

EPBC REF: 2022/09324
EXPANSION OF LIMESTONE EXTRACTION OPERATIONS

210 WESCO ROAD, NOWERGUP, WANNEROO

**CONSTRUCTION ENVIRONMENTAL
MANAGEMENT PLAN**

PREPARED FOR:

METEOR STONE PTY LTD



PREPARED BY:

Martinick Bosch Sell Pty Ltd
4 Cook Street
West Perth WA 6005
Ph: (08) 9226 3166
Email: info@mbsenvironmental.com.au
Web: www.mbsenvironmental.com.au

MBS
ENVIRONMENTAL

EXPANSION OF LIMESTONE EXTRACTION OPERATIONS CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN

Distribution List:

Company	Contact name	Copies	Date
Meteor Stone	[REDACTED]	[01]	16 May 2024
Stoneridge, Meteor Stone	[REDACTED]	[02]	16 May 2024
Complex Land Solutions	[REDACTED]	[03]	16 May 2024
DCCEEW	South WA Assessments Team	[04]	16 May 2024

Document Control for Job Number: MSEAA

Document Status	Prepared By	Authorised By	Date
Draft Report	Hayden Beltz	Sue Brand	12 April 2024
Final Report	Hayden Beltz	Sue Brand	16 April 2024
Revision 1	Hayden Beltz	Sue Brand	16 May 2024

Disclaimer, Confidentiality and Copyright Statement

This report is copyright. Ownership of the copyright remains with Martinick Bosch Sell Pty Ltd (MBS Environmental) and **Meteor Stone Pty Ltd**.

This report has been prepared for **Meteor Stone Pty Ltd** on the basis of instructions and information provided by **Meteor Stone Pty Ltd** and therefore may be subject to qualifications which are not expressed.

No person other than those authorised in the distribution list may use or rely on this report without confirmation in writing from MBS Environmental and **Meteor Stone Pty Ltd**. MBS Environmental has no liability to any other person who acts or relies upon any information contained in this report without confirmation.

This report has been checked and released for transmittal to **Meteor Stone Pty Ltd**.

These Technical Reports:

- Enjoy copyright protection and the copyright vests in Martinick Bosch Sell Pty Ltd (MBS Environmental) and **Meteor Stone Pty Ltd** unless otherwise agreed in writing.
- May not be reproduced or transmitted in any form or by any means whatsoever to any person without the written permission of the Copyright holder.

EXECUTIVE SUMMARY

Meteor Stone Pty Ltd are proposed to clear 6.495 ha of Carnaby's Cockatoo (*Zanda latirostris*) foraging habitat from a portion of Mining Tenement M70/138 in Neerabup (Proposed Action Area, PAA). As the Carnaby's Cockatoo is listed as Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act, the Act), the preparation of a Construction Environmental Management Plan will assist with the implementation management actions that will be implemented during the clearing/pre-operational phase of the Proposed Action.

This CEMP outlines:

- The project overview.
- Key project elements.
- CEMP purpose.
- Main impacts to the Carnaby's Cockatoo.
- Primary management strategies.

PROJECT OVERVIEW

It is Meteor Stone's intention to expand their current limestone extraction activities within the Sublease 1 area of mining tenement M70/138 into the 6.495-ha Sublease 5 area as the resource is close to being exhausted. The proposed clearing location represents the area with the best limestone resource present within the sublease 5 area of Lot 12737 (Landform Research, 2020). The entire PAA will be cleared on the granting of approvals, with extraction being undertaken progressively across the Site according to product demand. The Proposed Action (PA) will occur in three main phases over a minimum 10-year period up to a maximum 20 years according to product demand.

KEY PROJECT ELEMENTS

Key project elements can be categorised into three key phases, namely:

- Pre-operational activities associated with preparing the site for extraction. This phase involves clearing the 6.495 ha PAA of Carnaby's Cockatoo foraging habitat, soil, and overburden to gain access to the limestone resource. This phase of the project is expected to take four weeks to complete after all approvals are in place and is the subject of this CEMP.
- Operational activities associated with the extraction of the dimension stone, which is expected to occur over a minimum of 10 years and a maximum of 20 years, according to product demand.
- Post extraction (decommissioning) activities, including rehabilitation of the quarry site.

PRIMARY IMPACT TO THE CARNABY'S COCKATOO

The primary impacts of the clearing on Sublease 5 area are:

- The clearing of 6.495 ha of quality foraging habitat.
- Clearing beyond the approved PAA.
- The presence of Carnaby's Cockatoos within the PAA while the clearing is occurring.
- The potential for bird strike resulting in injury or death to individual or flocks of birds.

PRIMARY MANAGEMENT STRATEGIES

The management strategies to reduce primary impacts to the Carnaby's Cockatoo during clearing will include the use of:

- A fauna spotter to guide the location of clearing activities if Carnaby's Cockatoos are present within the PAA.
- Defined access tracks or cleared areas to minimise the likelihood of bird strike.
- Application of a maximum speed limit of 20 km/h within the PAA.

As the clearing of 6.495 ha of Carnaby's Cockatoo foraging habitat is an unavoidable impact, the primary management strategy will be the identification and management of a suitable offset. The Offset Strategy is included as Section 6 of PD document, with management of the offset site outlined in a separate Offset Management Plan.

SECONDARY IMPACTS

The secondary (or indirect) impacts to the Carnaby's Cockatoo within the PAA during the clearing process will include the following, with respective management strategies outlined within this CEMP:

- Dust.
- Noise.
- Weed encroachment.
- Introduction of plant pathogens, such as dieback.

DECLARATION OF ACCURACY:

In making this declaration, I am aware that section 491 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the *Environment Protection and Biodiversity Conservation Regulations* 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed

Full name (please print)

Organisation (please print)

Meteor Stone Pty Ltd

Date

16 / 5 / 2024

ABN

70 623 253 770

TABLE OF CONTENTS

1.	INTRODUCTION	1
1.1	PRIMARY IMPACTS	1
1.2	SECONDARY IMPACTS	1
1.3	PLAN PURPOSE	1
2.	PROJECT DESCRIPTION	3
2.1	PROJECT OVERVIEW	3
2.2	OBJECTIVES	3
3.	ROLES AND RESPONSIBILITIES	7
3.1	QUARRY MANAGER RESPONSIBILITIES	7
3.2	METEOR STONE PERSONNEL	7
3.3	CONTRACTORS AND/OR CONSULTANTS	8
4.	REPORTING	9
4.1	WEEKLY INSPECTION OF THE ACTIVE WORK SITE	9
4.2	INCIDENT REPORTING	9
4.3	NON-CONFORMANCE REPORTING	9
4.4	COMPLIANCE REPORTING	10
5.	ENVIRONMENTAL TRAINING	11
6.	EMERGENCY CONTACTS AND PROCEDURES	12
7.	POTENTIAL ENVIRONMENTAL IMPACTS AND RISKS	15
7.1	PRIMARY IMPACTS	15
7.2	SECONDARY IMPACTS	15
8.	RISK ASSESSMENT	16
9.	ENVIRONMENTAL MANAGEMENT ACTIVITIES, CONTROLS, AND PERFORMANCE TARGETS	21
10.	EMERGENCY MANAGEMENT MEASURES	25
11.	ENVIRONMENTAL MONITORING	27
12.	CEMP AUDIT AND REVIEW	28
13.	COMMUNICATIONS AND/OR CONCERNS	29
14.	REFERENCES	30

TABLES

Table 1:	Emergency Contacts	12
Table 2:	Likelihood Definitions	16
Table 3:	Consequence Definitions	16
Table 4:	Impact Assessment Matrix	17
Table 5:	Risk Assessment of the Proposed Action to MNES	18
Table 6:	Management Strategies/Controls and Performance Targets	21
Table 7:	Potential Emergency Situations and Required Actions	25
Table 8:	Project Activities Monitoring	27

FIGURES

Figure 1:	Project Location	4
Figure 2:	Location — Proposed Action Area	5
Figure 3:	Proposed Action Overview.....	6
Figure 4:	Directions to NAR partner vet — Pet Stock Brighton 9/1 Butler Boulevard	12
Figure 5:	Directions to NAR partner vet — Lakeside Vet Centre Joondalup, 47 Winton Road	13
Figure 6:	Directions to NAR partner vet — Drovers Vet Hospital, 1937 Wanneroo Road	14

APPENDICES

Appendix 1:	Forms
Appendix 2:	Induction Materials

1. INTRODUCTION

Meteor Stone Pty Ltd are a limestone extraction and supply company, supplying dimension stone blocks and other products according to demand. At present, their current extraction site in part of mining tenement M70/138 is coming to an end of its working life. The M70/138 tenement holder, Adelaide Brighton Cement Ltd, T/A Cockburn Cement, has provided Meteor Stone with approval to access the resource in that portion of the tenement known as Sublease 5 area, with the plan to clear 6.495 ha of Banksia heathland (FCT 24), and which represents the Proposed Action Area (PAA).

The Proposed Action Area (PAA) is located within a portion of Lot 12737 (210) Wesco Road, Nowergup, within the City of Wanneroo (Figure 1). Lot 12737 on Plan 193226 is zoned as Crown Reserve 27590 for Quarry Purposes.

Vegetation within in the PAA includes species that are preferred foraging habitat for the Carnaby's Cockatoo (*Zanda latirostris*), which is listed as Endangered under the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth) (EPBC Act, the Act). This Construction Environmental Management Plan (CEMP) has been prepared to support implementation of the Proposed Action to guide on-ground activities during the pre-operational phase of the Proposed Action (PA), when the potential for impacts to the Carnaby's Cockatoo are greatest. This document has been prepared in accordance with the DCCEEW (2024) Environmental Management Plan Guidelines.

1.1 PRIMARY IMPACTS

The primary (or direct) impact to the Carnaby's Cockatoo will be the clearing of the entire 6.495-ha PAA of foraging habitat. The clearing of vegetation will occur over an estimated 4-week period. Accordingly, the direct impacts to the Carnaby's Cockatoo during the clearing process will or could include:

- The clearing of 6.495 ha of quality foraging habitat.
- Potentially clearing beyond the nominated PAA.
- The presence of Carnaby's Cockatoos within the PAA while the clearing is occurring.
- The potential for bird strike resulting in injury or death to individual or flocks of birds.

The clearing of foraging habitat is the subject of the Offset Management Plan (OMP) (MBS, 2024), with the management of the other likely impacts to the Carnaby's Cockatoo documented in this Construction Environmental Management Plan (CEMP).

1.2 SECONDARY IMPACTS

Multiple secondary impacts have been identified during clearing activities:

- Dust.
- Noise.
- Weed encroachment.
- The Introduction of plant pathogens, such as dieback.

1.3 PLAN PURPOSE

This CEMP will address management of the identified primary and secondary (indirect) aspects that could impact Carnaby's Cockatoo population(s) utilising the PAA during clearing activities to ensure they will either avoid or mitigate impacts to individuals or the population. To support the development of this plan, the following information is provided:

- Project description: including project actions; their locations; and the environmental values of those locations. Note: this document does not include information relating to the proposed project offset site as that is addressed within the PD and an Offset Management Plan (OMP) that describes how it will be managed to achieve an improvement in the Carnaby's Cockatoo habitat.
- Construction vs. operational impacts, including the planned commencement and completion dates.
- Plan objectives.
- Environmental management roles and responsibilities.
- Reporting.
- Environmental training.
- Emergency contacts and procedures.
- Potential environmental impacts and risks.
- Emergency management measures.
- Environmental management activities, controls, and performance targets.
- Environmental monitoring.
- Corrective actions.
- CEMP audit and review.

2. PROJECT DESCRIPTION

Meteor Stone currently carries out limestone extraction activities in a portion of mining tenement M70/138 known as Sublease 1 within Lot 12737 Wesco Road in Nowergup (Figure 1). Extraction activities are coming to an end, with Meteor Stone receiving approval from Adelaide Brighton Pty Ltd, the tenement holder, to commence extraction activities in a new portion of the tenement known as Sublease 5. The PAA is 6.495 ha; of which the quarry area comprises 5.587 ha and the access track 0.908 ha (Figure 2).

2.1 PROJECT OVERVIEW

The project will be carried out in three phases (Figure 3), namely the:

- Pre-operational activities that will prepare the site for extraction, including: clearing of all native vegetation within the PAA; removal of topsoil and overburden (sand and surface limestone rubble); and mobilisation of equipment to be used to cut and remove the dimension stone to be extracted in layers across the extraction area. These activities will commence within four weeks of the approval being issued and be complete within four weeks of commencement.
- Operational phase that will involve the extraction of the dimension stone over the life of the quarry.
- Post-extraction (Decommissioning) Phase that prepares for the cessation of extraction and the implementation of required closure and rehabilitation activities; expected to take around three years to complete.

As the construction phase is that four-week period when clearing and other pre-operational phase activities will occur, this CEMP will apply to that period only. At the conclusion of the construction (pre-operational) phase, ongoing Site management will revert to relevant organisational procedures and/or those documented in the Mine Closure Plan (Landform Research, 2020).

2.2 OBJECTIVES

The objectives of this CEMP are to:

- Avoid or mitigate any potential direct or indirect impacts to Carnaby's Cockatoo individuals or flocks that utilise the PAA during clearing and other activities carried out during the pre-operational phase of the Proposed Action.
- Ensure compliance with Meteor Stone's statutory obligations.



Scale: 1: 8,000
Original Size: A3
Imagery source: NearMap July 2023, MPP0.597
Grid: GDA94 / MGA zone 50 (EPSG:28350)

0 0.25 0.5 km

\\mbssvr\working\Meteor Stone\GIS\Wesco Road Sublease 5.qgz 30/03/2024 F1 Location

Meteor Stone Pty Ltd
EPBC Act Preliminary Documentation
Portion of Sublease 5 Area

Figure 1

**M70/138 and Proposed Action Area
(Sublease 5) Location**

Martinick Bosch Sell Pty Ltd
4 Cook St
West Perth WA 6005
Australia
t: +61 8 9226 3166
info@mbsenvironmental.com.au
www.mbsenvironmental.com.au



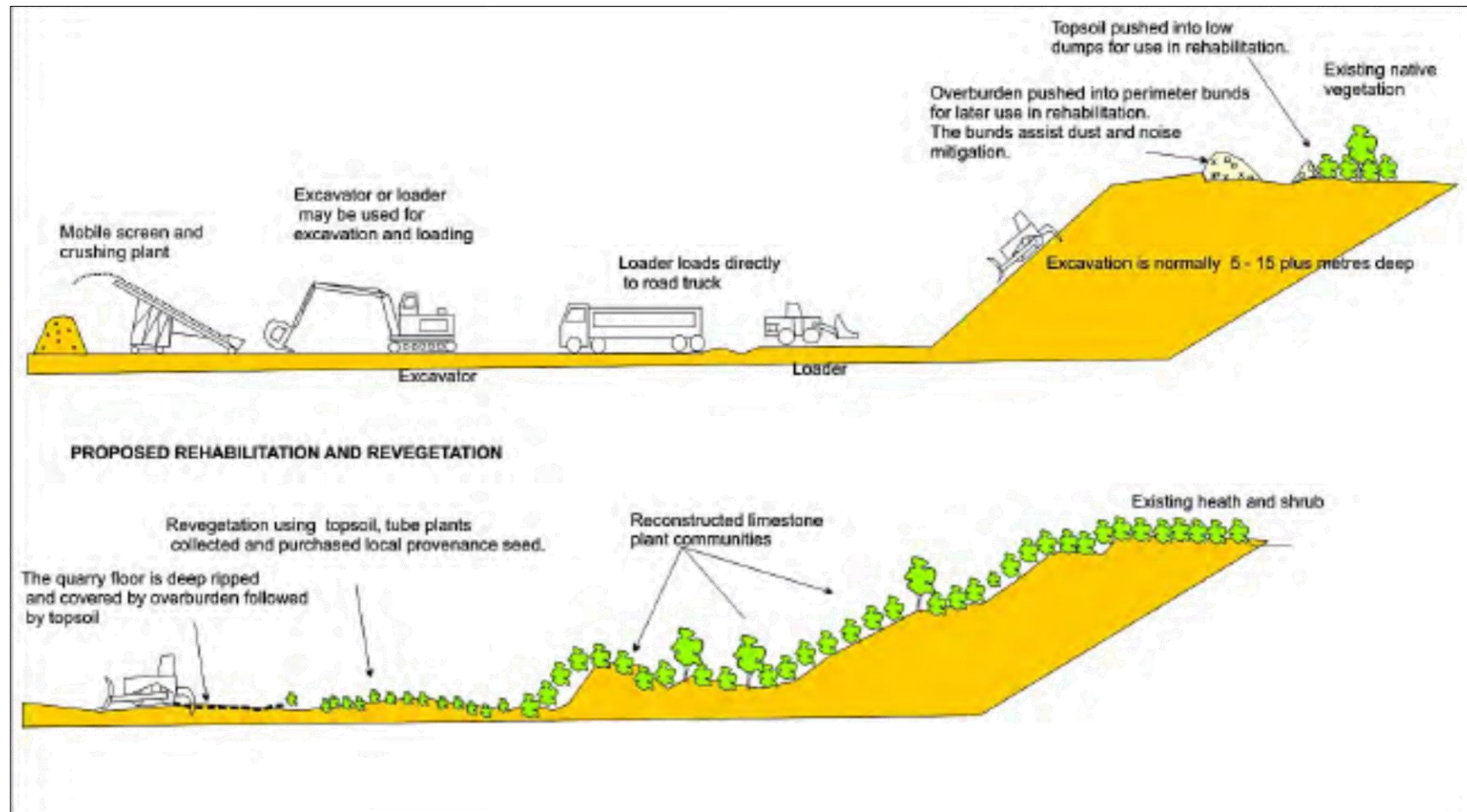


Figure 3: Proposed Action Overview

Source: Landform Research, 2020, page 17

3. ROLES AND RESPONSIBILITIES

All project personnel have a responsibility to comply with the requirements of this CEMP and will undergo an environmental induction prior to carrying out project-related activities. Meteor Stone acknowledges that the actions and management requirements identified in this CEMP shall be enforceable and will report any non-compliances to DCCEEW and other relevant organisations (such as DEMIRS) in line with statutory requirements.

3.1 QUARRY MANAGER RESPONSIBILITIES

Meteor Stone is wholly responsible for the implementation, monitoring, reporting and adherence of the requirements identified in this CEMP. The overall responsibility for environmental management will rest with the Managing Director, Tony Randazzo, with the general day-to-day site environmental management the responsibility of the Site Quarry Manager, Ross Corns. The Quarry Manager's responsibilities will include:

- Overseeing the works undertaken by staff, contractors and/or consultants visiting the Site.
- Implementing the requirements of this CEMP, along with other organisational plans and procedures relevant to this phase of the project.
- Undertaking project and site inductions for all personnel involved with this phase of the project, including recording dates and attendances for each participant, and having each participant sign the induction record to acknowledge they have read and understood all aspects of the CEMP.
- Record keeping relating to environmental matters, including signing-off on fauna spotter records relating to birds seen and actions taken during clearing to avoid personnel, vehicles, plant, and equipment encountering individuals or the flock.
- Being present on site during clearing and other pre-operational activities.
- Undertaking weekly site inspections to monitor and evaluate the effectiveness of the CEMP controls and provisions.
- Investigate incidents and non-conformances, and record outcomes.
- Records of any bird strikes, along with actions taken to care for the bird, where it may have been transferred, and its fate.
- Complying with any reporting requirements specified by DCCEEW, along with other appropriate organisations such as DEMIRS, relating to environmental approvals associated with Site activities.
- Reporting any incidents or other key information to the Managing Director as soon as practicable.

3.2 METEOR STONE PERSONNEL

Responsibilities of Meteor Stone personnel involved with implementing the CEMP will include:

- Complete the environmental induction prior to commencing any pre-operational works, including signing the induction register to acknowledge they have read and understood its contents and requirements.
- Review the requirements of the CEMP, including knowing who to direct questions and report any incidents to.
- Complete any tasks relating to the pre-operational phase of the project in accordance with the CEMP.
- Report any activity that may have the potential to result in environmental harm.
- Notify the Site Quarry Manager of any non-compliance with the CEMP or incident, including completing the required incident report form.

3.3 CONTRACTORS AND/OR CONSULTANTS

All contractors and/or consultants visiting the site or carrying out works during the construction phase will undergo the Project and Site environmental induction program and have the same responsibilities as Meteor Stone personnel in relation to compliance with the CEMP. Their attendance at the induction program will be recorded and they will sign the induction register to acknowledge that they have read and understood its contents and requirements. Any contractor or consultant not adhering to the requirements of this CEMP will be asked to leave the site.

4. REPORTING

The implementation of environmental management actions identified in this CEMP will be reported to DCCEE in accordance with approval conditions included in the Decision report issued under Sections 130 (1) and 133 of the EPBC Act. Any environmental incident or non-compliance with this CEMP will be reported to the Site Quarry Manager in the first instance as soon as practicable to do so. Any incidents that need to be reported to regulators by the Site Quarry Manager, the General Manager, or the Managing Director, and will occur within required timeframes. Reporting to regulators will include an indication of the incident, actions taken to mitigate any further risk, and any changes to the CEMP that resulted from the investigation of the incident; note that reports may also be issued to other regulators such as DEMIRS.

4.1 WEEKLY INSPECTION OF THE ACTIVE WORK SITE

For the purposes of the CEMP, the active work site is confined to the PAA area, or the access track and Sublease 5 quarry site. The Site Quarry Manager will undertake an inspection of the PAA at the commencement of each work week, recording outcomes on the Inspection Checklist.

4.2 INCIDENT REPORTING

Incident reporting will be required in the following circumstances:

- Injury or death of a Carnaby's Cockatoo.
- Inappropriate interaction with Carnaby's Cockatoo flocks or individuals by any personnel.
- Receipt of a complaint from neighbours or a member of the public.

As a minimum, reporting will detail:

- The person reporting the incident or non-compliance.
- The location of the incident or non-compliance.
- A short description of the event, including where relevant, photographs and maps.
- Outcomes of incident investigations carried out by Meteor Stone.
- Any relevant corrective actions undertaken within the short term to manage the event.
- Any updates to procedures to resulting from the incident or non-compliance to reduce the likelihood of reoccurrence.

4.3 NON-CONFORMANCE REPORTING

Non-conformances will be considered minor or major. Examples of minor non-conformance include inappropriate interaction with Carnaby's Cockatoos, or exceedance of the Site speed limit; whilst major non-conformance includes the removal of vegetation beyond the approved clearing area, or injury or death of Carnaby's Cockatoo. Each will be investigated and reported in accordance with this CEMP.

In the event of a major non-conformance:

- Pre-operational activities will cease immediately.
- Relevant organisations will be notified, such as DCCEE and DEMIRS.
- Remedial actions will be developed and implemented in consultation with relevant regulatory officers, organisational personnel, and specialist consultants as appropriate.

4.4 COMPLIANCE REPORTING

The short duration of the pre-operational activities means that reporting demonstrating compliance with the CEMP is limited. It may occur at nominated frequencies, such as at the conclusion of the construction phase and/or during the first annual compliance reporting activity in accordance with EPBC Act approval conditions.

5. ENVIRONMENTAL TRAINING

All personnel involved with the proposed limestone extraction operation will undergo a site environmental induction process to ensure they understand their responsibilities and obligations under the CEMP. The training will be conducted for all existing and new personnel (including relevant contractors, sub-contractors) and all visitors to Site that are not accompanied by an inducted person. All personnel will receive training on:

- The importance of Carnaby's Cockatoos and their protection under State and Commonwealth legislation.
- What the birds look like and where they might be found within the PAA.
- Required monitoring and management actions during operations, as appropriate to their roles.
- Project boundaries and restrictions for personnel and vehicle movements.
- Locations of protected trees and vegetation, i.e.: the extent of the PAA.
- Emergency procedures and contacts (Section 6).
- Actions and reporting required for a non-compliance or unexpected environmental incident.
- Adhering to the advice of a fauna specialist.

Follow up training will be conducted on an 'as needed' basis through regularly scheduled meetings or with individuals as required and appropriate.

Records of all training as a part of this CEMP will be taken and maintained including: attendee(s) name; date training was conducted; name of trainer(s); summary of content; and sign-off by participants .

6. EMERGENCY CONTACTS AND PROCEDURES

In the event of an incident or emergency involving flocks or individual Carnaby's Cockatoos, all efforts will be made to care for the bird(s) as a priority. This may involve ceasing pre-operational activities until the incident is under control. Table 1 provides a range of relevant contact numbers depending on the nature of the incident; Figures 4, 5, and 6 show the directions to the three nearest NAR partner veterinary hospitals.

Following all incidents, subsequent reporting will be undertaken in line with Section 4.1 and any other statutory reporting obligations.

Table 1: Emergency Contacts

Respondent	Contact
Police, Fire, and Ambulance emergency response	000
Meteor Stone Site Manager (Ross Corns)	0419 917 584
Meteor Stone Managing Director (Tony Randazzo)	0412 030 527
Wildcare Helpline (DBCA)	08 9474 9055
Native Animal Rescue (NAR) (Malaga)	9249 3434
NAR partner vet — Pet Stock Brighton 9/1 Butler Bvd	9562 5924 (weekdays 8 am – 7 pm)
NAR partner vet — Lakeside Vet Centre Joondalup, 47 Winton Road	9300 2727 (weekdays 9 am – 7 pm)
NAR partner vet — Drovers Vet Hospital, 1937 Wanneroo Rd	9306 3911 (weekdays 8 am – 7 pm)
WIRES Rescue Line	1300 094 737
Environmental pollution response (DWER)	1300 784 782

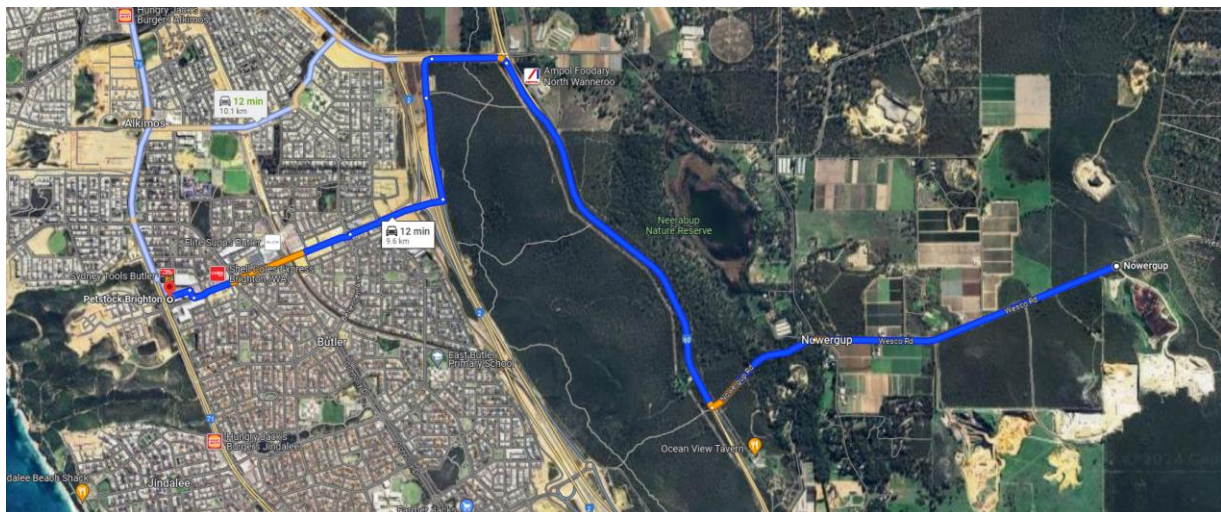


Figure 4: Directions to NAR partner vet — Pet Stock Brighton 9/1 Butler Boulevard
(Google Maps, 2024a)

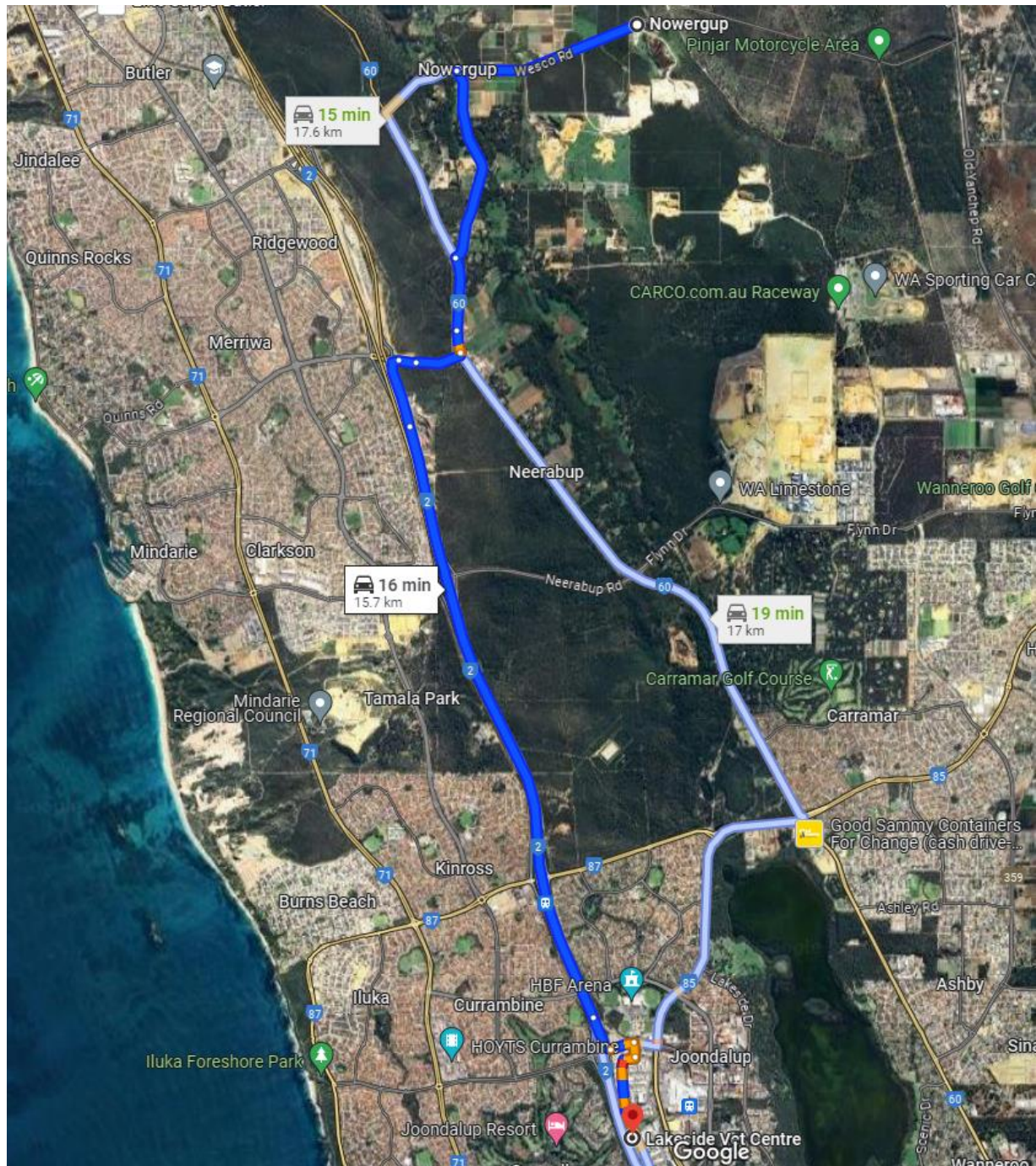


Figure 5: Directions to NAR partner vet — Lakeside Vet Centre Joondalup, 47 Winton Road

(Google Maps, 2024b)

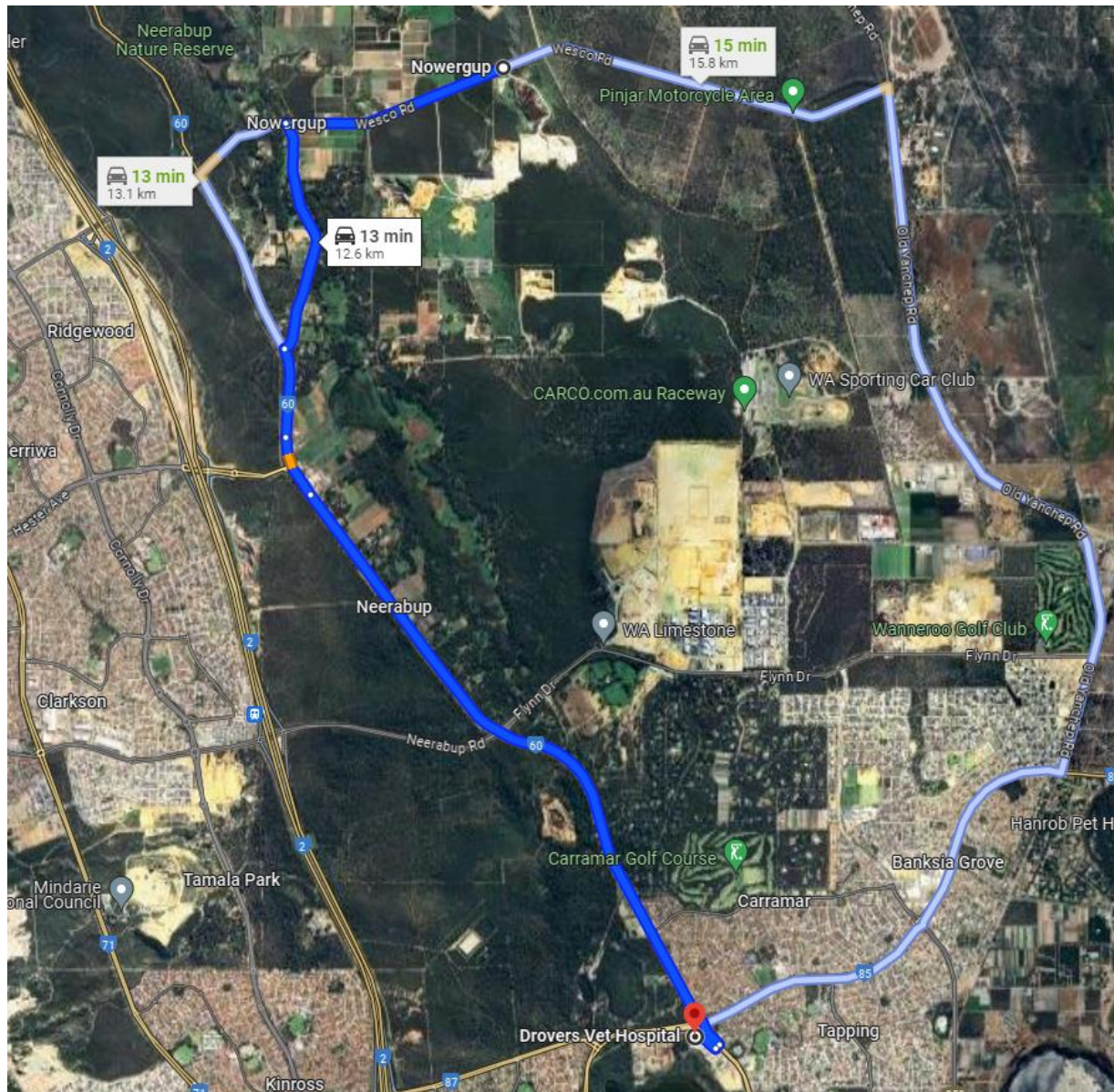


Figure 6: Directions to NAR partner vet — Drovers Vet Hospital, 1937 Wanneroo Road

(Google Maps, 2024c)

7. POTENTIAL ENVIRONMENTAL IMPACTS AND RISKS

A comprehensive assessment of threats, potential impacts and risks to matters of national environmental significance as protected under the EPBC Act, has been undertaken as part of the PD responding to DCEEWW's RFI. It was identified the proposal may have an impact on Carnaby's Cockatoo.

The PD details the potential impacts and risks to Carnaby's Cockatoos in Sections 4.1 and 4.3:

- Section 4.1.1 describes the species, their occurrence and preferred habitat.
- Section 4.3.1 describes the potential direct and indirect impacts.
- Section 4.3.1.1 includes a comprehensive risk assessment that describes both the raw risk and the residual risk following management and mitigation measures.

7.1 PRIMARY IMPACTS

The clearing of this vegetation will occur in a single campaign due to the nature of the extraction process that will be implemented and occur over an estimated four-week period. The primary impacts to the Carnaby's Cockatoo during the clearing process will include:

- The clearing of 6.495 ha of quality foraging habitat.
- Clearing beyond the nominated PAA.
- The presence of Carnaby's Cockatoos within the PAA while the clearing is occurring.
- The potential for bird strike resulting in injury or death to individual or flocks of birds.

Note that while unlikely, in the event of an opportunistic sighting of a Forest Red-tailed Black Cockatoo and/or a Baudin's Black Cockatoo, their presence and management will be the same as for the Carnaby's Cockatoo. If observed, their presence will be recorded on the daily checklist.

7.2 SECONDARY IMPACTS

In addition to the primary impacts that could occur during the clearing process, there are also potential secondary aspects that could result in impacts to the Carnaby's Cockatoo during clearing activities, namely, that could include:

- Dust.
- Noise.
- Weed encroachment.
- Introduction of plant pathogens, such as dieback.

8. RISK ASSESSMENT

Clearing activities will result in impacts to MNES, namely the Carnaby's Cockatoo. A risk assessment process was carried out to address the likelihood and consequences of those impacts based on the information provided in the PD, including Sections 3.1.7, 3.1.8.1, 4.1, and 4.2. The risk assessment included consideration of the nature and scale of the likely impacts, along with the level of confidence relating to the prediction of impacts.

While the outcomes of the risk assessment indicates that the Proposed Action poses an overall high residual risk in relation to the direct loss of Carnaby's Cockatoo foraging habitat, while all other impacts have a low residual risk in relation to other aspects of the Carnaby's Cockatoo presence.

The definition of likelihood and consequence definitions, and impact assessment matrix are provided in Tables 2, 3, and 4 respectively. The assessment outcome, including the raw and residual risk assessment and ranking, was carried out after considering the results of site visits, undertaking various desktop, and assessment outcomes of surveys carried out by other consultants to quantify where possible (e.g.: area to be cleared) or otherwise qualitatively assess likely impacts based on the available data (e.g.: impacts to Carnaby's Cockatoo). Outcomes of the risk assessment process are provided in Table 5.

Table 2: Likelihood Definitions

Likelihood	Definition
Rare	May occur in exceptional circumstances
Unlikely	Could occur during the construction period but considered to be unlikely
Possible	Might occur during the construction period
Likely	Will probably occur during the construction period
Almost Certain	Is expected to occur during the construction period

Table 3: Consequence Definitions

Consequence	Definition
Minor	Minor environmental impact that can be reversed
Moderate	Isolated by substantial environmental impact that could be reversed with intensive efforts
High	Substantial environmental impact that could be reversed with intensive efforts
Major	Major loss of environmental value with real possibility that it could continue
Critical	Severe widespread loss of environmental value including irrecoverable environmental damage

Table 4: Impact Assessment Matrix

Likelihood	Consequence				
	Minor	Moderate	High	Major	Critical
Rare	Low	Low	Low	Medium	High
Unlikely	Low	Low	Medium	High	High
Possible	Low	Medium	Medium	High	Extreme
Likely	Low	Medium	High	High	Extreme
Almost Certain	Medium	High	High	Extreme	Extreme

Table 5: Risk Assessment of the Proposed Action to MNES

Impact	Cause	Nature and/or Scale unknown, unpredictable, or irreversible	Confidence in predictions	Mitigation Measures	Raw Risk			Residual Risk		
					Likelihood	Consequence	Risk Rating	Likelihood	Consequence	Risk Rating
Direct loss of 6.495 ha of foraging habitat for the Carnaby's Cockatoo.	Approved clearing of Proposed Action Area.	<ul style="list-style-type: none"> Proposed Action Area boundary known. Irreversible impact due to length of extraction period and expected rehabilitation period. 	High level of confidence in predictions.	<ul style="list-style-type: none"> Delineation of clearing boundary. Clearing of entire PAA will occur prior to extraction commencing due to the extraction method that will be implemented. Offset site identified and secured. Offset Management Plan prepared 	Almost certain	High	High	Almost certain	High	High (offset will be implemented)
Loss of more than 6.495 ha of foraging habitat for Carnaby's Cockatoo.	Unauthorised clearing beyond delineated Proposed Action Area.	<ul style="list-style-type: none"> The scale of the impact is unpredictable as it is related to unauthorised clearing. If it occurs, it is likely to be around the perimeter of the PAA and limited in its location and extent. 	High level of confidence in predictions. Moderate level of confidence in the prediction of the scale of impacts.	<ul style="list-style-type: none"> CEMP prepared. Delineation of the clearing boundary. Pre-construction inspection of the clearing area and associated delineation of the clearing boundary. Clearing of the PAA will occur via the existing and proposed access track to the north, generally working towards the southern extent. Clearing beyond the approved clearing boundary will be recorded as an environmental incident, investigated, recorded, and reported in accordance with organisational and DCCEEW approval conditions. Rehabilitation of cleared area. 	Possible	Moderate	Medium	Unlikely	Moderate	Low
Injury or death of Carnaby's Cockatoo.	Collision with vehicle, plant, or equipment during clearing.	<ul style="list-style-type: none"> The nature of the impact is known in the sense that the PAA is within known black cockatoo foraging habitat, but unpredictable as it relates to vehicles, plant, or equipment coming into direct contact with birds. Impact is likely to be to an individual or small number of birds rather than a flock. 	High level of confidence in predictions and likely scale of impacts.	<ul style="list-style-type: none"> CEMP prepared. Use of a fauna spotter to confirm locations of cockatoos ahead of vehicles, plant and equipment entering the PAA prior to clearing. Allow birds to move on of their own accord. Avoid clearing in areas where cockatoos are present, allowing them to move away on their own. Clearing will occur in a general north-south direction; moving from cleared areas into uncleared areas. Speed limit of no more than 20 km/h within the PAA and access tracks will be applied. CEMP will include list of wildlife rescue organisations/vets. Reporting via daily/weekly checklist. Inappropriate interactions with birds will be recorded as an environmental incident, investigated, recorded, and reported in accordance with organisational and DCCEEW approval conditions. 	Possible	Moderate	Medium	Unlikely	Moderate	Low
Dust.	Vehicle movement, high winds.	<ul style="list-style-type: none"> The nature of the impact is known in that dust is likely when the clearing of vegetation is complete. Impact is likely to be consistent with existing extraction activities in other sublease areas. 	High level of confidence in predictions and likely scale of impacts.	<ul style="list-style-type: none"> Vegetation clearing and topsoil removal will only be undertaken on days of conducive wind strength and conditions to ensure windblown dust is minimised. Vegetation clearing and ground disturbance will occur over a maximum four-week period. Topsoil stockpiles will be no greater than 4 m in height. A vehicle speed limit of 20 km/h will be implemented across the Site. A water cart with a capacity >10,000 L will be available when required and will undertake preventative watering of access tracks and working areas when required. Reporting via daily checklist. 	Almost certain	Minor	Medium	Likely	Minor	Low

Impact	Cause	Nature and/or Scale unknown, unpredictable, or irreversible	Confidence in predictions	Mitigation Measures	Raw Risk			Residual Risk		
					Likelihood	Consequence	Risk Rating	Likelihood	Consequence	Risk Rating
Noise.	Operation of plant and equipment.	<ul style="list-style-type: none"> The nature of the impact is known in that noise is likely during clearing operations. Impact will be limited to a known quarry location with no sensitive neighbours close by. 	High level of confidence in predictions and likely scale of impacts.	<ul style="list-style-type: none"> Operational hours will be limited to between 7 am and 6 pm Monday to Friday, and 7 am to 1 pm on Saturday. All vehicles and machinery on site will be regularly serviced to maintain good operating condition and minimise unnecessary noise. The importance of minimising noise on site will be communicated to all personnel and contractors. If noise complaints are received, these will be investigated promptly. Site personnel will monitor noise generation on an ongoing basis and if unusually high noise levels are observed, these will be proactively investigated and rectified. Reporting via daily checklist. 	Almost certain	Minor	Medium	Likely	Minor	Low
Weed encroachment.	Vehicle and personnel movement, bird and animal droppings.	<ul style="list-style-type: none"> The nature of the impact is known in the that weed movement vectors are well understood. Weed establishment within the broader site is likely to be limited to already disturbed areas, with establishment within the cleared area prior to quarrying commencing unlikely given the short time frame that will occur between clearing and extraction commencing. 	High level of confidence in predictions and likely scale of impacts.	<ul style="list-style-type: none"> All vehicles will be clean on entry. A dedicated sweep out station will be provided where any seeds and/or dirt on vehicles that could harbour seeds can be removed by manual or other appropriate means and disposed of appropriately to landfill. Where possible, plant and equipment and other vehicles should remain within the clearing area to minimise the risk of spreading weeds. If appropriate, unwanted or unnecessary access to vegetated areas will be discouraged through track signage and education. Weed affected topsoils may need to be taken offsite or buried by 500 mm soil/overburden. If required, declared weeds should be treated promptly by digging out or spraying. Reporting via daily checklist. 	Unlikely	Minor	Low	Rare	Minor	Low
Introduction of plant pathogens.	Vehicle and personnel movement.	<ul style="list-style-type: none"> The nature of the impact is known in the that weed movement vectors are well understood. The limestone presence is known to inhibit the proliferation of <i>Phytophthora cinnamomi</i>. 	High level of confidence in predictions and likely scale of impacts.	<ul style="list-style-type: none"> All plant and equipment will be clean on entry, with any soil removed prior to entering the site and disposed of to landfill. Where possible, plant and equipment and other vehicles should remain within the clearing area to minimise the risk of spreading disease. Inform personnel that dieback may be spread into a location through the movement of infected soil, particularly moist or wet soil, on plant, equipment, vehicles, and footwear. Entry to and exit from the PAA will be limited to the nominated access track only. Existing and new personnel will be informed of dieback prevention measures through the induction process. Signage regarding unauthorised entry and 'clean on entry' requirements will be placed at the overall site entry. Vegetation and topsoil will be removed and stockpiled in accordance with the provision of the Mine Closure Plan (Landform Research, 2020), and the subsequent movement of vehicles and machinery will be limited to the areas that are cleared of vegetation. Reporting via daily checklist. 	Unlikely	Minor	Low	Rare	Minor	Low

Impact	Cause	Nature and/or Scale unknown, unpredictable, or irreversible	Confidence in predictions	Mitigation Measures	Raw Risk			Residual Risk		
					Likelihood	Consequence	Risk Rating	Likelihood	Consequence	Risk Rating
Fires associated with clearing activities.	Sparks from vehicles, discarded cigarettes, or similar igniting dry vegetation, such as weeds.	<ul style="list-style-type: none">The nature of the impact is known in that vegetation on the Swan Coastal Plain are known to benefit from regular fires at a suitable frequency, with fire being an aspect of flora species including but not limited to <i>Banksia</i>, <i>Grasstrees</i>, and <i>Hakea</i>.The scale of the impact is unpredictable as it depends on the fire fuel load, moisture, humidity, winds, the length of time since the previous fire, and the season when the clearing will occur.In the event of unfavourable events during warmer months of the year, the impact could be widespread and extend beyond the M70/138 tenement boundary.	Moderate to high level of confidence in predictions and likely scale of impacts.	<ul style="list-style-type: none">CEMP prepared.Water truck present on site for dust and fire suppression.Vehicles are fitted by fire extinguishers.Vehicles restricted to cleared areas unless directly involved with clearing works.Vegetation immediately adjacent to the PAA is dense with few weeds present, thus the likelihood of ignition is lower than in weedier areas to the west and outside the M70/138 boundaries.Fire danger ratings will be checked and observed if clearing occurs in warmer months, particularly those associated with Total Fire Bans, Extreme and Catastrophic fire rating days.	Possible	Moderate	Medium	Rare	Moderate	Low

9. ENVIRONMENTAL MANAGEMENT ACTIVITIES, CONTROLS, AND PERFORMANCE TARGETS

Proponents are required to ensure that every effort is made to protect impacts to Carnaby's Cockatoos during the pre-operational phase of the Proposed Action. Each of the projected direct and impacts, along with their management strategies/controls, and performance targets are provided in Table 6. It is noted that due to the short duration of the pre-operational activities (four weeks), all performance targets are expected to be achieved within this timeframe.

Table 6: Management Strategies/Controls and Performance Targets

Impacts	Management Strategies/Controls	Performance Targets
Direct Impacts		
<p>Presence of Carnaby's Cockatoos foraging within the PAA.</p> <p>In the unlikely event of an opportunistic sighting of a Forest Red-tailed Black Cockatoo and/or a Baudin's Cockatoo within the PAA.</p>	<ul style="list-style-type: none"> • Use of a fauna spotter to note presence and location of birds. • Allow birds to move on of their accord, ensuring they are not shepherded or encouraged to move along in any way (refer definition of 'disturb' in the BC Act, particularly (a)(i), (a)(iii) and (a)(iv)). • Clearing will occur in a general north-south direction, along cleared areas into uncleared areas from the access track and then towards the southern extent of proposed action area to minimise potential interactions with birds. • Mobile plant and equipment will comply at all times with the specified internal speed limit of 20 km/h for the PAA. • Reporting via daily checklist. • Inappropriate interactions with birds will be recorded as an environmental incident, investigated, recorded, and reported in accordance with organisational and DCCEEW approval conditions. 	<ul style="list-style-type: none"> • All individual birds or flock of birds will be allowed to move from within the PAA of their own accord. • There will be no intervention by project personnel that intentionally or unintentionally drives, herds, or otherwise 'encourages' birds to move away from the PAA. • All clearing activities are undertaken from a cleared portion of the site . • All vehicles involved with clearing activities will comply with nominated Site speed limits. • Daily checklist completed and recorded. • No recordable or reportable incidents.
<p>Bird strike resulting in injury or death.</p>	<ul style="list-style-type: none"> • Use of a fauna spotter to note presence and location of birds. • Allow birds to move on of their accord, ensuring they are not shepherded or encouraged to move along in any way (refer definition of 'disturb' of the Biodiversity Conservation Act 2016 (WA) (BC Act), particularly (a)(i), (a)(iii) and (a)(iv). • Clearing will occur in a general north-south direction, along cleared areas into uncleared area from the access track and then towards the southern extent of proposed action area to minimise potential interactions with birds. • Mobile plant and equipment will comply at all times with the specified internal speed limit of 20 km/h for the PAA. 	<ul style="list-style-type: none"> • All individual birds or flock of birds will be allowed to move from within the PAA of their own accord. • There will be no intervention by project personnel that intentionally or unintentionally drives, herds, or otherwise 'encourages' birds to move away from the PAA. • All clearing activities are undertaken from a cleared portion of the Site . • All vehicles involved with clearing activities will comply with nominated Site speed limits. • Daily checklist completed and recorded. • No recordable or reportable incidents.

Impacts	Management Strategies/Controls	Performance Targets
	<ul style="list-style-type: none"> Injured animals will be taken to a nearby native animal rescue partner vet for assessment (Section 6, Figures 4, 5, 6). Dead animals will be disposed of appropriately. Reporting via daily checklist. Bird strike and death of birds will be recorded as an environmental incident and non-conformance with the CEMP, investigated, recorded, and reported in accordance with organisational and DCCEEW approval conditions. 	
Clearing beyond approved boundary.	<ul style="list-style-type: none"> Delineating clearing area prior to clearing commencing using flagging tape or other suitable means. Site Quarry Manager and key personnel walking site daily prior to clearing commencing to review area to be cleared on the day. Reporting via daily checklist. Clearing beyond the approved boundary will be considered an environmental incident and non-conformance, investigated, recorded, and reported in accordance with organisational and DCCEEW approval conditions. 	<ul style="list-style-type: none"> No clearing beyond the approved boundary. Daily checklist completed and recorded. No non-conformances relating to clearing.
In the event one or more <i>Melaleuca</i> sp. Wanneroo or <i>Eucalyptus argutifolia</i> is encountered within the PAA.	<ul style="list-style-type: none"> Site Quarry Manager and key personnel walking site daily prior to clearing commencing to review area to be cleared on the day. The location of plants/populations to be noted and retained/avoided where possible to do so. Where it is not possible to retain plants/populations, they will be cleared, details recorded and reported as an environmental incident that will be investigated, recorded, and reported in accordance with organisational and DCCEEW approval conditions Reporting via daily checklist. 	<ul style="list-style-type: none"> Daily checklist completed and recorded. No clearing of <i>Melaleuca</i> sp. Wanneroo and/or <i>Eucalyptus argutifolia</i>.
Indirect Impacts		
Dust.	<ul style="list-style-type: none"> Vegetation clearing and topsoil removal will only be undertaken on days of conducive wind strength and conditions to ensure windblown dust is minimised. Vegetation clearing and ground disturbance will occur over a maximum 4-week period. Topsoil stockpiles will be no greater than 4 m in height. A vehicle speed limit of 20 km/h will be implemented across the Site. 	<ul style="list-style-type: none"> Dust generated from the PAA does not impact upon Black Cockatoos or their habitat. Daily checklist completed and recorded. No recordable or reportable incidents or complaints.

Impacts	Management Strategies/Controls	Performance Targets
	<ul style="list-style-type: none"> A water cart with a capacity greater than 10,000 L will be available when required and will undertake preventative watering of access tracks and working areas when required. Reporting via daily checklist. 	
Noise.	<ul style="list-style-type: none"> Operational hours will be limited to between 7 am and 6 pm Monday to Friday, and 7 am to 1 pm on Saturday. All vehicles and machinery on site will be regularly serviced to maintain good operating condition and minimise unnecessary noise. The importance of minimising noise on site will be communicated to all personnel and contractors. If noise complaints are received, these will be investigated promptly. Site personnel will monitor noise generation on an ongoing basis and if unusually high noise levels are observed, these will be proactively investigated and rectified. Reporting via daily checklist. 	<ul style="list-style-type: none"> No recordable or reportable incidents or complaints. Daily checklist completed and recorded. All vehicles involved with clearing activities will comply with nominated Site speed limits.
Weed encroachment.	<ul style="list-style-type: none"> All vehicles will be clean on entry. A dedicated sweep out station will be provided where any seeds and/or dirt on vehicles that could harbour seeds can be removed by manual or other appropriate means and disposed of appropriately to landfill. Where possible, plant and equipment and other vehicles should remain within the clearing area to minimise the risk of spreading weeds. If appropriate, unwanted or unnecessary access to vegetated areas will be discouraged through track signage and education. Weed affected topsoils may need to be taken offsite or buried by 500 mm soil/overburden. If required, declared weeds should be treated promptly by digging out or spraying. Reporting via daily checklist. 	<ul style="list-style-type: none"> All detected declared weeds to be removed. Daily checklist completed and recorded. No additional weed load as a result of Proposed Action that will impact on adjoining vegetation.
Introduction of plant pathogens	<ul style="list-style-type: none"> All plant and equipment will be clean on entry, with any soil removed prior to entering the site and disposed of to landfill. Where possible, plant and equipment and other vehicles should remain within the clearing area to minimise the risk of spreading disease. Inform personnel that dieback may be spread into a location through the 	<ul style="list-style-type: none"> <i>Phytophthora</i> dieback is not introduced to the PAA. No visible indicators of <i>Phytophthora</i> dieback show in the vegetation fringing the PAA. Daily checklist completed and recorded.

Impacts	Management Strategies/Controls	Performance Targets
	<p>movement of infected soil, particularly moist or wet soil, on plant, equipment, vehicles, and footwear.</p> <ul style="list-style-type: none"> • Entry to and exit from the PAA will be limited to the nominated access track only. • Existing and new personnel will be informed of dieback prevention measures through the induction process. • Signage regarding unauthorised entry and 'clean on entry' requirements will be placed at the overall site entry. • Vegetation and topsoil will be removed and stockpiled in accordance with the provision of the Mine Closure Plan (Landform Research, 2020), and the subsequent movement of vehicles and machinery will be limited to the areas that are cleared of vegetation. • Reporting via daily checklist. 	
Fire.	<ul style="list-style-type: none"> • CEMP prepared. • Water truck present on site for dust and fire suppression. • Vehicles are fitted by fire extinguishers. • Vehicles restricted to cleared areas unless directly involved with clearing works. • Vegetation immediately adjacent to the PAA is dense with few weeds present, thus the likelihood of ignition is lower than in weedier areas to the west and outside the M70/138 boundaries. • Fire danger ratings will be checked and observed if clearing occurs in warmer months, particularly those associated with Total Fire Bans, Extreme and Catastrophic fire rating days. • Recorded via daily checklist. 	<ul style="list-style-type: none"> • No fires caused by pre-operational activities. • Daily checklist completed and recorded.

10. EMERGENCY MANAGEMENT MEASURES

The short-term nature of the proposed pre-operational activities mean that the likelihood of emergency situations is low. However, they still need to be considered and planned for appropriately, with Table 7. In all cases:

- Work will stop immediately.
- Appropriate first aid is administered.
- The Site Quarry Manager is to be notified.
- If the incident is a notifiable incident according to State and/or Commonwealth legislation, the Site Quarry Manager or the General Manager will notify relevant regulatory agencies, DFES, Police, or similar.

Table 7: Potential Emergency Situations and Required Actions

Emergency Type	Potential Causes	Actions to be Implemented
Damage to plant or equipment.	<ul style="list-style-type: none"> • Inattention. • Slippery conditions. • Failure to give way. • Travel or movement too close to other plant, equipment, or vehicles. 	<p>If safe to do so:</p> <ul style="list-style-type: none"> • Stop, exit, and move away from the item(s). • Check for injuries to personnel and implement appropriate first aid. • Arrange for transport to medical or hospital as required. • Stabilise the equipment to prevent unexpected movement. • Assess damage to the item(s). • Advise quarry manager. • Arrange for removal and/or repair of the item(s) at an appropriate location.
Fire.	<ul style="list-style-type: none"> • Discarded cigarette. • Sparks from operation of vehicles, plant, or equipment. • Lightning strike. 	<ul style="list-style-type: none"> • If safe to do so, undertake fire suppression activities. • Evacuate the area as per organisational procedures.
Medical emergency.	<ul style="list-style-type: none"> • Various. 	<ul style="list-style-type: none"> • Apply appropriate first aid. • Arrange for transport to medical centre or hospital as required.
Severe weather event — heat.	<ul style="list-style-type: none"> • Heat wave conditions. • High temperatures. • Outdoor work. 	<ul style="list-style-type: none"> • Provide hydration and other appropriate first aid. • Move to the shade, or other suitable location. • Transport to medical centre or hospital as appropriate.
Severe weather event — storm.	<ul style="list-style-type: none"> • Winter or summer storm. 	<ul style="list-style-type: none"> • Take shelter in an appropriate location until the storm passes. • If lightning is present close by, do not shelter under trees. • Take extra care in wet and/or windy conditions.

Emergency Type	Potential Causes	Actions to be Implemented
Vehicle accident.	<ul style="list-style-type: none"> • Inattention. • Travelling at speed higher than specified within the work location. 	<p>If safe to do so:</p> <ul style="list-style-type: none"> • Stop, exit, and move away from the item(s). • Check for injuries to personnel and implement appropriate first aid. • Arrange for transport to medical or hospital as required. • Stabilise the equipment to prevent unexpected movement. • Assess damage to the item(s). • Advise quarry manager. • Arrange for removal and/or repair of the item(s) at an appropriate location.
Death or injury of Carnaby's Cockatoo.	<ul style="list-style-type: none"> • Inattention. • Failure to allow birds to move along of their own accord. • Travelling at speed higher than specified within the work location. 	<ul style="list-style-type: none"> • Have fauna spotter check the bird, or • Contact wildlife care or vet to determine most appropriate action. <p>If required, transport the injured bird to one of the vets designated in Section 6.</p>

11. ENVIRONMENTAL MONITORING

The majority of potential impacts from limestone extraction activities on Lot 12737 will be monitored through direct observation, record keeping and compliance reporting by Meteor Stone personnel and periodic site visits conducted by MBS Environmental. Monitoring requirements are outlined in Table 8.

Table 8: Project Activities Monitoring

Potential Activity Impacts	Monitoring
Fire	<ul style="list-style-type: none"> Ongoing monitoring for smoke will be an expected part of normal operations. Extra vigilance will be applied to monitoring for smoke during vegetation clearing activities.
Dieback	<ul style="list-style-type: none"> During pre-operational activities, a visual assessment of native flora health for the vegetation bordering the project area and existing internal tracks, checking for unexplained deaths of <i>Banksia</i>, <i>Hakea</i>, or <i>Xanthorrhoea</i> species. Vehicle movements will be limited to existing tracks and other cleared areas within the PAA. Meteor Stone will conduct monitoring in accordance with the Dieback Management Activities outlined in Table 6.
Dust	<ul style="list-style-type: none"> During operational hours, visual monitoring of dust generation from clearing operations will be undertaken. Wind speed, direction, and conditions will be monitored to identify likelihood of dust becoming a nuisance. Meteor Stone will conduct monitoring in accordance with the Dust Management Activities outlined in Table 6.
Weeds	<ul style="list-style-type: none"> Vehicles will be clean on entry to the tenement site. A clean-down station will be available for vehicles that have a build-up of soil that could transport weed seed to the site, with any soil/wastes disposed of to landfill Meteor Stone will conduct monitoring in accordance with the Weed Management Activities outlined in Table 6.
Waste and hazardous materials	<ul style="list-style-type: none"> Monitoring for spills will be conducted as a part of general operations and vehicle/machinery/equipment inspection during operational hours.
Noise and vibration	<ul style="list-style-type: none"> During operational hours, opportunistic monitoring will be noted for any unexpected or unexplained increases in noise and vibration.

12. CEMP AUDIT AND REVIEW

This CEMP is relevant for pre-operational activities relating to the project that will occur over a four-week period, thus this CEMP is unlikely to require updating during that time unless prompted by an incident or event.

12.1 ENVIRONMENTAL AUDITING

The implementation of the CEMP will be audited at a time(s) designated by DCCEEW, with the expectation that outcomes are reported either at the conclusion of the pre-operational activities and potentially within the first annual compliance report that documents compliance with approval conditions that will be submitted to DCCEEW.

In addition, reportable environmental incidents as specified in Section 4.1 may trigger an internal audit of the CEMP as part of adaptive management to ensure management and mitigation measures are adequate to prevent and minimise impacts to threatened Carnaby's Cockatoos.

12.2 ENVIRONMENTAL REVIEW

If required by DCCEEW, a review the CEMP at the conclusion of pre-operational activities will provide an indication of those aspects of the CEMP that worked well, those that didn't, and lessons learned: information that will allow for a review of the success of the CEMP implementation.

In the event an incident or an event occurs, the assessment/investigative process will include a review of the CEMP in order to:

- Assess if current management, mitigation, and monitoring measures are sufficient and practicable.
- Consider where improvements can be made to onsite environmental management measures.

13. COMMUNICATIONS AND/OR CONCERNS

Meteor Stone will maintain a register of communications for any written or verbal external concerns/complaints and any internal concerns/complaints or reports of incidents that directly relate to this CEMP and the ongoing consideration of Carnaby's Cockatoos and their habitat. The record will capture:

- Contact details of the person (name and phone number as a minimum preferred but recognising that communications can be made anonymously).
- Date, time, and method of contact.
- Summary of the communication with sufficient details to fully capture the nature of the concern/complaint and what action was taken to address it. If no action was required, justification for why will be given.
- If the concern/complaint is written, a copy will be retained. Meteor Stone will electronically scan any paper correspondence.

14. REFERENCES

Department of Climate Change, Energy, the Environment and Water (DCCEEW), (2024) *Environmental Management Plan Guidelines*, accessed April 2024 via:

<https://www.dcceew.gov.au/sites/default/files/documents/environmental-management-plan-guidelines.pdf>.

Environmental Protection Act 1986 (WA)

Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)

Google Maps. 2024a. *Directions for driving from Wesco Road, Nowergup to Pet Stock Brighton 9/1 Butler Boulevard* <https://www.google.com.au/maps> (accessed April 2024).

Google Maps. 2024b. *Directions for driving from Wesco Road, Nowergup to Lakeside Vet Centre Joondalup, 47 Winton Road*. <https://www.google.com.au/maps> (accessed April 2024).

Google Maps. 2024c. *Directions for driving from Wesco Road, Nowergup to Drovers Vet Hospital, 1937 Wanneroo Road*. <https://www.google.com.au/maps> (accessed April 2024).

Landform Research. 2020. *Mine Closure Plan – M70/138, L70/47 Limestone Pit – Wesco Road South, Nowergup*. Unpublished report prepared for Adelaide Brighton Cement Ltd.

MBS Environmental. (2024), *Offsite Management Plan*, unpublished report prepared for Meteor Stone Pty Ltd.

APPENDICES

APPENDIX 1: FORMS

Environmental Incident Report Form



Electronic Version Current: Uncontrolled copy valid only at time of printing

Printed: 18/4/24 15:40

To be completed in the event of any incident of the following circumstances:

- Injury or death of a Carnaby's Cockatoo.
- Inappropriate interaction with Carnaby's Cockatoo flocks or individuals by any personnel.
- Receipt of a complaint from neighbours or a member of the public.
- Clearing beyond the Proposed Action Area boundary

The completed form is to be signed by the Site Quarry Manager and submitted to the relevant person/regulatory body as soon as possible.

Person Reporting Incident:

Date and Time of Incident:

Name of Person Filling in This Form:

Position in Company:

Describe the Location of Incident (attach photos and/or map and provide GPS coordinates):

Describe how the Incident Happened:

Describe the Outcomes of Incident Investigations Carried out:

Describe the Corrective Actions/Changes Taken to Reduce Potential for Repeat of Incident:

Describe any Updates to Procedures Resulting From the Incident to Reduce the Likelihood of Reoccurrence:

--

Environmental Incident Report Form



Electronic Version Current: Uncontrolled copy valid only at time of printing

Printed: 18/4/24 15:40

Any Other Information:
Incident Report Form Noted:
Site Quarry Manager Signature:
Date:

Inspection Details					
Name				Date:	
Position				Time:	
Checklist	Yes	No			Comments
		Rectified	Further Actions	No Further Actions	
Dust					
Are wind strength and conditions conducive to clearing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are topsoil stockpiles no greater than 4 m in height?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a water cart with a capacity greater than 10,000 L available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has the speed limit of 20 km/h been abided by?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Noise					
Were operational hours limited to 7 am and 6 pm Monday to Friday, and 7 am to 1 pm on Saturday?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all vehicles and machinery on site been regularly serviced to minimise unnecessary noise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was the importance of minimising noise on site will be communicated to all personnel and contractors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were any noise complaints received?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were there any unusually high noise levels observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fauna					
Was a fauna spotter used prior to the commencement of clearing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were any Carnaby's Cockatoos spotted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If yes, were birds allowed to move on of their own accord?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If Carnaby's Cockatoos were spotted, was clearing avoided in these areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Clearing					
Has the PAA clearing area been clearly delineated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has any clearing been conducted outside of the PAA?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weeds					
Have any weeds been observed onsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If yes, were these weeds promptly treated or dug out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have vehicles and machinery been cleaned prior to entry on site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have vehicles and machinery kept to designated tracks where possible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are any topsoil stockpiles affected by weeds?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Checklist	Yes	No			Comments
		Rectified	Further Actions	No Further Actions	
If yes, has this topsoil been taken offsite or buried under 500 mm of soil/overburden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plant Pathogens					
Has all new plant and equipment been cleaned on entry to site? With soil removed to be disposed in landfill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have vehicles and machinery kept to designated tracks where possible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have site personnel been informed of the causes of dieback spread?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have existing and new personnel been informed of dieback prevention measures through the induction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has site entry and exit been restricted to the nominated track?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is signage regarding unauthorised entry and 'clean on entry' requirements placed at the overall site entry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has vegetation and topsoil been removed and stockpiled in accordance with the MCP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has the movement of vehicles and machinery been limited to the areas that are cleared of vegetation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fire					
Are vehicles fitted with fire extinguishers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have vehicles been restricted to cleared areas unless directly involved with clearing works?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a water truck present on site for dust and fire suppression?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other					
Anything else otherwise not specified?					
Comments					
Sign Off:					
Inspected by		Signature			

APPENDIX 2: INDUCTION MATERIALS

EPBC REF: 2022/09324
EXPANSION OF LIMESTONE EXTRACTION
OPERATIONS

210 WESCO ROAD, NOWERGUP, WANNEROO

ENVIRONMENTAL INDUCTION MATERIALS

PREPARED FOR:

METEOR STONE PTY LTD



MAY 2024

PREPARED BY:

Martinick Bosch Sell Pty Ltd
4 Cook Street
West Perth WA 6005
Ph: (08) 9226 3166
Email: info@mbsenvironmental.com.au
Web: www.mbsenvironmental.com.au

MBS
ENVIRONMENTAL

EXPANSION OF LIMESTONE EXTRACTION OPERATIONS PROPOSED ACTION INDUCTION MATERIALS

Distribution List:

Company	Contact name	Copies	Date
Meteor Stone	[REDACTED]	[01]	16 May 2024
Stoneridge, Meteor Stone	[REDACTED]	[02]	16 May 2024
Complex Land Solutions	[REDACTED]	[03]	16 May 2024
DCCEEW	South WA Assessments Team	[04]	16 May 2024

Document Control for Job Number: [Insert Job Code]

Document Status	Prepared By	Authorised By	Date
Final Report	Hayden Beltz	Sue Brand	18 April 2024
Revision 1	Haden Beltz	Sue Brand	16 May 2024

Disclaimer, Confidentiality and Copyright Statement

This report is copyright. Ownership of the copyright remains with Martinick Bosch Sell Pty Ltd (MBS Environmental) and **Meteor Stone Pty Ltd**.

This report has been prepared for **Meteor Stone Pty Ltd** on the basis of instructions and information provided by **Meteor Stone Pty Ltd** and therefore may be subject to qualifications which are not expressed.

No person other than those authorised in the distribution list may use or rely on this report without confirmation in writing from MBS Environmental and **Meteor Stone Pty Ltd**. MBS Environmental has no liability to any other person who acts or relies upon any information contained in this report without confirmation.

This report has been checked and released for transmittal to **Meteor Stone Pty Ltd**.

These Technical Reports:

- Enjoy copyright protection and the copyright vests in Martinick Bosch Sell Pty Ltd (MBS Environmental) and **Meteor Stone Pty Ltd** unless otherwise agreed in writing.
- May not be reproduced or transmitted in any form or by any means whatsoever to any person without the written permission of the Copyright holder.

TABLE OF CONTENTS

1.	PURPOSE AND SCOPE.....	1
2.	INDUCTION	3
3.	INDUCTION RECORDS	4
4.	ENVIRONMENTAL INDUCTION PROGRAM.....	5
4.1	CARNABY'S COCKATOO	5
4.2	UTILISATION OF THE PROPOSED ACTION AREA (SUBLEASE 5).....	5
4.3	FOREST RED-TAILED AND BAUDIN'S COCKATOO	6
4.4	MELALEUCA SP. WANNEROO.....	6
4.5	EUCALYPTUS ARGUTIFOLIA	6
4.6	POTENTIAL IMPACTS TO THE CARNABY'S COCKATOO.....	7
4.7	MANAGEMENT STRATEGIES	7
4.8	ENVIRONMENTAL INCIDENTS	8
5.	ENVIRONMENTAL APPROVAL CONDITIONS.....	9
6.	PROJECT INDUCTION ACKNOWLEDGMENT	10
7.	REFERENCES	11

FIGURES

Figure 1:	Proposed Action Area, Sublease 5.....	2
Figure 2:	Carnaby's Cockatoo	5
Figure 3:	Baudin's Cockatoo (L) and Forest Red-tailed Cockatoo (R)	6
Figure 4:	Melaleuca sp. Wanneroo (L) and Melaleuca systema (R)	6
Figure 5:	Eucalyptus argutifolia (Yanchep Mallee).....	7

APPENDICES

Appendix 1:	Environmental Approval Conditions	13
-------------	---	----

1. PURPOSE AND SCOPE

All personnel, including visitors, inspectors, consultants, and subcontractors are required to undergo an environmental induction relating to the implementation of clearing of the Proposed Action Area (PAA) (Figure 1) where the next phase of Meteor Stone's limestone extraction works will be carried out. The purpose of the induction is to ensure that all personnel and visitors:

- Are aware of and understand the environmental values associated with the Carnaby's Cockatoo and how its presence will be managed during the clearing works.
- Are aware of the approval conditions issued by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) and the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) under the *Biodiversity Conservation Act 2016* (WA) (BC Act) relating to the presence of the Carnaby's Cockatoo and how they will be complied with during the clearing works.
- Comply with the provisions of the Construction Environmental Management Plan (CEMP) that has been developed to as the instrument that will facilitate the implementation of the information provided in the approval documents submitted to DCCEEW and/or DEMIRS during the environmental approvals process.

Figure 1: Proposed Action Area, Sublease 5

2. INDUCTION

All personnel, including visitors, inspectors, consultants, and subcontractors will attend a construction site (Proposed Action Area (PAA)) (Figure 1) and Project-specific environmental induction program before accessing or commencing work on the Site. The environmental induction training will be delivered by a Meteor Stone authorised person and will address relevant location-specific requirements of the Proposed Action (PA) (Project), HSE issues, safety management system and emergency response arrangements. Short-term visitors, inspectors, consultants, and subcontractors will be escorted while onsite.

The induction process will include a documented acknowledgement indicating that the inducted employee, contractor, or other visitor understands and accepts their responsibilities in relation to project hazards, environmental values of the PAA, and the control measures that will be applied.

All personnel are responsible for contributing to general monitoring activities (i.e. keeping their eyes open and reporting anything of concern) during works at the PAA, including locations where birds are present, consideration of vehicle speed limits, requirements for vehicles to be clean on entry to the PAA, and the presence of smoke that could indicate a fire within or in proximity to the Site.

Project related inductions will include:

- Environmental concerns and activities, including information relating to managing the presence of the Carnaby's Cockatoo, along with weed and pathogen management.
- Hazard and Incident Reporting.
- Site Travel and Traffic Management.
- Location specific Work Procedure requirements.

3. INDUCTION RECORDS

The Site Quarry Manager is responsible for the implementation of the environmental induction program and recording attendances, noting that:

- Records of all personnel inducted shall be kept onsite, with electronic copies at head office.
- All personnel inducted will be entered into the Project induction register.
- The Induction register will be maintained and kept up to date.

4. ENVIRONMENTAL INDUCTION PROGRAM

4.1 CARNABY'S COCKATOO

The Carnaby's Cockatoo (*Zanda latirostris*) (Figure 2) is one of three Western Australian black cockatoo species that are listed as Endangered under both the EPBC Act (Cwlth) and Threatened under the BC Act (WA), largely due to habitat clearing across its range, and thus subject to protection from harm either directly or through the loss of their habitat. These birds will typically be heard before they are seen due to their distinctive call.



Figure 2: Carnaby's Cockatoo

Source: Brand, 2023 ©

4.2 UTILISATION OF THE PROPOSED ACTION AREA (SUBLEASE 5)

The Carnaby's Cockatoo likes to feed on the *Banksia sessilis* (Parrot Bush), and to a lesser extent, the *Hakea trifurcata* (Two-leaf Hakea) within the PAA. After they have finished feeding, they will typically move on of their own accord. There are no suitable trees within the PAA for them to roost on or nest in.

4.3 FOREST RED-TAILED AND BAUDIN'S COCKATOO

While it is unlikely that these species will be seen at the Site, there is a slim possibility that they could (Figure 3). They should be treated in the same way as Carnaby's Cockatoo – avoid and let them move on of their own accord.

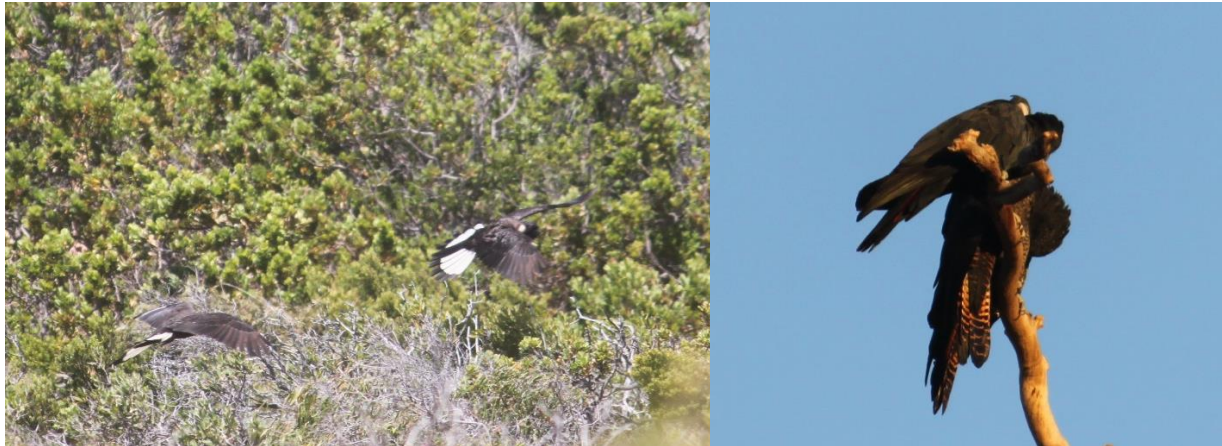


Figure 3: Baudin's Cockatoo (L) and Forest Red-tailed Cockatoo (R)

Source: Brand, 2019 and 2012 (Pers. Comm.)

4.4 MELALEUCA SP. WANNEROO

The *Melaleuca* sp. Wanneroo is known from the area, and while previous surveys have not located it within the proposed clearing area, there remains the possibility that it might be found. It is very similar to the *Melaleuca systema* (Figure 4). If encountered, clearing should be avoided if possible to do so.



Figure 4: Melaleuca sp. Wanneroo (L) and Melaleuca systema (R)

Sources: L) Keighery, 2017, R) DBCA, 2024

4.5 EUCALYPTUS ARGUTIFOLIA

The *Eucalyptus argutifolia* is a distinctive eucalypt with a mallee (multi-stemmed) form with a smooth bark, thus another species known from the area but not located within the proposed clearing area when previously surveyed. As for the *Melaleuca* sp. Wanneroo, if encountered during clearing, removal of that species should be avoided if possible to do so. .



Figure 5: *Eucalyptus argutifolia* (Yanchep Mallee)

Source: Florabase, DBCA 2023

4.6 POTENTIAL IMPACTS TO THE CARNABY'S COCKATOO

The PAA will be cleared in its entirety ahead of limestone extraction. In addition to this loss of foraging habitat, potential impacts to the birds include (refer to Section 9 of the CEMP):

- Bird strike that injures or kills the bird, or other inappropriate contact with bird(s).
- Dust.
- Noise.
- Introduction of weeds and/or Dieback.
- Clearing beyond the approved clearing area.

4.7 MANAGEMENT STRATEGIES

The following controls apply to the PAA to assist with ensuring that birds present within the PAA during the clearing process (pre-operational activities) include:

- The use of a fauna-spotter to watch for the birds and inform the team where they are and to avoid the area until they move on of their own accord. Note that it is an offence under the BC Act for people to harry or otherwise encourage native species to move away from an area.
- All personnel are required to comply with the instructions of the fauna spotter in relation to where clearing can take place according to the presence of the birds.
- A speed limit of 20 km/h will apply to the PAA.
- If bird strike, other injury, or death occurs, the fauna spotter is to be contacted in the first instance for additional instructions, such as removal of the affected bird(s) to a vet (refer Section 6 of the CEMP for details of local vets that deal with wildlife, their address and phone number).

- Access and egress from the PAA will be via the designated track only that will be cleared in the first instance.
- All clearing will occur in a general north–south direction, with vehicles working from previously cleared areas into uncleared areas.
- All vehicles entering the PAA will be clean on entry. This may require the manual brush down or wash down of the vehicle tyres, wheels, and undercarriage area prior to entering the site to ensure the site is kept free of weeds. Waste materials from this process must be disposed of to landfill.
- Disinfection of vehicle tyres, wheels, and undercarriage area using either Phytoclean or a 70% mix of methanol and water to ensure the site is kept free of dieback.
- Noise is not likely to be an issue.
- If clearing results in an excess of dust, a watercart will be deployed.
- The proposed clearing area will be delineated using flagging tape or similar, with daily checks undertaken kept in relation to the clearing area as a means of avoiding clearing beyond the approved area.

4.8 ENVIRONMENTAL INCIDENTS

The following are designated environmental incidents and reported to the Site Quarry Manager as soon as practicable to do so:

- Bird strike, injury, or death of a Carnaby's Cockatoo.
- Clearing beyond the approved clearing area.

These incidents will be investigated and reported in accordance with DCCEEW environmental approval conditions.

5. ENVIRONMENTAL APPROVAL CONDITIONS

**** Note, this section will be completed once approval conditions become available, with a copy of the approval conditions to be included in Appendix 1. ****

6. PROJECT INDUCTION ACKNOWLEDGMENT

Name: _____

Company: _____

Date: _____

Inducted by: _____

I acknowledge that I have been made aware of the Project requirements including the following:

- Proposed Action environmental values and management strategies.
- What to do in the event of bird strike or death of a Carnaby's Cockatoo.
- Environmental incidents, including reportable incidents.
- I acknowledge that I will always comply with the environmental requirements of the Proposed Action.

Print Name

Signature

7. REFERENCES

Biodiversity Conservation Act 2016 (WA)

Department of Biodiversity, Conservation and Attractions (DBCA), (2023), *Florabase – Eucalyptus argutifolia*, accessed March 2023 via: <https://florabase.dpaw.wa.gov.au/browse/profile/13091>.

Department of Biodiversity, Conservation and Attractions (DBCA), (2024), *Florabase – Melaleuca systema*, accessed May 2024 via: <https://florabase.dbca.wa.gov.au/browse/profile/18598>.

Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)

Keighery, G. (2017) Nomination Summary – *Melaleuca* sp. Wanneroo, in: Threatened Species Scientific Committee (2019) *Conservation Advice – Melaleuca* sp. Wanneroo, accessed March 2023 via: <http://www.environment.gov.au/biodiversity/threatened/species/pubs/89456-conservation-advice-04072019.pdf>.

MBS Environmental, (2024), *Construction Environmental Management Plan*, unpublished Report Prepared for Meteor Stone.

APPENDICES

APPENDIX 1: ENVIRONMENTAL APPROVAL CONDITIONS