

NEWCASTLE SAND

Noise Management Plan

Williamtown Sand Syndicate Pty Ltd

Cabbage Tree Road Sand Quarry
Cabbage Tree Road, Williamtown

23 September 2026

Noise Management Plan

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Cabbage Tree Road, Williamtown

Prepared for:

WILLIAMTOWN SAND SYNDICATE PTY LTD

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Glossary

Abbreviation	Definition or Meaning
AEMR	Annual Environmental Management Report / Annual Review under Schedule 5, Condition 11
AHD	Australian Height Datum
DPHI	Department of Planning Housing and Infrastructure
EMP	Environmental Management Plan
EPA	Environmental Protection Authority
EPL	Environmental Protection Licence
IPC	Independent Planning Commission
LAeq	Equivalent Continuous A-weighted Sound Pressure Level
LAmax	Maximum A-weighted Sound Pressure Level
Mt	Million Tonnes
NATA	National Association of Testing Authorities
NMP	Noise Management Plan
NPI	Noise Policy for Industry
PSC	Port Stephens Council
RBL	Rating Background Level
RMS	Roads and Maritime Authority (superseded by TfNSW)
SCA	State Conservation Area
SSD-6125	Development Consent for the Cabbage Tree Road Sand Quarry
TfNSW	Transport for NSW
VENM	Virgin Excavated Natural Material
WSS	Williamtown Sand Syndicate (the owner of Newcastle Sand)

1. INTRODUCTION

1.1 BACKGROUND

Newcastle Sand operates a sand quarry (the quarry) on five lots of land located at 398 Cabbage Tree Road, Williamtown, approximately 30 kilometres (km) from the Newcastle central business district. Newcastle Sand is a wholly owned subsidiary of Williamtown Sand Syndicate Pty Ltd (WSS), the entity associated with seeking the Project Approval. The quarry will extract up to 530,000 tonnes per annum of sand products over a period of up to 15 years.

Development Consent (SSD-6125) was granted by the NSW Independent Planning Commission on 9 May 2018 for construction and operation of the quarry subject to a series of conditions. Condition 6 of Schedule 3 of the Development Consent requires the preparation and implementation of a Noise Management Plan (NMP).

Potential noise impacts associated with the quarry include noise emissions from daily quarry operations at surrounding residential receptors. The quarry will generate noise from the use of quarry equipment (e.g. sand processing plant, excavators, articulated dump trucks, front-end loaders, screening and processing equipment, conveyors (where used) and associated mobile plant) while undertaking clearing, sand excavation and haulage of product sand into and out of the site.

Construction of the quarry commenced in August 2019, with operations commencing in May 2020. Modification 4, approved a 7.3 ha Western Extension on Lot 9 DP239608, extending extraction closer to the western project boundary. An updated Noise Impact Assessment confirmed that the project can continue to comply with the applicable operational noise criteria through the approved extraction sequence, operational controls and ongoing noise monitoring.

1.2 PROJECT OVERVIEW

The key details of the quarry are shown within **Table 1** below. The quarry operations plan is shown in **Figure 1**.

Table 1: Key Aspects of the Cabbage Tree Road Sand Quarry

Aspect	Key Aspects of the Quarry
Key Elements	Sand quarry extracting up to 530,000 tonnes per annum until 31 December 2033, incorporating dry sand extraction, screening, air separation and sand washing. The Project includes the quarry access intersection with Cabbage Tree Road, internal sealed and unsealed haul roads, processing plant, wash plant, water management infrastructure, stockpile areas, weighbridge, workshop, offices and ancillary facilities. Progressive rehabilitation will be undertaken throughout the life of the quarry, restoring disturbed land to native vegetation communities in accordance with the approved Conceptual Rehabilitation Plan.
Location	398 Cabbage Tree Road, Williamtown, within the Port Stephens Local Government Area.
Property Titles	Five titles within the Parish of Stockton, County of Gloucester including: • Lot 100 DP1263921 at 398 Cabbage Tree Road, Williamtown (replaces Lot 1 DP 224587 following the construction of intersection). • Lot 121 DP 556403 at 282B Cabbage Tree Road, Williamtown. • Lot 11 DP 629503 at 282A Cabbage Tree Road, Williamtown. • Lot 1012 DP 814078 at 282 Cabbage Tree Road Williamtown. • Lot 9 DP 239608
Land Owner	Port Stephens Council (Lots 100, 121, 11 and 1012) and Lot 9 DP239608, operated under lease arrangements by Williamtown Sand Syndicate Pty Ltd.
Proponent	Williamtown Sand Syndicate Pty Ltd, the owner of the quarry operator Newcastle Sand.
Area	Total Project Area of approximately 48.9 hectares (including Mod 4) from a Subject Land Area of approximately 197 hectares.
Project Life	Quarrying operations are approved until 31 December 2033. The remaining operational life of the quarry will depend on market demand and annual production rates, up to the approved maximum extraction rate of 530,000 tonnes per calendar year.
Extraction Rate	Maximum of 530,000 tonnes per annum, and an indicative maximum daily rate of 3,000 tonnes.
Operating Hours	Construction of intersection, access and workshop and office: • 7:00am to 5:00pm Monday to Friday. • 8:00am to 1:00pm Saturday. • No works on Sunday or public holidays. Quarrying Operations: • 7:00am to 5:00pm Monday to Friday. • 7:00am to 4:00pm on Saturday. • No quarrying on Sunday or a Public Holiday. Loading and dispatch of trucks: • 6:00am to 6:00pm Monday to Friday. • 7:00am to 4:00pm Saturday. • No works on Sunday or public holidays.

Aspect	Key Aspects of the Quarry
Transport Rate	• Annual average daily truck movement of 63 laden trucks per day (126 movements), equating to average hourly truck movements of 5 laden trucks per hour (10 trips per hour). • Up to 6 laden trucks per hour (12 trips per hour) during the hours of 6 am to 7 am Monday to Friday. • Up to a maximum of 10 laden trucks per hour (20 trips per hour) during hours of 7 am to 5 pm Monday to Friday (i.e. all haulage hours excluding the morning peak). • Up to a maximum of 10 laden trucks per hour (20 trips per hour) during hours of 7 am to 4 pm Saturdays. • Haulage between 5 am and 6 am is subject to agreement from adjacent landowners as per Schedule 3, Condition 1. • Up to 6 vehicles of employees would be expected to arrive from approximately 5:30 am to 7 am and leave between 5 pm and 7 pm.
Resource and Products	• Approved sand resources within the Southern Resource Area, Northern Resource Area and Western Extension area, comprising raw fill sand, screened sand, sandy loam, concrete sand and glass sand (estimated at about 16% of total resource), extracted from the site and transported via truck onto Cabbage Tree Road for distribution to market. • Extraction no closer than 0.7 m above the predicted maximum groundwater level groundwater level. • Import, processing and re-sale of VENM sand sourced offsite.
Extraction	• Maximum extraction rate of 530,000 tonnes per annum. • Excavator and/or bulldozer to clear vegetation and strip topsoil. • Bulldozer or grader to windrow sand. • Excavators extract material and load onto dump trucks. • Dump trucks to transfer sand to the processing plant. • Front-end loader to feed conveyors to convey sand to the processing plant when dump trucks unsuitable.
Processing Methods	• Raw sand product extracted directly from face with no processing. • Sand fed into electrically powered screen. • Screened sand sold as product or fed to electrically powered air separator or wash plant. • Products stockpiled for loading directly into truck or fill bulker bags for removal from the site by truck.
Support Facilities and Utilities	• Site office, workshop, stores, car parking. • Power supplied via diesel generator and local network services where available. • Water supply from local network.

1.3 PURPOSE AND SCOPE

This NMP outlines the key management controls implemented to minimise noise impacts from operational activities and any future approved construction work associated with the quarry. It also details noise monitoring requirements associated with operation of the quarry against relevant noise impact assessment criteria and forms part of the broader environmental management framework and should be read in conjunction with the projects management plans.

This document satisfies Development Consent Conditions 1 to 6 within Schedule 3 for the quarry. A checklist of where each condition has been addressed in this document is provided in **Section 2.2.**

1.4 CONSULTATION AND PLAN DEVELOPMENT

The approved NMP was supplied to the NSW Environmental Protection Authority (EPA) for review and comment.

As of the date of Version 5 of this plan, no response has been received from the EPA. It is understood the EPA regulate Environmental Protection Licence (EPL) 21264 as the preferred mechanism for management of noise impacts.

Copies of correspondence relating to the NMP are included within **Appendix 1**.

This NMP was approved by the Secretary on 16 April 2019.

A copy of the NMP was provided to the EPA for comment on the 11 September 2026 and no response was received.

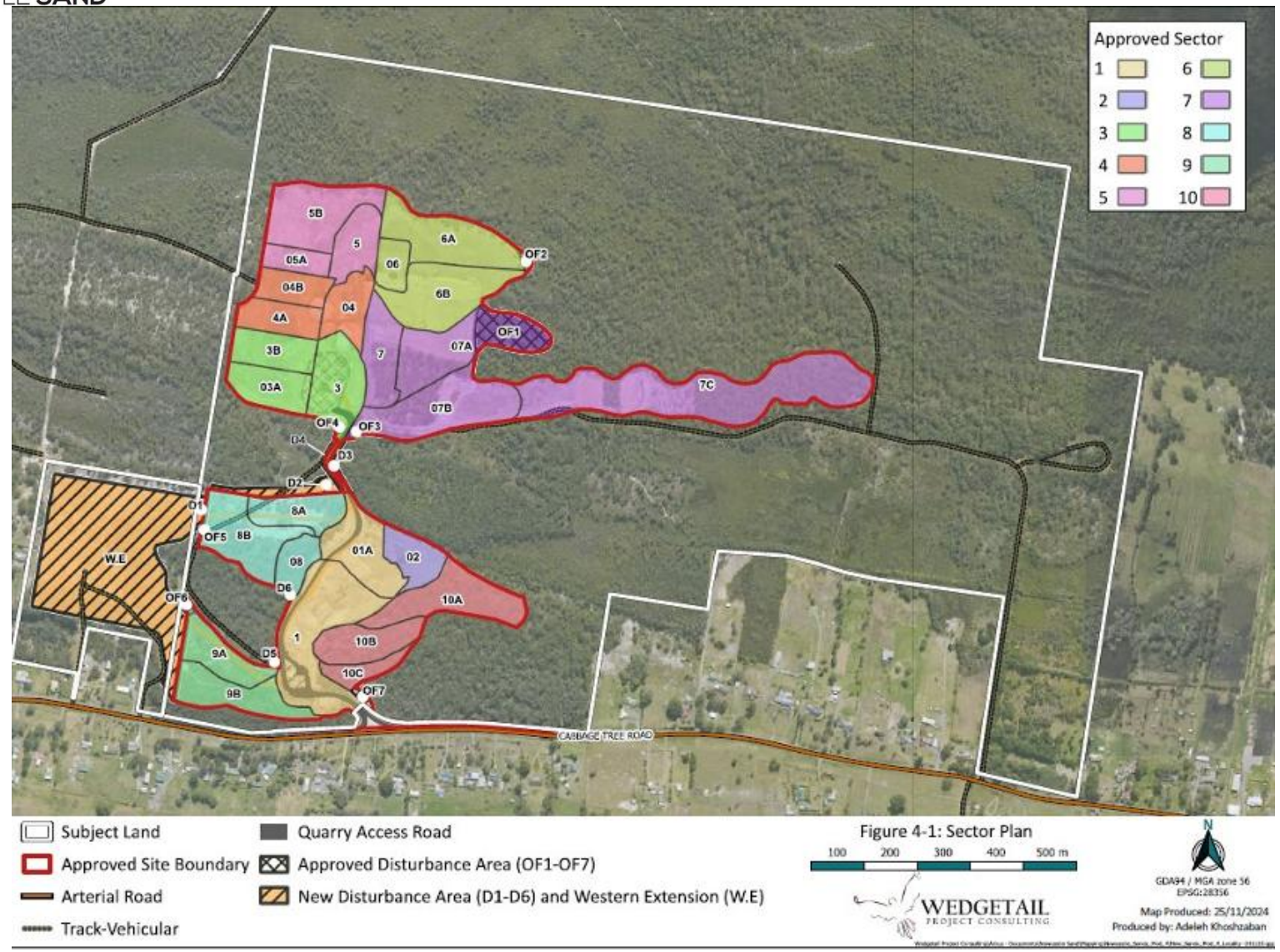


Figure 1: Operations Plan for the Cabbage Tree Road Sand Quarry on Cabbage Tree Road, Williamtown

2. STATUTORY REQUIREMENTS

2.1 LEGISLATION AND GUIDELINES

Noise monitoring and management is undertaken in accordance with the following State legislation:

- *Environmental Planning and Assessment Act 1979.*
- *Noise Policy for Industry 2017.*
- *Protection of the Environment Operations Act 1997.*

Meteorological station set-up and noise monitoring is completed in accordance with the requirements in the EPA *Approved Methods for Sampling and Analysis of Air Pollutants in NSW Jan 2022* for the life of the quarry.

All acoustic instrumentation used for monitoring comply with the requirements of *AS 1259.2-1990 Sound Level Meters* and will have current National Association of Testing Authorities (NATA) or manufacturer calibration certificates.

2.2 DEVELOPMENT CONSENT

A Development Consent was granted for the quarry under the *Environmental Planning and Assessment Act 1979* by the NSW Independent Planning Commission. The requirement for a NMP arises from Condition 6 within Schedule 3 of the Development Consent. Other noise monitoring requirements include Conditions 1 to 5 of Schedule 3 and Appendix 5 – Noise Compliance Assessment of the Development Consent.

Table 2 provides a summary of where each requirement of the of the Development Consent relating to noise is addressed in this document.

Table 2: Development Consent Conditions

<table>
<tr><th>Condition</th><th>Description</th><th>Addressed in Section</th></tr>
<tr><td colspan="3">Schedule 3 – Specific Environmental Conditions</td></tr>
<tr><td>1</td><td>Hours of Operation
The Applicant must comply with the operating hours set out in Table 1.

Table 1: Operating Hours
<table>
<tr><th>Activity</th><th>Permissible Hours</th></tr>
<tr><td>Quarrying operations</td><td>• 7 am to 5 pm Monday to Friday
• 7 am to 4 pm Saturday
• At no time on Sundays or public holidays</td></tr>
<tr><td>Loading and dispatch of laden trucks</td><td>• 6 am to 6 pm Monday to Friday
• 7 am to 4 pm Saturday
• At no time on Sundays or public holidays</td></tr>
<tr><td>Maintenance</td><td>• May be conducted at any time, provided that these activities are not audible at any privately-owned residence</td></tr>
</table>
However, if the Applicant reaches agreement to extend the hours of transportation with all owners of privately-owned land fronting Cabbage Tree Road immediately opposite the deceleration and acceleration lanes forming part of the quarry access intersection and has advised the Department in writing of the terms of these agreements, then the Applicant may also undertake loading and dispatch of laden trucks between 5 am and 6 am Monday to Friday.</td><td>Section 1.2 and Table 1.</td></tr>
<tr><td>2</td><td>Hours of Operation
The following activities may be carried out outside the hours specified in Table 1:
a) delivery or dispatch of materials as requested by Police or other public authorities; and
b) emergency work to avoid the loss of lives, property or to prevent environmental harm.
In such circumstances, the Applicant must notify the Planning Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.</td><td>Section 7</td></tr>
<tr><td>3</td><td>Noise Impact Assessment Criteria
The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.
Table 2: Noise criteria dB(A)
<table>
<tr><th>Receiver</th><th>Day
$L_{Aeq\ (15\ minute)}$</th><th>Shoulder
$L_{Aeq\ (15\ minute)}$</th><th>Shoulder
$L_{Amax\ (1\ minute)}$</th></tr>
<tr><td>Any residence on privately owned land</td><td>43</td><td>39</td><td>45</td></tr>
</table>
In this condition, ‘the development’ excludes road construction activities associated with the intersection of the quarry access road and Cabbage Tree Road and vegetation clearing operations within the Southern Resource Area (see condition 4 below).

Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological</td><td>Section 5</td></tr>
</table>

Condition	Description	Addressed in Section
	conditions) of the NPI. Appendix 5 of the Development Consent sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria. The criteria in Table 2 do not apply if the Applicant has an agreement with relevant landowner/s to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.	
4	**Operating Conditions** The Applicant must only undertake vegetation clearing operations within the Southern Resource Area under the following circumstances: a) noise generated by the development does not exceed 47 dB(A)LAeq (15 minute); b) bulldozer(s) or equipment with a sound power level greater than 104 dB(A) are not permitted to be used in Sectors 9B, 10A, 10B and 10C, as shown in Figure 2 of Appendix 1 of the Development Consent; c) clearing operations are limited to: • the Day period, Monday to Friday; • campaigns not exceeding 5 consecutive working days; • no more than four campaigns in any calendar year.	Section 5.3
5	**Operating Conditions** The Applicant must: a) implement best practice management to minimise the construction, operational and road transport noise of the development; b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 5 of the Development Consent); c) carry out noise monitoring (at least every 3 months or as otherwise determined by the Planning Secretary) to determine whether the development is complying with the relevant conditions of this consent; and d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Planning Secretary.	Section 7
6	**Noise Management Plan** The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must: a) be prepared in consultation with the EPA; b) be submitted to the Planning Secretary at least one month prior to commencing ground disturbing activities, unless otherwise agreed by the Planning Secretary; c) describe the measures to be implemented to ensure: d) compliance with the noise criteria and operating conditions in this consent; e) best practice management is being employed; and f) the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 5 of the Development Consent); g) describe the proposed noise management system; and h) include a monitoring program to be implemented to measure noise generated by the development against the noise criteria in conditions 3 and 4 of Schedule 3, and which evaluates and reports on the effectiveness of the noise management system on site. The Applicant must not commence ground disturbing activities until the Noise Management Plan is approved by the Planning Secretary. The Applicant must implement the Noise Management Plan as approved from time to time by the Planning Secretary.	Sections 1 - 9
Schedule 5 – Environmental Management, Reporting and Auditing		
3	**Management Plan Requirements** The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data;	Sections 1 - 9

Condition	Description	Addressed in Section
	(b) a description of: • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; and • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) a description of the measures that to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; (d) a program to monitor and report on the: • impacts and environmental performance of the development; and • effectiveness of any management measures (see (c) above); (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; (f) a program to investigate and implement ways to improve the environmental performance of the development over time; (g) a protocol for managing and reporting any: • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and (h) a protocol for periodic review of the plan *Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*	
Appendix 5 – Noise Compliance Assessment		
1	**Applicable Meteorological Conditions** The noise criteria in Table 2 are to apply under all meteorological conditions except the following: a) wind speeds greater than 3 m/s at 10 m above ground level; or b) temperature inversion conditions between 1.5°C and 3°C/100 m and wind speed greater than 2 m/s at 10 m above ground level; or c) temperature inversion conditions greater than 3°C/100 m.	Section 5.4
2	**Determination of Meteorological Conditions** Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station required under condition 10 of Schedule 3.	Section 5.4
3	**Compliance Monitoring** A noise compliance assessment must be undertaken within two months of commencement of quarrying operations. The assessment must be conducted by a suitably qualified and experienced acoustical practitioner and must assess compliance with noise criteria presented above. A report must be provided to the EPA within 1 month of the assessment.	Section 8
4	**Compliance Monitoring** Unless the Secretary agrees otherwise, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NPI (as amended from time to time), in particular the requirements relating to: a) monitoring locations for the collection of representative noise data; b) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; c) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration; and d) the use of an appropriate modifying factor for low frequency noise to be applied during compliance testing at any individual residence if low frequency noise is present (in accordance with the NPI) and before comparison with the specified noise levels in the consent.	Section 8

3. EXISTING ENVIRONMENT

3.1 AMBIENT NOISE LEVELS

The area around the quarry is rural in nature, comprising an arterial road, Cabbage Tree Road which becomes Tomago Road to the west, impacting all assessed receivers to some degree. The runway at Newcastle Airport carries both commercial and Air Force aircraft and is a significant noise source in the area.

As part of the Mod 4 Noise Impact Assessment, ambient noise monitoring was undertaken at Receiver R14 (24 Barrie Close, Williamtown), identified as the most potentially affected receiver for extraction activities in the Western Extension Area. The monitoring confirmed that the local acoustic environment continues to be influenced by road traffic and aircraft movements and remains generally consistent with the conditions assessed during the original project approval.

Trucks transport material from the extraction site to the processing area. Sound power testing conducted on site determined that the Moxy MY31 articulated truck is relatively quiet and further assessment concluded that haulage noise will be inaudible off-site. In addition, noise monitoring completed by the quarry on a quarterly basis since 2020 has resulted in the quarry being consistently inaudible, further demonstrating the quarry's effective noise management.

3.2 RECEPTORS

With respect to the proximity of residential dwellings it is important to note that the resource is effectively divided into three areas, the northern portion of the resource, the southern resource area and the western resource area. Land use surrounding these resource areas of the quarry is characterised below and shown within **Figure 2**:

- Northern resource area:
  - One dwelling within 500 m of the resource extraction area.
  - Land to the east, west and north of the quarry is uninhabited, comprising land used for biodiversity offset for the quarry, Hunter Water owned land and the Tilligerry State Conservation Area (SCA).
- Southern resource area:
  - To the south, the closest dwellings are located more than 75 m from Sector 9B (refer to **Figure 2**) along the southern most extent of the resource.
  - To the south-west, the closest dwelling is located more than 75 m from Sector 9B (refer to **Figure 2**) along the southern most extent of the resource.
  - To the west the closest dwelling is over 160 m, and the dwellings at the end of Barrie Close are in excess of 300 m from the Sector 8A and 9A.
  - To the east the closest dwelling is over 220 m.
- Western resource area:
  - Two dwellings (R14 and R28) at or less than 55 m from the extraction area to the west.
  - Receiver R14 is considered the critical receiver for assessment of noise impacts. All other receivers are at a greater distance from the pit edge and outside the 55 m setback.

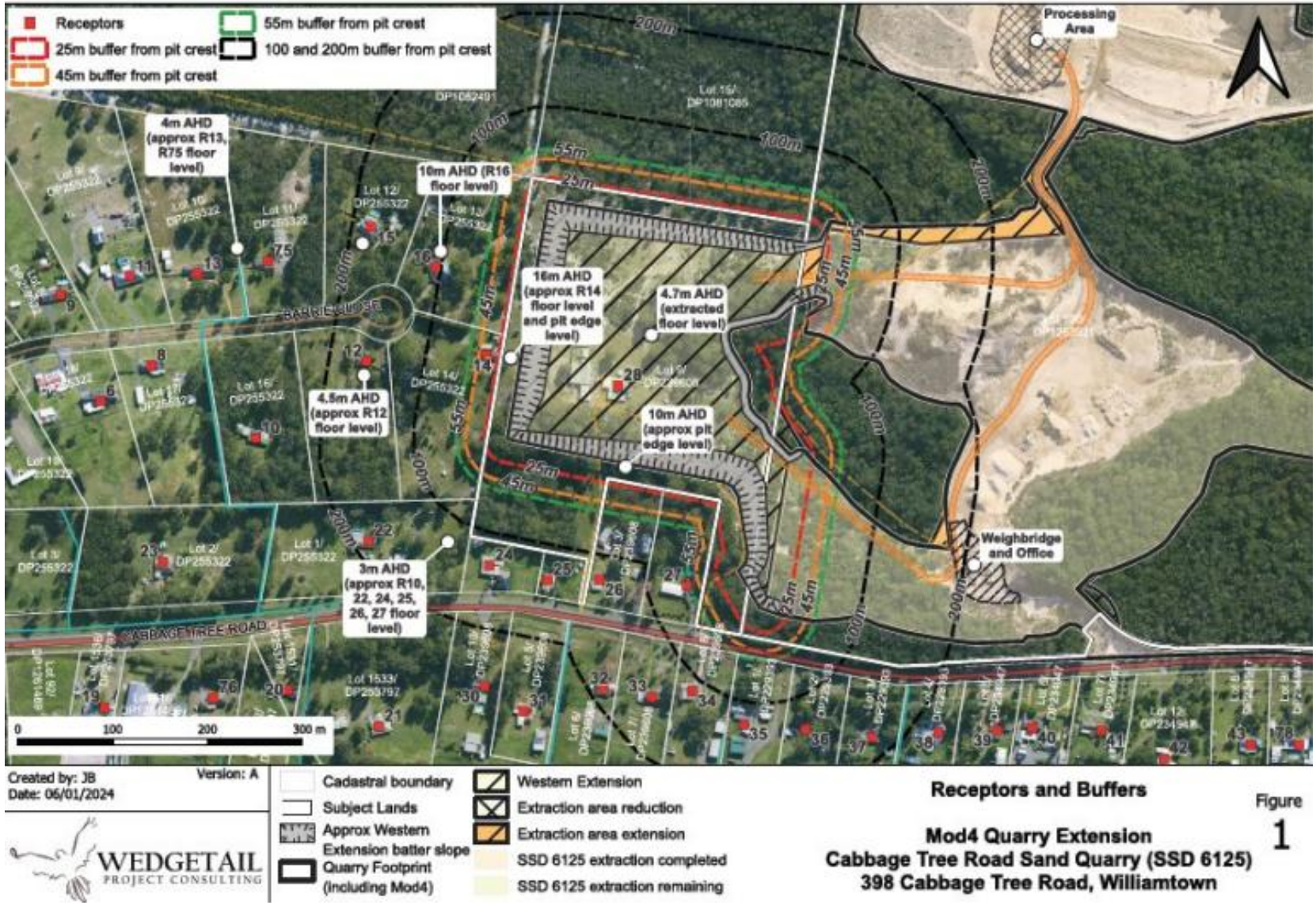


Figure 2: Subject Land and Receptors (Wedgetail, 2025)

3.3 WEATHER

Historical weather data is available at the Bureau of Meteorological Weather Station located at the Williamtown Airport approximately 4 km to the north east of the northern portion of the quarry. Based on this data the wind directions have the following key characteristics relevant to the quarry operations:

- Calm mornings and windy afternoons throughout the year.
- Mornings have a more even distribution of winds, with the following tendencies:
  - Summer has a greater proportion of winds from the south that will direct dust generated at the quarry away from dwellings.
  - Autumn, winter and spring have a higher proportion of winds from the west and north-west that have greater propensity to push dust generated from the quarry to dwellings.
- Afternoons typically have a more dominant wind pattering including:
  - Spring, summer and autumn have dominant south and south east onshore wind that will direct dust generated at the quarry away from dwellings.
  - Winter still have a southerly component, though north and north-westerly winds increase that have greater propensity to push dust generated from the quarry to dwellings.

While noise propagation is subject to a complex range of parameters (e.g. background levels, mixing heights etc), simplistically, based on prevailing winds winter is likely to require the highest level of noise management through the year, followed by the mornings during autumn and spring. Weather data for assessment of noise impacts will be sourced from an on-site meteorological station.

4. PREDICTED NOISE IMPACTS

4.1 CONSTRUCTION

Construction of the quarry was completed in 2020. Construction noise was assessed against the NSW EPA *Interim Construction Noise Guideline 2009* where it was determined that no residence would be considered "highly noise affected" (75 dBA $L_{Aeq(15minute)}$), with worst case noise levels assessed at 62 dBA $L_{Aeq(15minute)}$.

Any future construction works will be undertaken in accordance with the Development Consent and relevant guidelines.

4.2 OPERATIONS

4.2.1 Noise Sources

Noise sources and sound power levels of quarrying equipment for extraction and processing used in the previous assessment of noise impacts are listed in **Table 3**.

Table 3: Noise Sources and Sound Power Levels, Lw dB(A)

Equipment	Indicative Number	Use	Lw dB(A)
D8 Bulldozer (1st gear)	1	Tree clearing/material push-up	109
CAT 980 Loader	1	Loading conveyors and trucks	104
Excavator (30T)	1	Tree clearing/material push-up	104
Jump conveyor (30m)	1 per 30m	Material transfer	76
Zip line conveyor (150m)	1 per 150m	Material transfer	83
Radial stacker	1	Stacking product	93
Fisher air separator	1	Processing sand	98
McCloskey S190 screen	1	Screening sand	103

For the Mod 4 assessment, on-site noise measurements of a Volvo EC3500 in the operation of excavating material and loading a haul truck at three different distances were conducted. This extraction method via excavator replaces the previous use of a dozer and results in lower noise emissions with no identifiable track noise. Machinery noise was primarily below 800Hz, with higher frequencies dominated by wind and birds. The results are as shown in **Table 4.**

Table 4: Summary of Measured Operational Noise Levels

Distance	Shielding	Measured Level
25 m	No. Direct line of sight to excavator and truck	61.8 dB(A)
45 m	Direct line of sight to excavator and truck partially obscured	49.1 dB(A)
55 m	Yes. Measurement taken behind 2m high sand bund 43.5 dB(A) The results show the relatively quiet nature.	43.5 dB(A)

The Noise Impact Assessment was undertaken prepared in support of Mod 4 included the approved Western Extension Area and revised extraction methodology. The Mod 4 assessment incorporated updated baseline noise monitoring, revised extraction layouts and current operational practices. Receiver R14 (24 Barrie Close, Williamtown) was identified as the most potentially affected receiver.

The assessment determined that:

- Operational noise impacts associated with the Western Extension Area are generally consistent with, or lower than, those previously approved under the Development Consent.
- The use of excavators and articulated dump trucks does not result in a significant increase in operational noise emissions relative to previously approved extraction methods.
- Existing topography, extraction faces and operational controls provide substantial shielding of quarry-generated noise.
- Receiver R14 represents the critical receiver for future extraction activities and will remain the focus of operational monitoring.
- Compliance with the applicable operational noise criteria can be achieved through implementation of the management measures outlined in this NMP.

4.2.2 Modification 4

The Modification 4 Noise Impact Assessment assessed the potential operational noise impacts associated with the proposed Western Extension and revised extraction methodology. The assessment was based on site-specific noise measurements of the proposed excavator and haul truck extraction method at representative distances and shielding conditions, including assessment of the nearest and potentially most affected residential receivers.

The assessment found that operational noise from the modified quarry would generally remain compliant with the applicable 43 dB(A) LAeq(15 minute) noise limit through the use of separation distances, natural topographic shielding, and where required, the construction of an acoustic barrier or 2–3 m sand bund between excavation activities and nearby receivers. The assessment identified that only receivers R14 and R27 have potential to experience noise levels above the 43 dB(A) criterion during some stages of extraction within the Western Extension.

Newcastle Sand has entered into agreements with these landowners in relation to the proposed extraction works.

4.2.2.1 Short Term Impacts

Each extraction area will require the vegetation to be cleared prior to recovering the sand. Clearing will occur over short periods in the order of five days. In the most exposed areas (i.e. Areas 9b, 10a and 10c), using a bull dozer may result in the exceedance of noise criteria, as such a dozer will not be used to clear vegetation in the most exposed areas, as per the intent of Condition 4 of the Development Consent.

Demolition activities will be undertaken during approved construction hours and in accordance with *Australian Standard AS 2601–2001 The Demolition of Structures*. Given the short-term nature of the works, demolition activities are not expected to result in significant long-term noise impacts.

5.

5. NOISE CRITERIA

5.1 CONSTRUCTION CRITERIA

Construction of the quarry was completed in 2020. Any future construction works will be completed in accordance with the *Interim Construction Noise Guideline* (2009) and relevant issued approvals.

5.2 OPERATIONAL CRITERIA

Noise criteria are set for day and day shoulder periods to protect amenity of neighbouring residents. Noise criteria are expressed as $L_{Aeq\ (15\ minute)}$ where: $L_{Aeq\ 15\ minute}$ represents the equivalent continuous (energy average) A-weighted sound pressure level of the source over 15 minutes.

WSS shall ensure that all quarry operational activities do not exceed the noise criteria shown in **Table 5** at any residence on privately-owned land. Noting, the criteria do not apply if the quarry has an agreement with relevant landowner/s to exceed the noise criteria, and the quarry has advised the DPHI in writing of the terms of this agreement.

Table 5: Noise Criteria (SSD 6125 and EPL 21264)

Receiver	Day LAeq (15 minute)	Shoulder* LAeq (15 minute)	Shoulder* LAmax (1 minute)
Any residence on privately owned land	43 dB(A)	39 dB(A)	45 dB(A)

*Shoulder is the period between 5 am to 7am, Monday to Friday.

5.3 VEGETATION CLEARANCE

As per the Development Consent Conditions outlined in **Table 2**, vegetation clearing operations within the Southern Resource Area must adhere to the following criteria:

- Noise generated by the quarry does not exceed 47 dB(A) $L_{Aeq\ (15\ minute)}$.
- Bulldozer(s) or equipment with a sound power level greater than 104 dB(A) are not permitted to be used in Sectors 9B, 10A, 10B and 10C, as shown in Figure 2 of Appendix 1.
- Clearing operations are limited to:
  - The Day period, Monday to Friday.
  - Campaigns not exceeding 5 consecutive working days.
  - No more than four campaigns in any calendar year.

5.4 METEOROLOGICAL CONDITIONS

The quarry noise criteria applies under all meteorological conditions except the following:

- Wind speeds greater than 3m/s at 10 m above ground level; or
- Temperature inversion conditions between 1.5ºC and 3ºC / 100 m and wind speed greater than 2 m/s at 10 m above ground level; or
- Temperature inversion conditions greater than 3ºC / 100m.

Except for wind speed at microphone height, data for determining meteorological conditions will be recorded by an onsite meteorological station.

6. ROLES AND RESPONSIBILITIES

Roles and responsibilities relative to this NMP are defined in the sections below.

6.1 KEY CONTACTS

The following contacts are available in the event of a compliant, enquiry or emergency.

Table 6: Key Contacts

Contact	Name	Phone	Email
Quarry Manager	Eliott Laver	0402 648 079	Eliott@newcastlesand.com.au
EPA – Incidents Line		131 555	
EPA - Newcastle Office		02 4908 6800	
DPHI – Regional Operations - Newcastle		1300 305 695	compliance@planning.nsw.gov.au

6.2 QUARRY OWNER

WSS is the Quarry Owner and operates the quarry under the wholly owned subsidiary of Newcastle Sand. The Quarry Owner is responsible for the development and assignment of a suitably qualified Quarry Manager and to provide sufficient support to the Quarry Manager to undertake the required actions defined in this plan.

6.3 QUARRY MANAGER

The Quarry Manager is the person who manages the quarry and is responsible for the day to day activities on the site. The Quarry Manager reports to the Quarry Owner.

The Quarry Manager must read, understand and implement the practical application of this plan. All activities being undertaken on the quarry site are the responsibility of the Quarry Manager.

6.4 ONSITE PERSONNEL

Onsite personnel constitutes all employees and contractors working on the site.

7. MANAGEMENT CONTROLS

Table 7 describes the noise management metrics for the quarry**. Table 8** describes the relevant noise management actions and controls to be implemented at the quarry. These controls are based on achieving the Development Consent Conditions in **Table 2.**

Table 7: Noise Management Metrics

Aspects	• Use of quarry equipment • Excavation of quarry material • Transport of material to and from site	**Impacts**	• Noise emissions and disturbance to neighbouring landowners
Objectives	• Minimise unreasonable noise impacts on neighbouring landowners • Comply with Development Consent conditions • Comply with *Noise Policy for Industry 2017* and other standards	**Targets**	• Zero Environmental Incidents/Non-compliances • Zero landowner complaints

Table 8: Noise Management Measures

Item	Action	Trigger / Timing	Responsibility	Reporting
7.1 GENERAL				
A	Ground disturbing activities will not commence until this Noise Management Plan is approved by DPHI.	Prior to commencement of construction	Quarry Manager	Approval of this plan by DPHI
B	Inductions for operators and contractors working onsite will include consideration of potential for noise sensitive receptors surrounding the quarry and requested to limit noise emissions where safe to do so.	Ongoing	Quarry Manager	Induction records
C	Operating hours have been restricted to minimise impacts to neighbouring residences. Quarry activities will be undertaken in accordance with those	Ongoing	Quarry Manager	Nil

Item	Action	Trigger / Timing	Responsibility	Reporting
	hours outlined in **Table 1** of this plan.			
D	The following activities are permitted outside the hours specified in **Table 1**: a) Delivery or dispatch of material as requested by Police or other public authorities; and b) Emergency work to avoid the loss of lives, property or to prevent environmental harm. In such circumstances, WSS will notify DPHI and affected residents prior to undertaking the activities, or as soon as practicable thereafter.	Ongoing	Quarry Manager	Nil
7.2 DESIGN CONTROLS				
A	Areas 8, 9 and 10 will be extracted last to retain the natural sound attenuation of the sand dunes for as long as possible.	Ongoing	Quarry Manager	Nil
B	Extraction orientation will, where feasible, maintain the sand face between the operating plant and the nearest dwelling.	Ongoing	Quarry Manager	Nil
C	Use of low-noise extraction and transfer methods, including excavators, articulated dump trucks, conveyors where suitable, and topographic shielding.	During Construction	Quarry Manager	Nil
D	Construction of an acoustic barrier fence between excavation works and the eastern boundary of R14.	Prior to or during extraction within the Western Extension Area.	Quarry Manager	Nil
7.3 CONSTRUCTION				
A	The proponent will inform potentially noise affected residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.	Prior to undertaking works	Quarry Manager	Nil
B	All feasible and reasonable work practices will be implemented where possible to meet the noise affected level.	During construction	Quarry Manager	Nil
C	Construction personnel will be made aware of the requirement to minimise noise, and to implement best practice operating techniques to minimise noise.	During construction	Quarry Manager	Nil

Item	Action	Trigger / Timing	Responsibility	Reporting
D	Consideration should be given to operating low noise emission plant where possible.	During construction	Quarry Manager	Nil
7.4	**VIBRATION AND DILAPIDATION**			
A	Detailed dilapidation surveys will be undertaken at all properties within a 300 m radius of quarrying activities and/or intersection works where access is provided to undertake the reporting prior to the commencement of any works. Each property owner will be provided a copy of the dilapidation report for their property.	Prior to commencement of any work within a 300m radius of private dwelling	Quarry Manager	Dilapidation Report
B	Vibration monitoring at the potentially most affected residences at commencement, or during the highest vibration emitting period, of Cabbage Tree Road intersection construction activity.	During estimated 12-week construction phase.	Quarry Manager	Results included within AEMR DPHI notified where exceedance identified.
7.5	**OPERATIONS**			
A	Operations must have regard to the prevailing weather conditions and minimise noise impacts to surrounding properties, including: • Where adverse meteorological conditions (as per **Section 5.4**) apply and the operational criteria do not apply. • Where wind direction is toward nearby receptors (i.e. generally from west through north to east).	At all times	Quarry Manager	Nil
B	Vegetation clearing within the southern resource area will be undertaken in line with the following requirements: • Noise generated by the development does not exceed 47 dB(A) $L_{Aeq\ (15minute)}$ • Bulldozers or equipment with a sound power level greater than 104 dB(A) are not permitted to be used in Sectors 9B, 10B and 10C. Vegetation clearing will be limited to: • The day period, Monday to Friday; • Campaigns not exceeding 5 consecutive working days; and No more than four campaigns in any calendar year.	Vegetation clearing in southern resource area	Quarry Manager	Nil
C	Use of a dozer for operational material push up will be restricted to areas	Ongoing	Quarry Manager	Nil

Item	Action	Trigger / Timing	Responsibility	Reporting
	within the northern resource area and will not be used within Sectors 9B, 10A, 10B and 10C. A dozer may only be used in other areas of the southern resource area where monitoring determines noise criteria will not be exceeded at dwellings.			
D	All equipment frequently used onsite will be fitted with a BBS-Tek "backalarm" (or equivalent) broadband reversing alarms or similar.	Ongoing	Quarry Manager	Nil
E	All plant is to be positioned at each processing area with regard to minimising the potential for offsite noise at the surrounding dwellings.	Ongoing	Quarry Manager	Nil
F	Diesel generators used for backup power will be positioned such that the exhaust is generally directed to the north.	Ongoing	Quarry Manager	Nil
G	Use of an excavator rather than a dozer for extraction in the Western Extension Area.	Extraction in Western Extension Area	Quarry Manager	Nil
H	Maintain acoustic bunding or equivalent shielding between extraction activities and Receiver R14 where practicable.	Extraction in Western Extension Area	Quarry Manager	Nil
7.6 MONITORING				
A	**Construction** Monitoring undertaken during construction will include: • Attended noise monitoring at the potentially most affected residences at commencement, or during the highest noise emitting period, of each construction activity. • If noncompliance is demonstrated, additional monitoring will be undertaken within one week following implementation of additional mitigation controls. • Vibration monitoring at the potentially most affected residences at commencement, or during the highest vibration emitting period, of Cabbage Tree Road intersection construction activity	During construction	Quarry Manager	Attended Noise Monitoring Report
B	**Operations** A noise compliance assessment must be undertaken within two months of	Within two months of commencement	Quarry Manager	Noise Compliance Report

Item	Action	Trigger / Timing	Responsibility	Reporting
	commencement of quarrying operations. The assessment must be conducted by a suitably qualified and experienced acoustical practitioner and must assess compliance with noise criteria presented above. A report must be provided to the EPA within 1 month of the assessment.	of quarrying (i.e. after construction)		
C	Attended noise monitoring undertaken during operations by a suitably qualified acoustic consultant in line with **Section 8**.	Quarterly	Quarry Manager	Updated to website quarterly. Results published in AEMR.
D	Install a meteorological station to allow quarry personnel to access instantaneous wind speed and direction data and generate site specific meteorological data records (refer to **Section 5.4**).	Ongoing	Quarry Manager	Summary in AEMR.
7.7 COMPLIANCE EVALUATION				
A	Attended monitoring results are to be assessed for compliance using the following protocol: • Results above intrusiveness criteria; • Do standard meteorological conditions apply; • If non-standard weather conditions apply (as per **Section 5.4** / NPI), undertake follow-up monitoring if criterion is exceeded by more than 2 dB; • Are the results considered to be directly related to activities onsite or are they from an unrelated source? • If related to activities onsite and standard weather conditions apply, a non-compliance has occurred. Results above intrusiveness criteria are considered a project non-compliance. DPHI will be notified within 24 hours of an exceedance and be sent a report within 7 days outlining non-compliances and corrective actions undertaken. A summary of any non-compliances and associated corrective actions will be provided in the Annual Environmental Monitoring Report (AEMR) (refer **Section 9**).	When exceedance of noise criteria measured. DPHI notified within 24 hours where non-compliance identified.	Quarry Manager	Results included in AEMR Incident Notification
B	If non-compliance is demonstrated, additional monitoring will be undertaken within one week following implementation of additional mitigation controls.	Following non-compliance.	Quarry Manager	Results included in AEMR DPHI notified where non-compliance identified.

Item	Action	Trigger / Timing	Responsibility	Reporting
C	All complaints will be recorded in the Consultation Register and resolved in line with the project Complaints Procedure in Section 5.2.1.2 of the project EMP.	Ongoing	Quarry Manager	Summary in AEMR.
D	Monthly internal inspections as per 6.2 of the project EMP.	Monthly	Quarry Manager	Monthly Inspection Report
E	Three-yearly Independent Environmental Audits as per Section 6.3 of the project EMP.	Three-yearly	Quarry Manager	Audit Report
7.8 INCIDENT INVESTIGATION AND CORRECTIVE ACTIONS				
A	Incident Investigations will record the following details as part of the Incident Investigation: • When and where did the incident occur? • In the hour prior to and following the incident: o What were the monitoring results (if available)? o What operational activities were occurring at that time? o What were the weather conditions (rainfall, wind direction, temperature)? • If due to failure or equipment or to follow operational procedures, undertake corrective actions with equipment or onsite personnel to prevent recurrence. • If exceedance not as a result of failure, review and refine procedures. • If operational practices cannot be improved, consult with the residents of impacted dwellings to discuss potential reasonable and feasible (mitigation measures, this may include: o Double glazing of windows or similar improvements to dwellings. o Erection of a noise barrier (on resident's property or near source). o Provide compensation to allow receptor to seek relief from noise emissions. If a non-compliance has occurred, additional monitoring will be undertaken within one week following implementation of relevant additional management controls listed above.	Non-compliance with criteria	Quarry Manager	Incident Investigation and Corrective Actions Report provided to DPHI within 7 days of event.

Item	Action	Trigger / Timing	Responsibility	Reporting
7.9 COMPLAINTS				
A	All complaints will be recorded in the Consultation Register and resolved in line with the project Complaints Procedure in Section 5.2.1.2 of the project EMP.	Receipt of complaint	Quarry Manager	Complaints Register Summary in AEMR.
7.10 CONTINUOUS IMPROVEMENT				
A	All controls in this plan will be reviewed and if necessary, revised to confirm their applicability on an ongoing basis throughout the life of the quarry and ensure continual improvement of management practices. In addition the following circumstances will require review of this plan: • Internal monthly compliance inspections. • Non-compliance with criteria. • Annual review. • Modifications of the Consent • Audit Report.	Annually at a minimum	Quarry Manager	Summary in AEMR

8. MONITORING

Noise monitoring is to be undertaken by a suitably qualified acoustic consultant in accordance with the following requirements of the Development Consent and in accordance with the EPA *Noise Policy for Industry 2017.*

8.1 ATTENDED MONITORING PROGRAM

Attended noise monitoring is undertaken quarterly at the most affected neighbouring residences during the highest noise emitting period of each phase of the quarry operations. These phases should include:

- Clearing and stripping in Sectors 1, 3, 7, 8, 9, 10.
- Extraction and processing works in Sectors 1, 8, 9, 10.
- Extraction from the Western Extension Area.

Monitoring locations are described in **Table 9** and shown in **Figure 2**.

Table 9: Noise Monitoring Locations

Generalised Location	Receptor ID
Nearest residence to west (at road level)	27
Nearest residence to west elevated on hill crest	14
Residence due south of quarry	38
Nearest residence to the south east	74

Each noise monitoring event will comprise of measurements during standard hours and normal quarry operations. The following data will be recorded:

- Monitoring location(s).
- Date and time monitoring commenced and ended at each location.
- Height of the microphone above the ground.
- Meteorological data (refer **Section 8.2**).
- Equipment used, calibration details and demonstrated conformity to relevant Australian Standard.
- The $L_{Aeq\ (15\ minute)}$ noise level for each 15-minute period.
- The L_{Amax} noise level for each 15-minute period, for any night-time measurement.
- Noise sources contributing to recorded noise levels during the monitoring event.
- Modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.
- The use of an appropriate modifying factor for low frequency noise to be applied during compliance testing at any individual residence if low frequency noise is present (in accordance with the *Noise Policy for Industry 2017*) and before comparison with the specified noise levels in **Section 5**.

8.2 METEOROLOGICAL DATA

The following meteorological data will be collected where available during each noise monitoring event from the onsite meteorological station:

- Temperature
- Wind speed
- Wind direction
- Cloud cover
- Humidity
- Fog
- Rainfall
- Sigma-Theta

8.3 VIBRATION AND DILAPIDATION MONITORING

To comply with the Statement of Commitments within the Development Consent, additional monitoring will be undertaken to assess vibration and dilapidation impacts to most affected residences.

These are summarised below (**Table 10**) however do not form part of this NMP.

Table 10: Vibration and Dilapidation Monitoring

Item	Action	Trigger / Timing	Responsibility	Reporting
A	Vibration monitoring at the potentially most affected residences at commencement, or during the highest vibration emitting period, of Cabbage Tree Road intersection construction activity.	During estimated 12-week construction phase.	Quarry Manager	Results included within AEMR DPHI notified where exceedance identified.
B	Detailed dilapidation surveys will be undertaken at all properties within a 300m radius of quarrying activities and/or intersection works where access is provided to undertake the reporting prior to the commencement of any works. Each property owner will be provided a copy of the dilapidation report for their property.	Prior to commencement of any work within a 300m radius of private dwelling	Quarry Manager	Dilapidation Report

9. REPORTING

The following items associated with this NMP will be reported and/or recorded during the project.

Table 11: Reporting Requirements

Item	Report	Trigger	Responsibility	Reporting Authority
A	Attended Noise Monitoring Report	Following noise monitoring event	Quarry Manager	DPHI
B	Noise Compliance Report.	As required by consent/EPL.	Quarry Manager	EPA
C	Non Compliance Notification Within 7 days of becoming aware of a non-compliance, Newcastle Sand will notify the Department of the noncompliance. The notification will be in writing and must be submitted via the NSW planning portal (Major Projects). The notification will identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply, the reasons for the non-compliance (if known), and what actions have been undertaken, or will be undertaken, and when, to address the non-compliance. *Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance*	As required by Schedule 5 Condition 10 of the Development consent	Quarry Manager	DPHI

Item	Report	Trigger	Responsibility	Reporting Authority
D	Incident Notification Newcastle Sand must notify the Department within 24 hours of becoming aware of an incident. The notification must be made via the NSW planning portal (Major Projects) and address details of the incident including: (a) date, time and location; (b) a brief description of what occurred and why it has been classified as an incident; (c) a description of what immediate steps were taken in relation to the incident; and (d) identifying a contact person for further communication regarding the incident. Newcastle Sand will provide the Department with a subsequent incident report in accordance with Appendix 7 (Incident Notification and Reporting Requirements).	Following identification of a non-compliance.	Quarry Manager	EPA and DPHI – within 24 hours
E	Incident Investigation and Corrective Action Report	Incident Notification Completion	Quarry Manager	EPA and DPHI – within 7 days
F	Complaints Register, that includes the following information: • Name, address and contact details of complainant (kept confidential on website). • Date and time of complaint. • Date and time of incident / subject of complaint. • Nature of complaint (type, location, duration). • Investigation undertaken in relation to complaint. • Actions implemented due to complaint. • Notification of complainant of controls implemented.	Complaints	Quarry Manager	DPHI
G	Monthly Inspection Report	Following monthly internal inspections	Quarry Manager	Internal
H	Three-yearly Independent Environmental Audits	Following three-yearly independent audit	Quarry Manager	DPHI
I	The Project Website will include the following related to this plan: • A comprehensive summary of monitoring results from the development. • Complaints register. • A copy of this plan.	Updated monthly	Quarry Manager	Public

Item	Report	Trigger	Responsibility	Reporting Authority
J	Annual Environmental Management Report (AEMR). AEMR to include: • Summary of all noise monitoring results and management actions undertaken in the 12-month period; • Summary of any noise non-compliances recorded in the 12-month period; • Summary of any noise-related complaints recorded in the 12-month period; • Summary of corrective actions and improvements to reduce noise impacts. AEMR will be uploaded to Project website within two weeks of report being issued.	Annually at time agreed with DPHI	Quarry Manager	DPHI
K	Dilapidation Report	Prior to intersection construction for dwellings within 300 m of works area.	Quarry Manager	Land Owner and Internal.
L	Vibration Monitoring Report	During construction activities at the nearest residential building.	Quarry Manager	DPHI, Land Owner and Internal.

9.1 INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS

As per Appendix 7 of the Development Consent, incident notification and reporting requirements are defined as:

1) All incident notifications and reports will be submitted via the NSW planning portal (Major Projects).
2) Newcastle Sand will provide notification as required under the requirements, if Newcastle Sand fails to provide the notification required under condition 8, Schedule 4 of the consent or, having given such notification, subsequently forms the view that an incident has not occurred.
3) Within 7 days (or as otherwise agreed by the Planning Secretary) of Newcastle Sand making the incident notification (in accordance with condition 8, Schedule 4 of the consent), Newcastle Sand will submit a subsequent incident report that:
   a) identifies how the incident was detected;

b) identifies when the Applicant became aware of the incident;
c) identifies any actual or potential non-compliance with conditions of consent;
d) identifies further action(s) that will be taken in relation to the incident; and
e) a summary of the incident;
f) outcomes of an incident investigation, including identification of the cause of the incident;
g) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence, including the period for implementing any corrective and/or preventative actions; and
h) details of any communication with other relevant stakeholders regarding the incident.

4) Newcastle Sand will submit any further reports as directed by the Planning Secretary.

APPENDIX 1: REGULATOR CORRESPONDENCE

Correspondence	Comment	Response
Email from DPHI regarding amendment of draft NMP on 19 March 2019	1. Unfortunately the NMP has missed the mark in applying the noise criteria as contained in the Development Consent as granted by the Independent Planning Commission (IPC). The NMP makes reference to two operational noise criteria, where for most practical purposes the consent contains one set of criteria. The figures with noise contours in an Appendix to the NMP have a legend with noise criteria of 43 dB(A) for residences at lower elevations and 47 dB(A) for residences at higher elevation on the relict sand dunes. This approach was put forward in the EIS, and had some merit, but ultimately both the Department and the IPC decided that the noise criterion of 43 dB(A) should apply to all residences.	• Removed all incorrect references to 47 dB(A) in text and figures
	2. Pages 18-20. Discussion of the various noise generating scenarios (1-6). The discussion of the predicted noise levels against an operational noise criterion of 47 dB(A) is incorrect, and needs to be removed. In its place a renewed discussion against the criterion of 43 dB(A) for all properties should be included. Please note (as noted in Table 8) residence R28 is subject to a private noise agreement and should not be considered against the noise criterion. It would seem in many instances that this would lead to a prediction of compliance with the 43 dB(A) criterion at most other residences.	• Removed R28 and 47dB(A) references from noise scenarios. Noted that R28 has a private agreement.in Section 4.2.2 and 8.1. • All revised scenarios are compliant with the 43dB(A) criterion.
	3. Page 20? , section 4.2.2.7 – The Department does not accept that the clearing of vegetation “may result in exceedance of the noise criteria”. What is missing from the early section of the NMP is discussion of the 47 dB(A) criterion that applies to vegetation clearing in the southern sections of the quarry for up to 5 consecutive days on 4 different occasions in a calendar year. This activity is correctly mentioned in Section 7.5 but should be included immediately following discussion of Operational Criteria.	• Removed this section and added Vegetation Clearance criterion to Section 5.3.
	4. Page 31, Table 8. The selection of residence R28 as one of the four attended noise monitoring locations needs to be supported by a justification as it is a residence subject to a private noise	• Replaced R28 with R14.

Correspondence	Comment	Response
	agreement and the noise criteria do not apply to the residence. I can see that this residence could be used as the most likely to be affected residence and then calculations made for impacts at other residential locations. If this is so, it should be explained. Alternatively, the next most likely to be affected residence close by to R28 should be selected as a noise monitoring location.	
	5. Page 23, Table 5. I think that "OEH" (x2) should be replaced by "EPA"?	• Amended OEH to EPA and added contact details for EPA Newcastle Office
	6. Several of the even-numbered pages seems to be missing their pagination	• Amended page formatting
Version 5 prepared and submitted to the DPHI and EPA.	No response from the EPA. Submitted to the DPHI on the 23 September 2026.	•