

Scoping Report

**Proposed Modification to Salt Ash Sand Project –
Expansion to Adjacent Site**

DA07_0094

Janet Parade, Salt Ash

June 2023

Ref: 1225_SP**Scoping Proposal FOR
Proposed Salt Ash Sand Project Expansion**

WPP Pty Ltd

Address:

60 Denison Street Hamilton East NSW 2303

Contact:

ph: 0484 694 122

email: anthonywilliams@wppgroup.com.au**DOCUMENT STATUS**

Issue	Date	Description	By
1	06/06/23	Draft	JK
2	13/06/23	Client Review	AW
3			
4			

Copyright © Williams Planning and Property Services Pty Ltd

This document has been authorised by Anthony Williams
Date 20/06/2023**Disclaimer**

This report has been prepared based on the information supplied by the client and investigation undertaken by Williams Planning and Property Services Pty Ltd (WPP Pty Ltd) & other consultants. Recommendations are based on WPP's Pty Ltd professional judgement only and whilst every effort has been taken to provide accurate advice, Council and any other regulatory authorities may not concur with the recommendations expressed within this report. This document and the information are solely for the use of the authorised recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that for which it was supplied by WPP Pty Ltd. WPP Pty Ltd makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

Confidentiality Statement

All information, concepts, ideas, strategies, commercial data and all other information whatsoever contained within this document as well as any and all ideas and concepts described during the presentation are provided on a commercial in confidence basis and remain the intellectual property and Copyright of WPP Pty Ltd and affiliated entities.

This document has been registered with our solicitors along with a copy of all previous materials.

TABLE OF CONTENTS

1	Introduction	3
1.1	Project Overview.....	3
1.1.1	Project Background.....	3
1.1.2	The Site.....	4
1.1.3	Local and Regional Context.....	6
1.2	Proponent Details	7
2	Proposed Modification	7
3	Strategic Context	8
4	Statutory Context	9
5	Engagement	9
6	Proposed Assessment of Impacts	9
6.1	Matters Requiring Detailed Assessment.....	9
6.1.1	Aboriginal Heritage	9
6.1.2	Terrestrial Flora and Fauna	11
6.1.3	Noise & Vibration.....	14
6.1.4	Soil and Water.....	15
6.1.5	Visual Amenity	16
6.1.6	Air Quality	16
6.2	Matters Requiring Standard Assessment.....	17
6.3	Matters Requiring No Further Assessment.....	18

FIGURES

Figure 1:	Location of Approved Quarry Site and proposed Expansion Site	5
Figure 2:	Aerial view of proposed Expansion Site.....	5
Figure 3:	Approximate proposed Expansion Site Location - topography	6
Figure 4:	Landforms in the vicinity of the Approved Site	10
Figure 5:	Plan showing archaeological potential within the Approved Site	11
Figure 6:	Vegetation communities within the Approved Site.....	13
Figure 7:	Noise receiver locations in proximity to the Approved Site and proposed Expansion Site...	15

1 Introduction

1.1 Project Overview

Redisand Pty Ltd owns and operates the Salt Ash Sand Project at Janet Pde, Salt Ash (The 'Approved Site'). The Salt Ash Sand Project (or 'Quarry') is an operation that extracts, processes and transports bulk sand predominantly for the manufacturing, construction and landscaping industries.

Redisand is seeking consent for an extension to the Quarry's approved extraction footprint onto adjacent land. The proposed expansion area encompasses around 3.95ha, and comprises part of a sand dune of significant height. Mining in this location is anticipated to produce a valuable sand return within a relatively small ground disturbance footprint, and would make an efficient and logical extension to approved activities.

The proposed increase in sand resource availability would require an extension to the approved operating life of the Quarry (currently at 31 December 2030). However, no increase in annual extraction limits, vehicle movements or hours of operation are proposed. The additional sand resource would be extracted, processed and exported via the same methods as the approved Quarry. Similarly, existing infrastructure (such as the wash plant, weigh bridge and haul roads) would be utilised to process the resource. The methodology utilised to rehabilitate the existing Quarry land, post-extraction, would also be applied to the expanded site.

Redisand is proposing to modify the existing Quarry consent (DA 07_0094, as amended), pursuant to section 4.55(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), to incorporate the proposed additional land and resource.

This Scoping Report has been prepared by WPP Pty Ltd on behalf of Redisand for submission to the NSW Department of Planning and Environment (DPE), seeking confirmation and advice in relation to:

- the proposed planning approval pathway;
- the issues to be addressed within a proposed Modification Report; and
- to confirm the need for any community engagement.

1.1.1 Project Background

The Salt Ash Sand Project (DA 07_0094) was granted approval in 2010 under the former Part 3A provisions of the EP&A Act. The project transitioned to a State Significant Development in November 2018.

To date, the project consent has been modified 5 times. The current consent allows for the extraction, processing and transportation of up to 200,000 tonnes per annum of sand product until 31 December 2030. Subject to the upgrade of an intersection approved under Modification 4, Redisand can increase extraction, processing and transportation to 400,000 tonnes per annum.

1.1.2 The Site

The Approved Site for the existing quarry operations encompasses the following lots, as indicated in red in **Figure 1** following:

- Lot 2 in DP 1172862 (No. 7 Janet Pde)
- Lot 632 in DP 609506 (No. 2930 Nelson Bay Rd)
- Lot 633 in DP 609506 (No. 2942 Nelson Bay Rd)

The approved sand extraction area encompasses approximately 25.8ha.

Redisand is seeking to expand its current operations to an area of land immediately west of the site (the proposed 'Expansion Site'), as approximately indicated in yellow in **Figure 1**. An aerial view of the (approximate) Expansion Site is shown in **Figure 2**.

Details of the proposed Expansion Site are provided in **Table 1** below.

Table 1: Details of Proposed Expansion Site

	Proposed Expansion Site
Legal Description	Part of Lot 42 in DP 247593
Street Address	No. 11 Janet Parade, Salt Ash
Area	Approximately 3.95ha
Ownership	Barbara Wisely (Note - purchase of the site by Redisand is under negotiation)
Zoning	RU2 Rural Landscape pursuant to the <i>Port Stephens Local Environmental Plan 2013</i>

Key features of the Expansion Site are as follows:

- The Expansion Site forms the southern-most portion of Lot 42 DP 247593. Lot 42 is utilised for private residential purposes, and accommodates a single dwelling house associated outbuildings clustered within the central portion of the site. An established driveway along Lot 42's western boundary provides connections from the house to Janet Parade. The remainder of Lot 42, north of the dwelling house, is predominantly heavily vegetated with forest.
- Part of a cleared electricity transmission line easement, 50m wide, runs generally east-west along the proposed northern boundary of the Expansion Site.
- A fenced, cleared and grassed paddock sits astride the proposed western boundary and crosses into the site, directly south of the electricity easement.
- South of the easement, the site slopes upwards approximately 20 - 30m towards a hilltop along the southern boundary (see **Figure 3** below).
- The land south of the easement is heavily vegetated. Previous ecological survey mapping suggests this vegetation would comprise *Coastal Sand Apple – Blackbutt Forest*, the same vegetation type within the approved quarrying footprint within the Approved Site (see **Section 6.1.2** of this Report).
- The whole site is bushfire prone land (Category 1).
- The land is mapped as containing Class 4 Acid Sulphate Soils.
- The site is not mapped as containing Biodiversity Values, watercourses, or wetlands. However, a small area of mapped 'wetlands' (pursuant to the PSLEP) is located north of the electricity easement, beyond the proposed Expansion Site boundaries.

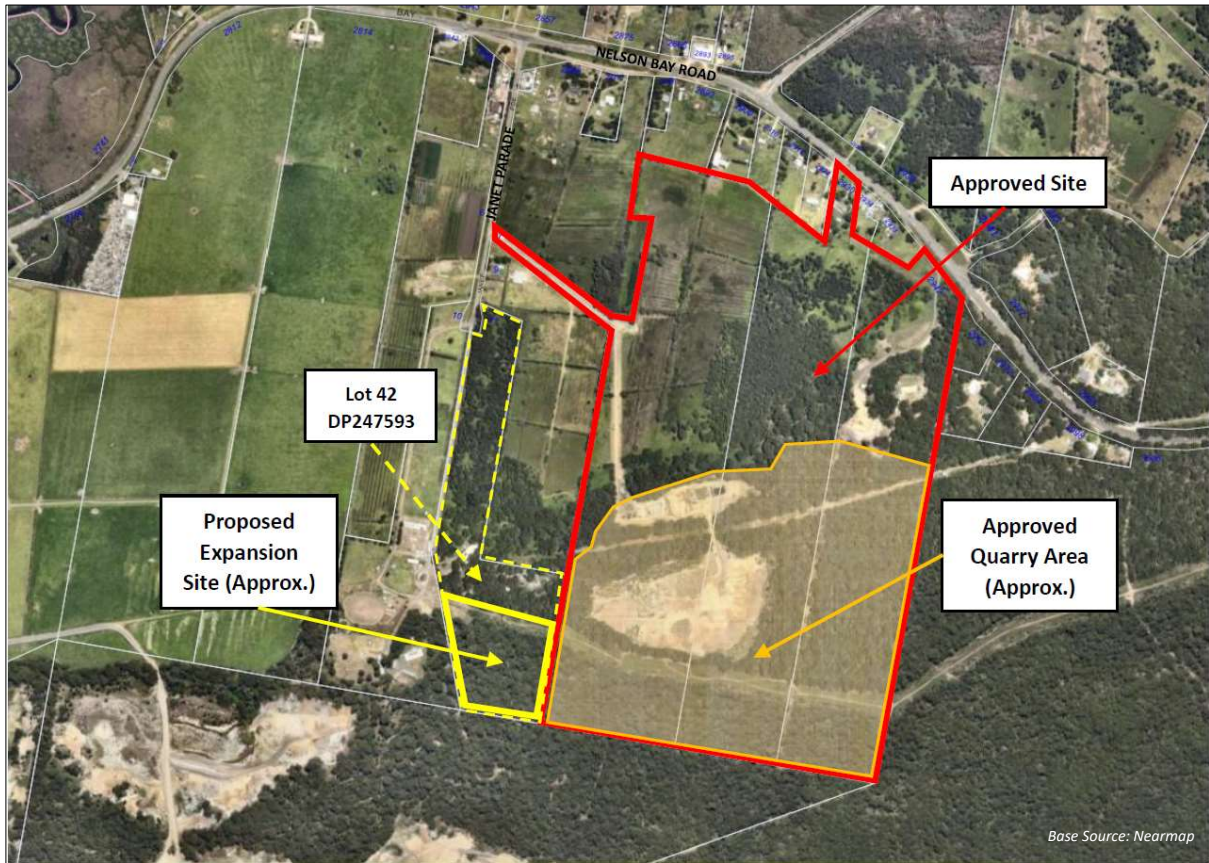


Figure 1: Location of Approved Quarry Site and proposed Expansion Site



Figure 2: Aerial view of proposed Expansion Site

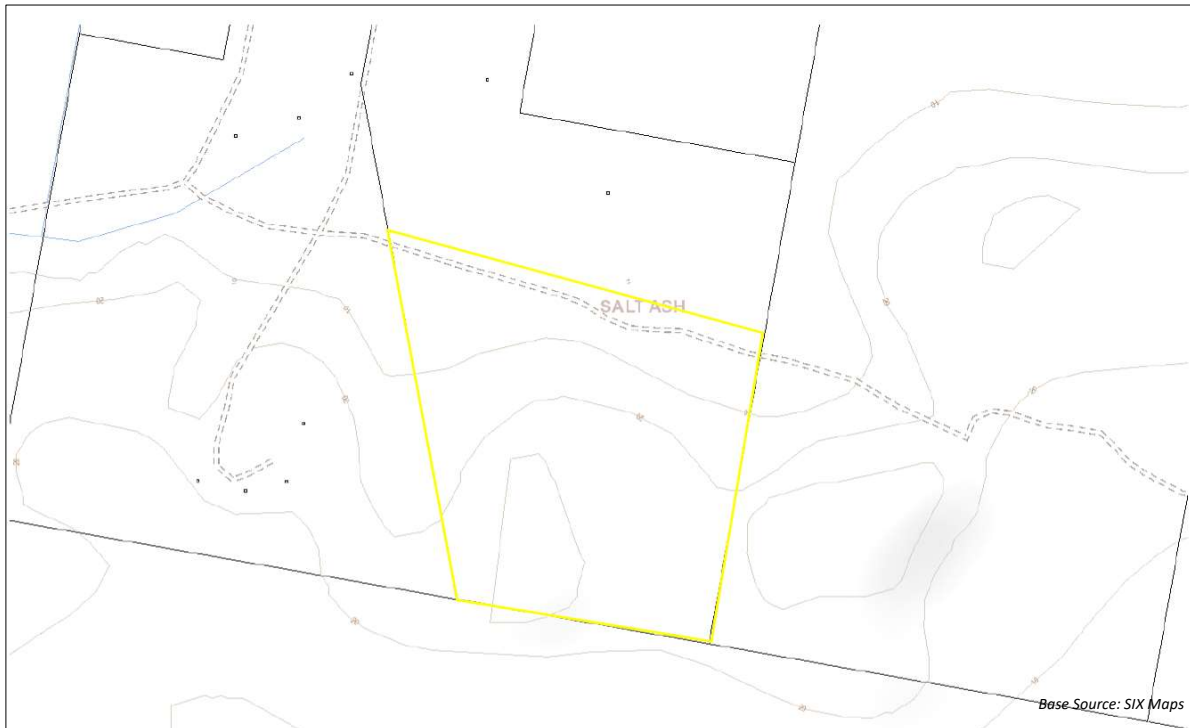


Figure 3: Approximate proposed Expansion Site Location - topography

1.1.3 Local and Regional Context

The proposed Expansion Site sits within the Newcastle Bight sand barrier system, created by historical winds shifting sand deposits into the area. The extensive sand resources contained within this barrier system has resulted in a significant number of resource mining operations in the locality, in addition to the approved Quarry.

More locally, the landuses in proximity to the proposed Expansion Site are described briefly below:

- **North:** a dwelling house and associated outbuildings is positioned approximately 70m north of the proposed site boundary (i.e. the home of the current owner of Lot 42 DP247593), as described in **Section 1.1.2** above.
- **West:** a dwelling house is positioned approximately 55m west of the proposed site boundary. Development associated with the Hellfire Paintball Centre is situated immediately west of the dwelling house. Numerous outbuildings and farm structures are sited to the north-west. Parts of this site were previously approved for a sand mining development in 2003 (DA 362-8-2003).
- **South:** heavily vegetated bushland immediately adjoins the site, owned by the Worimi Local Aboriginal Land Council. The bushland is on the same lot as extensive sand mining operations which form part of the 'Mackas Sand Project' (MP 08_0142, as modified) which commenced sand quarrying operations in 2009. Quarrying operations are anticipated to extend over the majority of this lot before the end of the Quarry's operations (limited by consent to December 2029).
- **East:** existing sand mining operations associated with the approved Quarry. The Worimi National Park and Stockton Beach lie further to the east and south-east.

1.2 Proponent Details

Redisand Pty Ltd will be the applicant for the proposed Modification. Additional company details will be provided within the forthcoming Modification Report.

2 Proposed Modification

The proposal involves the expansion of approved sand mining operations into the proposed Expansion Site.

Generally, it is anticipated that the sand mining footprint within the Expansion Site would be in a location south of the electricity transmission line easement, with appropriate non-disturbance buffers to be positioned along the new site boundaries and around electricity transmission poles. The precise extent of the sand mining footprint and the width and location of any buffers is to be determined as a result of forthcoming technical assessments. A proposed amended mining plan, inclusive of an amended Quarry mining sequence and new / amended buffer zones, will be presented within the Modification Report.

The sand won from the Expansion Site is proposed to be processed and exported utilising the same infrastructure, main haul routes and processes as the existing Quarry.

Table 2, below, provides a brief comparison of the approved project compared to the proposed modified project.

Further details of the proposed modification, including proposed modifications to Conditions of Consent and a discussion of modification alternatives, will be provided in the Modification Report. It is noted that a modification to the existing Consent may also require revision / amendment of the Statement of Commitments and the Environmental Protection License associated with the Consent.

Table 2: Summary Comparison of Approved Project to Proposed Modified Project

Issue	Approved Quarry Project	Proposed Modified Project	Comment
Sand extraction footprint	Approx 25.8ha	To be determined	Extent of footprint to be determined based on the results of forthcoming assessments – anticipated to be around 3ha or less.
Maximum sand extraction depth	RL 4m AHD	RL 4m AHD	No change proposed.
Sand extraction stages	5 stages	6 stages (to be confirmed)	An amended mining sequence plan would be presented within the Modification Report.
Annual sand extraction limits	400,000 tonnes per year	400,000 tonnes per year	No change proposed.
Operating life of Quarry	To 31 December 2030	To be determined	The proposed change to the operating life will be determined based on the results of detailed sand resource assessments – to be presented within the Modification Report.

Issue	Approved Quarry Project	Proposed Modified Project	Comment
Maximum vehicle movements	42 laden trucks per weekday, 18 on Saturdays (following completion of required road upgrades)	42 laden trucks per weekday, 18 on Saturdays (following completion of required road upgrades)	No change proposed.
Hours of operation	Quarrying permitted 6am to 6pm, Monday to Friday 8am to 1pm Saturdays	Quarrying permitted 6am to 6pm, Monday to Friday 8am to 1pm Saturdays	No change proposed.
Biodiversity Offsets	Retirement of 1,857 ecosystem credits at Tomalla offset site as part of Biobanking Agreement. Offset site managed in accordance with a Property Vegetation Plan.	Retirement and management of additional ecosystem credits to be confirmed.	The proposed biodiversity management strategy will be determined as part of the proposed Biodiversity Development Assessment Report.

3 Strategic Context

A brief discussion with regard to the justification of the proposal is provided below:

- The proposal would allow for a logical and efficient extension to existing quarrying activities, which would make use of existing access routes, infrastructure and processes. Accordingly, the potential environmental impacts would be minimised, compared to the establishment of a new or stand-alone quarrying operation.
- The proposal would allow for the extraction of a high return of sand resource, within a relatively small ground disturbance footprint, due to the height of the dune proposed to be mined. It is noted that the site presents one of the last remaining sand resources in the Newcastle Bight which offers relative ease of access (e.g. without the need for dredging).
- It would allow for the continuation of a local employment-generating business into the future, beyond the currently mandated quarry closure date of 2030.
- It would allow for the ongoing and long-term support of the construction industry in the region, through the supply of sand resources beyond 2030, in support of the objective outlined within the *Hunter Regional Plan 2041* (see below).

The key strategic planning documents of relevance to the proposal are briefly addressed below:

- The *Hunter Regional Plan 2041* recognises that NSW needs a reliable supply of construction materials, including sand, to support continued growth. It acknowledges that *future planning will need to consider the appropriate supply bank on the Hunter to meet future demand across the Six Cities* (p87). The proposed Quarry expansion aligns with the objective to support the growth of the construction industry across the region.
- Both the *Port Stephens Economic Development Strategy 2021 – 2025* and the *Port Stephens Local Strategic Planning Statement* acknowledge the LGA's diverse industry and employment base built around the natural environment. Both strategic documents aim to support the growth of existing business and industry. The proposal supports these objectives through the growth of an established local business.

4 Statutory Context

The proposal would seek to modify the existing Quarry consent (DA 07_0094, as amended) pursuant to Section 4.55(2) of the *Environmental Planning and Assessment Act 1979*, to incorporate the proposed additional land and resource.

The Modification Report will include an identification of the statutory requirements relevant to the assessment of the proposed modification, and a discussion of the proposal's compliance with these matters for consideration.

5 Engagement

To inform the assessment, it is proposed that consultation with the following stakeholders will be undertaken:

- Port Stephens Council;
- Transport for NSW;
- NSW Environment Protection Authority;
- NSW Department of Planning and Environment (Water);
- NSW Department of Planning and Environment (Environment and Heritage);
- AusGrid;
- Local Aboriginal stakeholders, including the Worimi Local Aboriginal Land Council;
- Adjoining landowners.

The results of the abovementioned consultation will be presented within the Modification Report.

6 Proposed Assessment of Impacts

The following sections identify the matters of some relevance to the environmental assessment of the proposed Modification. The matters have been divided into those requiring:

- detailed assessment;
- standard assessment; and
- no further assessment.

A discussion outlining why each matter has been categorised as such is provided below.

6.1 Matters Requiring Detailed Assessment

A preliminary assessment of the proposal indicates the following are key matters which require detailed assessment within the forthcoming Modification Report.

6.1.1 Aboriginal Heritage

The Modification would involve significant disturbance of the ground and removal of vegetation over the proposed Expansion Site. Accordingly, there is the potential to impact upon items or places of Aboriginal heritage significance.

As part of an *Aboriginal Heritage Impact Assessment* (AHMS, 2008 - the 'AHIA') prepared for the approved Quarry, the landforms present within the study area and surrounds were mapped. As

indicated in **Figure 4** below, an extrapolation of that mapping suggests that the proposed Expansion Site is within the stabilised Holocene transgressive dune (crest) landform. The AHIA noted that *the stabilised transgressive dune has high archaeological potential and the portions of the stabilised dune which are disturbed by the electricity easement and residential property have moderate archaeological potential* (p60).

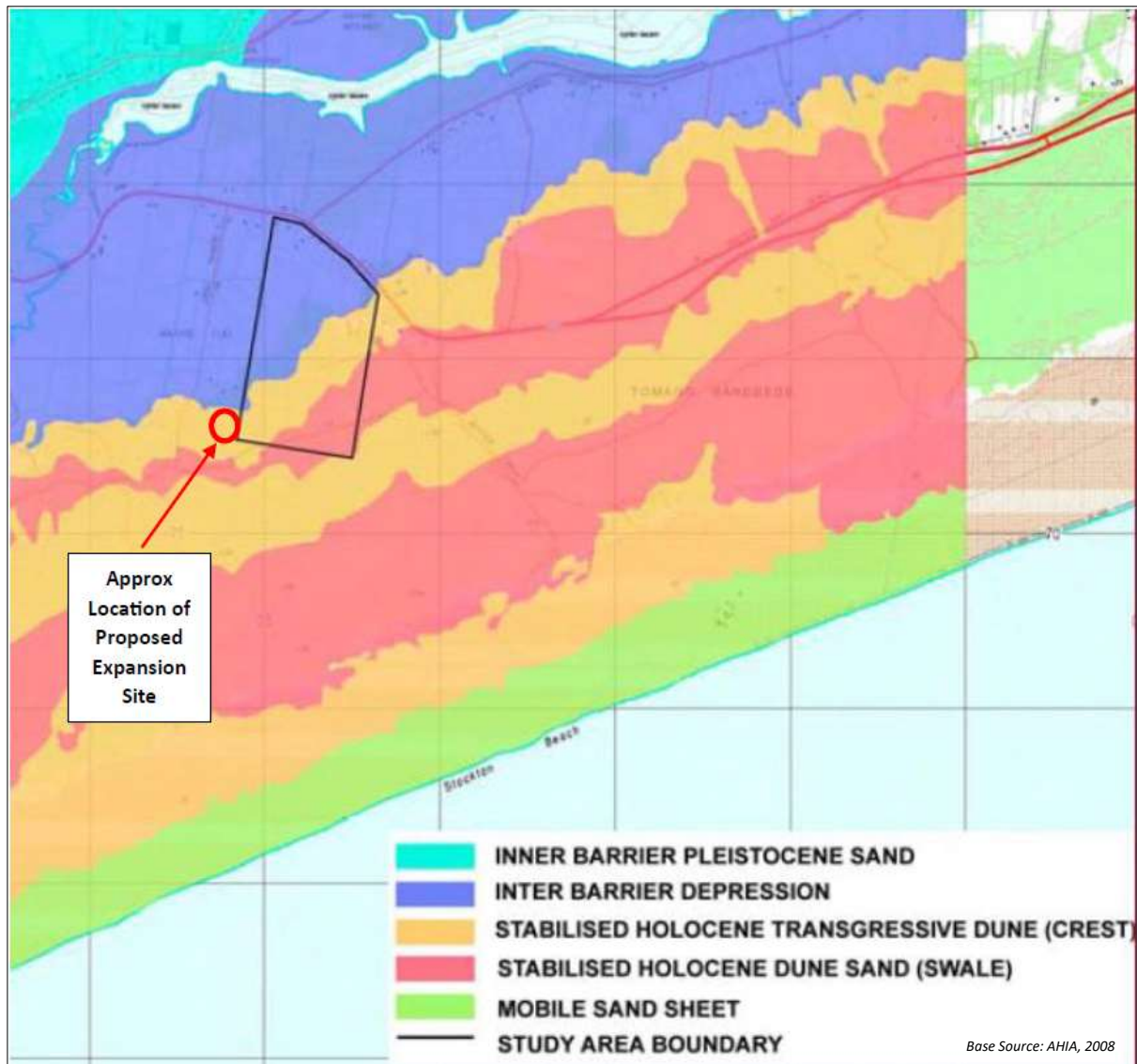


Figure 4: Landforms in the vicinity of the Approved Site

Areas of High, Moderate and Low archaeological potential within the Approved Site were mapped, as indicated in **Figure 5** below. Based on an extrapolation of that mapping into the proposed Expansion Site, it can be assumed that:

- The parts of the Expansion Site affected by the electricity transmission line easement are likely to have 'Moderate' archaeological potential; and
- The remainder of the Expansion Site is likely to have 'High' archaeological potential.

Therefore, the potential for the proposed Modification to impact upon matters of Aboriginal heritage matters is high, and a detailed assessment of this matter is required.

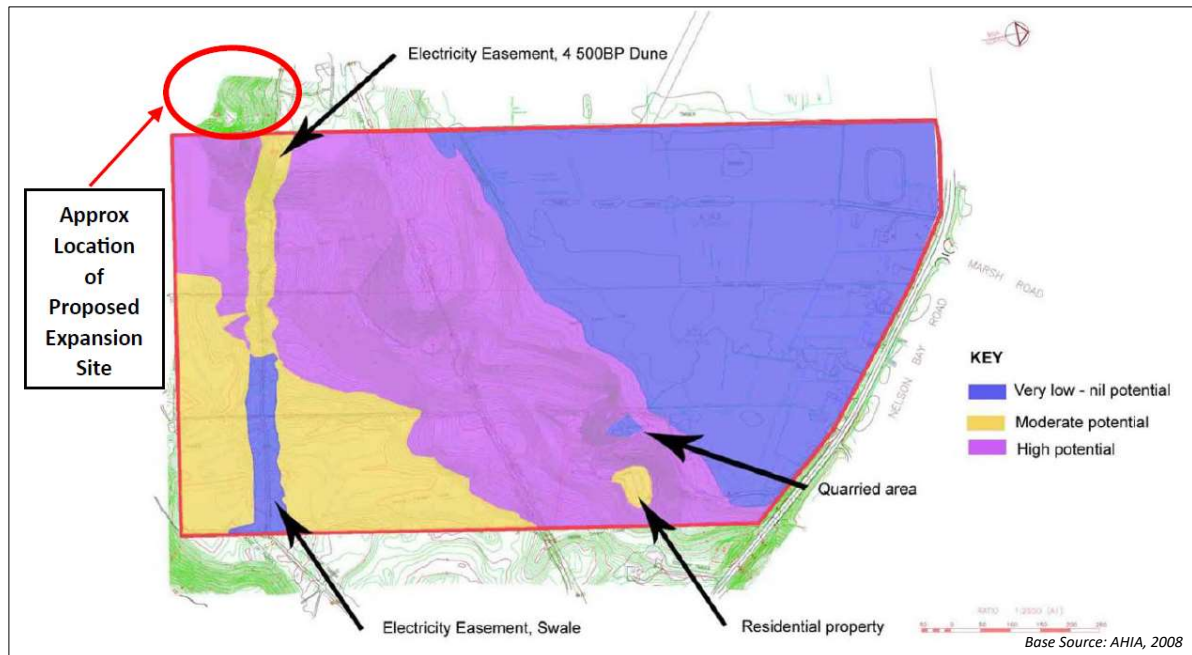


Figure 5: Plan showing archaeological potential within the Approved Site

With regard to the Approved Site, an Aboriginal Cultural Heritage Management Plan (ACHMP) was prepared in 2011 by AHMS, and was updated most recently in 2021 by ATB Morton. This plan includes a sub-surface archaeological investigation program for the site; procedures to be implemented if skeletal remains are located; on-going consultation with Aboriginal stakeholders in the management of surface-disturbance activities; and other matters.

With regard to the proposed Modification, it is proposed that an additional Aboriginal heritage assessment is undertaken by an appropriately qualified archaeologist to encompass the Expansion Site. This would be in the form of an Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared in accordance with the *OEH Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (2011) and the *Aboriginal cultural heritage consultation requirements for proponents* (2010). An application for an Aboriginal Heritage Impact Permit would also be required if harm to Aboriginal objects or places cannot be avoided.

Subsequently, it is anticipated that the approved ACHMP would be amended to include the Expansion Site and any additional associated recommendations.

6.1.2 Terrestrial Flora and Fauna

As part of the assessment for the approved Quarry, various ecological investigations were undertaken over the Approved Site, including assessments by Insite (2007), EcoLogical (2008) and Orogen (2009). As part of the consent process, the applicant entered into a Biobanking agreement relating to the retirement of 1,857 Ecosystem Credits at a site at Tomalla in order to offset the vegetation clearing associated with the Quarry. In addition, the Quarry is operating under an approved *Landscape Management Plan and Rehabilitation Plan* (see **Section** Error! Reference source

not found. for further details) which sets out pre-clearing protocols, the buffer maintenance regime, rehabilitation management procedures, performance monitoring criteria, and other matters which relate to the protection and restoration of terrestrial flora and fauna within the Approved Site.

Previous vegetation mapping prepared for the Approved Site is shown in **Figure 6** below. An extrapolation of that mapping into the Expansion Site indicates that the vegetation within the site is most likely to comprise Coastal Sands Blackbutt Forest.

The proposed Modification would involve the clearing of additional vegetation, encompassing the proposed quarrying footprint within the Expansion Site, as well as through the previously-established vegetation buffer along the boundary between the Approved Site and Expansion Site. Accordingly, the proposal has a high potential to impact upon ecological matters, and a detailed assessment of this matter is required.

It is proposed that an additional ecological investigation is undertaken by an appropriately qualified ecologist to encompass the Expansion Site. This assessment would be in the form of a Biodiversity Development Assessment Report (BDAR) prepared in accordance with the Biodiversity Assessment Method, and would include:

- Review of threatened species records and listings via searches of State and Commonwealth databases;
- Review of previous ecological assessments and management plans associated with the Approved Quarry;
- Habitat based field assessments within the Expansion Site and vegetation buffer to be impacted, along with targeted threatened flora and fauna surveys, to identify threatened biodiversity and their habitats;
- Mapping of survey locations, vegetation, key habitat features and any threatened species records;
- Determining the extent of any identified Threatened Ecological Communities;
- Assessment of existing buffers and proposed amendments to buffers;
- Identification of opportunities for impact avoidance and appropriate adaptive management actions to avoid significant impacts;
- The provision of advice with regard to the establishment of appropriate vegetation buffer zone widths around the sand extraction footprint;
- Reporting on the findings of the survey, including methodology, and threatened species and/or their habitat recorded. The report will include formal Assessments of Significance under the BC act and/or EPBC Act for identified species;
- If required, a biodiversity offset strategy will be developed and reported on, taking into account the NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014). It is noted that there are biodiversity credits available at the Tomalla site which may be appropriate for use / retirement in order to offset impacts of the Modification.

Subsequently, it is anticipated that the approved *Landscape Management Plan and Rehabilitation Plan* would be amended to include the Expansion Site and associated recommendations.

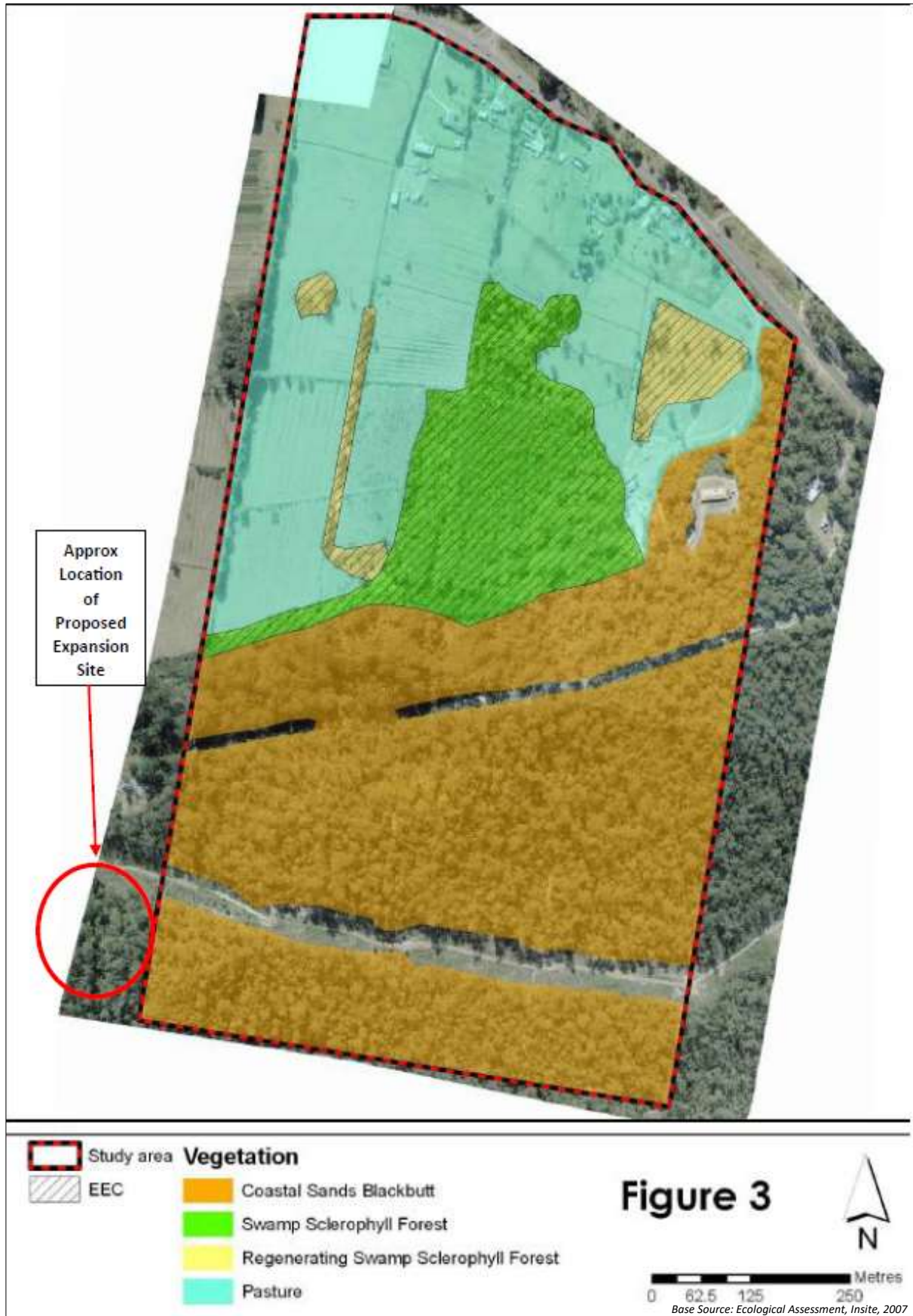


Figure 6: Vegetation communities within the Approved Site

6.1.3 Noise & Vibration

The proposed Modification, including the expanded quarrying footprint, has the potential to impact upon the existing noise environment in the locality.

As part of the assessment for the approved Quarry, several acoustic assessments were undertaken (including by Hunter Acoustics in 2008, and Heggies in 2009). Further, additional noise impact assessments were undertaken in relation to previously approved Modifications, including in relation to increasing the sand transportation rate from the originally approved 201,000 tonnes per annum to the currently approved 400,000 tonnes per annum.

The approved Quarry operates under a *Noise Management Plan*, and regular noise monitoring is undertaken at various locations around the Approved Site. Accordingly, there is a strong background knowledge of the acoustic environment in the vicinity of the Approved Site, including multiple years' worth of noise monitoring data.

Figure 7, below, illustrates the location of identified noise receivers (e.g. dwelling houses) in proximity to the Approved Site and Expansion Site. The Expansion Site is in the vicinity of 2 identified receivers, namely JP2 (the dwelling house associated with Lot 42) and JP1 (the dwelling house associated with the Hellfire Paintball property). Due to this proximity, the potential for the proposed Modification to impact upon nearby noise receivers is high, and a detailed assessment of this matter is required.

It is proposed that an additional Noise Impact Assessment is undertaken by an appropriately qualified consultant as part of the proposed Modification. This assessment would include:

- Discussion of the relevant noise legislation, guidelines and policies;
- Identification of sensitive receivers;
- Establishment of appropriate noise assessment criteria;
- Discussion of the background acoustic environment (noting the presence of established noise monitoring locations in close proximity to the Expansion Site i.e. JP1 and JP2. Acoustic data from these locations has been gathered since before the establishment of operations at the approved Quarry);
- Modelling of the predicted noise impacts associated with the proposed Modification;
- Overall assessment of the predicted acoustic impacts of the proposal;
- The provision of noise impact mitigation strategies.

Subsequently, it is anticipated that the *Noise Management Plan* and *Noise Monitoring Program* associated with the approved Quarry would be amended to include the additional land and any additional recommendations made by the acoustic consultant and / or the Department.

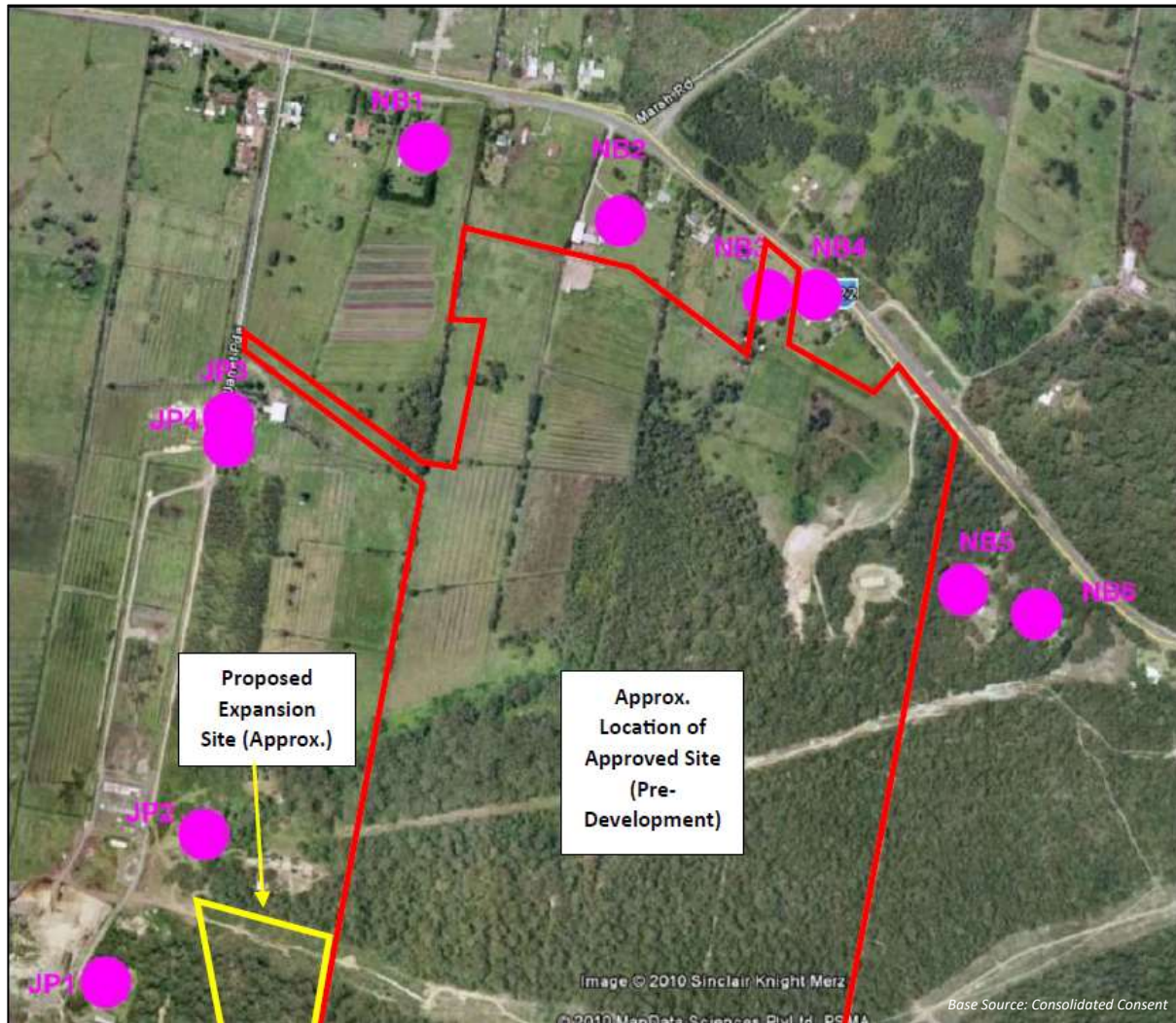


Figure 7: Noise receiver locations in proximity to the Approved Site and proposed Expansion Site

6.1.4 Soil and Water

The proposed sand extraction processes within the Expansion Site would be the same as for the existing Quarry. As for the existing Quarry, sand extraction would be limited to at least 1m above the highest predicted groundwater table for the extraction area (i.e. anticipated to be no lower than RL 4m AHD). No additional groundwater is proposed to be extracted from the Expansion Site, nor is there proposed to be any increase in the permitted groundwater extraction limits associated with the sand washing processes at the existing Quarry. No additional hardstand is proposed to be constructed, which would decrease the surface water permeability of the site.

Regardless, the Modification would involve significant disturbance of the ground and removal of vegetation over the Expansion Site. Accordingly, there is the potential to impact upon the hydrogeology of the land and a detailed assessment of this matter is required.

The Expansion Site is anticipated to have a very similar geotechnical and hydrological environment to the existing Quarry. Previous investigations of the Approved Site included a *Geotechnical and Hydrological Investigation* (Coffey, 2008) and *Hydrogeological Supplement* (Coffey, 2009).

In order to assess the impact of the proposed Modification, it is proposed that an additional Geotechnical and Hydrological Investigation is undertaken over the Expansion Site. This Investigation would include:

- An assessment of the extent and quality of the sand resource available;
- An assessment of the hydrogeological conditions in the context of the proposal;
- The establishment of borehole/s in order to determine the existing groundwater levels and fluctuations with rainfall;
- An assessment of the presence / absence of Acid Sulfate Soils;
- A preliminary assessment of the potential for land contamination to be present (should the proposed sand extraction footprint intrude into the northern areas of the site encompassing a paddock and electricity transmission line easement);
- An assessment of the quality of the groundwater;
- A brief discussion of the potential for impacts on surface water conditions; and a
- Discussion of the potential impacts on groundwater levels due to sand extraction / vegetation removal.

The existing Quarry operates under a *Soil and Water Management Plan* (SLR, 2018) which includes an:

- Erosion and Sediment Control Plan;
- Surface Water Monitoring Plan;
- Groundwater Monitoring Plan; and
- Acid Sulfate Soil Monitoring Plan.

It is anticipated that the *Soil and Water Management Plan* would be updated to reflect any changes associated with the proposed Modification.

6.1.5 Visual Amenity

The Expansion Site is predominantly visually isolated from surrounding land, with the exception of 2 dwelling houses and the Hellfire Paintball Centre. Due to the proposed quarrying operations, there is the potential to impact upon visual amenity for these receptors. Accordingly, a detailed assessment of this matter is required.

A Visual Impact Assessment is proposed to accompany the Modification Report. This would include:

- An analysis of the site topography and aerial photography to identify key viewing points / corridors into the proposed Expansion Site;
- A discussion of the potential visual impact of the proposal; and
- The provision of recommended visual impact mitigation strategies.

6.1.6 Air Quality

The Expansion Site is in proximity to 2 sensitive receivers. The proposed quarrying activities have the potential to create dust, including via the operation of front-end loaders within the proposed Expansion Site and the movement of haul vehicles. Accordingly, the proposal has the potential to impact upon local air quality and a detailed assessment of this matter is required.

An *Air Quality Impact Assessment* (Advitech, 2009) was prepared for the original Quarry, which assessed the background air quality before quarrying commenced; modelled the likely air quality impacts upon identified sensitive receivers; and provided recommendations to mitigate impacts. The existing Quarry now operates in accordance with an *Air Quality Management Plan* (VGT Laboratories, 2019) which sets out air quality goals; an air quality monitoring program and management system; a trigger action response plan; and reporting requirements, amongst other matters.

In order to assess the impacts of the proposed Modification, the preparation of an additional Air Quality Impact Assessment by an appropriately qualified consultant is proposed. The Assessment would include:

- The identification of sensitive receivers in proximity to the Expansion Site;
- A review of the relevant air quality guidelines;
- A discussion of the likely emission sources associated with the proposal;
- An assessment of the background air quality, including in relation to data obtained before and during operations at the existing Quarry;
- Modelling of the potential dispersal of particulate matter and dust particles from the site; and
- The provision of recommended air quality mitigation measures.

It is anticipated that the *Air Quality Management Plan* would be updated to reflect any changes associated with the proposed Modification.

6.2 Matters Requiring Standard Assessment

The following matters will not be assessed via a Detailed Assessment as they are unlikely to be significantly impacted by the proposed Modification. The Modification Report will provide a qualitative discussion and assessment of these matters. A brief discussion of each matter is provided below:

- **Access:** The proposed Expansion Site would be accessed via unsealed haul roads through the approved quarrying footprint of the Approved Site. The vegetation buffer along the western site boundary of the Approved Site in this location would need to be relocated, both to allow access and sand quarrying, however this issue would be addressed in detail via an ecological investigation. The sand from the Expansion Site would be transported to the washing plant via established haul roads through the Approved Site. Sand would then be exported from the site along the established sealed haul road and into Janet Parade, as occurs for the approved Quarry. No new designated access roads would be required. The site's access processes would be detailed within the Modification Report.
- **Built Environment:** As for the approved Quarry, the proposal would involve vehicle access through land burdened with an electricity transmission line easement. A review of the *Transfer Granting Easement* applicable to the land indicates no conflict with this activity. The Modification Report would include a discussion of this matter.
- **Contamination:** The site is not listed on the NSW Contaminated Land Record. Due to the presence of generally undisturbed vegetation on the site, most of the land is unlikely to have previously accommodated contaminating activities. However, the northern section of the

site contains an electricity transmission line easement and paddock which may have previously accommodated potentially contaminating activities. Accordingly, a preliminary contamination assessment is proposed for those areas, should they ultimately form part of the proposed sand extraction footprint (see **Section 6.1.4** of this Report).

- **Cumulative Impact:** The Modification Report would include a consideration of the cumulative impacts of key matters associated with the proposal. These are anticipated to include:
 - Terrestrial flora and fauna: the proposed BDAR would include consideration of the cumulative impacts of the proposal on biodiversity values;
 - Noise and vibration: the proposed Noise Impact Assessment would include consideration of the background acoustic environment, inclusive of the operations of the existing Quarry;
 - Air quality: the proposed Air Quality Impact Assessment would include consideration of the background air quality, inclusive of the operations of the existing Quarry.
- **Rehabilitation and Final Land Form:** As for the Approved Quarry, the proposed Expansion Site would be subject to staged rehabilitation and revegetation following sand extraction processes. This rehabilitation would be in line with the adopted *Landscape Management Plan / Rehabilitation Management Plan* (SLR, 2017) applying to the Quarry. It is anticipated that this Plan would be reviewed and updated to reflect the inclusion of the Expansion Site.
- **Site Survey:** A survey of the Expansion Site will accompany the Modification Report.

6.3 Matters Requiring No Further Assessment

The following matters are unlikely to be impacted by the proposed Modification; can be adequately managed under approved Quarry protocols; and / or are not relevant to the site or proposal. Accordingly, no additional assessment is proposed as part of the Modification Report. A brief discussion of each matter is provided in **Table 3** below.

Table 3: Summary of matters requiring no further assessment

Matter	Comment
Aquatic flora and fauna	The Expansion Site contains no waterways, and therefore the proposal would have no impacts on aquatic flora and fauna.
Biosecurity	The proposal would not raise any matters with relevance to biosecurity.
Bushfire	Whilst the Expansion Site is within a mapped bushfire prone area, the proposal does not involve the establishment of any new facilities, plant, dwellings or other structures which may be at risk from bushfires. The approved Quarry's <i>Site Emergency Procedure</i> is sufficient to address staff and equipment safety in the case of fire threatening the Expansion Site.
Coastal hazards	The proposal would not have any impacts on coastal processes or hazards as the dune system within the Expansion Site is stabilised. The proposed progressive rehabilitation / revegetation of quarried areas within the site, as occurs for the approved Quarry, would ensure the ongoing stability of the system.
Conservation areas	The Expansion Site is not located adjacent to or in close proximity to any conservation areas.
Dams safety	The Expansion Site contains no dams and no new dams are proposed.
Dangerous goods	The proposal would not involve the use or production of dangerous goods. The approved Quarry's <i>Site Emergency Procedure</i> is sufficient to address staff and equipment safety in the case of fuel or chemical spills.
Economic	The proposal is for a relatively minor expansion to an existing operation. It will assist in the longevity of an established local business. However, it will not involve the establishment of any new

Matter	Comment
	infrastructure or the purchase of new plant, and will not involve the recruitment of additional personnel. Therefore, the economic impacts of the proposal would be negligible.
Flooding	Current flood planning mapping by Port Stephens Council indicates a small area in the northern portion of the Expansion Site may be affected by flooding. However, the quarrying footprint would be within the sand dunes generally unaffected by flooding. Further, no plant or structures would be positioned within flood-affected areas. Accordingly, no specific assessment or management plans are required. 
Historic heritage	The site does not contain any listed heritage items, and is generally undeveloped. Accordingly, there are not likely to be any impacts on Non-Aboriginal heritage.
Odour	The extraction of sand is not associated with the production of significant odours which might impact nearby receivers. Note that air quality matters (such as dust mitigation) will be addressed separately as outlined in Section 6.1.6 above.
Social	The potential social impacts of sand quarrying operations were addressed within the original Environmental Assessment for the approved Quarry. The proposal is for a relatively minor expansion to this existing operation. The Expansion Site is relatively isolated, both physically and visually, and has only a small number of neighbours with the potential to be impacted. Specific potential impacts on neighbours (such as noise and visual amenity) will be addressed separately within the Modification Report. As outlined above, the Modification is not likely to have any significant economic impacts. Accordingly, no specific social impact assessment for the Modification is required.
Traffic and parking	The proposal would not result in any additional vehicle movements from the Quarry site. The sand won from the additional quarrying footprint would be managed by the existing operations and vehicle movement limitations under the approved Quarry's existing consent. No additional parking areas are required.
Waste	Any waste generated by the additional quarrying activities would be managed via the established processes within the approved Quarry.