of ANFO (dry holes) and emulsion blends (wet holes) explosives would continue to be used for the Project. Blast sizes would range up to 1,600 kilograms (kg).

Blast designs and sizes would vary over the life of the Project and would depend on numerous factors including the depth of coal seams and the design of open cut benches.

Blasting at the Mount Pleasant Operation would only occur between the hours of 9.00 am and 5.00 pm Monday to Saturday (excluding public holidays).

Up to two blasts per day and up to eight blasts per week, averaged over any calendar year, would occur on-site (unless additional blasts are required following misfires or for mine safety).

Wybong Road, Kayuga Road and Castlerock Road would continue to be temporarily closed during blasts within 500 m of the road. Dorset Road/Northern Link Road would also be temporarily closed during blasts within 500 m of the road.

Consistent with the SEARs for the Project (Section 1.2), potential blast impacts on people, animals, buildings/structures, infrastructure and significant natural features have been considered.

In regard to animals, potential blasting impacts on livestock are considered most relevant for the Project. While the Muswellbrook Racecourse is located to the south of the Mount Pleasant Operation and east of the Bengalla Mine, the Project would not involve blasting any closer to this facility than the approved Mount Pleasant Operation. Thus, potential blasting impacts are considered likely to be the same as, or less than, the approved blasting impacts of the Mount Pleasant Operation. No other thoroughbred enterprises are considered close enough to the Project to warrant further consideration.

As described in the *BMP* (MACH, 2020a), there are no known Aboriginal heritage sites at the Mount Pleasant Operation that are considered susceptible to impacts from blasting (e.g. cave or overhang sites or grinding grooves). Further, there are no known significant natural features (e.g. cliff faces or caves) considered susceptible to impacts from blasting. As such, no blast impacts have been determined at Aboriginal heritage sites or natural features.

9.1 Airblast Overpressure & Vibration Criteria

9.1.1 Criteria for the Minimisation of Human Annoyance from Blasting

The EPA guideline *Assessing Vibration: a technical guideline* (NSW Department of Environment and Conservation, 2006) defers to the *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* prepared by the Australian and New Zealand Environment Council (1990). In that document, human annoyance criteria for blasting for any privately-owned receivers or other sensitive locations are:

- maximum overpressure due to blasting should not exceed 115 dB for more than 5% of blasts in any year, and should not exceed 120 dB for any blast; and
- maximum peak particle ground velocity should not exceed 5 mm/s for more than 5% of blasts in any year, and should not exceed 10 mm/s for any blast.

These criteria are consistent with the blasting criteria for residences on privately-owned land defined in Table 7 of Development Consent DA 92/97.

9.1.2 Criteria for the Prevention of Structural Damage to Buildings

At sufficiently high levels, blast overpressure may in itself cause structural damage to some building elements such as windows.

Australian Standard (AS) 2187.2-2006 *Explosives – Storage and Use – Part 2 Use of explosives* indicates:

> *From Australian and overseas research, damage (even of a cosmetic nature) has not been found to occur at airblast levels below 133dB*.

For assessment of damage due to ground vibration, *AS 2187.2-2006* recommends frequency-dependent criteria for vibration damage, derived from British Standard 7385-2 and United States Bureau of Mines Standard RI 8507. These are less stringent than the human comfort criterion of 5 mm/s noted above, and hence need to be considered only in the case of mine-owned receivers. For the frequencies typical of blast vibration, a value of 10 mm/s peak particle velocity (PPV) represents a conservatively low estimate of the level above which structural damage may possibly occur.

9.1.3 Criteria for Historic Heritage Sites

There are no criteria relating to the potential for structural and cosmetic damage to historic heritage sites from blasting vibration and airblast overpressure. As such, a vibration criterion of 10 mm/s and airblast overpressure criterion of 130 dB are nominated for historic heritage sites. In most instances it is expected that higher limits would be able to be applied, but there may be some sites, for example buildings of European heritage significance in poor condition, where lower limits may be necessary.

In the event no specific criteria have been provided by a structural engineer, Wilkinson Murray recommend using the above criteria for all historic heritage sites.

9.1.4 Criterion for Public Infrastructure

Ground vibration criteria for the prevention of minor or cosmetic damage occurring in structures are set in Australian Standard AS 2187.2-2006 Explosives - Storage & use Part 2 - Use of explosives, which are derived from British Standard BS 7385-2 and the United States Bureau of Mines (USBM) RI 8507. The Standard recommends a ground vibration criterion of 50 mm/s for reinforced or framed structures, and industrial and heavy commercial buildings.

Consideration was given to an Ausgrid 66 kilovolt (kV) electric transmission line recently relocated directly east of the Mount Pleasant Operation along parts of Wybong Road and Kayuga Road. The vibration criteria nominated by Ausgrid for the prevention of damage to Ausgrid infrastructure based on Ausgrid Technical Guideline "T0083 – NEG-SM22 Blasting" nominates the following vibration limits for power poles:

> *Power Poles - 50mm/s at specific locations (pole with stay wires, transformers, overloaded decayed, damaged etc) increasing to 100mm/s as a general single pole limit. Blasting vibration is described as Peak Particle Velocity (PPV). PPV means the peak value of the vector sums for a blast duration.*

A 50 mm/s vibration criterion was conservatively used for all power poles along the relocated electric transmission line. This criterion may be revised upon detailed inspection of the power poles by an Ausgrid technician.

9.1.5 Criteria for Livestock

The criteria for livestock described in the *BMP* (MACH, 2020a) have been adopted in this assessment. The criteria are based on studies by Casaday and Lehmann (1967) and Heggies Australia (2006) into the effects of sonic booms and vibration on livestock animals, respectively.

Based on the studies, MACH conservatively adopts the following blast performance criteria for livestock:

- 125 dBL for airblast overpressure (Casaday and Lehmann, 1967); and
- 200 mm/s ground vibration (Heggies Australia, 2006).

9.2 Prediction of Airblast Overpressure & Vibration Levels

Airblast overpressure and ground vibration levels from blasting are related to the "scaled distance" from the blast, which is defined as:

> Scaled distance = D/W^(1/3) for airblast overpressure; and
>
> Scaled distance = D/W^(1/2) for ground vibration.
>
> where D is the distance from the blast in metres and W is the Maximum Instantaneous Charge (MIC) of explosive, in kg ANFO equivalent.

Predictive curves relating scaled distance to overpressure and ground vibration levels have been derived from measurements conducted at numerous sites, typically at a distance varying between 2 and 7 km.

For this assessment, Wilkinson Murray has used data from over 7,600 records of blasts undertaken in the Hunter Valley, NSW, to derive relationships between scaled distance and overpressure or vibration. These relationships are designed to predict not the mean level of overpressure or vibration, as in a standard "site law", but the 95th percentile value, representing the level that would be exceeded by only 5% of blasts, given the use of current blast practice and the current level of variability in overpressure or vibration for the same scaled distance.

The raw data, and the derived prediction curves which are appropriate up to distances of 10 km, are shown in Appendix L.

For overpressure, a curvilinear relationship with log (Scaled Distance) was required to adequately explain the data:

> Overpressure (dB) = 201.1 – 62.313 log(SD) + 10.79 (log(SD))^2
>
> where SD is the overpressure-scaled distance (as per formula given above).

For vibration, a linear relationship with log (Peak Particle Velocity) was derived:

> Log (Peak Particle Velocity) = 3.015 - 1.4359 log (SD)
>
> where SD is the vibration-scaled distance (as per formula given above).

These formulae were used to predict vibration levels at all potentially-affected locations.

Vibration and overpressure records for blasts conducted at the Mount Pleasant Operation between January 2017 and October 2020 were analysed and the 95th percentile "site law" relationships between scaled distance and vibration/overpressure were found to be consistent with those derived from the 7,600 blast monitoring records undertaken in the Hunter Valley.

9.3 Predicted Overpressure & Vibration Levels at Privately-Owned Residences

Based on the predictive equations outlined in Section 9.2, Table M-1 of Appendix M summarises the range of 5% exceedance overpressure and ground vibration levels predicted at the nearest privately-owned residences in all directions resulting from the proposed maximum blast MIC of 1,600 kg. The 5% exceedance levels are the levels that should be compared to the 5% exceedance criteria of 115 dBLinear (dBL) for overpressure and 5 mm/s for vibration. Peak or maximum blasting levels are not presented because these levels are typically caused by geological or blasting anomalies, which are unpredictable.

The assumed blast characteristics are representative of deep overburden blasts which would result in the maximum potential impact.

Results indicate that, in the absence of blast MIC control, there would be a range of potential exceedances of both overpressure and/or vibration criteria at the selected residences, including potential exceedances of the upper 10 mm/s and 120 dBL criteria.

The proposed maximum blast MIC of 1,600 kg would result in exceedances of the relevant human comfort criteria at receivers within 2,260 m of the blast.

To meet the relevant criteria when blasting within 2,260 m of receivers under all conditions, the MIC would be reduced. For blasts closer than 2,260 m, trial blasting should be used to determine a site-specific site law to more accurately predict noise and vibration levels for the specific conditions applying in the area. This should be used to inform blast design so that the human comfort criteria are not exceeded. As a guide, Table M-2 (Appendix M) provides indicative MIC requirements to ensure compliance when blasting at the closest point within the blast areas, using the general blast law derived from a range of sites as described above.

Table M-2 suggests that blast MIC would need to be reduced as follows to maintain compliance with the relevant human comfort criteria when blasting at the closest part of the open cut to the nearest receivers:

- receivers to the north-north-west – approximately 300 kg to 800 kg;
- receivers to the north-north-east – less than 50 kg to 1,050 kg;
- receivers to the north-east – 150 kg to 900 kg; and
- receivers to the east – 350 kg to 1,500 kg.

Compliance at the selected receivers presented in Table M-2 is expected to result in compliance at all privately-owned residences.

9.4 Predicted Overpressure & Vibration Levels at Mine-Owned Residences

Based on the predictive equations outlined in Section 9.2, Table M-3 (Appendix M) indicates the range of 5% exceedance overpressure and ground vibration levels expected at the nearest mine-owned residences in all directions resulting from the proposed maximum blast MIC of 1,600 kg. The 5% exceedance levels are then compared to the structural damage criteria of 133 dBL for overpressure and 10 mm/s for vibration.

Based on the proposed maximum blast MIC of 1,600 kg, there are a range of exceedances of both overpressure and/or vibration criteria predicted when blasting within 1,010 m of the mine-owned receivers, with the exceedances predicted between 2026 and 2041 at some of the eastern and northern receivers (receivers 1bf and 3v).

To meet the relevant criteria when blasting within 1,010 m of the above receivers, the MIC would need to be reduced as per Table M-4.

Table M-4 suggests that blast MIC would need to be reduced as follows to maintain compliance with the relevant structural damage criteria when blasting at the closest part of the open cut to the nearest mine-owned receivers:

- mine-owned receivers to the north – 1,100 kg to 1,500 kg; and
- mine-owned receivers to the east – 450 kg to 1,200 kg.

For blasts closer than 1,010 m of any mine-owned residences, on-site blast monitoring data would be used to inform blast design so that the structural damage criteria are not exceeded. Compliance at the receivers presented in Table M-4 is expected to result in compliance at all mine-owned residences.

9.5 Predicted Vibration Levels at Historic Heritage Sites

MACH will design and manage blast events in the vicinity of historic heritage sites such that the 10 mm/s vibration criterion and 130 dB airblast overpressure criteria are met. This includes historic heritage sites located within the Project disturbance area until such time they are managed in accordance with the most contemporary assessment of historic heritage for the Mount Pleasant Operation (e.g. excavated, salvaged or demolished).

It should be noted that due to ongoing historic heritage site management, some previously assessed heritage items are no longer present or have been found not to meet the criteria for heritage significance. Such sites have not been addressed in the blasting assessment.

The proposed maximum blast MIC of 1,600 kg would result in exceedances of the relevant vibration criterion at historic heritage sites within 1,010 m of the blast. It follows that if MACH were to complete the relevant historic heritage site management actions prior to blasting within 1,010 m of a historic heritage site, the proposed maximum blast MIC of 1,600 kg could be used.

The most contemporary historic heritage assessment for the Mount Pleasant Operation (Extent Heritage, 2020) identifies a number of historic heritage sites that would be managed through *in situ* conservation. Table M-5 (Appendix M) presents the range of ground vibration and airblast overpressure levels resulting from the proposed maximum blast MIC of 1,600 kg predicted at the nearest historic heritage sites in all directions that would remain *in situ*.

Compliance at the selected sites presented in Table M-5 is expected to result in compliance at all historic heritage sites.

As a guide, Table M-6 (Appendix M) provides indicative MIC requirements to ensure compliance when blasting at the closest point within the blast areas, using the general blast law derived from a range of sites as described above.

Table M-6 suggests that blast MIC would need to be reduced as follows to maintain compliance with the relevant criteria when blasting at the closest part of the open cut to the nearest historic heritage receivers:

- historic heritage receivers to the west-north-west – 1,150 kg to 1,450 kg; and
- historic heritage receivers to the north – 50 kg to 1,000 kg.
- historic heritage receivers to the east – 700 kg to 900 kg.

9.6 Predicted Vibration Levels at Public Infrastructure

The proposed maximum blast MIC of 1,600 kg would result in exceedances of the 50 mm/s ground vibration criterion for public infrastructure within 330 m of the blast. It is recommended that blasts be monitored when occurring within 350 m of any public infrastructure to ensure compliance is maintained at all times.

It is noted that the Ausgrid 66 kV electric transmission line would be located within 330 m of pit area during the assessed 2026, 2028, and 2034. To ensure that the Ausgrid vibration limit is maintained, it is recommended that blasts be monitored at the closest power pole once blasting encroaches within a 350 m buffer zone.

9.7 Predicted Overpressure & Vibration Impacts on Livestock

The proposed maximum blast MIC of 1,600 kg would result in exceedances of the 125 dBL criterion for airblast overpressure and/or 200 mm/s ground vibration criterion for within approximately 650 m of the blast.

For the Project, the Mount Pleasant Operation would continue to manage blast MIC such that compliance with relevant blast criteria is maintained.

10 CONCLUSION

This assessment has addressed potential noise and blasting impacts associated with the Project, which has a proposed mine life of approximately 26 years and proposes extraction of additional coal reserves within Mount Pleasant Operation MLs, and an increase in the rate of coal extraction, without significantly increasing the total disturbance footprint.

10.1 Project Operational Noise

- Operational noise impacts were assessed for seven years (2026, 2028, 2031, 2034, 2041, 2044 and 2047), for different periods of the day (daytime, evening and night time). Noise predictions were conducted for standard meteorological conditions and noise-enhancing conditions. Where relevant, the modelled scenarios included construction activities that would largely be indistinguishable from operational activities (e.g. CHPP Stage 2a upgrade and Fines Emplacement Area raises).
- The significance of noise-enhancing meteorological conditions (in accordance with Fact Sheet D of the *NPfI*) was determined based on meteorological data local to the site. While the frequency of occurrence of moderate-to-strong temperature inversions was determined to be lower than the threshold for significance, temperature inversions of up to 4ºC/100 m with winds up to 0.5 m/s were conservatively applied. The assessment presents the highest noise predictions under the relevant meteorological conditions, which are considered conservative.
- The noise model developed for the Mount Pleasant Operation was validated against recent night time attended noise measurements for the purpose of a model validation study. Results show a generally good correlation between measured and predicted noise levels under similar meteorological conditions. However, the noise model validation results indicate that the noise model may at times overpredict noise levels to a small degree, particularly during more adverse meteorological conditions (i.e. stronger source-to-receiver winds and/or stronger temperature inversions).
- The Mount Pleasant Operation already applies a comprehensive suite of noise mitigation and noise management measures on-site. These include:
  - contemporary technology fixed plant, including acoustic design such as full cladding where reasonable and feasible;
  - noise suppression is currently fitted on all major mobile equipment where reasonable and feasible;
  - mobile equipment is operated in less exposed areas during the evening and night; and
  - implementation of additional pro-active and reactive mitigation measures based on the predictive modelling system and real-time monitoring.
- Initial modelling resulted in various mitigation measures being proposed for the Project, including:
  - design of staged increase in extraction, handling and processing of ROM coal combined with mine progression to the west away from receivers in and around the township of Muswellbrook and village of Aberdeen;

- design of the integrated eastern waste rock landform area to provide shielding opportunities;
- continued implementation of noise suppression and acoustic design to all new major mobile equipment and fixed plant where reasonable and feasible to reduce emitted noise levels (in addition to the continued use of noise suppressed mobile equipment and acoustically designed fixed plant at the existing Mount Pleasant Operation);
- consideration of an additional noise barrier along the Mount Pleasant Operation rail spur; and
- continued use of the pro-active noise management system with development of modified operating scenarios during very noise-enhancing meteorological conditions in the day, evening and night time periods.

- With the above controls in place, exceedances of the Project noise trigger levels are predicted for a total of 84 privately-owned receivers for periods of time during the life of the Project, with the majority of exceedances deemed "negligible" (between 1-2 dB according to the *VLAMP* and *NPfI*). As described in the *VLAMP* and *NPfI*, such "negligible" exceedances would not be discernible by the average listener.
- All but two of the impacted receivers predicted to be exposed to "significant" (greater than 5 dB according to the *VLAMP* and *NPfI*) and "moderate" exceedances (between 3-5 dB according to the *VLAMP* and *NPfI*) are already subject to acquisition or mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise or noise/air impacts associated with the approved Mount Pleasant Operation.
- A low-frequency noise assessment was conducted that indicates that it is unlikely that any of the receivers surrounding the Project would be subject to low-frequency noise. Therefore, no modifying factor correction for low-frequency noise is warranted for the Project.
- The operational noise modelling results indicate the noise mitigation measures that would be implemented for the Project, including the staged increases to ROM coal extraction, would be effective in minimising potential noise impacts to the majority of receivers surrounding the Mount Pleasant Operation.

10.2 Vacant Land Assessment

- Review of the operational noise contours indicates that more than 25% of property 143e would be affected by noise from the Project. The owner of the property would therefore be afforded acquisition upon request rights in accordance with the *VLAMP*.

10.3 Cumulative Noise

- Cumulative noise predictions from the operation of the Project, Bengalla Mine, Mt Arthur Coal Mine, Mangoola Coal and Dartbrook Mine were conducted.

- The assessment indicates that cumulative noise levels resulting from the concurrent operation of these projects would exceed the night time recommended amenity noise level for a total of 14 privately-owned receivers where "moderate" and "negligible" exceedances are predicted. All receivers predicted to be exposed to "moderate" exceedances are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise or noise/air impacts associated with the approved mine.

- The majority of the impacted receivers are predicted to exceed the recommended amenity noise levels due to noise generated by the Bengalla Mine, or a combination of the Bengalla Mine and Mt Arthur Coal Mine. For those receivers, the Project would either result in a negligible 1 dB increase, or no change in noise levels.

- A number of the impacted receivers would exceed due to the Project alone. All those receivers are already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine.

- A sensitivity analysis of cumulative noise levels was conducted assuming mine activity at the Mt Arthur Coal Mine site would extend further than the current approval period. This would result in two additional "moderate" exceedances that would otherwise be classified as "negligible" (receivers 147 and 488b) and one additional "negligible" 1 dB exceedance (receiver 487).

10.4 Sleep Disturbance

- Modelling of L_{Amax} noise levels at nearby receivers was undertaken for typical instantaneous mine-site noise sources, such as excavator dumping in empty truck bodies, dozer track noise and impact noise from the infrastructure area. This analysis indicates that predicted L_{AFmax} noise levels would comply with the L_{AFmax} noise trigger of 52 dBA at all the identified receivers except receiver 156a in 2041. It should also be noted that receiver 156a is already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved Mount Pleasant Operation.

- The night time $L_{Aeq,15min}$ noise predictions are predicted to exceed the $L_{Aeq,15min}$ noise trigger of 40 dBA at 14 privately-owned residential receivers. All impacted receivers are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine, except for receiver 154b. In accordance with the *VLAMP*, receiver 154b would be afforded mitigation rights as a result of the Project, noting that it would be afforded acquisition rights in accordance with the predicted Project operational noise levels.

10.5 Project Construction Noise

- As described above, the modelled operational scenarios included construction activities that would largely be indistinguishable from operational activities (e.g. CHPP Stage 2a upgrade and Fines Emplacement Area raises), where relevant.

- While development of the approved Northern Link Road with a revised alignment for the Project may be distinct from operational activities (as perceived by proximal receivers), this activity has not been explicitly modelled, as:
  - The closest privately-owned residential receivers with no acquisition upon request rights in Development Consent DA 92/97 would be approximately 4 km from the works, where construction noise is likely to be inaudible during the day.
  - The revised alignment would not be significantly closer to privately-owned receivers.
  - There would be no material change to the overall construction fleet that would be used for the Project.

10.6 Road and Rail Transportation Noise

- Projected traffic volumes associated with the Mount Pleasant Operation are expected to have potential implications for noise on Wybong Road (between Bengalla Road and Kayuga Road) and Kayuga Road (north of Wybong Road). Up to five receivers are predicted to experience "negligible" exceedances (between 1-2 dB according to the *NPfI*) due to additional traffic associated with the Project. Those exceedances would not be discernible by the average listener according to the *NPfI*. Furthermore, the five receivers are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified). To address potential noise impacts at privately-owned receivers where road noise criteria are exceeded and the relative increase in traffic noise levels due to the Project is greater than 2 dB, MACH would continue to implement all feasible and reasonable mitigation measures.
- Along the Project rail spur, compliance with the *RING* noise criteria for non-network rail lines would be achieved at most surrounding noise sensitive receivers, except for two privately-owned receivers where 2 dB exceedances are predicted. Such exceedances are considered "negligible" (between 1-2 dB according to the *NPfI*) and would not be discernible (when compared to compliance with the Project noise trigger levels) by the average listener, in accordance with the *NPfI*. Both receivers are already subject to acquisition or additional mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise/air impacts associated with the approved mine.
- Two sections of railway on the ARTC's network were assessed for potential increases in rail noise associated with product coal train movements in 2034. Project rail movements would increase the offset distance from the railway where the *RING* criteria are met; however, the predicted noise level increase in all cases is less than 2 dB. However, the predicted cumulative rail noise levels in 2034 would be reduced compared to that currently approved, due to the cessation of a number of mining projects in the region.

10.7 Blasting

- The proposed maximum blast MIC of 1,600 kg would result in exceedances of the relevant human comfort criteria at receivers within 2,260 m of the blast. For the Project, the Mount Pleasant Operation would continue to manage blast MIC such that compliance with relevant blast criteria is maintained.

- The proposed maximum blast MIC of 1,600 kg would result in exceedances of the relevant vibration criterion at historic heritage sites within 1,010 m of the blast. It is recommended MACH complete the relevant historic heritage site management actions prior to blasting within 1,010 m of a historic heritage site, or lower the blast MIC as required.
- The proposed maximum blast MIC of 1,600 kg would result in exceedances of the 50 mm/s ground vibration criterion for public infrastructure within 330 m of the blast. It is recommended that blasts be monitored when occurring within 350 m of any public infrastructure (including the Ausgrid 66 kV electric transmission line located directly east of the Project) to ensure compliance is maintained at all times.
- Wybong Road, Kayuga Road and Castlerock Road would continue to be temporarily closed during blasts within 500 m of the road. Dorset Road/Northern Link Road would also be temporarily closed during blasts within 500 m of the road.
- The proposed maximum blast MIC of 1,600 kg would result in exceedances of the relevant livestock criteria within approximately 650 m of the blast. For the Project, the Mount Pleasant Operation would continue to manage blast MIC such that compliance with relevant blast criteria is maintained.
- As no known Aboriginal heritage sites or significant natural features (e.g. cliff faces or caves) that may be susceptible to blast impacts are located in proximity to the Mount Pleasant Operation, no blast impacts have been determined at Aboriginal heritage sites or natural features.

11 REFERENCES

- Australian and New Zealand Environment Council (1990) *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration*.
- Australian Rail Track Corporation (2016) *2016-25 Hunter Valley Corridor Capacity Strategy.*
- Bengalla Mining Company (2013) *Continuation of Bengalla Mine – Environmental Impact Statement.*
- Bridges Acoustics (2011) *Acoustic Impact Assessment Maules Creek Coal Project Environmental Assessment.*
- Bridges Acoustics (2013a) *Bengalla Continuation of Mining Project – Acoustic Impact Assessment.*
- Bridges Acoustics (2013b) *Watermark Coal Project Environmental Impact Statement Acoustics Impact Assessment.*
- Bridges Acoustics (2018) *Dartbrook Mine – Modification 7 – Acoustic Impact Assessment.*
- Casaday and Lehmann (1967) *Response of Farm Animals to Sonic Booms*.
- CPB Contractors (2017) *New Lord Street Project – Construction Noise, Vibration & Out of Hours Management Plan.*
- Department of Environment and Climate Change (2009) *Interim Construction Noise Guideline*.
- Department of Environment and Conservation (2006) *Assessing Vibration: a technical guideline*.
- Department of Environment, Climate Change and Water (2011) *NSW Road Noise Policy*.
- Department of Planning and Environment (2018) *Voluntary Land Acquisition and Mitigation Policy*.
- EMGA Mitchell McLennan (2013) *Mangoola Coal Project – Modification 6 – Noise and Vibration Assessment.*
- Environment Protection Authority (2000) *Industrial Noise Policy*.
- Extent Heritage (2020) *Mount Pleasant Optimisation Project – Historic Heritage Assessment.*
- Hansen Bailey (2017) *Bengalla Mine – Development Consent Modification 4 – Statement of Environmental Effects*.
- Heggies Australia Pty Ltd (2006) *Report on Vibration Effects in Transported Cattle*. Appendix D of the Albion Park Quarry Extension Revised Blast Management Plan.
- Liebherr Australia (2018) *Sound Power Level of Ultra Class Trucks*.
- MACH Energy Australia Pty Ltd (2018-20) *Mount Pleasant Operation – Monthly Environmental Monitoring Reports – May 2018 to August 2020.*
- MACH Energy Australia Pty Ltd (2019a) *Noise Management Plan*.

- MACH Energy Australia Pty Ltd (2019b) *Site Access Management Plan*.
- MACH Energy Australia Pty Ltd (2020a) *Blast Management Plan*.
- MACH Energy Australia Pty Ltd (2020b) SWL measurement report for mobile fleet at MPO.
- NSW Environment Protection Authority (2013) *Rail Infrastructure Noise Guideline*.
- NSW Environment Protection Authority (2017) *Noise Policy for Industry*.
- NSW Transport (2018) *New South Wales Train Link Timetable for the North Western Region*.
- Renzo Tonin & Associates (2018) *Sydney Metro City & Southwest-TSE Works - Construction Noise and Vibration Impact Statement: Pitt Street Construction Sites.*
- Roads & Maritime Services (2015) *Pacific Highway Upgrade – Woolgoolga to Ballina – Construction Noise and Vibration Management Plan.*
- SLR Consulting (2017) *Moolarben Coal Complex Open Cut Optimisation Modification – Noise Assessment*.
- The Transport Planning Partnership (2020) *Mount Pleasant Optimisation Project – Road Transport Assessment*.
- Transport for NSW (2019) *NSW Rail Noise Database 2014*.
- United Kingdom Department of Transport (1988) *Calculation of Road Traffic Noise*.
- Whitehaven Coal (2019) *Narrabri Underground Mine - Stage 3 Extension Project - Scoping Report.*
- Wilkinson Murray (2013) *Mt Arthur Coal Open Cut Modification – Noise and Blasting Assessment.*
- Wilkinson Murray (2016) *Bulga Village Noise Audit – Final Report*.
- Wilkinson Murray (2017a) *Mount Pleasant Operation - Mine Optimisation Modification – Noise & Blasting Assessment.*
- Wilkinson Murray (2017b) *Vickery Extension Project – Noise & Blasting Assessment.*
- Wilkinson Murray (2019) *Maxwell Project – Noise Impact Assessment*.

APPENDIX A

GLOSSARY OF TERMS & DEFINITIONS

Most environments are affected by environmental noise which continuously varies, largely as a result of road traffic. To describe the overall noise environment, a number of noise descriptors have been developed and these involve statistical and other analysis of the varying noise over sampling periods, typically taken as 15 minutes. These descriptors, which are demonstrated in the graph below, are here defined.

Maximum Noise Level (L_{Amax}) – The maximum noise level over a sample period is the maximum level, measured on fast response, during the sample period.

L_{A1} – The L_{A1} level is the noise level which is exceeded for 1% of the sample period. During the sample period, the noise level is below the L_{A1} level for 99% of the time.

L_{A10} – The L_{A10} level is the noise level which is exceeded for 10% of the sample period. During the sample period, the noise level is below the L_{A10} level for 90% of the time. The L_{A10} is a common noise descriptor for environmental noise and road traffic noise.

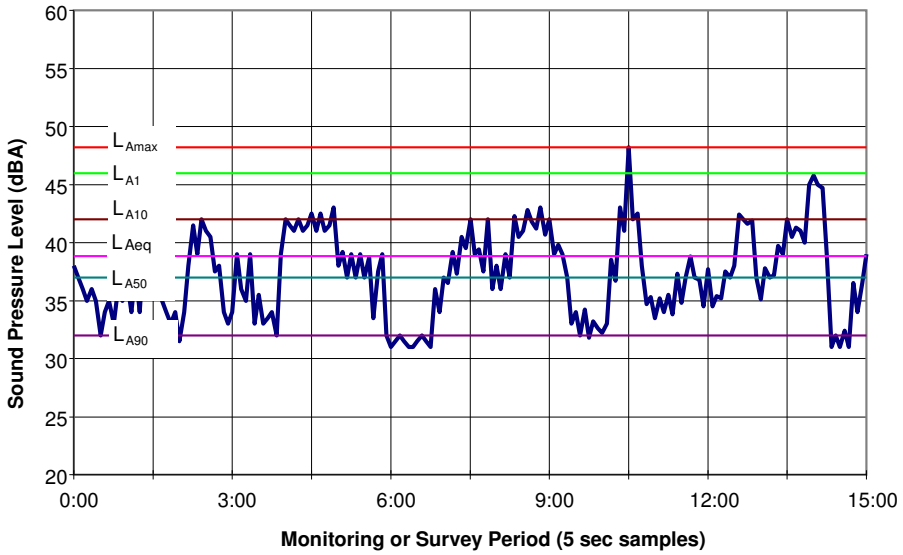
L_{A90} – The L_{A90} level is the noise level which is exceeded for 90% of the sample period. During the sample period, the noise level is below the L_{A90} level for 10% of the time. This measure is commonly referred to as the background noise level.

L_{Aeq} – The equivalent continuous sound level (L_{Aeq}) is the energy average of the varying noise over the sample period and is equivalent to the level of a constant noise which contains the same energy as the varying noise environment. This measure is also a common measure of environmental noise and road traffic noise.

ABL – The Assessment Background Level is the single figure background level representing each assessment period (daytime, evening and night time) for each day. It is determined by calculating the 10th percentile (lowest 10th percent) background level (L_{A90}) for each period.

RBL – The Rating Background Level for each period is the median value of the ABL values for the period over all of the days measured. There is therefore an RBL value for each period – daytime, evening and night time.

Typical Graph of Sound Pressure Level vs Time



APPENDIX B

NOISE SENSITIVE RECEIVERS

Table B-1 Privately-Owned Residential Receivers

Receiver ID	Project NAG	Landholders	Easting	Northing
4	n/a	JR SCRIVEN	299204	6425199
19	n/a	DP ENGLEBRECHT	299120	6426780
20	n/a	JA & KB BARNETT	298865	6426827
21	n/a	MJ MCGOLDRICK	298804	6426823
35	n/a	C HORNE	299981	6428578
35b	n/a	C HORNE	299987	6428649
43	n/a	JB MOORE	292319	6429013
43b	n/a	JB MOORE	291386	6428704
45	n/a	BA & TE STRACHAN	291265	6428277
45b	n/a	BA & TE STRACHAN	291282	6428296
45c	n/a	BA & TE STRACHAN	291304	6428289
47	n/a	BL & ML BATES	291276	6429621
67	n/a	PN SIMPSON	299896	6429203
74	n/a	M & N SORMAZ	300004	6429277
77	n/a	BE & WB WHITEHEAD	300331	6429494
79	n/a	MH RAY	300571	6429446
82	n/a	AK BIRCH	301019	6429169
83	n/a	CM & LG KELMAN	300958	6429302
84a	n/a	GE PITMAN	300797	6429363
84b	n/a	GE PITMAN	291180	6437474
86a	n/a	COWTIME INVESTMENTS PTY LIMITED	300343	6429725
86b	n/a	COWTIME INVESTMENTS PTY LIMITED	301866	6431881
96	n/a	RP GRAY	299880	6430325
102	n/a	AJPS MATHER	299830	6430444
108	n/a	JS GIBSON	299716	6430474
112	n/a	BD BARRY	299569	6430451
118	n/a	CA & JM HAYES	299654	6430631
120	n/a	DL & PA MOORE	299721	6430733
120c	n/a	DL & PA MOORE	299694	6430747
121	n/a	C & JM MOORE	299655	6430781
136	n/a	DG YORE	300332	6432454
140a	n/a	DAPKOS PTY. LIMITED	300978	6433036
140c	n/a	DAPKOS PTY. LIMITED	301238	6431475
143a	n/a	JS & NM LONERGAN	299926	6434460
143b	n/a	JS & NM LONERGAN	299210	6435242
147	n/a	MJ & RG ADNUM	299166	6434677
153a	n/a	EM LEECE	295895	6435445
154	n/a	F & PD STANDING	298538	6435519
154b	n/a	F & PD STANDING	298530	6435540
156a	n/a	JE LONERGAN	298881	6435174
156b	n/a	JM & ST & JE LONERGAN & LA PARKES & PM HOWARD	289455	6428817
157a	n/a	RB PARKINSON	298964	6434979
157b	n/a	RB PARKINSON	289022	6427911
159	n/a	JE & MS DUCEY	299130	6435011
169	n/a	J WATTUS & L GREENSILL	298867	6436641

Receiver ID	Project NAG	Landholders	Easting	Northing
171	n/a	J WATTUS & L GREENSILL	299038	6436959
172	n/a	CE & RL THOMPSON	299157	6437229
172b	n/a	CE & RL THOMPSON	299167	6437280
172c	n/a	CE & RL THOMPSON	299380	6437633
310	n/a	CE & RL THOMPSON	299136	6437287
173	n/a	JA WARD & TL KING	298878	6437774
174	n/a	ML POWER	298907	6437677
175	n/a	ML POWER	298924	6437623
175b	n/a	ML POWER	298907	6437621
175c	n/a	ML POWER	298949	6437595
176	n/a	JAF & LA ALLAN	298986	6437511
177	n/a	FW & HM & SA WHEATLEY	298729	6438048
178	n/a	PA NEELY	299347	6438055
179	n/a	F. A. WHEATLEY & SON PTY LIMITED	299188	6438161
180	n/a	F. A. WHEATLEY & SON PTY LIMITED	299231	6438235
180b	n/a	F. A. WHEATLEY & SON PTY LIMITED	299556	6438056
180c	n/a	F. A. WHEATLEY & SON PTY LIMITED	299443	6438875
181	n/a	K.L. & H.R. DAY PTY. LIMITED	300473	6437761
181c	n/a	K.L. & H.R. DAY PTY. LIMITED	300024	6437408
182	n/a	AJ & JG SADLER	300847	6437842
189	n/a	OB O'BRIEN	301237	6434699
190	n/a	OB O'BRIEN	301114	6434684
191	n/a	JA & JE FIBBINS	301415	6434535
192	n/a	CW & IG INGLE	301288	6434533
193	2	GM & KL SMITH	301528	6434368
193c	n/a	GM & KL SMITH	302408	6433967
194	2	JBA & TC HARRIS	302020	6433459
195	2	RK & T YOUNG	302120	6432953
197	n/a	RK & T YOUNG	302116	6432365
196	2	RK & T YOUNG	302230	6432239
195d	n/a	RK & T YOUNG	302172	6432125
198	n/a	NP & TJ GOLDRICK	301994	6431849
198b	n/a	NP & TJ GOLDRICK	301949	6431847
199	n/a	NA BURLING	302093	6431847
200	n/a	R EASTON	302256	6431849
202	n/a	DN RAPHAEL	301547	6431296
202b	n/a	DN RAPHAEL	301939	6431208
203	n/a	MA & RF MILLARD	301444	6431329
203b	n/a	MA & RF MILLARD	301482	6431298
203c	n/a	MA & RF MILLARD	301446	6431341
206	1	WJ HARDES	299807	6427072
207	n/a	KL & SW BARKLEY	299389	6426888
212	n/a	CJ & DR TUBB	299568	6426382
212b	n/a	CJ & DR TUBB	299544	6426340
213	n/a	ENGLEBRECHT RACING STABLES PTY. LIMITED	299175	6426542
214	n/a	AL THOMSON-WEIR & RC WEIR	299180	6426558

Receiver ID	Project NAG	Landholders	Easting	Northing
215	n/a	CB & WJ MCINTOSH	299187	6426609
216	n/a	NJ KEEVERS	299191	6426638
216b	n/a	NJ KEEVERS	299215	6426621
217	n/a	RRA FARNSWORTH	299197	6426668
218	n/a	SY JOHNSON	299137	6426582
219	n/a	GL & KL ANDREWS	299134	6426597
220	n/a	MA MOLLER & RA BYRNES	299145	6426635
221	n/a	TD BARRON	299149	6426680
222	n/a	EA & ML SWEENEY	299152	6426716
223	n/a	LJ & MC DOBIE	299126	6426722
223b	n/a	LJ & MC DOBIE	299113	6426701
224	n/a	DL ROBINSON	299097	6426729
225	n/a	JR GLEESON & MR CRANFIELD	299208	6426699
249	n/a	TW ROOTS	290948	6423469
252	n/a	KF & RM MERRICK	289458	6424902
257	n/a	CM & PG LANE	291300	6426071
258a	n/a	NJ & RY ELLIS	291000	6426444
258c	n/a	NJ & RY ELLIS	290978	6426456
259	n/a	MR PEEL	290893	6426165
259b	n/a	MR PEEL	290771	6426234
260	n/a	PSJ MURRAY	291001	6426005
260a	n/a	PSJ MURRAY	290975	6425981
260b	n/a	PSJ MURRAY	290967	6426001
261	n/a	PR ELLIS	290650	6425665
261b	n/a	PR ELLIS	290655	6425637
271	n/a	DE KILGANNON & DS MACDOUGALL	289007	6434419
272b	n/a	GC SPARRE	290544	6433781
272	n/a	GC SPARRE	290599	6433699
273	n/a	CM & IJ RICHARDS	289237	6435182
273b	n/a	CM & IJ RICHARDS	289270	6434795
288	1	JM & LA WEBSTER	300481	6427549
288b	1	JM & LA WEBSTER	300492	6427562
289	n/a	EA & RA LAWMAN	300328	6428693
292	n/a	GR & MK WALSH	290619	6422528
292b	n/a	GR & MK WALSH	290459	6422499
300	n/a	LJ & MG LATHAM	291433	6421730
298	n/a	LJ & MG LATHAM	291487	6421947
296a	n/a	JM WILD	291746	6422106
296b	n/a	JM WILD	291623	6422136
302a	n/a	MJ & MJ DUNCAN	290912	6421269
302c	n/a	MJ & MJ DUNCAN	290718	6421467
401	n/a	DG & JL DAY	289678	6437838
402	n/a	PC BRITTAN	290202	6438460
404	n/a	DG & JL & RW DAY	290589	6437642
407	n/a	AD LONERGAN	291737	6437529
413b	n/a	MJH LUMBY	288466	6437109

Receiver ID	Project NAG	Landholders	Easting	Northing
415	n/a	SJ FRANKLAND	288449	6436268
417	n/a	JA & M CASTELLANA	288298	6435593
418	n/a	PB WATTS	287815	6435334
418b	n/a	PB WATTS	287964	6435284
419	n/a	KM BATES & TG WOODS	288702	6436633
421	n/a	GW RICHARDS	289314	6435712
422a	n/a	ME DANIELS	297479	6438929
436	n/a	MEDEGATE PTY. LIMITED	299862	6438782
437	n/a	BG & S CANVIN	299724	6438830
441	n/a	MACQUEEN PROJECTS PTY LTD	301154	6438223
442	n/a	WJ BOURKE	304683	6437541
443	n/a	K & RG BRADLEY	301121	6438168
451	n/a	GK & HM SANSOM	303247	6434331
452	n/a	AJR MADDEN	303395	6431851
453a	n/a	ME & SC DEVER	288347	6434692
453b	n/a	ME & SC DEVER	288309	6434747
454	n/a	AP & PE MCMANUS	287915	6434470
455	n/a	RP KEAST	286340	6434252
456	n/a	GT KEAST	286643	6434110
456b	n/a	GT KEAST	286650	6434092
458	n/a	HJ WRIGHT	288255	6433351
460	n/a	RG GOWING	286411	6430732
460b	n/a	RG GOWING	286350	6430974
461	n/a	DG PEACE	286335	6430403
462a	n/a	SH JENNAR	286649	6429789
462b	n/a	SH JENNAR	286664	6429919
462c	n/a	SH JENNAR	286664	6429905
464	n/a	JL & KL BALMER	289094	6428237
464b	n/a	JL & KL BALMER	289152	6428303
465	n/a	FN & WL GOOGE	288368	6427932
466	n/a	GT MCNEILL	289104	6426843
467	n/a	AR & F FLETCHER	290362	6428029
467b	n/a	AR & F FLETCHER	290329	6428001
468a	n/a	S.R. & J. W. LAWSON (LINDISFARNE) PTY. LIMITED	288663	6422488
468b	n/a	S.R. & J. W. LAWSON (LINDISFARNE) PTY. LIMITED	288413	6422516
468c	n/a	S.R. & J. W. LAWSON (LINDISFARNE) PTY. LIMITED	288744	6422670
468d	n/a	S.R. & J. W. LAWSON (LINDISFARNE) PTY. LIMITED	288667	6422511
470	n/a	JI & PJ BROWN	289352	6423345
471	n/a	PJ BROWN	289166	6423423
472a	n/a	JDM MARKHAM	289359	6423042
472b	n/a	JDM MARKHAM	289391	6423191
472c	n/a	JDM MARKHAM	289154	6422757
474	n/a	AA & BT MEYER	289101	6422375
475	n/a	CA & EJ DENTON	290871	6421547
475b	n/a	CA & EJ DENTON	290870	6421557
476	n/a	CA & LA MACPHERSON	289424	6420979

Receiver ID	Project NAG	Landholders	Easting	Northing
477a	n/a	MW TURNER	290061	6421069
477b	n/a	MW TURNER	290048	6421063
481	n/a	RL WILKS	288729	6420219
483	n/a	RW JONES	287951	6420135
484	n/a	KM & TR PAULSEN	288861	6419989
485a	n/a	M & PR BURGMANN	288071	6419004
485b	n/a	M & PR BURGMANN	288066	6419050
485c	n/a	M & PR BURGMANN	287988	6419082
485d	n/a	M & PR BURGMANN	287933	6419095
485e	n/a	M & PR BURGMANN	287953	6419103
485f	n/a	M & PR BURGMANN	288112	6419015
487	n/a	E RANKIN	292323	6421880
488a	n/a	E & WJ RANKIN	292981	6421913
488b	n/a	E & WJ RANKIN	292667	6422647
515a	n/a	JA & SB REICHEL	303771	6435159
515b	n/a	JA & SB REICHEL	304395	6435587
516	n/a	MP CLIFFORD	304535	6436159
517	n/a	FL COLEMAN & JC THOMAS	304772	6434939
518	n/a	VM FRENCH	305208	6433773
519	n/a	GL & KR HAYDEN	304636	6435454
522a	n/a	BJ & VR PASSLOW	303468	6431491
522b	1	BJ & VR PASSLOW	301251	6429626
522c	1	BJ & VR PASSLOW	301256	6429585
522d	1	BJ & VR PASSLOW	301266	6429599
526	n/a	LG WICKS	300536	6429474
527	1	DJ & GH CORK	300601	6428695
528	1	AS CHICK	300622	6428695
529	1	AM SMITH & TH HAMILTON	300642	6428694
530	1	JM HARRISON & NJ & SC BULLARD	300678	6428689
531	1	EA & GJ MUNZENBERGER	300678	6428671
531b	1	EA & GJ MUNZENBERGER	300659	6428664
532	1	VL ROSE	300677	6428650
533	1	MJ BROWN	300673	6428629
534	1	EE MARKS	300670	6428613
535	1	DN & GL HORTON	300661	6428594
536	1	LJ CUMMINS	300665	6428573
537	1	RJ & SJ FARLEY	300663	6428556
538	1	KD POWER & T VERO	300511	6427653
539	1	CA SINGLETON & PH CURTAIN	300540	6427646
541	1	JG HINDER & VG MATHEWS	300559	6427610
542	1	GJ & PE CHAPMAN	300548	6427600
543	1	SM CROUCH	300534	6427594
543b	1	SM CROUCH	300512	6427612
544	1	DS & RM NEWTON	300521	6427585
545	1	JA GREEN	300508	6427571

Receiver ID	Project NAG	Landholders	Easting	Northing
547	2	FK & G & LA BRYANT	302119	6433355
549	n/a	J WHITE & MT BARRY	305106	6423175
550	n/a	KT RYAN	304389	6422458
552	n/a	MT PERRAM	304864	6424159
553	n/a	AV & MF DOHERTY	304139	6422116
554	n/a	K CASBEN	304376	6424137
557	n/a	CJ & LE DUCK	304348	6422171
559	n/a	LT & RC SKINNER	304853	6421916
560	n/a	DA & RJD OSBORN	304780	6422140
561	n/a	JW NASH	304794	6422638
562	n/a	RB HALLORAN	304976	6422282
563	n/a	ID & RE BAXTER	305453	6422383
564	n/a	RW KERR	305221	6423060
565	n/a	KL & N JACOBSEN	304962	6423375
566	n/a	J FOX	305174	6423525
569	n/a	MERLAUST PTY LIMITED	305079	6424360
570	n/a	D HARRIS	305097	6424577
571	n/a	BL & JM BENNETT	305190	6425431
572	n/a	PJ HOGAN	305176	6424761
573	n/a	JM & WR BUDDEN	305051	6424972
574	n/a	IE & LF HUNT	305016	6425085
575	n/a	DR & JA FOLPP	304989	6425269
576	n/a	BS & MB WELLS	304990	6425435
577a	n/a	JG ABERCROMBIE	304767	6425562
577b	n/a	JG ABERCROMBIE	304829	6425572
578	n/a	GK & JM BRIDGE	304802	6425787
583	n/a	JF & SJ AIRD	305401	6433259
586	n/a	K WILTON	305175	6435729
587a	n/a	AJ & SL MORRISON	305086	6436842
587b	n/a	AJ & SL MORRISON	305063	6436875
588	n/a	ME & SR EVANS	305203	6435904
600a	1	MJ WICKES	300595	6427645
600b	1	MJ WICKES	300580	6427673
601	1	GF & UD GARLAND	300608	6427653
602	1	MJ TURNER	300619	6427660
603	1	SA MAY	300632	6427671
604	1	BT & DJ SHER	300642	6427681
605	1	C DENT	300653	6427693
606	1	GL COOPER	300666	6427696
607	1	J DEVER	300679	6427702
608	1	JL & ML & R JOHNSTON	300683	6427716
609	1	TJ & VB OAKES	300694	6427727
610	1	RJ SPRADBROW	300712	6427736
611	1	ML STOCKER	300724	6427742
612	1	SATNJ PTY LIMITED	300706	6427795

Receiver ID	Project NAG	Landholders	Easting	Northing
613	1	CT & RC FACKENDER	300722	6427784
614	1	KJ & R CLYDSDALE	300728	6427771
615	1	ER SIDERIS	300744	6427752
616a	1	BAPTIST CHURCHES OF NEW SOUTH WALES PROPERTY	300995	6428951
616b	1	BAPTIST CHURCHES OF NEW SOUTH WALES PROPERTY	300751	6427816
617a	1	CD & RA NEWTON	300815	6427808
618a	1	N & S VASSOS	300833	6427817
618b	1	N & S VASSOS	300815	6427822
619	1	JP OAKES	300840	6427834
621	1	Y SAMPSON	300856	6427883
622a	1	JJ & JD MCKINLEY	300843	6427901
623a	n/a	HV ABORIGINAL CORPORATION	300931	6438285
623b	1	HV ABORIGINAL CORPORATION	300874	6427932
630a	1	MUSWELLBROOK & DISTRICT WORKERS' CLUB LIMITED	301047	6427990
631	1	YS BOYLE	301062	6428001
632	1	JW MILTON	301049	6428039
648	1	EL HOLBOROW	300992	6428237
649	1	JM WILD	300971	6428239
650	1	JR & VL ROSE	300955	6428238
651	1	CL ROWLAND	300991	6428284
652	1	BL HALL & LI PRITCHARD	300919	6428239
653	1	TL LYMBERY	300912	6428261
654a	1	JA LECKY	300891	6428526
654b	1	JA LECKY	300918	6428277
655	1	MF DAVIES	300919	6428290
658a	1	TRUSTEES OF CHURCH PROPERTY FOR THE DIOCESE OF	300878	6428388
659	1	J & PJ ROBINSON	300864	6428280
660a	1	ER & MA CLAYTON	300876	6428328
660b	1	ER & MA CLAYTON	300871	6428358
661	1	RD KROPP	300845	6428416
662	1	MR HORNE	300833	6428433
663	1	BA COLVIN	300814	6428439
664	1	NM STANSBURY	300800	6428436
665a	1	D PAYNE	300745	6428438
665b	1	D PAYNE	300745	6428399
667a	n/a	B LAWMAN	300416	6428684
667b	n/a	B LAWMAN	300443	6428720
667c	n/a	B LAWMAN	300417	6428676
667d	n/a	B LAWMAN	300414	6428656
667e	n/a	B LAWMAN	300427	6428663
667f	1	B LAWMAN	301345	6429739
669	1	VH ROOKE	300714	6428535
671	1	DB & MA & PJ TUALLY	300719	6428557
672	1	DD MANTHORP & KA LEGGAT	300719	6428569
673	1	CS RICH	300722	6428586
675	1	BA WHITBY & NT VESEY	300736	6428644

Receiver ID	Project NAG	Landholders	Easting	Northing
676	1	E & LW PITTMAN	300731	6428682
677	1	LS WHITE & MR PERFREMENT	300749	6428673
678	1	LA JEAN MERRICK	300764	6428667
679	1	PF TOMLINSON	300781	6428674
680	1	LJ STEVENS	300795	6428667
681	1	DM HUNT	300814	6428669
682a	1	C & SJ ATTARD	300851	6428664
682b	1	C & SJ ATTARD	300851	6428647
683	1	MD DONALDSON	300868	6428664
684	1	EV & RE RASMANIS	300904	6428651
685	1	JA NEWSON	300911	6428625
686	1	LJ HASTINGS	300907	6428610
687	1	SJ WILTON	300905	6428587
688	1	KM & NJ CANTOR	300896	6428571
689	1	MG BIRD	300814	6428498
690	1	SF & TJ REILLY	300844	6428497
691	1	AJ JONES	300887	6428480
692	1	VL PEARCE	300888	6428497
693	1	JH LIEBECK	300959	6428566
694a	1	RM CONSTABLE	300965	6428589
694b	1	RM CONSTABLE	300996	6428583
695	1	ML GOODWIN	300963	6428608
697	1	CLAUT INVESTMENTS PTY LTD & K RIGBY	300976	6428649
698	1	YK CONSTABLE	301022	6428640
715	n/a	SJ CRUMP	300858	6438168
728	1	L BOYE	301028	6428693
729	1	BM & SK BUTTON	301009	6428698
730	1	JG RICKEY	300986	6428697
731	1	JL & KL BOWER	300973	6428704
732	1	HM & RJ MCLAUCHLAN	300978	6428739
733	1	GM HASLER	300989	6428754
735a	1	S BARRELL	301000	6428829
735b	1	S BARRELL	300987	6428831
736	1	CD & GA BURGESS	301037	6428854
737	1	JA CAMERON	300996	6428858
738	1	KA SMITH & ME AKAUMA	301002	6428880
739	1	JE MOORE	300997	6428902
740a	1	G&L SHAW, J THATCHER, P SWAIN & K ROWNEY, P RAY, C OBERG, BRADCLIFFE, A TAN, S CUNNINGHAM, P&J CAVANAGH, J BEER & A PURKISS (STRATA TITLE)	301066	6428914
740b	1	G&L SHAW, J THATCHER, P SWAIN & K ROWNEY, P RAY, C OBERG, BRADCLIFFE, A TAN, S CUNNINGHAM, P&J CAVANAGH, J BEER & A PURKISS (STRATA TITLE)	301045	6428916
740c	1	G&L SHAW, J THATCHER, P SWAIN & K ROWNEY, P RAY, C OBERG, BRADCLIFFE, A TAN, S CUNNINGHAM, P&J CAVANAGH, J BEER & A PURKISS (STRATA TITLE)	301025	6428919

Receiver ID	Project NAG	Landholders	Easting	Northing
740d	1	G&L SHAW, J THATCHER, P SWAIN & K ROWNEY, P RAY, C OBERG, BRADCLIFFE, A TAN, S CUNNINGHAM, P&J CAVANAGH, J BEER & A PURKISS (STRATA TITLE)	301022	6428898
740e	1	G&L SHAW, J THATCHER, P SWAIN & K ROWNEY, P RAY, C OBERG, BRADCLIFFE, A TAN, S CUNNINGHAM, P&J CAVANAGH, J BEER & A PURKISS (STRATA TITLE)	301039	6428895
740f	1	G&L SHAW, J THATCHER, P SWAIN & K ROWNEY, P RAY, C OBERG, BRADCLIFFE, A TAN, S CUNNINGHAM, P&J CAVANAGH, J BEER & A PURKISS (STRATA TITLE)	301060	6428893
741	1	JM SIMMS	300983	6428927
742	1	RP SHARMA	300974	6428946
743	1	CJ BURGESS	300969	6428958
744	1	JA SHUTT & MR BERGHOFER	301013	6428958
745	1	LJ COOPS	301029	6428960
746	1	M BAXTER	301048	6428958
747	1	ST NOONAN	301067	6428962
748a	1	AR & DB THOMPSON	301085	6428965
748b	1	AR & DB THOMPSON	302248	6430681
749a	1	GS & JM BELFORD	300910	6428705
749b	1	GS & JM BELFORD	300920	6428704
750	1	D & KV WADWELL	300916	6428724
751	1	BA & RM MOORE	300924	6428739
752a	1	KM QUINN	300888	6428717
752b	1	KM QUINN	300897	6428740
753	1	SM RIECK	300873	6428717
754	1	RL GUEST	300858	6428719
755	1	DR & SP LINEY	300841	6428721
756	1	KL & RJ CLARKE	300826	6428721
757	1	KL WALMSLEY & RJ CLARKE	300814	6428725
758	1	WO WILSON	300803	6428731
759a	1	A & EJC VAUGHAN	300786	6428727
759b	1	A & EJC VAUGHAN	300787	6428749
760	1	RA BUCHANAN	300775	6428730
761	1	JA & MK NOONAN	300762	6428734
762	1	ST CASTILLO	300740	6428731
763	1	BE & VA PRIESTLEY	300745	6428742
764	1	KP MULLER	300741	6428757
765a	1	CL STANLEY	300751	6428773
765b	1	CL STANLEY	300743	6428780
766	1	AM SWEENEY	300751	6428787
767	1	JB HOLOHAN	300756	6428808
768	1	DR ELLIS	300759	6428834
769	1	JM & RJ CUTRUPI	300811	6428845
770	1	DL & GW BARTON	300762	6428854
771	1	OS REGAN	300765	6428876
772	1	IR & J BRAY	300765	6428894
773	1	GIAA PTY LTD	300767	6428909
774	1	JC DAVIES	300804	6428923

Receiver ID	Project NAG	Landholders	Easting	Northing
775	1	RA & SM FOX	300803	6428938
776	1	MJM VAN DER VLIET & RL VAN DER VLIET	300774	6428966
777	1	DL MCKAY	300788	6428979
778a	1	LJ & MR BARWICK	300797	6428997
778b	1	LJ & MR BARWICK	300782	6428994
779a	1	P & M JACOB INVESTMENTS PTY LIMITED	300804	6429006
779b	1	P & M JACOB INVESTMENTS PTY LIMITED	300826	6428997
780	1	AL & RJ GRAHAM	300795	6429023
781	1	MD & RS ENDERSBY	300783	6429038
782	1	EL GABRIEL & SR BOREHAM	300793	6429053
783	1	AJ BRADY	300790	6429071
784	1	JA & WJ O'BRIEN	300924	6428755
785	1	BW & D CAMPBELL	300926	6428773
786	1	MA & MJ BROWN	300907	6428792
787a	1	MM MILDON & TC BECKINGHAM	300928	6428805
787b	1	MM MILDON & TC BECKINGHAM	300881	6428810
788	1	MIPESH PTY LTD	300924	6428824
789	1	AM & TA CROMPTON	300920	6428843
790a	1	RW CULLEN	300937	6428855
790b	1	RW CULLEN	300919	6428867
791a	1	BH CROSSLEY & MT IVANCEVIC	300936	6428872
791b	1	BH CROSSLEY & MT IVANCEVIC	300918	6428881
792a	1	NR PLUNKETT	300880	6428899
792b	1	NR PLUNKETT	300928	6428892
793	1	DB HOLDSWORTH & JD CLIFFORD	300937	6428910
794	1	DB HOLDSWORTH	300929	6428923
795	1	SA QUINN	300916	6428944
796	1	SB GUMB	300907	6428957
797a	1	C & DJ MONTGOMERY	300903	6428972
797b	1	C & DJ MONTGOMERY	300882	6428980
798	1	PN FIBBINS	300890	6428996
801	1	AL HILL	300861	6429044
802	1	AJ ARMSTRONG	300854	6429062
803a	1	AL WATTS & PM DAWE	300931	6429019
803b	1	AL WATTS & PM DAWE	300938	6429034
804	1	MJ WATTERS	300939	6429005
805	1	D NORTON	300950	6428993
806	1	DA & TM DALEY	301182	6429263
807	1	LLJ EVERETT	301188	6429285
808	1	KA SCOTT	301193	6429304
809	1	JH GEOGHEGAN	301186	6429322
810	1	HM WILD	301192	6429342
811	1	DL & S EMMETT	301200	6429390
812	1	AM RAISBECK	301200	6429408
813	1	EC BLENMAN	301209	6429429
814	1	EA JIMMIESON	301214	6429448

Receiver ID	Project NAG	Landholders	Easting	Northing
815a	1	CA & CG SCRIVEN	301220	6429487
815b	1	CA & CG SCRIVEN	301215	6429465
816	1	JS KAPERNICK	301224	6429510
817	1	JENNDREW PTY LTD	301248	6429567
819	1	PP & PF CURRY	301374	6429740
820a	1	BK ATTKINS & VJ BARNETT	301396	6429771
820b	1	BK ATTKINS & VJ BARNETT	301373	6429781
821	1	JC & MJ POWELL	301408	6429788
822	1	LD & PJ GORDON	301419	6429797
823a	1	AG & HE ORTON	301428	6429815
823b	1	AG & HE ORTON	301397	6429849
824	1	AT & JM COLLINS	301456	6429839
825	1	DS STRANEY	301473	6429854
826	1	AE & GR COLLINS	301479	6429866
827	1	GR COLLINS	301492	6429875
828	1	GJ SQUIRES & KM ORR	301529	6429918
829a	1	SL SMITH	301553	6429950
829b	1	SL SMITH	301550	6429962
830	1	ME CHILDS	301573	6429960
831	1	JE MERRIMAN	301576	6429972
832	1	IJ & L HICKEY	301587	6429983
833	1	CL & JG EDWARDS	301600	6430004
834	1	NR & ZC STONE	301619	6430026
835	1	BAG ACRES & SM MCGIVERN	301635	6430041
836	1	JR & VM HUGGINS	301649	6430053
837	1	RD RAY	301659	6430062
838	1	JL SWEETMAN	301674	6430092
839	1	LA EVANS	301693	6430104
840	1	NJ FRAZER & TC ROBINSON	301705	6430114
841	1	MJ BUDDEN	301715	6430129
843a	1	PW CHAPMAN	301773	6430201
843b	1	PW CHAPMAN	301748	6430215
844a	1	RP GRAY	301876	6430314
845	1	DA BENNETT	301982	6430441
846	1	KF ZECHEL	301999	6430457
847	1	JC DENNIS	302006	6430465
848	1	S MACKENZIE	302025	6430475
849	1	JM ELLIS	302036	6430488
850	1	GC BRUNKER	302042	6430525
853	1	DG & MT WILD	302101	6430551
854	1	GS & TR JOHNSTON	302118	6430563
855	1	AA & KJ CLOSE	302133	6430574
856	1	PA DUNN	302148	6430586
857	1	DG & EA JIMMIESON	302159	6430600
858	1	TA NORMAN	302173	6430613
859	1	JF FIBBINS	302190	6430623

Receiver ID	Project NAG	Landholders	Easting	Northing
860	1	EC BATES & GT MASON	302199	6430632
861	1	GE WELDON	302215	6430644
862	1	WJ POWELL	302230	6430660
863	1	PA BOJBA	302263	6430702
864	1	BJ STRANG	302283	6430713
865	1	PJ BROWN	302293	6430724
866	2	BM HERON	302369	6430885
867	2	AJ SULTA & HJ FORDHAM	302373	6430903
868	2	MA & WG ASTILL & TK HOCKEY	302380	6430923
870	2	WD SMITH	302386	6430958
871	2	COWTIME INVESTMENTS PTY LTD & DN RAPHAEL PTY LTD	302395	6430982
872a	2	CS LOCKHART	302397	6431001
900a	n/a	NOTUSE PTY LIMITED	300949	6438379
900b	n/a	NOTUSE PTY LIMITED	300714	6437904
901	n/a	JH & LL MEDHURST	300593	6437924
902	n/a	AL & LR COX	300594	6437940
903	n/a	SA HASSELMANN	300598	6437957
904	n/a	BS & RL DOWELL	300601	6437976
905	n/a	JL & SA GEERIN	300603	6437993
906	n/a	KM & TJ DOW	300606	6438012
907	n/a	AD & MA TROMP	300607	6438029
908	n/a	BJ & TG KEEGAN	300607	6438051
909	n/a	RW MANNING	300615	6438078
911	n/a	BJ WARD	300648	6438099
912	n/a	GM COOK	300643	6438048
913	n/a	CM & SL MORAN	300688	6438094
914	n/a	MJ & SM SHEARMAN	300712	6438090
915	n/a	KA WILKINSON	300732	6438082
916	n/a	SJ & T CLIFFORD	300759	6438082
917	n/a	P WILLIAMS	300788	6438081
918	n/a	LJ WATSON	300774	6438046
919	n/a	BA ROBINS & TA MOXEY	300768	6438029
920	n/a	PM HOPMANS	300740	6438038
921	n/a	JE DIGGINS	300720	6438043
922	n/a	BL & RA MAHER	300700	6438042
924	n/a	AE BENNETT & MA KING	300663	6438004
925	n/a	GT LLOYD	300661	6437985
926	n/a	BC PAPWORTH	300655	6437968
927	n/a	JS & LM DUFFY	300649	6437951
928	n/a	AA BLACK	300645	6437931
929	n/a	JL & KH DUGGAN	300634	6437913
930	n/a	RP KING	300667	6437905
931	n/a	KL & MJH FENTON	300685	6437903
932a	n/a	RK CARTER	300714	6437939
932b	n/a	RK CARTER	300729	6437938
933	n/a	DC MCDONALD	300709	6437960

Receiver ID	Project NAG	Landholders	Easting	Northing
934	n/a	MB O'CONNELL	300715	6437979
935a	n/a	UNKNOWN OWNER	300732	6437994
935b	n/a	UNKNOWN OWNER	300713	6437998
936	n/a	ECJ & MR COWARD	300770	6437985
937	n/a	LB KEEGAN	300762	6437965
938	n/a	CG BABER & SC PAPWORTH	300756	6437947
939	n/a	NJ FEENEY	300758	6437927
940	n/a	DJ & FE FITTOCK	300752	6437907
941	n/a	MD O'HARA	300755	6437886
942	n/a	BJ & K FLAHERTY	300812	6437876
943	n/a	JA WADDELL	300820	6437894
944	n/a	JC & ME MITCHELL	300818	6437917
945a	n/a	GE SECKOLD	300828	6437934
945b	n/a	GE SECKOLD	300838	6437938
946	n/a	BJ SNOW	300831	6437952
947	n/a	HM & PM HOBBS	300833	6437974
948	n/a	NE & S DANIELS	300887	6437989
949	n/a	AAC MILLER & AD MANNING	300833	6438002
950	n/a	GC & SL BOUNDY	300835	6438022
951	n/a	ME DIGGINS	300838	6438066
952	n/a	J RIORDAN & MR CLARK	300859	6438063
953	n/a	BG & RM BAILEY	300888	6438063
954	n/a	MR CORY	300912	6438057
955	n/a	JC PHELPS	300900	6438012
956	n/a	KR & VJ TAYLOR	300950	6438058
957a	n/a	DJ & KL FOLEY	300833	6438430
957b	n/a	DJ & KL FOLEY	300946	6438038
958	n/a	CP BOTTRILL & GB AIRD	300943	6438018
959	n/a	MC THOMPSON	300940	6438000
960	n/a	JM & RJ NASH	300937	6437979
961	n/a	DT & R HARDCASTLE	300931	6437958
962	n/a	MJ FRENCH & SA LAUCHT	300929	6437932
963	n/a	LY & PW HARDES	300921	6437912
964	n/a	KA & VA BREEN	300914	6437888
965	n/a	AW MITCHELL & L PARKER	300955	6437879
966	n/a	MH & SJ NEWTON	300984	6437891
967a	n/a	L & S ALVOS	300987	6437911
967b	n/a	L & S ALVOS	300999	6437917
968	n/a	BF MILTON	300985	6437932
969	n/a	JA COLLISON	300995	6437949
970	n/a	SM BOND	300992	6437972
971	n/a	DG & TM GOOGE	300993	6437991
972	n/a	DJ & KJC SMITH	301000	6438007
973	n/a	JF & TL THOMPSON	300997	6438031
974	n/a	JB FINNERAN	301000	6438051
976	n/a	MJ HAYNES	301013	6438179

Receiver ID	Project NAG	Landholders	Easting	Northing
977a	n/a	ML & TB THOMPSON	300784	6438419
977b	n/a	ML & TB THOMPSON	300951	6438140
978	n/a	NJ ERVINE	301027	6438198
979a	n/a	KG HINDER	301007	6438441
979b	n/a	KG HINDER	301028	6438222
980	n/a	US ING	301040	6438271
981a	n/a	LA SINCLAIR	301024	6438278
981b	n/a	LA SINCLAIR	301017	6438263
982	n/a	JF FLAHERTY	301007	6438278
983	n/a	DG BRIGGS & JL WAKELING	300983	6438280
984	n/a	C BOURKE	300983	6438239
985	n/a	SR TAYLOR	300968	6438215
986	n/a	BK BIRD	300948	6438280
987	n/a	LG FITZSIMMONS	300912	6438286
988a	n/a	BS PURVIS	300893	6438295
988b	n/a	BS PURVIS	300897	6438272
989a	n/a	DT & PN STOKES	300872	6438298
989b	n/a	DT & PN STOKES	300878	6438278
990	n/a	DJ NASH	300870	6438266
991	n/a	MLV & NM ERVINE	300868	6438244
992	n/a	GC PARTRIDGE	300869	6438224
993a	n/a	JM & R BURGIN	300920	6438139
993b	n/a	JM & R BURGIN	300904	6438167
994a	n/a	DC & JL MILWAIN	300868	6438203
994b	n/a	DC & JL MILWAIN	300880	6438197
995	n/a	EJ WINDLE	300870	6438186
997	n/a	L & MS LAMBLEY	300853	6438146
998	n/a	BRUIN DEVELOPMENTS PTY LIMITED	300852	6438129
999	n/a	BR PARKINSON	300660	6438419
1000	n/a	JL TEAGUE	300727	6438401
1001	n/a	BJ & CA KINGDOM	300732	6438426
1002	n/a	CM & RJ THOMPSON	300736	6438444
1003	n/a	CD NIGHTINGALE	300738	6438463
1004	n/a	K BEST-WILLIAMS & T IDA	300741	6438483
1005	n/a	TJ SMITH	300743	6438502
1006	n/a	JD COLLESS	300747	6438518
1007	n/a	ARH & SE MCEWAN	300745	6438538
1008	n/a	J GOLLAN	300750	6438557
1009	n/a	MA CHANDLER	300799	6438542
1010	n/a	TW O'CONNELL	300797	6438502
1011	n/a	BJ & ED WENBAN	300789	6438473
1012	n/a	A & CM KOMACHA	300785	6438447
1014	n/a	CP & DL DOUGLASS	300778	6438400
1015	n/a	BW PRIGG	300776	6438377
1016	n/a	KA & TJ SMITH	300826	6438384
1017	n/a	SD HOBBS	300832	6438412

Receiver ID	Project NAG	Landholders	Easting	Northing
1018	n/a	SF LESLIE	300836	6438450
1019	n/a	T O'ROURKE	300832	6438466
1020	n/a	AJ GROENEVELD & RS BALDWIN	300844	6438485
1021	n/a	PJ & SM JONES	300845	6438503
1022	n/a	VA ASARA	300846	6438524
1023	n/a	GR & JE HUGHES	300848	6438542
1024	n/a	DK & LY BUCKMAN	300911	6438498
1025	n/a	KJ NEWTON & MR JORDAN	300889	6438389
1026	n/a	LT ZIEBELL	300882	6438359
1027	n/a	DH WALDRON-LAMOTTE & DM DIGGINS	300904	6438357
1028	n/a	AJ & CJ & KJ & LJ SAVAGE	300944	6438351
1029	n/a	KJ & SB MCLIESH	300954	6438396
1030	n/a	ME DAY	300953	6438411
1031	n/a	WL BRAZELL	300957	6438462
1032	n/a	BA & VJ RAY	300968	6438476
1033	n/a	AJ & ML BRUGNATTI	300966	6438490
1034	n/a	KM & TR IRELAND	300975	6438518
1035	n/a	JL GAFFNEY & SJ IRVING	301012	6438510
1036a	n/a	D & P AVARD	301035	6438511
1036b	n/a	D & P AVARD	301025	6438487
1037	n/a	AP & MJ MORRISON & PA BOND	301021	6438472
1038	n/a	JA & KM TUCKERMAN	301009	6438458
1039	n/a	AJ & DJ MORRISON	301008	6438422
1040	n/a	NL WALTERS	301000	6438406
1041	n/a	BS MILLS	301003	6438386
1042	n/a	DS & LY CROFT	301000	6438373
1043	n/a	KM WARD & PS WHITEHEAD	300987	6438342
1044	n/a	CW & RA HINZE	301011	6438341
1045	n/a	PM HOBBS	301071	6438451
1046	n/a	AM WILKS	301080	6438506
1077	n/a	DN & DM MURPHY	301135	6438268
1078	n/a	BA WATSON	301224	6438257
1079	n/a	DA & LJ ALLITT	301297	6438248
1080	n/a	CR CHURCHER & TL BARNETT	301305	6438291
1081	n/a	JM IRVING	301224	6438311
1082a	n/a	GA & PJ WATSON	301176	6438317
1082b	n/a	GA & PJ WATSON	301128	6438325
1100a	n/a	SPUR HILL AGRICULTURAL PTY LIMITED	286450	6420099
1100b	n/a	SPUR HILL AGRICULTURAL PTY LIMITED	286413	6419986

Table B-2 Generic Muswellbrook Residential Receivers

Receiver ID	Project NAG	Township	Easting	Northing
A	n/a	MUSWELLBROOK	301377.2	6428708
B	n/a	MUSWELLBROOK	301525.3	6428832

Receiver ID	Project NAG	Township	Easting	Northing
C	n/a	MUSWELLBROOK	301381.1	6429215
D	n/a	MUSWELLBROOK	301813.2	6429613
E	n/a	MUSWELLBROOK	302131.8	6429654
F	n/a	MUSWELLBROOK	301970.4	6429782
G	n/a	MUSWELLBROOK	302199.2	6429994

Table B-3 Council and State-Owned Residential Receivers

Receiver ID	NAG	Landholder	Easting	Northing
286e	n/a	MUSWELLBROOK SHIRE COUNCIL	304914	6423909
286f	n/a	MUSWELLBROOK SHIRE COUNCIL	305181	6423967
N1	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	300905	6438529
N2	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	300925	6438525
N3	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	300943	6438524
N4	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	300960	6438523
N5	n/a	NEW SOUTH WALES LAND AND HOUSING CORPORATION	300905	6438483
N6	n/a	NEW SOUTH WALES LAND AND HOUSING CORPORATION	300902	6438470
N7	n/a	NEW SOUTH WALES LAND AND HOUSING CORPORATION	300899	6438454
N8	n/a	NEW SOUTH WALES LAND AND HOUSING CORPORATION	300898	6438435
N9	n/a	NEW SOUTH WALES LAND AND HOUSING CORPORATION	300896	6438422
N10	n/a	NEW SOUTH WALES LAND AND HOUSING CORPORATION	300890	6438403
N11	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	300924	6438351
N12	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301077	6438487
N13	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301073	6438470
N14	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301069	6438434
N15	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301068	6438416
N16	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301066	6438399
N17	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301062	6438381
N18	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301058	6438363
N19	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301056	6438345
N20	n/a	THE HOUSING COMMISSION OF NEW SOUTH WALES	301049	6438328
N21	n/a	NEW SOUTH WALES LAND AND HOUSING CORPORATION	301035	6438241
N22	n/a	MINISTER FOR CORRECTIVE SERVICES	303781	6432747
N23	n/a	MINISTER FOR CORRECTIVE SERVICES	303791	6432764
N24	n/a	MINISTER FOR CORRECTIVE SERVICES	303802	6432778
N25	n/a	MINISTER FOR CORRECTIVE SERVICES	303952	6433292
N26	n/a	MINISTER FOR CORRECTIVE SERVICES	303940	6433330
N27	n/a	MINISTER FOR CORRECTIVE SERVICES	303973	6433346
N28	n/a	ROADS AND TRAFFIC AUTHORITY OF NEW SOUTH WALES	302450	6431157

Table B-4 Mine-Owned Dwellings

Receiver ID	NAG	Landholders	Easting	Northing
23	n/a	MACH ENERGY AUSTRALIA PTY LTD	299048	6427365
68	n/a	MACH ENERGY AUSTRALIA PTY LTD	299975	6429059
80a	n/a	MACH ENERGY AUSTRALIA PTY LTD	300556	6429466
135	n/a	MACH ENERGY AUSTRALIA PTY LTD	299993	6432183
135b	n/a	MACH ENERGY AUSTRALIA PTY LTD	299985	6432196
139	n/a	MACH ENERGY AUSTRALIA PTY LTD	300664	6432961
158	n/a	MACH ENERGY AUSTRALIA PTY LTD	299064	6435065
231	n/a	MACH ENERGY AUSTRALIA PTY LTD	300494	6429495
263	n/a	MACH ENERGY AUSTRALIA PTY LTD	291456	6427229
1p	n/a	MACH ENERGY AUSTRALIA PTY LTD	299904	6430905
1z	n/a	MACH ENERGY AUSTRALIA PTY LTD	299217	6434301
1ab	n/a	MACH ENERGY AUSTRALIA PTY LTD	299083	6434402
1ac	n/a	MACH ENERGY AUSTRALIA PTY LTD	299172	6427657
1ad	n/a	MACH ENERGY AUSTRALIA PTY LTD	293038	6436803
1ae	n/a	MACH ENERGY AUSTRALIA PTY LTD	298781	6428443
1af	n/a	MACH ENERGY AUSTRALIA PTY LTD	299583	6428764
1ag	n/a	MACH ENERGY AUSTRALIA PTY LTD	299663	6428879
1ah	n/a	MACH ENERGY AUSTRALIA PTY LTD	299927	6429227
1ai	n/a	MACH ENERGY AUSTRALIA PTY LTD	299940	6429238
1aj	n/a	MACH ENERGY AUSTRALIA PTY LTD	299956	6429248
1ak	n/a	MACH ENERGY AUSTRALIA PTY LTD	299971	6429258
1al	n/a	MACH ENERGY AUSTRALIA PTY LTD	299990	6429263
1am	n/a	MACH ENERGY AUSTRALIA PTY LTD	300115	6429782
1ar	n/a	MACH ENERGY AUSTRALIA PTY LTD	299929	6430146
1as	n/a	MACH ENERGY AUSTRALIA PTY LTD	299936	6430180
1aw	n/a	MACH ENERGY AUSTRALIA PTY LTD	299794	6430383
1ax	n/a	MACH ENERGY AUSTRALIA PTY LTD	299850	6430393
1bb	n/a	MACH ENERGY AUSTRALIA PTY LTD	299528	6429084
1bc	n/a	MACH ENERGY AUSTRALIA PTY LTD	299843	6430417
1bd	n/a	MACH ENERGY AUSTRALIA PTY LTD	292203	6436085
1bf	n/a	MACH ENERGY AUSTRALIA PTY LTD	299494	6432984
1bg	n/a	MACH ENERGY AUSTRALIA PTY LTD	299579	6433033
2i	n/a	MACH ENERGY AUSTRALIA PTY LTD	299422	6428720
246	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292869	6423439
246b	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292827	6423488
2b	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	297852	6427740
2d	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	300478	6428153
2e	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA	298360	6428431

Receiver ID	NAG	Landholders	Easting	Northing
		LIMITED		
2f	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	297839	6428519
2n	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	293016	6423529
2o	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292327	6423978
2p	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292261	6423979
2r	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292255	6424068
2s	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292244	6424131
2w	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	291603	6425848
2x	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298372	6426397
2y	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298379	6426499
2z	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298455	6426572
2aa	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298331	6426590
2ab	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298487	6426609
2ad	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298532	6426702
2af	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298638	6426785
2ai	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	297627	6426970
2aj	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298761	6427330
2al	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	297792	6427735
2am	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	298689	6426768
2an	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292183	6423976

Receiver ID	NAG	Landholders	Easting	Northing
2ao	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292219	6423991
7	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	298473	6426130
211	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	299510	6426190
299	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	291514	6421737
487b	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	292201	6422345
5f	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	298436	6426200
5g	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	298394	6426282
5i	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	291555	6421395
5j	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	289651	6421421
5k	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	291644	6421571
5l	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	291885	6422033
5m	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	293826	6422113
5p	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	293238	6422606
5r	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	295705	6423948
5t	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	296635	6424344
5v	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	290218	6424814
5x	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	290262	6424901
5y	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	298999	6424940
5z	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	299120	6424980
5aa	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	299061	6424990
5ab	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	299688	6425014
5ad	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	299776	6425226
5af	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	299751	6425111
5ag	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	292922	6419062
5ah	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	290815	6419814
5ai	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	291298	6420470
5aj	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	292757	6421175
5ak	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	292638	6421335
5al	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	290316	6422361
5am	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	294763	6422881
3a	2	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	301399	6434808
3b	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	301340	6434860
3c	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	299281	6435044
3d	2	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	301334	6435088
3e	2	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	301328	6435121
3f	2	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	301318	6435358
3g	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	299244	6435790
3i	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	300385	6436172
3j	2	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	301314	6436186
3k	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	298996	6436304
3m	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	297969	6436400
3n	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	299588	6436754
3o	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	297891	6436910
3p	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	297513	6436961

Receiver ID	NAG	Landholders	Easting	Northing
3r	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	297666	6438671
3s	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	297228	6438718
3t	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	299041	6436269
3u	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	299122	6436239
3v	n/a	AQC DARTBROOK PTY LTD / ACQ DARTBROOK MANAGEMENT PTY LTD	298608	6435243
274	n/a	MUSWELLBROOK COAL COMPANY LTD	288805	6435160
416	n/a	MUSWELLBROOK COAL COMPANY LTD	287603	6434882
463	n/a	MUSWELLBROOK COAL COMPANY LTD	286578	6429561
7b	n/a	MUSWELLBROOK COAL COMPANY LTD	287607	6421748
7c	n/a	MUSWELLBROOK COAL COMPANY LTD	287634	6421808
7d	n/a	MUSWELLBROOK COAL COMPANY LTD	288584	6426061
7e	n/a	MUSWELLBROOK COAL COMPANY LTD	287897	6427953
7f	n/a	MUSWELLBROOK COAL COMPANY LTD	286866	6428574
7g	n/a	MUSWELLBROOK COAL COMPANY LTD	287939	6432773
7h	n/a	MUSWELLBROOK COAL COMPANY LTD	288912	6434317
7i	n/a	MUSWELLBROOK COAL COMPANY LTD	288167	6434615
7j	n/a	MUSWELLBROOK COAL COMPANY LTD	289296	6434614
7k	n/a	MUSWELLBROOK COAL COMPANY LTD	289565	6436700
7l	n/a	MUSWELLBROOK COAL COMPANY LTD	287617	6421769
7m	n/a	MUSWELLBROOK COAL COMPANY LTD	289194	6433777
7n	n/a	MUSWELLBROOK COAL COMPANY LTD	304429	6431978
7o	n/a	MUSWELLBROOK COAL COMPANY LTD	305277	6432484
8b	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286950	6420596
8c	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286886	6420607
8e	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286763	6422241
8f	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	287201	6425412
8h	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	287586	6427892
8i	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286574	6428572
8j	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286934	6420591
8k	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286767	6422296
8l	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	287514	6427944
8m	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	287576	6427885
8n	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286556	6428591
8o	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286387	6424379
8p	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286336	6424834
Mal1	n/a	MALABAR COAL (DRAYTON MANAGEMENT) PTY LTD	303998	6422187
Mal2	n/a	MALABAR COAL (DRAYTON MANAGEMENT) PTY LTD	305129	6422061
Mal3	n/a	MALABAR COAL (DRAYTON MANAGEMENT) PTY LTD	304129	6422562

Table B-5 Aged Care Receivers

Receiver ID	Project NAG	Landholders	Easting	Northing
658a	1	TRUSTEES OF CHURCH PROPERTY FOR THE DIOCESE OF NEWCASTLE	300880	6428415
658b	1	TRUSTEES OF CHURCH PROPERTY FOR THE DIOCESE OF NEWCASTLE	300982	6428403
658c	1	TRUSTEES OF CHURCH PROPERTY FOR THE DIOCESE OF NEWCASTLE	300989	6428353

Receiver ID	Project NAG	Landholders	Easting	Northing
658d	1	TRUSTEES OF CHURCH PROPERTY FOR THE DIOCESE OF NEWCASTLE	300981	6428334
658e	1	TRUSTEES OF CHURCH PROPERTY FOR THE DIOCESE OF NEWCASTLE	300960	6428334

Table B-6 Accommodation Receivers

Receiver ID	Project NAG	Landholders	Easting	Northing
622b	n/a	JJ MCKINLEY & JD MCKINLEY	300813	6428070
622n	n/a	JJ MCKINLEY & JD MCKINLEY	300805	6428005
622u	n/a	JJ MCKINLEY & JD MCKINLEY	300775	6427926
975	n/a	WALEMA INVESTMENTS PTY LIMITED	300992	6438136

Table B-7 School Receivers

Receiver ID	Project NAG	Landholders	Easting	Northing
N30	n/a	MINISTER FOR EDUCATION	300752	6428412
N31	n/a	MINISTER FOR EDUCATION	300779	6428412
N32	n/a	MINISTER FOR EDUCATION	300783	6428432
N33	n/a	MINISTER FOR EDUCATION	300762	6428447

Table B-8 Church Receivers

Receiver ID	Project NAG	Landholders	Easting	Northing
520	n/a	JEHOVAH'S WITNESSES CONGREGATIONS	303177	6431293
658b	1	TRUSTEES OF CHURCH PROPERTY FOR THE DIOCESE OF NEWCASTLE	300972	6428497
658c	1	TRUSTEES OF CHURCH PROPERTY FOR THE DIOCESE OF NEWCASTLE	300960	6428359
616c	n/a	BAPTIST CHURCHES OF NEW SOUTH WALES PROPERTY TRUST	300772	6427803
N34	n/a	MINISTER FOR CORRECTIVE SERVICES	303965	6433325

Table B-9 Correctional Centre Receivers

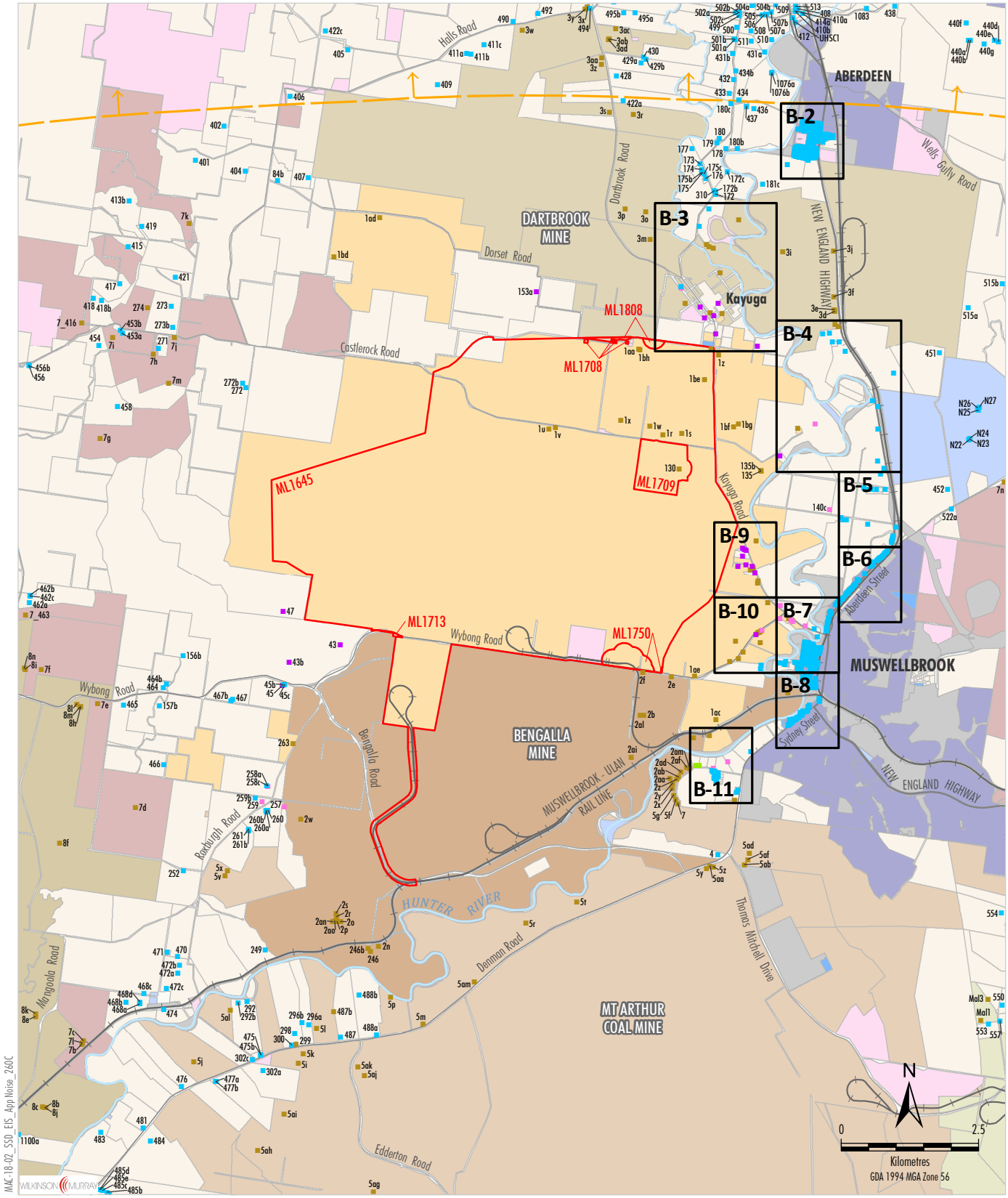
Receiver ID	Project NAG	Landholders	Easting	Northing
MP1	n/a	MINISTER FOR CORRECTIVE SERVICES	304175	6433242
MP42	n/a	MINISTER FOR CORRECTIVE SERVICES	304401	6433111
MP80	n/a	MINISTER FOR CORRECTIVE SERVICES	304883	6432951

Table B-10 Commercial Receivers

Receiver ID	Project NAG	Landholders	Easting	Northing
6	n/a	MUSWELLBROOK RACE CLUB LIMITED	298610	6426132
195e	n/a	RK YOUNG & T YOUNG	302049	6432884
140b-1	n/a	DAPKOS PTY LIMITED	302278	6430796
140b-2	n/a	DAPKOS PTY LIMITED	302298	6430770
140b-3	n/a	DAPKOS PTY LIMITED	302319	6430829
140b-4	n/a	DAPKOS PTY LIMITED	302269	6430825

Receiver ID	Project NAG	Landholders	Easting	Northing
202c	n/a	DN RAPHAEL	301708	6431218
202d	n/a	DN RAPHAEL	301641	6431256
202e	n/a	DN RAPHAEL	301651	6431306
202f	n/a	DN RAPHAEL	301684	6431300
202g	n/a	DN RAPHAEL	301677	6431286
472d	n/a	JDM MARKHAM	289233	6422879
472e	n/a	JDM MARKHAM	289198	6422896
472f	n/a	JDM MARKHAM	289322	6422944
472g	n/a	JDM MARKHAM	289359	6422932
472h	n/a	JDM MARKHAM	289316	6423002
472i	n/a	JDM MARKHAM	289286	6423020
472j	n/a	JDM MARKHAM	289216	6423051
472k	n/a	JDM MARKHAM	289150	6423080
472l	n/a	JDM MARKHAM	289413	6423059
472m	n/a	JDM MARKHAM	289357	6423114
489	n/a	ALIFORM PTY LIMITED	296045	6424961
540	n/a	GRENTELL PTY LIMITED	300567	6427625
546a	n/a	SJ SCOTT	300298	6427589
546b	n/a	SJ SCOTT	300339	6427586
546c	n/a	SJ SCOTT	300347	6427604
617b	n/a	CD NEWTON & RA NEWTON	300800	6427830
617c	n/a	CD NEWTON & RA NEWTON	300748	6427882
617d	n/a	CD NEWTON & RA NEWTON	300745	6427854
617e	n/a	CD NEWTON & RA NEWTON	300733	6427864
617f	n/a	CD NEWTON & RA NEWTON	300741	6427866
617g	n/a	CD NEWTON & RA NEWTON	300800	6427807
617h	n/a	CD NEWTON & RA NEWTON	300771	6427818
617i	n/a	CD NEWTON & RA NEWTON	300782	6427846
620	n/a	MA WILSON	300874	6427863
622ah	n/a	JJ MCKINLEY & JD MCKINLEY	300810	6427938
622ai	n/a	JJ MCKINLEY & JD MCKINLEY	300812	6427950
611aj	n/a	JJ MCKINLEY & JD MCKINLEY	300848	6427943
622ak	n/a	JJ MCKINLEY & JD MCKINLEY	300862	6427948
625	n/a	GDRM PROPERTY HOLDINGS PTY LIMITED	300904	6427946
629	n/a	HELLOCA PTY LIMITED	300925	6427900
626	n/a	S PHIYASIRIKUL	300902	6427878
627	n/a	XQ SU & X WANG	300911	6427885
628	n/a	BR PETERS & SM PETERS	300918	6427890
630a	1	MUSWELLBROOK & DISTRICT WORKERS' CLUB LTD	300969	6427939
630b	n/a	MUSWELLBROOK & DISTRICT WORKERS' CLUB LTD	300949	6427957
630c	n/a	MUSWELLBROOK AND DISTRICT WORKERS' CLUB LTD	300951	6427920
630d	n/a	MUSWELLBROOK AND DISTRICT WORKERS' CLUB LTD	300994	6427975
656	n/a	KR TIMPSON	300927	6428312
674a	n/a	HUNTER TERRACE PTY LIMITED	300764	6428614
674b	n/a	HUNTER TERRACE PTY LIMITED	300732	6428613

Receiver ID	Project NAG	Landholders	Easting	Northing
818a	n/a	LYSTURN PTY LIMITED	301322	6429712
818b	n/a	LYSTURN PTY LIMITED	301318	6429690
844b	n/a	RP GRAY	301864	6430299
872b	n/a	CS LOCKHART	302387	6431018
1085	n/a	ENEF INVESTMENTS PTY LTD	301174	6438420
2ap	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292350	6423979
2aq	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292215	6424163
2ar	n/a	MITSUI BENGALLA INVESTMENT PTY LTD & NEW HOPE BENGALLA PTY LTD & TAIPOWER BENGALLA PTY LIMITED & WESFARMERS BENGALLA LIMITED	292208	6424153
5h	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	289886	6421308
5w	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	290175	6424831
5an	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	289922	6421309
5ao	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	289865	6421347
5ap	n/a	HUNTER VALLEY ENERGY COAL PTY LTD	290190	6424811
8q	n/a	MANGOOLA COAL OPERATIONS PTY LIMITED	286898	6420715
Mal4	n/a	MALABAR COAL (DRAYTON MANAGEMENT) PTY LTD	304171	6421187
Mal5	n/a	MALABAR COAL (DRAYTON MANAGEMENT) PTY LTD	304178	6421225
Mal6	n/a	MALABAR COAL (DRAYTON MANAGEMENT) PTY LTD	304108	6421201
UHSC2	n/a	SCONE SHIRE COUNCIL	300508	6437938
UHSC3	n/a	SCONE SHIRE COUNCIL	300538	6437969
UHSC4	n/a	SCONE SHIRE COUNCIL	300529	6437944
N29	n/a	MINISTER FOR CORRECTIVE SERVICES	303474	6432379



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Specific Receivers Not Modelled

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

Source: MACH (2020); NSW Spatial Services (2020)

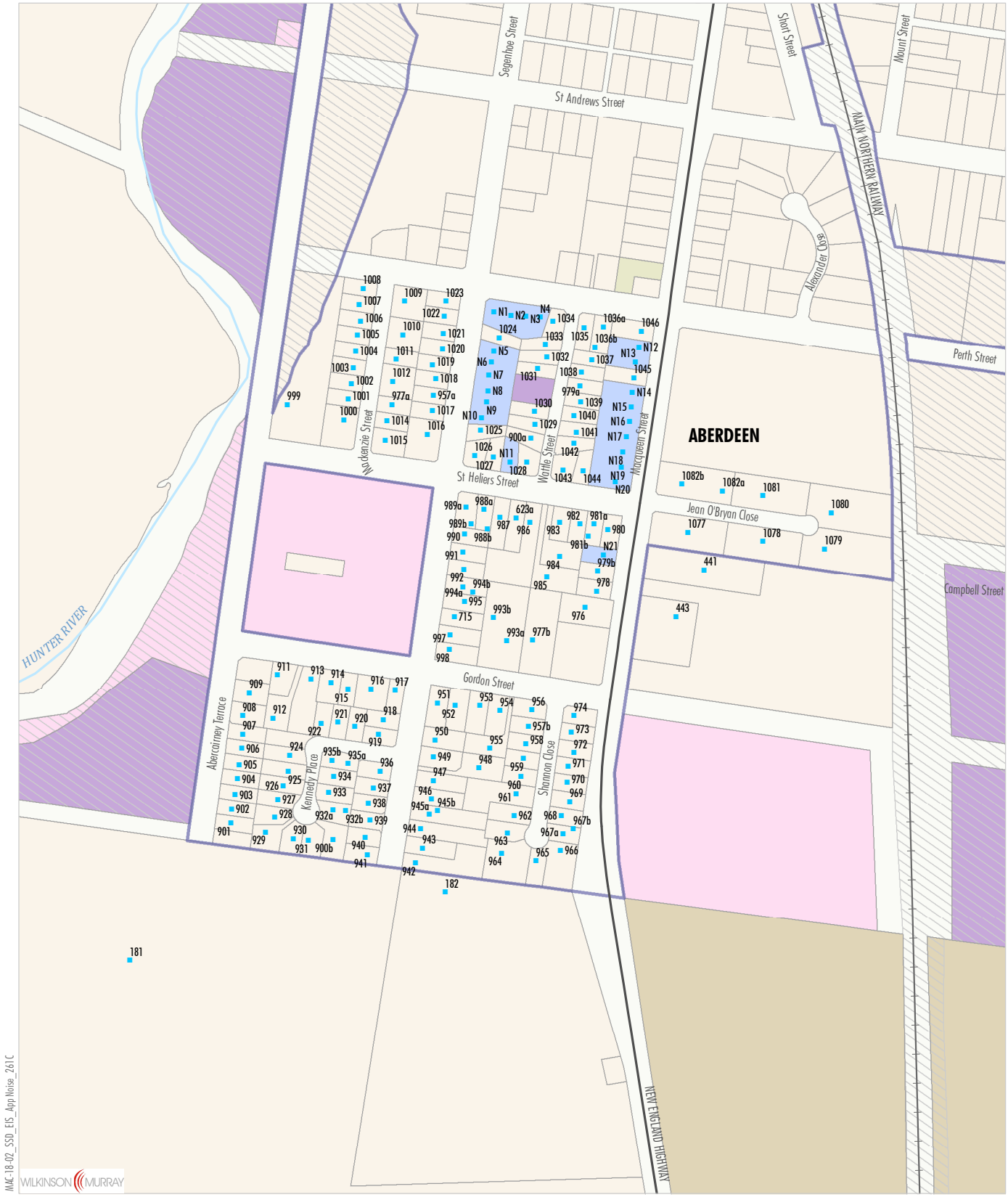
Refer Figures B-2 to B-11 for Insets.

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MOUNT PLEASANT OPTIMISATION PROJECT

Receivers Overview

Figure B-1



MAC-18-02_SSD_EIS_App Noise_261C

LEGEND

- Dartbrook-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

- Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 250

Metres

GDA 1994 MGA Zone 56

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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-2



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Dartbrook-controlled
- Crown
- Muswellbrook Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 500

Metres

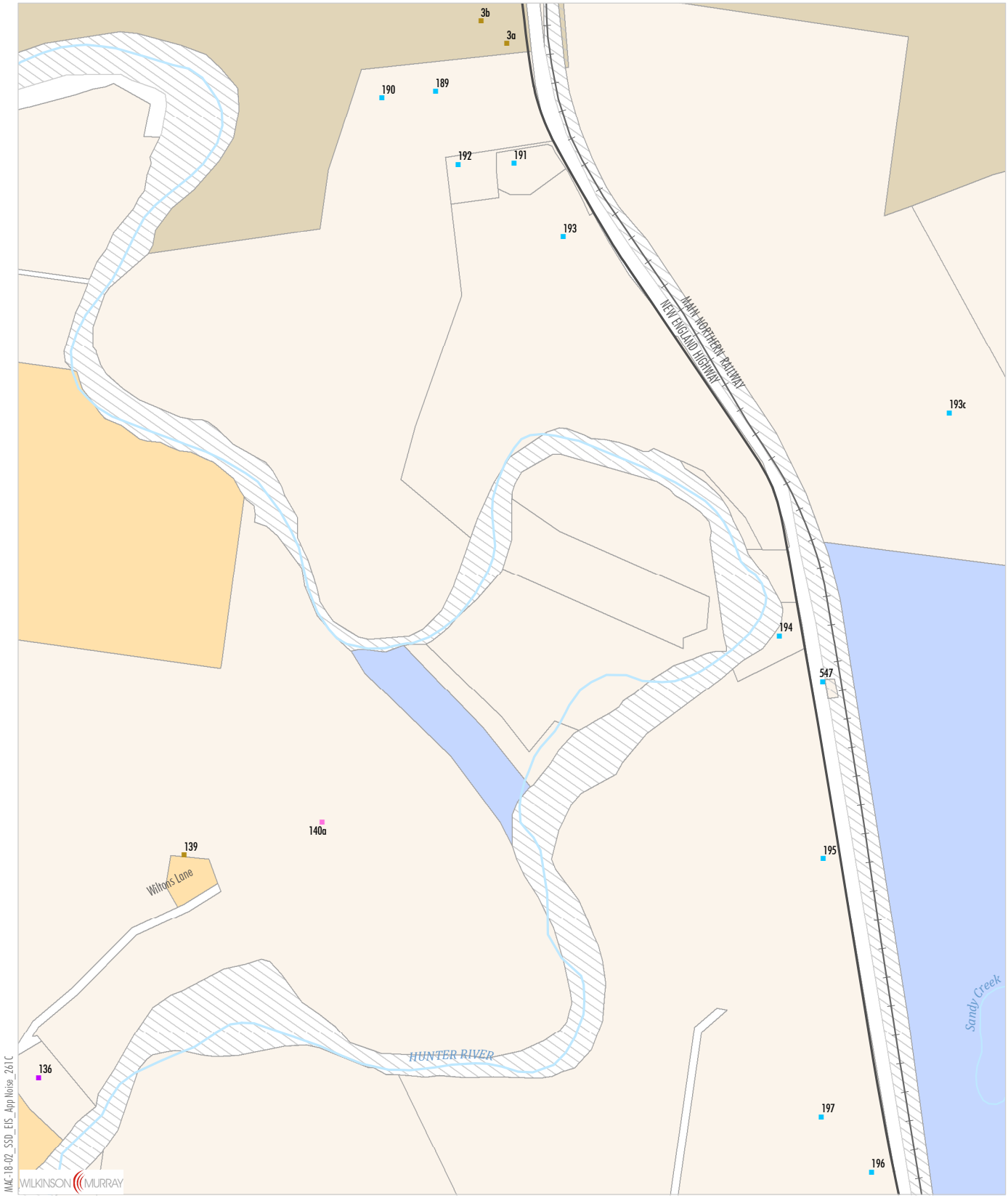
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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-3



MAC-18-02_SSD_EIS_App Noise_261C

LEGEND

- Mount Pleasant-controlled
- Dartbrook-controlled
- The State of NSW
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 500

Metres

GDA 1994 MGA Zone 56

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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-4



MAC-18-02_SSD_EIS_App Noise_261C

LEGEND

The State of NSW
Privately-owned Land
Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

Privately-owned - Mitigation on Request
Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 250

Metres

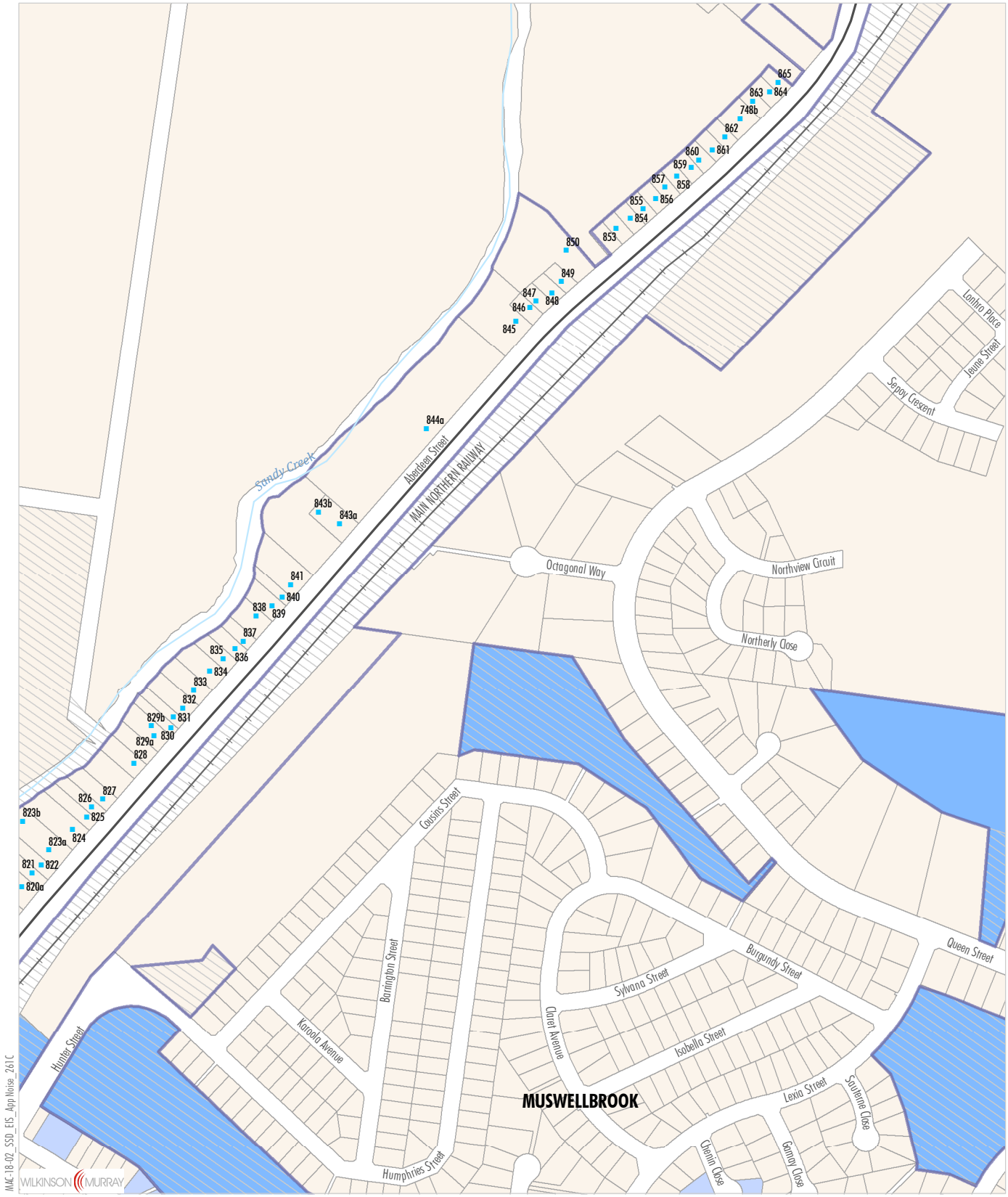
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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-5



MAC-18-02_SSD_EIS_App Noise_261C

WILKINSON MURRAY

LEGEND

- The State of NSW
- Muswellbrook Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

- Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 250

Metres

GDA 1994 MGA Zone 56

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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-6



MAC-18-02_SSD_EIS_App Noise_261C

WILKINSON MURRAY

LEGEND

- Mount Pleasant-controlled
- The State of NSW
- Muswellbrook Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

- Mine-owned
- Privately-owned - Mitigation on Request
- Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 250

Metres

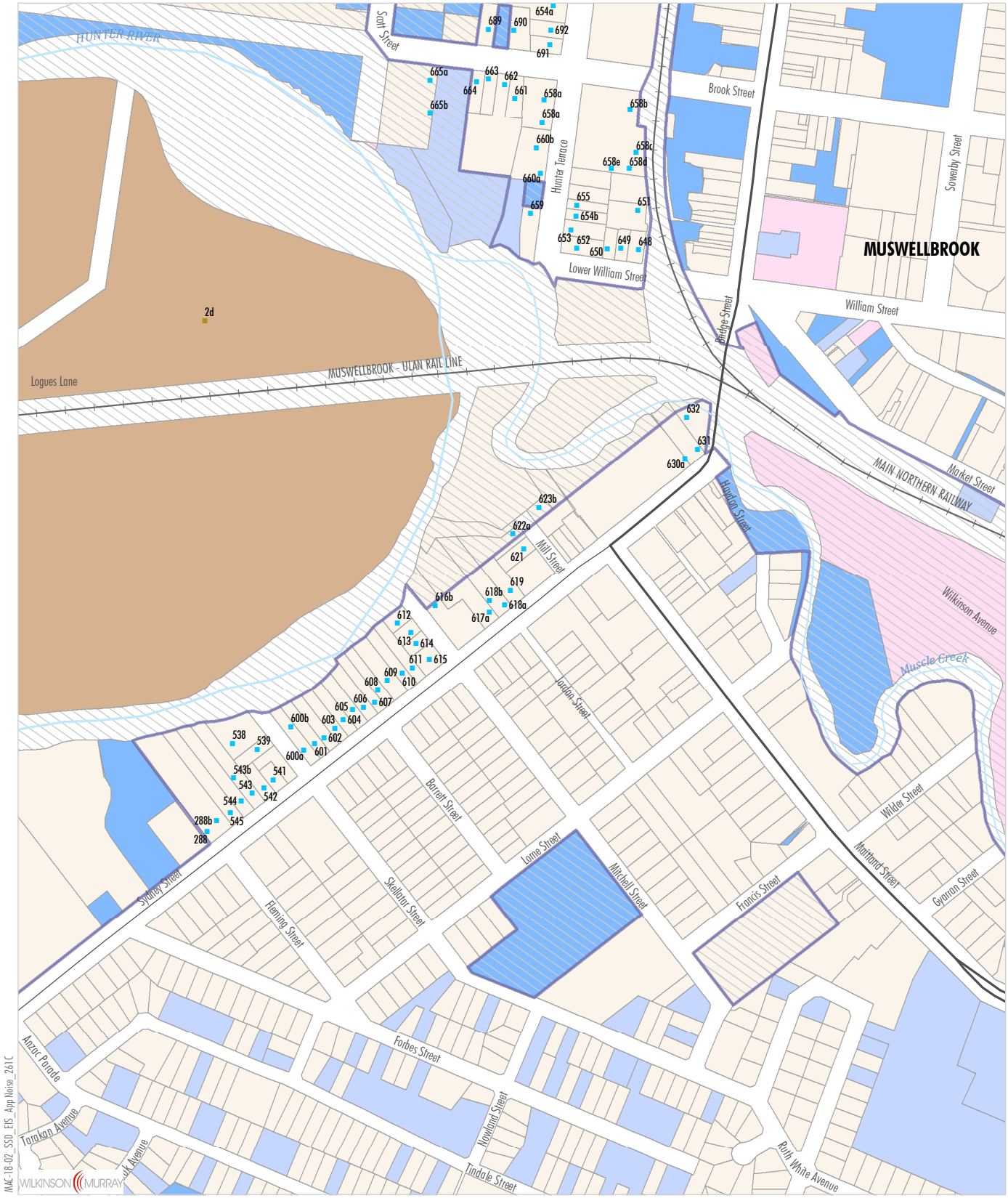
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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-7



MAC-18-02_SSD_EIS_App Noise_261C

WILKINSON MURRAY

LEGEND

- Bengalla-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

- Mine-owned
- Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 250

Metres

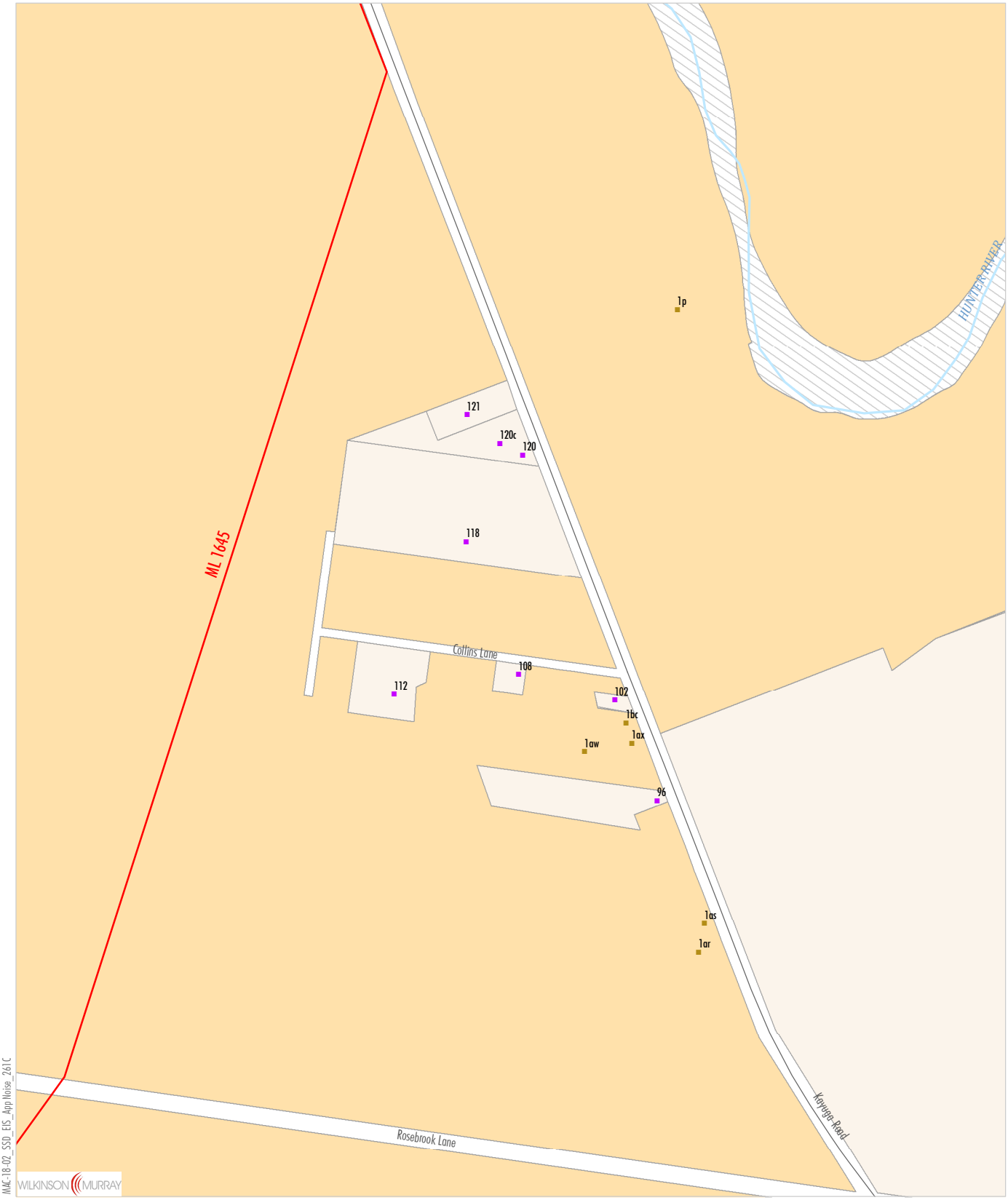
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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-8



MAC-18-02_SSD_EIS_App Noise_261C

WILKINSON MURRAY

LEGEND

Mining Lease Boundary (Mount Pleasant Operation)

Mount Pleasant-controlled

Privately-owned Land

Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request

Source: MACH (2020); NSW Spatial Services (2020)

N

0 250

Metres

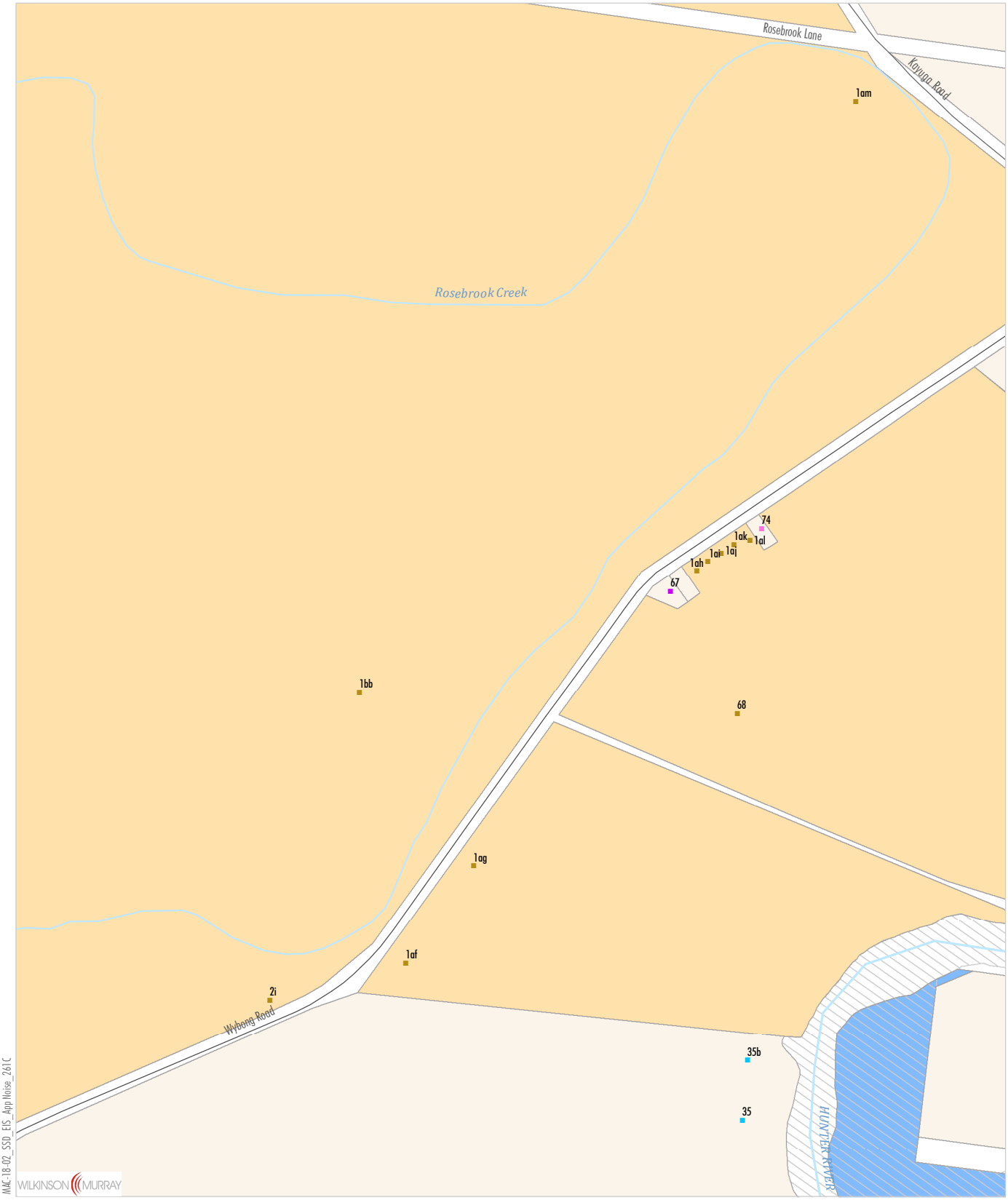
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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-9



MAC-18-02_SSD_EIS_App Noise_261C

LEGEND

Mount Pleasant-controlled
Muswellbrook Shire Council
Privately-owned Land
Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

Mine-owned
Privately-owned - Acquisition on Request
Privately-owned - Mitigation on Request
Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 250

Metres

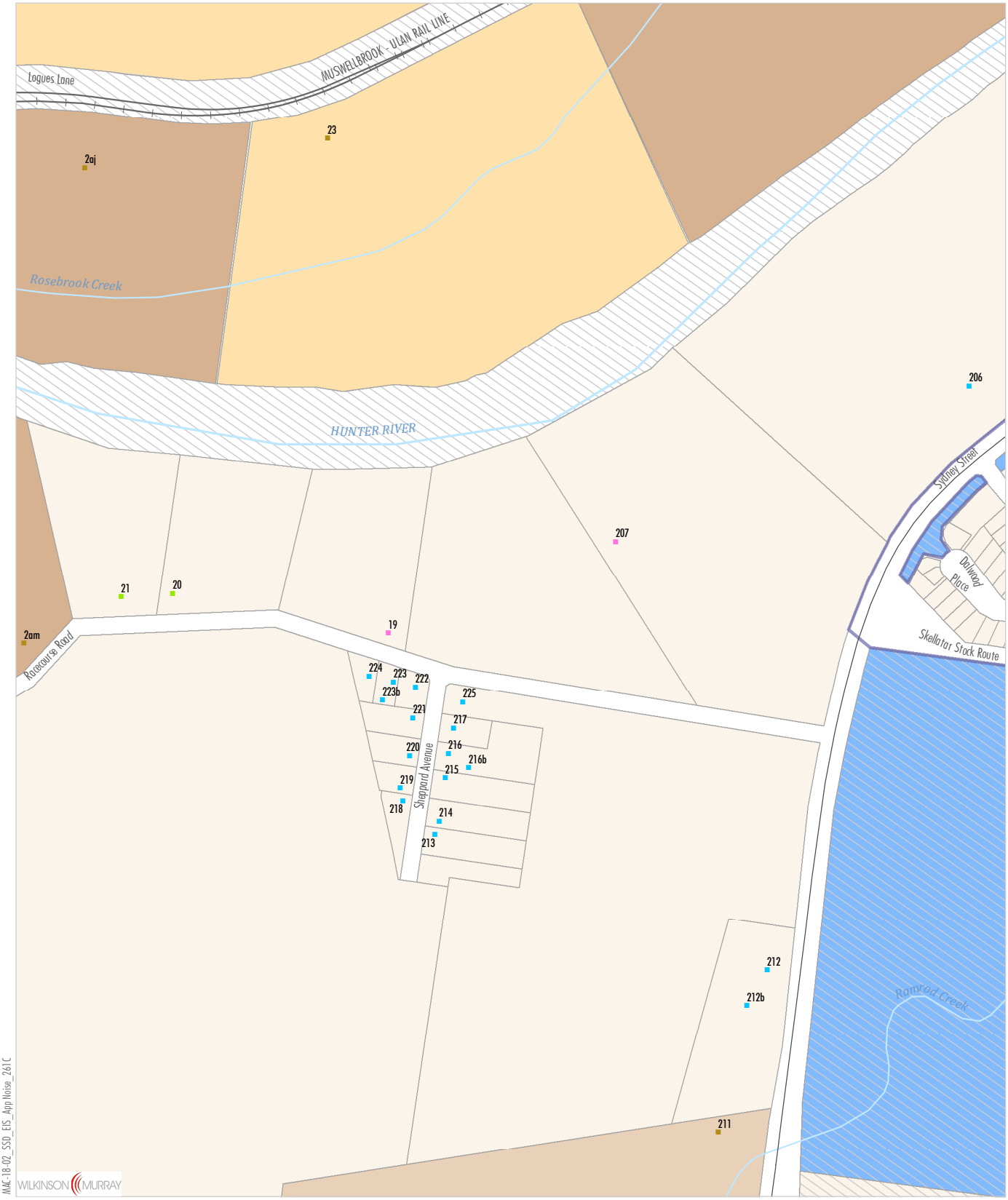
GDA 1994 MGA Zone 56

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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-10



MAC-18-02_SSD_EIS_App Noise_261C

WILKINSON MURRAY

LEGEND

- Mount Pleasant-controlled
- Bengalla-controlled
- Mt Arthur-controlled
- Muswellbrook Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Residence under DA92/97

- Mine-owned
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned

Source: MACH (2020); NSW Spatial Services (2020)

N

0 250

Metres

GDA 1994 MGA Zone 56

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

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MOUNT PLEASANT OPTIMISATION PROJECT

Receiver Locations

Figure B-11

APPENDIX C

BACKGROUND NOISE SURVEYS – METHODOLOGY & RESULTS SUMMARY

Appendix C provides a summary of the monitoring methodology and results associated with the background noise surveys conducted for the Project, whilst Appendix P presents a graphical representation of the measured levels.

As described in the report, two background noise surveys were carried out in the vicinity of the Project in support of the SSD application, the first survey in 2018 and the second in 2020.

C.1 Measurement Description – 2018 Background Noise Survey

C.1.1 Monitoring Methodology

The 2018 background noise survey was conducted at 16 monitoring locations surrounding the Project between Friday, 14 September 2018 and Wednesday, 31 October 2018 and included both attended and unattended monitoring. At the time of the surveys, the Mount Pleasant Operation was still in the early stages of development, with mining occurring during day shift only (the Mount Pleasant Operation did not transition to 24-hour operations until December 2018). Activities were located in the south-eastern portion of the site, with a focus being the development of the Eastern Out-of-Pit Emplacement.

Noise measurements were conducted using environmental noise loggers left onsite for a minimum duration of two weeks and deployed in two consecutive batches of eight loggers between Friday, 14 September 2018 and Wednesday, 31 October 2018. Leaving each noise logger onsite for a duration of two weeks was aimed at ensuring a minimum of seven days' worth of valid data excluding adverse meteorological conditions (i.e. average wind speeds greater than 5 metres per second (m/s) at microphone height and/or rain).

Additionally, two 15-minute attended measurements were carried out at each monitoring location - one during the deployment of the loggers and a second during the collection of the units. The attended measurements recorded the nature of the acoustic environment dominating background noise levels

C.1.2 Monitoring Equipment

The noise monitoring equipment used for the unattended measurements consisted of ARL NGARA environmental noise loggers set to A-weighted, fast response, continuously monitoring in 0.1 second intervals for later detailed analysis of required descriptors. The equipment calibration was checked before and after the survey and no significant drift was noted.

The analysis of the logger typically determines L_{Amax} L_{A10}, L_{A90} and L_{Aeq} levels of the ambient noise. L_{A10} and L_{A90} are the levels exceeded for 10% and 90% of the sample time, respectively (see Glossary of Acoustic Terms for definitions). The L_{Amax} is indicative of maximum noise levels due to individual noise events. This is used for the assessment of sleep disturbance. The L_{A90} level is normally taken as the background noise level during the relevant period. The L_{Aeq} is the energy average level which is widely used in many standards and guidelines to assess potential noise impact.

All attended measurements were conducted using a Brüel & Kjær Type 2236 Sound Level Meter. This sound level meter conforms to Australian Standard 1259 *Acoustics – Sound Level Meters* as a Type 1 Precision Sound Level Meter which has an accuracy suitable for field and laboratory use. The A-Weighting filter of the meter was selected and the time weighting was set to "Fast". The calibration of the meter was checked before and after the measurements with a Brüel & Kjær Type 4230 sound level calibrator and no significant drift was noted.

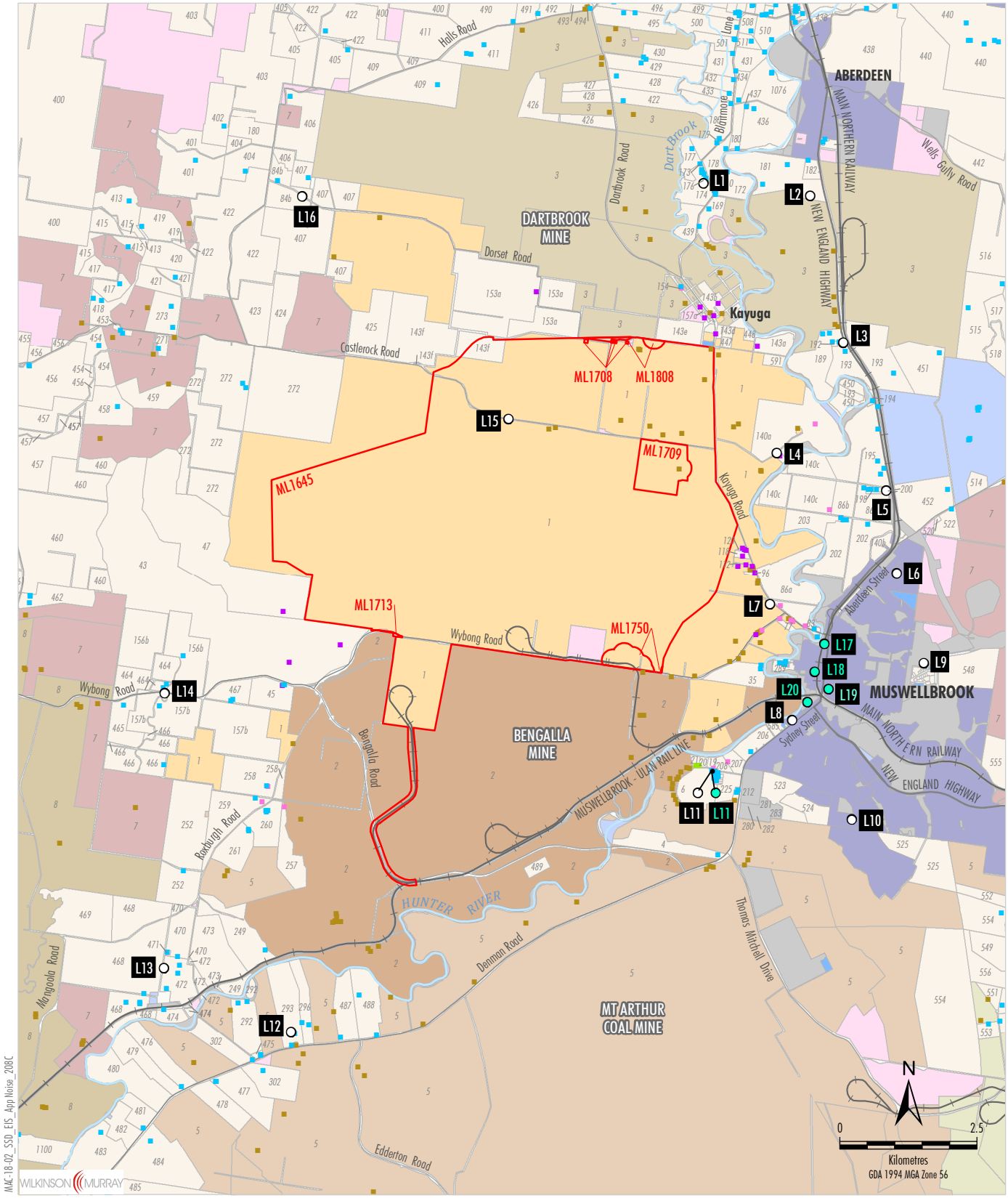
The Brüel & Kjær Type 2236 and Type 4230 have been laboratory calibrated within the previous two years in accordance with our in-house Quality Assurance Procedures.

C.1.3 Monitoring Locations

The 16 monitoring locations are summarised in Table C-1 and shown in Figure C-1.

Table C-1 Background Noise Monitoring Locations – 2018 Survey

Location ID	Address	Coordinates (GDA2020, Zone 56)
L1	414 Blairmore Lane, Aberdeen	E298942, N6437423
L2	981 New England Highway, Muswellbrook	E300891, N6437194
L3	689 New England Highway, Aberdeen	E301492, N6434518
L4	120 Wiltons Lane, Kayuga	E300283, N6432507
L5	32 Koolbury Flats Row, Muswellbrook	E302274, N6431826
L6	7a Sepoy Crescent, Muswellbrook	E302465, N6430319
L7	168 Kayuga Road, Muswellbrook	E300157, N6429755
L8	107 Sydney Street, Muswellbrook	E300560, N6427647
L9	8 Thiess Crescent, Muswellbrook	E302962, N6428680
L10	63 Ironbark Road, Muswellbrook	E301651, N6425838
L11	8 Racecourse Road, Muswellbrook	E299106, N6426719
L12	1252 Denman Road, Muswellbrook	E291425, N6421962
L13	603 Roxburgh Road, Mangoola	E289107, N6423125
L14	1535 Wybong Road, Castle Rock	E289122, N6428139
L15	272 Castlerock Road, Kayuga	E295388, N6433126
L16	10 Dorset Road, Kayuga	E291629, N6437183



MAC-18-02_SSD_EIS_App Noise_208C

LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- 2018 Background Noise Monitoring Location
- 2020 Background Noise Monitoring Location

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Background Noise Monitoring Locations

Figure C-1

C.2 Measurement Results – 2018 Background Noise Survey

C.2.1 Unattended Noise Monitoring Results

Table C-2 summarises the unattended noise monitoring results expressed as Rating Background Levels (RBLs) for the day (7.00 am – 6.00 pm), evening (6.00 pm – 10.00 pm) and night time (10.00 pm – 7.00 am) assessment periods. The RBL (defined in the glossary of acoustic terms) provides a single figure representing background noise levels for assessment purposes.

The RBLs presented in Table C-2 were derived from valid noise data only (i.e. excluding data measured during adverse meteorological conditions). Most of the RBLs were derived from at least one week's worth of valid data. The day RBLs for Locations L12, L14 and L16 were based on five days' worth of valid data only and the night RBL for Location L12 was based on six days' worth of valid data only. Background noise levels at all three locations were mostly affected by noise associated with distant fauna which is random in nature and for this reason it is believed that RBLs for these three locations are representative of background noise levels even if derived from less than a week's worth of data.

Due to equipment failure, less than three days' worth of data was measured at Location L8. As such, no representative RBLs could be established for this location.

A graphical representation of the noise measurement results is included in Appendix P.

Table C-2 Unattended Noise Monitoring Results – 2018 Survey

Location ID	RBL (dBA)		
	Day	Evening	Night Time
L1	26	28	26
L2	37	37	27
L3	44	36	26
L4	32	33	30
L5	43	38	28
L6	31	31	26
L7	34	35	31
L8	-[1]	-[1]	-[1]
L9	32	30	27
L10	31	33	29
L11	38	34	27
L12	32	32	30
L13	31	30	27
L14	29	27	24

Location ID	RBL (dBA)		
	Day	Evening	Night Time
L15	25	28	22
L16	23	32	25

Note:
1. Due to equipment failure, less than three days' worth of data was measured at Location L8. As such, no representative RBLs could be established for this location.

C.2.2 Attended Noise Monitoring Results

In addition to the unattended noise survey, two 15-minute attended measurements were carried out at each of the 16 monitoring locations. Table C-3 summarises the attended measurement results.

Table C-3 Attended Noise Measurement Results – 2018 Survey

Location	Date	Start Time	$L_{A90,15min}$ (dBA)	Comments
L1	14 September	8.53 am	29	Background noise levels dominated by nearby fauna
	9 October	1.43 pm	29	Background noise levels dominated by distant traffic on New England Highway
L2	14 September	9.30 am	43	Background noise levels dominated by New England Highway traffic noise
	9 October	2.12 pm	38	Background noise levels dominated by New England Highway traffic noise
L3	14 September	9.50 am	47	Background noise levels dominated by New England Highway traffic noise
	9 October	2.37 pm	47	Background noise levels dominated by New England Highway traffic noise
L4	14 September	8.18 am	33	Background noise levels dominated by nearby fauna and distant machinery
	9 October	1.15 pm	36	Background noise levels dominated by New England Highway traffic noise
L5	14 September	10.27 am	48	Background noise levels dominated by New England Highway traffic noise
	9 October	2.58 pm	47	Background noise levels dominated by New England Highway traffic noise
L6	14 September	10.59 am	34	Background noise levels dominated by Aberdeen Street traffic noise
	9 October	3.27 pm	37	Background noise levels dominated by Aberdeen Street traffic noise

Location	Date	Start Time	$L_{A90,15min}$ (dBA)	Comments
L7	14 September	7.33 am	35	Background noise levels dominated by nearby fauna and distant traffic noise from Aberdeen Street
	9 October	12.52 pm	37	Background noise levels dominated by nearby fauna and distant traffic noise from Aberdeen Street
L8	16 October	11.11 am	43	Background noise levels dominated by Sydney Street traffic noise and distant radio
	31 October	1.45 pm	44	Background noise levels dominated by Sydney Street traffic noise
L9	14 September	11.25 am	37	Background noise levels dominated by nearby fauna, distant road traffic noise and distant machinery
	9 October	3.53 pm	36	Background noise levels dominated by distant road traffic noise
L10	16 October	10.45 am	33	Background noise levels dominated by nearby fauna and distant traffic noise
	31 October	2.17 pm	31	Background noise levels dominated by nearby fauna and distant traffic noise
L11	16 October	10.19 am	43	Background noise levels dominated by neighbours' radio
	31 October	2.49 pm	35	Background noise levels dominated by Denman Road traffic noise
L12	16 October	9.51 am	32	Background noise levels dominated by Denman Road traffic noise and nearby fauna
	31 October	3.18 pm	31	Background noise levels dominated by Denman Road traffic noise
L13	16 October	9.13 am	28	Background noise levels dominated by Mangoola Road traffic noise and nearby fauna
	31 October	3.50 pm	30	Background noise levels dominated by Mangoola Road traffic noise and nearby fauna
L14	16 October	8.47 am	32	Background noise levels dominated by nearby fauna and distant traffic noise from Wybong Road
	31 October	4.15 pm	32	Background noise levels dominated by nearby fauna and distant traffic noise from Wybong Road
L15	16 October	8.20 am	24	Background noise levels dominated by nearby fauna
	31 October	4.52 pm	31	Background noise levels dominated by nearby fauna
L16	16 October	7.33 am	25	Background noise levels dominated by nearby fauna
	31 October	5.21 pm	25	Background noise levels dominated by nearby fauna

Attended noise monitoring results are consistent with the unattended measurement results, with $L_{A90,15min}$ levels generally slightly higher than the daytime RBLs as measured by the noise loggers. This is due to the fact that the daytime RBL is the median value of all daytime ABL values over the monitoring period which, in turn, are determined by calculating the lowest 10th percentile L_{A90} level for each daytime period.

Attended monitoring indicated that residences to the west and north-west of the Project are subject to a natural background noise environment driven by fauna. On the other hand, residences closer to Muswellbrook and arterial roads such as Denman Road, Sydney Street, Aberdeen Street and New England Highway are subject to background noise levels mostly affected by traffic noise.

C.3 Measurement Description – 2020 Background Noise Survey

C.3.1 Monitoring Methodology

The 2020 supplementary noise survey was conducted at five monitoring locations in and around Muswellbrook between Thursday, 27 August 2020 and Thursday, 10 September 2020. It included both attended and unattended monitoring. Although the survey was undertaken during the course of the Covid-19 pandemic, no lockdown measures were in place during the period of the measurements, and the pandemic is deemed to have a negligible impact on the measured background noise levels.

Noise measurements were conducted using environmental noise loggers left onsite for a minimum duration of two weeks between Thursday, 27 August 2020 and Thursday, 10 September 2020. Leaving each noise logger onsite for a duration of two weeks was aimed at ensuring a minimum of seven days' worth of valid data excluding adverse meteorological conditions (i.e. average wind speeds greater than 5 m/s at microphone height and/or rain).

Additionally, a 15-minute attended measurement was carried out at each monitoring location during the collection of the loggers. The attended measurements recorded the nature of the acoustic environment dominating background noise levels

C.3.2 Monitoring Equipment

The noise monitoring equipment used for the unattended measurements consisted of ARL NGARA environmental noise loggers set to A-weighted, fast response, continuously monitoring in 0.1 second intervals for later detailed analysis of required descriptors. The equipment calibration was checked before and after the survey and no significant drift was noted.

The analysis of the logger typically determines L_{Amax} L_{A10}, L_{A90} and L_{Aeq} levels of the ambient noise. L_{A10} and L_{A90} are the levels exceeded for 10% and 90% of the sample time respectively (see Glossary of Acoustic Terms for definitions). The L_{Amax} is indicative of maximum noise levels due to individual noise events. This is used for the assessment of sleep disturbance. The L_{A90} level is normally taken as the background noise level during the relevant period. The L_{Aeq} is the energy average level which is widely used in many standards and guidelines to assess potential noise impact.

All attended measurements were conducted using a Brüel & Kjær Type 2236 Sound Level Meter. This sound level meter conforms to Australian Standard 1259 *Acoustics – Sound Level Meters* as a Type 1 Precision Sound Level Meter which has an accuracy suitable for field and laboratory use. The A-Weighting filter of the meter was selected and the time weighting was set to "Fast".

The calibration of the meter was checked before and after the measurements with a Brüel & Kjær Type 4230 sound level calibrator and no significant drift was noted.

The Brüel & Kjær Type 2236 and Type 4230 have been laboratory calibrated within the previous two years in accordance with our in-house Quality Assurance Procedures.

C.3.3 Monitoring Locations

The five monitoring locations included in the 2020 survey are summarised in Table C-4 and shown in Figure C-1.

Monitoring location L11 (2018) was repeated in 2020 to provide additional background noise levels representative of the Racecourse Road area. Location L20 was included to determine background noise levels along Sydney Street in Muswellbrook not possible as part of the 2018 survey due to equipment failure (L8).

Table C-4 Background Noise Monitoring Locations – 2020 Survey

Location ID	Address	Coordinates (GDA2020, Zone 56)
L11	8 Racecourse Road, Muswellbrook	E299106, N6426719
L17	210 Bridge Street, Muswellbrook	E301150, N6429034
L18	20 Brook Street, Muswellbrook	E300971, N6428523
L19	26 William St, Muswellbrook	E301227, N6428211
L20	10 Mill Street, Muswellbrook	E300840, N6427974

C.4 Measurement Results – 2020 Background Noise Survey

C.4.1 Unattended Noise Monitoring Results

Table C-5 summarises the unattended noise monitoring results expressed as RBLs (defined in the glossary of acoustic terms) for the day (7.00 am – 6.00 pm), evening (6.00 pm – 10.00 pm) and night time (10.00 pm – 7.00 am) assessment periods. The RBL provides a single figure representing background noise levels for assessment purposes.

The RBLs presented in Table C-5 were derived from at least one week's worth of valid data (i.e. excluding data measured during adverse meteorological conditions).

A graphical representation of the noise measurement results is included in Appendix P.

Table C-5 shows abnormally high RBLs at locations L19 and L20, especially during the evening and night time assessment periods. Review of the noise graphs included in Appendix P indicates that the noise loggers at those two locations are likely to have been affected by a distinct local mechanical noise source (e.g. air-conditioning unit). As such, RBLs from locations L19 and L20 have not been considered in the assessment.

Table C-5 Unattended Noise Monitoring Results – 2020 Survey

Location ID	RBL (dBA)		
	Day	Evening	Night Time
L11	36	33	32
L17	38	37	32
L18	39	37	33
L19[1]	44	41	41
L20[1]	41	50	46

Note:
1. Noise logger at this location is likely to have been affected by a distinct local mechanical noise source (e.g. air-conditioning unit). As such, RBLs from this location have not been considered in the assessment.

C.2.2 Attended Noise Monitoring Results

In addition to the unattended noise survey, one 15-minute attended measurement was carried out at each of the five monitoring locations. Table C-6 summarises the attended measurement results.

Table C-6 Attended Noise Measurement Results – 2020 Survey

Location	Date	Start Time	$L_{A90,15min}$ (dBA)	Comments
L11	10 September	10.00 pm	36	Background noise levels dominated by distant traffic on Denman Road and nearby fauna
L17	10 September	11.19 pm	33	Background noise levels dominated by distant traffic and general mechanical noise in city centre
L18	10 September	11.00 pm	41	Background noise levels dominated by distant traffic and nearby fauna
L19	10 September	10.41 pm	37	Background noise levels dominated by distant traffic
L20	10 September	10.22 pm	38	Background noise levels dominated by distant traffic and nearby fauna

Attended noise monitoring results at locations L11, L17 and L18 are consistent with the unattended measurement results, with $L_{A90,15min}$ levels generally higher than the night time RBLs as measured by the noise loggers. This is due to the fact that the night time RBL is the median value of all night time ABL values over the monitoring period which in turn are determined by calculating the lowest 10th percentile L_{A90} level for each night time period.

Attended monitoring indicated that residences inside Muswellbrook are subject to night time background noise levels primarily affected by distant traffic noise. Residences in the city centre and along the main commercial streets of Muswellbrook are also affected to some extent by general noise associated with nearby commercial premises.

APPENDIX D

DETERMINATION OF NOISE-ENHANCING METEOROLOGICAL CONDITIONS IN ACCORDANCE WITH FACT SHEET D OF THE *NPfI*

Appendix D sets out the process followed to determine the significance of the noise-enhancing meteorological conditions. As described in Fact Sheet D of the *NPfI*, the significance of noise-enhancing conditions is based on a threshold of occurrence of 30 per cent (%).

D.1 Wind-Related Noise-Enhancing Conditions

For each season and assessment period (i.e. day, evening, night), the following process was followed:

1. Convert sigma-theta observations from raw data into Pasquill-Gifford (PG) stability category using the sigma-theta methodology. We assumed a surface roughness of 0.1 m.
2. Cull out any data with PG stability category other than A, B, C or D and winds of 0 m/s or > 3 m/s.
3. Group all wind directions into a 16-direction wind compass (22.5 degree-arc per direction), with North ranging from 348.75 degrees – 11.25 degrees.
4. For each of the above 16 directions, add the four closest directions (2 x 22.5 degree-arcs on either side) to generate 16 totals (112.5 degree-arc per direction).
5. Divide the number of entries in each of the 16 totals over base data.
6. Assess percentage of occurrence against threshold of occurrence of 30% determined in accordance with the provisions in *NPfI*. If percentage of occurrence is 30% or more (rounded to one decimal place), light winds in the direction in question are considered significant.

Tables D-1, D-2 and D-3 summarise the frequencies of occurrence for all seasons for the day, evening and night periods, respectively.

Table D-1 Wind-Related Noise-Enhancing Conditions - Percentages of Occurrence - Day

Direction	Spring	Summer	Autumn	Winter
N	11.7%	9.9%	15.8%	19.2%
NNE	13.1%	11.3%	16.9%	18.8%
NE	14.6%	12.9%	17.7%	18.8%
ENE	17.0%	15.7%	19.2%	20.4%
E	17.5%	17.9%	18.2%	19.1%
ESE	17.4%	18.2%	18.4%	19.6%
SE	16.1%	17.0%	17.5%	20.3%
SSE	13.6%	14.6%	15.0%	18.4%
S	10.2%	10.5%	11.5%	14.8%
SSW	7.6%	7.0%	9.1%	13.0%
SW	6.2%	5.6%	7.0%	11.7%
WSW	5.9%	5.3%	5.7%	10.4%
W	6.3%	5.6%	6.6%	11.4%
WNW	7.3%	6.4%	8.2%	13.1%
NW	8.3%	7.3%	9.6%	14.6%
NNW	10.3%	8.6%	13.7%	17.8%

Table D-2 Wind-Related Noise-Enhancing Conditions - Percentages of Occurrence - Evening

Direction	Spring	Summer	Autumn	Winter
N	3.0%	3.3%	4.6%	11.4%
NNE	2.7%	2.6%	4.3%	9.9%
NE	2.7%	2.1%	4.2%	8.4%
ENE	4.7%	3.6%	5.0%	6.4%
E	7.2%	6.3%	5.9%	4.5%
ESE	10.0%	7.6%	8.7%	6.0%
SE	10.9%	8.1%	10.3%	7.7%
SSE	10.6%	8.1%	11.1%	8.9%
S	8.5%	6.5%	10.2%	8.8%
SSW	6.7%	3.4%	8.9%	10.3%
SW	4.5%	2.1%	6.6%	10.4%
WSW	3.8%	1.8%	5.4%	9.4%
W	3.7%	2.3%	4.3%	9.3%
WNW	3.9%	2.8%	3.7%	10.2%
NW	3.3%	2.9%	4.2%	10.1%
NNW	3.1%	3.3%	4.9%	11.8%

Table D-3 Wind-Related Noise-Enhancing Conditions - Percentages of Occurrence - Night

Direction	Spring	Summer	Autumn	Winter
N	6.6%	5.4%	11.1%	16.3%
NNE	6.5%	4.9%	10.6%	15.2%
NE	6.5%	4.7%	9.6%	13.3%
ENE	8.7%	7.6%	7.3%	9.4%
E	12.3%	13.1%	7.5%	3.6%
ESE	16.7%	17.8%	10.0%	3.6%
SE	18.3%	19.7%	11.0%	4.5%
SSE	18.0%	19.4%	11.3%	5.0%
S	14.3%	15.6%	10.3%	5.2%
SSW	9.6%	9.4%	7.7%	5.5%
SW	5.2%	4.6%	4.7%	5.1%
WSW	3.5%	3.0%	4.3%	4.9%
W	3.3%	3.0%	4.1%	5.5%
WNW	3.6%	3.7%	4.9%	7.1%
NW	5.2%	4.7%	8.3%	10.3%
NNW	6.5%	5.5%	11.1%	15.8%

Table D-4 summarises all percentages of occurrence for the worst-case seasons for day, evening and night.

Table D-4 Wind-Related Noise-Enhancing Conditions - Percentages of Occurrence – Worst-Case Season

Direction	Day	Evening	Night Time
N	19.2%	11.4%	16.3%
NNE	18.8%	9.9%	15.2%
NE	18.8%	8.4%	13.3%
ENE	20.4%	6.4%	9.4%
E	19.1%	7.2%	13.1%
ESE	19.6%	10.0%	17.8%
SE	20.3%	10.9%	19.7%
SSE	18.4%	11.1%	19.4%
S	14.8%	10.2%	15.6%
SSW	13.0%	10.3%	9.6%
SW	11.7%	10.4%	5.2%
WSW	10.4%	9.4%	4.9%
W	11.4%	9.3%	5.5%
WNW	13.1%	10.2%	7.1%
NW	14.6%	10.1%	10.3%
NNW	17.8%	11.8%	15.8%

Based on the percentages of occurrence summarised in Table D-4, no winds in any of the 16 directions were considered significant for the Project.

D.2 Temperature Inversion Noise-Enhancing Conditions

1. Convert sigma-theta observations from raw data into PG stability category using the sigma-theta methodology. We assumed a surface roughness of 0.1 m.
2. For the combined evening/night assessment periods and winter season, cull out any data with PG stability category other than F or G.
3. Divide the number of entries over base data including all PG stability categories to establish a percentage of occurrence.
4. Assess percentage of occurrence against threshold of occurrence of 30% determined in accordance with the provisions in *NPfI*. If percentage of occurrence is 30% or more (rounded to 1 decimal place), moderate-to-strong temperature inversions are considered significant.

Table D-5 summarises percentages of occurrence of temperature inversion noise-enhancing conditions for each season. The percentage of occurrence was determined to be 23.8% in winter and ranging 19.0-24.4% across all seasons and therefore moderate-to-strong temperature inversions are not considered a significant feature of the area.

Table D-5 Temperature Inversion Noise-Enhancing Conditions - Percentages of Occurrence

Spring	Summer	Autumn	Winter
20.2%	19.0%	24.4%	23.8%

While moderate-to-strong temperature inversions are not a significant feature of the area, they have been conservatively included in the operational noise modelling.

Fact Sheet D of the *NPfI* states that where moderate-to-strong inversions are relevant for an assessment, winds up to 2 m/s during such inversions should be considered. However, no guidance is provided to determine an applicable wind speed for a site if winds of that magnitude are infrequent in combination with moderate-to-strong inversions.

Analysis of the frequency of winds up to 2 m/s in combination with moderate-to-strong inversions at night in winter indicates these would be infrequent (<5%) (Table D-6). Note these frequencies of occurrence relate only to times when moderate-to-strong inversions are present at night in winter, not total time at night in winter.

Table D-6 Percentages of Occurrence of Light Winds (up to 2 m/s) in Combination with Moderate-to-Strong Inversions - Winter

Direction	Frequency
N	3.7%
NNE	3.5%
NE	2.2%
ENE	1.2%
E	1.0%
ESE	0.9%
SE	0.7%
SSE	1.1%
S	1.1%
SSW	1.1%
SW	1.2%
WSW	1.1%
W	1.0%
WNW	1.3%
NW	1.6%
NNW	2.8%

APPENDIX E

MODEL VALIDATION STUDY – NOISE MONITORING METHODOLOGY & MEASUREMENT RESULTS

The noise model developed for the Mount Pleasant Operation was validated against recent night time attended noise measurements conducted in the vicinity of the site by Wilkinson Murray.

E.1 Monitoring Procedure

Attended noise monitoring was conducted on the nights of Wednesday 1 April to Thursday 2 April 2020 and Wednesday 15 April to Thursday 16 April 2020, between the hours of 8.00 pm and 5.00 am at two different locations as described in Table E-1 (including Eastings and Northings in GDA 2020, MGA Zone 56).

Table E-1 Model Validation Study – Monitoring Locations

Location ID	Location Description	Easting	Northing
Eastern Location	Approximately 1,200 m east of the eastern waste rock emplacement area, on Wybong Road	299510	6428728
Western Location	Approximately 750 m west of the CHPP area, on Mount Pleasant Operation site access road near Wybong Road	292904	6429338

Monitoring was conducted for four hours at each location, with both locations being visited sequentially (i.e. between 8.00 pm and 12.00 am at the first location and 1.00 am to 5.00 am at the second location, noting the sequence was inverted on the second monitoring night).

Monitoring was carried out during relatively typical operating conditions so as to ensure the model validation study is as relevant to the Project as possible.

The measurements were conducted in suitable meteorological conditions (wind at microphone height below 5 m/s and no rain) in accordance with the *NPfI*.

E.2 Monitoring Equipment

All measurements were conducted using a NTi Type XL2 sound level meter (SLM). This SLM is an approved system offering Class 1 performance according to IEC 61672-1:2013 *Electroacoustics – Sound level meters – Part 1: Specifications,* is consistent with National Association of Testing Authorities, Australia (NATA) requirements and calibrated to IEC 61672-3:2013 *Electroacoustics – Sound level meters – Part 3: Periodic tests.* The A-weighting filter of the meter was selected, and the time weighting was set to "Fast". The field calibration of the meter was checked before and after the measurements with a Brüel & Kjær Type 4231 sound level calibrator (SLC) and no significant drift was noted. This SLC is a Class 1 calibrator according to AS IEC 60942-2004 *Electroacoustics – Sound calibrators* and has been calibrated to the same Standard.

The NTi Type XL2 and Brüel & Kjær Type 4231 hold current laboratory calibrations in accordance with NATA and our in-house Quality Assurance Procedures.

Wind speed at microphone height was determined using a hand-held digital anemometer AR816.

E.3 Monitoring Results

Tables E-2 and E-3 summarise the noise results measured on the nights of 1-2 April 2020 and 15-16 April 2020, respectively. Noise results are expressed as $L_{Aeq,15min}$ noise levels generated by the Mount Pleasant Operation.

Table E-2 Model Validation Study – Monitoring Results (1-2 April 2020)

Monitoring Location	Time Period	$L_{Aeq,15min}$ due to MPO
Eastern Location	8.00 pm - 8.15 pm	<29 [1]
	8.15 pm - 8.30 pm	<29 [1]
	8.30 pm - 8.45 pm	<29 [1]
	8.45 pm - 9.00 pm	<29 [1]
	9.00 pm - 9.15 pm	<29 [1]
	9.15 pm - 9.30 pm	<29 [1]
	9.30 pm - 9.45 pm	<29 [1]
	9.45 pm - 10.00 pm	<29 [1]
	10.00 pm - 10.15 pm	<29 [1]
	10.15 pm - 10.30 pm	<29 [1]
	10.30 pm - 10.45 pm	<29 [1]
	10.45 pm - 11.00 pm	<29 [1]
	11.00 pm - 11.15 pm	<29 [1]
	11.15 pm - 11.30 pm	<29 [1]
	11.30 pm - 11.45 pm	<29 [1]
	11.45 pm - 12.00 am	<29 [1]
Western Location	1.00 am - 1.15 am	39
	1.15 am - 1.30 am	39
	1.30 am - 1.45 am	38
	1.45 am - 2.00 am	39
	2.00 am - 2.15 am	39
	2.15 am - 2.30 am	39
	2.30 am - 2.45 am	38
	2.45 am - 3.00 am	41
	3.00 am - 3.15 am	42
	3.15 am - 3.30 am	40
	3.30 am - 3.45 am	43
	3.45 am - 4.00 am	39
	4.00 am - 4.15 am	39
	4.15 am - 4.30 am	37
	4.30 am - 4.45 am	36
	4.45 am - 5.00 am	39

Note:

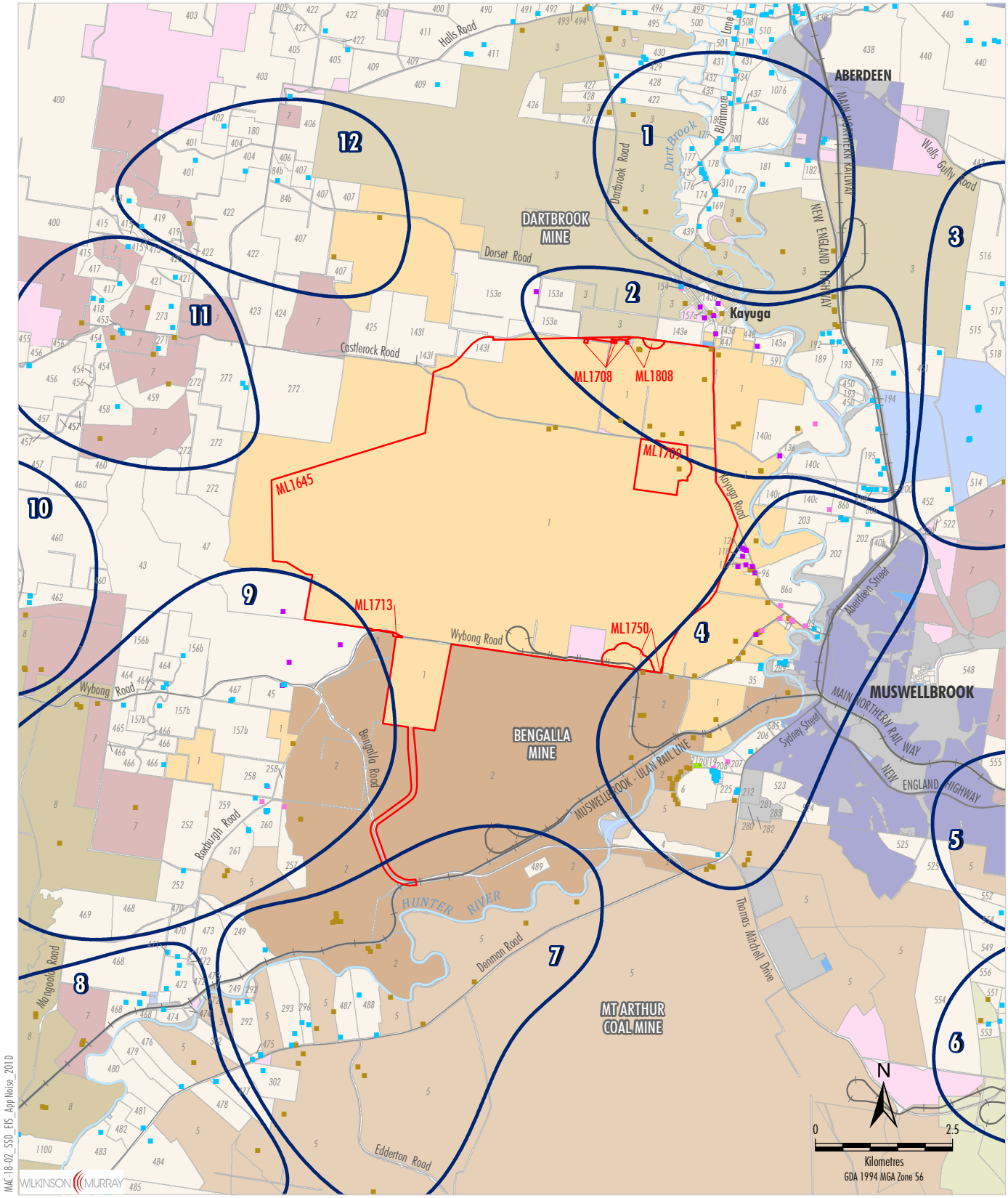
1. Mount Pleasant Operation inaudible throughout monitoring period due to relatively high background noise levels masking site noise and meteorological conditions not conducive to the propagation of site noise towards the monitoring location.

Table E-2 Model Validation Study – Monitoring Results (15-16 April 2020)

Monitoring Location	Time Period	$L_{Aeq,15min}$ due to MPO
Western Location	8.00 pm - 8.15 pm	35
	8.15 pm - 8.30 pm	35
	8.30 pm - 8.45 pm	36
	8.45 pm - 9.00 pm	38
	9.00 pm - 9.15 pm	41
	9.15 pm - 9.30 pm	40
	9.30 pm - 9.45 pm	41
	9.45 pm - 10.00 pm	40
	10.00 pm - 10.15 pm	40
	10.15 pm - 10.30 pm	41
	10.30 pm - 10.45 pm	42
	10.45 pm - 11.00 pm	42
	11.00 pm - 11.15 pm	43
	11.15 pm - 11.30 pm	41
	11.30 pm - 11.45 pm	40
	11.45 pm - 12.00 am	40
Eastern Location	1.00 am - 1.15 am	35
	1.15 am - 1.30 am	36
	1.30 am - 1.45 am	35
	1.45 am - 2.00 am	37
	2.00 am - 2.15 am	39
	2.15 am - 2.30 am	37
	2.30 am - 2.45 am	39
	2.45 am - 3.00 am	36
	3.00 am - 3.15 am	38
	3.15 am - 3.30 am	37
	3.30 am - 3.45 am	37
	3.45 am - 4.00 am	36
	4.00 am - 4.15 am	36
	4.15 am - 4.30 am	36
	4.30 am - 4.45 am	36
	4.45 am - 5.00 am	36

APPENDIX F

LOW-FREQUENCY NOISE ASSESSMENT CATCHMENT AREAS AND SPECTRA AT REPRESENTATIVE RECEIVERS



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Catchment Area

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Low-Frequency Noise Assessment
Catchment Areas

Figure F-1

Figure F-2 Low-Frequency Spectra at Representative Receivers - 2026

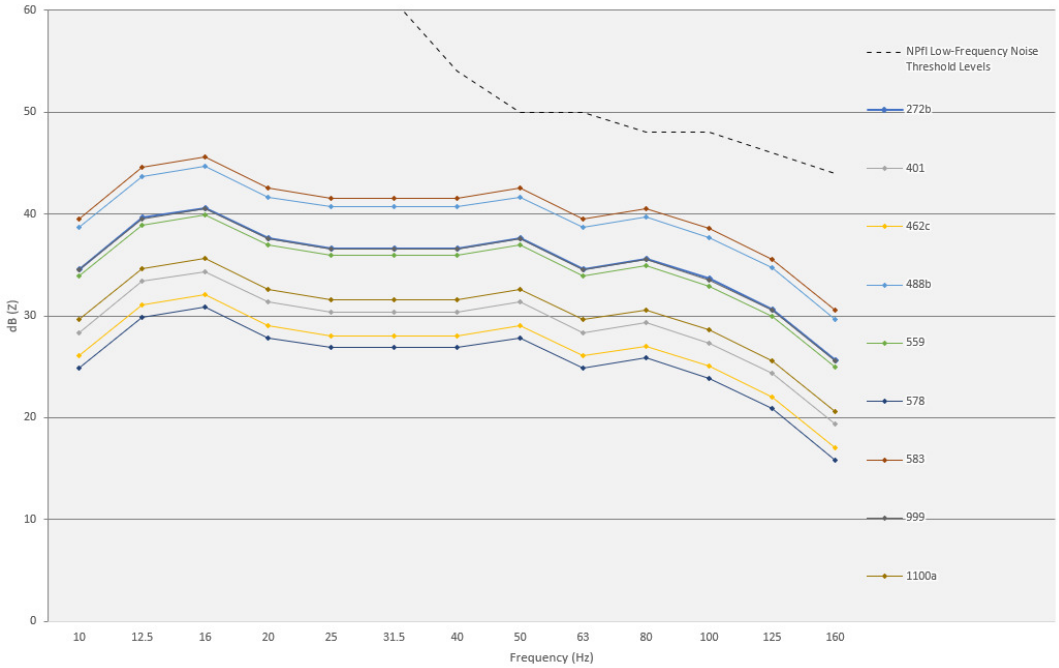


Figure F-3 Low-Frequency Spectra at Representative Receivers - 2028

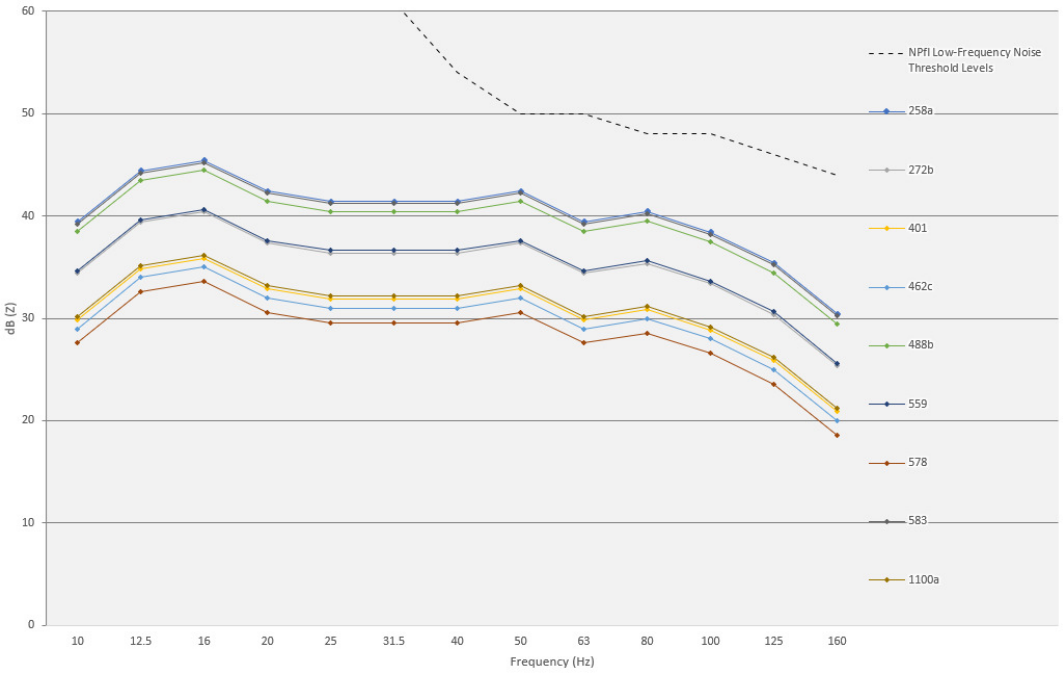


Figure F-4 Low-Frequency Spectra at Representative Receivers - 2031

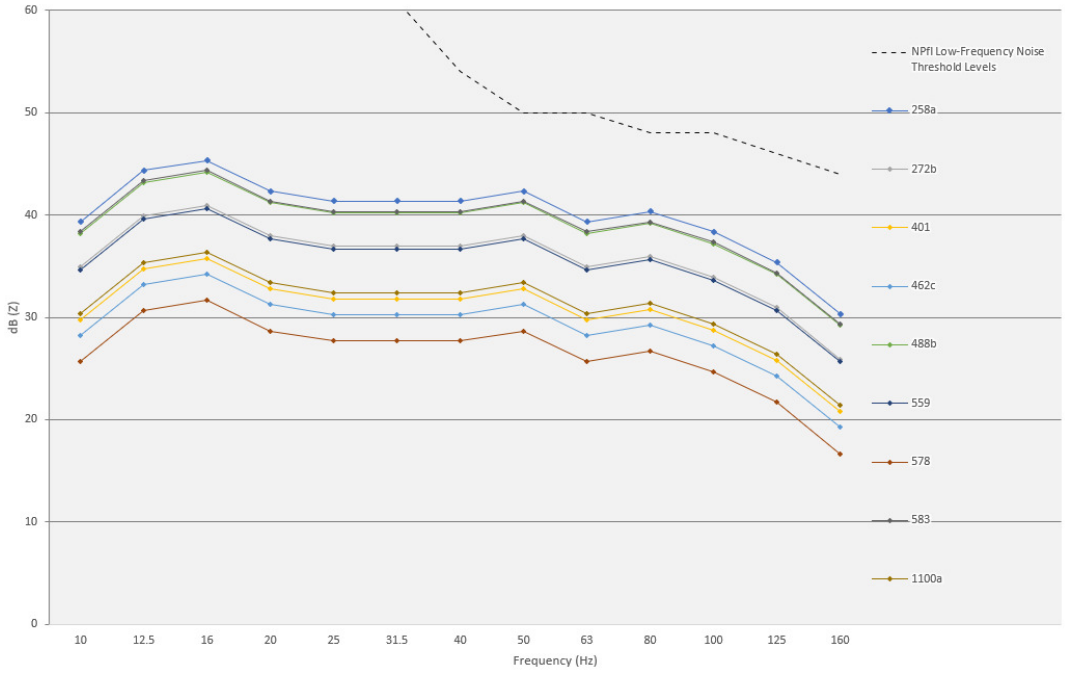


Figure F-5 Low-Frequency Spectra at Representative Receivers - 2034

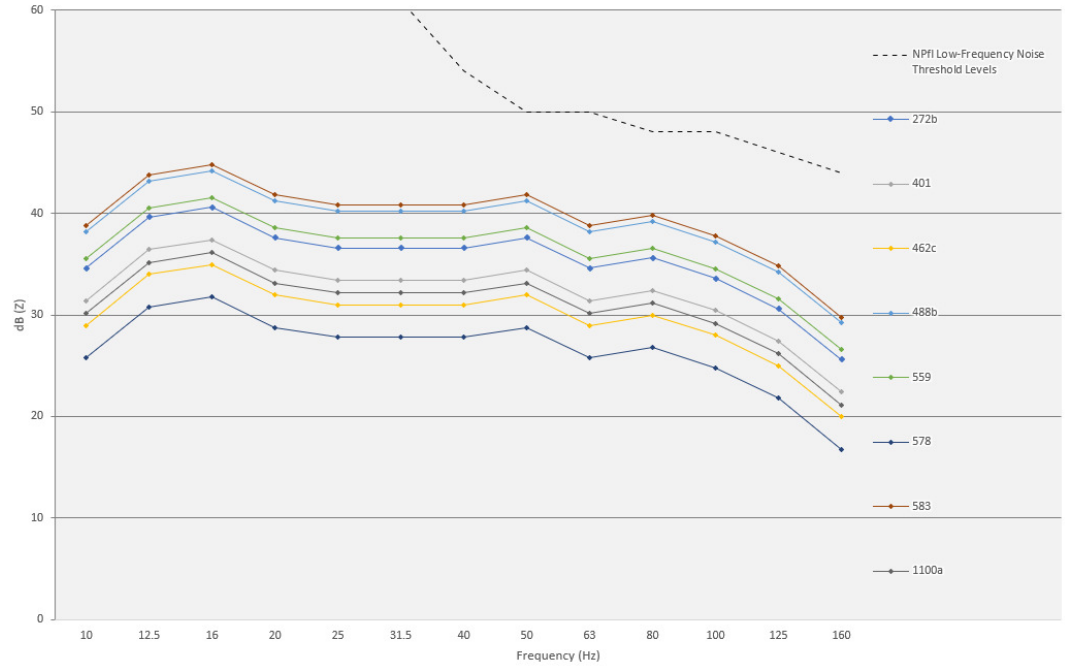


Figure F-6 Low-Frequency Spectra at Representative Receivers - 2041

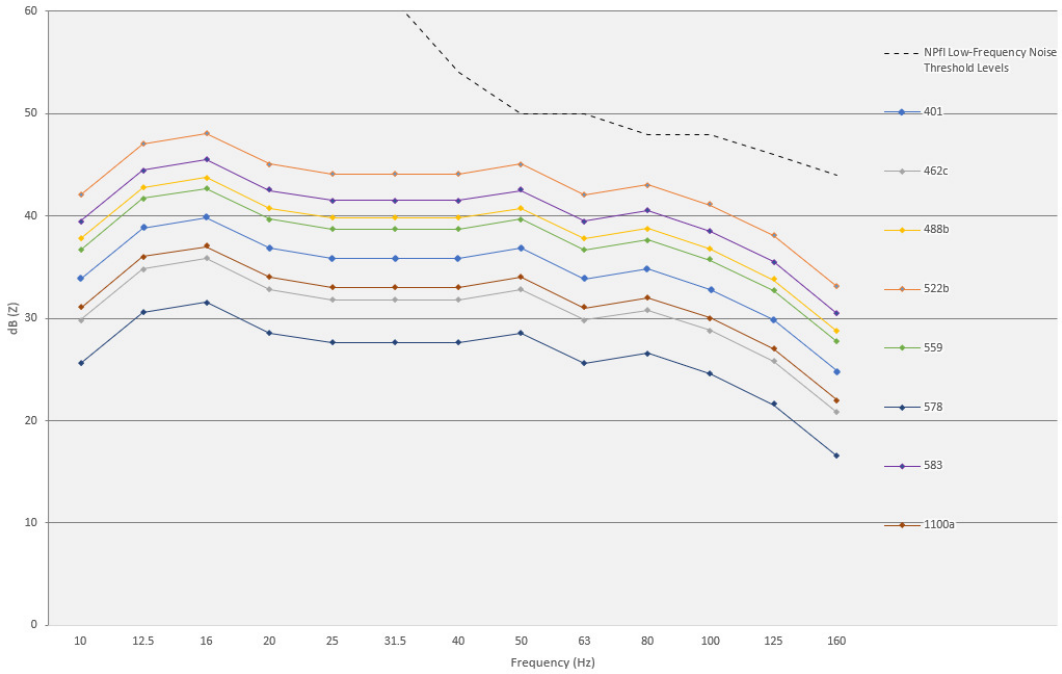


Figure F-7 Low-Frequency Spectra at Representative Receivers - 2044

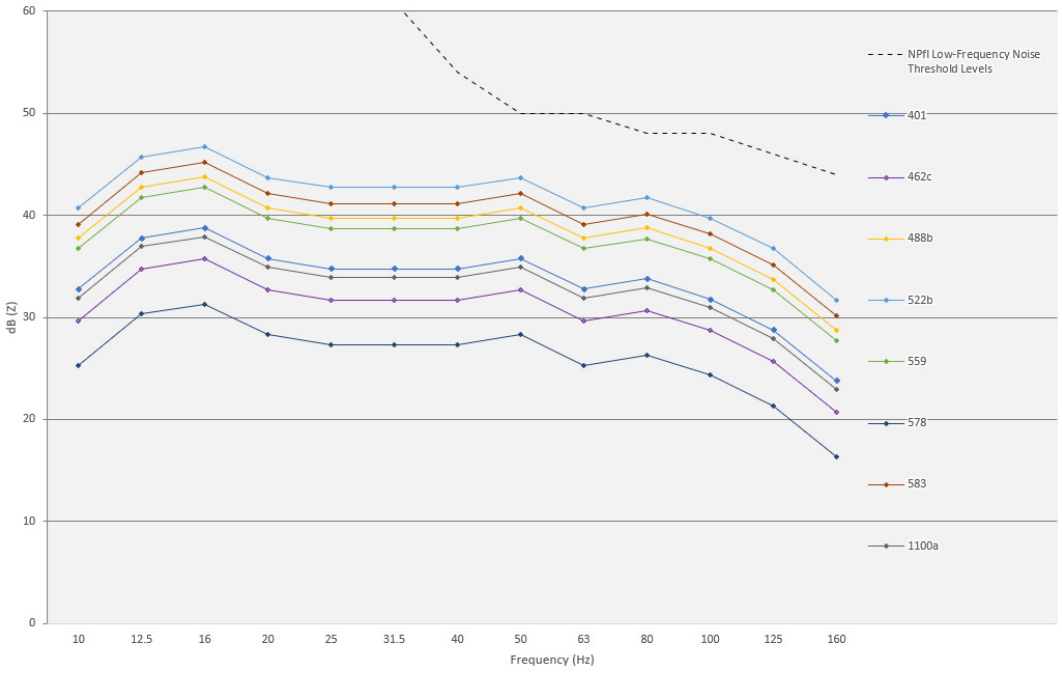
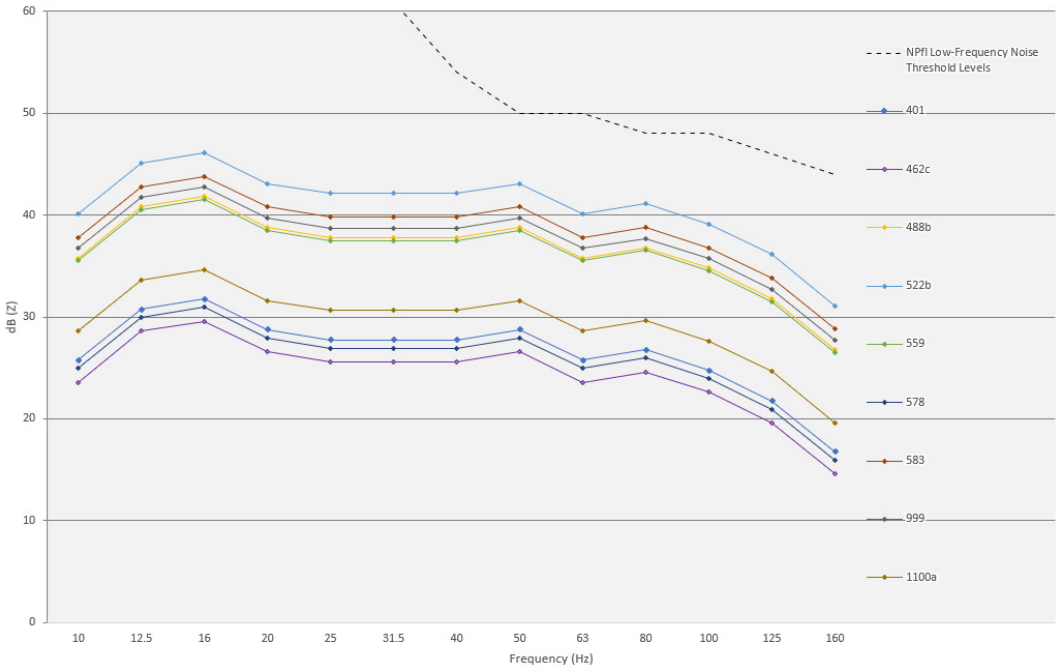


Figure F-8 Low-Frequency Spectra at Representative Receivers - 2047



APPENDIX G

PREDICTED OPERATIONAL NOISE LEVELS

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL D/E/N (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
Privately-Owned Residential Receivers																							
4	n/a	28	25	33	27	26	33	26	23	33	24	24	34	25	23	34	23	23	33	22	22	32	40 / 35 / 35
19[1]	n/a	31	28	37	30	29	37	31	28	37	27	27	37	29	27	37	27	27	37	27	27	36	40 / 35 / 35
20[1,2]	n/a	31	28	37	29	29	38	31	27	37	28	27	37	29	27	37	27	27	37	27	27	36	40 / 35 / 35
21[1,2]	n/a	31	28	37	29	29	38	31	27	37	27	27	38	29	27	38	27	27	37	27	27	37	40 / 35 / 35
35	n/a	35	32	38	34	33	38	34	33	38	32	32	38	32	32	38	32	32	38	32	32	37	40 / 35 / 35
35b	n/a	35	32	38	34	33	38	34	33	38	33	32	38	32	32	38	32	32	38	32	32	37	40 / 35 / 35
43[4]	n/a	33	30	37	30	31	38	33	30	38	31	31	38	34	32	39	31	31	39	29	30	38	40 / 35 / 35
43b[4]	n/a	30	26	37	26	27	38	30	26	38	27	27	38	31	28	39	27	27	39	25	25	37	40 / 35 / 35
45[3]	n/a	28	25	33	26	26	34	28	26	34	26	26	34	28	27	35	26	26	35	25	25	33	40 / 35 / 35
45b	n/a	29	26	34	26	27	34	29	26	34	27	27	35	30	27	35	26	27	35	25	26	34	40 / 35 / 35
45c	n/a	29	26	34	26	27	34	29	26	34	27	27	35	30	27	35	27	27	35	25	26	34	40 / 35 / 35
47[3]	n/a	31	25	39	26	26	40	31	25	39	26	26	40	31	26	40	26	26	40	24	24	39	40 / 35 / 35
67[3]	n/a	36	31	38	34	32	38	32	31	37	31	30	37	30	30	37	30	30	38	30	30	37	40 / 35 / 35
74[1]	n/a	36	30	37	34	32	38	32	31	38	31	30	37	30	30	38	30	30	37	30	30	37	40 / 35 / 35
77[1]	n/a	34	29	37	33	31	37	30	29	37	29	28	37	28	28	37	28	28	36	28	28	36	40 / 35 / 35
79[1]	n/a	33	28	36	33	31	37	31	30	37	29	28	36	28	28	36	28	28	35	27	27	35	40 / 35 / 35
82	n/a	32	28	36	31	30	36	30	29	35	28	27	35	28	27	35	27	27	35	27	27	34	40 / 35 / 35
83	n/a	32	28	36	32	30	36	30	29	36	28	27	36	28	27	36	27	27	35	27	27	34	40 / 35 / 35
84a[1]	n/a	33	28	36	32	30	37	30	30	36	29	28	36	28	28	36	27	27	35	27	27	35	40 / 35 / 35
84b	n/a	15	13	23	16	16	26	18	16	25	17	16	25	17	16	27	15	14	27	11	10	24	40 / 35 / 35
86a[1]	n/a	35	28	36	34	31	38	31	30	37	29	27	36	27	27	37	27	27	36	27	27	36	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
86b	n/a	31	26	36	32	30	36	29	27	36	26	24	36	24	20	35	20	20	33	19	19	33	40 / 35 / 35
96[3]	n/a	35	26	35	34	32	37	32	29	39	29	24	37	24	23	37	23	23	36	23	23	36	40 / 35 / 35
102[3]	n/a	35	26	34	34	32	37	32	29	40	30	23	36	23	23	36	22	22	35	21	21	35	40 / 35 / 35
108[3]	n/a	33	25	33	32	30	36	33	30	40	30	23	36	22	22	35	21	21	34	20	20	34	40 / 35 / 35
112[3]	n/a	32	25	31	31	29	35	32	29	36	30	22	35	22	21	34	21	21	33	19	19	33	40 / 35 / 35
118[3]	n/a	33	25	31	32	30	36	33	30	41	31	22	36	22	21	34	20	20	33	18	18	33	40 / 35 / 35
120[3]	n/a	34	25	32	34	32	36	33	30	41	31	22	36	21	21	35	20	20	33	18	18	34	40 / 35 / 35
120c[3]	n/a	34	25	32	33	31	36	33	30	41	31	22	36	21	20	35	20	20	33	18	18	33	40 / 35 / 35
121[3]	n/a	33	25	31	33	31	36	33	30	41	31	22	36	21	20	34	20	19	33	18	18	32	40 / 35 / 35
136[3]	n/a	32	28	39	37	35	41	34	31	38	30	26	35	25	20	34	19	19	33	17	17	34	40 / 35 / 35
140a[1]	n/a	36	24	37	34	33	40	34	32	39	33	29	38	27	20	37	19	19	35	17	17	34	40 / 35 / 35
140c[1]	n/a	32	25	37	34	32	37	30	28	37	26	23	37	24	21	36	20	20	34	20	20	34	40 / 35 / 35
143a[3]	n/a	39	24	37	35	35	40	34	32	42	36	34	43	32	27	40	21	21	37	20	20	36	40 / 35 / 35
143b[3]	n/a	37	24	36	40	38	46	39	37	45	39	39	45	35	33	44	31	30	40	33	33	39	40 / 35 / 35
147[3]	n/a	38	23	36	37	37	40	37	35	44	37	37	45	32	29	43	25	25	39	24	23	39	40 / 35 / 35
153a[3]	n/a	30	25	35	33	33	39	35	32	39	35	35	42	38	36	44	35	34	42	36	32	45	40 / 35 / 35
154[1]	n/a	36	26	36	39	36	42	36	33	42	39	38	43	36	36	43	32	33	42	33	32	42	40 / 35 / 35
154b	n/a	36	26	36	38	36	42	36	33	41	38	38	43	36	36	42	32	32	42	32	32	42	40 / 35 / 35
156a[3]	n/a	37	25	37	42	39	47	40	38	47	41	41	46	37	36	46	32	32	42	35	34	40	40 / 35 / 35
156b	n/a	24	19	31	19	19	32	24	19	32	20	19	32	25	20	33	19	18	33	16	16	31	40 / 35 / 35
157a[3]	n/a	38	24	37	39	37	45	38	36	46	39	39	46	33	32	44	30	30	41	30	29	40	40 / 35 / 35
157b	n/a	22	17	28	17	17	29	22	17	28	17	17	29	22	17	30	17	16	29	15	14	28	40 / 35 / 35
159[3]	n/a	35	23	37	39	38	46	38	35	45	38	39	46	33	32	43	30	29	40	31	30	39	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL D/E/N (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
169	n/a	29	20	29	32	29	35	30	28	33	31	31	37	31	30	37	27	26	36	27	26	37	40 / 35 / 35
171	n/a	31	24	32	33	30	37	31	29	35	32	32	37	31	31	37	27	27	36	28	27	35	40 / 35 / 35
172	n/a	30	25	33	33	30	36	31	29	35	32	32	36	31	31	37	27	27	36	29	27	35	40 / 35 / 35
172b	n/a	30	25	33	33	30	36	31	29	36	32	32	36	31	31	37	28	28	36	29	27	35	40 / 35 / 35
172c	n/a	29	25	32	32	30	35	30	29	35	31	32	36	32	31	37	28	28	35	28	27	33	40 / 35 / 35
310	n/a	30	25	33	33	30	36	31	28	35	31	32	36	32	31	36	28	28	36	28	27	35	40 / 35 / 35
173	n/a	29	24	32	31	28	34	28	26	33	30	30	34	30	29	35	26	26	34	27	26	33	40 / 35 / 35
174	n/a	29	24	32	31	28	35	29	26	33	30	30	34	31	30	35	27	26	35	27	26	33	40 / 35 / 35
175	n/a	29	24	32	31	28	35	29	26	33	30	30	34	31	30	35	27	26	35	27	26	33	40 / 35 / 35
175b	n/a	29	24	32	31	28	35	29	26	33	30	30	34	31	30	35	27	26	35	27	26	33	40 / 35 / 35
175c	n/a	29	25	32	31	28	35	29	27	34	30	30	35	31	30	35	27	26	35	28	27	34	40 / 35 / 35
176	n/a	29	24	31	32	29	35	30	27	33	31	31	35	31	30	35	27	27	35	28	27	34	40 / 35 / 35
177	n/a	28	23	30	30	27	33	28	25	33	28	28	33	29	28	34	25	24	34	25	24	32	40 / 35 / 35
178	n/a	28	24	31	31	28	34	29	27	34	31	31	34	31	30	35	28	27	34	27	27	33	40 / 35 / 35
179	n/a	28	24	31	30	28	33	29	27	34	30	31	34	31	30	35	27	27	35	27	26	32	40 / 35 / 35
180	n/a	28	24	31	30	28	33	29	27	33	30	30	34	31	30	35	28	28	34	27	26	32	40 / 35 / 35
180b	n/a	28	24	31	30	29	33	29	28	34	30	31	35	31	31	36	28	28	35	28	27	32	40 / 35 / 35
180c	n/a	27	24	30	28	27	31	27	26	32	29	29	33	29	29	34	27	27	34	26	25	31	40 / 35 / 35
181	n/a	28	24	31	30	29	34	30	29	34	31	31	35	30	29	35	27	26	35	27	27	32	40 / 35 / 35
181c	n/a	29	25	32	31	30	35	32	30	35	32	32	36	31	30	37	28	27	36	29	28	33	40 / 35 / 35
182	n/a	27	24	31	29	28	33	29	28	33	30	30	34	29	28	35	26	25	34	27	26	31	40 / 35 / 35
189	n/a	32	25	35	33	33	37	33	31	37	33	31	37	28	25	37	20	20	34	22	21	33	40 / 35 / 35
190	n/a	33	25	35	33	33	37	34	32	37	33	31	37	29	25	37	20	20	35	22	21	34	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL D/E/N (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
191	n/a	32	24	35	32	32	37	33	31	36	32	30	36	28	23	36	21	20	34	21	20	33	40 / 35 / 35
192	n/a	32	25	35	32	33	37	33	31	37	33	31	37	28	23	36	20	20	34	21	20	33	40 / 35 / 35
193	2	32	23	35	32	31	37	32	30	36	32	29	36	27	24	36	20	20	34	19	19	33	42 / 41 / 35
193c	n/a	30	22	34	30	29	35	30	28	34	29	27	34	24	21	34	20	20	33	19	19	32	40 / 35 / 35
194	2	31	22	34	31	30	36	30	28	35	29	27	35	24	19	35	19	19	33	18	18	33	42 / 41 / 35
195	2	31	23	35	30	29	36	29	27	35	28	26	35	24	19	35	19	19	33	18	18	33	42 / 41 / 35
197	n/a	30	24	35	30	29	35	29	26	35	27	25	36	23	20	34	19	19	33	19	19	32	40 / 35 / 35
196	2	30	25	35	30	29	35	29	27	34	27	24	35	23	20	34	19	19	32	19	19	32	42 / 41 / 35
195d	n/a	30	25	35	31	29	35	29	27	35	25	24	35	23	20	34	20	19	32	19	19	32	40 / 35 / 35
198	n/a	31	25	35	31	30	35	29	27	35	25	24	35	23	20	34	20	20	33	19	19	32	40 / 35 / 35
198b	n/a	31	25	35	31	30	35	29	27	35	25	24	35	24	20	34	20	20	33	19	19	33	40 / 35 / 35
199	n/a	30	26	35	31	30	35	29	26	35	25	24	35	23	20	34	20	20	32	19	19	32	40 / 35 / 35
200	n/a	30	25	35	31	30	35	28	26	34	25	24	35	23	20	34	20	20	32	19	19	32	40 / 35 / 35
202	n/a	31	25	36	33	31	37	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	40 / 35 / 35
202b	n/a	30	25	35	31	30	36	29	27	35	25	23	35	23	21	34	21	21	33	20	20	32	40 / 35 / 35
203[1]	n/a	32	25	36	33	31	37	30	27	37	26	23	36	24	21	35	21	21	33	20	20	33	40 / 35 / 35
203b	n/a	32	25	36	33	31	37	30	27	37	26	23	36	24	21	35	21	21	33	20	20	33	40 / 35 / 35
203c	n/a	32	25	36	33	31	37	30	27	37	26	23	36	24	21	35	21	21	33	20	20	33	40 / 35 / 35
206	1	31	28	36	31	30	36	31	28	36	28	28	36	29	28	36	28	28	36	28	28	35	40 / 38 / 36
207[1]	n/a	31	28	37	31	30	37	31	28	37	28	28	37	29	27	37	27	27	36	27	27	36	40 / 35 / 35
212	n/a	30	26	35	29	28	36	29	26	35	26	26	36	27	25	35	25	25	35	26	25	34	40 / 35 / 35
212b	n/a	29	26	35	29	28	36	29	26	35	26	26	36	27	25	35	25	25	35	25	25	34	40 / 35 / 35
213	n/a	30	27	36	29	28	37	30	27	36	27	27	37	28	26	36	26	26	36	27	26	35	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
214	n/a	30	27	36	29	28	37	30	27	36	27	27	37	28	26	36	26	26	36	26	26	35	40 / 35 / 35
215	n/a	30	27	36	30	29	37	30	27	36	27	27	37	28	26	37	26	26	36	26	26	36	40 / 35 / 35
216	n/a	30	27	36	30	29	37	30	27	36	27	27	37	28	27	37	26	26	36	27	26	36	40 / 35 / 35
216b	n/a	30	27	36	30	29	37	30	27	36	27	27	37	28	26	37	26	26	36	26	26	36	40 / 35 / 35
217	n/a	31	27	36	30	29	37	30	27	36	27	27	37	28	27	37	27	27	36	27	26	36	40 / 35 / 35
218	n/a	30	27	36	29	28	37	30	27	36	27	27	37	28	26	37	26	26	36	27	26	36	40 / 35 / 35
219	n/a	30	27	36	29	29	37	30	27	36	27	27	37	28	26	37	26	26	36	26	26	36	40 / 35 / 35
220	n/a	30	27	36	30	29	37	30	27	36	27	27	37	28	27	37	26	26	36	27	26	36	40 / 35 / 35
221	n/a	31	28	36	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	26	36	40 / 35 / 35
222	n/a	31	28	37	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	26	36	40 / 35 / 35
223	n/a	31	28	37	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	27	36	40 / 35 / 35
223b	n/a	31	28	36	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	26	36	40 / 35 / 35
224	n/a	31	28	37	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	27	36	40 / 35 / 35
225	n/a	31	28	36	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	26	36	40 / 35 / 35
249	n/a	21	20	26	21	21	26	22	21	26	22	22	27	24	23	28	22	22	27	21	21	26	40 / 35 / 35
252	n/a	20	18	24	19	19	25	20	19	25	19	19	25	21	20	26	20	19	26	18	18	24	40 / 35 / 35
257[1]	n/a	29	27	33	27	27	34	29	27	33	27	27	33	29	28	34	27	27	34	26	26	32	40 / 35 / 35
258a	n/a	25	24	31	24	24	32	25	23	32	24	24	32	26	25	32	24	24	32	23	23	31	40 / 35 / 35
258c	n/a	25	24	31	24	24	32	25	24	31	24	24	32	26	25	32	24	24	32	23	23	31	40 / 35 / 35
259[1]	n/a	27	26	32	25	26	33	26	25	32	25	25	32	27	26	33	25	25	33	24	24	31	40 / 35 / 35
259b	n/a	28	26	32	25	26	32	27	25	32	26	26	32	28	27	33	26	26	33	24	24	31	40 / 35 / 35
260	n/a	24	22	30	23	23	31	23	22	31	23	23	31	24	23	32	23	23	31	22	21	30	40 / 35 / 35
260a	n/a	23	22	30	23	23	31	23	22	31	22	22	31	24	23	31	23	22	31	21	21	30	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
260b	n/a	23	22	29	23	23	30	23	22	30	22	22	30	24	23	31	22	22	30	22	21	29	40 / 35 / 35
261	n/a	28	26	31	27	27	32	27	26	32	26	26	32	28	27	32	26	26	32	25	25	30	40 / 35 / 35
261b	n/a	28	26	31	27	27	32	27	26	32	26	26	32	28	27	32	26	26	32	25	25	30	40 / 35 / 35
271	n/a	23	17	28	20	20	29	24	19	28	19	19	29	23	19	30	19	18	30	16	16	28	40 / 35 / 35
272b	n/a	26	16	29	18	18	31	26	18	30	19	18	31	26	18	32	17	17	32	15	15	30	40 / 35 / 35
272	n/a	26	16	29	18	18	31	26	17	30	18	18	31	26	18	32	17	17	32	15	15	30	40 / 35 / 35
273	n/a	22	19	27	22	21	28	23	20	27	21	21	28	23	21	29	20	20	30	17	17	27	40 / 35 / 35
273b	n/a	23	18	27	20	21	29	24	19	28	20	20	29	23	20	30	19	18	30	16	16	27	40 / 35 / 35
288	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
288b	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
289	n/a	34	31	37	33	32	37	32	31	36	31	31	37	31	31	37	31	31	36	30	30	36	40 / 35 / 35
292	n/a	20	19	24	20	20	25	21	20	25	20	21	25	22	21	26	21	21	26	20	20	24	40 / 35 / 35
292b	n/a	19	17	24	19	19	25	20	18	24	19	19	25	21	20	26	20	20	26	19	18	24	40 / 35 / 35
300	n/a	23	22	26	23	22	26	23	22	26	22	22	27	23	23	27	22	22	27	21	21	25	40 / 35 / 35
298	n/a	23	22	26	22	22	26	23	22	26	21	22	26	23	22	27	22	22	27	21	21	26	40 / 35 / 35
296a	n/a	23	21	26	22	22	27	23	22	27	22	22	26	24	23	27	23	23	27	21	21	26	40 / 35 / 35
296b	n/a	22	21	26	22	22	27	22	21	26	21	21	26	23	23	27	22	22	27	21	21	26	40 / 35 / 35
302a	n/a	23	21	25	22	22	25	22	22	25	22	22	26	22	21	26	21	21	26	19	19	24	40 / 35 / 35
302c	n/a	22	21	25	21	21	25	21	21	25	20	20	25	22	21	26	21	21	25	19	19	24	40 / 35 / 35
401	n/a	16	13	21	19	17	24	20	17	23	19	19	24	20	19	25	18	18	24	14	11	20	40 / 35 / 35
402	n/a	20	16	24	20	19	25	21	18	25	20	20	26	22	21	27	21	20	27	16	15	24	40 / 35 / 35
404	n/a	20	16	24	20	19	26	22	18	25	21	20	27	22	21	28	20	19	27	16	14	24	40 / 35 / 35
407	n/a	14	11	22	14	13	25	15	13	24	15	14	24	16	15	27	14	13	26	10	9	23	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
413b	n/a	18	15	19	16	16	21	18	15	21	16	16	21	18	16	22	16	16	21	15	15	20	40 / 35 / 35
415	n/a	22	19	25	21	21	26	23	20	25	21	21	26	23	21	27	21	20	27	18	17	24	40 / 35 / 35
417	n/a	14	11	17	13	13	20	15	12	19	13	13	20	15	13	20	12	12	19	10	10	15	40 / 35 / 35
418	n/a	21	18	24	20	20	25	21	18	25	19	19	25	22	20	26	19	19	26	16	17	23	40 / 35 / 35
418b	n/a	20	16	23	18	18	25	21	17	24	18	18	25	21	17	25	17	17	26	16	16	23	40 / 35 / 35
419	n/a	15	12	17	12	13	19	15	12	18	12	12	18	15	13	19	12	12	17	11	11	15	40 / 35 / 35
421	n/a	22	18	26	21	21	28	23	19	27	21	20	28	23	21	29	20	19	29	17	17	26	40 / 35 / 35
422a	n/a	23	18	25	25	25	29	25	22	28	26	26	31	26	26	32	24	23	32	21	19	29	40 / 35 / 35
436	n/a	26	23	29	28	27	31	28	27	32	29	29	33	30	30	34	27	27	33	26	25	31	40 / 35 / 35
437	n/a	26	23	29	29	27	32	28	27	32	29	29	33	30	30	34	27	27	33	26	26	31	40 / 35 / 35
441	n/a	27	24	30	28	28	32	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	40 / 35 / 35
442	n/a	17	13	23	18	18	24	18	17	23	17	15	23	15	13	23	13	12	22	12	11	22	40 / 35 / 35
443	n/a	27	24	30	29	28	32	29	27	32	30	29	33	28	27	34	25	25	33	26	25	30	40 / 35 / 35
451	n/a	27	22	32	27	27	32	27	25	31	25	22	30	22	20	30	21	21	29	19	19	29	40 / 35 / 35
452	n/a	27	24	32	29	28	32	27	25	32	25	24	33	22	21	32	20	20	31	19	20	30	40 / 35 / 35
453a	n/a	22	17	25	21	20	27	23	19	26	20	20	27	23	20	28	19	18	28	16	15	25	40 / 35 / 35
453b	n/a	22	17	26	21	21	28	23	19	26	20	20	27	23	20	28	19	18	29	16	16	26	40 / 35 / 35
454	n/a	23	19	26	22	21	27	24	20	27	21	21	27	24	22	28	21	20	28	18	17	26	40 / 35 / 35
455	n/a	9	6	14	6	7	15	8	6	15	6	6	13	9	7	14	7	7	13	5	5	10	40 / 35 / 35
456	n/a	8	6	11	6	6	12	7	6	11	6	6	12	9	7	12	7	7	11	5	5	8	40 / 35 / 35
456b	n/a	8	6	10	6	6	12	7	6	11	6	6	12	9	7	12	7	7	11	5	5	8	40 / 35 / 35
458	n/a	24	19	27	21	21	28	25	20	28	21	21	29	25	22	30	21	20	30	18	17	27	40 / 35 / 35
460	n/a	10	8	15	10	10	17	11	9	15	10	10	17	12	10	17	10	10	17	8	9	14	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
460b	n/a	11	9	18	9	10	20	11	10	18	10	9	19	12	10	19	10	10	19	8	8	16	40 / 35 / 35
461	n/a	15	13	21	13	13	23	15	13	21	14	13	22	15	13	22	13	13	22	12	12	20	40 / 35 / 35
462a	n/a	16	11	22	12	12	24	16	11	22	13	12	23	17	12	23	12	12	23	10	11	21	40 / 35 / 35
462b	n/a	15	10	22	12	12	23	16	11	22	12	11	23	17	12	23	12	12	23	10	10	21	40 / 35 / 35
462c	n/a	16	11	22	12	12	24	16	11	22	12	11	23	17	12	23	12	12	23	10	10	21	40 / 35 / 35
464	n/a	23	16	27	16	16	28	23	16	27	17	17	28	24	17	28	18	18	29	17	16	28	40 / 35 / 35
464b	n/a	23	16	27	18	18	29	23	17	28	18	17	29	24	20	29	18	18	30	17	17	28	40 / 35 / 35
465	n/a	24	20	29	22	21	30	24	20	29	21	21	30	25	22	31	21	21	31	20	19	29	40 / 35 / 35
466	n/a	21	14	21	15	15	23	21	14	22	15	15	23	21	16	25	15	15	23	13	14	21	40 / 35 / 35
467	n/a	21	17	26	18	18	27	21	18	26	19	18	28	22	19	28	18	18	28	16	17	25	40 / 35 / 35
467b	n/a	22	17	27	18	18	27	22	18	27	19	18	28	22	19	28	18	18	28	16	17	26	40 / 35 / 35
468a	n/a	14	11	19	13	13	21	14	12	20	13	13	21	15	14	22	13	13	22	11	10	19	40 / 35 / 35
468b	n/a	14	11	20	13	13	21	14	12	20	12	12	21	15	14	22	12	12	22	11	10	19	40 / 35 / 35
468c	n/a	14	12	20	13	13	21	14	12	20	13	12	21	15	14	22	13	12	22	11	10	19	40 / 35 / 35
468d	n/a	14	12	19	13	13	21	14	12	20	13	13	21	15	14	22	13	12	22	11	10	19	40 / 35 / 35
470	n/a	19	17	24	19	18	25	20	18	25	18	18	25	21	19	25	18	18	25	17	17	23	40 / 35 / 35
471	n/a	19	17	23	19	19	24	19	18	24	19	19	24	21	20	25	19	19	25	17	17	22	40 / 35 / 35
472a	n/a	19	17	23	19	19	24	20	18	24	19	19	24	21	20	25	19	18	25	17	17	23	40 / 35 / 35
472b	n/a	19	17	23	18	18	24	19	18	24	18	19	24	21	20	25	18	18	25	16	16	23	40 / 35 / 35
472c	n/a	15	13	19	14	14	20	15	13	20	14	14	21	16	15	22	14	14	21	12	12	19	40 / 35 / 35
474	n/a	13	11	19	13	13	20	13	12	20	13	13	21	14	14	22	13	12	21	11	11	19	40 / 35 / 35
475	n/a	22	21	25	21	21	25	22	21	25	20	20	25	22	21	26	21	21	26	19	19	24	40 / 35 / 35
475b	n/a	22	21	25	21	21	25	22	21	25	20	20	25	22	21	26	21	21	26	19	19	24	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
476	n/a	20	18	23	19	19	23	20	18	23	19	19	23	21	20	25	20	20	25	18	18	23	40 / 35 / 35
477a	n/a	21	20	24	20	20	24	20	19	24	20	20	24	21	21	25	20	20	25	19	19	24	40 / 35 / 35
477b	n/a	21	20	24	20	20	24	20	19	24	20	20	24	21	21	25	20	20	25	19	19	24	40 / 35 / 35
481	n/a	20	18	22	19	19	23	19	18	23	18	18	23	20	19	24	19	19	24	17	17	22	40 / 35 / 35
483	n/a	19	17	22	18	18	22	18	17	22	18	18	22	19	19	23	18	18	23	16	16	21	40 / 35 / 35
484	n/a	21	20	23	20	20	23	20	20	23	20	20	24	21	20	24	19	19	24	18	18	22	40 / 35 / 35
485a	n/a	10	8	14	10	10	15	11	9	15	11	11	16	12	11	17	11	10	16	9	8	14	40 / 35 / 35
485b	n/a	11	8	14	10	10	15	11	9	15	11	11	16	12	11	17	11	10	16	9	8	14	40 / 35 / 35
485c	n/a	11	9	14	10	11	15	12	10	15	11	11	16	13	12	17	11	11	17	10	9	14	40 / 35 / 35
485d	n/a	11	9	15	10	10	16	11	10	16	11	11	17	12	11	18	11	11	17	10	9	15	40 / 35 / 35
485e	n/a	11	9	15	10	10	16	11	10	15	11	11	17	13	11	17	11	11	17	10	9	15	40 / 35 / 35
485f	n/a	10	8	14	10	10	15	11	9	14	11	10	15	12	10	16	11	10	16	9	8	14	40 / 35 / 35
487	n/a	24	22	27	23	23	27	24	23	27	24	24	28	25	25	28	25	25	28	23	23	27	40 / 35 / 35
488a	n/a	24	23	27	24	24	28	25	24	28	25	25	28	26	26	29	26	26	29	24	25	27	40 / 35 / 35
488b	n/a	24	23	28	24	24	29	25	24	28	24	24	29	25	24	29	24	24	29	22	22	27	40 / 35 / 35
515a	n/a	15	12	16	15	15	24	15	13	24	14	13	23	13	12	21	11	11	17	10	10	20	40 / 35 / 35
515b	n/a	18	15	23	18	17	26	18	16	25	17	15	24	14	13	25	13	13	24	12	12	24	40 / 35 / 35
516	n/a	14	11	23	14	14	25	14	14	24	13	11	24	11	10	24	10	10	23	9	8	23	40 / 35 / 35
517	n/a	24	21	29	25	25	29	25	23	28	24	22	29	22	20	28	20	20	27	19	19	26	40 / 35 / 35
518	n/a	24	21	29	25	25	29	26	24	28	24	23	28	22	20	29	20	20	28	21	20	27	40 / 35 / 35
519	n/a	21	18	27	23	22	27	23	21	27	21	19	26	19	17	26	17	17	25	16	16	25	40 / 35 / 35
522a	n/a	28	25	32	29	28	32	27	25	31	25	24	33	22	21	32	21	21	31	20	20	30	40 / 35 / 35
522b	1	31	27	35	32	30	36	30	28	35	27	26	35	26	26	35	26	26	34	25	25	34	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
522c	1	31	27	35	32	30	36	30	28	35	27	26	35	26	26	35	26	26	34	25	25	34	40 / 38 / 36
522d	1	31	27	35	32	30	36	30	28	35	27	26	35	26	26	35	26	26	34	25	25	34	40 / 38 / 36
526[1]	n/a	34	28	36	33	31	37	31	30	37	29	28	36	28	27	37	28	28	36	27	27	35	40 / 35 / 35
527	1	33	30	36	33	31	36	31	30	36	30	30	36	30	29	36	29	30	36	29	29	35	40 / 38 / 36
528	1	33	30	36	33	32	36	31	30	36	30	30	36	30	29	36	29	29	36	29	29	35	40 / 38 / 36
529	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
530	1	33	30	36	33	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
531	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
531b	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
532	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
533	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
534	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
535	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
536	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
537	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	30	35	29	29	35	40 / 38 / 36
538	1	32	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	30	35	29	29	34	40 / 38 / 36
539	1	32	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
541	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
542	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
543	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
543b	1	32	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	30	35	29	29	34	40 / 38 / 36
544	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
545	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL D/E/N (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
547	2	31	22	35	30	30	36	30	28	35	29	27	35	24	19	35	19	19	33	18	18	32	42 / 41 / 35
549	n/a	14	9	15	13	12	17	12	10	15	10	9	16	10	8	15	8	8	15	8	7	15	40 / 35 / 35
550	n/a	20	17	20	20	20	22	20	19	21	19	19	22	20	19	22	19	19	23	18	18	22	40 / 35 / 35
552	n/a	14	10	16	13	13	18	13	11	16	11	10	16	12	10	16	10	10	16	9	9	16	40 / 35 / 35
553	n/a	15	12	15	15	14	17	14	12	16	12	12	16	12	11	16	11	11	16	11	10	16	40 / 35 / 35
554	n/a	23	20	24	23	22	23	22	21	24	21	21	25	22	21	26	21	20	25	20	20	24	40 / 35 / 35
557	n/a	16	12	15	17	15	17	14	12	16	12	11	16	12	10	15	11	11	16	11	10	16	40 / 35 / 35
559	n/a	20	18	21	20	20	22	20	18	21	19	18	22	20	19	23	19	19	23	18	18	22	40 / 35 / 35
560	n/a	19	17	19	20	19	21	19	18	21	19	18	22	20	19	22	19	19	22	18	18	22	40 / 35 / 35
561	n/a	19	16	18	19	18	20	18	17	19	17	16	19	17	16	19	16	16	20	15	15	20	40 / 35 / 35
562	n/a	19	16	19	19	19	21	18	17	19	17	17	20	18	17	21	17	17	21	17	17	21	40 / 35 / 35
563	n/a	17	13	17	17	16	19	16	14	18	14	14	18	15	13	19	13	13	19	13	12	19	40 / 35 / 35
564	n/a	16	10	17	15	14	19	14	11	17	12	11	18	12	10	18	10	10	18	10	9	18	40 / 35 / 35
565	n/a	13	9	14	13	12	17	12	9	15	10	9	15	10	8	14	8	8	15	7	7	14	40 / 35 / 35
566	n/a	16	11	15	17	16	18	15	13	16	12	11	16	13	10	16	10	10	16	10	9	16	40 / 35 / 35
569	n/a	11	8	15	11	11	17	9	8	15	8	8	15	9	7	15	7	7	15	6	6	15	40 / 35 / 35
570	n/a	11	8	15	12	11	18	10	8	15	9	7	16	8	7	15	7	7	15	5	5	15	40 / 35 / 35
571	n/a	17	13	18	18	17	20	16	14	19	14	13	19	14	12	18	12	12	18	11	11	18	40 / 35 / 35
572	n/a	14	10	16	15	14	18	14	11	16	12	10	16	12	9	16	9	9	16	8	8	16	40 / 35 / 35
573	n/a	15	12	16	15	14	19	14	12	17	12	11	17	12	10	16	10	10	16	9	9	16	40 / 35 / 35
574	n/a	15	12	17	16	15	19	15	13	17	13	11	17	12	11	17	11	11	17	10	10	17	40 / 35 / 35
575	n/a	15	12	17	16	15	19	15	13	17	13	12	18	12	11	17	11	11	17	10	10	17	40 / 35 / 35
576	n/a	15	12	17	16	15	19	14	12	18	12	11	18	12	11	17	11	11	18	9	9	17	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
577a	n/a	17	15	18	18	17	20	17	15	19	15	15	19	15	14	19	14	14	19	14	14	19	40 / 35 / 35
577b	n/a	15	12	17	15	14	20	14	13	18	13	12	18	12	11	17	11	11	18	10	10	17	40 / 35 / 35
578	n/a	14	11	15	14	13	18	13	12	15	12	11	16	11	10	15	10	10	15	9	9	15	40 / 35 / 35
583	n/a	24	21	29	25	25	29	25	23	27	24	22	28	21	20	29	20	20	28	20	20	27	40 / 35 / 35
586	n/a	22	19	26	23	23	27	23	22	26	22	20	26	20	19	27	18	18	25	17	17	24	40 / 35 / 35
587a	n/a	17	13	23	19	18	25	20	18	24	19	17	24	18	14	25	15	15	23	16	15	23	40 / 35 / 35
587b	n/a	17	14	23	19	18	25	20	18	24	19	17	24	18	14	25	15	15	23	16	15	23	40 / 35 / 35
588	n/a	21	18	26	22	22	26	23	21	25	21	19	26	19	18	26	17	17	25	16	16	24	40 / 35 / 35
600a	1	31	29	35	32	31	35	31	29	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
600b	1	32	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
601	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
602	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
603	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
604	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
605	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
606	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
607	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
608	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
609	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
610	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
611	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
612	1	32	29	35	32	31	35	31	29	34	30	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
613	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
614	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
615	1	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
616a	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
616b	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	40 / 38 / 36
617a	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	40 / 38 / 36
618a	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	40 / 38 / 36
618b	1	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	34	29	29	34	40 / 38 / 36
619	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	40 / 38 / 36
621	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	40 / 38 / 36
622a	1	31	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	40 / 38 / 36
623a	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	40 / 35 / 35
623b	1	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	40 / 38 / 36
630a	1	31	28	35	31	30	35	30	29	34	29	28	35	29	28	35	28	28	34	28	28	34	40 / 38 / 36
631	1	31	28	35	31	30	35	30	29	34	29	28	35	29	28	35	28	28	34	28	28	34	40 / 38 / 36
632	1	29	25	34	29	28	33	28	26	32	26	25	33	26	25	34	25	25	33	25	25	33	40 / 38 / 36
648	1	31	29	35	32	31	35	30	29	34	29	29	35	29	29	35	29	29	34	29	29	34	40 / 38 / 36
649	1	31	29	35	32	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	29	34	40 / 38 / 36
650	1	32	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	34	28	29	34	40 / 38 / 36
651	1	31	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	40 / 38 / 36
652	1	32	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
653	1	32	29	35	32	31	35	31	30	34	29	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
654a	1	32	29	35	32	31	35	31	30	35	29	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
654b	1	32	29	35	32	31	35	31	30	34	29	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
655	1	32	29	35	32	31	35	31	30	34	29	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
658a	1	32	29	35	32	31	35	31	30	35	29	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
659	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
660a	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
660b	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
661	1	32	29	35	32	31	36	31	30	35	30	29	35	29	29	35	29	29	35	29	29	35	40 / 38 / 36
662	1	32	29	35	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	40 / 38 / 36
663	1	32	29	35	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	40 / 38 / 36
664	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	40 / 38 / 36
665a	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
665b	1	32	29	36	32	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
667a	n/a	34	30	37	33	32	37	32	31	36	31	30	37	30	30	36	30	30	36	30	30	36	40 / 35 / 35
667b	n/a	34	30	36	33	32	37	32	31	36	31	30	37	30	30	36	30	30	36	30	30	36	40 / 35 / 35
667c	n/a	34	30	37	33	32	37	32	31	36	31	30	37	30	30	36	30	30	36	30	30	36	40 / 35 / 35
667d	n/a	34	31	37	33	32	37	32	31	36	31	30	37	31	30	36	30	30	36	30	30	36	40 / 35 / 35
667e	n/a	34	30	37	33	32	37	32	31	36	31	30	37	30	30	36	30	30	36	30	30	36	40 / 35 / 35
667f	1	32	27	35	32	30	35	29	28	35	27	25	35	26	25	35	25	25	34	25	25	33	40 / 38 / 36
669	1	33	30	36	32	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
671	1	33	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
672	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
673	1	33	29	36	32	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	40 / 38 / 36
675	1	33	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
676	1	33	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
677	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
678	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
679	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
680	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
681	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
682a	1	32	29	36	32	31	36	31	30	35	29	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
682b	1	32	29	36	32	31	36	31	30	35	29	29	36	29	29	35	29	29	35	29	29	35	40 / 38 / 36
683	1	32	29	36	32	31	36	31	30	35	29	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
684	1	32	29	36	32	31	36	30	30	35	29	29	36	29	29	36	29	29	35	28	29	35	40 / 38 / 36
685	1	32	29	36	32	31	36	30	30	35	29	29	36	29	29	36	29	29	35	28	29	35	40 / 38 / 36
686	1	32	29	35	32	31	36	30	30	35	29	29	35	29	29	35	28	29	35	28	28	35	40 / 38 / 36
687	1	32	29	35	32	31	36	30	30	35	29	29	35	29	29	35	29	29	35	28	28	35	40 / 38 / 36
688	1	32	29	35	32	31	35	30	30	35	29	29	35	29	29	35	29	29	35	29	29	35	40 / 38 / 36
689	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	40 / 38 / 36
690	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	40 / 38 / 36
691	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	40 / 38 / 36
692	1	32	29	35	32	31	35	30	30	35	29	29	35	29	29	35	29	29	35	28	29	34	40 / 38 / 36
693	1	32	29	35	32	31	35	30	30	35	29	29	35	29	29	35	29	29	35	28	28	34	40 / 38 / 36
694a	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	36	29	29	35	28	28	34	40 / 38 / 36
694b	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	36	28	29	35	28	28	34	40 / 38 / 36
695	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	36	29	29	35	28	28	34	40 / 38 / 36
697	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	36	28	28	35	28	28	34	40 / 38 / 36
698	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	35	28	29	35	28	28	34	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
715	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
728	1	32	29	35	32	31	36	30	29	35	29	28	35	29	28	35	28	28	35	28	28	34	40 / 38 / 36
729	1	32	29	35	32	31	36	30	29	35	29	29	35	29	28	36	28	28	35	28	28	34	40 / 38 / 36
730	1	32	29	35	32	31	36	30	29	35	29	29	35	29	28	35	28	28	35	28	28	34	40 / 38 / 36
731	1	32	29	36	32	31	36	30	29	35	29	29	35	29	28	36	28	28	35	28	28	34	40 / 38 / 36
732	1	32	29	35	32	31	36	30	29	35	29	29	35	29	28	36	28	28	35	28	28	34	40 / 38 / 36
733	1	32	29	35	32	31	36	30	29	35	29	29	35	29	28	35	28	28	35	28	28	34	40 / 38 / 36
735a	1	32	29	35	32	31	36	30	29	35	29	29	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
735b	1	32	29	35	32	31	36	30	29	35	29	29	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
736	1	32	28	35	32	31	36	30	29	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
737	1	32	29	36	32	31	36	30	29	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
738	1	32	28	36	32	31	36	30	29	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
739	1	32	28	36	32	31	36	30	29	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
740a	1	32	28	35	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	40 / 38 / 36
740b	1	32	28	35	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	40 / 38 / 36
740c	1	32	28	35	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
740d	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
740e	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
740f	1	32	28	35	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	40 / 38 / 36
741	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
742	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36
743	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	36	28	28	35	28	28	34	40 / 38 / 36
744	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
745	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	40 / 38 / 36
746	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	40 / 38 / 36
747	1	32	28	35	32	31	36	30	29	35	29	28	35	28	28	35	28	28	34	28	28	34	40 / 38 / 36
748a	1	32	28	35	32	31	36	30	29	35	29	28	35	28	28	35	27	28	34	27	27	34	40 / 38 / 36
748b	1	29	25	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	40 / 38 / 36
749a	1	32	29	36	32	31	36	30	29	35	29	29	36	29	29	36	28	29	35	28	28	35	40 / 38 / 36
749b	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	35	40 / 38 / 36
750	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	35	40 / 38 / 36
751	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	35	40 / 38 / 36
752a	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	35	40 / 38 / 36
752b	1	32	29	36	32	31	36	30	30	35	29	29	36	29	29	36	29	29	35	28	29	34	40 / 38 / 36
753	1	32	29	36	32	31	36	30	29	35	29	29	36	29	29	36	29	29	35	28	29	35	40 / 38 / 36
754	1	32	29	36	32	31	36	30	30	35	29	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
755	1	32	29	36	32	31	36	31	30	35	29	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
756	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
757	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
758	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
759a	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
759b	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
760	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
761	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
762	1	33	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
763	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
764	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
765a	1	33	29	36	33	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
765b	1	33	29	36	33	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
766	1	33	29	36	33	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
767	1	33	29	36	33	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
768	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
769	1	32	29	36	32	31	36	30	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
770	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
771	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
772	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
773	1	33	29	36	33	31	36	30	30	36	30	29	36	29	29	36	29	29	35	29	29	35	40 / 38 / 36
774	1	33	29	36	32	31	36	30	30	36	30	29	36	29	29	36	28	29	35	28	28	35	40 / 38 / 36
775	1	33	29	36	32	31	36	30	30	36	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
776	1	33	29	36	32	31	36	30	30	36	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
777	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
778a	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
778b	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
779a	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
779b	1	32	29	36	32	31	36	30	29	36	29	29	36	28	28	36	28	28	35	28	28	35	40 / 38 / 36
780	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
781	1	33	29	36	33	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
782	1	33	29	36	32	31	36	30	29	36	29	28	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
783	1	33	29	36	33	31	36	30	29	36	29	28	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
784	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	34	40 / 38 / 36
785	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	40 / 38 / 36
786	1	32	29	36	32	31	36	30	30	35	29	29	36	29	28	36	28	28	35	28	28	34	40 / 38 / 36
787a	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	40 / 38 / 36
787b	1	32	29	36	32	31	36	30	30	35	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
788	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	40 / 38 / 36
789	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	40 / 38 / 36
790a	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	40 / 38 / 36
790b	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	40 / 38 / 36
791a	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
791b	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	40 / 38 / 36
792a	1	32	29	36	32	31	36	30	30	35	29	29	36	29	28	36	28	28	35	28	28	35	40 / 38 / 36
792b	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
793	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
794	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
795	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
796	1	32	29	36	32	31	36	30	29	35	29	28	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
797a	1	32	29	36	32	31	36	30	29	36	29	28	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
797b	1	32	29	36	32	31	36	30	29	36	29	28	36	28	28	36	28	28	35	28	28	35	40 / 38 / 36
798	1	32	29	36	32	31	36	30	29	36	29	28	36	28	28	36	28	28	35	28	28	35	40 / 38 / 36
801	1	32	29	36	32	31	36	31	30	36	29	28	36	28	28	36	28	28	35	28	28	35	40 / 38 / 36
802	1	32	29	36	32	31	36	31	30	36	29	28	36	28	28	36	28	28	35	28	28	35	40 / 38 / 36
803a	1	32	28	36	32	31	36	30	30	35	29	28	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL D/E/N (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
803b	1	32	28	36	32	31	36	30	30	35	29	28	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
804	1	32	28	36	32	31	36	30	30	35	29	28	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
805	1	32	28	36	32	31	36	30	30	35	29	28	36	28	28	36	28	28	35	28	28	34	40 / 38 / 36
806	1	32	28	35	31	30	35	30	29	35	28	27	35	27	27	35	27	27	34	27	27	34	40 / 38 / 36
807	1	32	27	35	31	30	35	30	29	35	28	27	35	27	27	35	27	27	34	27	27	34	40 / 38 / 36
808	1	32	28	35	31	30	35	30	29	35	28	27	35	27	27	35	27	27	34	27	27	34	40 / 38 / 36
809	1	32	28	35	31	30	36	30	29	35	28	27	35	27	27	35	27	27	34	27	27	34	40 / 38 / 36
810	1	32	28	35	31	30	35	30	29	35	28	27	35	27	27	35	27	27	34	26	27	34	40 / 38 / 36
811	1	32	27	35	31	30	36	30	29	35	28	27	35	27	27	35	26	26	34	26	26	34	40 / 38 / 36
812	1	32	27	35	31	30	36	30	29	35	28	27	35	27	26	35	26	26	34	26	26	34	40 / 38 / 36
813	1	32	27	35	31	30	36	30	29	35	28	27	35	27	26	35	26	26	34	26	26	34	40 / 38 / 36
814	1	32	27	35	31	30	36	30	29	35	28	26	35	27	26	35	26	26	34	26	26	34	40 / 38 / 36
815a	1	32	27	35	31	30	36	30	29	35	27	26	35	27	26	35	26	26	34	26	26	34	40 / 38 / 36
815b	1	32	27	35	31	30	36	30	29	35	27	26	35	27	26	35	26	26	34	26	26	34	40 / 38 / 36
816	1	32	27	35	32	30	36	30	29	35	27	26	35	27	26	35	26	26	34	26	26	34	40 / 38 / 36
817	1	32	27	35	32	30	36	30	28	35	27	26	35	26	26	35	26	26	34	26	26	34	40 / 38 / 36
819	1	32	27	35	32	30	35	29	28	35	27	25	35	25	25	35	25	25	34	25	25	33	40 / 38 / 36
820a	1	32	27	35	32	30	35	29	28	35	27	25	35	25	25	35	25	25	34	25	25	33	40 / 38 / 36
820b	1	32	27	35	32	30	35	29	28	35	27	25	35	25	25	35	25	25	34	25	25	33	40 / 38 / 36
821	1	31	27	35	32	30	35	29	28	35	27	25	35	25	25	35	25	25	34	24	24	33	40 / 38 / 36
822	1	31	27	35	32	30	35	29	28	35	26	25	35	25	25	35	25	25	34	24	24	33	40 / 38 / 36
823a	1	31	27	35	32	30	35	29	28	35	26	25	35	25	25	35	25	25	34	24	24	33	40 / 38 / 36
823b	1	32	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	34	24	24	33	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
824	1	31	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	34	24	24	33	40 / 38 / 36
825	1	31	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	33	24	24	33	40 / 38 / 36
826	1	31	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	33	24	24	33	40 / 38 / 36
827	1	31	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	33	24	24	33	40 / 38 / 36
828	1	31	26	35	32	30	35	29	27	35	26	25	35	25	24	35	24	24	34	24	24	33	40 / 38 / 36
829a	1	31	27	35	32	30	35	29	27	35	26	24	35	25	24	35	24	24	33	24	24	33	40 / 38 / 36
829b	1	31	27	35	32	30	35	29	27	35	26	24	35	25	24	35	24	24	33	24	24	33	40 / 38 / 36
830	1	31	27	35	32	30	35	29	27	35	26	24	35	25	24	35	24	24	33	24	24	33	40 / 38 / 36
831	1	31	26	35	32	30	35	29	27	35	26	24	35	25	24	35	24	24	33	24	24	33	40 / 38 / 36
832	1	31	26	35	32	30	35	29	27	35	26	24	35	25	24	34	24	24	33	24	24	33	40 / 38 / 36
833	1	31	26	35	32	30	35	29	27	35	26	24	35	25	24	34	24	24	33	23	23	33	40 / 38 / 36
834	1	31	26	35	32	30	35	29	27	35	26	24	35	24	24	34	24	24	33	23	23	33	40 / 38 / 36
835	1	31	26	35	32	30	35	29	27	35	26	24	35	24	24	34	24	24	33	23	23	33	40 / 38 / 36
836	1	31	26	35	32	30	35	29	27	35	26	24	35	24	24	34	24	23	33	23	23	33	40 / 38 / 36
837	1	31	26	35	32	30	35	29	27	35	26	24	35	24	24	34	23	23	33	23	23	33	40 / 38 / 36
838	1	31	26	35	32	30	35	29	27	35	26	24	35	24	23	34	23	23	33	23	23	33	40 / 38 / 36
839	1	31	26	34	32	30	35	29	27	35	26	24	35	24	23	34	23	23	33	23	23	33	40 / 38 / 36
840	1	31	26	34	32	30	35	29	27	35	26	24	35	24	23	34	23	23	33	23	23	33	40 / 38 / 36
841	1	31	26	34	32	30	35	29	27	35	26	24	35	24	23	34	23	23	33	23	23	33	40 / 38 / 36
843a	1	30	26	34	32	30	35	29	27	35	25	24	35	24	23	34	23	23	33	23	23	33	40 / 38 / 36
843b	1	31	26	34	32	30	35	29	27	35	25	24	35	24	23	34	23	23	33	23	23	33	40 / 38 / 36
844a	1	30	26	34	32	30	35	28	27	34	25	23	34	24	23	34	23	23	33	22	22	33	40 / 38 / 36
845	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
846	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36
847	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36
848	1	30	26	35	32	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36
849	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36
850	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36
853	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36
854	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36
855	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	40 / 38 / 36
856	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	21	21	32	40 / 38 / 36
857	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	21	21	32	40 / 38 / 36
858	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	21	21	32	40 / 38 / 36
859	1	29	26	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	40 / 38 / 36
860	1	29	25	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	40 / 38 / 36
861	1	29	25	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	40 / 38 / 36
862	1	29	25	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	40 / 38 / 36
863	1	29	25	35	31	30	35	28	26	34	25	23	34	23	22	34	22	22	33	21	21	32	40 / 38 / 36
864	1	29	25	35	31	30	35	28	26	34	25	23	34	23	22	34	22	21	32	21	21	32	40 / 38 / 36
865	1	29	25	35	31	30	35	28	27	34	25	23	34	23	22	34	22	21	32	21	21	32	40 / 38 / 36
866	2	29	25	34	31	30	35	28	26	34	25	23	34	23	21	34	21	21	32	20	20	32	42 / 41 / 35
867	2	29	25	34	31	30	35	28	26	34	24	23	34	23	21	34	21	21	32	20	20	32	42 / 41 / 35
868	2	29	25	34	31	30	35	28	26	34	24	23	34	23	21	34	21	21	32	20	20	32	42 / 41 / 35
870	2	29	25	34	31	30	35	28	26	34	25	23	34	23	21	33	21	21	32	20	20	32	42 / 41 / 35
871	2	29	25	34	31	30	35	28	26	34	24	23	34	23	21	33	21	21	32	20	20	32	42 / 41 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
872a	2	29	25	34	31	30	35	28	26	34	24	23	34	23	21	33	21	21	32	20	20	32	42 / 41 / 35
900a	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	26	31	40 / 35 / 35
900b	n/a	27	24	31	30	29	33	30	28	33	30	30	34	30	29	35	26	26	34	27	27	31	40 / 35 / 35
901	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	27	32	40 / 35 / 35
902	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	27	32	40 / 35 / 35
903	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	27	32	40 / 35 / 35
904	n/a	28	24	30	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	26	32	40 / 35 / 35
905	n/a	28	24	30	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	40 / 35 / 35
906	n/a	28	24	30	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	40 / 35 / 35
907	n/a	27	24	30	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	40 / 35 / 35
908	n/a	27	24	30	30	29	33	30	29	33	30	30	34	30	29	34	27	26	34	27	26	31	40 / 35 / 35
909	n/a	27	24	30	30	28	33	30	28	33	30	30	34	30	29	34	27	26	34	27	26	31	40 / 35 / 35
911	n/a	27	24	30	29	28	32	30	28	33	30	30	34	30	29	34	27	26	34	27	26	31	40 / 35 / 35
912	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	29	34	27	26	34	27	26	31	40 / 35 / 35
913	n/a	27	24	30	29	28	32	30	28	33	30	30	34	30	29	34	26	26	34	27	26	31	40 / 35 / 35
914	n/a	27	24	30	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
915	n/a	27	24	30	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
916	n/a	27	24	30	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
917	n/a	27	24	30	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
918	n/a	27	24	30	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
919	n/a	27	24	30	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
920	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	40 / 35 / 35
921	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
922	n/a	27	24	30	29	29	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
924	n/a	28	24	30	29	29	33	30	29	33	30	30	34	30	28	35	26	26	34	27	26	31	40 / 35 / 35
925	n/a	28	24	30	30	29	33	30	28	33	30	30	34	30	29	35	26	26	34	27	26	31	40 / 35 / 35
926	n/a	28	24	30	30	29	33	30	29	33	30	30	34	30	29	35	26	26	34	27	26	31	40 / 35 / 35
927	n/a	28	24	30	30	29	33	30	29	33	30	30	34	30	29	35	26	26	34	27	26	31	40 / 35 / 35
928	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	31	40 / 35 / 35
929	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	31	40 / 35 / 35
930	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	32	40 / 35 / 35
931	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	32	40 / 35 / 35
932a	n/a	27	24	30	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	27	31	40 / 35 / 35
932b	n/a	27	24	30	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	27	31	40 / 35 / 35
933	n/a	28	24	30	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	27	32	40 / 35 / 35
934	n/a	27	24	30	30	29	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	40 / 35 / 35
935a	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	40 / 35 / 35
935b	n/a	27	24	30	29	29	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	40 / 35 / 35
936	n/a	27	24	30	29	28	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
937	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	40 / 35 / 35
938	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	35	26	26	34	27	26	31	40 / 35 / 35
939	n/a	27	24	30	29	28	33	30	28	33	30	30	34	29	28	35	26	26	34	26	25	31	40 / 35 / 35
940	n/a	27	24	31	29	28	33	30	28	33	30	30	34	29	28	35	26	26	34	26	26	31	40 / 35 / 35
941	n/a	28	24	31	30	28	33	30	28	33	30	30	34	29	28	35	26	26	34	27	26	32	40 / 35 / 35
942	n/a	27	24	31	29	28	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	31	40 / 35 / 35
943	n/a	27	24	30	29	28	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	31	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
944	n/a	27	24	30	29	28	33	29	28	33	30	30	34	29	28	35	26	25	34	27	26	31	40 / 35 / 35
945a	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
945b	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
946	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
947	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
948	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
949	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
950	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
951	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
952	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
953	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
954	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
955	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
956	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	26	25	34	26	26	31	40 / 35 / 35
957a	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
957b	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	40 / 35 / 35
958	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
959	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
960	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
961	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
962	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
963	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35
964	n/a	27	24	30	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
965	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	40 / 35 / 35
966	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	40 / 35 / 35
967a	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	40 / 35 / 35
967b	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	40 / 35 / 35
968	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	25	25	34	27	26	31	40 / 35 / 35
969	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	25	25	34	26	26	31	40 / 35 / 35
970	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	40 / 35 / 35
971	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	40 / 35 / 35
972	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	40 / 35 / 35
973	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	40 / 35 / 35
974	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	40 / 35 / 35
976	n/a	27	24	30	29	28	32	29	27	32	30	30	34	29	28	34	26	25	33	26	26	31	40 / 35 / 35
977a	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
977b	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	40 / 35 / 35
978	n/a	27	24	30	29	28	32	29	27	32	30	30	33	29	27	34	26	25	33	26	26	30	40 / 35 / 35
979a	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
979b	n/a	27	24	30	29	28	32	29	27	32	30	30	33	29	27	34	26	25	33	26	26	30	40 / 35 / 35
980	n/a	27	24	30	28	28	32	29	27	32	30	29	33	29	27	34	26	25	33	26	26	30	40 / 35 / 35
981a	n/a	27	24	30	28	28	32	29	27	32	30	29	33	29	28	34	26	25	33	26	26	30	40 / 35 / 35
981b	n/a	27	24	30	28	28	32	29	27	32	30	30	33	29	28	34	26	25	33	26	26	30	40 / 35 / 35
982	n/a	27	24	30	28	28	32	29	27	32	30	29	33	29	28	34	26	25	33	26	26	30	40 / 35 / 35
983	n/a	27	24	30	29	28	32	29	27	32	30	29	33	29	28	34	26	25	33	26	26	30	40 / 35 / 35
984	n/a	27	24	30	29	28	32	29	27	32	30	30	33	29	28	34	26	25	33	26	26	30	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
985	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	33	26	26	31	40 / 35 / 35
986	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	26	31	40 / 35 / 35
987	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	26	31	40 / 35 / 35
988a	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	40 / 35 / 35
988b	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	26	31	40 / 35 / 35
989a	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	40 / 35 / 35
989b	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	40 / 35 / 35
990	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	40 / 35 / 35
991	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	40 / 35 / 35
992	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	40 / 35 / 35
993a	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	40 / 35 / 35
993b	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	40 / 35 / 35
994a	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
994b	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	40 / 35 / 35
995	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
997	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
998	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	40 / 35 / 35
999	n/a	26	23	29	28	28	32	29	27	32	29	29	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1000	n/a	27	24	30	29	28	32	29	27	32	30	29	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1001	n/a	27	24	30	29	28	32	29	27	32	30	29	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1002	n/a	27	24	30	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1003	n/a	27	24	30	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1004	n/a	27	24	30	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
1005	n/a	27	24	30	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1006	n/a	27	24	29	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1007	n/a	27	24	29	29	28	31	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1008	n/a	27	24	29	29	27	31	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1009	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1010	n/a	27	24	29	28	28	32	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1011	n/a	27	24	29	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1012	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1014	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1015	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1016	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1017	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1018	n/a	27	24	29	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1019	n/a	27	24	29	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1020	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1021	n/a	27	24	29	28	28	31	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1022	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
1023	n/a	21	16	21	23	22	27	24	22	27	24	24	28	24	23	26	20	20	25	21	20	25	40 / 35 / 35
1024	n/a	27	24	29	27	26	30	28	25	29	27	27	29	28	25	29	25	25	32	26	26	30	40 / 35 / 35
1025	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1026	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	40 / 35 / 35
1027	n/a	27	24	30	29	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	31	40 / 35 / 35
1028	n/a	27	24	30	28	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	25	30	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
1029	n/a	27	24	29	28	28	32	29	28	31	29	29	33	29	28	33	26	25	33	26	25	30	40 / 35 / 35
1030	n/a	27	24	29	28	28	32	29	28	31	29	29	33	29	28	33	26	25	33	26	25	30	40 / 35 / 35
1031	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	25	25	33	25	25	29	40 / 35 / 35
1032	n/a	27	24	29	28	28	31	29	27	31	29	29	33	28	28	33	25	25	33	25	25	29	40 / 35 / 35
1033	n/a	27	24	29	28	27	31	29	28	31	29	29	33	27	26	32	24	23	30	23	23	27	40 / 35 / 35
1034	n/a	26	23	29	28	27	31	29	27	31	29	29	32	26	25	30	22	22	27	23	22	26	40 / 35 / 35
1035	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	25	25	30	40 / 35 / 35
1036a	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
1036b	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
1037	n/a	27	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
1038	n/a	27	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
1039	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	26	25	33	26	25	30	40 / 35 / 35
1040	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	26	25	33	26	25	30	40 / 35 / 35
1041	n/a	27	24	29	28	28	31	29	28	32	29	29	33	29	28	33	26	25	33	26	25	30	40 / 35 / 35
1042	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	26	30	40 / 35 / 35
1043	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	30	40 / 35 / 35
1044	n/a	27	24	29	28	28	32	29	27	32	29	29	33	29	28	33	26	25	33	26	26	30	40 / 35 / 35
1045	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
1046	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
1077	n/a	26	24	29	28	27	32	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	40 / 35 / 35
1078	n/a	27	24	29	28	27	31	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	40 / 35 / 35
1079	n/a	27	24	29	28	27	31	29	27	31	29	29	33	28	27	33	25	24	33	26	25	30	40 / 35 / 35
1080	n/a	27	24	29	28	27	31	28	27	31	29	29	33	28	27	33	25	24	33	26	25	30	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
1081	n/a	27	24	29	28	27	31	28	27	31	29	29	33	28	27	33	25	25	33	26	25	30	40 / 35 / 35
1082a	n/a	26	24	29	28	27	31	29	27	31	29	29	33	28	27	33	25	25	33	26	25	30	40 / 35 / 35
1082b	n/a	26	24	29	28	27	31	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	40 / 35 / 35
1100a	n/a	17	15	20	16	16	21	17	16	20	16	16	20	18	17	22	16	16	22	15	14	19	40 / 35 / 35
1100b	n/a	17	15	20	17	17	21	17	16	21	16	16	21	18	17	22	16	16	22	15	15	19	40 / 35 / 35
Generic Muswellbrook Residential Receivers																							
A	n/a	31	28	35	31	30	35	30	29	34	28	27	34	28	27	35	27	27	34	27	27	33	40 / 35 / 35
B	n/a	31	28	34	31	30	34	29	29	34	28	27	34	27	27	35	27	27	34	26	26	33	40 / 35 / 35
C	n/a	31	27	35	32	30	35	29	28	34	28	27	35	27	26	35	26	26	34	26	26	33	40 / 35 / 35
D	n/a	31	27	34	31	30	34	29	28	34	26	25	34	26	25	34	25	25	33	25	25	33	40 / 35 / 35
E	n/a	30	26	34	31	29	34	28	28	33	26	25	34	25	25	34	24	25	33	24	24	32	40 / 35 / 35
F	n/a	30	27	34	31	30	34	29	28	34	26	25	34	25	24	34	24	24	33	24	24	32	40 / 35 / 35
G	n/a	29	26	33	31	29	34	28	27	33	25	24	34	24	23	34	23	23	33	23	23	32	40 / 35 / 35
Council and State-Owned Residential Receivers																							
286e	n/a	16	12	16	16	15	18	16	13	16	13	12	17	14	11	16	11	11	17	10	10	17	40 / 35 / 35
286f	n/a	15	11	17	14	14	19	14	12	18	12	11	18	13	11	18	11	11	18	10	10	18	40 / 35 / 35
N1	n/a	26	16	21	24	23	27	27	23	27	25	25	29	26	23	27	22	22	27	23	22	26	40 / 35 / 35
N2	n/a	26	16	22	24	23	27	27	24	27	26	26	29	26	24	27	22	22	27	23	22	26	40 / 35 / 35
N3	n/a	26	16	22	25	24	27	27	24	27	26	26	29	26	24	27	22	22	27	23	22	26	40 / 35 / 35
N4	n/a	26	22	28	27	25	29	27	25	28	27	27	30	26	24	28	22	22	27	23	22	26	40 / 35 / 35
N5	n/a	27	24	29	28	27	31	29	26	30	28	28	31	29	28	33	26	26	33	26	26	30	40 / 35 / 35
N6	n/a	27	24	29	28	28	31	29	28	31	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
N7	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
N8	n/a	27	24	29	29	27	31	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
N9	n/a	27	24	29	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	25	30	40 / 35 / 35
N10	n/a	27	24	30	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	40 / 35 / 35
N11	n/a	27	24	30	29	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	31	40 / 35 / 35
N12	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N13	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N14	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N15	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N16	n/a	27	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N17	n/a	27	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N18	n/a	27	24	29	28	27	31	29	27	32	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N19	n/a	27	24	29	28	27	31	29	27	32	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N20	n/a	27	24	29	28	28	32	29	27	32	29	29	33	29	28	33	25	25	33	26	25	30	40 / 35 / 35
N21	n/a	27	24	30	28	28	32	29	27	32	30	30	33	29	27	34	26	25	33	26	26	30	40 / 35 / 35
N22	n/a	27	23	32	27	27	33	28	26	31	26	24	32	22	21	32	20	20	31	19	20	29	40 / 35 / 35
N23	n/a	27	22	32	27	27	33	28	26	31	26	24	31	22	21	32	20	20	31	19	20	29	40 / 35 / 35
N24	n/a	27	22	32	27	27	33	27	26	31	26	24	31	22	21	32	20	20	30	19	20	29	40 / 35 / 35
N25	n/a	26	23	31	27	27	32	27	26	30	26	24	31	22	21	32	21	21	30	20	20	29	40 / 35 / 35
N26	n/a	26	23	31	27	27	32	27	26	30	26	24	31	23	21	32	21	21	30	20	20	29	40 / 35 / 35
N27	n/a	26	23	31	27	27	32	27	26	30	26	24	31	23	21	31	21	21	30	20	20	29	40 / 35 / 35
N28	n/a	29	25	34	30	30	35	28	27	34	25	23	34	23	21	33	21	21	32	20	20	32	40 / 35 / 35
Mine-Owned Residential Receivers																							

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
23	n/a	33	30	39	32	31	39	33	30	39	30	30	39	31	30	39	30	30	38	30	30	38	n/a
68	n/a	36	31	38	34	32	38	32	32	37	31	31	37	31	31	38	31	31	37	31	31	37	n/a
80a	n/a	34	28	36	33	31	37	31	30	37	29	28	36	28	27	37	28	28	36	27	27	35	n/a
135	n/a	39	30	41	40	38	45	34	31	42	31	26	38	26	21	36	20	19	35	17	17	35	n/a
135b	n/a	39	30	41	40	38	45	34	31	42	31	26	38	27	21	36	20	19	35	17	17	35	n/a
139	n/a	38	25	36	34	32	41	33	31	40	34	30	39	29	20	37	19	19	35	17	17	35	n/a
158	n/a	37	24	37	40	38	47	38	36	45	39	39	46	34	32	44	30	30	40	31	30	39	n/a
231	n/a	34	28	36	33	31	37	31	30	37	29	28	36	28	27	37	28	28	36	27	27	35	n/a
263	n/a	32	30	35	31	31	36	32	30	36	31	31	36	33	32	38	32	32	38	31	31	36	n/a
1p	n/a	34	25	38	35	34	40	33	30	41	30	22	37	22	20	35	20	20	34	18	18	34	n/a
1z	n/a	34	23	33	37	37	38	36	32	41	36	36	44	29	27	34	23	23	37	20	19	36	n/a
1ab	n/a	34	23	33	38	37	40	37	33	42	37	37	44	30	29	36	24	24	38	21	20	36	n/a
1ac	n/a	34	32	39	34	33	40	34	32	39	32	31	39	32	31	39	31	31	39	32	31	39	n/a
1ad	n/a	20	15	24	21	21	28	24	21	27	23	22	29	23	23	31	20	20	30	16	15	29	n/a
1ae	n/a	40	38	43	38	38	44	39	38	43	38	38	43	38	38	43	38	38	43	38	38	43	n/a
1af	n/a	37	34	39	36	35	40	35	34	39	34	34	39	34	34	39	34	34	39	34	34	39	n/a
1ag	n/a	37	33	39	35	34	39	34	33	38	33	33	38	33	33	39	33	33	39	33	33	39	n/a
1ah	n/a	36	30	38	34	32	38	32	31	37	31	30	37	30	30	37	30	30	38	30	30	37	n/a
1ai	n/a	36	30	38	34	32	38	32	31	37	31	30	37	30	30	37	30	30	38	30	30	37	n/a
1aj	n/a	36	30	37	34	32	38	32	31	37	31	30	37	30	30	37	30	30	37	30	30	37	n/a
1ak	n/a	36	30	37	34	32	38	32	31	38	31	30	37	30	30	38	30	30	37	30	30	37	n/a
1al	n/a	36	30	37	34	32	38	32	31	38	31	30	37	30	30	38	30	30	37	30	30	37	n/a

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
1am	n/a	36	28	37	34	31	38	31	29	38	29	27	37	27	27	37	27	27	36	27	27	36	n/a
1ar	n/a	35	27	36	34	32	38	31	29	39	29	25	37	25	25	37	25	25	36	24	24	36	n/a
1as	n/a	35	27	36	34	32	38	31	29	39	29	25	37	25	24	37	24	24	36	24	24	36	n/a
1aw	n/a	34	26	34	33	31	36	32	29	40	29	24	36	23	23	36	23	23	35	22	22	35	n/a
1ax	n/a	35	26	35	34	32	37	32	29	39	29	24	36	24	23	36	23	23	35	22	22	35	n/a
1bb	n/a	37	33	39	36	34	39	33	33	39	33	32	39	32	32	39	32	32	39	32	32	39	n/a
1bc	n/a	35	26	34	34	32	37	32	29	40	29	24	36	23	23	36	23	23	35	22	22	35	n/a
1bd	n/a	21	18	26	23	22	29	24	21	27	24	23	29	24	23	30	22	21	30	18	15	27	n/a
1bf	n/a	48	33	43	45	43	49	40	38	48	41	39	44	37	24	35	22	22	34	19	19	36	n/a
1bg	n/a	47	33	43	44	43	48	42	40	47	43	38	44	37	23	35	22	22	35	19	19	37	n/a
2i	n/a	38	35	40	36	36	40	36	35	40	35	35	40	35	35	40	35	35	40	35	35	40	n/a
246	n/a	21	19	26	21	21	27	22	21	27	21	21	27	23	22	28	22	22	28	21	21	26	n/a
246b	n/a	21	19	26	21	21	27	22	21	27	22	22	27	24	23	29	22	22	28	21	21	27	n/a
2b	n/a	35	31	39	31	31	40	37	30	40	30	29	40	33	29	39	29	29	39	29	29	39	n/a
2d	n/a	33	30	36	32	31	36	32	31	35	30	30	36	30	30	36	30	30	36	30	30	35	n/a
2e	n/a	43	41	46	41	41	47	42	41	46	41	41	46	41	41	46	41	41	46	41	41	46	n/a
2f	n/a	53	53	54	53	53	54	53	53	54	53	53	54	53	53	54	53	53	54	53	53	54	n/a
2n	n/a	22	20	28	21	21	28	22	21	28	22	22	28	23	22	29	22	22	29	21	21	27	n/a
2o	n/a	27	25	30	27	27	31	27	26	31	27	27	31	29	28	32	28	28	32	26	26	30	n/a
2p	n/a	27	26	30	27	27	31	28	27	31	27	27	31	29	29	32	28	28	32	26	26	30	n/a
2r	n/a	27	27	31	27	27	31	28	27	31	28	28	32	29	29	33	28	28	32	27	27	31	n/a
2s	n/a	27	27	31	27	27	31	28	27	31	28	28	32	29	29	33	28	28	32	26	27	30	n/a

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
2w	n/a	30	29	34	30	30	35	30	30	34	30	30	35	31	31	36	31	31	35	29	29	34	n/a
2x	n/a	29	25	36	27	26	37	29	23	36	23	23	37	26	22	36	22	22	36	22	22	35	n/a
2y	n/a	29	25	37	27	26	37	29	24	37	24	23	37	26	23	37	23	23	36	22	22	36	n/a
2z	n/a	30	25	37	27	27	37	29	24	37	24	24	37	26	23	37	23	23	36	23	23	36	n/a
2aa	n/a	30	25	37	27	26	37	29	24	37	24	24	37	26	23	37	23	23	36	22	22	36	n/a
2ab	n/a	30	26	37	27	27	37	30	25	37	25	25	37	27	24	37	24	24	36	24	23	36	n/a
2ad	n/a	30	26	37	28	27	37	30	25	37	26	26	37	28	25	37	25	25	37	25	24	36	n/a
2af	n/a	31	28	37	29	29	38	31	27	37	27	27	37	28	26	37	26	26	37	26	26	36	n/a
2ai	n/a	30	26	39	28	28	38	30	25	36	25	24	37	25	24	36	24	24	35	24	24	34	n/a
2aj	n/a	33	30	39	31	31	40	33	30	39	30	30	39	31	30	39	30	30	39	30	29	39	n/a
2al	n/a	34	31	39	31	31	40	36	29	40	29	29	40	33	29	39	29	29	38	29	29	39	n/a
2am	n/a	31	28	37	29	29	38	31	27	37	27	27	37	28	27	37	26	26	37	26	26	36	n/a
2an	n/a	27	26	30	27	27	31	28	27	31	27	27	31	29	29	32	28	28	32	26	27	30	n/a
2ao	n/a	27	26	30	27	27	31	28	27	31	27	27	31	29	29	32	28	28	32	26	27	31	n/a
7	n/a	29	25	36	27	26	36	28	23	36	23	23	36	25	22	36	22	22	35	22	22	35	n/a
211	n/a	29	26	35	28	27	35	28	25	35	26	25	35	26	25	35	25	25	35	25	24	34	n/a
299	n/a	23	22	26	23	23	26	23	23	26	22	22	27	23	23	27	23	22	27	21	21	26	n/a
487b	n/a	24	23	27	24	24	28	24	23	27	23	23	27	25	24	28	23	23	28	22	22	27	n/a
5f	n/a	29	25	36	27	26	36	28	23	36	23	23	36	25	22	36	22	22	35	22	22	35	n/a
5g	n/a	29	25	36	26	26	36	28	23	36	23	23	36	25	22	36	22	22	36	22	22	35	n/a
5i	n/a	23	22	26	23	23	26	23	23	26	23	23	27	25	24	28	24	24	27	22	22	26	n/a
5j	n/a	20	18	23	19	20	24	20	19	24	19	19	24	21	20	25	20	20	25	18	18	23	n/a

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
5k	n/a	23	22	26	23	23	27	24	23	26	23	23	27	25	25	28	24	24	28	22	22	26	n/a
5l	n/a	23	22	27	23	23	27	23	23	27	23	23	27	24	23	28	23	23	27	22	22	26	n/a
5m	n/a	25	24	29	25	25	29	26	25	29	26	26	29	27	26	30	26	26	30	25	25	28	n/a
5p	n/a	25	24	29	25	25	29	26	25	29	25	25	29	27	26	30	26	26	30	25	25	29	n/a
5r	n/a	27	26	32	27	27	33	27	27	32	27	27	33	28	28	33	27	28	33	27	27	31	n/a
5t	n/a	24	23	32	23	24	33	24	23	32	24	23	33	24	24	33	23	24	32	22	23	31	n/a
5v	n/a	21	18	26	19	19	27	20	19	26	20	20	27	22	20	28	19	19	27	18	17	26	n/a
5x	n/a	20	19	26	19	20	27	20	19	26	20	20	27	21	21	28	19	19	28	18	18	26	n/a
5y	n/a	27	24	33	26	26	33	25	23	33	23	23	33	24	22	33	22	22	33	22	22	32	n/a
5z	n/a	27	24	33	26	26	33	25	23	33	23	23	33	24	23	33	22	23	33	22	22	32	n/a
5aa	n/a	27	24	33	26	26	33	25	23	33	23	23	33	24	23	33	22	22	33	22	22	32	n/a
5ab	n/a	27	25	32	27	26	33	26	24	32	24	24	33	25	24	33	24	24	32	23	23	31	n/a
5ad	n/a	28	25	33	27	26	33	26	24	33	25	24	33	25	24	33	24	24	33	23	23	32	n/a
5af	n/a	28	25	33	27	26	33	26	24	33	24	24	33	25	24	33	24	24	33	23	23	31	n/a
5ag	n/a	22	22	24	22	22	25	22	22	24	22	22	25	24	23	26	23	23	26	22	22	24	n/a
5ah	n/a	22	21	24	21	22	24	22	22	24	22	22	25	24	23	26	23	23	26	22	22	24	n/a
5ai	n/a	23	22	25	22	23	25	23	23	25	23	23	26	25	24	27	24	24	27	23	23	25	n/a
5aj	n/a	24	23	26	23	23	27	24	23	26	24	24	27	25	25	28	25	25	28	24	24	26	n/a
5ak	n/a	24	23	27	24	24	27	24	24	27	24	24	27	26	25	28	25	25	28	24	24	27	n/a
5al	n/a	19	17	24	19	19	24	20	19	24	20	20	25	21	21	26	20	20	26	19	19	24	n/a
5am	n/a	26	24	30	26	26	31	27	26	30	26	26	31	28	27	32	27	27	32	27	27	30	n/a
3a	n/a	32	25	35	33	33	36	33	31	36	32	31	37	28	25	36	21	21	34	22	21	33	n/a

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
3b	n/a	32	25	35	33	33	36	33	31	36	33	31	37	29	25	36	21	21	35	22	22	33	n/a
3c	n/a	38	23	36	38	38	46	37	35	44	39	39	45	33	31	43	29	29	39	28	27	38	n/a
3d	n/a	31	25	35	33	33	36	32	30	36	32	31	37	29	24	36	22	22	35	23	22	33	n/a
3e	n/a	31	24	34	33	32	36	32	30	36	32	31	37	29	24	36	22	22	35	24	22	33	n/a
3f	n/a	31	24	34	32	32	35	32	30	36	32	31	37	28	24	36	24	24	35	24	23	33	n/a
3g	n/a	34	24	35	38	36	43	37	35	41	37	37	42	34	33	43	30	29	40	32	30	38	n/a
3i	n/a	31	24	34	33	32	35	33	31	36	34	33	38	31	29	39	26	26	36	29	28	34	n/a
3j	n/a	30	24	33	31	30	34	31	29	34	32	30	36	28	26	36	24	23	34	26	25	32	n/a
3k	n/a	29	20	29	31	29	36	30	28	34	31	31	38	30	30	38	27	26	36	26	25	37	n/a
3m	n/a	32	27	34	35	33	39	33	30	40	35	35	40	38	36	42	33	33	41	33	32	41	n/a
3n	n/a	31	24	33	34	32	38	33	32	38	34	34	38	32	31	39	28	28	38	29	29	36	n/a
3o	n/a	21	16	22	23	22	34	23	21	30	23	24	33	24	23	33	22	22	29	20	19	28	n/a
3p	n/a	21	16	23	23	22	35	23	21	29	24	24	32	25	24	33	24	23	31	22	20	28	n/a
3r	n/a	24	18	26	27	26	30	26	23	30	26	26	31	27	26	33	24	24	32	21	19	31	n/a
3s	n/a	24	18	26	26	23	29	25	22	28	27	27	31	27	26	33	24	24	32	21	19	28	n/a
3t	n/a	31	20	29	32	30	36	31	28	35	32	33	38	30	30	38	27	27	36	27	26	37	n/a
3u	n/a	31	20	30	33	31	36	32	30	35	33	33	38	31	31	38	27	27	36	27	26	36	n/a
3v	n/a	37	26	37	42	39	46	38	36	45	40	40	45	38	38	46	34	34	45	37	36	41	n/a
274	n/a	18	14	19	19	18	22	20	17	21	19	19	23	21	19	24	18	19	23	14	14	21	n/a
416	n/a	22	18	25	21	21	26	23	19	25	20	20	26	23	21	27	20	20	28	17	16	24	n/a
463	n/a	17	12	22	13	13	24	17	12	22	13	12	23	17	13	23	13	13	24	11	11	21	n/a
7b	n/a	17	14	22	16	16	22	17	15	22	15	15	22	17	16	22	15	14	23	13	13	20	n/a

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
7c	n/a	17	14	21	16	15	22	17	15	21	15	15	21	17	16	22	14	14	22	13	12	19	n/a
7d	n/a	18	13	24	14	14	24	18	13	23	14	14	24	19	15	25	14	14	24	12	12	22	n/a
7e	n/a	16	14	19	14	14	19	15	14	19	14	14	19	16	14	19	14	14	19	13	13	17	n/a
7f	n/a	15	11	18	12	12	19	15	11	18	12	11	20	15	12	19	12	12	20	10	10	17	n/a
7g	n/a	25	20	27	22	22	29	25	20	28	21	21	28	25	22	29	21	21	30	18	17	27	n/a
7h	n/a	23	17	27	21	21	29	24	19	28	20	20	29	24	20	30	19	18	30	16	16	27	n/a
7i	n/a	22	18	26	21	21	27	23	19	26	20	20	27	23	20	28	19	19	29	16	15	26	n/a
7j	n/a	23	17	27	19	19	28	23	18	27	18	17	28	23	18	29	18	17	29	16	16	27	n/a
7k	n/a	22	19	25	21	21	27	23	20	26	21	21	27	23	22	28	21	20	28	18	17	25	n/a
7l	n/a	17	14	22	16	16	22	17	15	22	15	15	22	17	16	22	15	14	23	13	13	20	n/a
7m	n/a	24	19	28	21	21	30	25	20	29	21	21	30	25	21	31	20	20	31	17	17	28	n/a
7n	n/a	26	23	30	27	27	30	26	24	29	25	23	31	22	21	30	21	21	29	20	20	28	n/a
7o	n/a	24	22	28	26	25	28	25	24	28	24	23	30	21	20	29	20	20	28	20	20	27	n/a
8b	n/a	17	15	21	17	17	21	17	16	21	16	16	21	18	17	22	16	16	22	15	15	20	n/a
8c	n/a	16	14	21	16	16	21	16	15	21	15	15	21	17	16	22	15	15	22	13	13	19	n/a
8e	n/a	11	8	16	8	8	18	10	8	17	7	7	18	10	8	19	8	8	18	6	5	16	n/a
8f	n/a	19	15	24	17	17	25	19	15	24	17	17	24	20	17	25	17	16	26	15	14	23	n/a
8h	n/a	16	14	20	14	14	21	16	14	20	14	14	21	16	14	21	14	14	21	13	13	19	n/a
8i	n/a	16	11	20	12	12	22	16	11	20	13	12	22	17	13	22	12	12	22	10	11	19	n/a
8j	n/a	17	15	21	17	17	21	17	16	21	16	16	21	18	17	22	16	16	22	15	15	19	n/a
8k	n/a	10	7	16	7	7	18	10	7	17	7	7	18	10	8	19	8	8	18	6	5	16	n/a
8l	n/a	16	14	21	14	15	21	16	14	20	14	14	21	16	15	21	15	14	21	13	13	19	n/a

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
8m	n/a	16	14	21	15	15	22	16	14	21	14	14	21	16	15	21	15	15	21	13	13	19	n/a
8n	n/a	16	11	21	12	12	22	16	11	21	13	12	22	17	13	22	12	12	22	10	11	20	n/a
8o	n/a	18	16	23	17	17	24	18	16	23	17	17	23	18	17	24	16	16	24	15	14	22	n/a
8p	n/a	20	18	24	19	19	25	20	18	24	19	19	25	21	20	26	19	19	26	18	18	24	n/a
Mal1	n/a	22	20	23	22	21	24	21	20	23	20	20	24	21	20	24	20	20	24	19	19	23	n/a
Mal2	n/a	19	16	19	19	19	20	18	17	20	17	17	21	18	18	21	18	18	22	18	18	21	n/a
Mal3	n/a	21	19	22	21	21	23	20	19	22	19	19	23	21	20	23	20	20	24	19	19	23	n/a
Aged Care Receivers																							
658a	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
658b	1	32	29	35	32	31	35	30	29	34	29	29	35	29	29	35	29	29	35	28	28	34	48 / 43 / 38
658c	1	31	29	35	32	31	35	30	29	34	29	28	35	29	28	35	28	28	34	28	28	34	48 / 43 / 38
658d	1	32	29	35	32	31	35	30	29	34	29	29	35	29	29	35	28	29	35	28	28	34	48 / 43 / 38
658e	1	32	29	35	32	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	48 / 43 / 38
Accommodation Receivers																							
622b	n/a	30	25	34	30	28	34	29	26	33	26	24	34	25	24	34	24	24	34	24	24	33	53 / 48 / 43
622n	n/a	31	29	35	31	31	35	31	29	35	29	29	35	29	29	35	29	29	35	28	29	34	53 / 48 / 43
622u	n/a	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	35	29	29	34	53 / 48 / 43
School Receivers																							
N30	n/a	32	29	36	32	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	43 / 43 / -
N31	n/a	32	29	36	32	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	43 / 43 / -
N32	n/a	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	43 / 43 / -
N33	n/a	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	43 / 43 / -

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL D/E/N (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
Church Receivers																							
520	n/a	28	25	33	29	29	33	27	25	32	25	24	34	22	21	32	21	21	31	20	20	31	48 / 48 / 48
658b	1	32	29	35	32	31	35	30	30	35	29	29	35	29	29	35	29	29	35	28	29	34	48 / 48 / 48
658c	1	32	29	35	32	31	35	30	29	34	29	29	35	29	28	35	28	29	35	28	28	34	48 / 48 / 48
616c	n/a	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 48 / 48
N34	n/a	26	23	31	27	27	32	27	26	30	26	24	31	22	21	32	21	21	30	20	20	29	48 / 48 / 48
Correctional Centre Receivers																							
MP1	n/a	26	22	31	26	26	32	27	25	30	24	22	30	22	20	29	20	20	29	20	20	28	53 / 48 / 43
MP42	n/a	26	22	31	27	26	31	27	25	29	25	23	30	22	21	31	20	20	29	20	20	28	53 / 48 / 43
MP80	n/a	25	22	29	26	26	29	26	24	29	25	23	30	22	21	30	20	20	29	20	20	27	53 / 48 / 43
Commercial Receivers																							
6	n/a	29	25	35	27	27	36	28	23	36	24	24	36	25	23	36	23	22	35	22	22	35	63 / 63 / 63
195e	n/a	31	23	35	30	28	37	29	27	34	28	25	35	24	19	35	19	19	33	18	18	33	63 / 63 / 63
140b-1	n/a	29	25	35	31	30	35	28	26	34	25	23	35	23	21	34	21	21	33	21	21	32	63 / 63 / 63
140b-2	n/a	29	25	34	31	30	35	28	26	34	25	23	34	23	21	34	21	21	33	21	21	32	63 / 63 / 63
140b-3	n/a	29	25	34	31	30	35	28	26	34	25	23	35	23	21	34	21	21	32	21	21	32	63 / 63 / 63
140b-4	n/a	29	25	35	31	30	35	28	26	34	24	23	35	23	21	34	21	21	33	21	21	32	63 / 63 / 63
202c	n/a	31	25	36	32	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
202d	n/a	31	25	36	33	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
202e	n/a	31	25	36	32	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
202f	n/a	31	25	36	32	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
202g	n/a	31	25	36	32	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
472d	n/a	16	14	19	15	15	20	16	14	20	15	15	20	17	16	22	15	15	21	13	13	19	63 / 63 / 63
472e	n/a	15	14	19	15	15	21	15	14	20	15	15	21	16	16	22	15	15	21	13	13	19	63 / 63 / 63
472f	n/a	18	16	23	18	18	23	18	17	23	18	18	23	19	19	24	17	17	24	16	15	21	63 / 63 / 63
472g	n/a	19	17	23	19	19	24	20	18	24	19	19	24	21	20	25	19	19	25	18	18	23	63 / 63 / 63
472h	n/a	18	17	23	18	18	24	19	18	24	19	19	24	20	20	25	18	18	25	17	16	23	63 / 63 / 63
472i	n/a	17	15	22	17	17	22	17	16	22	17	17	22	18	17	23	16	16	22	15	14	19	63 / 63 / 63
472j	n/a	16	14	19	14	14	20	15	14	19	14	14	20	16	15	21	15	14	20	12	12	18	63 / 63 / 63
472k	n/a	15	13	18	14	14	19	15	13	19	14	14	20	15	15	21	14	14	20	12	11	18	63 / 63 / 63
472l	n/a	19	17	23	19	19	24	20	18	24	19	19	24	21	20	25	19	19	25	18	18	23	63 / 63 / 63
472m	n/a	19	17	23	18	18	24	20	18	24	19	19	24	21	20	25	19	18	25	17	16	23	63 / 63 / 63
489	n/a	24	24	34	24	24	34	25	24	33	24	24	34	25	25	34	24	25	33	23	24	33	63 / 63 / 63
540	n/a	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
546a	n/a	32	30	36	32	31	36	31	30	35	30	30	36	30	30	36	30	30	35	29	29	35	63 / 63 / 63
546b	n/a	32	30	36	32	31	36	31	30	35	30	30	36	30	30	36	30	30	35	29	29	35	63 / 63 / 63
546c	n/a	32	30	36	32	31	36	31	30	35	30	30	36	30	30	36	30	30	35	29	29	35	63 / 63 / 63
617b	n/a	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617c	n/a	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617d	n/a	31	29	35	32	31	35	31	29	34	30	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617e	n/a	31	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617f	n/a	31	29	35	31	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617g	n/a	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	34	29	29	34	63 / 63 / 63
617h	n/a	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617i	n/a	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL
		2026			2028			2031			2034			2041			2044			2047			D/E/N
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	(dBA)
620	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	29	34	63 / 63 / 63
622ah	n/a	31	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	35	29	29	34	63 / 63 / 63
622ai	n/a	31	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	35	29	29	34	63 / 63 / 63
611aj	n/a	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	35	28	29	34	63 / 63 / 63
622ak	n/a	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	28	29	34	63 / 63 / 63
625	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
629	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
626	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	29	34	63 / 63 / 63
627	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
628	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
630a	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
630b	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	28	29	34	28	28	34	63 / 63 / 63
630c	n/a	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
630d	n/a	31	29	35	31	30	35	30	29	34	29	29	35	29	29	35	28	29	34	28	28	34	63 / 63 / 63
656	n/a	32	29	35	32	31	35	31	30	34	29	29	35	29	29	35	29	29	35	29	29	34	63 / 63 / 63
674a	n/a	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	63 / 63 / 63
674b	n/a	33	29	36	33	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	63 / 63 / 63
818a	n/a	32	27	35	32	30	35	30	28	35	27	25	35	26	25	35	25	25	34	25	25	34	63 / 63 / 63
818b	n/a	31	27	35	32	30	35	30	28	35	27	26	35	26	25	35	25	25	34	25	25	34	63 / 63 / 63
844b	n/a	30	26	34	31	30	35	28	27	34	25	23	34	24	23	34	23	23	33	22	22	33	63 / 63 / 63
872b	n/a	29	25	34	31	30	35	28	26	34	24	23	34	23	21	33	21	21	32	20	20	32	63 / 63 / 63
1085	n/a	26	24	29	28	27	31	28	27	31	29	29	33	28	27	33	25	25	33	26	25	30	63 / 63 / 63
2ap	n/a	27	25	30	27	27	31	27	27	31	27	27	31	29	28	32	28	28	32	26	26	30	63 / 63 / 63

Receiver ID	NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					PNTL D/E/N (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
2aq	n/a	27	27	31	27	27	31	28	27	31	28	28	32	29	29	33	28	28	32	26	27	31	63 / 63 / 63
2ar	n/a	27	27	31	27	27	31	28	27	31	28	28	32	29	29	33	28	28	32	26	27	30	63 / 63 / 63
5h	n/a	20	19	24	20	20	24	20	19	24	20	20	24	21	21	25	20	20	25	19	19	23	63 / 63 / 63
5w	n/a	21	19	26	20	20	27	21	20	27	20	20	27	21	20	28	20	20	27	18	18	25	63 / 63 / 63
5an	n/a	21	19	24	20	20	24	20	19	24	20	20	24	21	21	25	21	20	25	19	19	23	63 / 63 / 63
5ao	n/a	20	19	24	20	20	24	20	19	24	20	20	24	21	21	25	20	20	25	19	19	23	63 / 63 / 63
5ap	n/a	21	19	26	20	20	27	21	19	26	20	20	27	22	21	28	20	20	27	18	18	25	63 / 63 / 63
8q	n/a	17	14	21	16	16	21	16	15	20	15	16	21	17	16	22	15	15	22	14	14	19	63 / 63 / 63
Mal4	n/a	19	17	21	20	18	21	18	16	21	17	16	22	16	15	22	15	14	22	16	16	21	63 / 63 / 63
Mal5	n/a	19	16	21	20	18	21	18	16	21	17	16	22	16	15	22	15	14	22	16	16	21	63 / 63 / 63
Mal6	n/a	19	16	22	19	18	21	19	16	21	17	16	23	17	15	23	15	15	23	16	16	22	63 / 63 / 63
UHSC2	n/a	28	24	31	30	29	33	30	29	33	31	31	34	30	29	35	27	26	35	27	27	31	63 / 63 / 63
UHSC3	n/a	28	24	31	30	29	33	30	28	33	31	30	34	30	29	35	27	26	34	27	27	31	63 / 63 / 63
UHSC4	n/a	28	24	31	30	29	33	30	28	33	31	31	34	30	29	35	27	26	35	27	27	31	63 / 63 / 63
N29	n/a	27	23	32	28	27	32	27	25	31	26	24	33	22	21	32	20	20	31	19	20	30	63 / 63 / 63

Notes:

- D = Day (7.00 am – 6.00 pm Monday to Saturday, and 8.00 am – 6.00 pm Sundays and public holidays); E = Evening (6.00 pm – 10.00 pm); N = the remaining periods.
- PNTL = Project Noise Trigger Level
- Levels highlighted in yellow indicate predictions under the relevant Fact Sheet D meteorological conditions in excess of the Project noise trigger level.
- Mine-owned residential receivers are included for the purpose of information only.

1. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted air impacts. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.

APPENDIX H

PREDICTED CUMULATIVE NOISE LEVELS

Table H-1 Project Amenity Noise Predictions

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
Privately-Owned Residential Receivers																							
4	n/a	28	25	33	27	26	33	26	23	33	24	24	34	25	23	34	23	23	33	22	22	32	48 / 43 / 38
19[1]	n/a	31	28	37	30	29	37	31	28	37	27	27	37	29	27	37	27	27	37	27	27	36	48 / 43 / 38
20[1,2]	n/a	31	28	37	29	29	38	31	27	37	28	27	37	29	27	37	27	27	37	27	27	36	48 / 43 / 38
21[1,2]	n/a	31	28	37	29	29	38	31	27	37	27	27	38	29	27	38	27	27	37	27	27	37	48 / 43 / 38
35	n/a	35	32	38	34	33	38	34	33	38	32	32	38	32	32	38	32	32	38	32	32	37	48 / 43 / 38
35b	n/a	35	32	38	34	33	38	34	33	38	33	32	38	32	32	38	32	32	38	32	32	37	48 / 43 / 38
43[4]	n/a	33	30	37	30	31	38	33	30	38	31	31	38	34	32	39	31	31	39	29	30	38	48 / 43 / 38
43b[4]	n/a	30	26	37	26	27	38	30	26	38	27	27	38	31	28	39	27	27	39	25	25	37	48 / 43 / 38
45[3]	n/a	28	25	33	26	26	34	28	26	34	26	26	34	28	27	35	26	26	35	25	25	33	48 / 43 / 38
45b	n/a	29	26	34	26	27	34	29	26	34	27	27	35	30	27	35	26	27	35	25	26	34	48 / 43 / 38
45c	n/a	29	26	34	26	27	34	29	26	34	27	27	35	30	27	35	27	27	35	25	26	34	48 / 43 / 38
47[3]	n/a	31	25	39	26	26	40	31	25	39	26	26	40	31	26	40	26	26	40	24	24	39	48 / 43 / 38
67[3]	n/a	36	31	38	34	32	38	32	31	37	31	30	37	30	30	37	30	30	38	30	30	37	48 / 43 / 38
74[1]	n/a	36	30	37	34	32	38	32	31	38	31	30	37	30	30	38	30	30	37	30	30	37	48 / 43 / 38
77[1]	n/a	34	29	37	33	31	37	30	29	37	29	28	37	28	28	37	28	28	36	28	28	36	48 / 43 / 38
79[1]	n/a	33	28	36	33	31	37	31	30	37	29	28	36	28	28	36	28	28	35	27	27	35	48 / 43 / 38
82	n/a	32	28	36	31	30	36	30	29	35	28	27	35	28	27	35	27	27	35	27	27	34	48 / 43 / 38
83	n/a	32	28	36	32	30	36	30	29	36	28	27	36	28	27	36	27	27	35	27	27	34	48 / 43 / 38
84a[1]	n/a	33	28	36	32	30	37	30	30	36	29	28	36	28	28	36	27	27	35	27	27	35	48 / 43 / 38
84b	n/a	15	13	23	16	16	26	18	16	25	17	16	25	17	16	27	15	14	27	11	10	24	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
86a[1]	n/a	35	28	36	34	31	38	31	30	37	29	27	36	27	27	37	27	27	36	27	27	36	48 / 43 / 38
86b	n/a	31	26	36	32	30	36	29	27	36	26	24	36	24	20	35	20	20	33	19	19	33	48 / 43 / 38
96[3]	n/a	35	26	35	34	32	37	32	29	39	29	24	37	24	23	37	23	23	36	23	23	36	48 / 43 / 38
102[3]	n/a	35	26	34	34	32	37	32	29	40	30	23	36	23	23	36	22	22	35	21	21	35	48 / 43 / 38
108[3]	n/a	33	25	33	32	30	36	33	30	40	30	23	36	22	22	35	21	21	34	20	20	34	48 / 43 / 38
112[3]	n/a	32	25	31	31	29	35	32	29	36	30	22	35	22	21	34	21	21	33	19	19	33	48 / 43 / 38
118[3]	n/a	33	25	31	32	30	36	33	30	41	31	22	36	22	21	34	20	20	33	18	18	33	48 / 43 / 38
120[3]	n/a	34	25	32	34	32	36	33	30	41	31	22	36	21	21	35	20	20	33	18	18	34	48 / 43 / 38
120c[3]	n/a	34	25	32	33	31	36	33	30	41	31	22	36	21	20	35	20	20	33	18	18	33	48 / 43 / 38
121[3]	n/a	33	25	31	33	31	36	33	30	41	31	22	36	21	20	34	20	19	33	18	18	32	48 / 43 / 38
136[3]	n/a	32	28	39	37	35	41	34	31	38	30	26	35	25	20	34	19	19	33	17	17	34	48 / 43 / 38
140a[1]	n/a	36	24	37	34	33	40	34	32	39	33	29	38	27	20	37	19	19	35	17	17	34	48 / 43 / 38
140c[1]	n/a	32	25	37	34	32	37	30	28	37	26	23	37	24	21	36	20	20	34	20	20	34	48 / 43 / 38
143a[3]	n/a	39	24	37	35	35	40	34	32	42	36	34	43	32	27	40	21	21	37	20	20	36	48 / 43 / 38
143b[3]	n/a	37	24	36	40	38	46	39	37	45	39	39	45	35	33	44	31	30	40	33	33	39	48 / 43 / 38
147[3]	n/a	38	23	36	37	37	40	37	35	44	37	37	45	32	29	43	25	25	39	24	23	39	48 / 43 / 38
153a[3]	n/a	30	25	35	33	33	39	35	32	39	35	35	42	38	36	44	35	34	42	36	32	45	48 / 43 / 38
154[1]	n/a	36	26	36	39	36	42	36	33	42	39	38	43	36	36	43	32	33	42	33	32	42	48 / 43 / 38
154b	n/a	36	26	36	38	36	42	36	33	41	38	38	43	36	36	42	32	32	42	32	32	42	48 / 43 / 38
156a[3]	n/a	37	25	37	42	39	47	40	38	47	41	41	46	37	36	46	32	32	42	35	34	40	48 / 43 / 38
156b	n/a	24	19	31	19	19	32	24	19	32	20	19	32	25	20	33	19	18	33	16	16	31	48 / 43 / 38
157a[3]	n/a	38	24	37	39	37	45	38	36	46	39	39	46	33	32	44	30	30	41	30	29	40	48 / 43 / 38
157b	n/a	22	17	28	17	17	29	22	17	28	17	17	29	22	17	30	17	16	29	15	14	28	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
159[3]	n/a	35	23	37	39	38	46	38	35	45	38	39	46	33	32	43	30	29	40	31	30	39	48 / 43 / 38
169	n/a	29	20	29	32	29	35	30	28	33	31	31	37	31	30	37	27	26	36	27	26	37	48 / 43 / 38
171	n/a	31	24	32	33	30	37	31	29	35	32	32	37	31	31	37	27	27	36	28	27	35	48 / 43 / 38
172	n/a	30	25	33	33	30	36	31	29	35	32	32	36	31	31	37	27	27	36	29	27	35	48 / 43 / 38
172b	n/a	30	25	33	33	30	36	31	29	36	32	32	36	31	31	37	28	28	36	29	27	35	48 / 43 / 38
172c	n/a	29	25	32	32	30	35	30	29	35	31	32	36	32	31	37	28	28	35	28	27	33	48 / 43 / 38
310	n/a	30	25	33	33	30	36	31	28	35	31	32	36	32	31	36	28	28	36	28	27	35	48 / 43 / 38
173	n/a	29	24	32	31	28	34	28	26	33	30	30	34	30	29	35	26	26	34	27	26	33	48 / 43 / 38
174	n/a	29	24	32	31	28	35	29	26	33	30	30	34	31	30	35	27	26	35	27	26	33	48 / 43 / 38
175	n/a	29	24	32	31	28	35	29	26	33	30	30	34	31	30	35	27	26	35	27	26	33	48 / 43 / 38
175b	n/a	29	24	32	31	28	35	29	26	33	30	30	34	31	30	35	27	26	35	27	26	33	48 / 43 / 38
175c	n/a	29	25	32	31	28	35	29	27	34	30	30	35	31	30	35	27	26	35	28	27	34	48 / 43 / 38
176	n/a	29	24	31	32	29	35	30	27	33	31	31	35	31	30	35	27	27	35	28	27	34	48 / 43 / 38
177	n/a	28	23	30	30	27	33	28	25	33	28	28	33	29	28	34	25	24	34	25	24	32	48 / 43 / 38
178	n/a	28	24	31	31	28	34	29	27	34	31	31	34	31	30	35	28	27	34	27	27	33	48 / 43 / 38
179	n/a	28	24	31	30	28	33	29	27	34	30	31	34	31	30	35	27	27	35	27	26	32	48 / 43 / 38
180	n/a	28	24	31	30	28	33	29	27	33	30	30	34	31	30	35	28	28	34	27	26	32	48 / 43 / 38
180b	n/a	28	24	31	30	29	33	29	28	34	30	31	35	31	31	36	28	28	35	28	27	32	48 / 43 / 38
180c	n/a	27	24	30	28	27	31	27	26	32	29	29	33	29	29	34	27	27	34	26	25	31	48 / 43 / 38
181	n/a	28	24	31	30	29	34	30	29	34	31	31	35	30	29	35	27	26	35	27	27	32	48 / 43 / 38
181c	n/a	29	25	32	31	30	35	32	30	35	32	32	36	31	30	37	28	27	36	29	28	33	48 / 43 / 38
182	n/a	27	24	31	29	28	33	29	28	33	30	30	34	29	28	35	26	25	34	27	26	31	48 / 43 / 38
189	n/a	32	25	35	33	33	37	33	31	37	33	31	37	28	25	37	20	20	34	22	21	33	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
190	n/a	33	25	35	33	33	37	34	32	37	33	31	37	29	25	37	20	20	35	22	21	34	48 / 43 / 38
191	n/a	32	24	35	32	32	37	33	31	36	32	30	36	28	23	36	21	20	34	21	20	33	48 / 43 / 38
192	n/a	32	25	35	32	33	37	33	31	37	33	31	37	28	23	36	20	20	34	21	20	33	48 / 43 / 38
193	2	32	23	35	32	31	37	32	30	36	32	29	36	27	24	36	20	20	34	19	19	33	48 / 43 / 38
193c	n/a	30	22	34	30	29	35	30	28	34	29	27	34	24	21	34	20	20	33	19	19	32	48 / 43 / 38
194	2	31	22	34	31	30	36	30	28	35	29	27	35	24	19	35	19	19	33	18	18	33	48 / 43 / 38
195	2	31	23	35	30	29	36	29	27	35	28	26	35	24	19	35	19	19	33	18	18	33	48 / 43 / 38
197	n/a	30	24	35	30	29	35	29	26	35	27	25	36	23	20	34	19	19	33	19	19	32	48 / 43 / 38
196	2	30	25	35	30	29	35	29	27	34	27	24	35	23	20	34	19	19	32	19	19	32	48 / 43 / 38
195d	n/a	30	25	35	31	29	35	29	27	35	25	24	35	23	20	34	20	19	32	19	19	32	48 / 43 / 38
198	n/a	31	25	35	31	30	35	29	27	35	25	24	35	23	20	34	20	20	33	19	19	32	48 / 43 / 38
198b	n/a	31	25	35	31	30	35	29	27	35	25	24	35	24	20	34	20	20	33	19	19	33	48 / 43 / 38
199	n/a	30	26	35	31	30	35	29	26	35	25	24	35	23	20	34	20	20	32	19	19	32	48 / 43 / 38
200	n/a	30	25	35	31	30	35	28	26	34	25	24	35	23	20	34	20	20	32	19	19	32	48 / 43 / 38
202	n/a	31	25	36	33	31	37	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	48 / 43 / 38
202b	n/a	30	25	35	31	30	36	29	27	35	25	23	35	23	21	34	21	21	33	20	20	32	48 / 43 / 38
203[1]	n/a	32	25	36	33	31	37	30	27	37	26	23	36	24	21	35	21	21	33	20	20	33	48 / 43 / 38
203b	n/a	32	25	36	33	31	37	30	27	37	26	23	36	24	21	35	21	21	33	20	20	33	48 / 43 / 38
203c	n/a	32	25	36	33	31	37	30	27	37	26	23	36	24	21	35	21	21	33	20	20	33	48 / 43 / 38
206	1	31	28	36	31	30	36	31	28	36	28	28	36	29	28	36	28	28	36	28	28	35	48 / 43 / 38
207[1]	n/a	31	28	37	31	30	37	31	28	37	28	28	37	29	27	37	27	27	36	27	27	36	48 / 43 / 38
212	n/a	30	26	35	29	28	36	29	26	35	26	26	36	27	25	35	25	25	35	26	25	34	48 / 43 / 38
212b	n/a	29	26	35	29	28	36	29	26	35	26	26	36	27	25	35	25	25	35	25	25	34	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
213	n/a	30	27	36	29	28	37	30	27	36	27	27	37	28	26	36	26	26	36	27	26	35	48 / 43 / 38
214	n/a	30	27	36	29	28	37	30	27	36	27	27	37	28	26	36	26	26	36	26	26	35	48 / 43 / 38
215	n/a	30	27	36	30	29	37	30	27	36	27	27	37	28	26	37	26	26	36	26	26	36	48 / 43 / 38
216	n/a	30	27	36	30	29	37	30	27	36	27	27	37	28	27	37	26	26	36	27	26	36	48 / 43 / 38
216b	n/a	30	27	36	30	29	37	30	27	36	27	27	37	28	26	37	26	26	36	26	26	36	48 / 43 / 38
217	n/a	31	27	36	30	29	37	30	27	36	27	27	37	28	27	37	27	27	36	27	26	36	48 / 43 / 38
218	n/a	30	27	36	29	28	37	30	27	36	27	27	37	28	26	37	26	26	36	27	26	36	48 / 43 / 38
219	n/a	30	27	36	29	29	37	30	27	36	27	27	37	28	26	37	26	26	36	26	26	36	48 / 43 / 38
220	n/a	30	27	36	30	29	37	30	27	36	27	27	37	28	27	37	26	26	36	27	26	36	48 / 43 / 38
221	n/a	31	28	36	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	26	36	48 / 43 / 38
222	n/a	31	28	37	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	26	36	48 / 43 / 38
223	n/a	31	28	37	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	27	36	48 / 43 / 38
223b	n/a	31	28	36	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	26	36	48 / 43 / 38
224	n/a	31	28	37	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	27	36	48 / 43 / 38
225	n/a	31	28	36	30	29	37	30	27	37	27	27	37	28	27	37	27	27	36	27	26	36	48 / 43 / 38
249	n/a	21	20	26	21	21	26	22	21	26	22	22	27	24	23	28	22	22	27	21	21	26	48 / 43 / 38
252	n/a	20	18	24	19	19	25	20	19	25	19	19	25	21	20	26	20	19	26	18	18	24	48 / 43 / 38
257[1]	n/a	29	27	33	27	27	34	29	27	33	27	27	33	29	28	34	27	27	34	26	26	32	48 / 43 / 38
258a	n/a	25	24	31	24	24	32	25	23	32	24	24	32	26	25	32	24	24	32	23	23	31	48 / 43 / 38
258c	n/a	25	24	31	24	24	32	25	24	31	24	24	32	26	25	32	24	24	32	23	23	31	48 / 43 / 38
259[1]	n/a	27	26	32	25	26	33	26	25	32	25	25	32	27	26	33	25	25	33	24	24	31	48 / 43 / 38
259b	n/a	28	26	32	25	26	32	27	25	32	26	26	32	28	27	33	26	26	33	24	24	31	48 / 43 / 38
260	n/a	24	22	30	23	23	31	23	22	31	23	23	31	24	23	32	23	23	31	22	21	30	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
260a	n/a	23	22	30	23	23	31	23	22	31	22	22	31	24	23	31	23	22	31	21	21	30	48 / 43 / 38
260b	n/a	23	22	29	23	23	30	23	22	30	22	22	30	24	23	31	22	22	30	22	21	29	48 / 43 / 38
261	n/a	28	26	31	27	27	32	27	26	32	26	26	32	28	27	32	26	26	32	25	25	30	48 / 43 / 38
261b	n/a	28	26	31	27	27	32	27	26	32	26	26	32	28	27	32	26	26	32	25	25	30	48 / 43 / 38
271	n/a	23	17	28	20	20	29	24	19	28	19	19	29	23	19	30	19	18	30	16	16	28	48 / 43 / 38
272b	n/a	26	16	29	18	18	31	26	18	30	19	18	31	26	18	32	17	17	32	15	15	30	48 / 43 / 38
272	n/a	26	16	29	18	18	31	26	17	30	18	18	31	26	18	32	17	17	32	15	15	30	48 / 43 / 38
273	n/a	22	19	27	22	21	28	23	20	27	21	21	28	23	21	29	20	20	30	17	17	27	48 / 43 / 38
273b	n/a	23	18	27	20	21	29	24	19	28	20	20	29	23	20	30	19	18	30	16	16	27	48 / 43 / 38
288	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
288b	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
289	n/a	34	31	37	33	32	37	32	31	36	31	31	37	31	31	37	31	31	36	30	30	36	48 / 43 / 38
292	n/a	20	19	24	20	20	25	21	20	25	20	21	25	22	21	26	21	21	26	20	20	24	48 / 43 / 38
292b	n/a	19	17	24	19	19	25	20	18	24	19	19	25	21	20	26	20	20	26	19	18	24	48 / 43 / 38
300	n/a	23	22	26	23	22	26	23	22	26	22	22	27	23	23	27	22	22	27	21	21	25	48 / 43 / 38
298	n/a	23	22	26	22	22	26	23	22	26	21	22	26	23	22	27	22	22	27	21	21	26	48 / 43 / 38
296a	n/a	23	21	26	22	22	27	23	22	27	22	22	26	24	23	27	23	23	27	21	21	26	48 / 43 / 38
296b	n/a	22	21	26	22	22	27	22	21	26	21	21	26	23	23	27	22	22	27	21	21	26	48 / 43 / 38
302a	n/a	23	21	25	22	22	25	22	22	25	22	22	26	22	21	26	21	21	26	19	19	24	48 / 43 / 38
302c	n/a	22	21	25	21	21	25	21	21	25	20	20	25	22	21	26	21	21	25	19	19	24	48 / 43 / 38
401	n/a	16	13	21	19	17	24	20	17	23	19	19	24	20	19	25	18	18	24	14	11	20	48 / 43 / 38
402	n/a	20	16	24	20	19	25	21	18	25	20	20	26	22	21	27	21	20	27	16	15	24	48 / 43 / 38
404	n/a	20	16	24	20	19	26	22	18	25	21	20	27	22	21	28	20	19	27	16	14	24	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
407	n/a	14	11	22	14	13	25	15	13	24	15	14	24	16	15	27	14	13	26	10	9	23	48 / 43 / 38
413b	n/a	18	15	19	16	16	21	18	15	21	16	16	21	18	16	22	16	16	21	15	15	20	48 / 43 / 38
415	n/a	22	19	25	21	21	26	23	20	25	21	21	26	23	21	27	21	20	27	18	17	24	48 / 43 / 38
417	n/a	14	11	17	13	13	20	15	12	19	13	13	20	15	13	20	12	12	19	10	10	15	48 / 43 / 38
418	n/a	21	18	24	20	20	25	21	18	25	19	19	25	22	20	26	19	19	26	16	17	23	48 / 43 / 38
418b	n/a	20	16	23	18	18	25	21	17	24	18	18	25	21	17	25	17	17	26	16	16	23	48 / 43 / 38
419	n/a	15	12	17	12	13	19	15	12	18	12	12	18	15	13	19	12	12	17	11	11	15	48 / 43 / 38
421	n/a	22	18	26	21	21	28	23	19	27	21	20	28	23	21	29	20	19	29	17	17	26	48 / 43 / 38
422a	n/a	23	18	25	25	25	29	25	22	28	26	26	31	26	26	32	24	23	32	21	19	29	48 / 43 / 38
436	n/a	26	23	29	28	27	31	28	27	32	29	29	33	30	30	34	27	27	33	26	25	31	48 / 43 / 38
437	n/a	26	23	29	29	27	32	28	27	32	29	29	33	30	30	34	27	27	33	26	26	31	48 / 43 / 38
441	n/a	27	24	30	28	28	32	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	48 / 43 / 38
442	n/a	17	13	23	18	18	24	18	17	23	17	15	23	15	13	23	13	12	22	12	11	22	48 / 43 / 38
443	n/a	27	24	30	29	28	32	29	27	32	30	29	33	28	27	34	25	25	33	26	25	30	48 / 43 / 38
451	n/a	27	22	32	27	27	32	27	25	31	25	22	30	22	20	30	21	21	29	19	19	29	48 / 43 / 38
452	n/a	27	24	32	29	28	32	27	25	32	25	24	33	22	21	32	20	20	31	19	20	30	48 / 43 / 38
453a	n/a	22	17	25	21	20	27	23	19	26	20	20	27	23	20	28	19	18	28	16	15	25	48 / 43 / 38
453b	n/a	22	17	26	21	21	28	23	19	26	20	20	27	23	20	28	19	18	29	16	16	26	48 / 43 / 38
454	n/a	23	19	26	22	21	27	24	20	27	21	21	27	24	22	28	21	20	28	18	17	26	48 / 43 / 38
455	n/a	9	6	14	6	7	15	8	6	15	6	6	13	9	7	14	7	7	13	5	5	10	48 / 43 / 38
456	n/a	8	6	11	6	6	12	7	6	11	6	6	12	9	7	12	7	7	11	5	5	8	48 / 43 / 38
456b	n/a	8	6	10	6	6	12	7	6	11	6	6	12	9	7	12	7	7	11	5	5	8	48 / 43 / 38
458	n/a	24	19	27	21	21	28	25	20	28	21	21	29	25	22	30	21	20	30	18	17	27	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
460	n/a	10	8	15	10	10	17	11	9	15	10	10	17	12	10	17	10	10	17	8	9	14	48 / 43 / 38
460b	n/a	11	9	18	9	10	20	11	10	18	10	9	19	12	10	19	10	10	19	8	8	16	48 / 43 / 38
461	n/a	15	13	21	13	13	23	15	13	21	14	13	22	15	13	22	13	13	22	12	12	20	48 / 43 / 38
462a	n/a	16	11	22	12	12	24	16	11	22	13	12	23	17	12	23	12	12	23	10	11	21	48 / 43 / 38
462b	n/a	15	10	22	12	12	23	16	11	22	12	11	23	17	12	23	12	12	23	10	10	21	48 / 43 / 38
462c	n/a	16	11	22	12	12	24	16	11	22	12	11	23	17	12	23	12	12	23	10	10	21	48 / 43 / 38
464	n/a	23	16	27	16	16	28	23	16	27	17	17	28	24	17	28	18	18	29	17	16	28	48 / 43 / 38
464b	n/a	23	16	27	18	18	29	23	17	28	18	17	29	24	20	29	18	18	30	17	17	28	48 / 43 / 38
465	n/a	24	20	29	22	21	30	24	20	29	21	21	30	25	22	31	21	21	31	20	19	29	48 / 43 / 38
466	n/a	21	14	21	15	15	23	21	14	22	15	15	23	21	16	25	15	15	23	13	14	21	48 / 43 / 38
467	n/a	21	17	26	18	18	27	21	18	26	19	18	28	22	19	28	18	18	28	16	17	25	48 / 43 / 38
467b	n/a	22	17	27	18	18	27	22	18	27	19	18	28	22	19	28	18	18	28	16	17	26	48 / 43 / 38
468a	n/a	14	11	19	13	13	21	14	12	20	13	13	21	15	14	22	13	13	22	11	10	19	48 / 43 / 38
468b	n/a	14	11	20	13	13	21	14	12	20	12	12	21	15	14	22	12	12	22	11	10	19	48 / 43 / 38
468c	n/a	14	12	20	13	13	21	14	12	20	13	12	21	15	14	22	13	12	22	11	10	19	48 / 43 / 38
468d	n/a	14	12	19	13	13	21	14	12	20	13	13	21	15	14	22	13	12	22	11	10	19	48 / 43 / 38
470	n/a	19	17	24	19	18	25	20	18	25	18	18	25	21	19	25	18	18	25	17	17	23	48 / 43 / 38
471	n/a	19	17	23	19	19	24	19	18	24	19	19	24	21	20	25	19	19	25	17	17	22	48 / 43 / 38
472a	n/a	19	17	23	19	19	24	20	18	24	19	19	24	21	20	25	19	18	25	17	17	23	48 / 43 / 38
472b	n/a	19	17	23	18	18	24	19	18	24	18	19	24	21	20	25	18	18	25	16	16	23	48 / 43 / 38
472c	n/a	15	13	19	14	14	20	15	13	20	14	14	21	16	15	22	14	14	21	12	12	19	48 / 43 / 38
474	n/a	13	11	19	13	13	20	13	12	20	13	13	21	14	14	22	13	12	21	11	11	19	48 / 43 / 38
475	n/a	22	21	25	21	21	25	22	21	25	20	20	25	22	21	26	21	21	26	19	19	24	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
475b	n/a	22	21	25	21	21	25	22	21	25	20	20	25	22	21	26	21	21	26	19	19	24	48 / 43 / 38
476	n/a	20	18	23	19	19	23	20	18	23	19	19	23	21	20	25	20	20	25	18	18	23	48 / 43 / 38
477a	n/a	21	20	24	20	20	24	20	19	24	20	20	24	21	21	25	20	20	25	19	19	24	48 / 43 / 38
477b	n/a	21	20	24	20	20	24	20	19	24	20	20	24	21	21	25	20	20	25	19	19	24	48 / 43 / 38
481	n/a	20	18	22	19	19	23	19	18	23	18	18	23	20	19	24	19	19	24	17	17	22	48 / 43 / 38
483	n/a	19	17	22	18	18	22	18	17	22	18	18	22	19	19	23	18	18	23	16	16	21	48 / 43 / 38
484	n/a	21	20	23	20	20	23	20	20	23	20	20	24	21	20	24	19	19	24	18	18	22	48 / 43 / 38
485a	n/a	10	8	14	10	10	15	11	9	15	11	11	16	12	11	17	11	10	16	9	8	14	48 / 43 / 38
485b	n/a	11	8	14	10	10	15	11	9	15	11	11	16	12	11	17	11	10	16	9	8	14	48 / 43 / 38
485c	n/a	11	9	14	10	11	15	12	10	15	11	11	16	13	12	17	11	11	17	10	9	14	48 / 43 / 38
485d	n/a	11	9	15	10	10	16	11	10	16	11	11	17	12	11	18	11	11	17	10	9	15	48 / 43 / 38
485e	n/a	11	9	15	10	10	16	11	10	15	11	11	17	13	11	17	11	11	17	10	9	15	48 / 43 / 38
485f	n/a	10	8	14	10	10	15	11	9	14	11	10	15	12	10	16	11	10	16	9	8	14	48 / 43 / 38
487	n/a	24	22	27	23	23	27	24	23	27	24	24	28	25	25	28	25	25	28	23	23	27	48 / 43 / 38
488a	n/a	24	23	27	24	24	28	25	24	28	25	25	28	26	26	29	26	26	29	24	25	27	48 / 43 / 38
488b	n/a	24	23	28	24	24	29	25	24	28	24	24	29	25	24	29	24	24	29	22	22	27	48 / 43 / 38
515a	n/a	15	12	16	15	15	24	15	13	24	14	13	23	13	12	21	11	11	17	10	10	20	48 / 43 / 38
515b	n/a	18	15	23	18	17	26	18	16	25	17	15	24	14	13	25	13	13	24	12	12	24	48 / 43 / 38
516	n/a	14	11	23	14	14	25	14	14	24	13	11	24	11	10	24	10	10	23	9	8	23	48 / 43 / 38
517	n/a	24	21	29	25	25	29	25	23	28	24	22	29	22	20	28	20	20	27	19	19	26	48 / 43 / 38
518	n/a	24	21	29	25	25	29	26	24	28	24	23	28	22	20	29	20	20	28	21	20	27	48 / 43 / 38
519	n/a	21	18	27	23	22	27	23	21	27	21	19	26	19	17	26	17	17	25	16	16	25	48 / 43 / 38
522a	n/a	28	25	32	29	28	32	27	25	31	25	24	33	22	21	32	21	21	31	20	20	30	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
522b	1	31	27	35	32	30	36	30	28	35	27	26	35	26	26	35	26	26	34	25	25	34	48 / 43 / 38
522c	1	31	27	35	32	30	36	30	28	35	27	26	35	26	26	35	26	26	34	25	25	34	48 / 43 / 38
522d	1	31	27	35	32	30	36	30	28	35	27	26	35	26	26	35	26	26	34	25	25	34	48 / 43 / 38
5261	n/a	34	28	36	33	31	37	31	30	37	29	28	36	28	27	37	28	28	36	27	27	35	48 / 43 / 38
527	1	33	30	36	33	31	36	31	30	36	30	30	36	30	29	36	29	30	36	29	29	35	48 / 43 / 38
528	1	33	30	36	33	32	36	31	30	36	30	30	36	30	29	36	29	29	36	29	29	35	48 / 43 / 38
529	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
530	1	33	30	36	33	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
531	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
531b	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
532	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
533	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
534	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
535	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
536	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
537	1	33	30	36	33	31	36	31	30	35	30	30	36	30	29	36	29	30	35	29	29	35	48 / 43 / 38
538	1	32	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	30	35	29	29	34	48 / 43 / 38
539	1	32	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
541	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
542	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
543	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
543b	1	32	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	30	35	29	29	34	48 / 43 / 38
544	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
545	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
547	2	31	22	35	30	30	36	30	28	35	29	27	35	24	19	35	19	19	33	18	18	32	48 / 43 / 38
549	n/a	14	9	15	13	12	17	12	10	15	10	9	16	10	8	15	8	8	15	8	7	15	48 / 43 / 38
550	n/a	20	17	20	20	20	22	20	19	21	19	19	22	20	19	22	19	19	23	18	18	22	48 / 43 / 38
552	n/a	14	10	16	13	13	18	13	11	16	11	10	16	12	10	16	10	10	16	9	9	16	48 / 43 / 38
553	n/a	15	12	15	15	14	17	14	12	16	12	12	16	12	11	16	11	11	16	11	10	16	48 / 43 / 38
554	n/a	23	20	24	23	22	23	22	21	24	21	21	25	22	21	26	21	20	25	20	20	24	48 / 43 / 38
557	n/a	16	12	15	17	15	17	14	12	16	12	11	16	12	10	15	11	11	16	11	10	16	48 / 43 / 38
559	n/a	20	18	21	20	20	22	20	18	21	19	18	22	20	19	23	19	19	23	18	18	22	48 / 43 / 38
560	n/a	19	17	19	20	19	21	19	18	21	19	18	22	20	19	22	19	19	22	18	18	22	48 / 43 / 38
561	n/a	19	16	18	19	18	20	18	17	19	17	16	19	17	16	19	16	16	20	15	15	20	48 / 43 / 38
562	n/a	19	16	19	19	19	21	18	17	19	17	17	20	18	17	21	17	17	21	17	17	21	48 / 43 / 38
563	n/a	17	13	17	17	16	19	16	14	18	14	14	18	15	13	19	13	13	19	13	12	19	48 / 43 / 38
564	n/a	16	10	17	15	14	19	14	11	17	12	11	18	12	10	18	10	10	18	10	9	18	48 / 43 / 38
565	n/a	13	9	14	13	12	17	12	9	15	10	9	15	10	8	14	8	8	15	7	7	14	48 / 43 / 38
566	n/a	16	11	15	17	16	18	15	13	16	12	11	16	13	10	16	10	10	16	10	9	16	48 / 43 / 38
569	n/a	11	8	15	11	11	17	9	8	15	8	8	15	9	7	15	7	7	15	6	6	15	48 / 43 / 38
570	n/a	11	8	15	12	11	18	10	8	15	9	7	16	8	7	15	7	7	15	5	5	15	48 / 43 / 38
571	n/a	17	13	18	18	17	20	16	14	19	14	13	19	14	12	18	12	12	18	11	11	18	48 / 43 / 38
572	n/a	14	10	16	15	14	18	14	11	16	12	10	16	12	9	16	9	9	16	8	8	16	48 / 43 / 38
573	n/a	15	12	16	15	14	19	14	12	17	12	11	17	12	10	16	10	10	16	9	9	16	48 / 43 / 38
574	n/a	15	12	17	16	15	19	15	13	17	13	11	17	12	11	17	11	11	17	10	10	17	48 / 43 / 38
575	n/a	15	12	17	16	15	19	15	13	17	13	12	18	12	11	17	11	11	17	10	10	17	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
576	n/a	15	12	17	16	15	19	14	12	18	12	11	18	12	11	17	11	11	18	9	9	17	48 / 43 / 38
577a	n/a	17	15	18	18	17	20	17	15	19	15	15	19	15	14	19	14	14	19	14	14	19	48 / 43 / 38
577b	n/a	15	12	17	15	14	20	14	13	18	13	12	18	12	11	17	11	11	18	10	10	17	48 / 43 / 38
578	n/a	14	11	15	14	13	18	13	12	15	12	11	16	11	10	15	10	10	15	9	9	15	48 / 43 / 38
583	n/a	24	21	29	25	25	29	25	23	27	24	22	28	21	20	29	20	20	28	20	20	27	48 / 43 / 38
586	n/a	22	19	26	23	23	27	23	22	26	22	20	26	20	19	27	18	18	25	17	17	24	48 / 43 / 38
587a	n/a	17	13	23	19	18	25	20	18	24	19	17	24	18	14	25	15	15	23	16	15	23	48 / 43 / 38
587b	n/a	17	14	23	19	18	25	20	18	24	19	17	24	18	14	25	15	15	23	16	15	23	48 / 43 / 38
588	n/a	21	18	26	22	22	26	23	21	25	21	19	26	19	18	26	17	17	25	16	16	24	48 / 43 / 38
600a	1	31	29	35	32	31	35	31	29	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
600b	1	32	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
601	1	32	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
602	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
603	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
604	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
605	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
606	1	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
607	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
608	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
609	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
610	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
611	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
612	1	32	29	35	32	31	35	31	29	34	30	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
613	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
614	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
615	1	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
616a	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
616b	1	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 43 / 38
617a	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	48 / 43 / 38
618a	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	48 / 43 / 38
618b	1	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	34	29	29	34	48 / 43 / 38
619	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	48 / 43 / 38
621	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	48 / 43 / 38
622a	1	31	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	48 / 43 / 38
623a	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	48 / 43 / 38
623b	1	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	48 / 43 / 38
630a	1	31	28	35	31	30	35	30	29	34	29	28	35	29	28	35	28	28	34	28	28	34	48 / 43 / 38
631	1	31	28	35	31	30	35	30	29	34	29	28	35	29	28	35	28	28	34	28	28	34	48 / 43 / 38
632	1	29	25	34	29	28	33	28	26	32	26	25	33	26	25	34	25	25	33	25	25	33	48 / 43 / 38
648	1	31	29	35	32	31	35	30	29	34	29	29	35	29	29	35	29	29	34	29	29	34	48 / 43 / 38
649	1	31	29	35	32	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	29	34	48 / 43 / 38
650	1	32	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	34	28	29	34	48 / 43 / 38
651	1	31	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	34	29	29	34	48 / 43 / 38
652	1	32	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
653	1	32	29	35	32	31	35	31	30	34	29	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
654a	1	32	29	35	32	31	35	31	30	35	29	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
654b	1	32	29	35	32	31	35	31	30	34	29	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
655	1	32	29	35	32	31	35	31	30	34	29	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
658a	1	32	29	35	32	31	35	31	30	35	29	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
659	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
660a	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
660b	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
661	1	32	29	35	32	31	36	31	30	35	30	29	35	29	29	35	29	29	35	29	29	35	48 / 43 / 38
662	1	32	29	35	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	48 / 43 / 38
663	1	32	29	35	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	48 / 43 / 38
664	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	48 / 43 / 38
665a	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
665b	1	32	29	36	32	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
667a	n/a	34	30	37	33	32	37	32	31	36	31	30	37	30	30	36	30	30	36	30	30	36	48 / 43 / 38
667b	n/a	34	30	36	33	32	37	32	31	36	31	30	37	30	30	36	30	30	36	30	30	36	48 / 43 / 38
667c	n/a	34	30	37	33	32	37	32	31	36	31	30	37	30	30	36	30	30	36	30	30	36	48 / 43 / 38
667d	n/a	34	31	37	33	32	37	32	31	36	31	30	37	31	30	36	30	30	36	30	30	36	48 / 43 / 38
667e	n/a	34	30	37	33	32	37	32	31	36	31	30	37	30	30	36	30	30	36	30	30	36	48 / 43 / 38
667f	1	32	27	35	32	30	35	29	28	35	27	25	35	26	25	35	25	25	34	25	25	33	48 / 43 / 38
669	1	33	30	36	32	31	36	31	30	35	30	30	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
671	1	33	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
672	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
673	1	33	29	36	32	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	48 / 43 / 38
675	1	33	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
676	1	33	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
677	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
678	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
679	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
680	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
681	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
682a	1	32	29	36	32	31	36	31	30	35	29	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
682b	1	32	29	36	32	31	36	31	30	35	29	29	36	29	29	35	29	29	35	29	29	35	48 / 43 / 38
683	1	32	29	36	32	31	36	31	30	35	29	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
684	1	32	29	36	32	31	36	30	30	35	29	29	36	29	29	36	29	29	35	28	29	35	48 / 43 / 38
685	1	32	29	36	32	31	36	30	30	35	29	29	36	29	29	36	29	29	35	28	29	35	48 / 43 / 38
686	1	32	29	35	32	31	36	30	30	35	29	29	35	29	29	35	28	29	35	28	28	35	48 / 43 / 38
687	1	32	29	35	32	31	36	30	30	35	29	29	35	29	29	35	29	29	35	28	28	35	48 / 43 / 38
688	1	32	29	35	32	31	35	30	30	35	29	29	35	29	29	35	29	29	35	29	29	35	48 / 43 / 38
689	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	48 / 43 / 38
690	1	32	29	36	32	31	36	31	30	35	30	29	36	29	29	35	29	29	35	29	29	35	48 / 43 / 38
691	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
692	1	32	29	35	32	31	35	30	30	35	29	29	35	29	29	35	29	29	35	28	29	34	48 / 43 / 38
693	1	32	29	35	32	31	35	30	30	35	29	29	35	29	29	35	29	29	35	28	28	34	48 / 43 / 38
694a	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	36	29	29	35	28	28	34	48 / 43 / 38
694b	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	36	28	29	35	28	28	34	48 / 43 / 38
695	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	36	29	29	35	28	28	34	48 / 43 / 38
697	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	36	28	28	35	28	28	34	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
698	1	32	29	35	32	31	36	30	29	35	29	29	35	29	29	35	28	29	35	28	28	34	48 / 43 / 38
715	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
728	1	32	29	35	32	31	36	30	29	35	29	28	35	29	28	35	28	28	35	28	28	34	48 / 43 / 38
729	1	32	29	35	32	31	36	30	29	35	29	29	35	29	28	36	28	28	35	28	28	34	48 / 43 / 38
730	1	32	29	35	32	31	36	30	29	35	29	29	35	29	28	35	28	28	35	28	28	34	48 / 43 / 38
731	1	32	29	36	32	31	36	30	29	35	29	29	35	29	28	36	28	28	35	28	28	34	48 / 43 / 38
732	1	32	29	35	32	31	36	30	29	35	29	29	35	29	28	36	28	28	35	28	28	34	48 / 43 / 38
733	1	32	29	35	32	31	36	30	29	35	29	29	35	29	28	35	28	28	35	28	28	34	48 / 43 / 38
735a	1	32	29	35	32	31	36	30	29	35	29	29	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
735b	1	32	29	35	32	31	36	30	29	35	29	29	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
736	1	32	28	35	32	31	36	30	29	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
737	1	32	29	36	32	31	36	30	29	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
738	1	32	28	36	32	31	36	30	29	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
739	1	32	28	36	32	31	36	30	29	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
740a	1	32	28	35	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	48 / 43 / 38
740b	1	32	28	35	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	48 / 43 / 38
740c	1	32	28	35	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
740d	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
740e	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
740f	1	32	28	35	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	48 / 43 / 38
741	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
742	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
743	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	36	28	28	35	28	28	34	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
744	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	35	28	28	34	48 / 43 / 38
745	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	48 / 43 / 38
746	1	32	28	36	32	31	36	30	30	35	29	28	35	28	28	35	28	28	34	28	28	34	48 / 43 / 38
747	1	32	28	35	32	31	36	30	29	35	29	28	35	28	28	35	28	28	34	28	28	34	48 / 43 / 38
748a	1	32	28	35	32	31	36	30	29	35	29	28	35	28	28	35	27	28	34	27	27	34	48 / 43 / 38
748b	1	29	25	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	48 / 43 / 38
749a	1	32	29	36	32	31	36	30	29	35	29	29	36	29	29	36	28	29	35	28	28	35	48 / 43 / 38
749b	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	35	48 / 43 / 38
750	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	35	48 / 43 / 38
751	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	35	48 / 43 / 38
752a	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	35	48 / 43 / 38
752b	1	32	29	36	32	31	36	30	30	35	29	29	36	29	29	36	29	29	35	28	29	34	48 / 43 / 38
753	1	32	29	36	32	31	36	30	29	35	29	29	36	29	29	36	29	29	35	28	29	35	48 / 43 / 38
754	1	32	29	36	32	31	36	30	30	35	29	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
755	1	32	29	36	32	31	36	31	30	35	29	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
756	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
757	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
758	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
759a	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
759b	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
760	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
761	1	32	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
762	1	33	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
763	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
764	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
765a	1	33	29	36	33	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
765b	1	33	29	36	33	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
766	1	33	29	36	33	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
767	1	33	29	36	33	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
768	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
769	1	32	29	36	32	31	36	30	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
770	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
771	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
772	1	33	29	36	32	31	36	31	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
773	1	33	29	36	33	31	36	30	30	36	30	29	36	29	29	36	29	29	35	29	29	35	48 / 43 / 38
774	1	33	29	36	32	31	36	30	30	36	30	29	36	29	29	36	28	29	35	28	28	35	48 / 43 / 38
775	1	33	29	36	32	31	36	30	30	36	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
776	1	33	29	36	32	31	36	30	30	36	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
777	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
778a	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
778b	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
779a	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
779b	1	32	29	36	32	31	36	30	29	36	29	29	36	28	28	36	28	28	35	28	28	35	48 / 43 / 38
780	1	33	29	36	32	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
781	1	33	29	36	33	31	36	30	29	36	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
782	1	33	29	36	32	31	36	30	29	36	29	28	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
783	1	33	29	36	33	31	36	30	29	36	29	28	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
784	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	29	35	28	28	34	48 / 43 / 38
785	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	48 / 43 / 38
786	1	32	29	36	32	31	36	30	30	35	29	29	36	29	28	36	28	28	35	28	28	34	48 / 43 / 38
787a	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	48 / 43 / 38
787b	1	32	29	36	32	31	36	30	30	35	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
788	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	48 / 43 / 38
789	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	48 / 43 / 38
790a	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	48 / 43 / 38
790b	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	48 / 43 / 38
791a	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
791b	1	32	29	36	32	31	36	30	29	35	29	29	36	29	28	36	28	28	35	28	28	34	48 / 43 / 38
792a	1	32	29	36	32	31	36	30	30	35	29	29	36	29	28	36	28	28	35	28	28	35	48 / 43 / 38
792b	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
793	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
794	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
795	1	32	29	36	32	31	36	30	29	35	29	29	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
796	1	32	29	36	32	31	36	30	29	35	29	28	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
797a	1	32	29	36	32	31	36	30	29	36	29	28	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
797b	1	32	29	36	32	31	36	30	29	36	29	28	36	28	28	36	28	28	35	28	28	35	48 / 43 / 38
798	1	32	29	36	32	31	36	30	29	36	29	28	36	28	28	36	28	28	35	28	28	35	48 / 43 / 38
801	1	32	29	36	32	31	36	31	30	36	29	28	36	28	28	36	28	28	35	28	28	35	48 / 43 / 38
802	1	32	29	36	32	31	36	31	30	36	29	28	36	28	28	36	28	28	35	28	28	35	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
803a	1	32	28	36	32	31	36	30	30	35	29	28	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
803b	1	32	28	36	32	31	36	30	30	35	29	28	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
804	1	32	28	36	32	31	36	30	30	35	29	28	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
805	1	32	28	36	32	31	36	30	30	35	29	28	36	28	28	36	28	28	35	28	28	34	48 / 43 / 38
806	1	32	28	35	31	30	35	30	29	35	28	27	35	27	27	35	27	27	34	27	27	34	48 / 43 / 38
807	1	32	27	35	31	30	35	30	29	35	28	27	35	27	27	35	27	27	34	27	27	34	48 / 43 / 38
808	1	32	28	35	31	30	35	30	29	35	28	27	35	27	27	35	27	27	34	27	27	34	48 / 43 / 38
809	1	32	28	35	31	30	36	30	29	35	28	27	35	27	27	35	27	27	34	27	27	34	48 / 43 / 38
810	1	32	28	35	31	30	35	30	29	35	28	27	35	27	27	35	27	27	34	26	27	34	48 / 43 / 38
811	1	32	27	35	31	30	36	30	29	35	28	27	35	27	27	35	26	26	34	26	26	34	48 / 43 / 38
812	1	32	27	35	31	30	36	30	29	35	28	27	35	27	26	35	26	26	34	26	26	34	48 / 43 / 38
813	1	32	27	35	31	30	36	30	29	35	28	27	35	27	26	35	26	26	34	26	26	34	48 / 43 / 38
814	1	32	27	35	31	30	36	30	29	35	28	26	35	27	26	35	26	26	34	26	26	34	48 / 43 / 38
815a	1	32	27	35	31	30	36	30	29	35	27	26	35	27	26	35	26	26	34	26	26	34	48 / 43 / 38
815b	1	32	27	35	31	30	36	30	29	35	27	26	35	27	26	35	26	26	34	26	26	34	48 / 43 / 38
816	1	32	27	35	32	30	36	30	29	35	27	26	35	27	26	35	26	26	34	26	26	34	48 / 43 / 38
817	1	32	27	35	32	30	36	30	28	35	27	26	35	26	26	35	26	26	34	26	26	34	48 / 43 / 38
819	1	32	27	35	32	30	35	29	28	35	27	25	35	25	25	35	25	25	34	25	25	33	48 / 43 / 38
820a	1	32	27	35	32	30	35	29	28	35	27	25	35	25	25	35	25	25	34	25	25	33	48 / 43 / 38
820b	1	32	27	35	32	30	35	29	28	35	27	25	35	25	25	35	25	25	34	25	25	33	48 / 43 / 38
821	1	31	27	35	32	30	35	29	28	35	27	25	35	25	25	35	25	25	34	24	24	33	48 / 43 / 38
822	1	31	27	35	32	30	35	29	28	35	26	25	35	25	25	35	25	25	34	24	24	33	48 / 43 / 38
823a	1	31	27	35	32	30	35	29	28	35	26	25	35	25	25	35	25	25	34	24	24	33	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
823b	1	32	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	34	24	24	33	48 / 43 / 38
824	1	31	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	34	24	24	33	48 / 43 / 38
825	1	31	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	33	24	24	33	48 / 43 / 38
826	1	31	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	33	24	24	33	48 / 43 / 38
827	1	31	27	35	32	30	35	29	28	35	26	25	35	25	24	35	24	24	33	24	24	33	48 / 43 / 38
828	1	31	26	35	32	30	35	29	27	35	26	25	35	25	24	35	24	24	34	24	24	33	48 / 43 / 38
829a	1	31	27	35	32	30	35	29	27	35	26	24	35	25	24	35	24	24	33	24	24	33	48 / 43 / 38
829b	1	31	27	35	32	30	35	29	27	35	26	24	35	25	24	35	24	24	33	24	24	33	48 / 43 / 38
830	1	31	27	35	32	30	35	29	27	35	26	24	35	25	24	35	24	24	33	24	24	33	48 / 43 / 38
831	1	31	26	35	32	30	35	29	27	35	26	24	35	25	24	35	24	24	33	24	24	33	48 / 43 / 38
832	1	31	26	35	32	30	35	29	27	35	26	24	35	25	24	34	24	24	33	24	24	33	48 / 43 / 38
833	1	31	26	35	32	30	35	29	27	35	26	24	35	25	24	34	24	24	33	23	23	33	48 / 43 / 38
834	1	31	26	35	32	30	35	29	27	35	26	24	35	24	24	34	24	24	33	23	23	33	48 / 43 / 38
835	1	31	26	35	32	30	35	29	27	35	26	24	35	24	24	34	24	24	33	23	23	33	48 / 43 / 38
836	1	31	26	35	32	30	35	29	27	35	26	24	35	24	24	34	24	23	33	23	23	33	48 / 43 / 38
837	1	31	26	35	32	30	35	29	27	35	26	24	35	24	24	34	23	23	33	23	23	33	48 / 43 / 38
838	1	31	26	35	32	30	35	29	27	35	26	24	35	24	23	34	23	23	33	23	23	33	48 / 43 / 38
839	1	31	26	34	32	30	35	29	27	35	26	24	35	24	23	34	23	23	33	23	23	33	48 / 43 / 38
840	1	31	26	34	32	30	35	29	27	35	26	24	35	24	23	34	23	23	33	23	23	33	48 / 43 / 38
841	1	31	26	34	32	30	35	29	27	35	26	24	35	24	23	34	23	23	33	23	23	33	48 / 43 / 38
843a	1	30	26	34	32	30	35	29	27	35	25	24	35	24	23	34	23	23	33	23	23	33	48 / 43 / 38
843b	1	31	26	34	32	30	35	29	27	35	25	24	35	24	23	34	23	23	33	23	23	33	48 / 43 / 38
844a	1	30	26	34	32	30	35	28	27	34	25	23	34	24	23	34	23	23	33	22	22	33	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
845	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
846	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
847	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
848	1	30	26	35	32	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
849	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
850	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
853	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
854	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
855	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	22	22	32	48 / 43 / 38
856	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	21	21	32	48 / 43 / 38
857	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	21	21	32	48 / 43 / 38
858	1	30	26	35	31	30	35	28	27	34	25	23	35	24	22	34	22	22	33	21	21	32	48 / 43 / 38
859	1	29	26	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	48 / 43 / 38
860	1	29	25	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	48 / 43 / 38
861	1	29	25	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	48 / 43 / 38
862	1	29	25	35	31	30	35	28	27	34	25	23	35	23	22	34	22	22	33	21	21	32	48 / 43 / 38
863	1	29	25	35	31	30	35	28	26	34	25	23	34	23	22	34	22	22	33	21	21	32	48 / 43 / 38
864	1	29	25	35	31	30	35	28	26	34	25	23	34	23	22	34	22	21	32	21	21	32	48 / 43 / 38
865	1	29	25	35	31	30	35	28	27	34	25	23	34	23	22	34	22	21	32	21	21	32	48 / 43 / 38
866	2	29	25	34	31	30	35	28	26	34	25	23	34	23	21	34	21	21	32	20	20	32	48 / 43 / 38
867	2	29	25	34	31	30	35	28	26	34	24	23	34	23	21	34	21	21	32	20	20	32	48 / 43 / 38
868	2	29	25	34	31	30	35	28	26	34	24	23	34	23	21	34	21	21	32	20	20	32	48 / 43 / 38
870	2	29	25	34	31	30	35	28	26	34	25	23	34	23	21	33	21	21	32	20	20	32	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
871	2	29	25	34	31	30	35	28	26	34	24	23	34	23	21	33	21	21	32	20	20	32	48 / 43 / 38
872a	2	29	25	34	31	30	35	28	26	34	24	23	34	23	21	33	21	21	32	20	20	32	48 / 43 / 38
900a	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	26	31	48 / 43 / 38
900b	n/a	27	24	31	30	29	33	30	28	33	30	30	34	30	29	35	26	26	34	27	27	31	48 / 43 / 38
901	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	27	32	48 / 43 / 38
902	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	27	32	48 / 43 / 38
903	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	27	32	48 / 43 / 38
904	n/a	28	24	30	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	26	32	48 / 43 / 38
905	n/a	28	24	30	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	48 / 43 / 38
906	n/a	28	24	30	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	48 / 43 / 38
907	n/a	27	24	30	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	48 / 43 / 38
908	n/a	27	24	30	30	29	33	30	29	33	30	30	34	30	29	34	27	26	34	27	26	31	48 / 43 / 38
909	n/a	27	24	30	30	28	33	30	28	33	30	30	34	30	29	34	27	26	34	27	26	31	48 / 43 / 38
911	n/a	27	24	30	29	28	32	30	28	33	30	30	34	30	29	34	27	26	34	27	26	31	48 / 43 / 38
912	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	29	34	27	26	34	27	26	31	48 / 43 / 38
913	n/a	27	24	30	29	28	32	30	28	33	30	30	34	30	29	34	26	26	34	27	26	31	48 / 43 / 38
914	n/a	27	24	30	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
915	n/a	27	24	30	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
916	n/a	27	24	30	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
917	n/a	27	24	30	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
918	n/a	27	24	30	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
919	n/a	27	24	30	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
920	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
921	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	48 / 43 / 38
922	n/a	27	24	30	29	29	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
924	n/a	28	24	30	29	29	33	30	29	33	30	30	34	30	28	35	26	26	34	27	26	31	48 / 43 / 38
925	n/a	28	24	30	30	29	33	30	28	33	30	30	34	30	29	35	26	26	34	27	26	31	48 / 43 / 38
926	n/a	28	24	30	30	29	33	30	29	33	30	30	34	30	29	35	26	26	34	27	26	31	48 / 43 / 38
927	n/a	28	24	30	30	29	33	30	29	33	30	30	34	30	29	35	26	26	34	27	26	31	48 / 43 / 38
928	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	31	48 / 43 / 38
929	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	31	48 / 43 / 38
930	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	32	48 / 43 / 38
931	n/a	28	24	31	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	32	48 / 43 / 38
932a	n/a	27	24	30	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	27	31	48 / 43 / 38
932b	n/a	27	24	30	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	27	31	48 / 43 / 38
933	n/a	28	24	30	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	27	32	48 / 43 / 38
934	n/a	27	24	30	30	29	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	48 / 43 / 38
935a	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	48 / 43 / 38
935b	n/a	27	24	30	29	29	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	48 / 43 / 38
936	n/a	27	24	30	29	28	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
937	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	48 / 43 / 38
938	n/a	27	24	30	29	28	33	30	28	33	30	30	34	30	28	35	26	26	34	27	26	31	48 / 43 / 38
939	n/a	27	24	30	29	28	33	30	28	33	30	30	34	29	28	35	26	26	34	26	25	31	48 / 43 / 38
940	n/a	27	24	31	29	28	33	30	28	33	30	30	34	29	28	35	26	26	34	26	26	31	48 / 43 / 38
941	n/a	28	24	31	30	28	33	30	28	33	30	30	34	29	28	35	26	26	34	27	26	32	48 / 43 / 38
942	n/a	27	24	31	29	28	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	31	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
943	n/a	27	24	30	29	28	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	31	48 / 43 / 38
944	n/a	27	24	30	29	28	33	29	28	33	30	30	34	29	28	35	26	25	34	27	26	31	48 / 43 / 38
945a	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
945b	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
946	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
947	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
948	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
949	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
950	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
951	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
952	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
953	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
954	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
955	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
956	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	26	25	34	26	26	31	48 / 43 / 38
957a	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
957b	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	48 / 43 / 38
958	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
959	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
960	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
961	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
962	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
963	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
964	n/a	27	24	30	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	48 / 43 / 38
965	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	48 / 43 / 38
966	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	48 / 43 / 38
967a	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	48 / 43 / 38
967b	n/a	27	24	30	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	48 / 43 / 38
968	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	25	25	34	27	26	31	48 / 43 / 38
969	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	25	25	34	26	26	31	48 / 43 / 38
970	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	48 / 43 / 38
971	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	48 / 43 / 38
972	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	48 / 43 / 38
973	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	48 / 43 / 38
974	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	48 / 43 / 38
976	n/a	27	24	30	29	28	32	29	27	32	30	30	34	29	28	34	26	25	33	26	26	31	48 / 43 / 38
977a	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
977b	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	48 / 43 / 38
978	n/a	27	24	30	29	28	32	29	27	32	30	30	33	29	27	34	26	25	33	26	26	30	48 / 43 / 38
979a	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
979b	n/a	27	24	30	29	28	32	29	27	32	30	30	33	29	27	34	26	25	33	26	26	30	48 / 43 / 38
980	n/a	27	24	30	28	28	32	29	27	32	30	29	33	29	27	34	26	25	33	26	26	30	48 / 43 / 38
981a	n/a	27	24	30	28	28	32	29	27	32	30	29	33	29	28	34	26	25	33	26	26	30	48 / 43 / 38
981b	n/a	27	24	30	28	28	32	29	27	32	30	30	33	29	28	34	26	25	33	26	26	30	48 / 43 / 38
982	n/a	27	24	30	28	28	32	29	27	32	30	29	33	29	28	34	26	25	33	26	26	30	48 / 43 / 38
983	n/a	27	24	30	29	28	32	29	27	32	30	29	33	29	28	34	26	25	33	26	26	30	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
984	n/a	27	24	30	29	28	32	29	27	32	30	30	33	29	28	34	26	25	33	26	26	30	48 / 43 / 38
985	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	33	26	26	31	48 / 43 / 38
986	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	26	31	48 / 43 / 38
987	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	26	31	48 / 43 / 38
988a	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	48 / 43 / 38
988b	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	26	31	48 / 43 / 38
989a	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	48 / 43 / 38
989b	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	48 / 43 / 38
990	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	48 / 43 / 38
991	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	48 / 43 / 38
992	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	48 / 43 / 38
993a	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	48 / 43 / 38
993b	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	48 / 43 / 38
994a	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
994b	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	48 / 43 / 38
995	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
997	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
998	n/a	27	24	30	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	48 / 43 / 38
999	n/a	26	23	29	28	28	32	29	27	32	29	29	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1000	n/a	27	24	30	29	28	32	29	27	32	30	29	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1001	n/a	27	24	30	29	28	32	29	27	32	30	29	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1002	n/a	27	24	30	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1003	n/a	27	24	30	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1004	n/a	27	24	30	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1005	n/a	27	24	30	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1006	n/a	27	24	29	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1007	n/a	27	24	29	29	28	31	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1008	n/a	27	24	29	29	27	31	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1009	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1010	n/a	27	24	29	28	28	32	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1011	n/a	27	24	29	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1012	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1014	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1015	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1016	n/a	27	24	30	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1017	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1018	n/a	27	24	29	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1019	n/a	27	24	29	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1020	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1021	n/a	27	24	29	28	28	31	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1022	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
1023	n/a	21	16	21	23	22	27	24	22	27	24	24	28	24	23	26	20	20	25	21	20	25	48 / 43 / 38
1024	n/a	27	24	29	27	26	30	28	25	29	27	27	29	28	25	29	25	25	32	26	26	30	48 / 43 / 38
1025	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1026	n/a	27	24	30	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	48 / 43 / 38
1027	n/a	27	24	30	29	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	31	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1028	n/a	27	24	30	28	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	25	30	48 / 43 / 38
1029	n/a	27	24	29	28	28	32	29	28	31	29	29	33	29	28	33	26	25	33	26	25	30	48 / 43 / 38
1030	n/a	27	24	29	28	28	32	29	28	31	29	29	33	29	28	33	26	25	33	26	25	30	48 / 43 / 38
1031	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	25	25	33	25	25	29	48 / 43 / 38
1032	n/a	27	24	29	28	28	31	29	27	31	29	29	33	28	28	33	25	25	33	25	25	29	48 / 43 / 38
1033	n/a	27	24	29	28	27	31	29	28	31	29	29	33	27	26	32	24	23	30	23	23	27	48 / 43 / 38
1034	n/a	26	23	29	28	27	31	29	27	31	29	29	32	26	25	30	22	22	27	23	22	26	48 / 43 / 38
1035	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	25	25	30	48 / 43 / 38
1036a	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
1036b	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
1037	n/a	27	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
1038	n/a	27	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
1039	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	26	25	33	26	25	30	48 / 43 / 38
1040	n/a	27	24	29	28	28	31	29	27	31	29	29	33	29	28	33	26	25	33	26	25	30	48 / 43 / 38
1041	n/a	27	24	29	28	28	31	29	28	32	29	29	33	29	28	33	26	25	33	26	25	30	48 / 43 / 38
1042	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	26	30	48 / 43 / 38
1043	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	30	48 / 43 / 38
1044	n/a	27	24	29	28	28	32	29	27	32	29	29	33	29	28	33	26	25	33	26	26	30	48 / 43 / 38
1045	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
1046	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
1077	n/a	26	24	29	28	27	32	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	48 / 43 / 38
1078	n/a	27	24	29	28	27	31	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	48 / 43 / 38
1079	n/a	27	24	29	28	27	31	29	27	31	29	29	33	28	27	33	25	24	33	26	25	30	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1080	n/a	27	24	29	28	27	31	28	27	31	29	29	33	28	27	33	25	24	33	26	25	30	48 / 43 / 38
1081	n/a	27	24	29	28	27	31	28	27	31	29	29	33	28	27	33	25	25	33	26	25	30	48 / 43 / 38
1082a	n/a	26	24	29	28	27	31	29	27	31	29	29	33	28	27	33	25	25	33	26	25	30	48 / 43 / 38
1082b	n/a	26	24	29	28	27	31	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	48 / 43 / 38
1100a	n/a	17	15	20	16	16	21	17	16	20	16	16	20	18	17	22	16	16	22	15	14	19	48 / 43 / 38
1100b	n/a	17	15	20	17	17	21	17	16	21	16	16	21	18	17	22	16	16	22	15	15	19	48 / 43 / 38
Generic Muswellbrook Residential Receivers																							
A	n/a	31	28	35	31	30	35	30	29	34	28	27	34	28	27	35	27	27	34	27	27	33	48 / 43 / 38
B	n/a	31	28	34	31	30	34	29	29	34	28	27	34	27	27	35	27	27	34	26	26	33	48 / 43 / 38
C	n/a	31	27	35	32	30	35	29	28	34	28	27	35	27	26	35	26	26	34	26	26	33	48 / 43 / 38
D	n/a	31	27	34	31	30	34	29	28	34	26	25	34	26	25	34	25	25	33	25	25	33	48 / 43 / 38
E	n/a	30	26	34	31	29	34	28	28	33	26	25	34	25	25	34	24	25	33	24	24	32	48 / 43 / 38
F	n/a	30	27	34	31	30	34	29	28	34	26	25	34	25	24	34	24	24	33	24	24	32	48 / 43 / 38
G	n/a	29	26	33	31	29	34	28	27	33	25	24	34	24	23	34	23	23	33	23	23	32	48 / 43 / 38
Council and State-Owned Residential Receivers																							
286e	n/a	16	12	16	16	15	18	16	13	16	13	12	17	14	11	16	11	11	17	10	10	17	48 / 43 / 38
286f	n/a	15	11	17	14	14	19	14	12	18	12	11	18	13	11	18	11	11	18	10	10	18	48 / 43 / 38
N1	n/a	26	16	21	24	23	27	27	23	27	25	25	29	26	23	27	22	22	27	23	22	26	48 / 43 / 38
N2	n/a	26	16	22	24	23	27	27	24	27	26	26	29	26	24	27	22	22	27	23	22	26	48 / 43 / 38
N3	n/a	26	16	22	25	24	27	27	24	27	26	26	29	26	24	27	22	22	27	23	22	26	48 / 43 / 38
N4	n/a	26	22	28	27	25	29	27	25	28	27	27	30	26	24	28	22	22	27	23	22	26	48 / 43 / 38
N5	n/a	27	24	29	28	27	31	29	26	30	28	28	31	29	28	33	26	26	33	26	26	30	48 / 43 / 38
N6	n/a	27	24	29	28	28	31	29	28	31	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
N7	n/a	27	24	29	28	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
N8	n/a	27	24	29	29	27	31	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
N9	n/a	27	24	29	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	25	30	48 / 43 / 38
N10	n/a	27	24	30	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	48 / 43 / 38
N11	n/a	27	24	30	29	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	31	48 / 43 / 38
N12	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N13	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N14	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N15	n/a	26	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N16	n/a	27	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N17	n/a	27	24	29	28	27	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N18	n/a	27	24	29	28	27	31	29	27	32	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N19	n/a	27	24	29	28	27	31	29	27	32	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N20	n/a	27	24	29	28	28	32	29	27	32	29	29	33	29	28	33	25	25	33	26	25	30	48 / 43 / 38
N21	n/a	27	24	30	28	28	32	29	27	32	30	30	33	29	27	34	26	25	33	26	26	30	48 / 43 / 38
N22	n/a	27	23	32	27	27	33	28	26	31	26	24	32	22	21	32	20	20	31	19	20	29	48 / 43 / 38
N23	n/a	27	22	32	27	27	33	28	26	31	26	24	31	22	21	32	20	20	31	19	20	29	48 / 43 / 38
N24	n/a	27	22	32	27	27	33	27	26	31	26	24	31	22	21	32	20	20	30	19	20	29	48 / 43 / 38
N25	n/a	26	23	31	27	27	32	27	26	30	26	24	31	22	21	32	21	21	30	20	20	29	48 / 43 / 38
N26	n/a	26	23	31	27	27	32	27	26	30	26	24	31	23	21	32	21	21	30	20	20	29	48 / 43 / 38
N27	n/a	26	23	31	27	27	32	27	26	30	26	24	31	23	21	31	21	21	30	20	20	29	48 / 43 / 38
N28	n/a	29	25	34	30	30	35	28	27	34	25	23	34	23	21	33	21	21	32	20	20	32	48 / 43 / 38
Mine-Owned Residential Receivers																							

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
23	n/a	33	30	39	32	31	39	33	30	39	30	30	39	31	30	39	30	30	38	30	30	38	n/a
68	n/a	36	31	38	34	32	38	32	32	37	31	31	37	31	31	38	31	31	37	31	31	37	n/a
80a	n/a	34	28	36	33	31	37	31	30	37	29	28	36	28	27	37	28	28	36	27	27	35	n/a
135	n/a	39	30	41	40	38	45	34	31	42	31	26	38	26	21	36	20	19	35	17	17	35	n/a
135b	n/a	39	30	41	40	38	45	34	31	42	31	26	38	27	21	36	20	19	35	17	17	35	n/a
139	n/a	38	25	36	34	32	41	33	31	40	34	30	39	29	20	37	19	19	35	17	17	35	n/a
158	n/a	37	24	37	40	38	47	38	36	45	39	39	46	34	32	44	30	30	40	31	30	39	n/a
231	n/a	34	28	36	33	31	37	31	30	37	29	28	36	28	27	37	28	28	36	27	27	35	n/a
263	n/a	32	30	35	31	31	36	32	30	36	31	31	36	33	32	38	32	32	38	31	31	36	n/a
1p	n/a	34	25	38	35	34	40	33	30	41	30	22	37	22	20	35	20	20	34	18	18	34	n/a
1z	n/a	34	23	33	37	37	38	36	32	41	36	36	44	29	27	34	23	23	37	20	19	36	n/a
1ab	n/a	34	23	33	38	37	40	37	33	42	37	37	44	30	29	36	24	24	38	21	20	36	n/a
1ac	n/a	34	32	39	34	33	40	34	32	39	32	31	39	32	31	39	31	31	39	32	31	39	n/a
1ad	n/a	20	15	24	21	21	28	24	21	27	23	22	29	23	23	31	20	20	30	16	15	29	n/a
1ae	n/a	40	38	43	38	38	44	39	38	43	38	38	43	38	38	43	38	38	43	38	38	43	n/a
1af	n/a	37	34	39	36	35	40	35	34	39	34	34	39	34	34	39	34	34	39	34	34	39	n/a
1ag	n/a	37	33	39	35	34	39	34	33	38	33	33	38	33	33	39	33	33	39	33	33	39	n/a
1ah	n/a	36	30	38	34	32	38	32	31	37	31	30	37	30	30	37	30	30	38	30	30	37	n/a
1ai	n/a	36	30	38	34	32	38	32	31	37	31	30	37	30	30	37	30	30	38	30	30	37	n/a
1aj	n/a	36	30	37	34	32	38	32	31	37	31	30	37	30	30	37	30	30	37	30	30	37	n/a
1ak	n/a	36	30	37	34	32	38	32	31	38	31	30	37	30	30	38	30	30	37	30	30	37	n/a
1al	n/a	36	30	37	34	32	38	32	31	38	31	30	37	30	30	38	30	30	37	30	30	37	n/a
1am	n/a	36	28	37	34	31	38	31	29	38	29	27	37	27	27	37	27	27	36	27	27	36	n/a

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1ar	n/a	35	27	36	34	32	38	31	29	39	29	25	37	25	25	37	25	25	36	24	24	36	n/a
1as	n/a	35	27	36	34	32	38	31	29	39	29	25	37	25	24	37	24	24	36	24	24	36	n/a
1aw	n/a	34	26	34	33	31	36	32	29	40	29	24	36	23	23	36	23	23	35	22	22	35	n/a
1ax	n/a	35	26	35	34	32	37	32	29	39	29	24	36	24	23	36	23	23	35	22	22	35	n/a
1bb	n/a	37	33	39	36	34	39	33	33	39	33	32	39	32	32	39	32	32	39	32	32	39	n/a
1bc	n/a	35	26	34	34	32	37	32	29	40	29	24	36	23	23	36	23	23	35	22	22	35	n/a
1bd	n/a	21	18	26	23	22	29	24	21	27	24	23	29	24	23	30	22	21	30	18	15	27	n/a
1bf	n/a	48	33	43	45	43	49	40	38	48	41	39	44	37	24	35	22	22	34	19	19	36	n/a
1bg	n/a	47	33	43	44	43	48	42	40	47	43	38	44	37	23	35	22	22	35	19	19	37	n/a
2i	n/a	38	35	40	36	36	40	36	35	40	35	35	40	35	35	40	35	35	40	35	35	40	n/a
246	n/a	21	19	26	21	21	27	22	21	27	21	21	27	23	22	28	22	22	28	21	21	26	n/a
246b	n/a	21	19	26	21	21	27	22	21	27	22	22	27	24	23	29	22	22	28	21	21	27	n/a
2b	n/a	35	31	39	31	31	40	37	30	40	30	29	40	33	29	39	29	29	39	29	29	39	n/a
2d	n/a	33	30	36	32	31	36	32	31	35	30	30	36	30	30	36	30	30	36	30	30	35	n/a
2e	n/a	43	41	46	41	41	47	42	41	46	41	41	46	41	41	46	41	41	46	41	41	46	n/a
2f	n/a	53	53	54	53	53	54	53	53	54	53	53	54	53	53	54	53	53	54	53	53	54	n/a
2n	n/a	22	20	28	21	21	28	22	21	28	22	22	28	23	22	29	22	22	29	21	21	27	n/a
2o	n/a	27	25	30	27	27	31	27	26	31	27	27	31	29	28	32	28	28	32	26	26	30	n/a
2p	n/a	27	26	30	27	27	31	28	27	31	27	27	31	29	29	32	28	28	32	26	26	30	n/a
2r	n/a	27	27	31	27	27	31	28	27	31	28	28	32	29	29	33	28	28	32	27	27	31	n/a
2s	n/a	27	27	31	27	27	31	28	27	31	28	28	32	29	29	33	28	28	32	26	27	30	n/a
2w	n/a	30	29	34	30	30	35	30	30	34	30	30	35	31	31	36	31	31	35	29	29	34	n/a
2x	n/a	29	25	36	27	26	37	29	23	36	23	23	37	26	22	36	22	22	36	22	22	35	n/a

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
2y	n/a	29	25	37	27	26	37	29	24	37	24	23	37	26	23	37	23	23	36	22	22	36	n/a
2z	n/a	30	25	37	27	27	37	29	24	37	24	24	37	26	23	37	23	23	36	23	23	36	n/a
2aa	n/a	30	25	37	27	26	37	29	24	37	24	24	37	26	23	37	23	23	36	22	22	36	n/a
2ab	n/a	30	26	37	27	27	37	30	25	37	25	25	37	27	24	37	24	24	36	24	23	36	n/a
2ad	n/a	30	26	37	28	27	37	30	25	37	26	26	37	28	25	37	25	25	37	25	24	36	n/a
2af	n/a	31	28	37	29	29	38	31	27	37	27	27	37	28	26	37	26	26	37	26	26	36	n/a
2ai	n/a	30	26	39	28	28	38	30	25	36	25	24	37	25	24	36	24	24	35	24	24	34	n/a
2aj	n/a	33	30	39	31	31	40	33	30	39	30	30	39	31	30	39	30	30	39	30	29	39	n/a
2al	n/a	34	31	39	31	31	40	36	29	40	29	29	40	33	29	39	29	29	38	29	29	39	n/a
2am	n/a	31	28	37	29	29	38	31	27	37	27	27	37	28	27	37	26	26	37	26	26	36	n/a
2an	n/a	27	26	30	27	27	31	28	27	31	27	27	31	29	29	32	28	28	32	26	27	30	n/a
2ao	n/a	27	26	30	27	27	31	28	27	31	27	27	31	29	29	32	28	28	32	26	27	31	n/a
7	n/a	29	25	36	27	26	36	28	23	36	23	23	36	25	22	36	22	22	35	22	22	35	n/a
211	n/a	29	26	35	28	27	35	28	25	35	26	25	35	26	25	35	25	25	35	25	24	34	n/a
299	n/a	23	22	26	23	23	26	23	23	26	22	22	27	23	23	27	23	22	27	21	21	26	n/a
487b	n/a	24	23	27	24	24	28	24	23	27	23	23	27	25	24	28	23	23	28	22	22	27	n/a
5f	n/a	29	25	36	27	26	36	28	23	36	23	23	36	25	22	36	22	22	35	22	22	35	n/a
5g	n/a	29	25	36	26	26	36	28	23	36	23	23	36	25	22	36	22	22	36	22	22	35	n/a
5i	n/a	23	22	26	23	23	26	23	23	26	23	23	27	25	24	28	24	24	27	22	22	26	n/a
5j	n/a	20	18	23	19	20	24	20	19	24	19	19	24	21	20	25	20	20	25	18	18	23	n/a
5k	n/a	23	22	26	23	23	27	24	23	26	23	23	27	25	25	28	24	24	28	22	22	26	n/a
5l	n/a	23	22	27	23	23	27	23	23	27	23	23	27	24	23	28	23	23	27	22	22	26	n/a
5m	n/a	25	24	29	25	25	29	26	25	29	26	26	29	27	26	30	26	26	30	25	25	28	n/a

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
5p	n/a	25	24	29	25	25	29	26	25	29	25	25	29	27	26	30	26	26	30	25	25	29	n/a
5r	n/a	27	26	32	27	27	33	27	27	32	27	27	33	28	28	33	27	28	33	27	27	31	n/a
5t	n/a	24	23	32	23	24	33	24	23	32	24	23	33	24	24	33	23	24	32	22	23	31	n/a
5v	n/a	21	18	26	19	19	27	20	19	26	20	20	27	22	20	28	19	19	27	18	17	26	n/a
5x	n/a	20	19	26	19	20	27	20	19	26	20	20	27	21	21	28	19	19	28	18	18	26	n/a
5y	n/a	27	24	33	26	26	33	25	23	33	23	23	33	24	22	33	22	22	33	22	22	32	n/a
5z	n/a	27	24	33	26	26	33	25	23	33	23	23	33	24	23	33	22	23	33	22	22	32	n/a
5aa	n/a	27	24	33	26	26	33	25	23	33	23	23	33	24	23	33	22	22	33	22	22	32	n/a
5ab	n/a	27	25	32	27	26	33	26	24	32	24	24	33	25	24	33	24	24	32	23	23	31	n/a
5ad	n/a	28	25	33	27	26	33	26	24	33	25	24	33	25	24	33	24	24	33	23	23	32	n/a
5af	n/a	28	25	33	27	26	33	26	24	33	24	24	33	25	24	33	24	24	33	23	23	31	n/a
5ag	n/a	22	22	24	22	22	25	22	22	24	22	22	25	24	23	26	23	23	26	22	22	24	n/a
5ah	n/a	22	21	24	21	22	24	22	22	24	22	22	25	24	23	26	23	23	26	22	22	24	n/a
5ai	n/a	23	22	25	22	23	25	23	23	25	23	23	26	25	24	27	24	24	27	23	23	25	n/a
5aj	n/a	24	23	26	23	23	27	24	23	26	24	24	27	25	25	28	25	25	28	24	24	26	n/a
5ak	n/a	24	23	27	24	24	27	24	24	27	24	24	27	26	25	28	25	25	28	24	24	27	n/a
5al	n/a	19	17	24	19	19	24	20	19	24	20	20	25	21	21	26	20	20	26	19	19	24	n/a
5am	n/a	26	24	30	26	26	31	27	26	30	26	26	31	28	27	32	27	27	32	27	27	30	n/a
3a	n/a	32	25	35	33	33	36	33	31	36	32	31	37	28	25	36	21	21	34	22	21	33	n/a
3b	n/a	32	25	35	33	33	36	33	31	36	33	31	37	29	25	36	21	21	35	22	22	33	n/a
3c	n/a	38	23	36	38	38	46	37	35	44	39	39	45	33	31	43	29	29	39	28	27	38	n/a
3d	n/a	31	25	35	33	33	36	32	30	36	32	31	37	29	24	36	22	22	35	23	22	33	n/a
3e	n/a	31	24	34	33	32	36	32	30	36	32	31	37	29	24	36	22	22	35	24	22	33	n/a

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
3f	n/a	31	24	34	32	32	35	32	30	36	32	31	37	28	24	36	24	24	35	24	23	33	n/a
3g	n/a	34	24	35	38	36	43	37	35	41	37	37	42	34	33	43	30	29	40	32	30	38	n/a
3i	n/a	31	24	34	33	32	35	33	31	36	34	33	38	31	29	39	26	26	36	29	28	34	n/a
3j	n/a	30	24	33	31	30	34	31	29	34	32	30	36	28	26	36	24	23	34	26	25	32	n/a
3k	n/a	29	20	29	31	29	36	30	28	34	31	31	38	30	30	38	27	26	36	26	25	37	n/a
3m	n/a	32	27	34	35	33	39	33	30	40	35	35	40	38	36	42	33	33	41	33	32	41	n/a
3n	n/a	31	24	33	34	32	38	33	32	38	34	34	38	32	31	39	28	28	38	29	29	36	n/a
3o	n/a	21	16	22	23	22	34	23	21	30	23	24	33	24	23	33	22	22	29	20	19	28	n/a
3p	n/a	21	16	23	23	22	35	23	21	29	24	24	32	25	24	33	24	23	31	22	20	28	n/a
3r	n/a	24	18	26	27	26	30	26	23	30	26	26	31	27	26	33	24	24	32	21	19	31	n/a
3s	n/a	24	18	26	26	23	29	25	22	28	27	27	31	27	26	33	24	24	32	21	19	28	n/a
3t	n/a	31	20	29	32	30	36	31	28	35	32	33	38	30	30	38	27	27	36	27	26	37	n/a
3u	n/a	31	20	30	33	31	36	32	30	35	33	33	38	31	31	38	27	27	36	27	26	36	n/a
3v	n/a	37	26	37	42	39	46	38	36	45	40	40	45	38	38	46	34	34	45	37	36	41	n/a
274	n/a	18	14	19	19	18	22	20	17	21	19	19	23	21	19	24	18	19	23	14	14	21	n/a
416	n/a	22	18	25	21	21	26	23	19	25	20	20	26	23	21	27	20	20	28	17	16	24	n/a
463	n/a	17	12	22	13	13	24	17	12	22	13	12	23	17	13	23	13	13	24	11	11	21	n/a
7b	n/a	17	14	22	16	16	22	17	15	22	15	15	22	17	16	22	15	14	23	13	13	20	n/a
7c	n/a	17	14	21	16	15	22	17	15	21	15	15	21	17	16	22	14	14	22	13	12	19	n/a
7d	n/a	18	13	24	14	14	24	18	13	23	14	14	24	19	15	25	14	14	24	12	12	22	n/a
7e	n/a	16	14	19	14	14	19	15	14	19	14	14	19	16	14	19	14	14	19	13	13	17	n/a
7f	n/a	15	11	18	12	12	19	15	11	18	12	11	20	15	12	19	12	12	20	10	10	17	n/a
7g	n/a	25	20	27	22	22	29	25	20	28	21	21	28	25	22	29	21	21	30	18	17	27	n/a

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
7h	n/a	23	17	27	21	21	29	24	19	28	20	20	29	24	20	30	19	18	30	16	16	27	n/a
7i	n/a	22	18	26	21	21	27	23	19	26	20	20	27	23	20	28	19	19	29	16	15	26	n/a
7j	n/a	23	17	27	19	19	28	23	18	27	18	17	28	23	18	29	18	17	29	16	16	27	n/a
7k	n/a	22	19	25	21	21	27	23	20	26	21	21	27	23	22	28	21	20	28	18	17	25	n/a
7l	n/a	17	14	22	16	16	22	17	15	22	15	15	22	17	16	22	15	14	23	13	13	20	n/a
7m	n/a	24	19	28	21	21	30	25	20	29	21	21	30	25	21	31	20	20	31	17	17	28	n/a
7n	n/a	26	23	30	27	27	30	26	24	29	25	23	31	22	21	30	21	21	29	20	20	28	n/a
7o	n/a	24	22	28	26	25	28	25	24	28	24	23	30	21	20	29	20	20	28	20	20	27	n/a
8b	n/a	17	15	21	17	17	21	17	16	21	16	16	21	18	17	22	16	16	22	15	15	20	n/a
8c	n/a	16	14	21	16	16	21	16	15	21	15	15	21	17	16	22	15	15	22	13	13	19	n/a
8e	n/a	11	8	16	8	8	18	10	8	17	7	7	18	10	8	19	8	8	18	6	5	16	n/a
8f	n/a	19	15	24	17	17	25	19	15	24	17	17	24	20	17	25	17	16	26	15	14	23	n/a
8h	n/a	16	14	20	14	14	21	16	14	20	14	14	21	16	14	21	14	14	21	13	13	19	n/a
8i	n/a	16	11	20	12	12	22	16	11	20	13	12	22	17	13	22	12	12	22	10	11	19	n/a
8j	n/a	17	15	21	17	17	21	17	16	21	16	16	21	18	17	22	16	16	22	15	15	19	n/a
8k	n/a	10	7	16	7	7	18	10	7	17	7	7	18	10	8	19	8	8	18	6	5	16	n/a
8l	n/a	16	14	21	14	15	21	16	14	20	14	14	21	16	15	21	15	14	21	13	13	19	n/a
8m	n/a	16	14	21	15	15	22	16	14	21	14	14	21	16	15	21	15	15	21	13	13	19	n/a
8n	n/a	16	11	21	12	12	22	16	11	21	13	12	22	17	13	22	12	12	22	10	11	20	n/a
8o	n/a	18	16	23	17	17	24	18	16	23	17	17	23	18	17	24	16	16	24	15	14	22	n/a
8p	n/a	20	18	24	19	19	25	20	18	24	19	19	25	21	20	26	19	19	26	18	18	24	n/a
Mal1	n/a	22	20	23	22	21	24	21	20	23	20	20	24	21	20	24	20	20	24	19	19	23	n/a
Mal2	n/a	19	16	19	19	19	20	18	17	20	17	17	21	18	18	21	18	18	22	18	18	21	n/a

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
Mal3	n/a	21	19	22	21	21	23	20	19	22	19	19	23	21	20	23	20	20	24	19	19	23	n/a
Aged Care Receivers																							
658a	1	32	29	35	32	31	35	31	30	35	30	29	35	29	29	35	29	29	35	29	29	34	48 / 43 / 38
658b	1	32	29	35	32	31	35	30	29	34	29	29	35	29	29	35	29	29	35	28	28	34	48 / 43 / 38
658c	1	31	29	35	32	31	35	30	29	34	29	28	35	29	28	35	28	28	34	28	28	34	48 / 43 / 38
658d	1	32	29	35	32	31	35	30	29	34	29	29	35	29	29	35	28	29	35	28	28	34	48 / 43 / 38
658e	1	32	29	35	32	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	48 / 43 / 38
Accommodation Receivers																							
622b	n/a	30	25	34	30	28	34	29	26	33	26	24	34	25	24	34	24	24	34	24	24	33	53 / 48 / 43
622n	n/a	31	29	35	31	31	35	31	29	35	29	29	35	29	29	35	29	29	35	28	29	34	53 / 48 / 43
622u	n/a	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	35	29	29	34	53 / 48 / 43
School Receivers																							
N30	n/a	32	29	36	32	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	43 / 43 / -
N31	n/a	32	29	36	32	31	36	31	30	35	30	29	36	30	29	36	29	29	35	29	29	35	43 / 43 / -
N32	n/a	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	43 / 43 / -
N33	n/a	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	43 / 43 / -
Church Receivers																							
520	n/a	28	25	33	29	29	33	27	25	32	25	24	34	22	21	32	21	21	31	20	20	31	48 / 48 / 48
658b	1	32	29	35	32	31	35	30	30	35	29	29	35	29	29	35	29	29	35	28	29	34	48 / 48 / 48
658c	1	32	29	35	32	31	35	30	29	34	29	29	35	29	28	35	28	29	35	28	28	34	48 / 48 / 48
616c	n/a	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	48 / 48 / 48
N34	n/a	26	23	31	27	27	32	27	26	30	26	24	31	22	21	32	21	21	30	20	20	29	48 / 48 / 48
Correctional Centre Receivers																							

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
MP1	n/a	26	22	31	26	26	32	27	25	30	24	22	30	22	20	29	20	20	29	20	20	28	53 / 48 / 43
MP42	n/a	26	22	31	27	26	31	27	25	29	25	23	30	22	21	31	20	20	29	20	20	28	53 / 48 / 43
MP80	n/a	25	22	29	26	26	29	26	24	29	25	23	30	22	21	30	20	20	29	20	20	27	53 / 48 / 43
Commercial Receivers																							
6	n/a	29	25	35	27	27	36	28	23	36	24	24	36	25	23	36	23	22	35	22	22	35	63 / 63 / 63
195e	n/a	31	23	35	30	28	37	29	27	34	28	25	35	24	19	35	19	19	33	18	18	33	63 / 63 / 63
140b-1	n/a	29	25	35	31	30	35	28	26	34	25	23	35	23	21	34	21	21	33	21	21	32	63 / 63 / 63
140b-2	n/a	29	25	34	31	30	35	28	26	34	25	23	34	23	21	34	21	21	33	21	21	32	63 / 63 / 63
140b-3	n/a	29	25	34	31	30	35	28	26	34	25	23	35	23	21	34	21	21	32	21	21	32	63 / 63 / 63
140b-4	n/a	29	25	35	31	30	35	28	26	34	24	23	35	23	21	34	21	21	33	21	21	32	63 / 63 / 63
202c	n/a	31	25	36	32	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
202d	n/a	31	25	36	33	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
202e	n/a	31	25	36	32	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
202f	n/a	31	25	36	32	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
202g	n/a	31	25	36	32	31	36	29	27	36	26	23	36	24	21	35	21	21	33	20	20	33	63 / 63 / 63
472d	n/a	16	14	19	15	15	20	16	14	20	15	15	20	17	16	22	15	15	21	13	13	19	63 / 63 / 63
472e	n/a	15	14	19	15	15	21	15	14	20	15	15	21	16	16	22	15	15	21	13	13	19	63 / 63 / 63
472f	n/a	18	16	23	18	18	23	18	17	23	18	18	23	19	19	24	17	17	24	16	15	21	63 / 63 / 63
472g	n/a	19	17	23	19	19	24	20	18	24	19	19	24	21	20	25	19	19	25	18	18	23	63 / 63 / 63
472h	n/a	18	17	23	18	18	24	19	18	24	19	19	24	20	20	25	18	18	25	17	16	23	63 / 63 / 63
472i	n/a	17	15	22	17	17	22	17	16	22	17	17	22	18	17	23	16	16	22	15	14	19	63 / 63 / 63
472j	n/a	16	14	19	14	14	20	15	14	19	14	14	20	16	15	21	15	14	20	12	12	18	63 / 63 / 63
472k	n/a	15	13	18	14	14	19	15	13	19	14	14	20	15	15	21	14	14	20	12	11	18	63 / 63 / 63

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
472l	n/a	19	17	23	19	19	24	20	18	24	19	19	24	21	20	25	19	19	25	18	18	23	63 / 63 / 63
472m	n/a	19	17	23	18	18	24	20	18	24	19	19	24	21	20	25	19	18	25	17	16	23	63 / 63 / 63
489	n/a	24	24	34	24	24	34	25	24	33	24	24	34	25	25	34	24	25	33	23	24	33	63 / 63 / 63
540	n/a	31	29	35	32	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
546a	n/a	32	30	36	32	31	36	31	30	35	30	30	36	30	30	36	30	30	35	29	29	35	63 / 63 / 63
546b	n/a	32	30	36	32	31	36	31	30	35	30	30	36	30	30	36	30	30	35	29	29	35	63 / 63 / 63
546c	n/a	32	30	36	32	31	36	31	30	35	30	30	36	30	30	36	30	30	35	29	29	35	63 / 63 / 63
617b	n/a	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617c	n/a	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617d	n/a	31	29	35	32	31	35	31	29	34	30	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617e	n/a	31	29	35	32	31	35	31	30	35	30	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617f	n/a	31	29	35	31	31	35	31	30	34	30	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617g	n/a	31	29	35	31	31	35	31	29	34	29	29	35	30	29	35	29	29	34	29	29	34	63 / 63 / 63
617h	n/a	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
617i	n/a	31	29	35	32	31	35	31	29	34	29	29	35	30	29	35	29	29	35	29	29	34	63 / 63 / 63
620	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	29	34	63 / 63 / 63
622ah	n/a	31	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	35	29	29	34	63 / 63 / 63
622ai	n/a	31	29	35	32	31	35	31	29	34	29	29	35	29	29	35	29	29	35	29	29	34	63 / 63 / 63
611aj	n/a	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	35	28	29	34	63 / 63 / 63
622ak	n/a	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	28	29	34	63 / 63 / 63
625	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
629	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
626	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	29	34	63 / 63 / 63

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
627	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
628	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
630a	1	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
630b	n/a	31	29	35	31	31	35	30	29	34	29	29	35	29	29	35	28	29	34	28	28	34	63 / 63 / 63
630c	n/a	31	29	35	31	31	35	31	29	34	29	29	35	29	29	35	29	29	34	28	28	34	63 / 63 / 63
630d	n/a	31	29	35	31	30	35	30	29	34	29	29	35	29	29	35	28	29	34	28	28	34	63 / 63 / 63
656	n/a	32	29	35	32	31	35	31	30	34	29	29	35	29	29	35	29	29	35	29	29	34	63 / 63 / 63
674a	n/a	32	29	36	32	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	63 / 63 / 63
674b	n/a	33	29	36	33	31	36	31	30	35	30	29	36	29	29	36	29	29	35	29	29	35	63 / 63 / 63
818a	n/a	32	27	35	32	30	35	30	28	35	27	25	35	26	25	35	25	25	34	25	25	34	63 / 63 / 63
818b	n/a	31	27	35	32	30	35	30	28	35	27	26	35	26	25	35	25	25	34	25	25	34	63 / 63 / 63
844b	n/a	30	26	34	31	30	35	28	27	34	25	23	34	24	23	34	23	23	33	22	22	33	63 / 63 / 63
872b	n/a	29	25	34	31	30	35	28	26	34	24	23	34	23	21	33	21	21	32	20	20	32	63 / 63 / 63
1085	n/a	26	24	29	28	27	31	28	27	31	29	29	33	28	27	33	25	25	33	26	25	30	63 / 63 / 63
2ap	n/a	27	25	30	27	27	31	27	27	31	27	27	31	29	28	32	28	28	32	26	26	30	63 / 63 / 63
2aq	n/a	27	27	31	27	27	31	28	27	31	28	28	32	29	29	33	28	28	32	26	27	31	63 / 63 / 63
2ar	n/a	27	27	31	27	27	31	28	27	31	28	28	32	29	29	33	28	28	32	26	27	30	63 / 63 / 63
5h	n/a	20	19	24	20	20	24	20	19	24	20	20	24	21	21	25	20	20	25	19	19	23	63 / 63 / 63
5w	n/a	21	19	26	20	20	27	21	20	27	20	20	27	21	20	28	20	20	27	18	18	25	63 / 63 / 63
5an	n/a	21	19	24	20	20	24	20	19	24	20	20	24	21	21	25	21	20	25	19	19	23	63 / 63 / 63
5ao	n/a	20	19	24	20	20	24	20	19	24	20	20	24	21	21	25	20	20	25	19	19	23	63 / 63 / 63
5ap	n/a	21	19	26	20	20	27	21	19	26	20	20	27	22	21	28	20	20	27	18	18	25	63 / 63 / 63
8q	n/a	17	14	21	16	16	21	16	15	20	15	16	21	17	16	22	15	15	22	14	14	19	63 / 63 / 63

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Project Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
Mal4	n/a	19	17	21	20	18	21	18	16	21	17	16	22	16	15	22	15	14	22	16	16	21	63 / 63 / 63
Mal5	n/a	19	16	21	20	18	21	18	16	21	17	16	22	16	15	22	15	14	22	16	16	21	63 / 63 / 63
Mal6	n/a	19	16	22	19	18	21	19	16	21	17	16	23	17	15	23	15	15	23	16	16	22	63 / 63 / 63
UHSC2	n/a	28	24	31	30	29	33	30	29	33	31	31	34	30	29	35	27	26	35	27	27	31	63 / 63 / 63
UHSC3	n/a	28	24	31	30	29	33	30	28	33	31	30	34	30	29	35	27	26	34	27	27	31	63 / 63 / 63
UHSC4	n/a	28	24	31	30	29	33	30	28	33	31	31	34	30	29	35	27	26	35	27	27	31	63 / 63 / 63
N29	n/a	27	23	32	28	27	32	27	25	31	26	24	33	22	21	32	20	20	31	19	20	30	63 / 63 / 63

Notes:

- D = Day (7.00 am – 6.00 pm Monday to Saturday, and 8.00 am – 6.00 pm Sundays and public holidays); E = Evening (6.00 pm – 10.00 pm); N = the remaining periods.
- Levels highlighted in yellow indicate predictions under the relevant Fact Sheet D meteorological conditions in excess of the Project amenity noise level.
- Mine-owned residential receivers are included for the purpose of information only.

1. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted air impacts. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.

Table H-2 Noise Contributions from Neighbouring Mining Operations

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
4	n/a	28	28	38	30	30	35	29	29	35	<20	<20	<20	<20	<20	<20
19[1]	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
20[1,2]	n/a	24	24	37	31	31	34	32	32	36	<20	<20	<20	<20	<20	<20
21[1,2]	n/a	24	24	37	32	32	34	32	32	36	<20	<20	<20	<20	<20	<20
35	n/a	<20	<20	35	32	32	33	32	32	34	<20	<20	<20	<20	<20	<20
35b	n/a	<20	<20	35	32	32	33	32	32	34	<20	<20	<20	<20	<20	<20
43[4]	n/a	<20	<20	28	45	45	37	48	48	46	25	24	24	<20	<20	<20
43b[4]	n/a	<20	<20	28	37	37	29	40	40	35	25	24	24	<20	<20	<20
45[3]	n/a	<20	<20	29	38	38	32	41	41	38	25	24	24	<20	<20	<20
45b	n/a	<20	<20	29	38	38	32	41	41	38	25	24	24	<20	<20	<20
45c	n/a	<20	<20	29	38	38	32	41	41	38	25	24	24	<20	<20	<20
47[3]	n/a	<20	<20	28	41	41	33	43	43	40	25	24	24	<20	<20	<20
67[3]	n/a	23	23	36	33	33	32	32	32	33	<20	<20	<20	<20	<20	<20
74[1]	n/a	<20	<20	35	33	33	32	32	32	33	<20	<20	<20	<20	<20	<20
77[1]	n/a	<20	<20	35	33	33	32	32	32	33	<20	<20	<20	<20	<20	<20
79[1]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
82	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
83	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
84a[1]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
84b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
86a[1]	n/a	<20	<20	35	33	33	31	32	32	32	<20	<20	<20	<20	<20	<20
86b	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
96[3]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
102[3]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
108[3]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
112[3]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
118[3]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
120[3]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
120c[3]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
121[3]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
136[3]	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
140a[1]	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
140c[1]	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
143a[3]	n/a	<20	<20	25	<20	<20	<20	<20	<20	<20	<20	<20	<20	32	32	32
143b[3]	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	39	35	35
147[3]	n/a	<20	<20	25	<20	<20	<20	<20	<20	<20	<20	<20	<20	25	30	30
153a[3]	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
154[1]	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	40	32	32
154b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	40	32	32
156a[3]	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	34	34
156b	n/a	<20	<20	27	36	36	30	38	38	35	28	28	28	<20	<20	<20
157a[3]	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	30	33	33

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
157b	n/a	<20	<20	27	35	35	30	37	34	34	30	30	30	<20	<20	<20
159[3]	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	31	34	34
169	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	40	33	33
171	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	39	32	32
172	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	37	37	37
172b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	37	37	37
172c	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	35	35
310	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	37	37	37
173	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	35	35
174	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	35	35
175	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	36	36
175b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	36	36
175c	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	36	36
176	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	36	36	36
177	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	34	34	34
178	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	35	35
179	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	34	34	34
180	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	34	34	34
180b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	35	35
180c	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	32	32	32
181	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
181c	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	40	40	40

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
182	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
189	n/a	<20	<20	25	<20	<20	<20	<20	<20	<20	<20	<20	<20	33	40	40
190	n/a	<20	<20	25	<20	<20	<20	<20	<20	<20	<20	<20	<20	33	39	39
191	n/a	<20	<20	25	<20	<20	<20	<20	<20	<20	<20	<20	<20	30	38	38
192	n/a	<20	<20	25	<20	<20	<20	<20	<20	<20	<20	<20	<20	30	38	38
193	2	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	30	37	37
193c	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	29	29
194	2	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	32	32
195	2	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	31	31
197	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
196	2	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
195d	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
198	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
198b	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
199	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
200	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
202	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
202b	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
203[1]	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
203b	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
203c	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
206	1	23	23	36	30	30	33	29	29	34	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
207[1]	n/a	23	23	37	30	30	33	29	29	35	<20	<20	<20	<20	<20	<20
212	n/a	24	24	37	30	30	34	29	29	35	<20	<20	<20	<20	<20	<20
212b	n/a	25	25	37	30	30	34	28	28	35	<20	<20	<20	<20	<20	<20
213	n/a	24	24	37	31	31	34	29	29	35	<20	<20	<20	<20	<20	<20
214	n/a	24	24	37	31	31	34	29	29	35	<20	<20	<20	<20	<20	<20
215	n/a	24	24	37	31	31	34	29	29	35	<20	<20	<20	<20	<20	<20
216	n/a	24	24	37	31	31	34	29	29	35	<20	<20	<20	<20	<20	<20
216b	n/a	24	24	37	31	31	34	29	29	35	<20	<20	<20	<20	<20	<20
217	n/a	24	24	37	31	31	34	29	29	35	<20	<20	<20	<20	<20	<20
218	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
219	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
220	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
221	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
222	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
223	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
223b	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
224	n/a	24	24	37	31	31	34	30	30	35	<20	<20	<20	<20	<20	<20
225	n/a	24	24	37	31	31	34	29	29	35	<20	<20	<20	<20	<20	<20
249	n/a	23	23	38	26	26	39	26	26	41	29	28	28	<20	<20	<20
252	n/a	<20	31	31	30	30	30	30	30	33	32	31	31	<20	<20	<20
257[1]	n/a	<20	<20	33	42	42	39	45	45	45	28	26	26	<20	<20	<20
258a	n/a	<20	<20	32	42	42	40	45	45	45	29	27	27	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
258c	n/a	<20	<20	32	42	42	40	45	45	45	29	27	27	<20	<20	<20
259[1]	n/a	<20	<20	34	41	41	39	45	45	45	29	27	27	<20	<20	<20
259b	n/a	<20	<20	34	41	41	39	45	45	45	29	27	27	<20	<20	<20
260	n/a	<20	<20	33	40	40	37	42	42	43	29	27	27	<20	<20	<20
260a	n/a	<20	<20	33	40	40	37	42	42	43	29	27	27	<20	<20	<20
260b	n/a	<20	<20	33	40	40	37	42	42	43	29	27	27	<20	<20	<20
261	n/a	21	21	34	39	39	37	40	40	42	29	28	28	<20	<20	<20
261b	n/a	21	21	34	39	39	37	40	40	42	29	28	28	<20	<20	<20
271	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
272b	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
272	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
273	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
273b	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
288	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
288b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
289	n/a	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
292	n/a	21	21	36	23	23	37	24	24	40	29	28	28	<20	<20	<20
292b	n/a	21	21	36	23	23	37	24	24	40	30	28	28	<20	<20	<20
300	n/a	<20	<20	34	26	26	38	26	26	40	28	27	27	<20	<20	<20
298	n/a	<20	<20	34	26	26	39	26	26	41	28	27	27	<20	<20	<20
296a	n/a	23	23	38	26	26	40	27	27	42	28	27	27	<20	<20	<20
296b	n/a	23	23	38	26	26	40	27	27	42	28	27	27	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
302a	n/a	<20	<20	37	25	25	38	26	26	39	30	29	29	<20	<20	<20
302c	n/a	<20	<20	34	24	24	37	25	25	40	30	29	29	<20	<20	<20
401	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
402	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
404	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
407	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
413b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
415	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
417	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
418	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
418b	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
419	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
421	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
422a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	30	30	30
436	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	35	35
437	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	35	35	35
441	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
442	n/a	<20	<20	25	<20	<20	<20	<20	<20	<20	<20	<20	<20	25	30	30
443	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
451	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
452	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
453a	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
453b	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
454	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
455	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
456	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
456b	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
458	n/a	<20	<20	25	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
460	n/a	<20	<20	27	30	30	30	30	30	30	23	23	23	<20	<20	<20
460b	n/a	<20	<20	27	30	30	30	30	30	30	<20	21	21	<20	<20	<20
461	n/a	<20	<20	27	30	30	30	30	30	30	<20	<20	<20	<20	<20	<20
462a	n/a	<20	<20	27	30	30	30	30	30	30	27	27	27	<20	<20	<20
462b	n/a	<20	<20	27	30	30	30	30	30	30	26	26	26	<20	<20	<20
462c	n/a	<20	<20	27	30	30	30	30	30	30	26	26	26	<20	<20	<20
464	n/a	<20	<20	27	35	35	31	38	38	35	29	29	29	<20	<20	<20
464b	n/a	<20	<20	27	35	35	31	38	38	35	29	29	29	<20	<20	<20
465	n/a	<20	<20	27	34	34	30	36	36	35	30	30	30	<20	<20	<20
466	n/a	<20	<20	27	31	31	25	33	33	30	32	32	32	<20	<20	<20
467	n/a	<20	<20	28	38	38	38	38	38	38	30	30	30	<20	<20	<20
467b	n/a	<20	<20	28	38	38	38	38	38	38	30	30	30	<20	<20	<20
468a	n/a	<20	<20	34	<20	<20	32	<20	<20	35	32	32	32	<20	<20	<20
468b	n/a	<20	<20	31	<20	<20	32	<20	<20	35	33	33	33	<20	<20	<20
468c	n/a	<20	<20	31	<20	<20	32	<20	<20	35	32	32	32	<20	<20	<20
468d	n/a	<20	<20	34	<20	<20	32	<20	<20	35	32	32	32	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)													
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine	
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027	
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
470	n/a	<20	<20	35	25	25	34	26	26	37	33	31	31	<20	<20	<20
471	n/a	<20	<20	35	25	25	33	26	26	36	33	32	32	<20	<20	<20
472a	n/a	<20	<20	35	23	23	34	24	24	37	32	30	30	<20	<20	<20
472b	n/a	<20	<20	35	24	24	35	25	25	38	32	30	30	<20	<20	<20
472c	n/a	<20	<20	35	21	21	33	23	23	36	32	31	31	<20	<20	<20
474	n/a	<20	<20	34	<20	<20	32	21	21	36	31	31	31	<20	<20	<20
475	n/a	<20	<20	34	24	24	38	24	24	40	30	28	28	<20	<20	<20
475b	n/a	<20	<20	34	24	24	38	24	24	40	30	28	28	<20	<20	<20
476	n/a	<20	<20	33	21	21	35	22	22	37	32	31	31	<20	<20	<20
477a	n/a	<20	<20	37	23	23	37	23	23	38	31	30	30	<20	<20	<20
477b	n/a	<20	<20	37	23	23	37	23	23	38	31	30	30	<20	<20	<20
481	n/a	<20	<20	31	<20	<20	33	<20	<20	34	33	33	33	<20	<20	<20
483	n/a	<20	<20	33	<20	<20	32	<20	<20	33	33	34	34	<20	<20	<20
484	n/a	<20	<20	32	<20	<20	33	<20	<20	34	32	32	32	<20	<20	<20
485a	n/a	<20	<20	33	32	32	32	32	32	32	31	32	32	<20	<20	<20
485b	n/a	<20	<20	33	32	32	32	32	32	32	31	32	32	<20	<20	<20
485c	n/a	<20	<20	33	32	32	32	32	32	32	32	32	32	<20	<20	<20
485d	n/a	<20	<20	33	32	32	32	32	32	32	32	32	32	<20	<20	<20
485e	n/a	<20	<20	33	32	32	32	32	32	32	32	32	32	<20	<20	<20
485f	n/a	<20	<20	33	32	32	32	32	32	32	31	32	32	<20	<20	<20
487	n/a	24	24	38	28	28	41	28	28	42	26	24	24	<20	<20	<20
488a	n/a	26	26	41	30	30	41	30	30	43	26	24	24	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
488b	n/a	27	27	41	29	29	43	29	29	44	26	24	24	<20	<20	<20
515a	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
515b	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
516	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
517	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
518	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
519	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
522a	n/a	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
522b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
522c	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
522d	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
526[1]	n/a	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
527	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
528	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
529	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
530	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
531	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
531b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
532	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
533	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
534	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
535	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
536	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
537	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
538	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
539	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
541	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
542	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
543	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
543b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
544	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
545	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
547	2	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	32	32
549	n/a	25	25	37	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
550	n/a	28	28	36	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
552	n/a	<20	<20	29	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
553	n/a	30	30	37	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
554	n/a	22	22	37	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
557	n/a	30	30	38	25	25	25	25	25	25	<20	<20	<20	<20	<20	<20
559	n/a	34	34	41	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
560	n/a	32	32	39	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
561	n/a	28	28	38	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
562	n/a	31	31	38	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
563	n/a	30	30	39	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
564	n/a	25	25	37	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
565	n/a	25	25	37	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
566	n/a	23	23	32	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
569	n/a	<20	<20	29	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
570	n/a	<20	<20	30	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
571	n/a	<20	<20	33	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
572	n/a	<20	<20	30	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
573	n/a	<20	<20	31	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
574	n/a	<20	<20	32	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
575	n/a	<20	<20	32	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
576	n/a	<20	<20	33	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
577a	n/a	<20	<20	33	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
577b	n/a	<20	<20	33	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
578	n/a	<20	<20	33	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
583	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
586	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
587a	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
587b	n/a	<20	<20	25	<20	<20	<20	<20	<20	<20	<20	<20	<20	25	30	30
588	n/a	<20	<20	30	25	25	25	25	25	25	<20	<20	<20	25	30	30
600a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
600b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
601	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
602	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
603	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
604	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
605	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
606	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
607	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
608	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
609	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
610	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
611	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
612	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
613	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
614	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
615	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
616a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
616b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
617a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
618a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
618b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
619	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
621	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
622a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
623a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
623b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
630a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
631	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
632	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
648	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
649	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
650	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
651	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
652	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
653	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
654a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
654b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
655	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
658a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
659	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
660a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
660b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
661	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
662	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
663	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
664	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
665a	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
665b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
667a	n/a	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
667b	n/a	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
667c	n/a	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
667d	n/a	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
667e	n/a	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
667f	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
669	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
671	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
672	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
673	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
675	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
676	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
677	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
678	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
679	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
680	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
681	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
682a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
682b	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
683	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
684	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
685	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
686	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
687	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
688	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
689	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
690	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
691	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
692	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
693	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
694a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
694b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
695	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
697	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
698	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
715	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
728	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
729	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
730	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
731	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
732	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
733	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
735a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
735b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
736	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
737	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
738	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
739	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
740a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
740b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
740c	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
740d	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
740e	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
740f	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
741	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
742	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
743	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
744	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
745	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
746	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
747	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
748a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
748b	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
749a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
749b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
750	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
751	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
752a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
752b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
753	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
754	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
755	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
756	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
757	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
758	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
759a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
759b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
760	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
761	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
762	1	23	23	36	33	33	33	33	33	33	<20	<20	<20	<20	<20	<20
763	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
764	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
765a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
765b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
766	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
767	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
768	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
769	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
770	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
771	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
772	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
773	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
774	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
775	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
776	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
777	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
778a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
778b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
779a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
779b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
780	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
781	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
782	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
783	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
784	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
785	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
786	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
787a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
787b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
788	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
789	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
790a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
790b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
791a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
791b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
792a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
792b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
793	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
794	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
795	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
796	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
797a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
797b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
798	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
801	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
802	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
803a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
803b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
804	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
805	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
806	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
807	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
808	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
809	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
810	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
811	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
812	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
813	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
814	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
815a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
815b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
816	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
817	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
819	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
820a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
820b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
821	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
822	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
823a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
823b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
824	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
825	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
826	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
827	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
828	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
829a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
829b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
830	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
831	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
832	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
833	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
834	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
835	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
836	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
837	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
838	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
839	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
840	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
841	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
843a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
843b	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
844a	1	<20	<20	35	32	32	32	32	32	32	<20	<20	<20	<20	<20	<20
845	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
846	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
847	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
848	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
849	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
850	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
853	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
854	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
855	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
856	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
857	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
858	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
859	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
860	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
861	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
862	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
863	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
864	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
865	1	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
866	2	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
867	2	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
868	2	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
870	2	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
871	2	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
872a	2	<20	<20	33	30	30	30	30	30	30	<20	<20	<20	<20	25	25
900a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
900b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
901	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
902	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
903	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
904	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
905	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
906	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
907	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
908	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
909	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
911	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
912	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
913	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
914	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
915	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
916	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
917	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
918	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
919	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
920	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
921	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
922	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
924	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
925	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
926	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
927	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
928	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
929	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
930	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
931	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
932a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
932b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
933	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
934	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
935a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
935b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
936	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
937	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
938	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
939	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
940	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
941	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
942	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
943	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
944	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
945a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
945b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
946	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
947	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
948	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
949	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
950	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
951	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
952	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
953	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
954	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
955	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
956	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
957a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
957b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
958	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
959	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
960	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
961	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
962	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
963	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
964	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
965	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
966	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
967a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
967b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
968	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
969	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
970	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
971	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
972	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
973	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
974	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
976	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
977a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
977b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
978	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
979a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
979b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
980	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
981a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
981b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
982	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
983	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
984	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
985	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
986	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
987	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
988a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
988b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
989a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
989b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
990	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
991	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
992	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
993a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
993b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
994a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
994b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
995	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
997	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
998	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
999	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
1000	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1001	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1002	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1003	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1004	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1005	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1006	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1007	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1008	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1009	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1010	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1011	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1012	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1014	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1015	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1016	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1017	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1018	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1019	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1020	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1021	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1022	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
1023	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1024	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1025	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1026	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1027	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1028	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1029	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1030	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1031	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1032	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1033	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1034	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1035	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1036a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1036b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1037	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1038	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1039	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1040	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1041	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1042	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1043	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)														
		Mt Arthur Coal Mine			Bengalla Mine						Mangoola Coal			Dartbrook Mine		
		2026			Project Year 15 (2029)			Project Year 24 (2038)			Project Year 10 (2023)			All years until 2027		
		Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night
1044	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1045	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1046	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1077	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1078	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1079	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1080	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1081	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1082a	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1082b	n/a	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	38	41	41
1100a	n/a	<20	<20	33	32	32	32	32	32	32	37	36	36	<20	<20	<20
1100b	n/a	<20	<20	33	32	32	32	32	32	32	36	36	36	<20	<20	<20

Notes:

- Day = 7.00 am – 6.00 pm Monday to Saturday, and 8.00 am – 6.00 pm Sundays and public holidays; Eve = 6.00 pm – 10.00 pm; Night = the remaining periods.
- Receivers with no noise predictions are deemed to be subject to negligible impact due to important distances separating the receiver and the mining operation in question.

1. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted air impacts. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.

Table H-3 Cumulative Noise Predictions from All Mining Operations (incl. Project)

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
4	n/a	33	33	41	31	31	37	31	31	37	30	30	37	25	23	34	23	23	33	22	22	32	53 / 48 / 43
19[1]	n/a	34	33	41	33	33	39	34	33	39	32	32	39	29	27	37	27	27	37	27	27	36	53 / 48 / 43
20[1,2]	n/a	35	34	41	34	33	39	34	33	39	33	33	40	29	27	37	27	27	37	27	27	36	53 / 48 / 43
21[1,2]	n/a	35	34	41	34	33	39	34	33	39	33	33	40	29	27	38	27	27	37	27	27	37	53 / 48 / 43
35	n/a	37	35	40	36	35	39	36	35	39	35	35	39	32	32	38	32	32	38	32	32	37	53 / 48 / 43
35b	n/a	37	35	41	36	36	39	36	35	39	35	35	39	32	32	38	32	32	38	32	32	37	53 / 48 / 43
43[4]	n/a	46	45	40	45	45	41	45	45	40	48	48	46	34	32	39	31	31	39	29	30	38	53 / 48 / 43
43b[4]	n/a	38	38	38	38	38	39	38	38	38	40	40	40	31	28	39	27	27	39	25	25	37	53 / 48 / 43
45[3]	n/a	39	38	37	39	39	37	39	38	36	41	41	39	28	27	35	26	26	35	25	25	33	53 / 48 / 43
45b	n/a	39	39	37	39	39	37	39	38	36	41	41	39	30	27	35	26	27	35	25	26	34	53 / 48 / 43
45c	n/a	39	39	37	39	39	37	39	38	36	41	41	39	30	27	35	27	27	35	25	26	34	53 / 48 / 43
47[3]	n/a	42	41	40	41	41	41	42	41	40	43	43	43	31	26	40	26	26	40	24	24	39	53 / 48 / 43
67[3]	n/a	38	35	41	37	36	39	36	35	39	35	34	39	30	30	37	30	30	38	30	30	37	53 / 48 / 43
74[1]	n/a	38	35	40	36	35	39	35	35	39	34	34	39	30	30	38	30	30	37	30	30	37	53 / 48 / 43
77[1]	n/a	37	34	40	36	35	39	35	34	38	34	34	38	28	28	37	28	28	36	28	28	36	53 / 48 / 43
79[1]	n/a	36	34	40	36	34	38	34	34	38	34	33	38	28	28	36	28	28	35	27	27	35	53 / 48 / 43
82	n/a	35	34	39	35	34	37	34	34	37	34	33	37	28	27	35	27	27	35	27	27	34	53 / 48 / 43
83	n/a	35	34	39	35	34	37	34	34	37	34	33	37	28	27	36	27	27	35	27	27	34	53 / 48 / 43
84a[1]	n/a	36	34	39	35	34	38	34	34	38	34	33	37	28	28	36	27	27	35	27	27	35	53 / 48 / 43
84b	n/a	21	21	26	22	21	27	22	21	26	22	21	27	17	16	27	15	14	27	11	10	24	53 / 48 / 43
86a[1]	n/a	37	34	40	36	35	39	35	34	38	34	33	38	27	27	37	27	27	36	27	27	36	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
86b	n/a	34	32	38	34	33	37	33	32	37	31	31	37	24	20	35	20	20	33	19	19	33	53 / 48 / 43
96[3]	n/a	37	33	39	36	35	38	35	34	40	34	33	37	23	23	36	22	22	35	21	21	35	53 / 48 / 43
102[3]	n/a	37	33	39	36	35	38	35	34	40	34	33	37	23	23	36	22	22	35	21	21	35	53 / 48 / 43
108[3]	n/a	36	33	38	35	34	37	35	34	41	34	32	37	22	22	35	21	21	34	20	20	34	53 / 48 / 43
112[3]	n/a	35	33	38	35	34	37	35	34	38	34	32	37	22	21	34	21	21	33	19	19	33	53 / 48 / 43
118[3]	n/a	35	33	38	35	34	37	36	34	41	34	32	37	22	21	34	20	20	33	18	18	33	53 / 48 / 43
120[3]	n/a	36	33	38	36	35	38	36	34	41	34	32	37	21	21	35	20	20	33	18	18	34	53 / 48 / 43
120c[3]	n/a	36	33	38	36	35	38	36	34	41	34	32	37	21	20	35	20	20	33	18	18	33	53 / 48 / 43
121[3]	n/a	36	33	38	36	34	37	36	34	42	35	32	37	21	20	34	20	19	33	18	18	32	53 / 48 / 43
136[3]	n/a	33	33	40	37	35	41	35	32	38	31	29	35	25	20	34	19	19	33	17	17	34	53 / 48 / 43
140a[1]	n/a	37	32	38	35	34	41	35	33	40	33	31	39	27	20	37	19	19	35	17	17	34	53 / 48 / 43
140c[1]	n/a	35	32	39	35	34	38	33	32	38	32	31	37	24	21	36	20	20	34	20	20	34	53 / 48 / 43
143a[3]	n/a	40	33	38	35	35	41	34	32	42	36	34	43	32	27	40	21	21	37	20	20	36	53 / 48 / 43
143b[3]	n/a	41	35	39	40	38	46	39	37	45	39	39	45	35	33	44	31	30	40	33	33	39	53 / 48 / 43
147[3]	n/a	38	31	37	38	37	40	37	35	44	37	38	45	32	29	43	25	25	39	24	23	39	53 / 48 / 43
153a[3]	n/a	30	27	36	33	33	39	35	33	39	35	35	42	38	36	44	35	34	42	36	32	45	53 / 48 / 43
154[1]	n/a	41	33	38	39	36	42	36	33	42	39	38	43	36	36	43	32	33	42	33	32	42	53 / 48 / 43
154b	n/a	41	33	37	38	36	42	36	33	41	38	38	43	36	36	42	32	32	42	32	32	42	53 / 48 / 43
156a[3]	n/a	39	35	39	42	39	47	40	38	47	41	41	46	37	36	46	32	32	42	35	34	40	53 / 48 / 43
156b	n/a	37	37	35	37	37	35	36	36	34	38	38	37	25	20	33	19	18	33	16	16	31	53 / 48 / 43
157a[3]	n/a	38	34	38	39	37	45	38	36	46	39	39	46	33	32	44	30	30	41	30	29	40	53 / 48 / 43
157b	n/a	36	36	35	36	36	35	35	35	32	37	34	35	22	17	30	17	16	29	15	14	28	53 / 48 / 43
159[3]	n/a	36	34	39	39	38	46	38	35	45	38	39	46	33	32	43	30	29	40	31	30	39	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
169	n/a	40	33	35	33	29	35	30	28	33	31	32	37	31	30	37	27	26	36	27	26	37	53 / 48 / 43
171	n/a	40	33	35	33	30	37	31	29	35	32	32	37	31	31	37	27	27	36	28	27	35	53 / 48 / 43
172	n/a	38	37	39	33	30	36	31	29	35	32	32	36	31	31	37	27	27	36	29	27	35	53 / 48 / 43
172b	n/a	38	37	38	33	30	36	31	29	36	32	32	36	31	31	37	28	28	36	29	27	35	53 / 48 / 43
172c	n/a	36	35	37	32	30	35	30	29	35	32	32	36	32	31	37	28	28	35	28	27	33	53 / 48 / 43
310	n/a	38	37	38	33	30	36	31	29	35	32	32	36	32	31	36	28	28	36	28	27	35	53 / 48 / 43
173	n/a	36	35	37	31	28	34	29	26	33	30	30	34	30	29	35	26	26	34	27	26	33	53 / 48 / 43
174	n/a	36	35	37	31	28	35	29	26	33	30	30	34	31	30	35	27	26	35	27	26	33	53 / 48 / 43
175	n/a	36	36	38	31	28	35	29	27	33	30	30	34	31	30	35	27	26	35	27	26	33	53 / 48 / 43
175b	n/a	36	36	38	31	28	35	29	27	33	30	30	34	31	30	35	27	26	35	27	26	33	53 / 48 / 43
175c	n/a	36	36	38	31	29	35	29	27	34	31	31	35	31	30	35	27	26	35	28	27	34	53 / 48 / 43
176	n/a	37	36	37	32	29	35	30	27	33	31	31	35	31	30	35	27	27	35	28	27	34	53 / 48 / 43
177	n/a	35	34	36	30	27	33	28	26	33	28	29	33	29	28	34	25	24	34	25	24	32	53 / 48 / 43
178	n/a	36	35	37	31	29	34	29	28	34	31	31	34	31	30	35	28	27	34	27	27	33	53 / 48 / 43
179	n/a	35	35	36	30	28	34	29	27	34	31	31	34	31	30	35	27	27	35	27	26	32	53 / 48 / 43
180	n/a	35	35	36	30	28	33	29	27	33	30	30	34	31	30	35	28	28	34	27	26	32	53 / 48 / 43
180b	n/a	36	35	37	31	29	33	30	28	34	31	31	35	31	31	36	28	28	35	28	27	32	53 / 48 / 43
180c	n/a	33	33	34	29	27	32	28	26	32	29	29	33	29	29	34	27	27	34	26	25	31	53 / 48 / 43
181	n/a	38	41	41	30	29	34	31	29	34	31	31	35	30	29	35	27	26	35	27	27	32	53 / 48 / 43
181c	n/a	40	40	41	32	31	35	32	30	35	32	32	36	31	30	37	28	27	36	29	28	33	53 / 48 / 43
182	n/a	38	41	41	30	29	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	31	53 / 48 / 43
189	n/a	36	40	41	33	33	37	33	32	37	33	31	37	28	25	37	20	20	34	22	21	33	53 / 48 / 43
190	n/a	36	39	41	34	34	37	34	32	37	33	32	37	29	25	37	20	20	35	22	21	34	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
191	n/a	34	38	40	32	33	37	33	31	37	32	31	37	28	23	36	21	20	34	21	20	33	53 / 48 / 43
192	n/a	35	38	40	33	33	37	33	32	37	33	31	37	28	23	36	20	20	34	21	20	33	53 / 48 / 43
193	2	35	37	40	33	32	37	33	31	37	32	31	37	27	24	36	20	20	34	19	19	33	53 / 48 / 43
193c	n/a	32	31	36	31	31	35	31	30	34	30	29	35	24	21	34	20	20	33	19	19	32	53 / 48 / 43
194	2	33	33	37	32	31	37	31	30	35	30	29	36	24	19	35	19	19	33	18	18	33	53 / 48 / 43
195	2	33	33	38	31	30	36	31	29	35	30	28	36	24	19	35	19	19	33	18	18	33	53 / 48 / 43
197	n/a	33	32	38	33	32	36	32	32	36	32	31	37	23	20	34	19	19	33	19	19	32	53 / 48 / 43
196	2	33	32	38	33	33	36	32	32	36	32	31	37	23	20	34	19	19	32	19	19	32	53 / 48 / 43
195d	n/a	33	32	38	33	33	36	32	32	36	31	31	37	23	20	34	20	19	32	19	19	32	53 / 48 / 43
198	n/a	34	32	38	34	33	36	32	32	36	31	31	37	23	20	34	20	20	33	19	19	32	53 / 48 / 43
198b	n/a	34	32	38	34	33	37	32	32	36	31	31	37	24	20	34	20	20	33	19	19	33	53 / 48 / 43
199	n/a	33	32	38	33	33	36	32	32	36	31	31	36	23	20	34	20	20	32	19	19	32	53 / 48 / 43
200	n/a	33	32	38	33	33	36	32	31	36	31	31	36	23	20	34	20	20	32	19	19	32	53 / 48 / 43
202	n/a	34	32	39	34	34	37	33	32	37	31	31	37	24	21	35	21	21	33	20	20	33	53 / 48 / 43
202b	n/a	33	32	38	34	33	37	32	32	36	31	31	36	23	21	34	21	21	33	20	20	32	53 / 48 / 43
203[1]	n/a	34	32	39	35	34	38	33	32	38	31	31	37	24	21	35	21	21	33	20	20	33	53 / 48 / 43
203b	n/a	34	32	39	35	34	38	33	32	37	31	31	37	24	21	35	21	21	33	20	20	33	53 / 48 / 43
203c	n/a	34	32	39	35	34	38	33	32	37	31	31	37	24	21	35	21	21	33	20	20	33	53 / 48 / 43
206	1	34	33	40	34	33	38	33	32	38	32	32	38	29	28	36	28	28	36	28	28	35	53 / 48 / 43
207[1]	n/a	34	33	41	34	33	39	33	32	38	32	32	39	29	27	37	27	27	36	27	27	36	53 / 48 / 43
212	n/a	33	32	40	32	32	38	32	31	37	31	30	38	27	25	35	25	25	35	26	25	34	53 / 48 / 43
212b	n/a	33	32	40	32	32	38	32	31	37	30	30	38	27	25	35	25	25	35	25	25	34	53 / 48 / 43
213	n/a	34	33	41	33	33	38	33	32	38	31	31	39	28	26	36	26	26	36	27	26	35	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
214	n/a	34	33	41	33	33	38	33	32	38	31	31	39	28	26	36	26	26	36	26	26	35	53 / 48 / 43
215	n/a	34	33	41	33	33	39	33	32	38	31	31	39	28	26	37	26	26	36	26	26	36	53 / 48 / 43
216	n/a	34	33	41	33	33	39	33	32	38	31	31	39	28	27	37	26	26	36	27	26	36	53 / 48 / 43
216b	n/a	34	33	41	33	33	39	33	32	38	31	31	39	28	26	37	26	26	36	26	26	36	53 / 48 / 43
217	n/a	34	33	41	33	33	39	33	32	38	31	31	39	28	27	37	27	27	36	27	26	36	53 / 48 / 43
218	n/a	34	33	41	33	33	39	33	32	38	31	31	39	28	26	37	26	26	36	27	26	36	53 / 48 / 43
219	n/a	34	33	41	33	33	39	33	32	38	31	31	39	28	26	37	26	26	36	26	26	36	53 / 48 / 43
220	n/a	34	33	41	33	33	39	33	32	38	31	31	39	28	27	37	26	26	36	27	26	36	53 / 48 / 43
221	n/a	34	33	41	33	33	39	33	32	38	32	32	39	28	27	37	27	27	36	27	26	36	53 / 48 / 43
222	n/a	34	33	41	33	33	39	33	32	38	32	32	39	28	27	37	27	27	36	27	26	36	53 / 48 / 43
223	n/a	34	33	41	33	33	39	34	32	39	32	32	39	28	27	37	27	27	36	27	27	36	53 / 48 / 43
223b	n/a	34	33	41	33	33	39	34	32	38	32	32	39	28	27	37	27	27	36	27	26	36	53 / 48 / 43
224	n/a	34	33	41	33	33	39	34	32	39	32	32	39	28	27	37	27	27	36	27	27	36	53 / 48 / 43
225	n/a	34	33	41	33	33	39	33	32	38	31	31	39	28	27	37	27	27	36	27	26	36	53 / 48 / 43
249	n/a	32	31	42	31	31	39	27	27	39	27	27	41	24	23	28	22	22	27	21	21	26	53 / 48 / 43
252	n/a	34	36	36	34	34	34	30	30	31	30	30	33	21	20	26	20	19	26	18	18	24	53 / 48 / 43
257[1]	n/a	42	42	41	42	42	40	42	42	40	45	45	46	29	28	34	27	27	34	26	26	32	53 / 48 / 43
258a	n/a	43	43	41	43	42	40	42	42	40	45	45	45	26	25	32	24	24	32	23	23	31	53 / 48 / 43
258c	n/a	43	43	41	43	42	40	42	42	40	45	45	45	26	25	32	24	24	32	23	23	31	53 / 48 / 43
259[1]	n/a	42	42	41	42	41	40	41	41	40	45	45	45	27	26	33	25	25	33	24	24	31	53 / 48 / 43
259b	n/a	42	42	41	42	41	40	41	41	40	45	45	45	28	27	33	26	26	33	24	24	31	53 / 48 / 43
260	n/a	40	40	39	40	40	38	40	40	38	42	42	43	24	23	32	23	23	31	22	21	30	53 / 48 / 43
260a	n/a	40	40	39	40	40	38	40	40	38	42	42	43	24	23	31	23	22	31	21	21	30	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
260b	n/a	40	40	39	40	40	38	40	40	38	42	42	43	24	23	31	22	22	30	22	21	29	53 / 48 / 43
261	n/a	39	39	40	39	39	39	39	39	38	40	40	42	28	27	32	26	26	32	25	25	30	53 / 48 / 43
261b	n/a	39	39	40	39	39	39	39	39	38	40	40	42	28	27	32	26	26	32	25	25	30	53 / 48 / 43
271	n/a	27	26	31	26	26	31	27	26	30	26	26	30	23	19	30	19	18	30	16	16	28	53 / 48 / 43
272b	n/a	28	26	32	26	26	32	29	26	31	26	26	32	26	18	32	17	17	32	15	15	30	53 / 48 / 43
272	n/a	29	26	31	26	26	32	29	26	31	26	26	32	26	18	32	17	17	32	15	15	30	53 / 48 / 43
273	n/a	27	26	30	27	27	30	27	26	29	26	26	30	23	21	29	20	20	30	17	17	27	53 / 48 / 43
273b	n/a	27	26	31	26	26	30	28	26	30	26	26	30	23	20	30	19	18	30	16	16	27	53 / 48 / 43
288	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
288b	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
289	n/a	37	35	40	36	35	39	36	35	38	35	35	38	31	31	37	31	31	36	30	30	36	53 / 48 / 43
292	n/a	31	30	40	30	30	38	25	25	38	26	26	40	22	21	26	21	21	26	20	20	24	53 / 48 / 43
292b	n/a	32	30	40	31	30	38	25	25	38	25	25	40	21	20	26	20	20	26	19	18	24	53 / 48 / 43
300	n/a	31	30	40	31	30	39	27	27	39	27	27	41	23	23	27	22	22	27	21	21	25	53 / 48 / 43
298	n/a	31	30	41	31	30	40	27	27	39	27	27	41	23	22	27	22	22	27	21	21	26	53 / 48 / 43
296a	n/a	32	31	42	31	30	40	28	28	40	28	28	42	24	23	27	23	23	27	21	21	26	53 / 48 / 43
296b	n/a	32	31	42	31	30	40	28	28	40	28	28	42	23	23	27	22	22	27	21	21	26	53 / 48 / 43
302a	n/a	32	31	41	32	31	38	27	27	38	27	27	39	22	21	26	21	21	26	19	19	24	53 / 48 / 43
302c	n/a	32	31	39	31	31	38	26	25	37	26	26	40	22	21	26	21	21	25	19	19	24	53 / 48 / 43
401	n/a	22	21	25	23	22	25	23	22	25	23	23	26	20	19	25	18	18	24	14	11	20	53 / 48 / 43
402	n/a	23	22	26	23	23	27	23	22	26	23	23	27	22	21	27	21	20	27	16	15	24	53 / 48 / 43
404	n/a	23	22	27	23	23	27	24	22	26	24	23	27	22	21	28	20	19	27	16	14	24	53 / 48 / 43
407	n/a	21	21	25	21	21	26	21	21	25	21	21	26	16	15	27	14	13	26	10	9	23	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
413b	n/a	22	21	25	21	21	24	22	21	23	21	21	23	18	16	22	16	16	21	15	15	20	53 / 48 / 43
415	n/a	27	26	30	27	26	29	27	26	28	26	26	29	23	21	27	21	20	27	18	17	24	53 / 48 / 43
417	n/a	25	25	28	25	25	26	25	25	26	25	25	26	15	13	20	12	12	19	10	10	15	53 / 48 / 43
418	n/a	27	26	30	26	26	28	27	26	28	26	26	28	22	20	26	19	19	26	16	17	23	53 / 48 / 43
418b	n/a	26	26	29	26	26	28	26	26	28	26	26	28	21	17	25	17	17	26	16	16	23	53 / 48 / 43
419	n/a	25	25	28	25	25	26	25	25	26	25	25	26	15	13	19	12	12	17	11	11	15	53 / 48 / 43
421	n/a	27	26	30	26	26	30	27	26	29	26	26	30	23	21	29	20	19	29	17	17	26	53 / 48 / 43
422a	n/a	31	30	31	26	25	29	25	22	28	26	26	31	26	26	32	24	23	32	21	19	29	53 / 48 / 43
436	n/a	36	35	36	28	27	31	28	27	32	30	30	33	30	30	34	27	27	33	26	25	31	53 / 48 / 43
437	n/a	36	35	36	29	28	32	28	27	32	29	30	33	30	30	34	27	27	33	26	26	31	53 / 48 / 43
441	n/a	38	41	41	29	28	32	29	28	32	30	30	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
442	n/a	27	31	32	22	22	25	22	22	25	22	21	25	15	13	23	13	12	22	12	11	22	53 / 48 / 43
443	n/a	38	41	41	29	28	32	29	28	32	30	30	33	28	27	34	25	25	33	26	25	30	53 / 48 / 43
451	n/a	31	32	36	29	29	33	29	28	32	28	27	32	22	20	30	21	21	29	19	19	29	53 / 48 / 43
452	n/a	32	32	37	32	32	34	32	31	34	31	31	35	22	21	32	20	20	31	19	20	30	53 / 48 / 43
453a	n/a	27	26	30	26	26	29	27	26	29	26	26	29	23	20	28	19	18	28	16	15	25	53 / 48 / 43
453b	n/a	27	26	30	27	26	29	27	26	29	26	26	29	23	20	28	19	18	29	16	16	26	53 / 48 / 43
454	n/a	27	26	30	27	27	29	27	26	29	26	26	29	24	22	28	21	20	28	18	17	26	53 / 48 / 43
455	n/a	25	25	28	25	25	25	25	25	25	25	25	25	9	7	14	7	7	13	5	5	10	53 / 48 / 43
456	n/a	25	25	28	25	25	25	25	25	25	25	25	25	9	7	12	7	7	11	5	5	8	53 / 48 / 43
456b	n/a	25	25	28	25	25	25	25	25	25	25	25	25	9	7	12	7	7	11	5	5	8	53 / 48 / 43
458	n/a	28	26	31	26	26	30	28	26	30	27	26	30	25	22	30	21	20	30	18	17	27	53 / 48 / 43
460	n/a	31	31	32	31	31	31	30	30	30	30	30	30	12	10	17	10	10	17	8	9	14	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
460b	n/a	31	31	32	30	31	31	30	30	30	30	30	30	12	10	19	10	10	19	8	8	16	53 / 48 / 43
461	n/a	31	30	32	30	30	31	30	30	31	30	30	31	15	13	22	13	13	22	12	12	20	53 / 48 / 43
462a	n/a	32	32	33	32	32	32	30	30	31	30	30	31	17	12	23	12	12	23	10	11	21	53 / 48 / 43
462b	n/a	32	32	33	32	32	32	30	30	31	30	30	31	17	12	23	12	12	23	10	10	21	53 / 48 / 43
462c	n/a	32	32	33	32	32	32	30	30	31	30	30	31	17	12	23	12	12	23	10	10	21	53 / 48 / 43
464	n/a	36	36	35	36	36	34	36	35	33	38	38	36	24	17	28	18	18	29	17	16	28	53 / 48 / 43
464b	n/a	36	36	35	36	36	35	36	35	33	38	38	36	24	20	29	18	18	30	17	17	28	53 / 48 / 43
465	n/a	36	36	35	36	36	35	34	34	33	36	36	36	25	22	31	21	21	31	20	19	29	53 / 48 / 43
466	n/a	35	35	34	35	35	33	31	31	27	33	33	31	21	16	25	15	15	23	13	14	21	53 / 48 / 43
467	n/a	39	39	39	39	39	39	38	38	38	38	38	38	22	19	28	18	18	28	16	17	25	53 / 48 / 43
467b	n/a	39	39	39	39	39	39	38	38	38	38	38	38	22	19	28	18	18	28	16	17	26	53 / 48 / 43
468a	n/a	32	32	37	32	32	35	21	20	32	20	20	35	15	14	22	13	13	22	11	10	19	53 / 48 / 43
468b	n/a	33	33	37	33	33	35	21	20	32	20	20	35	15	14	22	12	12	22	11	10	19	53 / 48 / 43
468c	n/a	32	32	36	32	32	35	21	21	32	20	20	35	15	14	22	13	12	22	11	10	19	53 / 48 / 43
468d	n/a	32	32	37	32	32	35	21	20	32	20	20	35	15	14	22	13	12	22	11	10	19	53 / 48 / 43
470	n/a	34	32	39	34	32	36	26	26	35	27	27	37	21	19	25	18	18	25	17	17	23	53 / 48 / 43
471	n/a	34	33	39	34	33	36	26	26	34	27	27	36	21	20	25	19	19	25	17	17	22	53 / 48 / 43
472a	n/a	33	31	38	33	31	36	24	24	34	25	25	37	21	20	25	19	18	25	17	17	23	53 / 48 / 43
472b	n/a	33	31	39	33	31	36	25	25	35	26	26	38	21	20	25	18	18	25	16	16	23	53 / 48 / 43
472c	n/a	33	32	38	32	32	35	22	22	33	24	24	36	16	15	22	14	14	21	12	12	19	53 / 48 / 43
474	n/a	32	32	37	31	31	35	21	21	33	22	22	36	14	14	22	13	12	21	11	11	19	53 / 48 / 43
475	n/a	32	31	40	31	30	38	26	26	38	26	26	40	22	21	26	21	21	26	19	19	24	53 / 48 / 43
475b	n/a	32	31	40	31	30	38	26	26	38	26	26	40	22	21	26	21	21	26	19	19	24	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
476	n/a	33	32	38	33	32	37	24	23	35	24	24	37	21	20	25	20	20	25	18	18	23	53 / 48 / 43
477a	n/a	32	31	40	32	31	38	25	25	37	25	25	38	21	21	25	20	20	25	19	19	24	53 / 48 / 43
477b	n/a	32	31	40	32	31	38	25	25	37	24	24	38	21	21	25	20	20	25	19	19	24	53 / 48 / 43
481	n/a	33	33	37	33	33	36	23	22	34	22	22	35	20	19	24	19	19	24	17	17	22	53 / 48 / 43
483	n/a	33	34	38	33	34	36	22	21	32	21	21	33	19	19	23	18	18	23	16	16	21	53 / 48 / 43
484	n/a	33	33	37	33	33	36	24	23	33	23	23	34	21	20	24	19	19	24	18	18	22	53 / 48 / 43
485a	n/a	35	35	37	35	35	35	32	32	32	32	32	32	12	11	17	11	10	16	9	8	14	53 / 48 / 43
485b	n/a	35	35	37	35	35	35	32	32	32	32	32	32	12	11	17	11	10	16	9	8	14	53 / 48 / 43
485c	n/a	35	35	37	35	35	35	32	32	32	32	32	32	13	12	17	11	11	17	10	9	14	53 / 48 / 43
485d	n/a	35	35	37	35	35	35	32	32	32	32	32	32	12	11	18	11	11	17	10	9	15	53 / 48 / 43
485e	n/a	35	35	37	35	35	35	32	32	32	32	32	32	13	11	17	11	11	17	10	9	15	53 / 48 / 43
485f	n/a	35	35	37	35	35	35	32	32	32	32	32	32	12	10	16	11	10	16	9	8	14	53 / 48 / 43
487	n/a	32	31	43	31	30	41	30	29	41	30	30	42	25	25	28	25	25	28	23	23	27	53 / 48 / 43
488a	n/a	33	33	44	32	32	42	31	31	42	31	31	43	26	26	29	26	26	29	24	25	27	53 / 48 / 43
488b	n/a	33	32	45	32	31	43	30	30	43	31	31	45	25	24	29	24	24	29	22	22	27	53 / 48 / 43
515a	n/a	28	31	34	25	25	28	25	25	28	25	25	27	13	12	21	11	11	17	10	10	20	53 / 48 / 43
515b	n/a	28	31	34	26	26	28	26	26	28	26	25	28	14	13	25	13	13	24	12	12	24	53 / 48 / 43
516	n/a	28	31	34	25	25	28	25	25	28	25	25	28	11	10	24	10	10	23	9	8	23	53 / 48 / 43
517	n/a	29	32	35	28	28	30	28	27	30	27	27	30	22	20	28	20	20	27	19	19	26	53 / 48 / 43
518	n/a	30	32	35	28	28	31	28	27	30	28	27	30	22	20	29	20	20	28	21	20	27	53 / 48 / 43
519	n/a	29	31	34	27	27	29	27	26	29	27	26	29	19	17	26	17	17	25	16	16	25	53 / 48 / 43
522a	n/a	32	32	37	32	32	34	32	31	34	31	31	35	22	21	32	21	21	31	20	20	30	53 / 48 / 43
522b	1	35	34	39	35	34	37	34	34	37	33	33	37	26	26	35	26	26	34	25	25	34	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
522c	1	35	34	39	35	34	37	34	34	37	33	33	37	26	26	35	26	26	34	25	25	34	53 / 48 / 43
522d	1	35	34	39	35	34	37	34	34	37	33	33	37	26	26	35	26	26	34	25	25	34	53 / 48 / 43
526[1]	n/a	36	34	40	36	34	38	35	34	38	34	33	38	28	27	37	28	28	36	27	27	35	53 / 48 / 43
527	1	36	35	40	36	35	38	35	35	38	35	35	38	30	29	36	29	30	36	29	29	35	53 / 48 / 43
528	1	36	35	40	36	35	38	35	35	38	35	35	38	30	29	36	29	29	36	29	29	35	53 / 48 / 43
529	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
530	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
531	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
531b	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
532	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
533	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
534	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
535	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
536	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
537	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	30	35	29	29	35	53 / 48 / 43
538	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	30	35	29	29	34	53 / 48 / 43
539	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
541	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
542	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
543	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
543b	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	30	35	29	29	34	53 / 48 / 43
544	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
545	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
547	2	33	33	38	32	31	36	31	30	35	30	29	36	24	19	35	19	19	33	18	18	32	53 / 48 / 43
549	n/a	34	34	38	33	33	33	33	33	33	33	33	33	10	8	15	8	8	15	8	7	15	53 / 48 / 43
550	n/a	30	30	36	26	26	27	26	26	27	26	26	27	20	19	22	19	19	23	18	18	22	53 / 48 / 43
552	n/a	33	33	35	33	33	33	33	33	33	33	33	33	12	10	16	10	10	16	9	9	16	53 / 48 / 43
553	n/a	31	31	37	25	25	26	25	25	25	25	25	26	12	11	16	11	11	16	11	10	16	53 / 48 / 43
554	n/a	28	28	37	27	27	27	27	26	27	27	26	28	22	21	26	21	20	25	20	20	24	53 / 48 / 43
557	n/a	31	31	38	26	25	26	25	25	25	25	25	26	12	10	15	11	11	16	11	10	16	53 / 48 / 43
559	n/a	37	37	42	33	33	33	33	33	33	33	33	33	20	19	23	19	19	23	18	18	22	53 / 48 / 43
560	n/a	36	36	40	33	33	33	33	33	33	33	33	33	20	19	22	19	19	22	18	18	22	53 / 48 / 43
561	n/a	34	34	39	33	33	33	33	33	33	33	33	33	17	16	19	16	16	20	15	15	20	53 / 48 / 43
562	n/a	35	35	39	33	33	33	33	33	33	33	33	33	18	17	21	17	17	21	17	17	21	53 / 48 / 43
563	n/a	35	35	40	33	33	33	33	33	33	33	33	33	15	13	19	13	13	19	13	12	19	53 / 48 / 43
564	n/a	34	34	38	33	33	33	33	33	33	33	33	33	12	10	18	10	10	18	10	9	18	53 / 48 / 43
565	n/a	34	34	38	33	33	33	33	33	33	33	33	33	10	8	14	8	8	15	7	7	14	53 / 48 / 43
566	n/a	34	33	36	33	33	33	33	33	33	33	33	33	13	10	16	10	10	16	10	9	16	53 / 48 / 43
569	n/a	33	33	35	33	33	33	33	33	33	33	33	33	9	7	15	7	7	15	6	6	15	53 / 48 / 43
570	n/a	33	33	35	33	33	33	33	33	33	33	33	33	8	7	15	7	7	15	5	5	15	53 / 48 / 43
571	n/a	33	33	36	33	33	33	33	33	33	33	33	33	14	12	18	12	12	18	11	11	18	53 / 48 / 43
572	n/a	33	33	35	33	33	33	33	33	33	33	33	33	12	9	16	9	9	16	8	8	16	53 / 48 / 43
573	n/a	33	33	35	33	33	33	33	33	33	33	33	33	12	10	16	10	10	16	9	9	16	53 / 48 / 43
574	n/a	33	33	36	33	33	33	33	33	33	33	33	33	12	11	17	11	11	17	10	10	17	53 / 48 / 43
575	n/a	33	33	36	33	33	33	33	33	33	33	33	33	12	11	17	11	11	17	10	10	17	53 / 48 / 43
576	n/a	33	33	36	33	33	33	33	33	33	33	33	33	12	11	17	11	11	18	9	9	17	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
577a	n/a	33	33	36	33	33	33	33	33	33	33	33	33	15	14	19	14	14	19	14	14	19	53 / 48 / 43
577b	n/a	33	33	36	33	33	33	33	33	33	33	33	33	12	11	17	11	11	18	10	10	17	53 / 48 / 43
578	n/a	33	33	36	33	33	33	33	33	33	33	33	33	11	10	15	10	10	15	9	9	15	53 / 48 / 43
583	n/a	30	32	35	28	28	31	28	27	29	27	27	30	21	20	29	20	20	28	20	20	27	53 / 48 / 43
586	n/a	29	31	34	27	27	29	27	27	29	27	26	29	20	19	27	18	18	25	17	17	24	53 / 48 / 43
587a	n/a	28	31	34	26	26	28	26	26	27	26	26	28	18	14	25	15	15	23	16	15	23	53 / 48 / 43
587b	n/a	27	31	32	22	22	26	23	22	25	23	22	26	18	14	25	15	15	23	16	15	23	53 / 48 / 43
588	n/a	29	31	34	27	27	29	27	26	28	27	26	28	19	18	26	17	17	25	16	16	24	53 / 48 / 43
600a	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
600b	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
601	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
602	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
603	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
604	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
605	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
606	1	36	35	40	35	35	37	35	35	37	35	35	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
607	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
608	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
609	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
610	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
611	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
612	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
613	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
614	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
615	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
616a	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
616b	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	35	29	29	34	53 / 48 / 43
617a	1	35	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	29	29	34	53 / 48 / 43
618a	1	35	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	29	29	34	53 / 48 / 43
618b	1	36	35	40	35	35	37	35	35	37	35	34	37	30	29	35	29	29	34	29	29	34	53 / 48 / 43
619	1	35	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	29	29	34	53 / 48 / 43
621	1	35	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	29	29	34	53 / 48 / 43
622a	1	35	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	29	29	34	53 / 48 / 43
623a	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
623b	1	35	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	28	28	34	53 / 48 / 43
630a	1	35	35	39	35	35	37	35	35	36	34	34	37	29	28	35	28	28	34	28	28	34	53 / 48 / 43
631	1	35	35	39	35	35	37	35	35	36	34	34	37	29	28	35	28	28	34	28	28	34	53 / 48 / 43
632	1	35	34	39	34	34	36	34	34	36	34	34	36	26	25	34	25	25	33	25	25	33	53 / 48 / 43
648	1	36	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	29	29	34	53 / 48 / 43
649	1	36	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	28	29	34	53 / 48 / 43
650	1	36	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	28	29	34	53 / 48 / 43
651	1	36	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	34	29	29	34	53 / 48 / 43
652	1	36	35	40	35	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
653	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
654a	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
654b	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
655	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
658a	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
659	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
660a	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
660b	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
661	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	35	53 / 48 / 43
662	1	36	35	40	36	35	37	35	35	37	35	35	37	29	29	35	29	29	35	29	29	35	53 / 48 / 43
663	1	36	35	40	36	35	37	35	35	37	35	35	37	29	29	35	29	29	35	29	29	35	53 / 48 / 43
664	1	36	35	40	36	35	38	35	35	37	35	35	38	29	29	35	29	29	35	29	29	35	53 / 48 / 43
665a	1	36	35	40	36	35	38	35	35	37	35	35	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
665b	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
667a	n/a	37	35	40	36	35	38	35	35	38	35	35	38	30	30	36	30	30	36	30	30	36	53 / 48 / 43
667b	n/a	37	35	40	36	35	38	35	35	38	35	35	38	30	30	36	30	30	36	30	30	36	53 / 48 / 43
667c	n/a	37	35	40	36	35	38	35	35	38	35	35	38	30	30	36	30	30	36	30	30	36	53 / 48 / 43
667d	n/a	37	35	40	36	35	38	35	35	38	35	35	38	31	30	36	30	30	36	30	30	36	53 / 48 / 43
667e	n/a	37	35	40	36	35	38	35	35	38	35	35	38	30	30	36	30	30	36	30	30	36	53 / 48 / 43
667f	1	35	34	39	35	34	37	34	33	37	33	33	37	26	25	35	25	25	34	25	25	33	53 / 48 / 43
669	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
671	1	36	35	40	36	35	38	35	35	37	35	35	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
672	1	36	35	40	36	35	38	35	35	37	35	35	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
673	1	36	35	40	36	35	38	35	35	37	35	35	38	30	29	36	29	29	35	29	29	35	53 / 48 / 43
675	1	36	35	40	36	35	38	35	35	37	35	35	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
676	1	36	35	40	36	35	38	35	35	37	35	35	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
677	1	36	35	40	36	35	38	35	35	37	35	35	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
678	1	36	35	40	36	35	38	35	35	37	35	34	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
679	1	36	35	40	36	35	38	35	35	37	35	34	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
680	1	36	35	40	36	35	38	35	35	37	35	34	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
681	1	36	35	40	36	35	38	35	35	37	35	34	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
682a	1	35	34	39	35	35	37	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
682b	1	36	35	40	36	35	38	35	35	37	35	34	38	29	29	35	29	29	35	29	29	35	53 / 48 / 43
683	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
684	1	35	34	39	35	35	37	34	34	37	34	34	37	29	29	36	29	29	35	28	29	35	53 / 48 / 43
685	1	35	34	39	35	35	37	34	34	37	34	34	37	29	29	36	29	29	35	28	29	35	53 / 48 / 43
686	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	28	29	35	28	28	35	53 / 48 / 43
687	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	28	28	35	53 / 48 / 43
688	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	35	53 / 48 / 43
689	1	36	35	40	36	35	38	35	35	37	35	34	38	29	29	35	29	29	35	29	29	35	53 / 48 / 43
690	1	36	35	40	36	35	38	35	35	37	35	34	37	29	29	35	29	29	35	29	29	35	53 / 48 / 43
691	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	29	29	34	53 / 48 / 43
692	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	28	29	34	53 / 48 / 43
693	1	36	35	40	36	35	37	35	35	37	35	34	37	29	29	35	29	29	35	28	28	34	53 / 48 / 43
694a	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	36	29	29	35	28	28	34	53 / 48 / 43
694b	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	36	28	29	35	28	28	34	53 / 48 / 43
695	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	36	29	29	35	28	28	34	53 / 48 / 43
697	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	36	28	28	35	28	28	34	53 / 48 / 43
698	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	35	28	29	35	28	28	34	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
715	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
728	1	35	34	39	35	34	37	34	34	37	34	34	37	29	28	35	28	28	35	28	28	34	53 / 48 / 43
729	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
730	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	35	28	28	35	28	28	34	53 / 48 / 43
731	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
732	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
733	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	35	28	28	35	28	28	34	53 / 48 / 43
735a	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
735b	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
736	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
737	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
738	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
739	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
740a	1	35	34	39	35	34	37	34	34	37	34	33	37	28	28	35	28	28	34	28	28	34	53 / 48 / 43
740b	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	35	28	28	34	28	28	34	53 / 48 / 43
740c	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
740d	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
740e	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
740f	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	35	28	28	34	28	28	34	53 / 48 / 43
741	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
742	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43
743	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
744	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	35	28	28	35	28	28	34	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
745	1	35	34	39	35	34	37	34	34	37	34	33	37	28	28	35	28	28	34	28	28	34	53 / 48 / 43
746	1	35	34	39	35	34	37	34	34	37	34	33	37	28	28	35	28	28	34	28	28	34	53 / 48 / 43
747	1	35	34	39	35	34	37	34	34	37	34	33	37	28	28	35	28	28	34	28	28	34	53 / 48 / 43
748a	1	35	34	39	35	34	37	34	34	37	34	33	37	28	28	35	27	28	34	27	27	34	53 / 48 / 43
748b	1	33	32	38	34	33	36	32	32	35	31	31	36	23	22	34	22	22	33	21	21	32	53 / 48 / 43
749a	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	36	28	29	35	28	28	35	53 / 48 / 43
749b	1	35	34	39	35	34	37	34	34	37	34	34	37	29	28	36	28	29	35	28	28	35	53 / 48 / 43
750	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	29	35	28	28	35	53 / 48 / 43
751	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	29	35	28	28	35	53 / 48 / 43
752a	1	35	34	39	35	34	37	34	34	37	34	34	37	29	28	36	28	29	35	28	28	35	53 / 48 / 43
752b	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	36	29	29	35	28	29	34	53 / 48 / 43
753	1	35	34	39	35	34	37	34	34	37	34	34	37	29	29	36	29	29	35	28	29	35	53 / 48 / 43
754	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
755	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
756	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
757	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
758	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
759a	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
759b	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
760	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
761	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
762	1	36	35	40	36	35	38	35	35	37	35	34	38	29	29	36	29	29	35	29	29	35	53 / 48 / 43
763	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
764	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
765a	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
765b	1	35	34	40	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
766	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
767	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
768	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
769	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
770	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
771	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
772	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
773	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	29	29	35	29	29	35	53 / 48 / 43
774	1	35	34	39	35	35	38	34	34	37	34	34	37	29	29	36	28	29	35	28	28	35	53 / 48 / 43
775	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
776	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
777	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
778a	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
778b	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
779a	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
779b	1	35	34	39	35	35	38	34	34	37	34	34	37	28	28	36	28	28	35	28	28	35	53 / 48 / 43
780	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
781	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
782	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
783	1	35	34	39	35	35	38	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
784	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	29	35	28	28	34	53 / 48 / 43
785	1	35	34	39	35	34	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
786	1	35	34	39	35	34	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
787a	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
787b	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
788	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
789	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
790a	1	35	34	39	35	34	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
790b	1	35	34	39	35	34	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
791a	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
791b	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	34	53 / 48 / 43
792a	1	35	34	39	35	35	37	34	34	37	34	34	37	29	28	36	28	28	35	28	28	35	53 / 48 / 43
792b	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
793	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
794	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
795	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
796	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
797a	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
797b	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	35	53 / 48 / 43
798	1	35	34	39	35	35	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	35	53 / 48 / 43
801	1	35	34	39	35	35	38	34	34	37	34	34	37	28	28	36	28	28	35	28	28	35	53 / 48 / 43
802	1	35	34	39	35	35	38	34	34	37	34	34	37	28	28	36	28	28	35	28	28	35	53 / 48 / 43
803a	1	35	34	39	35	34	37	34	34	37	34	33	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
803b	1	35	34	39	35	34	37	34	34	37	34	33	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
804	1	35	34	39	35	34	37	34	34	37	34	33	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
805	1	35	34	39	35	34	37	34	34	37	34	34	37	28	28	36	28	28	35	28	28	34	53 / 48 / 43
806	1	35	34	39	35	34	37	34	34	37	33	33	37	27	27	35	27	27	34	27	27	34	53 / 48 / 43
807	1	35	34	39	35	34	37	34	34	37	33	33	37	27	27	35	27	27	34	27	27	34	53 / 48 / 43
808	1	35	34	39	35	34	37	34	34	37	33	33	37	27	27	35	27	27	34	27	27	34	53 / 48 / 43
809	1	35	34	39	35	34	37	34	34	37	33	33	37	27	27	35	27	27	34	27	27	34	53 / 48 / 43
810	1	35	34	39	35	34	37	34	34	37	33	33	37	27	27	35	27	27	34	26	27	34	53 / 48 / 43
811	1	35	34	39	35	34	37	34	34	37	33	33	37	27	27	35	26	26	34	26	26	34	53 / 48 / 43
812	1	35	34	39	35	34	37	34	34	37	33	33	37	27	26	35	26	26	34	26	26	34	53 / 48 / 43
813	1	35	34	39	35	34	37	34	34	37	33	33	37	27	26	35	26	26	34	26	26	34	53 / 48 / 43
814	1	35	34	39	35	34	37	34	34	37	33	33	37	27	26	35	26	26	34	26	26	34	53 / 48 / 43
815a	1	35	34	39	35	34	37	34	34	37	33	33	37	27	26	35	26	26	34	26	26	34	53 / 48 / 43
815b	1	35	34	39	35	34	37	34	34	37	33	33	37	27	26	35	26	26	34	26	26	34	53 / 48 / 43
816	1	35	34	39	35	34	37	34	34	37	33	33	37	27	26	35	26	26	34	26	26	34	53 / 48 / 43
817	1	35	34	39	35	34	37	34	34	37	33	33	37	26	26	35	26	26	34	26	26	34	53 / 48 / 43
819	1	35	34	39	35	34	37	34	33	37	33	33	37	25	25	35	25	25	34	25	25	33	53 / 48 / 43
820a	1	35	34	39	35	34	37	34	33	37	33	33	37	25	25	35	25	25	34	25	25	33	53 / 48 / 43
820b	1	35	34	39	35	34	37	34	33	37	33	33	37	25	25	35	25	25	34	25	25	33	53 / 48 / 43
821	1	35	34	39	35	34	37	34	33	37	33	33	37	25	25	35	25	25	34	24	24	33	53 / 48 / 43
822	1	35	34	39	35	34	37	34	33	37	33	33	37	25	25	35	25	25	34	24	24	33	53 / 48 / 43
823a	1	35	34	39	35	34	37	34	33	37	33	33	37	25	25	35	25	25	34	24	24	33	53 / 48 / 43
823b	1	35	33	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	34	24	24	33	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
824	1	35	34	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	34	24	24	33	53 / 48 / 43
825	1	35	34	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	33	24	24	33	53 / 48 / 43
826	1	35	34	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	33	24	24	33	53 / 48 / 43
827	1	35	34	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	33	24	24	33	53 / 48 / 43
828	1	35	33	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	34	24	24	33	53 / 48 / 43
829a	1	35	33	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	33	24	24	33	53 / 48 / 43
829b	1	35	33	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	33	24	24	33	53 / 48 / 43
830	1	35	33	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	33	24	24	33	53 / 48 / 43
831	1	35	33	39	35	34	37	34	33	37	33	33	37	25	24	35	24	24	33	24	24	33	53 / 48 / 43
832	1	35	33	39	35	34	37	34	33	37	33	33	37	25	24	34	24	24	33	24	24	33	53 / 48 / 43
833	1	35	33	39	35	34	37	34	33	37	33	33	37	25	24	34	24	24	33	23	23	33	53 / 48 / 43
834	1	35	33	39	35	34	37	34	33	37	33	33	37	24	24	34	24	24	33	23	23	33	53 / 48 / 43
835	1	35	33	39	35	34	37	34	33	37	33	33	37	24	24	34	24	24	33	23	23	33	53 / 48 / 43
836	1	35	33	39	35	34	37	34	33	37	33	33	37	24	24	34	24	23	33	23	23	33	53 / 48 / 43
837	1	35	33	39	35	34	37	34	33	37	33	33	37	24	24	34	23	23	33	23	23	33	53 / 48 / 43
838	1	35	33	39	35	34	37	34	33	37	33	33	37	24	23	34	23	23	33	23	23	33	53 / 48 / 43
839	1	35	33	39	35	34	37	34	33	37	33	33	37	24	23	34	23	23	33	23	23	33	53 / 48 / 43
840	1	35	33	39	35	34	37	34	33	37	33	33	37	24	23	34	23	23	33	23	23	33	53 / 48 / 43
841	1	35	33	39	35	34	37	34	33	36	33	33	37	24	23	34	23	23	33	23	23	33	53 / 48 / 43
843a	1	34	33	39	35	34	37	34	33	36	33	33	37	24	23	34	23	23	33	23	23	33	53 / 48 / 43
843b	1	35	33	39	35	34	37	34	33	36	33	33	37	24	23	34	23	23	33	23	23	33	53 / 48 / 43
844a	1	34	33	39	35	34	37	34	33	36	33	33	36	24	23	34	23	23	33	22	22	33	53 / 48 / 43
845	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
846	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43
847	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43
848	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43
849	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43
850	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43
853	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43
854	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43
855	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	22	22	32	53 / 48 / 43
856	1	33	32	38	34	33	36	32	32	36	31	31	36	24	22	34	22	22	33	21	21	32	53 / 48 / 43
857	1	33	32	38	34	33	36	32	32	35	31	31	36	24	22	34	22	22	33	21	21	32	53 / 48 / 43
858	1	33	32	38	34	33	36	32	32	35	31	31	36	24	22	34	22	22	33	21	21	32	53 / 48 / 43
859	1	33	32	38	34	33	36	32	32	35	31	31	36	23	22	34	22	22	33	21	21	32	53 / 48 / 43
860	1	33	32	38	34	33	36	32	32	35	31	31	36	23	22	34	22	22	33	21	21	32	53 / 48 / 43
861	1	33	32	38	34	33	36	32	32	35	31	31	36	23	22	34	22	22	33	21	21	32	53 / 48 / 43
862	1	33	32	38	34	33	36	32	32	35	31	31	36	23	22	34	22	22	33	21	21	32	53 / 48 / 43
863	1	33	32	38	34	33	36	32	32	35	31	31	36	23	22	34	22	22	33	21	21	32	53 / 48 / 43
864	1	33	32	38	34	33	36	32	32	35	31	31	36	23	22	34	22	21	32	21	21	32	53 / 48 / 43
865	1	33	32	38	34	33	36	32	32	35	31	31	36	23	22	34	22	21	32	21	21	32	53 / 48 / 43
866	2	33	32	38	33	33	36	32	32	35	31	31	36	23	21	34	21	21	32	20	20	32	53 / 48 / 43
867	2	33	32	38	33	33	36	32	32	35	31	31	36	23	21	34	21	21	32	20	20	32	53 / 48 / 43
868	2	33	32	38	33	33	36	32	31	35	31	31	36	23	21	34	21	21	32	20	20	32	53 / 48 / 43
870	2	33	32	38	33	33	36	32	31	35	31	31	36	23	21	33	21	21	32	20	20	32	53 / 48 / 43
871	2	33	32	38	33	33	36	32	31	35	31	31	36	23	21	33	21	21	32	20	20	32	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
872a	2	33	32	38	33	33	36	32	31	35	31	31	36	23	21	33	21	21	32	20	20	32	53 / 48 / 43
900a	n/a	38	41	41	29	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	26	31	53 / 48 / 43
900b	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	27	31	53 / 48 / 43
901	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	27	26	34	27	27	32	53 / 48 / 43
902	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	27	26	34	27	27	32	53 / 48 / 43
903	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	27	26	34	27	27	32	53 / 48 / 43
904	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	27	26	34	27	26	32	53 / 48 / 43
905	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	27	26	34	27	26	31	53 / 48 / 43
906	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	26	31	53 / 48 / 43
907	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	26	31	53 / 48 / 43
908	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	34	27	26	34	27	26	31	53 / 48 / 43
909	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	29	34	27	26	34	27	26	31	53 / 48 / 43
911	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	29	34	27	26	34	27	26	31	53 / 48 / 43
912	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	29	34	27	26	34	27	26	31	53 / 48 / 43
913	n/a	38	41	41	29	29	33	30	29	33	30	30	34	30	29	34	26	26	34	27	26	31	53 / 48 / 43
914	n/a	38	41	41	29	29	33	30	29	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
915	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
916	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
917	n/a	38	41	41	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
918	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
919	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
920	n/a	38	41	41	29	29	33	30	29	33	30	30	34	30	28	34	26	26	34	27	26	31	53 / 48 / 43
921	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	28	34	26	26	34	27	26	31	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
922	n/a	38	41	41	30	29	33	30	29	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
924	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	28	35	26	26	34	27	26	31	53 / 48 / 43
925	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	26	31	53 / 48 / 43
926	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	26	26	34	27	26	31	53 / 48 / 43
927	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	26	26	34	27	26	31	53 / 48 / 43
928	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	26	26	34	27	27	31	53 / 48 / 43
929	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	26	26	34	27	27	31	53 / 48 / 43
930	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	26	26	34	27	27	32	53 / 48 / 43
931	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	26	26	34	27	27	32	53 / 48 / 43
932a	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	28	35	26	26	34	27	27	31	53 / 48 / 43
932b	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	28	35	26	26	34	27	27	31	53 / 48 / 43
933	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	28	35	26	26	34	27	27	32	53 / 48 / 43
934	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	28	34	26	26	34	27	26	31	53 / 48 / 43
935a	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	28	34	26	26	34	27	26	31	53 / 48 / 43
935b	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	28	34	26	26	34	27	26	31	53 / 48 / 43
936	n/a	38	41	41	30	29	33	30	29	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
937	n/a	38	41	41	30	29	33	30	28	33	30	30	34	30	28	34	26	26	34	27	26	31	53 / 48 / 43
938	n/a	38	41	41	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	26	31	53 / 48 / 43
939	n/a	38	41	41	30	29	33	30	28	33	31	30	34	29	28	35	26	26	34	26	25	31	53 / 48 / 43
940	n/a	38	41	41	30	29	33	30	28	33	31	30	34	29	28	35	26	26	34	26	26	31	53 / 48 / 43
941	n/a	38	41	41	30	29	33	30	28	33	31	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
942	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	31	53 / 48 / 43
943	n/a	38	41	41	29	29	33	30	28	33	31	30	34	29	28	35	26	25	34	27	26	31	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
944	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	31	53 / 48 / 43
945a	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
945b	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
946	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
947	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
948	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
949	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
950	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
951	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
952	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
953	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
954	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
955	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
956	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	26	25	34	26	26	31	53 / 48 / 43
957a	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
957b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
958	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
959	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
960	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
961	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
962	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
963	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
964	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
965	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
966	n/a	38	41	41	29	29	33	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
967a	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
967b	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
968	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
969	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	25	25	34	26	26	31	53 / 48 / 43
970	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	53 / 48 / 43
971	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	53 / 48 / 43
972	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	53 / 48 / 43
973	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	53 / 48 / 43
974	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	25	25	34	26	26	31	53 / 48 / 43
976	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	33	26	26	31	53 / 48 / 43
977a	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
977b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
978	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	26	25	33	26	26	30	53 / 48 / 43
979a	n/a	38	41	41	28	28	31	29	28	31	29	29	33	29	28	33	25	25	33	26	25	30	53 / 48 / 43
979b	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	27	34	26	25	33	26	26	30	53 / 48 / 43
980	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	27	34	26	25	33	26	26	30	53 / 48 / 43
981a	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	30	53 / 48 / 43
981b	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	30	53 / 48 / 43
982	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	30	53 / 48 / 43
983	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	30	53 / 48 / 43
984	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	30	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
985	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	33	26	26	31	53 / 48 / 43
986	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
987	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
988a	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
988b	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
989a	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
989b	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
990	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
991	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	33	26	26	31	53 / 48 / 43
992	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
993a	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
993b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
994a	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
994b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
995	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
997	n/a	38	41	41	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
998	n/a	38	41	41	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
999	n/a	38	41	41	28	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1000	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1001	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1002	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1003	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1004	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1005	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1006	n/a	38	41	41	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1007	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1008	n/a	38	41	41	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1009	n/a	38	41	41	29	28	31	29	27	31	29	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1010	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1011	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1012	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1014	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1015	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1016	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1017	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1018	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1019	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1020	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1021	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1022	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	30	53 / 48 / 43
1023	n/a	38	41	41	24	23	27	24	23	27	25	25	29	24	23	26	20	20	25	21	20	25	53 / 48 / 43
1024	n/a	38	41	41	27	26	30	28	25	29	27	27	30	28	25	29	25	25	32	26	26	30	53 / 48 / 43
1025	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1026	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	30	53 / 48 / 43
1027	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
1028	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	25	30	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1029	n/a	38	41	41	29	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	25	30	53 / 48 / 43
1030	n/a	38	41	41	29	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	25	30	53 / 48 / 43
1031	n/a	38	41	41	28	28	32	29	28	31	29	29	33	29	28	33	25	25	33	25	25	29	53 / 48 / 43
1032	n/a	38	41	41	29	28	31	29	28	31	29	29	33	28	28	33	25	25	33	25	25	29	53 / 48 / 43
1033	n/a	38	41	41	29	28	31	29	28	31	29	29	33	27	26	32	24	23	30	23	23	27	53 / 48 / 43
1034	n/a	38	41	41	28	27	31	29	28	31	29	29	32	26	25	30	22	22	27	23	22	26	53 / 48 / 43
1035	n/a	38	41	41	28	28	31	29	28	31	29	29	33	29	28	33	25	25	33	25	25	30	53 / 48 / 43
1036a	n/a	38	41	41	28	28	31	29	28	31	29	29	33	29	28	33	25	25	33	26	25	30	53 / 48 / 43
1036b	n/a	38	41	41	28	28	31	29	28	31	29	29	33	29	28	33	25	25	33	26	25	30	53 / 48 / 43
1037	n/a	38	41	41	28	28	31	29	28	31	29	29	33	29	28	33	25	25	33	26	25	30	53 / 48 / 43
1038	n/a	38	41	41	28	28	31	29	28	31	29	29	33	29	28	33	25	25	33	26	25	30	53 / 48 / 43
1039	n/a	38	41	41	28	28	31	29	28	31	29	29	33	29	28	33	26	25	33	26	25	30	53 / 48 / 43
1040	n/a	38	41	41	28	28	31	29	28	32	29	29	33	29	28	33	26	25	33	26	25	30	53 / 48 / 43
1041	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	25	33	26	25	30	53 / 48 / 43
1042	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	25	33	26	26	30	53 / 48 / 43
1043	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	30	53 / 48 / 43
1044	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	25	33	26	26	30	53 / 48 / 43
1045	n/a	38	41	41	28	28	31	29	27	31	29	29	33	29	28	33	25	25	33	26	25	30	53 / 48 / 43
1046	n/a	38	41	41	28	28	31	29	28	31	29	29	33	29	28	33	25	25	33	26	25	30	53 / 48 / 43
1077	n/a	38	41	41	29	28	32	29	27	32	30	29	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
1078	n/a	38	41	41	29	28	32	29	27	32	30	29	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
1079	n/a	38	41	41	29	28	31	29	27	32	29	29	33	28	27	33	25	24	33	26	25	30	53 / 48 / 43
1080	n/a	38	41	41	29	28	31	29	27	31	29	29	33	28	27	33	25	24	33	26	25	30	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1081	n/a	38	41	41	28	28	31	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
1082a	n/a	38	41	41	28	28	31	29	27	32	30	29	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
1082b	n/a	38	41	41	28	28	32	29	27	32	30	29	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
1100a	n/a	38	38	39	38	37	38	32	32	32	32	32	32	18	17	22	16	16	22	15	14	19	53 / 48 / 43
1100b	n/a	38	38	39	37	37	38	32	32	32	32	32	32	18	17	22	16	16	22	15	15	19	53 / 48 / 43

Notes:

- D = Day (7.00 am – 6.00 pm Monday to Saturday, and 8.00 am – 6.00 pm Sundays and public holidays); E = Evening (6.00 pm – 10.00 pm); N = the remaining periods.
- Levels highlighted in yellow indicate predictions under the relevant Fact Sheet D meteorological conditions in excess of the Amenity noise level.

1. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted air impacts. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.

APPENDIX I

SENSITIVITY ANALYSIS - CUMULATIVE NOISE LEVELS ASSUMING CONTINUED MT ARTHUR COAL MINE OPERATIONS

A sensitivity analysis of cumulative noise levels was conducted assuming mine activity at the Mt Arthur Coal Mine site would extend further than the current approval period (ending in June 2026). Noise predictions and discussion of outcomes are summarised in this Appendix.

The methodology used for the sensitivity analysis is the same as that of cumulative noise assessment presented in the report (Section 6.11.2).

Assuming continued Mt Arthur Coal Mine operations, the summation of the various noise predictions adopted for the sensitivity analysis is as follows:

- Cumulative 2026 = Project (2026) + Bengalla Mine (Project Year 15 [2029]) + Mt Arthur Coal Mine (2026) + Mangoola Coal (Project Year 10 [2023]) + Dartbrook (all years until 2022)
- Cumulative 2028 = Project (2028) + Bengalla Mine (Project Year 15 [2029]) + Mt Arthur Coal Mine (2026) + Mangoola Coal (Project Year 10 [2023])
- Cumulative 2031 = Project (2031) + Bengalla Mine (Project Year 15 [2029]) + Mt Arthur Coal Mine (2026)
- Cumulative 2034= Project (2034) + Bengalla Mine (Project Year 24 [2038]) + Mt Arthur Coal Mine (2026)
- Cumulative 2041 = Project (2041) + Mt Arthur Coal Mine (2026)
- Cumulative 2044 = Project (2044) + Mt Arthur Coal Mine (2026)
- Cumulative 2047 = Project (2047) + Mt Arthur Coal Mine (2026).

When considering the maximum noise emissions across all assessed cumulative years, "moderate" night time exceedances (between 3-5 dB according to the *VLAMP* and *NPfI*) are predicted at eight privately-owned residential receivers, while seven privately-owned residential receivers would be subject to "negligible" night time exceedances (between 1-2 dB according to the *VLAMP* and *NPfI*). As described in the *VLAMP* and *NPfI*, such "negligible" exceedances would not be discernible by the average listener.

All cumulative noise levels assuming continued Mt Arthur Coal Mine operations are found to comply with the amenity noise levels during the day and evening assessment periods.

A summary of the receivers predicted to exceed the night time amenity noise level is provided in Table I-1. The receivers are grouped according to noise impacts as interpreted by the *VLAMP* and the *NPfI* (Section 4.7).

The exceedances listed in Table I-1 are reflective of the assessed cumulative year(s) with potentially the most impact. It is expected that those receivers may at times be subject to lesser impact and/or no impact during the life of the Project.

Cumulative noise levels assuming continued Mt Arthur Coal Mine operations are summarised in Table I-2.

Table I-1 Summary of Potential Cumulative Noise Level Exceedances – Night Time

Zone	Exceedance Level	Privately-Owned Residential Receivers Predicted to Exceed Amenity Noise Levels
Noise Management Zone	**1 to 2 dB**	Receivers, 153a[1], 258a, 258c, 259[2], 259b, 487, and 488a
	3 to 5 dB	Receivers 43[3], 143b[1], 147[1], 156a[1], 157a[1], 159[1], 257[2], and 488b

Notes:

1. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.

Table I-1 indicates that all receivers exposed to "moderate" night time exceedances are already subject to acquisition or mitigation upon request rights in Development Consent DA 92/97 (as modified) for predicted noise or noise/air impacts associated with the approved mine, except for receiver 488b and newly identified receiver 258c. In accordance with the *VLAMP*, because the Project would not increase cumulative noise levels by more than 1 dB and the night time amenity noise level is predicted to exceed due to a combination of Bengalla Mine and Mt Arthur Coal Mine at the above receivers (i.e. irrespective of the Project), the receivers would not be afforded mitigation upon request rights as a result of the Project.

The majority of the receivers identified in Table I-1 are predicted to exceed the recommended amenity noise levels due to noise generated by the Bengalla Mine (receivers 43, 257, 258a, 258c, 259 and 259b) or a combination of the Bengalla Mine and Mt Arthur Coal Mine (receivers 487, 488a and 488b). For those receivers, the Project would either result a negligible 1 dB increase (receiver 257) or no change in noise levels.

A number of the receivers listed in Table I-1 would exceed due to the Project alone (receivers 143b, 147, 153a, 156a, 157a and 159). All those receivers are already subject to acquisition upon request rights in Development Consent DA 92/97 (as modified) for predicted noise impacts associated with the approved mine.

Table I-2 Cumulative Noise Predictions Assuming Continued Mt Arthur Coal Mine Operations

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
4	n/a	33	33	41	33	33	41	33	33	41	32	32	41	30	29	39	29	29	39	29	29	39	53 / 48 / 43
19[1]	n/a	34	33	41	34	34	41	34	33	41	32	32	41	30	29	40	29	29	40	29	29	40	53 / 48 / 43
20[1,2]	n/a	35	34	41	34	34	41	35	33	41	34	34	42	30	29	40	29	29	40	29	29	40	53 / 48 / 43
21[1,2]	n/a	35	34	41	34	34	41	35	33	41	34	34	42	30	29	40	29	29	40	29	29	40	53 / 48 / 43
35	n/a	37	35	40	36	36	41	36	35	40	35	35	41	33	32	40	32	32	40	32	32	39	53 / 48 / 43
35b	n/a	37	35	41	36	36	41	36	35	40	35	35	41	33	32	40	32	32	39	32	32	39	53 / 48 / 43
43[4]	n/a	46	45	40	45	45	41	45	45	41	48	48	47	34	32	39	31	31	40	29	30	38	53 / 48 / 43
43b[4]	n/a	38	38	38	38	38	39	38	38	39	40	40	40	31	28	39	27	27	39	25	25	38	53 / 48 / 43
45[3]	n/a	39	38	37	39	39	37	39	38	37	41	41	40	29	27	36	26	27	36	25	25	35	53 / 48 / 43
45b	n/a	39	39	37	39	39	37	39	38	37	41	41	40	30	27	36	27	27	36	26	26	35	53 / 48 / 43
45c	n/a	39	39	37	39	39	37	39	38	37	41	41	40	30	27	36	27	27	36	26	26	35	53 / 48 / 43
47[3]	n/a	42	41	40	41	41	41	42	41	41	43	43	43	31	26	40	26	26	41	25	25	39	53 / 48 / 43
67[3]	n/a	38	35	41	37	36	41	36	36	40	35	35	41	31	31	40	31	31	40	31	31	40	53 / 48 / 43
74[1]	n/a	38	35	40	37	35	41	35	35	40	35	34	40	30	30	40	30	30	39	30	30	39	53 / 48 / 43
77[1]	n/a	37	34	40	36	35	40	35	35	40	34	34	40	29	29	39	29	29	39	28	28	38	53 / 48 / 43
79[1]	n/a	36	34	40	36	35	40	35	34	40	34	34	39	28	28	39	28	28	38	28	28	38	53 / 48 / 43
82	n/a	35	34	39	35	34	39	34	34	39	34	34	39	28	28	38	28	28	38	28	28	38	53 / 48 / 43
83	n/a	35	34	39	35	34	39	34	34	39	34	34	39	28	28	38	28	28	38	28	28	38	53 / 48 / 43
84a[1]	n/a	36	34	39	35	34	40	34	34	40	34	34	39	28	28	39	28	28	38	28	28	38	53 / 48 / 43
84b	n/a	21	21	26	22	22	28	22	21	27	22	21	27	17	17	28	15	14	28	12	11	25	53 / 48 / 43
86a[1]	n/a	37	34	40	36	35	40	35	35	40	34	34	40	28	28	39	28	28	39	28	28	38	53 / 48 / 43
86b	n/a	34	32	38	34	33	38	33	32	38	31	31	38	24	21	37	21	21	36	21	21	36	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
96[3]	n/a	37	33	39	36	35	40	35	34	41	34	33	39	25	25	38	24	24	38	24	24	38	53 / 48 / 43
102[3]	n/a	37	33	39	36	35	40	35	34	41	34	33	39	25	25	38	24	24	38	24	24	38	53 / 48 / 43
108[3]	n/a	36	33	38	35	34	39	35	34	42	34	33	39	24	24	38	24	24	37	23	23	38	53 / 48 / 43
112[3]	n/a	35	33	38	35	34	39	35	34	39	34	33	39	24	24	37	23	23	37	23	23	37	53 / 48 / 43
118[3]	n/a	35	33	38	35	34	39	36	34	42	35	33	39	24	23	38	23	23	37	22	22	37	53 / 48 / 43
120[3]	n/a	36	33	38	36	35	40	36	34	42	35	33	39	24	23	38	23	23	37	22	22	37	53 / 48 / 43
120c[3]	n/a	36	33	38	36	35	40	36	34	42	35	33	39	24	23	38	23	23	37	22	22	37	53 / 48 / 43
121[3]	n/a	36	33	38	36	35	39	36	34	43	35	33	39	24	23	38	23	23	37	22	22	37	53 / 48 / 43
136[3]	n/a	33	33	40	37	35	41	35	32	38	31	29	37	25	21	36	20	19	35	18	18	36	53 / 48 / 43
140a[1]	n/a	37	32	38	35	34	41	35	33	40	33	31	39	28	20	38	20	19	36	18	18	36	53 / 48 / 43
140c[1]	n/a	35	32	39	35	34	39	33	32	39	32	31	39	25	22	38	22	21	36	21	21	36	53 / 48 / 43
143a[3]	n/a	40	33	38	35	35	41	34	32	42	36	34	43	32	27	40	22	22	37	21	20	37	53 / 48 / 43
143b[3]	n/a	41	35	39	40	38	46	39	37	45	39	39	45	35	33	44	31	30	40	33	33	39	53 / 48 / 43
147[3]	n/a	38	31	37	38	37	40	37	35	44	37	38	46	32	30	43	25	25	39	24	23	39	53 / 48 / 43
153a[3]	n/a	30	27	36	33	33	39	35	33	39	35	35	42	38	36	44	35	34	42	36	32	45	53 / 48 / 43
154[1]	n/a	41	33	38	39	36	42	36	33	42	39	38	43	36	36	43	32	33	42	33	32	42	53 / 48 / 43
154b	n/a	41	33	37	38	36	42	36	33	41	38	38	43	36	36	42	32	32	42	32	32	42	53 / 48 / 43
156a[3]	n/a	39	35	39	42	39	47	40	38	47	41	41	46	37	36	46	32	32	42	35	34	40	53 / 48 / 43
156b	n/a	37	37	35	37	37	36	36	36	35	38	38	37	25	21	34	20	19	34	17	17	33	53 / 48 / 43
157a[3]	n/a	38	34	38	39	37	45	38	36	46	39	39	46	33	32	44	30	30	41	30	29	40	53 / 48 / 43
157b	n/a	36	36	35	36	36	35	35	35	34	37	34	36	23	18	31	18	17	31	16	16	30	53 / 48 / 43
159[3]	n/a	36	34	39	39	38	46	38	35	45	38	39	46	33	32	43	30	29	40	31	30	39	53 / 48 / 43
169	n/a	40	33	35	33	29	35	30	28	34	31	32	37	31	30	37	27	26	36	27	26	37	53 / 48 / 43
171	n/a	40	33	35	33	30	37	31	29	35	32	32	37	32	31	37	27	27	36	28	27	35	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
172	n/a	38	37	39	33	30	36	31	29	36	32	32	36	31	31	37	27	27	36	29	27	35	53 / 48 / 43
172b	n/a	38	37	38	33	30	36	31	29	37	32	32	36	31	31	37	28	28	36	29	27	35	53 / 48 / 43
172c	n/a	36	35	37	32	30	35	30	29	35	32	32	36	32	31	37	28	28	36	28	27	33	53 / 48 / 43
310	n/a	38	37	38	33	30	36	31	29	36	32	32	36	32	31	37	28	28	36	28	27	35	53 / 48 / 43
173	n/a	36	35	37	31	28	35	29	26	34	30	30	34	30	29	35	26	26	35	27	26	33	53 / 48 / 43
174	n/a	36	35	37	31	28	35	29	26	34	30	30	34	31	30	35	27	26	35	27	26	33	53 / 48 / 43
175	n/a	36	36	38	31	28	35	29	27	33	30	30	34	31	30	35	27	26	35	27	27	34	53 / 48 / 43
175b	n/a	36	36	38	31	29	35	29	27	33	30	30	34	31	30	35	27	26	35	27	26	34	53 / 48 / 43
175c	n/a	36	36	38	31	29	35	29	27	34	31	31	35	31	30	35	27	26	35	28	27	34	53 / 48 / 43
176	n/a	37	36	37	32	29	35	30	27	34	31	31	35	31	30	36	27	27	35	28	27	34	53 / 48 / 43
177	n/a	35	34	36	30	27	34	28	26	33	28	29	33	29	28	34	25	24	34	25	24	33	53 / 48 / 43
178	n/a	36	35	37	31	29	34	29	28	34	31	31	35	31	30	35	28	27	34	27	27	33	53 / 48 / 43
179	n/a	35	35	36	30	29	34	29	27	34	31	31	34	31	30	35	27	27	35	27	27	33	53 / 48 / 43
180	n/a	35	35	36	30	28	33	29	27	34	30	30	34	31	30	36	28	28	35	27	26	33	53 / 48 / 43
180b	n/a	36	35	37	31	29	34	30	28	34	31	31	35	31	31	36	28	28	35	28	27	33	53 / 48 / 43
180c	n/a	33	33	34	29	27	32	28	26	32	29	29	33	29	29	34	27	27	34	26	25	31	53 / 48 / 43
181	n/a	38	41	41	30	29	34	31	29	34	31	31	35	30	29	35	27	26	35	27	27	32	53 / 48 / 43
181c	n/a	40	40	41	32	31	35	32	30	35	32	32	36	31	30	37	28	27	36	29	28	33	53 / 48 / 43
182	n/a	38	41	41	30	29	33	30	28	33	31	30	34	29	28	35	26	25	34	27	26	32	53 / 48 / 43
189	n/a	36	40	41	33	33	37	33	32	37	33	31	37	28	25	37	21	20	35	22	21	34	53 / 48 / 43
190	n/a	36	39	41	34	34	37	34	32	38	33	32	38	29	25	37	20	20	35	22	21	34	53 / 48 / 43
191	n/a	34	38	40	32	33	37	33	31	37	33	31	37	28	23	36	21	20	35	21	20	34	53 / 48 / 43
192	n/a	35	38	40	33	33	37	33	32	37	33	31	37	28	24	37	21	20	35	21	20	34	53 / 48 / 43
193	2	35	37	40	33	32	38	33	31	38	32	31	38	27	24	37	21	21	35	20	19	35	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
193c	n/a	32	31	36	31	31	36	31	30	36	30	29	36	24	22	36	21	21	35	20	20	34	53 / 48 / 43
194	2	33	33	37	32	31	37	31	30	37	30	29	37	24	20	36	20	20	35	19	19	34	53 / 48 / 43
195	2	33	33	38	31	30	37	31	29	36	30	29	37	24	20	36	20	19	34	19	19	34	53 / 48 / 43
197	n/a	33	32	38	33	33	38	33	32	38	32	31	38	24	21	37	21	21	36	20	20	36	53 / 48 / 43
196	2	33	32	38	33	33	38	32	32	38	32	31	38	24	21	37	21	21	36	20	20	36	53 / 48 / 43
195d	n/a	33	32	38	33	33	38	32	32	38	31	31	38	24	21	37	21	21	36	20	20	36	53 / 48 / 43
198	n/a	34	32	38	34	33	38	32	32	38	31	31	38	24	21	37	21	21	36	21	21	36	53 / 48 / 43
198b	n/a	34	32	38	34	33	38	32	32	38	31	31	38	24	21	37	21	21	36	21	21	36	53 / 48 / 43
199	n/a	33	32	38	34	33	38	32	32	38	31	31	38	24	21	37	21	21	36	20	21	36	53 / 48 / 43
200	n/a	33	32	38	33	33	38	32	32	38	31	31	38	23	21	36	21	21	36	20	21	36	53 / 48 / 43
202	n/a	34	32	39	35	34	39	33	32	39	31	31	39	24	22	37	22	22	36	21	21	36	53 / 48 / 43
202b	n/a	33	32	38	34	33	38	32	32	38	31	31	38	24	22	37	22	22	36	21	21	36	53 / 48 / 43
203[1]	n/a	34	32	39	35	34	39	33	32	39	32	31	39	25	22	37	22	22	36	21	21	36	53 / 48 / 43
203b	n/a	34	32	39	35	34	39	33	32	39	32	31	39	25	22	37	22	22	36	21	21	36	53 / 48 / 43
203c	n/a	34	32	39	35	34	39	33	32	39	32	31	39	25	22	37	22	22	36	21	21	36	53 / 48 / 43
206	1	34	33	40	34	33	40	34	33	40	32	32	40	30	29	39	29	29	39	29	29	39	53 / 48 / 43
207[1]	n/a	34	33	41	34	33	41	34	33	41	32	32	41	30	29	40	29	29	40	29	28	40	53 / 48 / 43
212	n/a	33	32	40	33	33	40	33	32	40	31	31	41	29	28	39	28	28	39	28	27	39	53 / 48 / 43
212b	n/a	33	32	40	33	33	40	33	32	40	31	31	41	29	28	39	28	28	39	28	28	39	53 / 48 / 43
213	n/a	34	33	41	34	33	41	34	33	41	32	32	41	29	28	40	28	28	39	29	28	39	53 / 48 / 43
214	n/a	34	33	41	34	33	41	34	33	41	32	32	41	29	28	40	28	28	39	28	28	39	53 / 48 / 43
215	n/a	34	33	41	34	33	41	34	33	41	32	32	41	29	28	40	28	28	40	28	28	39	53 / 48 / 43
216	n/a	34	33	41	34	33	41	34	33	41	32	32	41	29	28	40	28	28	40	28	28	39	53 / 48 / 43
216b	n/a	34	33	41	34	33	41	34	33	41	32	32	41	29	28	40	28	28	40	28	28	39	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
217	n/a	34	33	41	34	33	41	34	33	41	32	32	41	30	29	40	28	28	40	29	28	39	53 / 48 / 43
218	n/a	34	33	41	34	33	41	34	33	41	32	32	41	29	28	40	28	28	40	29	28	39	53 / 48 / 43
219	n/a	34	33	41	34	33	41	34	33	41	32	32	41	29	28	40	28	28	40	28	28	39	53 / 48 / 43
220	n/a	34	33	41	34	33	41	34	33	41	32	32	41	29	28	40	28	28	40	28	28	39	53 / 48 / 43
221	n/a	34	33	41	34	33	41	34	33	41	32	32	41	30	29	40	29	29	40	29	28	39	53 / 48 / 43
222	n/a	34	33	41	34	33	41	34	33	41	32	32	41	30	29	40	29	29	40	29	28	40	53 / 48 / 43
223	n/a	34	33	41	34	33	41	34	33	41	32	32	41	30	29	40	29	29	40	29	28	40	53 / 48 / 43
223b	n/a	34	33	41	34	33	41	34	33	41	32	32	41	30	29	40	29	29	40	29	28	40	53 / 48 / 43
224	n/a	34	33	41	34	34	41	34	33	41	32	32	41	30	29	40	29	29	40	29	28	40	53 / 48 / 43
225	n/a	34	33	41	34	33	41	34	33	41	32	32	41	30	29	40	29	29	40	29	28	39	53 / 48 / 43
249	n/a	32	31	42	32	31	42	29	28	41	29	29	43	26	26	38	26	25	38	25	25	38	53 / 48 / 43
252	n/a	34	36	36	34	36	36	31	34	34	30	34	35	23	31	32	21	31	32	21	31	32	53 / 48 / 43
257[1]	n/a	42	42	41	42	42	41	42	42	41	45	45	46	30	29	36	28	28	36	27	27	36	53 / 48 / 43
258a	n/a	43	43	41	43	43	41	42	42	41	45	45	45	27	26	35	25	25	35	24	24	34	53 / 48 / 43
258c	n/a	43	43	41	43	43	41	42	42	41	45	45	45	27	26	35	25	25	35	25	24	34	53 / 48 / 43
259[1]	n/a	42	42	41	42	42	41	41	41	41	45	45	45	28	27	37	26	26	36	25	25	36	53 / 48 / 43
259b	n/a	42	42	41	42	42	41	41	41	41	45	45	45	28	27	36	27	27	36	26	26	36	53 / 48 / 43
260	n/a	40	40	39	40	40	39	40	40	39	42	42	43	25	25	35	24	24	35	24	23	35	53 / 48 / 43
260a	n/a	40	40	39	40	40	39	40	40	39	42	42	43	25	25	35	24	24	35	23	23	35	53 / 48 / 43
260b	n/a	40	40	39	40	40	39	40	40	39	42	42	43	25	25	35	24	24	35	23	23	34	53 / 48 / 43
261	n/a	39	39	40	39	39	40	39	39	40	40	40	43	29	28	36	27	27	36	27	26	36	53 / 48 / 43
261b	n/a	39	39	40	39	39	40	39	39	40	40	40	43	28	28	36	27	27	36	27	26	36	53 / 48 / 43
271	n/a	27	26	31	26	26	32	27	26	31	26	26	31	24	20	31	19	18	31	16	16	29	53 / 48 / 43
272b	n/a	28	26	32	26	26	33	29	26	32	26	26	33	26	19	33	18	18	33	16	16	31	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
272	n/a	29	26	31	26	26	33	29	26	32	26	26	33	26	18	33	18	18	33	16	16	31	53 / 48 / 43
273	n/a	27	26	30	27	27	31	27	26	31	26	26	31	23	21	31	20	20	31	18	17	29	53 / 48 / 43
273b	n/a	27	26	31	26	26	32	28	26	31	26	26	31	24	20	31	19	19	31	17	17	29	53 / 48 / 43
288	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
288b	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
289	n/a	37	35	40	36	36	40	36	36	40	35	35	40	31	31	39	31	31	39	31	31	39	53 / 48 / 43
292	n/a	31	30	40	31	30	40	27	26	40	27	27	42	25	24	36	24	24	36	24	23	36	53 / 48 / 43
292b	n/a	32	30	40	32	30	40	26	26	40	27	27	42	24	24	36	24	23	36	23	23	36	53 / 48 / 43
300	n/a	31	30	40	31	31	40	28	28	40	28	28	41	25	24	35	24	24	35	24	23	35	53 / 48 / 43
298	n/a	31	30	41	31	31	41	28	28	40	28	28	42	25	24	35	24	24	35	23	23	35	53 / 48 / 43
296a	n/a	32	31	42	32	31	42	29	29	42	29	29	43	26	26	38	26	26	38	25	25	38	53 / 48 / 43
296b	n/a	32	31	42	31	31	42	29	29	42	29	29	43	26	26	38	26	26	38	25	25	38	53 / 48 / 43
302a	n/a	32	31	41	32	31	41	28	27	40	28	28	41	24	24	37	24	24	37	23	23	37	53 / 48 / 43
302c	n/a	32	31	39	32	31	39	27	26	39	27	27	41	24	23	35	23	23	35	22	22	34	53 / 48 / 43
401	n/a	22	21	25	23	22	26	23	22	26	23	23	27	20	19	26	18	18	25	14	12	23	53 / 48 / 43
402	n/a	23	22	26	23	23	27	24	22	27	23	23	28	23	21	28	21	20	28	16	15	25	53 / 48 / 43
404	n/a	23	22	27	23	23	28	24	22	27	24	23	28	22	21	28	20	20	28	16	14	26	53 / 48 / 43
407	n/a	21	21	25	21	21	27	21	21	26	21	21	27	16	16	27	15	14	27	11	10	25	53 / 48 / 43
413b	n/a	22	21	25	21	22	25	22	21	25	21	21	25	18	16	24	16	16	24	15	16	23	53 / 48 / 43
415	n/a	27	26	30	27	27	30	27	26	30	26	26	30	23	22	29	21	21	29	18	18	28	53 / 48 / 43
417	n/a	25	25	28	25	25	29	25	25	29	25	25	29	16	14	26	14	14	26	12	12	25	53 / 48 / 43
418	n/a	27	26	30	26	26	30	27	26	30	26	26	30	22	20	29	19	19	29	17	17	27	53 / 48 / 43
418b	n/a	26	26	29	26	26	30	27	26	29	26	26	30	21	18	28	18	18	28	16	17	27	53 / 48 / 43
419	n/a	25	25	28	25	25	28	25	25	28	25	25	28	16	14	26	14	14	26	12	13	25	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
421	n/a	27	26	30	27	26	31	27	26	31	26	26	31	23	21	30	20	20	30	17	17	29	53 / 48 / 43
422a	n/a	31	30	31	26	25	29	25	22	28	26	26	31	26	26	32	24	23	32	21	19	29	53 / 48 / 43
436	n/a	36	35	36	28	27	32	28	27	32	30	30	33	30	30	34	27	27	33	26	25	31	53 / 48 / 43
437	n/a	36	35	36	29	28	32	28	27	32	29	30	33	30	30	34	27	27	34	26	26	31	53 / 48 / 43
441	n/a	38	41	41	29	28	32	29	28	32	30	30	34	28	27	34	25	25	33	26	25	31	53 / 48 / 43
442	n/a	27	31	32	22	22	28	22	22	28	22	21	28	15	14	27	14	14	27	14	13	27	53 / 48 / 43
443	n/a	38	41	41	29	28	32	29	28	32	30	30	34	28	27	34	25	25	33	26	25	31	53 / 48 / 43
451	n/a	31	32	36	29	29	35	29	28	34	28	27	34	23	21	33	21	21	33	20	20	33	53 / 48 / 43
452	n/a	32	32	37	33	32	37	32	31	36	31	31	37	23	22	36	22	22	35	21	21	35	53 / 48 / 43
453a	n/a	27	26	30	27	26	31	27	26	30	26	26	31	23	20	30	19	18	30	16	16	28	53 / 48 / 43
453b	n/a	27	26	30	27	26	31	27	26	30	26	26	31	23	20	30	19	19	30	17	16	28	53 / 48 / 43
454	n/a	27	26	30	27	27	31	27	26	30	27	26	31	24	22	30	21	21	30	18	18	28	53 / 48 / 43
455	n/a	25	25	28	25	25	28	25	25	28	25	25	28	12	11	25	10	10	25	10	10	25	53 / 48 / 43
456	n/a	25	25	28	25	25	28	25	25	28	25	25	28	11	11	25	10	10	25	10	10	25	53 / 48 / 43
456b	n/a	25	25	28	25	25	28	25	25	28	25	25	28	11	11	25	11	10	25	10	10	25	53 / 48 / 43
458	n/a	28	26	31	27	27	31	28	26	31	27	27	31	25	22	31	21	20	31	18	18	29	53 / 48 / 43
460	n/a	31	31	32	31	31	32	30	30	32	30	30	32	14	13	27	13	13	27	12	12	27	53 / 48 / 43
460b	n/a	31	31	32	30	31	32	30	30	32	30	30	32	14	13	28	13	13	28	12	12	27	53 / 48 / 43
461	n/a	31	30	32	30	30	33	30	30	32	30	30	32	17	15	28	15	15	28	14	14	28	53 / 48 / 43
462a	n/a	32	32	33	32	32	34	30	30	32	30	30	32	18	15	29	15	15	29	14	14	28	53 / 48 / 43
462b	n/a	32	32	33	32	32	33	30	30	32	30	30	32	18	15	28	15	15	28	14	14	28	53 / 48 / 43
462c	n/a	32	32	33	32	32	33	30	30	32	30	30	32	18	15	28	15	15	29	14	14	28	53 / 48 / 43
464	n/a	36	36	35	36	36	35	36	35	34	38	38	36	24	18	31	19	19	31	18	17	31	53 / 48 / 43
464b	n/a	36	36	35	36	36	35	36	35	34	38	38	36	24	21	31	19	19	32	18	18	31	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
465	n/a	36	36	35	36	36	35	34	34	34	36	36	37	25	22	32	22	22	32	20	20	31	53 / 48 / 43
466	n/a	35	35	34	35	35	34	31	31	30	33	33	32	21	17	29	16	17	29	15	16	28	53 / 48 / 43
467	n/a	39	39	39	39	39	39	38	38	39	38	38	39	22	20	31	19	19	31	18	18	30	53 / 48 / 43
467b	n/a	39	39	39	39	39	39	38	38	39	38	38	39	23	20	31	19	19	31	18	18	30	53 / 48 / 43
468a	n/a	32	32	37	32	32	38	22	22	36	22	22	38	19	19	34	18	18	34	18	18	34	53 / 48 / 43
468b	n/a	33	33	37	33	33	37	22	22	34	21	21	36	18	17	32	17	17	32	16	16	31	53 / 48 / 43
468c	n/a	32	32	36	32	32	36	22	22	34	21	21	37	18	17	32	17	17	31	16	16	31	53 / 48 / 43
468d	n/a	32	32	37	32	32	38	23	22	36	22	22	38	20	20	34	19	19	34	19	19	34	53 / 48 / 43
470	n/a	34	32	39	34	32	39	27	27	38	28	28	39	23	23	35	22	22	35	22	22	35	53 / 48 / 43
471	n/a	34	33	39	34	33	39	27	27	37	27	27	39	23	23	35	22	22	35	21	21	35	53 / 48 / 43
472a	n/a	33	31	38	33	31	38	26	25	38	26	26	39	24	23	35	22	22	35	22	22	35	53 / 48 / 43
472b	n/a	33	31	39	33	31	39	26	26	38	27	27	40	23	22	35	22	22	35	21	21	35	53 / 48 / 43
472c	n/a	33	32	38	33	32	38	24	24	37	25	25	39	21	21	35	21	21	35	21	21	35	53 / 48 / 43
474	n/a	32	32	37	32	32	37	23	23	36	23	23	38	20	19	34	19	19	34	19	19	34	53 / 48 / 43
475	n/a	32	31	40	32	31	40	27	27	39	27	27	41	24	24	35	24	24	35	23	23	34	53 / 48 / 43
475b	n/a	32	31	40	32	31	40	27	27	39	27	27	41	24	24	35	24	24	35	23	23	34	53 / 48 / 43
476	n/a	33	32	38	33	32	38	24	24	37	24	24	39	22	21	34	21	21	34	20	20	33	53 / 48 / 43
477a	n/a	32	31	40	32	31	40	26	26	40	26	26	41	24	23	37	23	23	37	22	22	37	53 / 48 / 43
477b	n/a	32	31	40	32	31	40	26	26	40	26	26	41	24	23	37	23	23	37	22	22	37	53 / 48 / 43
481	n/a	33	33	37	33	33	37	23	23	35	23	23	36	21	20	32	20	20	32	19	19	32	53 / 48 / 43
483	n/a	33	34	38	33	34	38	23	22	36	22	22	36	21	21	33	20	20	33	19	19	33	53 / 48 / 43
484	n/a	33	33	37	33	33	37	24	24	36	24	24	36	22	21	33	21	21	33	20	20	32	53 / 48 / 43
485a	n/a	35	35	37	35	35	37	32	32	36	32	32	36	17	17	33	17	17	33	17	17	33	53 / 48 / 43
485b	n/a	35	35	37	35	35	37	32	32	36	32	32	36	17	17	33	17	17	33	17	17	33	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
485c	n/a	35	35	37	35	35	37	32	32	36	32	32	36	18	17	33	17	17	33	17	17	33	53 / 48 / 43
485d	n/a	35	35	37	35	35	37	32	32	36	32	32	36	18	17	33	17	17	33	17	17	33	53 / 48 / 43
485e	n/a	35	35	37	35	35	37	32	32	36	32	32	36	18	17	33	17	17	33	17	17	33	53 / 48 / 43
485f	n/a	35	35	37	35	35	37	32	32	36	32	32	36	17	17	33	17	17	33	17	17	33	53 / 48 / 43
487	n/a	32	31	43	32	31	43	31	30	43	31	31	44	28	28	38	27	27	38	26	26	38	53 / 48 / 43
488a	n/a	33	33	44	33	33	44	32	32	44	32	32	45	29	29	41	29	29	41	28	28	41	53 / 48 / 43
488b	n/a	33	32	45	33	33	45	32	32	45	32	32	46	29	29	41	29	29	41	28	28	41	53 / 48 / 43
515a	n/a	28	31	34	26	26	32	26	25	32	26	25	32	15	15	31	14	14	30	13	13	30	53 / 48 / 43
515b	n/a	28	31	34	26	26	32	26	26	32	26	26	32	16	15	31	15	15	31	15	15	31	53 / 48 / 43
516	n/a	28	31	34	26	25	32	26	25	32	25	25	32	14	14	31	13	13	31	13	13	31	53 / 48 / 43
517	n/a	29	32	35	28	28	33	28	27	33	28	27	33	22	21	32	21	20	32	20	20	32	53 / 48 / 43
518	n/a	30	32	35	28	28	33	28	28	33	28	27	33	22	21	33	21	20	32	21	21	32	53 / 48 / 43
519	n/a	29	31	34	27	27	33	27	27	33	27	26	32	19	18	31	18	18	31	17	17	31	53 / 48 / 43
522a	n/a	32	32	37	32	32	37	32	31	36	31	31	37	23	22	35	22	22	35	21	21	35	53 / 48 / 43
522b	1	35	34	39	35	34	39	34	34	39	33	33	39	27	27	38	27	27	38	26	26	37	53 / 48 / 43
522c	1	35	34	39	35	34	39	34	34	39	33	33	39	27	27	38	27	27	38	27	27	37	53 / 48 / 43
522d	1	35	34	39	35	34	39	34	34	39	33	33	39	27	27	38	27	27	38	27	26	37	53 / 48 / 43
526[1]	n/a	36	34	40	36	35	40	35	34	40	34	34	40	28	28	39	28	28	38	28	28	38	53 / 48 / 43
527	1	36	35	40	36	35	40	35	35	40	35	35	40	31	30	39	30	30	39	30	30	39	53 / 48 / 43
528	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
529	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
530	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
531	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
531b	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
532	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
533	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
534	1	36	35	40	36	36	40	35	35	40	35	35	40	31	30	39	30	30	39	30	30	39	53 / 48 / 43
535	1	36	35	40	36	36	40	35	35	40	35	35	40	31	30	39	30	30	39	30	30	39	53 / 48 / 43
536	1	36	35	40	36	36	40	35	35	40	35	35	40	31	30	39	30	30	39	30	30	39	53 / 48 / 43
537	1	36	35	40	36	36	40	35	35	40	35	35	40	31	30	39	30	30	39	30	30	39	53 / 48 / 43
538	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	39	30	30	38	53 / 48 / 43
539	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	39	30	30	38	53 / 48 / 43
541	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
542	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
543	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
543b	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	39	30	30	38	53 / 48 / 43
544	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
545	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
547	2	33	33	38	32	31	37	31	30	36	30	29	37	24	20	36	20	19	35	18	18	34	53 / 48 / 43
549	n/a	34	34	38	34	34	38	34	34	38	34	34	38	25	25	37	25	25	37	25	25	37	53 / 48 / 43
550	n/a	30	30	36	30	30	36	30	30	36	30	30	36	29	29	36	29	29	36	28	28	36	53 / 48 / 43
552	n/a	33	33	35	33	33	35	33	33	35	33	33	35	21	20	29	20	20	29	20	20	29	53 / 48 / 43
553	n/a	31	31	37	31	31	37	31	31	37	31	31	37	30	30	37	30	30	37	30	30	37	53 / 48 / 43
554	n/a	28	28	37	28	28	37	28	28	37	28	28	38	25	24	37	24	24	37	24	24	37	53 / 48 / 43
557	n/a	31	31	38	31	31	38	31	31	38	31	31	38	30	30	38	30	30	38	30	30	38	53 / 48 / 43
559	n/a	37	37	42	37	37	42	37	37	42	37	37	42	34	34	41	34	34	41	34	34	41	53 / 48 / 43
560	n/a	36	36	40	36	36	40	36	36	40	36	36	40	32	32	39	32	32	39	32	32	39	53 / 48 / 43
561	n/a	34	34	39	34	34	39	34	34	39	34	34	39	28	28	38	28	28	38	28	28	38	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
562	n/a	35	35	39	35	35	39	35	35	39	35	35	39	31	31	38	31	31	38	31	31	38	53 / 48 / 43
563	n/a	35	35	40	35	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
564	n/a	34	34	38	34	34	39	34	34	38	34	34	38	25	25	37	25	25	37	25	25	37	53 / 48 / 43
565	n/a	34	34	38	34	34	38	34	34	38	34	34	38	25	25	37	25	25	37	25	25	37	53 / 48 / 43
566	n/a	34	33	36	34	33	36	33	33	36	33	33	36	23	23	32	23	23	32	23	23	32	53 / 48 / 43
569	n/a	33	33	35	33	33	35	33	33	35	33	33	35	20	20	29	20	20	29	20	20	29	53 / 48 / 43
570	n/a	33	33	35	33	33	35	33	33	35	33	33	35	20	20	30	20	20	30	20	20	30	53 / 48 / 43
571	n/a	33	33	36	33	33	36	33	33	36	33	33	36	19	19	33	19	19	33	19	19	33	53 / 48 / 43
572	n/a	33	33	35	33	33	35	33	33	35	33	33	35	20	19	30	19	19	30	19	19	30	53 / 48 / 43
573	n/a	33	33	35	33	33	35	33	33	35	33	33	35	20	20	31	20	20	31	19	19	31	53 / 48 / 43
574	n/a	33	33	36	33	33	36	33	33	36	33	33	36	20	20	32	20	20	32	20	19	32	53 / 48 / 43
575	n/a	33	33	36	33	33	36	33	33	36	33	33	36	20	20	32	20	20	32	20	20	32	53 / 48 / 43
576	n/a	33	33	36	33	33	36	33	33	36	33	33	36	19	19	33	19	19	33	19	19	33	53 / 48 / 43
577a	n/a	33	33	36	33	33	36	33	33	36	33	33	36	20	20	33	20	20	33	19	19	33	53 / 48 / 43
577b	n/a	33	33	36	33	33	36	33	33	36	33	33	36	19	19	33	19	19	33	19	19	33	53 / 48 / 43
578	n/a	33	33	36	33	33	36	33	33	36	33	33	36	19	19	33	19	19	33	19	19	33	53 / 48 / 43
583	n/a	30	32	35	28	28	33	28	27	33	27	27	33	22	21	32	21	20	32	21	21	32	53 / 48 / 43
586	n/a	29	31	34	27	27	33	27	27	32	27	26	32	20	19	32	19	19	31	18	18	31	53 / 48 / 43
587a	n/a	28	31	34	26	26	32	26	26	32	26	26	32	19	16	31	16	16	31	18	16	31	53 / 48 / 43
587b	n/a	27	31	32	23	22	29	23	22	28	23	22	28	18	15	28	16	15	27	17	16	27	53 / 48 / 43
588	n/a	29	31	34	27	27	32	27	27	32	27	26	32	20	19	31	18	18	31	17	17	31	53 / 48 / 43
600a	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
600b	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	39	30	30	38	53 / 48 / 43
601	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
602	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
603	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
604	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
605	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
606	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
607	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
608	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
609	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
610	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
611	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
612	1	36	35	40	36	35	40	35	35	39	35	35	40	31	30	39	30	30	38	30	30	38	53 / 48 / 43
613	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
614	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
615	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
616a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	28	29	38	28	28	38	53 / 48 / 43
616b	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
617a	1	35	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
618a	1	35	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
618b	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
619	1	35	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
621	1	35	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
622a	1	35	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
623a	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
623b	1	35	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
630a	1	35	35	39	35	35	39	35	35	39	35	35	39	30	29	38	29	30	38	29	29	38	53 / 48 / 43
631	1	35	35	39	35	35	39	35	35	39	35	35	39	30	29	38	29	30	38	29	29	38	53 / 48 / 43
632	1	35	34	39	35	34	39	34	34	39	34	34	39	28	27	38	27	27	38	27	27	38	53 / 48 / 43
648	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
649	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
650	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
651	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
652	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
653	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
654a	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
654b	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
655	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
658a	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
659	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
660a	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
660b	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
661	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
662	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
663	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
664	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
665a	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
665b	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
667a	n/a	37	35	40	36	36	40	36	35	40	35	35	40	31	31	39	31	31	39	31	31	39	53 / 48 / 43
667b	n/a	37	35	40	36	36	40	36	35	40	35	35	40	31	31	39	31	31	39	31	31	39	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
667c	n/a	37	35	40	36	36	40	36	35	40	35	35	40	31	31	39	31	31	39	31	31	39	53 / 48 / 43
667d	n/a	37	35	40	36	36	40	36	35	40	35	35	40	31	31	39	31	31	39	31	31	39	53 / 48 / 43
667e	n/a	37	35	40	36	36	40	36	35	40	35	35	40	31	31	39	31	31	39	31	31	39	53 / 48 / 43
667f	1	35	34	39	35	34	39	34	34	39	33	33	39	27	26	38	26	26	37	26	26	37	53 / 48 / 43
669	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
671	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
672	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
673	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
675	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
676	1	36	35	40	36	36	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
677	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
678	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
679	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
680	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
681	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
682a	1	35	34	39	35	35	39	34	34	39	34	34	39	30	29	38	29	29	38	29	29	38	53 / 48 / 43
682b	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
683	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
684	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
685	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
686	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	29	30	38	53 / 48 / 43
687	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
688	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
689	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
690	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	38	53 / 48 / 43
691	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
692	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	38	30	30	38	53 / 48 / 43
693	1	36	35	40	36	35	40	35	35	39	35	35	40	30	30	39	30	30	38	29	29	38	53 / 48 / 43
694a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
694b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
695	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
697	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
698	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
715	n/a	38	41	41	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
728	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
729	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
730	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
731	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
732	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
733	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
735a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
735b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
736	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
737	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
738	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
739	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
740a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43
740b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
740c	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	28	29	38	28	28	38	53 / 48 / 43
740d	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
740e	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	28	29	38	28	28	38	53 / 48 / 43
740f	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43
741	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
742	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
743	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
744	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43
745	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43
746	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43
747	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43
748a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43
748b	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	22	36	22	22	36	53 / 48 / 43
749a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
749b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
750	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
751	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
752a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
752b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
753	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
754	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
755	1	35	34	39	35	35	39	35	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
756	1	35	34	39	35	35	39	35	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
757	1	35	34	39	35	35	39	35	34	39	34	34	39	29	29	39	29	29	38	29	29	38	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
758	1	35	34	39	35	35	39	35	34	39	34	34	39	30	29	39	29	29	38	29	29	38	53 / 48 / 43
759a	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	39	29	29	38	29	29	38	53 / 48 / 43
759b	1	35	34	39	35	35	39	35	34	39	34	34	39	30	29	38	29	29	38	29	29	38	53 / 48 / 43
760	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	39	29	29	38	29	29	38	53 / 48 / 43
761	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	39	29	29	38	29	29	38	53 / 48 / 43
762	1	36	35	40	36	35	40	35	35	40	35	35	40	30	30	39	30	30	39	30	30	39	53 / 48 / 43
763	1	35	34	39	35	35	40	35	34	39	34	34	39	30	30	38	29	30	38	29	29	38	53 / 48 / 43
764	1	35	34	39	35	35	40	35	34	39	34	34	39	30	30	39	29	30	38	29	29	38	53 / 48 / 43
765a	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	39	29	29	38	29	29	38	53 / 48 / 43
765b	1	35	34	40	35	35	40	35	34	39	34	34	39	30	29	39	29	29	38	29	29	38	53 / 48 / 43
766	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	38	29	29	38	29	29	38	53 / 48 / 43
767	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	39	29	29	38	29	29	38	53 / 48 / 43
768	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	38	29	29	38	29	29	38	53 / 48 / 43
769	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
770	1	35	34	39	35	35	40	34	34	39	34	34	39	30	29	39	29	29	38	29	29	38	53 / 48 / 43
771	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	38	29	29	38	29	29	38	53 / 48 / 43
772	1	35	34	39	35	35	40	35	34	39	34	34	39	30	29	38	29	29	38	29	29	38	53 / 48 / 43
773	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	39	29	29	38	29	29	38	53 / 48 / 43
774	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
775	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
776	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
777	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
778a	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
778b	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	39	29	29	38	29	29	38	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
779a	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
779b	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
780	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
781	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	39	29	29	38	29	29	38	53 / 48 / 43
782	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
783	1	35	34	39	35	35	40	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
784	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
785	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
786	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
787a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
787b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
788	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
789	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
790a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
790b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
791a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
791b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
792a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
792b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
793	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
794	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
795	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
796	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
797a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
797b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
798	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
801	1	35	34	39	35	35	39	35	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
802	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	29	29	38	53 / 48 / 43
803a	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	28	29	38	28	28	38	53 / 48 / 43
803b	1	35	34	39	35	35	39	34	34	39	34	34	39	29	28	38	28	28	38	28	28	38	53 / 48 / 43
804	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
805	1	35	34	39	35	35	39	34	34	39	34	34	39	29	29	38	29	29	38	28	28	38	53 / 48 / 43
806	1	35	34	39	35	34	39	34	34	39	34	33	39	28	28	38	28	28	38	27	27	38	53 / 48 / 43
807	1	35	34	39	35	34	39	34	34	39	34	33	39	28	28	38	27	28	38	27	27	37	53 / 48 / 43
808	1	35	34	39	35	34	39	34	34	39	34	33	39	28	28	38	27	28	38	27	27	37	53 / 48 / 43
809	1	35	34	39	35	34	39	34	34	39	34	33	39	28	28	38	27	28	38	27	27	38	53 / 48 / 43
810	1	35	34	39	35	34	39	34	34	39	34	33	39	28	27	38	27	27	38	27	27	37	53 / 48 / 43
811	1	35	34	39	35	34	39	34	34	39	34	33	39	28	27	38	27	27	38	27	27	37	53 / 48 / 43
812	1	35	34	39	35	34	39	34	34	39	34	33	39	28	27	38	27	27	38	27	27	37	53 / 48 / 43
813	1	35	34	39	35	34	39	34	34	39	34	33	39	28	27	38	27	27	38	27	27	37	53 / 48 / 43
814	1	35	34	39	35	34	39	34	34	39	34	33	39	28	27	38	27	27	38	27	27	37	53 / 48 / 43
815a	1	35	34	39	35	34	39	34	34	39	34	33	39	27	27	38	27	27	38	27	27	37	53 / 48 / 43
815b	1	35	34	39	35	34	39	34	34	39	34	33	39	27	27	38	27	27	38	27	27	37	53 / 48 / 43
816	1	35	34	39	35	34	39	34	34	39	33	33	39	27	27	38	27	27	38	27	27	37	53 / 48 / 43
817	1	35	34	39	35	34	39	34	34	39	33	33	39	27	27	38	27	27	37	27	27	37	53 / 48 / 43
819	1	35	34	39	35	34	39	34	34	39	33	33	39	27	26	38	26	26	37	26	26	37	53 / 48 / 43
820a	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
820b	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
821	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
822	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
823a	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
823b	1	35	33	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
824	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
825	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
826	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
827	1	35	34	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	26	26	37	53 / 48 / 43
828	1	35	33	39	35	34	39	34	34	39	33	33	39	26	26	38	26	26	37	25	25	37	53 / 48 / 43
829a	1	35	33	39	35	34	39	34	34	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
829b	1	35	33	39	35	34	39	34	34	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
830	1	35	33	39	35	34	39	34	34	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
831	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
832	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
833	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
834	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
835	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
836	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
837	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
838	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
839	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
840	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
841	1	35	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43
843a	1	34	33	39	35	34	39	34	33	39	33	33	39	26	25	38	25	25	37	25	25	37	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																					Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
843b	1	35	33	39	35	34	39	34	33	39	33	33	39	25	25	38	25	25	37	25	25	37	53 / 48 / 43
844a	1	34	33	39	35	34	39	34	33	39	33	33	39	25	24	38	25	24	37	24	24	37	53 / 48 / 43
845	1	33	32	38	34	33	38	32	32	38	31	31	38	24	23	37	23	23	36	23	23	36	53 / 48 / 43
846	1	33	32	38	34	33	38	32	32	38	31	31	38	24	23	37	23	23	36	23	23	36	53 / 48 / 43
847	1	33	32	38	34	33	38	32	32	38	31	31	38	24	23	37	23	23	36	23	23	36	53 / 48 / 43
848	1	33	32	38	34	33	38	32	32	38	31	31	38	24	23	37	23	23	36	23	23	36	53 / 48 / 43
849	1	33	32	38	34	33	38	32	32	38	31	31	38	24	23	37	23	23	36	23	23	36	53 / 48 / 43
850	1	33	32	38	34	33	38	32	32	38	31	31	38	24	23	37	23	23	36	22	22	36	53 / 48 / 43
853	1	33	32	38	34	33	38	32	32	38	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
854	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
855	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
856	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
857	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
858	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
859	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
860	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
861	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	23	36	22	22	36	53 / 48 / 43
862	1	33	32	38	34	33	38	32	32	37	31	31	38	24	23	36	23	22	36	22	22	36	53 / 48 / 43
863	1	33	32	38	34	33	38	32	32	37	31	31	38	24	22	36	22	22	36	22	22	35	53 / 48 / 43
864	1	33	32	38	34	33	38	32	32	37	31	31	38	24	22	36	22	22	36	22	22	35	53 / 48 / 43
865	1	33	32	38	34	33	38	32	32	37	31	31	38	24	22	36	22	22	36	22	22	35	53 / 48 / 43
866	2	33	32	38	33	33	38	32	32	37	31	31	38	24	22	36	22	22	36	21	22	35	53 / 48 / 43
867	2	33	32	38	33	33	38	32	32	37	31	31	38	24	22	36	22	22	36	21	22	35	53 / 48 / 43
868	2	33	32	38	33	33	38	32	32	37	31	31	38	24	22	36	22	22	36	21	21	35	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
870	2	33	32	38	33	33	38	32	32	37	31	31	38	24	22	36	22	22	36	21	21	35	53 / 48 / 43
871	2	33	32	38	33	33	38	32	32	37	31	31	38	24	22	36	22	22	36	21	21	35	53 / 48 / 43
872a	2	33	32	38	33	33	38	32	32	37	31	31	38	24	22	36	22	22	36	21	21	35	53 / 48 / 43
900a	n/a	38	41	41	29	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
900b	n/a	38	41	41	30	29	33	30	29	33	31	30	35	30	29	35	26	26	34	27	27	32	53 / 48 / 43
901	n/a	38	41	41	30	29	33	30	29	33	31	31	35	30	29	35	27	26	35	27	27	32	53 / 48 / 43
902	n/a	38	41	41	30	29	33	30	29	33	31	31	35	30	29	35	27	26	35	27	27	32	53 / 48 / 43
903	n/a	38	41	41	30	29	33	30	29	33	31	31	35	30	29	35	27	26	35	27	27	32	53 / 48 / 43
904	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	27	26	35	27	26	32	53 / 48 / 43
905	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	27	26	35	27	26	32	53 / 48 / 43
906	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	26	32	53 / 48 / 43
907	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	26	32	53 / 48 / 43
908	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	27	26	34	27	26	31	53 / 48 / 43
909	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	53 / 48 / 43
911	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	53 / 48 / 43
912	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	29	35	27	26	34	27	26	31	53 / 48 / 43
913	n/a	38	41	41	29	29	33	30	29	33	30	30	34	30	29	34	26	26	34	27	26	31	53 / 48 / 43
914	n/a	38	41	41	29	29	33	30	29	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
915	n/a	38	41	41	29	29	33	30	29	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
916	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
917	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
918	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
919	n/a	38	41	41	29	29	33	30	29	33	30	30	34	29	28	35	26	26	34	27	26	31	53 / 48 / 43
920	n/a	38	41	41	29	29	33	30	29	33	30	30	34	30	28	34	26	26	34	27	26	32	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
921	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	28	35	26	26	34	27	26	32	53 / 48 / 43
922	n/a	38	41	41	30	29	33	30	29	33	30	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
924	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	26	32	53 / 48 / 43
925	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	29	35	26	26	34	27	26	32	53 / 48 / 43
926	n/a	38	41	41	30	29	33	30	29	33	31	31	34	30	29	35	26	26	34	27	26	32	53 / 48 / 43
927	n/a	38	41	41	30	29	33	30	29	33	31	31	35	30	29	35	26	26	34	27	26	32	53 / 48 / 43
928	n/a	38	41	41	30	29	33	30	29	33	31	31	35	30	29	35	26	26	35	27	27	32	53 / 48 / 43
929	n/a	38	41	41	30	29	33	30	29	33	31	31	35	30	29	35	26	26	35	27	27	32	53 / 48 / 43
930	n/a	38	41	41	30	29	33	30	29	33	31	31	35	30	29	35	26	26	35	27	27	32	53 / 48 / 43
931	n/a	38	41	41	30	29	33	30	29	33	31	31	35	30	29	35	26	26	35	27	27	32	53 / 48 / 43
932a	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	28	35	26	26	34	27	27	32	53 / 48 / 43
932b	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	28	35	26	26	34	27	27	32	53 / 48 / 43
933	n/a	38	41	41	30	29	33	30	29	33	31	30	34	30	28	35	26	26	34	27	27	32	53 / 48 / 43
934	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	28	35	26	26	34	27	27	32	53 / 48 / 43
935a	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	28	35	26	26	34	27	26	32	53 / 48 / 43
935b	n/a	38	41	41	30	29	33	30	29	33	30	30	34	30	29	35	26	26	34	27	26	32	53 / 48 / 43
936	n/a	38	41	41	30	29	33	30	29	33	30	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
937	n/a	38	41	41	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	26	32	53 / 48 / 43
938	n/a	38	41	41	30	29	33	30	28	33	30	30	34	30	28	35	26	26	34	27	26	32	53 / 48 / 43
939	n/a	38	41	41	30	29	33	30	28	33	31	30	34	29	28	35	26	26	34	26	26	32	53 / 48 / 43
940	n/a	38	41	41	30	29	33	30	28	33	31	30	34	29	28	35	26	26	34	26	26	32	53 / 48 / 43
941	n/a	38	41	41	30	29	33	30	28	33	31	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
942	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
943	n/a	38	41	41	29	29	33	30	28	33	31	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
944	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
945a	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
945b	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
946	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
947	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	35	26	26	34	27	26	32	53 / 48 / 43
948	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
949	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	32	53 / 48 / 43
950	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
951	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
952	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
953	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
954	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
955	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
956	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
957a	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
957b	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
958	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
959	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
960	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
961	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
962	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	27	26	31	53 / 48 / 43
963	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	32	53 / 48 / 43
964	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	32	53 / 48 / 43
965	n/a	38	41	41	29	29	33	30	28	33	30	30	34	29	28	35	26	25	34	27	26	31	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
966	n/a	38	41	41	29	29	33	29	28	33	30	30	34	29	28	35	25	25	34	27	26	31	53 / 48 / 43
967a	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
967b	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
968	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
969	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	25	25	34	27	26	31	53 / 48 / 43
970	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	25	25	34	26	26	31	53 / 48 / 43
971	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
972	n/a	38	41	41	29	28	33	29	28	33	30	30	34	29	27	34	25	25	34	26	26	31	53 / 48 / 43
973	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	27	34	26	25	34	26	26	31	53 / 48 / 43
974	n/a	38	41	41	29	28	32	29	28	33	30	30	34	29	27	34	26	25	34	26	26	31	53 / 48 / 43
976	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
977a	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
977b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
978	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	26	25	34	26	26	31	53 / 48 / 43
979a	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	25	31	53 / 48 / 43
979b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	26	25	34	26	26	31	53 / 48 / 43
980	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	27	34	26	25	33	26	26	31	53 / 48 / 43
981a	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	33	26	26	31	53 / 48 / 43
981b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	33	26	26	31	53 / 48 / 43
982	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	33	26	26	31	53 / 48 / 43
983	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	33	26	26	31	53 / 48 / 43
984	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
985	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
986	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
987	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
988a	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
988b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
989a	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
989b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
990	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
991	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
992	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
993a	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	25	34	26	26	31	53 / 48 / 43
993b	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
994a	n/a	38	41	41	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
994b	n/a	38	41	41	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
995	n/a	38	41	41	29	28	32	30	28	32	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
997	n/a	38	41	41	29	28	32	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
998	n/a	38	41	41	29	28	33	30	28	33	30	30	34	29	28	34	26	26	34	27	26	31	53 / 48 / 43
999	n/a	38	41	41	28	28	32	29	28	32	30	29	33	29	28	34	26	26	34	26	26	31	53 / 48 / 43
1000	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	34	26	26	31	53 / 48 / 43
1001	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1002	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1003	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1004	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1005	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1006	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1007	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	33	26	26	33	26	26	31	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1008	n/a	38	41	41	29	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	31	53 / 48 / 43
1009	n/a	38	41	41	29	28	32	29	27	32	29	29	33	29	28	33	26	26	33	26	26	31	53 / 48 / 43
1010	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1011	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1012	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1014	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1015	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
1016	n/a	38	41	41	29	28	32	29	28	32	30	30	34	29	28	34	26	26	34	26	26	31	53 / 48 / 43
1017	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1018	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1019	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1020	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1021	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	33	26	26	33	26	26	31	53 / 48 / 43
1022	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	26	26	33	26	26	31	53 / 48 / 43
1023	n/a	38	41	41	24	23	28	24	23	28	25	25	29	24	23	27	21	20	26	21	21	26	53 / 48 / 43
1024	n/a	38	41	41	27	26	31	28	25	29	27	27	30	28	25	30	25	25	32	26	26	30	53 / 48 / 43
1025	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1026	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	26	33	26	26	31	53 / 48 / 43
1027	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
1028	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	25	31	53 / 48 / 43
1029	n/a	38	41	41	29	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
1030	n/a	38	41	41	29	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
1031	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	34	25	25	33	25	25	30	53 / 48 / 43
1032	n/a	38	41	41	29	28	32	29	28	32	29	29	33	28	28	33	25	25	33	25	25	29	53 / 48 / 43

Receiver ID	Project NAG	$L_{Aeq,15min}$ Noise Level (dBA)																				Amenity Noise Levels (dBA)
		2026			2028			2031			2034			2041			2044			2047			
		D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	D	E	N	
1033	n/a	38	41	41	29	28	32	29	28	32	29	29	33	27	26	32	24	23	31	23	23	28	53 / 48 / 43
1034	n/a	38	41	41	28	27	31	29	28	32	29	29	32	27	25	31	22	22	28	23	22	27	53 / 48 / 43
1035	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	25	25	33	25	25	30	53 / 48 / 43
1036a	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	25	25	33	26	25	31	53 / 48 / 43
1036b	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	25	31	53 / 48 / 43
1037	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	25	31	53 / 48 / 43
1038	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	26	25	33	26	25	31	53 / 48 / 43
1039	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	25	31	53 / 48 / 43
1040	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	34	26	25	33	26	25	31	53 / 48 / 43
1041	n/a	38	41	41	29	28	32	29	28	32	30	29	33	29	28	34	26	25	33	26	25	31	53 / 48 / 43
1042	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
1043	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
1044	n/a	38	41	41	29	28	32	29	28	32	30	30	33	29	28	34	26	25	33	26	26	31	53 / 48 / 43
1045	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	25	25	33	26	25	31	53 / 48 / 43
1046	n/a	38	41	41	28	28	32	29	28	32	29	29	33	29	28	33	25	25	33	26	25	30	53 / 48 / 43
1077	n/a	38	41	41	29	28	32	29	28	32	30	30	33	28	27	34	25	25	33	26	25	31	53 / 48 / 43
1078	n/a	38	41	41	29	28	32	29	27	32	30	29	33	28	27	34	25	25	33	26	25	31	53 / 48 / 43
1079	n/a	38	41	41	29	28	32	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
1080	n/a	38	41	41	29	28	32	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
1081	n/a	38	41	41	28	28	32	29	27	32	29	29	33	28	27	33	25	25	33	26	25	30	53 / 48 / 43
1082a	n/a	38	41	41	28	28	32	29	27	32	30	29	33	28	27	33	25	25	33	26	25	31	53 / 48 / 43
1082b	n/a	38	41	41	28	28	32	29	27	32	30	29	33	28	27	34	25	25	33	26	25	31	53 / 48 / 43
1100a	n/a	38	38	39	38	38	39	32	32	36	32	32	36	20	19	33	19	19	33	18	18	33	53 / 48 / 43
1100b	n/a	38	38	39	38	38	39	32	32	36	32	32	36	20	20	33	19	19	33	18	18	33	53 / 48 / 43

Notes:

- D = Day (7.00 am – 6.00 pm Monday to Saturday, and 8.00 am – 6.00 pm Sundays and public holidays); E = Evening (6.00 pm – 10.00 pm); N = the remaining periods.
- Levels highlighted in yellow indicate predictions under the relevant Fact Sheet D meteorological conditions in excess of the Amenity noise level.

1. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted air impacts. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.

APPENDIX J

PREDICTED L_{AFmax} NOISE LEVELS FOR NIGHT TIME OPERATIONS

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
Privately-Owned Residential Receivers									
4	n/a	38	37	36	36	36	36	35	52
19[1]	n/a	42	42	42	42	42	42	41	52
20[1,2]	n/a	43	43	43	43	43	42	42	52
21[1,2]	n/a	43	43	43	43	43	43	42	52
35	n/a	42	43	43	42	42	42	43	52
35b	n/a	42	43	43	42	42	42	41	52
43[4]	n/a	42	42	42	43	43	44	41	52
43b[4]	n/a	45	46	45	46	46	46	39	52
45[3]	n/a	39	39	39	39	39	39	35	52
45b	n/a	38	39	39	39	39	39	36	52
45c	n/a	38	39	39	39	39	39	36	52
47[3]	n/a	45	45	45	45	45	45	42	52
67[3]	n/a	42	44	44	42	42	42	41	52
74[1]	n/a	42	44	44	41	41	41	41	52
77[1]	n/a	42	43	43	40	40	39	39	52
79[1]	n/a	41	42	42	40	39	39	38	52
82	n/a	40	40	40	39	38	37	37	52
83	n/a	40	40	40	39	38	38	37	52
84a[1]	n/a	41	41	41	39	39	38	38	52
84b	n/a	27	28	27	28	29	29	25	52
86a[1]	n/a	42	43	44	39	40	39	39	52
86b	n/a	41	41	41	40	37	35	34	52
96[3]	n/a	42	46	48	40	40	39	39	52
102[3]	n/a	42	47	48	40	39	39	39	52
108[3]	n/a	42	47	50	40	39	39	38	52
112[3]	n/a	41	47	44	40	38	38	38	52
118[3]	n/a	41	48	51	40	38	37	37	52
120[3]	n/a	41	48	50	41	38	38	37	52
120c[3]	n/a	41	48	50	40	38	38	37	52
121[3]	n/a	40	49	51	40	38	37	37	52
136[3]	n/a	43	48	45	40	37	37	37	52
140a[1]	n/a	41	47	44	46	40	37	36	52
140c[1]	n/a	43	44	42	42	38	36	35	52
143a[3]	n/a	42	48	48	48	45	39	38	52
143b[3]	n/a	41	48	48	49	48	43	40	52
147[3]	n/a	41	50	50	50	49	41	40	52
153a[3]	n/a	39	42	43	45	46	46	46	52
154[1]	n/a	40	46	46	48	47	44	42	52
154b	n/a	40	46	46	48	46	48	42	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
156a[3]	n/a	42	50	50	50	53	45	41	52
156b	n/a	36	37	37	37	37	37	33	52
157a[3]	n/a	42	49	50	51	48	43	41	52
157b	n/a	31	32	31	31	32	32	30	52
159[3]	n/a	41	49	49	51	48	42	40	52
169	n/a	33	39	39	42	41	40	38	52
171	n/a	36	40	39	41	42	39	36	52
172	n/a	36	39	39	41	40	38	36	52
172b	n/a	36	39	39	41	40	38	35	52
172c	n/a	35	37	38	40	40	38	34	52
310	n/a	36	39	39	40	40	38	35	52
173	n/a	35	37	37	38	38	37	34	52
174	n/a	35	37	37	38	39	37	34	52
175	n/a	35	38	37	38	39	37	35	52
175b	n/a	35	38	37	38	39	37	35	52
175c	n/a	35	38	37	38	39	38	35	52
176	n/a	35	38	37	39	39	38	35	52
177	n/a	34	36	36	37	38	36	34	52
178	n/a	34	36	37	39	38	37	34	52
179	n/a	34	36	36	38	38	37	34	52
180	n/a	34	36	36	38	38	37	34	52
180b	n/a	34	36	37	39	39	37	34	52
180c	n/a	32	34	34	36	36	36	32	52
181	n/a	34	36	36	39	38	37	33	52
181c	n/a	35	38	38	40	40	39	35	52
182	n/a	33	35	35	38	37	37	33	52
189	n/a	40	42	41	43	40	37	35	52
190	n/a	41	42	42	43	40	38	35	52
191	n/a	40	42	41	42	39	37	34	52
192	n/a	41	42	41	43	40	37	35	52
193	2	38	41	41	42	39	37	35	52
193c	n/a	37	39	38	39	37	35	33	52
194	2	38	41	39	41	37	35	34	52
195	2	39	40	39	40	37	35	34	52
197	n/a	40	40	39	40	37	35	34	52
196	2	40	39	39	39	36	34	34	52
195d	n/a	40	40	39	39	36	34	34	52
198	n/a	41	40	39	40	36	35	34	52
198b	n/a	41	40	40	40	37	35	34	52
199	n/a	40	40	39	40	36	34	34	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
200	n/a	40	39	38	39	36	34	33	52
202	n/a	42	43	41	41	37	35	35	52
202b	n/a	41	42	40	39	36	35	34	52
203[1]	n/a	42	43	41	41	37	35	35	52
203b	n/a	42	43	41	41	37	35	35	52
203c	n/a	42	43	41	41	37	35	35	52
206	1	40	40	40	40	40	40	39	52
207[1]	n/a	41	41	41	41	41	41	41	52
212	n/a	39	40	39	40	39	39	39	52
212b	n/a	39	39	39	40	39	39	39	52
213	n/a	41	41	41	41	41	41	41	52
214	n/a	41	41	41	41	41	41	41	52
215	n/a	41	41	41	41	41	41	41	52
216	n/a	41	41	41	41	41	41	41	52
216b	n/a	41	41	41	41	41	41	41	52
217	n/a	41	41	41	41	41	41	41	52
218	n/a	41	41	41	41	41	41	41	52
219	n/a	41	41	41	41	41	41	41	52
220	n/a	41	41	41	41	41	41	41	52
221	n/a	41	41	41	41	41	41	41	52
222	n/a	41	41	41	41	41	41	41	52
223	n/a	41	42	41	42	41	41	41	52
223b	n/a	41	42	41	41	41	41	41	52
224	n/a	41	42	42	42	42	41	41	52
225	n/a	41	41	41	41	41	41	41	52
249	n/a	28	28	28	28	29	29	28	52
252	n/a	27	27	27	27	28	28	26	52
257[1]	n/a	36	36	36	36	36	36	34	52
258a	n/a	34	34	34	34	34	35	32	52
258c	n/a	34	34	34	34	34	34	32	52
259[1]	n/a	36	36	36	36	36	36	33	52
259b	n/a	35	36	36	36	36	36	32	52
260	n/a	34	35	35	35	35	35	31	52
260a	n/a	34	35	35	35	35	35	31	52
260b	n/a	34	35	35	35	35	35	31	52
261	n/a	34	35	34	34	35	35	32	52
261b	n/a	34	34	34	34	34	34	32	52
271	n/a	31	31	30	31	32	32	31	52
272b	n/a	33	34	33	34	35	35	33	52
272	n/a	33	34	34	34	35	35	33	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
273	n/a	30	30	30	30	32	32	30	52
273b	n/a	30	31	30	31	32	32	30	52
288	1	39	39	38	39	39	38	38	52
288b	1	39	39	38	39	39	38	38	52
289	n/a	41	41	42	40	40	40	40	52
292	n/a	27	27	27	27	28	28	26	52
292b	n/a	27	27	27	27	28	28	26	52
300	n/a	28	28	28	28	28	28	28	52
298	n/a	29	29	28	28	28	28	28	52
296a	n/a	29	29	28	28	29	29	28	52
296b	n/a	29	29	28	28	29	29	28	52
302a	n/a	27	27	27	28	27	27	26	52
302c	n/a	27	27	27	27	27	27	26	52
401	n/a	24	25	25	27	28	27	24	52
402	n/a	26	27	27	28	29	29	27	52
404	n/a	27	28	28	29	30	30	27	52
407	n/a	26	28	28	28	30	29	25	52
413b	n/a	22	23	23	23	24	23	22	52
415	n/a	27	28	27	28	29	29	27	52
417	n/a	20	22	22	22	23	22	18	52
418	n/a	27	27	27	27	28	28	27	52
418b	n/a	25	26	26	27	27	28	25	52
419	n/a	19	20	20	20	20	19	18	52
421	n/a	29	30	29	30	31	31	29	52
422a	n/a	28	32	32	34	35	34	30	52
436	n/a	32	34	34	37	37	35	33	52
437	n/a	32	34	34	36	37	35	32	52
441	n/a	32	34	34	37	36	35	32	52
442	n/a	25	27	26	27	26	23	24	52
443	n/a	32	34	34	37	36	35	32	52
451	n/a	35	36	34	35	31	31	31	52
452	n/a	37	36	35	36	34	33	32	52
453a	n/a	29	29	29	29	30	31	29	52
453b	n/a	29	29	29	30	31	31	29	52
454	n/a	29	29	29	29	30	30	29	52
455	n/a	17	17	17	16	16	15	13	52
456	n/a	13	14	13	13	13	12	11	52
456b	n/a	13	14	13	13	13	12	11	52
458	n/a	30	31	30	31	32	32	30	52
460	n/a	18	19	18	19	20	19	16	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
460b	n/a	22	21	21	21	22	22	19	52
461	n/a	24	24	23	24	24	24	22	52
462a	n/a	25	25	24	25	25	25	23	52
462b	n/a	24	25	24	25	25	25	23	52
462c	n/a	24	25	24	25	25	25	23	52
464	n/a	30	30	30	31	31	31	30	52
464b	n/a	31	31	31	31	32	33	31	52
465	n/a	32	33	32	33	33	33	31	52
466	n/a	25	25	25	26	27	27	26	52
467	n/a	30	30	30	30	31	31	28	52
467b	n/a	30	30	30	31	31	31	28	52
468a	n/a	23	24	23	24	24	24	22	52
468b	n/a	23	23	23	23	24	24	22	52
468c	n/a	23	24	24	24	25	24	22	52
468d	n/a	23	24	23	24	24	24	22	52
470	n/a	26	27	27	27	27	27	25	52
471	n/a	25	25	25	25	26	26	25	52
472a	n/a	26	26	26	26	27	27	25	52
472b	n/a	26	26	26	25	26	27	25	52
472c	n/a	22	22	22	22	23	23	23	52
474	n/a	21	22	22	22	23	22	23	52
475	n/a	27	27	27	27	27	27	26	52
475b	n/a	27	27	27	27	27	27	26	52
476	n/a	25	25	25	25	26	26	25	52
477a	n/a	26	26	26	26	26	27	26	52
477b	n/a	26	26	26	26	26	27	26	52
481	n/a	24	24	24	24	25	25	24	52
483	n/a	24	24	23	23	24	24	24	52
484	n/a	25	25	24	25	25	25	24	52
485a	n/a	16	17	16	17	18	18	18	52
485b	n/a	16	17	16	17	18	18	18	52
485c	n/a	17	17	17	17	18	19	18	52
485d	n/a	17	17	17	18	19	19	19	52
485e	n/a	17	17	17	18	19	19	19	52
485f	n/a	16	16	16	17	18	18	18	52
487	n/a	29	29	29	29	30	30	29	52
488a	n/a	30	30	29	30	30	30	29	52
488b	n/a	31	31	30	30	30	31	29	52
515a	n/a	21	30	30	29	23	21	21	52
515b	n/a	25	29	29	29	28	25	26	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
516	n/a	25	29	27	28	27	25	26	52
517	n/a	31	31	31	31	30	28	28	52
518	n/a	32	32	30	32	31	30	29	52
519	n/a	29	30	29	30	28	26	26	52
522a	n/a	37	36	34	36	34	33	32	52
522b	1	40	40	40	39	37	36	36	52
522c	1	40	40	40	39	37	36	36	52
522d	1	40	40	40	39	37	36	36	52
526[1]	n/a	41	42	42	40	39	39	38	52
527	1	40	41	41	39	39	39	38	52
528	1	40	40	41	39	39	39	38	52
529	1	40	40	40	39	39	39	38	52
530	1	40	40	40	39	39	39	38	52
531	1	40	40	40	39	39	39	38	52
531b	1	40	40	40	39	39	39	38	52
532	1	40	40	40	39	39	39	38	52
533	1	40	40	40	39	39	39	38	52
534	1	40	40	40	39	39	39	38	52
535	1	40	40	40	39	39	39	38	52
536	1	40	40	40	39	39	39	38	52
537	1	40	40	40	39	39	39	38	52
538	1	40	39	39	39	39	39	38	52
539	1	39	39	39	39	39	39	38	52
541	1	39	39	39	39	39	38	38	52
542	1	39	39	38	39	39	38	38	52
543	1	39	39	38	39	39	38	38	52
543b	1	40	39	39	39	39	39	38	52
544	1	39	39	38	39	39	38	38	52
545	1	39	39	38	39	39	38	38	52
547	2	38	40	39	40	37	35	34	52
549	n/a	20	21	20	20	20	20	18	52
550	n/a	22	24	23	24	24	24	24	52
552	n/a	21	22	21	21	21	21	20	52
553	n/a	20	21	20	21	20	21	19	52
554	n/a	27	27	25	27	27	27	26	52
557	n/a	20	21	20	20	20	20	19	52
559	n/a	24	24	23	24	24	24	24	52
560	n/a	22	23	22	23	24	24	24	52
561	n/a	21	22	21	22	22	22	22	52
562	n/a	21	22	22	22	22	23	23	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
563	n/a	20	22	21	21	21	21	21	52
564	n/a	21	22	21	21	21	21	20	52
565	n/a	20	21	20	21	20	20	18	52
566	n/a	20	21	20	21	20	21	19	52
569	n/a	21	22	21	21	21	21	19	52
570	n/a	21	22	21	21	21	21	19	52
571	n/a	22	23	23	23	22	23	21	52
572	n/a	21	22	21	22	21	21	20	52
573	n/a	22	23	22	22	22	22	20	52
574	n/a	22	23	22	22	22	22	20	52
575	n/a	22	23	22	22	22	22	21	52
576	n/a	22	23	22	22	22	22	21	52
577a	n/a	23	24	23	23	23	23	22	52
577b	n/a	23	23	23	23	23	23	21	52
578	n/a	19	23	22	20	20	20	18	52
583	n/a	32	32	30	31	30	30	28	52
586	n/a	29	29	29	29	28	27	26	52
587a	n/a	25	27	27	27	27	25	25	52
587b	n/a	25	27	27	27	26	25	25	52
588	n/a	28	28	28	29	28	26	26	52
600a	1	39	39	39	38	39	38	38	52
600b	1	39	39	39	39	39	39	38	52
601	1	39	39	39	38	39	38	38	52
602	1	39	39	39	38	39	38	38	52
603	1	39	39	39	38	39	38	38	52
604	1	39	39	39	38	39	38	38	52
605	1	39	39	39	38	38	38	38	52
606	1	39	39	39	38	38	38	37	52
607	1	39	39	38	38	38	38	37	52
608	1	39	39	39	38	38	38	37	52
609	1	39	39	39	38	38	38	37	52
610	1	39	39	39	38	38	38	37	52
611	1	39	39	38	38	38	38	37	52
612	1	40	39	39	38	38	38	38	52
613	1	39	39	39	38	38	38	37	52
614	1	39	39	39	38	38	38	37	52
615	1	39	39	38	38	38	38	37	52
616a	1	40	40	39	39	38	37	37	52
616b	1	39	39	39	38	38	38	37	52
617a	1	39	39	38	38	38	38	37	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
618a	1	39	39	38	38	38	38	37	52
618b	1	39	39	38	38	38	38	37	52
619	1	39	39	38	38	38	38	37	52
621	1	39	39	38	38	38	38	37	52
622a	1	39	39	38	38	38	38	37	52
623a	n/a	32	34	34	37	36	36	32	52
623b	1	39	39	38	38	38	38	37	52
630a	1	39	39	38	37	37	37	36	52
631	1	39	39	38	37	37	37	36	52
632	1	38	37	37	36	37	37	36	52
648	1	39	39	38	38	38	37	37	52
649	1	39	39	39	38	38	37	37	52
650	1	39	39	39	38	38	38	37	52
651	1	39	39	38	38	38	38	37	52
652	1	39	39	39	38	38	38	37	52
653	1	40	39	39	38	38	38	37	52
654a	1	40	40	39	38	38	38	38	52
654b	1	39	39	39	38	38	38	37	52
655	1	39	39	39	38	38	38	37	52
658a	1	40	40	39	38	38	38	37	52
659	1	40	39	39	38	38	38	37	52
660a	1	40	39	39	38	38	38	37	52
660b	1	40	39	39	38	38	38	37	52
661	1	40	40	39	38	38	38	37	52
662	1	40	40	39	38	38	38	38	52
663	1	40	40	39	39	38	38	38	52
664	1	40	40	39	39	38	38	38	52
665a	1	40	40	39	39	39	38	38	52
665b	1	40	40	39	39	39	38	38	52
667a	n/a	41	41	41	40	40	40	39	52
667b	n/a	41	41	41	40	40	40	39	52
667c	n/a	41	41	41	40	40	40	39	52
667d	n/a	41	41	41	40	40	40	39	52
667e	n/a	41	41	41	40	40	40	39	52
667f	1	40	40	40	39	37	36	35	52
669	1	40	40	40	39	39	38	38	52
671	1	40	40	40	39	39	38	38	52
672	1	40	40	40	39	39	38	38	52
673	1	40	40	40	39	39	38	38	52
675	1	40	40	40	39	39	38	38	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
676	1	40	40	40	39	39	38	38	52
677	1	40	40	40	39	39	38	38	52
678	1	40	40	40	39	39	38	38	52
679	1	40	40	40	39	38	38	38	52
680	1	40	40	40	39	38	38	38	52
681	1	40	40	40	39	38	38	38	52
682a	1	40	40	40	39	38	38	37	52
682b	1	40	40	39	39	38	38	37	52
683	1	40	40	40	39	38	38	37	52
684	1	40	40	39	38	38	38	37	52
685	1	40	40	39	38	38	38	37	52
686	1	40	40	39	38	38	38	37	52
687	1	40	40	39	38	38	38	37	52
688	1	40	40	39	38	38	38	37	52
689	1	40	40	39	39	38	38	38	52
690	1	40	40	39	38	38	38	38	52
691	1	40	40	39	38	38	38	37	52
692	1	40	40	39	38	38	38	37	52
693	1	40	39	39	38	38	38	37	52
694a	1	40	40	39	38	38	38	37	52
694b	1	40	40	39	38	38	38	37	52
695	1	40	40	39	38	38	38	37	52
697	1	40	40	39	38	38	38	37	52
698	1	40	40	39	38	38	37	37	52
715	n/a	32	34	35	37	36	36	33	52
728	1	40	40	39	38	38	37	37	52
729	1	40	40	39	38	38	37	37	52
730	1	40	40	39	38	38	38	37	52
731	1	40	40	39	38	38	38	37	52
732	1	40	40	39	38	38	38	37	52
733	1	40	40	39	38	38	37	37	52
735a	1	40	40	39	39	38	37	37	52
735b	1	40	40	39	39	38	38	37	52
736	1	40	40	39	38	38	37	37	52
737	1	40	40	39	39	38	38	37	52
738	1	40	40	39	39	38	37	37	52
739	1	40	40	39	39	38	37	37	52
740a	1	40	40	39	38	38	37	37	52
740b	1	40	40	39	38	38	37	37	52
740c	1	40	40	39	38	38	37	37	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
740d	1	40	40	39	38	38	37	37	52
740e	1	40	40	39	38	38	37	37	52
740f	1	40	40	39	38	38	37	37	52
741	1	40	40	39	39	38	37	37	52
742	1	40	40	39	39	38	38	37	52
743	1	40	40	39	39	38	38	37	52
744	1	40	40	39	39	38	37	37	52
745	1	40	40	39	39	38	37	37	52
746	1	40	40	39	39	38	37	37	52
747	1	40	40	39	38	38	37	37	52
748a	1	40	40	39	38	38	37	36	52
748b	1	39	39	38	38	35	34	33	52
749a	1	40	40	40	38	38	38	37	52
749b	1	40	40	40	38	38	38	37	52
750	1	40	40	40	39	38	38	37	52
751	1	40	40	39	39	38	38	37	52
752a	1	40	40	40	39	38	38	37	52
752b	1	40	40	40	39	38	38	37	52
753	1	40	40	40	39	38	38	37	52
754	1	40	40	40	39	38	38	37	52
755	1	40	40	40	39	38	38	37	52
756	1	40	40	40	39	39	38	37	52
757	1	40	40	40	39	39	38	38	52
758	1	40	40	40	39	39	38	38	52
759a	1	40	40	40	39	39	38	38	52
759b	1	40	40	40	39	39	38	38	52
760	1	40	40	40	39	39	38	38	52
761	1	40	40	40	39	39	38	38	52
762	1	40	40	40	39	39	38	38	52
763	1	40	40	40	39	39	38	38	52
764	1	40	40	40	39	39	39	38	52
765a	1	40	40	40	39	39	38	38	52
765b	1	40	40	40	39	39	38	38	52
766	1	40	40	40	39	39	38	38	52
767	1	40	40	40	39	39	38	38	52
768	1	40	40	40	39	39	38	38	52
769	1	40	40	40	39	39	38	38	52
770	1	40	40	40	39	39	38	38	52
771	1	40	40	40	39	39	38	38	52
772	1	40	40	40	39	39	38	38	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
773	1	40	40	40	39	39	38	38	52
774	1	40	40	40	39	39	38	38	52
775	1	40	40	40	39	39	38	38	52
776	1	40	41	40	39	39	38	38	52
777	1	40	41	40	39	39	38	38	52
778a	1	40	40	40	39	39	38	38	52
778b	1	40	41	40	39	39	38	38	52
779a	1	40	40	40	39	39	38	38	52
779b	1	40	40	40	39	39	38	38	52
780	1	40	40	40	39	39	38	38	52
781	1	41	41	40	39	39	38	38	52
782	1	40	40	40	39	39	38	38	52
783	1	40	41	40	39	39	38	38	52
784	1	40	40	39	39	38	38	37	52
785	1	40	40	39	39	38	38	37	52
786	1	40	40	39	39	38	38	37	52
787a	1	40	40	39	39	38	38	37	52
787b	1	40	40	40	39	38	38	37	52
788	1	40	40	39	39	38	38	37	52
789	1	40	40	39	39	38	38	37	52
790a	1	40	40	39	39	38	38	37	52
790b	1	40	40	39	39	38	38	37	52
791a	1	40	40	39	39	38	38	37	52
791b	1	40	40	40	39	38	38	37	52
792a	1	40	40	40	39	38	38	37	52
792b	1	40	40	40	39	38	38	37	52
793	1	40	40	40	39	38	38	37	52
794	1	40	40	40	39	38	38	37	52
795	1	40	40	40	39	38	38	37	52
796	1	40	40	40	39	38	38	37	52
797a	1	40	40	40	39	38	38	37	52
797b	1	40	40	40	39	38	38	37	52
798	1	40	40	40	39	38	38	37	52
801	1	40	40	40	39	38	38	37	52
802	1	40	40	40	39	38	38	37	52
803a	1	40	40	40	39	38	38	37	52
803b	1	40	40	40	39	38	38	37	52
804	1	40	40	40	39	38	38	37	52
805	1	40	40	40	39	38	38	37	52
806	1	40	40	39	38	37	37	36	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
807	1	40	40	39	38	37	37	36	52
808	1	40	40	39	38	37	37	36	52
809	1	40	40	39	39	37	37	36	52
810	1	40	40	39	39	37	37	36	52
811	1	40	40	40	39	37	37	36	52
812	1	40	40	40	39	37	37	36	52
813	1	40	40	40	38	37	37	36	52
814	1	40	40	40	39	37	37	36	52
815a	1	40	40	40	39	37	37	36	52
815b	1	40	40	40	39	37	37	36	52
816	1	40	40	40	39	37	36	36	52
817	1	40	40	40	39	37	36	36	52
819	1	40	40	40	39	37	36	35	52
820a	1	40	40	40	39	37	36	35	52
820b	1	40	40	40	39	37	36	35	52
821	1	40	40	40	38	37	36	35	52
822	1	40	40	40	39	37	36	35	52
823a	1	40	40	40	39	37	36	35	52
823b	1	40	40	40	39	37	36	35	52
824	1	40	40	40	39	37	36	35	52
825	1	40	40	40	39	36	36	35	52
826	1	40	40	40	39	37	36	35	52
827	1	40	40	40	38	36	36	35	52
828	1	40	40	40	38	36	36	35	52
829a	1	40	40	40	38	36	35	35	52
829b	1	40	40	40	39	36	35	35	52
830	1	40	40	40	38	36	35	35	52
831	1	40	40	40	39	36	35	35	52
832	1	40	40	40	39	36	35	35	52
833	1	40	40	39	38	36	35	35	52
834	1	40	40	39	39	36	35	34	52
835	1	40	40	39	39	36	35	34	52
836	1	40	40	39	39	36	35	34	52
837	1	40	40	39	39	36	35	34	52
838	1	40	40	39	38	36	35	34	52
839	1	40	40	39	38	36	35	34	52
840	1	40	40	39	38	36	35	34	52
841	1	40	40	39	38	36	35	34	52
843a	1	40	39	39	38	36	35	34	52
843b	1	40	40	39	39	36	35	34	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
844a	1	39	40	39	38	36	35	34	52
845	1	40	40	39	38	36	35	34	52
846	1	40	40	39	38	36	35	34	52
847	1	40	40	39	38	36	35	34	52
848	1	40	40	38	38	36	35	34	52
849	1	40	40	38	38	36	35	34	52
850	1	40	40	38	38	36	35	34	52
853	1	39	39	38	38	36	34	34	52
854	1	39	39	38	38	36	34	34	52
855	1	39	39	38	38	36	34	34	52
856	1	39	39	38	38	36	34	33	52
857	1	39	39	38	38	36	34	33	52
858	1	39	39	38	38	36	34	33	52
859	1	39	39	38	38	35	34	33	52
860	1	39	39	38	38	35	34	33	52
861	1	39	39	38	38	35	34	33	52
862	1	39	39	38	38	35	34	33	52
863	1	39	39	38	38	35	34	33	52
864	1	39	39	38	38	35	34	33	52
865	1	39	39	38	38	35	34	33	52
866	2	39	39	37	38	35	34	33	52
867	2	39	40	37	38	35	34	33	52
868	2	39	40	38	38	35	34	33	52
870	2	39	40	37	38	35	34	33	52
871	2	39	40	37	38	35	34	33	52
872a	2	39	39	38	38	35	34	33	52
900a	n/a	32	34	34	37	36	35	32	52
900b	n/a	33	35	35	38	37	37	33	52
901	n/a	33	35	36	38	37	37	33	52
902	n/a	33	35	35	38	37	37	33	52
903	n/a	33	35	35	38	37	37	33	52
904	n/a	33	35	35	38	37	37	33	52
905	n/a	33	35	35	38	37	37	33	52
906	n/a	33	35	35	38	37	37	33	52
907	n/a	33	35	35	38	37	37	33	52
908	n/a	33	35	35	38	37	37	33	52
909	n/a	33	35	35	38	37	36	33	52
911	n/a	33	35	35	38	37	36	33	52
912	n/a	33	35	35	38	37	36	33	52
913	n/a	33	35	35	37	37	36	33	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
914	n/a	33	35	35	37	37	36	33	52
915	n/a	33	35	35	37	37	36	33	52
916	n/a	33	35	35	37	37	36	33	52
917	n/a	33	35	35	37	37	36	33	52
918	n/a	33	35	35	38	37	36	33	52
919	n/a	33	35	35	38	37	36	33	52
920	n/a	33	35	35	38	37	36	33	52
921	n/a	33	35	35	38	37	36	33	52
922	n/a	33	35	35	38	37	36	33	52
924	n/a	33	35	35	38	37	36	33	52
925	n/a	33	35	35	38	37	36	33	52
926	n/a	33	35	35	38	37	36	33	52
927	n/a	33	35	35	38	37	37	33	52
928	n/a	33	35	35	38	37	37	33	52
929	n/a	33	36	35	38	37	37	33	52
930	n/a	33	35	35	38	37	37	33	52
931	n/a	33	35	35	38	37	37	33	52
932a	n/a	33	35	35	38	37	36	33	52
932b	n/a	33	35	35	38	37	37	33	52
933	n/a	33	35	35	38	37	36	33	52
934	n/a	33	35	35	38	37	36	33	52
935a	n/a	33	35	35	38	37	36	33	52
935b	n/a	33	35	35	38	37	36	33	52
936	n/a	33	35	35	38	37	36	33	52
937	n/a	33	35	35	38	37	36	33	52
938	n/a	33	35	35	38	37	36	33	52
939	n/a	33	35	35	38	37	36	33	52
940	n/a	33	35	35	38	37	36	33	52
941	n/a	33	35	35	38	37	37	33	52
942	n/a	33	35	35	38	37	37	33	52
943	n/a	33	35	35	38	37	37	33	52
944	n/a	33	35	35	38	37	36	33	52
945a	n/a	33	35	35	38	37	36	33	52
945b	n/a	33	35	35	38	37	36	33	52
946	n/a	33	35	35	38	37	36	33	52
947	n/a	33	35	35	38	37	36	33	52
948	n/a	33	34	35	38	37	36	33	52
949	n/a	33	35	35	38	37	36	33	52
950	n/a	33	34	35	38	37	36	33	52
951	n/a	33	35	35	37	37	36	33	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
952	n/a	33	34	35	37	37	36	33	52
953	n/a	33	34	35	37	37	36	33	52
954	n/a	33	34	35	37	37	36	33	52
955	n/a	33	34	35	37	37	36	33	52
956	n/a	33	34	35	37	37	36	33	52
957a	n/a	32	34	34	37	36	35	32	52
957b	n/a	33	34	35	37	37	36	33	52
958	n/a	33	35	35	37	37	36	33	52
959	n/a	33	35	35	37	37	36	33	52
960	n/a	33	35	35	37	37	36	33	52
961	n/a	33	35	35	38	37	36	33	52
962	n/a	33	35	35	38	37	36	33	52
963	n/a	33	35	35	38	37	36	33	52
964	n/a	33	35	35	38	37	36	33	52
965	n/a	33	35	35	38	37	36	33	52
966	n/a	33	35	35	38	37	36	33	52
967a	n/a	33	35	35	38	37	36	33	52
967b	n/a	33	35	35	38	37	36	33	52
968	n/a	33	35	35	38	37	36	33	52
969	n/a	33	35	35	37	37	36	33	52
970	n/a	33	35	35	37	37	36	33	52
971	n/a	33	35	35	37	37	36	33	52
972	n/a	33	35	35	37	37	36	33	52
973	n/a	33	34	35	37	37	36	33	52
974	n/a	33	34	35	37	36	36	33	52
976	n/a	32	34	34	37	36	36	32	52
977a	n/a	32	34	34	37	36	35	32	52
977b	n/a	32	34	34	37	36	36	32	52
978	n/a	32	34	34	37	36	36	32	52
979a	n/a	32	34	34	36	36	35	32	52
979b	n/a	32	34	34	37	36	36	32	52
980	n/a	32	34	34	37	36	35	32	52
981a	n/a	32	34	34	37	36	35	32	52
981b	n/a	32	34	34	37	36	35	32	52
982	n/a	32	34	34	37	36	35	32	52
983	n/a	32	34	34	37	36	35	32	52
984	n/a	32	34	34	37	36	36	32	52
985	n/a	32	34	34	37	36	36	32	52
986	n/a	32	34	34	37	36	35	32	52
987	n/a	32	34	34	37	36	36	32	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
988a	n/a	32	34	34	37	36	36	32	52
988b	n/a	32	34	34	37	36	36	32	52
989a	n/a	32	34	34	37	36	36	32	52
989b	n/a	32	34	34	37	36	36	32	52
990	n/a	32	34	34	37	36	36	32	52
991	n/a	32	34	35	37	36	36	32	52
992	n/a	32	34	34	37	36	36	32	52
993a	n/a	32	34	35	37	36	36	33	52
993b	n/a	32	34	34	37	36	36	32	52
994a	n/a	32	34	34	37	36	36	32	52
994b	n/a	32	34	34	37	36	36	32	52
995	n/a	32	34	34	37	36	36	32	52
997	n/a	33	34	35	37	36	36	33	52
998	n/a	33	34	35	37	36	36	33	52
999	n/a	32	34	34	37	37	36	32	52
1000	n/a	32	34	34	37	36	36	32	52
1001	n/a	32	34	34	37	36	35	32	52
1002	n/a	32	34	34	37	36	35	32	52
1003	n/a	32	34	34	37	36	35	32	52
1004	n/a	32	34	34	37	36	35	32	52
1005	n/a	32	34	34	36	36	35	32	52
1006	n/a	32	34	34	36	36	35	32	52
1007	n/a	32	34	34	36	36	35	32	52
1008	n/a	32	34	34	36	36	35	32	52
1009	n/a	32	34	34	36	36	35	32	52
1010	n/a	32	34	34	36	36	35	32	52
1011	n/a	32	34	34	37	36	35	32	52
1012	n/a	32	34	34	37	36	35	32	52
1014	n/a	32	34	34	37	36	35	32	52
1015	n/a	32	34	34	37	36	36	32	52
1016	n/a	32	34	34	37	36	35	32	52
1017	n/a	32	34	34	37	36	35	32	52
1018	n/a	32	34	34	37	36	35	32	52
1019	n/a	32	34	34	36	36	35	32	52
1020	n/a	32	34	34	36	36	35	32	52
1021	n/a	32	34	34	36	36	35	32	52
1022	n/a	32	34	34	36	36	35	32	52
1023	n/a	23	32	31	32	29	27	28	52
1024	n/a	32	33	32	33	32	33	32	52
1025	n/a	32	34	34	37	36	35	32	52

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
1026	n/a	32	34	34	37	36	35	32	52
1027	n/a	32	34	34	37	36	36	32	52
1028	n/a	32	34	34	37	36	35	32	52
1029	n/a	32	34	34	37	36	35	32	52
1030	n/a	32	34	34	36	36	35	32	52
1031	n/a	32	34	34	36	36	35	31	52
1032	n/a	32	34	34	36	36	35	31	52
1033	n/a	32	34	34	36	34	32	29	52
1034	n/a	31	33	33	35	34	29	28	52
1035	n/a	32	33	34	36	36	35	32	52
1036a	n/a	32	33	34	36	36	35	32	52
1036b	n/a	32	33	34	36	36	35	32	52
1037	n/a	32	33	34	36	36	35	32	52
1038	n/a	32	34	34	36	36	35	32	52
1039	n/a	32	34	34	36	36	35	32	52
1040	n/a	32	34	34	37	36	35	32	52
1041	n/a	32	34	34	37	36	35	32	52
1042	n/a	32	34	34	37	36	35	32	52
1043	n/a	32	33	34	37	36	35	32	52
1044	n/a	32	34	34	37	36	35	32	52
1045	n/a	32	33	34	36	35	35	32	52
1046	n/a	32	33	34	36	35	35	32	52
1077	n/a	32	33	34	37	36	35	32	52
1078	n/a	32	33	34	37	36	35	32	52
1079	n/a	32	33	34	37	36	35	32	52
1080	n/a	32	33	34	36	35	35	32	52
1081	n/a	32	33	34	36	36	35	32	52
1082a	n/a	32	33	34	37	36	35	32	52
1082b	n/a	32	33	34	37	36	35	32	52
1100a	n/a	22	22	22	22	22	23	21	52
1100b	n/a	22	22	22	22	22	23	22	52
Generic Muswellbrook Residential Receivers									
A	n/a	39	39	38	37	37	36	36	52
B	n/a	39	39	38	37	36	36	35	52
C	n/a	40	39	39	38	37	36	36	52
D	n/a	39	39	38	38	36	35	34	52
E	n/a	39	38	37	37	35	34	33	52
F	n/a	39	39	38	37	36	35	34	52
G	n/a	39	38	37	37	35	34	33	52
Council and State-Owned Residential Receivers									

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
286e	n/a	21	22	21	21	21	21	20	52
286f	n/a	21	22	21	22	22	22	20	52
N1	n/a	24	31	31	32	29	28	28	52
N2	n/a	24	31	31	32	31	29	28	52
N3	n/a	24	31	31	32	31	29	28	52
N4	n/a	31	32	32	34	31	29	28	52
N5	n/a	32	33	33	35	35	35	32	52
N6	n/a	32	34	34	36	36	35	32	52
N7	n/a	32	34	34	36	36	35	32	52
N8	n/a	32	34	34	37	36	35	32	52
N9	n/a	32	34	34	37	36	35	32	52
N10	n/a	32	34	34	37	36	35	32	52
N11	n/a	32	34	34	37	36	35	32	52
N12	n/a	32	33	34	36	35	35	32	52
N13	n/a	32	33	34	36	35	35	32	52
N14	n/a	32	33	34	36	36	35	32	52
N15	n/a	32	34	34	36	36	35	32	52
N16	n/a	32	33	34	36	36	35	32	52
N17	n/a	32	33	34	37	36	35	32	52
N18	n/a	32	33	34	37	36	35	32	52
N19	n/a	32	33	34	37	36	35	32	52
N20	n/a	32	34	34	37	36	35	32	52
N21	n/a	32	34	34	37	36	35	32	52
N22	n/a	36	36	34	35	33	32	31	52
N23	n/a	35	36	34	35	33	32	31	52
N24	n/a	35	36	34	35	33	32	31	52
N25	n/a	35	35	33	35	33	32	31	52
N26	n/a	35	35	33	35	34	32	31	52
N27	n/a	35	35	33	35	33	32	31	52
N28	n/a	39	40	38	38	35	34	33	52
Mine-Owned Residential Receivers									
23	n/a	45	45	45	45	45	45	44	52
68	n/a	42	44	44	42	42	42	41	n/a
80a	n/a	41	42	42	40	39	39	38	52
135	n/a	47	52	49	44	38	37	38	n/a
135b	n/a	47	52	49	44	38	37	38	n/a
139	n/a	42	49	45	47	39	38	37	n/a
158	n/a	41	50	49	50	49	43	40	52
231	n/a	42	43	42	40	39	39	38	n/a
263	n/a	40	40	40	40	41	43	40	n/a

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
1p	n/a	45	48	50	41	38	37	37	n/a
1z	n/a	38	46	50	51	38	38	37	n/a
1ab	n/a	38	49	48	49	40	40	39	n/a
1ac	n/a	45	45	45	45	45	45	45	n/a
1ad	n/a	27	31	31	33	33	33	32	n/a
1ae	n/a	51	51	51	51	51	51	50	n/a
1af	n/a	44	45	45	44	44	44	44	n/a
1ag	n/a	43	45	45	43	43	43	43	n/a
1ah	n/a	42	44	44	41	41	42	41	n/a
1ai	n/a	42	44	44	41	41	41	41	n/a
1aj	n/a	42	44	44	41	41	41	41	n/a
1ak	n/a	42	44	44	41	42	41	41	n/a
1al	n/a	42	44	44	41	41	41	41	n/a
1am	n/a	42	44	45	40	40	40	39	n/a
1ar	n/a	42	45	47	40	40	39	39	n/a
1as	n/a	42	45	47	40	40	39	39	n/a
1aw	n/a	42	47	49	40	39	39	39	n/a
1ax	n/a	42	46	48	40	39	39	39	n/a
1bb	n/a	44	46	46	44	44	44	44	n/a
1bc	n/a	42	47	48	40	39	39	39	n/a
1bd	n/a	30	31	31	32	34	33	30	n/a
1bf	n/a	49	57	54	55	38	37	39	n/a
1bg	n/a	48	56	53	54	38	38	40	n/a
2i	n/a	45	45	46	45	45	45	45	n/a
246	n/a	30	31	31	31	31	31	29	n/a
246b	n/a	30	31	31	31	31	31	29	n/a
2b	n/a	49	49	49	49	49	49	49	n/a
2d	n/a	40	40	40	40	40	39	39	n/a
2e	n/a	56	56	56	56	56	56	56	n/a
2f	n/a	69	69	69	69	69	69	69	n/a
2n	n/a	31	31	31	31	31	31	29	n/a
2o	n/a	33	33	33	33	34	34	32	n/a
2p	n/a	33	34	33	33	34	34	32	n/a
2r	n/a	34	34	33	34	34	34	33	n/a
2s	n/a	34	34	33	34	34	34	32	n/a
2w	n/a	37	37	37	37	38	38	36	n/a
2x	n/a	42	42	42	42	42	42	41	n/a
2y	n/a	42	42	42	42	42	42	41	n/a
2z	n/a	42	42	42	42	42	42	41	n/a
2aa	n/a	43	43	43	43	43	43	42	n/a

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
2ab	n/a	42	42	42	42	42	42	42	n/a
2ad	n/a	43	43	43	43	43	43	42	n/a
2af	n/a	43	43	43	43	43	43	42	n/a
2ai	n/a	45	45	45	45	44	44	44	n/a
2aj	n/a	46	46	46	46	46	46	46	n/a
2al	n/a	45	46	46	46	45	45	45	n/a
2am	n/a	43	43	43	43	43	43	42	n/a
2an	n/a	33	33	33	33	34	34	33	n/a
2ao	n/a	33	34	33	33	34	34	33	n/a
7	n/a	41	40	40	40	40	40	39	n/a
211	n/a	39	39	39	39	39	39	39	n/a
299	n/a	28	29	28	28	28	29	28	n/a
487b	n/a	30	30	29	29	30	30	29	n/a
5f	n/a	41	41	41	41	41	40	40	n/a
5g	n/a	41	41	41	41	41	41	41	n/a
5i	n/a	28	28	28	28	29	29	28	n/a
5j	n/a	26	26	25	25	26	26	25	n/a
5k	n/a	28	29	28	29	29	29	28	n/a
5l	n/a	29	29	29	29	29	29	28	n/a
5m	n/a	31	31	31	31	31	31	30	n/a
5p	n/a	32	31	31	32	32	32	31	n/a
5r	n/a	36	35	34	34	35	35	33	n/a
5t	n/a	36	36	34	35	35	34	33	n/a
5v	n/a	29	30	30	30	30	30	28	n/a
5x	n/a	30	30	30	30	31	31	28	n/a
5y	n/a	37	36	36	36	36	36	34	n/a
5z	n/a	37	36	36	36	36	36	34	n/a
5aa	n/a	37	36	35	36	36	35	35	n/a
5ab	n/a	37	36	35	35	35	35	34	n/a
5ad	n/a	37	36	35	35	35	35	34	n/a
5af	n/a	37	36	35	35	35	35	34	n/a
5ag	n/a	26	26	26	26	26	27	26	n/a
5ah	n/a	26	26	25	26	27	27	26	n/a
5ai	n/a	27	27	26	27	28	28	28	n/a
5aj	n/a	29	29	28	29	29	29	28	n/a
5ak	n/a	29	29	28	29	29	29	29	n/a
5al	n/a	27	27	26	27	27	27	26	n/a
5am	n/a	33	33	32	33	33	33	32	n/a
3a	n/a	39	41	41	42	39	37	34	n/a
3b	n/a	39	41	40	42	40	37	34	n/a

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
3c	n/a	41	50	49	49	48	42	40	n/a
3d	n/a	39	40	40	42	39	37	34	n/a
3e	n/a	39	40	40	42	39	37	34	n/a
3f	n/a	38	40	40	41	39	37	34	n/a
3g	n/a	39	45	45	46	48	44	39	n/a
3i	n/a	37	40	40	42	43	40	35	n/a
3j	n/a	37	37	38	40	39	37	33	n/a
3k	n/a	33	41	40	43	42	41	38	n/a
3m	n/a	38	43	43	45	46	45	42	n/a
3n	n/a	37	42	41	43	43	42	37	n/a
3o	n/a	25	38	38	38	38	32	32	n/a
3p	n/a	26	38	37	38	38	34	31	n/a
3r	n/a	29	33	33	35	35	35	32	n/a
3s	n/a	30	32	32	35	35	34	29	n/a
3t	n/a	32	40	41	43	42	39	38	n/a
3u	n/a	34	40	41	43	42	38	37	n/a
3v	n/a	41	49	49	50	52	49	42	n/a
274	n/a	21	24	23	25	26	25	24	n/a
416	n/a	28	28	28	28	29	29	28	n/a
463	n/a	25	25	24	25	25	26	24	n/a
7b	n/a	24	24	23	23	24	24	22	n/a
7c	n/a	23	23	23	23	23	24	22	n/a
7d	n/a	27	26	26	26	27	27	26	n/a
7e	n/a	22	21	22	20	21	21	20	n/a
7f	n/a	21	21	20	21	21	22	20	n/a
7g	n/a	30	30	30	30	31	31	29	n/a
7h	n/a	30	31	30	31	32	32	30	n/a
7i	n/a	29	29	28	29	30	30	28	n/a
7j	n/a	30	30	30	30	32	32	30	n/a
7k	n/a	28	29	28	29	30	30	28	n/a
7l	n/a	24	24	23	23	24	24	22	n/a
7m	n/a	31	32	31	32	33	33	31	n/a
7n	n/a	34	34	32	34	32	31	30	n/a
7o	n/a	32	32	30	32	30	30	29	n/a
8b	n/a	23	23	22	22	23	23	22	n/a
8c	n/a	23	23	22	22	23	23	21	n/a
8e	n/a	18	19	19	19	20	20	20	n/a
8f	n/a	26	27	26	27	27	27	25	n/a
8h	n/a	24	23	23	23	23	23	21	n/a
8i	n/a	23	23	23	24	24	24	24	n/a

Receiver ID	NAG Night	L_{AFmax} Noise Level (dBA)							L_{AFmax} Trigger Level (dBA)
		2026	2028	2031	2034	2041	2044	2047	
8j	n/a	23	23	22	22	23	23	22	n/a
8k	n/a	18	19	19	19	20	20	20	n/a
8l	n/a	24	23	23	23	23	23	22	n/a
8m	n/a	24	23	23	23	23	24	22	n/a
8n	n/a	24	24	23	24	24	25	24	n/a
8o	n/a	25	25	25	25	25	26	24	n/a
8p	n/a	26	26	26	26	27	27	26	n/a
Mal1	n/a	26	26	25	25	26	25	25	n/a
Mal2	n/a	21	22	21	22	23	23	23	n/a
Mal3	n/a	25	25	24	25	25	25	25	n/a

Notes:

- Levels highlighted in yellow indicate predictions under the relevant Fact Sheet D meteorological conditions in excess of the L_{AFmax} trigger level at privately-owned residential receivers.
- Mine-owned residential receivers are included for the purpose of information only. L_{AFmax} trigger levels are not applicable to mine-owned residential receivers.

1. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted air impacts. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.
3. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
4. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise and air impacts.

APPENDIX K

NIGHT TIME RAIL NOISE IMPACTS – NON-NETWORK RAIL LINE

Receiver ID	Night Time $L_{Aeq,9hours}$ (dBA)	
	Low Wheel Defects	Medium Wheel Defects
Privately-Owned Residential Receivers		
19[1]	36	39
20[1,2]	39	42
21[1,2]	40	42
35	27	30
35b	27	30
206	31	33
207[1]	34	37
212	31	33
212b	31	34
213	34	37
214	34	37
215	35	37
216	35	37
216b	34	37
217	35	38
218	35	38
219	35	38
220	35	38
221	35	38
222	36	38
223	36	38
223b	36	38
224	36	39
225	35	38
Mine-Owned Residential Receivers		
23[3]	38	40
1ac	37	39
1ae	36	39
1af	29	32
1ag	28	31
1bb	28	31
2i	30	33
2b	48	51
2e	40	43
2f	53	56
2x	39	42
2y	40	43

Receiver ID	Night Time $L_{Aeq,9hours}$ (dBA)	
	Low Wheel Defects	Medium Wheel Defects
2z	40	43
2aa	42	44
2ab	41	43
2ad	41	44
2af	41	44
2ai	46	49
2aj	44	46
2al	49	52
2am	40	43
7	37	40
211	31	33
5f	37	40
5g	38	41
Commercial Receivers		
6	36	39
546a	27	30

Notes:

- Predictions at façade.
- Levels highlighted in yellow indicate predictions in excess of the *RING* night time noise criterion at privately-owned residential receivers.

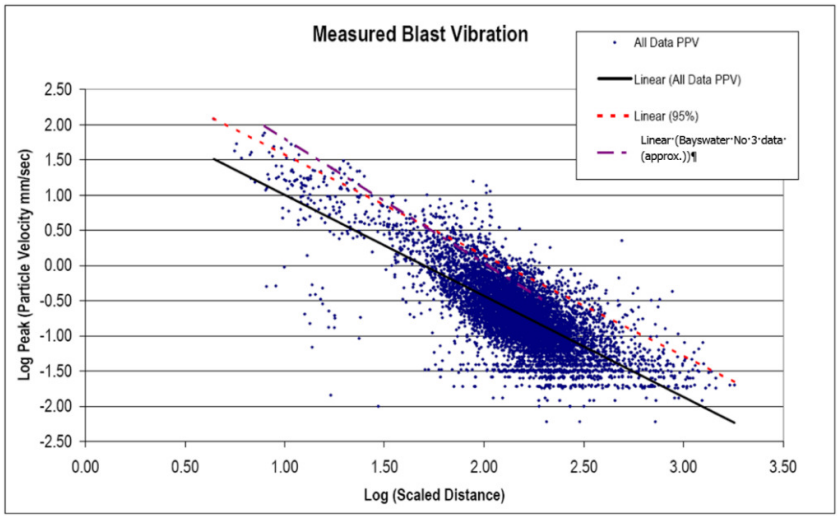
1. This receiver has the right to additional mitigation upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted noise impacts.
2. This receiver has the right to acquisition upon request in Development Consent DA 92/97 (as modified) for the approved mine for predicted air impacts. MACH is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.

APPENDIX L

BLASTING PREDICTION CURVES

For this study, Wilkinson Murray has derived predictive equations for vibration and overpressure using measurement data from approximately 7,000 blasts. Figure L.1 illustrates the measured data and associated linear trend lines for vibration.

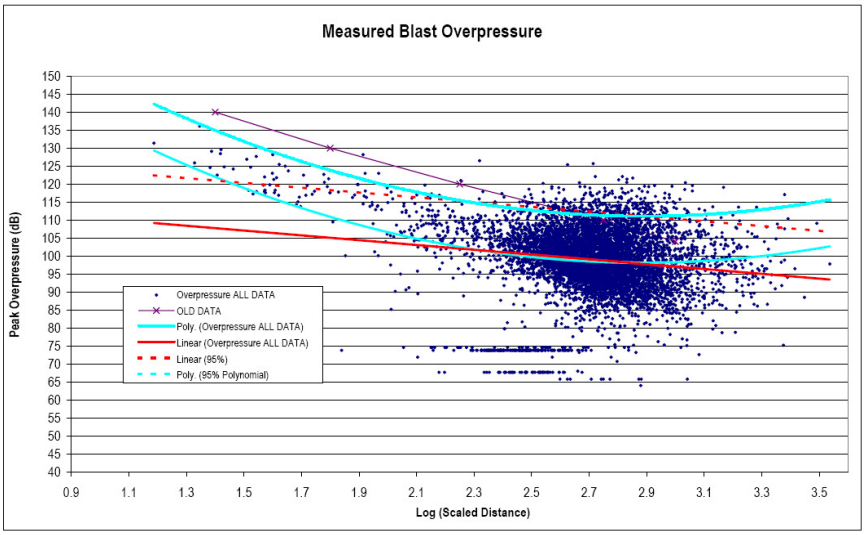
Figure L.1 Measured Peak Particle Velocity from Blasts at Mt Arthur North (logarithmic scale) and Comparison with Data from Bayswater No 3



The figure shows a revised best fit line, a 95th percentile line, and also the previously-adopted 95th percentile based on 1999 data from Bayswater No 3. The correlation with the old data is close, although the new 95th percentile shows slightly lower vibration levels at shorter scaled distance – in the order of 0.2 to 0.3 millimetres per second (mm/s).

Figure L.2 shows data for overpressure. Analysis of these data showed that the relationship between measured peak overpressure and scaled distance is better defined with a polynomial equation (blue) at close range rather than a standard linear equation (red). At relatively low values of scaled distance, the new polynomial 95th percentile curve is approximately 5 decibels (dB) lower than the linear trend line derived from the previous Bayswater No 3 data.

Figure L.2 Measured Peak Overpressure from Blasts at Mt Arthur North, and Comparison with Data from Bayswater No 3



APPENDIX M

PREDICTED OVERPRESSURE & VIBRATION LEVELS

Table M-1 Predicted Overpressure & Vibration Levels[1] Resulting from Blasting (5% Exceedance Levels) – Privately-Owned Residences

Direction & Closest Receiver ID	2026		2028		2031		2034		2041		2044		2047	
	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)
Dir- WSW ID- 43	111.2 to 112.5	0.5 to 1.4	111.1 to 112.9	0.5 to 1.7	111.1 to 113.2	0.5 to 1.8	111.1 to 113.3	0.5 to 1.9	111.2 to 113.8	0.5 to 2.3	111.2 to 114.1	0.5 to 2.4	111.2 to 113.8	0.6 to 2.3
Dir- WNW ID- 272	111.1 to 111.3	0.5 to 0.6	111.1 to 111.3	0.5 to 0.7	111.2 to 111.3	0.5 to 0.7	111.2 to 111.5	0.5 to 0.8	111.2 to 111.6	0.6 to 0.9	111.3 to 111.7	0.6 to 0.9	111.3 to 111.7	0.7 to 0.9
Dir- NNW ID- 153a	111.3 to 113.1	0.7 to 1.8	111.3 to 113.6	0.7 to 2.1	111.3 to 113.7	0.7 to 2.2	111.4 to **116.3**	0.7 to 4.3	111.5 to **117.2**	0.8 to **5.1**	111.5 to **118.6**	0.8 to **6.7**	111.5 to **118.6**	0.8 to **6.7**
Dir- NNE ID- 154	111.3 to **116.3**	0.6 to 4.2	111.3 to **118.9**	0.6 to **7.2**	111.3 to **119.7**	0.6 to **8.2**	111.3 to **120.2**	0.6 to **9**	111.3 to **119.7**	0.7 to **8.2**	111.3 to **118.4**	0.7 to **6.5**	111.3 to **116.9**	0.7 to 4.8
Dir- NNE ID- 156a	111.3 to **117.7**	0.7 to **5.7**	111.3 to **118.9**	0.6 to **7.2**	111.3 to **122.4**	0.6 to **12.6**	111.3 to **122.7**	0.6 to **13.2**	111.3 to **120.2**	0.7 to **9**	111.3 to **118.1**	0.7 to **6.2**	111.3 to **116.4**	0.7 to 4.4
Dir- NNE ID- 157a	111.3 to **118.7**	0.7 to **6.9**	111.3 to **124.2**	0.7 to **16.5**	111.3 to **124.3**	0.7 to **16.7**	111.3 to **124.3**	0.7 to **16.7**	111.3 to **120.6**	0.7 to **9.5**	111.3 to **118.1**	0.7 to **6.2**	111.3 to **116.3**	0.7 to 4.3
Dir- NNE ID- 147	111.4 to **120.4**	0.7 to **9.3**	111.4 to **127.8**	0.7 to **26.2**	111.3 to **127.5**	0.7 to **25.3**	111.3 to **127.1**	0.7 to **24**	111.4 to **119.9**	0.7 to **8.5**	111.4 to **117.5**	0.7 to **5.5**	111.4 to **115.9**	0.7 to 3.9
Dir- NE ID- 143a	111.3 to **118.7**	0.7 to **6.9**	111.3 to **120.7**	0.7 to **9.8**	111.3 to **119.9**	0.7 to **8.5**	111.3 to **119.6**	0.7 to **8.1**	111.3 to **116.2**	0.7 to 4.1	111.3 to 115	0.6 to 3.1	111.3 to 114.1	0.7 to 2.4
Dir- E ID- 136	111.7 to **118.1**	0.9 to **6.2**	111.6 to **118.3**	0.9 to **6.4**	111.6 to **116.2**	0.9 to 4.1	111.6 to **115.3**	0.8 to 3.3	111.5 to 113.8	0.8 to 2.2	111.5 to 113.2	0.8 to 1.9	111.5 to 112.8	0.8 to 1.6
Dir- E ID- 121	112.7 to **116.9**	1.5 to 4.8	112.4 to **116.8**	1.3 to 4.8	112.3 to **115.1**	1.3 to 3.2	112.2 to 114.6	1.2 to 2.8	112 to 113.6	1.1 to 2.1	111.9 to 113.2	1.1 to 1.8	112 to 113	1.1 to 1.7

Direction & Closest Receiver ID	2026		2028		2031		2034		2041		2044		2047	
	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)
Dir- E ID- 112	112.9 to **116**	1.7 to 4	112.6 to **115.9**	1.4 to 3.9	112.5 to 114.8	1.4 to 3	112.1 to 114.5	1.2 to 2.8	112 to 113.5	1.1 to 2	111.9 to 113.1	1 to 1.8	111.9 to 112.9	1 to 1.6
Dir- E ID- 67	112 to 114.2	1.1 to 2.5	111.8 to 114	1 to 2.4	111.7 to 113.4	0.9 to 2	111.5 to 113.3	0.8 to 1.9	111.5 to 112.6	0.8 to 1.5	111.4 to 112.4	0.8 to 1.4	111.4 to 112.2	0.8 to 1.2
Dir- ESE ID- 23	111.4 to 114.1	0.7 to 2.5	111.3 to 114.2	0.6 to 2.5	111.3 to 114.2	0.6 to 2.5	111.2 to 113.2	0.6 to 1.8	111.2 to 112.6	0.6 to 1.5	111.2 to 112.5	0.6 to 1.4	111.2 to 112.2	0.6 to 1.2

Notes:
1. Overpressure and ground vibration levels likely to result from the proposed maximum blast MIC of 1,600 kg.
2. Values that are above the criterion are highlighted in bold.
3. WSW = West-South-West; WNW = West-North-West; NNW = North-North-West; NNE = North-North-East; NE = North-East; E = East; and ESE = East-South-East.

Table M-2 Required MIC to Comply with Airblast Overpressure & Vibration Criteria – Privately-Owned Residences

Direction & Closest Receiver ID	2026		2028		2031		2034		2041		2044		2047	
	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance
Dir- NNW ID- 153a	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	1,822 m	800 kg	1,613 m	550 kg	1,337 m	300 kg	1,337 m	300 kg
Dir- NNE ID- 154	1,849 m	850 kg	1,274 m	250 kg	1,164 m	200 kg	1,089 m	150 kg	1,161 m	200 kg	1,361 m	350 kg	1,681 m	650 kg
Dir- NNE ID- 156a	1,493 m	450 kg	1,274 m	250 kg	862 m	50 kg	837 m	50 kg	1,092 m	150 kg	1,416 m	350 kg	1,807 m	800 kg
Dir- NNE ID- 157a	1,308 m	300 kg	713 m	50 kg	708 m	<50 kg	707 m	<50 kg	1,049 m	150 kg	1,413 m	350 kg	1,822 m	800 kg
Dir- NNE ID- 147	1,066 m	150 kg	518 m	<50 kg	530 m	<50 kg	551 m	<50 kg	1,136 m	200 kg	1,541 m	500 kg	1,966 m	1,050 kg
Dir- NE ID- 143a	1,309 m	300 kg	1,027 m	150 kg	1,134 m	200 kg	1,173 m	200 kg	1,876 m	900 kg	n/a[1]	n/a[1]	n/a[1]	n/a[1]
Dir- E ID- 136	1,418 m	350 kg	1,381 m	350 kg	1,869 m	900 kg	2,171 m	1,400 kg	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]
Dir- E ID- 121	1,682 m	650 kg	1,695 m	650 kg	2,216 m	1,500 kg	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]
Dir- E ID- 112	1,931 m	1,000 kg	1,959 m	1,000 kg	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]

Notes: 1. Not relevant as blasting within proposed blast area and using proposed maximum blast MIC of 1,600 kg is predicted to comply with relevant criteria.
2. NNW = North-North-West; NNE = North-North-East; NE = North-East; and E = East.

Table M-3 Predicted Overpressure & Vibration[1] Levels Resulting from Blasting (5% Exceedance Levels) - Mine-Owned Residences

Direction & Closest Receiver ID	2026		2028		2031		2034		2041		2044		2047	
	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)
Dir- WSW ID- 263	111.1 to 111.8	0.4 to 1	111.2 to 111.9	0.4 to 1.1	111.2 to 112	0.4 to 1.1	111.2 to 112	0.4 to 1.1	111.1 to 112.2	0.4 to 1.2	111.1 to 112.2	0.4 to 1.2	111.1 to 112.2	0.4 to 1.2
Dir- W ID- 7m	111.1 to 111.2	0.4 to 0.5	111.1 to 111.2	0.4 to 0.5	111.1 to 111.2	0.4 to 0.5	111.1 to 111.2	0.4 to 0.6	111.1 to 111.3	0.4 to 0.6	111.1 to 111.3	0.5 to 0.7	111.2 to 111.3	0.5 to 0.7
Dir- NW ID- 1ad	111.1 to 111.4	0.5 to 0.7	111.1 to 111.4	0.5 to 0.8	111.1 to 111.5	0.4 to 0.8	111.1 to 111.9	0.5 to 1	111.2 to 112	0.5 to 1.1	111.2 to 112.1	0.5 to 1.2	111.2 to 112.1	0.6 to 1.2
Dir- N ID- 3m	111.2 to 113.9	0.5 to 2.3	111.2 to 115	0.5 to 3.1	111.2 to 115.4	0.6 to 3.4	111.2 to 116.1	0.5 to 4.1	111.2 to 116.1	0.6 to 4	111.2 to 116	0.6 to 4	111.2 to 115.6	0.6 to 3.6
Dir- N ID- 3v	111.3 to 117.4	0.7 to 5.3	111.3 to 121.1	0.6 to **10.3**	111.3 to 122.1	0.7 to **12.1**	111.3 to 122.6	0.6 to **13.1**	111.3 to 121.4	0.7 to **10.8**	111.3 to 119.3	0.7 to 7.6	111.3 to 117.3	0.7 to 5.2
Dir- E ID- 1bf	111.8 to 126.5	1 to **22.2**	111.8 to 127.2	1 to **24.3**	111.7 to 122.1	0.9 to **12**	111.7 to 119.5	0.9 to 7.9	111.6 to 116.1	0.9 to 4.1	111.6 to 114.9	0.9 to 3.1	111.6 to 114.1	0.9 to 2.4
Dir- E ID- 135b	111.9 to 120	1.1 to 8.6	111.8 to 120.3	1 to 9.1	111.8 to 117	1 to 5	111.7 to 115.9	0.9 to 3.9	111.7 to 114.2	0.9 to 2.5	111.6 to 113.5	0.9 to 2	111.6 to 113	0.9 to 1.7
Dir- E ID- 1p	112.5 to 116.7	1.4 to 4.6	112.2 to 116.7	1.2 to 4.7	112.1 to 115	1.2 to 3.1	112 to 114.4	1.1 to 2.7	112.2 to 113.3	1.2 to 1.9	111.8 to 113	1 to 1.7	111.9 to 112.8	1 to 1.6
Dir- E ID- 1aw	112.7 to 115.5	1.6 to 3.5	112.4 to 115.4	1.3 to 3.5	112.3 to 114.2	1.3 to 2.5	112 to 114.1	1.1 to 2.4	111.9 to 113.2	1.1 to 1.8	111.8 to 112.9	1 to 1.6	111.8 to 112.7	1 to 1.5
Dir- ESE ID- 1bb	112 to 114.8	1.1 to 3	111.7 to 114.7	0.9 to 2.9	111.7 to 114	0.9 to 2.4	111.5 to 113.7	0.8 to 2.1	111.5 to 112.9	0.8 to 1.7	111.5 to 112.7	0.8 to 1.5	111.5 to 112.4	0.8 to 1.4
Dir- SE ID- 2f	111.7 to 120.7	0.9 to 9.8	111.5 to 120.8	0.8 to 9.9	111.5 to 120.3	0.8 to 9.1	111.5 to 116.8	0.8 to 4.7	111.5 to 115	0.8 to 3.2	111.4 to 114.7	0.8 to 2.9	111.4 to 114.1	0.8 to 2.4

Notes:
1. Overpressure and ground vibration levels likely to result from maximum MIC of 1,600 kg.
2. Values that are above the criterion are highlighted in bold.
3. WSW = West-South-West; W = West; NW = North-West; N = North; NNE = North-North-East; E = East; ESE = East-South-East; and SE = South-East.

Table M-4 Required MIC to Comply with Airblast Overpressure & Vibration Criteria - Mine-Owned Residences

Direction & Closest Receiver ID	2026		2028		2031		2034		2041	
	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance
Dir- N ID- 3v	n/a(1)	n/a(1)	989 m	1,500 kg	886 m	1,200 kg	838 m	1,100 kg	957 m	1,400 kg
Dir- E ID- 1bf	580 m	500 kg	546 m	450 kg	891 m	1,200 kg	n/a(1)	n/a(1)	n/a(1)	n/a(1)

Notes:
1. Not relevant as blasting using proposed maximum blast MIC of 1,600 kg is expected to comply with relevant criteria.
2. Required MIC calculated for blasts at least 400 m from the receiver.
3. N = North; NNE = North-North-East; and E = East.

Table M-5 Predicted Overpressure & Vibration Levels[1] Resulting from Blasting (5% Exceedance Levels) – Historic Heritage Sites

Direction & Closest Receiver ID	2026		2028		2031		2034		2041		2044		2047	
	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)	Peak Over-pressure (dBL)	PPV Ground Vibration (mm/s)
Dir- W ID- MP01	111.2 to 111.9	0.5 to 1	111.2 to 112.1	0.5 to 1.1	111.2 to 112.3	0.5 to 1.3	111.2 to 112.4	0.5 to 1.3	111.2 to 112.7	0.6 to 1.6	111.2 to 113	0.6 to 1.7	111.3 to 113	0.7 to 1.7
Dir- WNW ID- MP36	112 to 114.5	1.1 to 2.8	112 to 114.9	1.1 to 3.1	112 to 115.3	1.1 to 3.4	112.2 to 117.2	1.2 to 5.2	112.5 to 121.3	1.4 to **10.8**	112.6 to 122.3	1.4 to **12.5**	112.7 to 122.3	1.5 to **12.5**
Dir- N ID- MP46	111.4 to 122.9	0.8 to **13.6**	111.4 to **138.4**	0.7 to **83.1**	111.4 to **138.1**	0.7 to **80.8**	111.4 to **137.2**	0.7 to **73.6**	111.4 to 122.1	0.8 to **12.1**	111.4 to 118.8	0.7 to 7	111.4 to 116.7	0.8 to 4.6
Dir- NE ID- MP41	111.9 to 120.2	1.1 to 8.9	111.8 to 120.5	1 to 9.3	111.8 to 117.1	1 to 5.1	111.7 to 116	0.9 to 4	111.6 to 114.2	0.9 to 2.5	111.6 to 113.6	0.9 to 2.1	111.6 to 113.2	0.9 to 1.8
Dir- E ID- MP49b	113 to 124.8	1.7 to **17.9**	112.8 to 123.5	1.6 to **15**	112.7 to 120.6	1.5 to 9.6	112.7 to 119.2	1.5 to 7.5	112.4 to 116.3	1.4 to 4.3	112.3 to 115.4	1.3 to 3.4	112.4 to 114.9	1.4 to 3
Dir- E ID- MP49a	113.4 to 120.2	2 to 8.9	113 to 119.6	1.7 to 8	113 to 119.4	1.7 to 7.9	112.9 to 118.3	1.6 to 6.4	112.6 to 115.8	1.5 to 3.8	112.5 to 115	1.4 to 3.1	112.6 to 114.5	1.5 to 2.8
Dir- E ID- MP39	112.6 to 116.8	1.5 to 4.7	112.2 to 115.5	1.2 to 3.5	112.1 to 115.2	1.2 to 3.3	111.9 to 114.9	1 to 3.1	111.8 to 113.8	1 to 2.2	111.7 to 113.4	0.9 to 2	111.7 to 113.1	0.9 to 1.8
Dir- SSE ID- MP52	111.5 to 117.4	0.8 to 5.3	111.3 to 117.4	0.7 to 5.3	111.3 to 117.7	0.7 to 5.7	111.3 to 115.3	0.7 to 3.4	111.3 to 114.2	0.6 to 2.5	111.3 to 113.9	0.6 to 2.3	111.3 to 113.4	0.6 to 2

Notes:
1. Overpressure and ground vibration levels likely to result from the proposed maximum blast MIC of 1,600 kg.
2. Values that are above the criterion are highlighted in bold.
3. W = West; WNW = West-North-West; N = North; NE = North-East; E = East; and SSE = South-South-East.

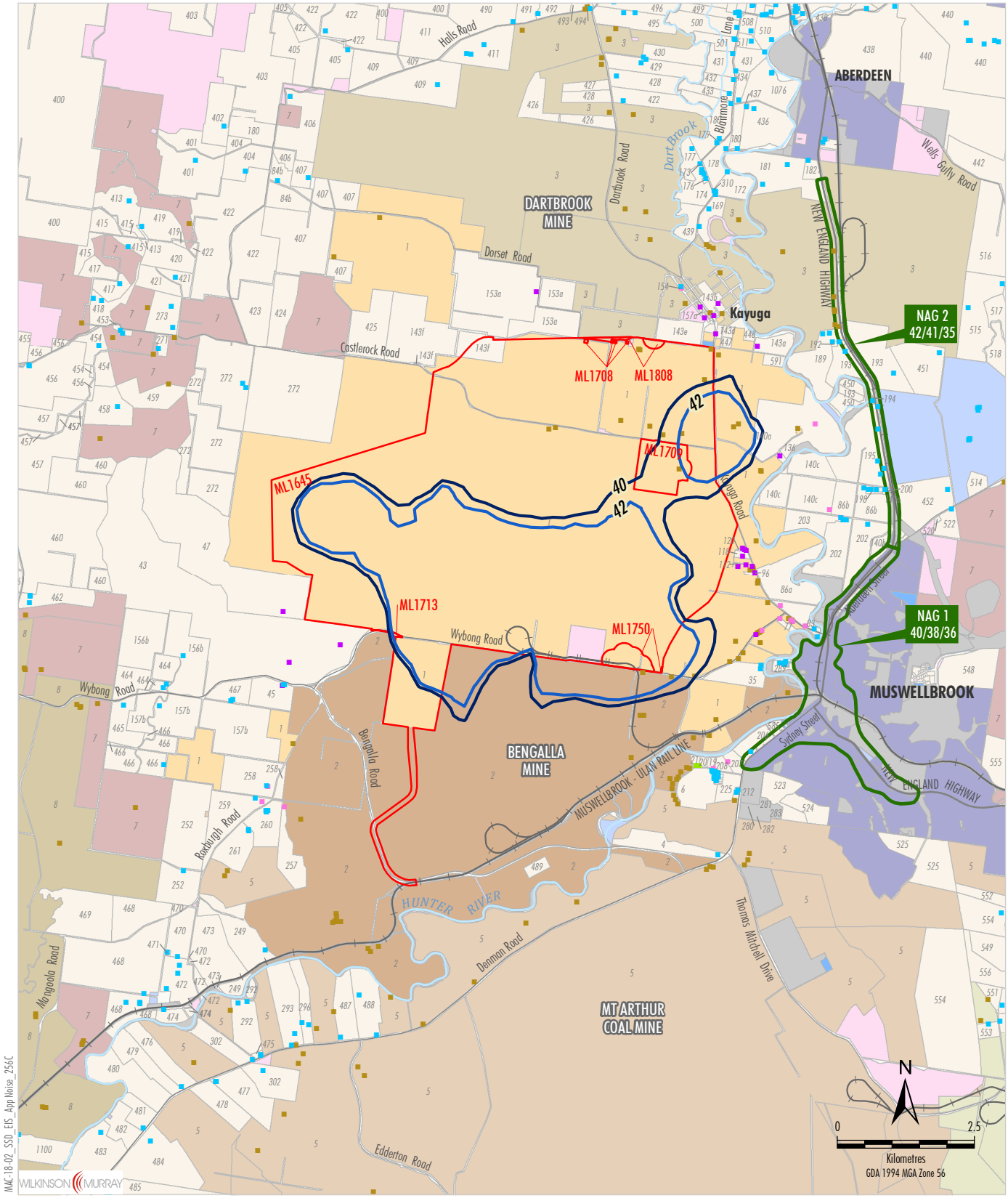
Table M-6 Required MIC to Comply with Airblast Overpressure & Vibration Criteria – Historic Heritage Sites

Direction & Closest Receiver ID	2026		2028		2031		2034		2041		2044		2047	
	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance	Approx. Minimum Distance	Required MIC to Comply at Minimum Distance
Dir- WNW ID- MP36	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	961 m	1,450 kg	869 m	1,150 kg	869 m	1,150 kg
Dir- N ID- MP46	817 m	1000 kg	232 m	50 kg	236 m	50 kg	252 m	50 kg	885 m	1,200 kg	n/a[1]	n/a[1]	n/a[1]	n/a[1]
Dir- E ID- MP49b	674 m	700 kg	764 m	900 kg	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]

Notes: 1. Not relevant as blasting within proposed blast area and using proposed maximum blast MIC of 1,600 kg is expected to comply with relevant criteria.
2. WNW = West-North-West; N = North; and E = East.

APPENDIX N

NOISE CONTOURS



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (40 dBA)
- Noise Contour (42 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

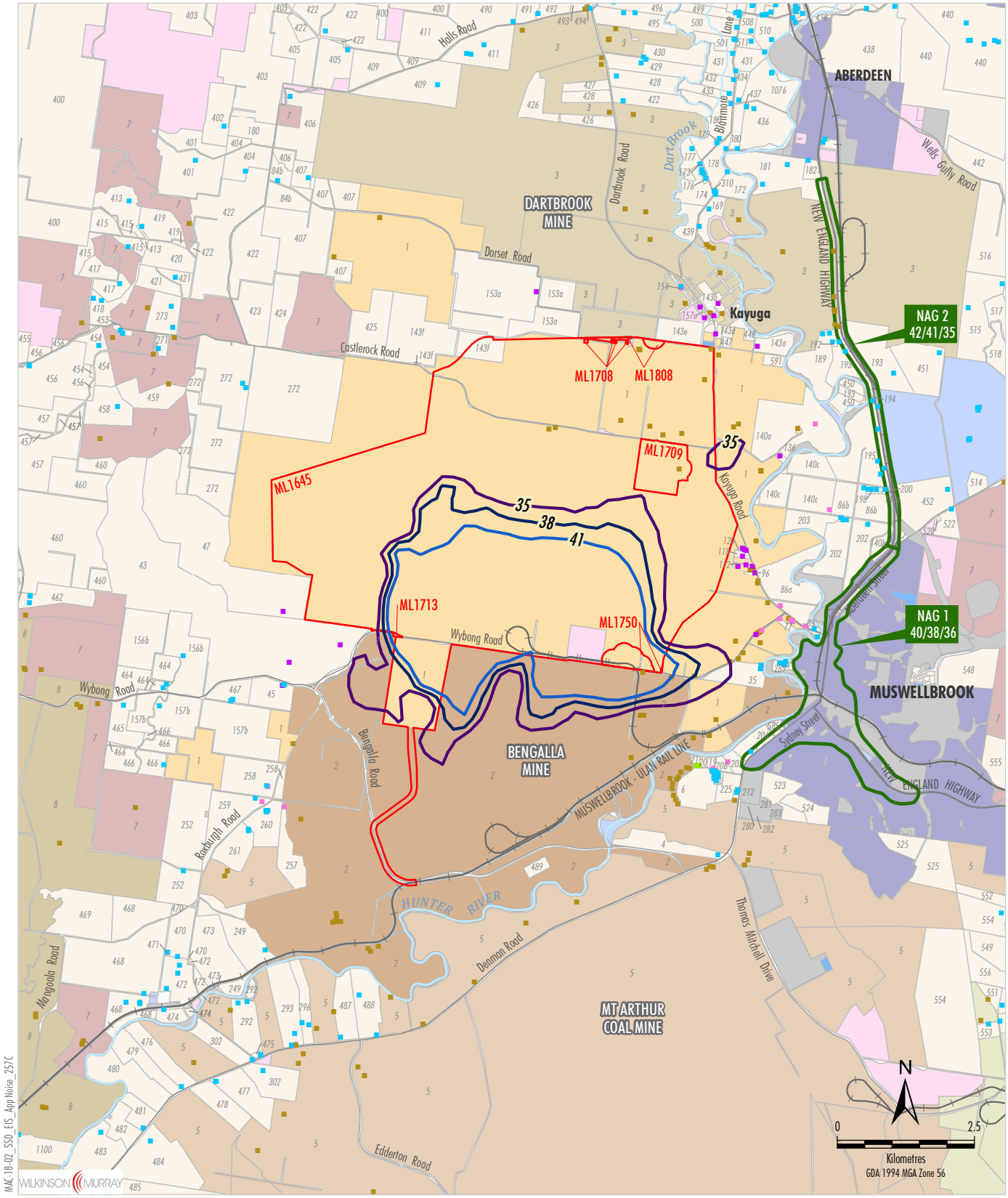
Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Day Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2026

Figure N-1



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (38 dBA)
- Noise Contour (41 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

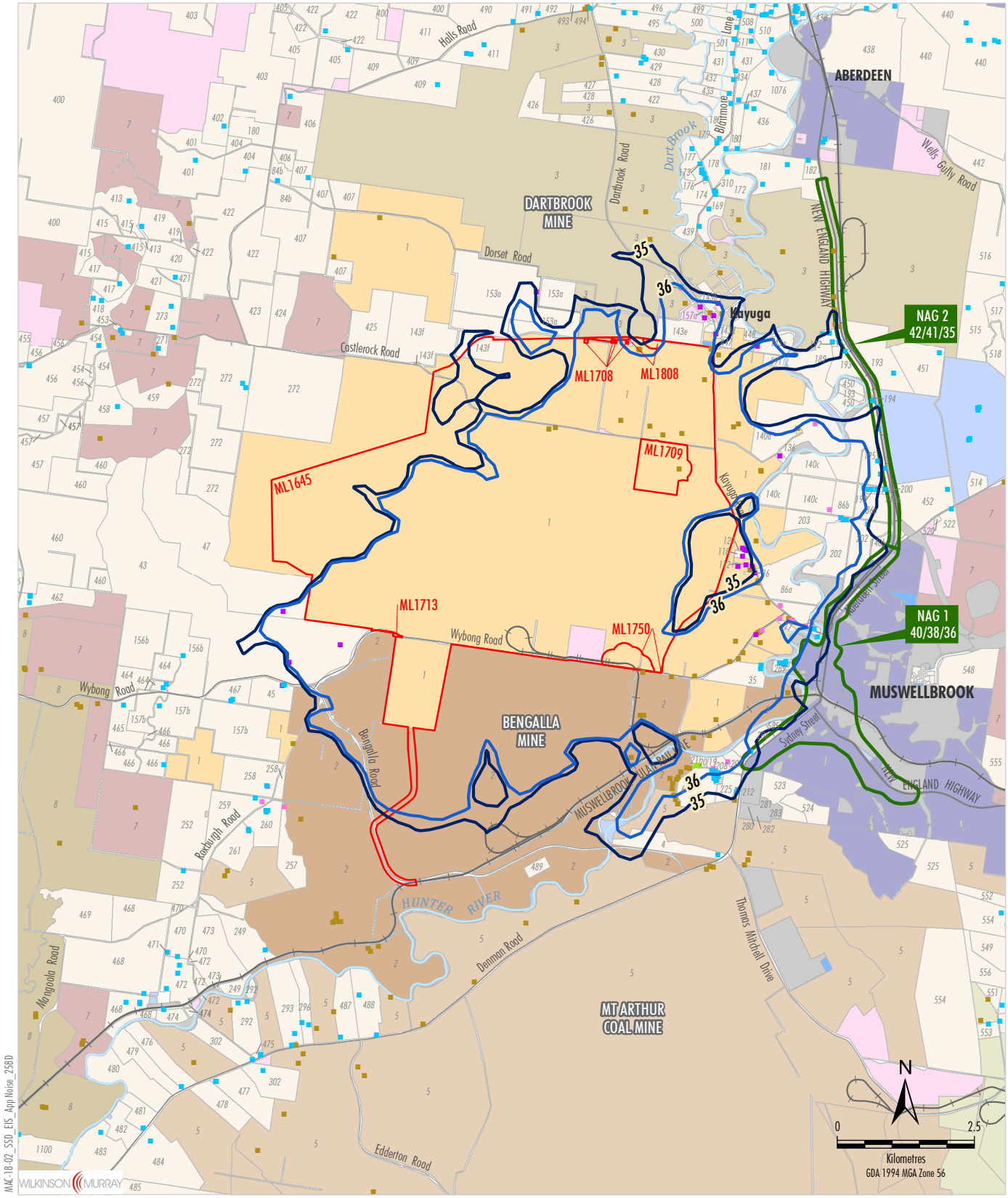
Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Evening Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2026

Figure N-2



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (36 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

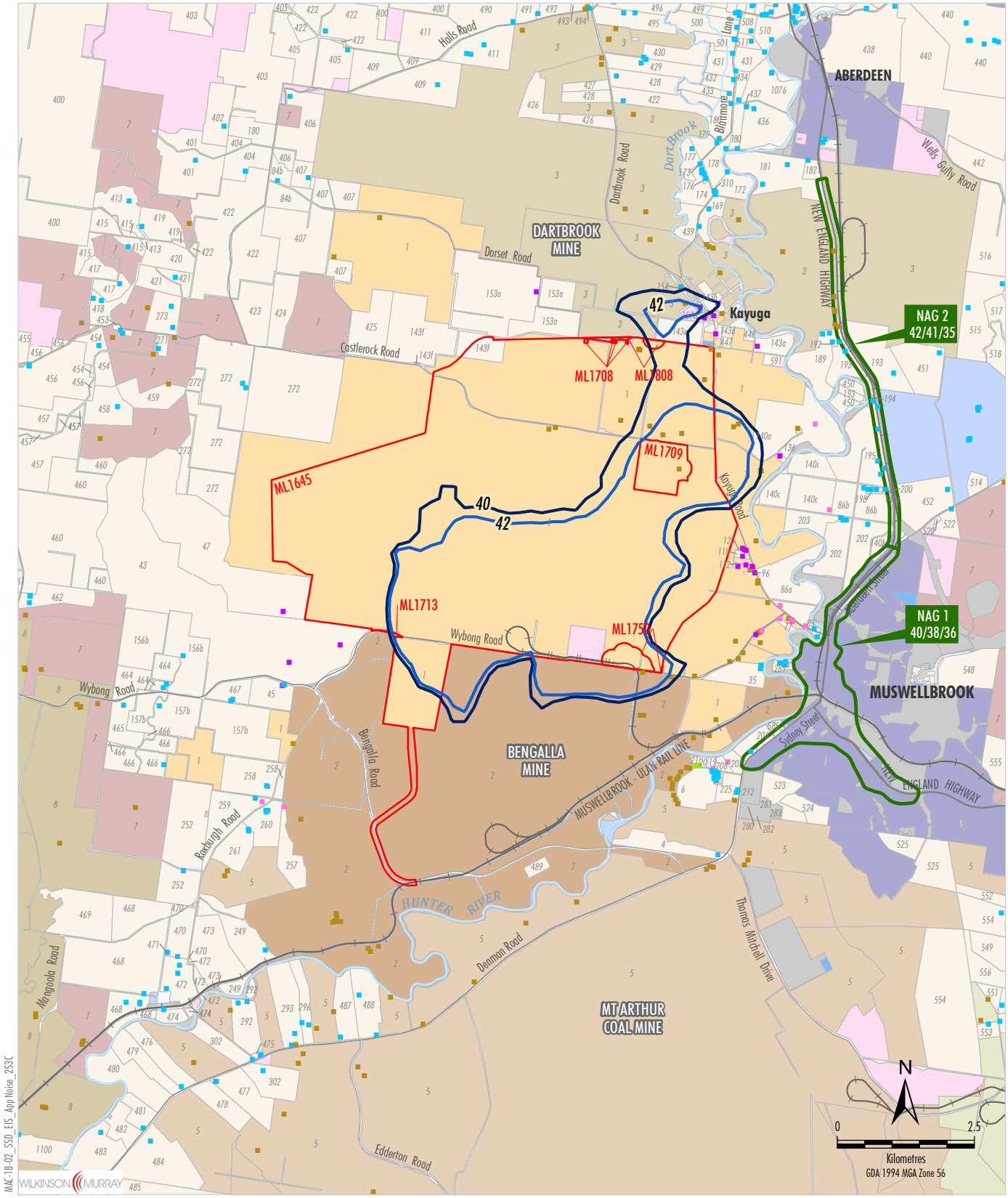
Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Night Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2026

Figure N-3



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (40 dBA)
- Noise Contour (42 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

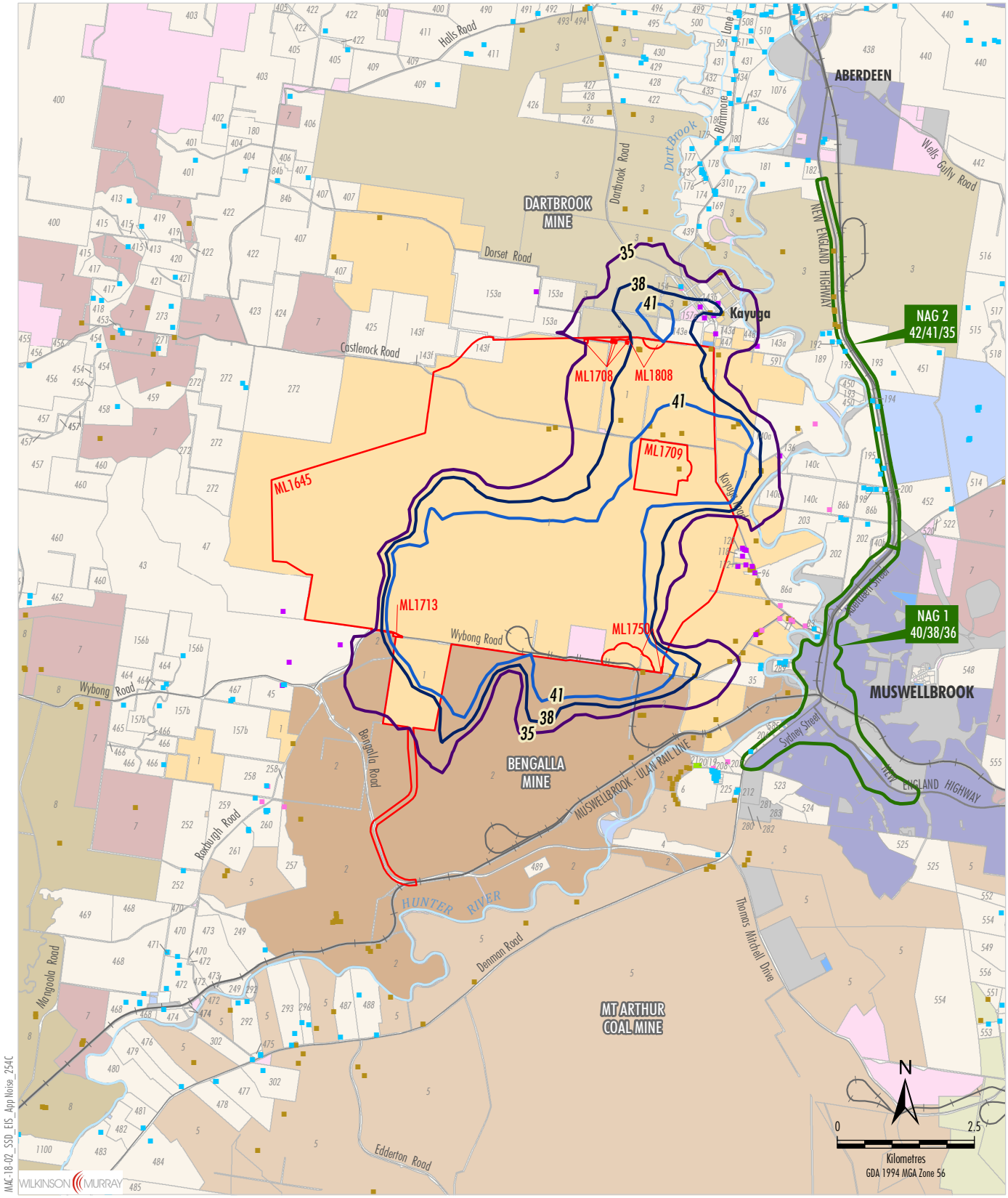
Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Day Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2028

Figure N-4



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (38 dBA)
- Noise Contour (41 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

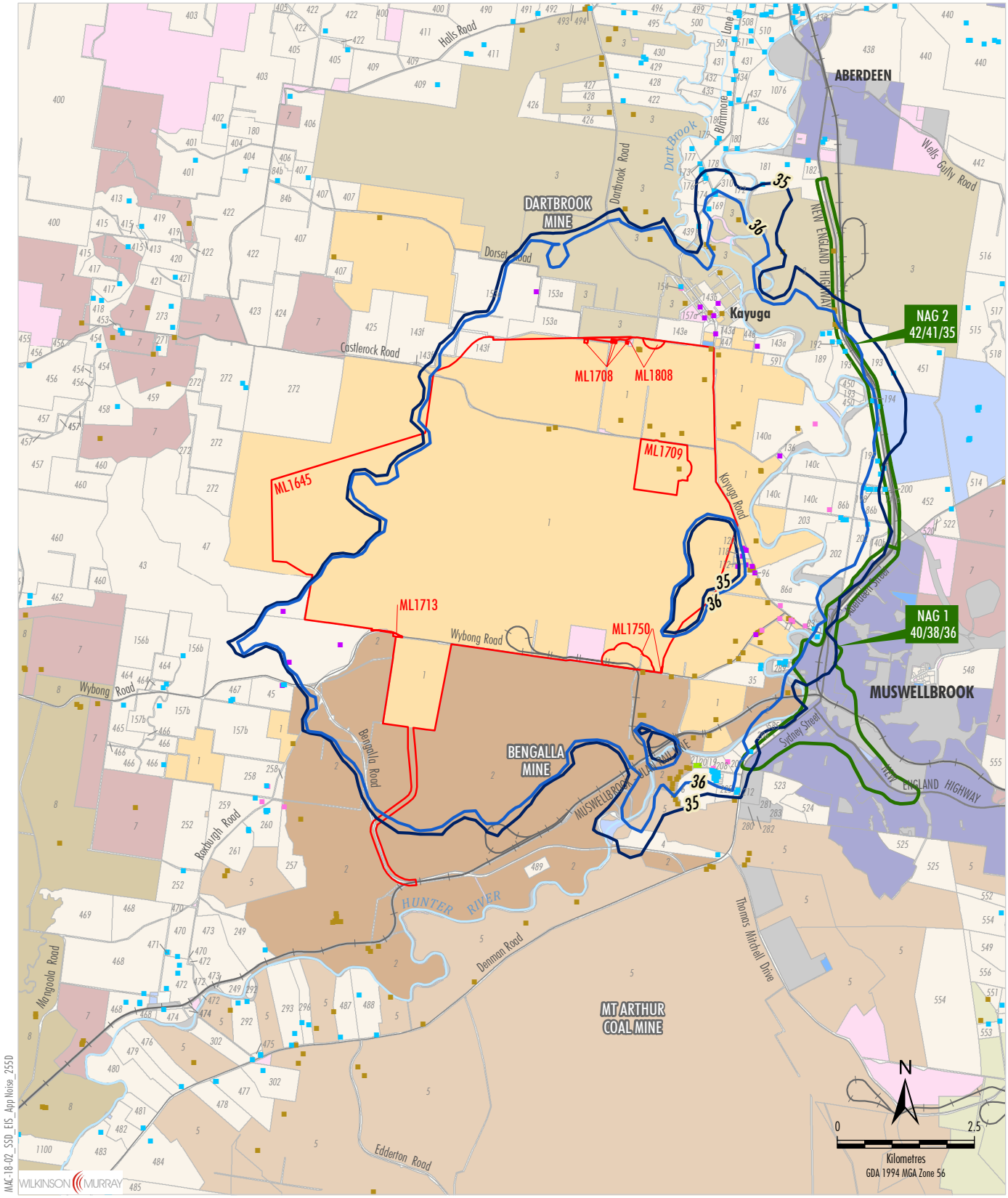
Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Evening Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2028

Figure N-5



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (36 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

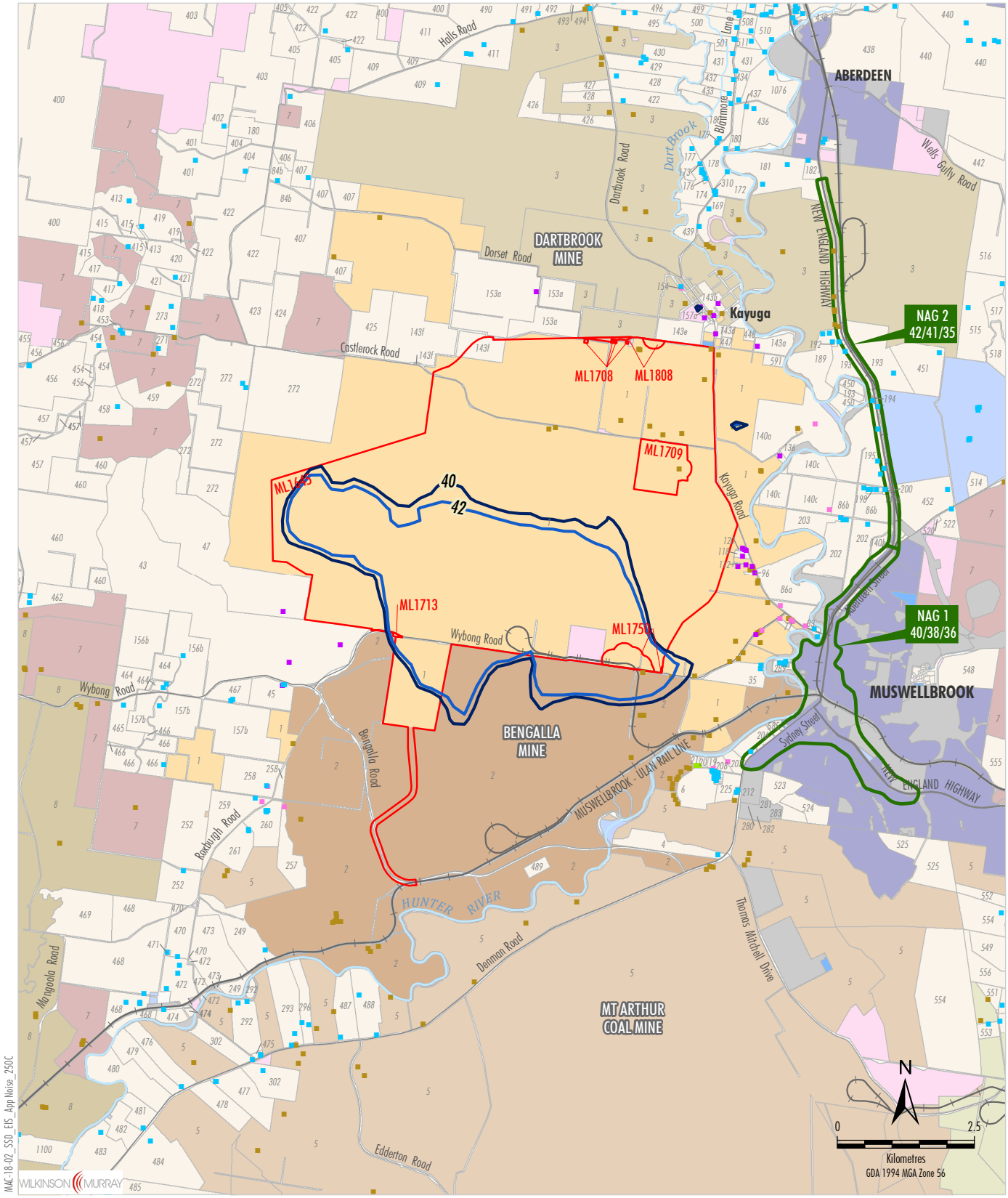
Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Night Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2028

Figure N-6



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (40 dBA)
- Noise Contour (42 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

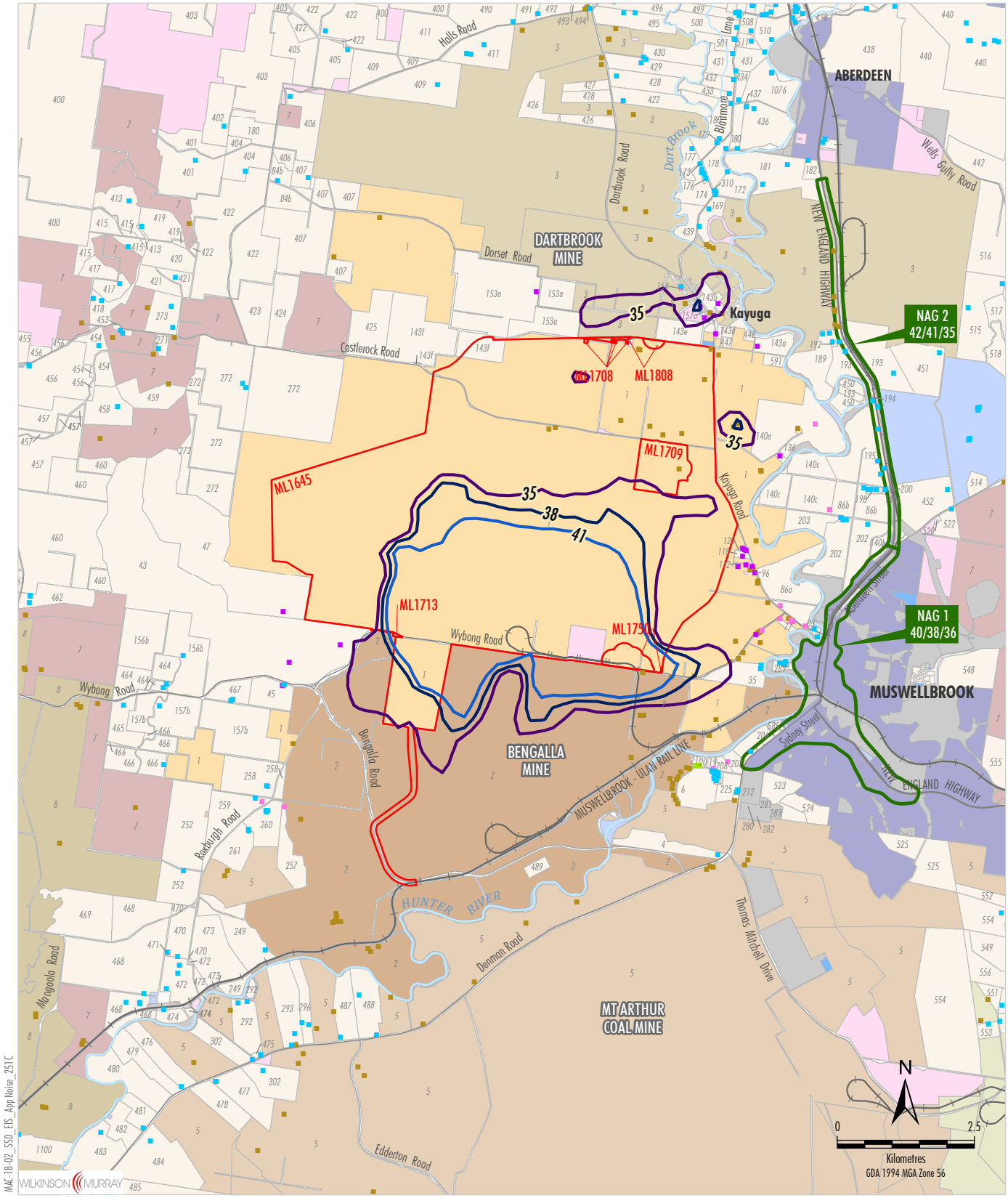
Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

Day Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2031

Figure N-7



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (38 dBA)
- Noise Contour (41 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

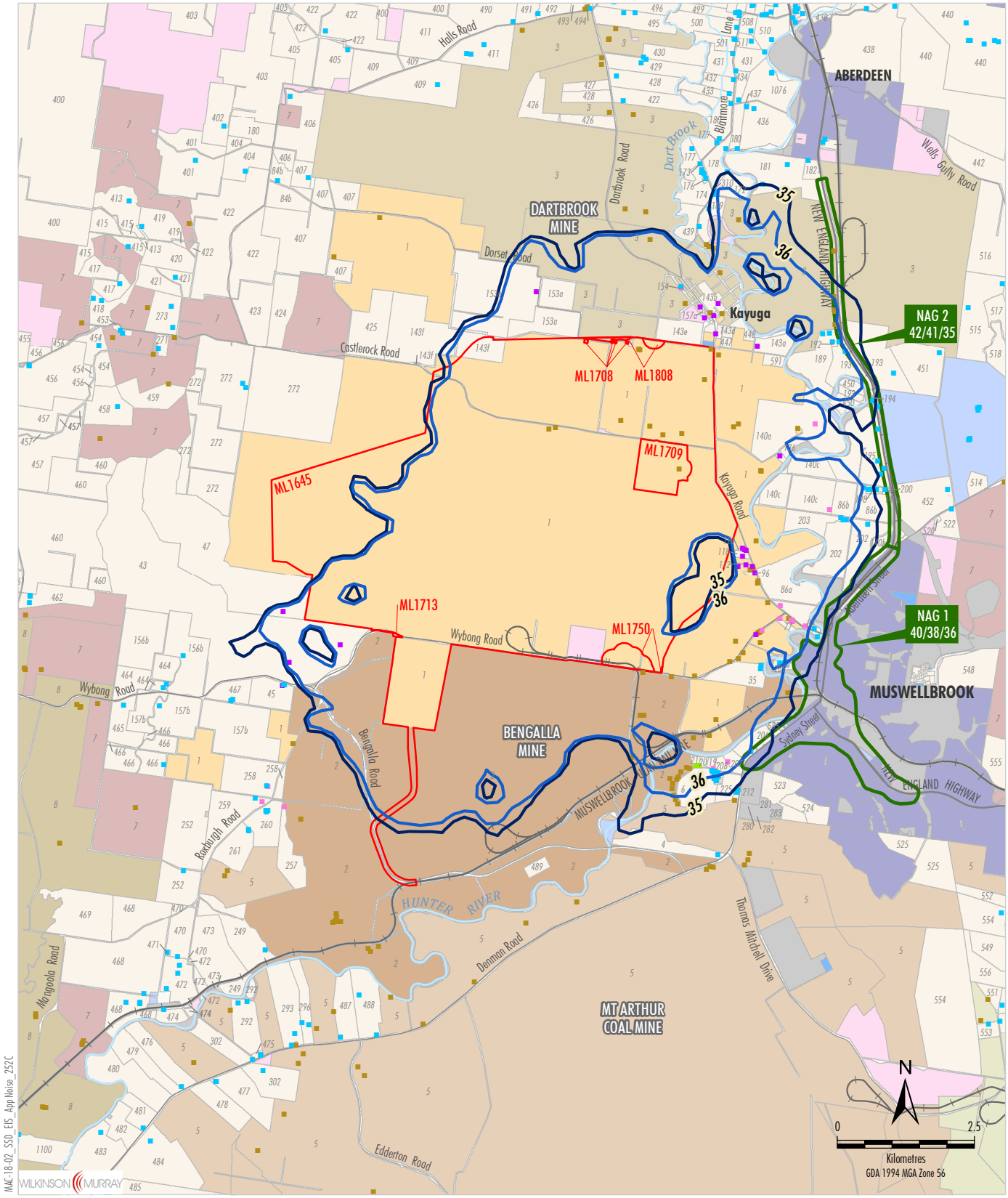
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Evening Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2031

Figure N-8



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (36 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

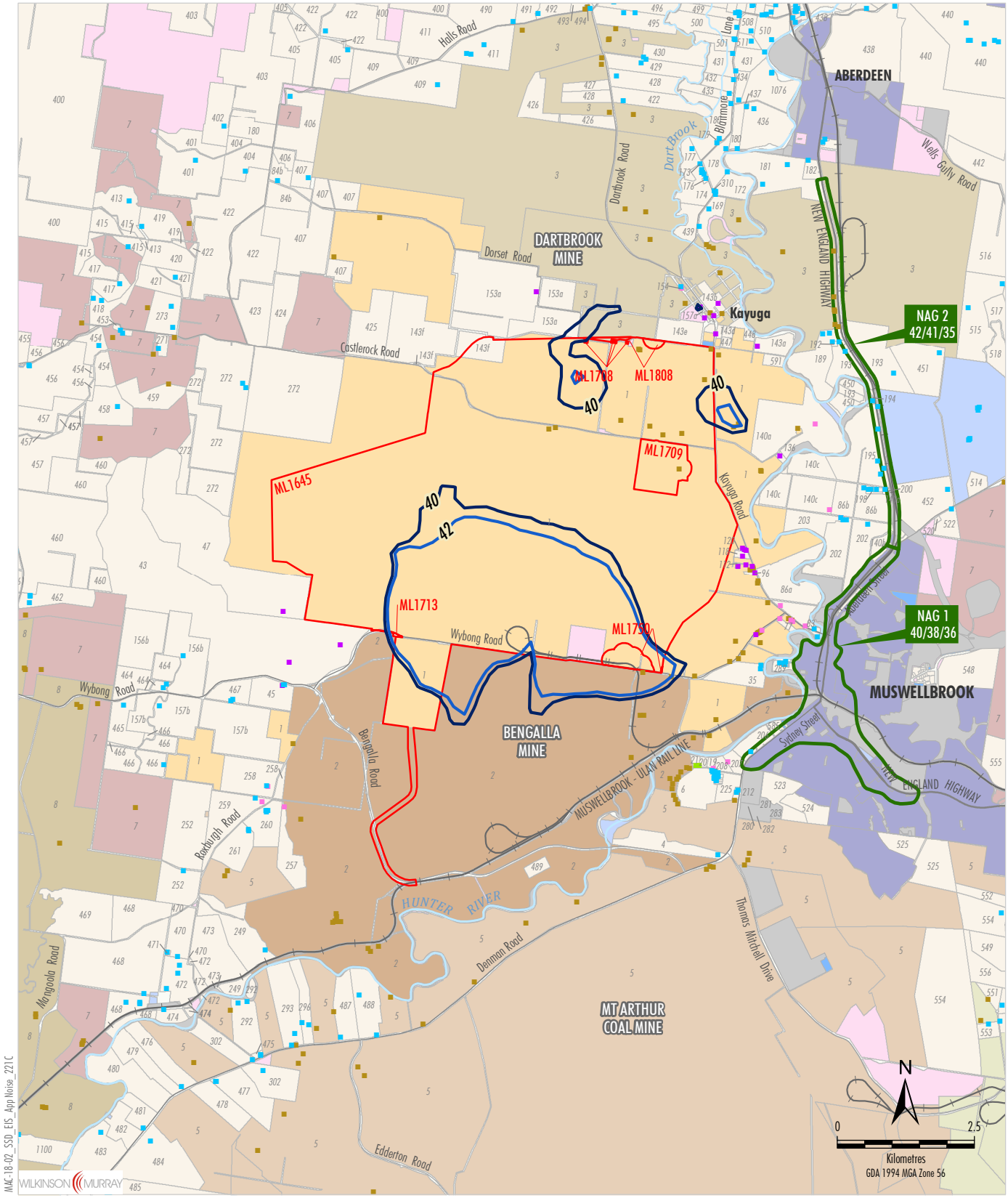
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Night Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2031

Figure N-9



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (40 dBA)
- Noise Contour (42 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

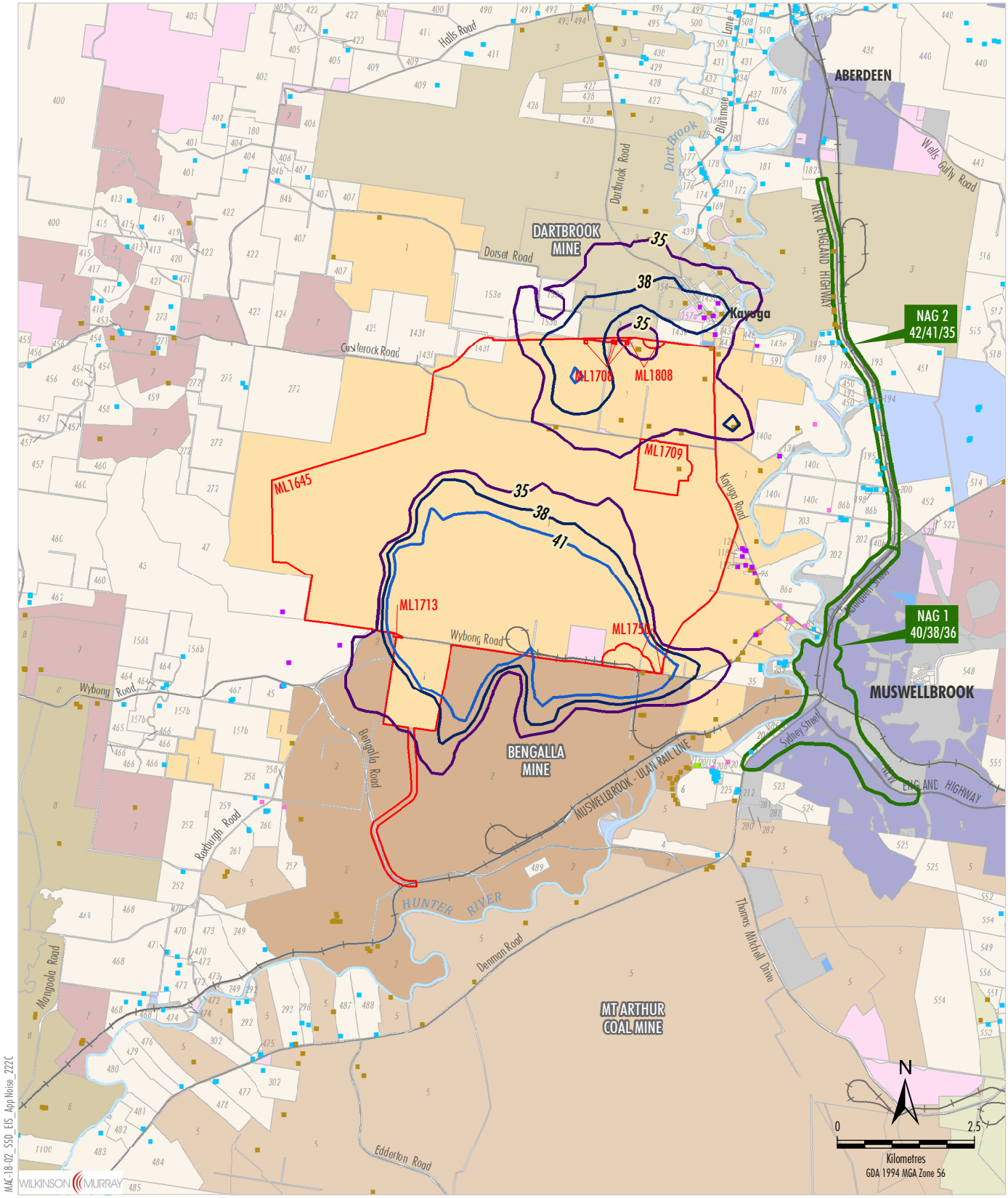
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Day Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2034

Figure N-10



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (38 dBA)
- Noise Contour (41 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

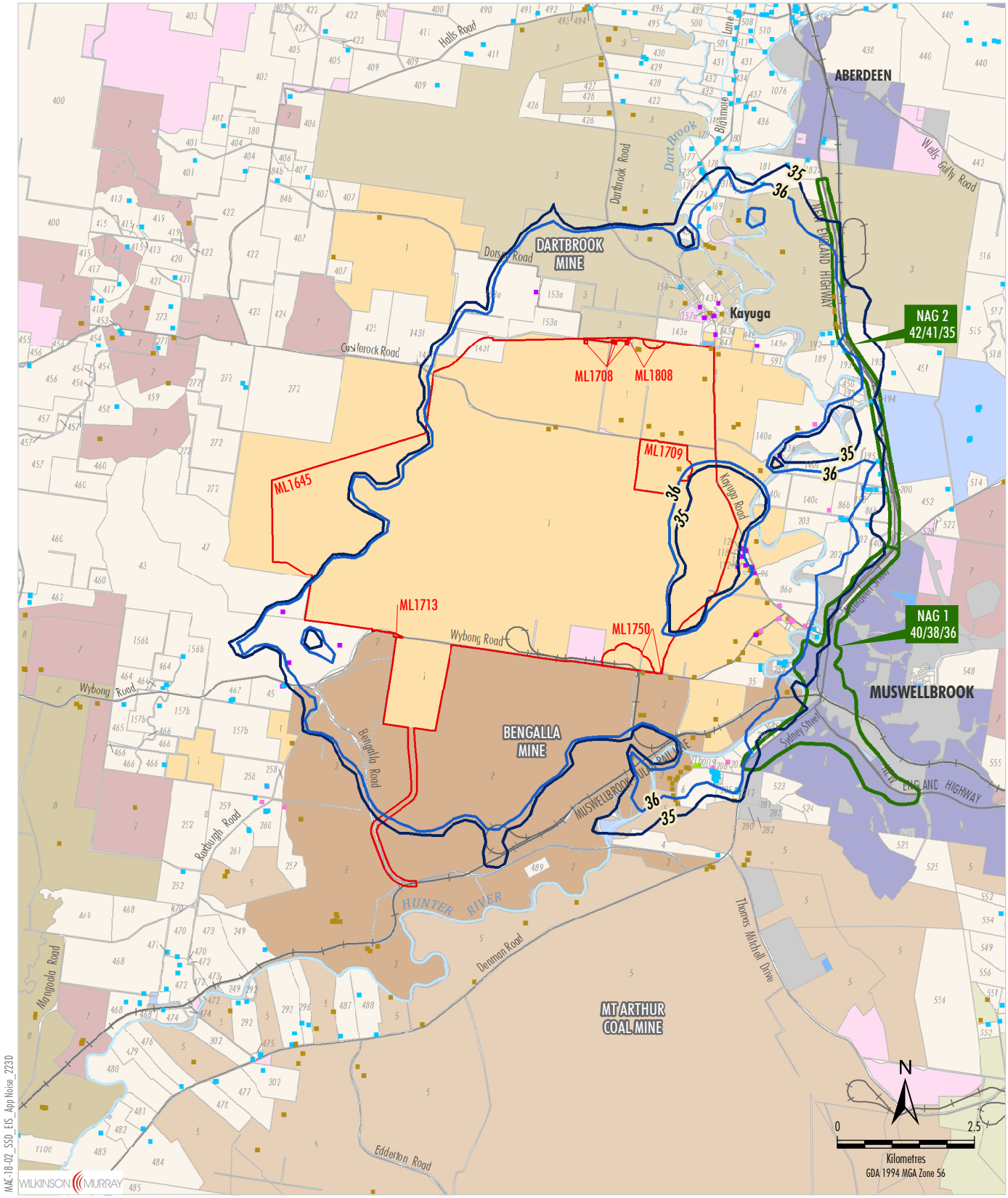
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Evening Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2034

Figure N-11



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (36 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

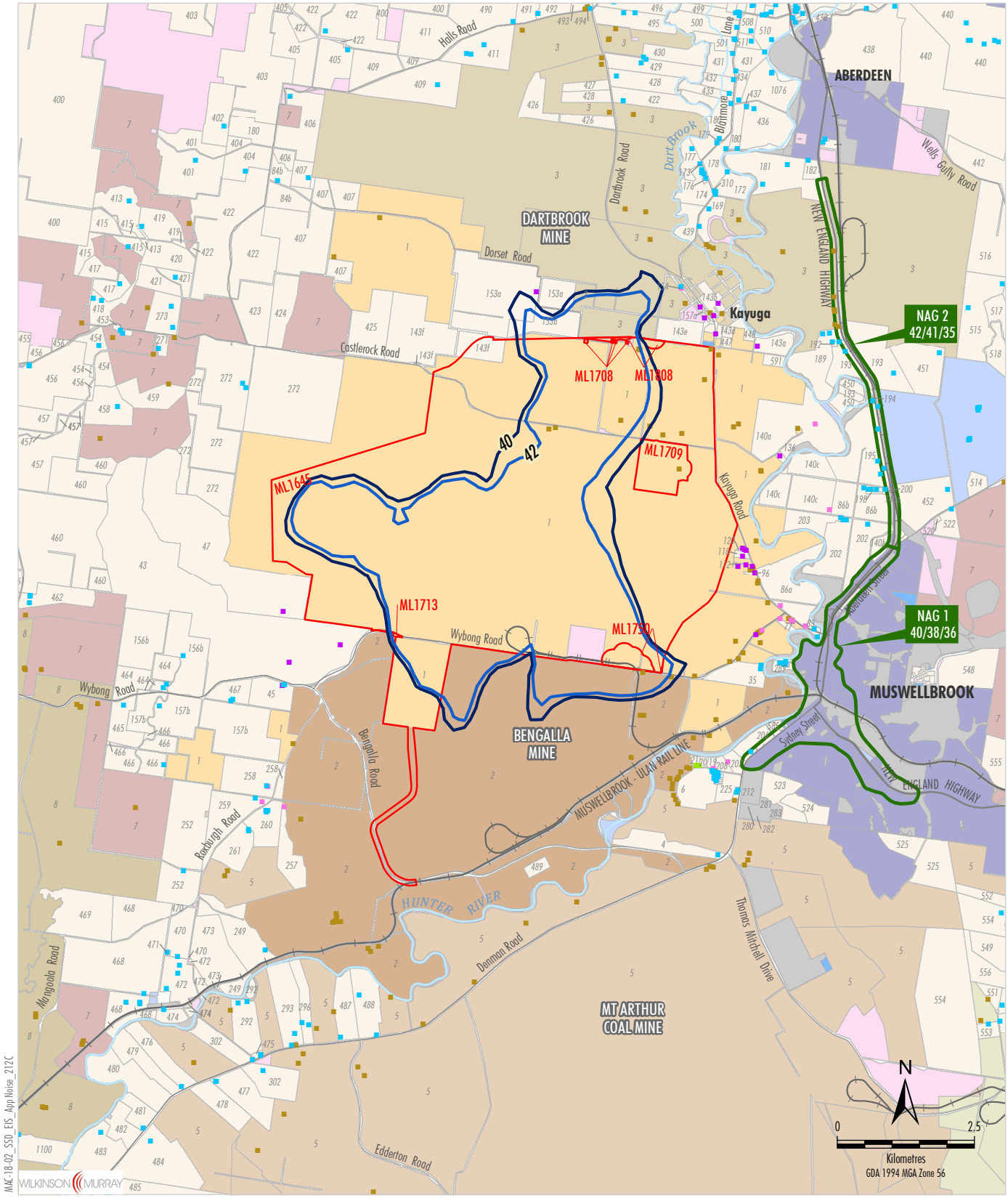
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Night Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2034

Figure N-12



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (40 dBA)
- Noise Contour (42 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

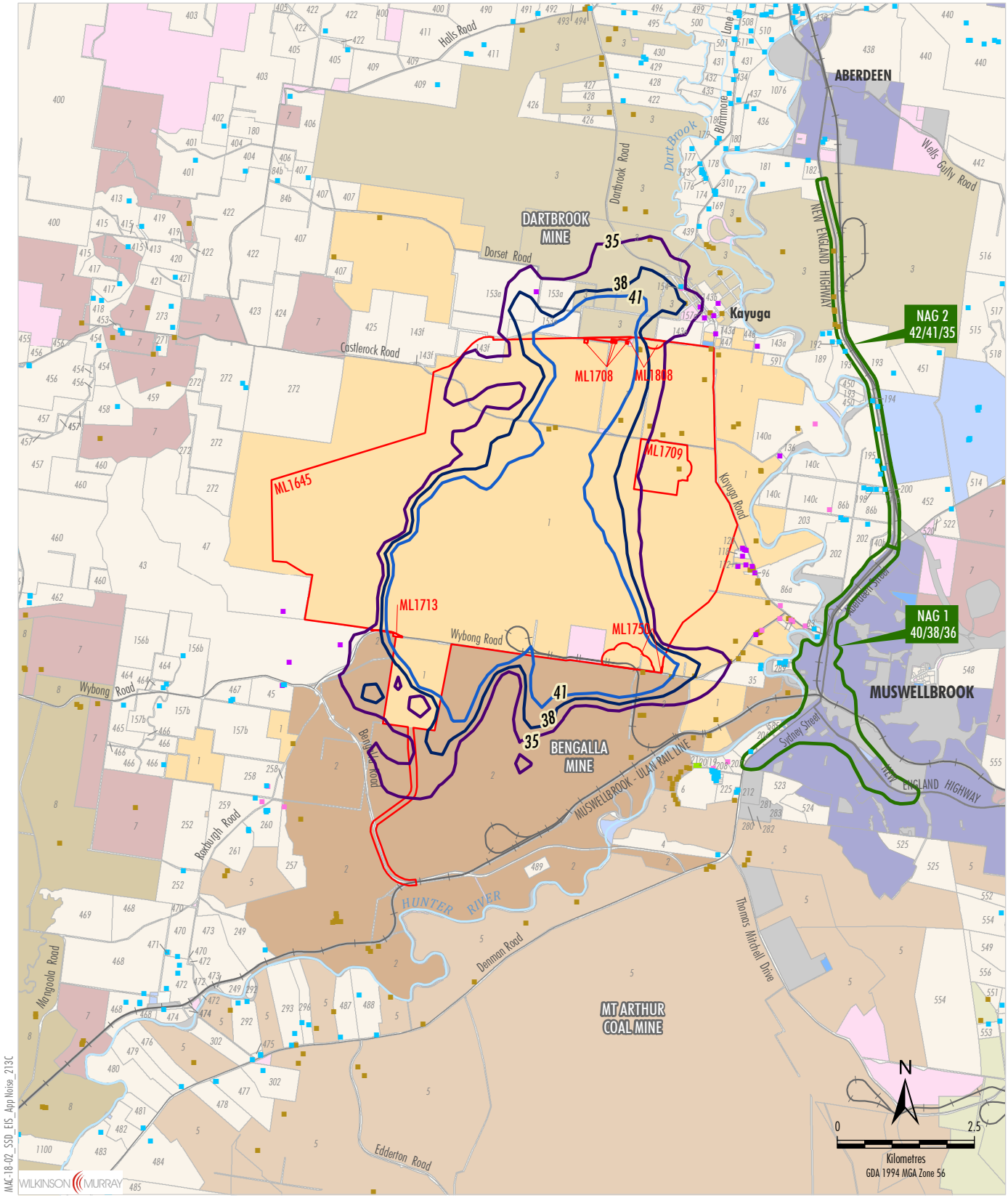
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Day Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2041

Figure N-13



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (38 dBA)
- Noise Contour (41 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

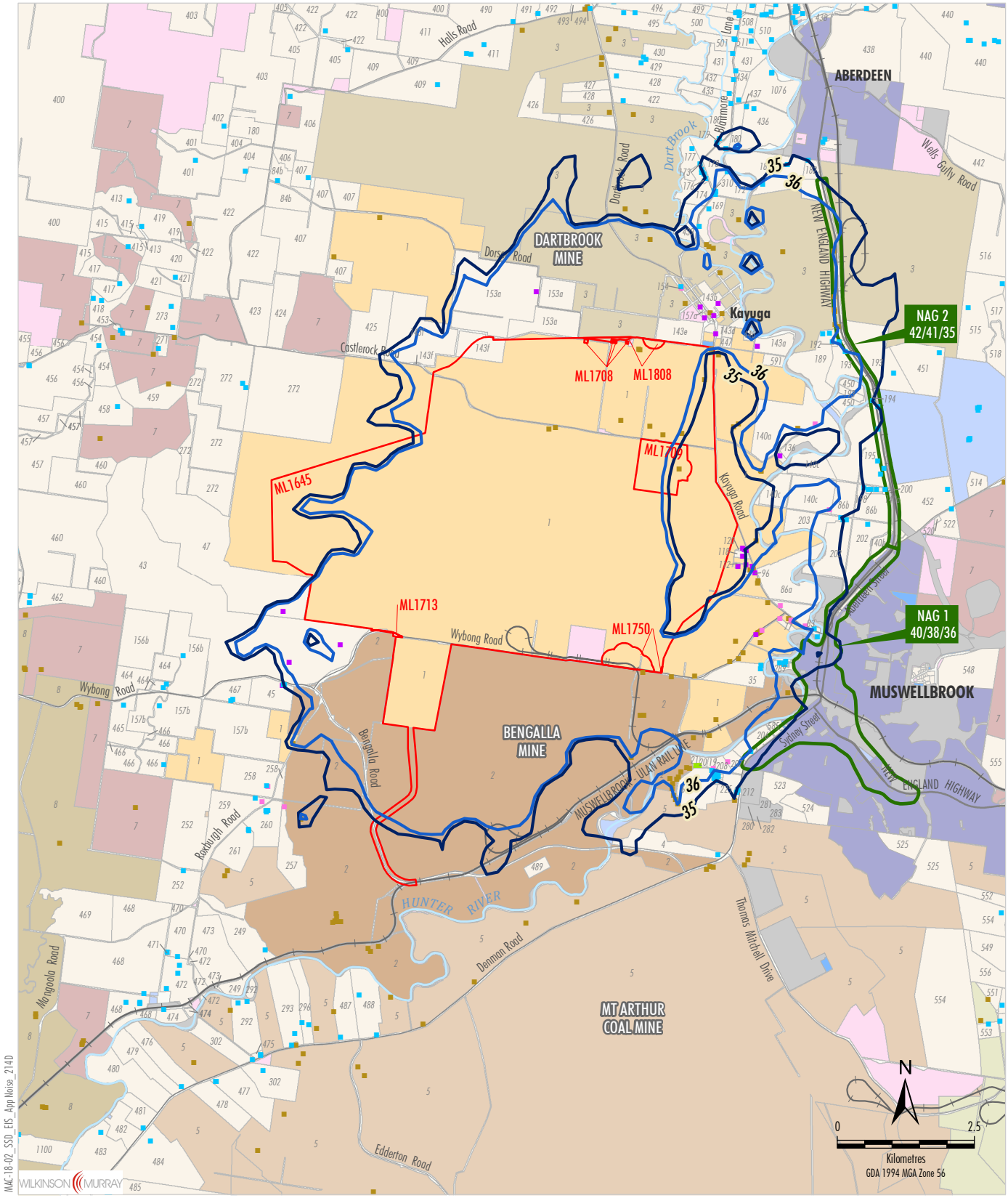
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Evening Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2041

Figure N-14



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (36 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

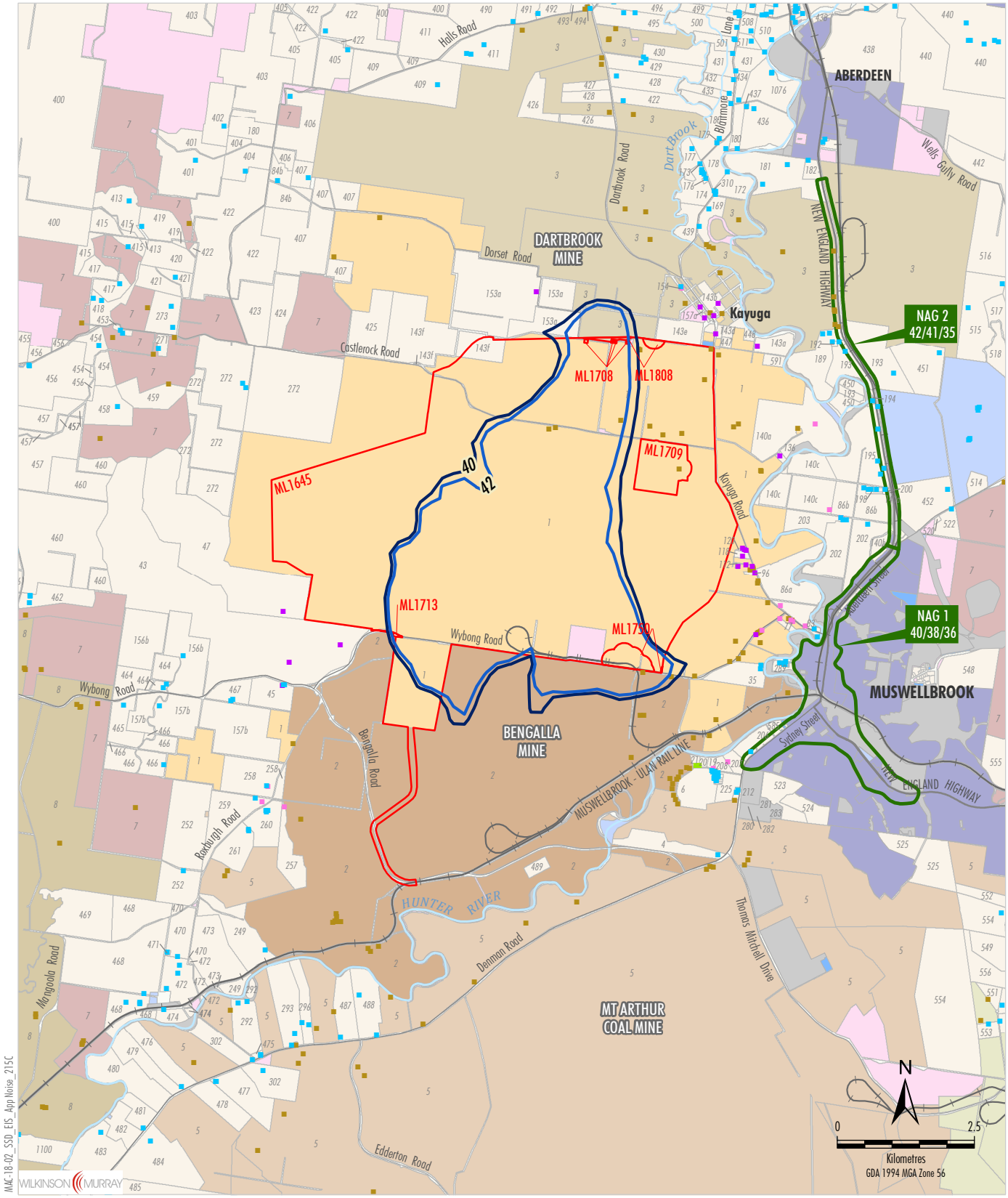
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Night Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2041

Figure N-15



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (40 dBA)
- Noise Contour (42 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

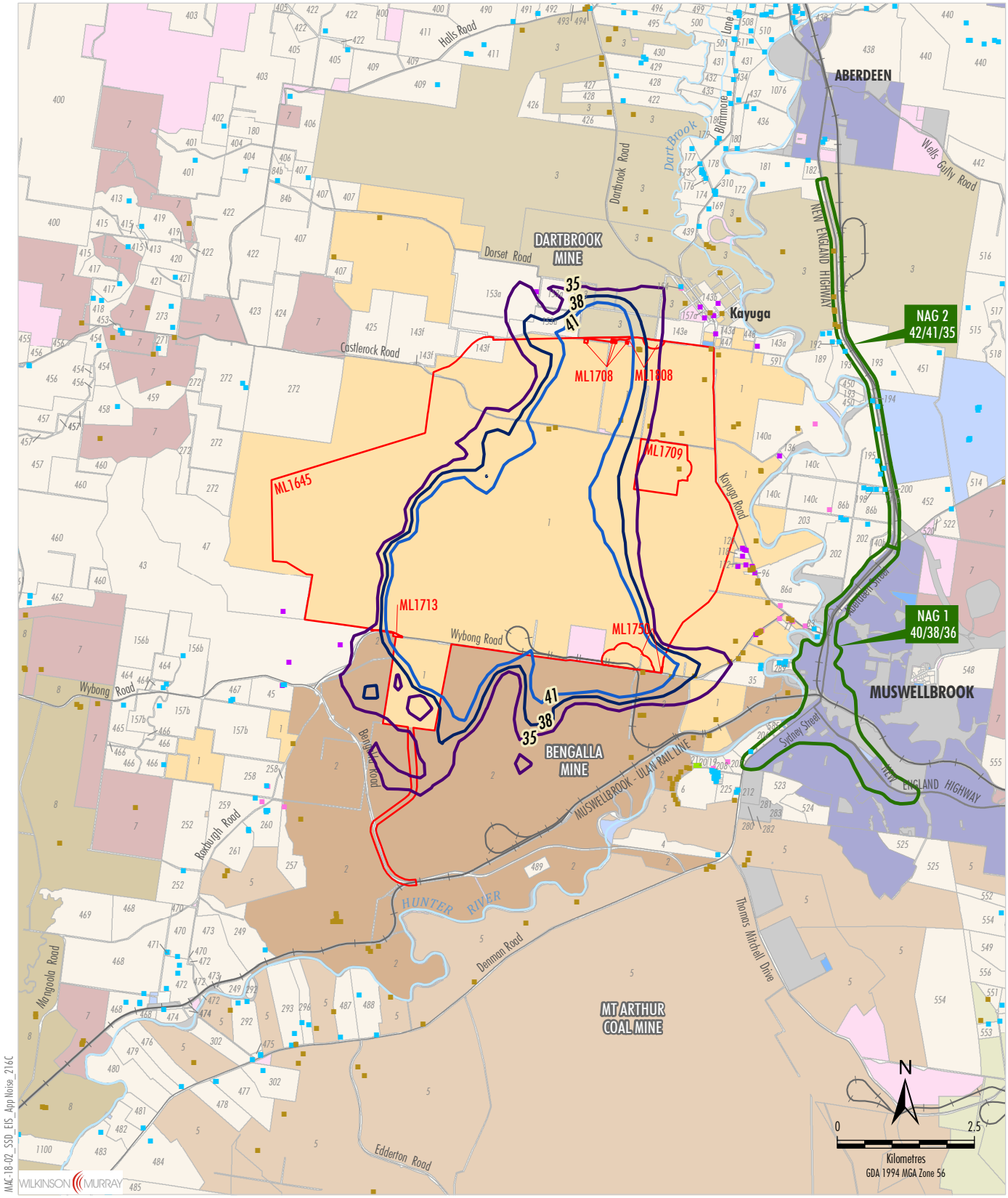
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Day Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2044

Figure N-16



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (38 dBA)
- Noise Contour (41 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

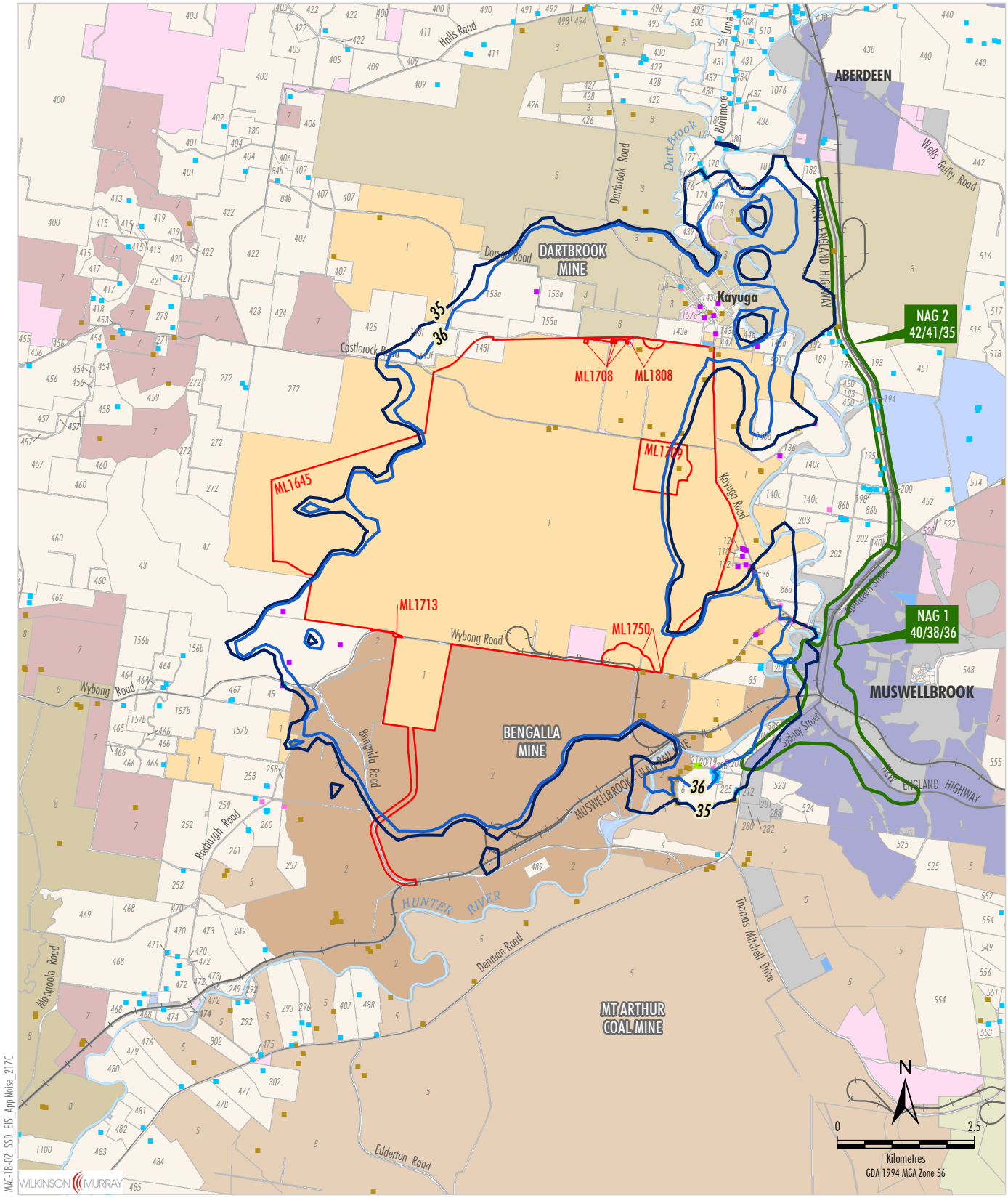
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Evening Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2044

Figure N-17



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (36 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

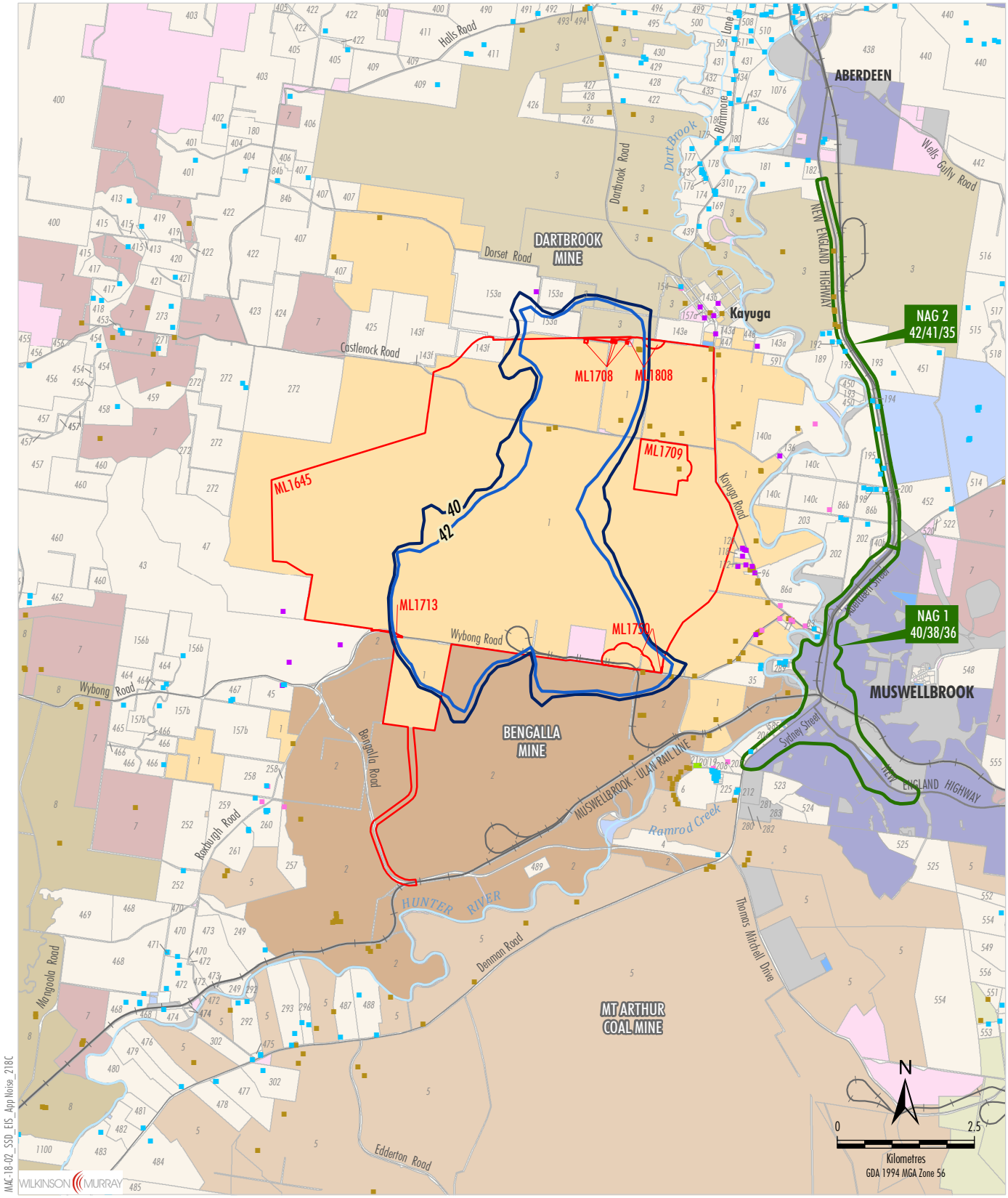
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Night Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2044

Figure N-18



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (40 dBA)
- Noise Contour (42 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

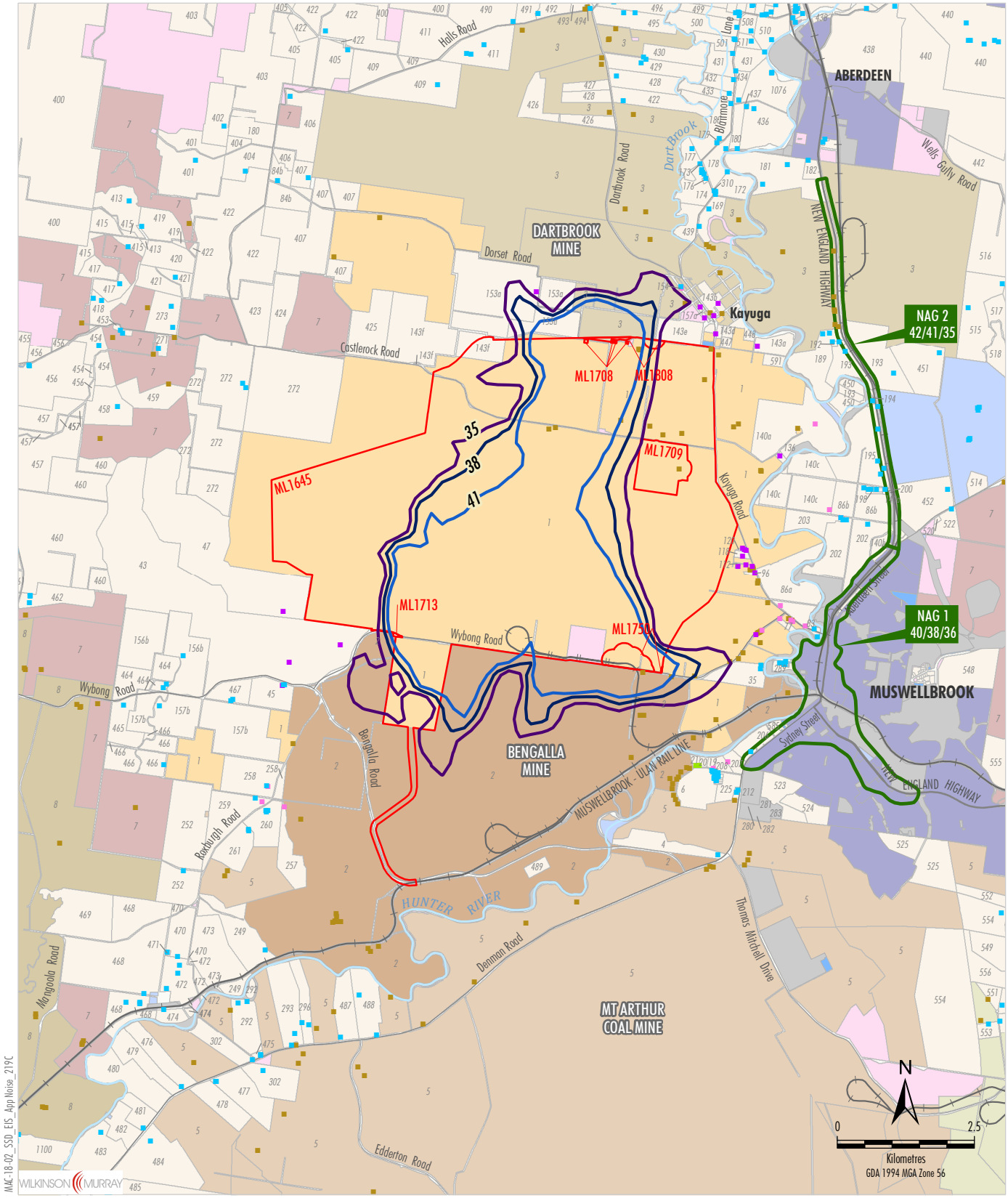
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Day Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2047

Figure N-19



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (38 dBA)
- Noise Contour (41 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

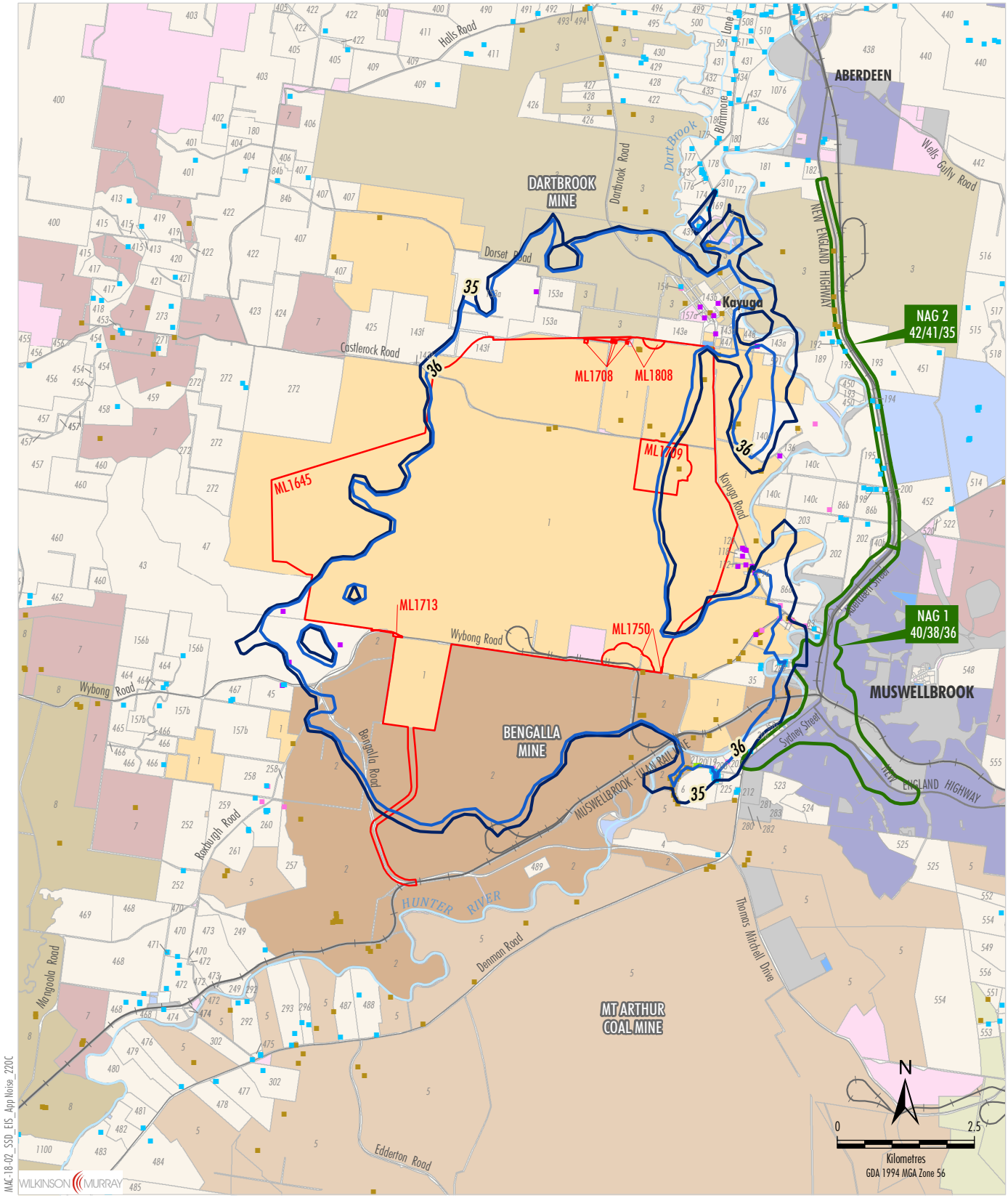
Source: MACH (2020); NSW Spatial Services (2020)

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MOUNT PLEASANT OPTIMISATION PROJECT

Evening Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2047

Figure N-20



LEGEND

- Mining Lease Boundary (Mount Pleasant Operation)
- Mount Pleasant-controlled
- Bengalla-controlled
- Dartbrook-controlled
- Mangoola-controlled
- Muswellbrook Coal-controlled
- Mt Arthur-controlled
- Other Mining/Resource-controlled
- Crown
- The State of NSW
- Muswellbrook Shire Council
- Upper Hunter Shire Council
- Privately-owned Land
- Muswellbrook and Upper Hunter LEP Zones B2, B5, R1, R5
- Muswellbrook and Upper Hunter LEP Zones IN1, SP2, RE1, RE2, W1

Category of Rural Residence under DA92/97

- Mine-owned
- Privately-owned - Acquisition on Request
- Privately-owned - Mitigation on Request
- Privately-owned - Mitigation/Acquisition on Request*
- Other Privately-owned
- Noise Assessment Group (NAG)
- 40/38/36 Default NAG Noise Criteria for Day/Evening/Night
- Noise Contour (35 dBA)
- Noise Contour (36 dBA)

* Mitigation on Request - rail noise/Aquisition on Request - air quality. MACH is only required to acquire and/or install air quality mitigation measures at this property if not reasonably achievable under a separate approval for the Bengalla Mine.

Source: MACH (2020); NSW Spatial Services (2020)

MACHEnergy

MOUNT PLEASANT OPTIMISATION PROJECT

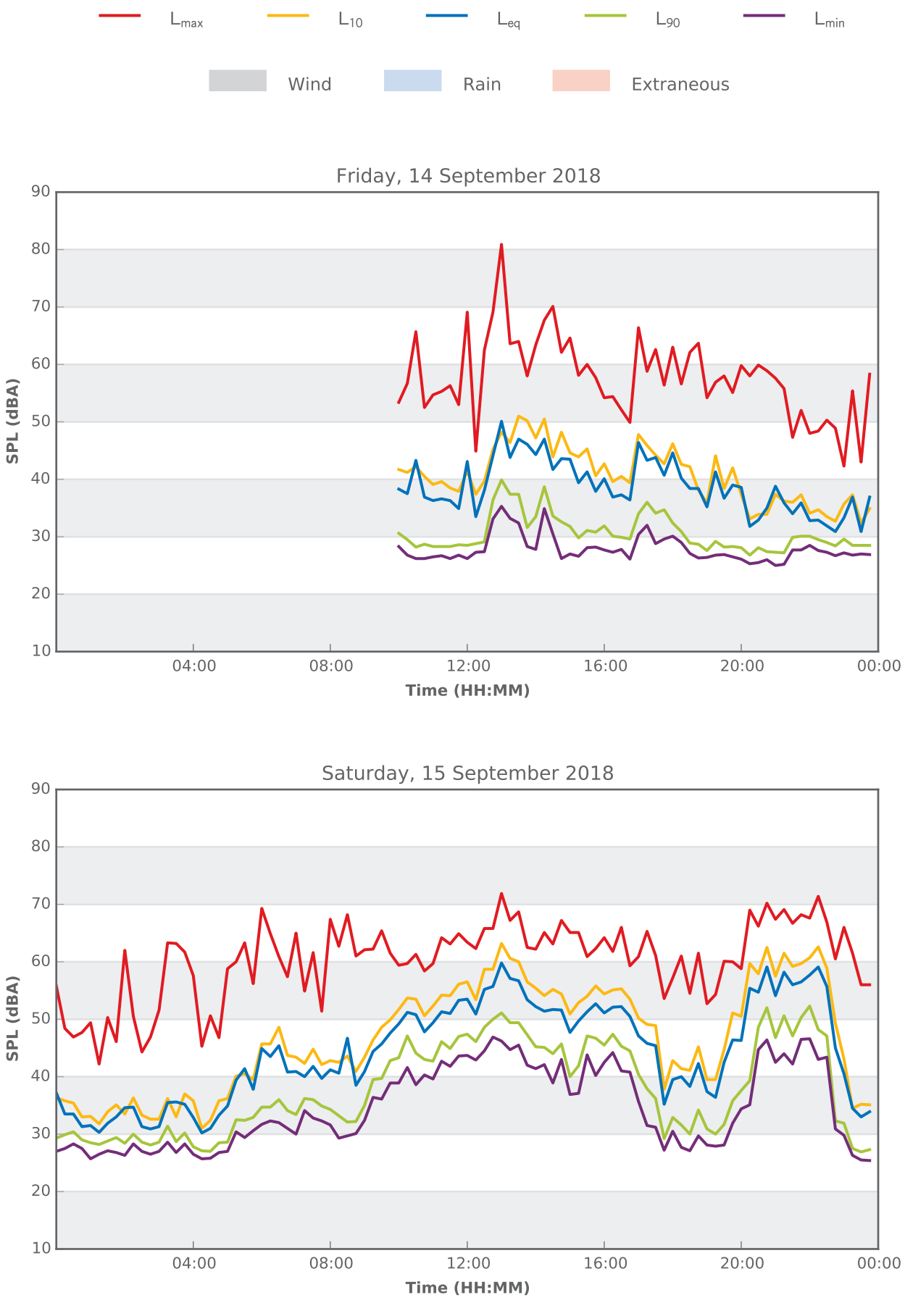
Night Intrusive $L_{Aeq\ (15\ min)}$ Noise Contours 2047

Figure N-21

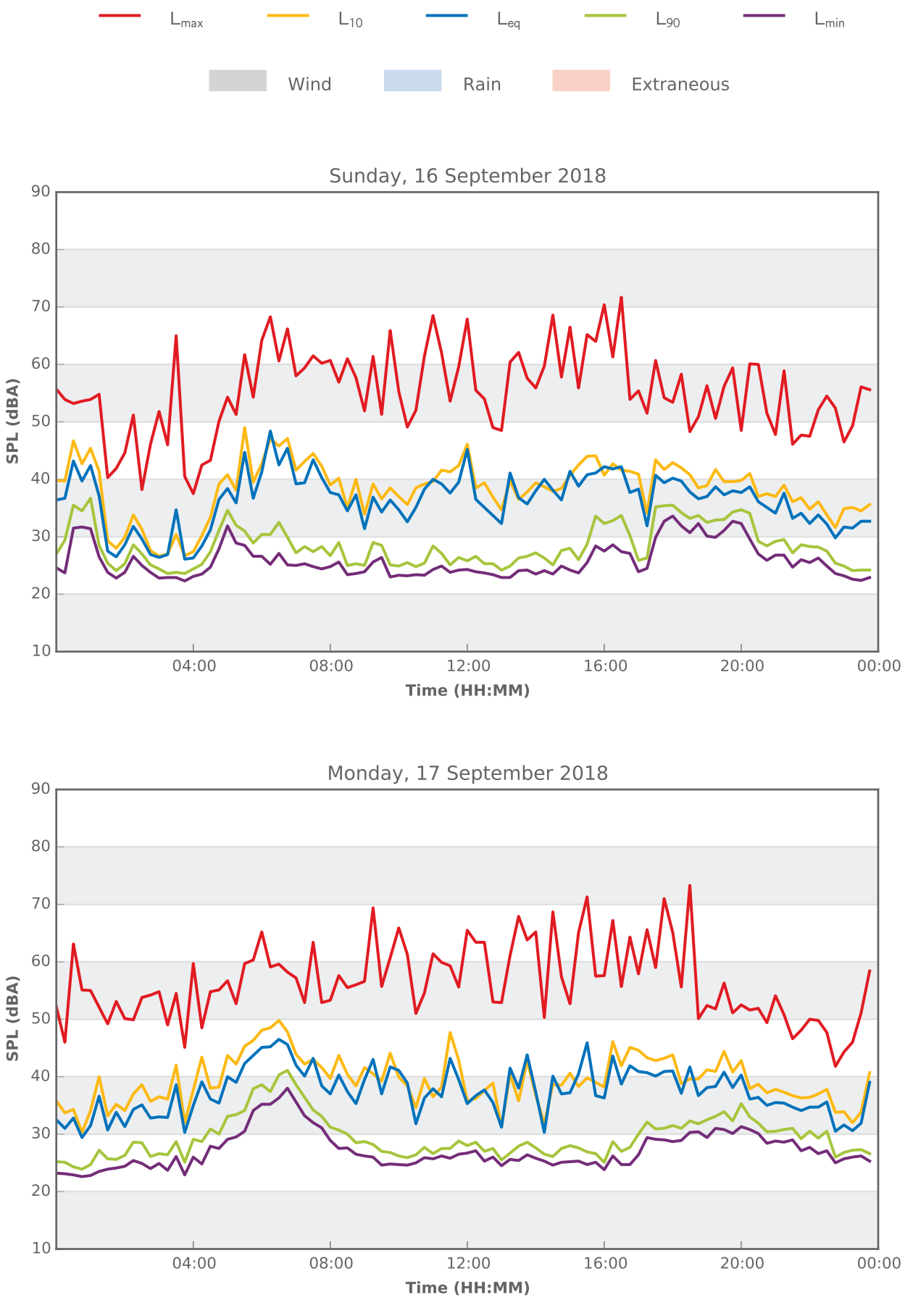
APPENDIX O

BACKGROUND NOISE SURVEY – GRAPHICAL REPRESENTATION OF MEASURED LEVELS

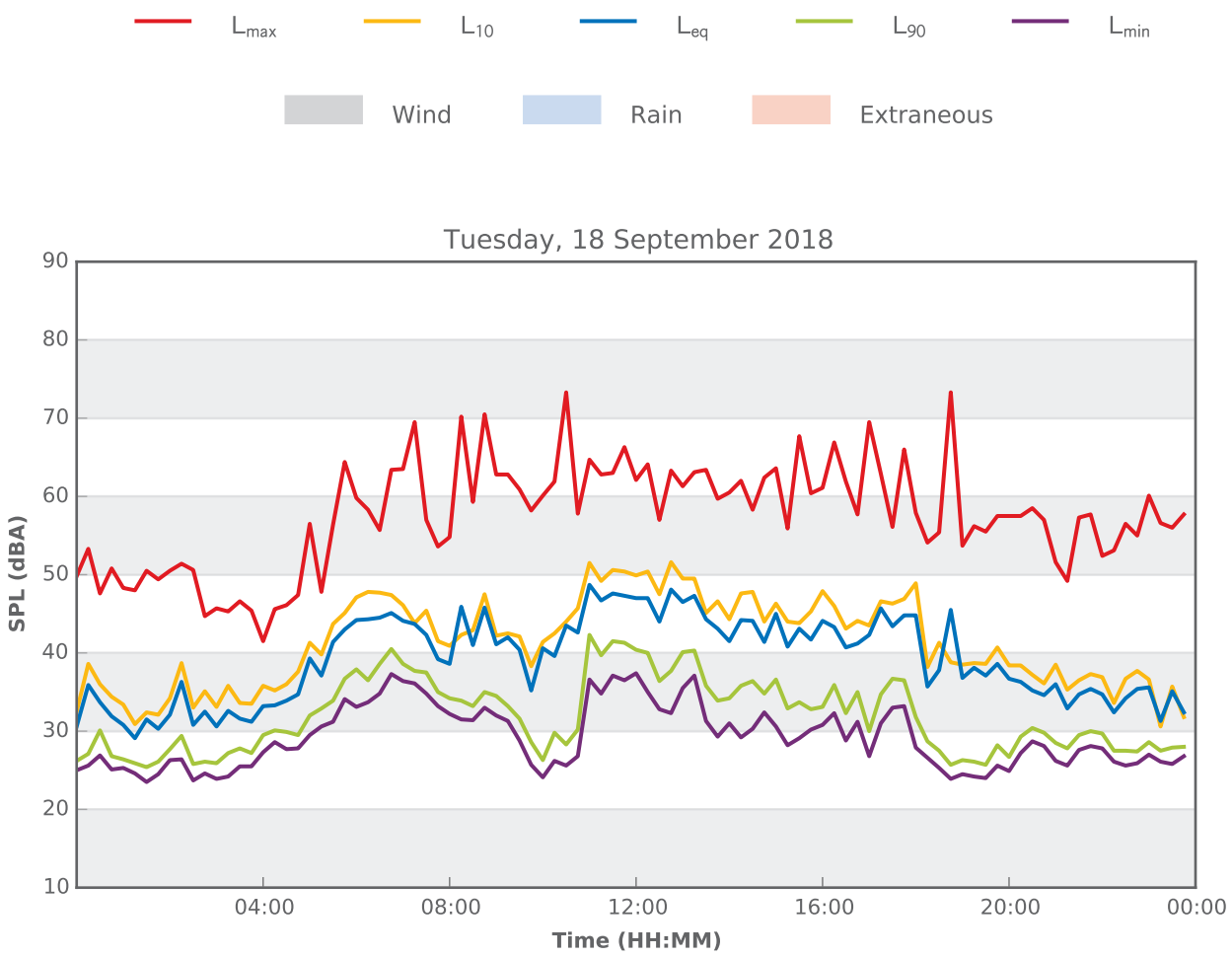
414 Blairmore Lane, Aberdeen

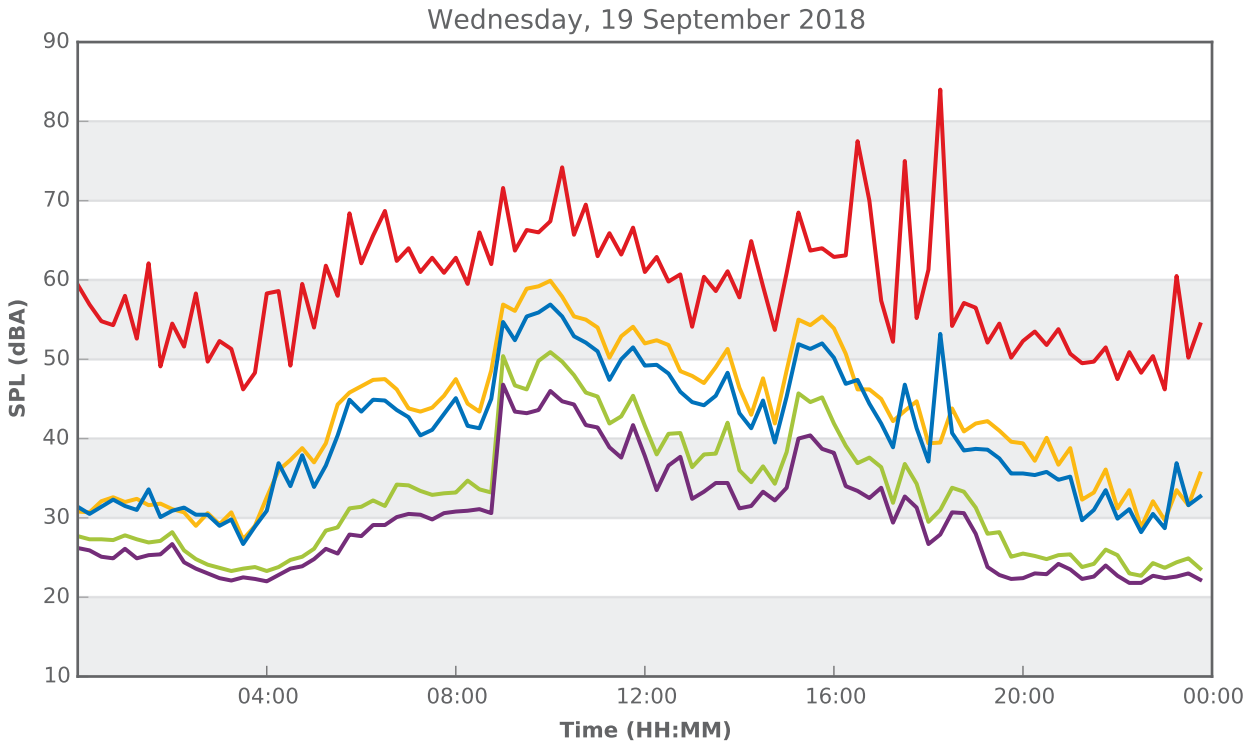


414 Blairmore Lane, Aberdeen

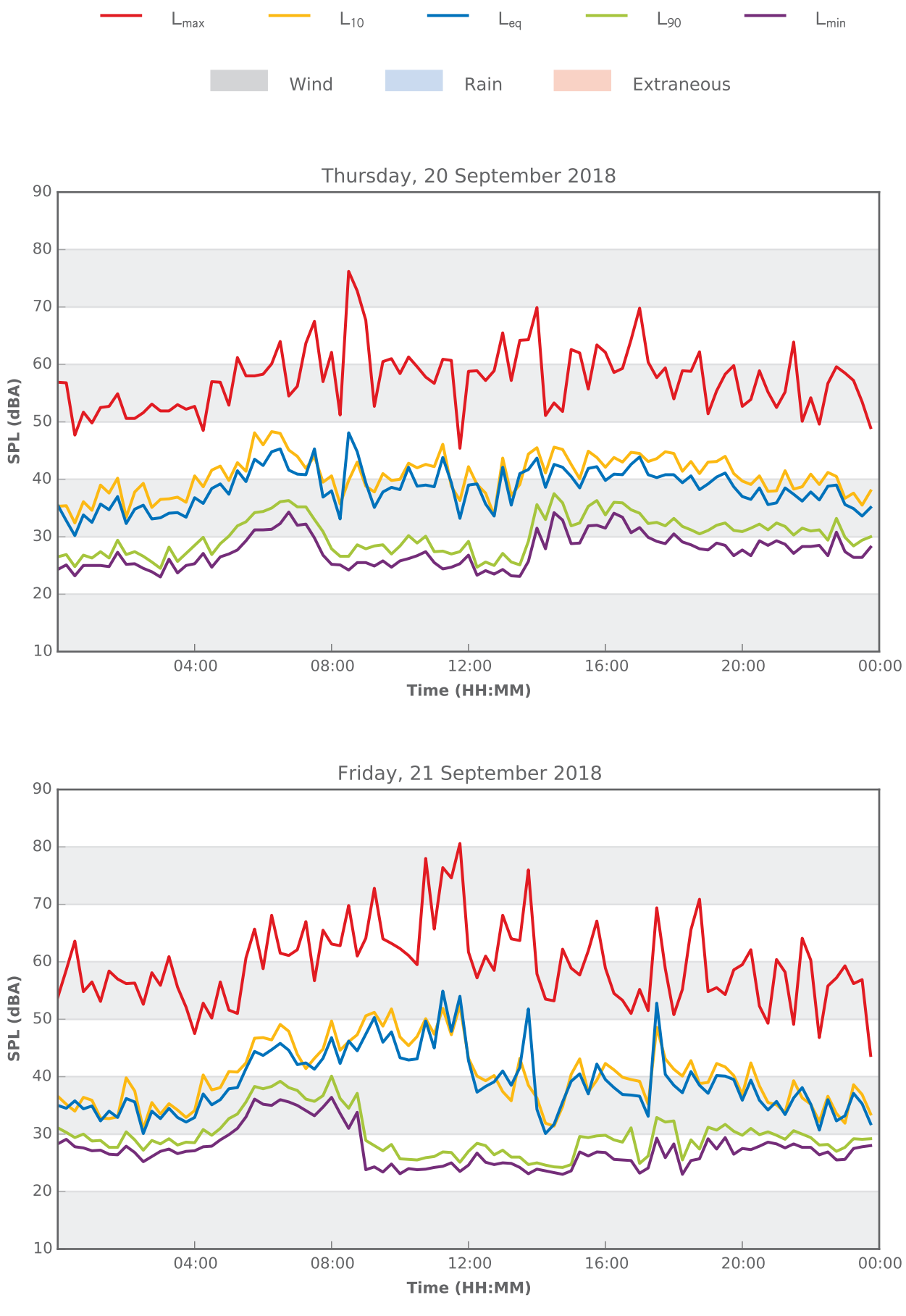


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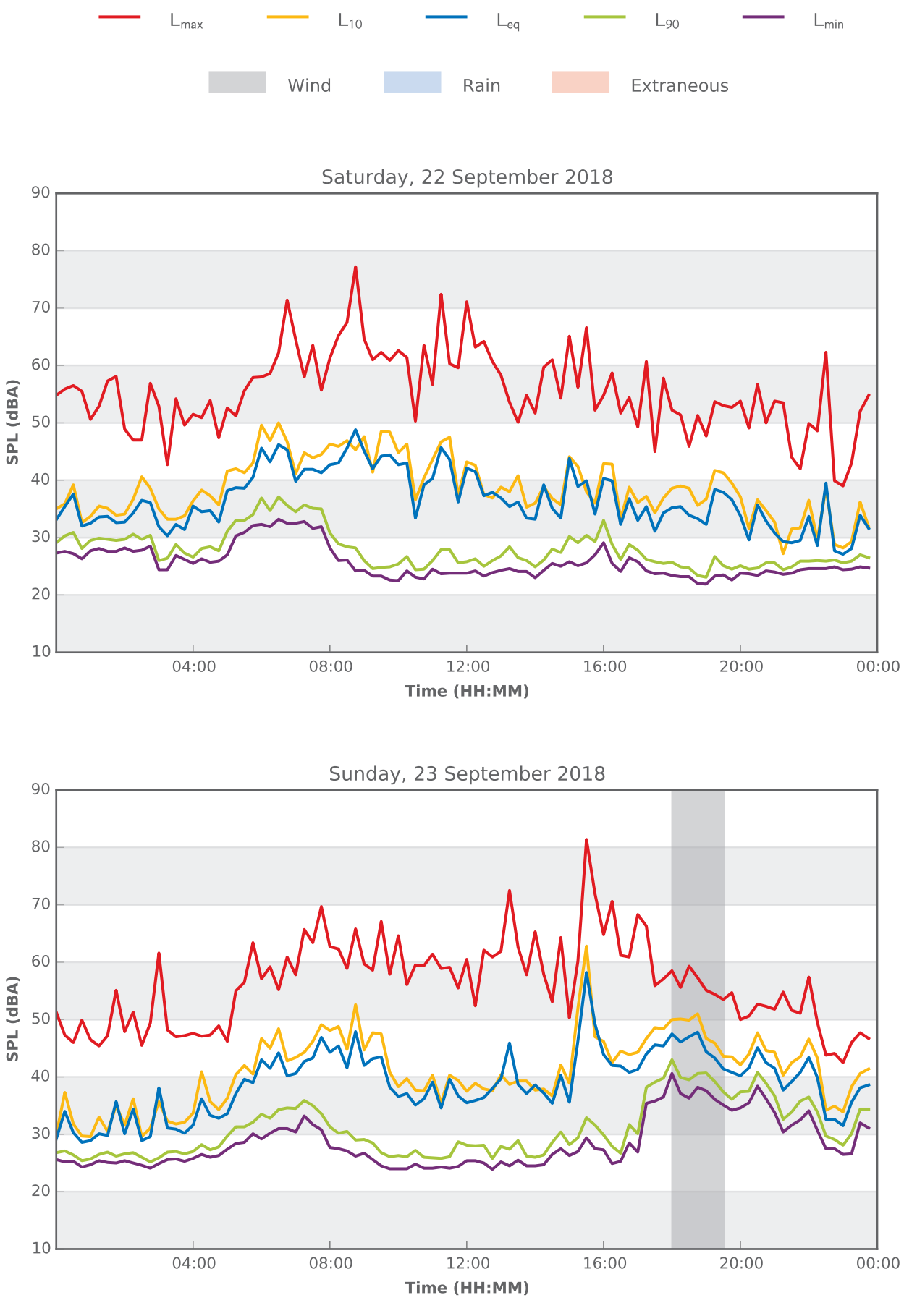




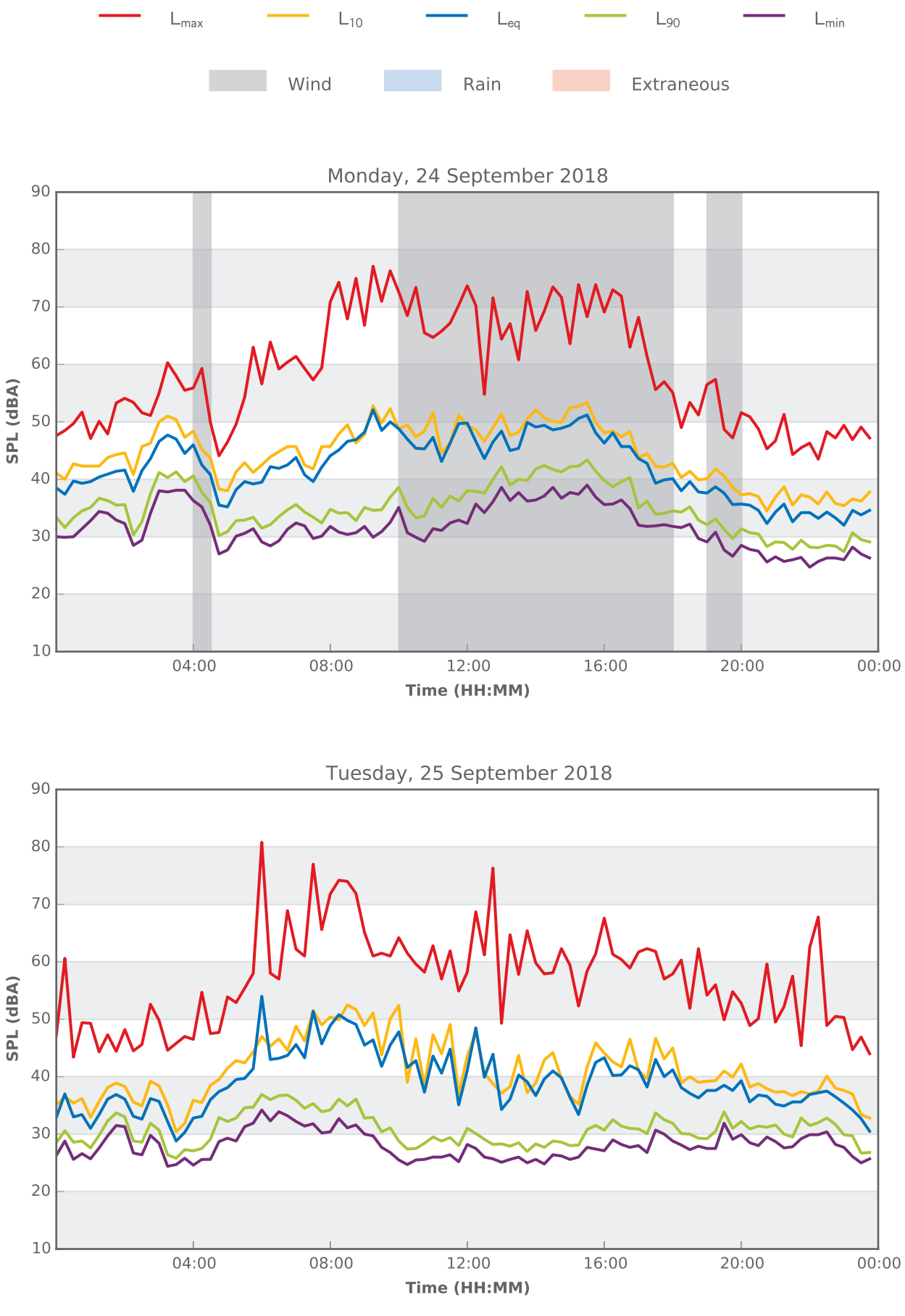
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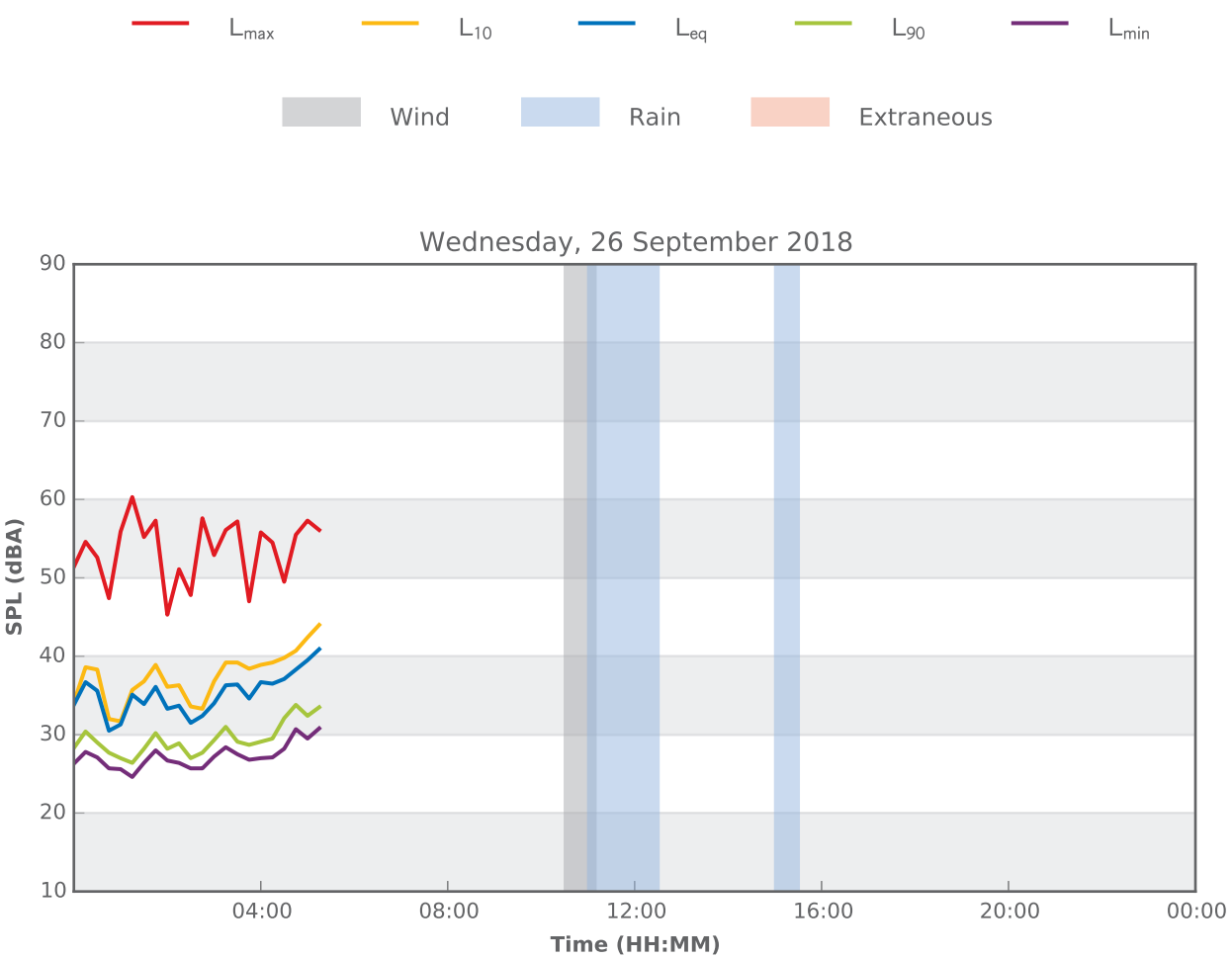
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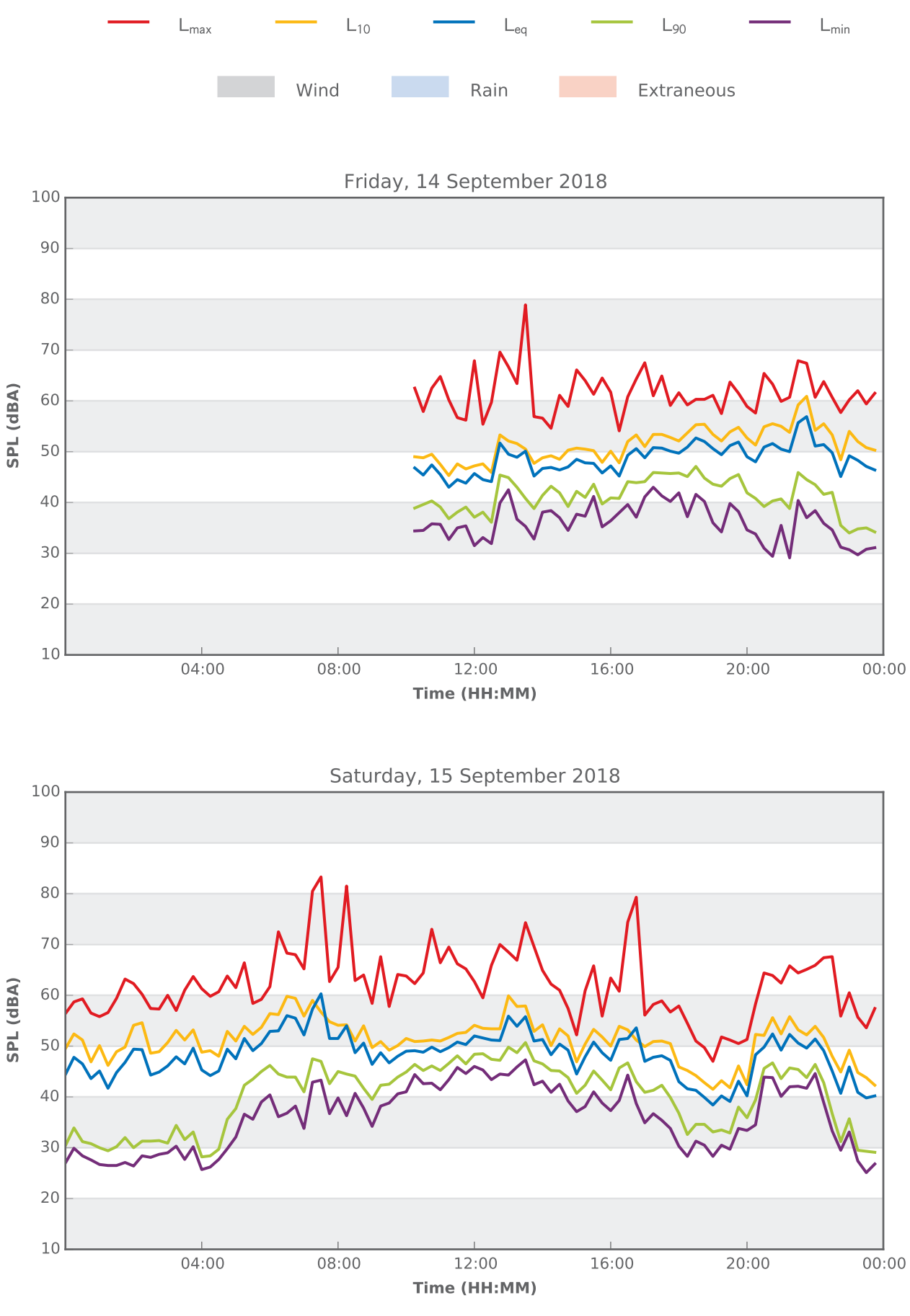
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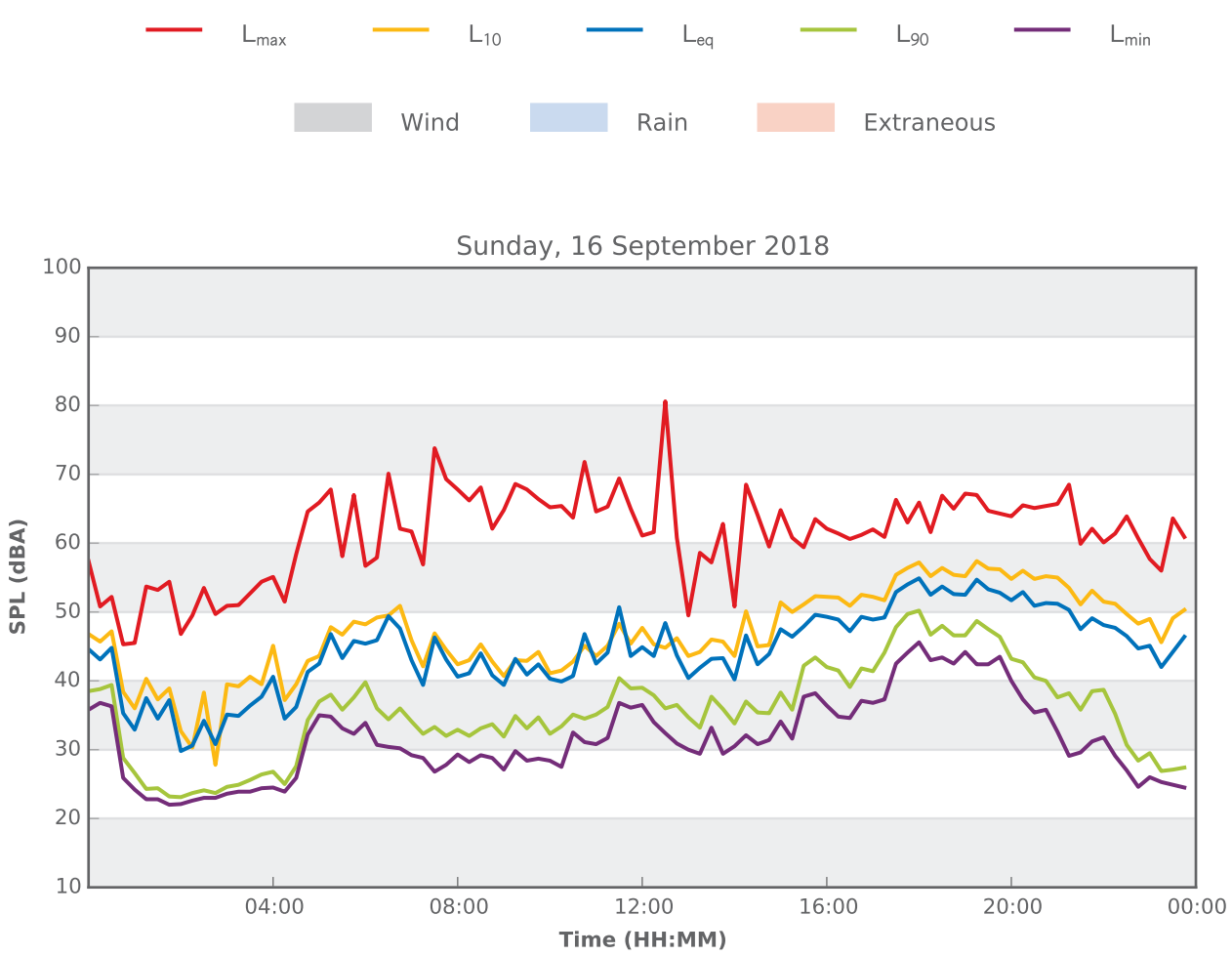
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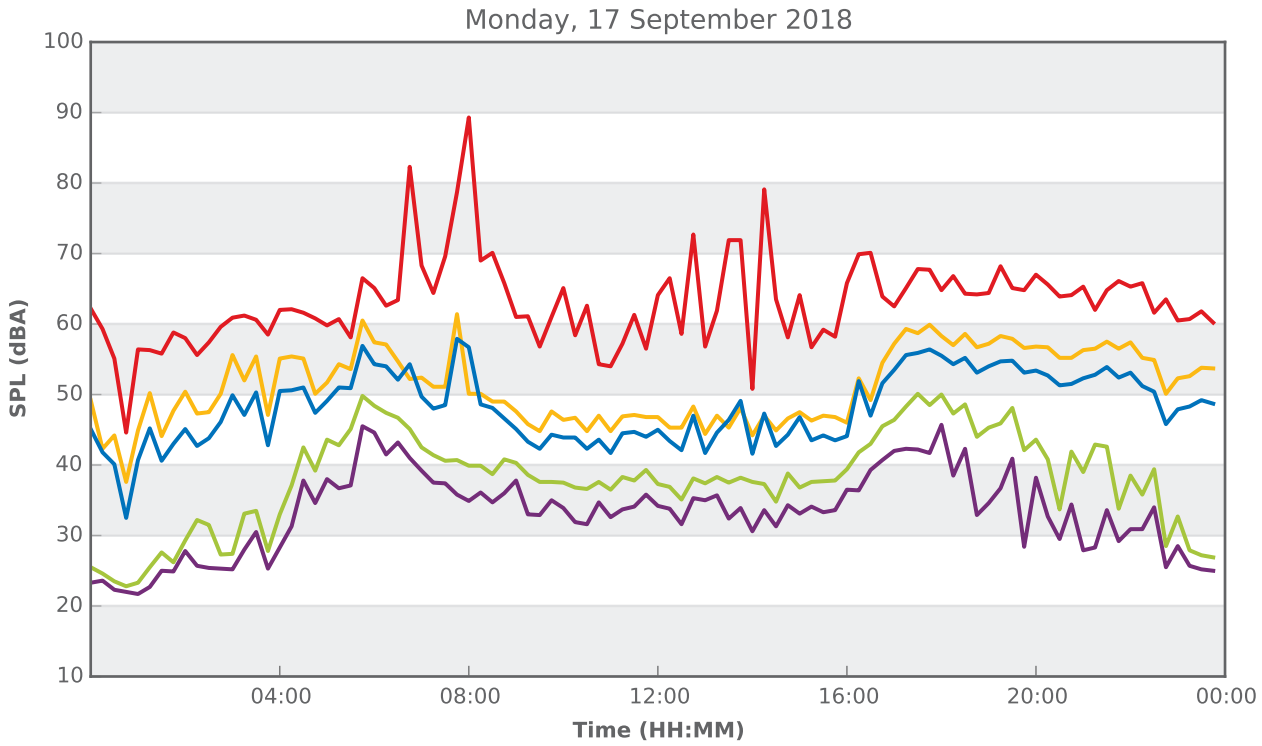


981 New England Highway, Musswellbrook

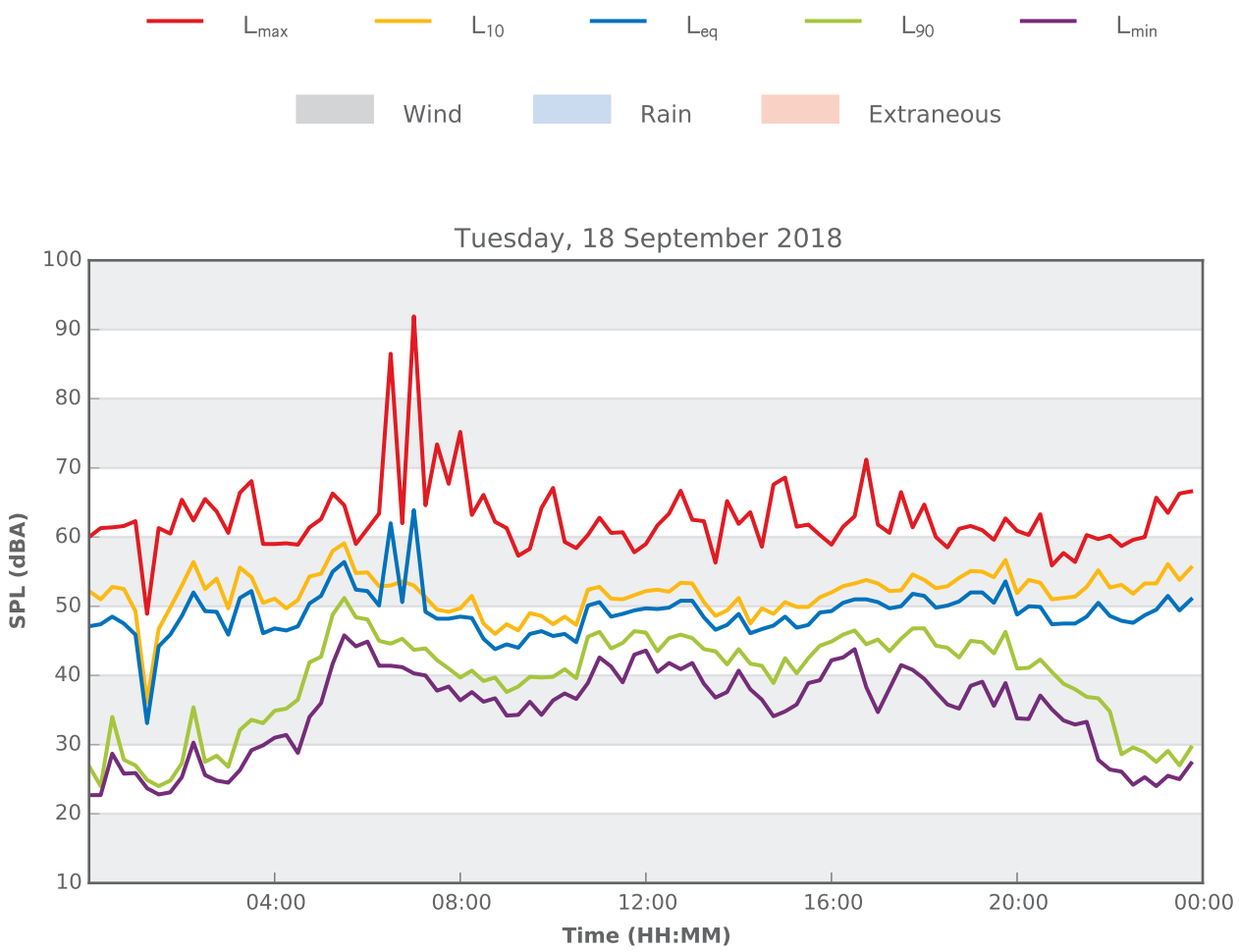


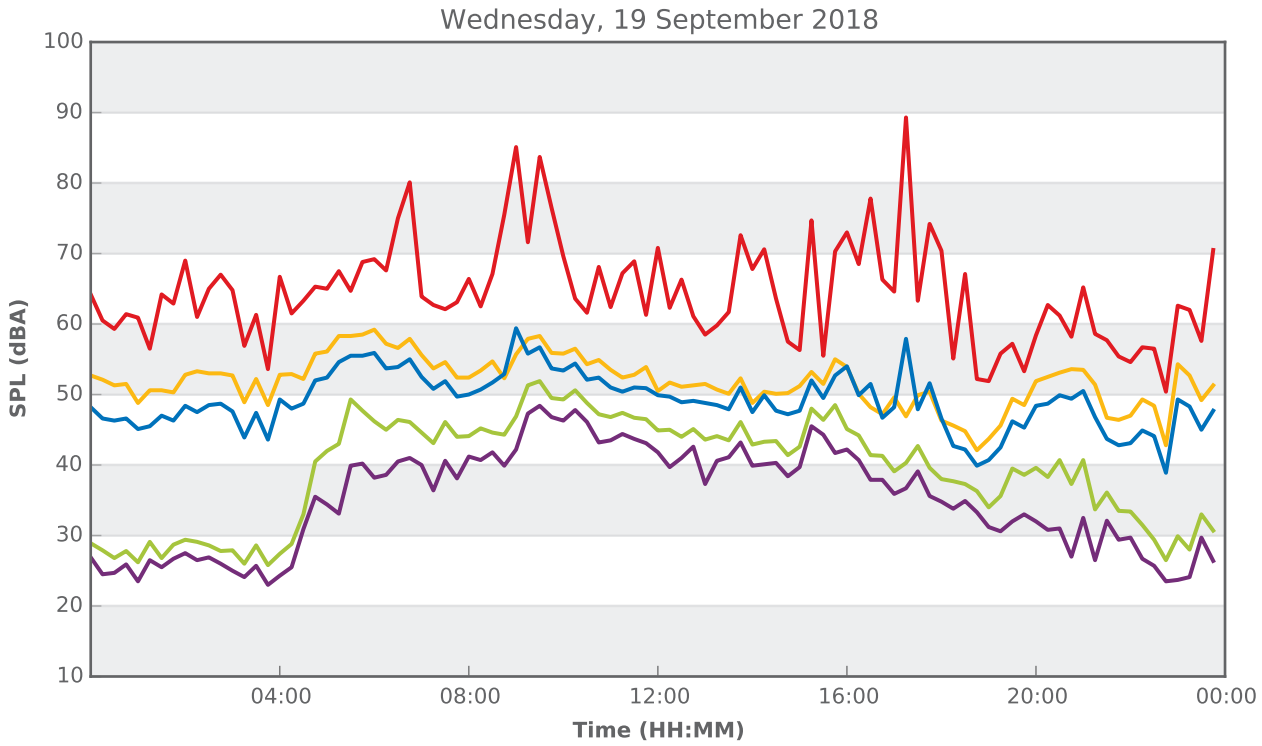
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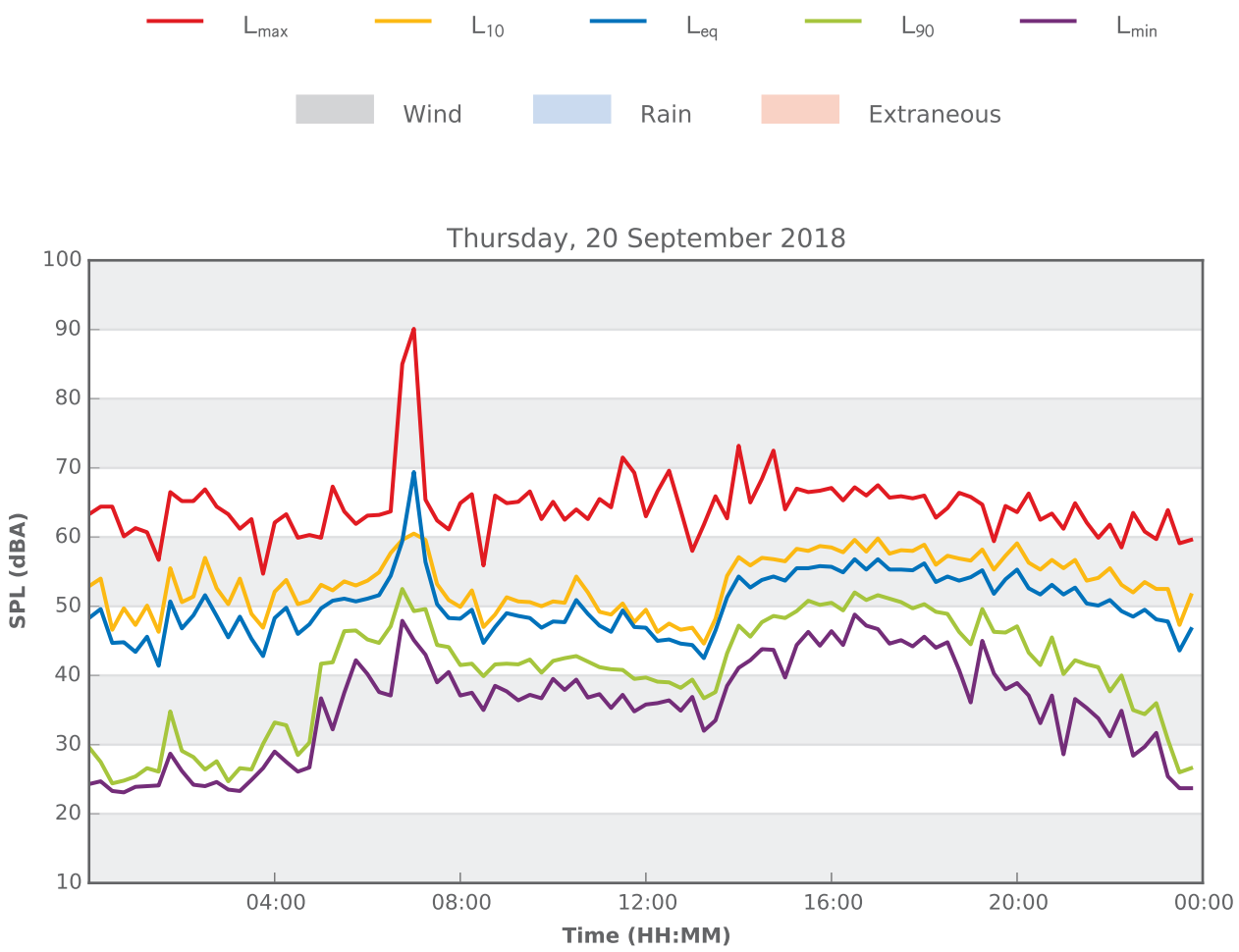


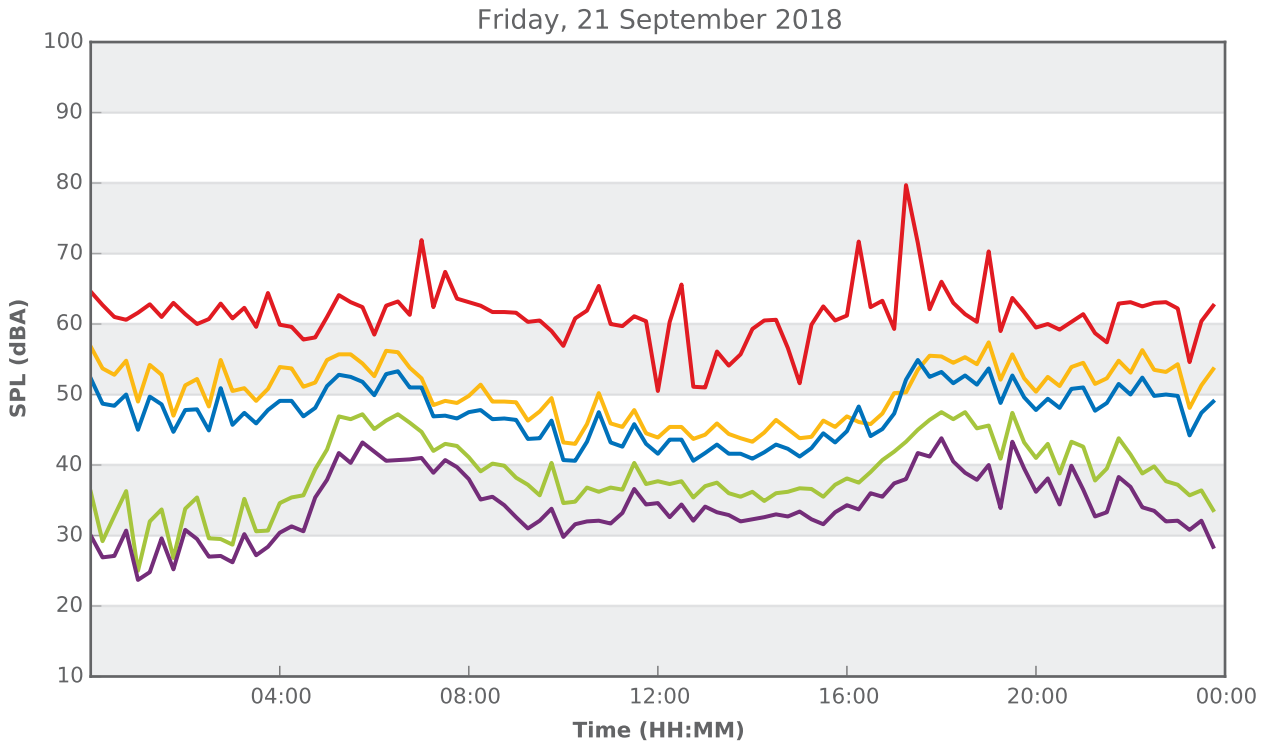
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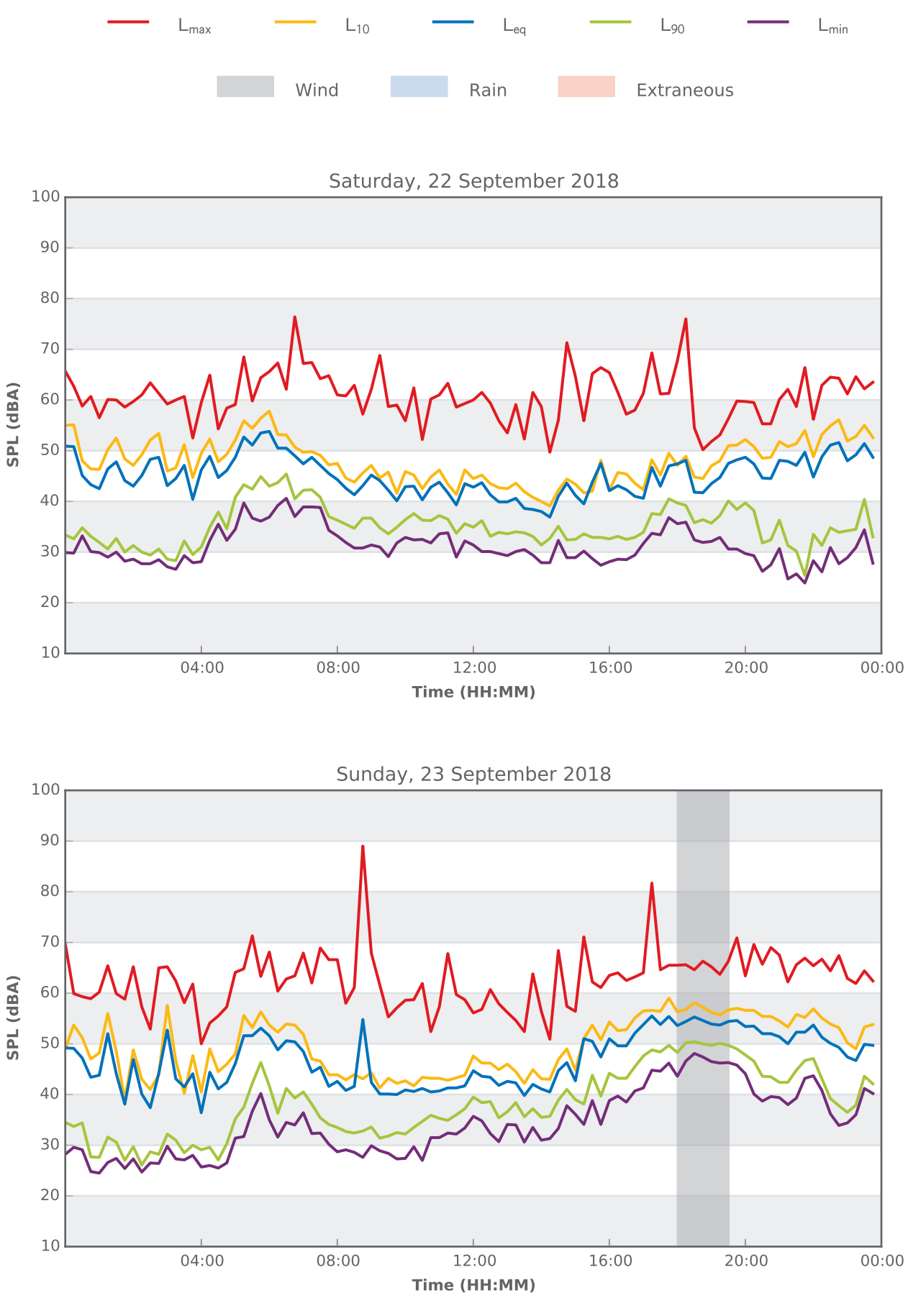


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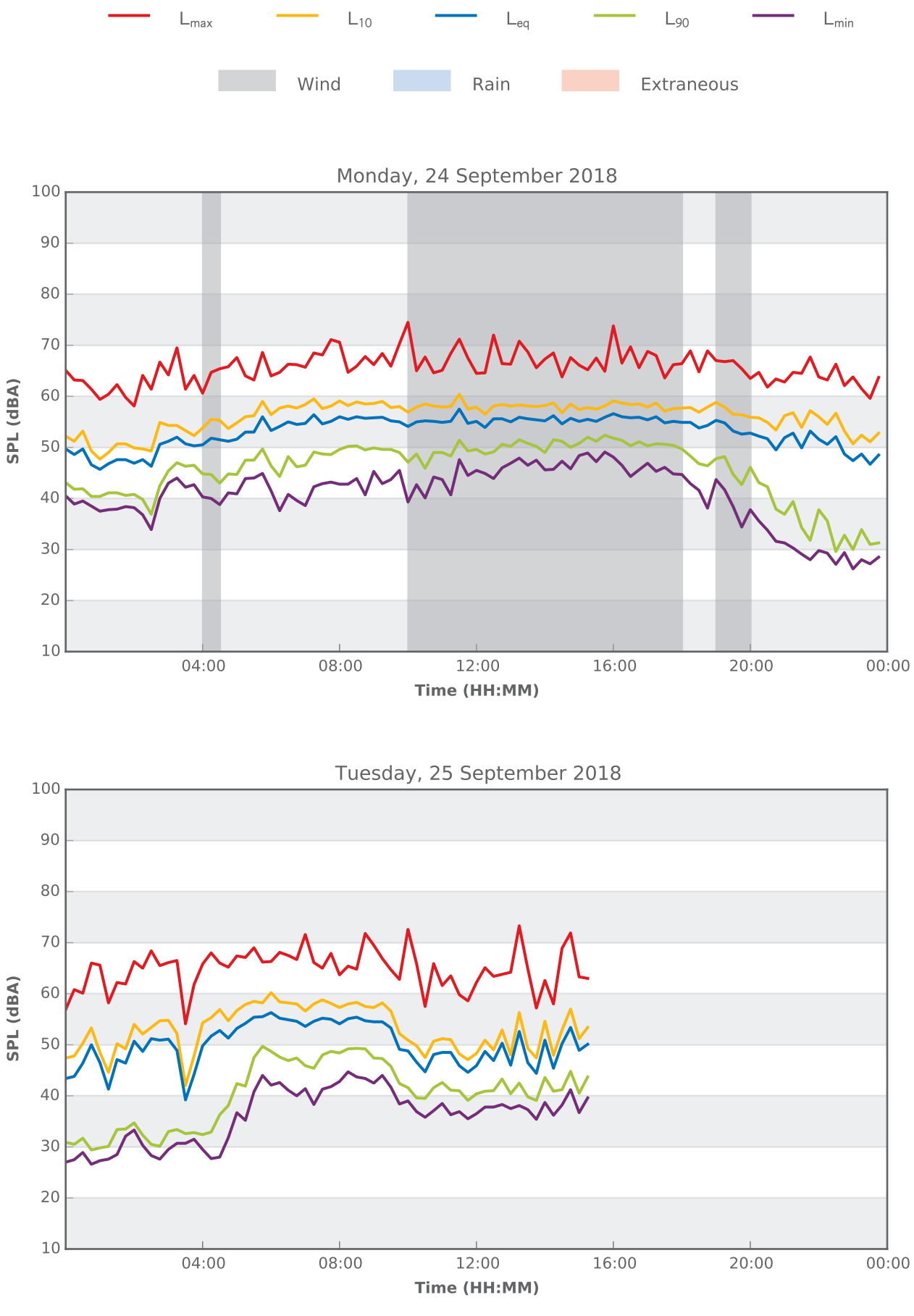




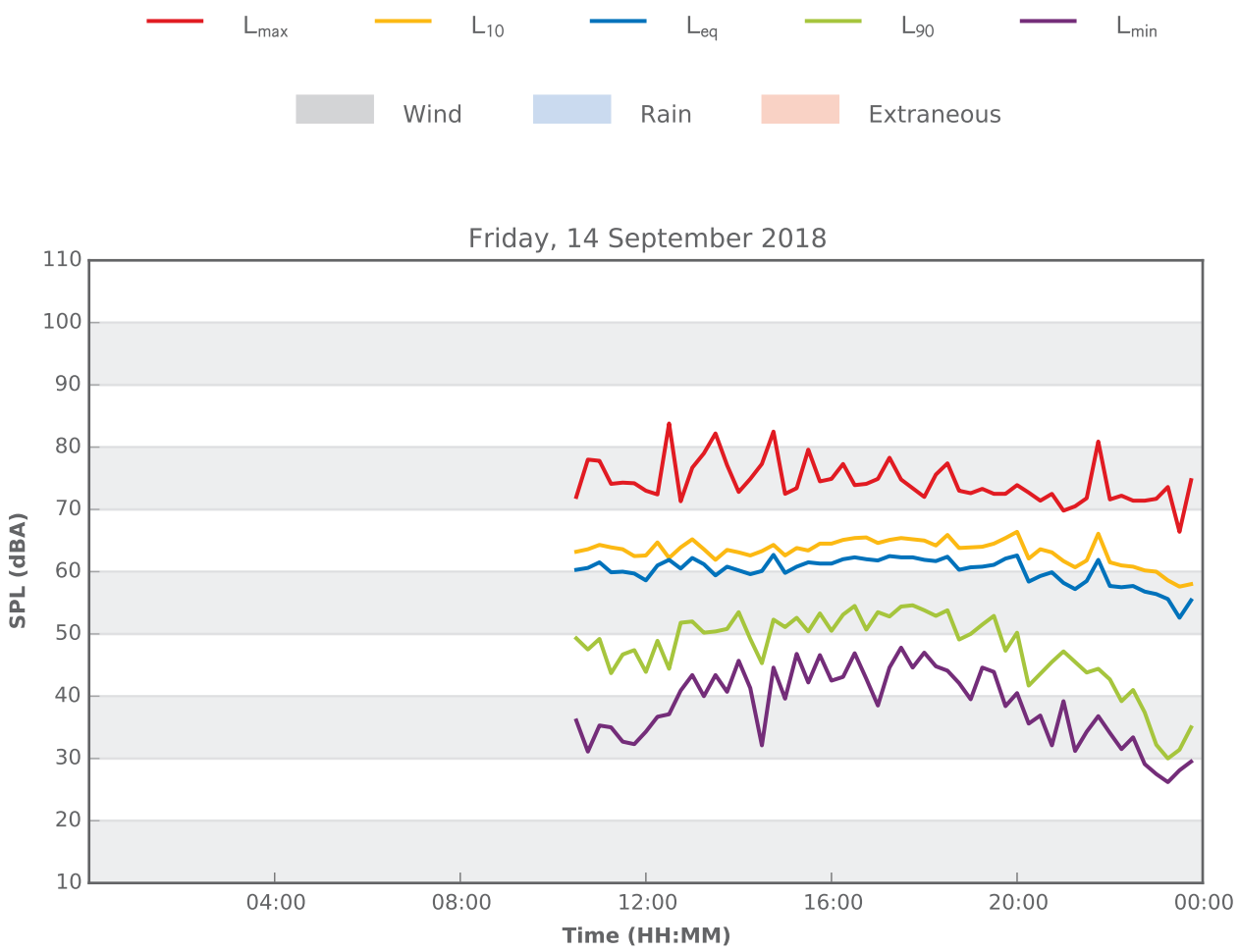
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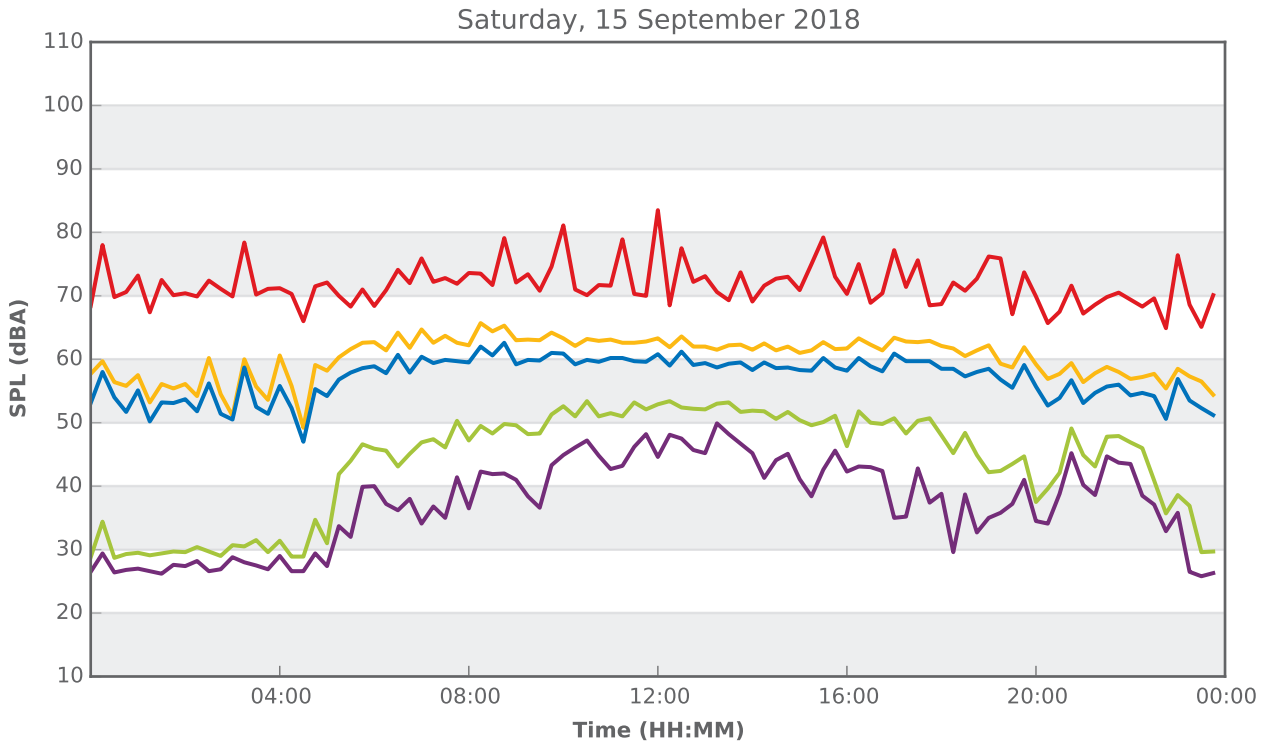


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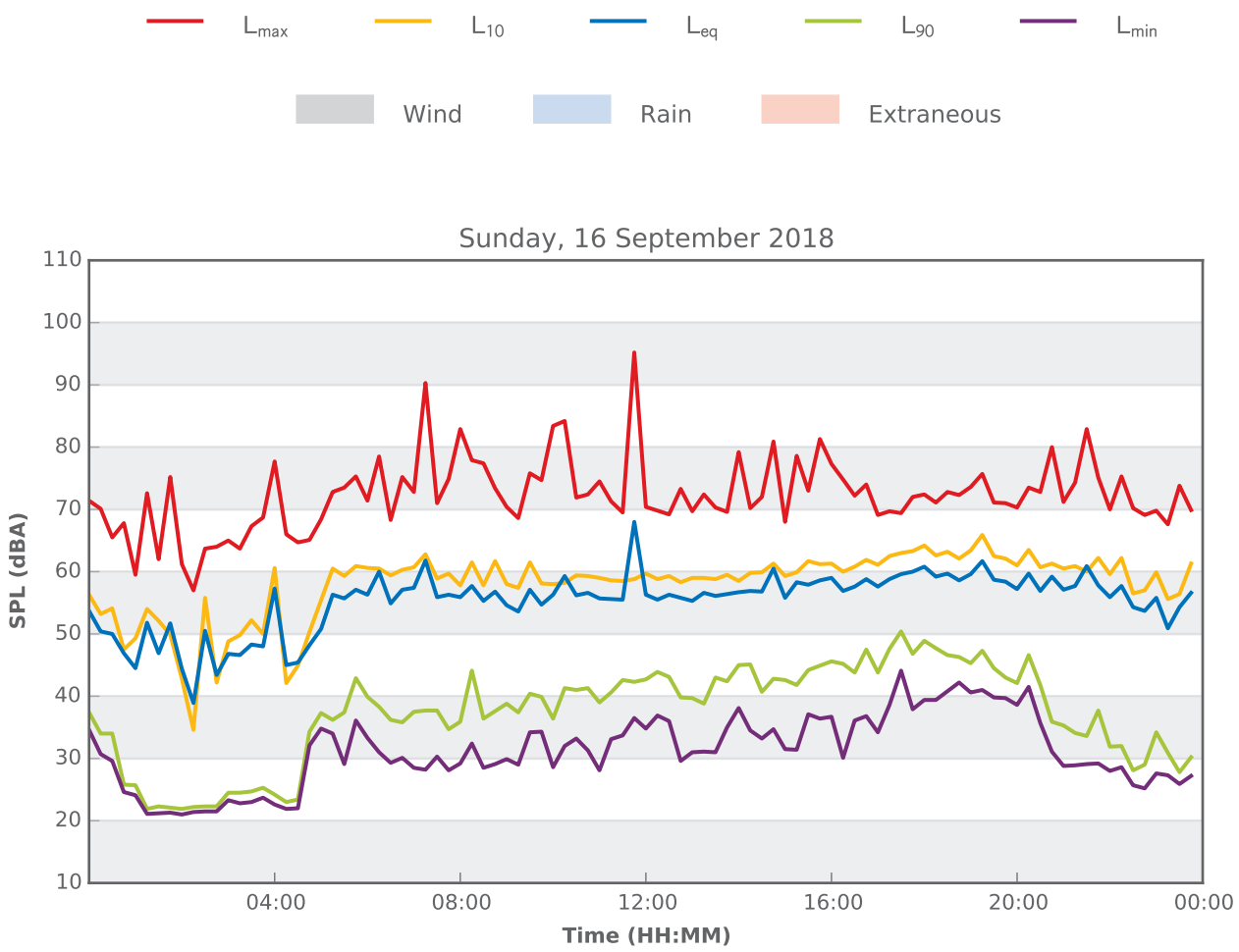


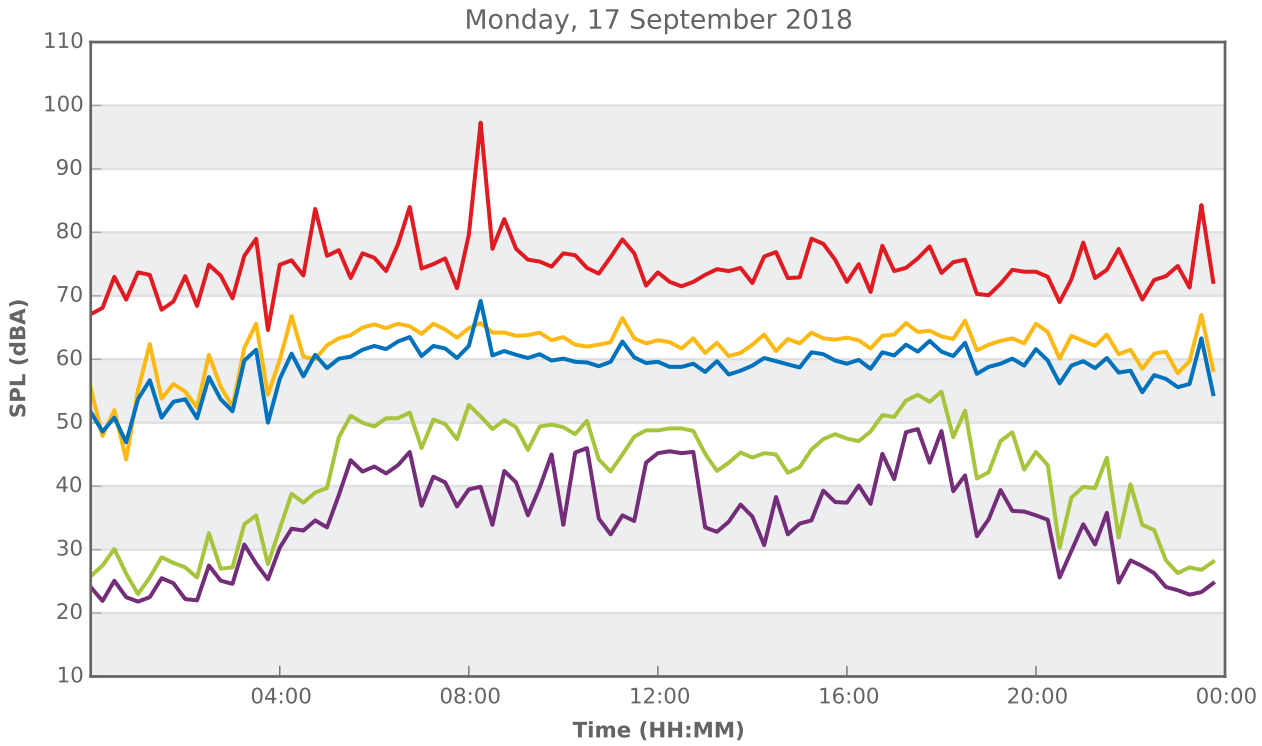
689 New England Highway, Aberdeen



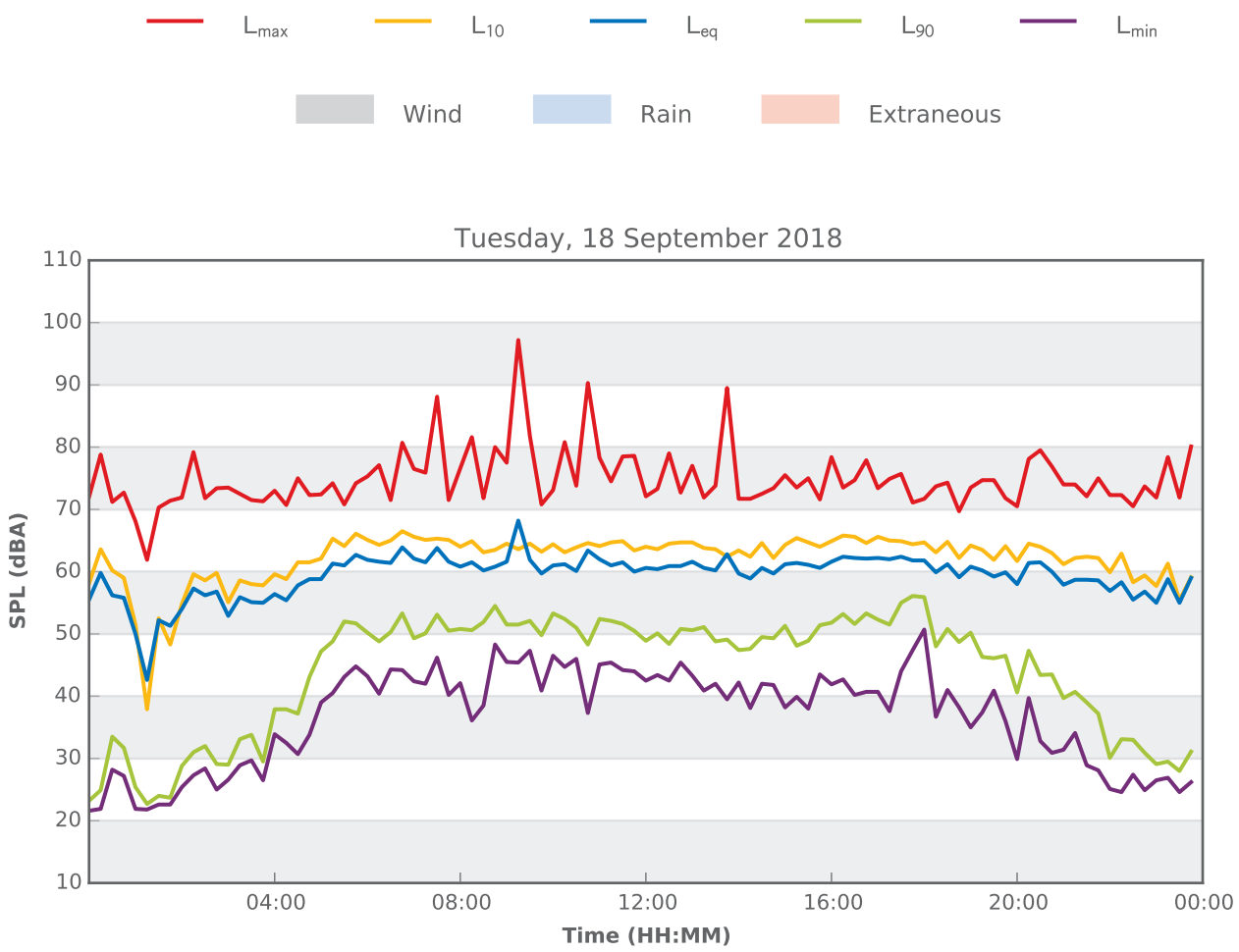


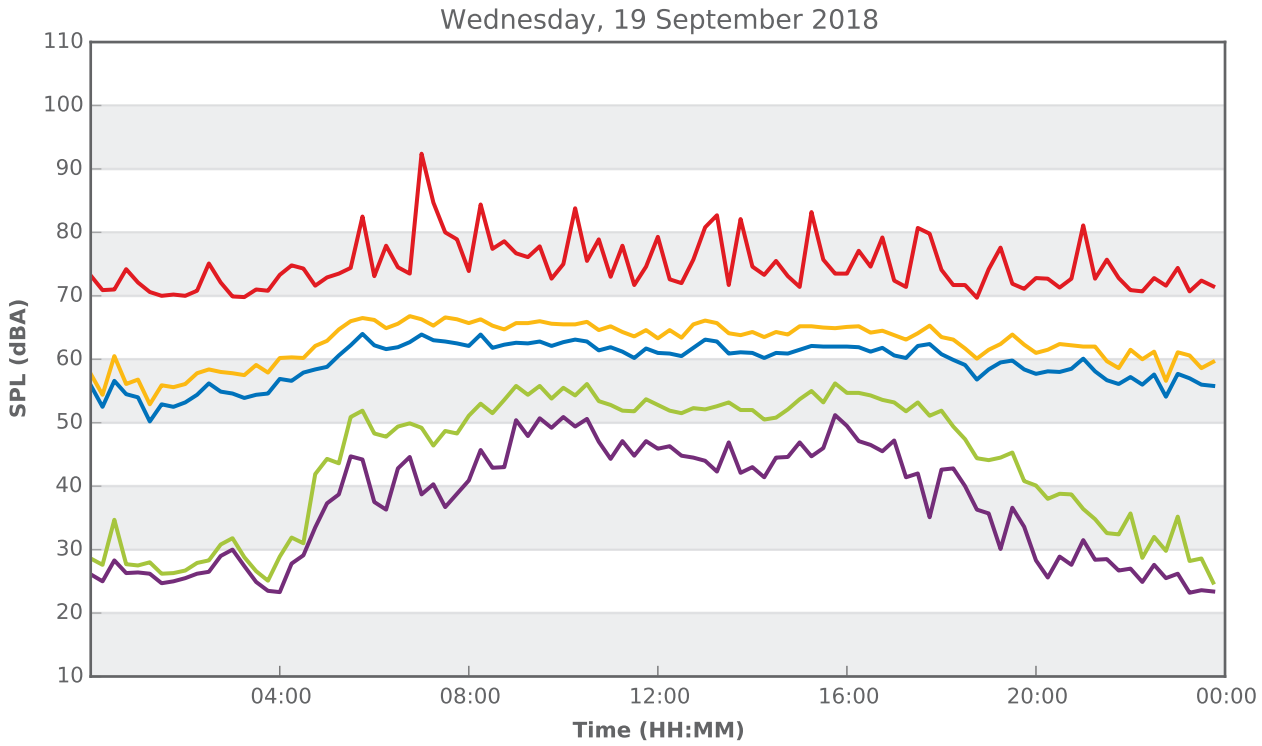
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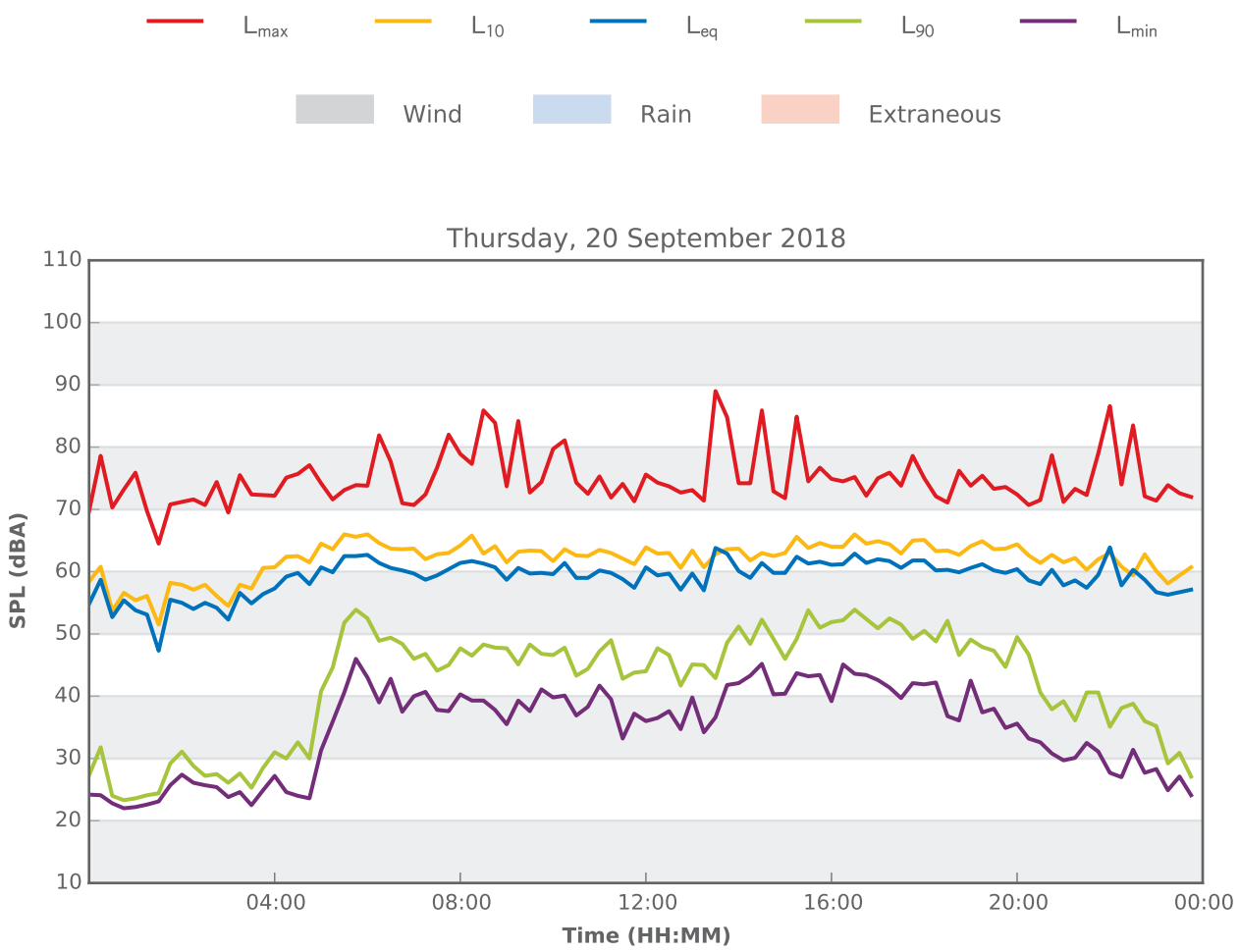


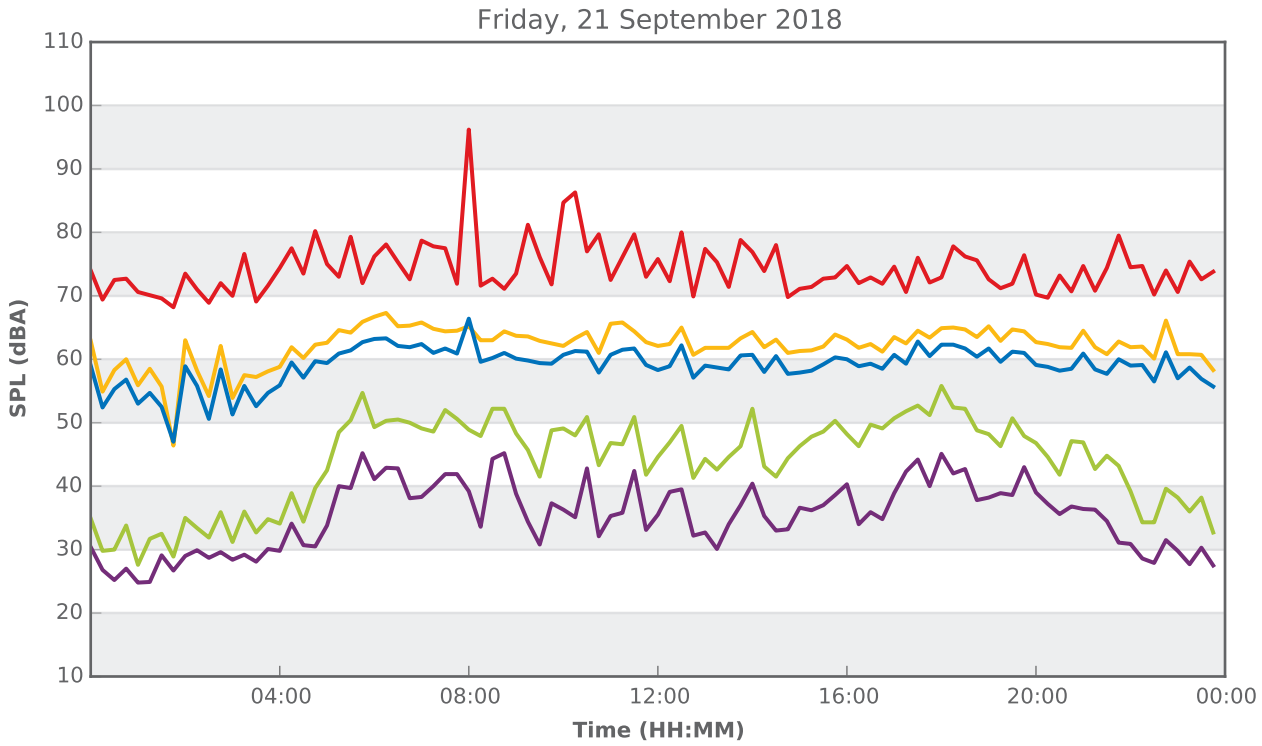
689 New England Highway, Aberdeen



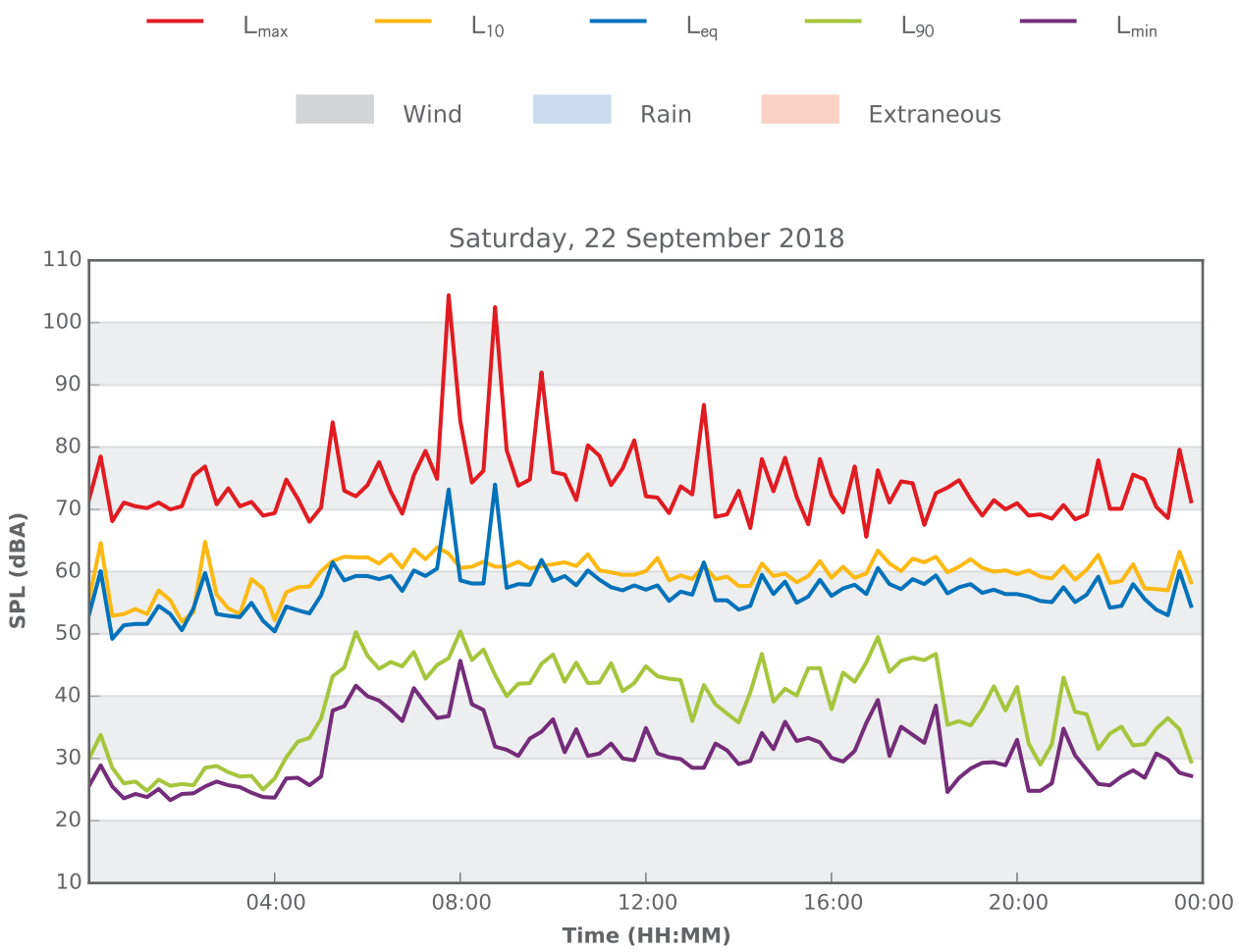


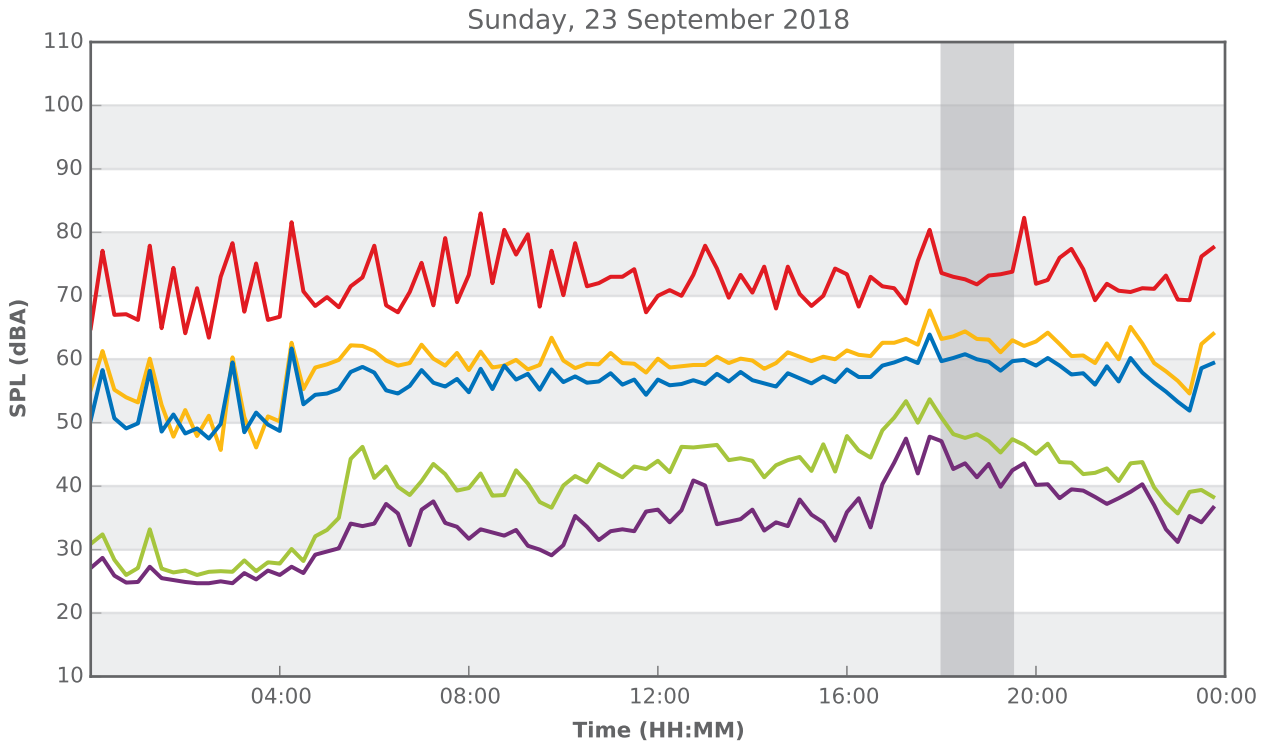
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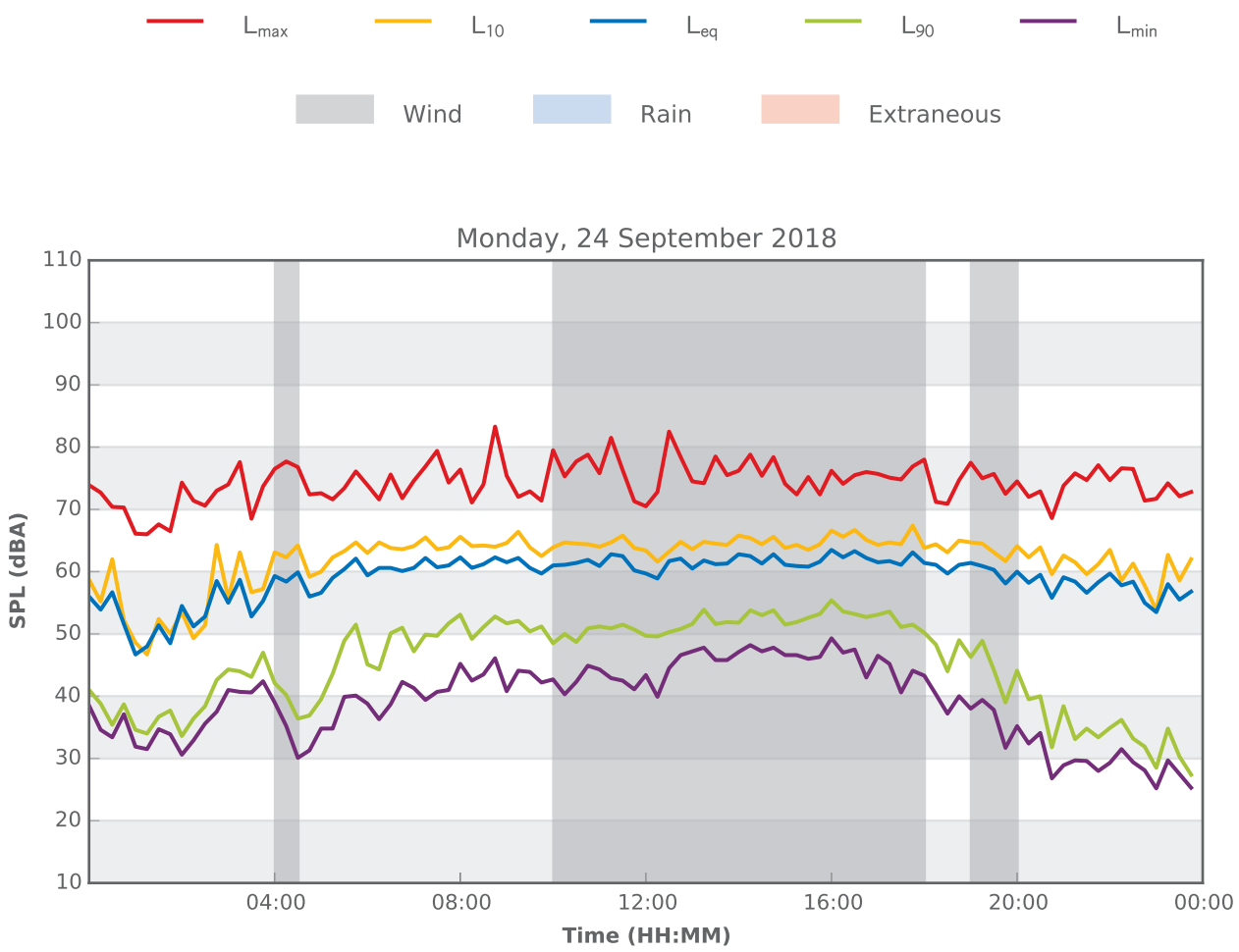


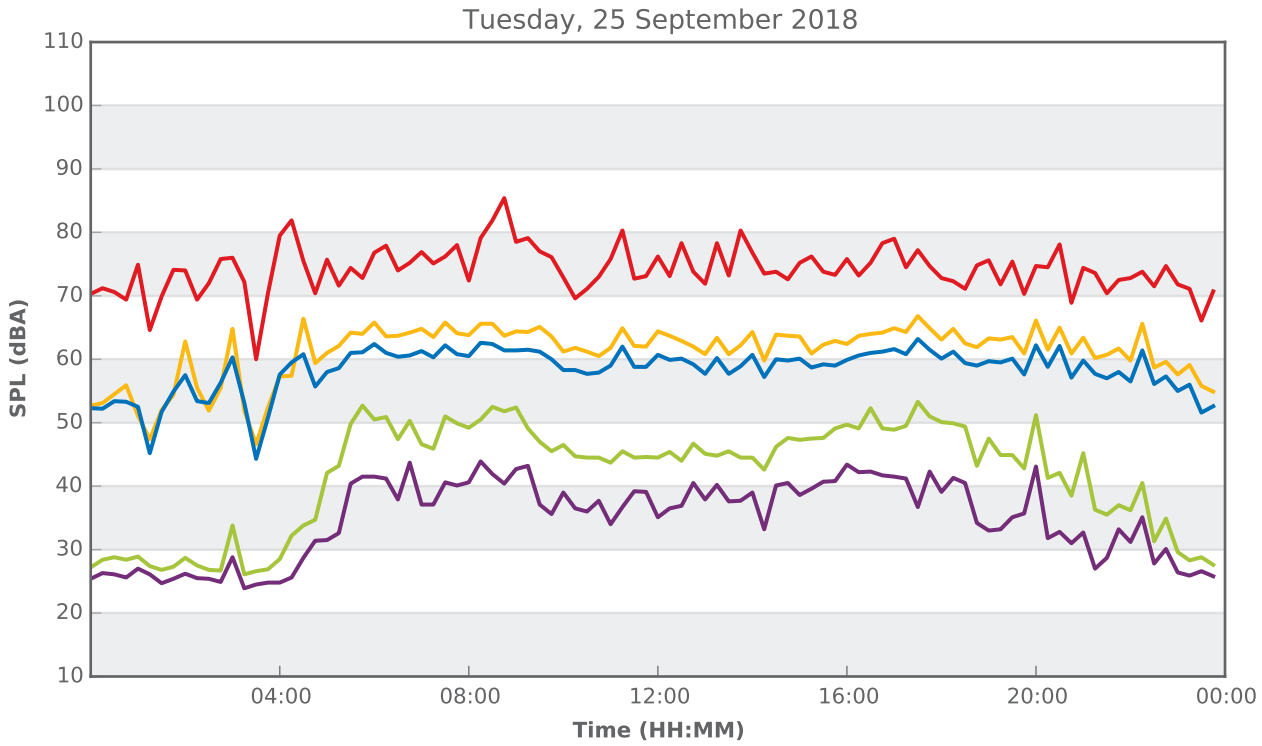
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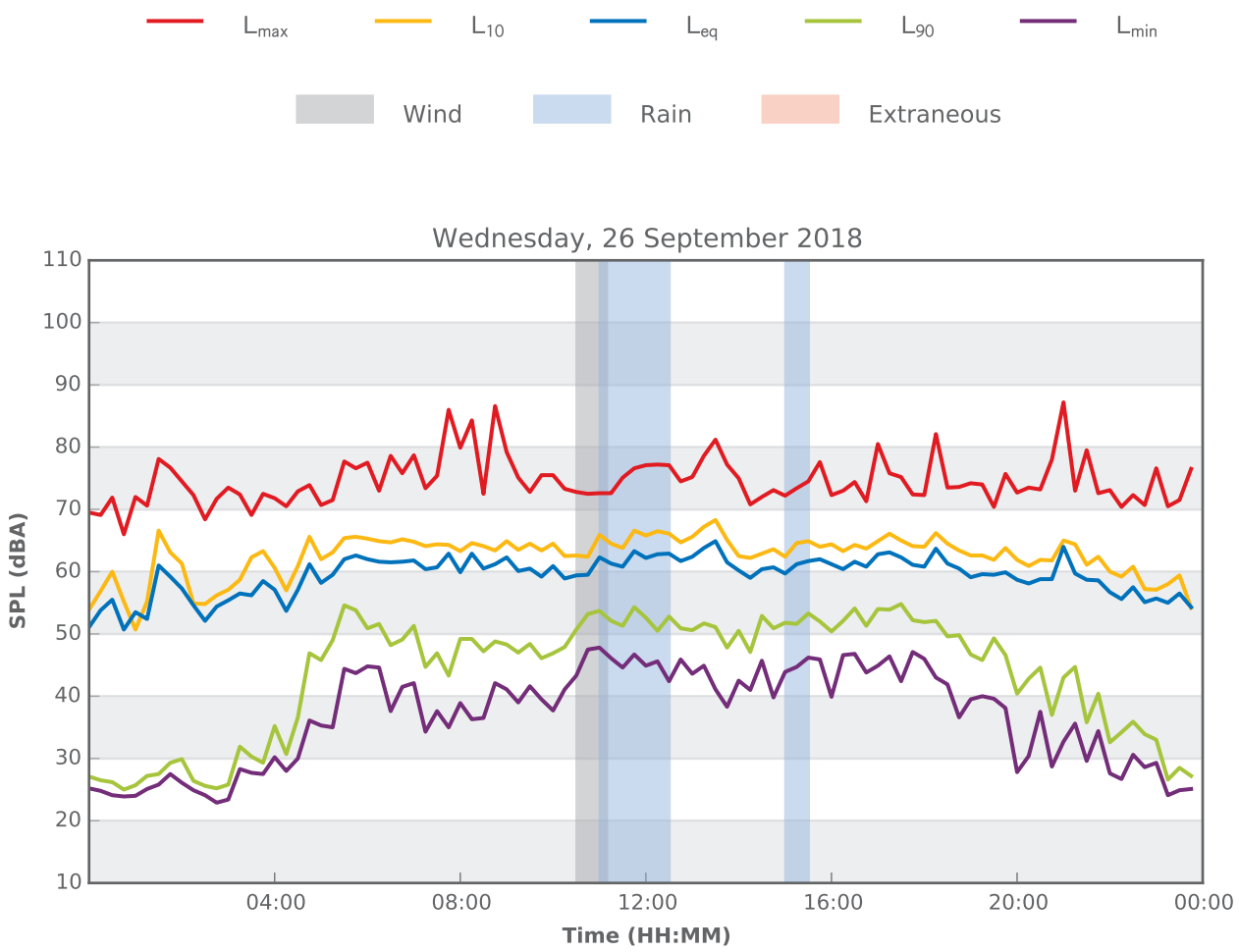


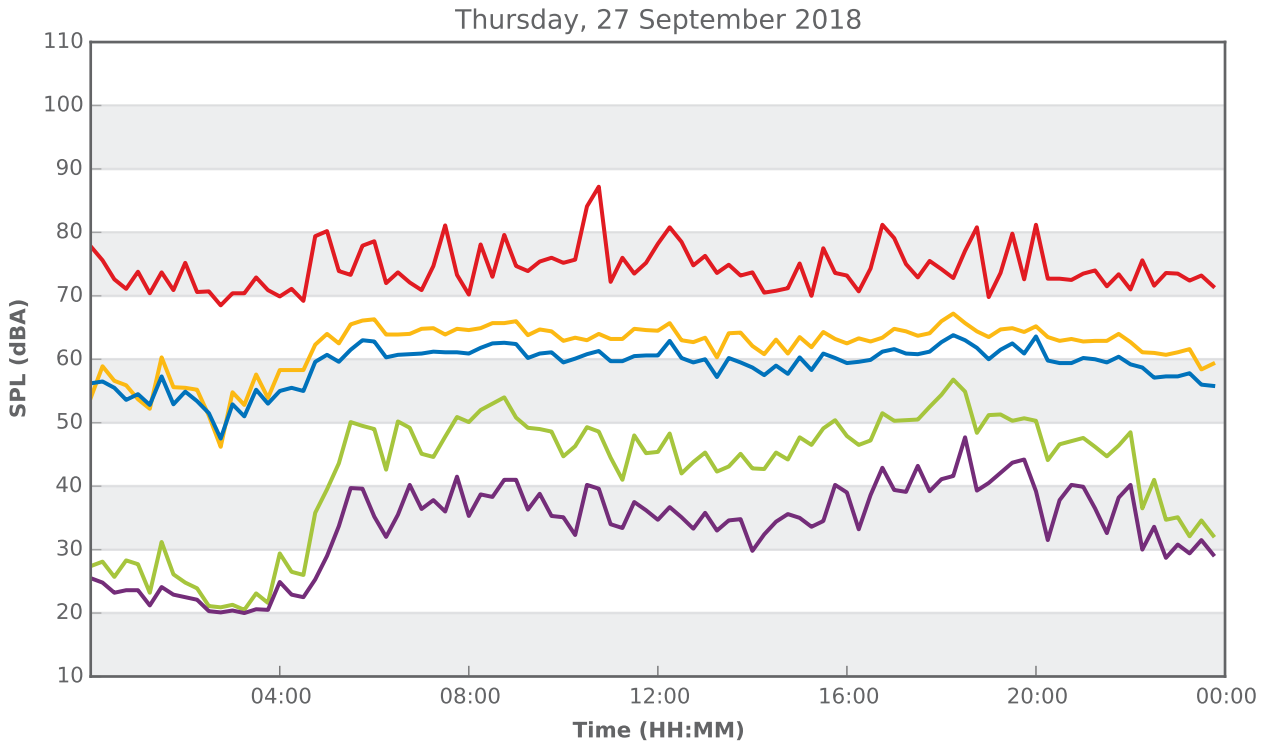
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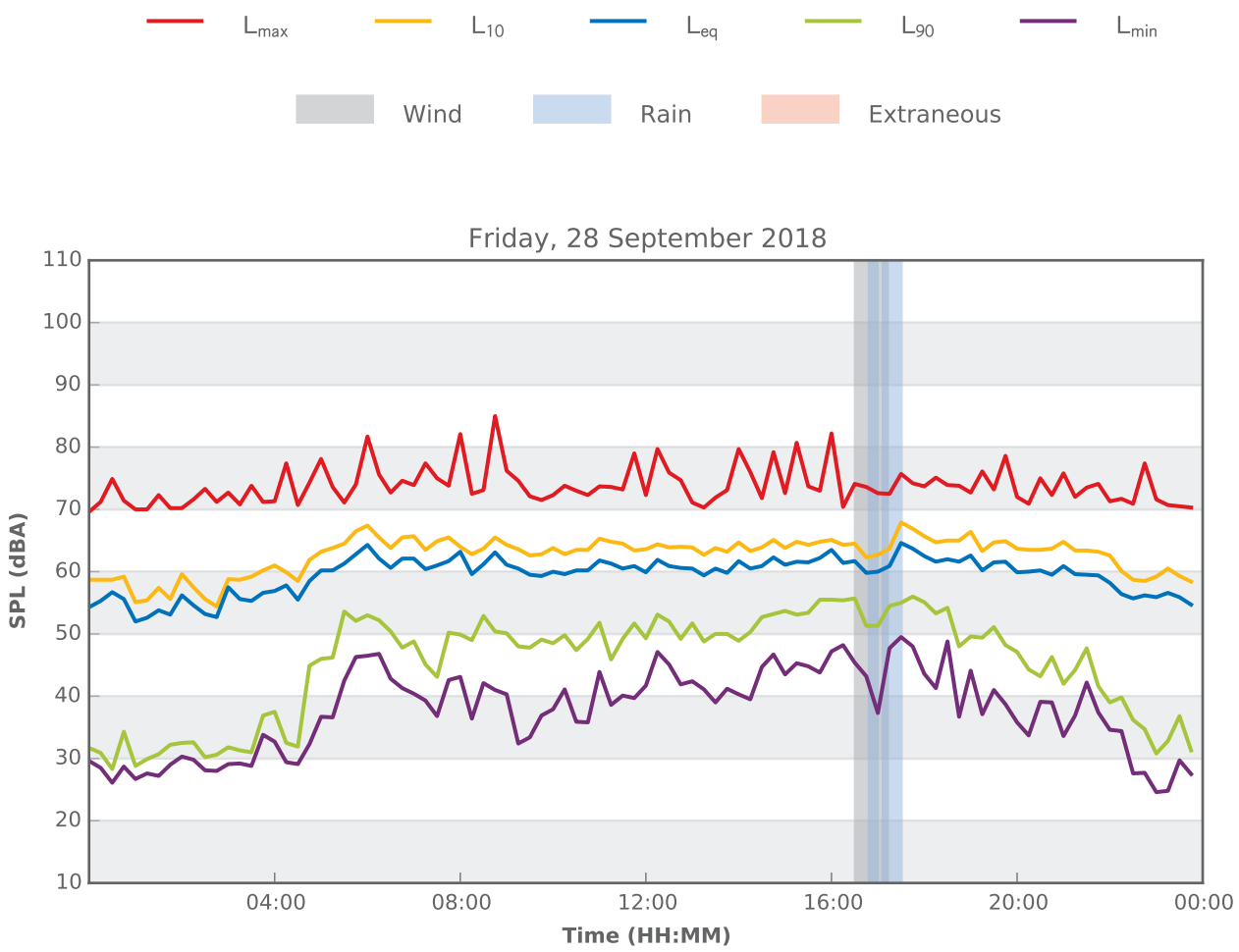


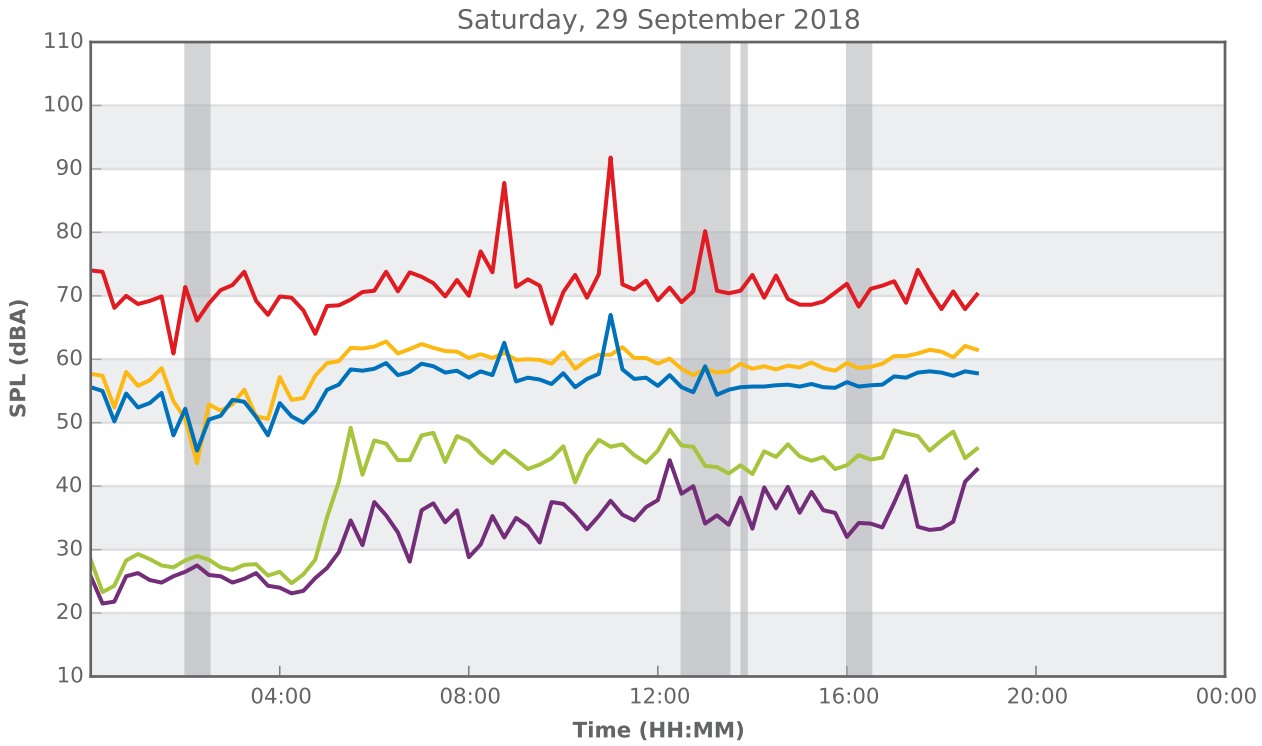
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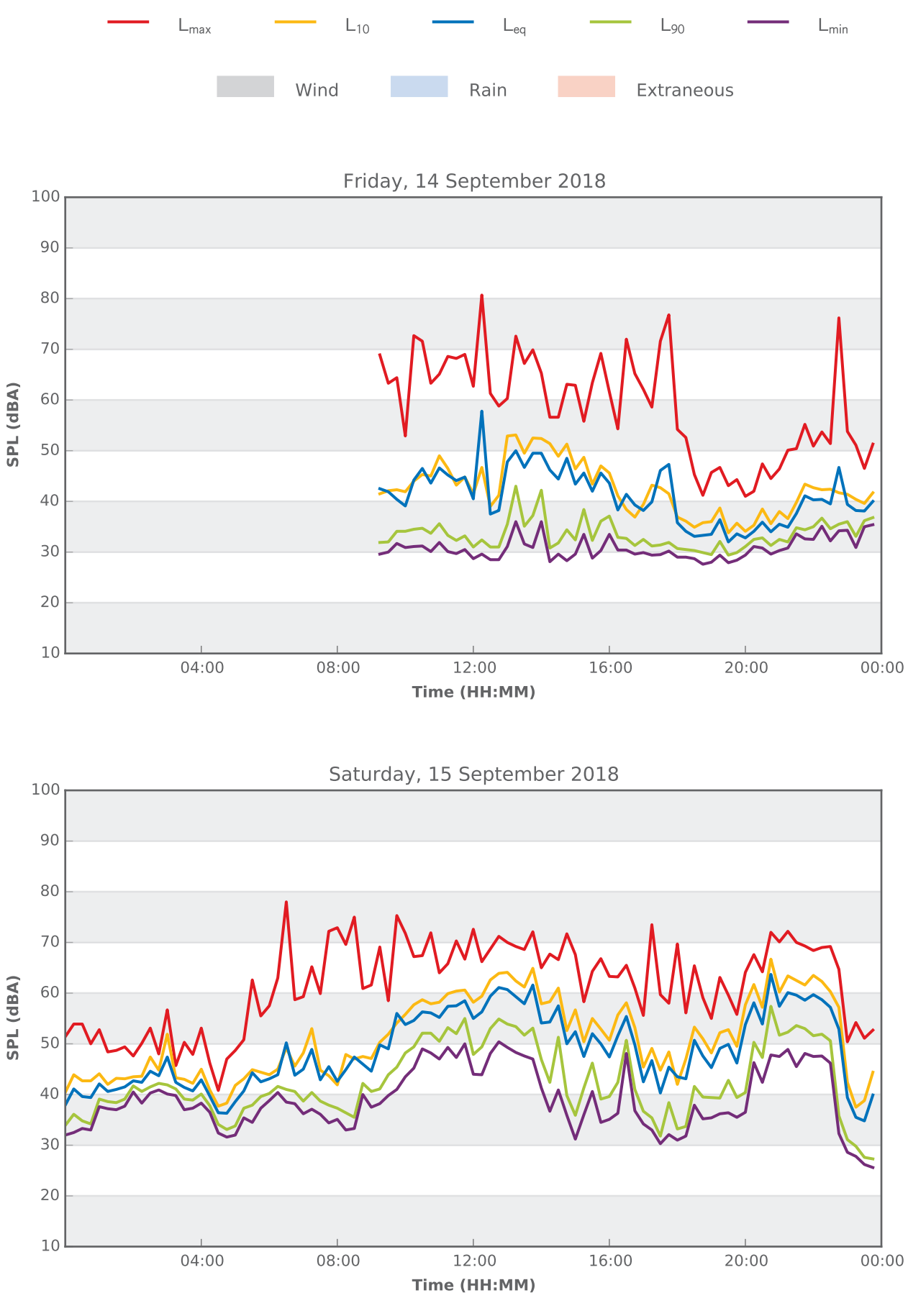


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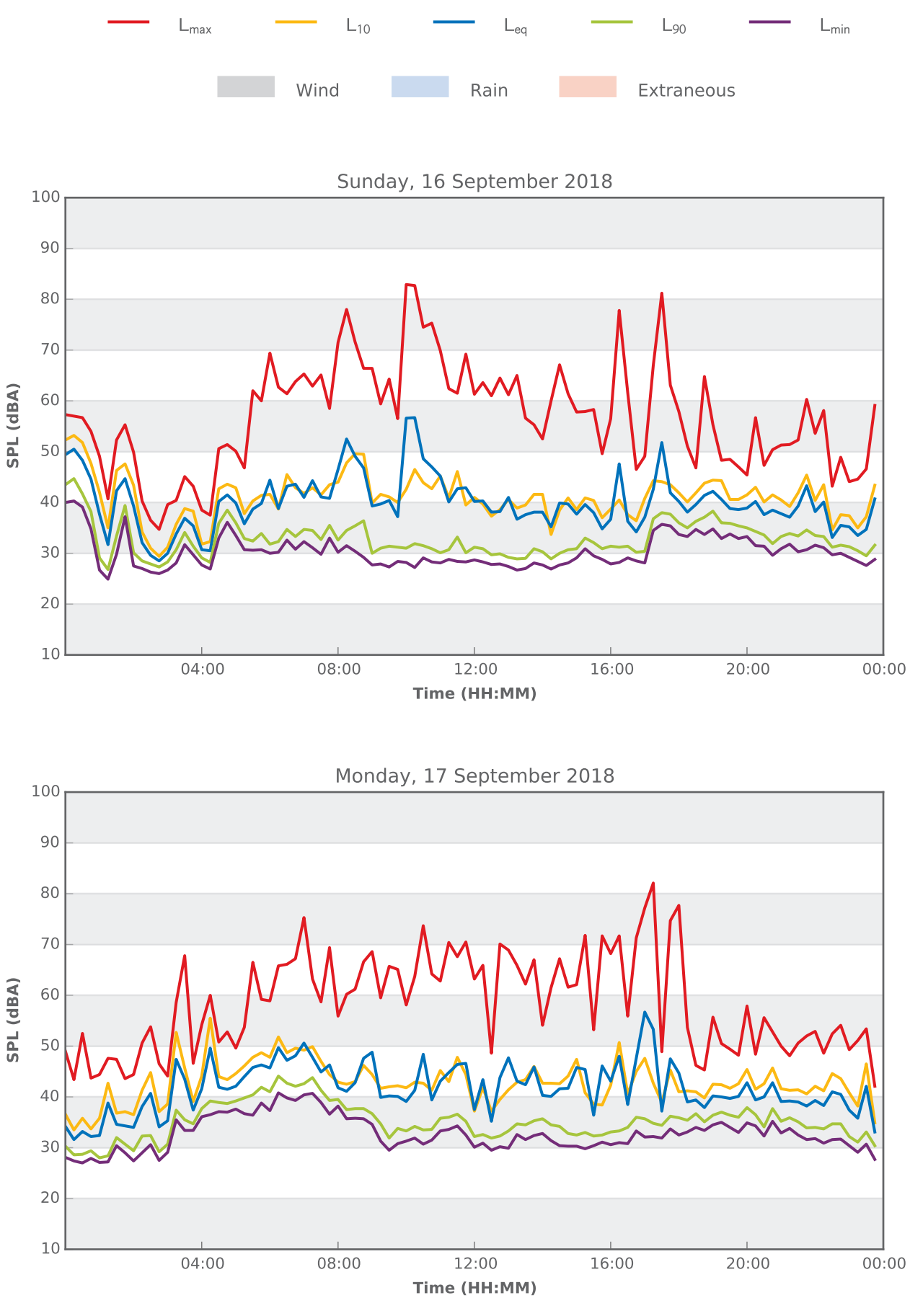




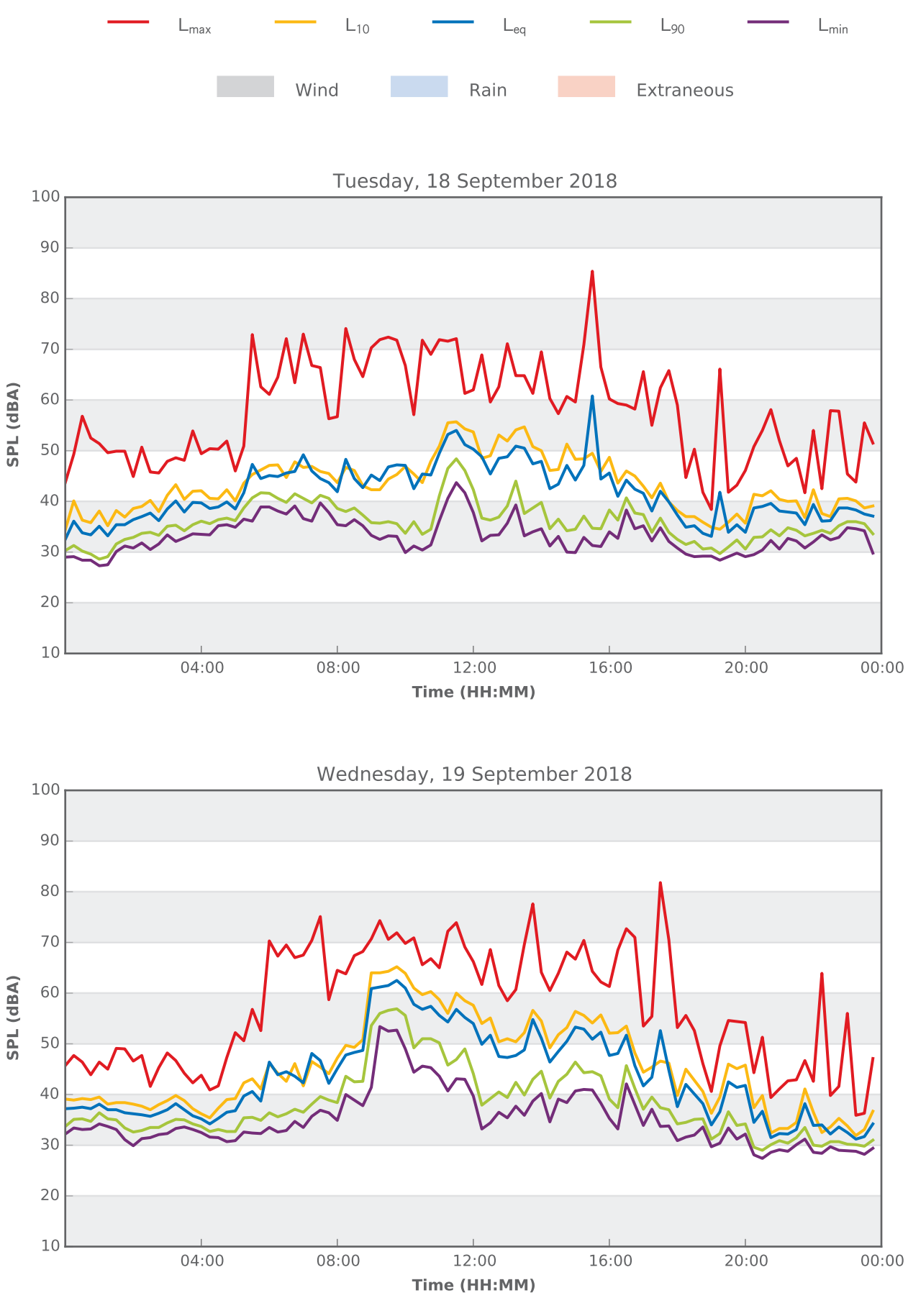
120 Wiltons Lane, Kayuga



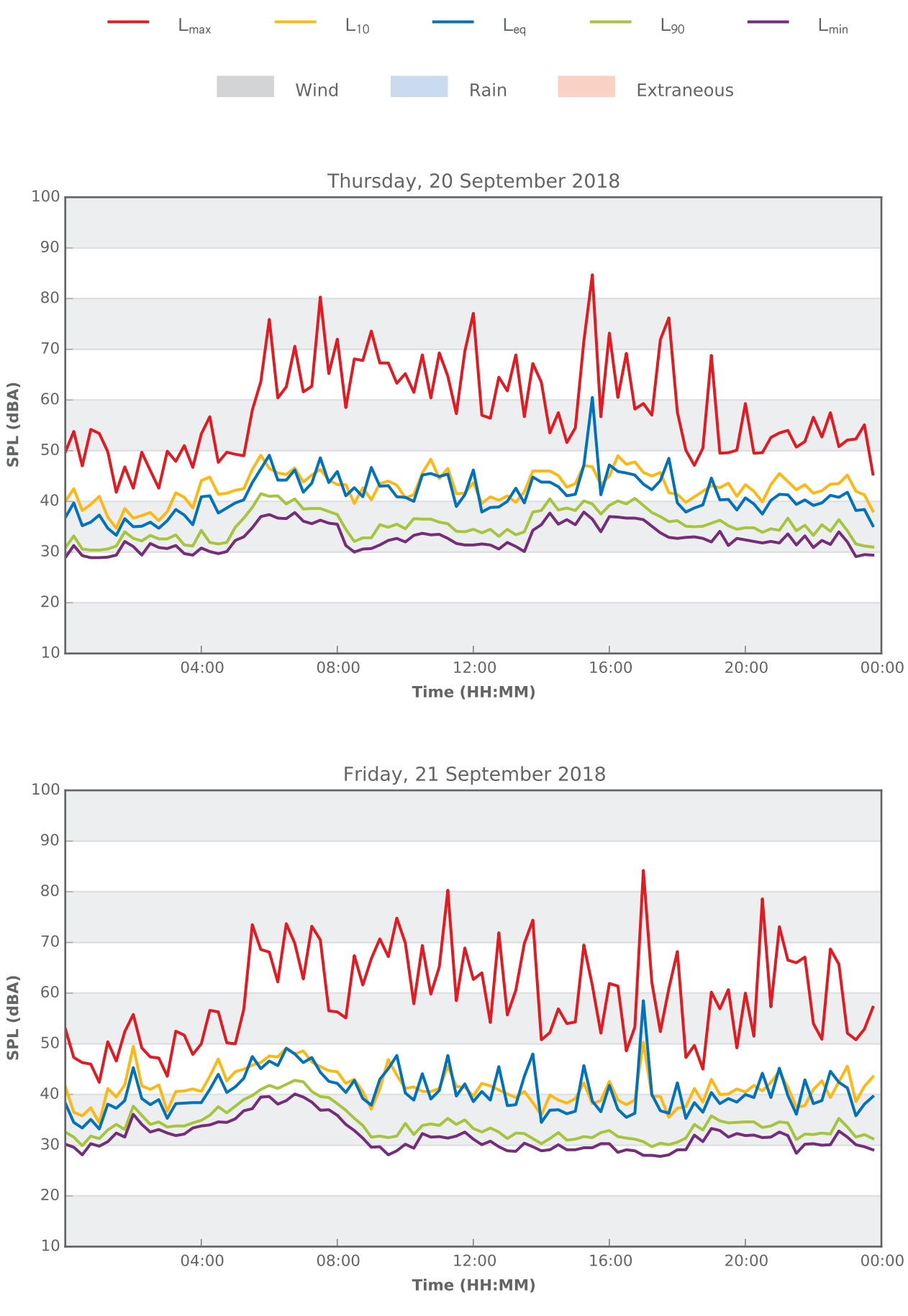
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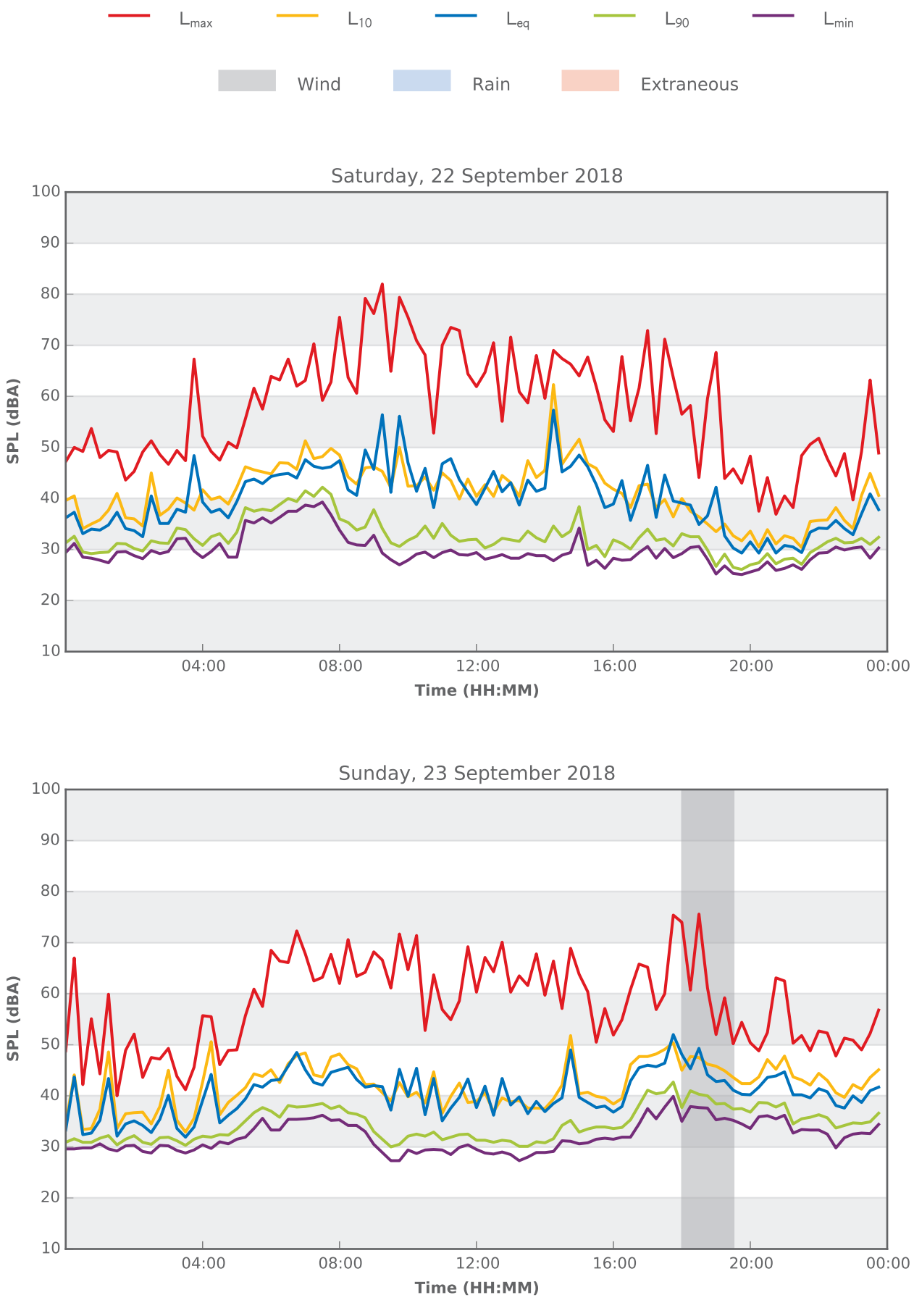
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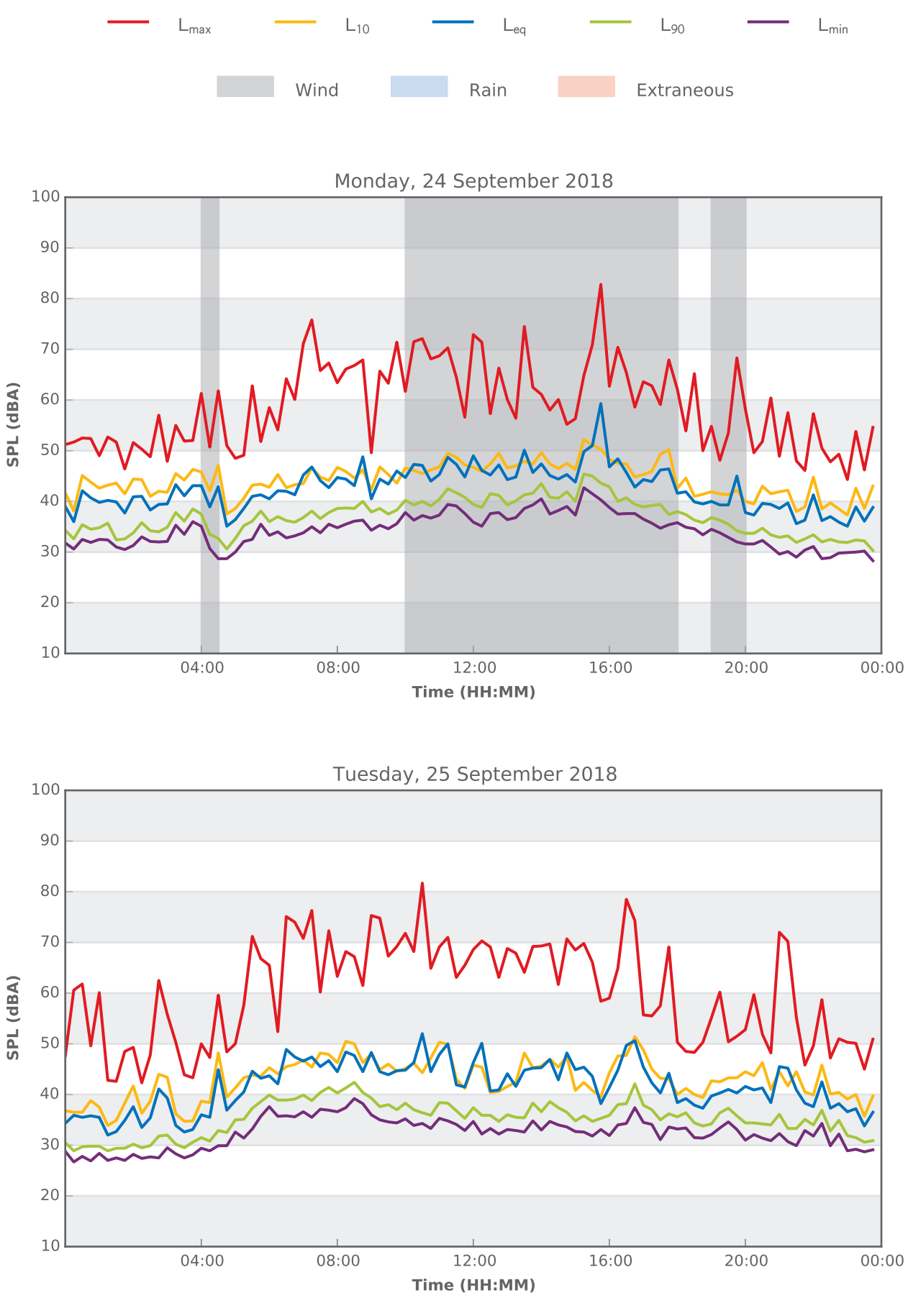
120 Wiltons Lane, Kayuga



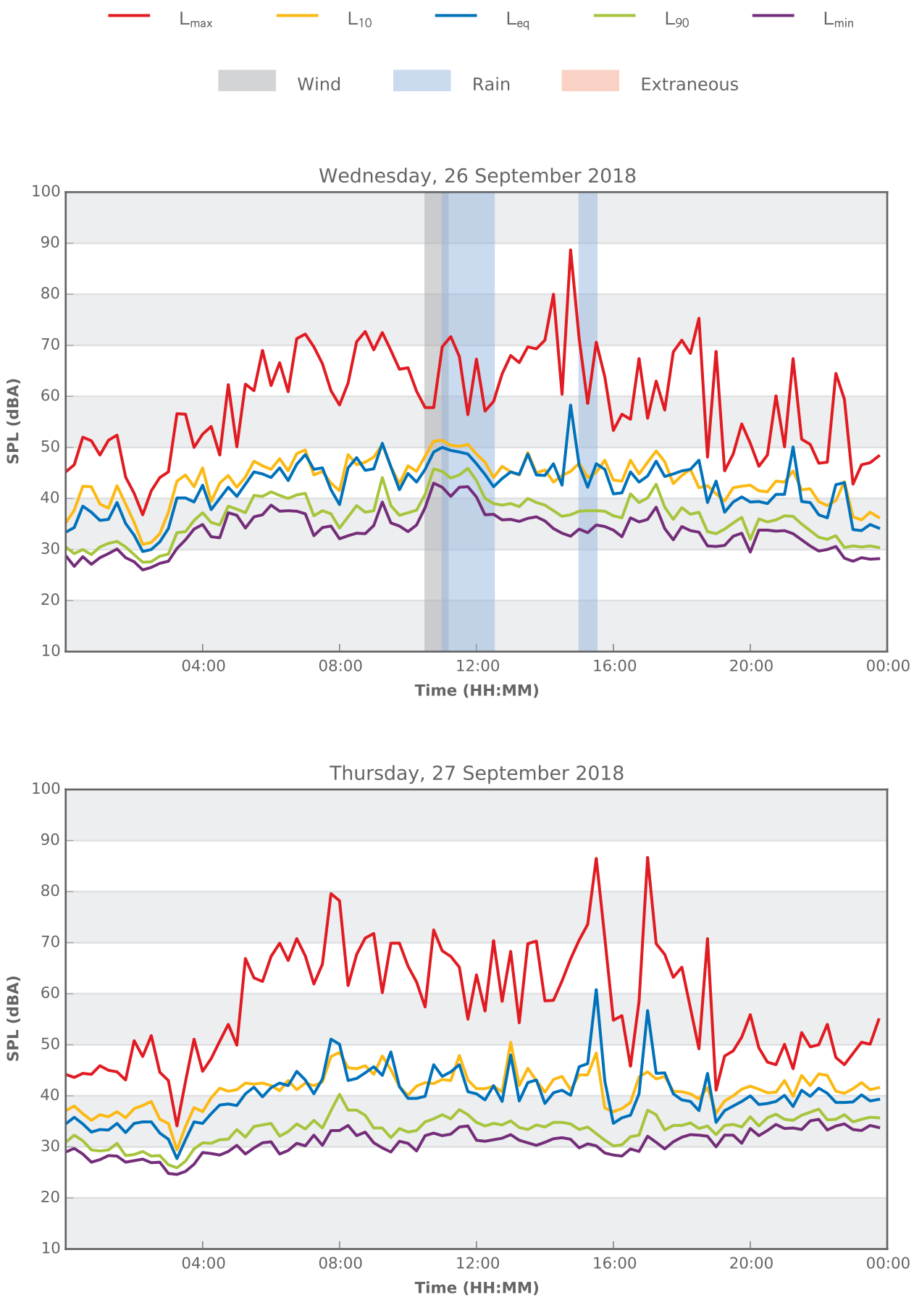
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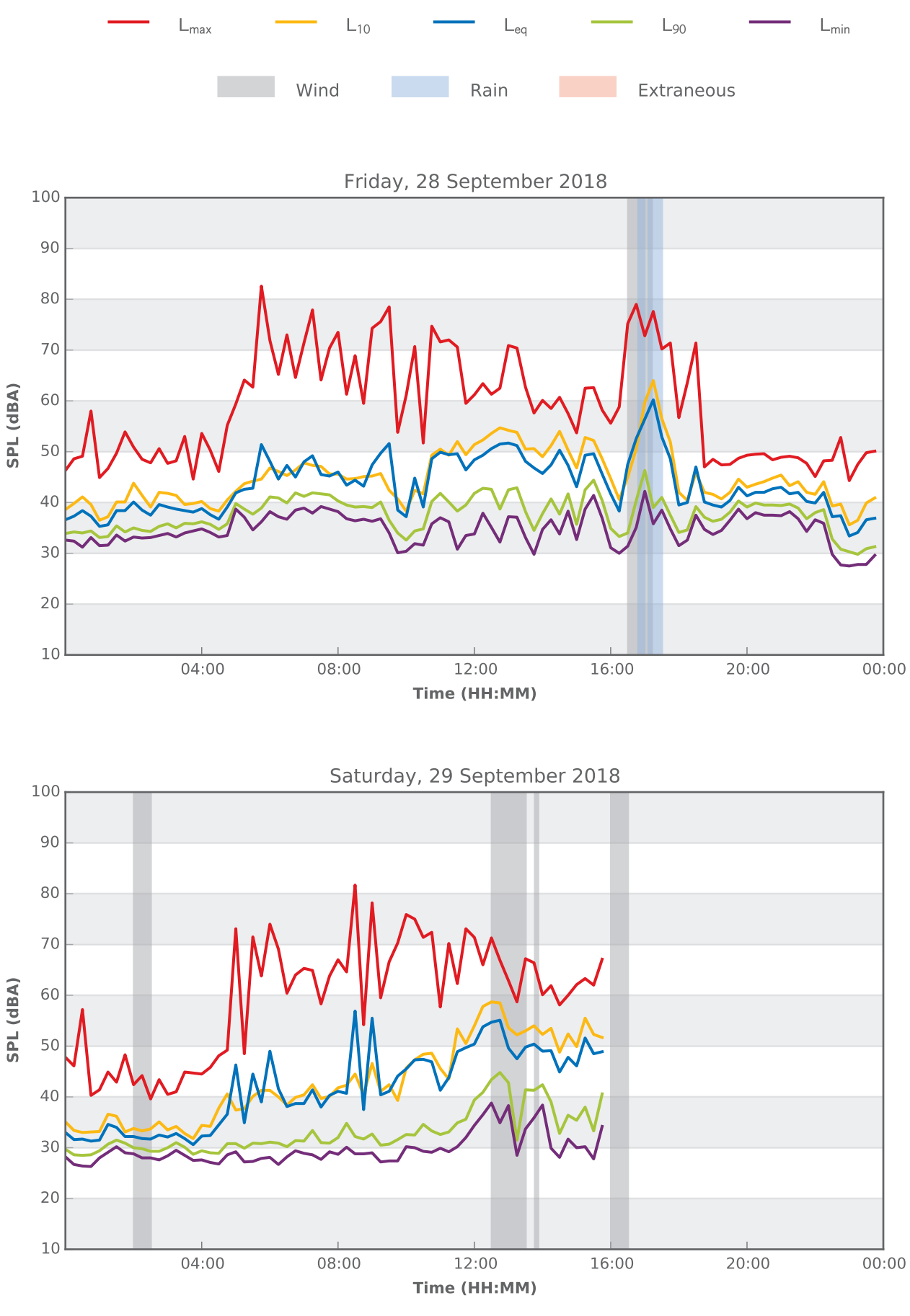
120 Wiltons Lane, Kayuga



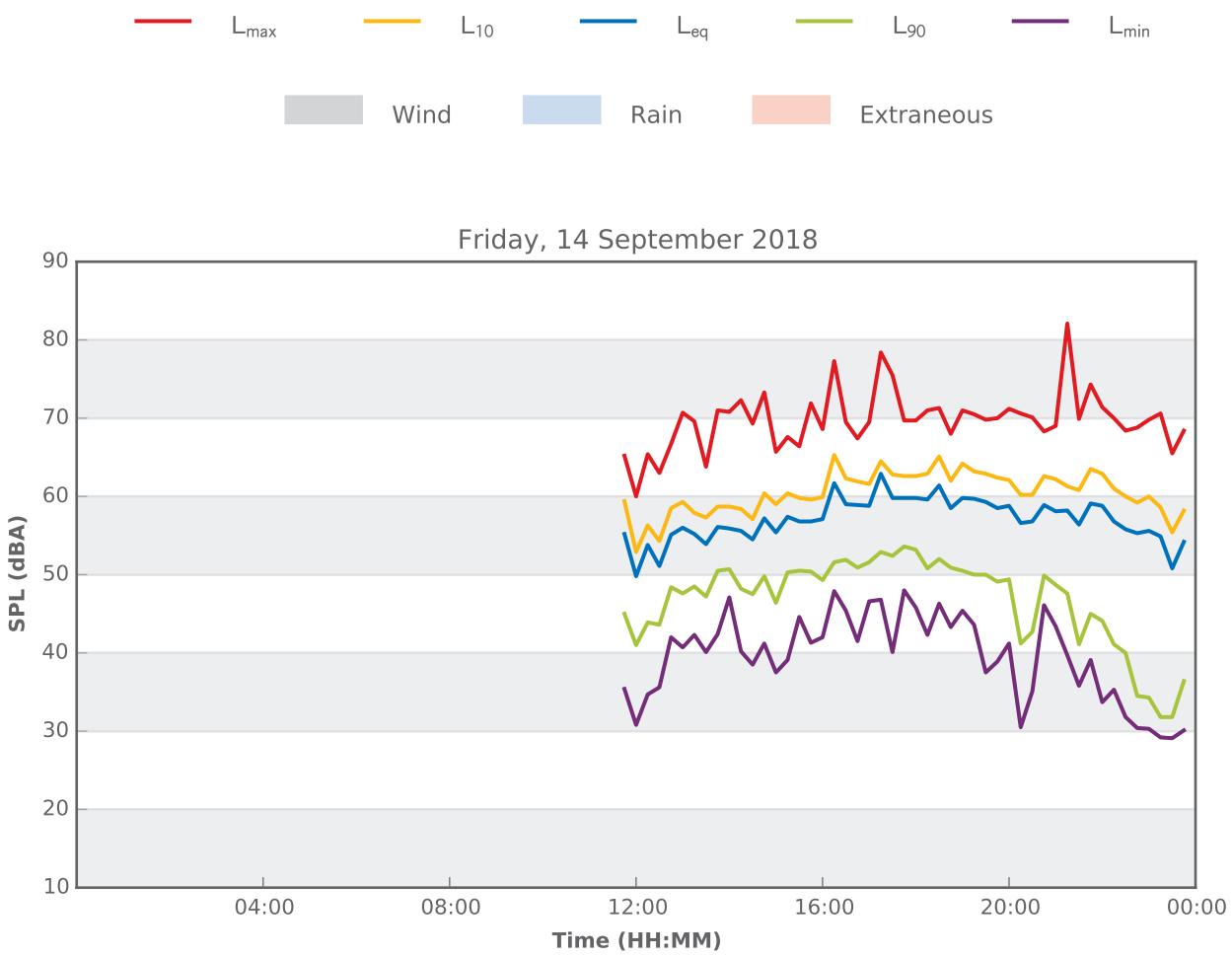
120 Wiltons Lane, Kayuga

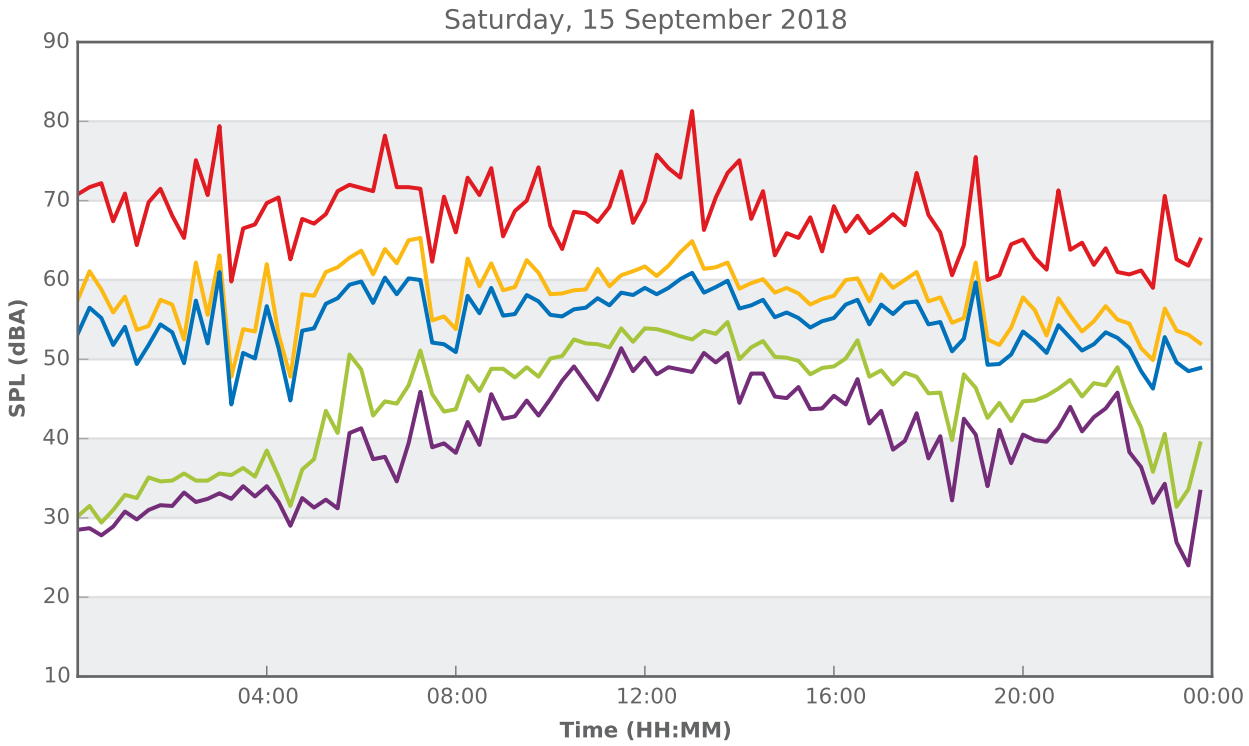


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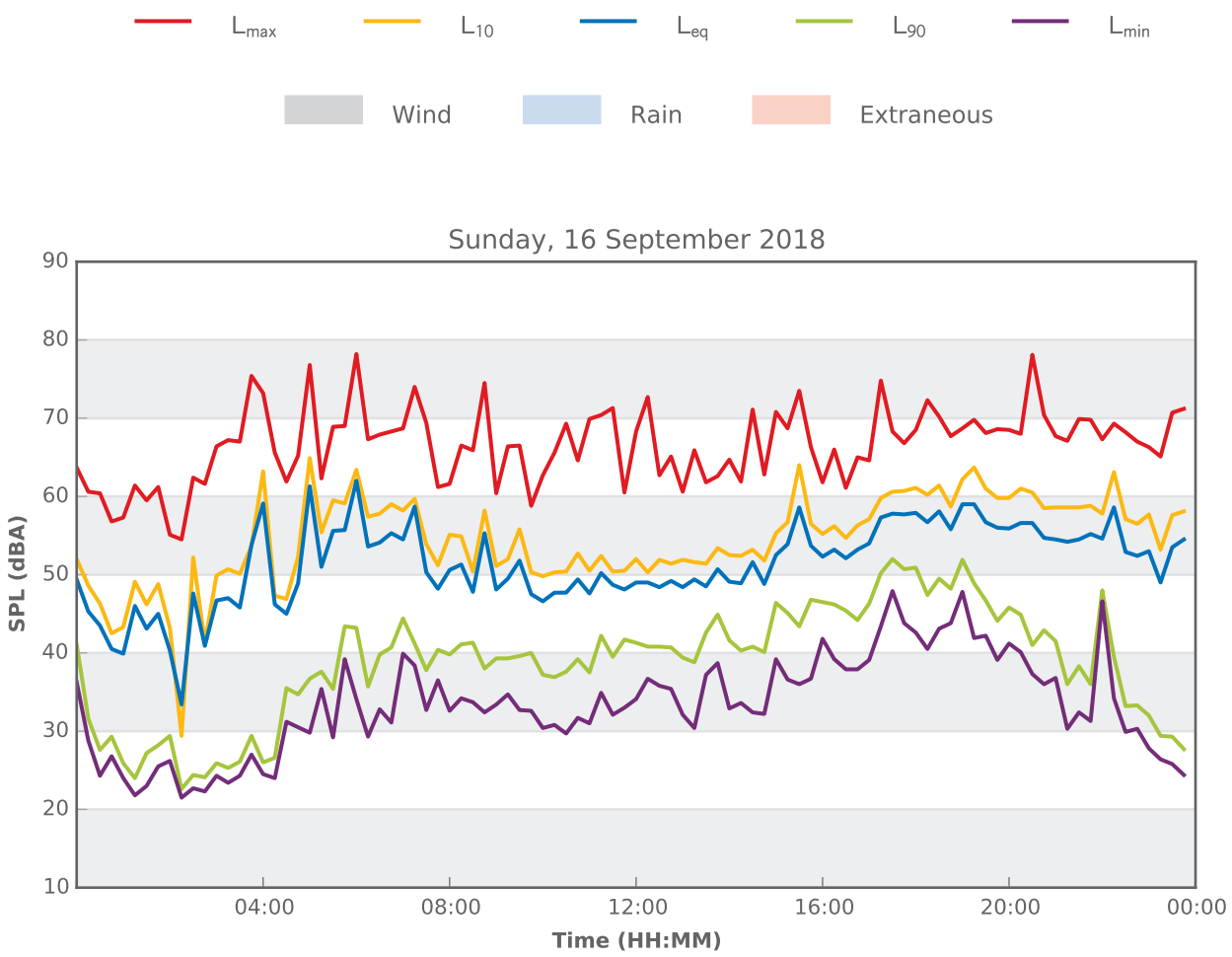


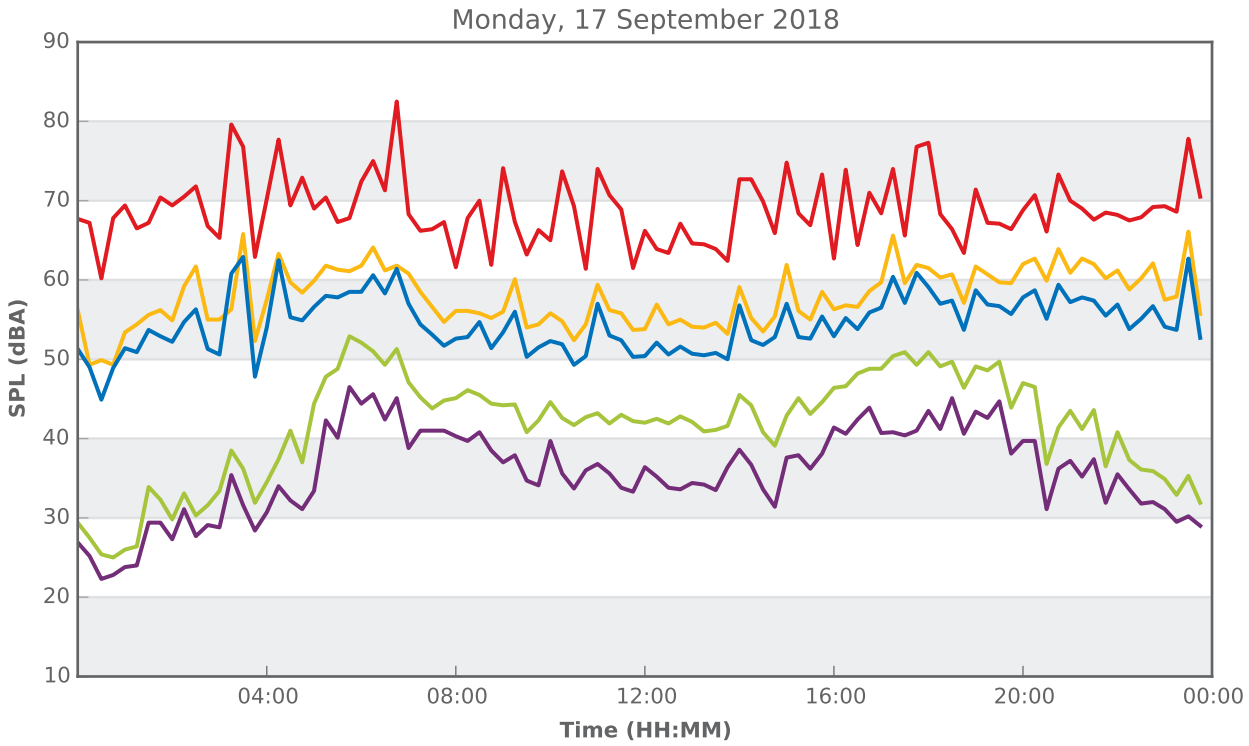
32 Koolbury Flats Row, Muswellbrook



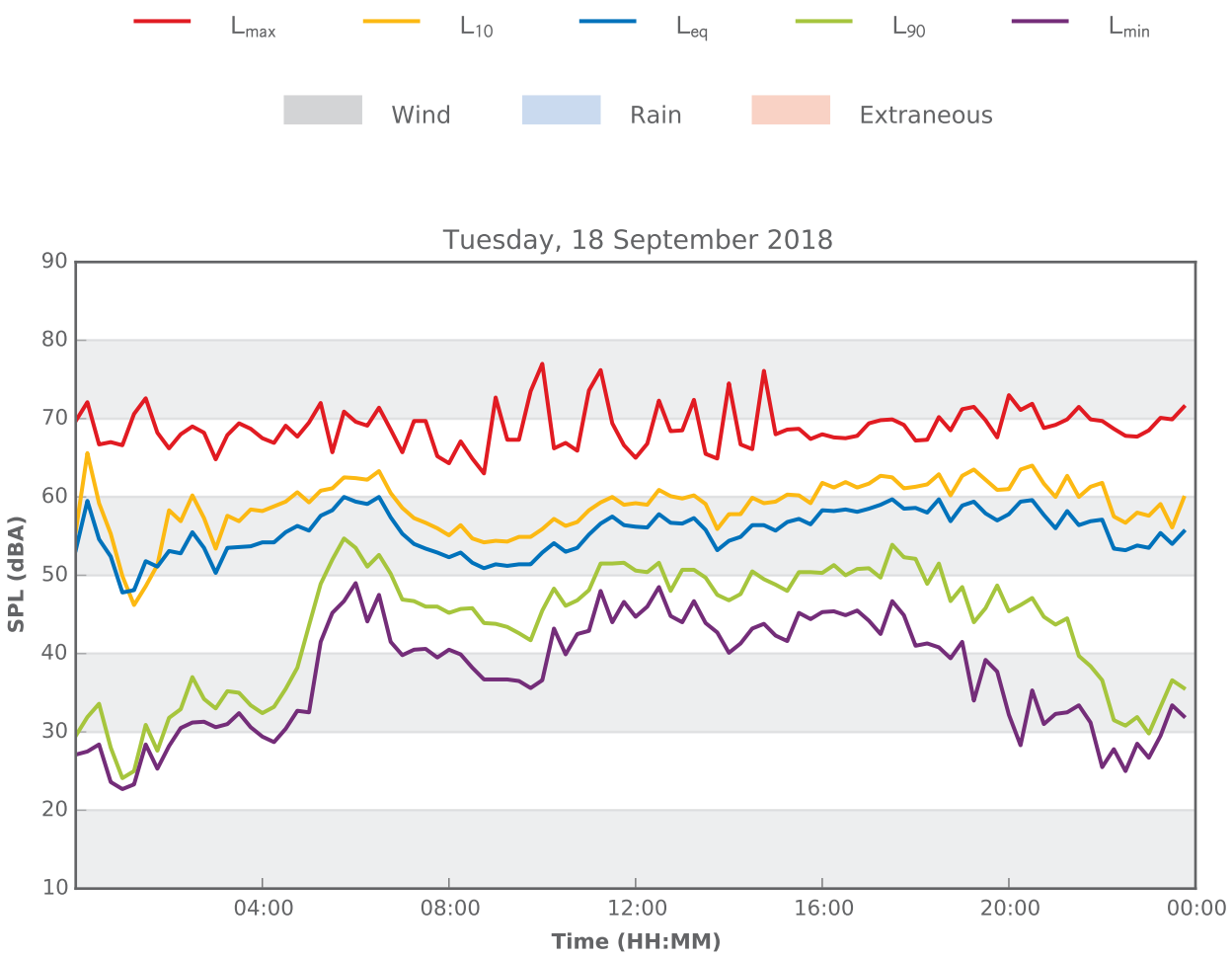


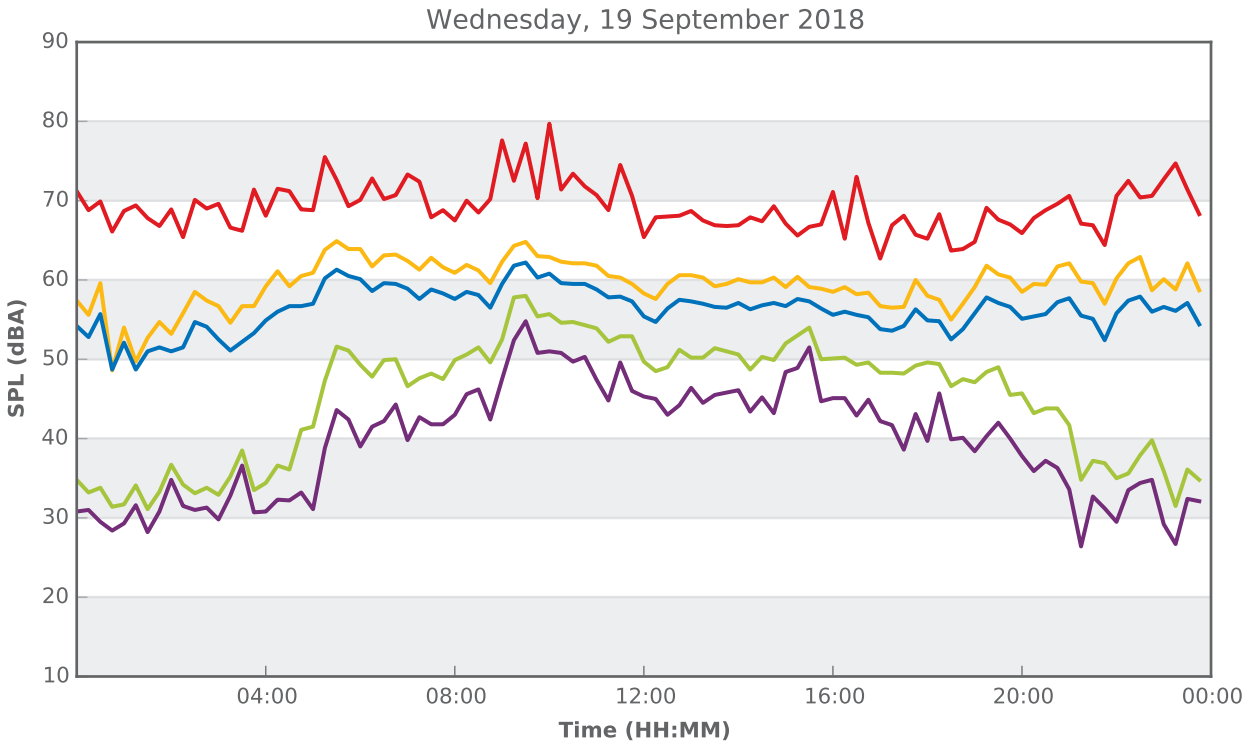
32 Koolbury Flats Row, Muswellbrook



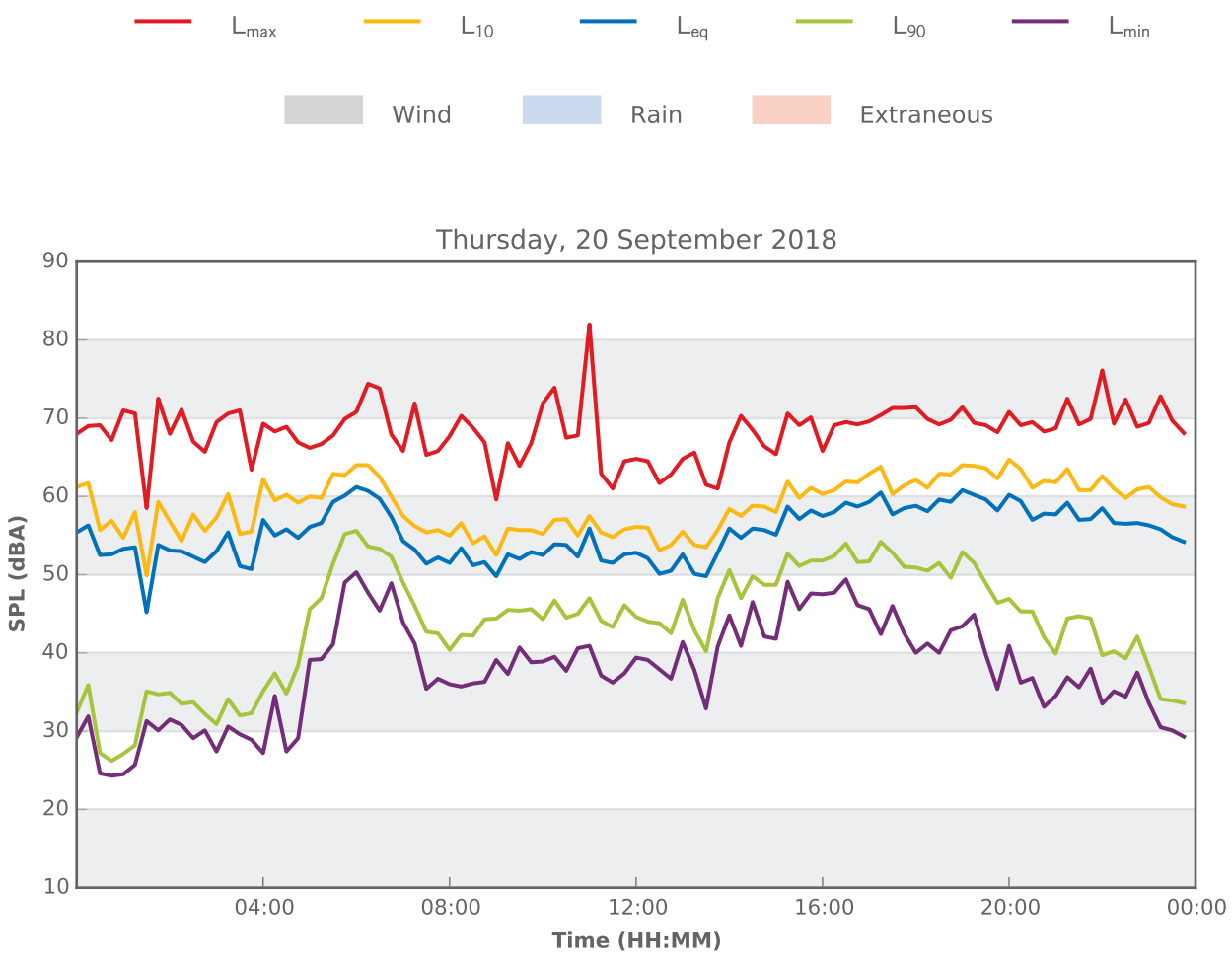


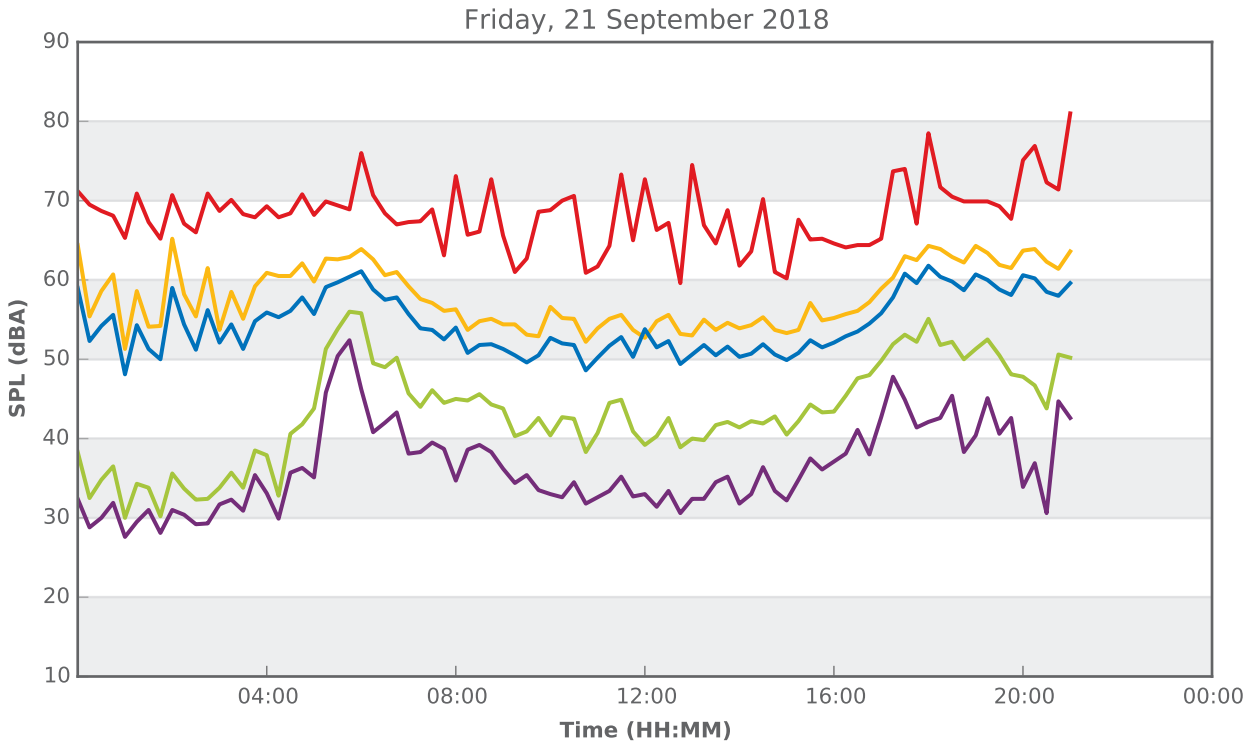
32 Koolbury Flats Row, Muswellbrook



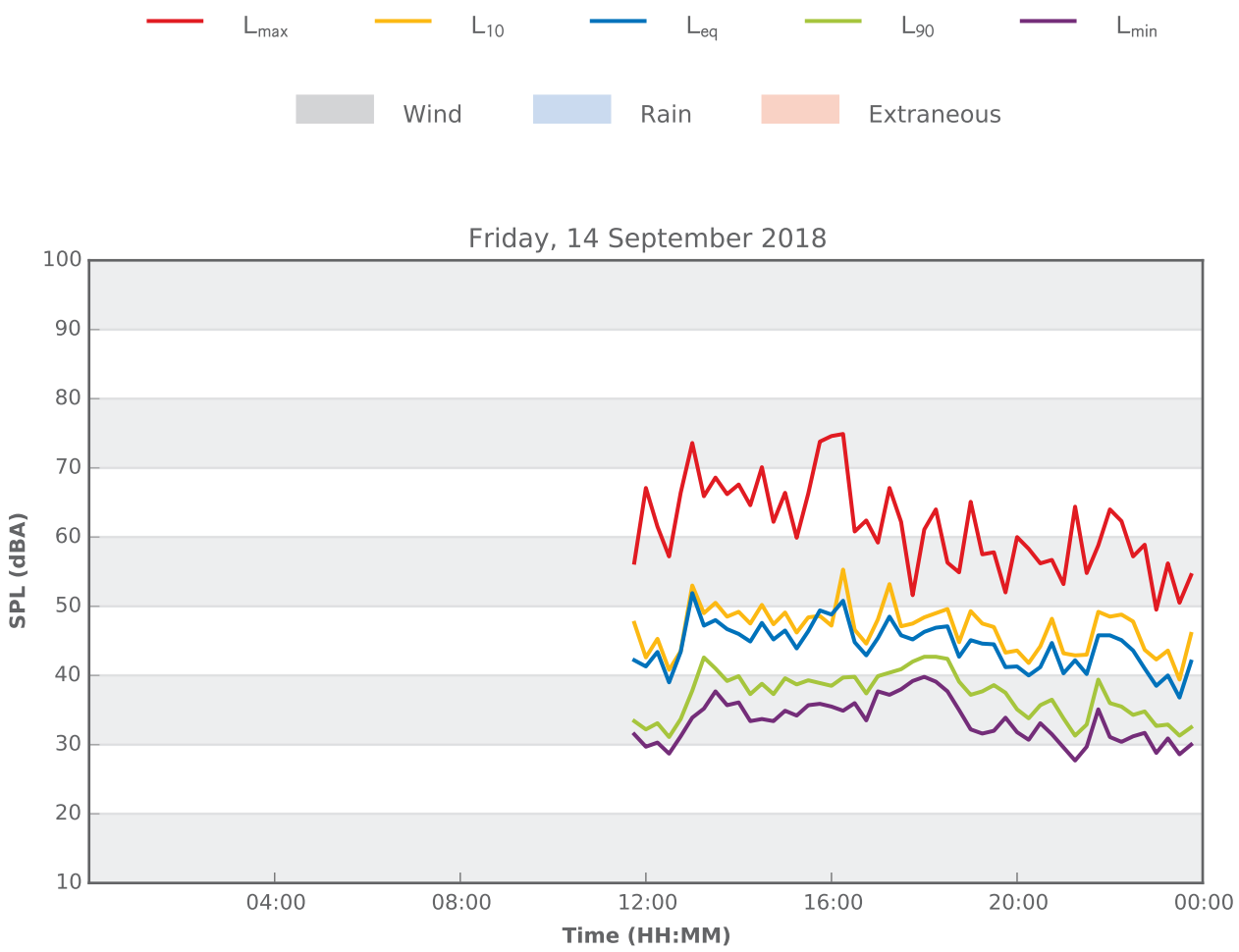


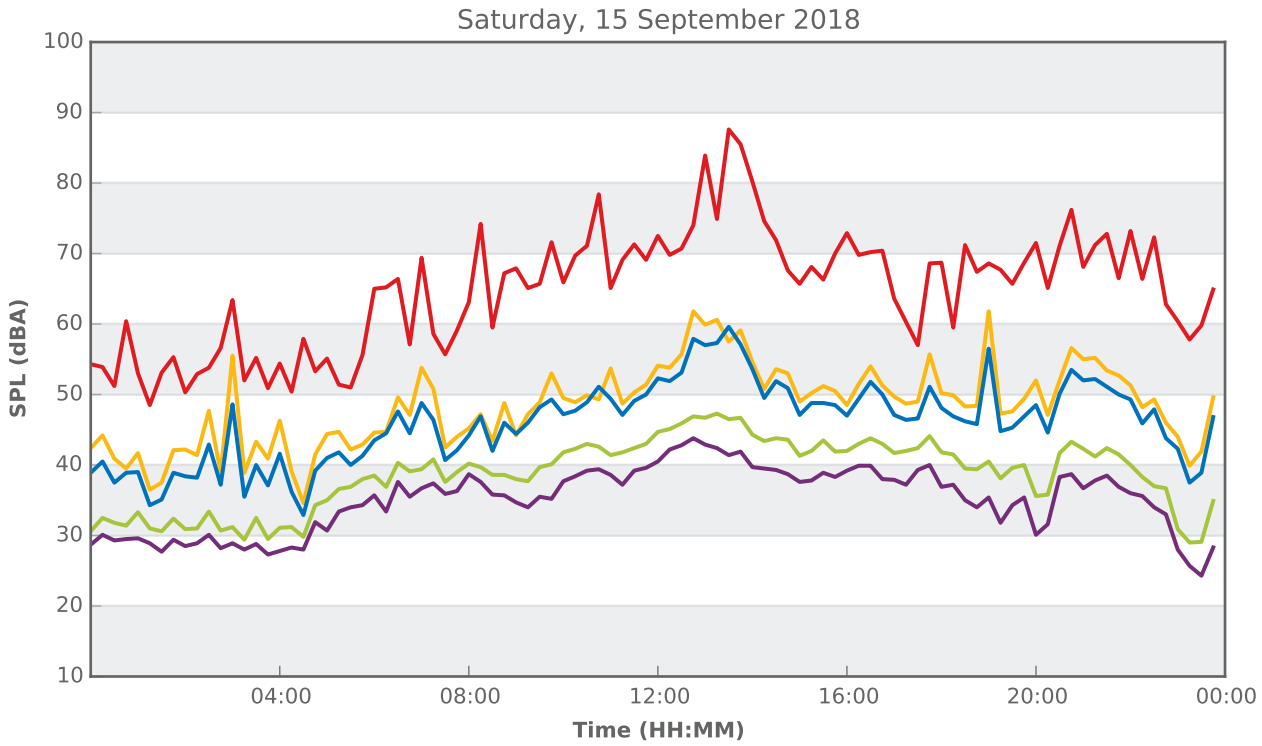
32 Koolbury Flats Row, Muswellbrook



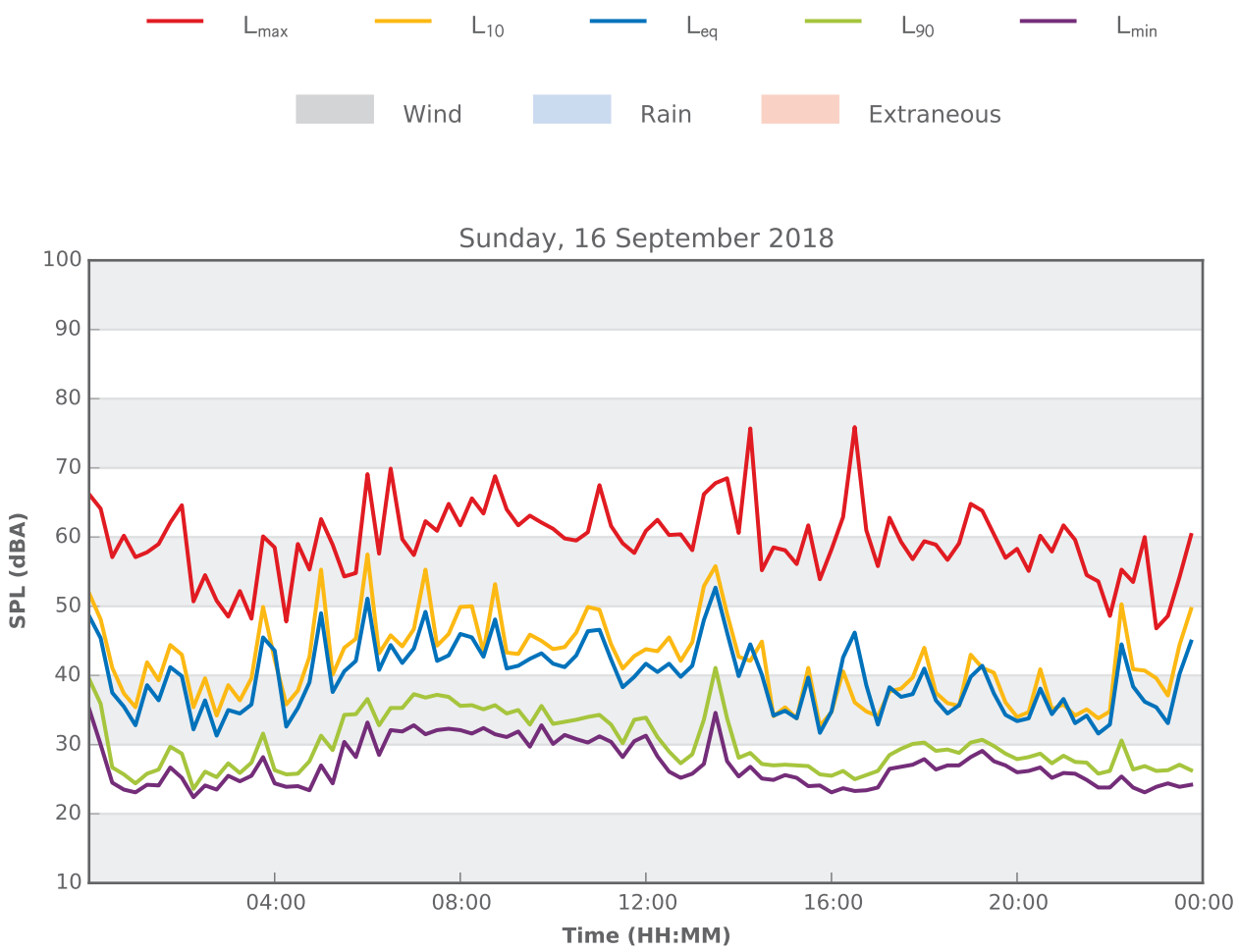


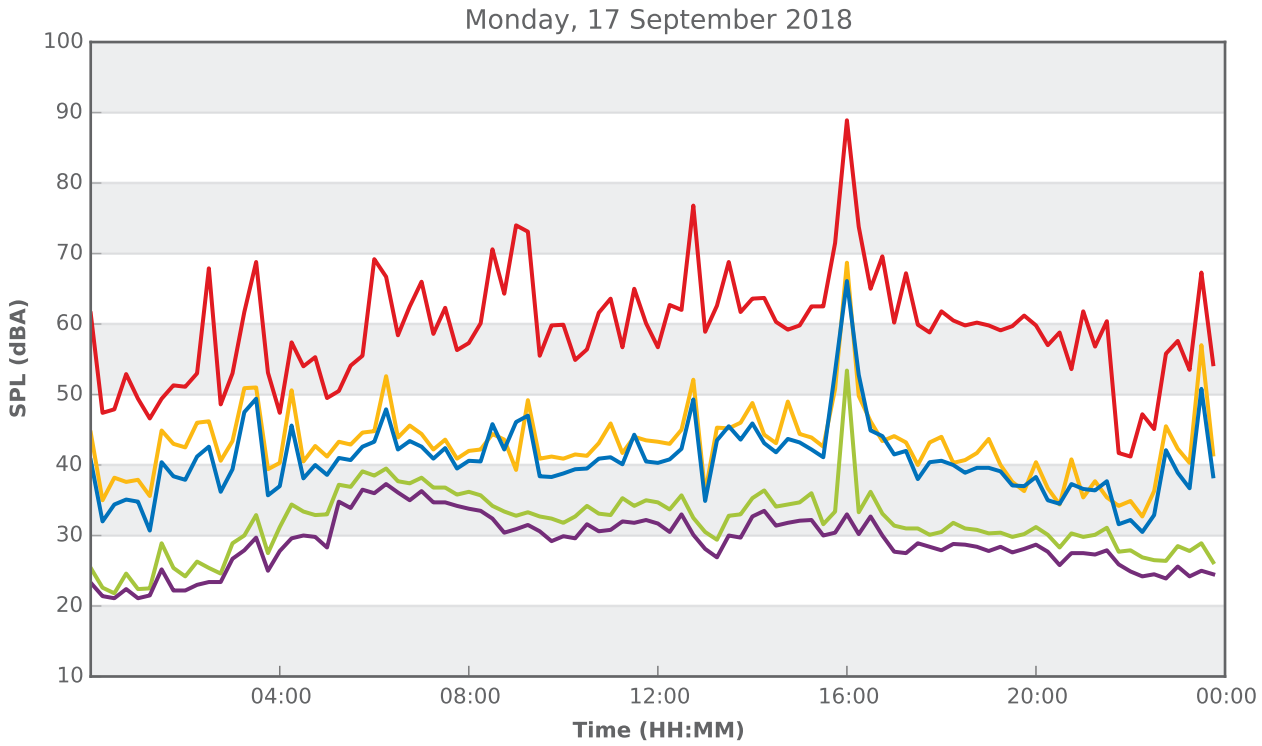
7A Sepoy Crescent, Muswellbrook



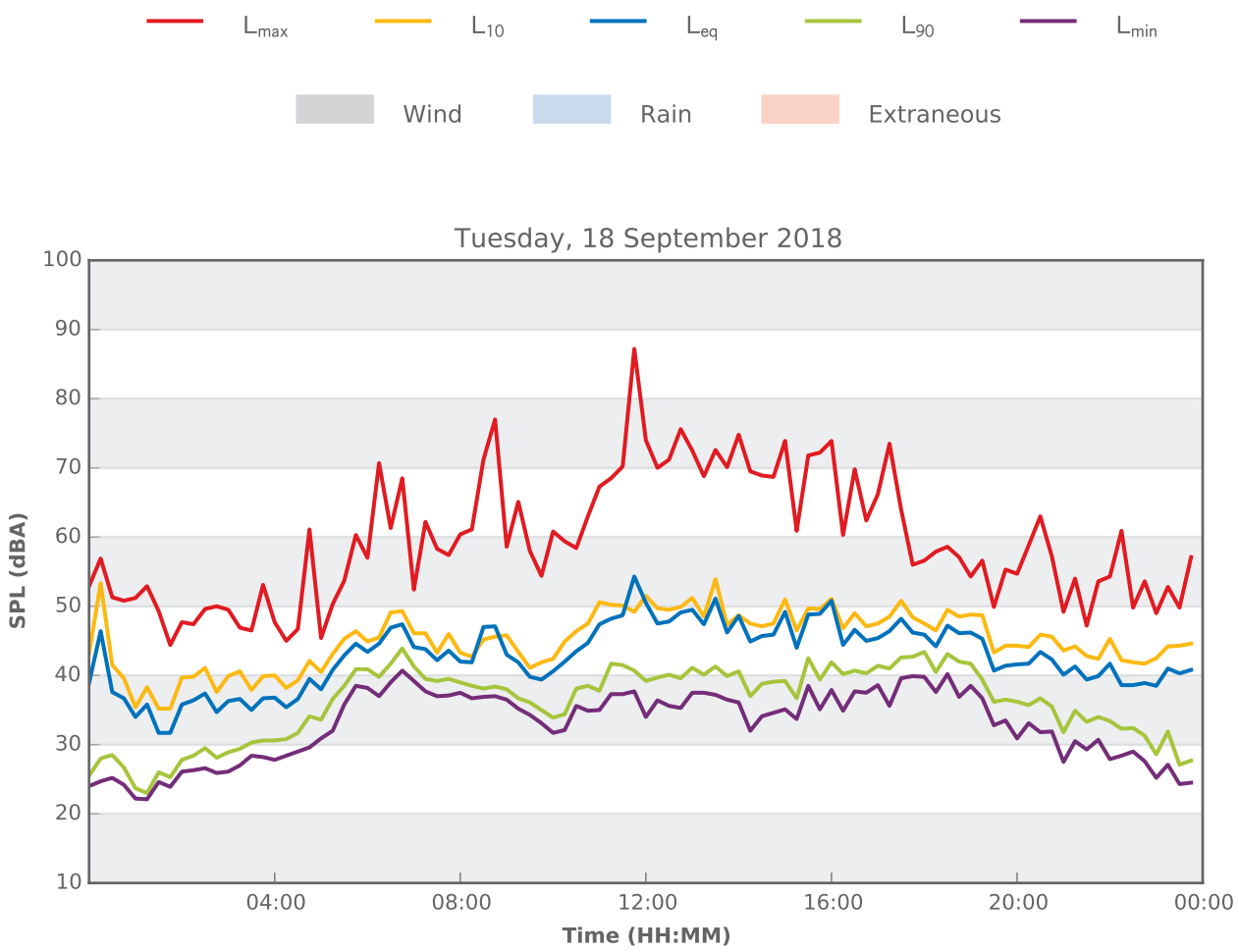


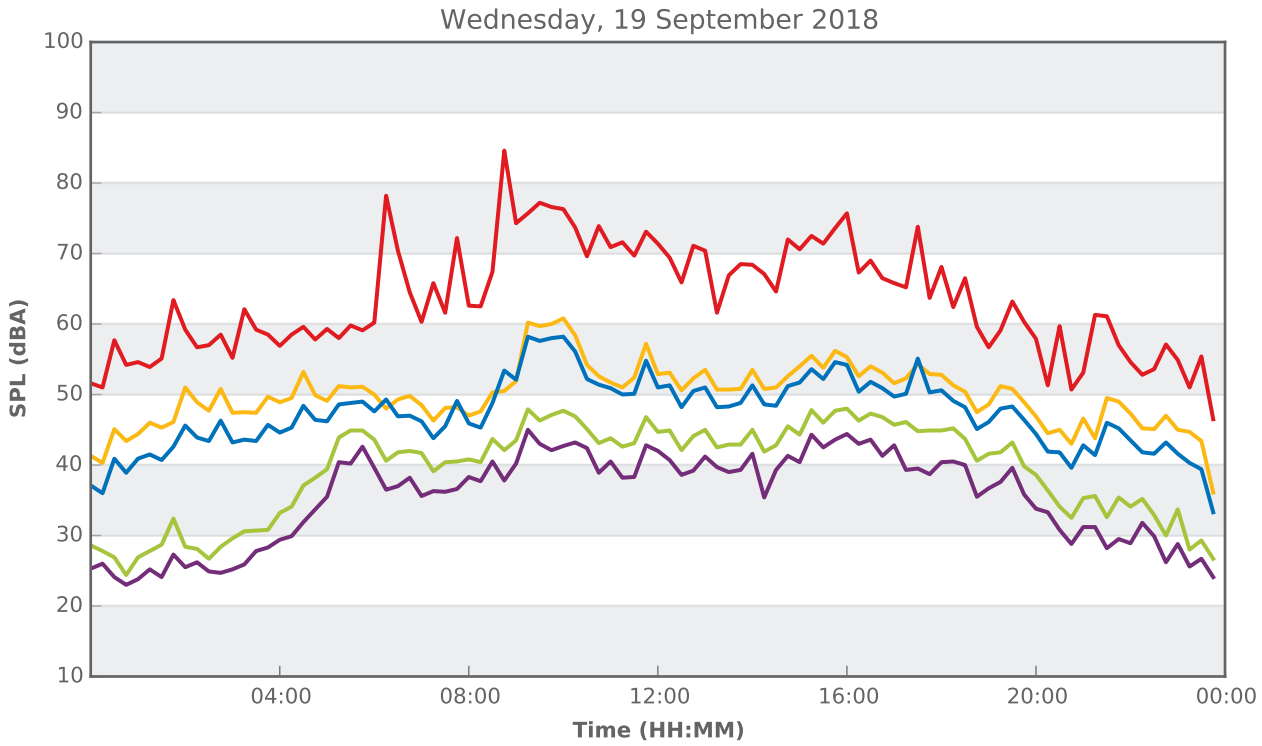
7A Sepoy Crescent, Muswellbrook



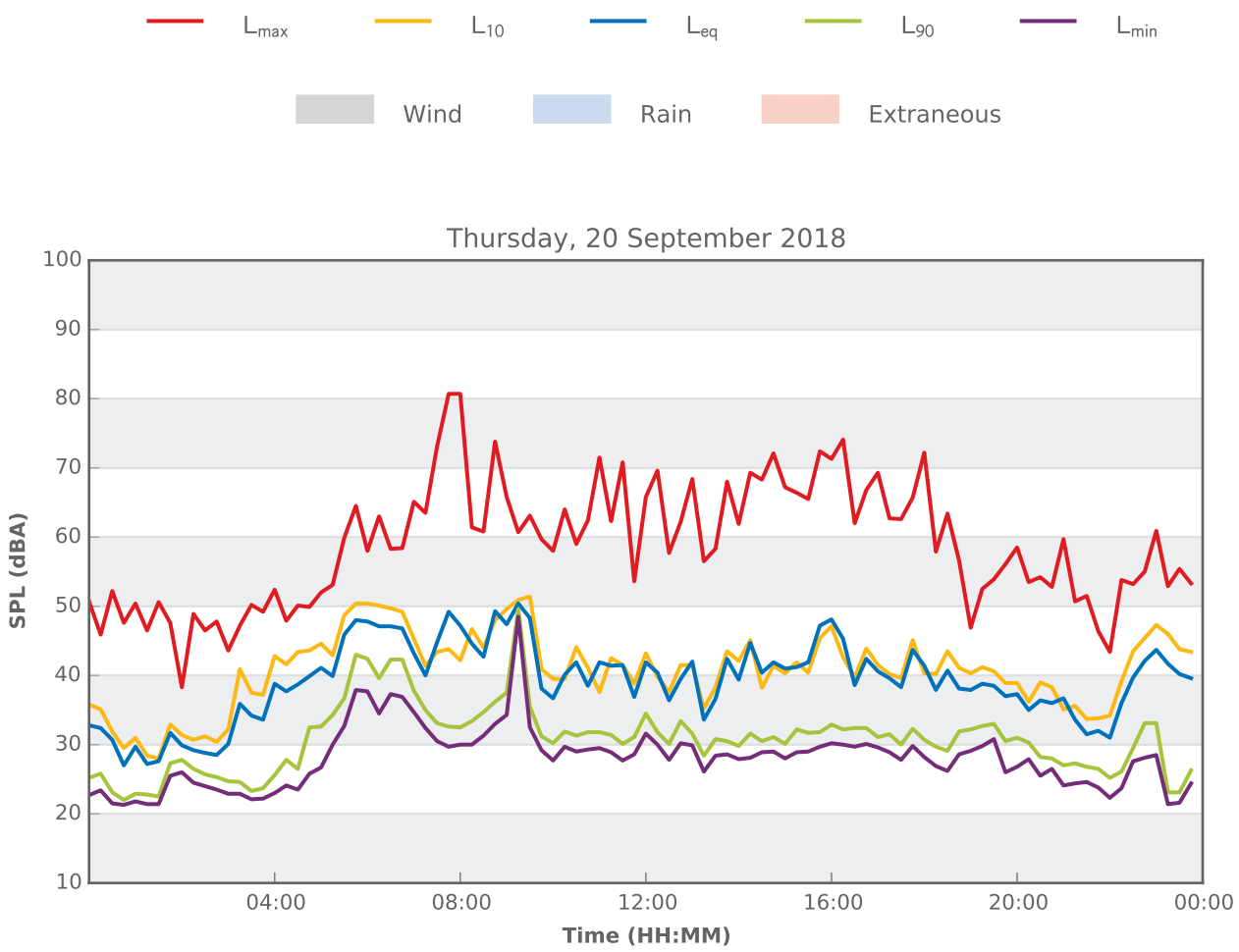


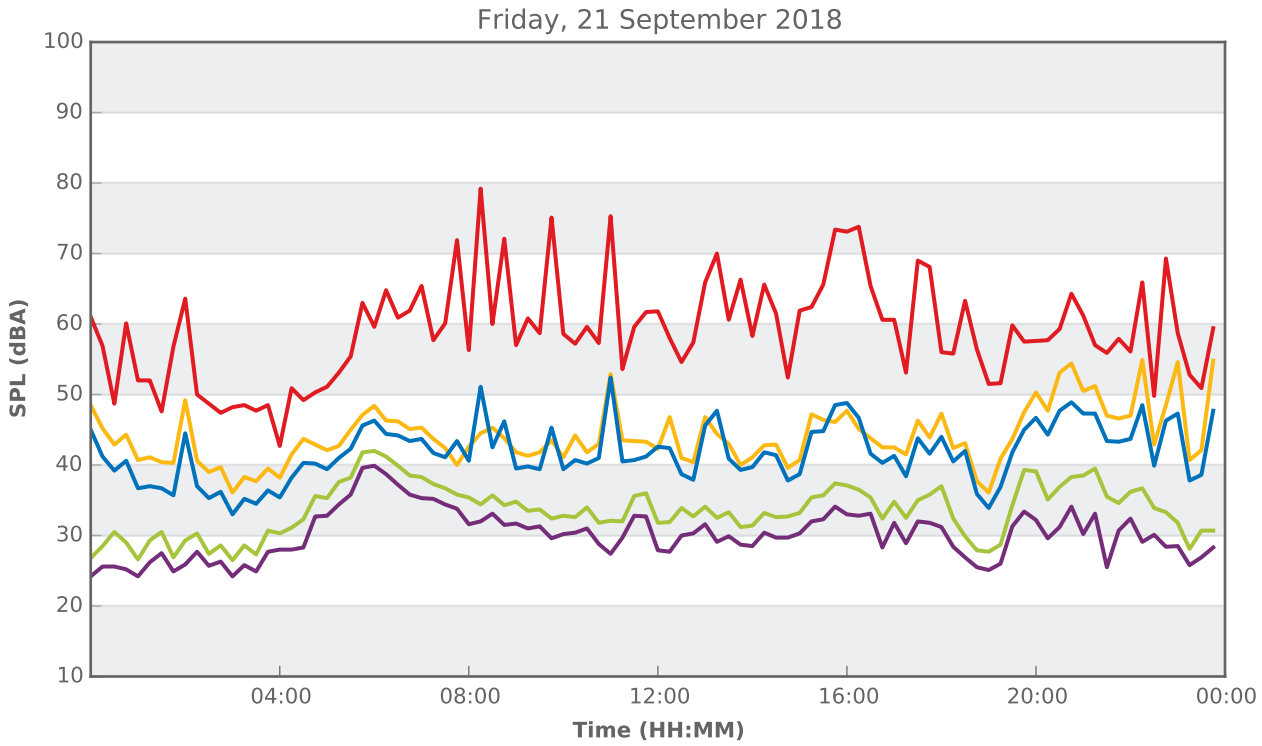
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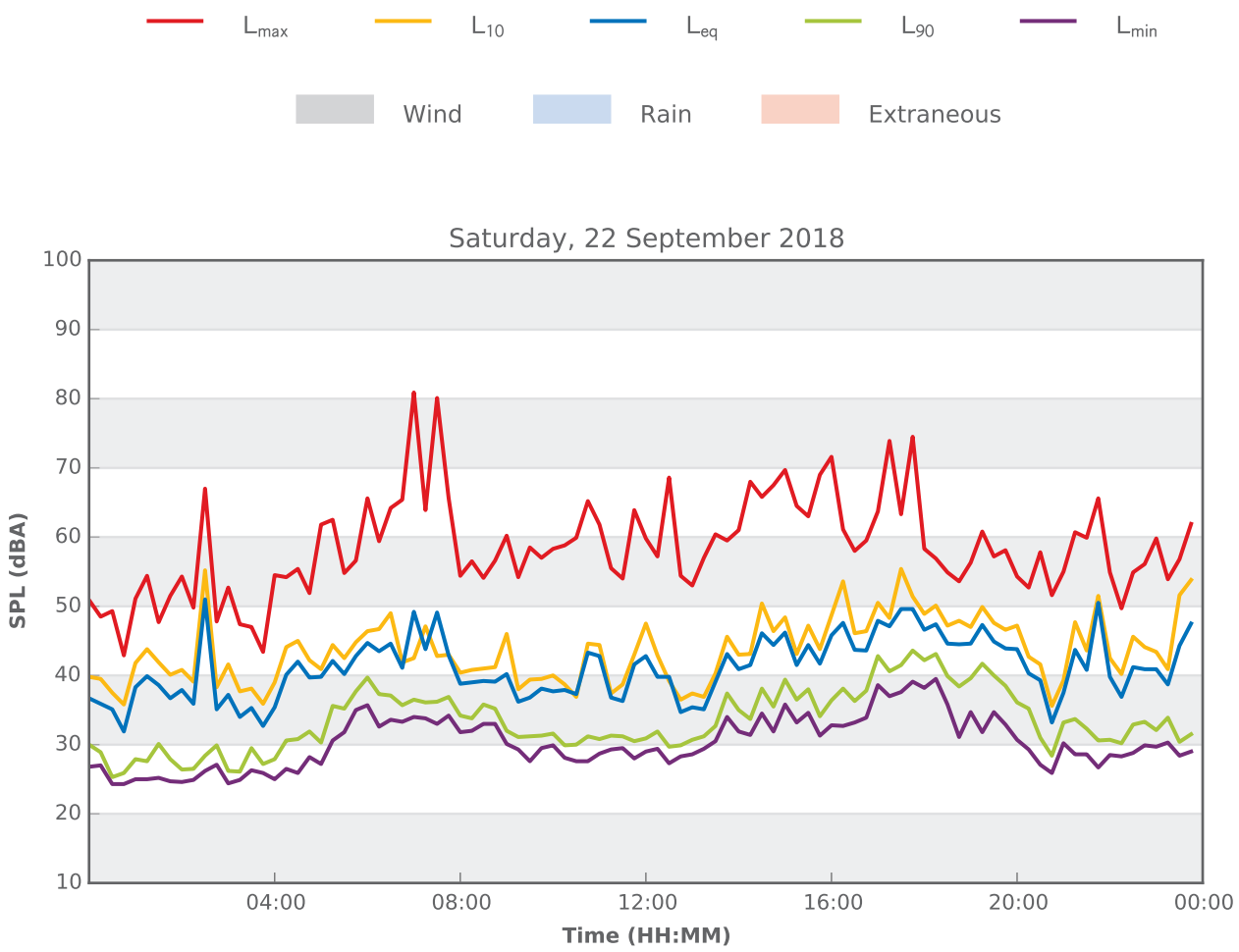


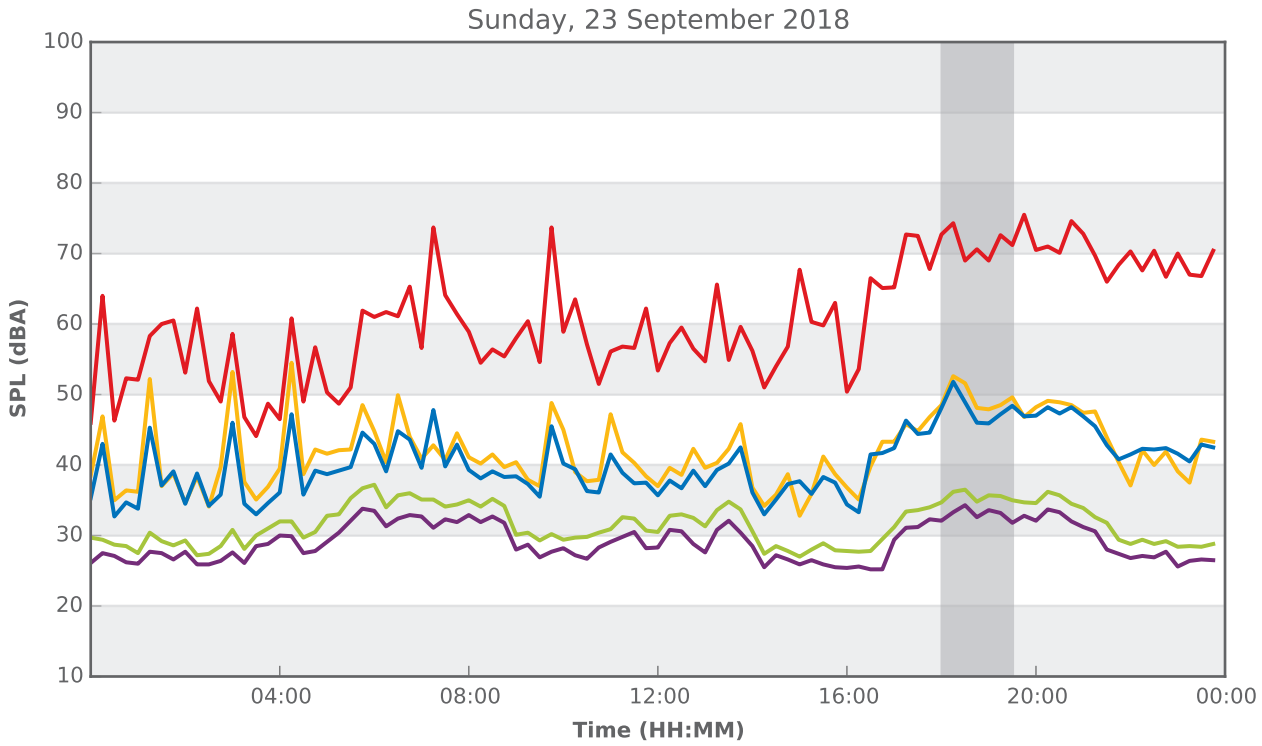
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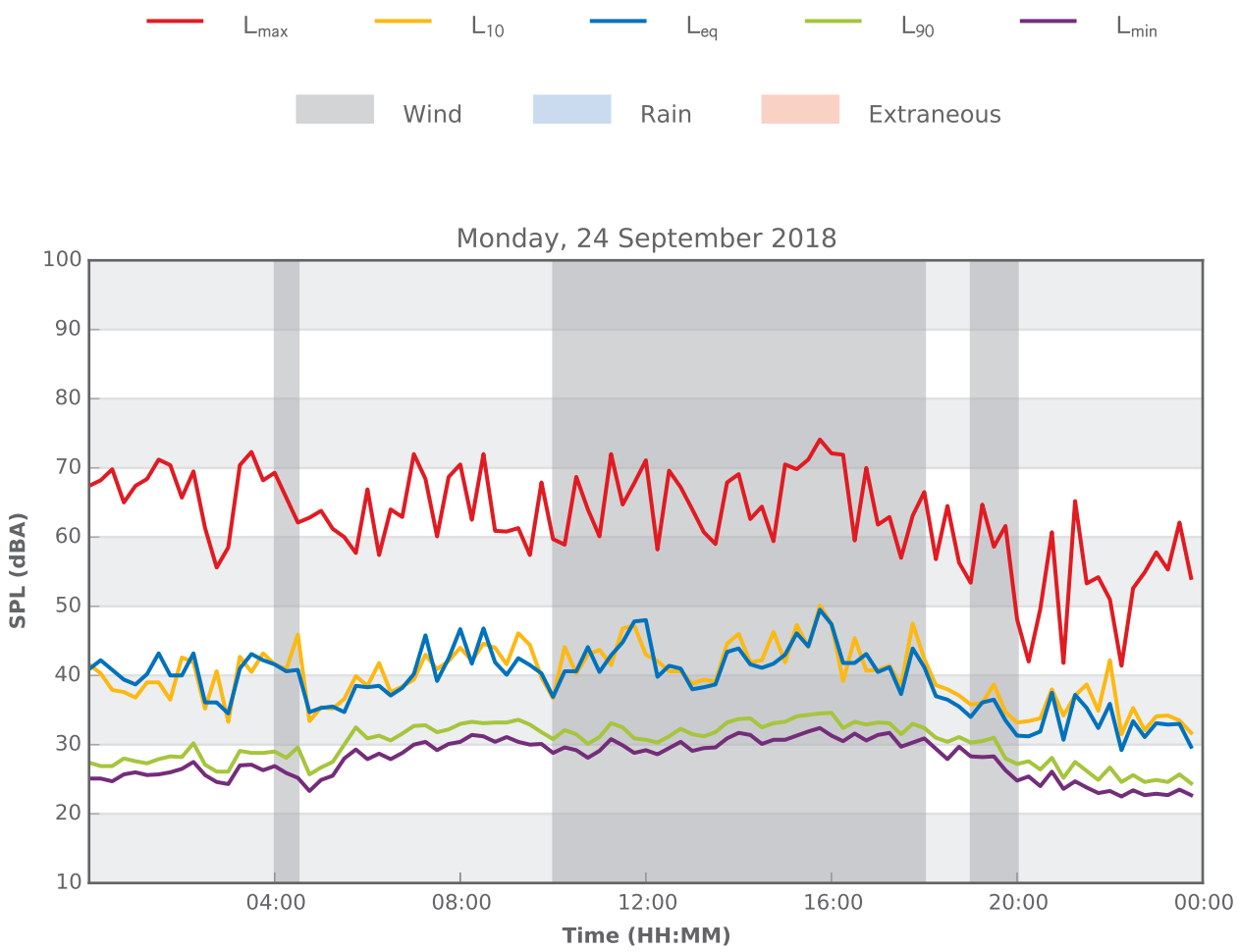


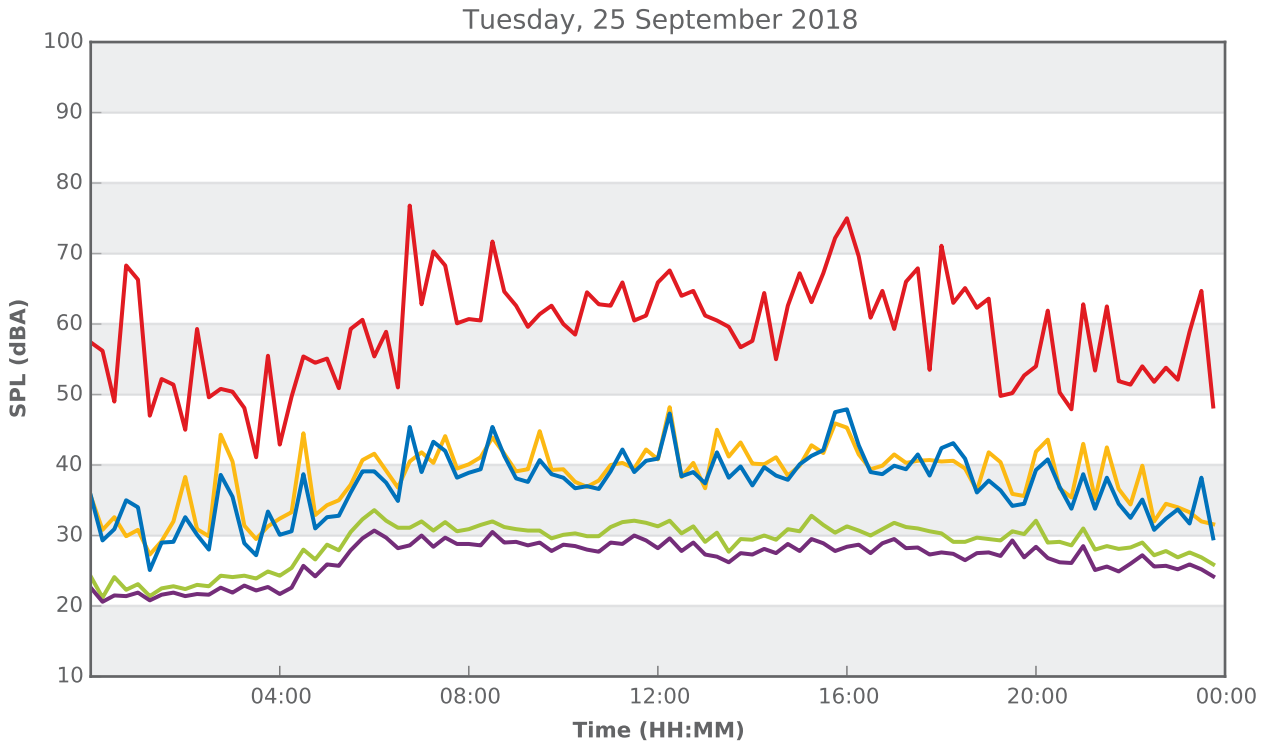
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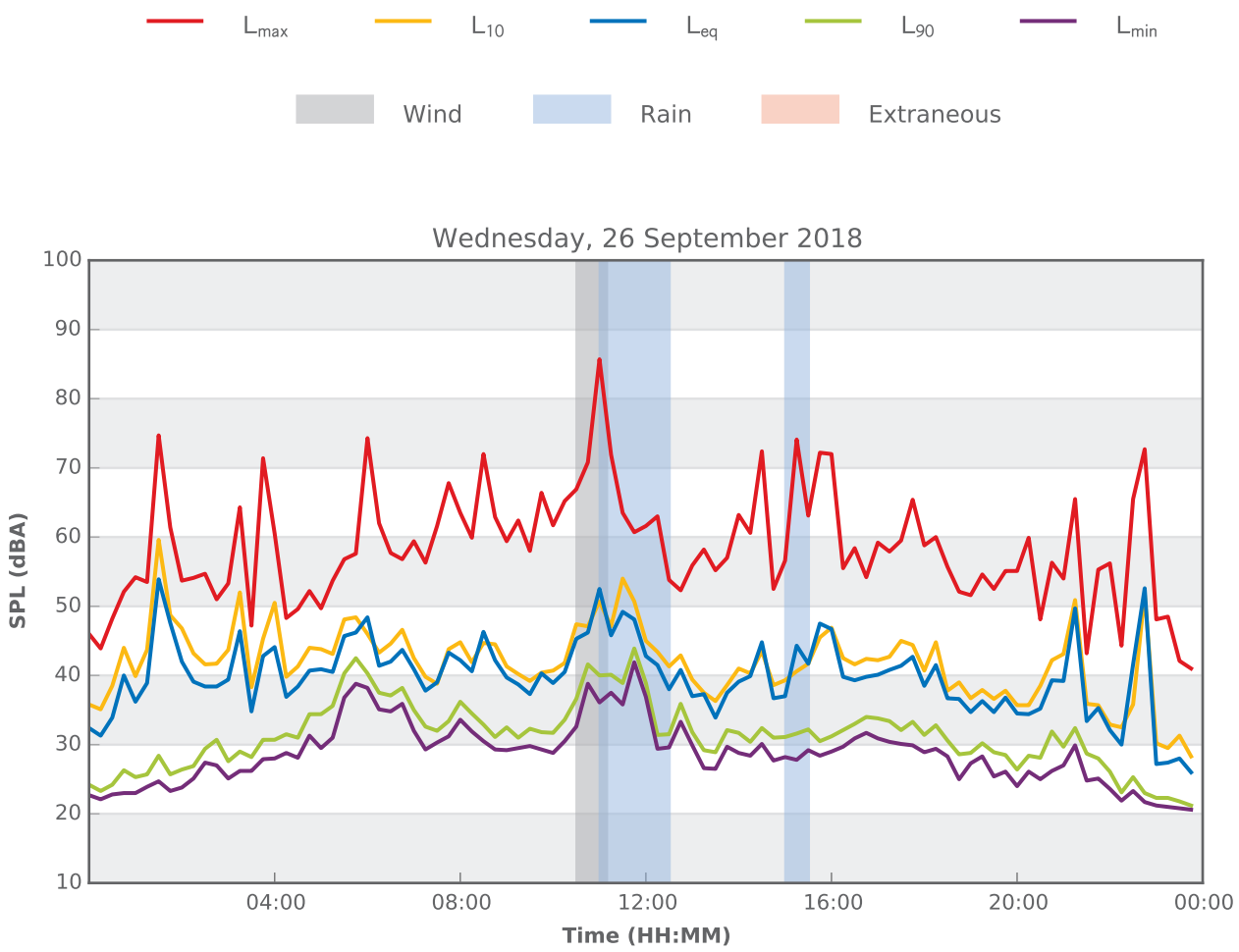


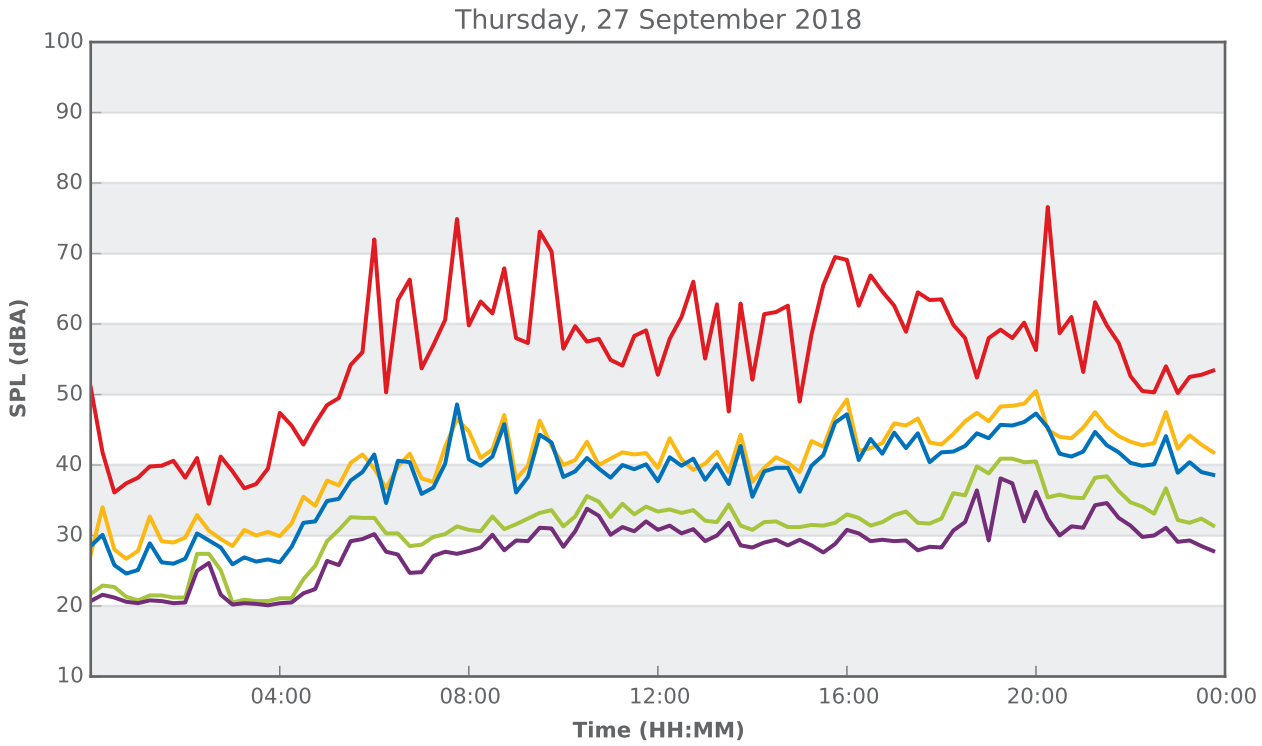
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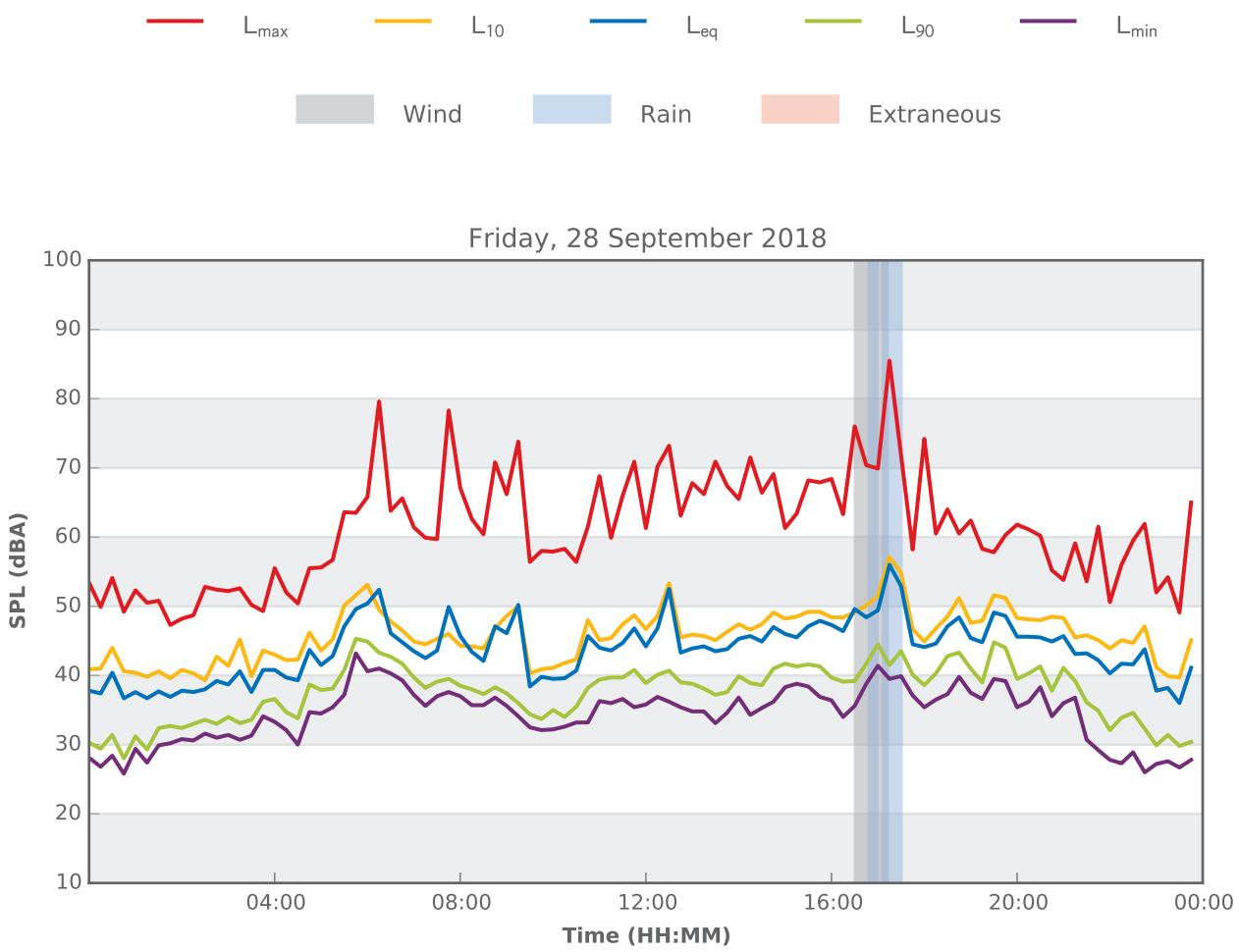


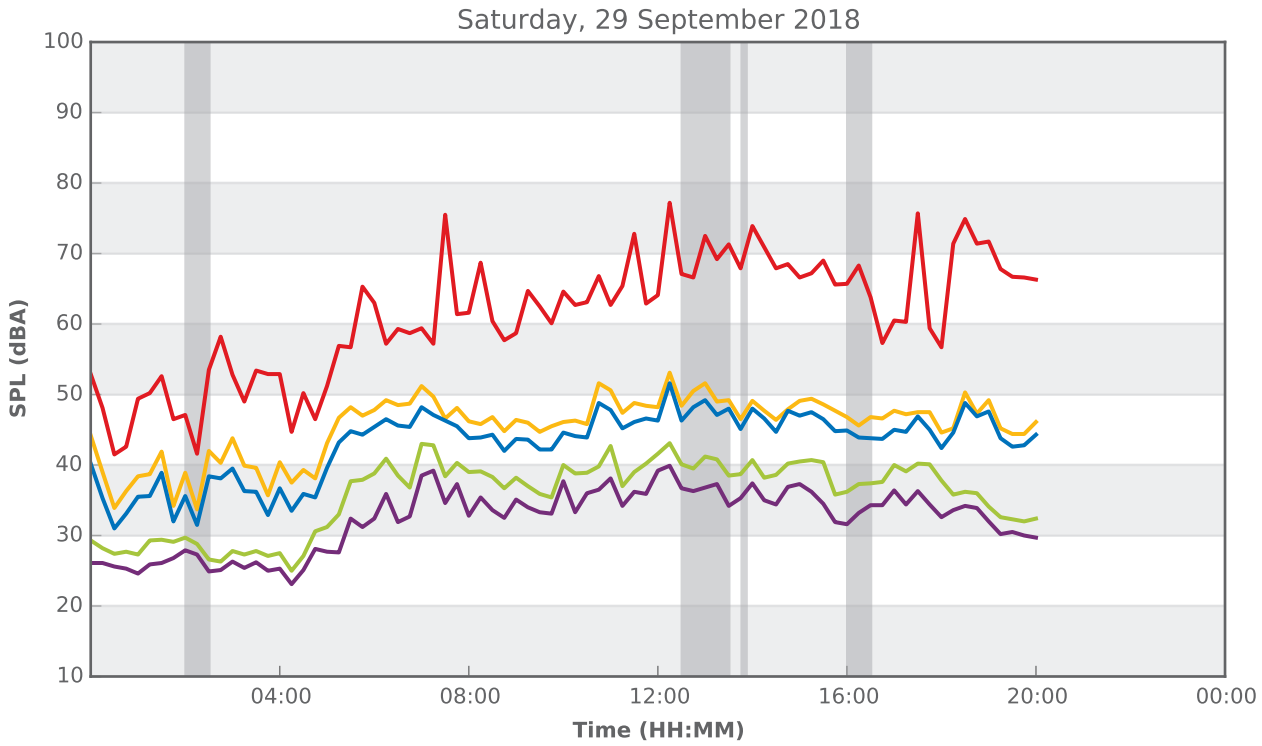
7A Sepoy Crescent, Muswellbrook



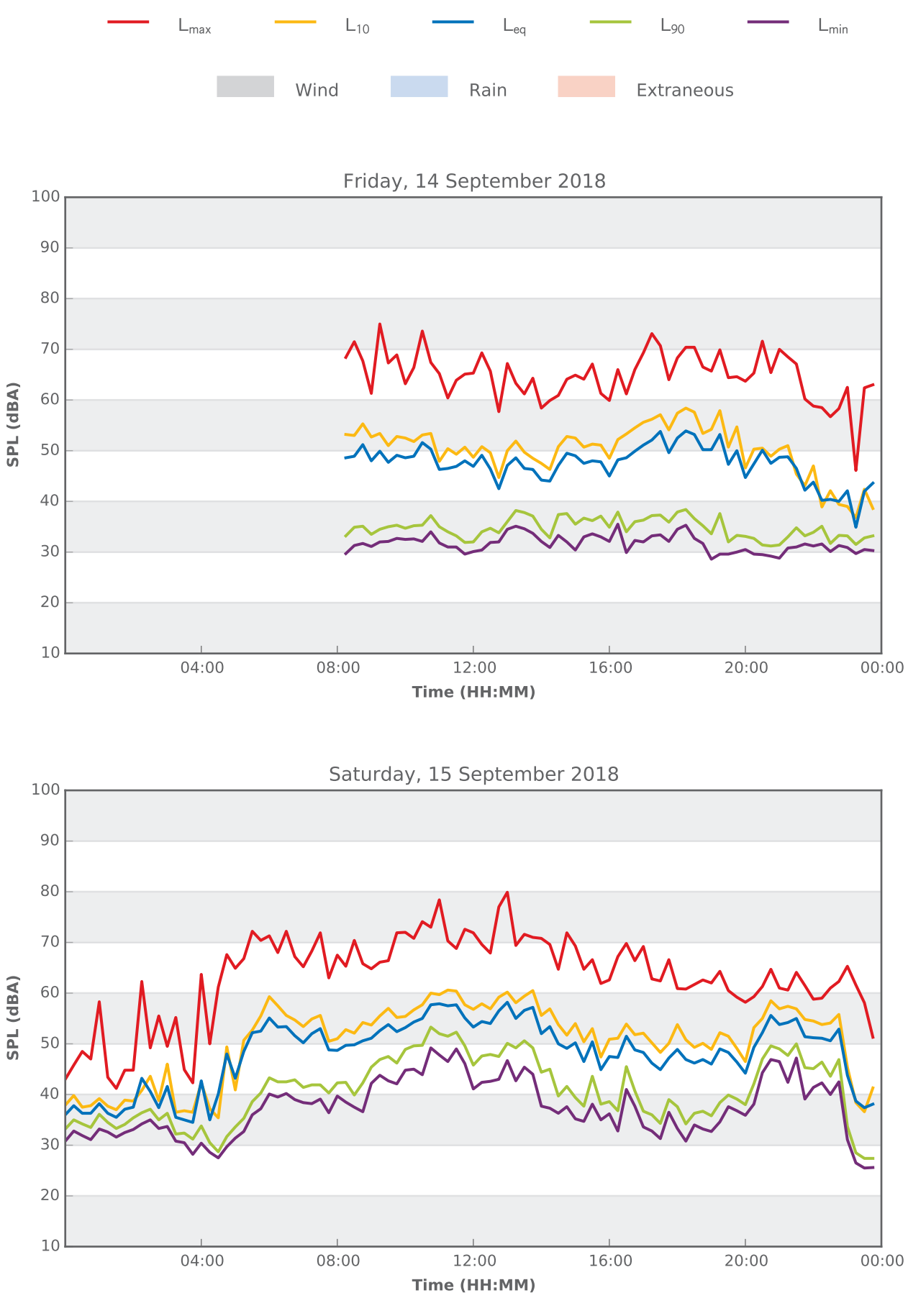


7A Sepoy Crescent, Muswellbrook

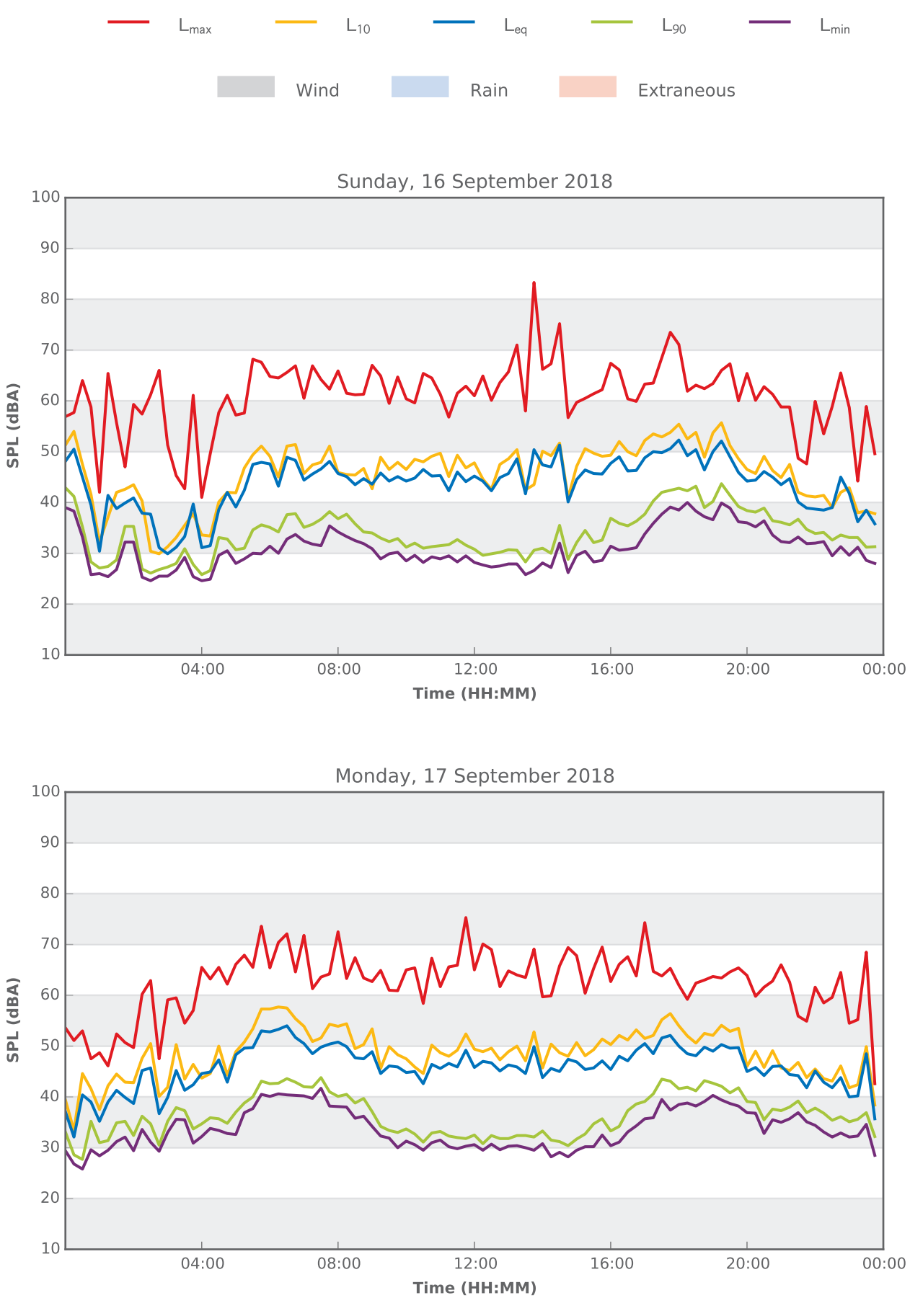




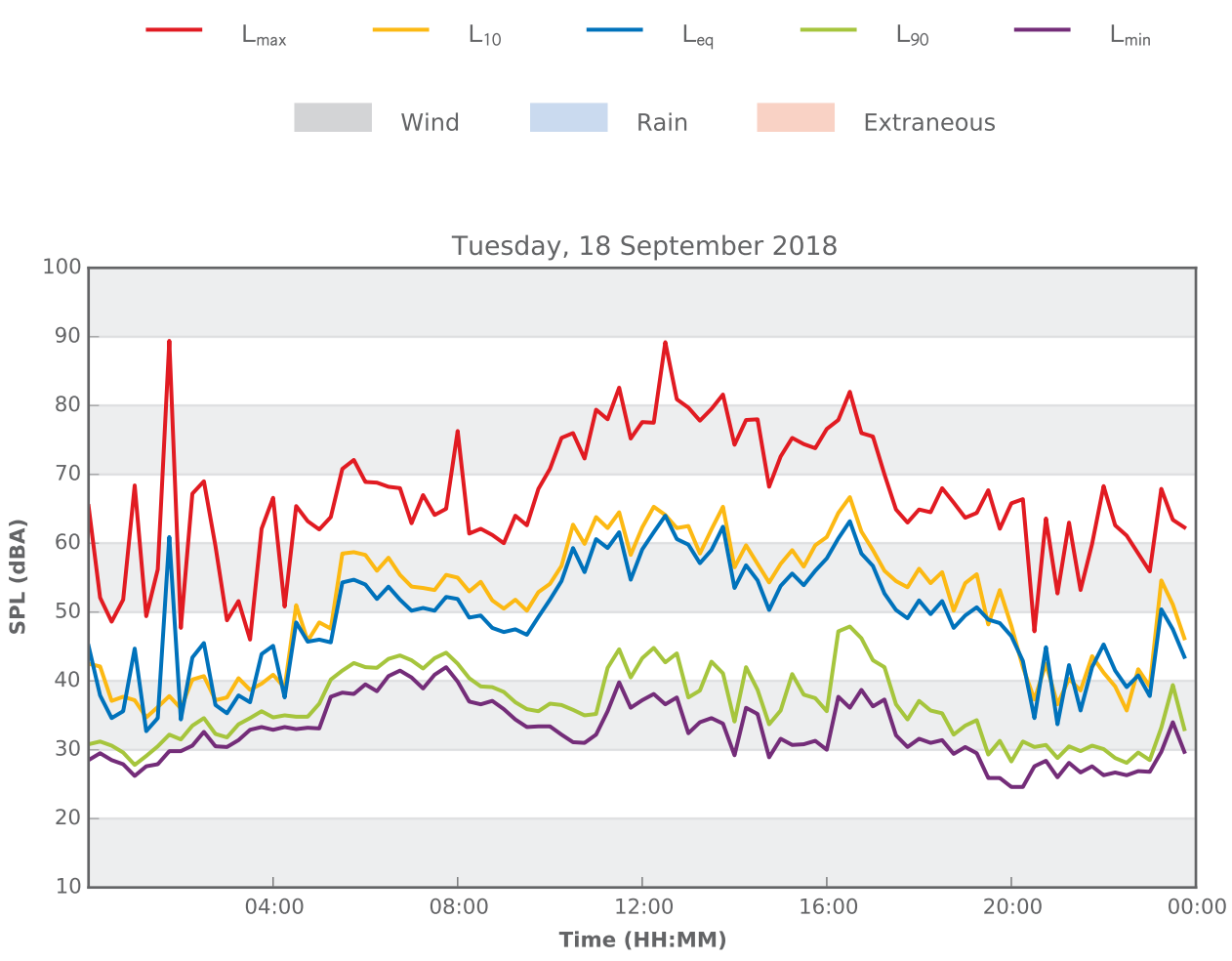
168 Kayuga Road, Muswellbrook

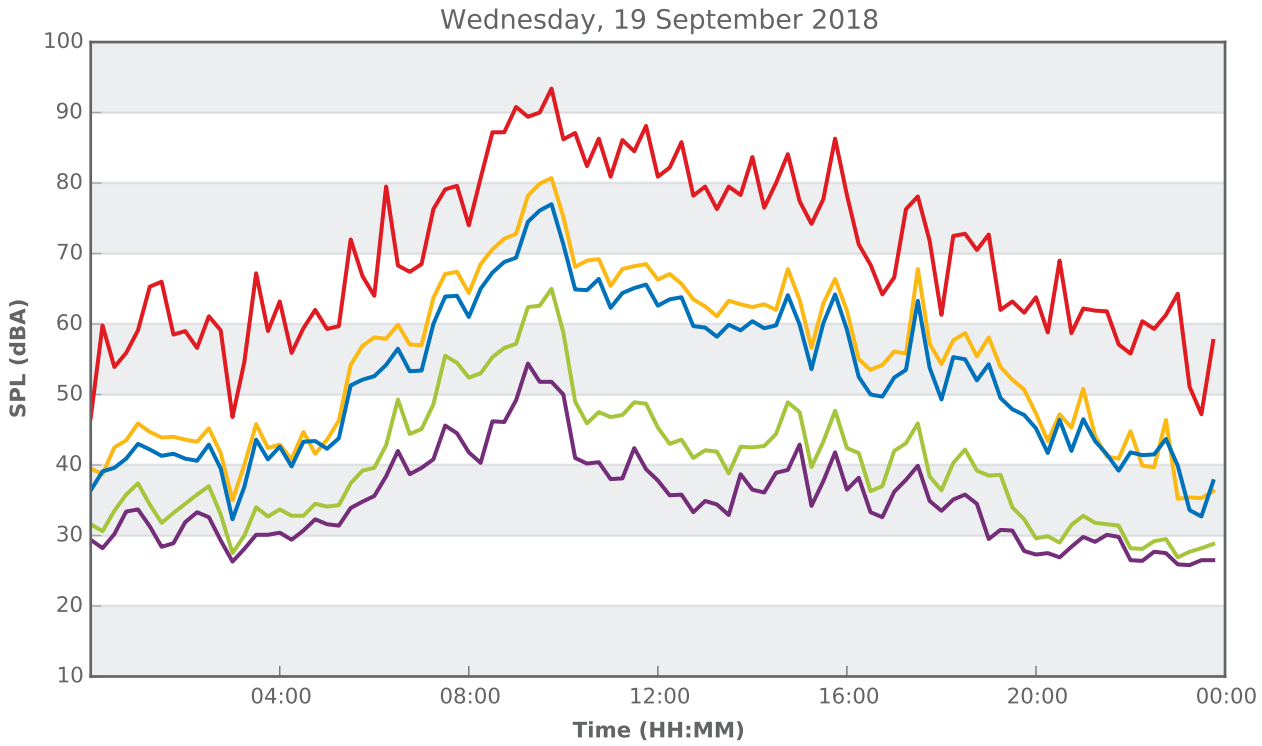


168 Kayuga Road, Muswellbrook

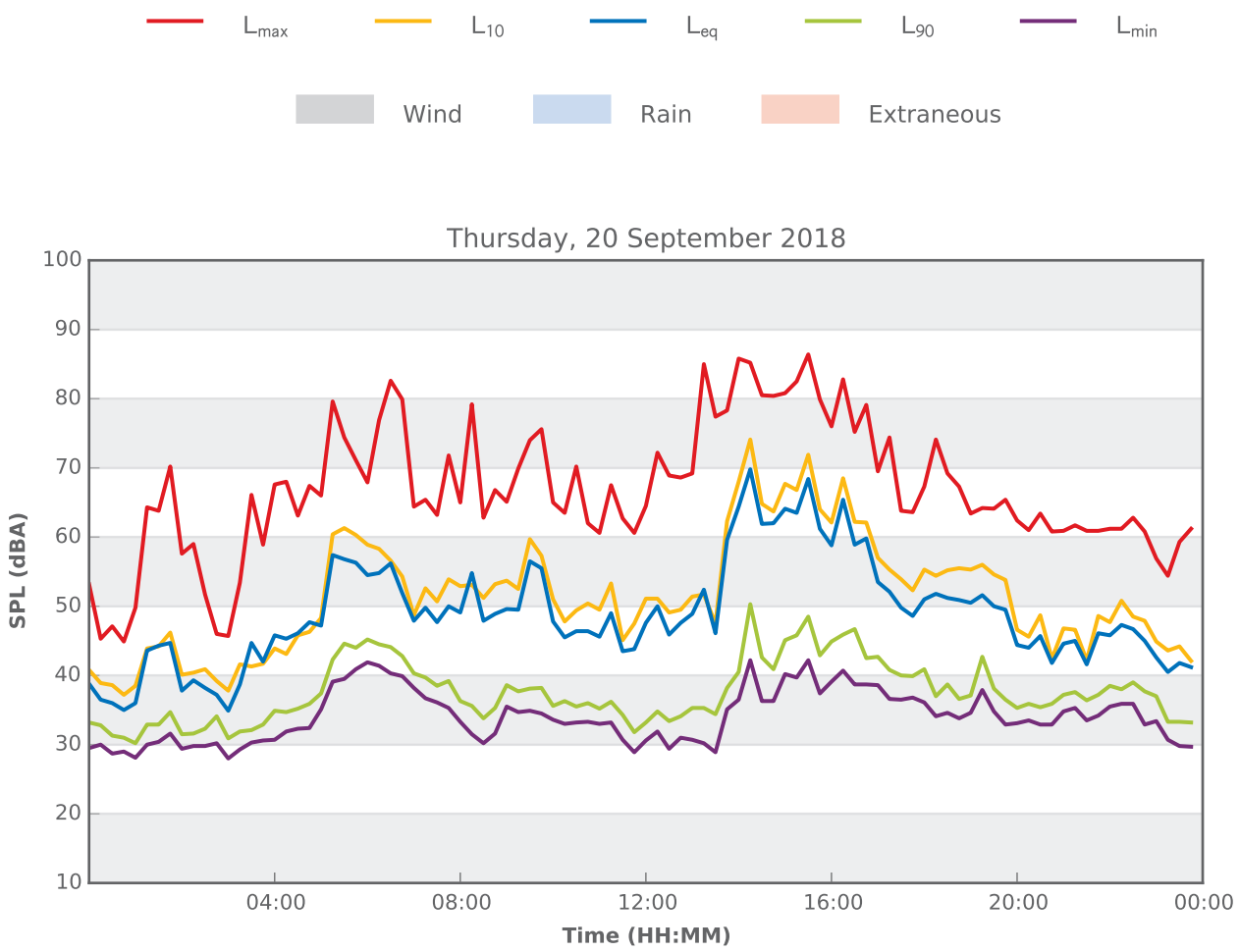


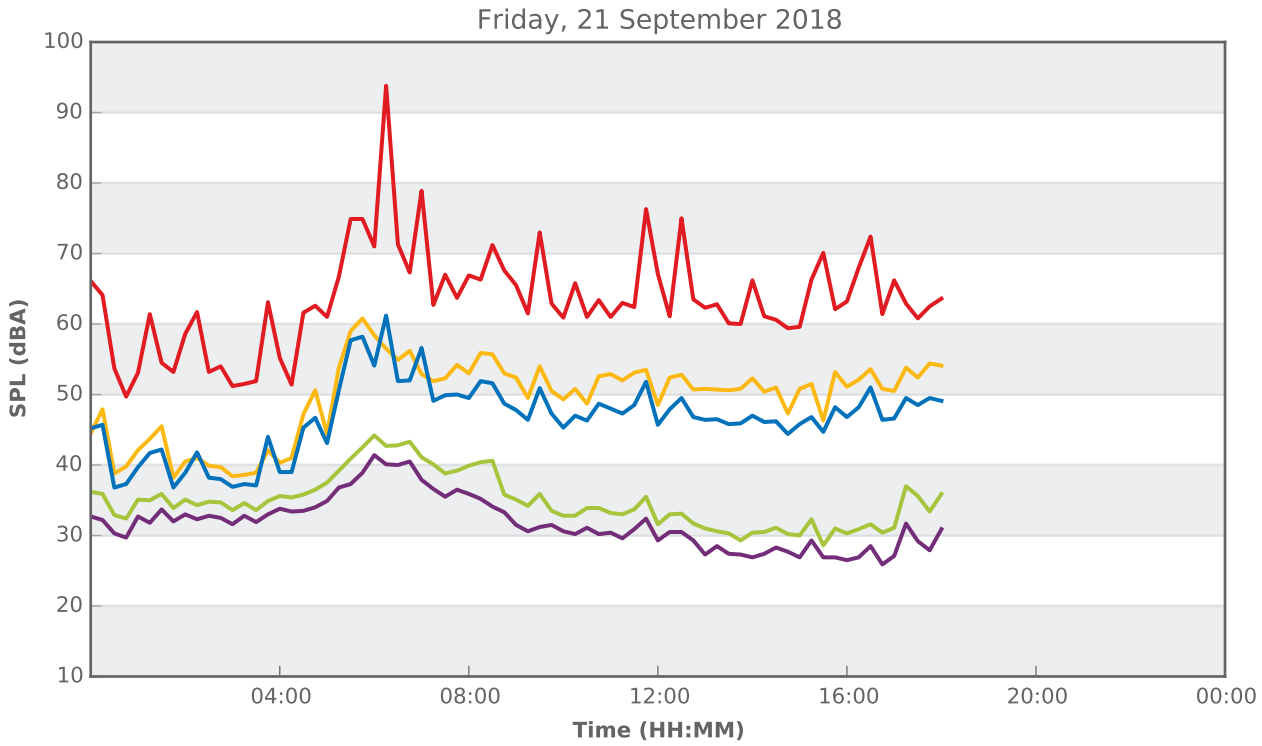
168 Kayuga Road, Muswellbrook





168 Kayuga Road, Muswellbrook

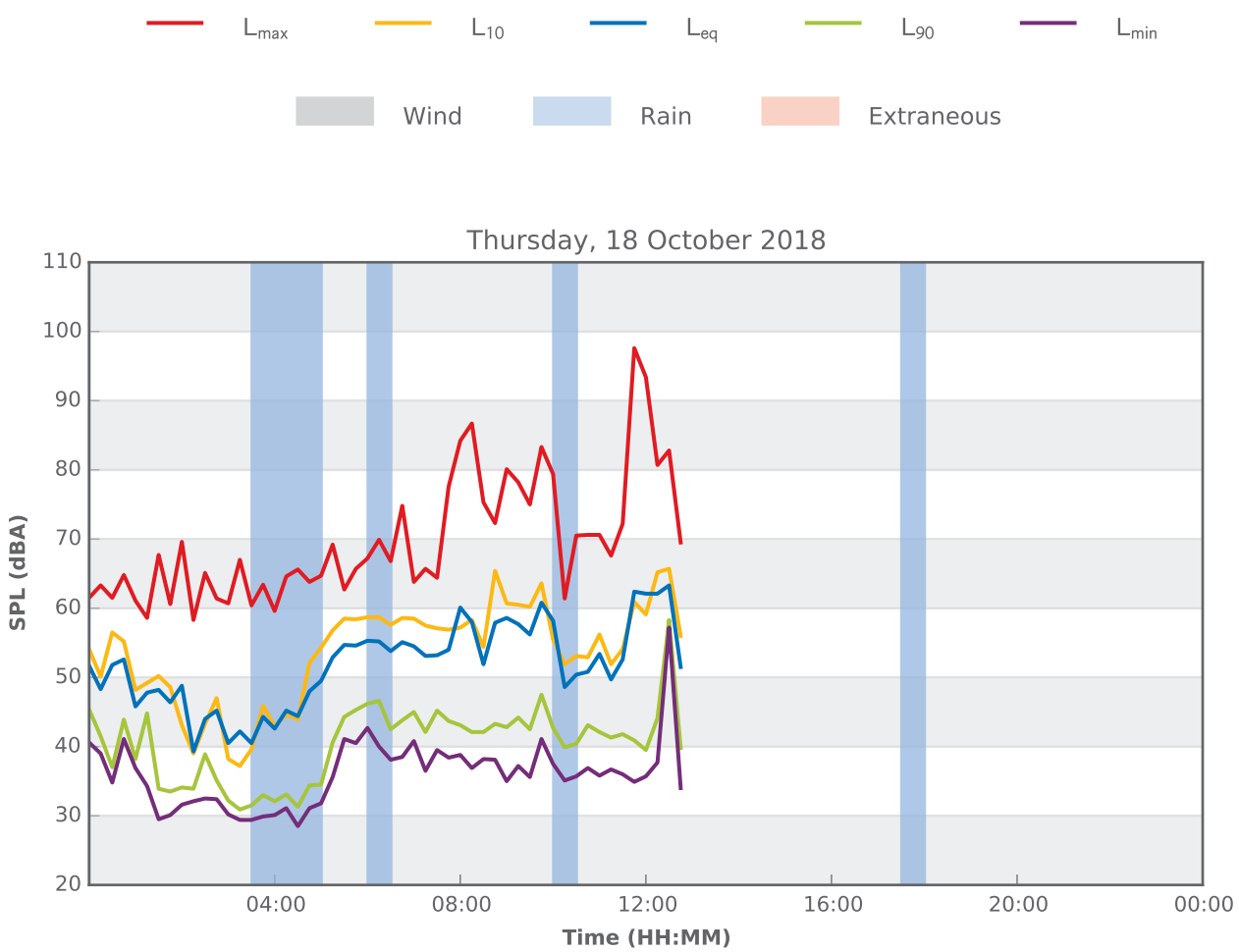




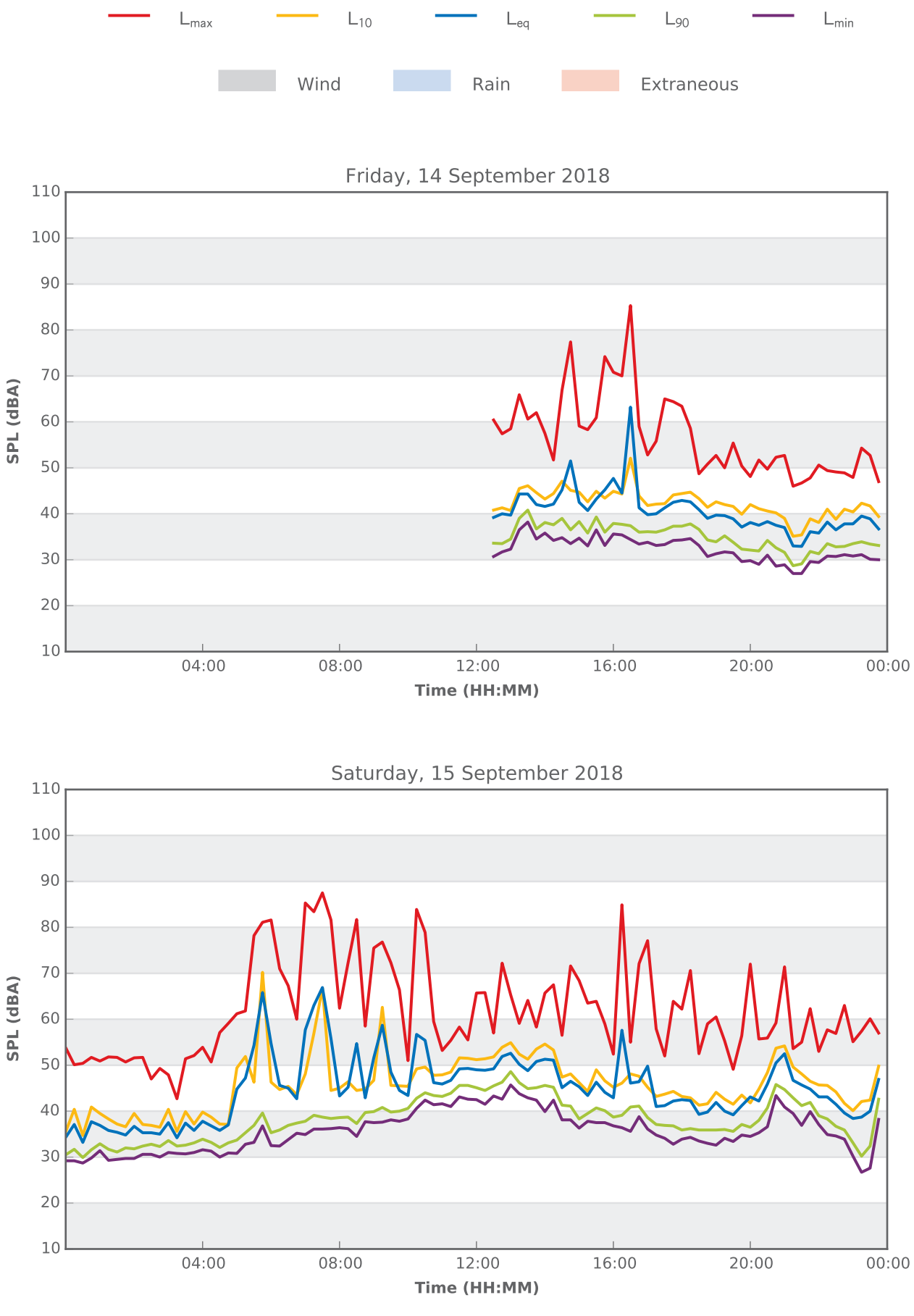
107 Sydney Street, Muswellbrook



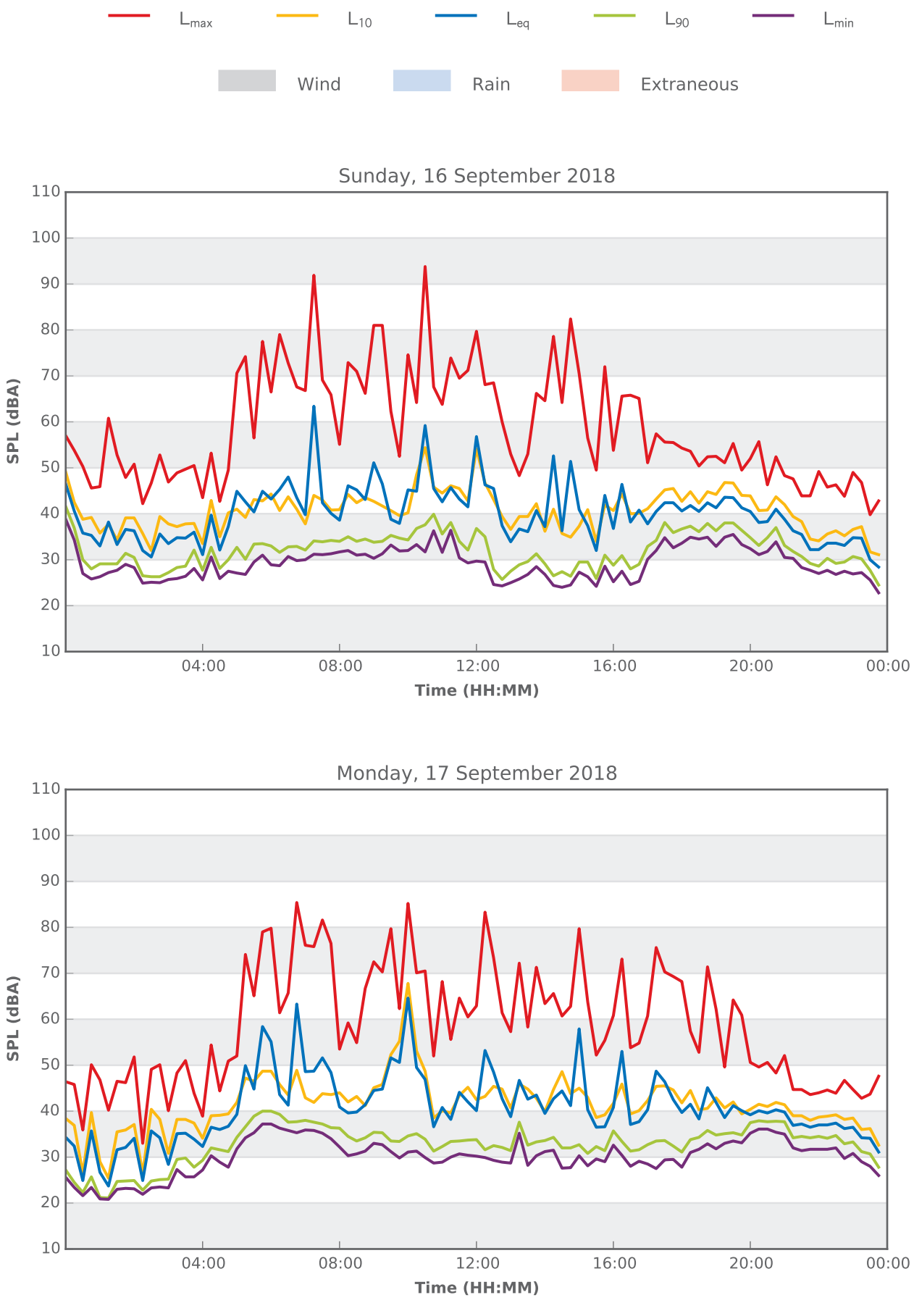
107 Sydney Street, Muswellbrook



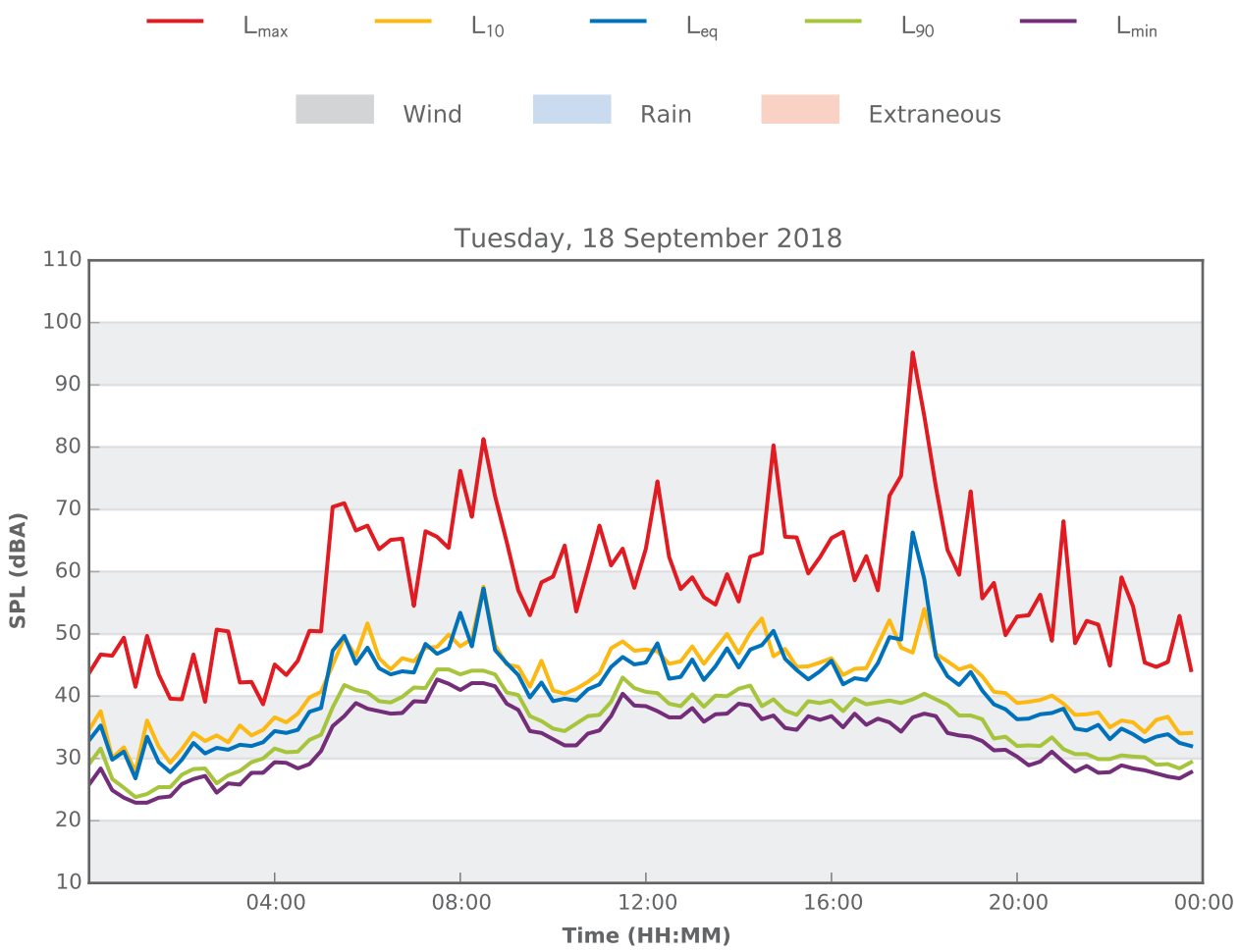
8 Thiess Cresecent, Muswelbrook

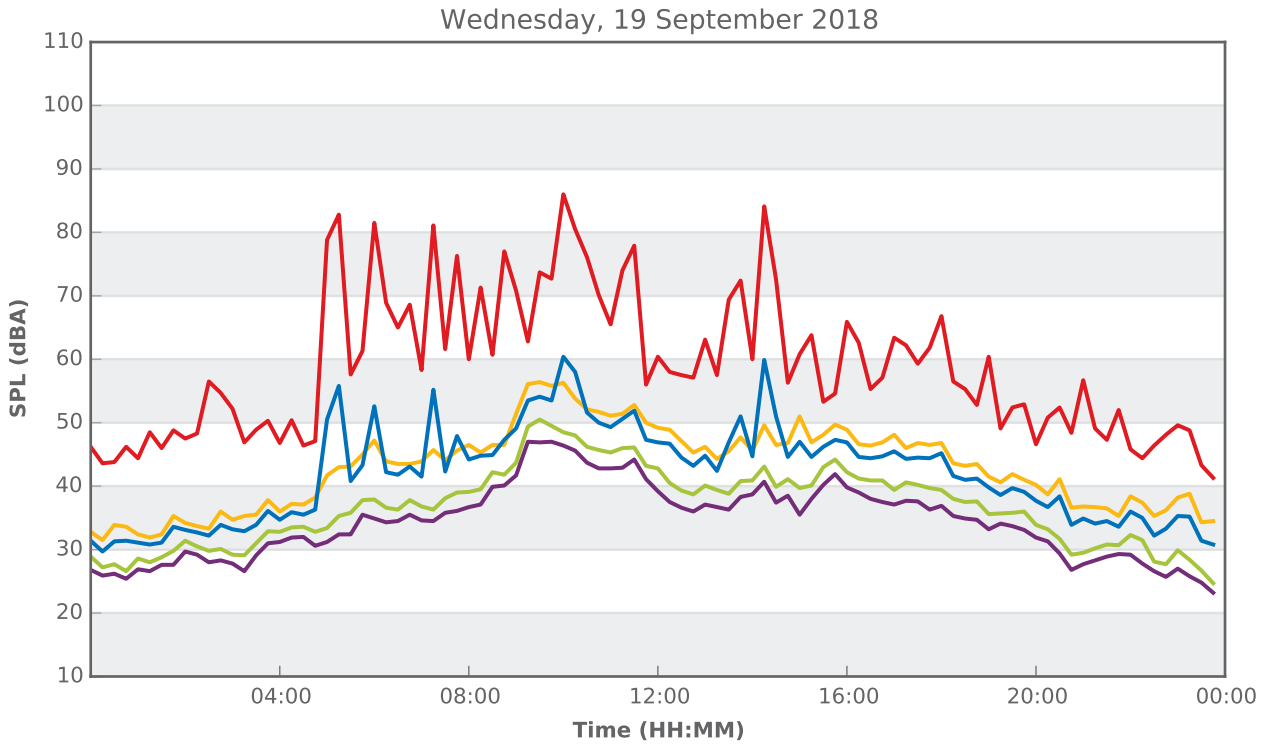


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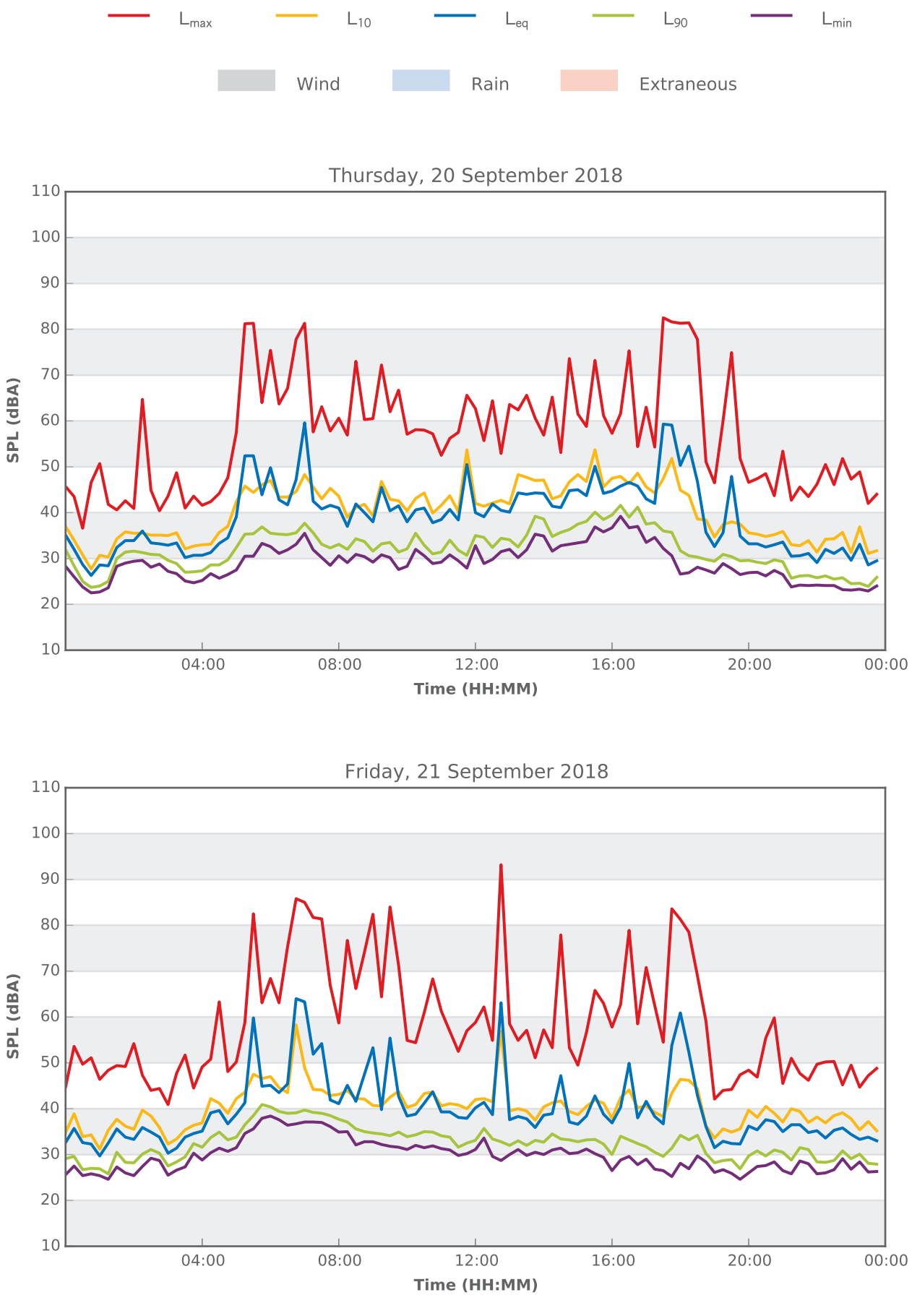


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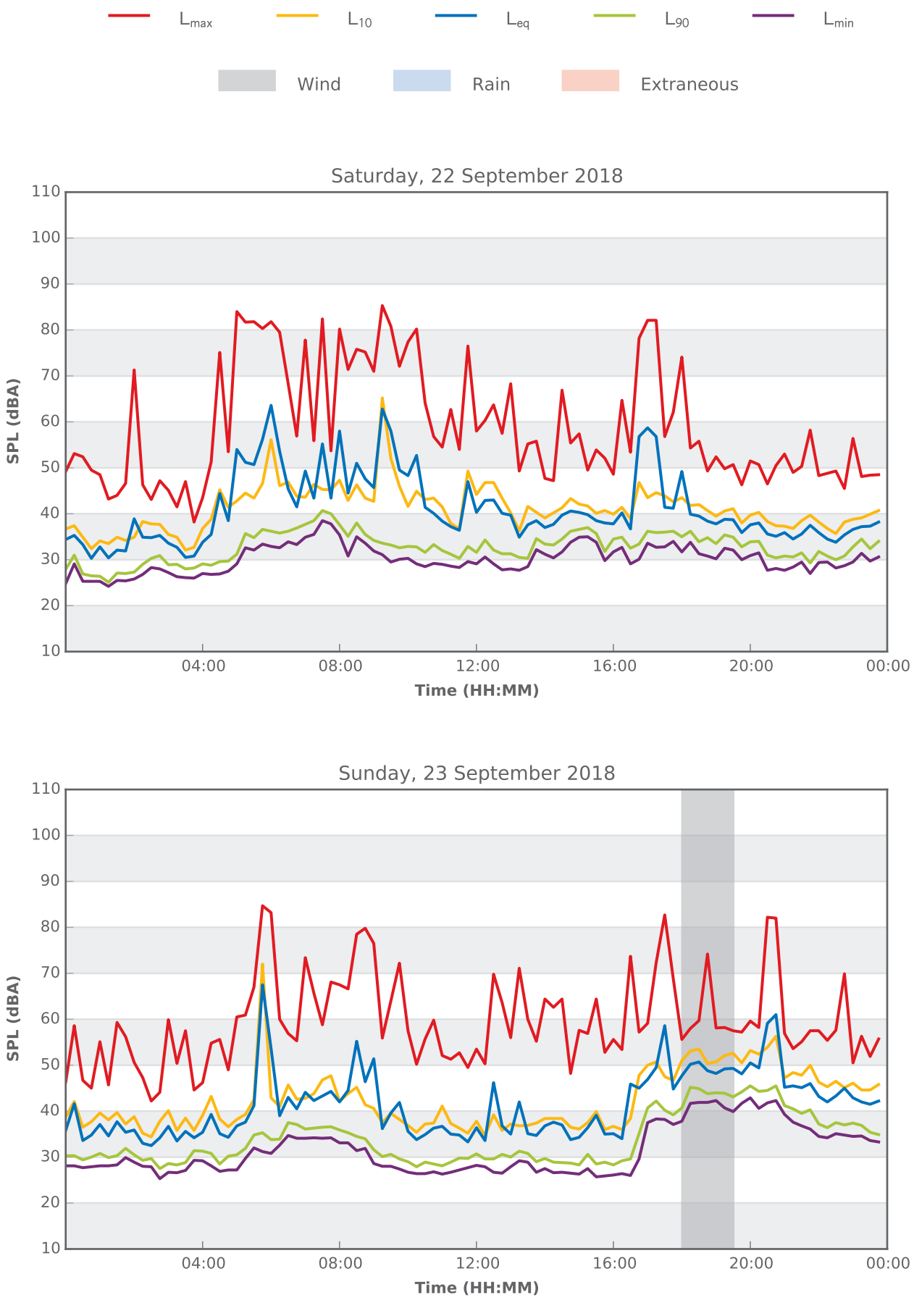




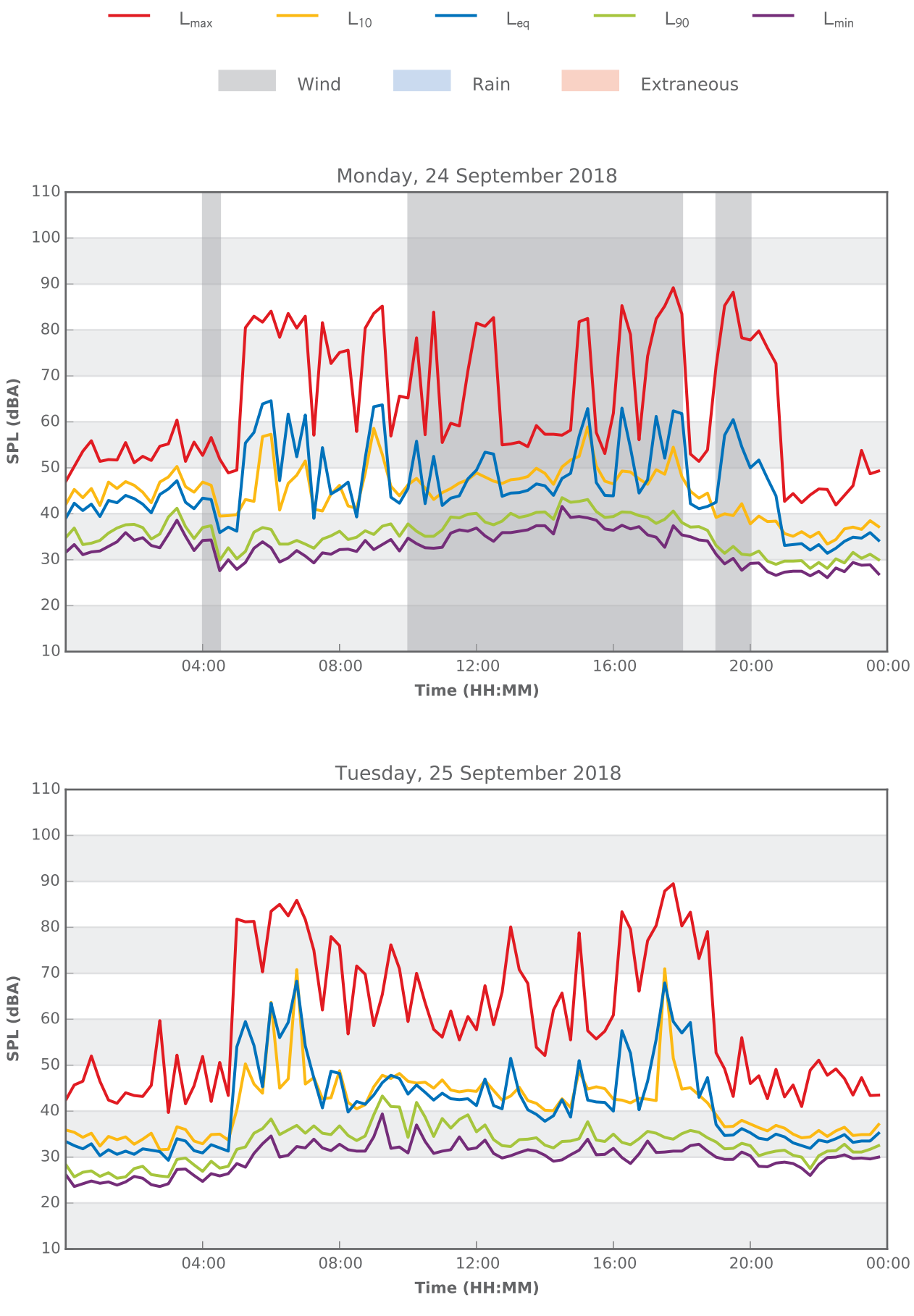
8 Thiess Cresecent, Muswelbrook



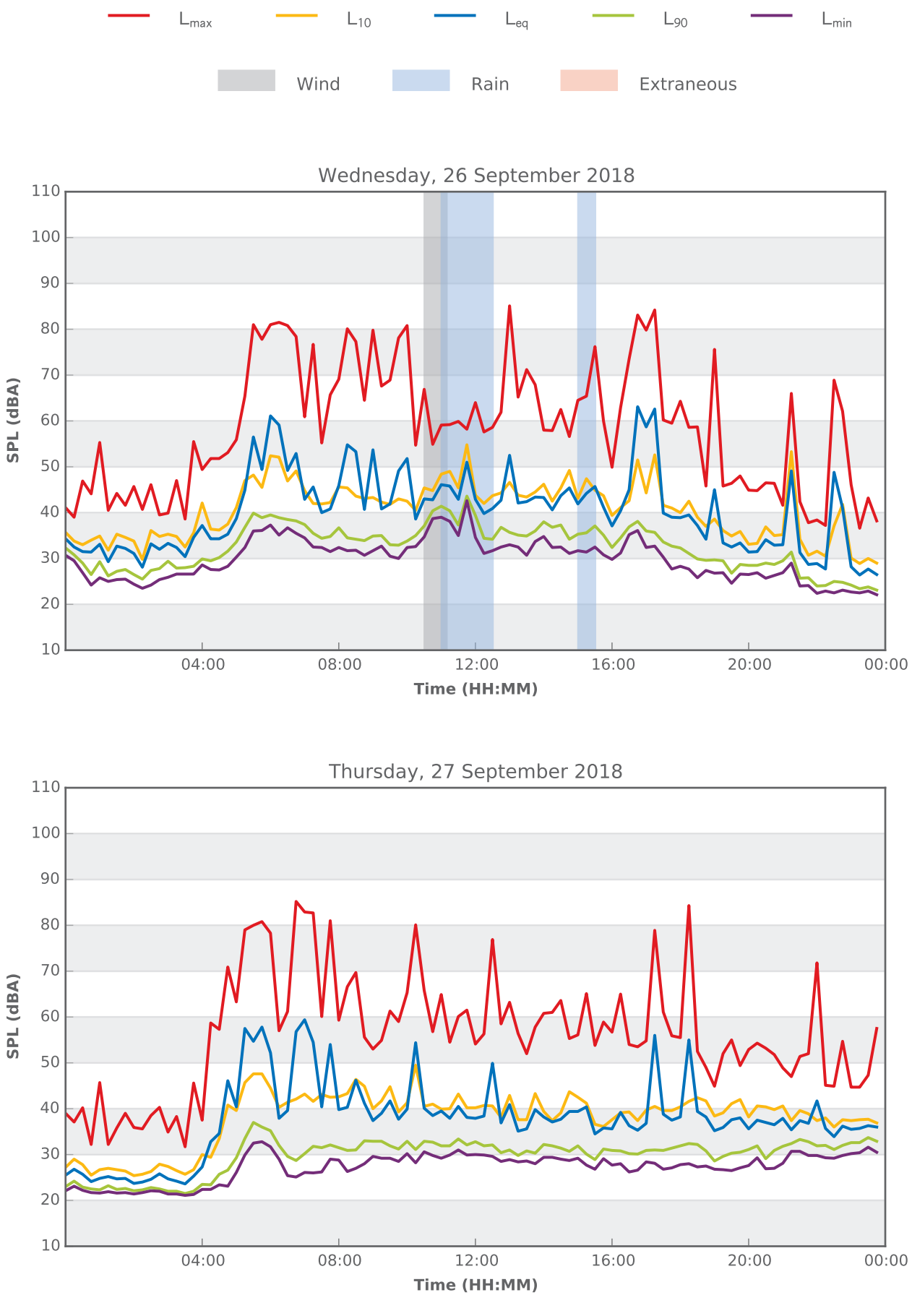
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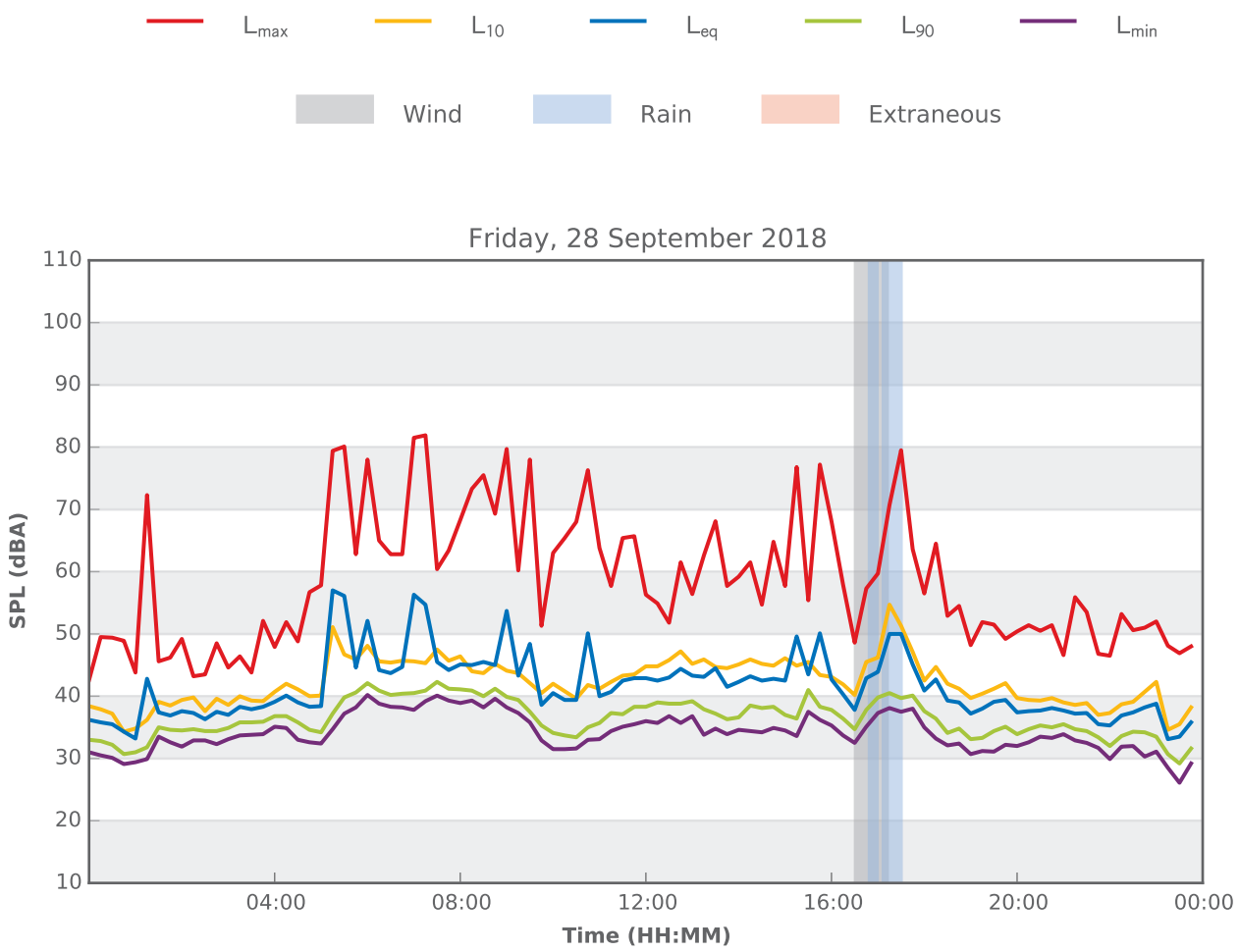
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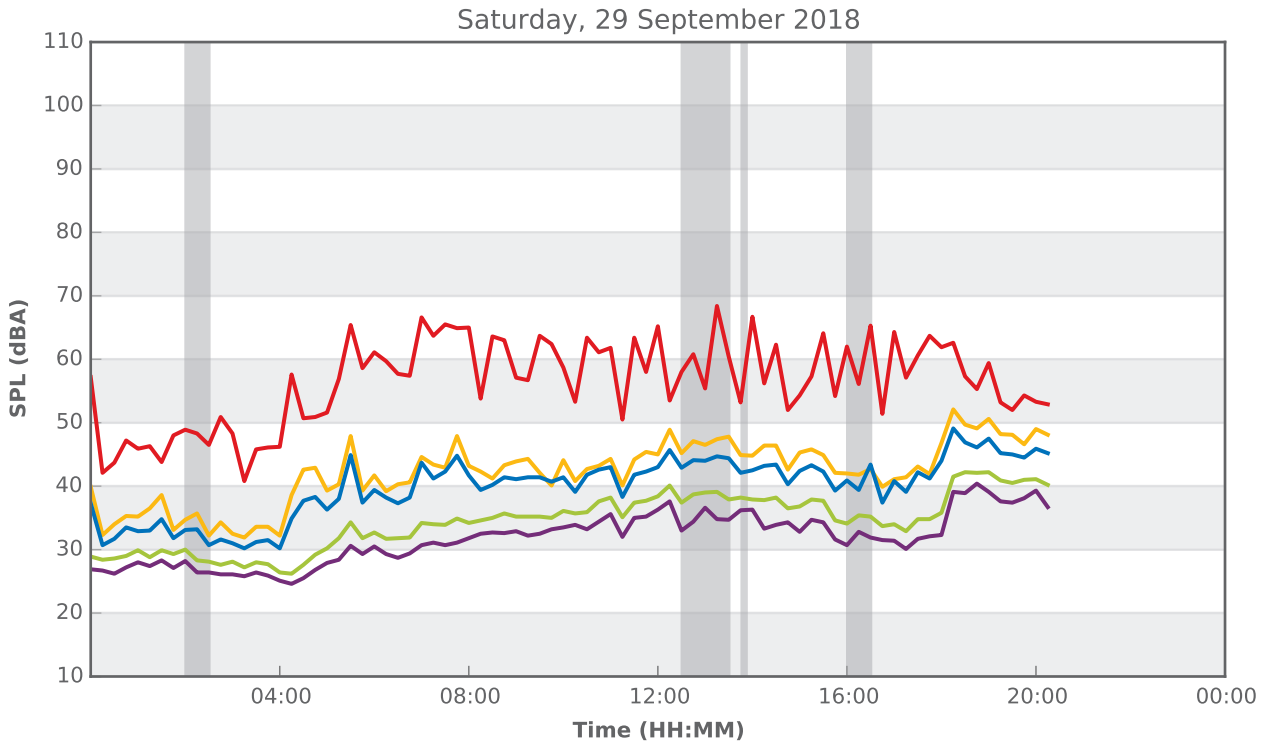


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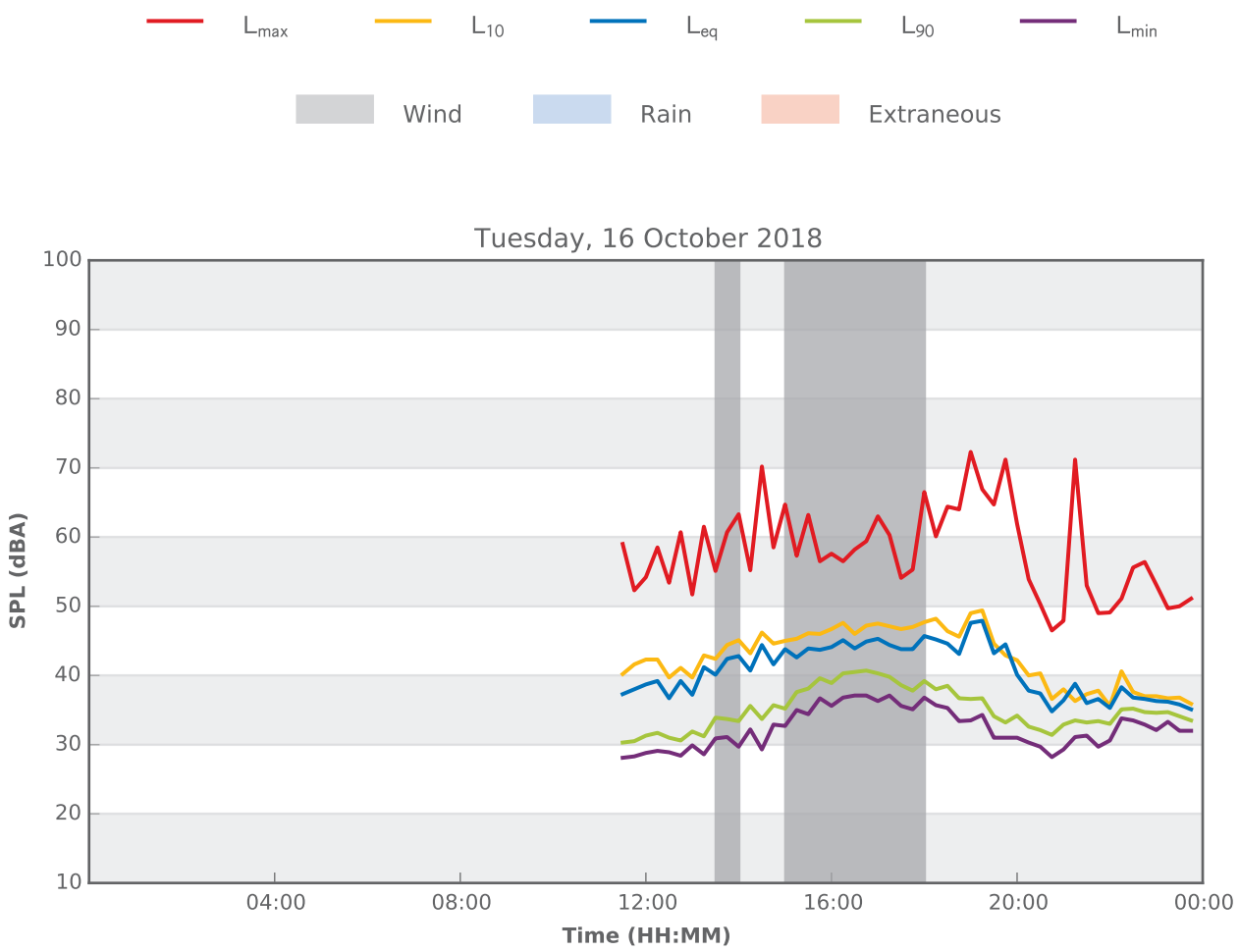


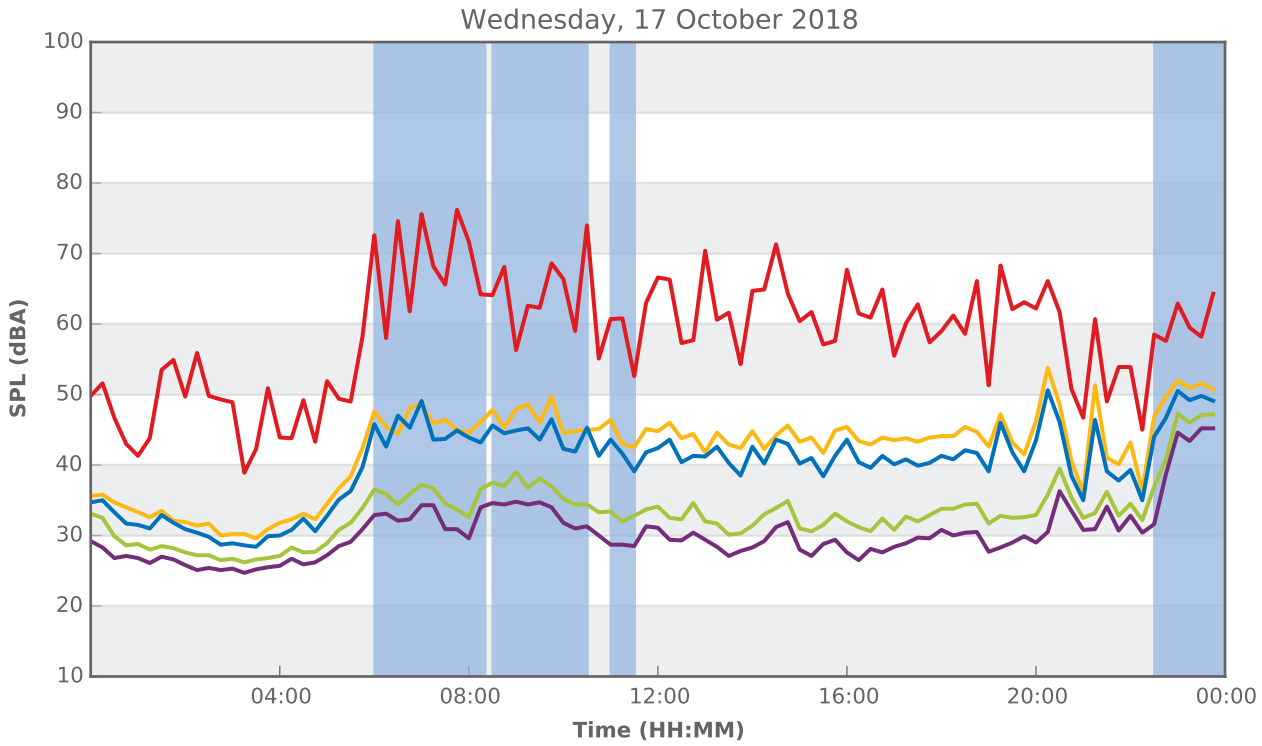
8 Thiess Cresecent, Muswelbrook



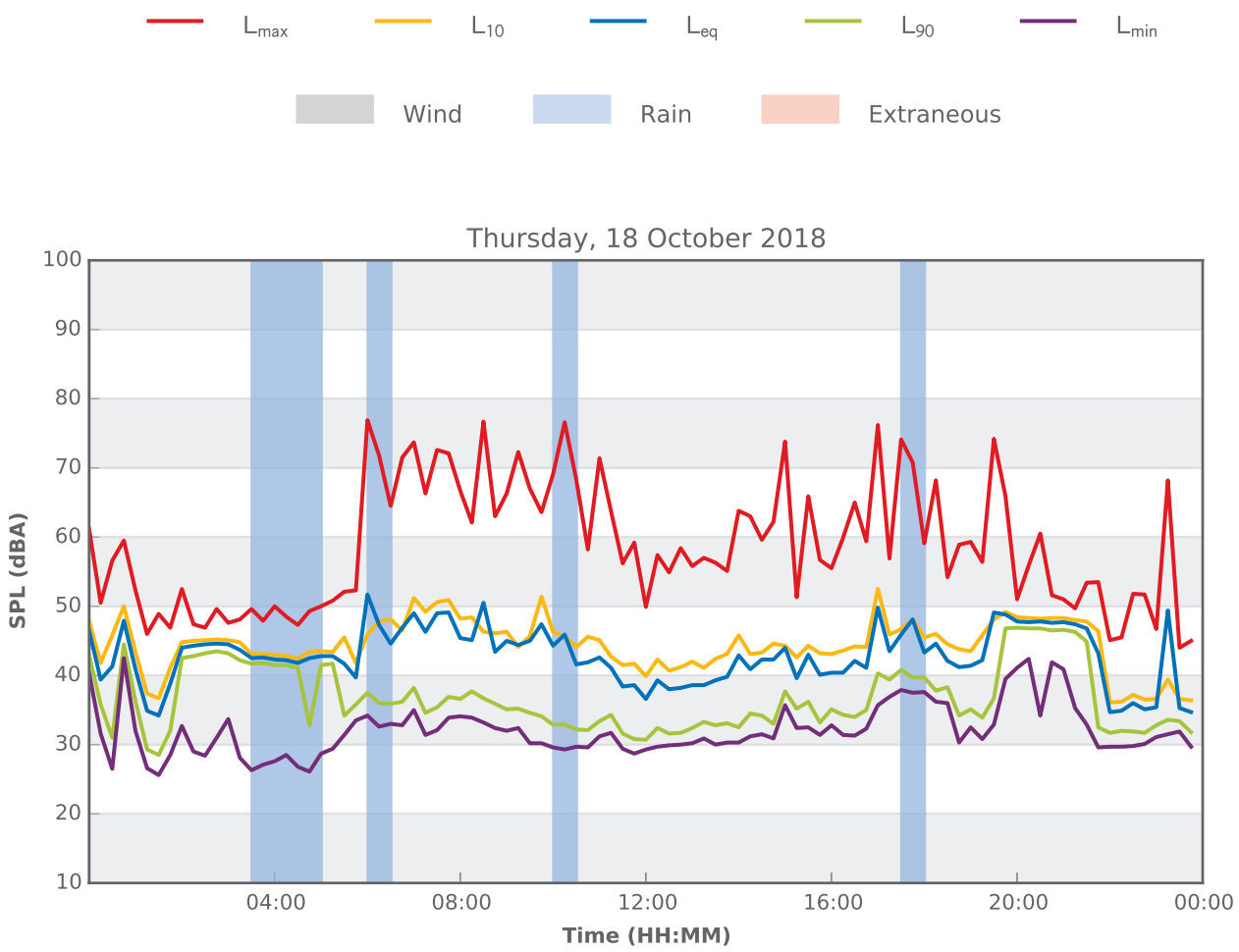


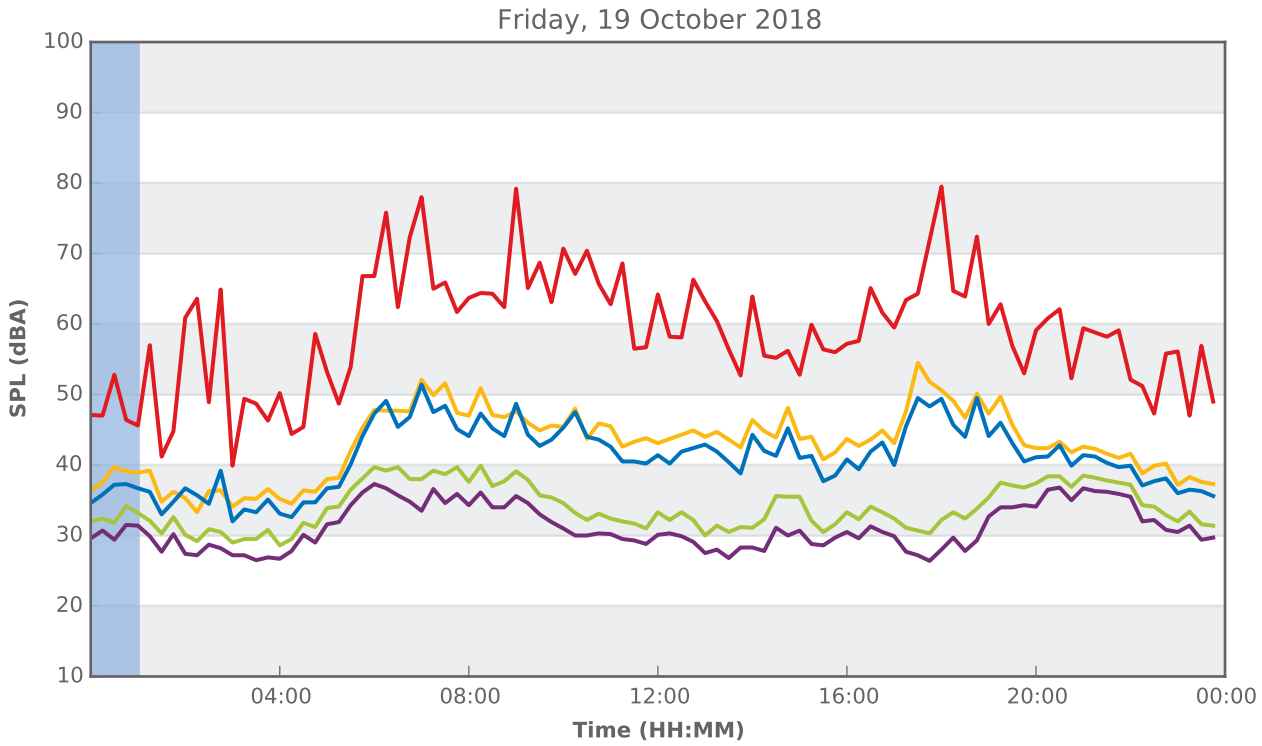
63 Ironbark Road, Muswellbrook



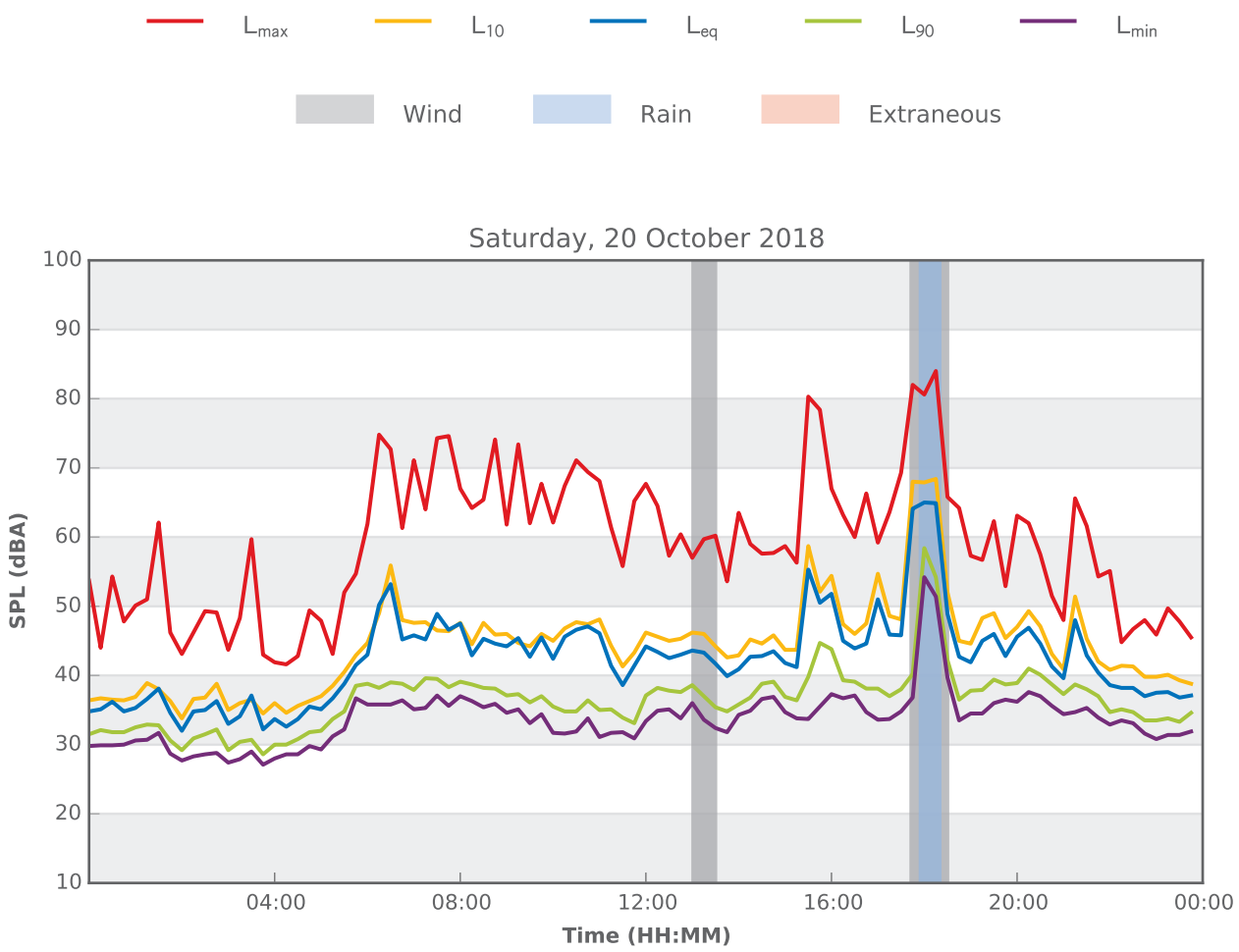


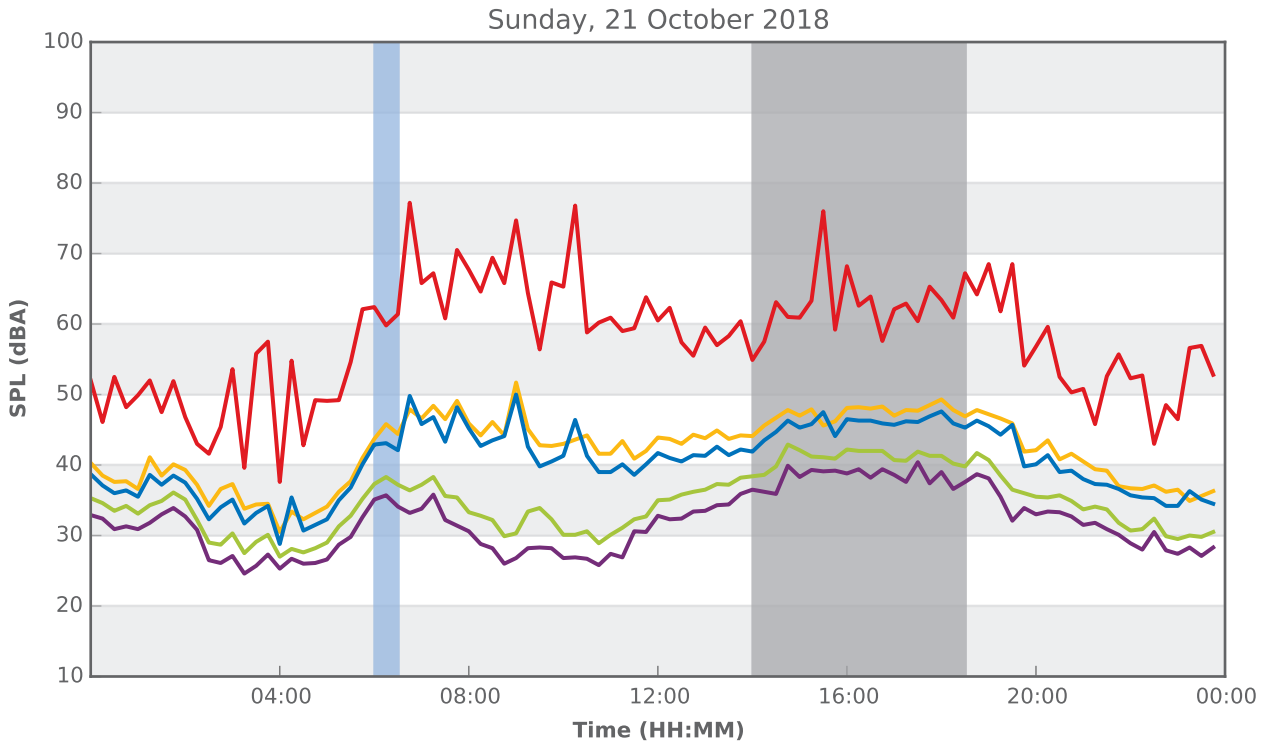
63 Ironbark Road, Muswellbrook





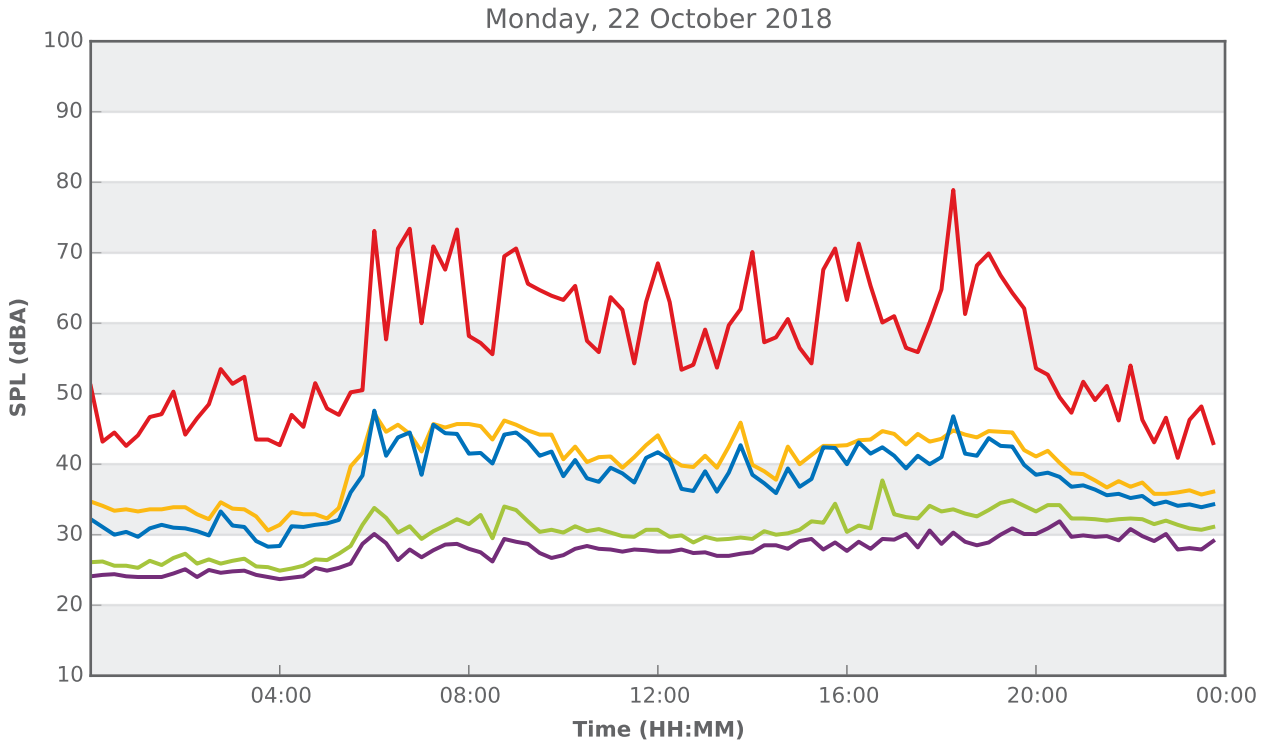
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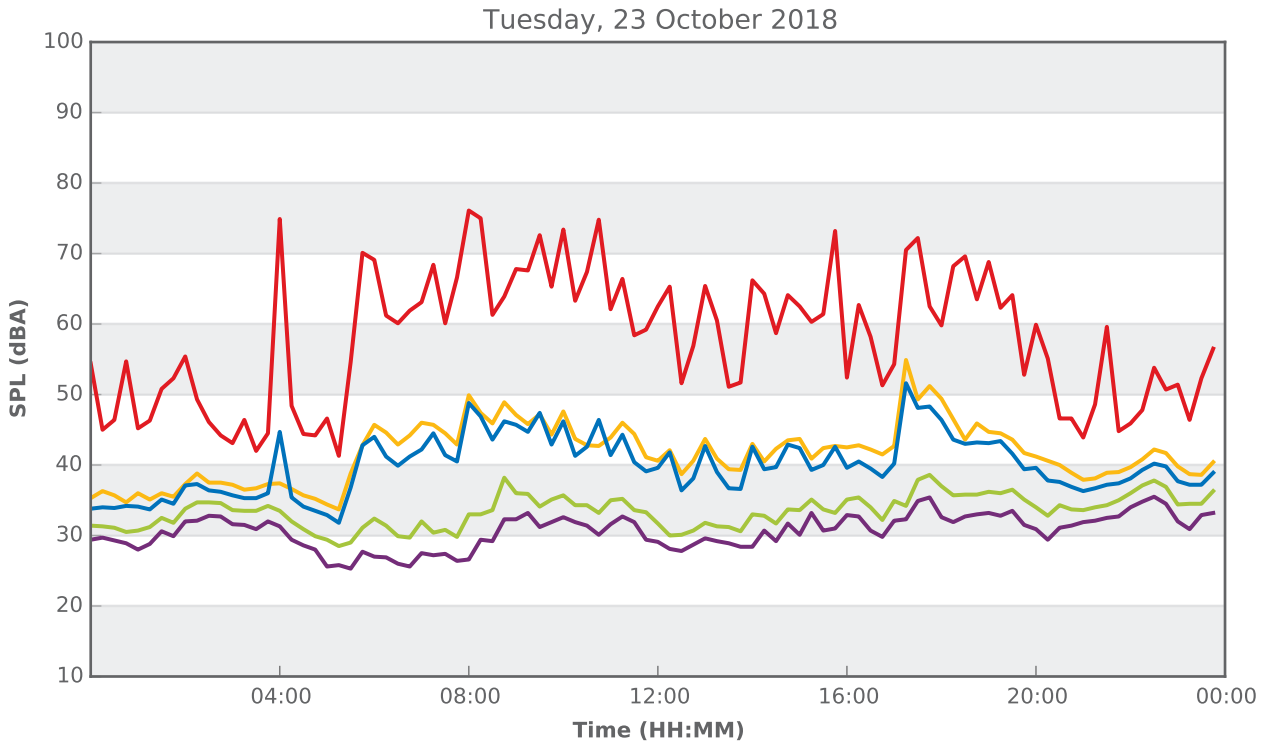




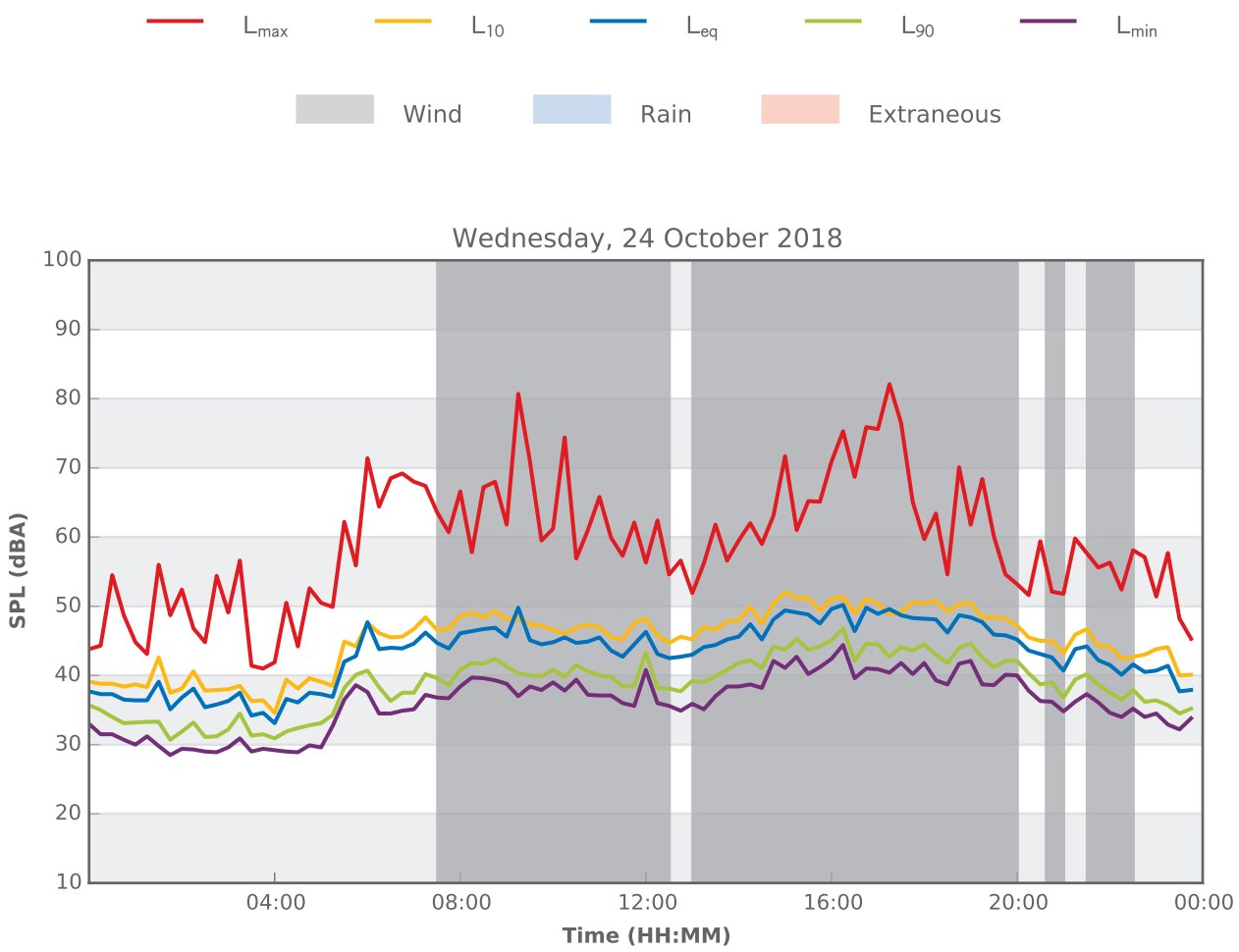
63 Ironbark Road, Muswellbrook

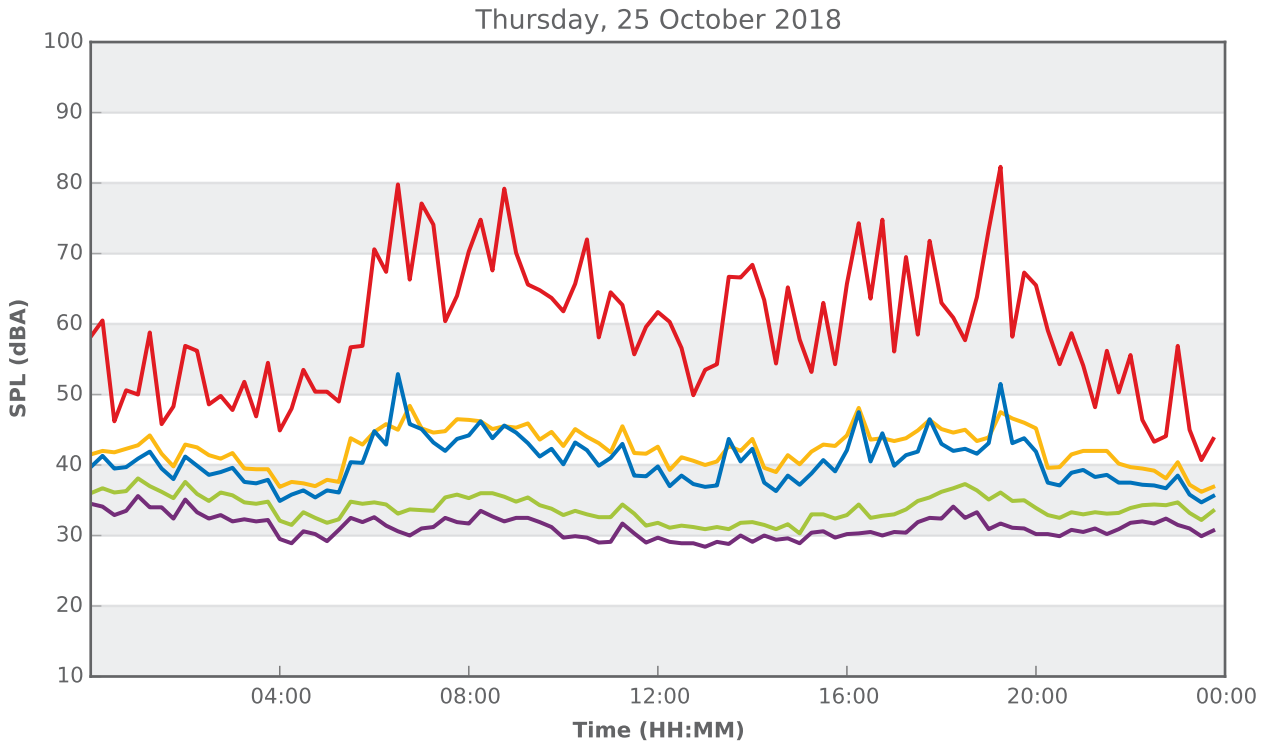




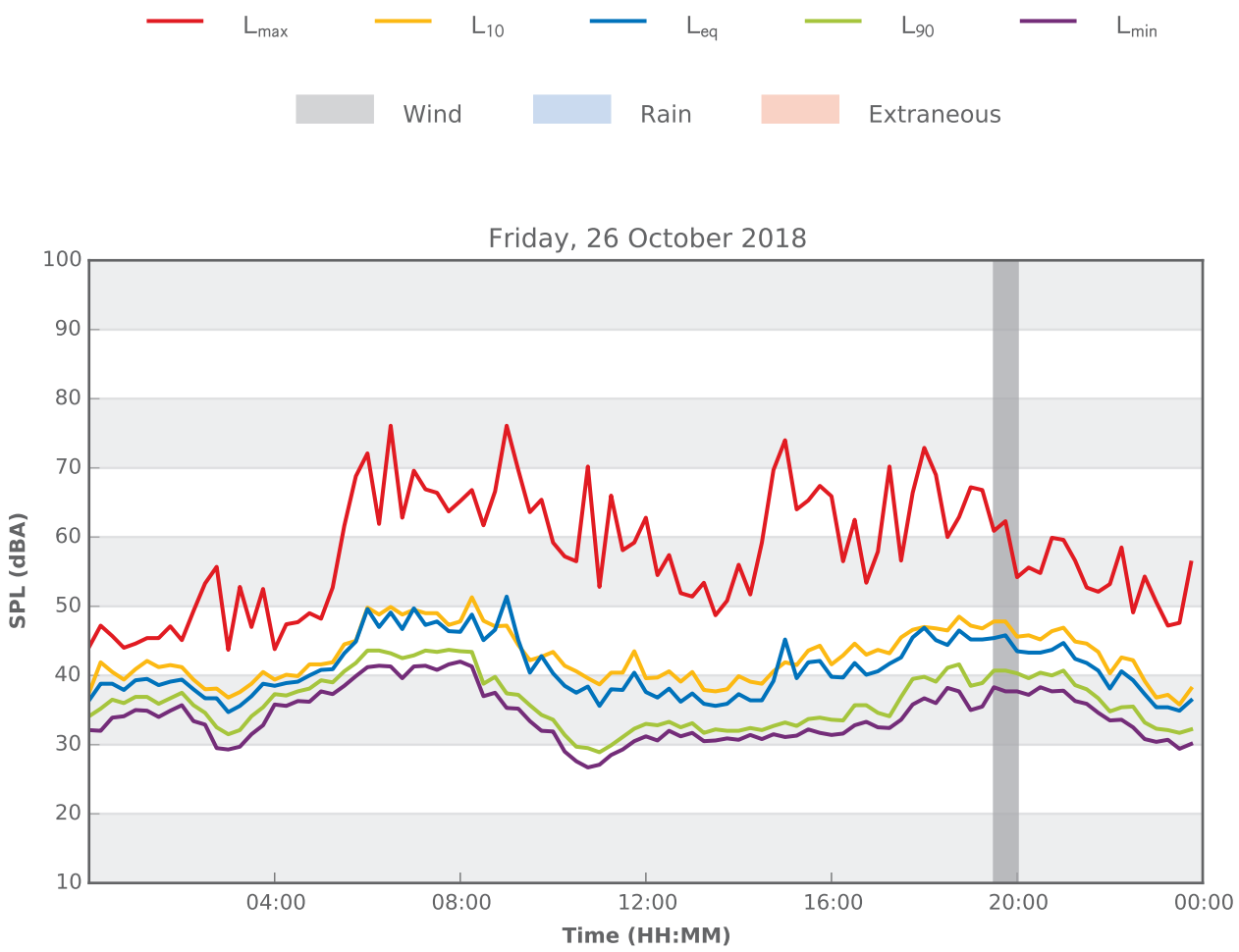


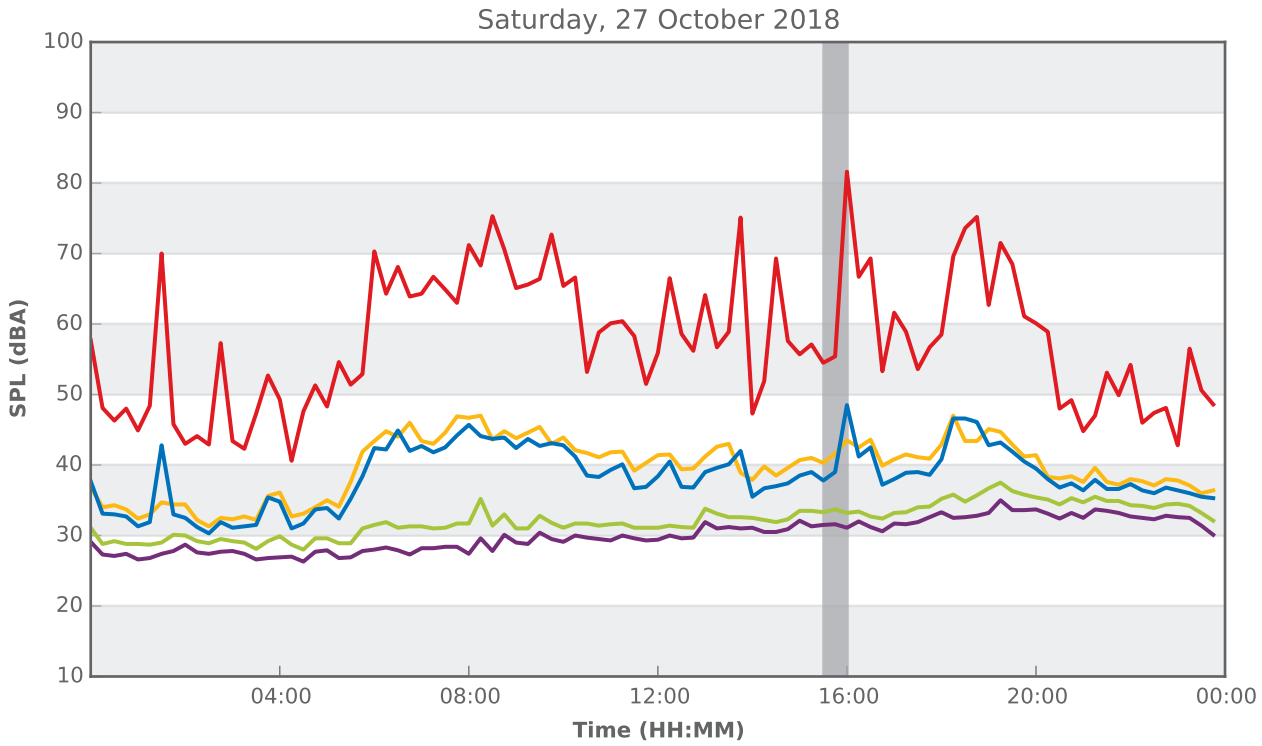
63 Ironbark Road, Muswellbrook



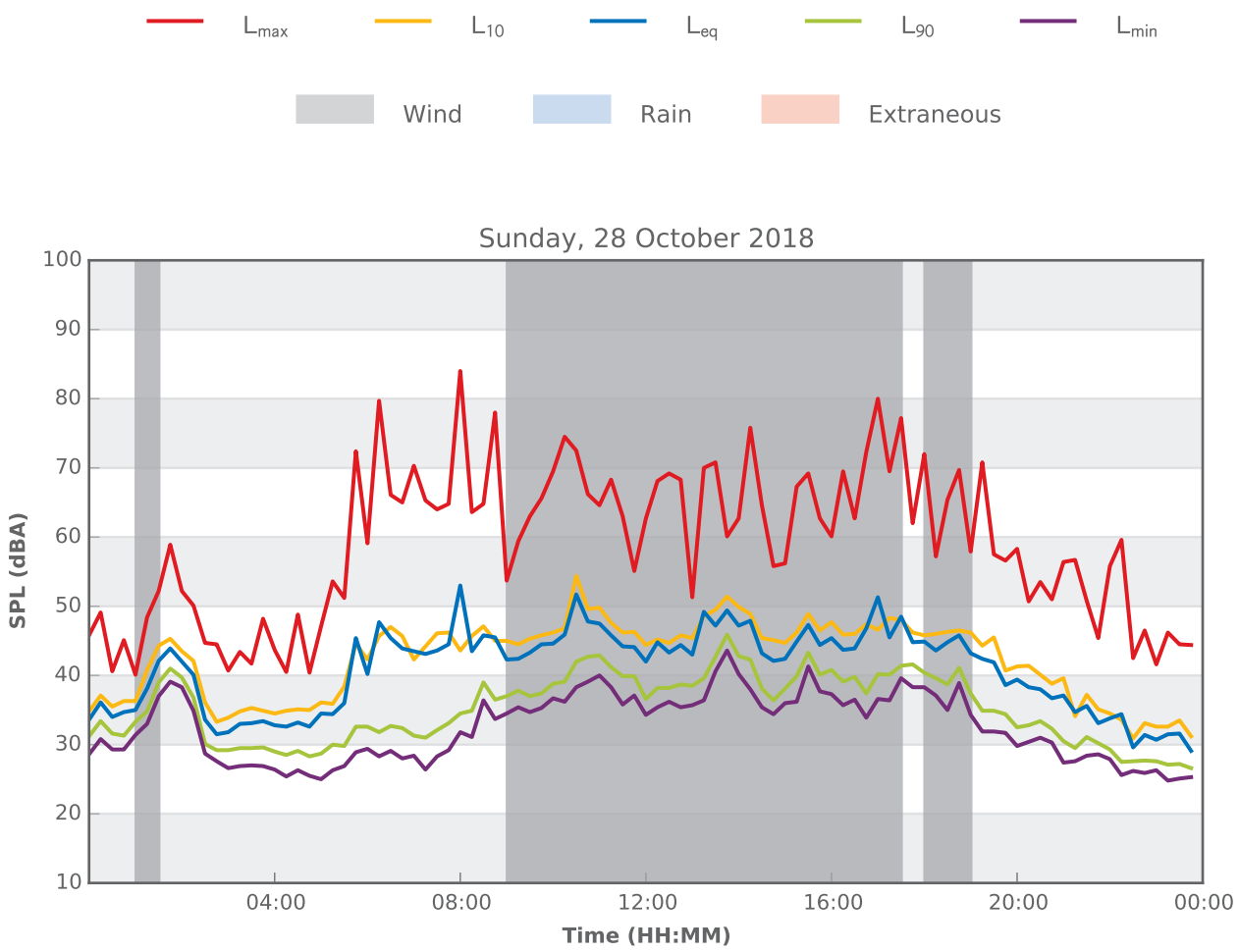


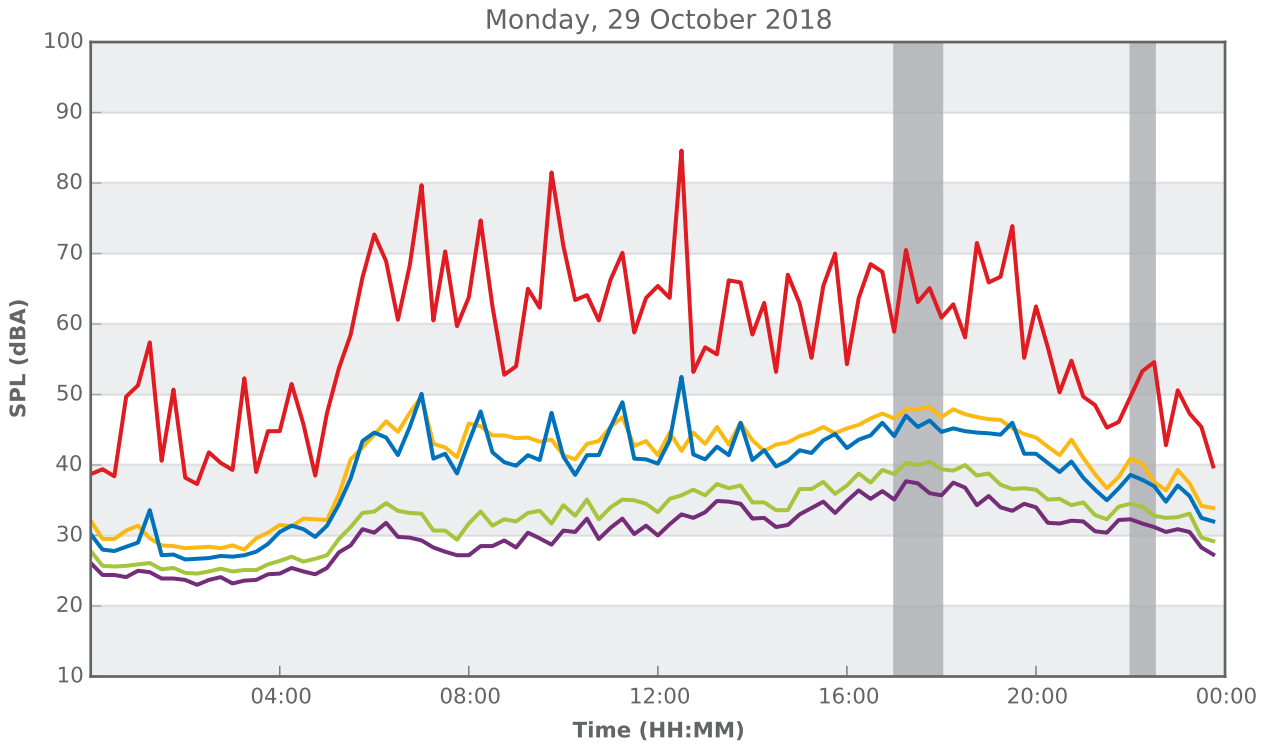
63 Ironbark Road, Muswellbrook



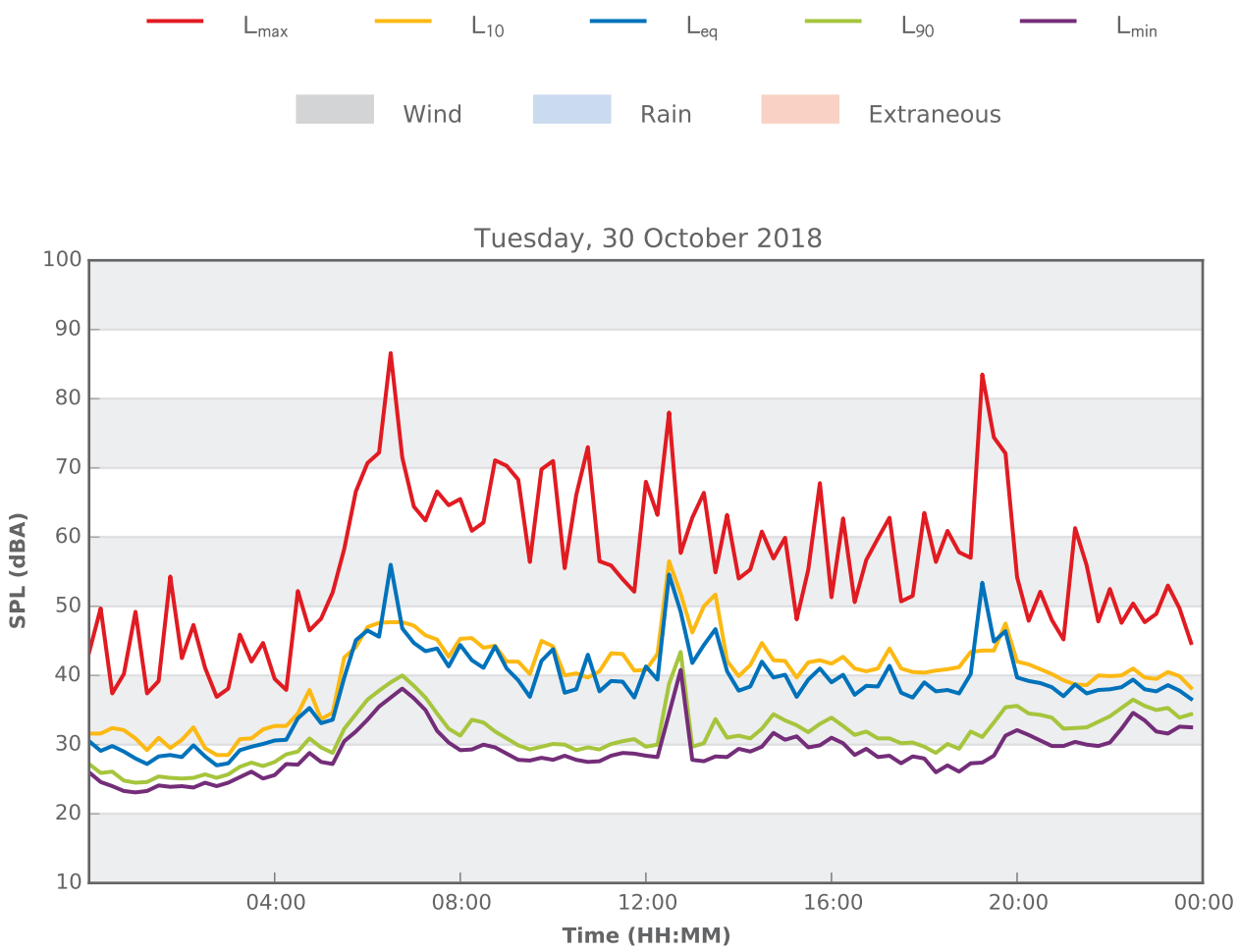


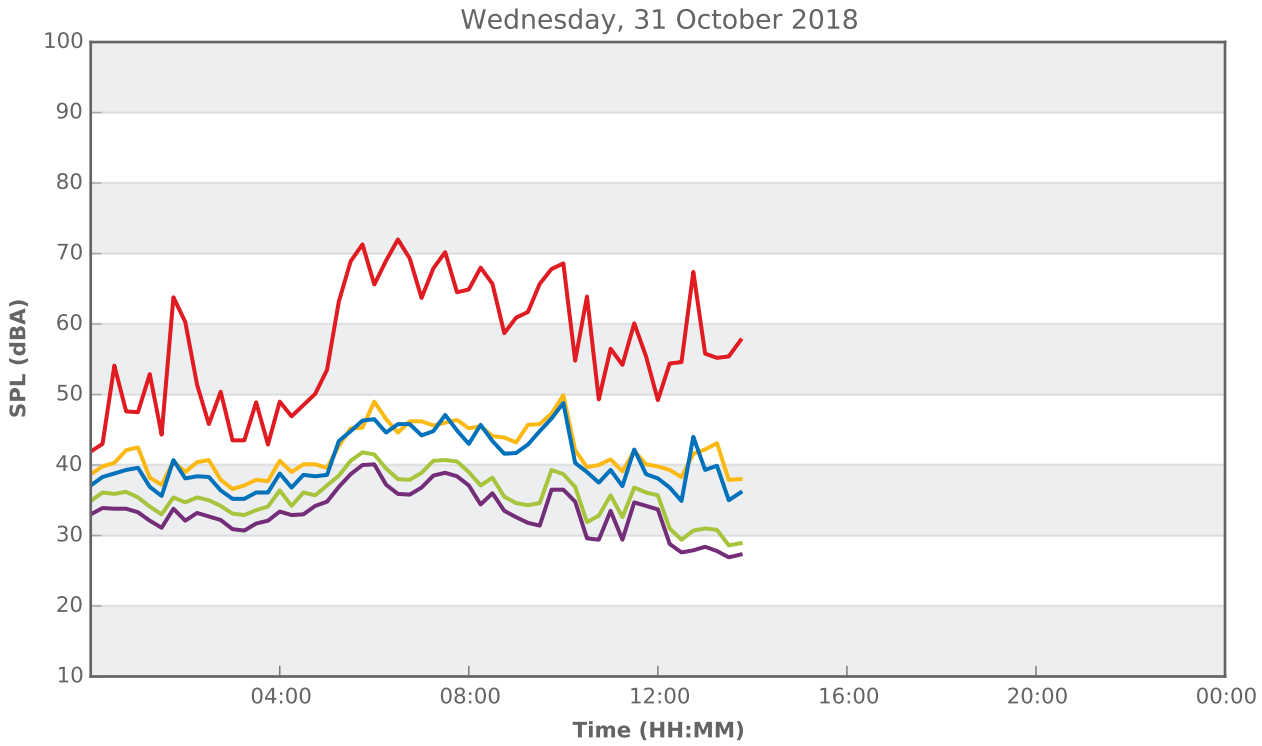
63 Ironbark Road, Muswellbrook



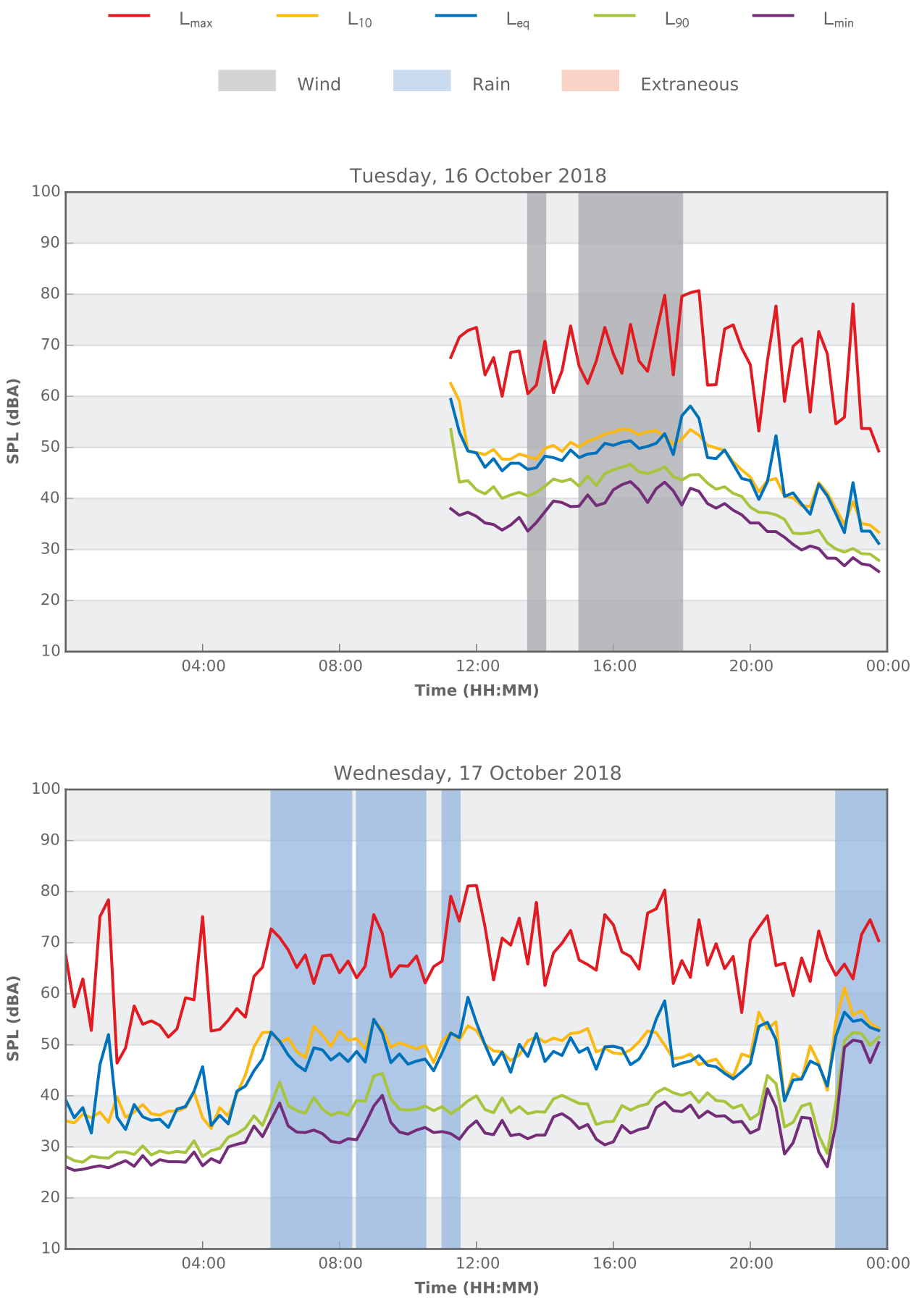


63 Ironbark Road, Muswellbrook

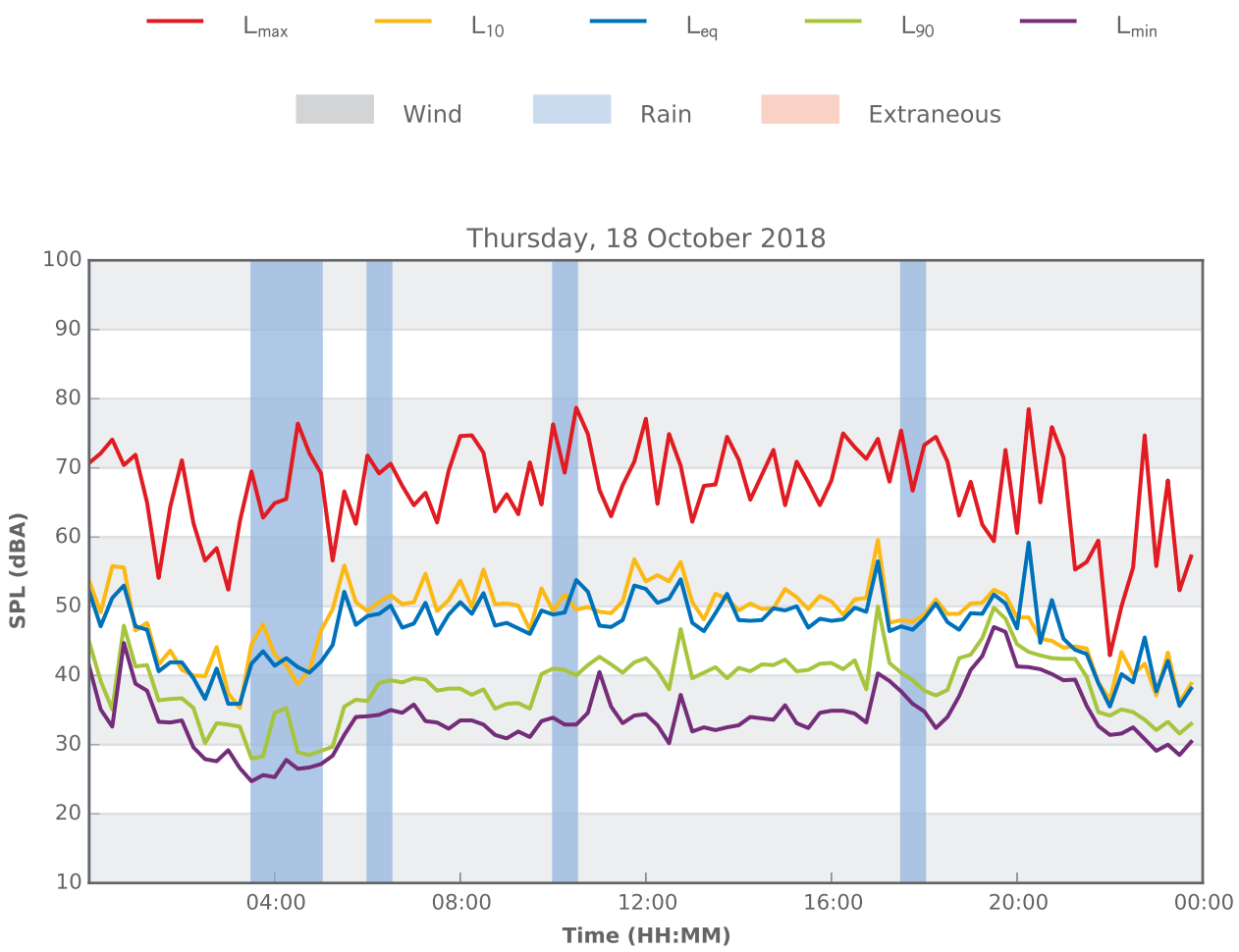


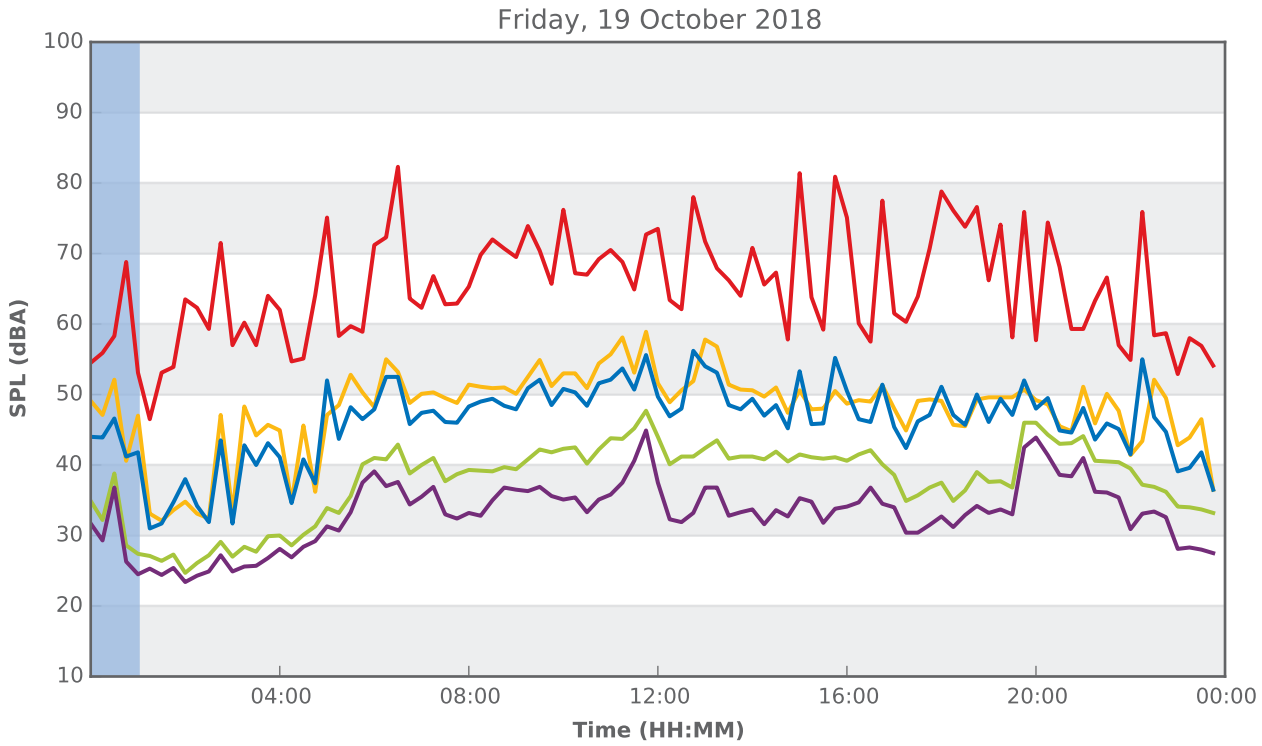


8 Racecourse Road, Muswellbrook

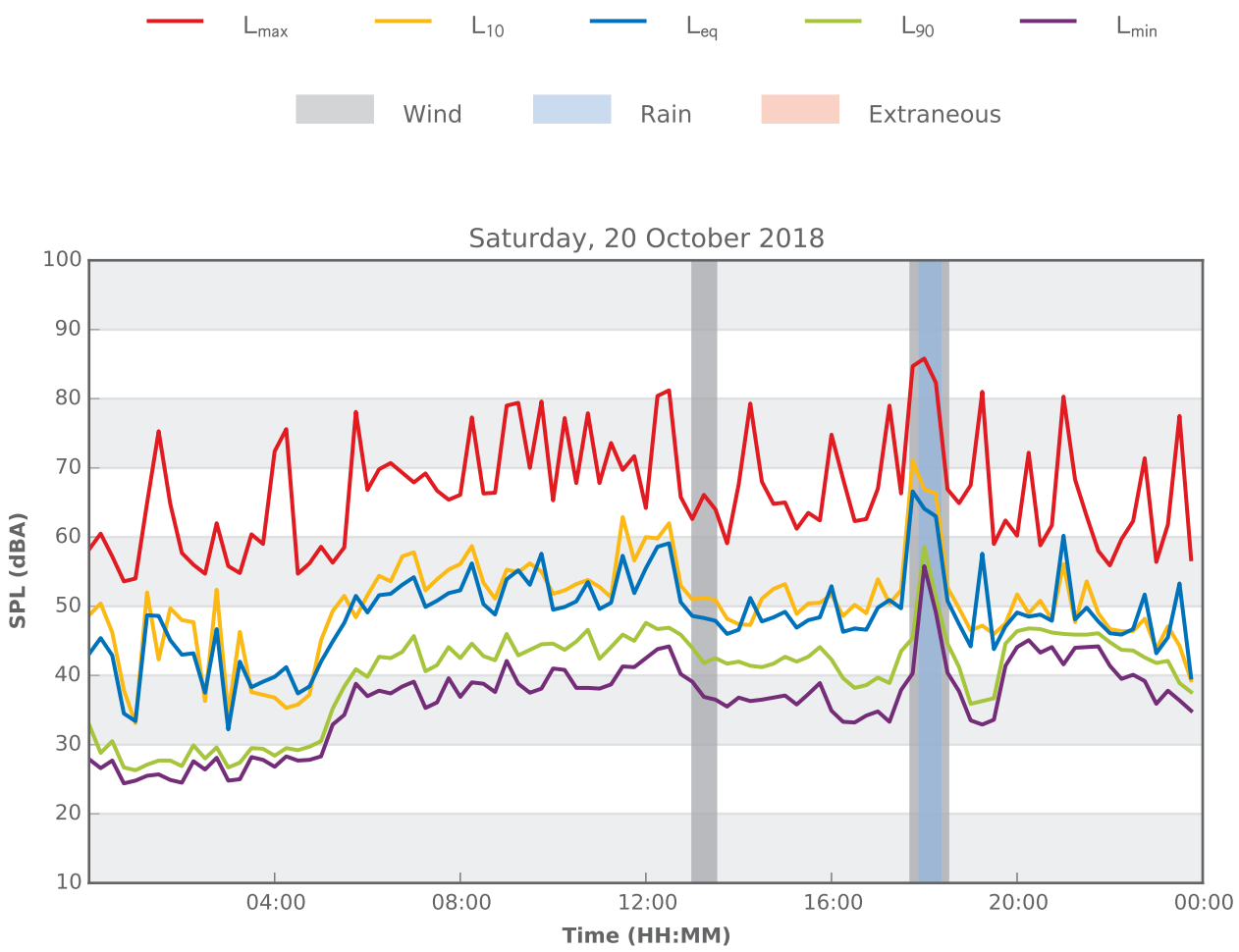


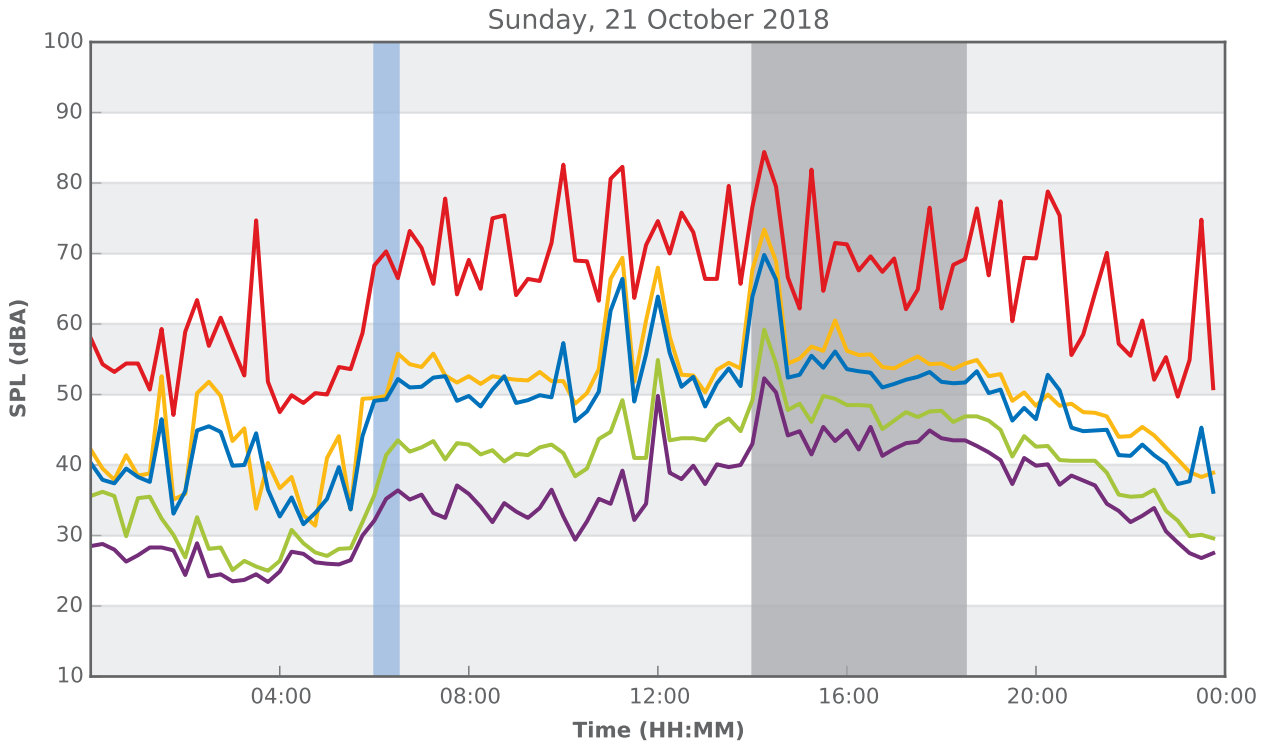
8 Racecourse Road, Muswellbrook



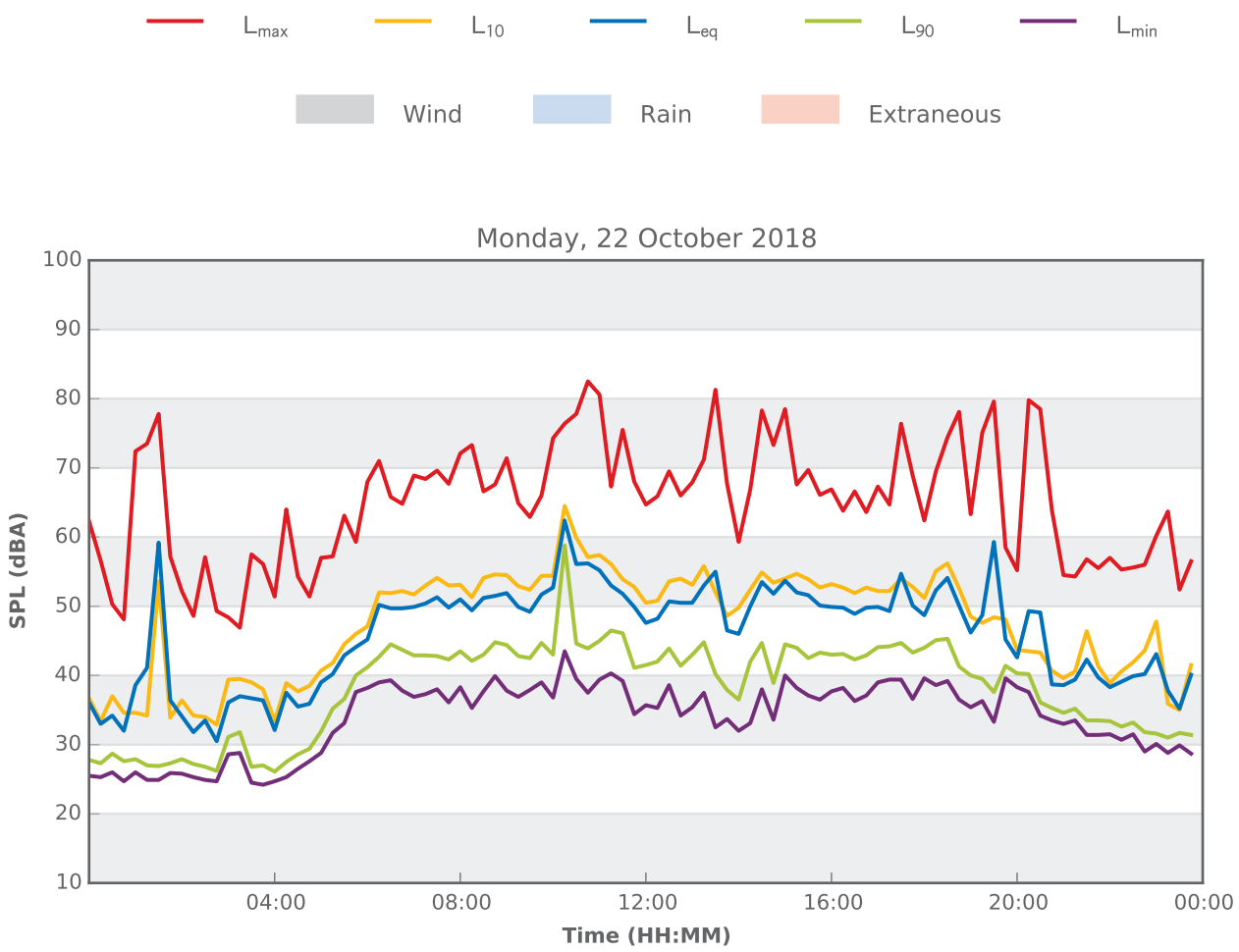


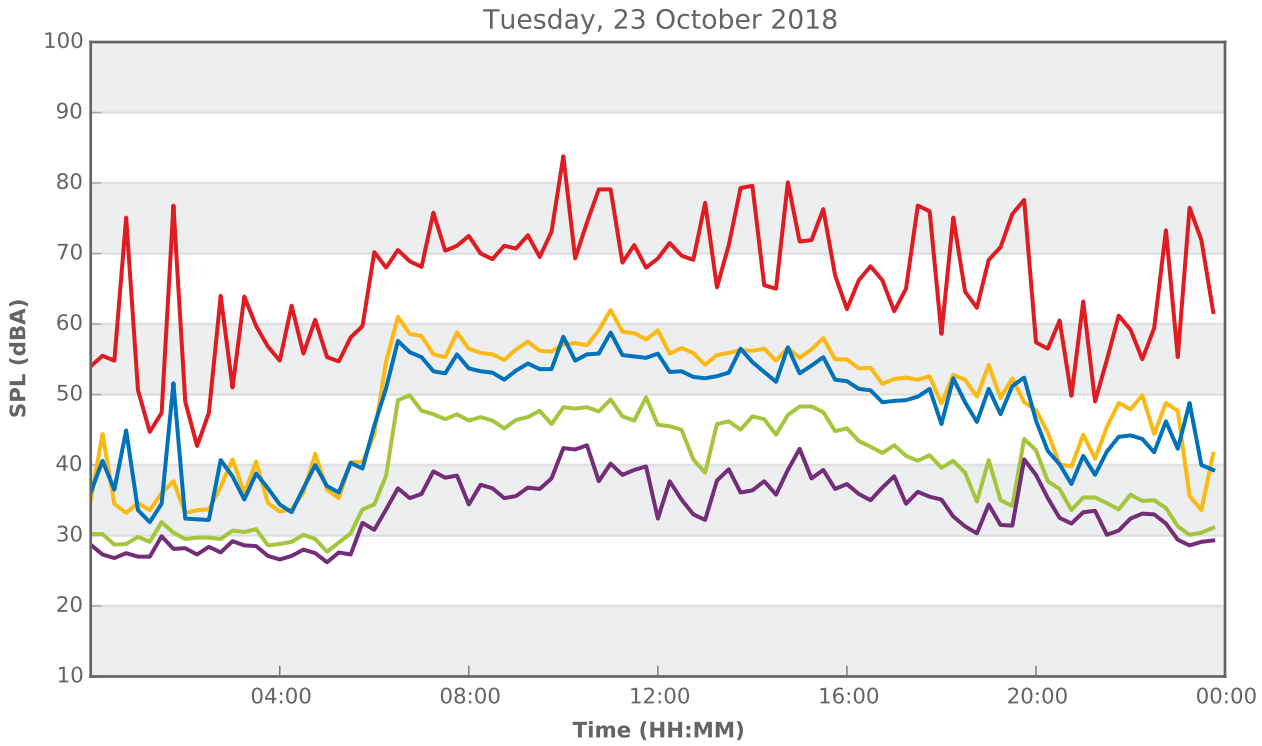
8 Racecourse Road, Muswellbrook



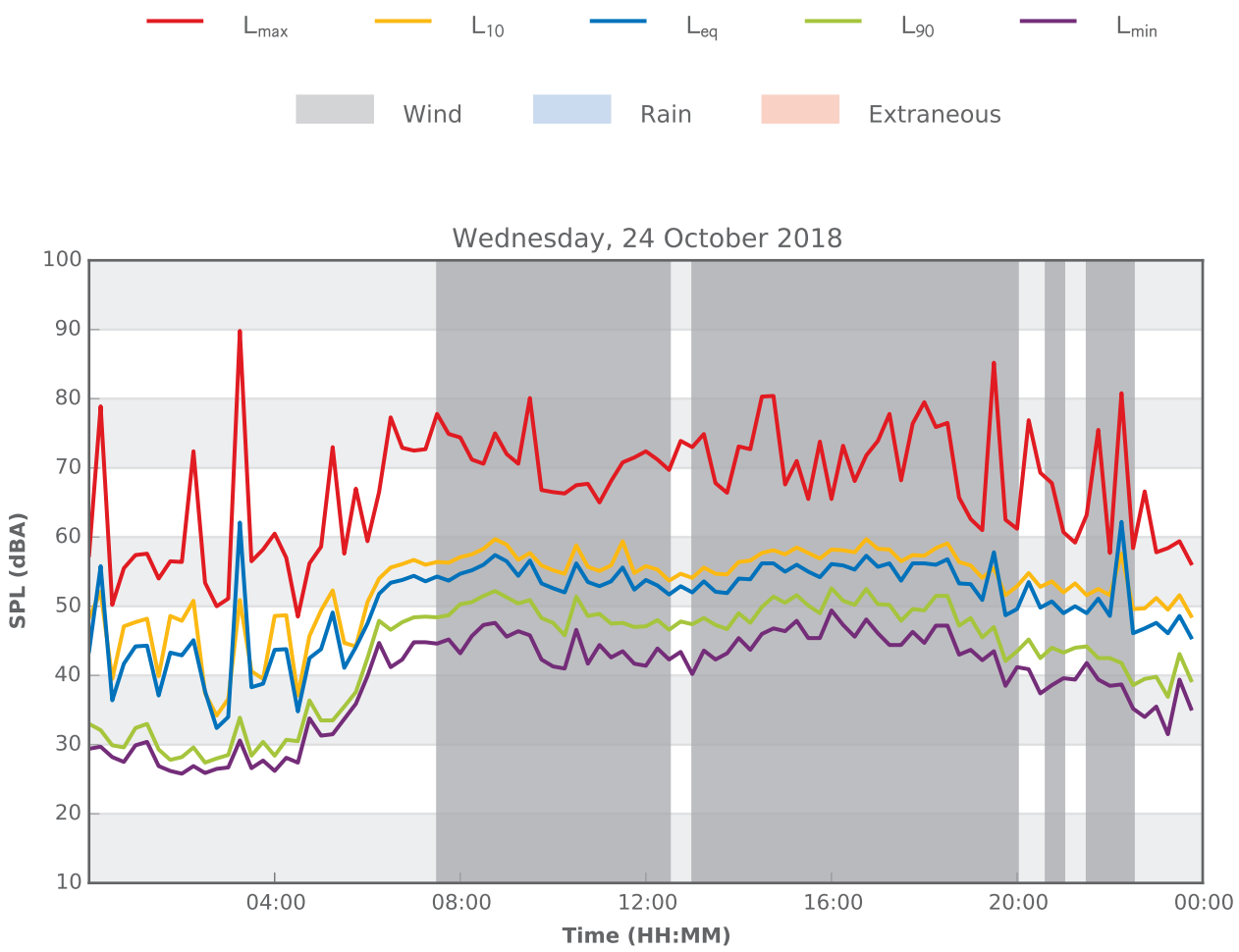


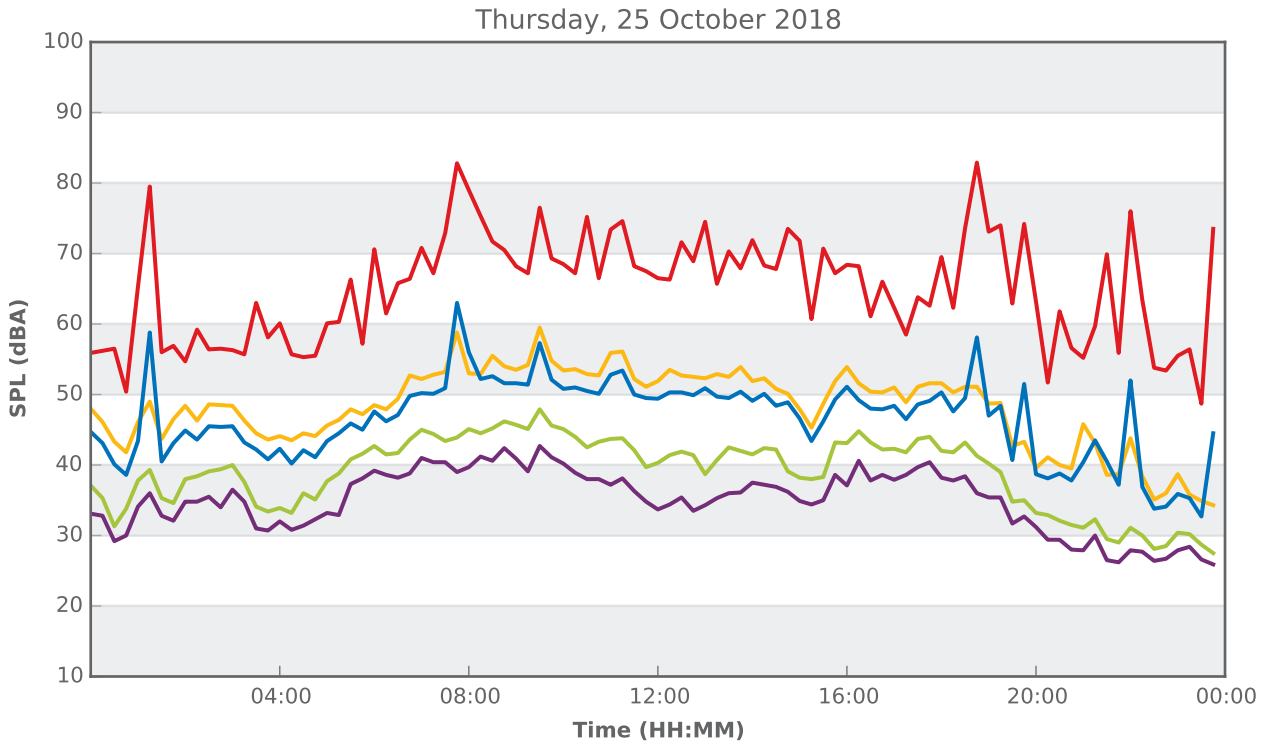
8 Racecourse Road, Muswellbrook



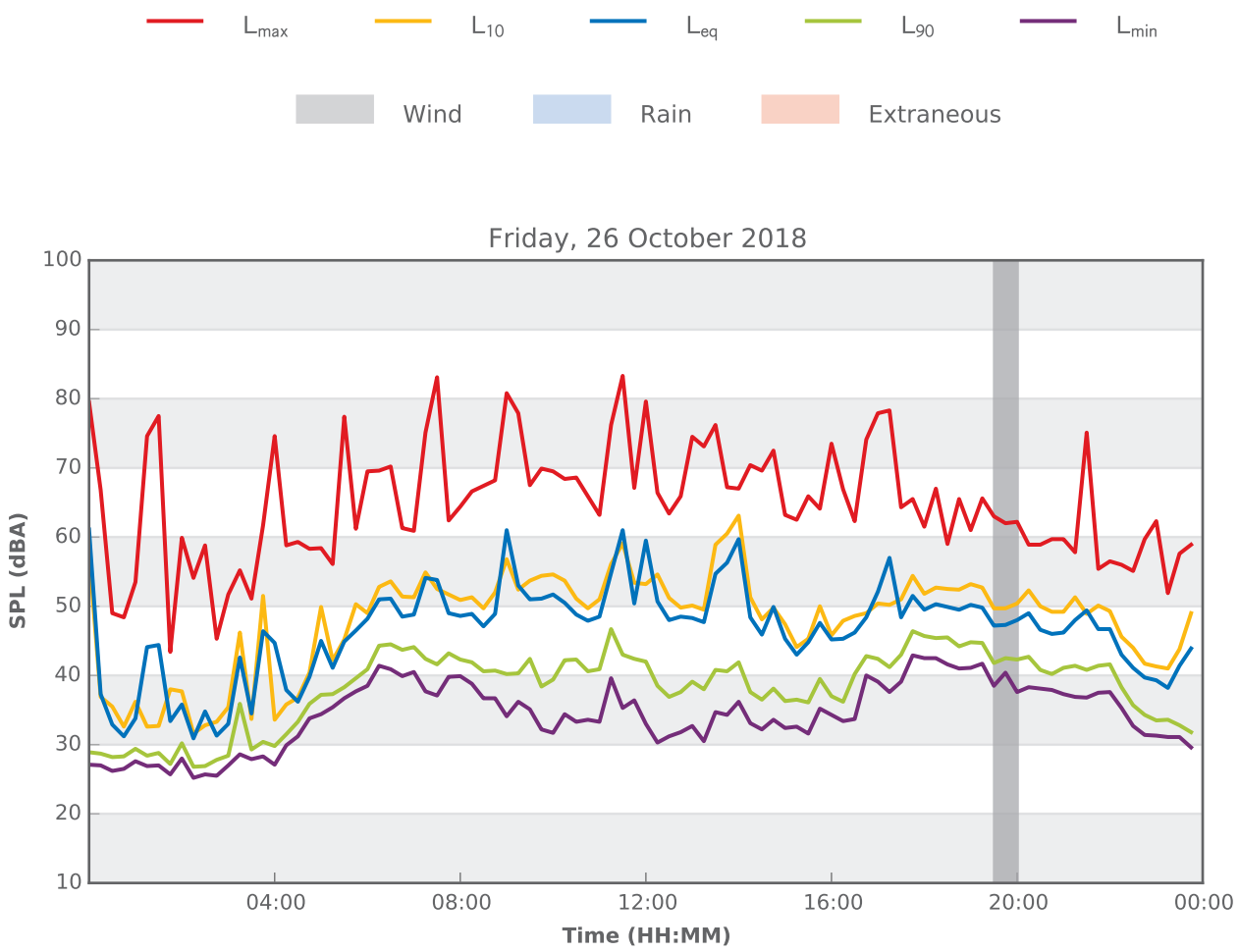


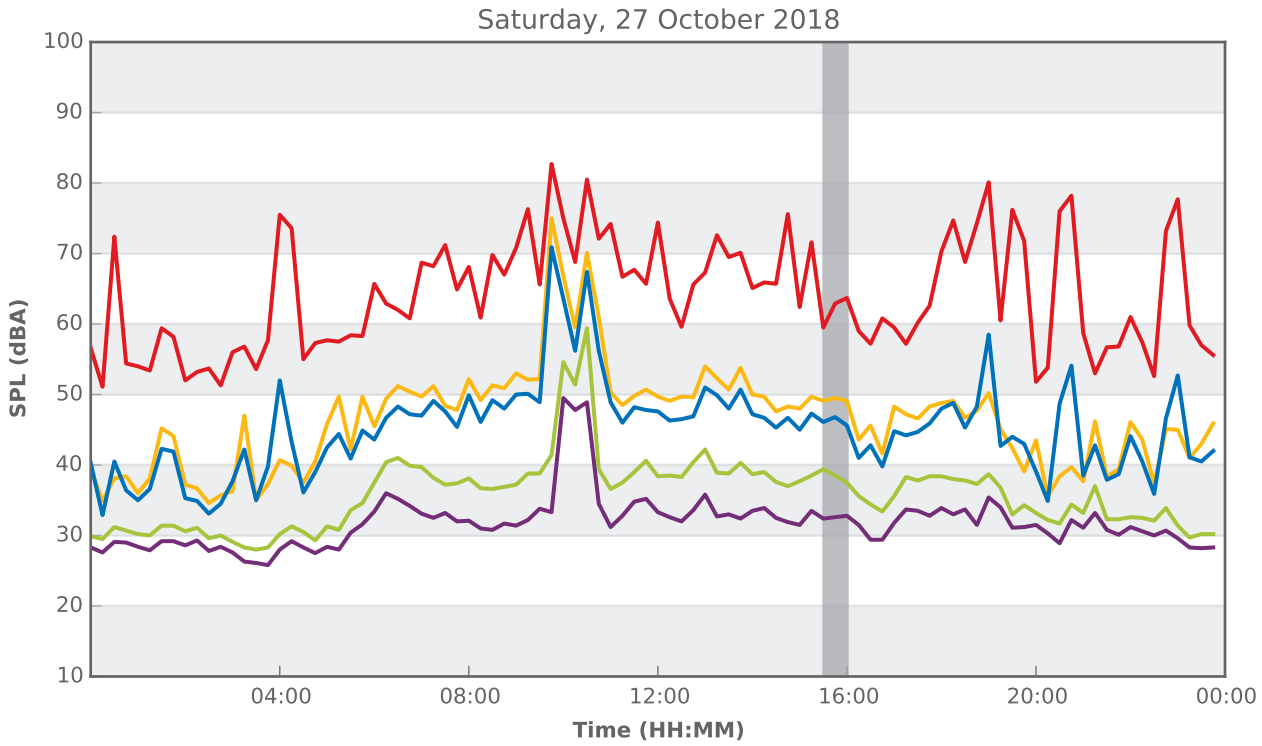
8 Racecourse Road, Muswellbrook



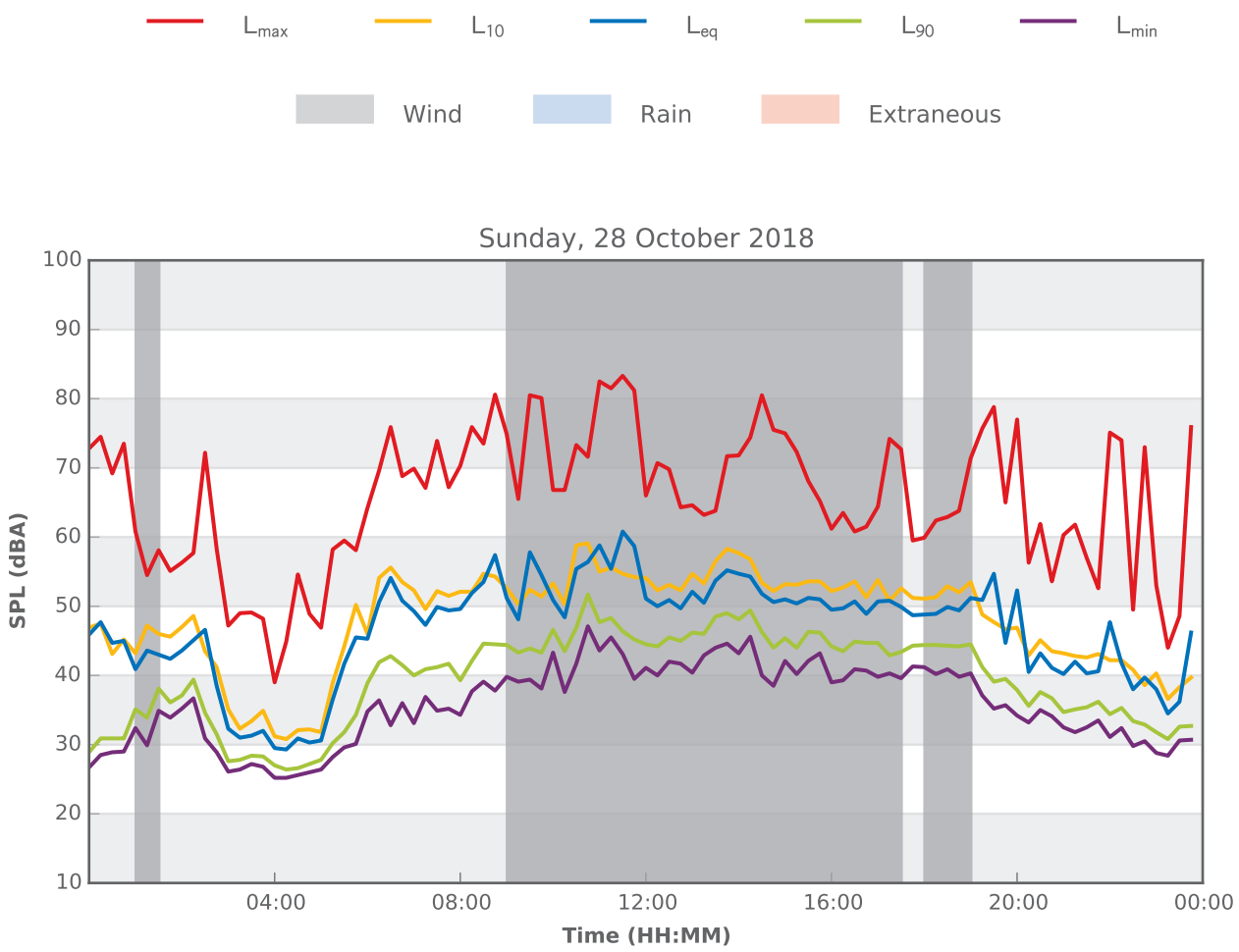


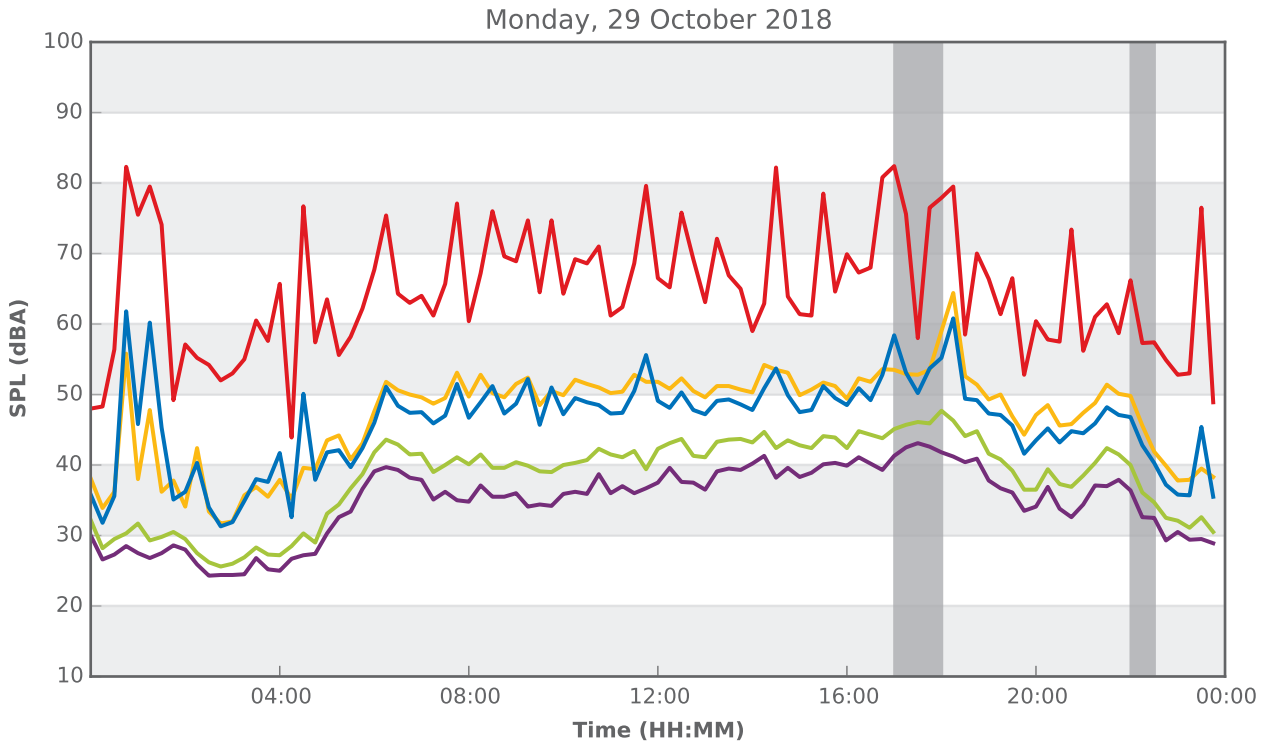
8 Racecourse Road, Muswellbrook



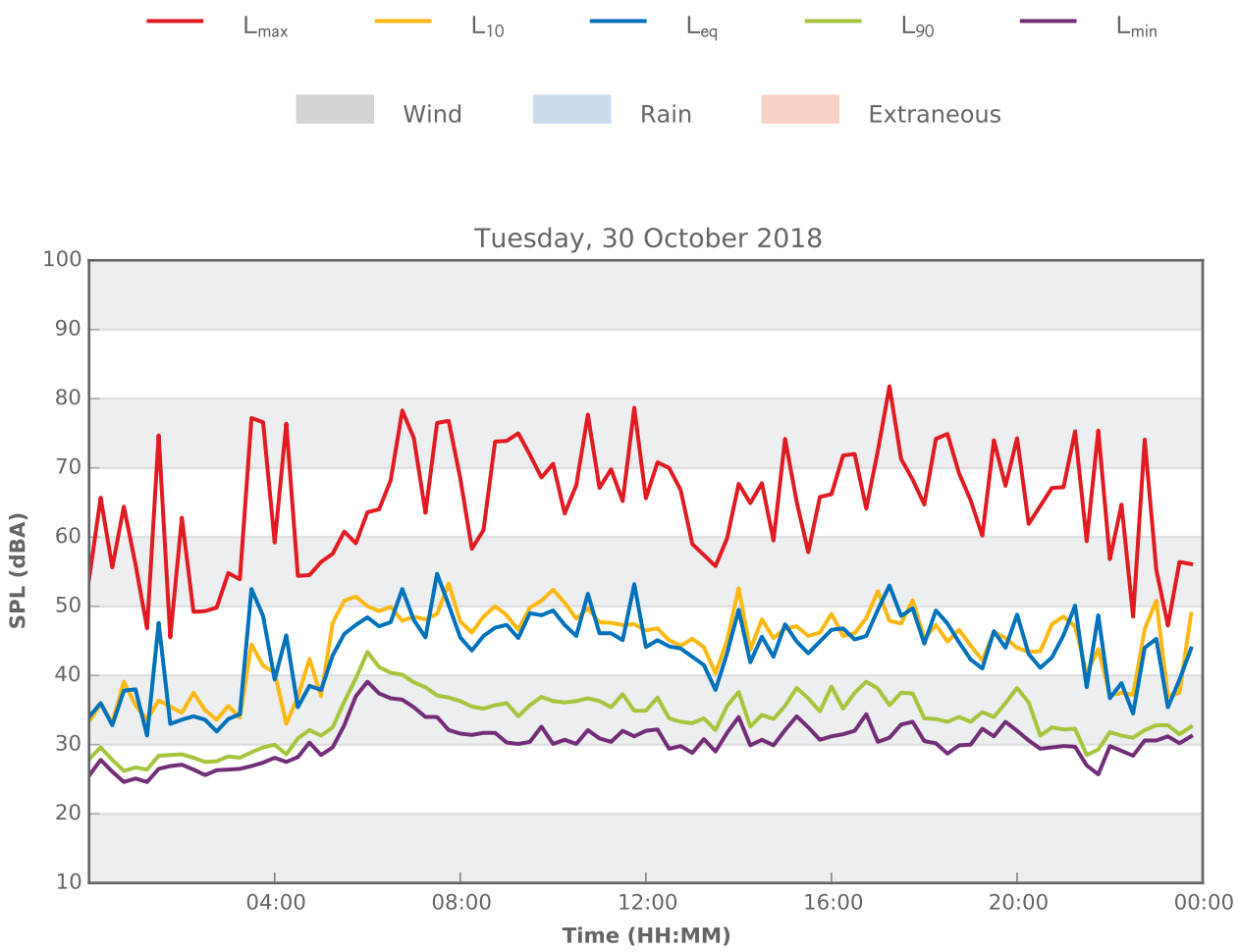


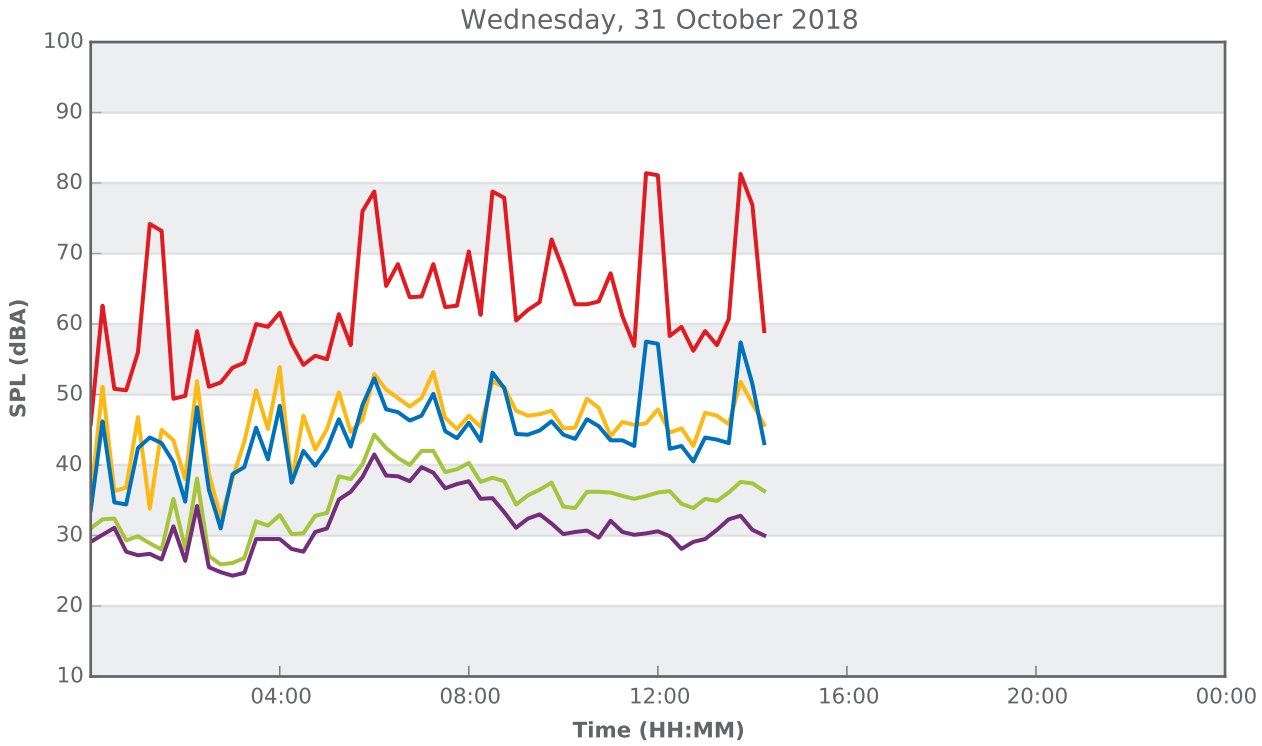
8 Racecourse Road, Muswellbrook



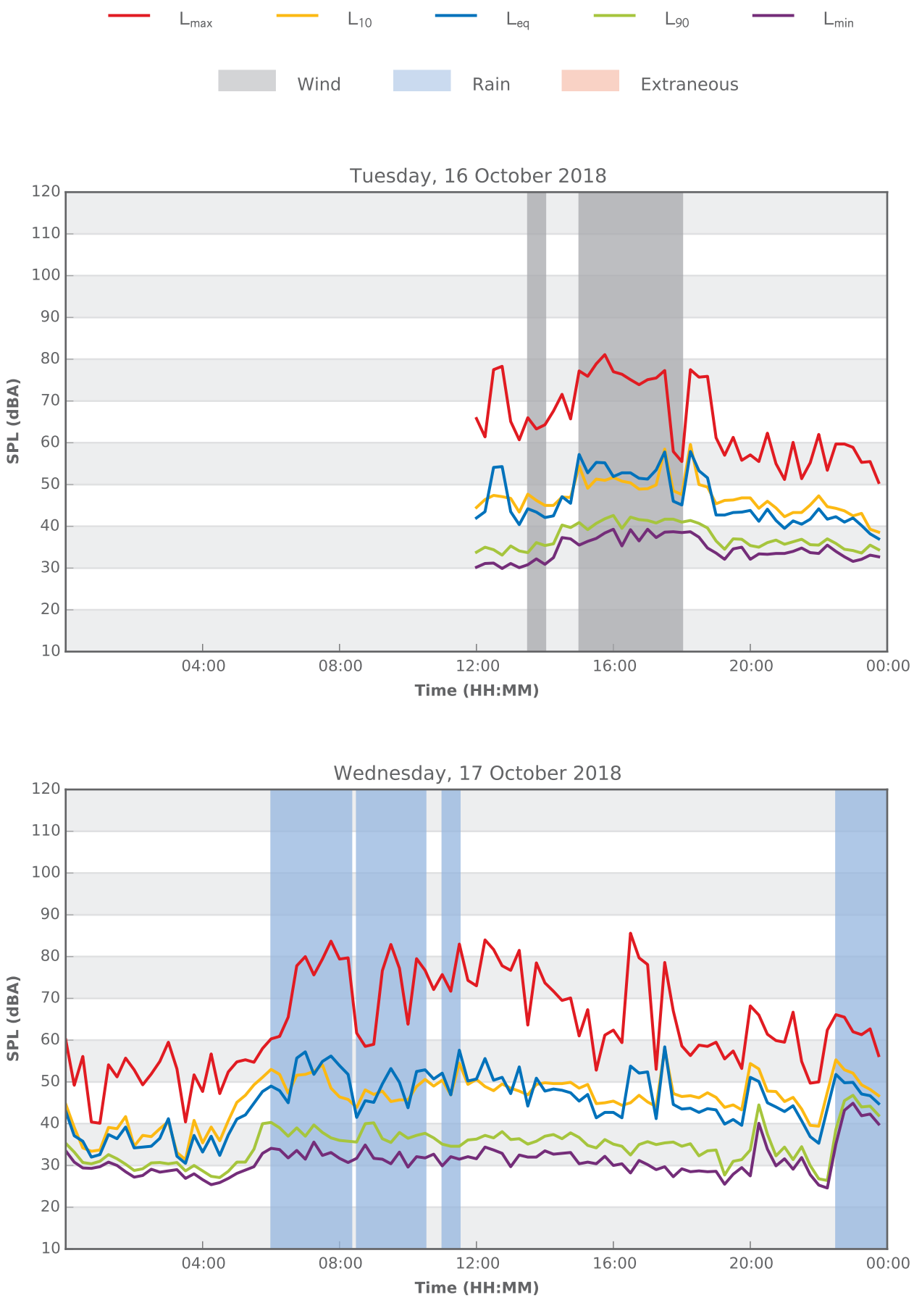


8 Racecourse Road, Muswellbrook

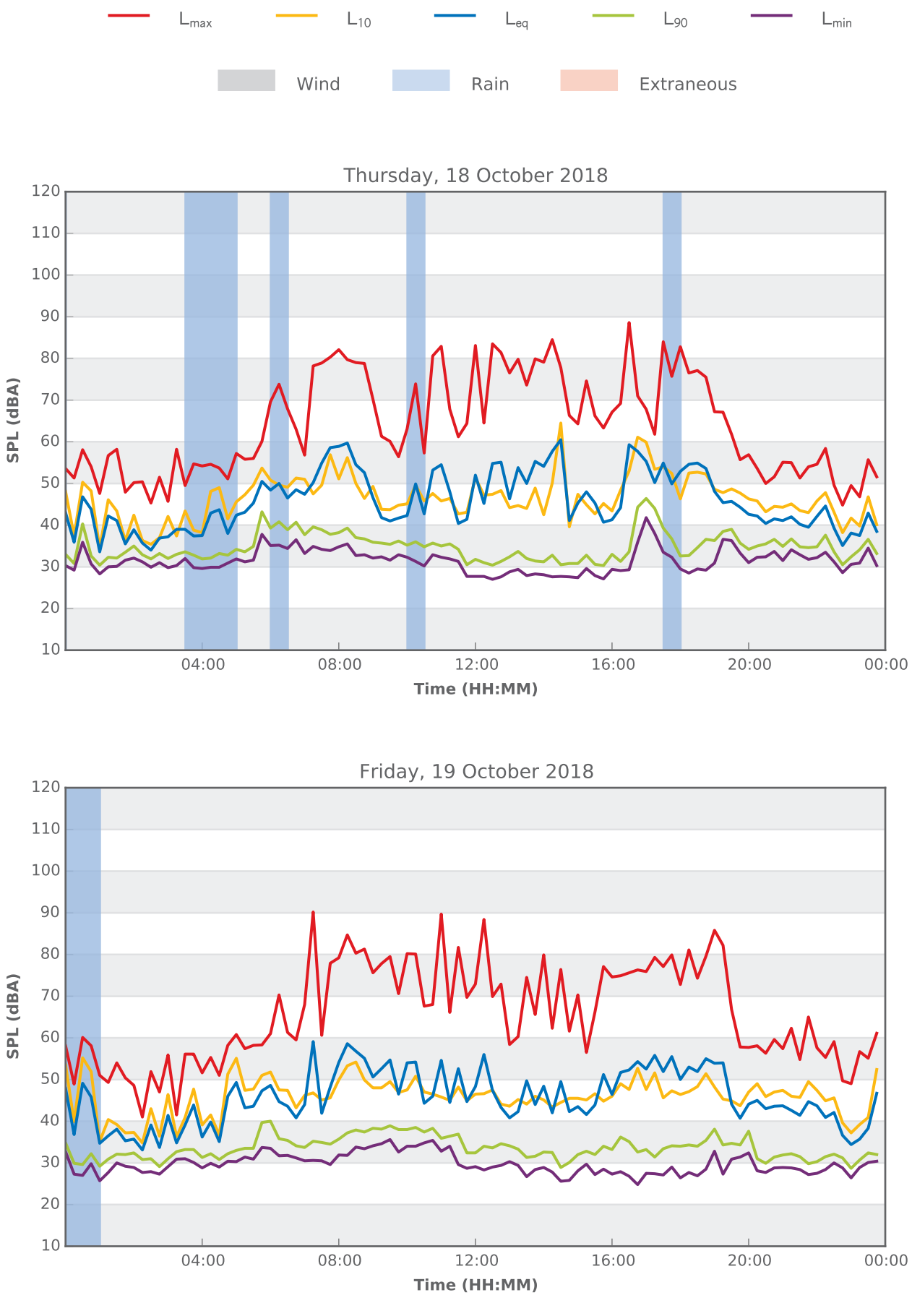




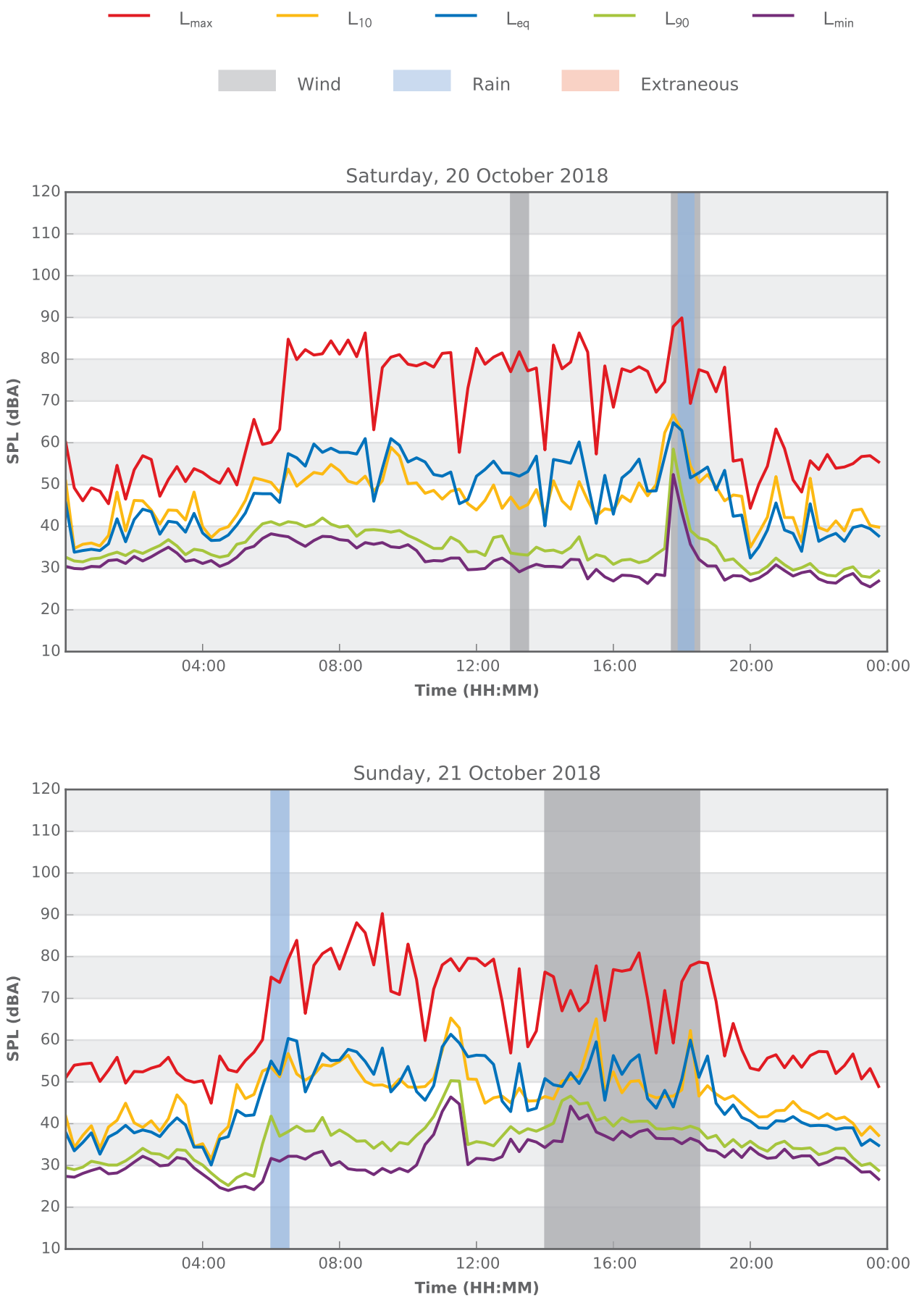
1252 Denman Road, Muswellbrook



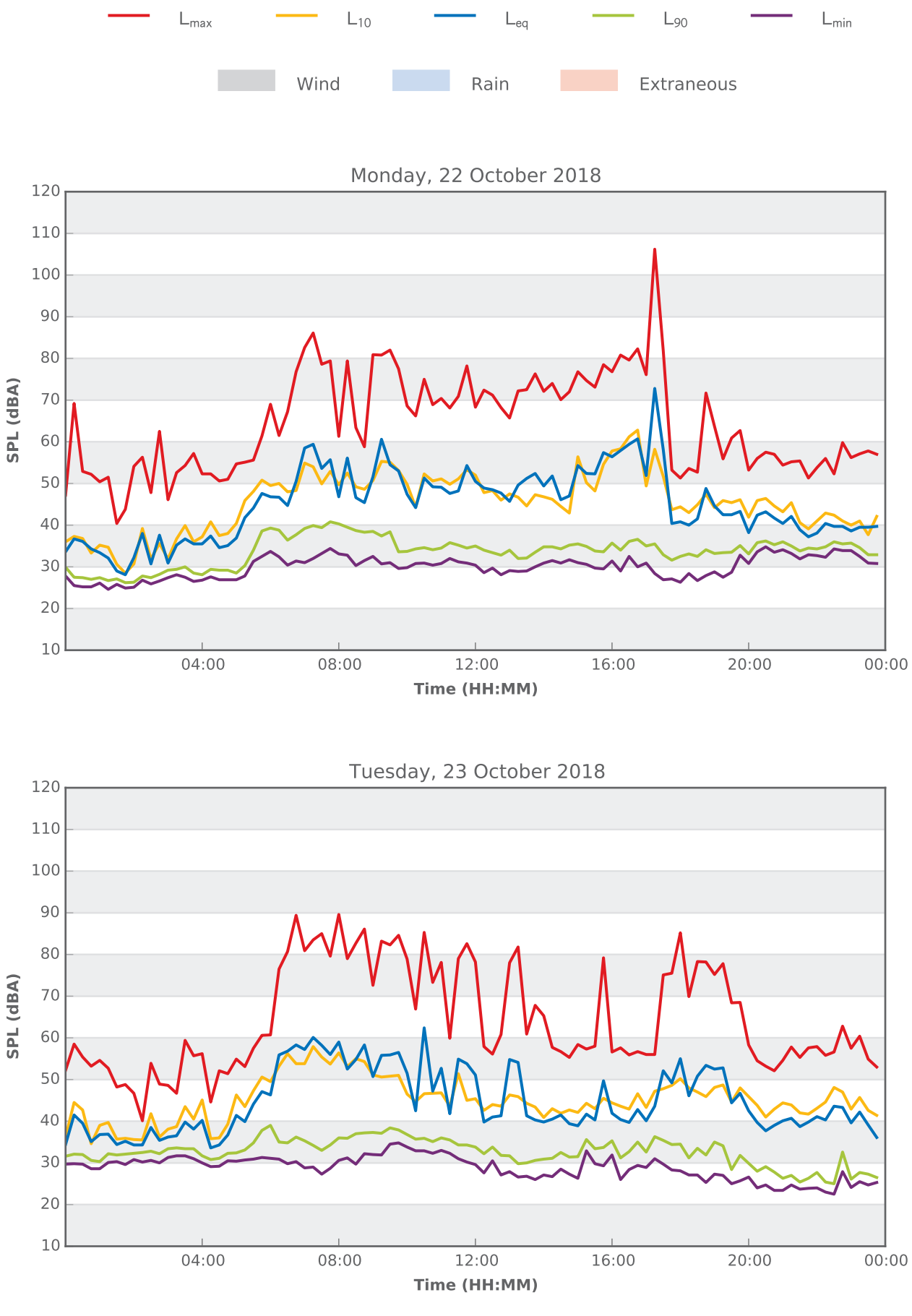
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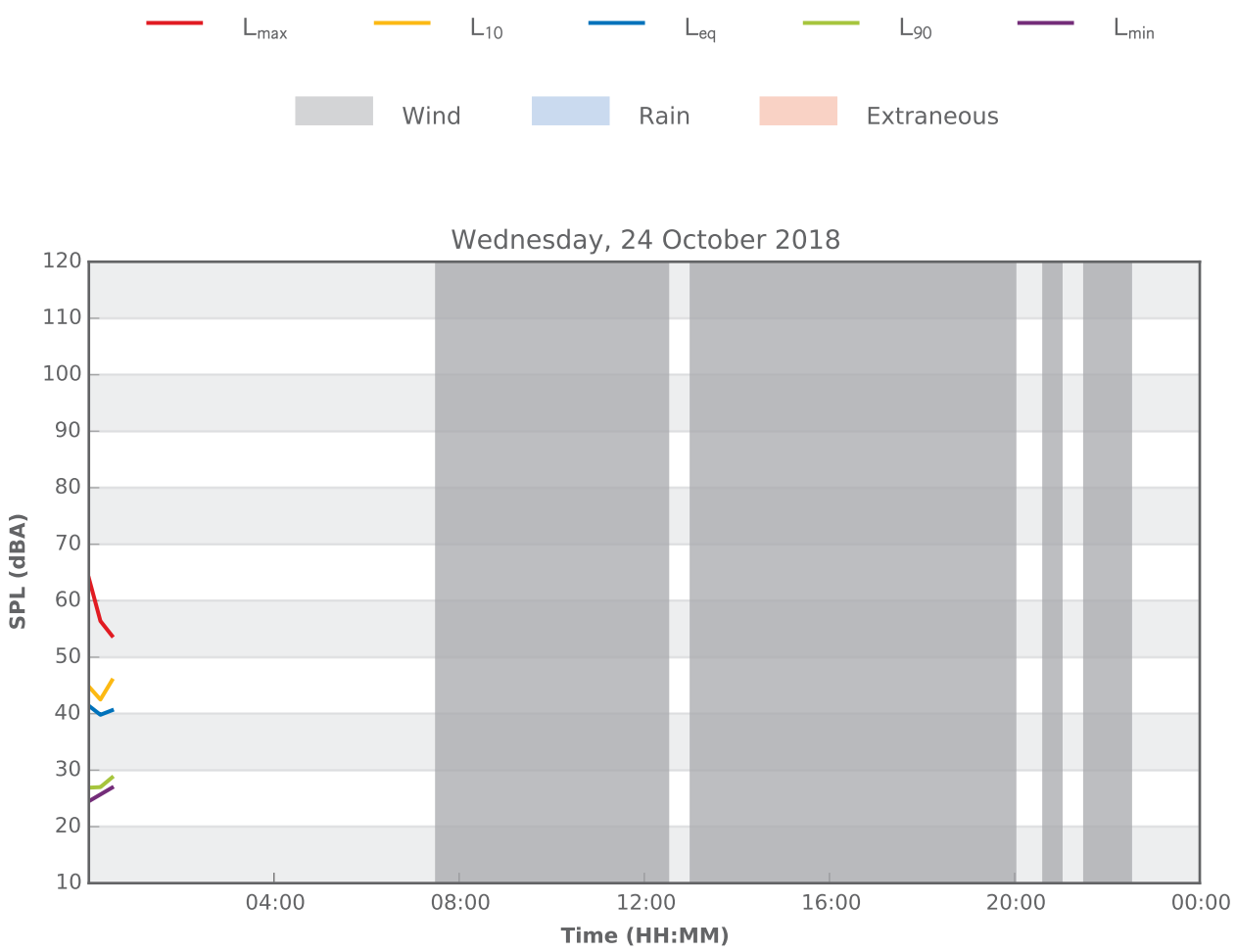
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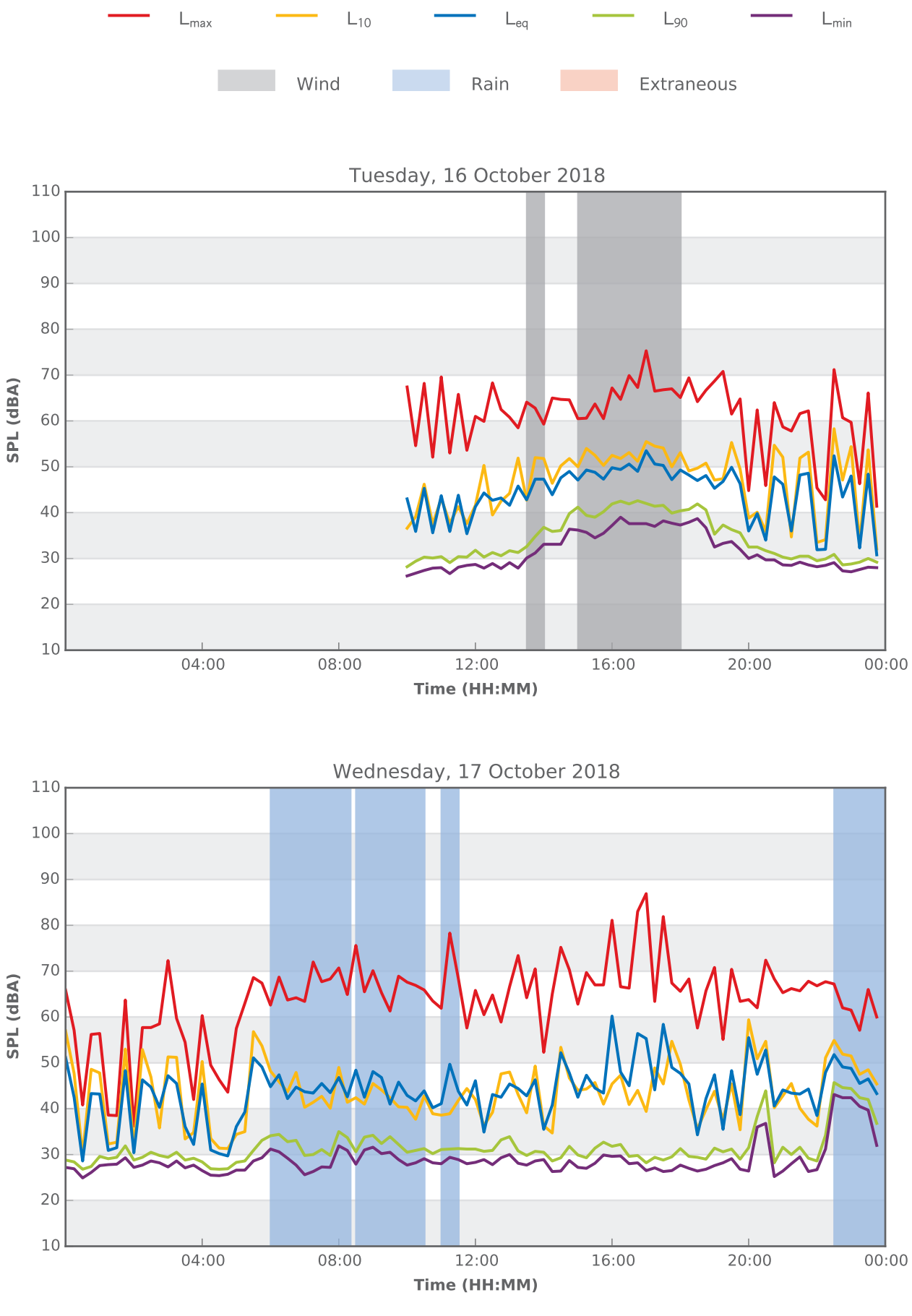
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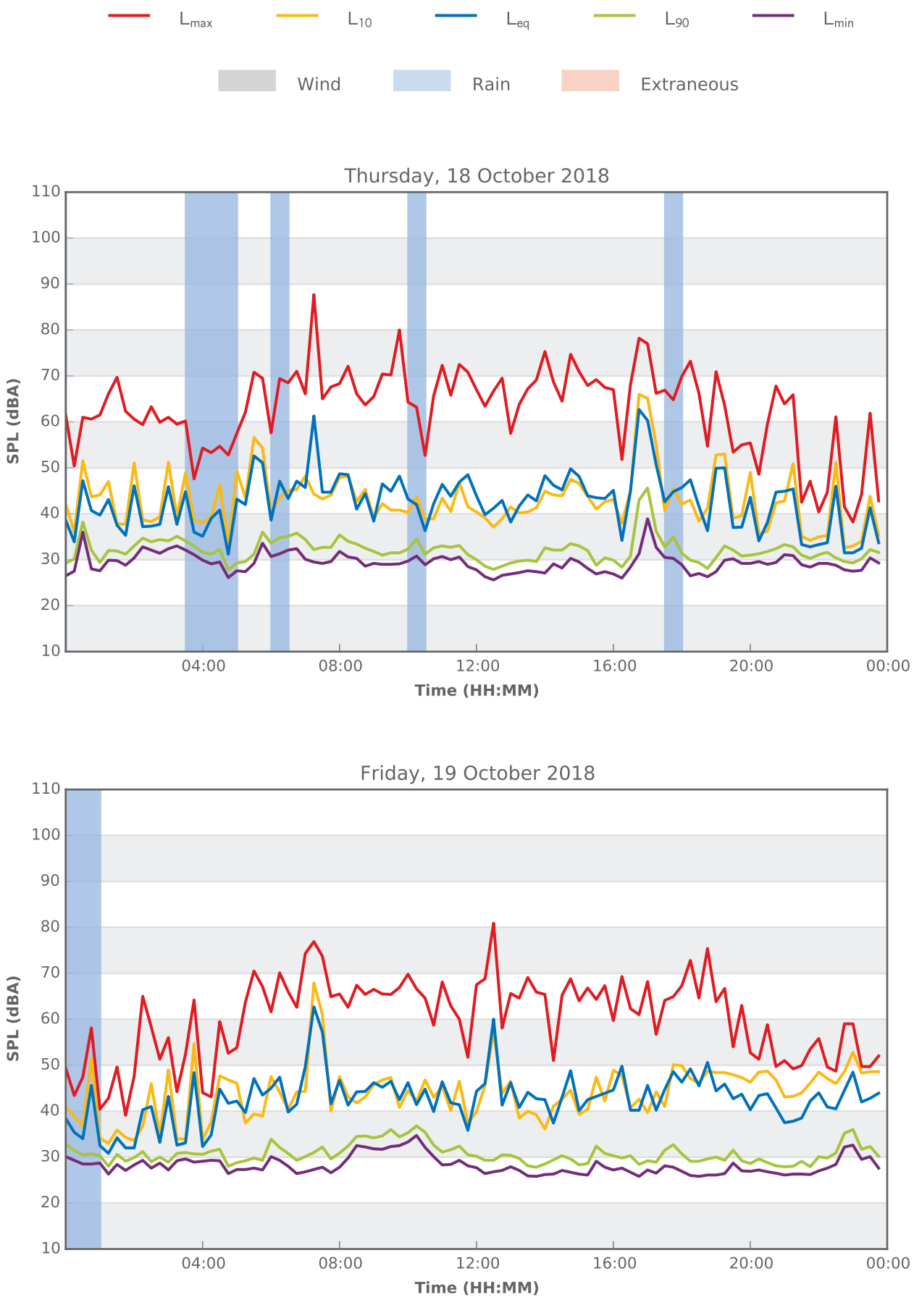
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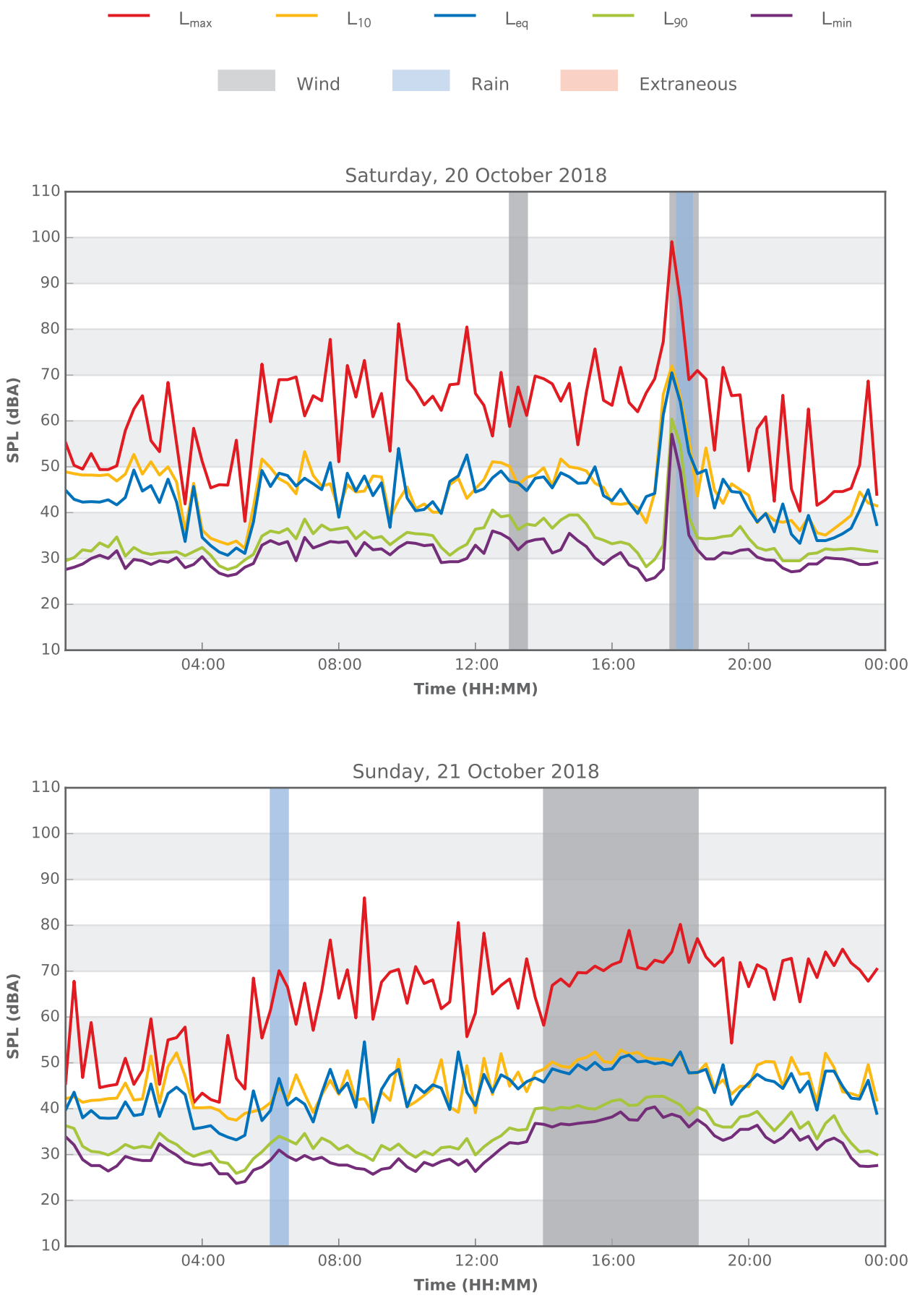
603 Roxburgh Road, Mangoola



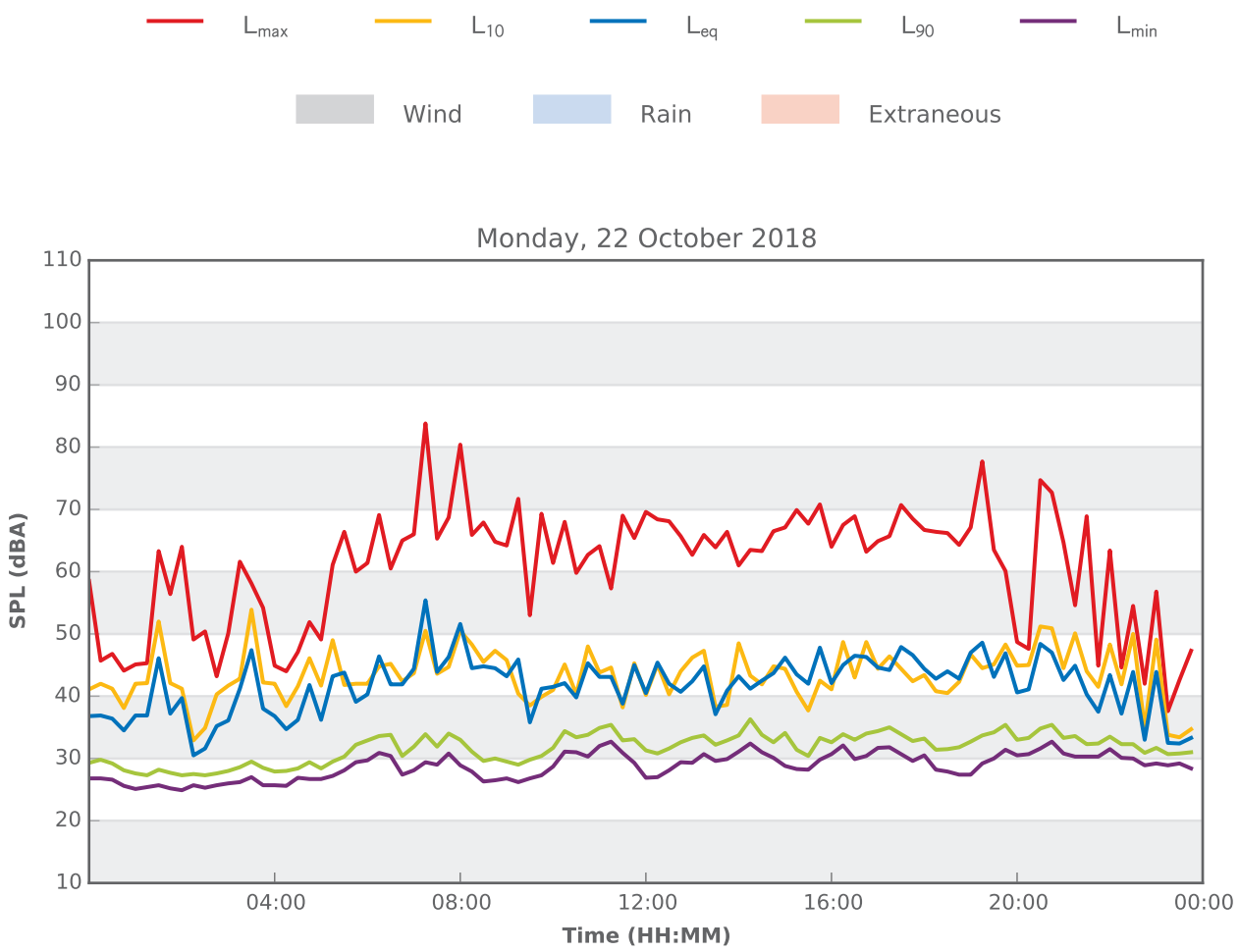
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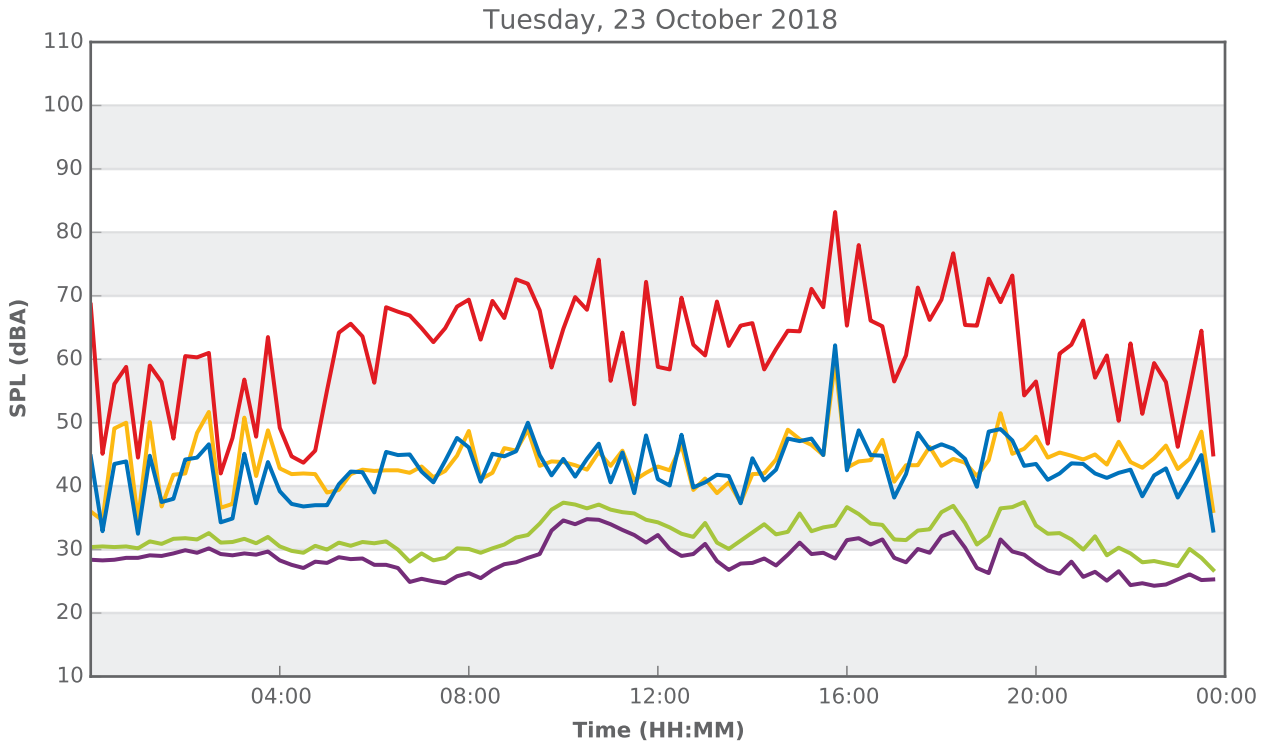


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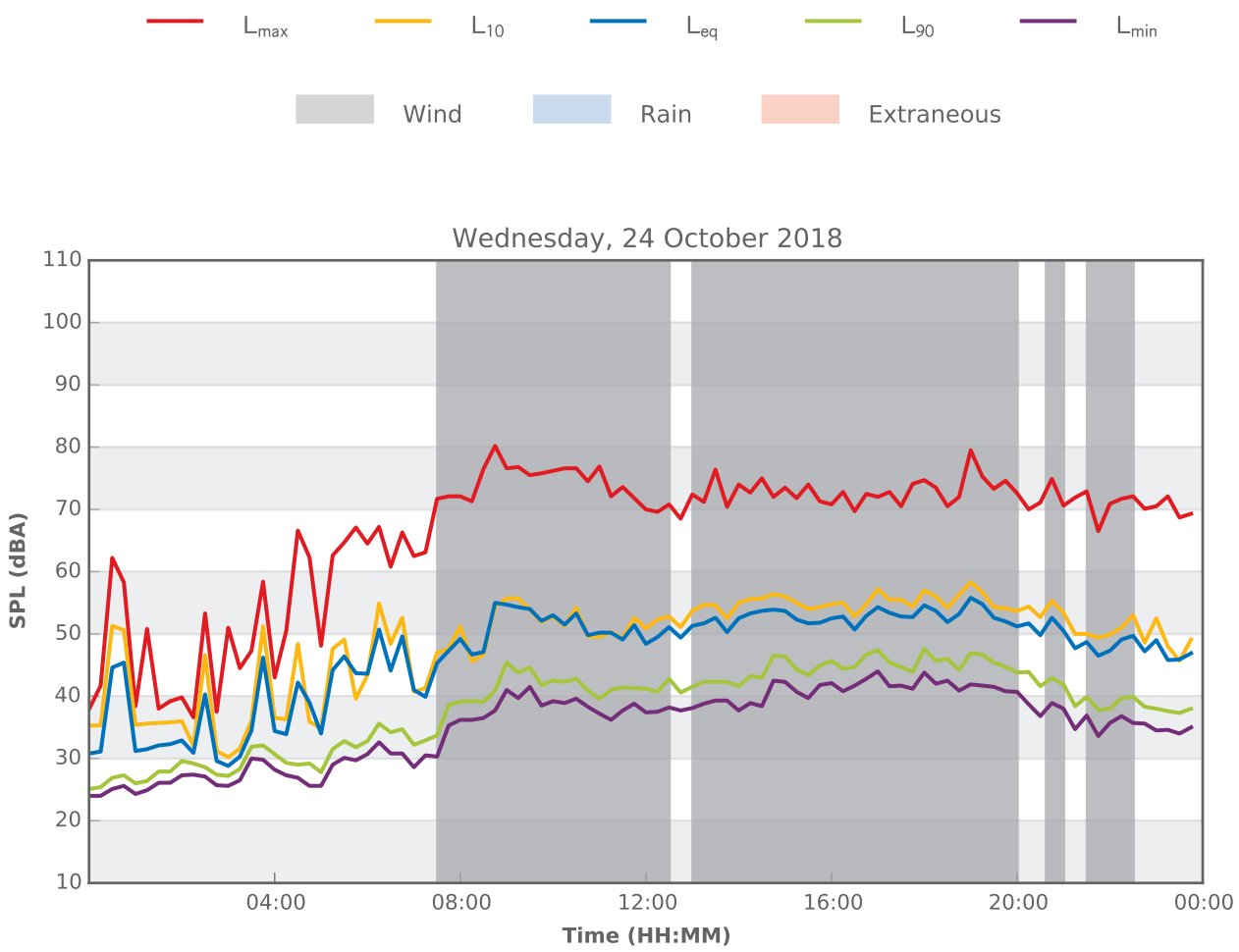


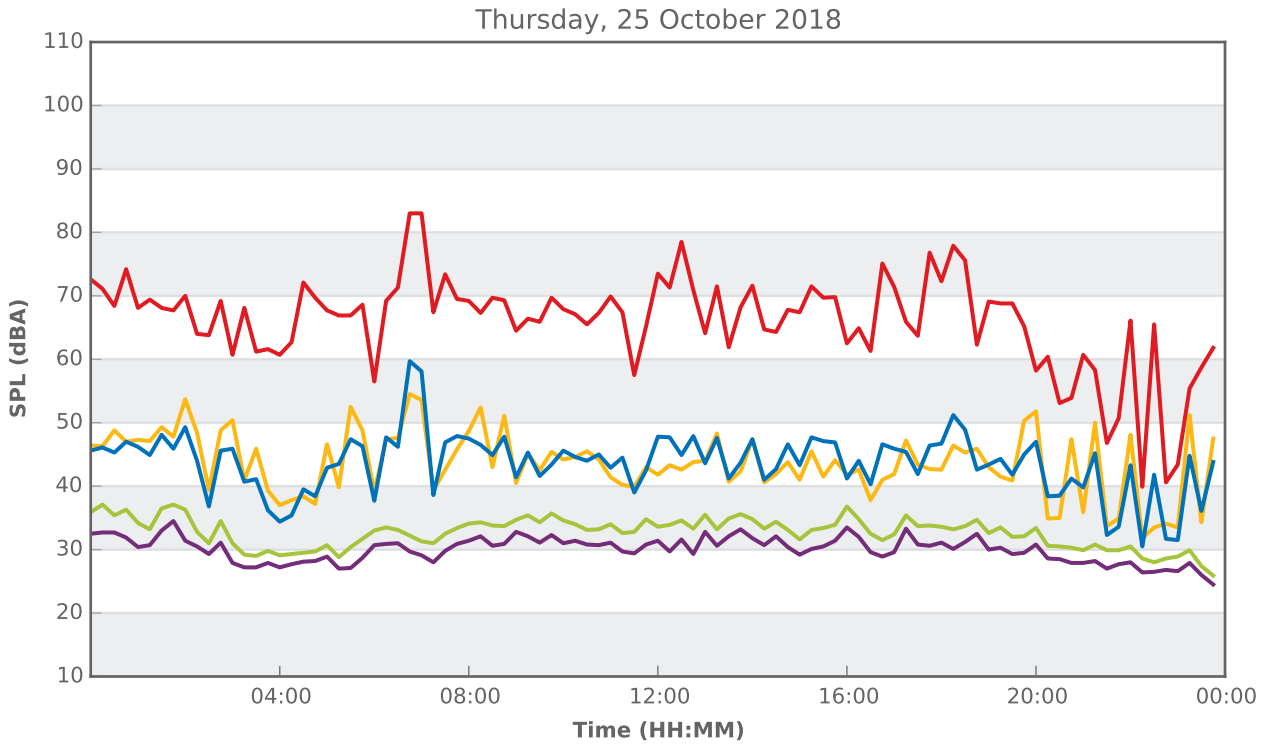
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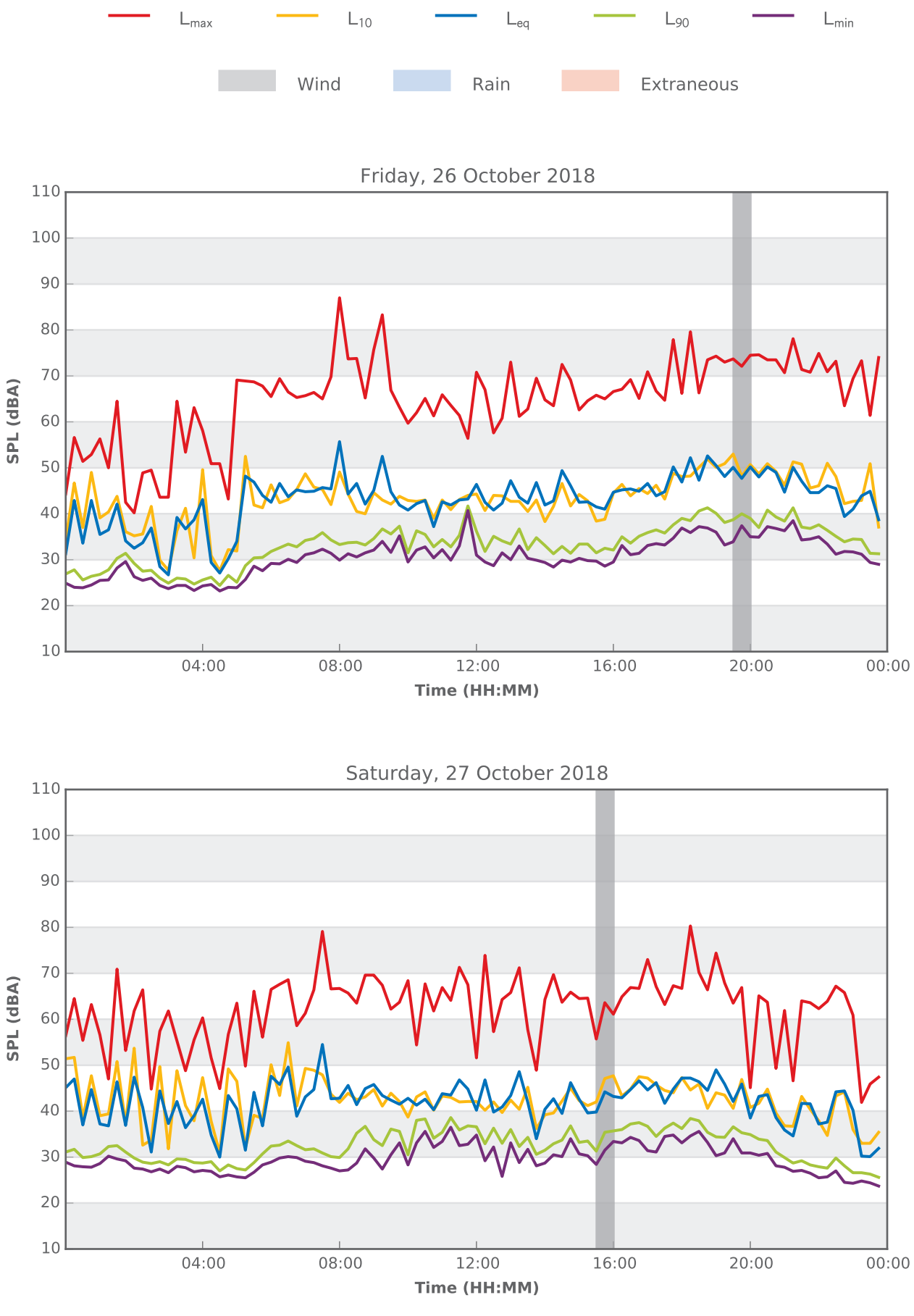


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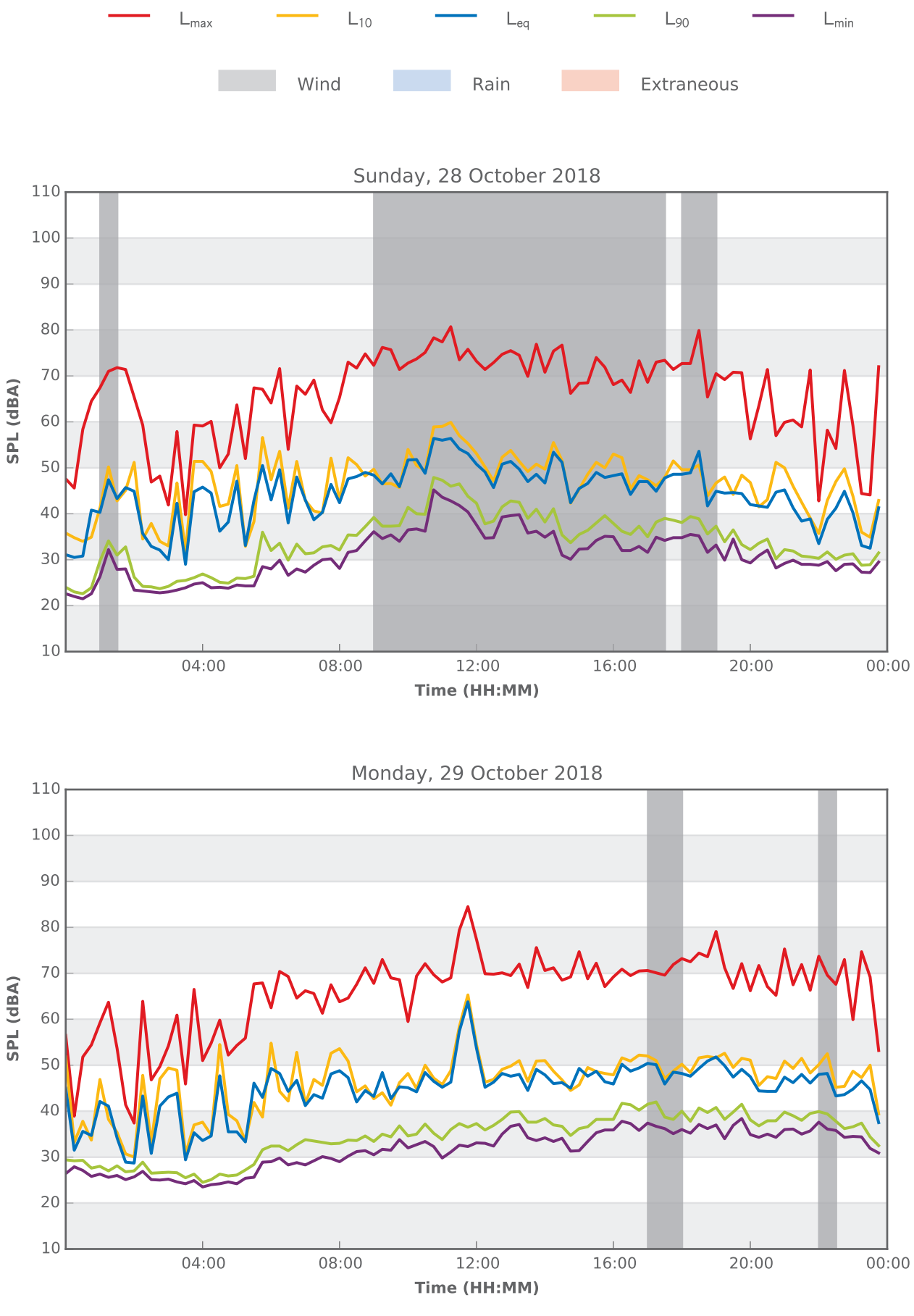




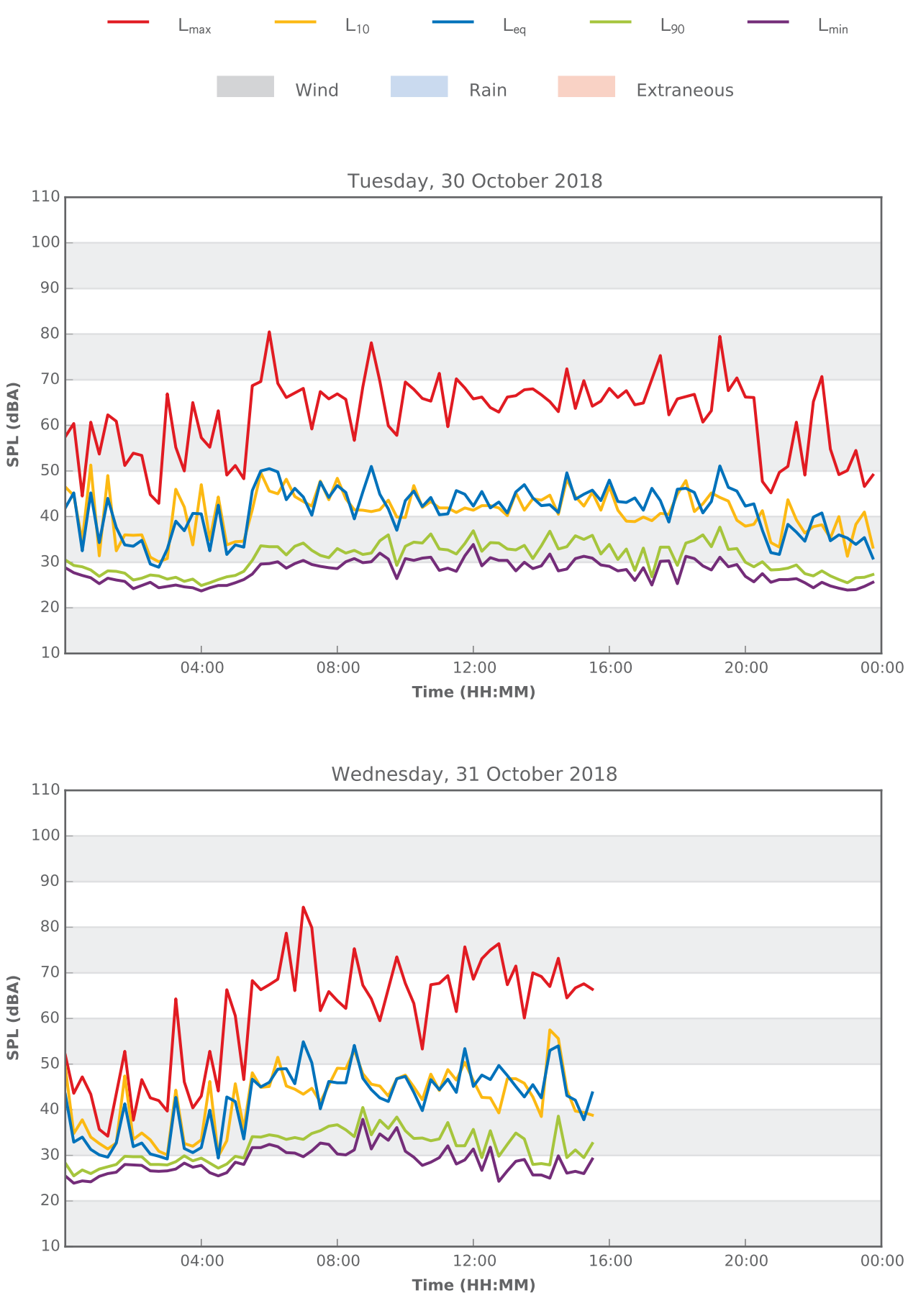
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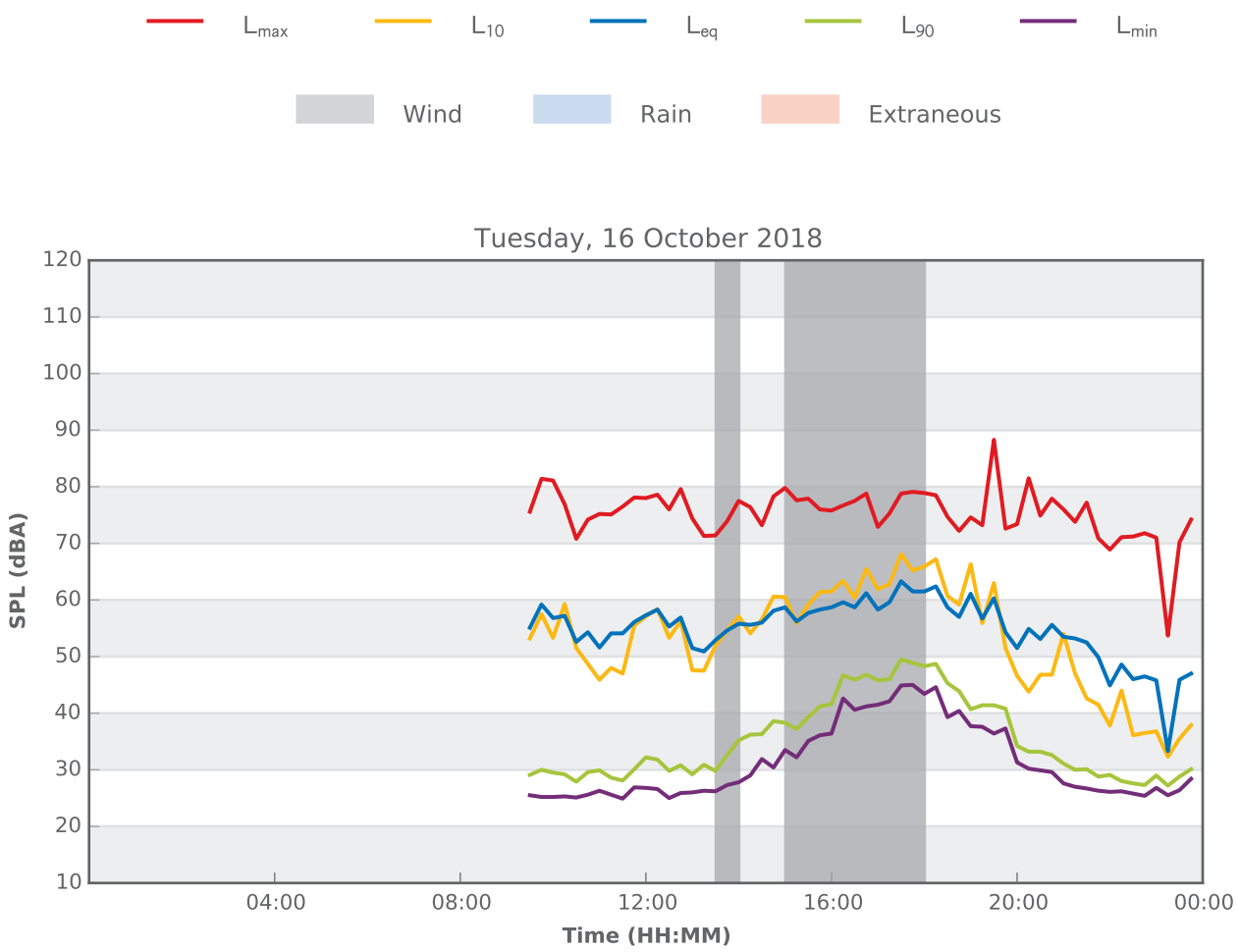
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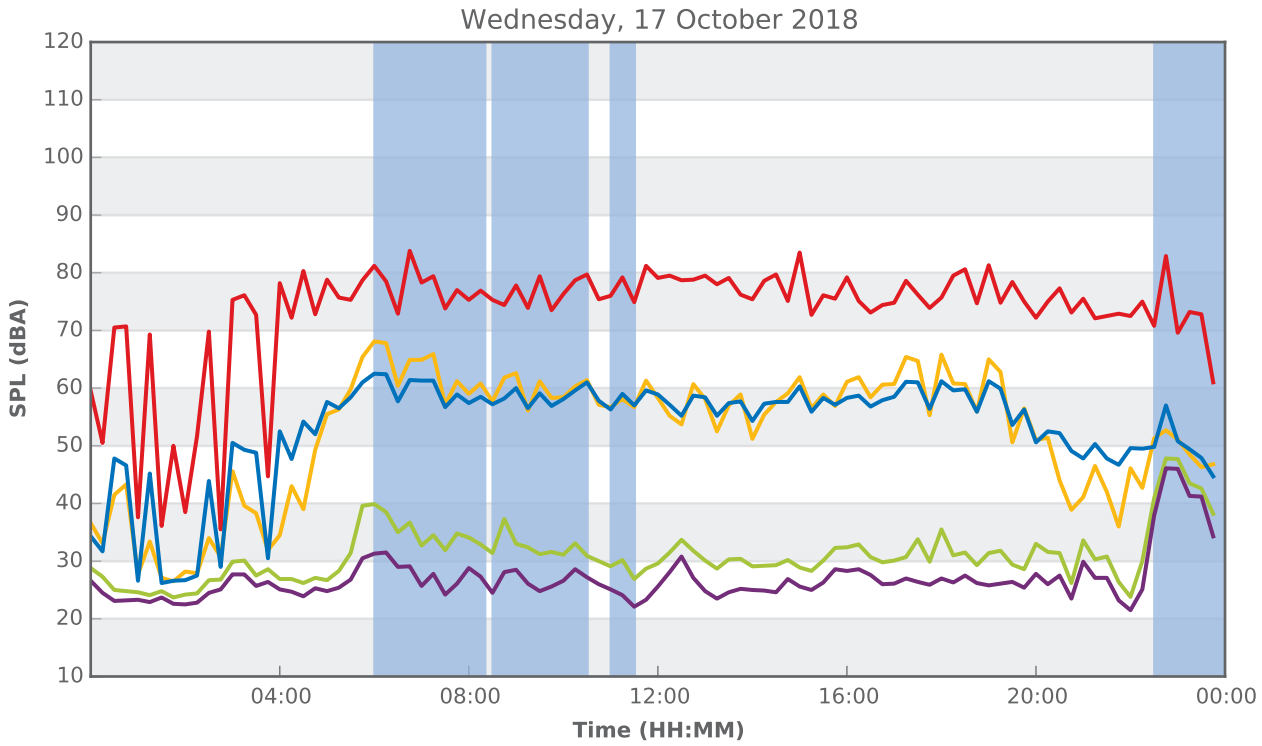


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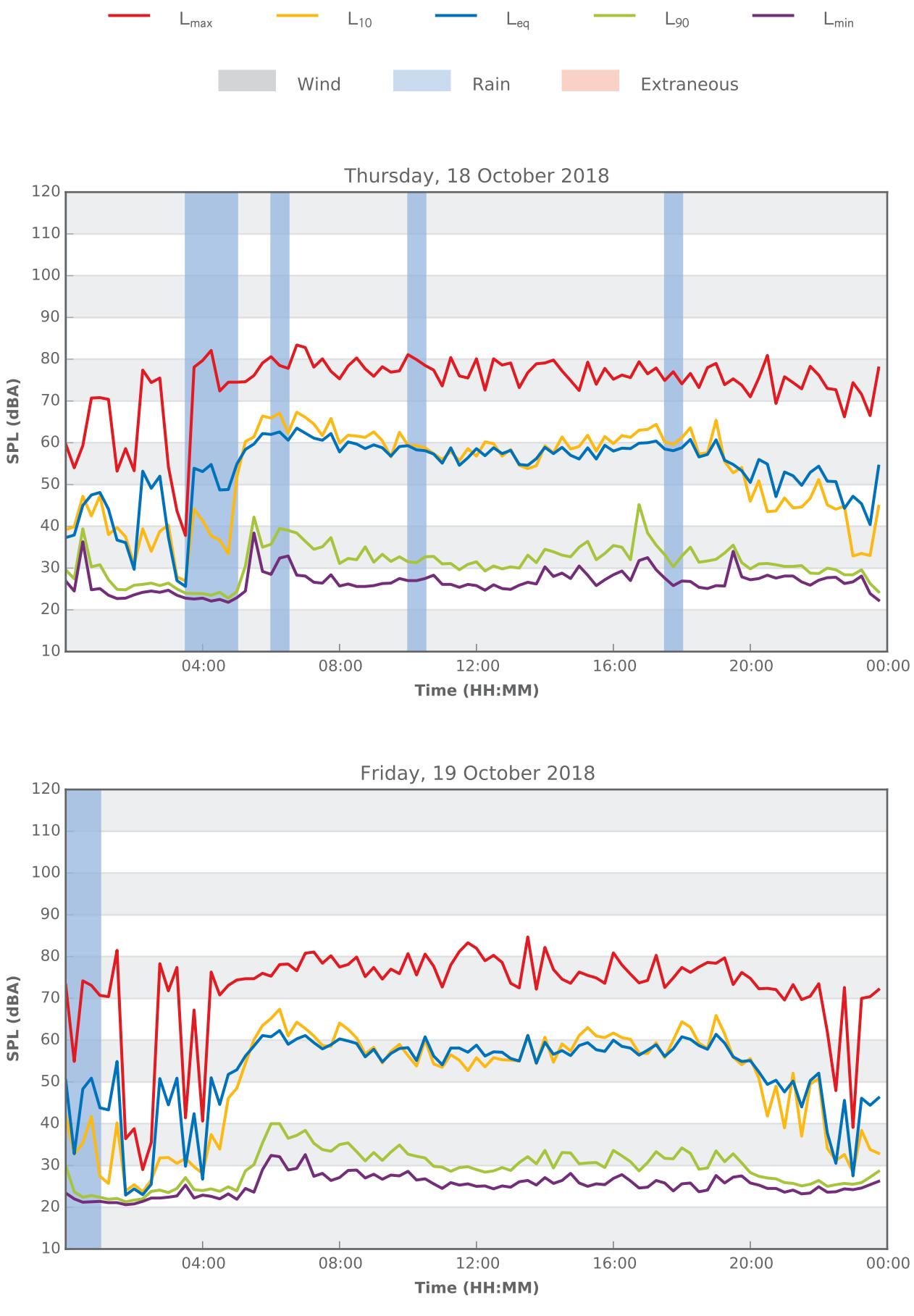


1535 Wybong Road, Castle Rock

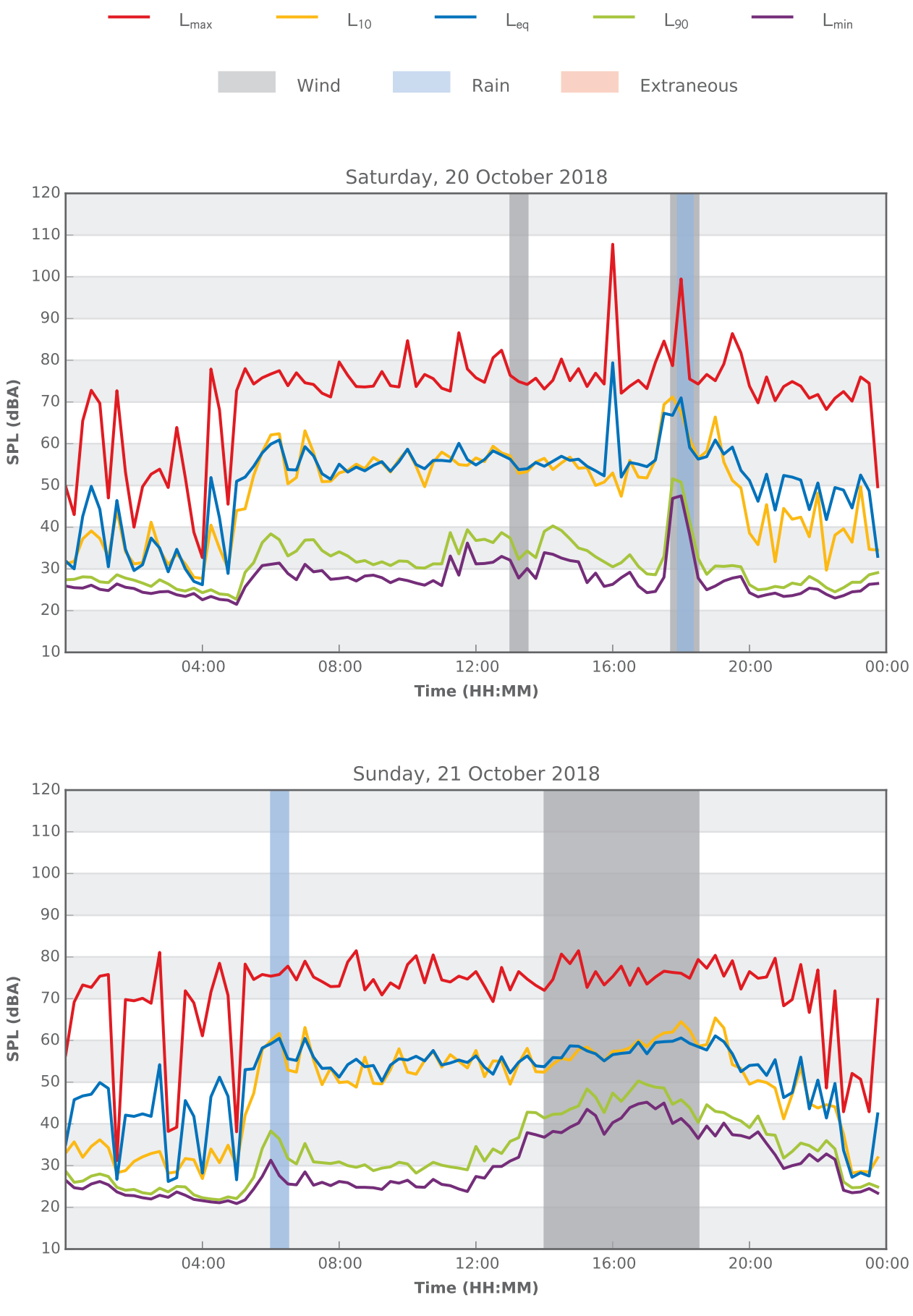




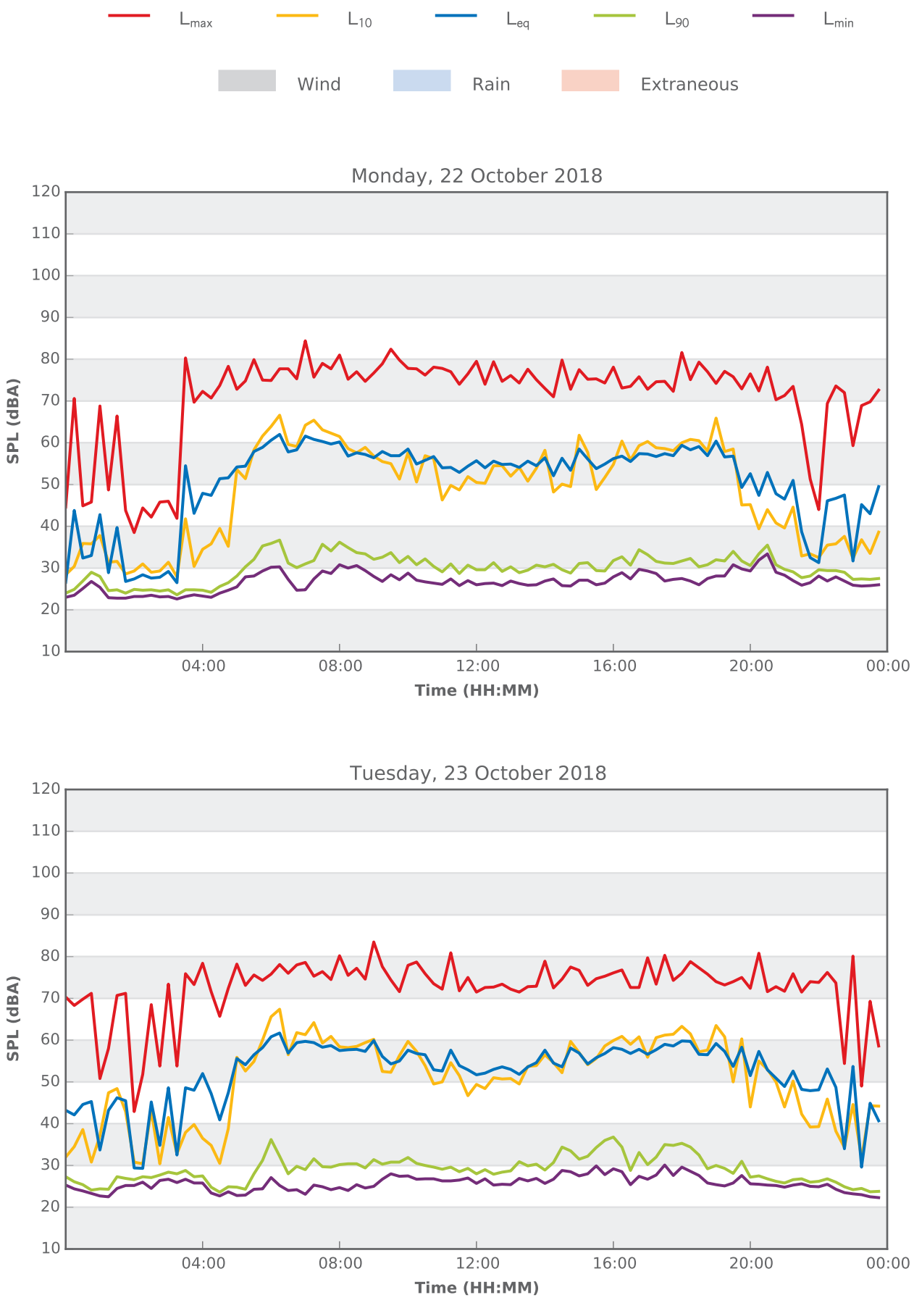
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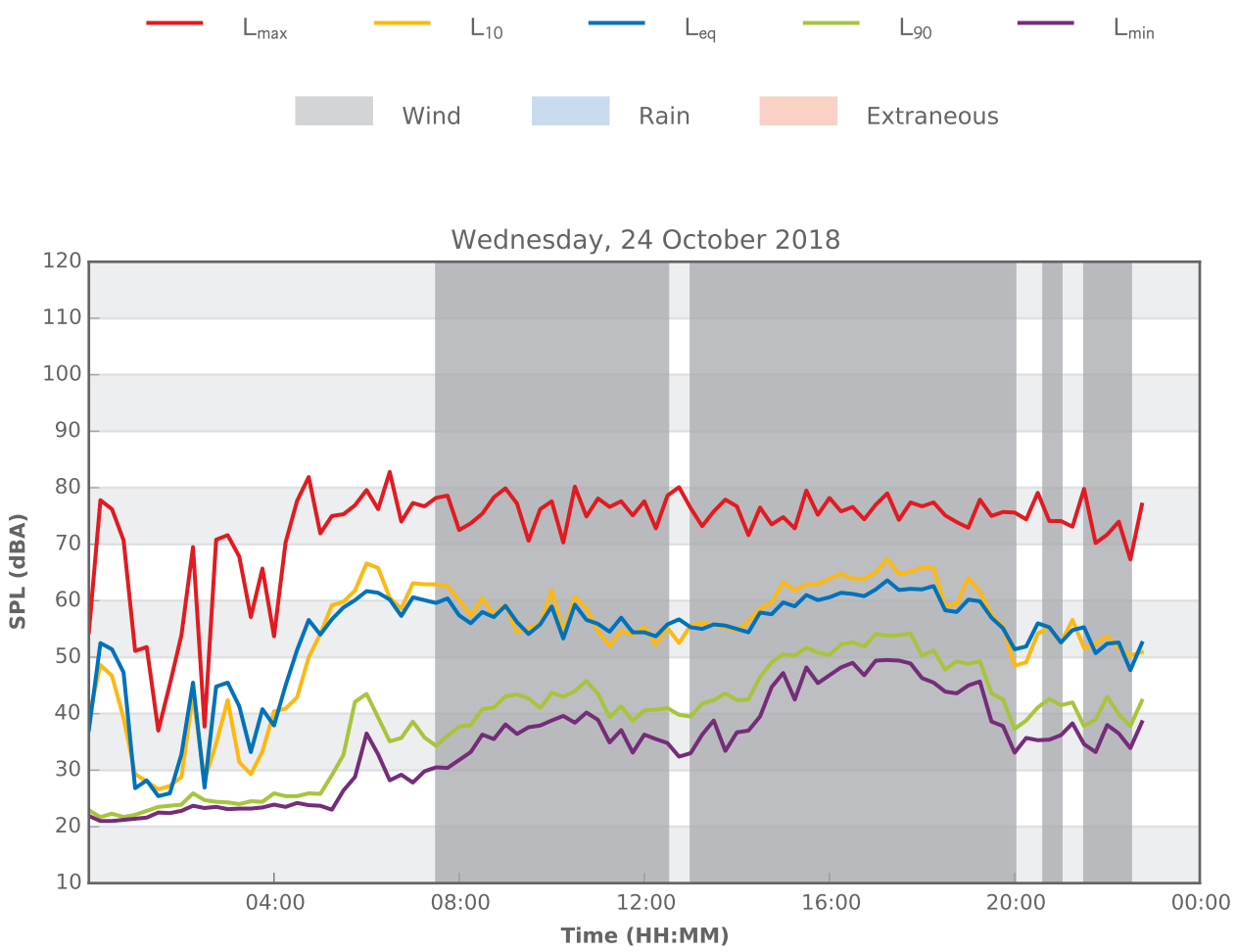
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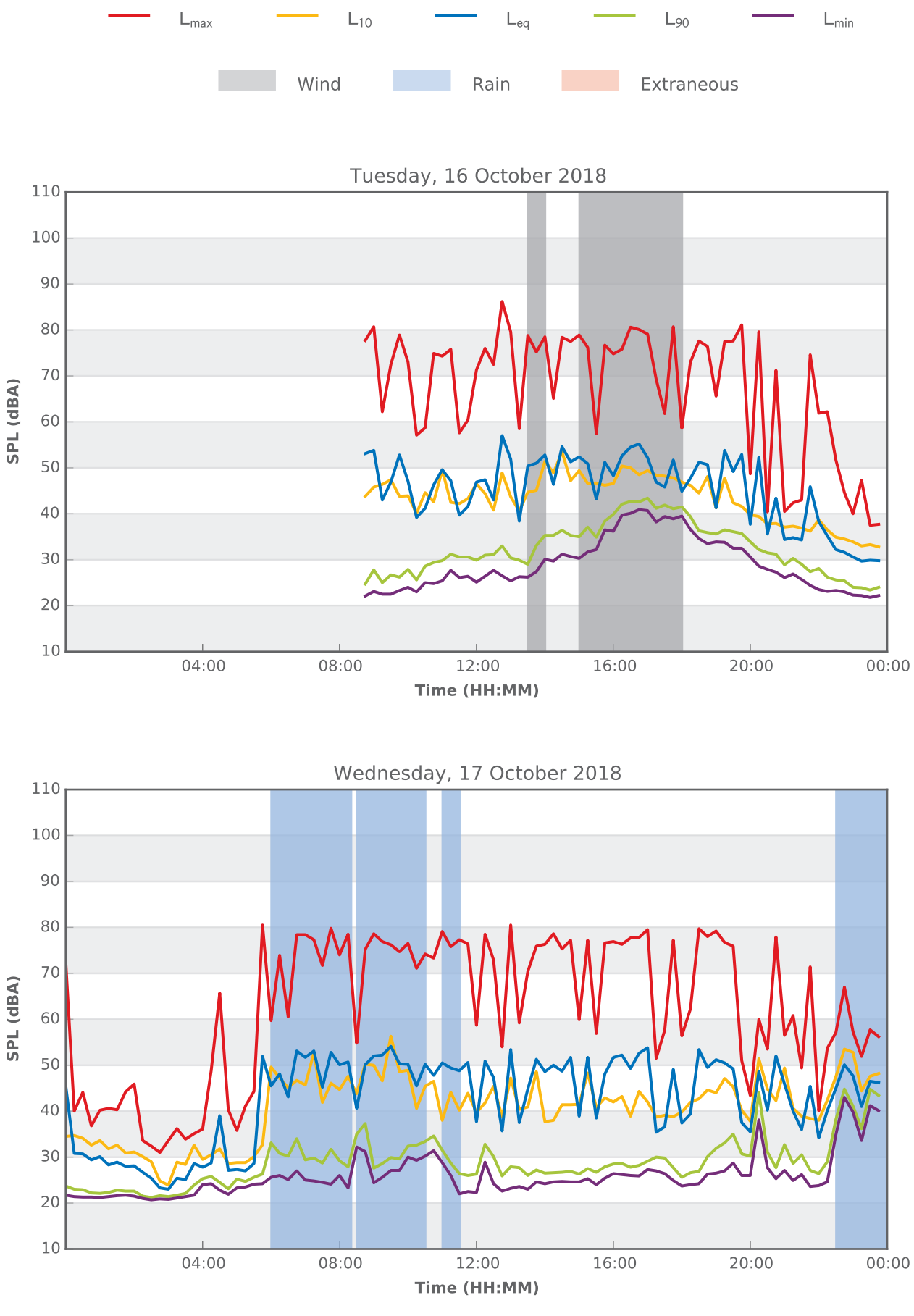
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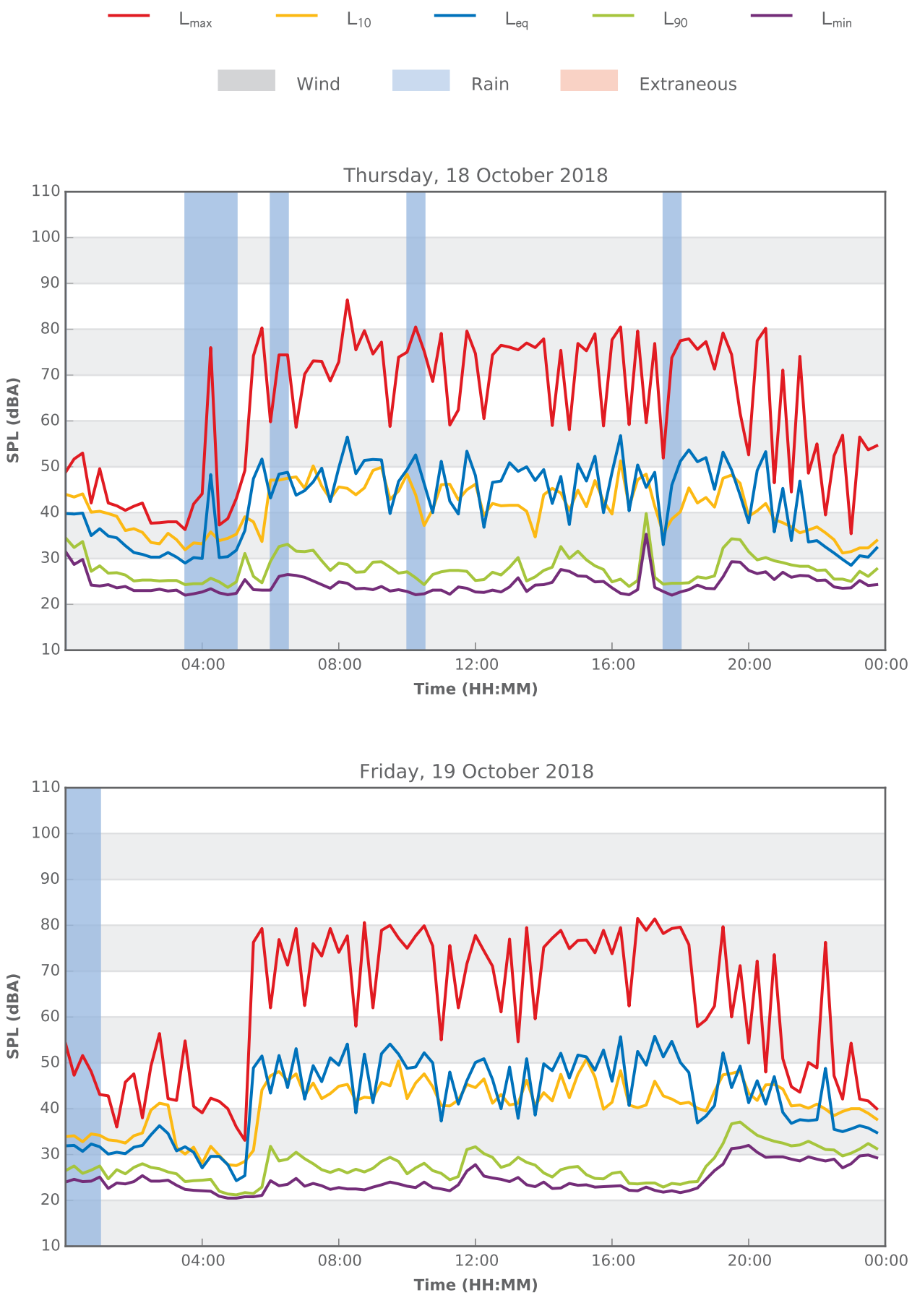
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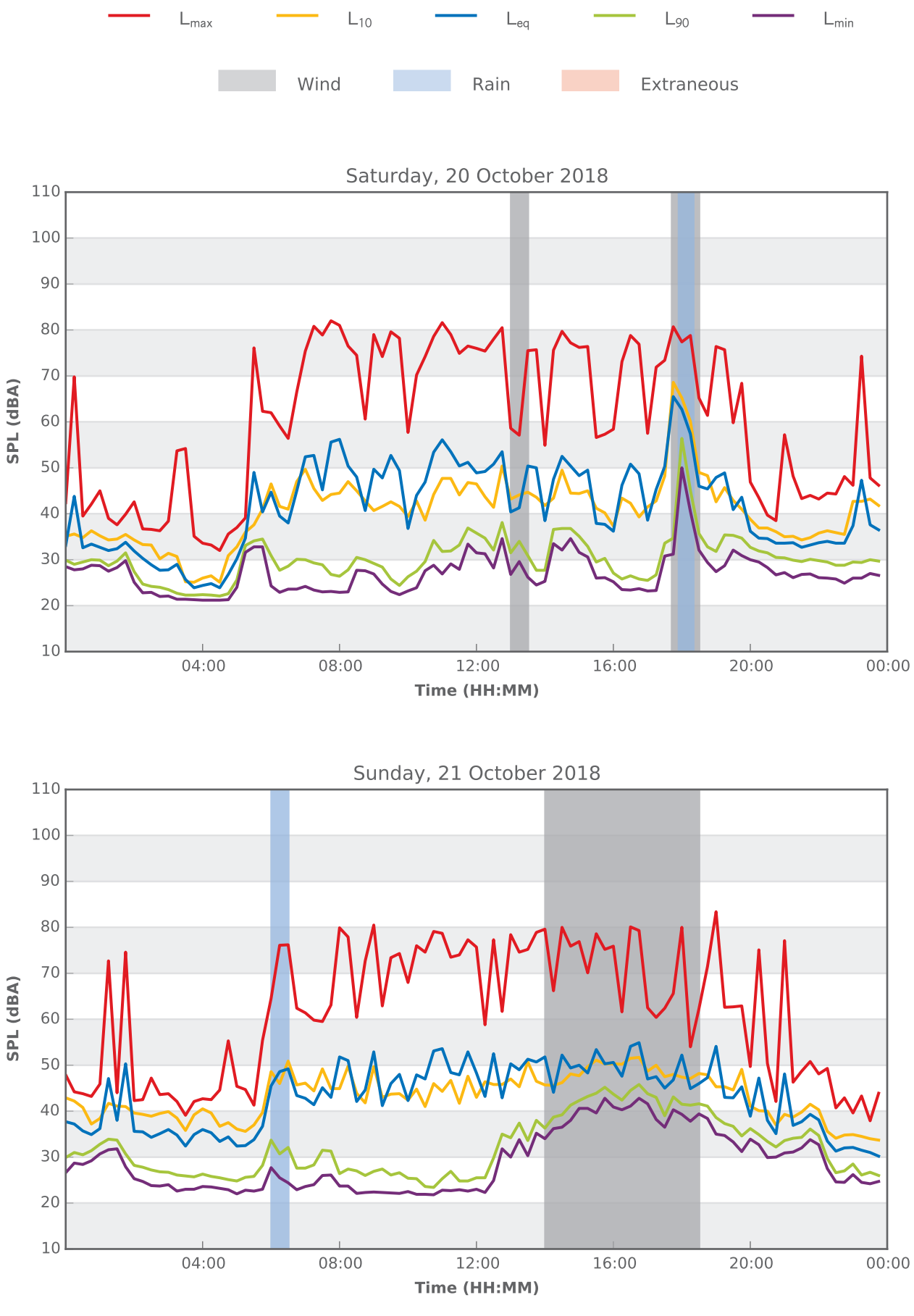
272 Castle Rock Road, Castle Rock



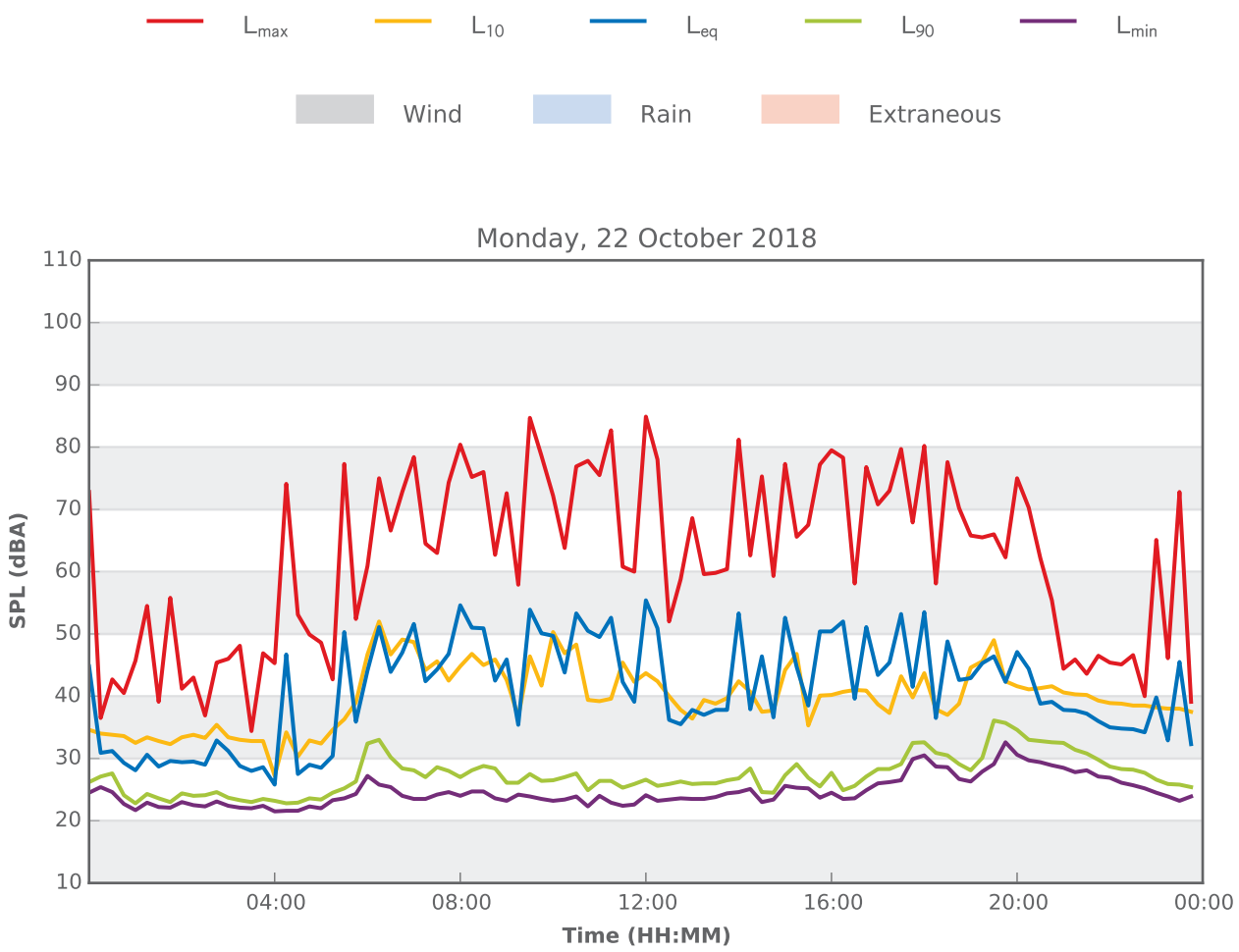
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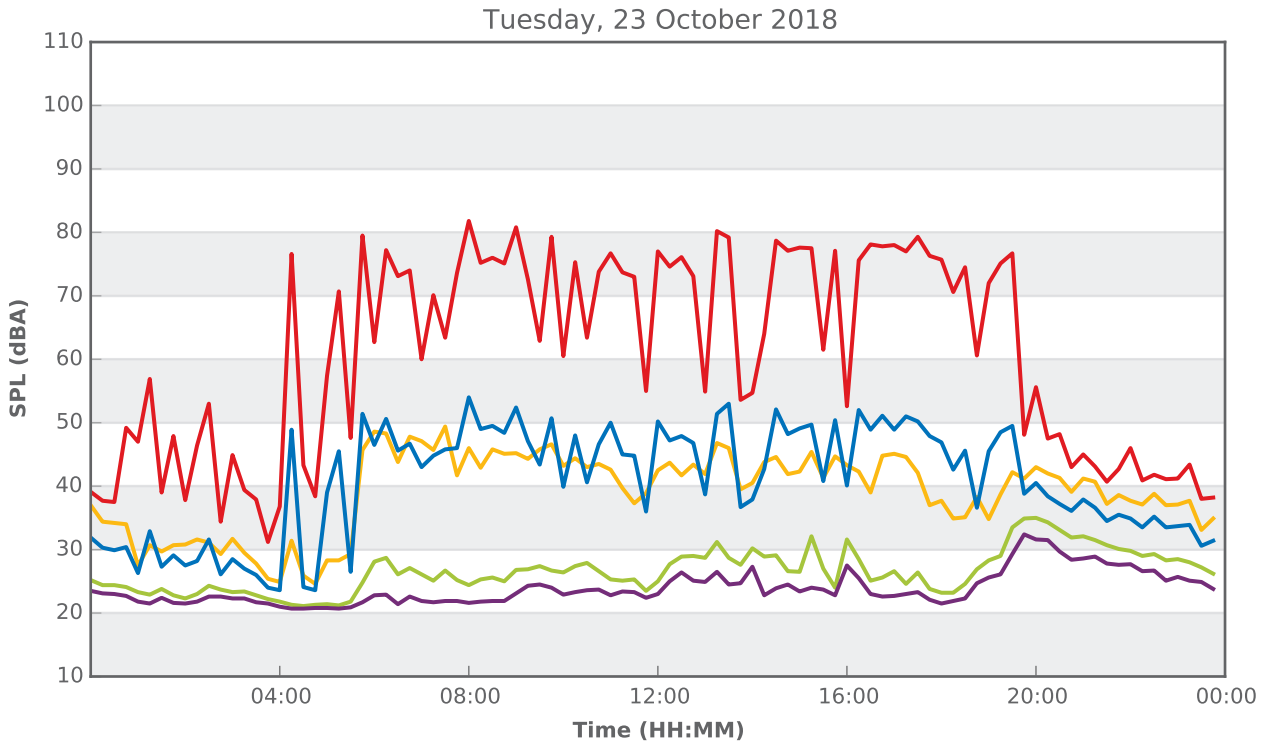


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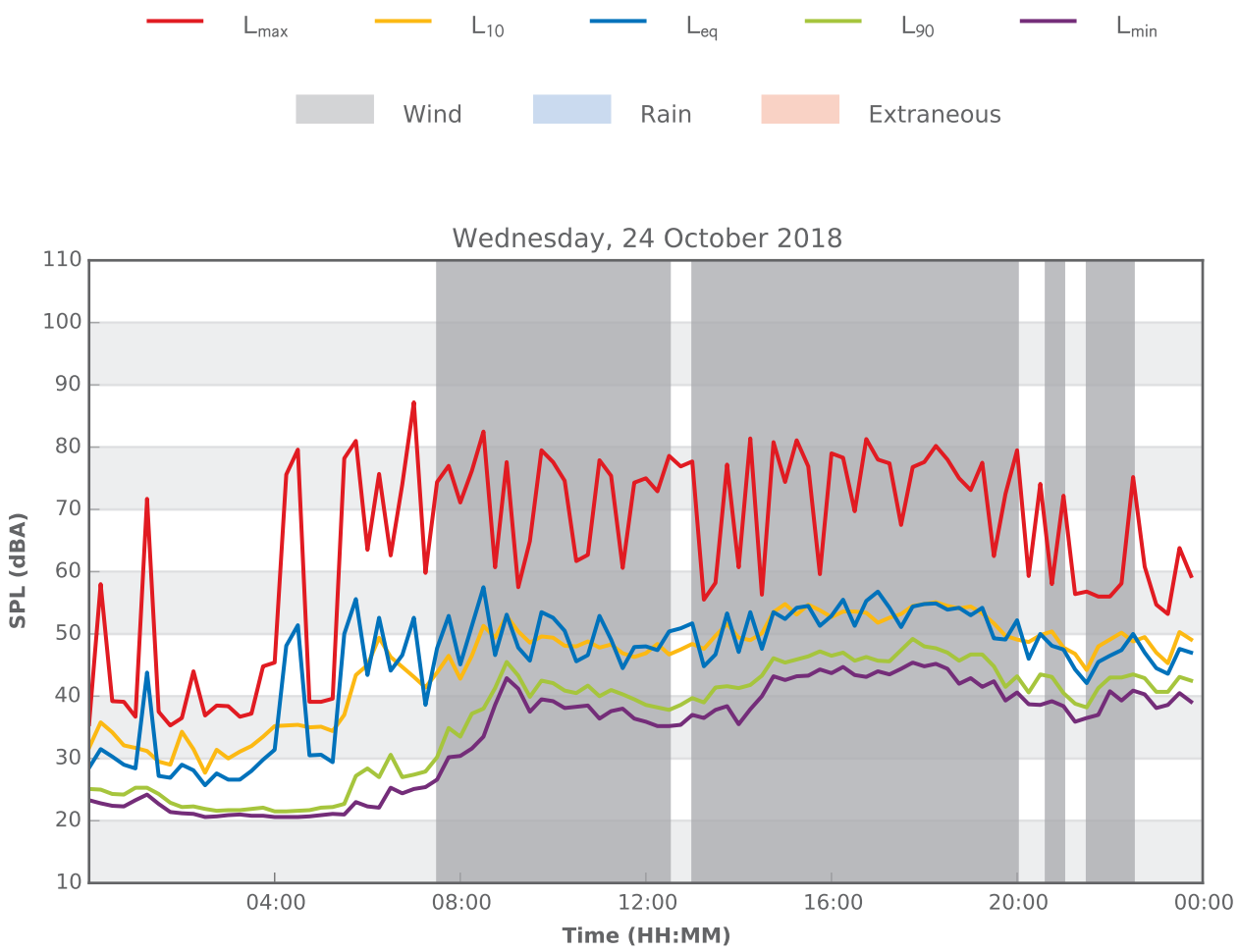


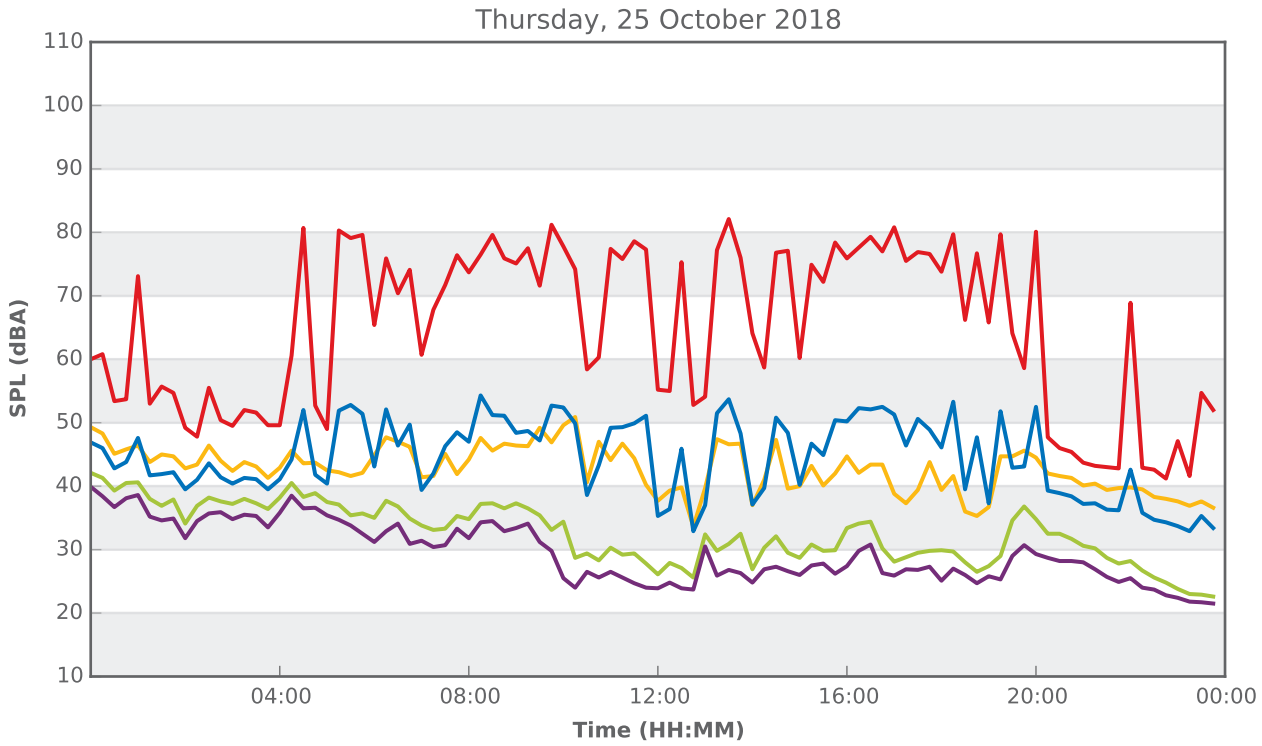
272 Castle Rock Road, Castle Rock



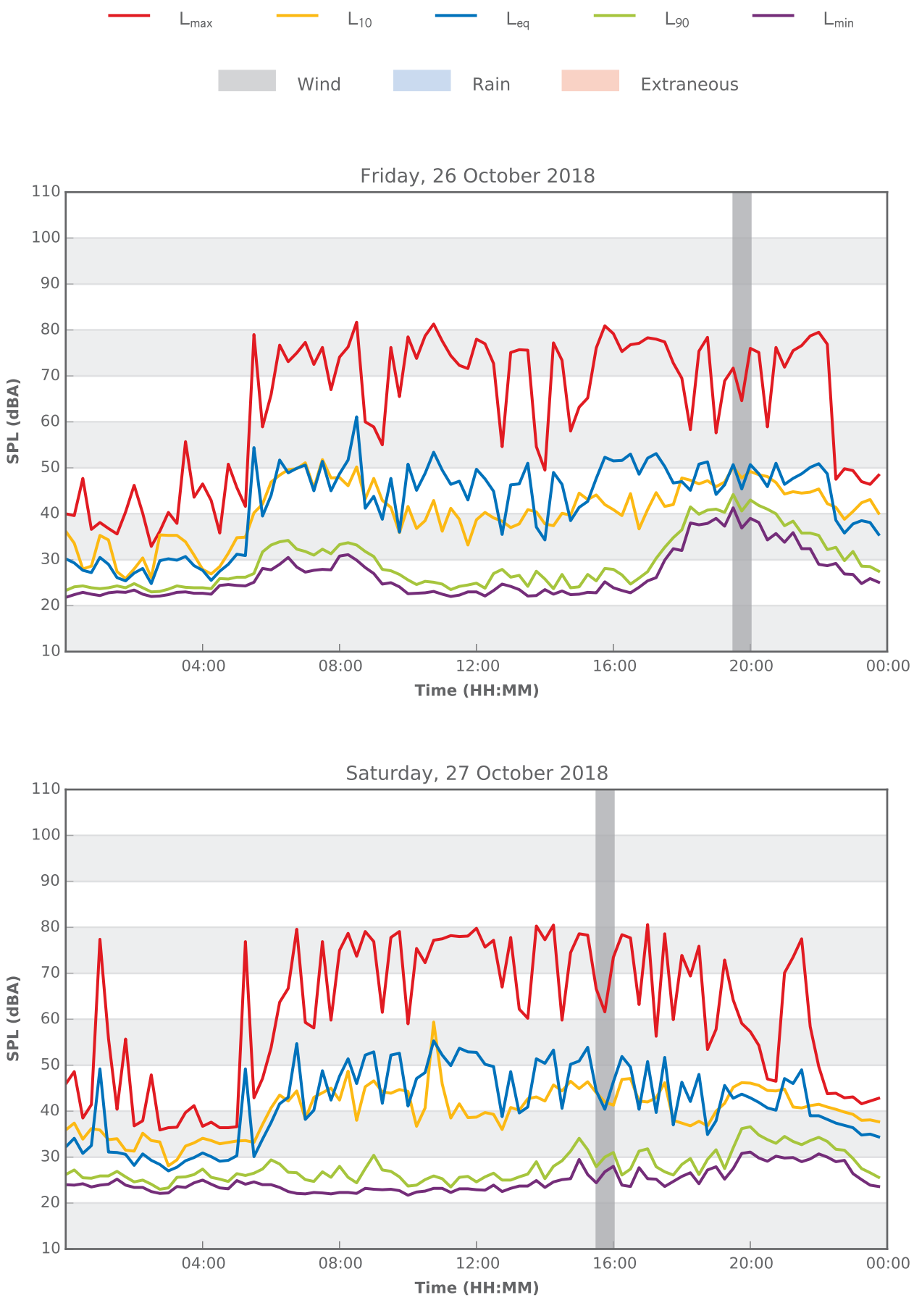


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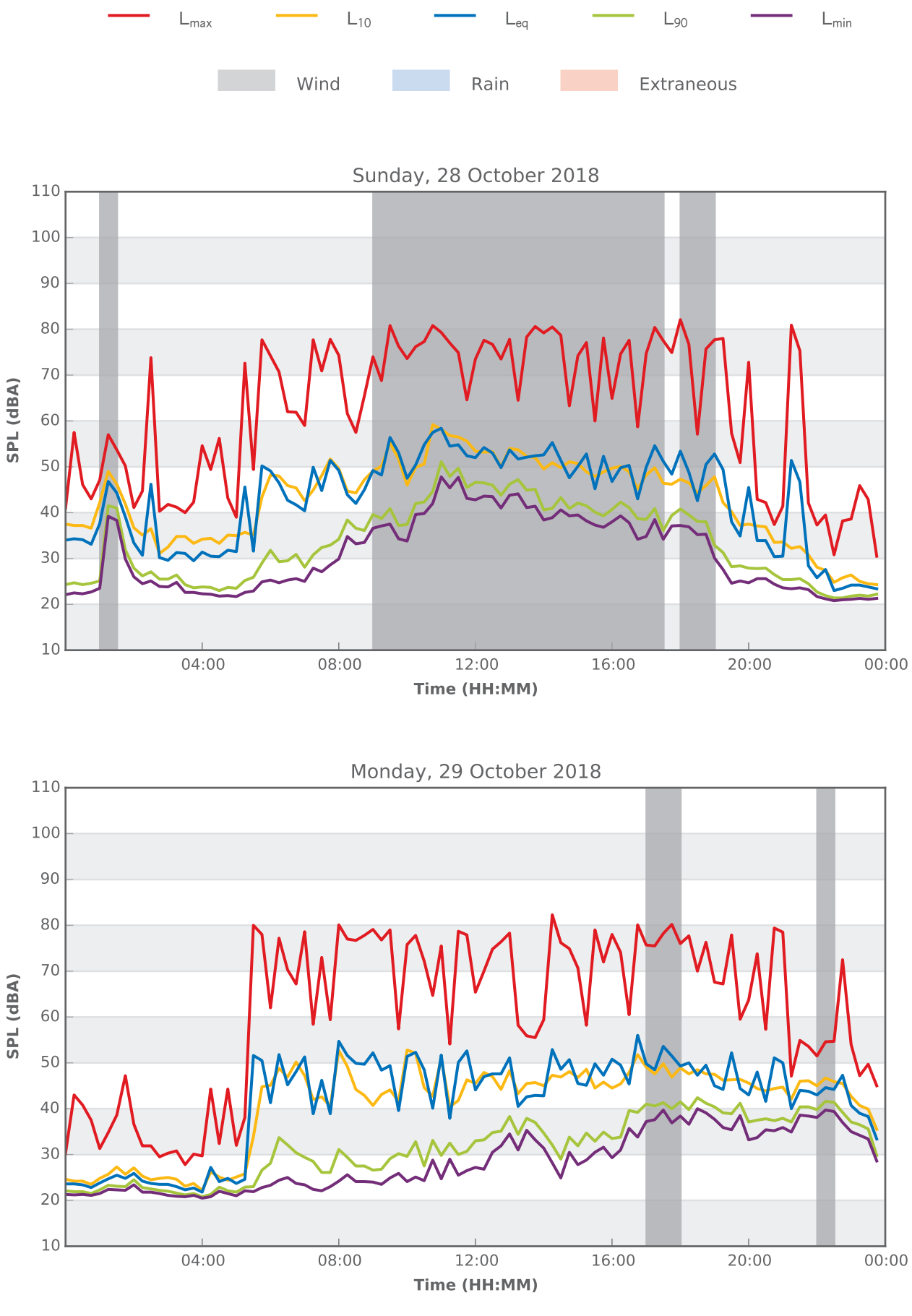




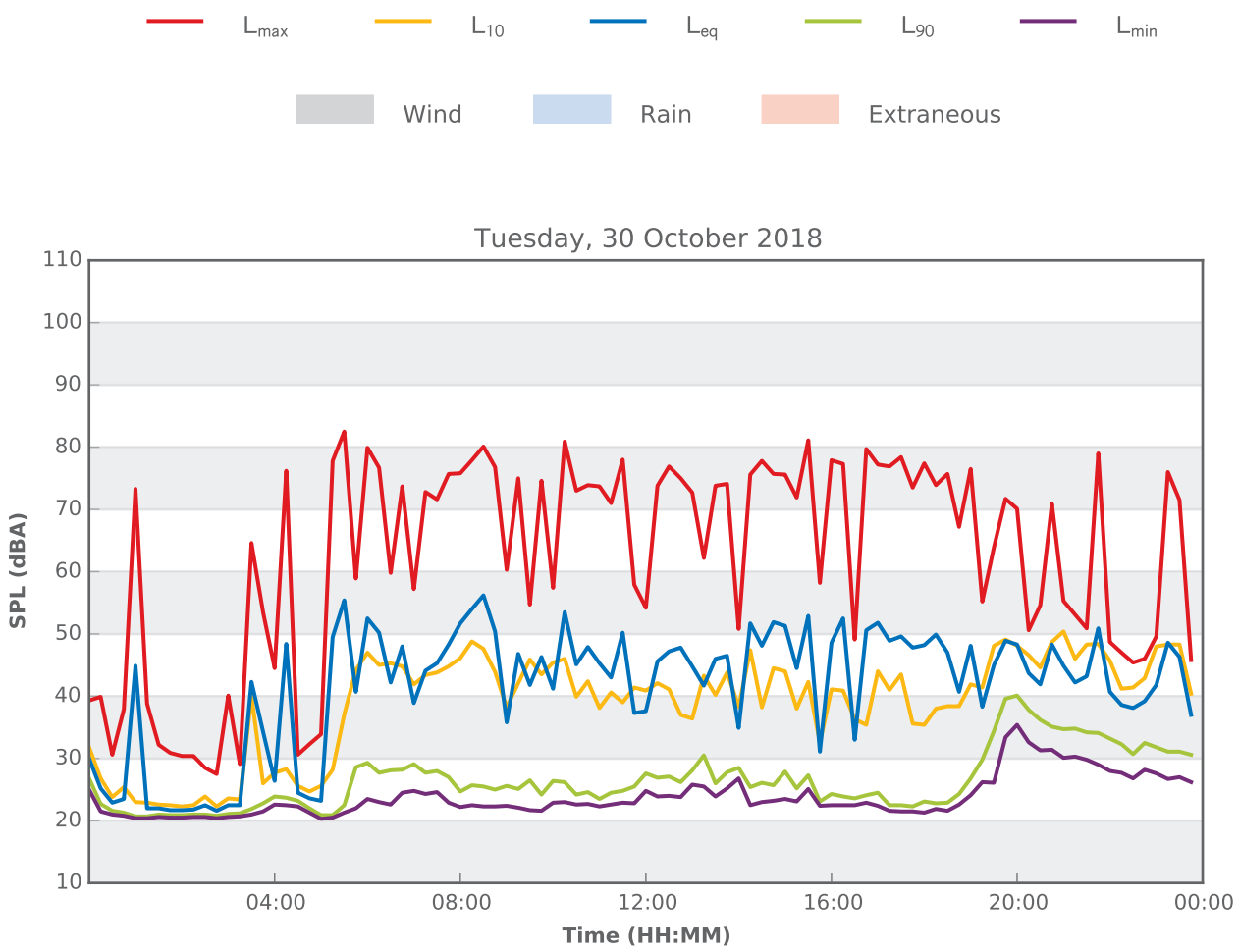
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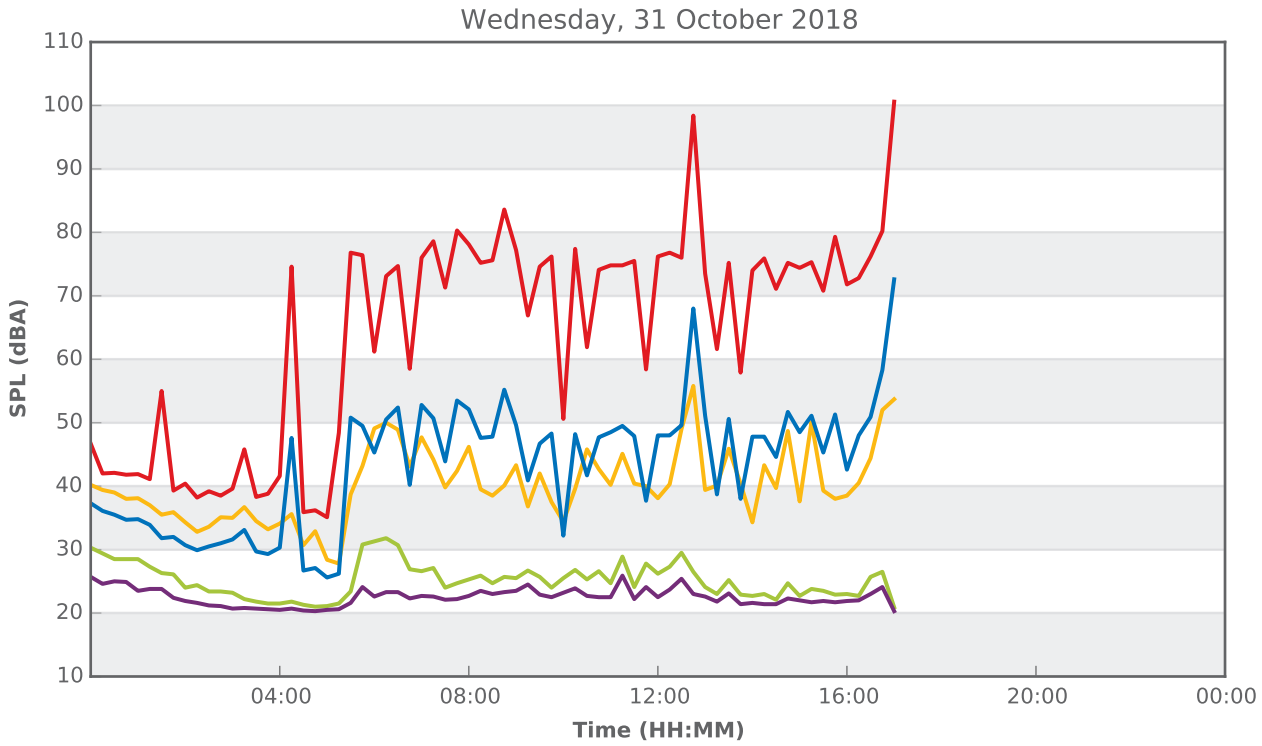


272 Castle Rock Road, Castle Rock

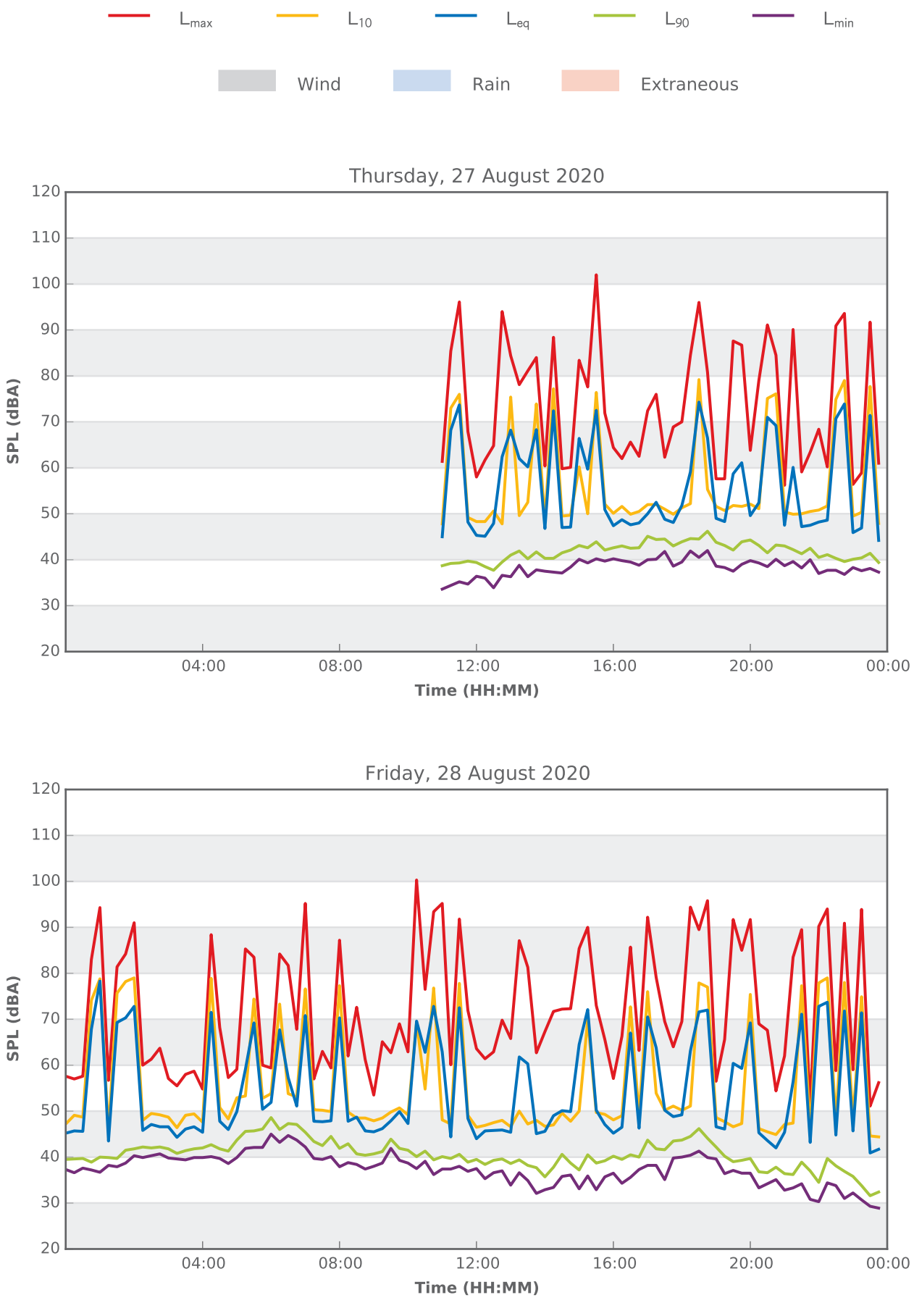


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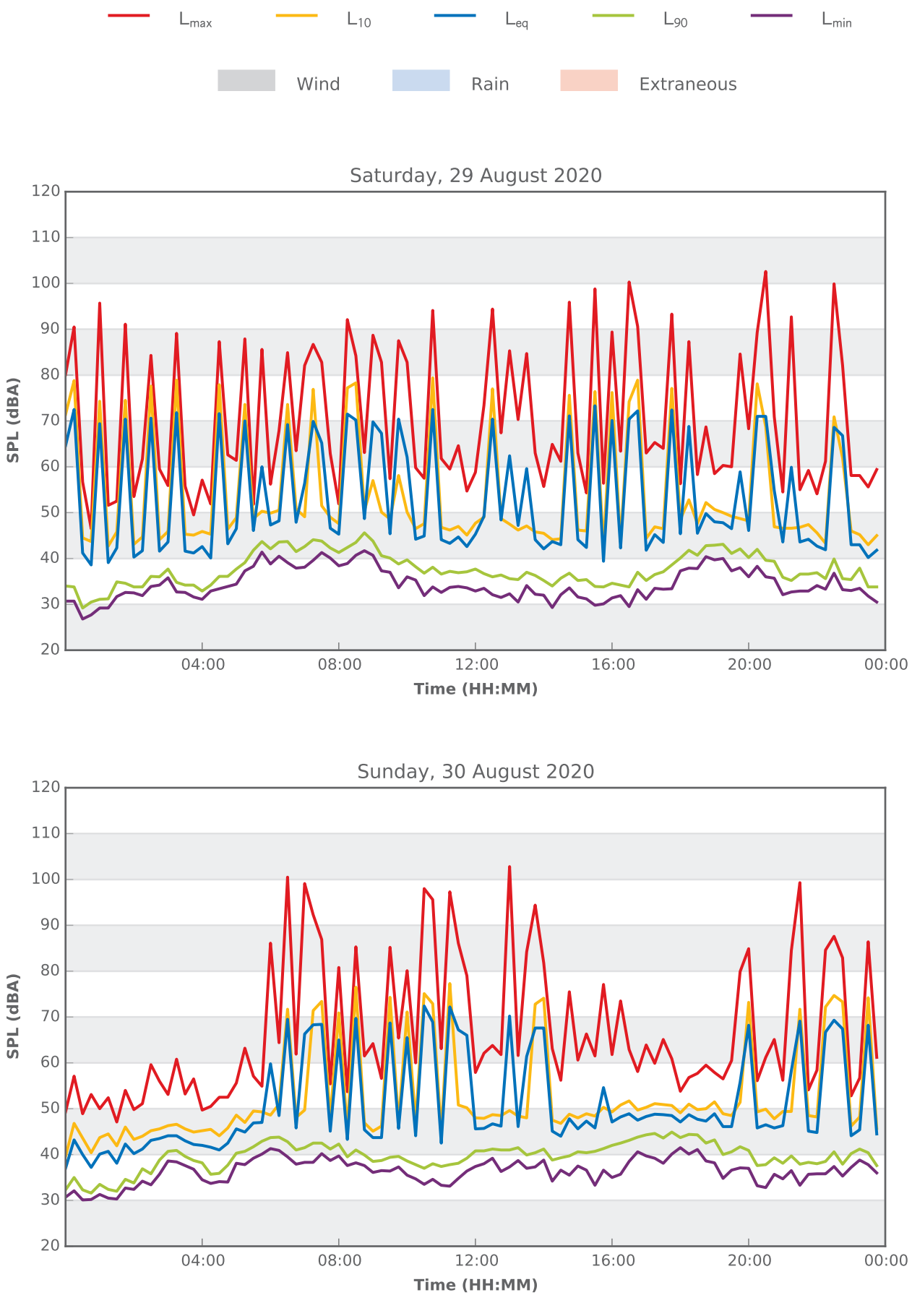




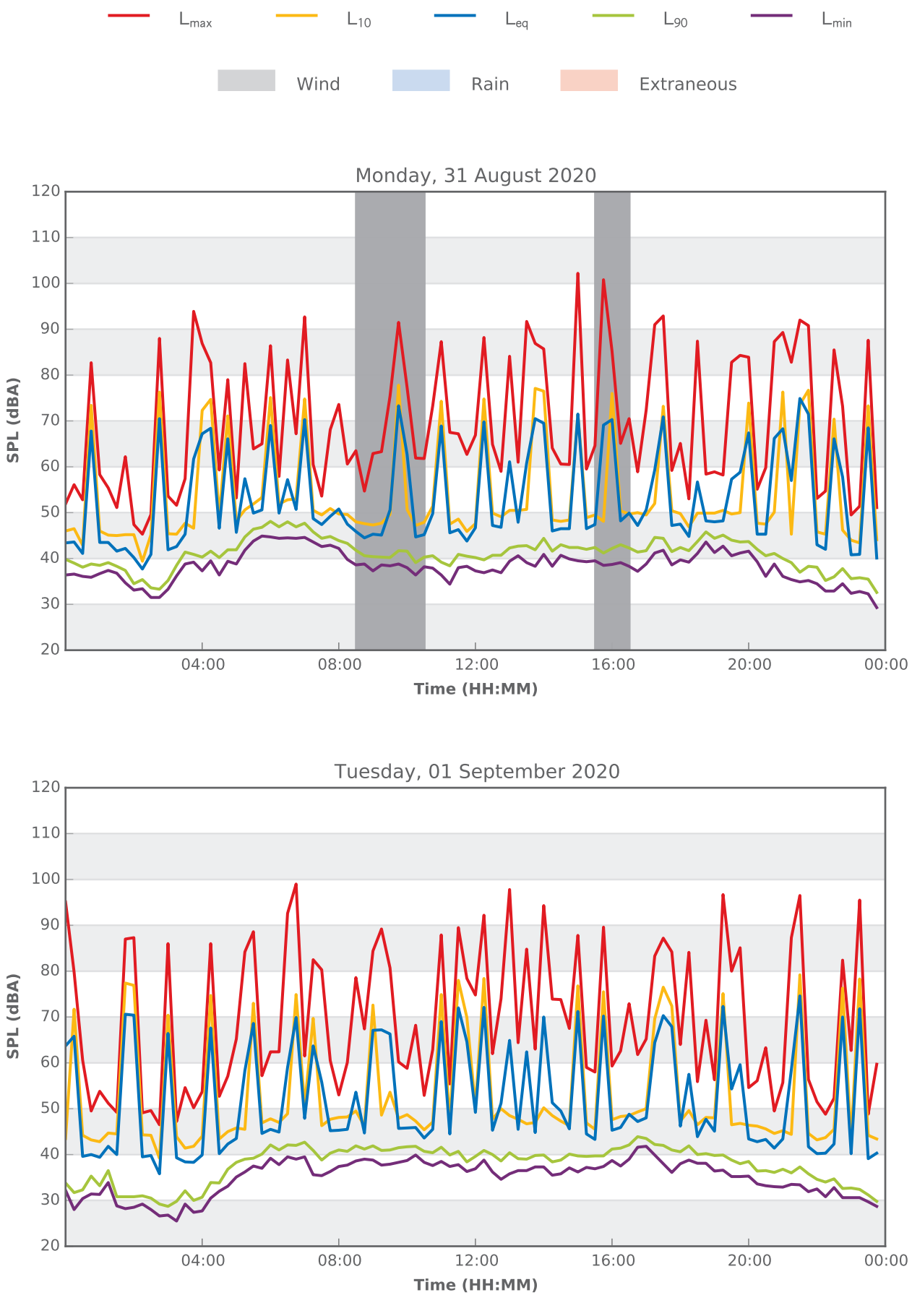
210 Bridge Street, Muswellbrook



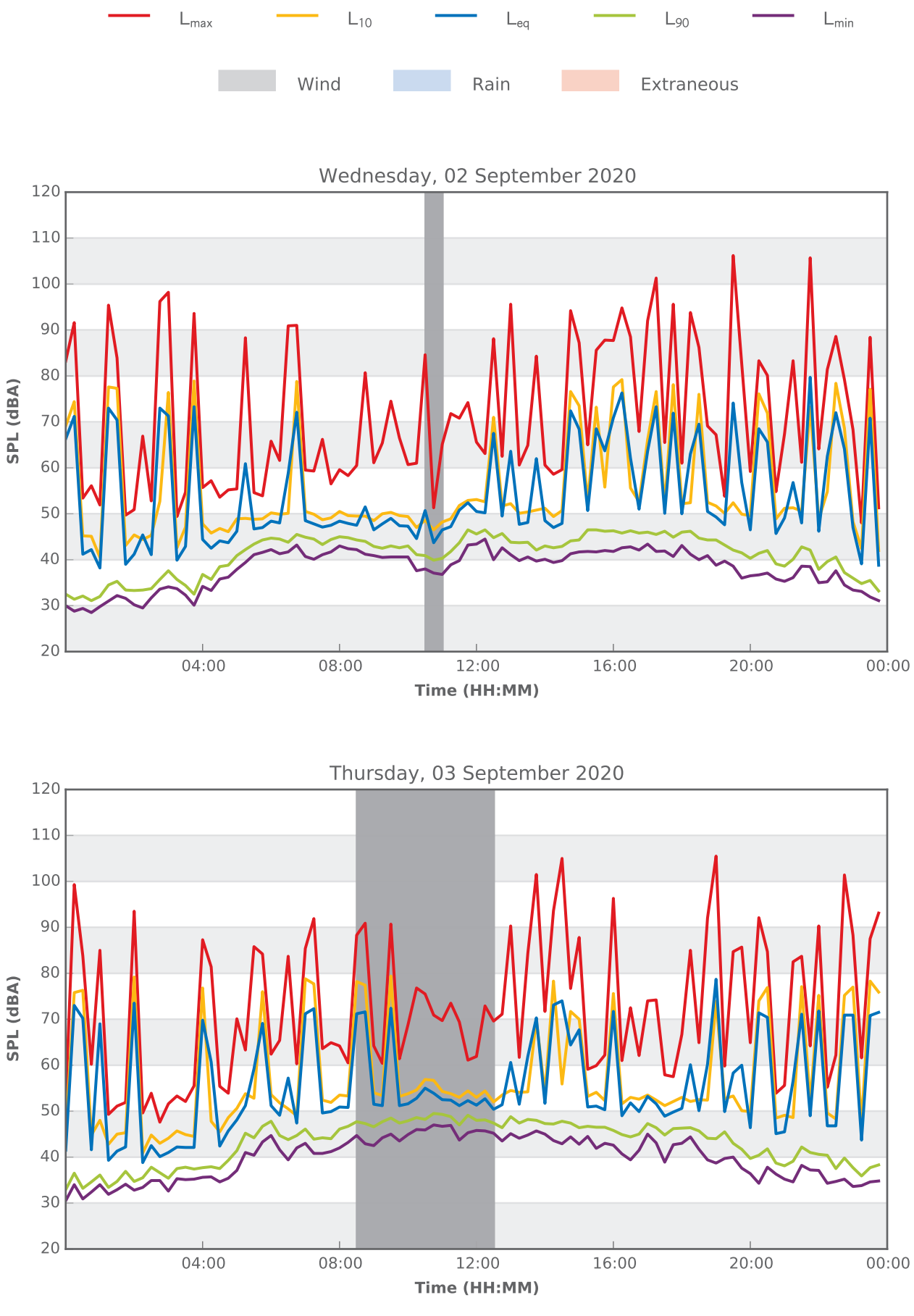
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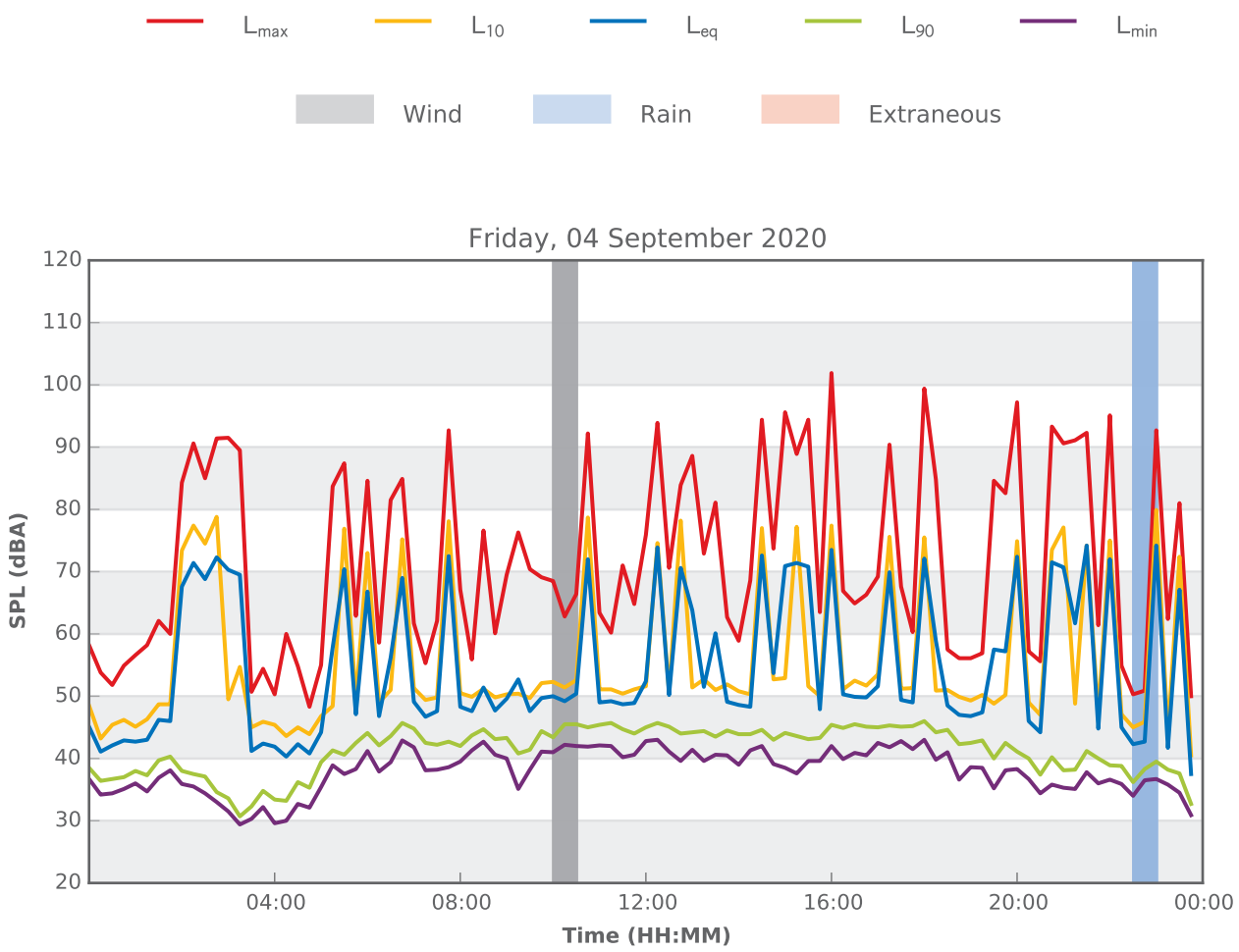
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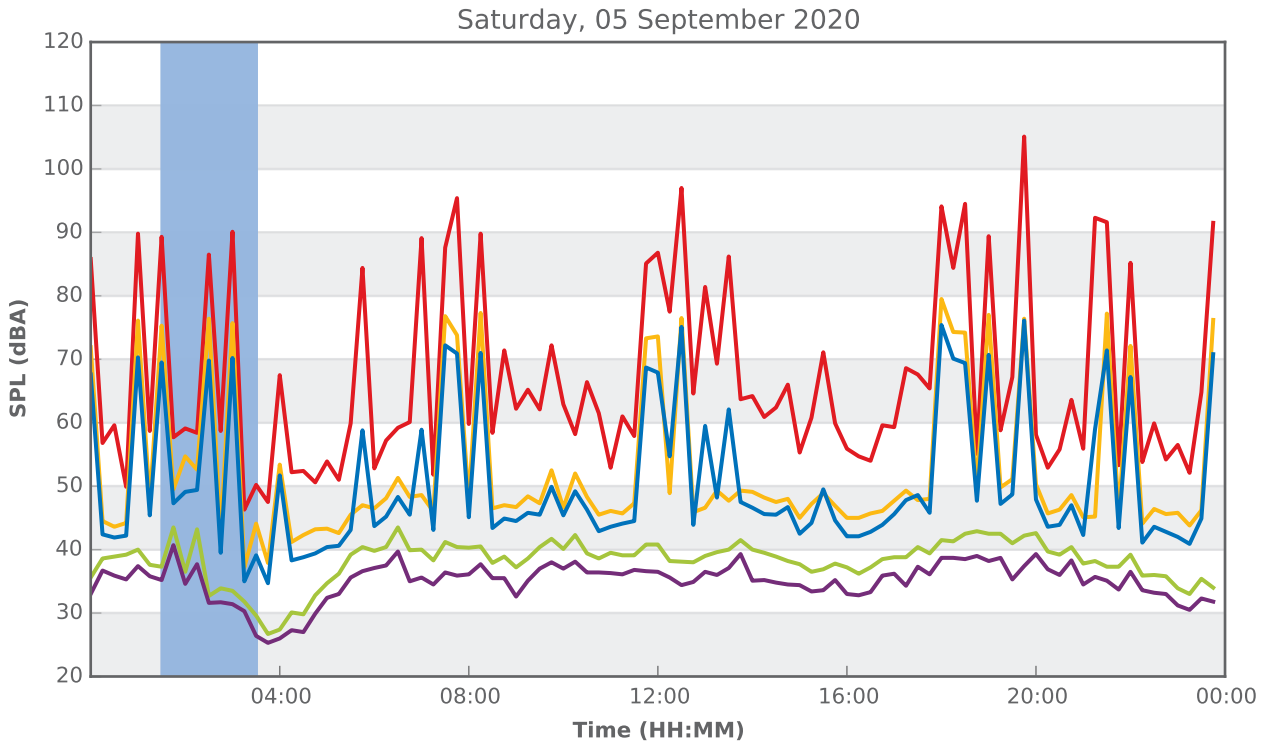


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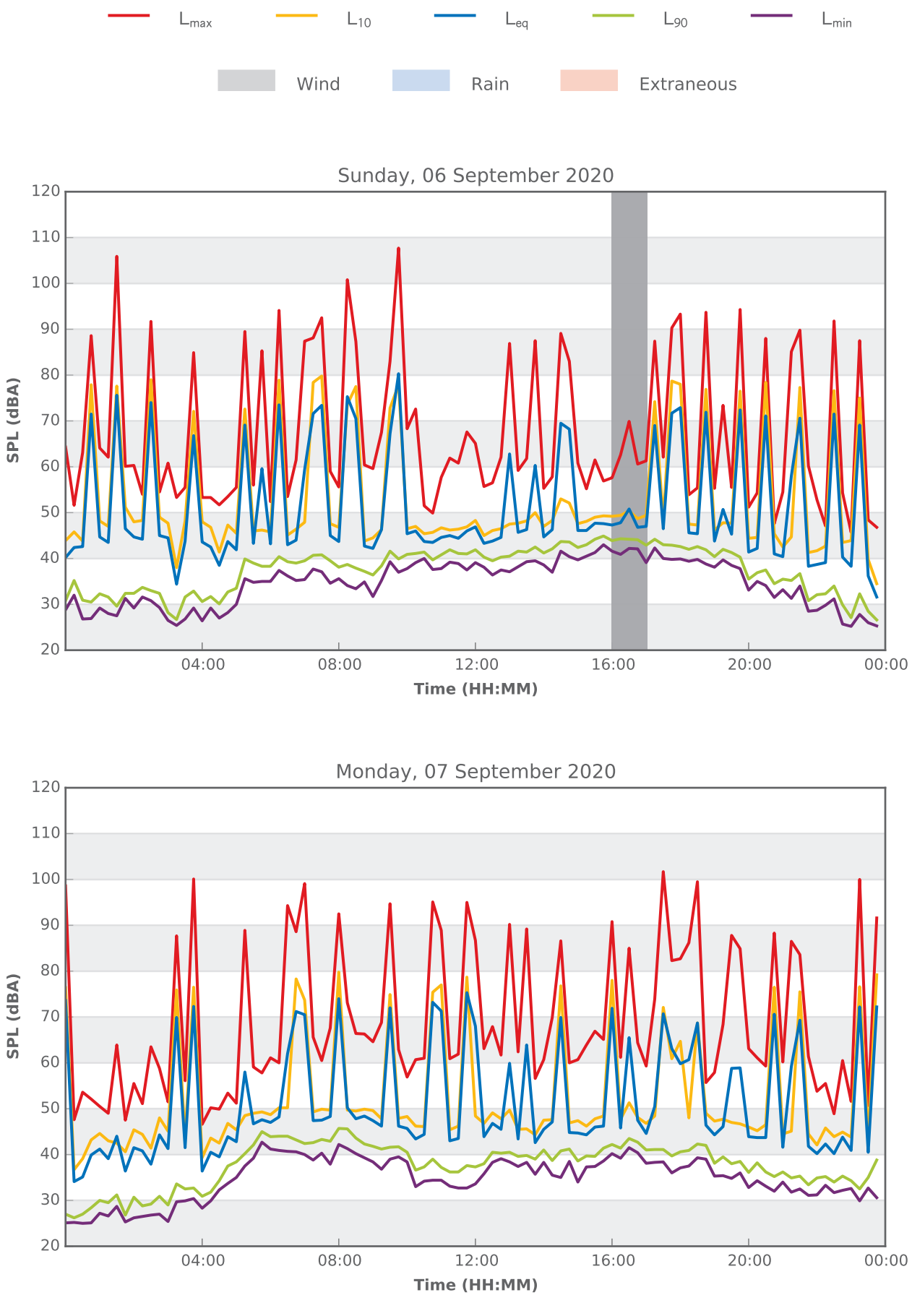


210 Bridge Street, Muswellbrook

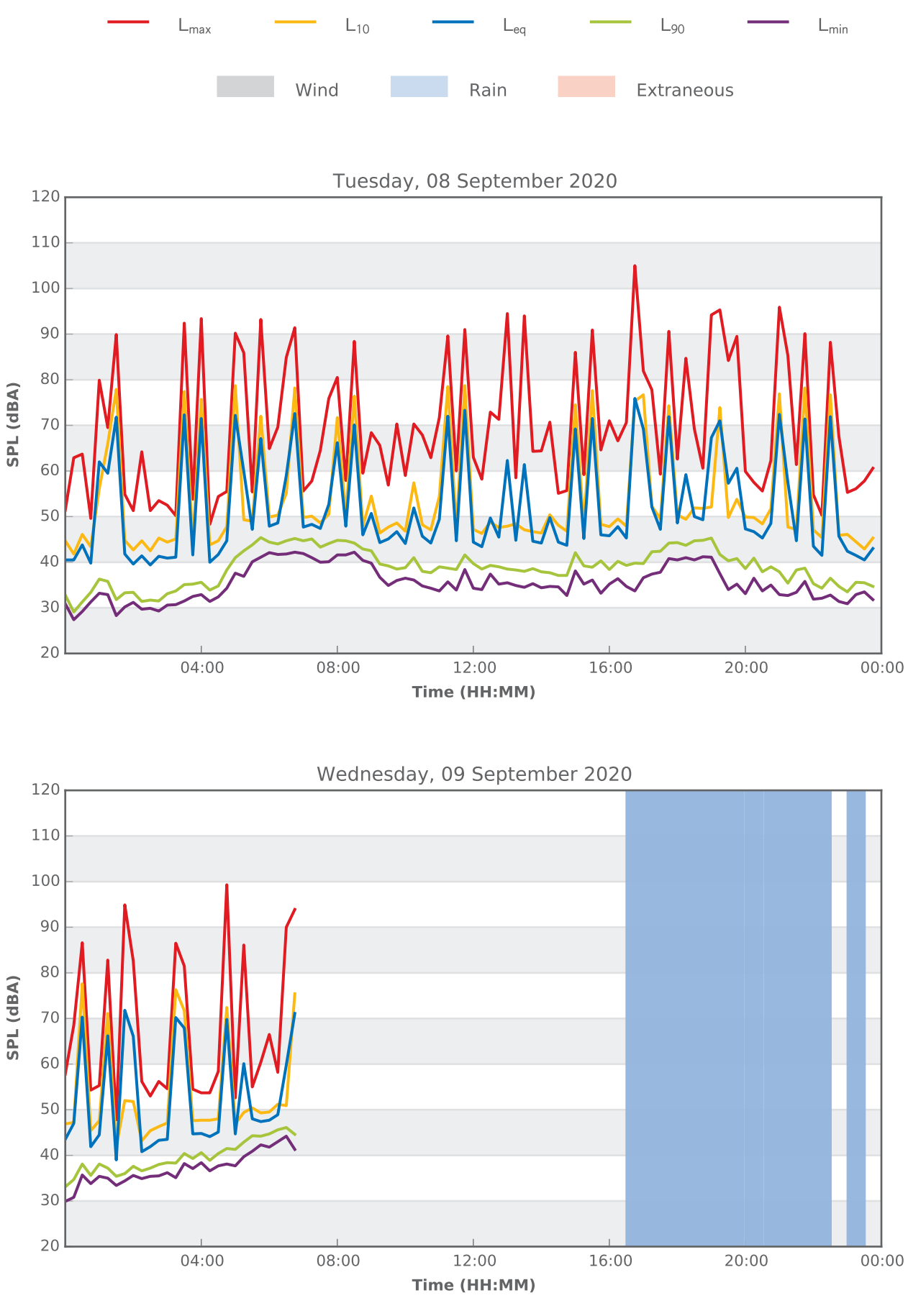




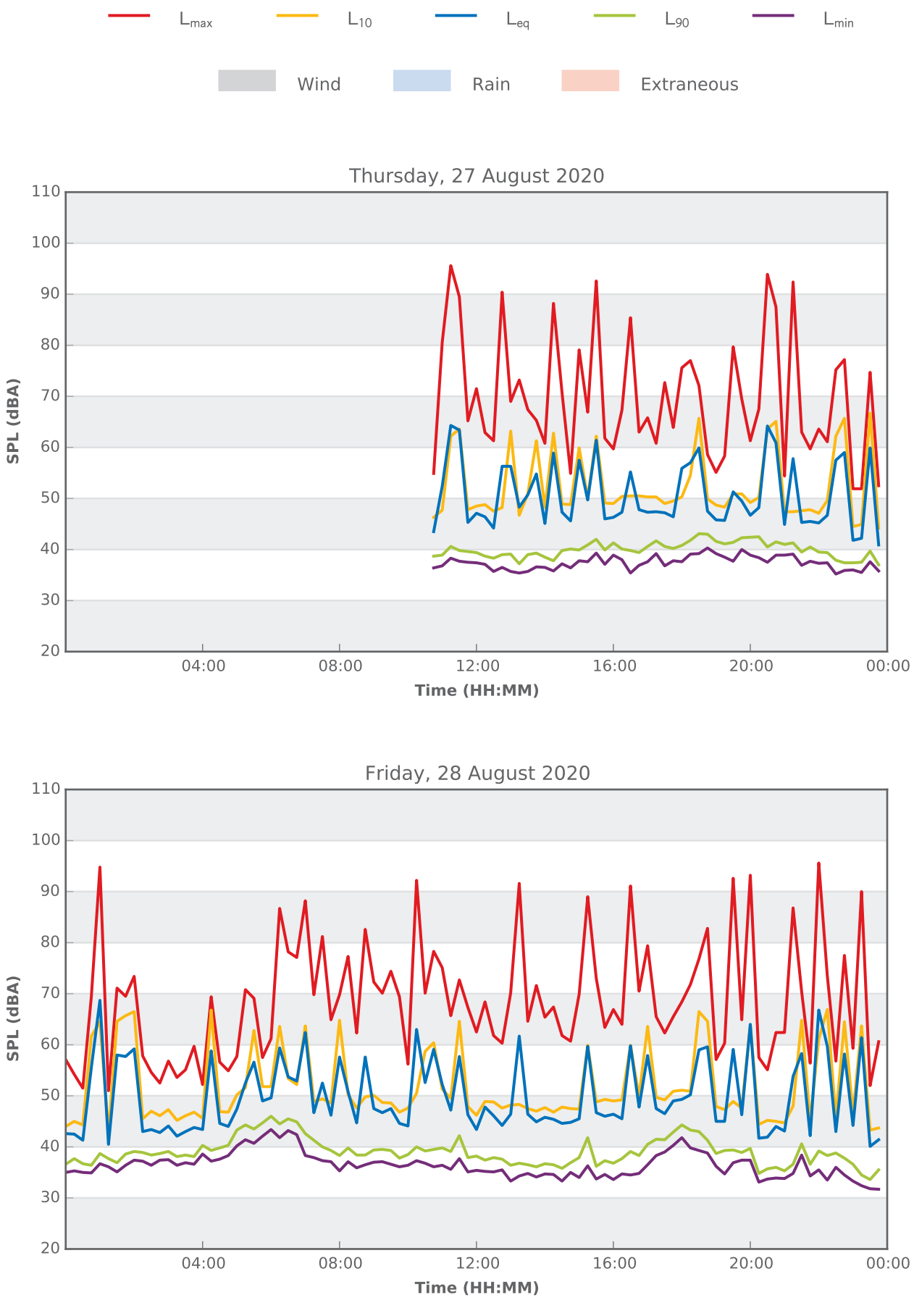
210 Bridge Street, Muswellbrook



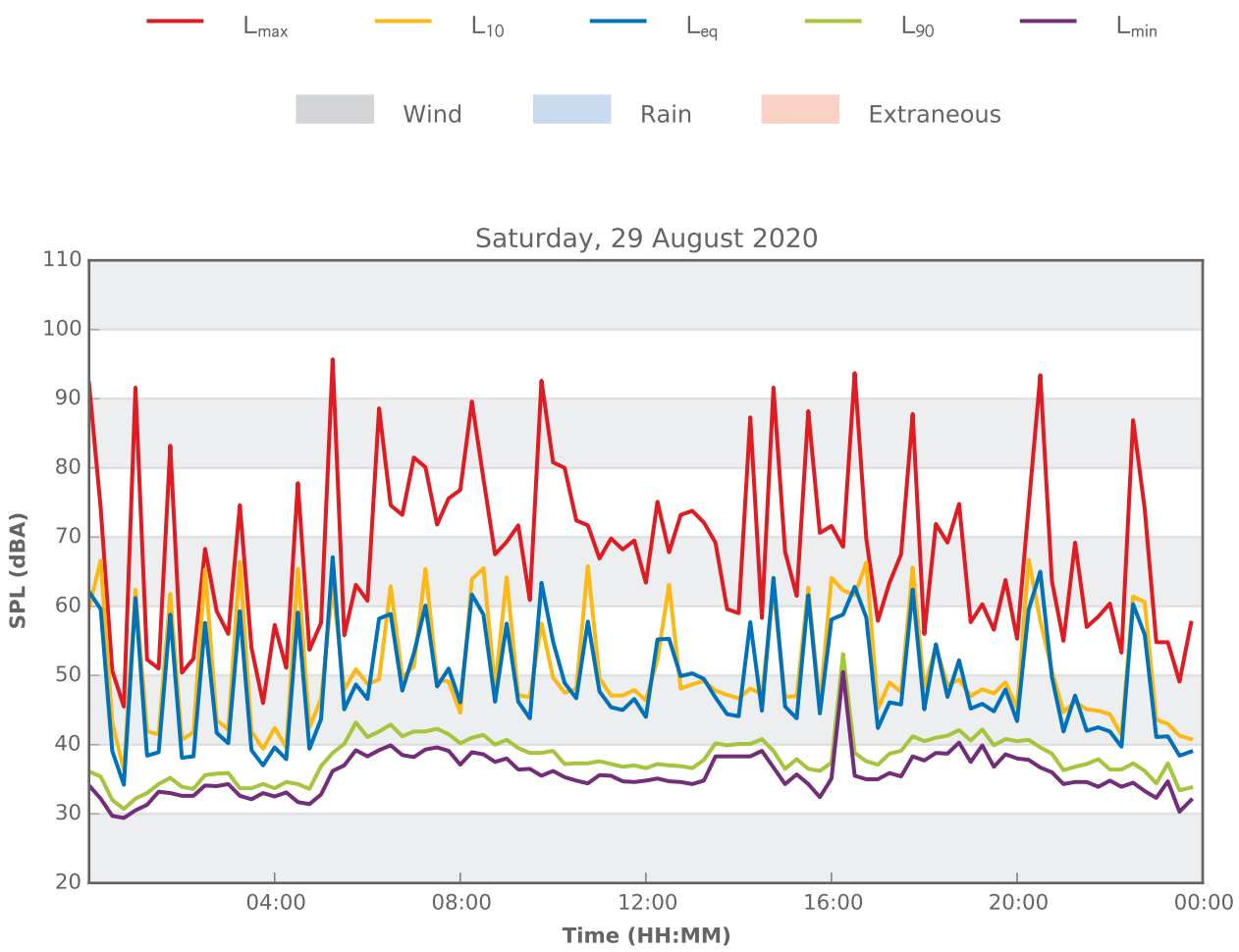
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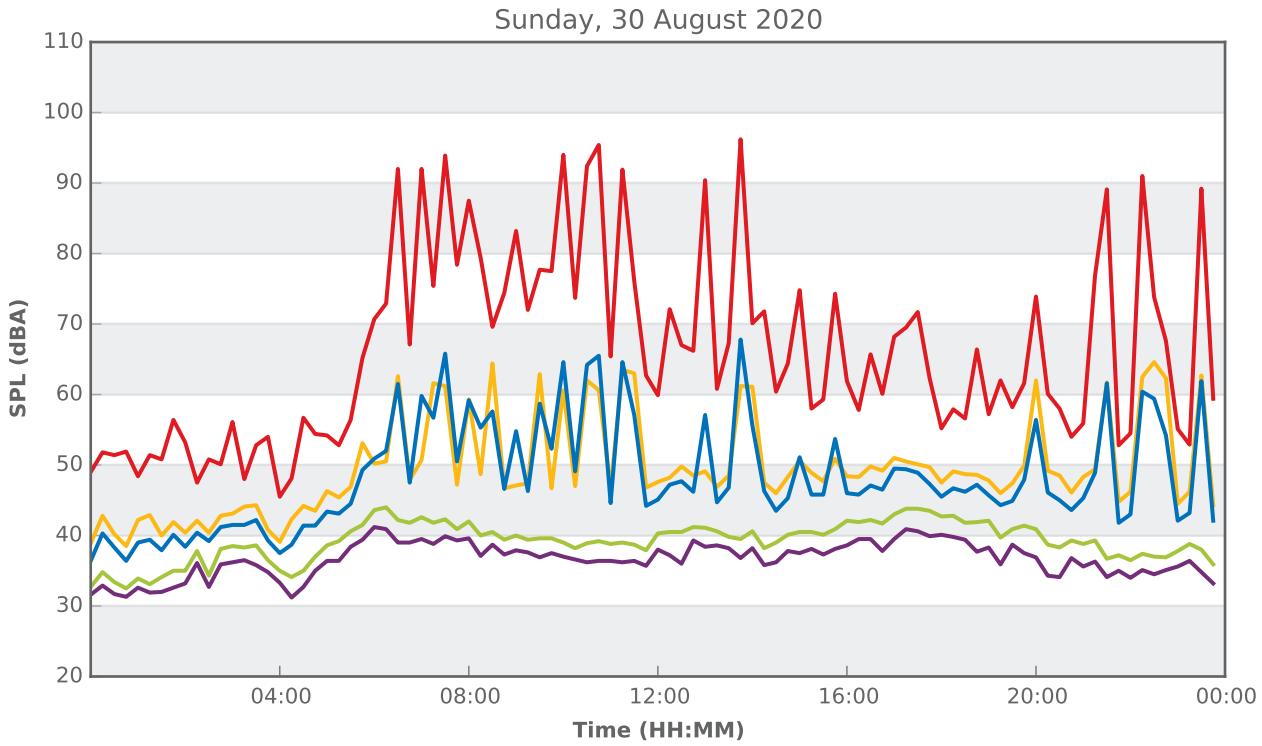


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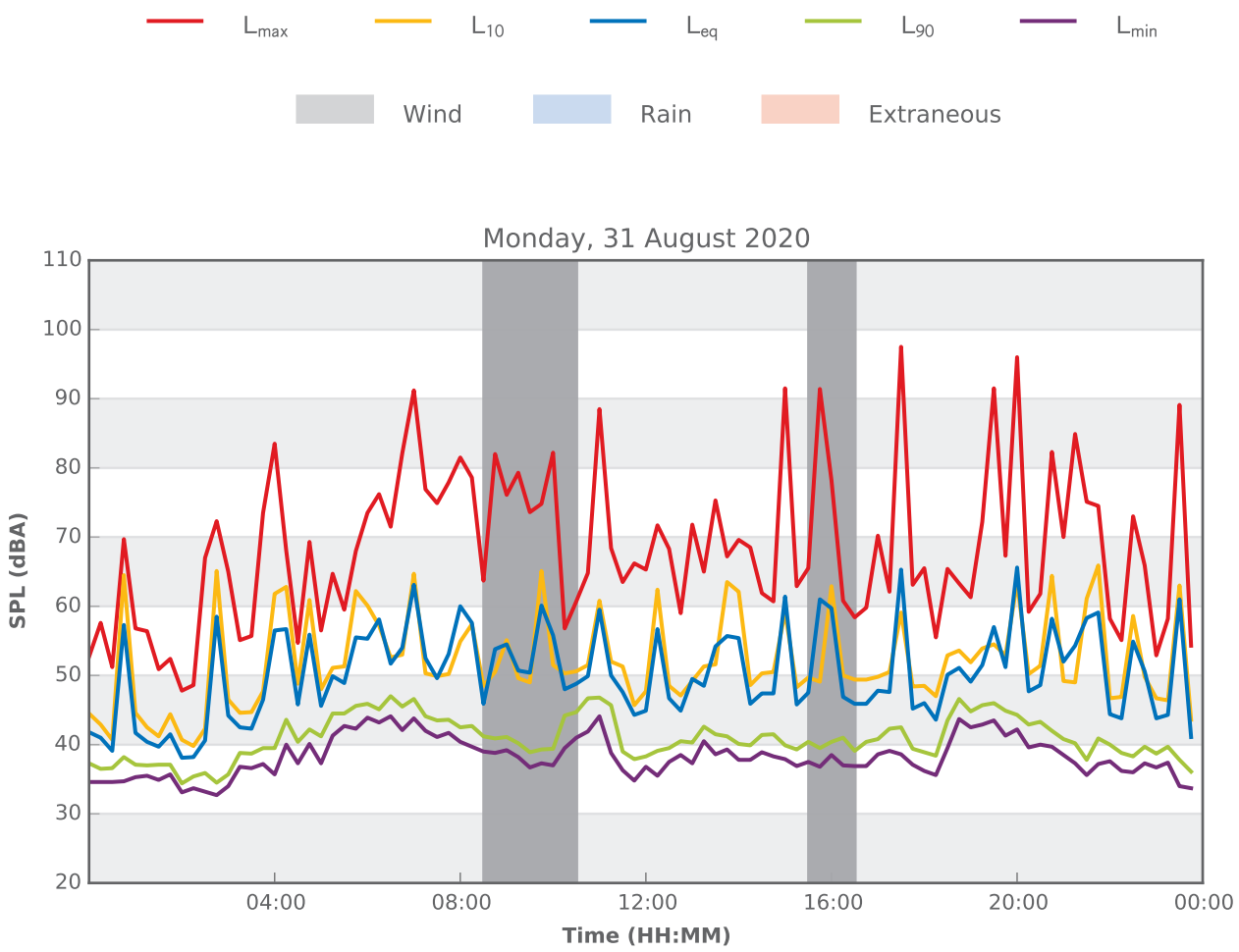


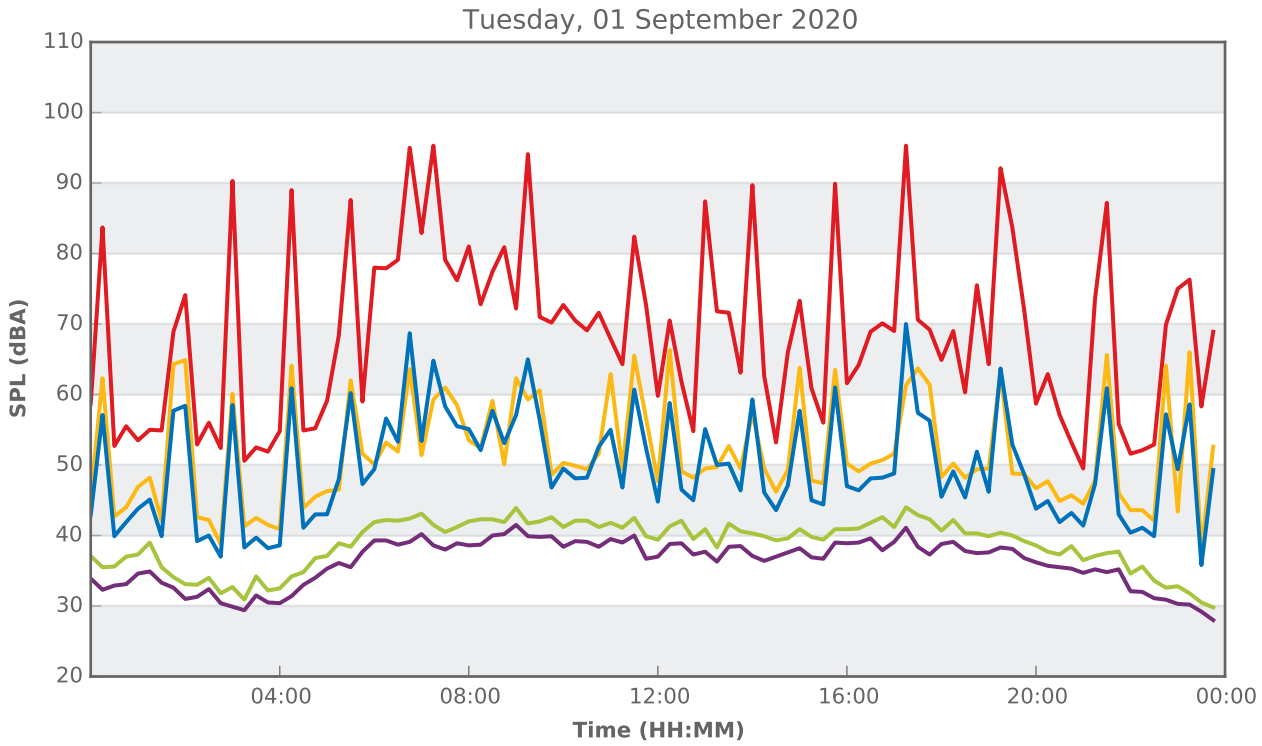
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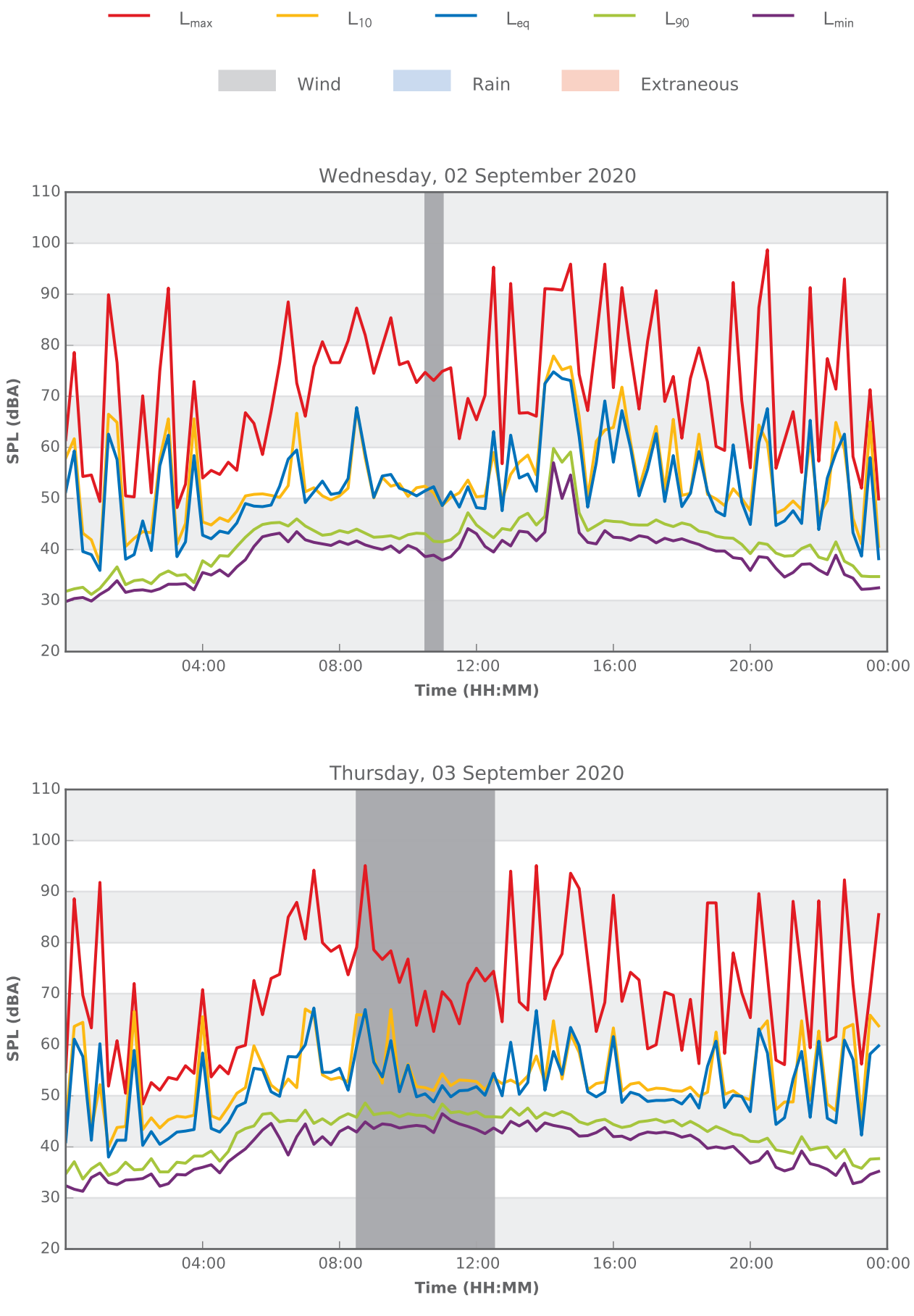


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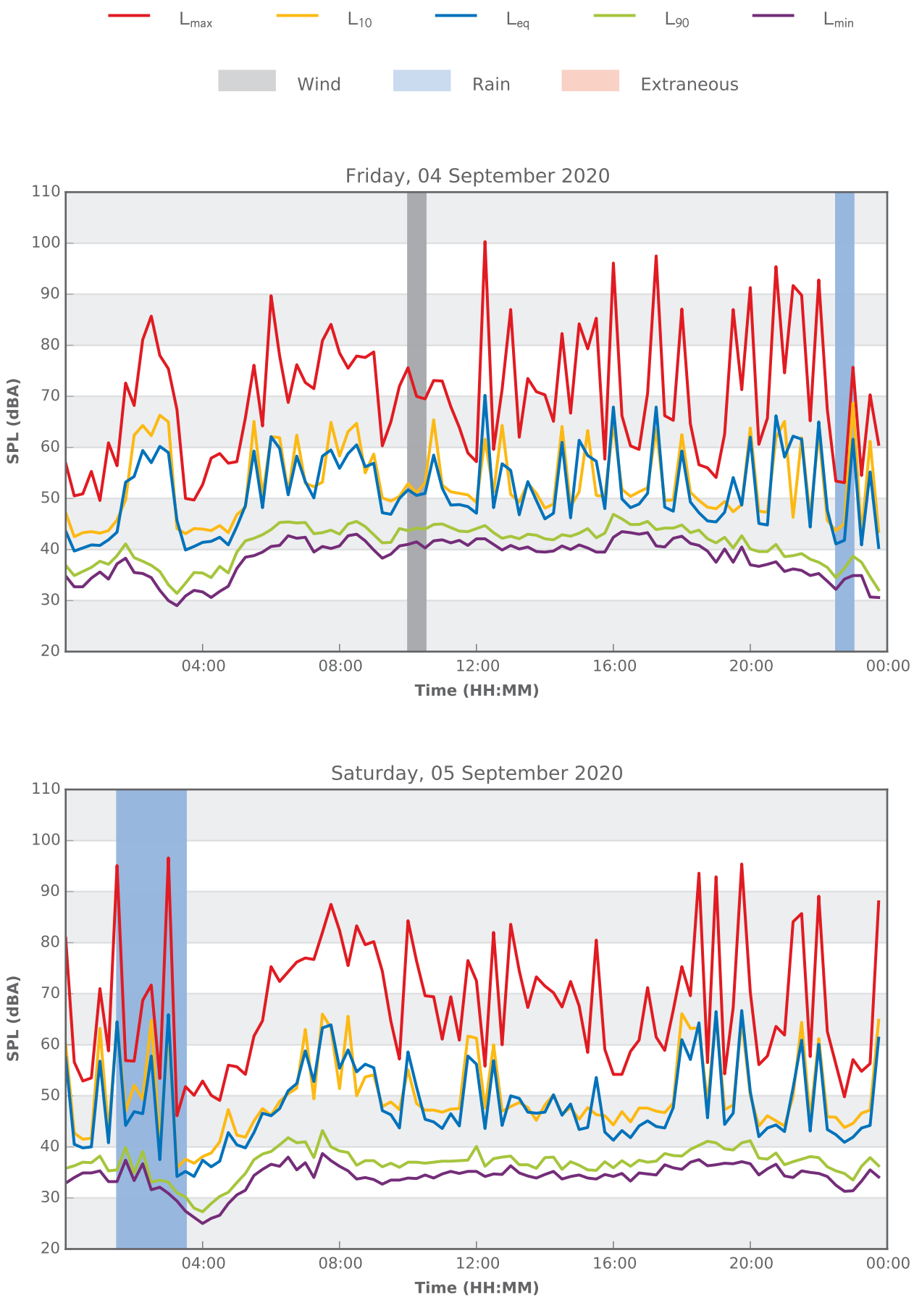




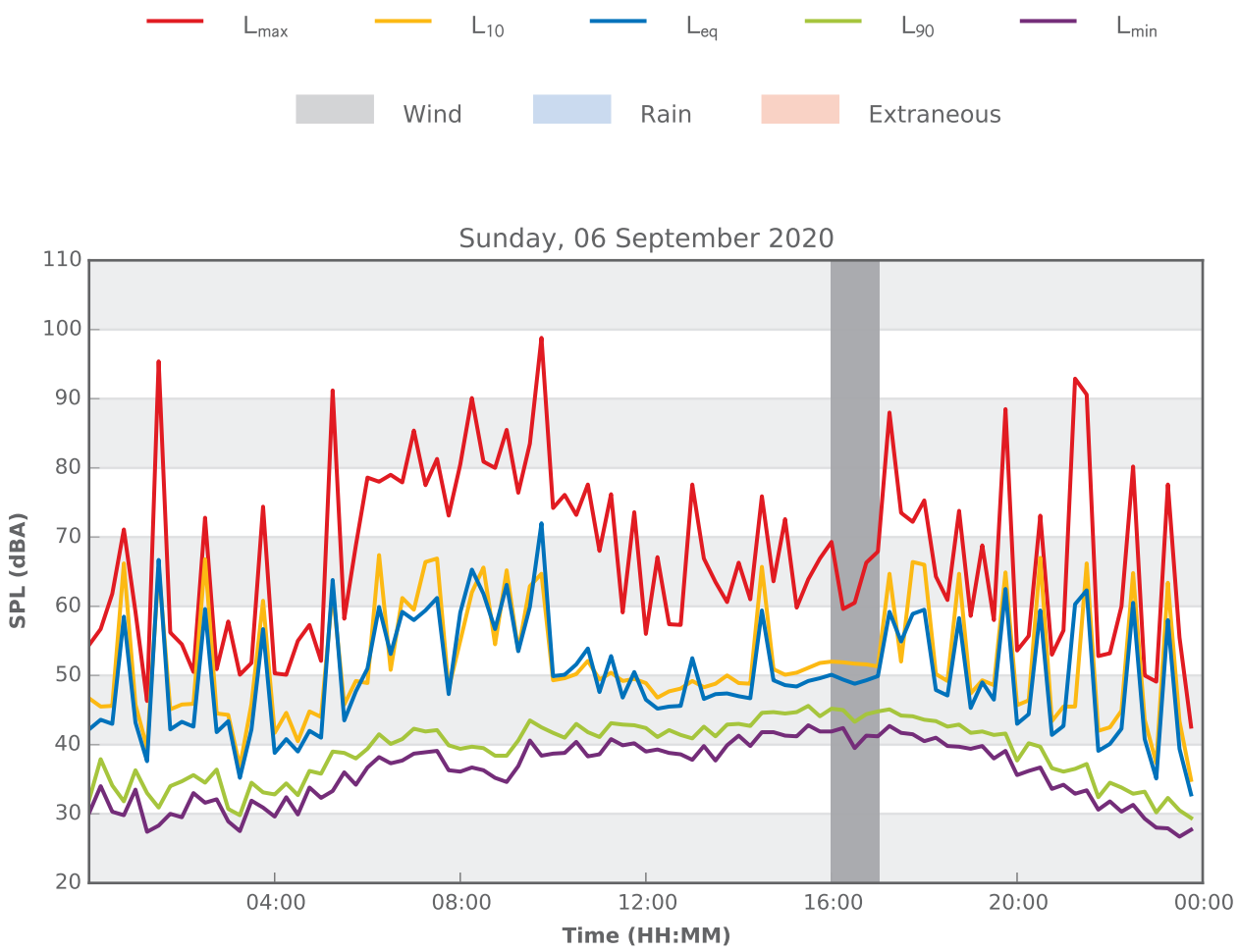
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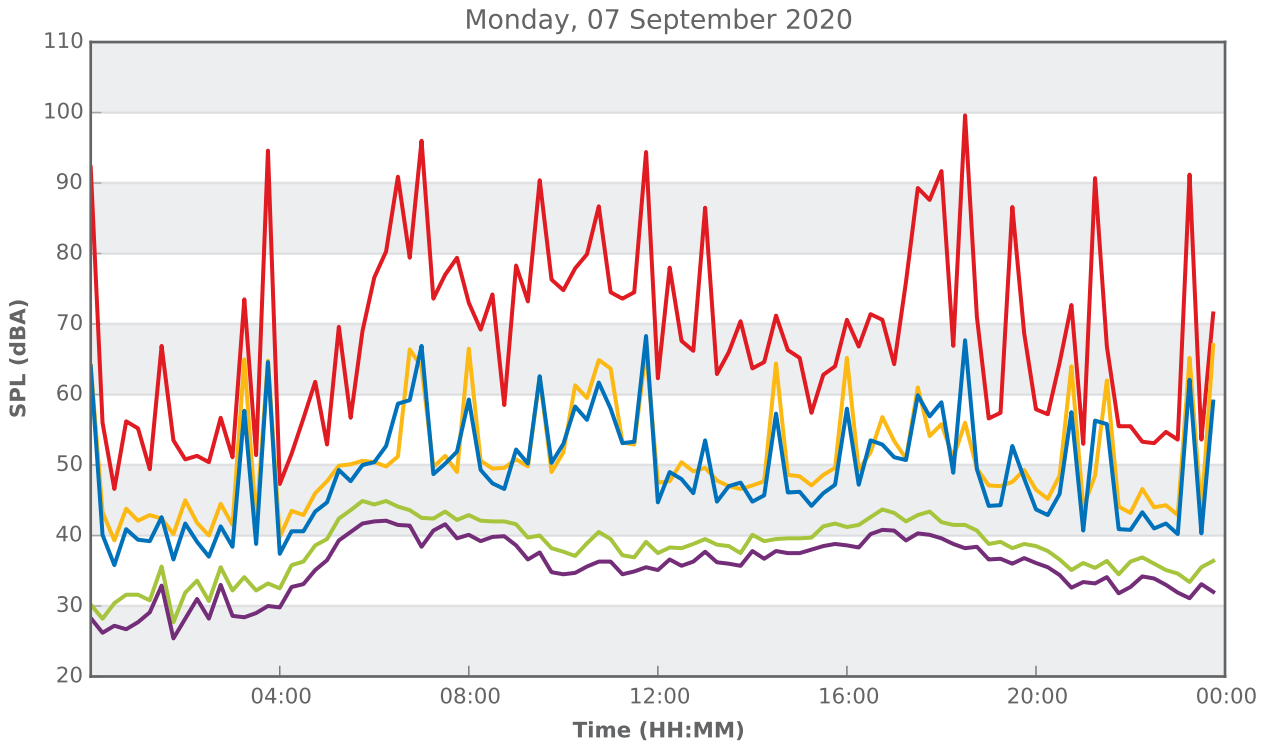


20 Brook Street, Muswellbrook

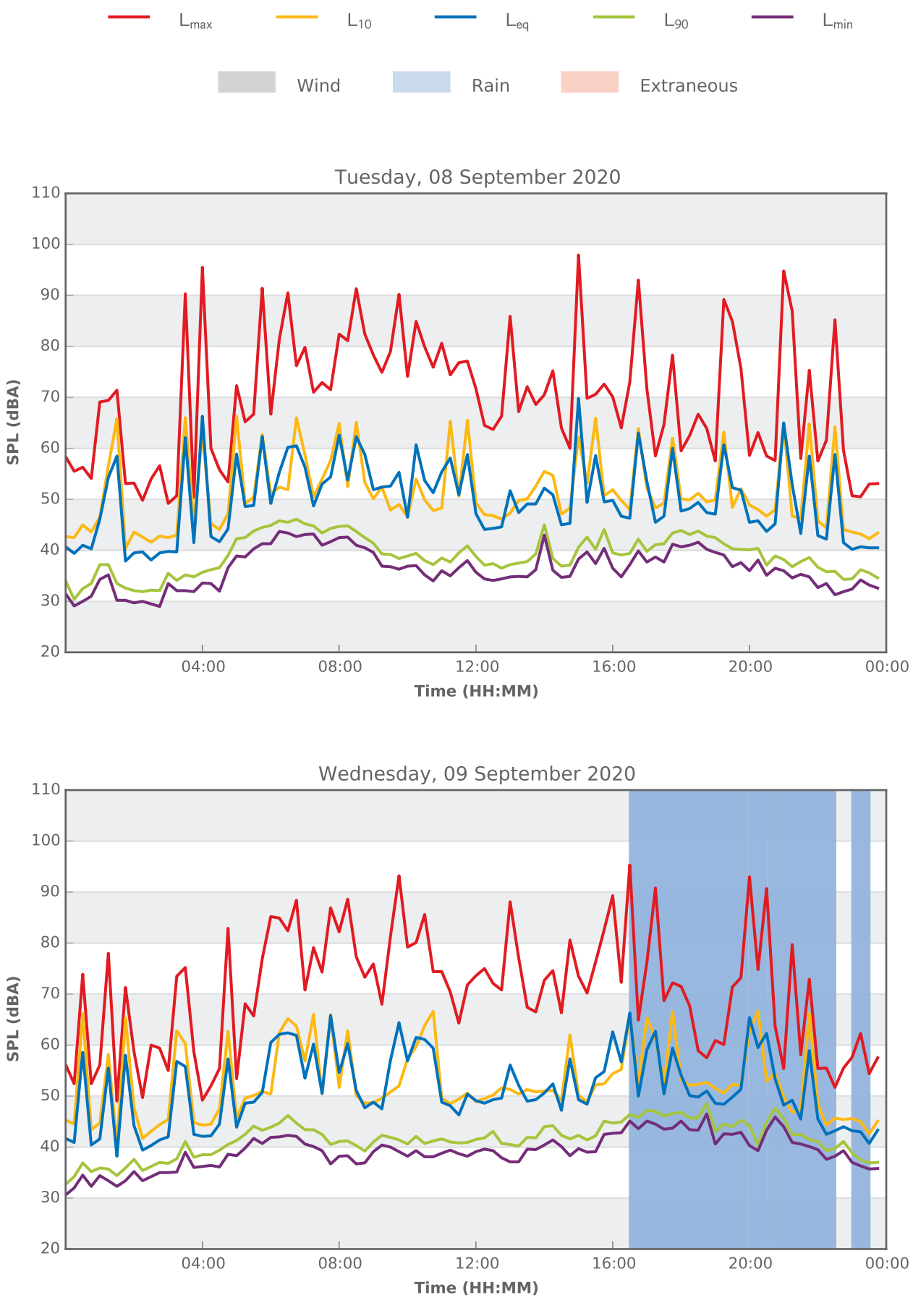


20 Brook Street, Muswellbrook

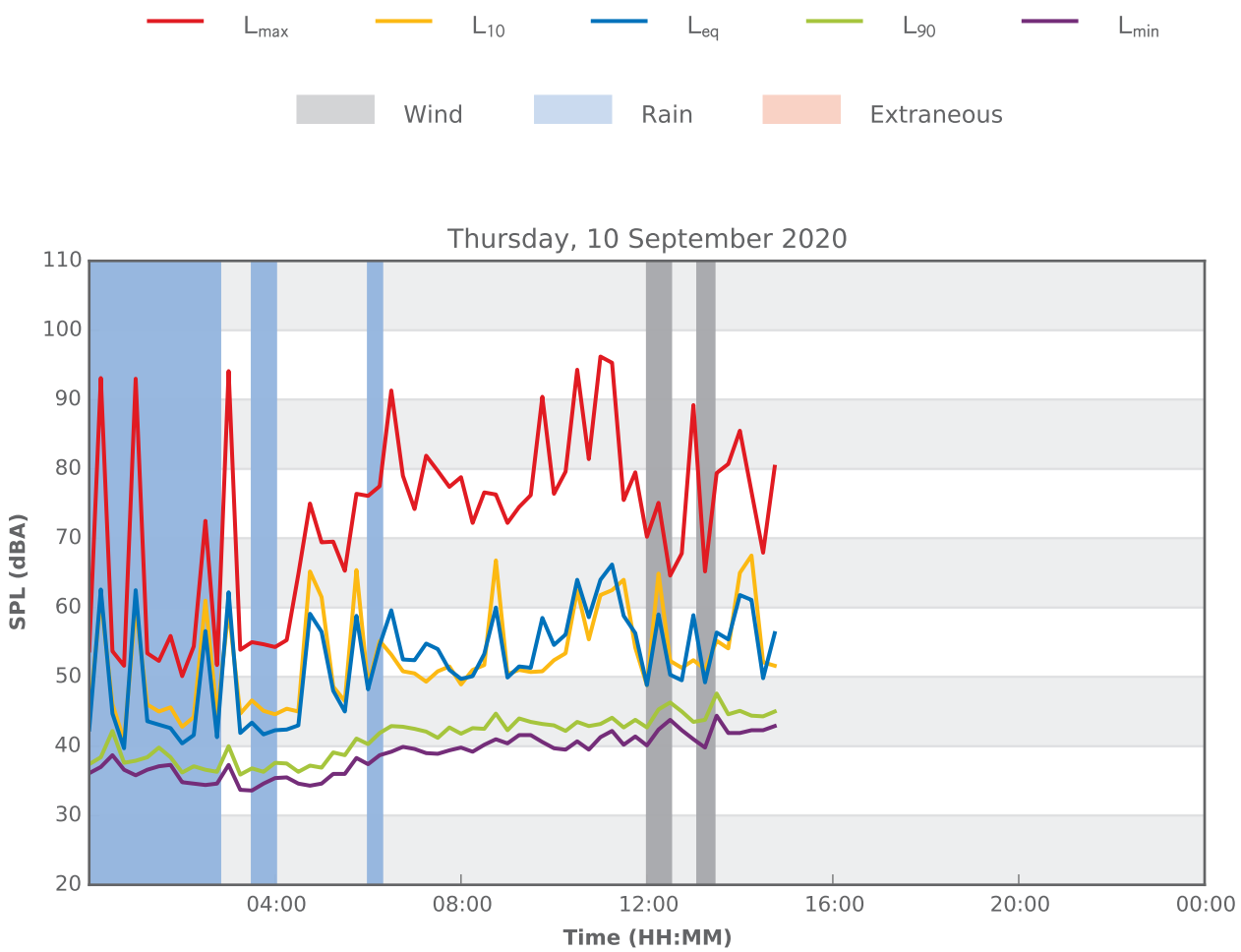




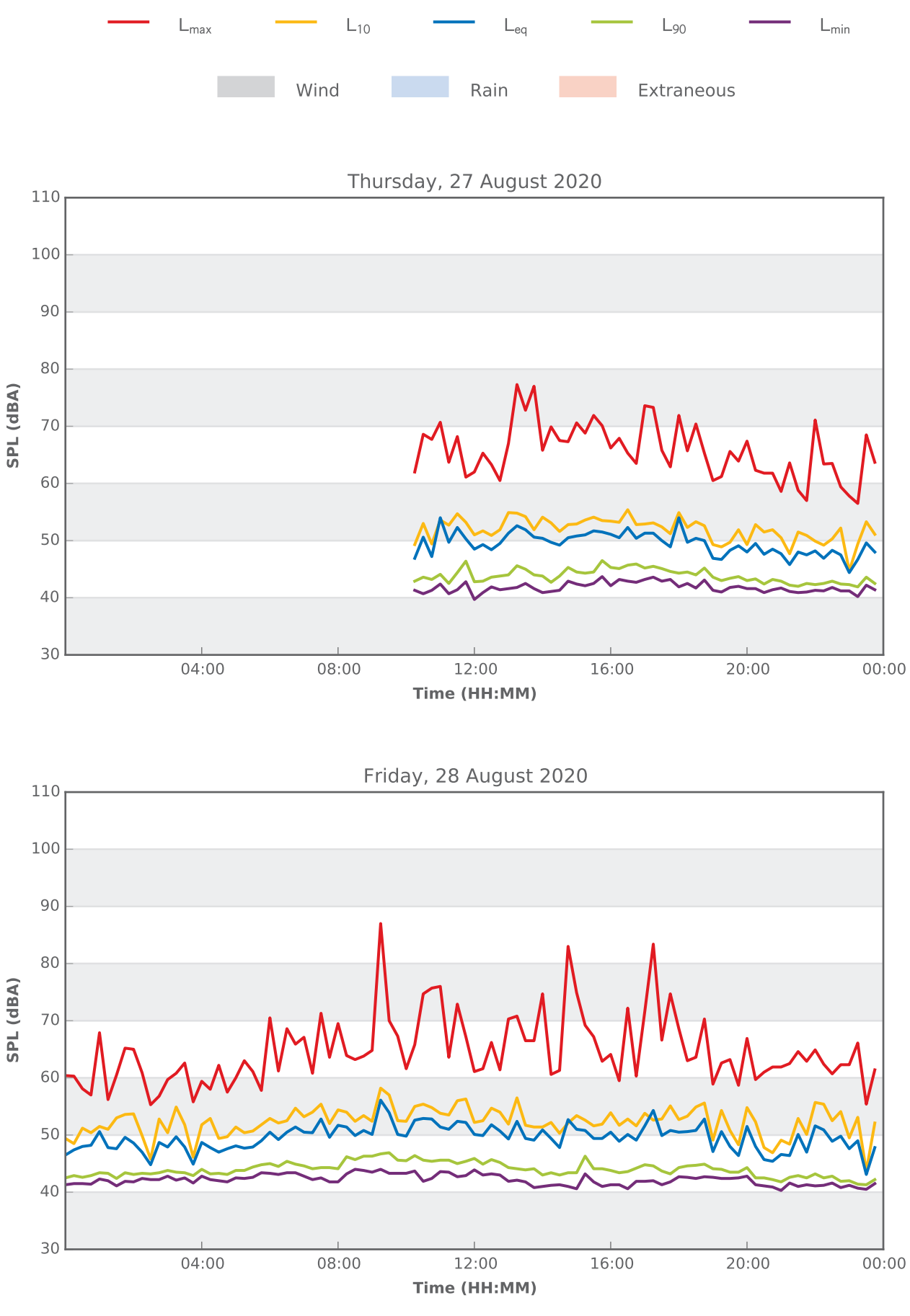
20 Brook Street, Muswellbrook



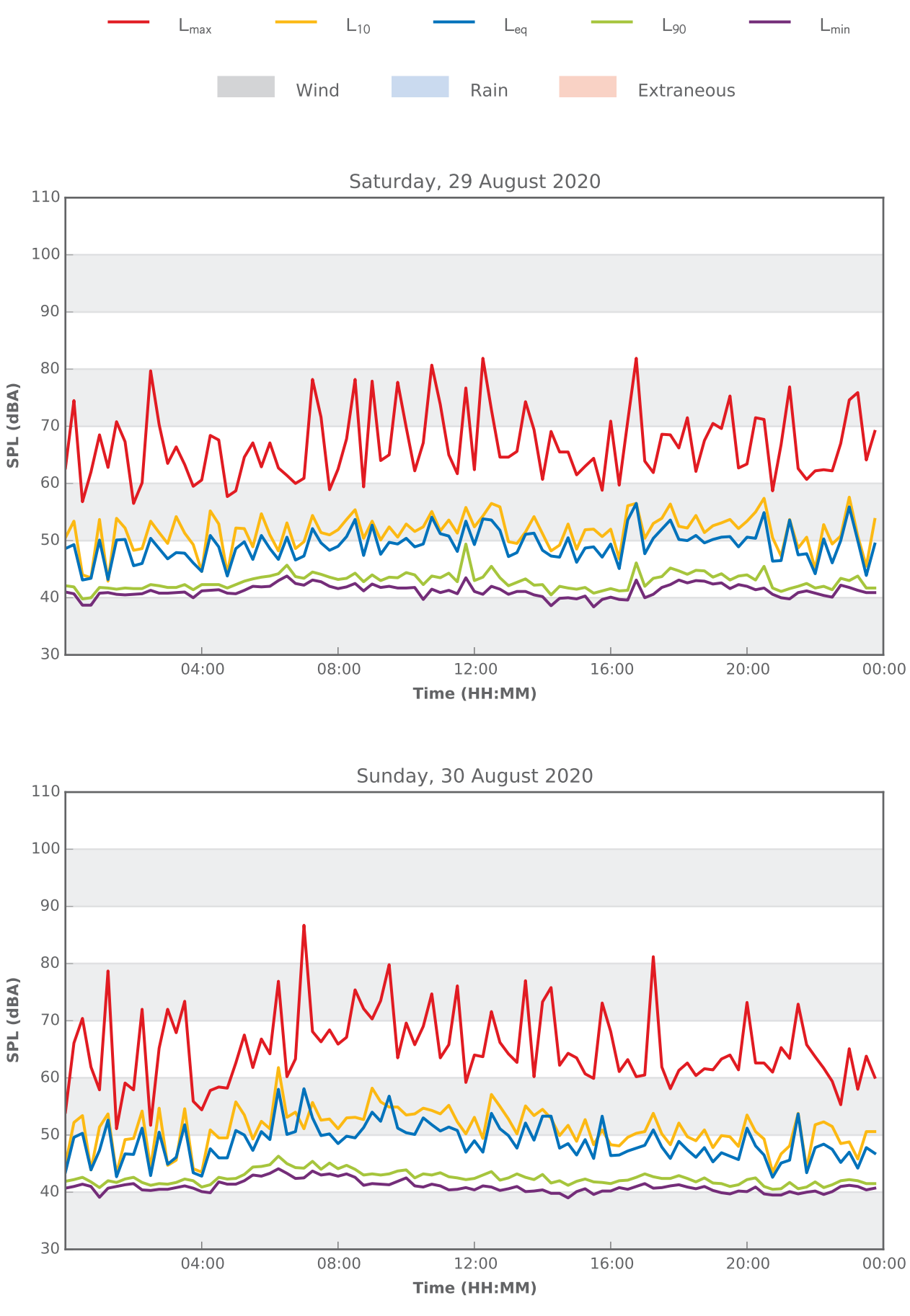
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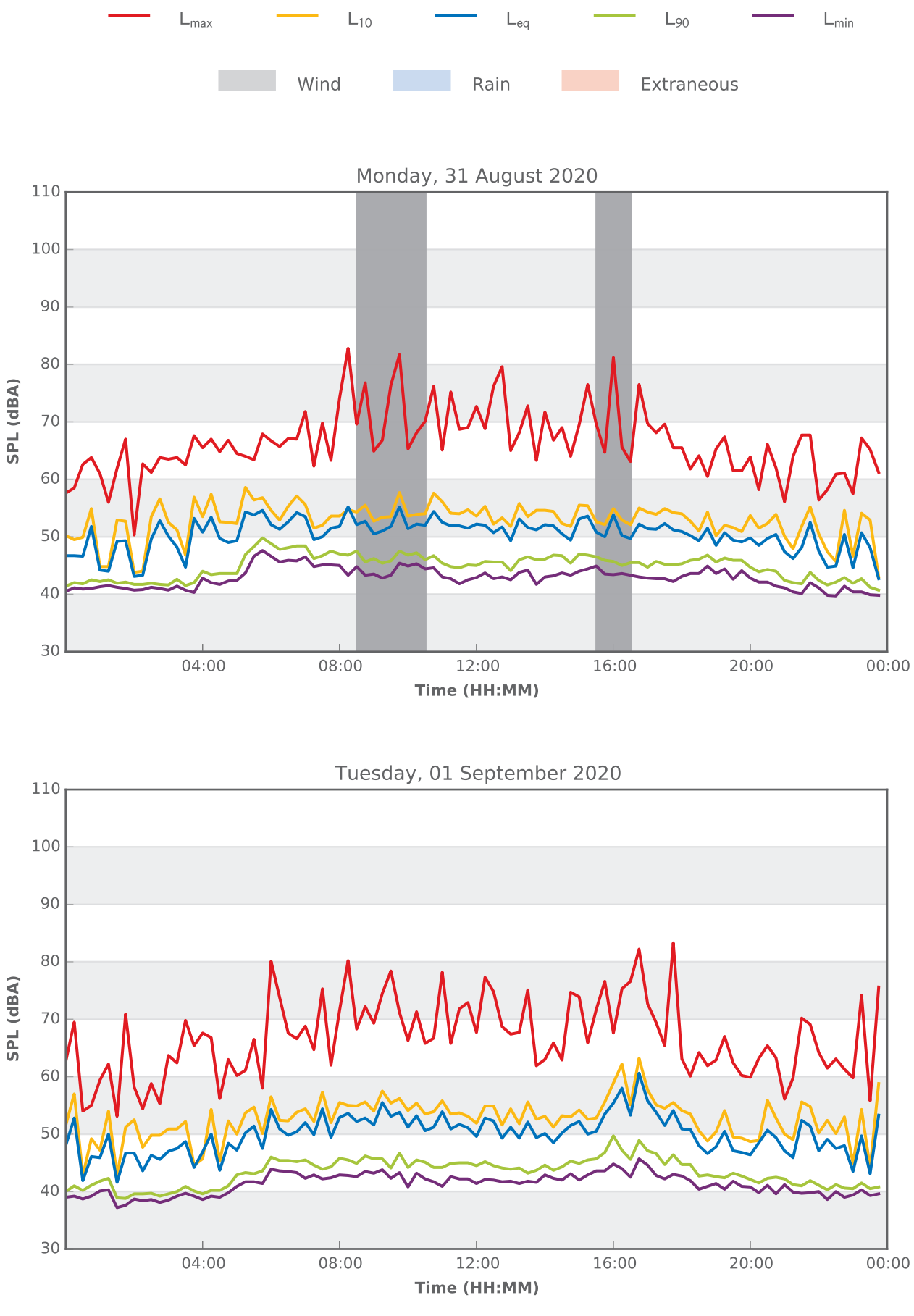
26 William St, Muswellbrook



26 William St, Muswellbrook



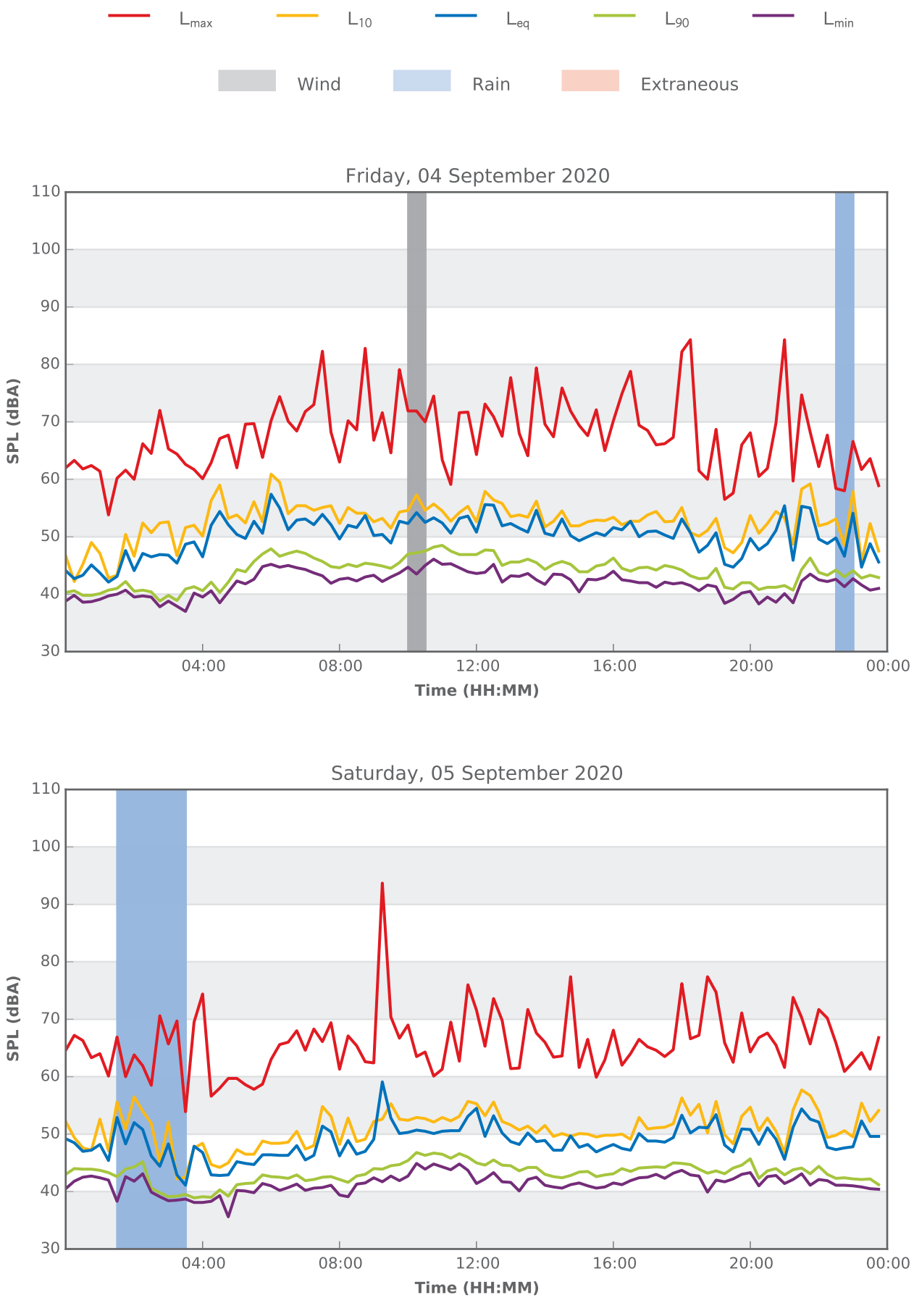
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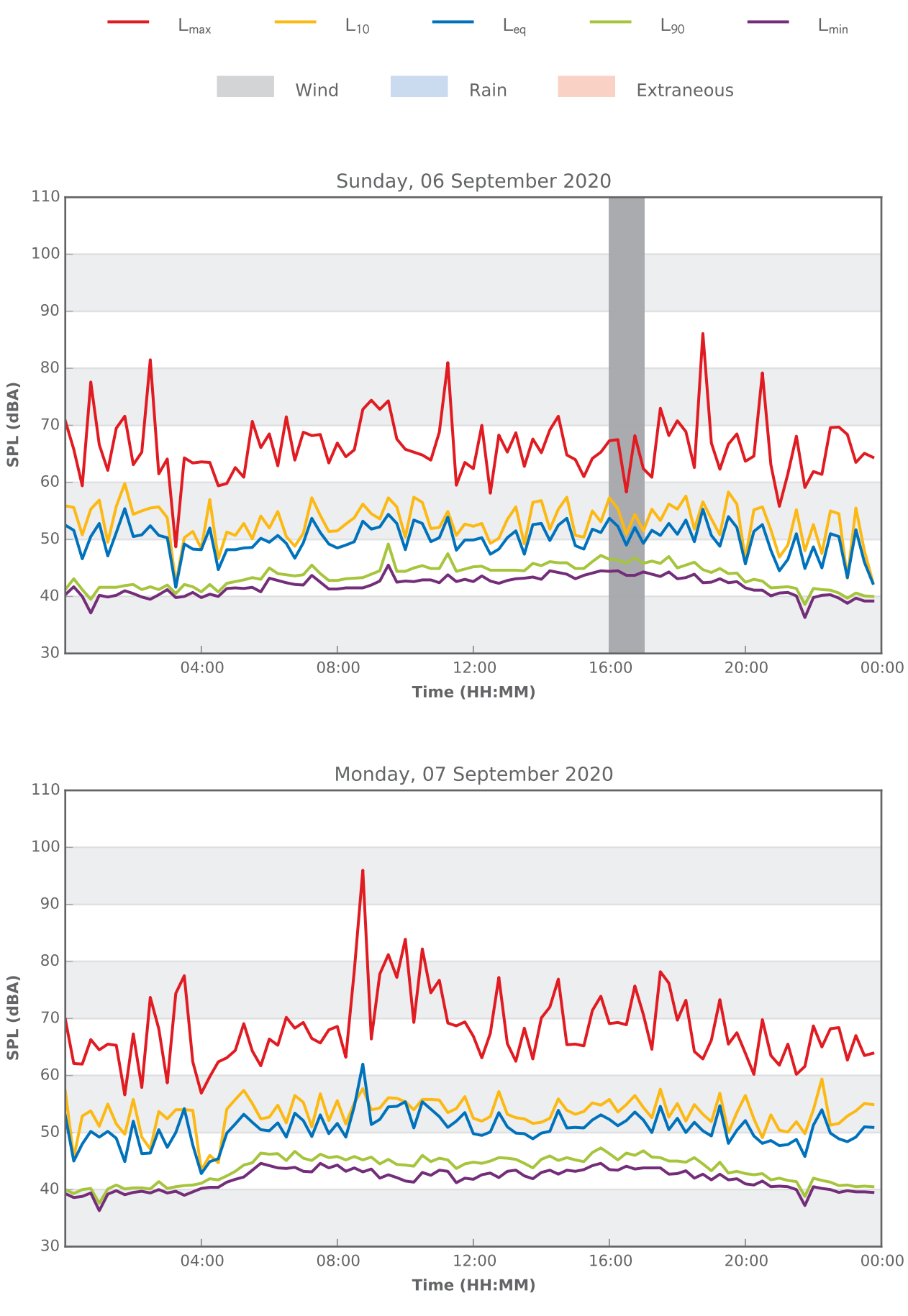
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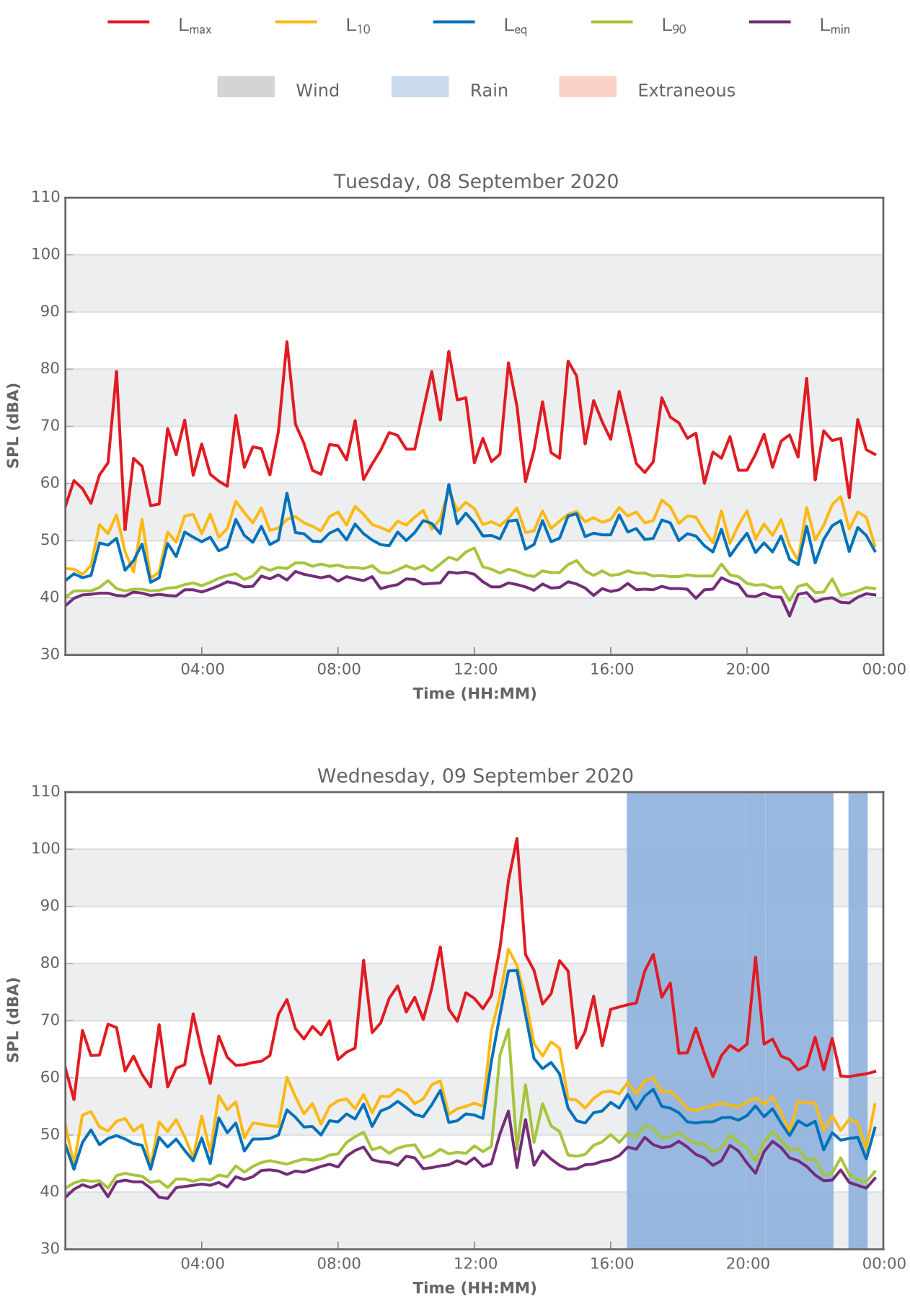
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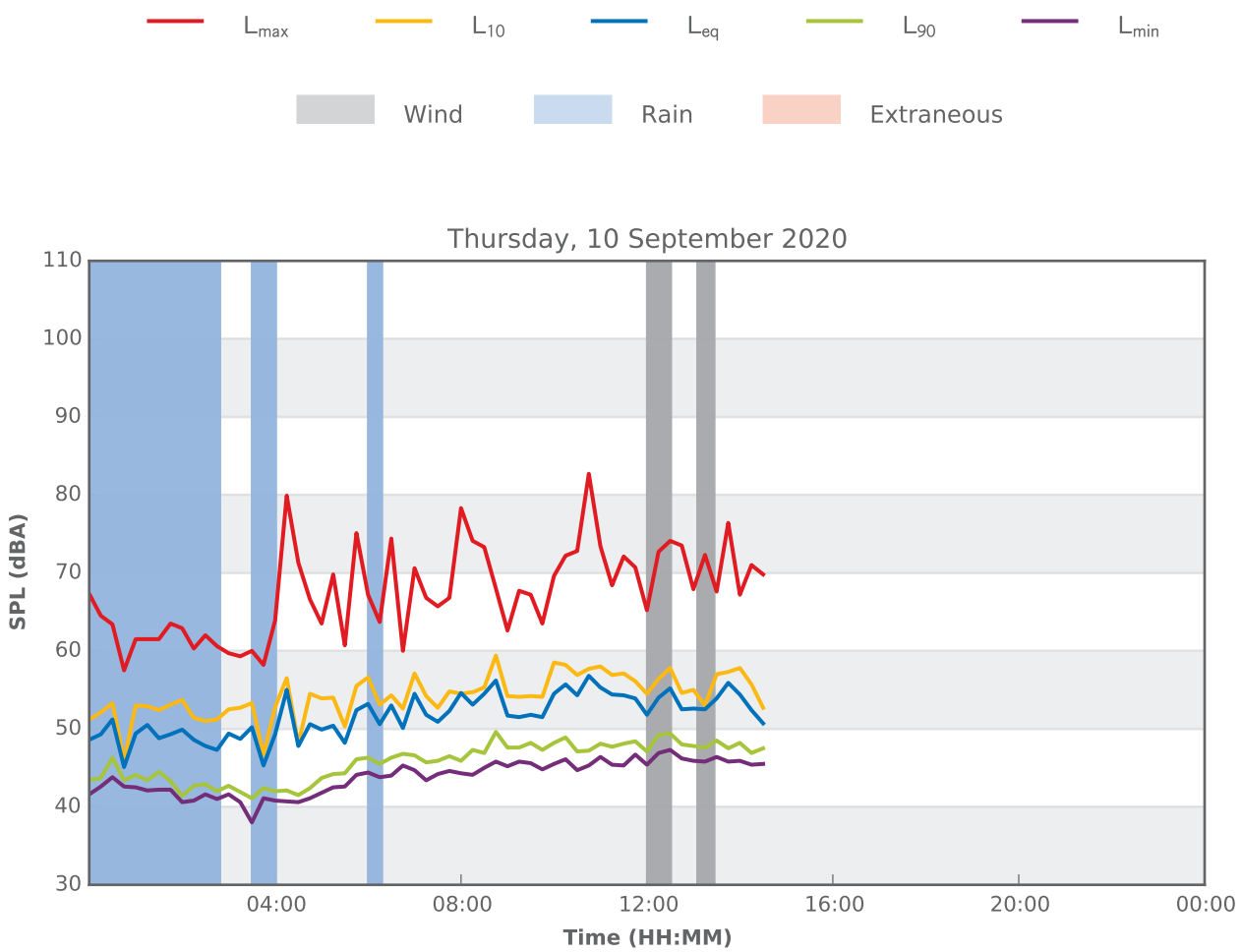
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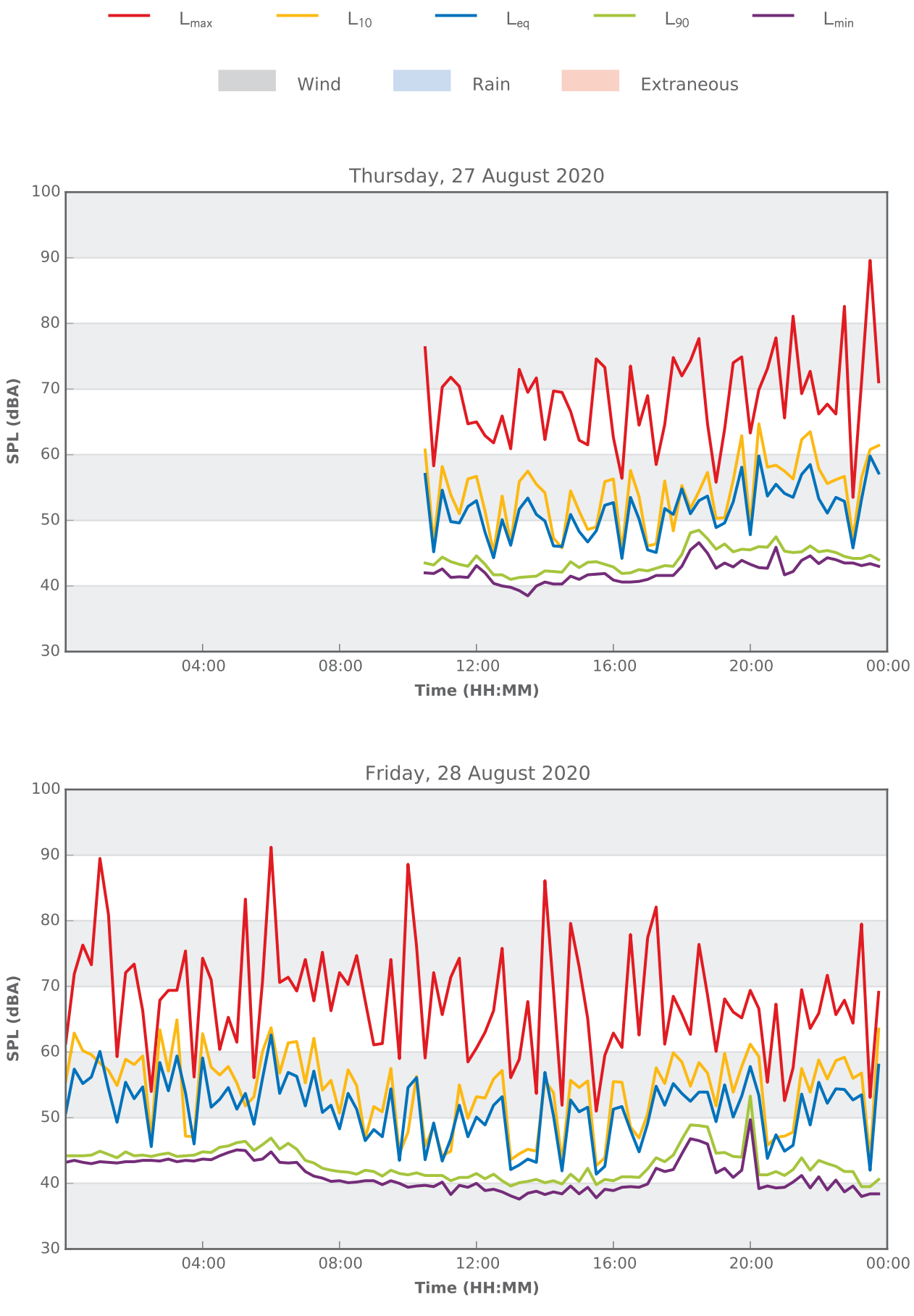
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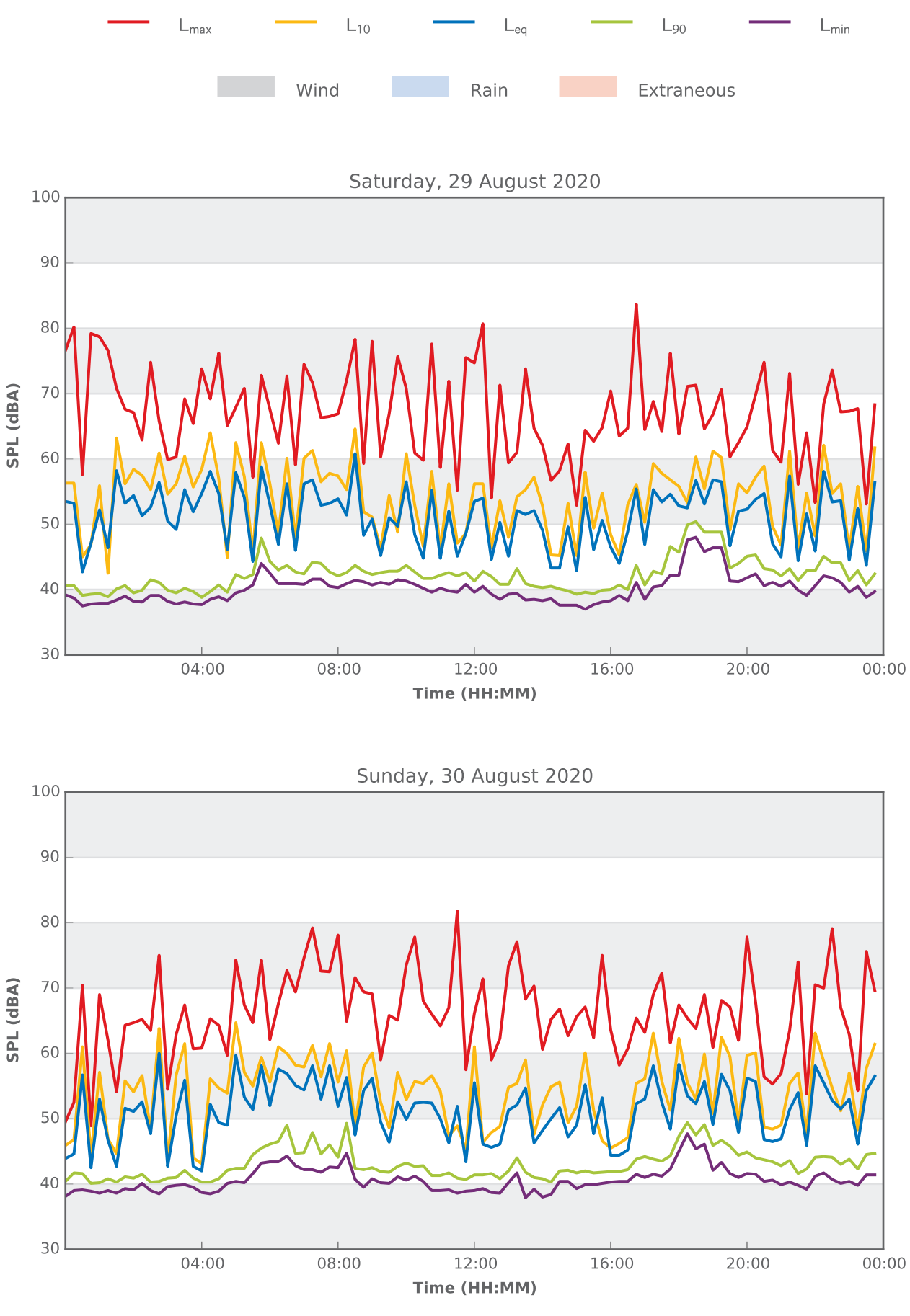
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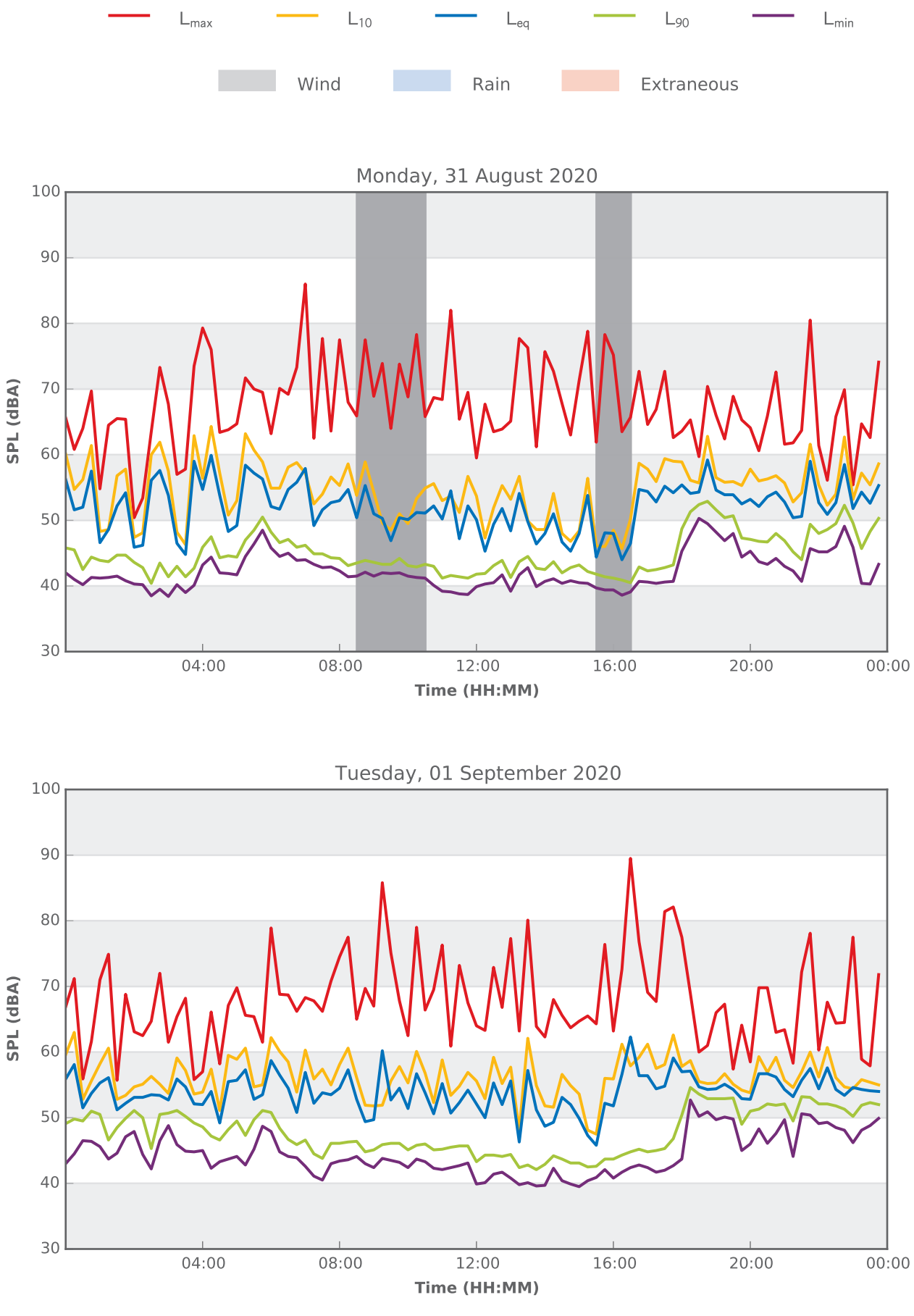
10 Mill Street, Muswellbrook



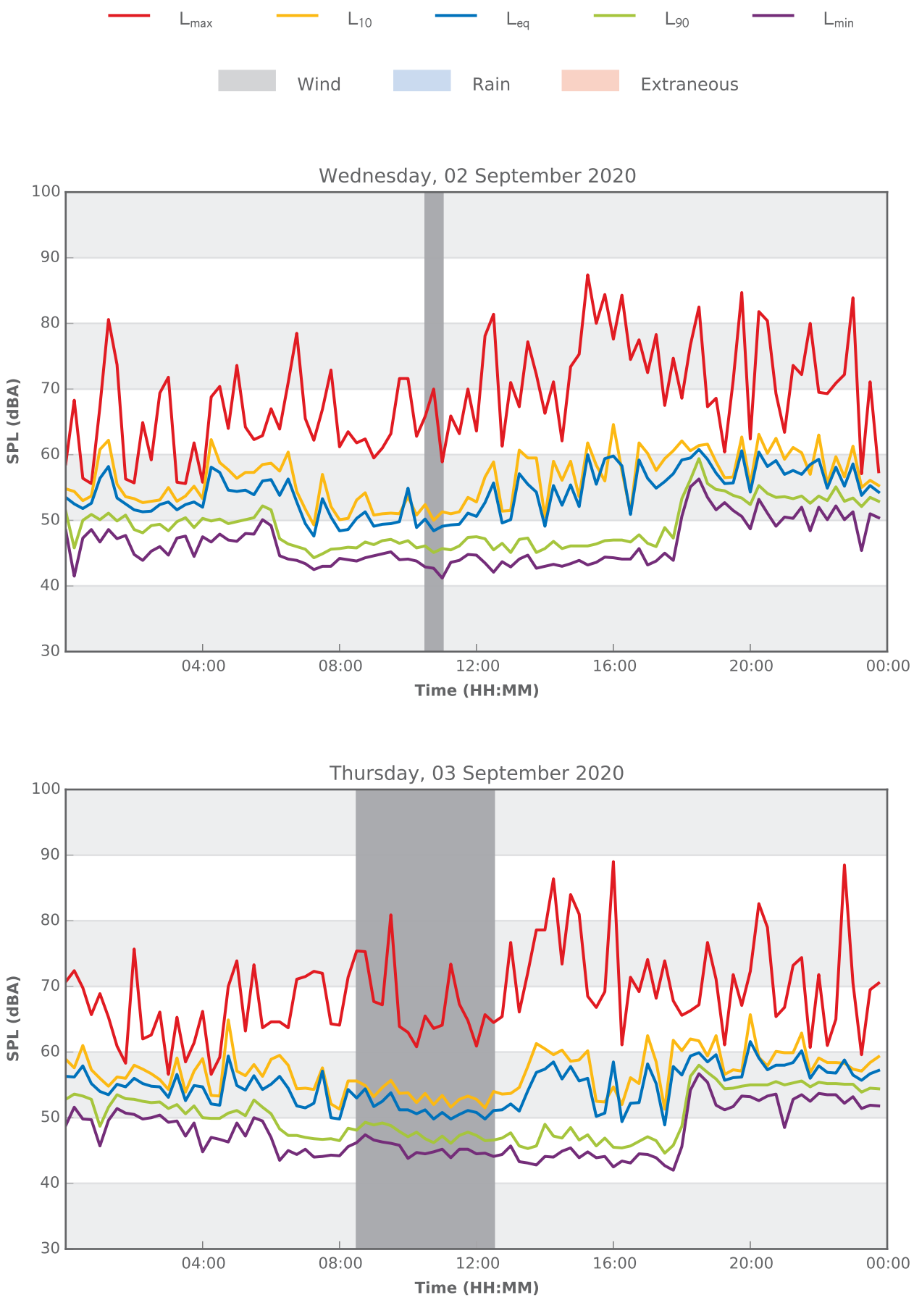
10 Mill Street, Muswellbrook



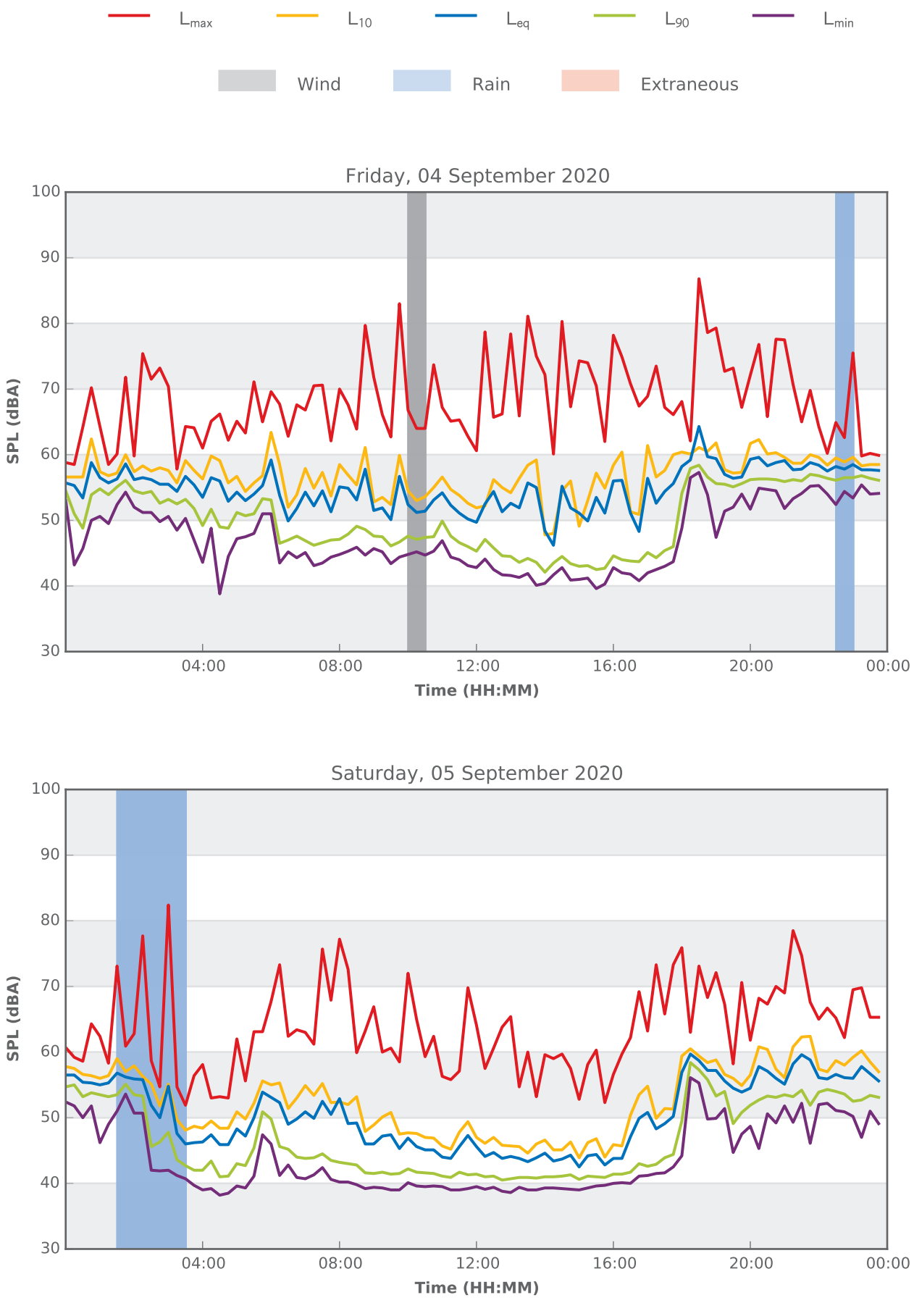
10 Mill Street, Muswellbrook



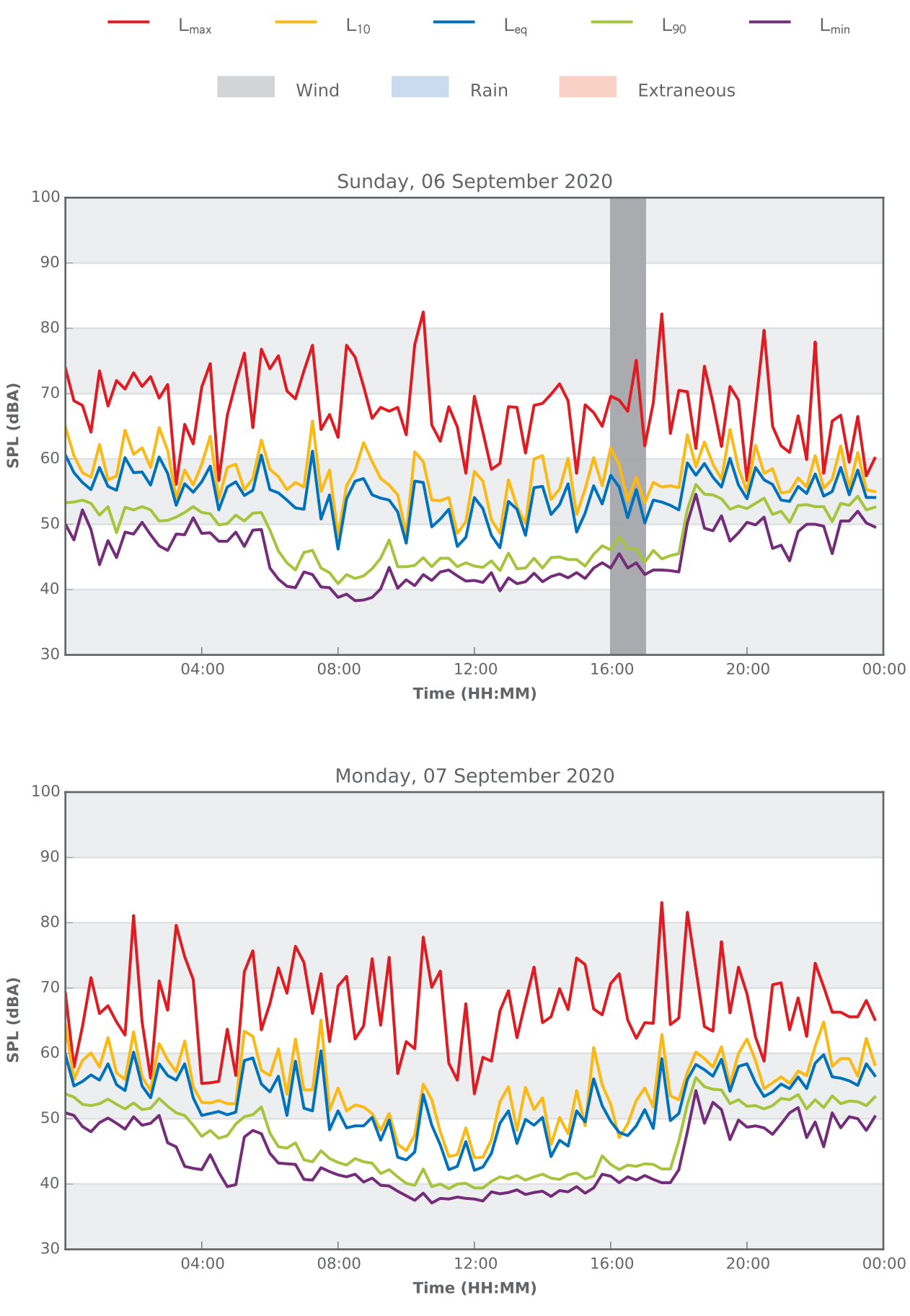
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