



Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

Prepared by:

SLR Consulting Australia Pty Ltd

SLR Project No.: 655.010515.00005

16 February 2026

Revision: 3.0

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1.0	16 October 2025	Jessica Cooney	Carly Monaghan	James Rowe
2.0	11 November 2025	Carly Monaghan	James Rowe	James Rowe
3.0	16 February 2026	Carly Monaghan	James Rowe	James Rowe

Basis of Report

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Adelaide Brighton Cement Limited (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



Table of Contents

Revision Record.....	i
Declaration of Accuracy	1
1.0 Introduction	2
1.1 Background	2
1.2 Site Overview.....	3
1.3 Site Contact	3
2.0 Description of the Existing Environment.....	4
2.1 Topography and Landscape.....	4
2.2 Climate	4
2.3 Topsoil and Subsoil	5
2.4 Geological Environment	7
2.4.1 Regional Geology	7
2.4.2 Site Geology.....	7
2.5 Geohazards.....	8
2.6 Groundwater.....	8
2.7 Surface Water	11
2.8 Vegetation, Weeds and Plant Pathogens.....	11
2.8.1 Vegetation	11
2.8.2 Weeds, Pests and Plant Pathogens.....	12
2.9 Fauna	13
2.10 Caves	14
2.11 Local Community	14
2.12 Land Use	14
2.13 Proximity to Infrastructure and Housing	15
2.14 Exempt Land.....	15
2.15 Amenity.....	17
2.16 Air Quality	17
2.17 Noise	17
2.18 Heritage (Aboriginal, European, Geological).....	18
2.19 Proximity to Conservation Areas	18
2.20 Pre-existing Site Contamination and Previous Disturbance	19
2.21 Tailings Generation and Management	19
3.0 Description of the Proposed Mining Operations.....	20
3.1 General Description and Maps/Plans of Operation.....	20



3.1.1 Options	23
3.2 Resource and Products	24
3.2.1 Ore Reserves and Mineral Resources	24
3.2.2 Production Rate and Products.....	24
3.3 Exploration Activities.....	24
3.4 Quarrying Activities	25
3.4.1 Type or Types of Proposed Quarry Operations to be Carried Out.....	25
3.4.2 Sequence of Quarrying and Progressive Rehabilitation.....	26
3.4.3 Underground Workings	27
3.4.4 Material Movements.....	27
3.4.5 Stockpiles.....	27
3.4.6 Use of Explosives	28
3.4.7 Modes and Hours of Operation.....	28
3.5 Crushing, Processing and Product Transport	29
3.5.1 Fixed Plant	29
3.5.2 Hours of Operation	29
3.5.3 Processing Wastes	29
3.5.4 Industrial and Domestic Wastes	29
3.5.5 Rehabilitation Strategies and Timing	30
3.6 Supporting Surface Infrastructure	30
3.6.1 Access and Roads	30
3.6.2 Accommodation and Offices.....	30
3.6.3 Public Services and Utilities Used by the Operation.....	30
3.6.4 Visual Screening.....	31
3.6.5 Fuel and Chemical Storage	31
3.6.6 Site Security	32
3.6.7 Erosion, Sediment and Silt Control	32
3.7 Vegetation Clearance	32
3.8 Site Water Management.....	33
3.9 Description of Quarry Site at Completion.....	33
4.0 Description of Potential Benefits	34
4.1 Description of workforce and local procurement	34
4.1.1 Energy Sources	34
4.1.2 Water Sources.....	34
4.2 Economic.....	34
5.0 Consultation	36



6.0	Management of Environmental Impacts	38
6.1	Introduction to Environmental Risk Assessment	38
7.0	Assessment of Environmental Impacts	39
7.1	Surface Water (Erosion, Silt and Stormwater Management)	39
7.1.1	Context	39
7.1.2	Impact Assessment	39
7.1.3	Control and Management Strategies	40
7.1.4	Proposed Environmental Outcome and Measurement Criteria	41
7.2	Noise	42
7.2.1	Context	42
7.2.2	Impact Assessment	42
7.2.3	Control and Management Strategies	43
7.2.4	Proposed Environmental Outcome and Measurement Criteria	43
7.3	Dust	44
7.3.1	Context	44
7.3.2	Impact Assessment	44
7.3.3	Control and Management Strategies	47
7.3.4	Proposed Environmental Outcome and Measurement Criteria	48
7.4	Visual Amenity	49
7.4.1	Context	49
7.4.2	Impact Assessment	49
7.4.3	Control and Management Strategies	51
7.4.4	Proposed Environmental Outcome and Measurement Criteria	51
7.5	Native Vegetation and Habitat	52
7.5.1	Context	52
7.5.2	Impact Assessment	53
7.5.3	Control and Management Strategies	54
7.5.4	Proposed Environmental Outcome and Measurement Criteria	54
7.6	Weeds, Pests and Plant Pathogens	55
7.6.1	Context	55
7.6.2	Impact Assessment	55
7.6.3	Control and Management Strategies	56
7.6.4	Proposed Environmental Outcome and Measurement Criteria	57
7.7	Native Fauna	58
7.7.1	Context	58
7.7.2	Impact Assessment	59



7.8 Topsoil Management	59
7.8.1 Context	59
7.8.2 Impact Assessment	59
7.8.3 Control and Management Strategies	61
7.8.4 Proposed Environmental Outcome and Measurement Criteria	61
7.9 Waste Management	62
7.9.1 Context	62
7.9.2 Impact Assessment	62
7.9.3 Control and Management Strategies	64
7.9.4 Proposed Environmental Outcome and Measurement Criteria	64
7.10 Public Safety	65
7.10.1 Context	65
7.10.2 Impact Assessment	65
7.10.3 Control and Management Strategies	66
7.10.4 Proposed Environmental Outcome and Measurement Criteria	67
7.11 Traffic	68
7.11.1 Context	68
7.11.2 Impact Assessment	68
7.12 Heritage	69
7.12.1 Context	69
7.12.2 Impact Assessment	69
7.12.3 Control and Management Strategies	70
7.12.4 Proposed Environmental Outcome and Measurement Criteria	70
7.13 Protection of Third-party Property	71
7.13.1 Context	71
7.13.2 Impact Assessment	71
7.13.3 Control and Management Strategies	72
7.13.4 Proposed Environmental Outcome and Measurement Criteria	72
7.14 Blasting	73
7.14.1 Context	73
7.14.2 Impact Assessment	73
7.14.3 Control and Management Strategies	74
7.14.4 Proposed Environmental Outcome and Measurement Criteria	74
7.15 Groundwater	75
7.15.1 Context	75
7.15.2 Impact Assessment	75



7.15.3 Control and Management Strategies.....	76
7.15.4 Proposed Environmental Outcome and Measurement Criteria.....	76
8.0 Effective and efficient mining and outcome achievement statement.....	78
9.0 Operator capability and compliance history	79
10.0 Reference List	80

Tables

Table 1 Tenement Detail Summary	3
Table 2 Site Contact Details	3
Table 3 Earthquakes	8
Table 4 Local Groundwater Well Summary	10
Table 5 Nature Maps listed threatened species	12
Table 6: Land Title Details of the Site and Adjacent Owners	14
Table 7: Exempt Land Features	16
Table 8: State Registered Heritage Places	18
Table 9: SA Coastline Reserve Detail.....	18
Table 10: Site Reserves	24
Table 11: Historical Exploration Drilling	25
Table 12: Mobile Equipment.....	29
Table 13: SEB Offset Required for Clearance	32

Figures

Figure 1 Mean Rainfall Patterns	5
Figure 2 Maximum and Minimum Temperature Patterns	5
Figure 3 Topsoil along western boundary of ML 5881.....	7
Figure 4 SA Coastal Reserve	19
Figure 5 ANFO Storage	28
Figure 6 Electrical Substation.....	31

Drawings

*Note: All drawings listed below are found within **Appendix A**.*

Site Layout Map (MC Area)	(Drawing No. 1940.DRG.056R2)
Quarry Development Plan	(Drawing No. 1940.DRG.084AR1)
Conceptual Staged Quarry Development Plan	(Drawing No. 1940.DRG.095A)
Conceptual Combined Pit Shell	(Drawing No. 1940.DRG.082A)



Conceptual Combined Pit Shell Cross Sections A-A' to D-D'	(Drawing No. 1940.DRG.082B)
Site Location Map	(Drawing No. 1940.DRG.047)
Orthophoto and Topography Map	(Drawing No. 1940.DRG.077A)
Regional Geology Map	(Drawing No. 1940.DRG.045)
Geological Cross Section	(Drawing No. 1940.DRG.055)
Drillhole Location Map	(Drawing No. 1940.DRG.042)
Geohazards Map	(Drawing No. 1940.DRG.085)
Groundwater Map	(Drawing No. 1940.DRG.049)
Topographic Map	(Drawing No. 1940.DRG.046)
Transmission Pole Locations	(Drawing No. 1940.DRG.041)
Land Access Map	(Drawing No. 1940.DRG.051)
Exempt Land Map	(Drawing No. 1940.DRG.043BR3)
Visual Assessment Map	(Drawing No. 1940.DRG.050)
Southern Planting Schedule Map	(Drawing No. 1940.DRG.093)
Heritage Map	(Drawing No. 1940.DRG.086)
Groundwater Cross Section Plan	(Drawing No. 1940.DRG.088A)
Groundwater Cross Section Plan Sections A-A' to C-C'	(Drawing No. 1940.DRG.088B)
Quarry Development Sections A-A' to B-B'	(Drawing No. 1940.DRG.084B)
Conceptual Final Landform Plan	(Drawing No. 1940.DRG.083A)
Conceptual Final Landform Plan Sections A-A' to D-D'	(Drawing No. 1940.DRG.083B)
Stakeholder Engagement Map (Landowners)	(Drawing No. 1940.DRG.048)
Proximity to Infrastructure and Housing Map	(Drawing No. 1940.DRG.089)
Vegetation Clearance Map	(Drawing No. 1940.DRG.094)

Appendices

Appendix A	Drawings
Appendix B	Wind Frequency Analysis
Appendix C	Health Safety Environment Australia Pty Ltd Report
Appendix D	Groundwater Monitoring Summary Report
Appendix E	Native Vegetation Clearance Data Report
Appendix F	EPBC Act Protected Matters Search Report
Appendix G	Visual Assessment
Appendix H	DPC Aboriginal Heritage Response (Confidential – Provided Separately)
Appendix I	Community Engagement Plan
Appendix J	Applicable Legislation and Standards



Acronyms and Abbreviations

ABCL	Adelaide Brighton Cement Ltd
AGT	Australian Groundwater Technologies
AHD	Australian Height Datum
ANFO	Ammonium Nitrate Fuel Oil
AS	Australian Standard
BMP	Blast Management Plan
BoM	Bureau of Meteorology
CCAA	Cement, Concrete and Aggregates Australia
CEP	Community Engagement Plan
dB	Decibels
DEM	Department for Energy and Mining
DEW	Department of Environment and Water
DPC AAR	Department for Premier and Cabinet Aboriginal Affairs Register
EPA	Environment Protection Authority
EPBC	Environment Protection Biodiversity and Conservation (Act)
FEL	Front End Loader
g	Grams
GDA	Geocentric Datum of Australia
GDE	Groundwater Dependent Ecosystem
GST	Goods and Services Tax
H	Horizontal
ha	Hectares
HME	Heavy Mobile Equipment
HSE	Health, Safety and Environment
HSEA	Health Safety Environment Australia Pty Ltd
HWM	High Water Mark
ILUA	Indigenous Land Use Agreement
JORC	Joint Ore Reserves Committee
kL	Kilolitre
km	Kilometres
km ²	Square kilometres
kt	Kilotonnes
kV	Kilovolts
L	Litres
LGA	Local Government Authority



LWM	Low Water Mark
m	Metres
m ²	Square metres
m ³	Cubic metres
MC	Mineral Claim
mg	Milligrams
MIC	Maximum Instantaneous Charge
ML	Mineral Lease / Mining Lease / Megalitres
MLP	Mining Lease Proposal
mm	Millimetres
MNES	Matters of National Environmental Significance
Mt	Million Tonnes
NNAC	Narungga Nation Aboriginal Corporation
NoE	Notice of Entry
NP&W	National Parks & Wildlife (Act)
NVC	Native Vegetation Clearence
NVF	Native Vegetation Fund
OEM	Original Equipment Manufacturer
PEL	Petroleum Exploration Licence
PEPR	Program for Environment Protection and Rehabilitation
PSD	Particle Size Distribution
PWA	Prescribed Wells Area
PWRA	Prescribed Water Resource Area
QDP	Quarry Development Plan
RL	Relative Level
ROM	Run of Mine
RSWL	Relative Standing Water Level
s	Second
SA	South Australia
SAPN	South Australian Power Networks
SARIG	South Australian Resources Information Gateway
SEB	Significant Environmental Benefit
SWL	Standing Water level
t	Tonnes
TDS	Total Dissolved Solids
TMP	Traffic Management Plan
TOR	Terms of Reference



UAV	Unmanned Aerial Vehicle
UTM	Universal Transverse Mercator
V	Vertical / Volts
WAAP	Water Affecting Activity Permit
WOB	Wool Bay Land System
WoNS	Weeds of National Significance
XRF	X-Ray Fluorescence
%	Percent



Declaration of Accuracy

I, **Daniel Baillie**, the applicant, have taken reasonable steps to review the information and to ensure its accuracy.

Daniel Baillie

Name: Daniel Baillie

Position: Manager – Quarry Operations

Dated: 16 February 2026



1.0 Introduction

1.1 Background

SLR Consulting Australia (SLR) has been engaged by Adelaide Brighton Cement Ltd (ABCL) to provide the development of a Mining Lease Proposal (MLP) for the one (1) Tenement area covered under Mineral Claim (MC) 4581 (The Site).

ABCL operate the adjacent Klein Point Limestone extraction operation (the Quarry), located approximately four (4) kilometres (km) to the south west of the township of Stansbury, South Australia (SA). The Quarry consists of 35 Mineral Leases (ML) and is accessed via Rocky Waterhole Road and Hayward Road (off the St Vincent Highway), Wool Bay, SA.

The Quarry has been operated by ABCL since 1913 and has been an instrumental asset for the delivery of clinker and cement production throughout SA.

The Site is located approximately 100 km north west of Adelaide on the Yorke Peninsula and accessed via Klein Point Road, Klein Point, SA. MC 4581 was registered by ABCL on 13 November 2024 comprising an area size of 66.67 hectares (ha). **Drawing No. 1940.DRG.056R2 – Site Layout Map (MC Area)** is presented and provides visual representation of the Site boundary.

A MC was historically granted over the land in 1994, however, for reasons that are unclear it was allowed to lapse after a 12 month window. The land was reserved from mining under the *Mining (Reservation from Act) (Coastal Land) Proclamation, 1973*, however in 2024, a submission for the variation to the coastal reserve was submitted and approved.

The pegging of mining tenure over the Site has been proposed for the extraction of limestone resource that occurs within the region, which will extend the tenure to the south of ML 5881 (a lease within the Quarry) to support future reserves for the Quarry and availability to blend the limestone due to the chemistry imbalances.

Large quantities of limestone materials are consumed each year in SA for domestic and commercial construction activities as well as maintaining the State and Local Government road network.

In developing this MLP, a Quarry Development Plan (QDP) has been designed for the MC area which inform how the relevant extraction activities within the MC (Site) relate to the existing ML 5881 (Quarry). This MLP only relates to the area of land within MC 4581 and does not affect the existing adjacent operations which have been approved separately. The approach to the project included meeting with surrounding stakeholders in the first instance to gain an appreciation of the potential concerns that stakeholders may have. Stakeholder views and comments were then compiled, reviewed, and executed into the development of the QDP for the Site.

It is the intent of ABCL to develop one (1) Program for Environment Protection and Rehabilitation (PEPR) document if, and when the MC is transferred to a Mining Lease (ML). Therefore, one (1) PEPR to cover the current MLs and the Tenement of which this document supports. For transparency, the drawings within this document to relate to the MC Area, refer to **Drawing No. 1940.DRG.084AR1 – Quarry Development Plan**. A conceptual approach to the QDP staging has been adopted and shown in **Drawing No. 1940.DRG.095A – Conceptual Staged Quarry Development Plan** (further discussed in **Section 3.4**). Conceptual combination with the already approved MLs surrounding the MC area is demonstrated in **Drawing No. 1940.DRG.082A – Conceptual Combined Pit Shell** and **Drawing No. 1940.DRG.082B – Conceptual Combined Pit Shell Cross Sections A-A' to D-D'**.



This MLP has been compiled in accordance with the requirements of *Terms of Reference (TOR) 006 Mineral mine lease / licence applications* under Section 36 of the *Mining Act 1971*. In addition, *Mineral Regulatory Guidelines MG1 – Quarrying and Mining* developed by the Department for Energy and Mining (DEM) has also been relied upon in the development of this document.

Within the QDP for the Site, elevation and survey data is provided in Geocentric Datum of Australia (GDA) 94 under Universal Transverse Mercator (UTM) Zone 54. The Relative Level (RL) references throughout this document are to metres (m) Australian Height Datum (AHD), the vertical height or elevation above Mean Sea Level which forms the National Standard benchmark to which all height measurements are referred.

1.2 Site Overview

An overview of the tenement details are summarised in **Table 1**.

Table 1 Tenement Detail Summary

Tenement Number	MC 4581
Tenement Holder / Operator	Adelaide Brighton Cement Ltd
Registration Grant Date	13/11/2024
Expiry Date	12/11/2025
Commodities	Limestone
Legal Area (ha)	66.67
Commodity Categories	Industrial Minerals

(Source: South Australian Resources Information Gateway (SARIG), 2025)

1.3 Site Contact

Table 2 summarises the Site contact details.

Table 2 Site Contact Details

Contact Name / Position	Daniel Baillie – Manager Quarry Operations
Phone Number	0432 178 869
Postal Address	157 Grenfell Street, Adelaide, 5000
Email	Daniel.Baillie@adbri.com.au



2.0 Description of the Existing Environment

2.1 Topography and Landscape

The Yorke Peninsula in SA is comprised of agricultural, mining, commercial and tourism activities. The surrounding agricultural land is utilised predominantly for cropping purposes.

The Site is situated approximately four (4) km south west of the township of Stansbury, SA. **Drawing No. 1940.DRG.047 – Site Location Map** is presented as a visual representation to outline the Site's location in relation to the surrounding townships. Further information on demographics and utilities of the town is outlined in **Section 2.11**.

A search of the Department of Environment and Water (DEW) EnviroData, application NatureMaps (*NatureMaps*) (2025) found that the Site is located on the lower east coast of the Yorke Peninsula in the Wool Bay Land System (WOB) and described as being stony coastal plains with some depressions and some slight rises. The overall landscape within the region consists of high agricultural land with little native vegetation surrounding areas of the MC area.

Site topography as assessed by an Unmanned Aerial Vehicle (UAV) survey on 9 December 2024 is presented in **Drawing No. 1940.DRG.077A – Orthophoto and Topography Map**. Elevations within the Site range from approximately 26 mAHD along the north eastern boundary, dipping to elevations of approximately 13 mAHD on the western. The natural topography at the Site generally slopes in a south westerly direction across the Site.

2.2 Climate

Climate data has been sourced from the Bureau of Meteorology (BoM) Edithburgh station (No. 022046) represented as the closest weather station, located approximately 13 km to the South of the Site. The average rainfall annually is 372.1 millimetres (mm) based on the records obtained from the Edithburgh weather station (No. 022046). **Figure 1** shown below gives a graphically representation of rainfall recordings in the area.

The climate is described as Mediterranean with the majority of rainfall experienced between the months of May – September whilst the summer period is generally hot and dry with minimal rainfall experienced. The average monthly temperature varies, with warm summers and moderately cool winters, refer to **Figure 2**. Temperature data obtained from the Edithburgh weather station (No. 022046) are as low as 7.3 degrees Celsius in winter and extend to an average of 25.5 degrees Celsius in summer.

Wind direction can vary depending on the season and time of day; however, review of annual wind rose data from the Edithburgh weather station (No. 022046), recording a daily wind speed and direction, indicates that winds commonly occur from the north east or south east in the morning and south easterly wind in the afternoon, refer to **Appendix B**.



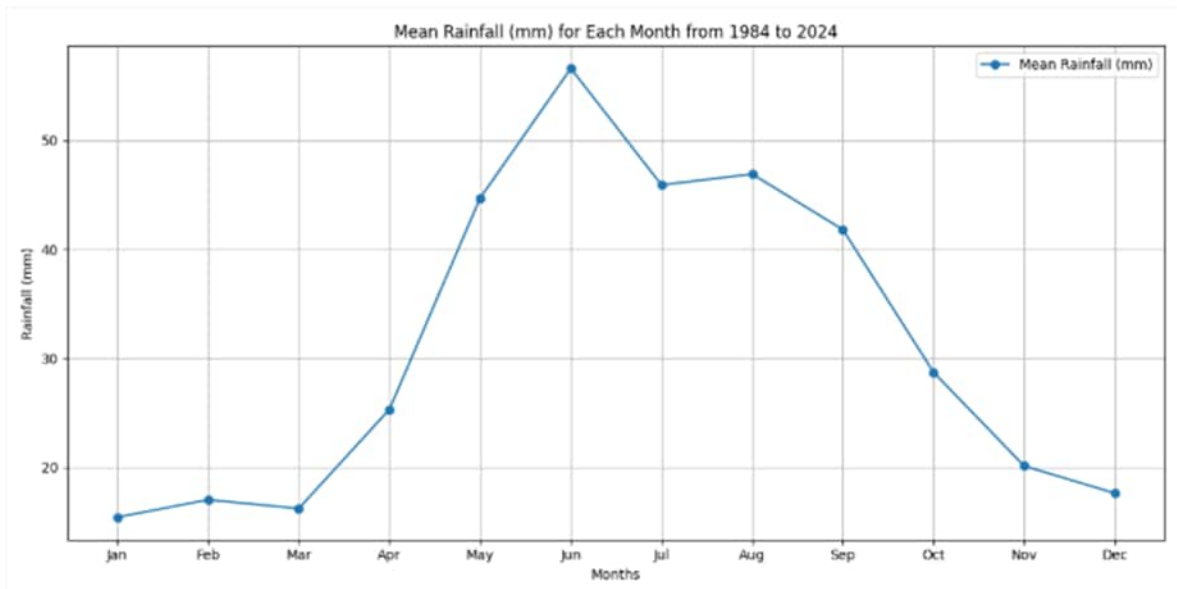


Figure 1 Mean Rainfall Patterns

(Source: BoM, 2025)

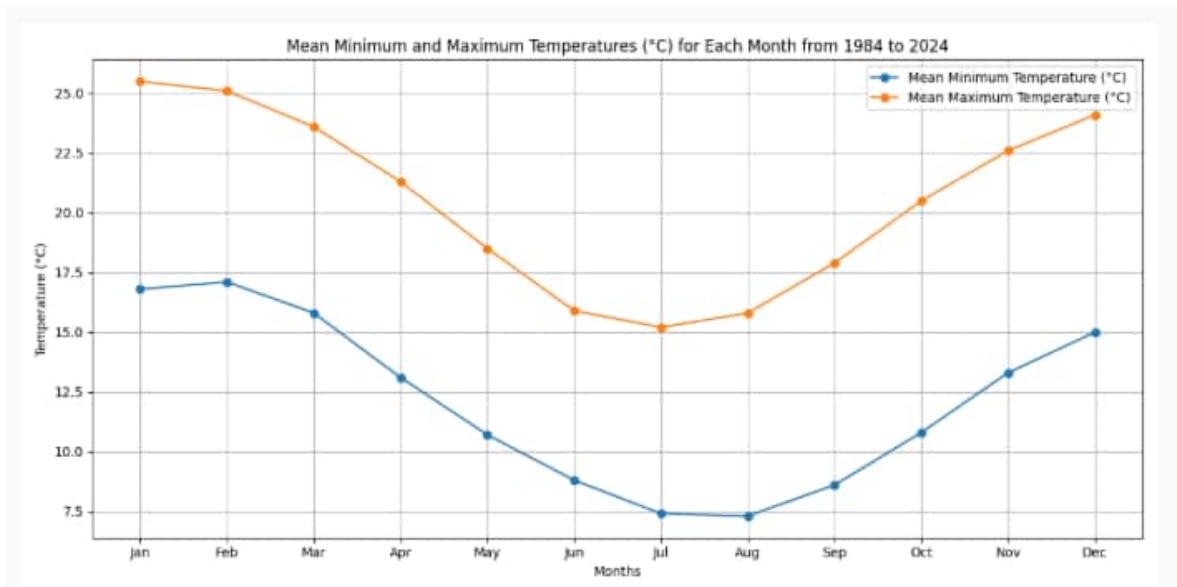


Figure 2 Maximum and Minimum Temperature Patterns

(Source: BoM, 2025)

2.3 Topsoil and Subsoil

A search of *NatureMaps* (2025) has identified the Site to be in the WOB. The main soil type typically comprises of a mixture of shallow calcareous loam on calcrete (B2 – B1) and shallow loam on calcrete (B3) soil profiles. Regions of the WOB tend to have raised salinity levels, low inherent fertility, and alkaline surface soils, in which conditions are chemically unfavourable for plant growth and interfere with many farming practices.



Typical soil characteristics of the soil profiles identified at the Site (WOB with soil types B1, B2 and B3) include low surface soil acidity, negligible sub-surface acidity, and no evidence of acid sulfate soil potential. Soils demonstrate a moderately low to low potential for wind erosion, and a low potential for water erosion, with no special management needed. There is a negligible risk of scalding, gully erosion, or mass movement. The water repellence of soil units is considered negligible, with a low waterlogging susceptibility (*NatureMaps, 2026*). There is a potential for sodic or dispersive soils to be present at the Site, and *NatureMaps (2026)* indicates the proportion of land potentially effected is up to 60 percent (%) at a depth of 50 – 100 mm. Effective controls are required to ensure that dispersive soils are not impacted when stored or placed during rehabilitation, refer **Section 7.6**.

Regionally across the MC area, the topsoil comprises of shallow grey to red brown soils of the aeolian origin with a depth from 0 to 0.12 m. The subsoil is fractured and strongly cemented calcrete with yellowish brown to light, very highly calcareous, sandy clay loam in fissures with a depth of 0.12 m to 1.02 m. The overburden consists of red and yellowish heavy clay to sandy clay with abundant carbonate and calcrete fragments with depth from 1.02 m to two (2) m (*The Soils of Southern South Australia, 2006*).

Topsoil is preserved from the very top layer of material extracted; the topsoil is stored in stockpiles no more than three (3) m high to preserve micro-organisms in the soil profile in readiness for rehabilitation. While the industry standard in quarries is to store topsoil stockpiles in rows no more than two (2) m high, the currently approved PEPR for the Quarry has a topsoil condition to ensure stockpile heights are no more than three (3) m high. the Quarry has a history of demonstrated success with the existing topsoil management strategies at the Quarry, refer to **Section 3.9**. Furthermore, if the MLP for MC 4581 is approved, it is the intention of ABCL to submit a combined PEPR encompassing all tenements (refer to **Section 1.1**). On this basis and to avoid the potential for conflicting conditions in a future, combined PEPR, it is proposed that stockpiles for topsoil are limited to three (3) m in height at the Site. This is reflected throughout this document with appropriate control strategies nominated to ensure this strategy remains effective at mitigating potential impacts, refer to **Section 7.6**.





Figure 3 Topsoil along western boundary of ML 5881

Regionally, the area is known for its increased cropping density usually determined by favourable rainfall and good topsoil and subsoil profiles refer to **Section 3.4.5.1**.

2.4 Geological Environment

2.4.1 Regional Geology

The Yorke Peninsula is situated within the Gawler Craton with a basement assemblage of Pre-Cambrian, coarsely crystalline rocks which are overlain by dominantly limestone rocks of the Cambrian Stansbury Basin. After a long period of deformation, erosion and glaciation, terrestrial and marine sediments were deposited in the St Vincent Basin during the Cenozoic.

During the Quaternary, repeated oscillations of sea level resulted in the development of stacked sequences of aeolianite of the Pleistocene Bridgewater Formation. During high sea levels, when the sea was near present levels, beach sand was swept landward to form dunes. During low sea levels, when the shoreline was up to 125 m lower than present, the dunes were flattened by erosion and soil processes formed calcrete layers on them. Repeated sea level oscillations thus developed the layer-cake arrangement of aeolianite separated by former soils.

Refer to **Drawing No. 1940.DRG.045 – Regional Geology Map** for a graphical depiction of the surface geology for MC 4581 and surrounds.

2.4.2 Site Geology

The region of the existing ML tenements consists of Miocene Port Willunga Formation (Tomw), which comprises calcarenite (cemented calcareous sands) with bryozoa,



glaucanite, silt and sand, which is overlain by the Bridgewater Formation (Qpcb), described as shallow sub-tidal sediments; bioclastic and aeolian cross-bedded calcarenite, aplaeosol horizons, often capped by calcrete (SARIG, 2025). These units extend into the area of the MC.

Refer to **Drawing No. 1940.DRG.055 – Geological Cross Section** which provides a representative cross section of the Site geology. **Drawing No. 1940.DRG.042 – Drillhole Location Map** outlines the drillhole test locations within and adjacent to the MC.

Contact between Tertiary calcarenites and underlying Permian glacio-marine clays is projected from a petroleum exploration well (Stansbury Town 1) approximately seven (7) km to the north of the Site.

2.5 Geohazards

The known minerals that occur in the material to be quarried, which have the potential to pollute the surrounding environment and / or are hazardous to human health include respirable silica. A respirable crystalline silica monitoring report was undertaken by Health Safety Environment Australia Pty Ltd (HSEA) in November 2022 specifically for ABCL at the Quarry and reported that under the conditions of monitoring, being typical of the exposures experienced by the workers while carrying out mining and crushing, the risk of exposure to respirable dust appears to be moderate and the risk of exposure to quartz appears to be low (HSEA, 2024), refer **Appendix C**.

A search of the SARIG (2025) returned results for three (3) historic seismic events that have occurred within eight (8) km of the Site, refer to **Drawing No. 1940.DRG.085 – Geohazards Map**. No recorded earthquakes have occurred within the MC area. **Table 3** shows the date and magnitude of the occurrences of seismic events in the area.

Table 3 Earthquakes

Magnitude	Date	Time	Longitude	Latitude	Depth (km)
2.2	06/06/1967	2141	137.8	-34.98	9.3
2.4	06/07/1989	1224	137.834	-35.001	7.6
0.8	30/08/2015	1153	137.824	-35.018	15.6

(Source: SARIG 2025)

There are no known minerals that occur in the material to be quarried including overburden that are hazardous to human health or the potential to pollute the environment such as respirable silica or sulphide minerals that may generate acid.

2.6 Groundwater

A search on *NatureMaps* (2025), identified that the Site is not located within a Prescribed Water Resource Area (PWRA) or a groundwater Prescribed Wells Area (PWA). Review of the BoM Groundwater Dependent Ecosystem (GDE) Atlas did not identify any aquatic GDE within or adjacent to the MC 4581 or existing ML Tenement areas. A field survey conducted by Australian Groundwater Technologies (AGT) in 2016 identified that the native vegetation located within three (3) km of the Quarry is native woodland rather than riparian vegetation reliant on groundwater discharge. The woodland species are deemed to rely on incidental rainfall rather than shallow groundwater. The nearest GDE is approximately six (6) km west at inland salt lakes. This distance is well outside the proposed quarry footprint and unlikely to be affected by current or future quarry activities (AGT, 2016). It should be noted that the Yorke Peninsula has been heavily cleared with the majority of native vegetation historically



cleared for cropping. The most extensive remnant vegetation is located within the Innes National Park, 90 km south west of the Quarry, refer to **Section 2.8.1**.

A search on the SARIG (2025) and the SA Government Application *Water Connect* (2025) (*WaterConnect*) identified 20 groundwater wells located within three (3) km radius of the Site as outlined within **Drawing No. 1940.DRG.049 – Groundwater Map**.

Groundwater depth within proximity to the Site ranges between -5.48 mAHD and +9.7 mAHD with Total Dissolved Solids (TDS) ranging between 1,655 and 10,545 milligrams per litre (mg/L) indicating a high degree of TDS variability. However, most wells appear to be within acceptable limits to support use for grazing and cropping. A summary of the groundwater well data in the area including Relative Standing Water Level (RSWL), distance from the Site and direction is provided within **Table 4**.

Regional groundwater quality data available based on spatial distribution of salinity observations indicates that the nearest groundwater wells data for salinity are approximately five (5) km south of the Site (SARIG, 2025). Groundwater salinity of the available well data, revealed that the highest groundwater salinities are commonly observed nearest to the coastal wells with a general salinity measurement of TDS of more than 10,000 mg/L. Groundwater salinity averaged a TDS value of 6,000 mg/L within the three (3) km radius of the Site, which most likely reflects the bicarbonate content of the limestone aquifer. These salinity levels are suitable for stock and industrial purposes and above the accepted irrigation quality threshold of 3,000 mg/L (AGT, 2016).



Table 4 Local Groundwater Well Summary

Well Unit No.	Distance to MC (km)	Direction to well	Well Status	RSWL (mAHD)	TDS (mg/L)	Well elevation (mAHD)	Standing Water Level (SWL) (m below ground)	Water Level Date
6428-0685	0.12	West	Abandoned	4.05	5273	22	17.9	15/08/1995
6428-0269	0.05	South	Operational	3.1	4119	18	14.9	15/08/1995
6468-0684	0.57	South west	Abandoned	-	6056	25	-	23/08/1995
6428-0686	0.61	North west	Backfilled	-	-	-	-	-
6428-0683	0.87	South west	Operational	-5.48	6826	25	30.48	17/07/1953
6428-0275	0.20	North east	Abandoned	-1.83	6370	26.82	28.65	25/04/1956
6428-0687	1.74	North west	Operational	-0.08	4326	-	30.08	23/08/1995
6428-0703	2.60	West	Operational	1.5	6099	30	28.5	15/08/1995
6428-0704	2.85	West	Operational	4.84	10545	28	23.16	27/11/1956
6428-0690	2.81	North	Operational	4.96	6291	22.7	17.76	17/08/1995
6428-0691	2.75	North	Operational	5.5	5843	20	14.5	21/08/1995
6428-0725	2.70	South west	Operational (stock)	-	6931	29.26	-	15/08/1995
6428-0726	2.6	South west	Not Located	-	7052	29.96	-	01/05/1944
6428-0738	1.65	South west	Operational	4.24	5896	28.01	23.77	17/07/1953
6428-0268	1.71	South	Operational	-	1655	23.99	-	-
6428-0688	2.28	North west	Operational	9.7	4676	30.00	20.29	23/08/1995
6428-0689	2.58	North west	Operational	-	3862	25.00	-	-
6428-0378	2.46	North	Operational	4.67	5896	30.00	25.33	18/08/1995
6428-0377	2.40	North east	Operational	-	5961	32.00	-	-
6428-0314	2.64	North east	Abandoned	-4.99	7290	20.00	24.99	25/04/1956

(WaterConnect 2025)



A report conducted by AGT in 2016 undertook a Groundwater Data Review and a Well Census to assess any potential risk to existing groundwater users and GDEs from quarrying activities, identified that there is very limited groundwater use in the region of interest, with only two (2) operational wells used for stock or domestic purposes (Well No. 6428-0690 and Well No. 6428-0269 – the ‘farmhouse well’ located south of the Quarry). Well No. 6428-0690 is low yielding and operates intermittently for stock watering, while the farmhouse well is rarely used due to its high salinity which is unsuitable for domestic or irrigation purposes.

As the closest accessible well to the MC area, Well No. 6428-690 was inspected during an inspection undertaken by SLR in September 2024. The data obtained from Well No. 6428-690 recorded a depth of 17.78 m below ground level. **Appendix D** shows the last five (5) years of groundwater monitoring events. The results from the inspections and discussions with adjacent landholders and quarry management indicated that there is limited use of groundwater locally, other than supplies for stock and domestic purposes.

Outlined within the current approved PEPR for the Quarry, the existing Quarry development is approved to a pit depth of 1.5 mAHD. The pit sump located in the Quarry is constructed to -2.0 mAHD with a water level surveyed at + 0.2 mAHD. Groundwater extraction volumes are estimated at 1.86 L / second (s) (58.8 Megalitres (ML) / year) for dust suppression uses.

Based upon the historical and current groundwater data (*Water Connect*, 2025), the continued proposed depth for the Site in accordance with the current approved depth of the Quarry pit extraction to 1.5 mAHD will remain above the groundwater elevation of 0.43 mAHD (AGT, 2016).

The absence of groundwater users and GDEs within proximity to the Site and the compliance of the existing quarry operation, demonstrate that the proposed Site operations are unlikely to affect the quality or quantity of groundwater available to existing groundwater users or GDEs.

2.7 Surface Water

A search of *NatureMaps* (2025) database for watercourses and waterbodies in the local area has confirmed an absence of water courses and waterbodies within and adjacent to the MC area. A further search on *NatureMaps* (2025), identified the Site is not within a PWRA. Therefore, under the *Landscape South Australia Act 2019*, a surface water licence or a Water Affecting Activities Permit (WAAP) is not required for this Site.

As outlined within **Section 2.2**, the MC is located within a low rainfall area of which there are only likely to be low volumes of surface water generated during rainfall events. Should there be sufficient rainfall, water would flow in the drainage depressions, which effectively channels surface water run-off into the low-lying areas of the Site. **Drawing No. 1940.DRG.046 – Topographic Map** is presented to outline the Site topography and the associated direction of surface water drainage within the Site.

A search on the SARIG (2025) confirmed that the Site does not fall within the Murray River Water Protection and Tributaries Zones.

2.8 Vegetation, Weeds and Plant Pathogens

2.8.1 Vegetation

A native vegetation assessment was conducted by SLR in June 2025 that assessed the presence of vegetation located within MC 4581, refer to **Appendix E**. This Site visit confirmed that the Site contains native vegetation as defined by the *Native Vegetation Act 1991*.



A total of one (1) vegetation association was identified across the Site:

- *Austrostipa* sp. grassland over introduced weeds.

The vegetation under application is isolated from any other remnant vegetation, with the majority of the vegetation occurring as isolated clumps on unproductive cropping sections of the Site. Historically planted revegetation is located adjacent to the Site, with a screening planting extending from the northwestern corner boundary of the Site, originally planted to screen the existing quarry operations to the north of the current MC. Roadside vegetation also runs along the western side of the Site, as well as a narrow strip of vegetation along the southern boundary.

An *Environment Protection Biodiversity and Conservation Act, 1999* (EPBC Act) protected matters search report listed nine (9) threatened fauna species and 13 threatened flora species. A search of *NatureMaps* (2025) reported no threatened fauna species and two (2) threatened flora species recorded within the preceding 20 years within a five (5) km radius of the Site. Of the two (2) threatened flora species identified within the desktop assessment, both were considered 'unlikely' to occur based on current known distributions, barriers to seed movement, habitat preferences (including soil types), and Site characteristics identified during the Site inspections. No threatened plant communities were recorded in the Site inspection. **Table 5** outlines the threatened species recorded within the Site area with a reference to the *National Parks & Wildlife Act, 1972* (NP&W Act), and the EPBC Act, if relevant.

Table 5 Nature Maps listed threatened species

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences
<i>Leptorhynchus elongatus</i> (Lanky Buttons)	E		2009	Grows in woodland or grassland, sometimes on the margins of swamps.
<i>Podolepis decipiens</i>	R		2006	Found in a wide range of non-arid habitats including near coastal, alpine, sub-alpine and plains country grasslands, woodlands and open forests.

2.8.2 Weeds, Pests and Plant Pathogens

No Weeds of National Significance (WoNS) are mapped as being present within the MC area. However, the below WoNS in accordance with *NatureMaps* (2025) have historically been identified within a radius of approximately five (5) km of the Site.

- African Boxthorn (*Lycium ferocissimum*)
- Horehound (*Marrubium vulgare*)
- Onion Weed (*Asphodelus fistulosus*)
- Common Heliotrope (*Heliotropium europaeum*)
- Wild Sage (*Salvia verbenaca* var.)
- Saffron Thistle (*Carthamus lanatus*)
- Black Nightshade (*Solanum nigrum*)
- Aleppo Pine (*Pinus halepensis*)



- Olive (wilding) (*Olea europaea*)
- African lovegrass (*Eragrostis curvula*)

An inspection of the Quarry as part of the annual compliance report was undertaken by SLR on 4 November 2024 to review the weed, pest and plant pathogens at the Quarry and determine if there was an introduction of new weed or pests (including feral animals) or an increased abundance of weeds, pests, or plant pathogens within the Quarry area. The Quarry inspection did not identify any introduction of new weeds or sustained increase in abundance of any adjoining landholdings, including the MC land. This is detailed within the annual compliance report for the Quarry.

There have been no incidents or reports to indicate that there has been an increase in pests on the Quarry.

An inspection of the Site in November 2024 confirmed that the weed species observed appear to be similar to the adjacent land and appear to be well managed within the Site with weed treatment campaigns undertaken as required. Further weed treatment campaigns will be incorporated into the treatment campaign of the existing Quarry.

A search of the *NatureMaps* (2025) confirmed *Phytophthora* is not present within the Site and immediate surrounds.

2.9 Fauna

The EPBC Act protected matters search report (2025) of the Site and immediate surrounds summarises the Matters of National Environmental Significance (MNES) (fauna) that may occur within five (5) km of the Site, refer **Appendix F**.

The EPBC Act protected matters search report (2025) identified 45 Listed Threatened Species; 38 bird species, two (2) mammal species, two (2) reptile species, one (1) fish species, one (1) shark species and 45 Listed Migratory Species; 15 migratory marine bird species, 8 Migratory Marine Species (Whales and Other Cetaceans), two (2) Migratory Terrestrial Species, 15 Migratory Wetlands Species, refer **Appendix F**.

A search of *NatureMaps* (2025) identified 18 native fauna species that may be present within a five (5) km radius in which none were state or nationally rated as species of national environmental significance.

A search of *NatureMaps* (2025) identified three (3) Invasive Species (birds) and two (2) Invasive Species (mammals) potentially present in the area, of which the following are typical of disturbed areas including house mice (*Mus musculus*) and the European brown hare (*Lepus europaeus*).

A Site inspection conducted in November 2024 confirmed no listed native fauna species were identified within the Site at the time of inspection. It is unlikely that any of these species would use this Site as a refuge due to the high level of historical disturbance and lack of habitat for foraging, feeding or related behaviour. Some birds may utilise the Site as transient visitors only. It would be expected that kangaroos, foxes, and rabbits may traverse the Site when foraging for food.

Due to the agricultural nature of the area and the historical clearing that has taken place within the Site, there is no significant habitat for wildlife. The adjacent area is lacking any significant adjoining habitat that might allow for some continuity or connectedness for wildlife movement.



2.10 Caves

A search of the SARIG (2025) did not identify any caves or significant limestone formations within proximity to the Site.

2.11 Local Community

The Site is located within the Yorke Peninsula Council Local Government Area (LGA), which has a total LGA footprint of 5,899 square km (km²), and a population of approximately 11,600 people. The LGA incorporates 12 townships and 33 settlements with the main townships being Kadina, Moonta, Wallaroo, Maitland, Minlaton, Yorketown and Ardrossan.

The Site is located in the southern east coast of the Yorke Peninsula, which is a major economic area for agriculture and tourism. The township of Stansbury is located approximately four (4) km north east of the MC area. According to the Australian Bureau of Statistics 2021 Census, there are approximately 603 inhabitants living in Stansbury and the immediate surrounds, comprising of 50 % male, 50 % female and 9 % Aboriginal and / or Torres Strait Islander people (Australian Bureau of Statistics, 2022). The township has amenities, such as a primary school, a post office and grocery stores.

2.12 Land Use

The Site is located within an agricultural cropping region in the Yorke Peninsula Council. The MC is located within a Resource Extraction Zone, which is defined as the provision and protection of land for the extraction, production, or processing of a mineral, extractive or petroleum resource (Plan SA, 2025). The Site is not within the interest of defence purposes. A Petroleum Exploration Licence (PEL) is held over the land by Gold Hydrogen Limited, with expiry dated 21 July 2026. A Notice of Entry (NoE) has been provided to Gold Hydrogen along with an agreement to waive the 42 Day Notice Period under the *Mining Act 1971* and will be submitted with this MLP.

The Site is located nearby to the Flinders Ports boundary, and ABCL utilise the Klein Point Port to transport the product to Adelaide.

SA Power Networks (SAPN) overhead distribution lines are located along the northern boundary of MC 4581 with the lines running from Hayward Park Road to the substation located in between ML 5881 and ML 4013, refer to **Drawing No. 1940.DRG.041 – Transmission Pole Locations**.

Historically, it is understood the land was utilised for the primary uses of grazing and farming. A substantial amount of extracted area has been returned to farming uses (cropping), and it is intended for the Site to be progressively returned to farming once areas of extraction activity have been exhausted of resource.

The land parcels relevant to the Site, and the adjacent land parcels are detailed in **Table 6** below.

Table 6: Land Title Details of the Site and Adjacent Owners

Land Parcel	Direction from Site	Owner
CT 5833 / 574 H 130500 SE4	Onsite	Adelaide Brighton Cement Ltd
CT 6215 / 582 D117405 Q103	Adjacent north	Adelaide Brighton Cement Ltd
CT 5231 / 176 H130500 SE13	Adjacent north west	Ian David Hoile and Veronica Jane Hoile
CT 5489 / 798 H130500 SE3	Adjacent west	Roennfeldt Nominees Pty. Ltd.



Land Parcel	Direction from Site	Owner
CT 5489 / 150 H130500 SE2	Adjacent south west	Roennfeldt Nominees Pty. Ltd.
CT 5834 / 177 H130500 SE1	Adjacent south	Robert George Roennfeldt and Merawyn Ruth Roennfeldt

Copies of Certificates of Title can be provided upon request.

2.13 Proximity to Infrastructure and Housing

The nearest residential dwelling is situated approximately 300 m south of the MC 4581 boundary. Another residence is located approximately 1.7 km to the north west of the MC 4581 boundary, refer to **Drawing No. 1940.DRG.051 – Land Access Map**.

A major State Road, the St. Vincent Highway, is located approximately one (1) km west of MC 4581. A local road, Hayward Park Road, runs along the western boundary of MC 4581. Another local road, Klein Point Road runs along the eastern boundaries of a number of Tenements relating to the Quarry (ML 3358, ML 2912, ML 3028, ML 3029, ML 3353, ML 3352, ML 4014, ML 4015, ML 3351, ML 3350 and ML 3349).

The Site access point is located on Klein Point Road, three (3) km north west from the Site at the Quarry. The access point consists of a boom gate with remote control by Site management to increase the security of the Site.

Material transport will occur within internal access tracks and haul roads through to the Quarry where processed material is transported via conveyor to the limestone cargo vessel or to the storage bin. The ship transports approximately 7,400 tonnes (t) of material daily from the Quarry across the Gulf of St Vincent to the dock at Birkenhead for cement manufacture. At times, road freight may be required for distribution of product.

The Site will operate on a continuous basis Monday to Sunday in alignment with the Quarry.

SAPN overhead distribution lines are located along the northern boundary of MC 4581 with the lines running from Hayward Park Road to the substation located in between ML 5881 and ML 4013. ABCL are currently in negotiations with SAPN regarding the relocation of the substation and removal or lifting of the powerline height to allow for mining activities to be undertaken within a safe separation distance to the overhead transmission lines, refer to **Drawing No. 1940.DRG.041 – Transmission Pole Locations** and **Section 5.0**.

There are no water mains running to or through the Site. Mains Water that is available from a line that is located from Wool Bay to the Quarry. Groundwater will be used for dust suppression by use of a watercart and sourced from the Quarry.

There are a number of groundwater wells located within close proximity to the Site, with the closest located approximately 40 m from the southern boundary of MC 4581, refer to **Section 2.6**.

2.14 Exempt Land

Exempt Land as defined under Section 9 of the *Mining Act 1971* exists within MC 4581 as shown in **Drawing No. 1940.DRG.043BR3 – Exempt Land Map**. Details of exempt land within the Site are outlined in **Table 7**.



Table 7: Exempt Land Features

Name of person entitled to exemption	Certificate of Title (CT) or Crown Land details	Reason for exemption	Waiver obtained	Conditions
ABCL (ACN: 007 870 199)	CT 6215/582 D117405 Q103	Infrastructure valued over \$2,500 within 150 m of Site Powerlines	Yes via Section 82 Deemed Consent Agreement	Nil
ABCL (ACN: 007 870 199)	CT 5833/574 H130500 S4	Infrastructure valued over \$2,500 within 150 m of Site Powerlines Land that is used as a cultivated field.	Yes via Section 82 Deemed Consent Agreement	Nil
Robert and Merawyn Roenfeldt	CT 5834/177 H130500 S1	Infrastructure valued over \$2,500 within 150 m of Site Water Well Land that is within 400 m of a building or structure used as a place of residence	Issued	Tree screening to be progressively planted over five (5) years in accordance with Drawing No. 1940.DRG.0 93 – Southern Planting Schedule Map , similar to existing tree screen on the western boundary.
Holland Park Nominees Pty Ltd. (ACN:008 151 237)	CT 5231/176 H1300500 S13	Infrastructure valued over \$2,500 within 150 m of Site Powerlines	No. Not required if powerlines are to be removed / relocated prior to extraction within 150 m of pit shell	Not applicable

The Site is also subject to two (2) Indigenous Land Use Agreements (ILUA) (Tribunal Number SI2003/004 registered 6 October 2005 and Tribunal Number SI2023/001 registered 17 November 2023), as agreements between the Narungga Local Government, Narungga Nation Aboriginal Corporation (NNAC) and the State of SA.

All WoE agreements listed above, and the Section 82 Deemed Consent Agreements have been lodged with DEM in support of this application, or will be lodged with DEM prior to extraction being undertaken within the Exempt Land.



2.15 Amenity

The Site is situated in an open paddock amongst agricultural cropped lands, which is visible from Hayward Park Road and St Vincent Highway. The land has been historically cleared of native vegetation for cropping purposes. The Site can be seen mostly from multiple viewpoints on Hayward Park Road. A visual amenity assessment was undertaken by SLR in November 2024. **Appendix F** when viewed with **Drawing No. 1940.DRG.050 – Visual Assessment Map** provides an overview of the extent of the Site that is visible from four (4) representative locations nearby. The visual amenity assessment indicated that the topography of the Site undulates from the north to the south east. Whilst views are realised of the majority of the Site from these locations the extent and degree of the views will vary depending upon the location of the operations within the Site, of which the south eastern portion of the Site remain out of sight due to the shielding by the natural topography.

A tree screen will be progressively planted and maintained, around the western and southern boundaries of the MC area, similar to the existing screen on the western boundary as per **Drawing No. 1940.DRG.093 – Southern Planting Schedule Map** and **Drawing No. 1940.DRG.084AR1 – Quarry Development Plan** as an outcome of consultation, refer to **Section 5.0**.

2.16 Air Quality

The Site is located within a large, rural setting which is used predominantly for agricultural purposes. Dust levels of the surrounding region are anticipated to be typical of a semi-arid and agricultural setting. The potential for generation of dust emissions is generally elevated during drier periods. During certain sowing and reaping cycles of agricultural cropping, dust will be created in the surrounds of MC area from agricultural machinery used on the dry soils.

Potential dust generating activities from operations are associated with material extraction, transport and transfer of material, crushing and screening, and stockpiling of material.

To assist in controlling dust emissions, the Site will utilise a water truck to dampen down hardstand and exposed areas to control potential dust emissions. Minimal dust is expected to travel in a westerly direction, as identified within **Appendix B**.

A respirable dust and respirable crystalline silica monitoring report undertaken by HSEA in November 2022 regarding operations at the Quarry reported that under the typical conditions experienced whilst undertaking extractive and crushing operations, the risk of exposure to respirable dust is moderate and the risk of exposure to quartz is low (HSEA, 2022), refer to **Appendix C**.

The Quarry won a “Highly Commended” award at the *2015 Cement, Concrete & Aggregates Australia (CCAA) Environment, Health & Safety Awards* regarding Health and Safety Innovation for the submission of the Site Dust Suppression System at the crushing plant area. The award commended the business on consulting with staff onsite (Health, Safety and Environment (HSE) Committee) in assigning a Foam Dust Suppression System that innovatively reduced overall dust impact on the surrounding environment and human health.

2.17 Noise

Noise levels in the region are generally typical of an agricultural setting. Sowing and reaping cycles related to agricultural cropping may result in increased noise emissions from the surrounding area. Traffic noise emitted from vehicles travelling along the Hayward Park Road and machinery associated with agricultural practices are typical anthropogenic noise sources in the surrounding area.



Potential noise generating activities onsite during operational activities include earthworks, drilling, blasting, Heavy Mobile Equipment (HME) movements, processing and crushing.

Historically, the Site has experienced minimal complaints in relation to noise.

2.18 Heritage (Aboriginal, European, Geological)

A search undertaken by the Department of Premier and Cabinet Aboriginal Affairs and Reconciliation (DPC AAR) of the Central Archive indicates that there are no known Aboriginal Sites of Significance within five (5) km of the Site, refer to **Appendix H**.

A search on the SARIG (2025), indicated that there are no geological heritage locations within close proximity to the Site.

A search of the SA Heritage Places Database returned 19 records within the Yorke Peninsula Council district. Two (2) registered State Heritage Places are located approximately three (3) km from Site, as shown in **Drawing 1940.DRG.086 – Heritage Map**, refer to **Table 8**.

The Site is also subject to two (2) ILUAs (Tribunal Number SI2003/004 registered 6 October 2005 and Tribunal Number SI2023/001 registered 17 November 2023), as agreements between the NNAC and the State of SA.

Table 8: State Registered Heritage Places

Heritage Place	Register ID number	Location	Details
The Lime Kiln	16680	3.2 km north on the Stansbury-Yorketown Road	A designated place of archaeological significance. Confirmed as a State Heritage Place.
Lime Kiln and Jetty	10112	2.8 km south east on The Esplanade Wool Bay	Confirmed as a State Heritage Place

2.19 Proximity to Conservation Areas

A search on the SARIG (2025), identified an SA Coastal Reserve and area of approximately 350 km², gazetted in 1973, refer to **Table 9** and **Figure 4**. The SA Coastal Reserve protects the coastline from mining through the reservation of land from the Low Water Mark (LWM) to the High Water mark (HWM), and from the HWM to 800 m inland from mining. A proclamation to vary the SA Coastal Reserve to allow mining within MC 4581 was issued in 2024, refer **Section 1.1**. The Site does not fall within the Adelaide Dolphin Sanctuary, the Adelaide International Bird Sanctuary, or a Marine Park.

Table 9: SA Coastline Reserve Detail

Location	Gazettal Date	Page	Area (km ²)	File Reference	Reason	Comments
SA Coastal Reserve	19/04/1973	1777	349.907774	196/68	To protect coastline from mining	Reserved from LWM to HWM and from HWM to 800 m inland



3.0 Description of the Proposed Mining Operations

3.1 General Description and Maps/Plans of Operation

The extraction process is proposed to be consistent with the processes undertaken at the Quarry, being typical open cut extraction methods involving drilling and blasting techniques. Nonel initiation blasting systems are used with the application of initiating Ammonium Nitrate Fuel Oil (ANFO) that is licensed to be stored onsite at the Quarry.

Topsoil is preserved from the very top layer of material extracted; the topsoil is stored in stockpiles no more than three (3) m high to preserve micro-organisms in the soil profile in readiness for rehabilitation.

In some areas of the Site, material will be able to be pushed with a bulldozer without the requirement of drilling and blasting. Limestone is then loaded onto rigid dump trucks using a Front End Loader (FEL) and hauled to the crushing and processing facility. Dump trucks then tip either directly into the primary crusher or place material on one (1) of two (2) Run of Mine (ROM) stockpiles for crushing at a later date.

Processed material is transported via conveyor to the storage bin for loading onto the limestone cargo vessel, which transports approximately 7,400 t of material daily from Klein Point to the dock at Birkenhead for cement manufacture.

Rehabilitation has successfully returned previously disturbed areas back to commercial farmland where cropping is undertaken. The Yorke Peninsula as a whole is a highly sought-after farming community with a large proportion of the Peninsula broad acre farmed for wheat, barley and associated products. A portion of overburden, or unusable chemical grade ore is placed on the floor at a thickness of approximately one (1) to two (2) m and covered with topsoil (stored onsite).

To support the development of this MLP, a series of maps and plans have been provided, including the below, which can be found within **Appendix A**:

Drawing No. 1940.DRG.047 – Site Location Map

- MC Area
- Surrounding Tenements
- Highlighting the Site location in relation to nearby townships of Stansbury and Wool Bay.

Drawing No. 1940.DRG.056R2 – Site Layout Map (MC Area)

- MC area and cadastral boundaries
- ML boundaries
- Stockpile locations
- Potential sump location
- Haul road location
- Site entry and exit points

Drawing No. 1940.DRG.046 – Topographic Map

- MC area
- Cadastral boundaries
- ML boundaries
- Five (5) and one (1) m contours
- Drainage Direction

Drawing No. 1940.DRG.045 – Regional Geology Map



- MC area
- ML boundaries
- Regional Geology Units

Drawing No. 1940.DRG.055 – Geological Cross Section

- MC area
- ML boundaries
- Geological Cross Section

Drawing No. 1940.DRG.049 – Groundwater Map

- MC area
- ML boundaries
- Cadastral boundaries
- Water Wells (publicly available)
- Waterbodies

Drawing No. 1940.DRG.088A – Groundwater Cross Section Plan

- MC area
- Cadastral boundaries
- Groundwater cross section locations

Drawing No. 1940.DRG.088B – Groundwater Cross Section Plan Sections A-A' to C-C'

- Existing topography
- Groundwater level

Drawing No. 1940.DRG.051 – Land Access Map

- MC area
- ML boundaries
- Residences
- Site entry and exit
- Power transmission line
- Power substation
- Site access route
- Proximity to Conservation areas

Drawing No. 1940.DRG.043BR3 – Exempt Land Map

- MC area
- ML boundaries
- Cadastral boundaries
- Exempt land identification
- Buffer planting areas / tree screen

Drawing No. 1940.DRG.050 – Visual Assessment Map

- Visual Assessment Photo Point Location
- Direction of Photo
- ML boundaries
- MC area

Drawing No. 1940.DRG.084AR1 – Quarry Development Plan

- MC area



- ML boundaries
- Cadastral boundaries
- Conceptual pit within MC, adjoining with the Quarry pit.
- Tree screen
- Offset buffer from MC boundary
- Cross section locations

Drawing No. 1940.DRG.084B – Quarry Development Sections A-A to B-B

- Pit design surface
- Existing Ground Surface
- Groundwater level

Drawing No. 1940.DRG.095A – Conceptual Staged Quarry Development Plan

- MC Boundary
- ML boundaries
- Pit design surface
- Conceptual staged quarry development depiction
- Bench heights and batter angles
- Tree screen

Drawing No. 1940.DRG.082A – Conceptual Combined Pit Shell

- MC boundary
- ML boundaries
- Cadastral boundaries
- Existing extraction boundary within MLs
- Conceptual pit design within MC 4581
- Combined conceptual pit shell
- Cross section locations

Drawing No. 1940.DRG.082B – Conceptual Combined Pit Shell Cross Sections A-A to D-D

- Pit design surface
- Existing Ground Surface

Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan

- MC area
- ML boundaries
- Cadastral boundaries
- Rehabilitated Landform
- Rehabilitated Contours
- Direction of Batter

Drawing No. 1940.DRG.083B – Conceptual Final Landform Plan Sections A-A' to D-D'

- Existing ground surface
- Conceptual Rehabilitation Surface

Drawing No. 1940.DRG.048 – Stakeholder Engagement Map (Landowners)

- MC area
- ML boundaries
- Cadastral boundaries



- Adjacent landowners

Drawing No.1940.DRG.041 – Transmission Pole Locations

- Cadastral boundary
- ML boundaries
- Transmission Pole locations
- Substation Boundary

Drawing No.1940.DRG.086 – Heritage Map

- MC Area
- Mining Lease Tenements
- SA Registered Heritage places

Drawing No. 1940.DRG.089 – Proximity to Infrastructure and Housing Map

- MC area
- ML boundaries
- Cadastral boundaries
- One (1) and two (2) km buffers
- Native vegetation within MC
- Flinders Port location and boundary
- Waterbodies
- Water wells
- Residences
- Power substation
- Power transmission lines

3.1.1 Options

In support of the ongoing operations at the Quarry, additional resource has been identified within the MC area that hosts high grade limestone, essential to continued cement production at ABCLs Birkenhead plant. This cement production is essential to the State's development. A MC was historically granted over the land in 1994, however, was allowed to lapse after a 12 month window. ABCL have now acquired the land and seek to combine the MC and subsequent ML post approval with the Quarry. The extension of the existing extraction area will be supported by the existing infrastructure at the Quarry. This will allow for effective and efficient extraction and rehabilitation through the establishment of a continuous and cohesive final landform post-quarrying.

The Site is required to support future longevity of reserves for the Quarry by providing the availability to blend the limestone due to the higher-grade chemistry that is known to be available on the 'southern leases' of the Quarry. The proposed Site area hosts high grade limestone that has the availability to be blended with lower grade chemical limestone to increase the resource life of the Site.

As outlined above and in **Section 1.1**, the QDP provided is of a single stage, as it is intended to combine the Site development with the Quarry upon ML approval. For further context, a conceptual depiction of quarry development is outlined within **Section 3.4.2** and is shown in **Drawing No. 1940.DRG.095A – Conceptual Staged Quarry Development Plan**. This plan is conceptual in nature and is subject to change, should the ML be approved and a combined PEPR be progressed for the Quarry and the Site. Upon approval, the Quarry staging will undergo a review and be incorporated into a subsequent PEPR for the whole of Site.



3.2 Resource and Products

3.2.1 Ore Reserves and Mineral Resources

The material proposed to be recovered from the Site is limestone. Chemical grade analysis of exploratory drilling has been undertaken, refer **Drawing No. 1940.DRG.042 – Drillhole Location Map**. The data has been analysed using X-Ray Fluorescence (XRF) technology to determine quality of the minerals. The data has then been compiled and developed into a block model for the Site. The block model has used spacings of blocks in 25 m sequences. Statistical validation was also undertaken to increase the validity of the block model.

The combination of drilling data and orthorectified survey has provided an accurate estimation of the resource. The resource is classified as “Indicated” at this stage until an approval is granted of which then it can be transferred to “Measured” or “Proven” under the Joint Ore Reserves Committee (JORC) framework.

The chemical analysis of the insitu rock including visual inspection of pit working faces and blastholes will determine if the material requires further blending prior to being entered into the crushing facility. ABCL are working on an overall block model for the entire Site (and Quarry) including the new MC area. Blending by face selection or at the crusher (by FEL) is undertaken to ensure limestone product meets the desired specification for the Birkenhead cement plant.

Reserves have been calculated using a nominal product density of 1.6 t / cubic metre (m³), as provided by ABCL.

The Site reserves within **Table 10** have been calculated for extraction of MC 4581, providing an estimate of the volume of material available. Estimated reserves for all stages of quarry development will be included within the updated PEPR, following the approval of this MLP. Based on the expected annual extraction of two (2) million tonnes (Mt) (consistent with the current production at the Quarry), the Site contains approximately an additional 8 years of reserves at the Site to support the cement manufacturing business.

Table 10: Site Reserves

QDP Stage	Stage Extraction Volume (m ³)	Material Density (t/m ³)	Total (t)
MC 4581	10,035,379	1.6	16,056,606

3.2.2 Production Rate and Products

The expected yields of extraction are approximately two (2) Mt of limestone annually (consistent with the current production at the Quarry), dependant on market demand. The limestone is transported via ship into Port Adelaide where the ABCL manufacturing plant is located with a dedicated unloading berth present.

Limestone is the only commodity that is sourced and distributed at the Site, the limestone is used in the cement manufacturing process hence classified as an industrial mineral.

3.3 Exploration Activities

Significant historic exploration drilling has been undertaken within the Site and the Quarry. In 1995, a total of 10 drillholes were drilled on the Site, in addition to five (5) drillholes to the south of the Site. All drillholes outlined in **Drawing No. 1940.DRG.042 – Drillhole Location Map** have informed the chemistry analysis and modelling for the Site to gain an appreciation



for blending requirements moving forward. **Table 11** gives an overview of the activities undertaken, the number of holes drilled per section of the total resource.

Table 11: Historical Exploration Drilling

Year	Company	Hole ID	Holes	Section	Method
1935	Adelaide Cement	1 to 11	11	398	D
1947	Adelaide Cement	1 to 6	6	8	D
1962	Adelaide Cement	1 to 93	93	7,8,9	D
1962	BHP	1 to 5	5	4,5	D
1972	ABCL	D94 to 96	3	4	D
	MESA	6428/270 to 1	2	4	D
1981	ABCL	RAB108 to 131	24	7,10,11,92,93,94	D
1991	ABCL	1 to 32	32	5,6,7	RC
1993	ABCL	33 to 52	20	5,7	RC
1995	ABCL	53 to 75	23	4	RC
1999	ABCL	76 to 99	24	9	RC
		TOTAL	243		

3.4 Quarrying Activities

3.4.1 Type or Types of Proposed Quarry Operations to be Carried Out

The quarrying method onsite will consist of traditional open cut quarrying techniques comprised of progressive quarrying followed by rehabilitation. Topsoil will be removed and stockpiled in windrows adjacent to the extraction area prior to extracting sand and limestone. Where and when achievable, the resource will be extracted with the use of a bulldozer (D11 or equivalent) or excavator. If the rock becomes too hard to rip and push, then conventional drill and blasting will be undertaken to dislodge and reduce the insitu rock size mass to a manageable Particle Size Distribution (PSD). Extracted material will then be transported to the crusher which is located within the Quarry for manufacturing into the required sizing and shape, screened and stockpiled. Allowance has been made for a mobile crusher to be present on the Site to crush material if required, however it is envisaged that rock will be crushed exclusively with the existing plant at the Quarry. Progressive rehabilitation will follow the path of quarrying, enabling the Site to progressively be returned to the existing agricultural land use as outlined in **Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan**.

Extraction activities are proposed to be undertaken and will progress south from ML 5881 to MC 4581, refer to **Drawing No. 1940.DRG.082A – Conceptual Combined Pit Shell**. The current QDP for the Site is a single stage concept and the full Site QDPs will be incorporated into the combined PEPR for the Quarry upon approval of the MLP. For further context, a conceptual depiction of quarry development is outlined within **Section 3.4.2** and is shown in **Drawing No. 1940.DRG.095A – Conceptual Staged Quarry Development Plan**. This plan is conceptual in nature and is subject to change, should the ML be approved and a combined PEPR be progressed for the Quarry and the Site. Extraction and crushing will occur on a continuous basis within the Quarry, with a maximum pit floor depth of RL 1.5 mAHD, consistent with the Quarry pit floor requirements.



3.4.2 Sequence of Quarrying and Progressive Rehabilitation

3.4.2.1 Quarry Development Plan

Extraction will continue from the previously extracted area progressively working from an east to west direction. For further context, a conceptual staged QDP is presented in **Drawing No. 1940.DRG.095A – Conceptual Staged Quarry Development Plan**. While this plan is subject to change, it provides an indication of how staged quarrying followed by progressive rehabilitation will occur on the Site, as it has with the historic and recent operations at the Quarry. Staged sections have been provided within the attached drawing. The extraction is proposed to begin from the east and traffic toward the west of the Site, for ease in understanding the plan, spatially this has been added onto the QDP for the Site.

Topsoil stripping will occur, followed by extraction, active rehabilitation, and finally rehabilitation maintenance. Quarrying will occur initially in a north to south direction for concept stage 1, followed by extraction progressively east – west for concept stages 2 and 3.

Quarrying will occur to a terminal depth of RL 1.5 mAHD, which will allow for progressive rehabilitation to occur. The milestone for rehabilitation in each section will be the extraction to terminal depth of the next section, and rehabilitation will occur as soon as operations allow. This is also in support of the outcomes of stakeholder engagement, refer to **Section 5.0**.

There is a 30 m offset buffer (22 m for a tree screen plus eight (8) m for a light vehicle Access Road) from Hayward Park Road on the western boundary of the MC. This commitment is in alignment with recent stakeholder engagement with the landowners to the south of the MC area. One (1) bench will be made along the western and southern sides at RL 11 mAHD and then a terminal face will be established with one (1) V : three (3) H batter to the proposed pit floor of RL 1.5 mAHD. The finished level of the pit floor would provide a buffer of approximately one (1) m between the Site operation and groundwater levels, refer **Drawing No. 1940.DRG.088A – Groundwater Cross Section Plan** and **Drawing No. 1940.DRG.088B – Groundwater Cross Section Plan Sections A-A' to C-C'**. The overall pit extent within MC 4581 will cover a pit shell area of approximately 1,000 m east – west, and 650 m north – south, refer to **Drawing No. 1940.DRG.084AR1 – Quarry Development Plan** and **Drawing No. 1940.DRG.084B – Quarry Development Sections A-A' to B-B'**.

Staged QDPs will be further reviewed and developed for the combined Site and Quarry and provided in an updated and combined PEPR following the MLP approval.

3.4.2.2 Rehabilitation Plan

The Site will operate in accordance with the current operations in adjacent MLs. Stockpiles will be stored in the pit floor and used for progressive rehabilitation. Additionally, farming land will occur on the pit floor as the quarry development continues to progress south.

Once an area of land has been extracted to a depth of RL 1.5 mAHD in accordance with **Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan** and it is no longer required for operational use, the area will be progressively rehabilitated. The base of the quarry will be ripped with a tyned loader or excavator if required, in consultation with the sharefarmer. Topsoil will be spread using a dozer or loader to a depth sufficient for rehabilitation (nominally expected at a depth of approximately 100 mm, however completed in consultation with the share farmer).

As cropping season requirements allow, rehabilitated areas will be seeded with agricultural crops by the sharefarmer. Access tracks may need to be retained around the rehabilitated areas as required, so that the sharefarmer can access the crops. An access track will also



be retained between stages as required for HME to access the active face. This is demonstrated in current operation within the Quarry to not have an effect on progressive rehabilitation.

Following extraction to the extent of the MC area, access tracks and terminal faces will be rehabilitated using the method described above as a final phase of rehabilitation. The final landform will be fully utilised for cropping purposes. Further information can be found in **Section 3.9**.

As mentioned above within **Section 3.4.2.1**, ABCL have committed to a 22 m tree screen along the western and southern boundaries of the MC area.

3.4.3 Underground Workings

No underground workings will be undertaken at the Site. Refer to **Section 3.4.1**.

3.4.4 Material Movements

Section 3.2.1 and **Section 3.2.2** outline the expected life of the Site and the Site's production annual rates. Material movements will occur as required within the operating hours, consistent with the Quarry, as outlined within **Section 3.4.7**.

3.4.5 Stockpiles

3.4.5.1 Topsoil and Subsoil

The existing topsoil environment and topsoil use to date at the Quarry is described in **Section 2.3**. Topsoil will initially be stockpiled and stored in windrows along the perimeter of the extraction area. As soon as practical, topsoil will be moved to the pit floor and stored in mounds not exceeding three (3) m in height ready for spreading over the progressive rehabilitation areas. Topsoil will be stripped through the use of a dozer, excavator or loader. Material will be transported via haul truck if required and will be pushed up or placed via dumping into wind rows of three (3) m or less in height on the pit floor. Topsoil stockpiles will be placed in elevated, flat areas around the pit floor where possible to reduce the risk of erosion by water. Topsoil stockpiles will be placed so that surface water travelling across the pit is directed away from topsoil stockpiles. Placement in the pit floor and ensuring topsoil heights do not exceed three (3) m reduces the risk of erosion by wind. Stabilisation will occur through natural regeneration and ensuring that the base of the stockpiles is kept in good condition, and runoff or erosion is monitored and kept to a minimum. If topsoil stockpiles are required to be stored for longer than 12 months, vegetation cover will be established through natural regeneration and or seeding of pasture grasses (where required) to stabilise the stockpiles and prevent erosion.

3.4.5.2 Product Stockpile

There are minimal stockpiles present throughout the Quarry, refer to **Drawing No.1940.DRG.056R2 – Site Layout Map (MC Area)**. Product stockpiles will be transported to and stored within the Quarry.

There will be no overburden stockpiles stored within MC 4581. Currently the Quarry contains two (2) 65,000 t raw feed stockpiles, located nearby to the crushing facility as a contingency supply for production processing. Additionally, there is a 25,000 t crushed material stockpile that can be sourced when required on adjacent tenements.



3.4.6 Use of Explosives

Explosives will be required in areas that prove difficult to move via earthmoving equipment. ABCL recently purchased a Caterpillar D-11 Bulldozer, anticipating that majority of the resource will be able to be ripped and pushed with the bulldozer. Historically, the Quarry has used explosives to assist with fragmenting the rock, being used predominantly on the top bench. The top bench consists of a layer of caprock limestone with increased iron levels which is consistent across the Yorke Peninsula. It is expected that the amount and frequency of blasting at the Site will be similar to blasting activities on the Quarry.

ANFO is utilised as the bulk explosive agent. Nonelectric detonation practises are used at the Quarry. All blasts are monitored for vibration and air overpressure. Within each blast design, details of blasting equipment and materials will be determined in accordance with the provisions of *Australian Standard (AS) 2187.2 Explosives – Storage and Use* by the licensed contractor. Blast design and assessments will be made in accordance with the Site geology and weather conditions at the time of the blast and take into consideration the direction and proximity of sensitive receivers and public infrastructure with the Maximum Instantaneous Charge (MIC) or charge mass per delay limited to the lowest possible level for each blast.

Volumes up to 250 kilotonnes (kt) of limestone are detonated at any one (1) time per blast. At an average, the Site blasts every six (6) – eight (8) weeks. Explosives will be stored within the Quarry. **Figure 5** shows the location of the ANFO storage at the Quarry.



Figure 5 ANFO Storage

3.4.7 Modes and Hours of Operation

The Site will be operated concurrently with the Quarry, under the following hours of operation:

- Excavation and Hauling 06:00 to 22:00, seven (7) days per week
- Additional Activities 06:00 to 22:00, seven (7) days per week
- Crushing, Maintenance and Loading (24 - hour access is to be maintained)



3.5 Crushing, Processing and Product Transport

3.5.1 Fixed Plant

At times, there may be a requirement to crush via a mobile crushing and screening unit; however, the majority of the raw feed material will be transported to the adjacent Quarry for processing near the wharf location. **Table 12** below identifies equipment utilised at the Site. The equipment below is subject to change if required.

Table 12: Mobile Equipment

Machine	Description	Noise, Vibration and Exhaust Outputs	Ignition Source
CAT D11T dozer	Bulldozer	Noise	Diesel
CAT 988B	Front End Loader	Noise	Diesel
CAT 992K FEL	Front End Loader	Noise	Diesel
CAT 992G FEL	Front End Loader	Noise	Diesel
CAT 777B	Water Truck	Noise	Diesel
CAT 777F	Dump Truck	Noise	Diesel
CAT 777F	Dump Truck	Noise	Diesel
CAT 16G	Grader	Noise	Diesel
CAT 326	Excavator	Noise	Diesel
Drilltech D25	28T Drilling Rig	Noise / Vibration	Diesel
Komatsu WA70	Front End Loader	Noise	Diesel
Crown CD40	Forklift	Noise	Diesel
Mitsubishi FM 65	Service Truck	Noise	Diesel
Ford Cargo	Vacuum Truck	Noise	Diesel

3.5.2 Hours of Operation

Refer to **Section 3.4.7**.

3.5.3 Processing Wastes

There will be no waste rock dumps and tailings storage facilities onsite. There will be no other processing wastes as a result of operations undertaken onsite.

3.5.4 Industrial and Domestic Wastes

All waste will be stored at the Quarry, and it is not anticipated that any wastes will be stored or generated at the Site.

All listed wastes, as specified in Schedule 1 Part B of the *Environment Protection Act 1993*, will be transported and disposed of (in the course of operations) by suitably licenced third parties authorised to transport waste to an appropriately licenced facility. General waste will also be removed from the Quarry (via skip bin) by a third-party contractor for disposal at an appropriately licenced facility.



Throughout the care and maintenance period (if required), industrial and commercial wastes will be kept to a minimum to ensure critical spares and lubrications are onsite for periodic start-up of plant. All maintenance will occur at the Quarry or through use of a mobile maintenance unit with the applicable waste handling facilities if required.

3.5.5 Rehabilitation Strategies and Timing

Within three (3) months of final cessation of mining activities, all redundant industrial and commercial wastes will be removed from Site. The land will be rehabilitated back to a final landform which is suitable for farming.

Progressive Tree Screen Planting will occur in alignment with the Quarry Development Plan.

Refer to **Section 3.4.2** for further detail on rehabilitation.

3.6 Supporting Surface Infrastructure

3.6.1 Access and Roads

Main access to the Site is gained from Klein Point Road via the Quarry. The Quarry access consists of a boom gate to increase security. The boom gate is located approximately five (5) km south from the township of Stansbury, SA, refer to **Drawing No. 1940.DRG.051 – Land Access Map**.

Klein Point Road is a “No Through Road” and ends at the Quarry entrance. An alternative access to the Site is available to light vehicles or as an emergency access via Hayward Park Road, refer to **Drawing No. 1940.DRG.056R2 – Site Layout Map (MC Area)**.

There are no immediate plans for Klein Point Road to be upgraded. The Quarry is primarily accessed by staff and contractors via light vehicle, due to the product being distributed via ship.

Transport of the processed material is via one (1) cargo ship per day, which sails from Port Adelaide. All material will be transported to the wharf for processing at the fixed crushing and screening plant prior to being loaded onto the cargo vessel for distribution to the Birkenhead cement manufacturing facility. Traffic access for material transport will be through an access gate on Hayward Park Road on an as needs basis as required.

3.6.2 Accommodation and Offices

There will be no accommodation and / or offices located onsite. The Site will utilise the Quarry’s infrastructure facilities, refer to **Drawing No. 1940.DRG.056R2 – Site Layout Map (MC Area)**.

The Quarry houses one (1) large workshop (a 35 m x 20 m shed) and contains sufficient capacity for any required repairs and / or maintenance. The main office building (50 m x 10 m) includes general office space, laboratory, and boilermaker workshop.

3.6.3 Public Services and Utilities Used by the Operation

No power will be required as there will be no fixed plant or equipment located onsite.

The Quarry is powered by a substation supplying 11 Kilovolts (kV) to a transformer near the offices and distributes 415 volts (V) to the main crushing facility. Additionally, there is an 11,000 V ring main supply to the jetty transformer which in turn feeds power to the ship load out facility. **Figure 6** provides an understanding of the substation located within the Quarry. ABCL are currently in negotiations with SAPN regarding the possible relocation of the



substation and potential lifting of the powerline height to allow for mining activities to be undertaken within a safe separation distance to the overhead transmission lines.



Figure 6 Electrical Substation

3.6.4 Visual Screening

The Site is located within existing cropping land and is visible from a number of locations along Hayward Park Road. Historically, the Quarry highlighted the importance for visual screening to occur along Hayward Park Road to reduce the visual impact of the operation to stakeholders traveling along the road network that links Wool Bay to other northern regional centres.

The western boundary of the Site along Hayward Park Road and St Vincent Highway both have scattered patches of native vegetation which assists with screening the Site. The undulating topography of the Site from the north to south east from locations along St Vincent Highway and Hayward Park Road also aids in minimising visual impacts to public traffic. **Section 2.15** and **Appendix F** outline visual impacts and screening of the Site.

Tree screening is to be progressively planted over five (5) years in accordance with **Drawing No. 1940.DRG.093 – Southern Planting Schedule Map** and **Drawing No. 1940.DRG.084AR1 – Quarry Development Plan**. These items are as an outcome of consultation, refer to **Section 5.0**.

3.6.5 Fuel and Chemical Storage

No fuels or chemicals will be stored onsite. All fuel is transported to the Site as required and stored within the Quarry.

The Quarry has a fully bunded and covered fuel storage facility with a maximum capacity of 99,000 L. Bulk oil storage is located in a separate shed in between the fuel storage area and the workshop, inclusive of waste oil storage. A separate area is also bunded to house smaller oil containers. The Quarry Environmental Management reported that bunding complies with EPA Guideline: *EPA080/12 Liquid storage Bunding and spill management* (EPA, 2012) and *AS1940-2004 for the storage and handling of flammable and combustible liquids*.



3.6.6 Site Security

Site access will be via the existing access point at the Quarry. The current operations have boom gate access and externally monitored security systems and alarm to minimise the risk of breaches occurring. There is three (3) strand farm fencing around the perimeter of the Site, and the area is well signposted advising no entry.

3.6.7 Erosion, Sediment and Silt Control

Due to the Site having low rainfall volumes annually and operating in a limestone resource, stormwater runoff and / or drainage paths is minimal. Water that falls on operational areas will be captured within the pit void. Water which has come in contact with disturbed areas will not leave the Site.

3.7 Vegetation Clearance

As outlined in **Section 2.8**, the Site has been historically cleared for agricultural cropping and / or grazing purposes with isolated clumps of native vegetation occurring on unproductive cropping sections of the Site, refer to **Appendix E**.

Native Vegetation Clearance (NVC) is proposed as part of this application, in accordance with the requirements of the *Native Vegetation Act* 1991. The development within the Site will impact approximately 3.53 ha of degraded native vegetation. The vegetation proposed for clearance is approximately 3.53 ha, and is depicted in **Drawing No. 1940.DRG.094 – Vegetation Clearance Map**. Vegetation outside of the pit extent is required to be cleared in order to install a tree screen for visual amenity purposes, in consultation with the adjacent landowners, refer to **Section 5.0** and **Drawing No. 1940.DRG.093 – Southern Planting Schedule Map**. A summary of the vegetation assessment and calculation of the required Significant Environmental Benefit (SEB) was undertaken and is submitted with the MLP, refer to **Appendix E**.

A summary of the vegetation assessment and associated SEB required prepared by SLR is provided in **Table 13** and **Appendix E**.

Table 13: SEB Offset Required for Clearance

Assessment for Clearance	The Site
SEB points required	8.89
SEB area required (ha)	3.53
Mean annual rainfall for the Site (mm)	388
SEB Payment into the Native Vegetation Fund (inc. Goods and Services Tax (GST))	\$5,694.60
Administration Fee (inc. GST)	\$313.20
Total	\$6,007.80

Prior to the commencement of operations within MC 4581, it is intended that the SEB will be established through the payment of \$6,007.80 into the Native Vegetation Fund (NVF) prior to the clearance activity occurring.



3.8 Site Water Management

There will be no water produced from processing onsite. Water will be sourced as per methods currently implemented at the Quarry, including groundwater extraction via a groundwater bore pump and surface water reuse.

Surface water that falls on operational areas will drain to the pit void. Surface water falling on non-operational areas will be directed away from the pit.

3.9 Description of Quarry Site at Completion

At the completion of extraction activities and progressive rehabilitation work, it is envisaged that the Site will be returned to the historic and current use of cropping land. For this reason, **Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan** and **Drawing No. 1940.DRG.083B – Conceptual Final Landform Plan Sections A-A' to D-D'** have been designed to outline a conceptual final landform that will ensure that the intended land use can successfully be achieved. The Conceptual Final Landform will be reviewed throughout each Stage of quarry development to ensure that it is consistent with the ongoing land use of the surrounding areas.

The Site will not have any waste disposal areas, and all waste will be managed in accordance with the Quarry. There will be no surface water infrastructure and mining infrastructure left onsite when operations cease.

Strategic staged rehabilitation of the adjacent Quarry has been very successful to date. The surrounding land uses are predominantly that of farming. ABCL have been proactively rehabilitating the Quarry for many years and returning it to farming. The farmer and adjacent landowner who leases the area has indicated that the Quarry can produce up to 18 bags to the acre of wheat on the land. This quantity of crop is consistent with or above farming outcomes in the general vicinity of the Quarry. The QDP has been designed to continue the successful rehabilitation strategy that ABCL incorporated since mining inception.

At the completion of extraction activities and progressive rehabilitation work, the Site will remain consistent with surrounding land uses. All terminal faces will be formed to a gradient no steeper than 1V:3H and, with currently only one (1) bench at RL 11 mAHD to the rehabilitated floor of RL 1.5 mAHD at the southern boundary of MC 4581.

Upon completion of quarrying operations, all plant, equipment, and materials shall be removed from the Site to the satisfaction of the Regulator.

Prior to the cessation of the Site and within five (5) years of surrender, a competent person will sign off that the landform is consistent with the proposed landform within an approval or program under the *Mining Act 1971*.



4.0 Description of Potential Benefits

4.1 Description of workforce and local procurement

The workforce at the Site will follow the current Quarry operations. Staff numbers are subject to change based on production requirements. The Quarry currently operates two (2) shifts, the workforce required includes:

- 18 operators in total (nine (9) operators per shift)
- One (1) Supervisor
- One (1) Administration Assistant (part time)
- One (1) Quality Supervisor (part time)
- One (1) Quarry Manager

The majority of the employees are sourced from the local Yorke Peninsula area. However, staff that may travel to Site from regional areas utilise the local accommodation (Price or Clinton) during their tenure at the Site.

ABCL's employment strategy will consider all applications from indigenous and non-indigenous applicants and will be award roles based on the applicants' experience. Local candidates would be desirable but not necessarily exclusive. Employment with ABCL will be dependent on business requirements.

4.1.1 Energy Sources

No power is required at the Site, refer to **Section 3.6.3** for information relating to power required by the Quarry.

4.1.2 Water Sources

The Site will utilise water sources from the Quarry for dust suppression. Water sources and usage estimations can be viewed under **Section 2.6** and **Section 3.6.3**.

The Quarry has been calculated to use approximately 58.8 ML/year from water extracted from the watering hole, refer to **Section 2.6**. An extraction pump and standpipe infrastructure is used to extract water from the sump into the Site watercart.

Additionally, the Quarry uses mains water that is available from a line that is located from Wool Bay to the Quarry. An analysis into annual consumption has reported that on average, approximately 2,400 kilolitres (kL) of water is used annually. This total average figure does show to fluctuate dependant on the year; however, for reporting purposes, 2400 kL is the average water consumption.

There will be no water discharged offsite by the operation.

4.2 Economic

The granting of the ML will unlock a significant amount of critical limestone reserve to produce cement that is essential to the State's continued economic development. Specifically, the grant of the MC will allow ABCL to continue to produce the high quality of cement from Klein Point through blending of specific grades of limestone that would prove challenging without the reserve contained within the MC.

The Quarry currently employs personnel from local and regional areas and will utilise accommodation in local communities where possible. There may be opportunity to use local contracting services where applicable, however most services required are specialised and require sourcing from outside of the local communities.



Economic benefit to the local communities will be mainly via hospitality venues. State Government taxes will be paid commensurate of operational activities. Additionally, the business participates in community initiatives and engagement with the local townships, providing sponsorship to Stansbury Bowling Club and Yorketown Area School.



5.0 Consultation

As the Quarry currently operates multiple MLs, a well-established relationship with adjacent land owners has already been formed. A Community Engagement Plan (CEP) has been developed for the Site and outlines the engagement procedure and processes, along with a summary report detailing recent engagement for MC 4581, refer to **Appendix I**.

Drawing No. 1940.DRG.048 – Stakeholder Engagement Map (Landowners) highlights the adjacent landowners and relevant stakeholders that were contacted throughout the development of the MLP.

Stakeholder Name: Yorke Peninsula Council

Date of consultation: 27/06/2025

Issue(s) raised: No issues raised, information shared on MLP.

Issue considered: No concerns / issues raised.

Stakeholder Name: Shanina

Date of consultation: 27/06/2025

Issue(s) raised: No issues raised with the MLP submission.

General comments: Questions around testing and data of groundwater bores. Requested detail on any quarry block modelling for the intended extraction of the Site.

Issues / comments considered: As part of ongoing Site compliance operations, ABCL will support the testing of Shanina's groundwater bore during the next monitoring round. ABCL will inform Shanina and arrange a meeting once the block modelling is completed.

Stakeholder Name: Nigel

Date of consultation: 27/06/2025, December 2025

Issue(s) raised: No issues raised with the MLP submission.

General comments: Discussion on exempt land. Queried where the exempt land interacts with the QDP. Visual Amenity – Discussions around visual amenity bunds, later evolved into discussions about tree screening around the southern and western boundaries of the southern leases. If possible, to advance the southern aspect of the pit floor rehabilitating with cropping as soon as practicable is preferred.

Issues / comments considered: Updated exempt land map showing the pit shell were provided to the stakeholder. Tree screening to be progressively planted



over five (5) years (from the PEPR approval date) in accordance with **Drawing No. 1940.DRG.093 – Southern Planting Schedule Map** and **Drawing No. 1940.DRG.084AR1 – Quarry Development Plan** (also included as a condition of the WoE), and ongoing consultation with the Quarry Manager regarding advancing cropping in the Southern extent of the Site and Quarry.

Stakeholder Name: NNAC representative - Jacob Habner

Date of consultation: 19 June 2025

Issue(s) raised: The Taa Wika search captures 1% of heritage sites statewide. NNAC consider this Site as high risk / high likelihood. Consider engagement with the traditional owners to ensure that topsoil stripping is completed with cultural heritage considered. Two different ways can be considered to address heritage finds, either with NNAC engagement and supervision or through referral to *Aboriginal Heritage Act, 1988* upon an unexpected find. The latter is lengthy and does not promote positive engagement with traditional owners.

Issue considered: Ongoing engagement with NNAC will continue. SLR met with RAW Group to discuss the proposed operations and to provide information relating to the proposed stripping. RAW Group to provide a scope to support the Site operations.

Stakeholder Name: SAPN

Date of consultation: 13/08/2025

Issue(s) raised: Nil.

Issues considered: SAPN to issue an offer fee for the relocation of the powerlines adjacent to the north of MC 4581. No issues or concerns have been raised at this time.



6.0 Management of Environmental Impacts

6.1 Introduction to Environmental Risk Assessment

To facilitate the management of potential environmental impacts at the Site in an efficient and effective manner, **Section 6.0** has been developed in accordance with the requirements of the *TOR 006 Mineral mine lease / licence applications*.

This MLP seeks to address potential environmental impacts and mitigation measures for the following environmental components that are reasonably expected to be affected by the proposed operations:

- Surface Water (Erosion, Silt and Stormwater Management)
- Noise
- Dust
- Visual Amenity
- Native Vegetation and Habitat
- Weeds, Pests and Plant Pathogens
- Native Fauna
- Topsoil Management
- Waste Management
- Public Safety
- Traffic
- Heritage
- Protection of Third-party Property
- Groundwater

The Environmental Impact Assessment presented in the following section identifies:

- The environmental components, context and interests of any affected parties.
- The potential environmental impacts that may be associated with the quarry activity.
- The potential source, pathway and receptor associated with the impact.
- Confirmation that the source, pathway and receptor are present for the associated impact.
- A description of the uncertainties and assumptions associated with the impact assessment.
- An evaluation of the sensitivity to change of the impact assessment.

Where the environmental impact source, pathway and receptor are confirmed to be present for a specific environmental impact the following information will also be provided:

- A description of the impact control and management strategies.
- A description of the uncertainties and assumptions associated with the control and management strategies.
- An evaluation of the sensitivity to change the control strategies.
- Proposed outcome and measurement criteria for each impact.

Applicable Legislation and Standards for each environmental aspect is provided in **Appendix J**.

The proposed outcomes and outcome measurement criteria presented at the end of each impact assessment are limited to those associated with environmental aspects that contain a source, pathway and receptor that are likely to be affected by the proposed operation.



7.0 Assessment of Environmental Impacts

An assessment of potential impact is outlined below taking into consideration the views and interests of third parties as summarised in **Section 5.0**.

7.1 Surface Water (Erosion, Silt and Stormwater Management)

7.1.1 Context

Site hydrology is outlined in **Section 2.7** and **Section 3.6.7**.

The direction of surface water flow is referenced in **Drawing No. 1940.DRG.046 – Topographical Map** which indicates a natural flow pathway from the north east corner to the western boundary of the proposed Site with elevations within the Site ranging from 26 mAHD to 13 mAHD respectively. Potential offsite discharge of surface water would be derived from rainfall events and runoff from undisturbed land. Future surface water runoff from disturbed areas within the Site will be directed inwards towards the pit floor.

Surface water catchment and the associated landform have been mapped with the use of a UAV survey to accurately determine the topography of the Site in comparison to the adjoining land. The topography of the Site indicates a gradual decline from the north eastern to western boundaries. Historical rainfall data has been based upon average rainfall data records obtained from the Edithburgh (Station No. 022046) weather station records.

The existing ground surface level is approximately RL 14 mAHD. As the final depth is reached of RL 1.5 mAHD, it is seen to be lowered by 12.5 m. The surface water runoff within the disturbed areas of the Site is expected to be captured within the pit area and allowed to evaporate.

No stakeholders raised surface water and / or erosion as a concern.

7.1.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Heavy rainfall events causing surface water discharge offsite and resulting in sediment laden water entering water ways and / or adjacent land.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
SW1	Disturbed land, surface water runoff.	Overland flow.	Adjacent land.	Yes.
Uncertainty and Assumptions		<p>Surface water catchments and associated flow paths have been determined based upon the existing topographical features of the Site. It is assumed that the climate is as is described in Section 2.2, however unprecedented rainfall events are also accounted for due to surface water catchment being within the pit.</p> <p>Some silt laden waters may occur from areas outside of the Site operations due to activities associated with the cropping land within the MC.</p> <p>All disturbed areas are contained within areas of lower topography compared to surrounding land, ensuring that any surface water runoff which has contacted disturbed land is directed into the pit void.</p>		



Sensitivity to Change	The volume, frequency and intensity of flows may change depending upon seasonal variations and climatic conditions, however the sensitivity to change is low.
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	The presence of quarrying activities and adjacent land and the nature of quarrying and ancillary operations means that the source, pathway and receptor is confirmed. However, due to the generally dry climate of the Site, paired with the elevated landform surrounding the Site, it is unlikely that silt laden surface waters would leave the Site or drain into the adjacent land / receptors.

Quarry Phase	Potential Impact Event			
Site Closure	Incomplete or insufficient rehabilitation, resulting in sedimented overland flow entering water ways and / or adjacent land from the rehabilitated landform.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
SW2	Disturbed land, surface water runoff.	Overland flow on rehabilitated surface areas.	Adjacent land.	Yes.
Uncertainty and Assumptions	Surface water catchments and associated flow paths have been determined based upon existing topographical features of the Site. Some silt laden water may occur from the area outside of the quarry operations due to activities associated with the cropping land within the MC that is already disturbed.			
Sensitivity to Change	The volume, frequency and intensity of flows may change depending upon seasonal variations and climatic conditions, however the sensitivity to change is considered to be low.			
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	Based upon the presence of sensitive adjacent land and the potential for insufficient rehabilitation, the source, pathway and receptor are confirmed.			

7.1.3 Control and Management Strategies

Control and Management Strategies
<p>Operational:</p> <ul style="list-style-type: none"> All surface waters affected by disturbed land to be directed to the pit void, or to the Quarry sump. Ensure that ground disturbance is limited to that which is required for operations and rehabilitated as soon as is reasonably practicable, refer to Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan. Manage stormwater flows by use of mitigation strategies such as using a perimeter bund, diversion banks or drains (if required), this will be monitored and if required discussed with the adjacent landowner if required.



Control and Management Strategies
<ul style="list-style-type: none"> Stabilise any agreed bunds and internal drains to prevent erosion. Undertake progressive rehabilitation of disturbed areas to the extent practicable. <p>Closure:</p> <ul style="list-style-type: none"> Ensure that rehabilitation is undertaken in accordance with Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan and Drawing No. 1940.DRG.083B – Conceptual Final Landform Plan Sections A-A' to D-D'.
Uncertainty and Assumptions of Control Strategies
The control strategies nominated are known to be effective and apply industry standards for the control and management of sediment laden surface water.
Sensitivity to Change of Assumptions
The volume of surface water discharge from the Site may be subject to seasonal variation based upon climatic conditions. However, the sensitivity of the control measures to a change of assumptions is low.

7.1.4 Proposed Environmental Outcome and Measurement Criteria

Surface Water		
Quarry Phase	Impact ID	Outcome
Operational	SW1	No Surface waters contaminated as a result of extraction operations are to leave the Tenement boundary.
Outcome Measurement		
<p>1. Outcome Achievement Monthly visual inspections to check surface water drainage ensure all surface water is directed into the quarry sump within the Pit. All heavy rainfall events (>30 mm over 24 hours) will require inspections to confirm that all surface water affected by disturbed land has been directed into the quarry sump within the pit and does not leave the Site.</p> <p>2. What will be measured and the form of measurement Drainage points and quarry sump by visual inspection</p> <p>3. Location of Measurement At the quarry sump and at discharge points within MC 4581.</p> <p>4. Frequency Monthly Inspections or in the event of heavy rainfall (>30 mm over 24 hours)</p> <p>5. Control/Baseline Data Not applicable.</p>		
Quarry Phase	Impact ID	Outcome
Closure	SW2	No surface waters contaminated as a result of the post quarrying landform.
Outcome Measurement		
<p>1. Outcome Achievement An inspection and report from a suitably qualified person conducted at the completion of each stage of quarry rehabilitation, and once prior to surrender application will verify that the final landform has been constructed as designed with faces battered to be consistent with that highlighted within Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan.</p>		



Surface Water

2. What will be measured and the form of measurement

Stages of rehabilitation and final landform construction through inspection by suitably qualified person.

3. Location of Measurement

Staged and fully rehabilitated landform within Site.

4. Frequency

At the completion of each stage, and prior to the surrender of the Tenement.

5. Control/Baseline Data

Not applicable.

7.2 Noise

7.2.1 Context

The proximity to the nearest sensitive receptors is discussed in **Section 2.13**.

The Site is situated on the south east coast of the Yorke Peninsula within an agricultural cropping region. Noise emissions are expected to be typical of rural settings and are not considered to significantly impact sensitive receptors.

Historically, there has been an absence of noise complaints regarding the operations within the Quarry operations. Consultation with identified stakeholders raised no concerns over noise.

7.2.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Noise generated from quarry operations causing a noise nuisance to sensitive receptors.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
N1	Noise generated from blasting, HME, and vehicles including haul trucks, FEL, excavators; and / or the crushing plant.	Air / wind.	Nearby residential dwellings as per Drawing 1940.DRG.089 – Proximity to Infrastructure and Housing Map.	Yes.
Uncertainty and Assumptions		The nearest residential receptors are located approximately 300 m south and 1.6 km north west of the Site. Adjacent land use includes agricultural cropping. It is assumed that the sensitive receptor locations do not change, and this assessment does not assess potential future receptor locations.		
Sensitivity to Change		The overall sensitivity to change for the proposed operations is considered to be low due to the surrounding land being utilised for high-quality cropping		



	– it is unlikely that additional residential dwellings will occur in close proximity to the Site in the future.
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	Due to the proximity to the adjacent sensitive receptors, it is reasonable to expect that there could be potential for noise to be generated from the Site that could cause impact. Therefore, the source, pathway and receptor are confirmed.

7.2.3 Control and Management Strategies

Control and Management Strategies
<p>Operational:</p> <ul style="list-style-type: none"> • Operations shall adhere to the approved operating hours. • Equipment is to be maintained in accordance with the Original Equipment Manufacturer (OEM) specifications. • Noise complaints from neighbouring residents are recorded, investigated, and responded to in a timely manner. • Establish and maintain a lowered quarry working area adjacent to the extraction areas in accordance with the approved QDPs as early as possible during each Stage of quarry development to form a barrier to reduce noise emanating from the Site. • Ensure that ground disturbance is limited to that which is required for operations and rehabilitated as soon as is reasonably practicable, refer to Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan. • Fit broadband reversing alarms on all HME. • Road freight trucks are restricted to 40 km/hr to reduce noise of empty tray liners.
Uncertainty and Assumptions of Control Strategies
Potential impacts associated with noise nuisance are further reduced through the implementation of the control and management strategies which are considered reasonable and of industry standard practice to protect sensitive receptors from noise nuisances.
Sensitivity to Change of Assumptions
Noise nuisance impacts may vary if there are any significant changes to the operations of the Site and the sources and location on noise generating activities are changed. The sensitivity to change of assumptions is low based on the local topography and the nature of operations.

7.2.4 Proposed Environmental Outcome and Measurement Criteria

Noise		
Quarry Phase	Impact ID	Outcome
Operational	N1	No public nuisance impacts from noise as a result of quarrying operations.
Outcome Measurement		
<p>1. Outcome Achievement</p> <p>Quarry records shall demonstrate that all noise related complaints are acknowledged within 48 hours and closed out within seven (7) days to the satisfaction of the Mining Regulator.</p> <p>In the event that complaints are not resolved to the satisfaction of the complainant and the Mining Regulator, and / or additional control measures are required, noise monitoring and measurements will be undertaken in accordance with Part 3 of the <i>Environment Protection</i></p>		



Noise
<p><i>(Noise) Policy 2007</i> at locations agreed upon by the operator and Regulator to verify compliance with Part 5 — Indicative noise levels.</p> <p>2. What will be measured and the form of measurement</p> <p>Noise related complaints acknowledged within 48 hours and closed out within seven (7) days. If complaints are not resolved, the implementation of control strategies and their success will be measured.</p> <p>Noise monitoring decibels (dB) records in accordance with <i>Environment Protection (Commercial and Industrial Noise) Policy 2023</i>.</p> <p>3. Location of Measurement</p> <p>At the sensitive receptor/s or alternative location as agreed with the Mining Regulator.</p> <p>4. Frequency</p> <p>Records maintained following a complaint.</p> <p>Controls implemented as required to resolve any complaints.</p> <p>Monitoring as required by the Mining Regulator.</p> <p>5. Control/Baseline Data</p> <p>Not applicable.</p>

7.3 Dust

7.3.1 Context

As outlined with **Section 2.16**, the Site is located within a large agricultural area and is surrounded by cropping as well as existing quarrying operations (MLs 6454, 5881, 3180, 3181, 3357, 3358, 3182, 3183, 3356, 2912, 3028, 3355, 3185, 3184, 3187, 5581, 3188, 3189, 3354, 3029, 3190, 3191, 3192, 3353, 3195, 3194, 3193, 4013, 4015, 3352, 4012, 4014 and 3351) being located to the north and east of the Site. Two (2) sensitive receptors are located 300 m south and 1.6 km north west of the Site, refer to **Section 2.13**.

Background dust emissions are expected to be typical of rural and agricultural settings with some influence from the Quarry, as well as traffic along unsealed road networks within the area.

Potential dust generating activities which will occur onsite include material extraction, transport and transfer of material, crushing and screening, stockpiling of materials and open areas. Local dust concentrations are also attributed to primary production activities and regional scale wind driven events.

If inappropriately managed, dust emissions caused by Site operations can cause adverse public health and nuisance impacts.

The Quarry has a dedicated water truck which will also be utilised within the Site.

No concerns were raised with stakeholders regarding dust in recent consultation.

7.3.2 Impact Assessment

Quarry Phase	Potential Impact Event
Operational	Potential for nuisance dust emissions generated by operational activities to negatively impact on sensitive receptors (residents).



Quarry Phase	Potential Impact Event			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
D1	Dust generated from onsite activities such as vehicle movements, product handling and transport, crushing and screening and dry / windy weather conditions.	Air	Nearby residential dwellings as per Drawing No. 1940.DRG.089 – Proximity to Infrastructure and Housing Map.	Yes
Uncertainty and Assumptions		The nearest residential receptors are located approximately 300 m south and 1.6 km north west of the Site. Adjacent land use includes agricultural cropping. It is assumed that the sensitive receptor locations do not change, and this assessment does not assess potential future receptor locations.		
Sensitivity to Change		The level of dust may be influenced by climatic conditions. It is common for drier seasons to contain higher levels of dust due to the extent of exposed soils, unsealed roads, and cropped land. It is not expected that additional residential receptors will occur in close proximity to the Site, as the adjacent land is utilised for high-quality cropping. Therefore, the sensitivity to change is considered to be low.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the presence of residential dwellings and the potential for onsite operations to produce dust emissions, the source, pathway and receptor are confirmed.		

Quarry Phase	Potential Impact Event			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
Operational	Potential for nuisance dust emissions generated by operational activities to negatively impact on sensitive receptors (road users of Hayward Park Road).			
D2	Dust generated from onsite activities such as vehicle movements, product handling and transport, crushing and screening and dry	Air	Nearby road users of Hayward Park Road.	Yes



Quarry Phase	Potential Impact Event			
	/ windy weather conditions.			
Uncertainty and Assumptions	<p>Hayward Park Road runs north-south adjacent to the western boundary of the Site. Adjacent land use includes agricultural cropping. It is assumed that the sensitive receptor locations and adjacent land uses do not change, and this assessment does not assess potential future receptor locations.</p> <p>It is assumed that users of Hayward Park Road are considered to be receptors for an extremely short duration, as they are passing the Site via car. Hayward park road is not a major highway and is used mostly by local traffic. Therefore, the risk is low.</p>			
Sensitivity to Change	<p>The level of dust may be influenced by climatic conditions. It is common for drier seasons to contain higher levels of dust due to the extent of exposed soils, unsealed roads, and cropped land.</p> <p>It is not expected that additional roads will be established within proximity to the Site in the near future. Therefore, the sensitivity to change is considered to be low.</p>			
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	<p>Based upon the presence of residential dwellings and the potential for onsite operations to produce dust emissions, the source, pathway and receptor are confirmed.</p>			

Quarry Phase	Potential Impact Event			
Site Closure	Potential for nuisance dust emissions generated by the final landform to negatively impact on the sensitive receptors (residents).			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
D3	Disturbed land and unrehabilitated areas.	Air.	Nearby residential dwellings.	Yes.
Uncertainty and Assumptions	<p>The nearest residential receptors are located approximately 300 m south and 1.6 km north west of the Site. Adjacent land use includes agricultural cropping. It is assumed that an adequately rehabilitated landform will return the dust emissions from the Site to reflect the surrounding background level. Progressive rehabilitation will occur where possible during operations to assist with successful final rehabilitation.</p>			



Quarry Phase	Potential Impact Event
Sensitivity to Change	The sensitivity to change of the assumptions is considered low, given the absence of dust generating operations activities post-closure and offset distances to sensitive receptors. Success rate of revegetation (cropping) may vary depending on climatic conditions. Potential erosion from wind and rain may inhibit progress of revegetation across the final landform.
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	Based upon the proximity to residential dwellings and the potential for an inadequately rehabilitated landform to result in excessive dust emissions, the source, pathway and receptor are confirmed.

7.3.3 Control and Management Strategies

Control and Management Strategies
<p>Operational:</p> <ul style="list-style-type: none"> • Use of a water truck to ensure emissions from the Site are minimised (when required). • Undertake ongoing visual inspections of Site operations and monitoring of wind and weather forecasts (BoM) to determine days when activities are likely to generate dust are to be avoided due to unfavourable weather conditions. Increase dust suppression (watering) regime as needed. • Seeding of rehabilitated areas with seeds suitable for cropping purposes. • Topsoil stripping and screening mound works cease if dry and windy conditions are causing dust to leave a Tenement Boundary. • Limit the amount of exposed area to that necessary for operations and undertake progressive rehabilitation to assist in managing dust emissions on the Site (in alignment with approved QDP's). • Ensure that ground disturbance is limited to that which is required for operations and rehabilitated as soon as is reasonably practicable, refer to Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan. • Blasting is to occur in accordance with the Sites Blast Management Plan (BMP). • Trucks and internal vehicles are to adhere to the Site speed limits and Traffic Management Plan (TMP). • Reduced vehicle speeds on dry and windy days. • Maintain vegetative cover on long term topsoil stockpiles. <p>Closure:</p> <ul style="list-style-type: none"> • Establishment of the final landform batters and stabilisation with seeds suitable for cropping purposes in accordance with Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan and through consultation with the share farmer. • Ensure that rehabilitation is completed in accordance with Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan.
Uncertainty and Assumptions of Control Strategies
The potential impacts to air quality are reduced provided that the operator adheres to the control and management strategies which are considered reasonable and industry standard practice to protect sensitive receptors.
Sensitivity to Change of Assumptions
The sensitivity to change is considered low; however, mitigation strategies maybe influenced by seasonal variations to onsite climate conditions.



7.3.4 Proposed Environmental Outcome and Measurement Criteria

Dust		
Quarry Phase	Impact ID	Outcome
Operational	D1, D2	No public health and / or nuisance impacts from dust generated by quarrying operations.
Outcome Measurement		
<p>1. Outcome Achievement</p> <p>Dust related complaints are acknowledged within 48 hours and actioned appropriately within seven (7) days to the satisfaction of the Mining Regulator. If required, additional controls will be implemented in consultation with the complainant and the Regulator in order to resolve the complaint.</p> <p>If the complaints are not resolved to the satisfaction of the Mining Regulator, air quality monitoring is to occur at locations, and using methods, as agreed with the Mining Regulator, to demonstrate that dust deposition conforms with the following nuisance and / or public health criteria, dust deposition of four (4) grams (g) / square metres (m²) / month, when monitored in accordance with <i>AS 3580.10.1 Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter – Gravimetric method</i>;</p> <p>or</p> <p>To the satisfaction of the Regulator.</p> <p>2. What will be measured and the form of measurement</p> <p>Dust related complaints acknowledged within 48 hours and actioned appropriately within seven (7) days to the satisfaction of the Mining Regulator.</p> <p>If additional controls are to be implemented, the success of these controls will be measured as required.</p> <p>If the complaints are not resolved to the satisfaction of the Mining Regulator, air quality monitoring is to occur at locations, and using methods, as agreed with the Mining Regulator, to demonstrate that dust deposition conforms with the following nuisance and / or public health criteria, dust deposition of four (4) g / m² / month, when monitored in accordance with <i>AS 3580.10.1 Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter – Gravimetric method</i>;</p> <p>or</p> <p>To the satisfaction of the Regulator.</p> <p>3. Location of Measurement</p> <p>At the sensitive receptor/s of alternative location as agreed with the Mining Regulator.</p> <p>4. Frequency</p> <p>Records maintained following a complaint.</p> <p>Monitoring as required by the Mining Regulator.</p> <p>5. Control/Baseline Data</p> <p>Not applicable.</p>		
Quarry Phase	Impact ID	Outcome
Closure	D3	The Tenement holder must ensure that final rehabilitation is completed in accordance with the rehabilitation plan(s) to ensure a non-polluting landform.
Outcome Measurement		
<p>1. Outcome Achievement</p>		



Dust
<p>An inspection and report from a suitably qualified person conducted prior to surrender application will verify that a safe, stable and non-polluting final landform has been constructed as per the final landform design for the Site.</p> <p>2. What will be measured and the form of measurement Inspection records of the final rehabilitated landform demonstrate that the rehabilitated areas have been constructed as per the approved final landform design and are safe, stable and non-polluting.</p> <p>3. Location of Measurement Rehabilitated landform within the Site.</p> <p>4. Frequency Following the completion of rehabilitation.</p> <p>5. Control/Baseline Data Not applicable.</p>

7.4 Visual Amenity

7.4.1 Context

The extent of which the proposed operations are expected to be visible and proposed visual screening are discussed in **Section 2.15** and **Section 3.6.4**.

The topography in which the Site is situated will allow for minor to moderate visual aspects of the proposed Site operations, these will be realised by the adjacent residential receptors. Other visual aspects of the quarry operations will be evident in the immediate proximity with road users travelling along Hayward Park Road. The degree and duration of the visual aspects experienced by road users will be temporary in nature and limited to passing traffic. The land adjacent to the Site in all directions is moderately undulating and therefore the Final Landform has been designed to allow for trafficable cropping equipment and to integrate and harmonise with adjacent landforms.

Consultation identified concern regarding visual amenity impact from the southern boundary of the MC. As outlined within **Drawing No. 1940.DRG.084AR1 – Quarry Development Plan** and **Drawing No. 1940.DRG.093 – Southern Planting Schedule Map**, a tree screen will be progressively planted and maintained along this southern boundary (as well as the eastern and western boundaries) to reduce visual amenity impact from the Site.

7.4.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Potential for negative visual impact of quarrying activities upon sensitive receptors situated within adjacent land and passing traffic.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
VA1	Quarry development.	External viewpoints.	Nearby sensitive receptors and road users along Hayward Park Road.	Yes.



Quarry Phase	Potential Impact Event
Uncertainty and Assumptions	<p>Assessment of the potential visual amenity impacts from the Site are well understood and informed by the visual amenity assessment undertaken in November 2024.</p> <p>Four (4) visual assessment locations have been informed via desktop analysis and field assessment of topography, vegetation, and sensitive receptors and are considered to be representative sensitive receptor locations. The assessment is based upon current receptor locations and future possible receptor locations have not been considered.</p> <p>Based upon the outcome of the visual assessment the predominant visual impacts associated with the Site are located to the south / south west / south east area.</p>
Sensitivity to Change	<p>The degree of the visual impact may vary depending upon the aspect of the sensitive receptor and the presence of other topographic features and vegetation that may be present between the viewpoint and the Site. However, the sensitivity to change is considered low based upon the current land use for the area and the topography within the Site. This has been taken into consideration with the development of the QDP to reduce the potential visual impact.</p>
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	<p>Based upon the presence of nearby sensitive receptors and proposed quarry development increasing disturbed land, the source, pathway and receptor are confirmed.</p>

Quarry Phase	Potential Impact Event			
Site Closure	Potential for negative visual impact of the rehabilitated landform upon sensitive receptors post-closure.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
VA2	Final landform.	External viewpoints.	Post mining land users and nearby sensitive receptors including nearby dwellings and users of Hayward Park Road.	Yes.
Uncertainty and Assumptions	The assessment does not consider potential future receptor locations which may be present at the time of Site closure.			
Sensitivity to Change	The degree of the visual impact may vary depending upon the aspect of the sensitive receptor and the presence of other topographic features and vegetation that may be present between the viewpoint and the Site. However, the sensitivity to change is considered medium based upon the current land use for the area.			



Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	Based upon the presence of sensitive receptors and the potential for inadequate rehabilitation causing amenity impact, the source, pathway and receptor are confirmed.
--	--

7.4.3 Control and Management Strategies

Control and Management Strategies
<p>Operational:</p> <ul style="list-style-type: none"> • Adherence with Drawing No. 1940.DRG.084AR1 – Quarry Development Plan and Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan. • Ongoing consultation with stakeholders (adjacent landowners) to ensure operations are within alignment of understood agreements between operators and external stakeholders. • Rehabilitation earthworks to be undertaken when weather conditions are appropriate to optimise soil stabilisation and support vegetation germinations and growth based upon the timing of future agricultural seeding activities. • The rehabilitation areas to be seeded with suitable cropping seed in consultation with the sharefarmer. • Minimise the disturbance footprint and clearing of unnecessary cropping land. • Rehabilitation is to be progressive and occur as soon as is reasonably practicable to minimise the amount of land disturbed at any one (1) time, refer Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan. Rehabilitation is to occur in accordance with Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan. <p>Closure:</p> <ul style="list-style-type: none"> • Establishment of the final landform and stabilisation with seeds suitable for cropping in accordance with Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan and in alignment with the current rehabilitation at the Quarry. • Ensure overburden placement batters are sufficient angle to support revegetation growth. • Quarry related infrastructure is removed at cessation of the quarry activity. • Ensure topsoil is managed effectively through storing in rows no greater than three (3) m in height and free from erosion in the quarry floor, to guarantee the final landform can be achieved.
Uncertainty and Assumptions of Control Strategies
<p>There is a low degree of uncertainty due to the existing topography and proposed progressive rehabilitation located within the Site, which will provide some visual relief. The success of the rehabilitation of the Quarry is also an assisting factor in ensuring that the uncertainty of the abovementioned control strategies is low.</p>
Sensitivity to Change of Assumptions
<p>The sensitivity to change is considered low based upon the timing of visual amenity improvements, which may vary depending upon the establishment rates of the vegetation and the duration of quarrying rehabilitation activities.</p>

7.4.4 Proposed Environmental Outcome and Measurement Criteria

Visual Amenity		
Quarry Phase	Impact ID	Outcome
Operational	VA1	Visual impacts of quarrying activities are reduced from view of sensitive receptors, including nearby dwellings and users of Hayward Park Road in accordance with the QDP and rehabilitation commitments.



Visual Amenity		
Outcome Measurement		
<p>1. Outcome Achievement All complaints regarding Visual Amenity will be acknowledged within 48 hours and closed out within seven (7) days. If the complaint cannot be resolved, further engagement with the complainant and / or the Mining Regulator will determine additional control strategies in order to address the complaint. Visual amenity assessments will occur on an annual basis in accordance with Appendix G and Drawing No. 1940.DRG.050 – Visual Assessment Map to ensure that operations are occurring in accordance with the QDP or until the complaint has been resolved.</p> <p>2. What will be measured and the form of measurement Complaints regarding visual amenity. If a complaint cannot be resolved, engagement with the complainant and / or the Mining Regulator will be documented and their success measured. Photographic records and visual assessment measures Site development against the approved QDP.</p> <p>3. Location of Measurement Locations outlined within Drawing No. 1940.DRG.050 – Visual Assessment Map. Locations as required following the receipt of an unresolved complaint.</p> <p>4. Frequency Upon receipt of complaint, Annually</p> <p>5. Control/Baseline Data Appendix G.</p>		
Quarry Phase	Impact ID	Outcome
Closure	VA2	Integrate and harmonise final landforms with the natural landform to minimise visual impact of quarrying activities upon sensitive receptors.
Outcome Measurement		
<p>1. Outcome Achievement Assessment undertaken at the visual assessment locations post quarry completion confirms the final landform conforms to the approved final landform and strategies have been implemented to minimise visual amenity impacts.</p> <p>2. What will be measured and the form of measurement Photographic records and visual assessment.</p> <p>3. Location of Measurement Locations outlined within Drawing No. 1940.DRG.050 – Visual Assessment Map.</p> <p>4. Frequency Once, following the completion of quarrying activities at the Site.</p> <p>5. Control/Baseline Data Appendix G.</p>		

7.5 Native Vegetation and Habitat

7.5.1 Context

Native vegetation is discussed in **Section 2.8**.



A Site survey was undertaken by SLR in June 2025 and it was confirmed the Site contained native vegetation with a total of one (1) Vegetation Association identified as *Austrostipa sp.* grassland over introduced weeds. NVC is proposed in accordance with the requirements of the *Native Vegetation Act 1991*, and summarised in **Section 3.7**, refer to **Appendix E**.

The quarry development footprint is to be established with overburden mounds stripped and stabilised with native vegetation species. The quarry development footprint of the external overburden mounds is not proposed to be altered throughout future quarry development.

As outlined in **Section 2.9**, revegetation within the Site and along the fringes of the Site boundary may provide some habitat value as it becomes more established; however, the habitat value is only limited to certain species typical to living within disturbed areas. Due to the agricultural clearing of vegetation within the region, the Site is not considered to act as any linkage / habitat corridor to surrounding habitat areas. As such any potential impacts to native fauna are considered low.

No concerns regarding native vegetation were raised in recent consultation.

7.5.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Unauthorised clearance or damage of native vegetation as a result of quarry operations operating outside of the approved extraction footprint, or Tenement.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
NV1	HME and light vehicles, quarry development.	Clearance activity and vehicle movements.	Native vegetation / habitat.	Yes.
Uncertainty and Assumptions		A NVC Report has been developed in September 2025 which forms the basis for understanding native vegetation presence onsite and clearance required for the proposed quarry development, refer to Appendix E . The NVC report was produced based upon the currently proposed pit extent as shown in Drawing No. 1940.DRG.084AR1 – Quarry Development Plan . No other clearance of native vegetation is proposed.		
Sensitivity to Change		The sensitivity to change is considered to be low, as the areas of native vegetation within the Site are bordered by an access track and crops, reducing the likelihood of additional native vegetation to become established outside of the current location.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the presence of native vegetation onsite paired with the requirement for clearance during quarry development, the source, pathway and receptor are confirmed.		



7.5.3 Control and Management Strategies

Control and Management Strategies
<p>Operational:</p> <ul style="list-style-type: none"> • Ensure stripping and other Site development activities are undertaken in accordance with Drawing No. 1940.DRG.084AR1 – Quarry Development Plan, and Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan. • Ensure that ground disturbance is limited to that which is required for operations and rehabilitated as soon as is reasonably practicable, refer to Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan. • Native vegetation clearance is to occur in accordance with the NVC report contained within Appendix E and Drawing No. 1940.DRG.094 – Vegetation Clearance Map. • Prior to the commencement of operations, an SEB payment as detailed in Section 3.7 will be paid into the NVF. • Prior to clearance, operators will consult the NVC report contained within Appendix E to ensure no accidental clearance of vegetation occurs. • Ensure vehicle movement onsite is restricted to existing tracks. • Ensure operators of HME and other Site machinery are appropriately trained to minimise the risk of incidental or unauthorised damage and / or clearance of native vegetation. • Undertake ongoing management of invasive weed and fauna species where required.
Uncertainty and Assumptions of Control Strategies
The uncertainty of the ability to implement the abovementioned control and management strategies is considered low. The controls are standard practice and have proven to be effective.
Sensitivity to Change of Assumptions
The sensitivity to change is considered to be low, based on the well-defined QDP outlining the extraction footprint and required clearance of native vegetation.

7.5.4 Proposed Environmental Outcome and Measurement Criteria

Native Vegetation		
Quarry Phase	Impact ID	Outcome
Operational	NV1	The Tenement Holder must ensure that there is no loss of abundance and / or diversity of native vegetation on or off the Site through clearance unless a Significant Environmental Benefit has been approved in accordance with the relevant legislation.
Outcome Measurement		
<ol style="list-style-type: none"> 1. Outcome Achievement Visual inspection and / or aerial imagery inspection undertaken by a suitably qualified person confirms that there has been no clearance outside of the defined extraction footprint shown within Drawing No. 1940.DRG.084AR1 – Quarry Development Plan. 2. What will be measured and the form of measurement Records demonstrating the Site has been developed in accordance with the QDP. 3. Location of Measurement Within MC 4581. 4. Frequency 		



Native Vegetation		
Annually.		
5. Control/Baseline Data		
Appendix E and Drawing No. 1940.DRG.084AR1 – Quarry Development Plan.		

7.6 Weeds, Pests and Plant Pathogens

7.6.1 Context

Weeds, pests and plant pathogens that may be present onsite are discussed within **Section 2.8** and **Section 2.9**.

There are no records of plant pathogens within the Site.

The land has been extensively used for cropping purposes and is affected by weed species that are typical of disturbed cropped land.

There were no concerns over weeds, pests and plant pathogens in recent consultation.

7.6.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Introduction of declared weed or pest species, or plant pathogens as a result of quarrying activities.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
WPP1	HME and light vehicles.	Movement of vehicles on roads, spreading weeds.	Operational, cropped, and rehabilitated areas.	Yes.
Uncertainty and Assumptions		Weed presence onsite has been predominantly identified from a native vegetation inspection and desktop methods, which may not be representative of the entire Site. It is assumed that the surrounding land use will not significantly change, and the adjacent landowner's weed management practices will continue to the same standards, so that the risk of weeds travelling onto the Site from adjacent lands (and the opposite) is not increased. It is assumed that weed management at the Site will be in accordance with the standards and frequency at the Quarry.		
Sensitivity to Change		Frequency of heavy vehicle movements from offsite could result in weed propagules being brought onto Site. The presence of weed species within the Site may change depending upon seasonal variations, climatic conditions as the quarry development footprint progresses.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the presence of weeds and pests onsite and the movement of HME and light vehicles onsite influencing		



Quarry Phase	Potential Impact Event
	this presence, the source, pathway and receptor are confirmed.

Quarry Phase	Potential Impact Event			
Site Closure	Introduction and / or spreading of declared weed or pest species, or plant pathogens as a result of insufficient rehabilitation at the quarry Site closure.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the Source Pathway and Receptor (Y/N)
WPP2	HME, wind.	Dispersal of weed species across the landscape.	Closed / rehabilitated areas.	Yes.
Uncertainty and Assumptions	Weed presence onsite has been predominantly identified from a native vegetation inspection and desktop methods, which may not be representative of the entire Site. It is assumed that the surrounding land use will not significantly change, and the adjacent landowner's weed management practices will continue to the same standards, so that the risk of weeds travelling onto the Site from adjacent lands is not increased. It is assumed that insufficient rehabilitation could result in prolonged exposure of disturbed areas, which could increase the risk of weeds and associated seeds travelling offsite, propagating weed generation.			
Sensitivity to Change	Frequency of HME movements from offsite could result in weed propagules being brought onto Site. Heavy vehicle movement likely from removal of materials in the Site closure Stage. The presence of weed species within the Site may change depending upon seasonal variations and climatic conditions in the Site closure Stage.			
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	Based upon the presence of weeds and pests onsite and the potential for spreading and / or introduction from earthmoving equipment when constructing the final landform, or through insufficient rehabilitation, the source, pathway and receptor are confirmed.			

7.6.3 Control and Management Strategies

Control and Management Strategies
Operational: <ul style="list-style-type: none"> All earthmoving equipment will be clean and free of weeds prior to being transported to the Site. Control weed infestations to prevent further spread of weeds. Annual weed spraying campaigns throughout the Site, with additional spraying (e.g., spot sprays) undertaken as necessary.



Control and Management Strategies
<ul style="list-style-type: none"> • Weeds identified onsite are to be prioritised for weed management according to the status of the weed, and the cause of the weed establishment must be determined to prevent or minimise further introduction and spread. • All access routes and hardstands are to be maintained in a weed-free or weed-reduced state, to lessen potential spread via vehicle movements. • Established roads and tracks are to be used whenever possible and weed-infested areas / sites are to be avoided. • Annual visual surveys to support the ongoing Annual Compliance Report for the Site. • Ensure that ground disturbance is limited to that which is required for operations and rehabilitated as soon as is reasonably practicable, refer to Drawing No. 1940.DRG.095 – Conceptual Staged Quarry Development Plan. • Minimise the amount of land disturbed to that necessary for Site operations, and undertake rehabilitation progressively as soon as is reasonably practicable in accordance with Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan. <p>Closure:</p> <ul style="list-style-type: none"> • Implement progressive rehabilitation as soon as practical as areas become available. • Prior to revegetation, the following may be implemented: <ul style="list-style-type: none"> ○ A spraying campaign to prevent migration or establishment of weed species in the area undergoing rehabilitation. ○ Alternative methods for controlling both grasses and weeds may be used, including manual weeding, slashing, weed matting, or mulching, where practicable. • Visual surveys are to be undertaken prior to topsoil stripping and, if necessary, control mechanisms undertaken to reduce the risk of the contamination of topsoil stockpiles with seed and vegetative weed material. • Weed control mechanisms may include separate stockpiling, herbicide spraying of stripped soils, or disposal as fill of soil materials infested with weeds.
Uncertainty and Assumptions of Control Strategies
Declared weed and pest species will be controlled through regular inspections and implementation of control and management strategies. Based upon reasonable industry standard practice there is a low degree of uncertainty and assumptions pertaining to the control and management strategies.
Sensitivity to Change of Assumptions
The sensitivity to change is considered low based upon weed and pest controls that are well established and prove to be effective where implemented.

7.6.4 Proposed Environmental Outcome and Measurement Criteria

Weeds, Pests and Plant Pathogens		
Quarry Phase	Impact ID	Outcome
Operational	WPP1	The Tenement Holder must, during construction and operation, ensure no introduction of new species of environmental weed, plant pathogens or pests (including feral animals), nor sustained increased in abundance of existing weed or pest species on the land.
Outcome Measurement		
1. Outcome Achievement		



Weeds, Pests and Plant Pathogens		
<p>Records of annual inspections undertaken in Spring, by a suitably qualified person, are held by the operator to demonstrate no introduction of new weeds, pests, or plant pathogens nor an increase in abundance of existing weeds and pests onsite.</p> <p>2. What will be measured and the form of measurement Records of inspections demonstrate no introduction of new weeds, pests or plant pathogens onsite as compared to previous reporting year and no increased abundance of weeds when compared to adjoining land holdings.</p> <p>3. Location of Measurement Within the MC 4581.</p> <p>4. Frequency Annually</p> <p>5. Control/Baseline Data Previous inspection records</p>		
Quarry Phase	Impact ID	Outcome
Closure	WPP2	Weed composition and density within rehabilitated landform equivalent too, or less than, adjacent landscapes.
Outcome Measurement		
<p>1. Outcome Achievement Inspection of Site undertaken by a suitably qualified person confirms weed composition and density within rehabilitation landform is equivalent too, or less than that of adjacent landscapes.</p> <p>2. What will be measured and the form of measurement Records of inspection demonstrate the density and composition of weeds within the rehabilitated landform equivalent too, or less than adjacent landscapes.</p> <p>3. Location of Measurement Rehabilitated landform.</p> <p>4. Frequency Prior to the ML revocation application</p> <p>5. Control/Baseline Data Weed monitoring reporting as per previous Annual Compliance Reports for the Site.</p>		

7.7 Native Fauna

7.7.1 Context

Native Fauna is outlined in **Section 2.9**.

There have been no recorded or observed State Rated fauna species observed onsite. Due to the historic clearing of vegetation that has taken place across the Site and surrounds, there is no significant habitat for wildlife remaining and it is considered unlikely the Site would be used by the species for permanent refuge. It would be expected that kangaroos, foxes, and rabbits would traverse the Site when foraging for food.



7.7.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Disturbance or damage to native fauna and habitat as a result of quarry operations.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
NF1	Native fauna.	Collision between machinery and wildlife, loss of habitat.	Native vegetation / habitat.	No.
Uncertainty and Assumptions		Due to historical vegetation clearing, the Site is not considered to provide suitable habitat for rare and endangered fauna species so the presence of such species is considered unlikely.		
Sensitivity to Change		The sensitivity to change is considered low as the presence of suitable habitat for rare and endangered species within the Site is unlikely to change during the course of the quarry operations at the Site.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based on the absence of habitat for rare and endangered species within the Site, Site operations are unlikely to result in impacts occurring to rare or endangered fauna species.		

7.8 Topsoil Management

7.8.1 Context

Section 2.3 provides an understanding of the topsoil profile on the Site.

Topsoil management will be an important factor in the rehabilitation process at the end of the quarry life. Topsoil contains micro-organisms and seed imperative to vegetation regrowth and therefore it will be important to stockpile the topsoil in an area that will secure for future use.

The aim of the Site operations is to manage earthworks and stripping to allow for soil conservation and appropriate management for ongoing revegetation. Topsoil will be stored in appropriate locations for future support of rehabilitation and revegetation. Visual assessment of topsoil will occur on the Site in accordance with the Annual Compliance Report for the Quarry to confirm that the management of topsoil is sufficient to support revegetation activities.

7.8.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Failure to strip, stockpile and conserve topsoil and subsoil in an efficient and effective manner intended for re-use in rehabilitation.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)



Quarry Phase	Potential Impact Event			
TM1	Quarry development.	Topsoil stripping and stockpiling.	Landform.	Yes.
Uncertainty and Assumptions		Development of the quarry operations as per the QDP will require soil stripping activities and topsoil will need to be stockpiled and maintained to allow for rehabilitation to take place. It is assumed that topsoil depth across the proposed extraction area is similar to that of already disturbed areas within the Quarry and contain a similar volume of organics and nutrients.		
Sensitivity to Change		The sensitivity to change is considered to be low as the proposed development area is not expected to significantly change during the life of the Site.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the requirement to strip and stockpile to undertake development at the Site, paired with the potential to inadequately do so, the source, pathway and receptor are confirmed.		

Quarry Phase	Potential Impact Event			
Site Closure	Insufficient application of topsoil on progressively rehabilitated landforms resulting in failed rehabilitation.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
TM2	Quarry development.	Rehabilitation activities.	Final landform.	Yes.
Uncertainty and Assumptions		It is assumed that topsoil depth across the proposed extraction area is similar to that of already disturbed areas within the Quarry. Additionally, with cropping being the existing land use over the proposed development area, it is assumed that the topsoil will be a suitable vegetation growth medium for final rehabilitation.		
Sensitivity to Change		The sensitivity to change is considered to be low as the proposed development area is not expected to significantly change during the life of the Site.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the requirement for topsoil application over the rehabilitation landform, paired with the potential to inadequately do so, the source, pathway and receptor are confirmed.		



7.8.3 Control and Management Strategies

Control and Management Strategies
<p>Operational:</p> <ul style="list-style-type: none"> • Soils to be stripped ahead of quarrying and temporarily stockpiled. • Stockpiles of topsoil shall not exceed three (3) m in height. • Wherever possible, soils should be used directly on areas being rehabilitated. • Compaction of topsoil by vehicles tracking over stockpiles should be avoided. • All topsoil stockpiles are to be regularly inspected and managed for weed infestation. • Topsoil, subsoil, and overburden should be stockpiled separately where possible. • Weed control mechanisms may include herbicide spraying of stripped soils or disposal as fill. • Long term topsoil stockpiles shall be stored and vegetated to reduce the potential for erosion of topsoil stockpiles. • Rehabilitation will be progressive and will occur as soon as is reasonably practicable in consultation with the share farmer. <p>Closure:</p> <ul style="list-style-type: none"> • Ensure soils are spread on rehabilitation areas to a sufficient depth to support vegetation growth. • Adherence with rehabilitation plans Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan and Drawing No. 1940.DRG.083B – Conceptual Final Landform Plan Sections A-A’ to D-D’.
Uncertainty and Assumptions of Control Strategies
<p>Uncertainty is considered low based upon the control and management strategies adopted are standard industry practice and are proven to be effective. However, localised changes in climatic conditions may result in variations in vegetation establishment.</p>
Sensitivity to change of Assumptions
<p>Sensitivity to change is low. The success and rate of the Site’s rehabilitation may be affected based upon the availability of topsoil for rehabilitation may affect the overall successful establishment of vegetation.</p>

7.8.4 Proposed Environmental Outcome and Measurement Criteria

Topsoil Management		
Quarry Phase	Impact ID	Outcome
Operational	TM1	Ensure that the existing topsoil quality and quantity is maintained for use in Site rehabilitation.
Outcome Measurement		
<p>1. Outcome Achievement Annual inspection and recording of soil stockpiles at the Site to confirm that:</p> <ul style="list-style-type: none"> • Topsoil stockpiles are kept separate from overburden and subsoil stockpiles. • There is no evidence of erosion (e.g. rills, gullies) or other evidence of topsoil loss. • Stockpiles of topsoil do not exceed three (3) m in height. <p>2. What will be measured and the form of measurement Records of inspection and visual/photographic evidence demonstrating minimal erosion and soil loss, height of stockpiles and vegetative cover.</p> <p>3. Location of Measurement</p>		



Topsoil Management		
Identified topsoil stockpiles within MC 4581.		
4. Frequency Annually.		
5. Control/Baseline Data Previous inspection records.		
Quarry Phase	Impact ID	Outcome
Closure	TM2	Sufficient topsoil of suitable quality is applied in all rehabilitation works.
Outcome Measurement		
1. Outcome Achievement Inspection of the topsoil application is undertaken by a suitably qualified person prior to the closure of the operations confirm topsoil has been adequately applied to ensure long-term establishment and success of vegetation growth.		
2. What will be measured and the form of measurement Visual inspection of the applied topsoil.		
3. Location of Measurement Rehabilitated areas as outlined within Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan.		
4. Frequency Following the completion of rehabilitation.		
5. Control/Baseline Data Not applicable.		

7.9 Waste Management

7.9.1 Context

Waste management of the Site is discussed in **Section 3.5.4**.

All waste will be managed within the facilities located at the Quarry. Waste generated onsite is limited to the production of overburden and the generation of a small quantity of commercial waste from the servicing of HME, which will be managed through the use of mobile servicing equipment with the relevant waste control facilities.

Oils and other industrial wastes are distributed by a third-party company and relevant EPA waste tracking certificates are kept onsite. Oils and coolants etc. are housed in the Quarry workshop in fully bunded facilities.

There will be no industrial or commercial wastes stored onsite.

7.9.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Soil and water contamination caused by inappropriate storage, handling, and disposal of wastes.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)



Quarry Phase	Potential Impact Event			
WM1	Commercial and Industrial waste (i.e. oils, tyres etc).	Air, overland flow and soil.	Land and downstream receptors.	Yes.
Uncertainty and Assumptions		Waste will be generated onsite and there is potential for contamination to occur if this waste is not managed appropriately. Industrial and domestic wastes which have potential to be produced onsite will be associated with maintenance of plant and machinery associating with quarrying activities, in addition to incidental spills.		
Sensitivity to Change		The sensitivity to change is considered to be low as the waste streams are expected to remain consistent throughout the life of the Site.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the identified waste streams expected to be present onsite, paired with the presence of sensitive receiving environments, the source, pathway and receptor are confirmed.		

Quarry Phase	Potential Impact Event			
Site Closure	Potential for impact to the land and land user post mining as a result of inappropriate waste management at Site closure.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
WM2	Commercial, industrial, and domestic waste.	Air, overland flow and soil	Groundwater, land and post mining land users.	Yes.
Uncertainty and Assumptions		Industrial and domestic wastes which have potential to be produced onsite will be associated with maintenance of plant and machinery associating with rehabilitation activities, in addition to incidental spills. This waste is limited to the use of mobile servicing equipment only and will be managed through the appropriate waste handling facilities. Where possible, all waste generation will occur and be managed at the Quarry. It is assumed that all waste will be removed following Site closure and completion of rehabilitation.		
Sensitivity to Change		The sensitivity to change is considered to be low due to the Site closure waste streams being consistent with those during operations.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the identified waste streams expected to be present during rehabilitation, paired with the presence of the receiving environment and post mining land user, the source, pathway and receptor are confirmed.		



7.9.3 Control and Management Strategies

Control and Management Strategies
<p>Operational:</p> <ul style="list-style-type: none"> • Ensure all trackable wastes are appropriately disposed of by a licenced operator at an approved facility. • Ensure that spill kits are available in the relevant locations at all times. • Any spills of potential contaminants are to be cleaned up immediately and disposed of to an appropriately licence facility. • The generation of waste onsite is to be limited to that generated from mobile maintenance. Mobile maintenance units attending the Site will have the appropriate waste control facilities available for use. <p>Closure:</p> <ul style="list-style-type: none"> • Remove all quarry related waste following the cessation of operations at the Site, unless otherwise specified by the landowner. • Where required, remediate land confirmed as contaminated through preliminary or detailed Site investigations.
Uncertainty and Assumptions of Control Strategies
Waste streams are well understood, and management procedures are considered adequate for wastes expected to be generated by Site activities.
Sensitivity to change of Assumptions
General waste streams are unlikely to change throughout the life of the Site, hence the sensitivity to change is considered to be low.

7.9.4 Proposed Environmental Outcome and Measurement Criteria

Waste Management		
Quarry Phase	Impact ID	Outcome
Operational	WM1	No adverse impacts to the environment from industrial or domestic waste produced as a result of Site operations.
Outcome Measurement		
<ol style="list-style-type: none"> 1. Outcome Achievement Records of annual Site inspections and waste tracking receipts demonstrate that all waste generated by operations onsite has been disposed of appropriately. 2. What will be measured and the form of measurement Site management records of waste removal. 3. Location of Measurement Within MC 4581. 4. Frequency Annually. 5. Control/Baseline Data Not applicable. 		
Quarry Phase	Impact ID	Outcome



Waste Management		
Closure	WM2	No waste is left on Site after Site closure / rehabilitation
Outcome Measurement		
<p>1. Outcome Achievement Inspection of the Site at quarry completion will ensure that no industrial, domestic or commercial waste is left onsite (unless otherwise approved to be retained in accordance with landowner agreement).</p> <p>2. What will be measured and the form of measurement Site inspection records and photographic evidence demonstrate that no industrial, domestic or commercial waste has been left onsite (unless otherwise approved in accordance with landowner agreement).</p> <p>3. Location of Measurement Within MC 4581.</p> <p>4. Frequency Once following Site closure.</p> <p>5. Control/Baseline Data Not applicable.</p>		

7.10 Public Safety

7.10.1 Context

The Site is in a rural / agricultural area. The Site is surrounded by agricultural lands (cropping) with the nearest residential dwellings located approximately 300 m south and 1.6 km north west of the Site and is unlikely to be directly accessed by members of the public, refer **Section 2.13**.

Access to the Site is via a gated entrance via the Quarry, which will be closed and locked outside of general operation hours, outlined in **Section 3.6.1**.

The Site boundary is fenced well with standard stock / rural fencing.

7.10.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Public injury and / or death due to members of the public entering the Site and interacting with the quarry equipment / landform.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
PS1	Site landform and HME.	Unauthorised public access to the quarry.	Members of the public.	Yes.
Uncertainty and Assumptions		The condition of the fencing surrounding the perimeter of the Site will remain in good order; however, may be subject to vandalism. All access to the Site is gained via the Quarry. The area surrounding the Site receives minimal volume of general public traffic, and is located a considerable distance from a town centre. It is assumed that sensitive receptor locations do		



	not change, and this assessment does not assess potential future receptor locations.
Sensitivity to Change	The overall sensitivity to change for the proposed operations is considered to be low due to the surrounding land being utilised for high-quality cropping – it is unlikely that additional residential dwellings will occur in close proximity to the Site in the future.
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	Based upon the potential for trespassers to enter the Site, the source, pathway and receptor are confirmed. However, given the low volume of general public experienced surrounding the Site and its distance from a population centre, the risk is low.

Quarry Phase	Potential Impact Event			
Site Closure	Public injury and / or death due to members of the public entering the Site and interacting with quarry development and final landform post-closure.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
PS2	Site rehabilitated landform.	Unauthorised public access.	Members of the public.	Yes.
Uncertainty and Assumptions	The condition of the fencing will remain in good order; however, may be subject to vandalism. The area surrounding the Site receives minimal volume of general public. It is assumed that sensitive receptor locations do not change, and this assessment does not assess potential future receptor locations. It is assumed that the Site will be rehabilitated in accordance with the conceptual final landform plan.			
Sensitivity to Change	The overall sensitivity to change for the proposed operations is considered to be low due to the surrounding land being utilised for high-quality cropping – it is unlikely that additional residential dwellings will occur in close proximity to the Site in the future.			
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	Based upon the potential for trespassers to enter the Site, the source, pathway and receptor are confirmed. However, given the low volume of general public experienced surrounding the Site, the risk is low.			

7.10.3 Control and Management Strategies

Control and Management Strategies
<p>Operational:</p> <ul style="list-style-type: none"> • Fencing around Site perimeter to be established and maintained in accordance with standard stock fencing. • Regular inspection of Site fencing, signage, and gates to ensure that they are adequately maintained. • Installation of signs warning of dangers within the quarry Site. • Evidence of break ins will be investigated by Site management.



Control and Management Strategies
<p>Closure:</p> <ul style="list-style-type: none"> Ensure the post-extraction landform is safe, stable, and suitable for the desired long-term land use. The conceptual final landform is maintained in accordance with the Final Landform design, refer Drawing No. 1940.DRG.083A – Conceptual Final Landform Plan.
Uncertainty and Assumptions of Control Strategies
<p>The potential impacts to public safety are reduced, provided that the operator adheres to the control and management strategies which are considered reasonable and industry standard practice. Adequate fencing around the perimeter of the Site is maintained and the Conceptual Final Landform is achieved through progressive rehabilitation.</p>
Sensitivity to Change of Assumptions
<p>The sensitivity to change may be likely as the condition of the fencing may change over time if it is neglected or subject to vandalism.</p>

7.10.4 Proposed Environmental Outcome and Measurement Criteria

Public Safety		
Quarry Phase	Impact ID	Outcome
Operational	PS1	The Tenement Holder must, during construction and operation, ensure that unauthorised entry to the land does not result in public injuries and / or deaths that could have been reasonably prevented.
Outcome Measurement		
<p>1. Outcome Achievement All public injuries and / or deaths resulting from unauthorised access to the Site are recorded in Quarry Managers Logbook and investigated by a suitably qualified third party within one (1) calendar month (or other time as agreed with the Mining Regulator), and the results of the investigation show that the incident could not have been reasonably prevented by the Tenement Holder.</p> <p>2. What will be measured and the form of measurement Records of incidents in quarry management logbook and results of investigations by a suitably qualified third-party.</p> <p>3. Location of Measurement Within MC 4581</p> <p>4. Frequency As required following any incidents</p> <p>5. Control/Baseline Data Not applicable.</p>		
Quarry Phase	Impact ID	Outcome
Closure	PS2	The Tenement Holder must demonstrate that prior to completion, the risks to the health and safety of the public so far as they may be affected by mining operations, are as low as reasonably practicable.
Outcome Measurement		



Public Safety

1. Outcome Achievement

Final landform to be constructed in accordance with the approved final designs and inspected by a certified engineer to ensure the stability of the landform.

2. What will be measured and the form of measurement

Progressive rehabilitation slope angles and geotechnical stability through inspection and report from suitably qualified person.

3. Location of Measurement

Rehabilitated landform within MC 4581

4. Frequency

Once post quarry completion prior to Tenement revocation application.

5. Control/Baseline Data

No applicable.

7.11 Traffic

7.11.1 Context

Site access is outlined in **Section 3.6.1**. Access to the Site will be made through the Quarry.

Access to Site will be restricted to the public and will only be accessed through the Quarry's current entry / exit point located on Klein Point Road. The Quarry has a boom gate to increase security of the Quarry and Site. The boom gate is located approximately five (5) km to the South from the township of Stansbury, SA. Klein Point Road is a "No Through Road" that ends at the Quarry entrance. The primary mechanism for material transport is via boat, the Accolade 2, therefore there will be minimal risk of road trucks entering and exiting the Site or Quarry. Traffic for material transport will enter and exit from Hayward park Road on an as needs basis if required.

No concerns raised over traffic during recent consultation.

7.11.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Public safety risks such as collision between trucks and vehicles resulting from quarry vehicles entering and exiting the Site at the access point.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
T1	Quarry related traffic.	Site access point	Public Traffic.	No.
Uncertainty and Assumptions		Public traffic will not be intercepted at the entry point at the Site, as the access point is located within the adjacent quarry Site and there is no access via public roads. Material is transported to the Quarry for processing and sale. The primary mechanism for material transport from the Quarry is via boat, the Accolade 2, therefore there will be minimal risk of road trucks entering and exiting the Site or Quarry.		



Quarry Phase	Potential Impact Event
Sensitivity to Change	Site access is expected to continue to be through the Quarry and is not likely to change.
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	The Site will be accessed via the Quarry and not directly via public roads, therefore public traffic will not be present at the Site access point. Based on this, there is no likely receptor for Site operations to cause a traffic impact.

7.12 Heritage

7.12.1 Context

Potential of Aboriginal and / or European cultural heritage sites, objects or remains existing on the Site which may be disturbed through the development and operation of the Site.

Section 2.18 discusses the results of desktop searches completed for the MC area which have not identified any Aboriginal cultural Sites within the area.

A search of the Central Archive of the DPC-AAR on 10 June 2025 did not return any results of Registered Aboriginal Sites, objects or remains to be present within or in proximity to the MC area, refer to **Appendix H**. The Site is subject to two (2) ILUAs (Tribunal Number SI2003/004 registered 6 October 2005 and Tribunal Number SI2023/001 registered 17 November 2023), and engagement has occurred with a relevant representative, refer **Section 5.0**.

7.12.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Disturbance and / or destruction of Aboriginal, European and / or Geological Heritage Sites or Objects through the development and operation of the Site.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
H1	Quarry development	Excavation during quarrying activities.	Heritage sites, objects and / or remains within the Site.	Yes.
Uncertainty and Assumptions		While there is an absence of recorded Aboriginal heritage items within proximity to the Site, it is possible that artefacts, objects or remains could exist that are currently unknown.		
Sensitivity to Change		Large scale earthworks could result in unrecorded Aboriginal heritage sites, objects and / or remains being uncovered and / or damaged.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the proposed quarry development at the Site, paired with the potential of unrecorded Aboriginal heritage sites, objects and / or remains being contained within the Site, the source, pathway and receptor are confirmed.		



7.12.3 Control and Management Strategies

Control and Management Strategies
<ul style="list-style-type: none"> • All personnel at the Site are to be inducted on cultural heritage requirements and the associated legislative responsibilities. • In the event any cultural heritage sites or objects are identified the following is to occur: <ul style="list-style-type: none"> ○ Immediately stop work in the vicinity of find. ○ Notify the relevant authority of the find / potential find at the Site. ○ No activities are to recommence in the vicinity of the find until such time that liaison with the relevant authority and / or the local Aboriginal groups has been undertaken and authority to proceed has been granted. • Development is to be undertaken in accordance with the approved QDPs.
Uncertainty and Assumptions of Control Strategies
<p>Uncertainty is considered medium based upon the control and management strategies adopted are standard industry practices and are proven to be effective and comply with the legislative requirements.</p>
Sensitivity to Change of Assumptions
<p>The sensitivity to change is unlikely due to the adopted management strategies and industry standard practices.</p>

7.12.4 Proposed Environmental Outcome and Measurement Criteria

Heritage		
Quarry Phase	Impact ID	Outcome
Operational	H1	The Tenement Holder must, during construction and operation, ensure that there is no damage, disturbance or interference to Aboriginal and non-Aboriginal Heritage sites, objects or remains as a result of quarrying operations, unless it is authorised under the relevant legislation.
Outcome Measurement		
<p>1. Outcome Achievement Quarry Management Logbook demonstrate that, upon discovery within the Site of any possible Aboriginal and/or European heritage sites; and / or objects or remains;</p> <ul style="list-style-type: none"> • Work ceased until the relevant authorities were notified and work recommenced only once authorisation was received. • Documented evidence of potential or actual finds of Aboriginal and / or European heritage objects and evidence of consultation with the relevant authority. <p>2. What will be measured and the form of measurement Quarry management logbook records if discovery and evidence of appropriate procedure followed upon discovery.</p> <p>3. Location of Measurement Within MC 4581</p> <p>4. Frequency Upon discovery of heritage related items.</p> <p>5. Control/Baseline Data Not Applicable.</p>		



7.13 Protection of Third-party Property

7.13.1 Context

Proximity to infrastructure and housing is outlined in **Section 2.13**. The nearest sensitive receptors are residential dwellings located approximately 300 m south and 1.6 km north west of the Site.

The Site is situated within rural cropping lands on all boundaries. There are existing MLs (MLs 6454, 5881, 3180, 3181, 3357, 3358, 3182, 3183, 3356, 2912, 3028, 3355, 3185, 3184, 3187, 5581, 3188, 3189, 3354, 3029, 3190, 3191, 3192, 3353, 3195, 3194, 3193, 4013, 4015, 3352, 4012, 4014 and 3351) located to the north and east, refer to **Drawing No. 1940.DRG.051 – Land Access Map**.

Existing infrastructure includes a substation supplying 11 kV to a transformer near the offices of the Quarry which distributes 415 V to the main crushing facility. Additionally, there is an 11,000 V ring main supply to the jetty transformer which in turn feeds power to the ship load out facility. The powerline runs directly from the substation across the northern boundary of the MC area bordering the adjacent ML 5881.

ABCL are currently in negotiations with SAPN regarding the possible relocation of the substation and potential lifting of the powerline height to allow for mining activities to be undertaken within a safe separation distance to the overhead transmission lines.

7.13.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Damage to third-party infrastructure, residential structures and adjacent land holdings from operational activities (including fire).			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
TPP1	Quarrying activities.	Land.	Nearby infrastructure, cropped land, property.	Yes.
Uncertainty and Assumptions		It is assumed that the existing adjacent land uses will remain consistent in the future, and that the risk of fire travel remains similar to current conditions.		
Sensitivity to Change		Potential impact to third-party property, specifically that caused by fire, is sensitive to varying climatic conditions. The sensitivity to change of the types of third-party property is considered to be low; however, it is possible that the location of the SAPN infrastructure may change in the future, dependent on the outcomes of negotiation between ABCL and SAPN.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the presence of third-party property surrounding the Site, paired with the potential to cause impact from Site operations, the source, pathway and receptor are confirmed.		



7.13.3 Control and Management Strategies

Control and Management Strategies
<ul style="list-style-type: none"> • Fire-fighting equipment will be available and maintained on the Quarry (fire extinguishers, emergency response plans and Site preparedness). • No hot works (welding) are to be undertaken onsite during total fire ban conditions. • Ensure initiation is in accordance with design parameters to minimise potential impacts of fly rock and air overpressure. • Extraction within the proximity of powerlines will be undertaken in consultation with SAPN. • Blasting will occur in accordance with the Site BMP and <i>AS 2187.2 2006: Storage and use of explosives</i>.
Uncertainty and Assumptions of Control Strategies
Control measures are considered standard practice for the quarry industry and are proven to be effective in the prevention of potential impacts.
Sensitivity to Change of Assumptions
The proposed control and mitigation strategies are well known and effective and are not considered to be sensitive to change.

7.13.4 Proposed Environmental Outcome and Measurement Criteria

Protection of Third-Party Property		
Quarry Phase	Impact ID	Outcome
Operational	TPP1	The Tenement Holder must, during construction and operations, ensure no adverse impact to third-party land and infrastructure as a result of quarrying that could have been reasonably prevented.
Outcome Measurement		
<p>1. Outcome Achievement All incidents involving damage to third party property resulting from the Site are recorded in the Quarry Management Logbook and investigated by a suitably qualified person within one (1) calendar month (or another time as agreed with the Mining Regulator) and the results of the investigation show that the incident could not have been reasonably prevented by the quarrying activity. If investigations cannot be resolved, the investigation will be escalated in consultation with the owner of the Third Party Property, the investigator (suitably qualified person), and / or the Mining Regulator.</p> <p>2. What will be measured and the form of measurement Records of incidents in Quarry Management Logbook and results of investigations by a suitably qualified third-party. If required, engagement with third party property owners, the investigator and / or the Mining Regulator to resolve the investigation.</p> <p>3. Location of Measurement Within MC 4581 and / or as required by the investigation.</p> <p>4. Frequency As required following incident/s.</p> <p>5. Control/Baseline Data Not applicable.</p>		



Protection of Third-Party Property		

7.14 Blasting

7.14.1 Context

Proximity to infrastructure and housing is outlined in **Section 2.13** and in **Section 7.13.1**. The nearest sensitive receptors are residential dwellings located approximately 300 m south and 1.6 km north west of the Site.

Blasting occurs at the Site on an as needs basis in areas of the material that prove difficult to move via earthmoving equipment. It is anticipated that the majority of the resource will be able to be ripped and pushed with the bulldozer. It is expected that the amount and frequency of blasting at the Site will be similar to blasting activities on the Quarry. Volumes up to 250 kt of limestone are detonated at any one (1) time per blast. At an average, the Site blasts every six (6) – eight (8) weeks.

Further context is provided in **Section 3.4.6**. Blasting occurs during operation only, so closure impacts related to blasting have not been addressed.

7.14.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Potential for fly rock, vibration and air overpressure causing damage to nearby infrastructure and / or environmental nuisance to nearby sensitive receptors.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
B1	Blasting onsite.	Air and land.	Nearby infrastructure, cropped land, property.	Yes.
Uncertainty and Assumptions		Resource will be extracted via earthmoving equipment where possible; however, it is assumed that blasting will be undertaken within the Site when required.		
Sensitivity to Change		The sensitivity to change of the types of third-party property is considered to be low; however, it is possible that the location of the SAPN infrastructure may change in the future, dependent on the outcomes of negotiation between ABCL and SAPN.		
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor		Based upon the proximity of nearby infrastructure, cropping land and residences, paired with the requirement for blasting onsite, the source, pathway and receptor are confirmed.		



7.14.3 Control and Management Strategies

Control and Management Strategies
<ul style="list-style-type: none"> • Ensure initiation is in accordance with design parameters to minimise potential impacts of fly rock and air overpressure. • Extraction within the proximity of powerlines will be undertaken in consultation with SAPN. • Blasting will occur in accordance with the Site BMP and <i>AS 2187.2 2006: Storage and use of explosives</i>.
Uncertainty and Assumptions of Control Strategies
Control measures are considered standard practice for the quarry industry and are proven to be effective in the prevention of potential impacts.
Sensitivity to Change of Assumptions
The proposed control and mitigation strategies are well known and effective and are not considered to be sensitive to change.

7.14.4 Proposed Environmental Outcome and Measurement Criteria

Quarry Phase	Impact ID	Outcome
Operational	B1	The Tenement Holder must, during construction and operations, ensure that there are no public health and / or nuisance impacts from air blast, fly rock and vibration caused by blasting.
Outcome Measurement		
<p>1. Outcome Achievement</p> <ul style="list-style-type: none"> • Records from the Mine Logbook demonstrates that all blast related complaints were acknowledged within 48 hours and resolved with the complainant within seven (7) days (or other time as approved by Mining Regulator) to the satisfaction of Mining Regulation. If the complaint is unable to be resolved, engagement with the complainant and / or the Mining Regulator will occur, inclusive of implementation of additional control strategies if required, in order to address the complaint. • Blast monitoring in accordance with the Site BMP and <i>AS 2187.2 2006: Storage and use of explosives</i> will demonstrate that blasts adhere to the following parameters: <ul style="list-style-type: none"> • Ground Vibration (Peak Particle Velocity (PPV)) < five (5) mm / s for 95 % of blasts, with a maximum of 10 mm / s (rolling 12 month average). • Airblast Overpressure: <115 dB(Linear Peak (Lin)) for 95 % of blasts, with a maximum of 120 dB (Lin) (rolling 12 month average). <p>2. What will be measured and the form of measurement</p> <p>The Mine Logbook demonstrates all complaints were recognised within 48 hours and resolved with the complainant within seven (7) days to the satisfaction of Mining Regulation.</p> <p>Blasting records will be measured and records retained onsite.</p> <p>3. Location of Measurement</p> <p>At sensitive receptor locations outside of MC 4581.</p> <p>At blast monitoring points in accordance with the BMP.</p>		



Quarry Phase	Impact ID	Outcome
	4. Frequency	Upon receipt of a complaint. Upon each blast.
	5. Control/Baseline Data	Previous blasting results.

7.15 Groundwater

7.15.1 Context

Groundwater is referenced within **Section 2.6**. The Site QDP has been developed in accordance with the approved depth of the Quarry pit, with proposed extraction to 1.5 mAHD. This ensures that the pit floor will remain above the groundwater elevation of 0.43 mAHD (AGT, 2016). The finished level of the pit floor would provide a buffer of approximately one (1) m between the Site operation and groundwater levels, refer **Drawing No. 1940.DRG.088A – Groundwater Cross Section Plan** and **Drawing No. 1940.DRG.088B – Groundwater Cross Section Plan Sections A-A' to C-C'**.

Groundwater monitoring of Well No. 6428-690 has occurred in alignment with the Quarry PEPR for a number of years, and has demonstrated very little change in groundwater levels since commencement, refer **Appendix D**. It is proposed that this monitoring continues in accordance with the frequency and parameters of this monitoring framework.

Regional groundwater data from nearby monitoring wells indicate average levels of salinity >6,000 mg/l which is unsuitable for domestic or irrigation purposes. The two (2) operational wells identified are low yielding and operate intermittently for stock watering or industrial use. Given that the Site is not within a PWA or has any presence of GDEs, it can be assumed that the activities are not expected to pose any risk to the regional groundwater system.

During recent consultation stakeholders raised queries regarding groundwater and the provision of monitoring data for their bore network. ABCCL will work with the relevant landowner to gain bore monitoring data during the next monitoring round for the Quarry.

7.15.2 Impact Assessment

Quarry Phase	Potential Impact Event			
Operational	Groundwater interaction resulting in adverse impacts on water quality, groundwater flows and groundwater levels.			
Impact (ID)	Source	Pathway	Receptor	Confirmation of the source pathway and receptor (Y/N)
GW1	Extraction activities.	Groundwater interception.	Nearby groundwater well users.	Yes.
Uncertainty and Assumptions		The groundwater level in the area has been determined based upon the outcomes of the Groundwater Desktop study and a Site inspection undertaken in June 2025, which confirmed the nearest groundwater user is approximately 300 m south and 1.6 km north west of the Site.		



Quarry Phase	Potential Impact Event
	Due to the relatively high groundwater salinity levels for the region, it may limit the suitability for irrigation and domestic purposes. There is an absence of GDEs within proximity to the Site, with the nearest GDE located approximately six (6) km west of the Site.
Sensitivity to Change	Seasonable variation in groundwater depths may occur; however, it is unlikely to result in a significant variation in groundwater level that would interact with the quarry development. The pit floor levels are unlikely to change during the life of the Site; however, the sensitivity to change of the impact is considered to be moderate, due to the small buffer between the determined groundwater level and the lowest pit floor level.
Justification for the Confirmation / Non-confirmation of Source, Pathway and Receptor	Based upon the determined groundwater level, paired with the potential for extraction activities to intercept groundwater, the source, pathway and receptor are confirmed.

7.15.3 Control and Management Strategies

Control and Management Strategies
<ul style="list-style-type: none"> Ensure quarry development is undertaken in accordance with Drawing No. 1940.DRG.084AR1 – Quarry Development Plan and Drawing No. 1940.DRG.084B – Quarry Development Sections A-A’ to B-B’, with the pit floor depth not exceeding 1.5 mAHD. Undertake six (6) monthly monitoring of nearby well to capture any seasonal variations in groundwater levels in accordance with the approved PEPR for the Quarry.
Uncertainty and Assumptions of Control Strategies
The control and management strategies are considered to be sufficient in ensuring seasonal changes in groundwater level are identified and intersection of groundwater is prevented.
Sensitivity to Change of Assumptions
Changes in seasonal groundwater levels may result in the requirement for increased control and management strategies at the Site.

7.15.4 Proposed Environmental Outcome and Measurement Criteria

Groundwater		
Quarry Phase	Impact ID	Outcome
Operational	GW1	The Tenement Holder must, during construction and operation ensure that there is no adverse impact to the quality and quantity of groundwater caused by quarrying operations to existing users and water dependent ecosystems.
Outcome Measurement		
1. Outcome Achievement		



Groundwater

- Annual reporting confirms that quarry development has been undertaken in accordance with **Drawing No.084AR1 – Quarry Development Plan** and **Drawing No. 084B – Quarry Development Sections A-A' to B-B'**.
- Groundwater monitoring on a bi-annual (six (6) monthly) basis of Well No. 6428-690 for water depth will demonstrate no significant change to groundwater levels when compared with previous results. If significant changes are identified, further investigation will occur.

2. What will be measured and the form of measurement

Survey confirming extraction is being undertaken in accordance with the QDP, with the pit floor depth not exceeding 1.5 mAHD.

Groundwater levels of Well No. 6428-690.

3. Location of Measurement

Extraction area within MC 4581.

Well No. 6428-690.

4. Frequency

Pit floor levels measured Annually.

Water monitoring undertaken bi-annually.

5. Control/Baseline Data

Drawing No. 084AR1 – Quarry Development Plan and **Drawing No. 084B – Quarry Development Plan Sections A-A' to B-B'**.

Previous groundwater monitoring results, refer **Appendix D**.



8.0 Effective and efficient mining and outcome achievement statement

- There is a reasonable prospect that the land in respect of which the lease is sought could be effectively and efficiently mined.

- Based on the control strategies provided I consider that the environmental outcomes will be able to be achieved.

- We / I declare that the mineral resource or ore reserve (or both) has been appropriately identified and estimated.



9.0 Operator capability and compliance history

ABCL have the following technical, operational and financial capabilities and resources available for carrying out proposed mining operations:

ABCL is part of the broader Adbri group of companies, with a long-established history in the production of clinker, cement and lime products, premixed concrete and aggregates and concrete and masonry products.

Established Safety and Sustainability Management Systems provide a framework to identify, report, and where practicable, eliminate or reduce risks and hazards to the lowest practical levels. The existing business strategy supports continuous improvement in the social, environmental and economic performance of the company. Demonstrated by improvement projects in alternative fuels, raw materials, land care and rehabilitation projects including extensive rehabilitation of quarry faces, community tree planting and wetland creation and maintenance demonstrated at the Birkenhead Wetlands.

The Site has a successful history of operation and rehabilitation of terminal areas, having returned an area of over 80 hectares to cropping land producing yields exceeding that of adjacent landholdings.

In the last 5 years, a related body corporate or I have failed to comply with a provision of a corresponding Australia Law or designated Australian Act in connection with authorised operations that resulted in:

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	The revocation or suspension of an authority to carry out authorised operations; or
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	A prosecution for an offence; or
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	The imposition of a penalty by a court; or
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	The issuing of a notice, direction or order that required the suspension of discontinuance of any authorised operations; or
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	The rectification of any harm to the environment or the rehabilitation of any land, place or other aspect of the environment.

Further detail on noncompliance if relevant:

Adbri was issued a Prohibition Notice by SafeWork SA on 11 May 2025 in response to an incident onsite at Klein Point which prohibited working at height, activity of disassembly / assembly of parts or components in relation to the crushing plant / Rollen-Rost chute.

Further information is available upon request.



10.0 Reference List

- Australian Bureau of Statistics (2022). 2021 Census QuickStats. Retrieved from, <https://www.abs.gov.au/census/find-census-data/quickstats/2021/SAL41636>
- Australian Stratigraphic Units Database (ASUD). (2022). Stratigraphic Unit Details: Woorinen Formation. Retrieved from, <https://asud.ga.gov.au/search-stratigraphic-units/results/20618>
- Bureau of Meteorology (2022). *BoM Climate Data Online* (Australian Government). Retrieved from, <http://www.bom.gov.au/climate/data/>
- Bureau of Meteorology (2022). BoM Groundwater Dependent Ecosystems Atlas (Australian Government). Retrieved from, <http://www.bom.gov.au/water/groundwater/gde/>
- Coastal Landscapes of SA
https://www.jstor.org/stable/10.20851/j.ctt1sq5wk8.12#metadata_info_tab_contents
- Hall, J, Maschmedt, D, Billing (2009). '*The Soils of Southern South Australia*', Government of South Australia 2009 (Department of Water, Land and Biodiversity Conservation). Retrieved from, <https://www.environment.sa.gov.au/topics/soil-and-land-management/soils-of-sa>
- Health Safety Environment Australia Pty Ltd (HSEA) (2022). ADBRI Personal Noise Dosimetry, Respirable Dust and Respirable Crystalline Silica Monitoring at Klein Point Quarry. Confidential correspondence.
- Nature Maps (2025). *Enviro Data SA NatureMaps* (Department of Environment and Water). Retrieved from, <http://spatialwebapps.environment.sa.gov.au/naturemaps/?locale=en-us&viewer=naturemaps>
- Plan SA (2025). *SA Property and Planning Atlas* (Yorke Peninsula, 5580). Retrieved from, <https://sappa.plan.sa.gov.au/>
- SARIG (2022). South Australian Resources Information Gateway, Government of South Australia. Retrieved from, <https://map.sarig.sa.gov.au/>
- WaterConnect (2025), WaterConnect, Government of South Australia. Retrieved from, <https://www.waterconnect.sa.gov.au/Systems/EPAWQ/SitePages/Map.aspx>





Appendix A Drawings

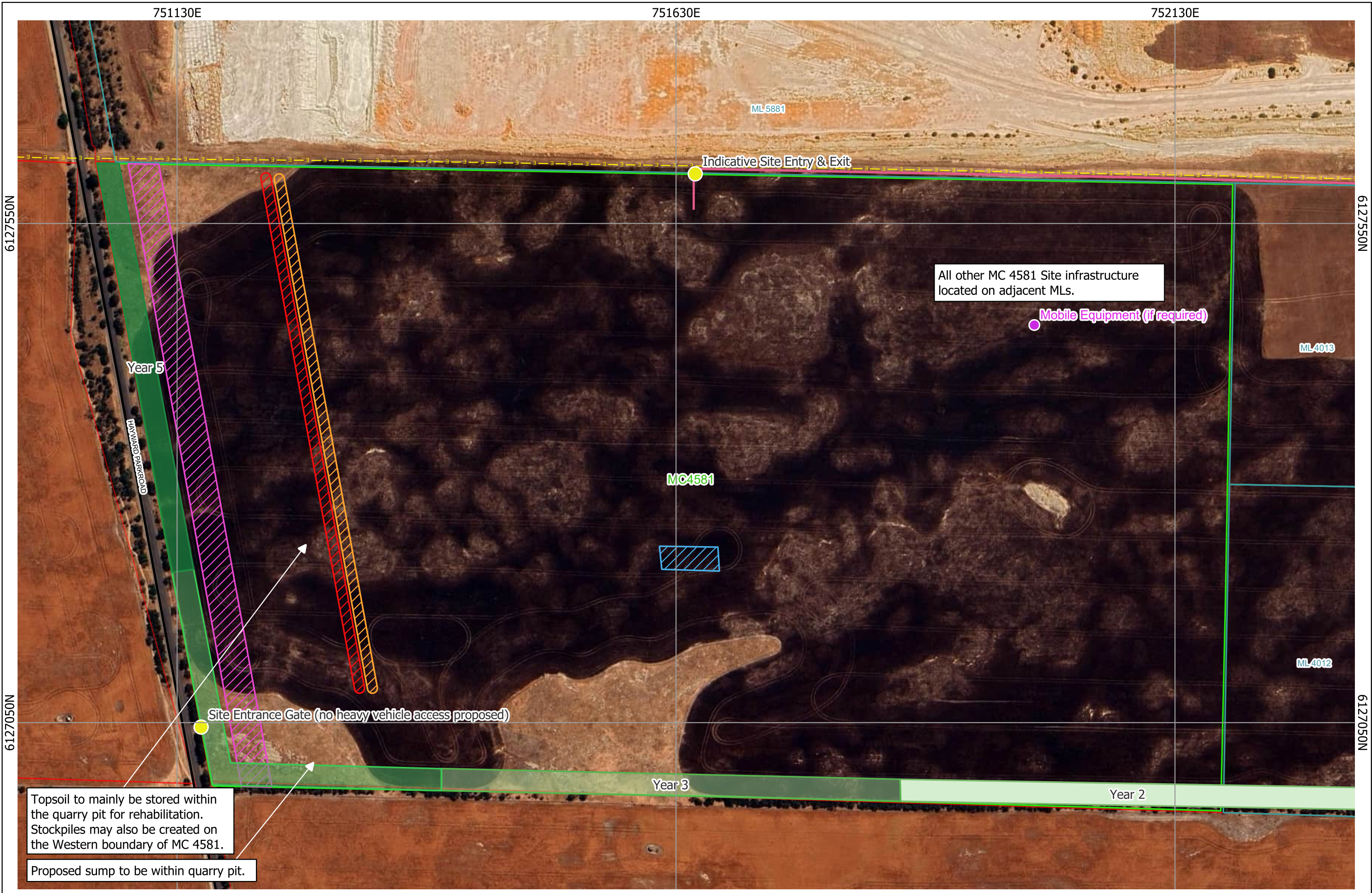
Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026



All other MC 4581 Site infrastructure located on adjacent MLs.

Mobile Equipment (if required)

Year 5

HAWAIAO PARKROAD

MC4581

ML4013

ML4012

Site Entrance Gate (no heavy vehicle access proposed)

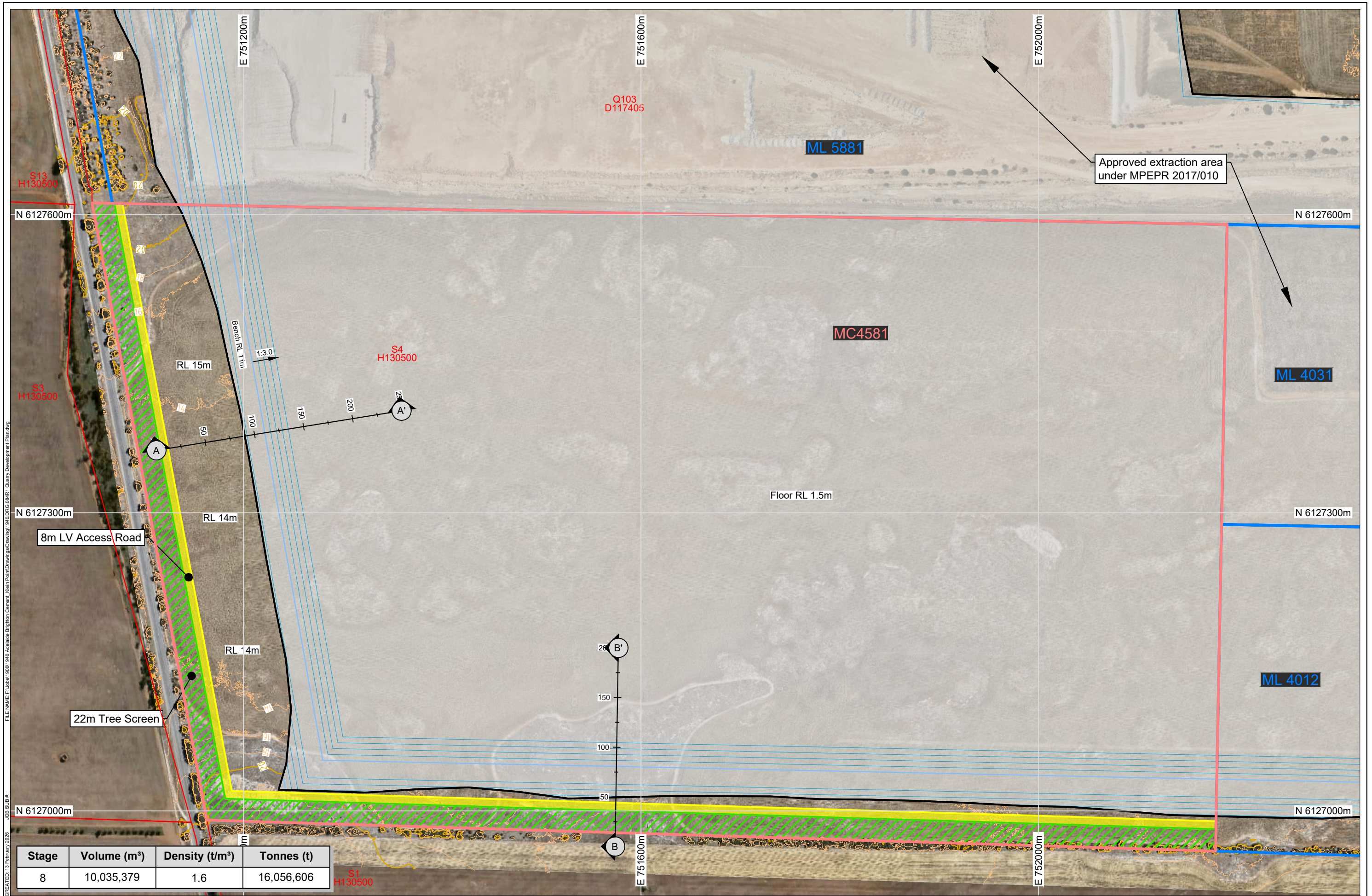
Year 3

Year 2

Topsoil to mainly be stored within the quarry pit for rehabilitation. Stockpiles may also be created on the Western boundary of MC 4581.

Proposed sump to be within quarry pit.

<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Issued for MC 4581, added Site features and notes</td> <td>04/09/2025</td> <td>CL</td> </tr> <tr> <td>2</td> <td>Updated with line screening, planting stages</td> <td>13/02/2025</td> <td>CL</td> </tr> </tbody> </table>		REV	DESCRIPTION	DATE	BY	1	Issued for MC 4581, added Site features and notes	04/09/2025	CL	2	Updated with line screening, planting stages	13/02/2025	CL	<p>Legend:</p> <ul style="list-style-type: none"> Road Linework Access Road Power Transmission Network (SAPN) Cadastral Boundaries Mineral Leases (ML) Mineral Claim (MC) Proposed Sump Proposed Stockpile Locations Overburden Topsoil Site Entry & Exit Mobile Equipment Proposed Revegetation Stages Year 2 Year 3 Year 4 Year 5 		<p>PROJECT: Klein Point Quarry</p> <p>CLIENT: Adelaide Brighton Cement Ltd</p> <p>TITLE: Site Layout Map</p> <p>SCALE: 1:3,500 When Printed On A3</p> <p>DATE: 13 February 2025 PRINTED: 13 February 2025</p> <p>DRAWN: CL CHECKED: CM</p> <p>DRAWING NUMBER: 1940.DRG.056</p> <p>REVISION: 2</p> <p>DATUM: HORIZONTAL / VERTICAL / EPSG:7850 MGA / AHD / 53</p>	
REV	DESCRIPTION	DATE	BY														
1	Issued for MC 4581, added Site features and notes	04/09/2025	CL														
2	Updated with line screening, planting stages	13/02/2025	CL														



FILE NAME: F:\Jobs\19001840 Adelaide Brighton Cement_Klein Point\Drawings\1940.DRG.084R1 Quarry Development Plan.dwg
 CREATED: 13 February 2026
 JOB SUB #

Stage	Volume (m ³)	Density (t/m ³)	Tonnes (t)
8	10,035,379	1.6	16,056,606

REV	DESCRIPTION	DATE	BY
1	Added Tree Screen and LV Access Road	2026/02/13	CP

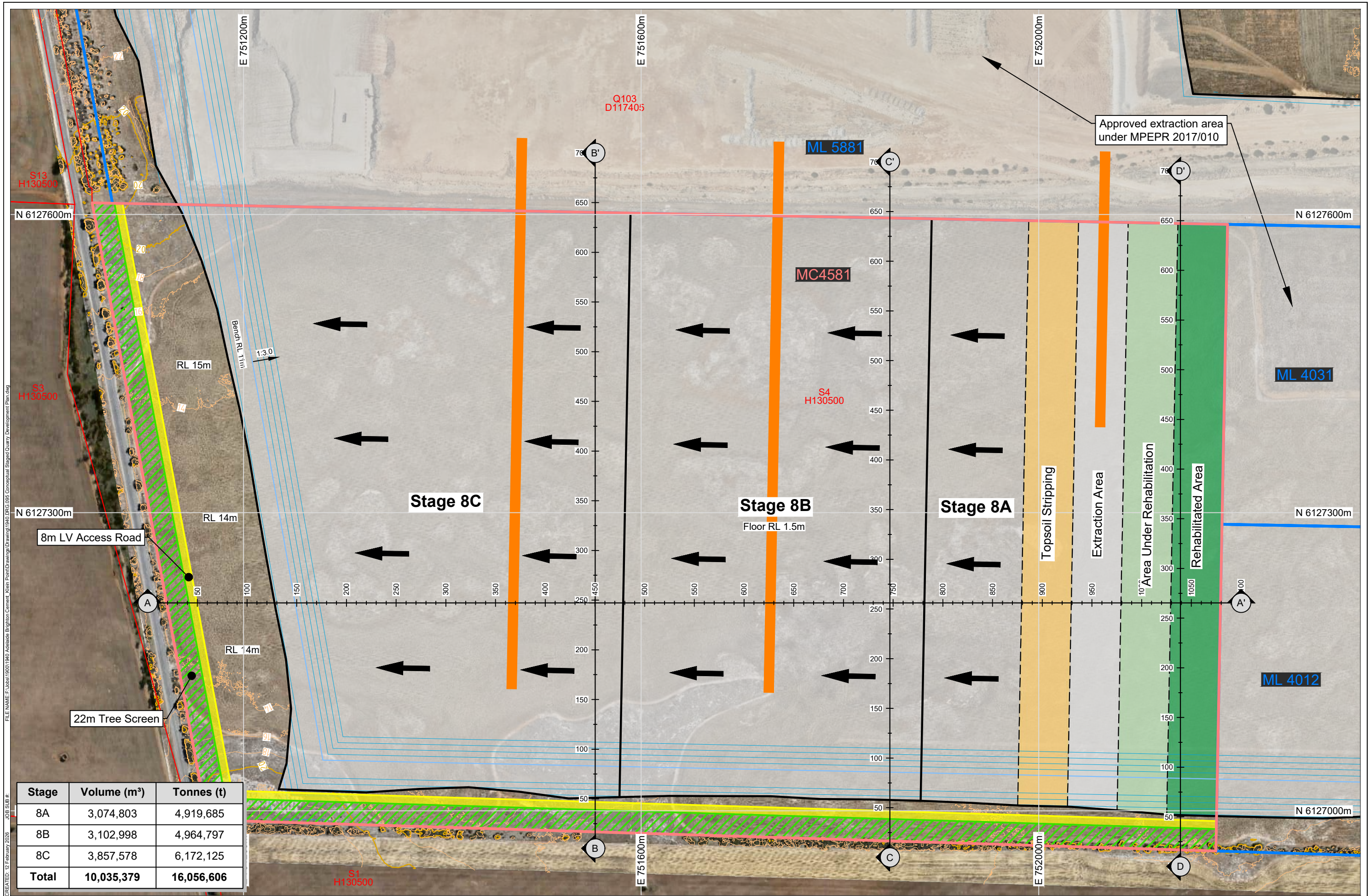
Data Sources:
 Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09
 Topography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 50cm
 Cadastre: © The Government of South Australia (C1) 2024
 Ecosystems:
 Other: © 2024 Microsoft Corporation; © 2024 Maxar; © CNES (2024) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

- Legend:**
- Cadastral Boundary
 - Mineral Lease
 - Mineral Claim
 - ▨ Tree Screen
 - ▨ LV Access Road



PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Quarry Development Plan
 SCALE: 1:8,000
 DRAWING NUMBER: 1940.DRG.084A
 REVISION: 1
 DATE: 13 February 2026
 PRINTED: 13 February 2026
 DRAWN: JR
 CHECKED: JR
 DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA2020 / MGA / AHD / 53



Stage	Volume (m ³)	Tonnes (t)
8A	3,074,803	4,919,685
8B	3,102,998	4,964,797
8C	3,857,578	6,172,125
Total	10,035,379	16,056,606

REV	DESCRIPTION	DATE	BY

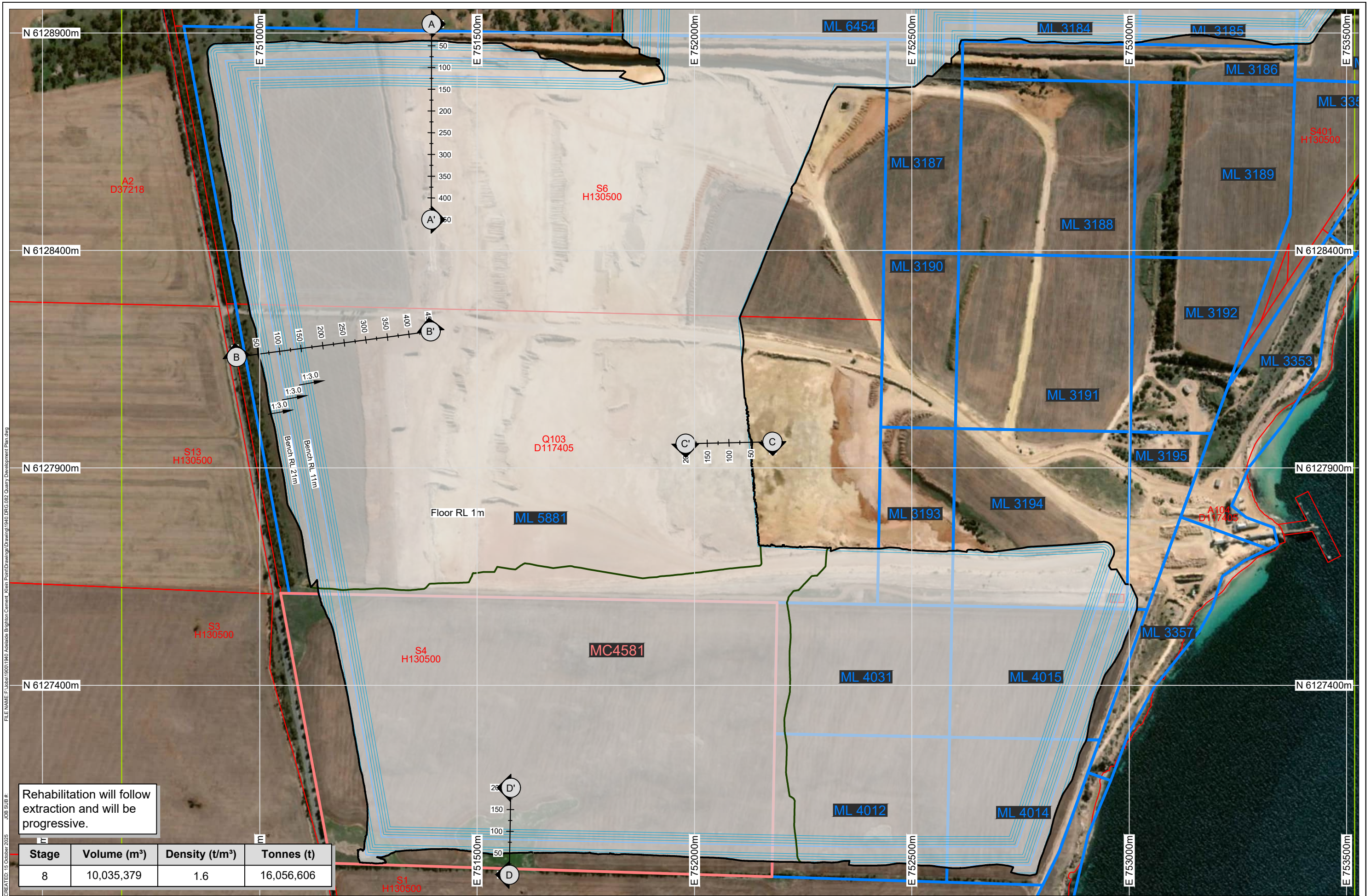
Data Sources:
 Photography: SLR Consulting Pty Ltd. UAV Survey, Captured 2024/12/09
 Topography: SLR Consulting Pty Ltd. UAV Survey, Captured 2024/12/09, DSM 50cm
 Cadastral: © The Government of South Australia (DIT) 2024
 Ecosystem: © 2024 Microsoft Corporation; © 2024 Maxar; © CNES (2024) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:

- Cadastral Boundary
- Mineral Lease
- Mineral Claim
- Extraction Area
- Tree Screen
- LV Access Road
- HME Haul Road
- Direction of Operations



Klein Point Adelaide Brighton Cement Ltd	Conceptual Staged Quarry Development Plan	SCALE: 1:3,500 <small>When Printed On A3</small>		DRAWING NUMBER: 1940.DRG.095A	REVISION: <small>DATE: 12 February 2026</small> <small>DATE: 12 February 2026</small>
<small>PROJECT: Klein Point</small> <small>CLIENT: Adelaide Brighton Cement Ltd</small>		<small>2 & 3/16 SECOND STREET NURIOOTPA SA 5350 AUSTRALIA T: 61 8 8562 4150</small>		<small>DATUM: HORIZONTAL / VERTICAL / ZONE</small> <small>CP</small>	<small>REVISION:</small> <small>JR</small>



Rehabilitation will follow extraction and will be progressive.

Stage	Volume (m ³)	Density (t/m ³)	Tonnes (t)
8	10,035,379	1.6	16,056,606

FILE NAME: F:\Jobs\190001940 Adelaide Brighton Cement - Klein Point\Drawings\Drawing\1940.DRG.082 Quarry Development Plan.dwg
JOB SUB #
CREATED: 15 October 2025

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09
 Topography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 50cm
 Cadastre: © The Government of South Australia (C) 2024
 Ecosystems:
 Other: © 2024 Microsoft Corporation; © 2024 Maxar; © CNES (2024) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

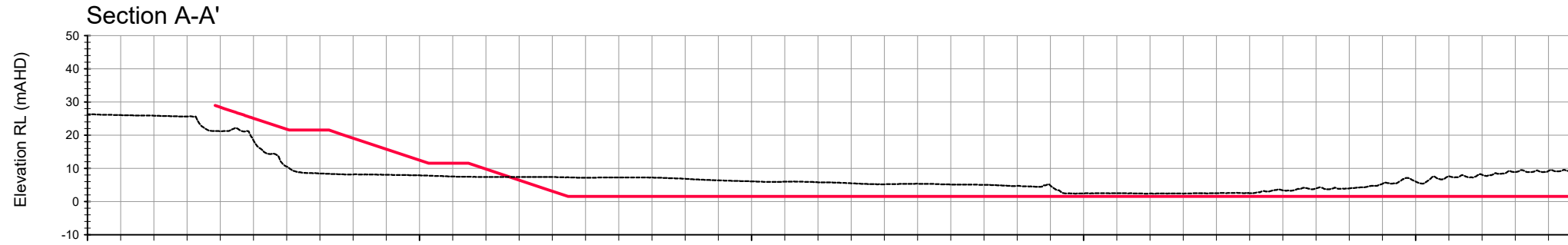
- Legend:**
- Cadastral Boundary
 - Mineral Lease
 - Mineral Claim
 - Historic Extraction Boundary



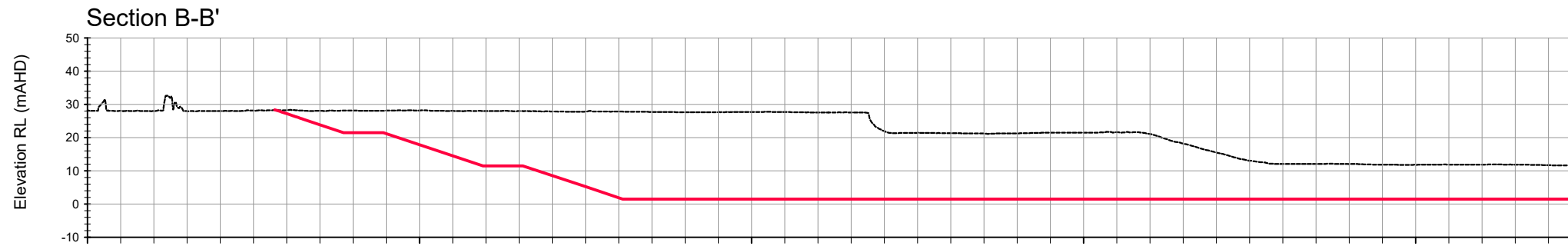
PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Quarry Development Plan
 SCALE: 1:8,000
 DRAWING NUMBER: 1940.DRG.082A
 REVISION:
 DATE: 15 October 2025
 PRINTED: 16 October 2025
 DRAWN: JR
 CHECKED: JR
 DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA2020 / MGA / AHD / 53

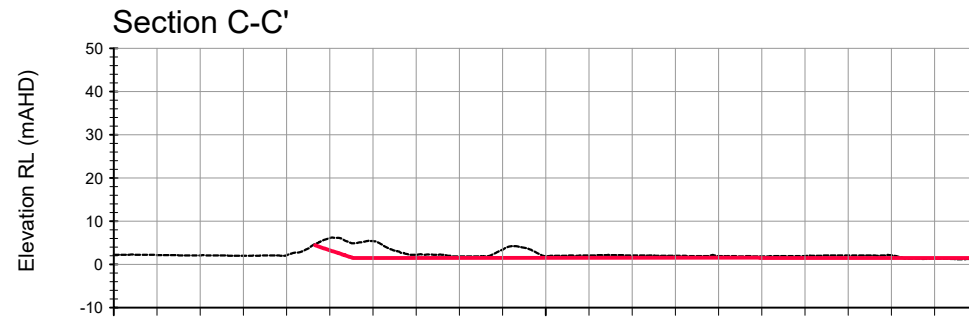
FILE NAME: F:\Jobs\19001940 Adelaide Brighton Cement_Klein Point\Drawings\1940.DRG.082.Quarry Development Plan.dwg
 CREATED: 5 March 2025
 JOB SUB #



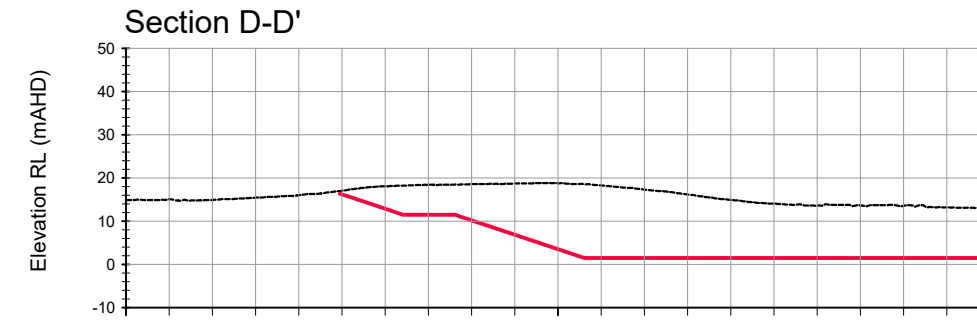
Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450
Design Level	26.0	25.9	25.6	21.2	18.4	10.5	8.4	8.2	8.1	7.9	7.5	7.4	7.4	7.4	7.1	7.2	7.2	6.8	6.4	6.1	6.0	5.8	5.5	5.2	5.4	5.1	5.0	4.7	4.8	2.4	2.5	2.4	2.4	2.5	2.5	3.4	3.9	4.0	5.3	6.0	7.6	8.1	8.9	9.2	9.4
Existing Level	26.0	25.9	25.6	21.2	18.4	10.5	8.4	8.2	8.1	7.9	7.5	7.4	7.4	7.4	7.1	7.2	7.2	6.8	6.4	6.1	6.0	5.8	5.5	5.2	5.4	5.1	5.0	4.7	4.8	2.4	2.5	2.4	2.4	2.5	2.5	3.4	3.9	4.0	5.3	6.0	7.6	8.1	8.9	9.2	9.4



Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	
Design Level	28.0	28.0	28.0	28.0	28.1	28.2	28.0	28.1	28.1	28.2	28.0	28.0	28.0	27.9	27.8	27.8	27.7	27.6	27.6	27.7	27.7	27.6	27.6	21.9	21.4	21.3	21.2	21.3	21.5	21.5	21.6	21.1	21.1	18.2	15.5	13.0	12.1	12.1	12.0	11.8	11.8	11.9	11.8	11.9	11.7	11.5
Existing Level	28.0	28.0	28.0	28.0	28.1	28.2	28.0	28.1	28.1	28.2	28.0	28.0	28.0	27.9	27.8	27.8	27.7	27.6	27.6	27.7	27.7	27.6	27.6	21.9	21.4	21.3	21.2	21.3	21.5	21.5	21.6	21.1	21.1	18.2	15.5	13.0	12.1	12.1	12.0	11.8	11.8	11.9	11.8	11.9	11.7	11.5



Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Design Level	2.2	2.1	2.0	2.1	6.1	5.4	2.2	1.9	3.4	1.9	2.1	2.1	2.0	2.0	1.9	2.0	2.1	2.1	1.4	1.3
Existing Level	2.2	2.1	2.0	2.1	6.1	5.4	2.2	1.9	3.4	1.9	2.1	2.1	2.0	2.0	1.9	2.0	2.1	2.1	1.4	1.3



Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Design Level	15.1	14.9	15.4	16.0	17.0	18.1	18.4	18.6	18.7	18.8	18.3	17.3	16.2	14.9	14.0	13.6	13.7	13.6	13.2	13.0
Existing Level	15.1	14.9	15.4	16.0	17.0	18.1	18.4	18.6	18.7	18.8	18.3	17.3	16.2	14.9	14.0	13.6	13.7	13.6	13.2	13.0

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 50cm
 Cadastre:
 Ecosystem:
 Other:

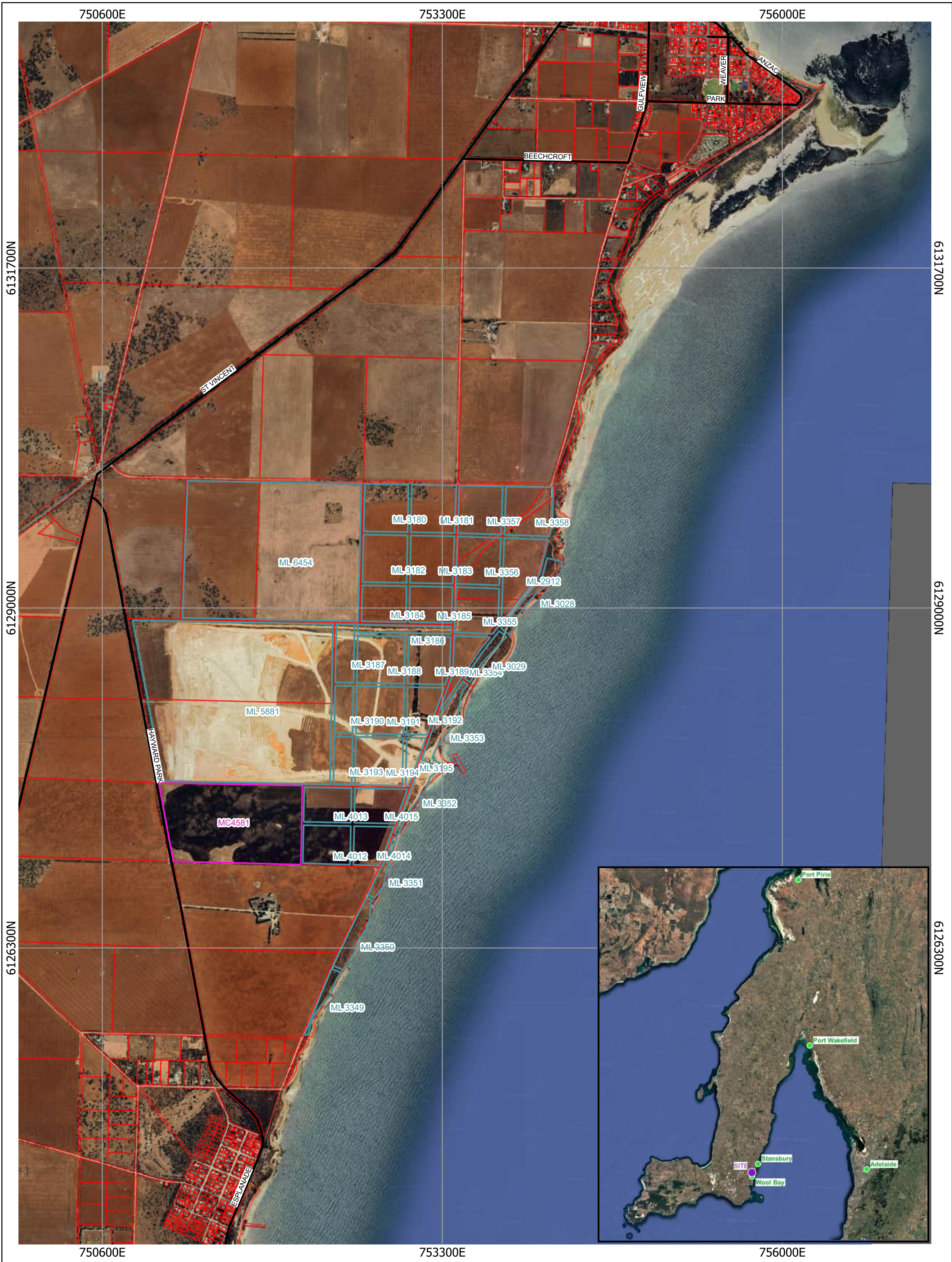
The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:
 - - - - Existing Ground Surface
 ——— Pit Design Surface



PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Conceptual Combined Pit Shell Cross Sections A-A' to D-D'
 SCALE: 1:1,750
 DRAWING NUMBER: 1940.DRG.082B
 DATE: 5 March 2025
 DRAWN: JR
 CHECKED: JR
 DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA2020 / MGA / AHD / 53



REV	DESCRIPTION	DATE	BY

- Legend:**
- Cadastral Boundaries
 - Mineral Claim 4581
 - Mineral leases
 - Towns
 - Road Linework



PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Site Location Map

SLR

SCALE: 1:27,000

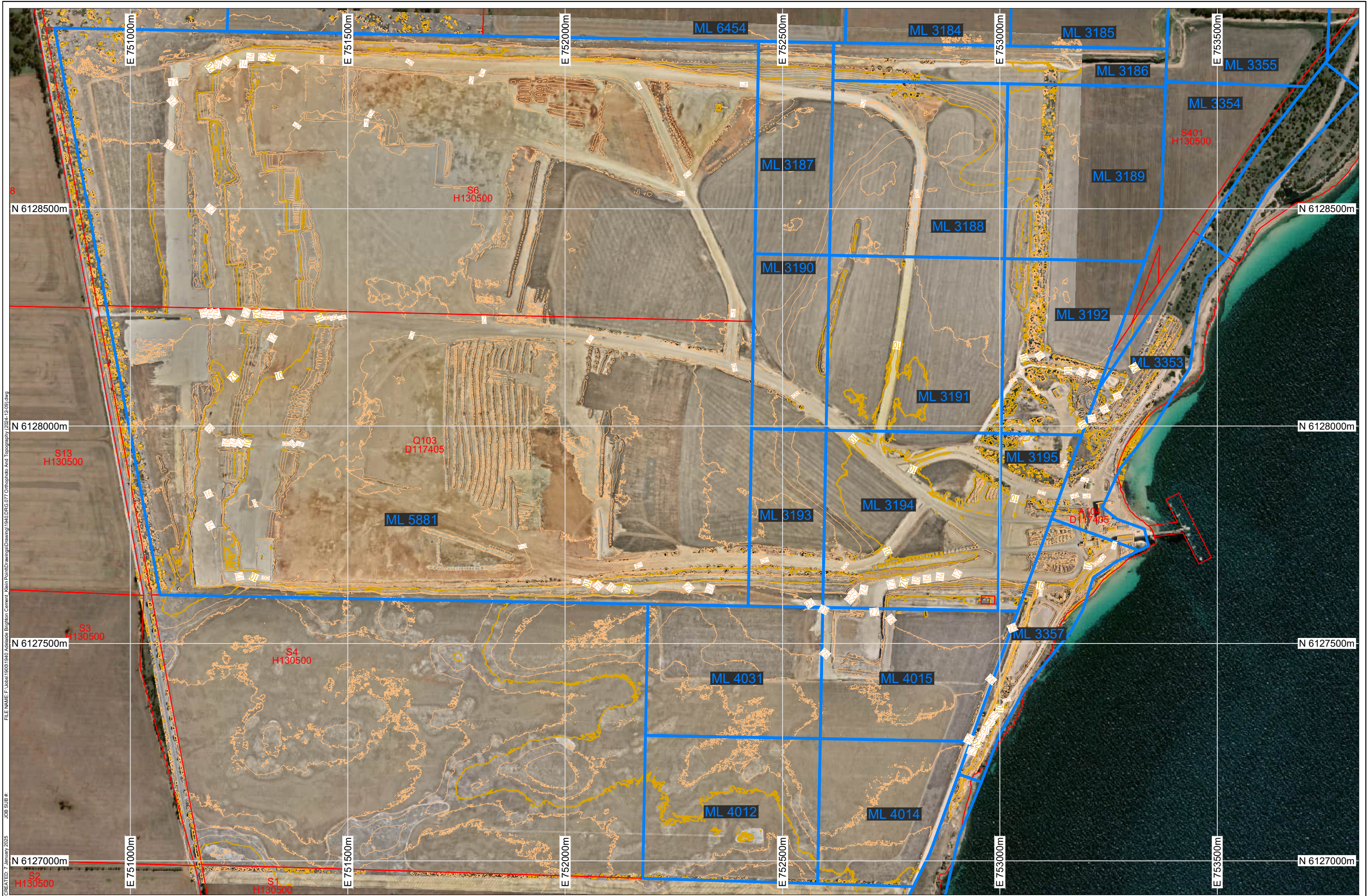
DATE: 21-January-2022
 PRINTED: 21-January-2022

DRAWN: MB
 CHECKED: CM

DRAWING NUMBER: 1940.DRG.047

DATUM: HORIZONTAL / VERTICAL / ZONE
 MGA / AHD / 53

REVISION: EPG/783



FILE NAME: F:\Jobs\190011940 Adelaide Brighton Cement_Klein Point\Drawing\Drawing\1940.DRG.077 Orthophoto And Topography (2024-12-09).dwg
 CREATED: 7 January 2025
 JOB SUB #

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09
 Topography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 50cm
 Cadastral: © The Government of South Australia (C1) 2024
 Ecosystem: © 2024 Microsoft Corporation; © 2024 Maxar; © CNES (2024) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:
— Cadastral Boundary
— Mineral Lease



PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Orthophoto and Topography 2024-12-09

2 & 3/16 SECOND STREET NURIOOTPA SA 5350 AUSTRALIA T: 61 8 8562 4158

SCALE: 1:8,000
 0 160m

DRAWING NUMBER: 1940.DRG.077A
 REVISION:

--	--

DATE: 7 January 2025
 PRINTED: 15 January 2025

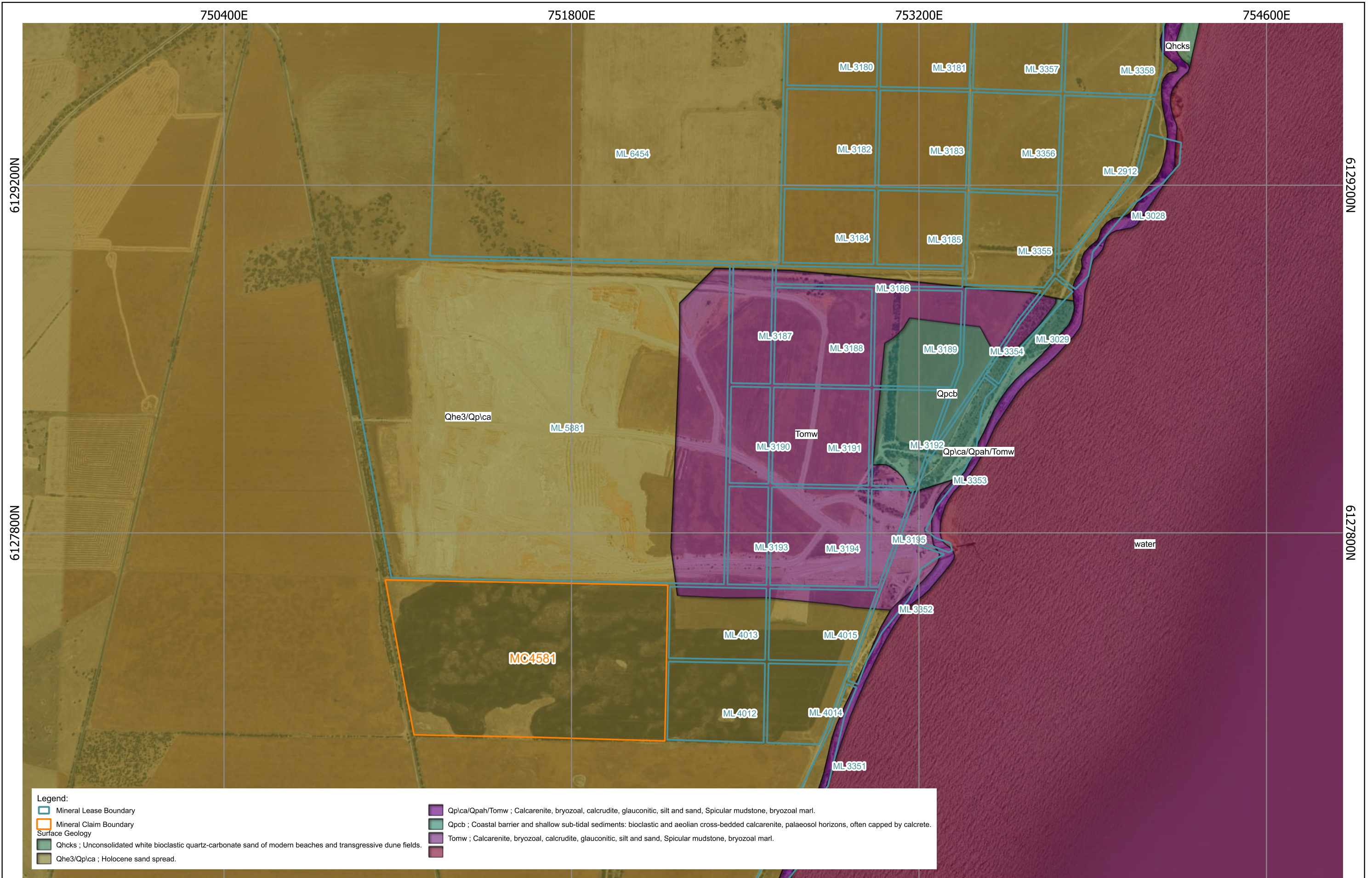
DRAWN:

--	--

 CHECKED:

--	--

DATUM: HORIZONTAL / VERTICAL / ZONE
 TT GDA2020 / MGA / AHD / 53



Legend:

Mineral Lease Boundary	Qpca/Qpah/Tomw ; Calcarenite, bryozoal, calcrudite, glauconitic, silt and sand, Spicular mudstone, bryozoal marl.
Mineral Claim Boundary	Qpcb ; Coastal barrier and shallow sub-tidal sediments: bioclastic and aeolian cross-bedded calcarenite, palaeosol horizons, often capped by calcrete.
Surface Geology	Tomw ; Calcarenite, bryozoal, calcrudite, glauconitic, silt and sand, Spicular mudstone, bryozoal marl.
Qhcks ; Unconsolidated white bioclastic quartz-carbonate sand of modern beaches and transgressive dune fields.	Qhe3/Qpica ; Holocene sand spread.

REV	DESCRIPTION	DATE	BY

Data
 Photography: Google Satellite Imagery accessed: 21/1/2025
 Cadastre: Data.sa.gov.au/Boundaries are indicative only, not all boundaries shown
 Ecosystems: Other: SARIG, 2025



PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Regional Geology Map

SCALE: 1:14,000
 When Printed On A3

DRAWING NUMBER: 1940.DRG.045

DATE: 21-January-2025
 PRINTED: 21-January-2025

DRAWN: MS
 CHECKED:

DATUM: HORIZONTAL / VERTICAL /
 MGA / AHD / 53

REVISION: EPG5.7854



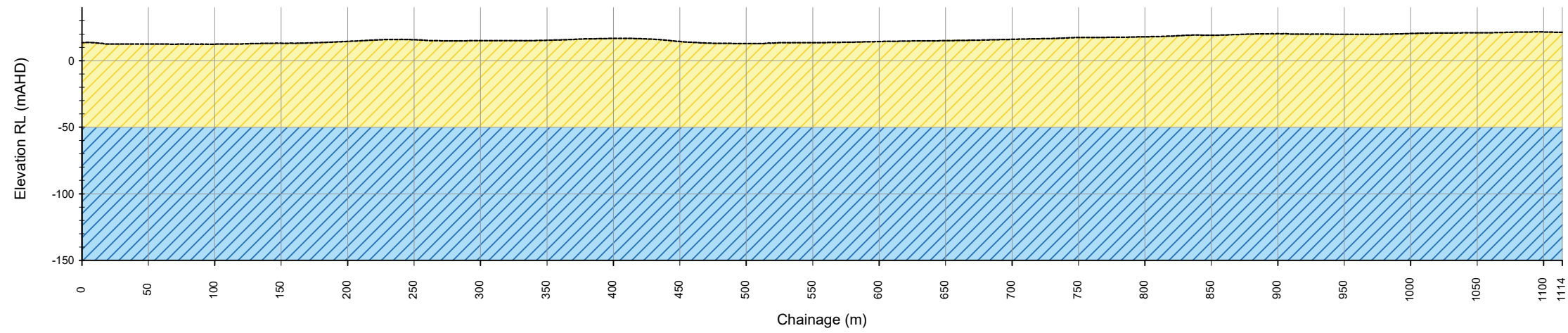
Legend:

- Cadastral Boundary
- Mineral Lease

SCALE: 1:5,000
When Printed On A3

0 100m

SCALES: HORIZONTAL 1:4000 VERTICAL 1:4000



REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: Groundwork Plus Pty Ltd UAV Photogrammetry Survey, Captured 2022-11-29
 Topography: Groundwork Plus Pty Ltd UAV Photogrammetry Survey, Captured 2022-11-29
 Cadastre: © The Government of South Australia (C11) 2022
 Ecosystem: © 2022 Maxar; © CNES (2022) Distribution Airbus DS
 Other: © 2022 Microsoft Corporation; © 2022 Maxar; © CNES (2022) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:

- Calcarenites
- Sandy/Pebbly Clays



PROJECT: Klein Point

CLIENT: Adelaide Brighton Cement Ltd

TITLE: Geological Cross Section

2 & 3/16 SECOND STREET, NURIOOTPA SA 5355 AUSTRALIA
 T: 61 8 8562 4150
 www.slrcollins.com

SCALE: 1:4,000
When Printed On A3

0 80m

DRAWING NUMBER: 1940.DRG.055

REVISION: MB

DATE: 30 May 2025
 PRINTED: 30 May 2025

DRAWN: CP
 CHECKED: MB

DATUM: HORIZONTAL / VERTICAL / ZONE

GDA2020 / MGA / AHD / 53



Drillhole Locations			
ID	Easting	Northing	Elevation
DH001	751180.45	6127681.19	20.3m
DH002	751430.45	6127681.19	21.4m
DH003	751680.45	6127681.19	17.3m
DH004	751930.45	6127681.19	20.4m
DH005	752180.45	6127681.19	22.6m
DH056	752180.85	6127437.19	21.9m
DH057	752176.16	6127187.18	20.5m
DH063	752178.06	6126939.18	18.2m
DH064	751929.55	6127442.19	24.9m
DH065	751680.35	6127446.18	14.5m
DH066	751417.65	6127436.18	14.8m
DH067	751146.95	6127435.18	14.8m
DH068	751176.75	6127202.18	12.7m
DH069	751426.65	6127199.18	14.3m
DH070	751676.65	6127195.18	14.3m
DH071	751926.05	6127192.18	24.0m
DH072	751923.85	6126942.18	15.2m
DH073	751672.55	6126945.18	14.6m
DH074	751423.55	6126949.18	16.8m
DH075	751210.65	6126944.18	20.8m

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: Groundwork Plus, UAV Photogrammetry Survey, 2022-05-17 (Paddocks) & 2022-04-13 (Site)
 Topography: SA
 Cadastre: © The Government of South Australia (DIT) 2022
 Ecosystem: © 2022 Microsoft Corporation; © 2022 Maxar; © CNES (2022) Distribution Airbus DS
 Other: © 2022 Microsoft Corporation; © 2022 Maxar; © CNES (2022) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:

- Cadastral Boundary
- Mineral Lease
- Mineral Claim
- Drillhole Location within Proposed Mineral Claim
- Drillhole Location outside Proposed Mineral Claim



PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Drillhole Location Map

2 & 3/16 SECOND STREET, NURIOOTPA SA 5350 AUSTRALIA
 T: 61 8 8562 4158
 www.slrconsulting.com

SCALE: 1:4,000
 0 80m

DRAWING NUMBER: 1940.DRG.042
 REVISION:

--

DATE: 22 January 2025
 PRINTED: 22 January 2025

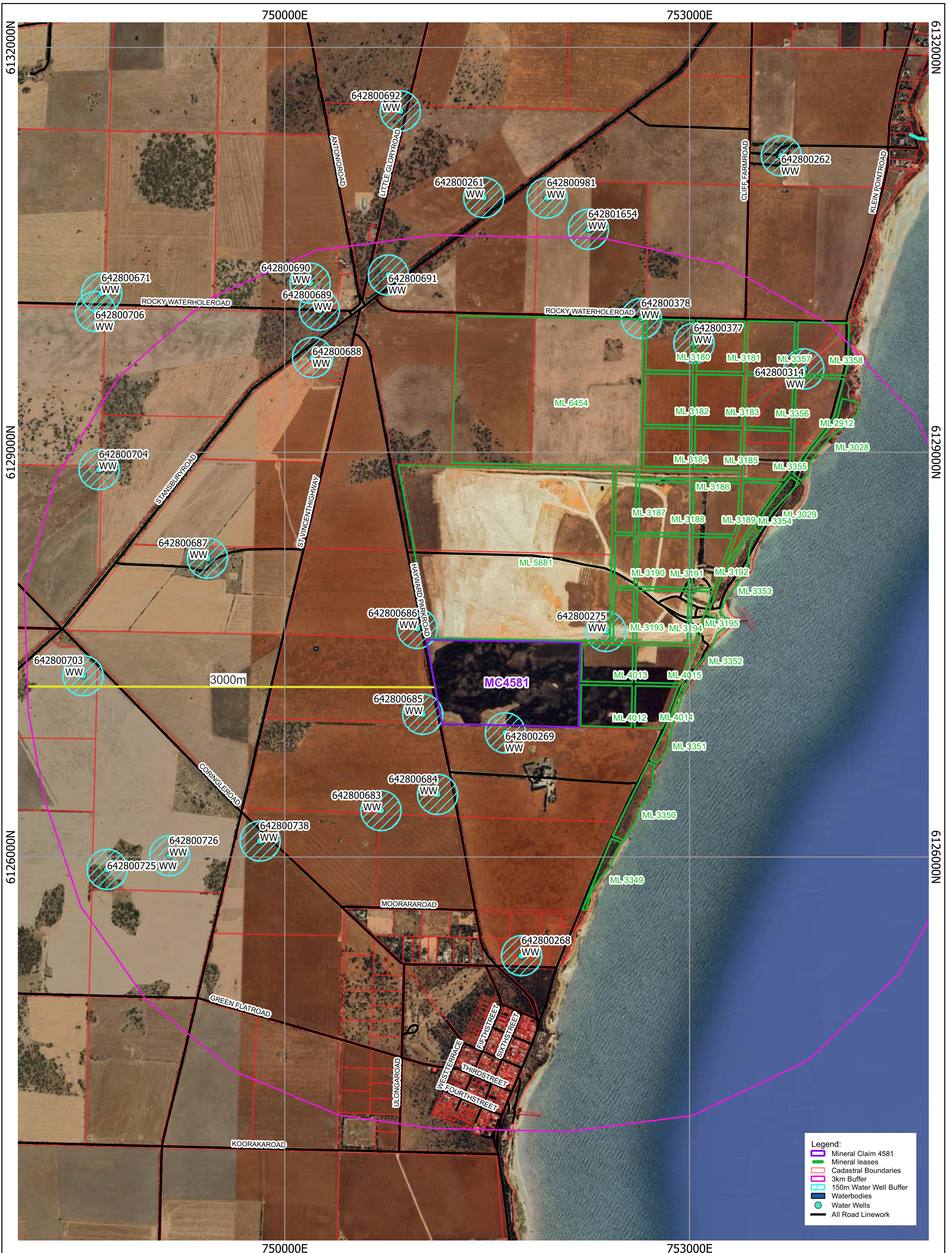
DRAWN: CP
 CHECKED: JR

DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA94 / MGA / AHD / 53



REV	DESCRIPTION	DATE	BY

<p>Legend:</p> <ul style="list-style-type: none"> Mineral Claim Boundary 5km Buffer 8km Buffer ● All Earthquakes 		<p>PROJECT: Klein Point</p> <p>CLIENT: Adelaide Brighton Cement Ltd</p>	<p>TITLE: Geohazards Map</p>	<p>SCALE: 1:81,000</p> <p>0 400 800 1,200 1,600 m</p> <p>DATE: 21-January-2025 DRAWN: JC</p> <p>PRINTED: 21-January-2025 CHECKED: CM</p>	<p>DRAWING NUMBER: 1940.DRG.085</p> <p>DATUM: HORIZONTAL / VERTICAL / ZONE</p> <p>EPSG: 7803 MGA / AHD / 53</p>	<p>REVISION:</p>
---	--	---	------------------------------	--	---	------------------



REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: UAV Survey 2023-11-2; Google Imagery accessed 20 February 2024
 Topography: UAV Survey 2023-11-2
 Cadastral: Data.sa.gov.au; Boundaries shown are indicative only
 Elevation: Other: SARI0, 2004

750000E

N

Klein Point

Adelaide Brighton Cement Ltd

PROJECT: Klein Point

CLIENT: Adelaide Brighton Cement Ltd

SLR

753000E

Groundwater Map

SCALE: 1:25,000

0 100 200 300 400 m

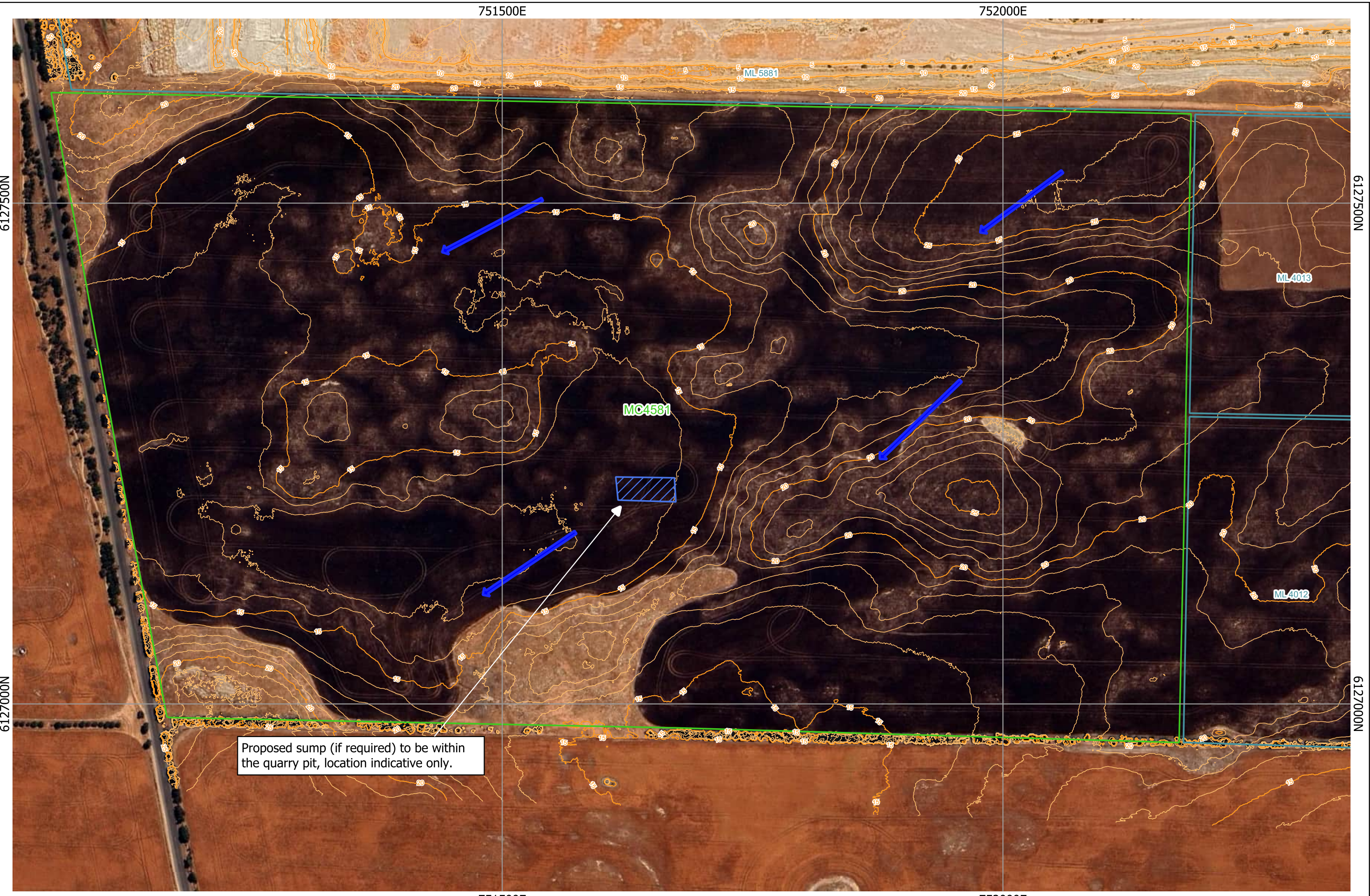
DRAWING NUMBER: 1940.DRG.049

DATE: 25 January 2024 DRAWN: JC

PRINTED: 21 January 2024 CHECKED: JR

DATUM: HORIZONTAL / VERTICAL / ZONE

PROJ: MGA / AHD / 53



REV	DESCRIPTION	DATE	BY
1	Added location of proposed sump area	09/09/2025	CL

- Legend:**
- Mineral Claim 4581
 - Mineral leases
 - Proposed Sump
 - ➔ Drainage direction
 - Major Contours
 - Minor Contours

Data
Photography: Google Satellite Imagery accessed: 04-August-2025
Topography: Data.sa.gov.au; Boundaries are indicative only, not all boundaries shown
Ecosystems: Other: SARIG, 2025



PROJECT: Klein Point
CLIENT: Adelaide Brighton Cement Ltd

TITLE: Topographic Map

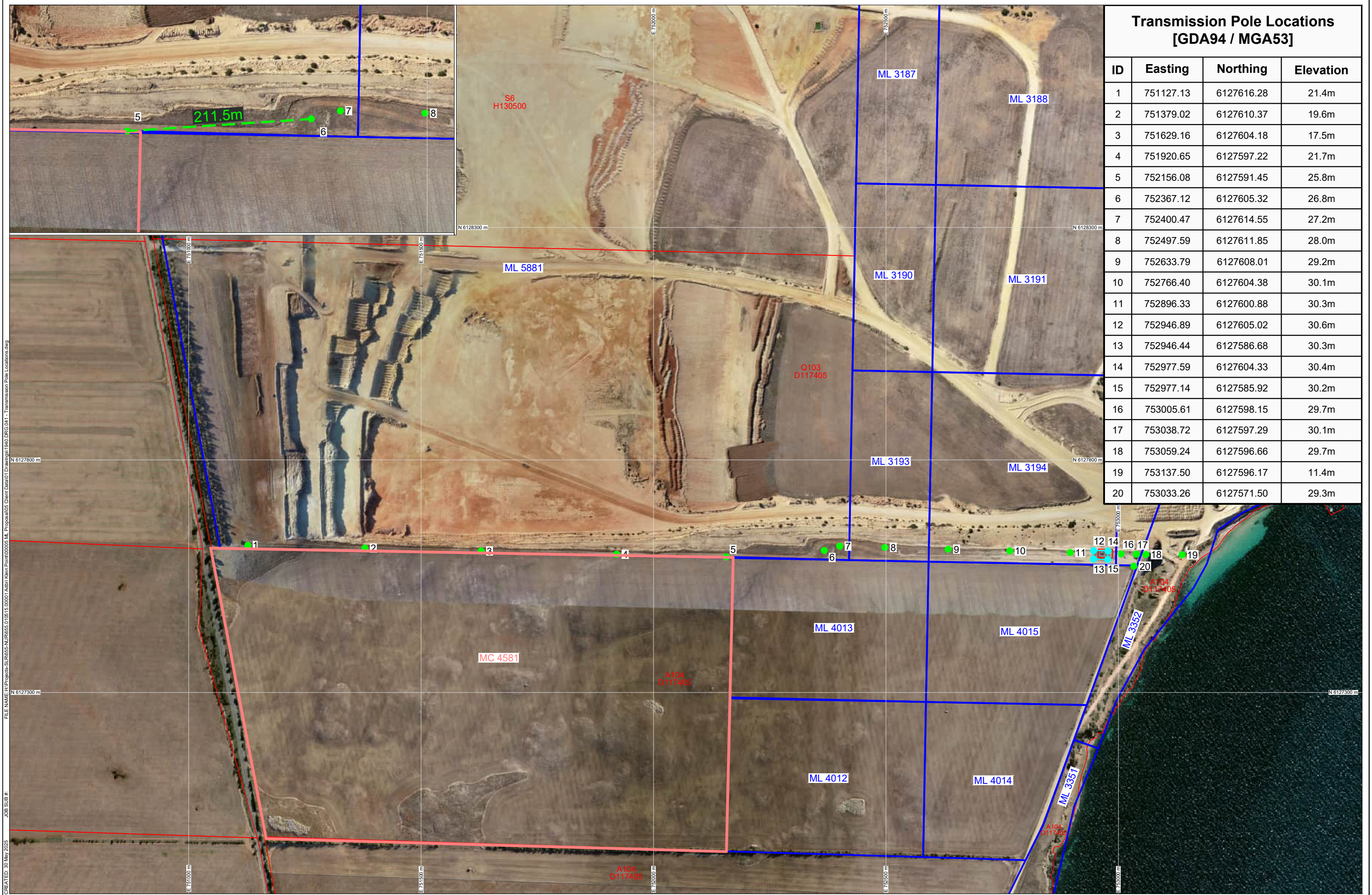
SCALE: 1:3,500
When Printed On A3

DATE: 15-October-2025
PRINTED: 15-October-2025

DRAWN: CL
CHECKED: CM

DRAWING NUMBER: 1940.DRG.046
DATUM: HORIZONTAL / VERTICAL / MGA / AHD / 53

REVISION: EPG/783



Transmission Pole Locations [GDA94 / MGA53]			
ID	Easting	Northing	Elevation
1	751127.13	6127616.28	21.4m
2	751379.02	6127610.37	19.6m
3	751629.16	6127604.18	17.5m
4	751920.65	6127597.22	21.7m
5	752156.08	6127591.45	25.8m
6	752367.12	6127605.32	26.8m
7	752400.47	6127614.55	27.2m
8	752497.59	6127611.85	28.0m
9	752633.79	6127608.01	29.2m
10	752766.40	6127604.38	30.1m
11	752896.33	6127600.88	30.3m
12	752946.89	6127605.02	30.6m
13	752946.44	6127586.68	30.3m
14	752977.59	6127604.33	30.4m
15	752977.14	6127585.92	30.2m
16	753005.61	6127598.15	29.7m
17	753038.72	6127597.29	30.1m
18	753059.24	6127596.66	29.7m
19	753137.50	6127596.17	11.4m
20	753033.26	6127571.50	29.3m

FILE NAME: H:\Projects-SI\Projects-SI\1940\1940.DWG.041 - Transmission Pole Locations.dwg
 JOB SUB #
 CREATED: 30 May 2025

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: Groundwork Plus, UAV Photogrammetry Survey, 2022-05-17 (Paddocks) & 2022-04-13 (Site)
 Topography: SA 3352 AUSTRALIA
 Cadastre: © The Government of South Australia (DIT) 2022
 Ecosystem: Other: © 2022 Microsoft Corporation; © 2022 Maxar; © CNES (2022) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

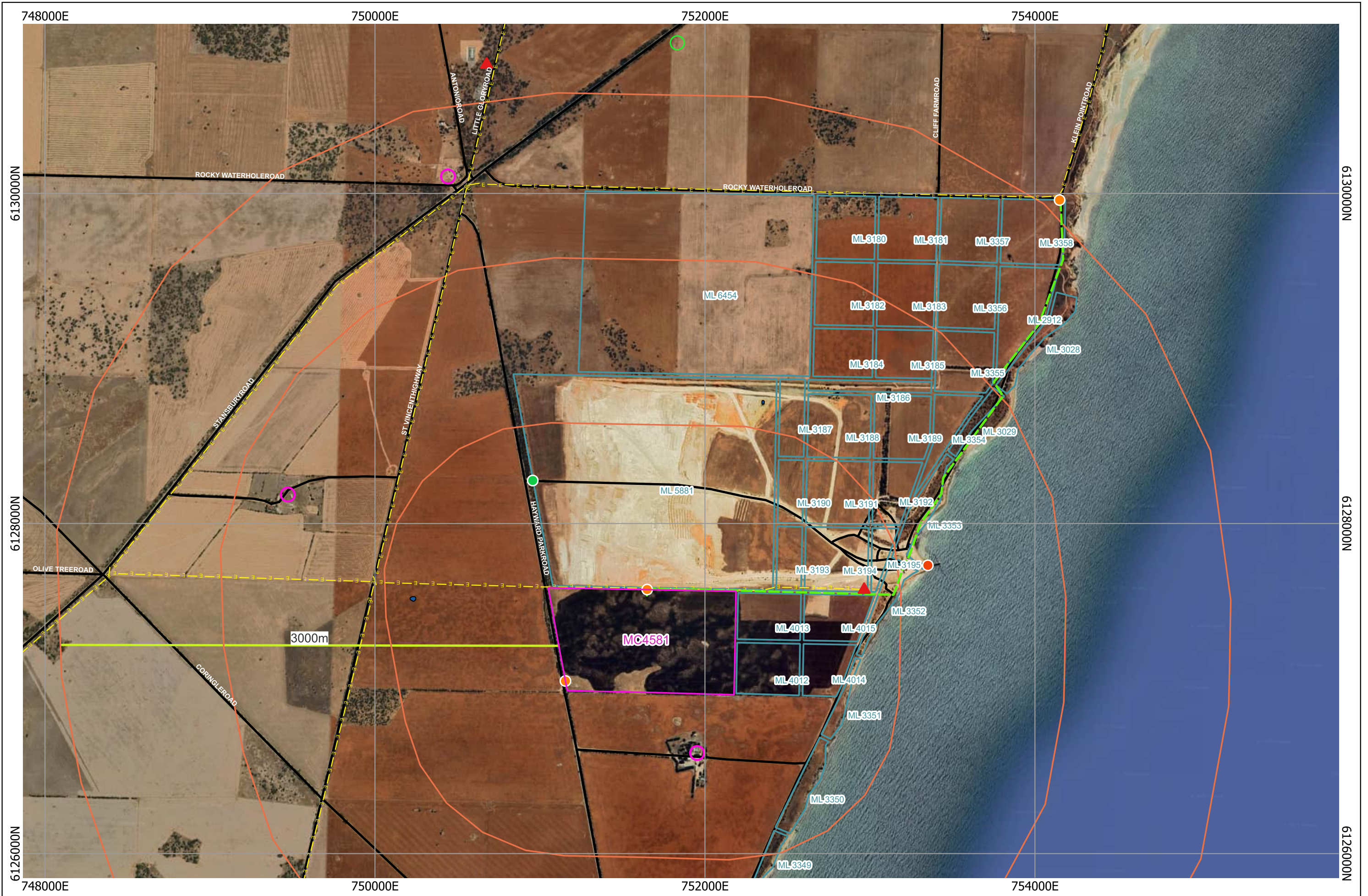
Legend:

- Cadastral Boundary
- Mineral Lease
- Transmission Pole
- Substation Boundary



PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Transmission Pole Locations
 SCALE: 1:7,500
 DRAWING NUMBER: 1940.DRG.041
 DATE: 30 May 2025
 DRAWN: JR
 CHECKED: JR
 DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA94 / MGA / AHD / 53



REV	DESCRIPTION	DATE	BY

Legend:

- Mineral Claim Boundary
- Mineral Lease Boundary
- Waterbodies
- Residence
- SA Heritage Place
- ▲ Power Substation
- Site Entry & Exit
- Flinders Port
- Road Freight Entry and Exit
- Power transmission line
- All Road Linework
- Access Road

PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Land Access Map

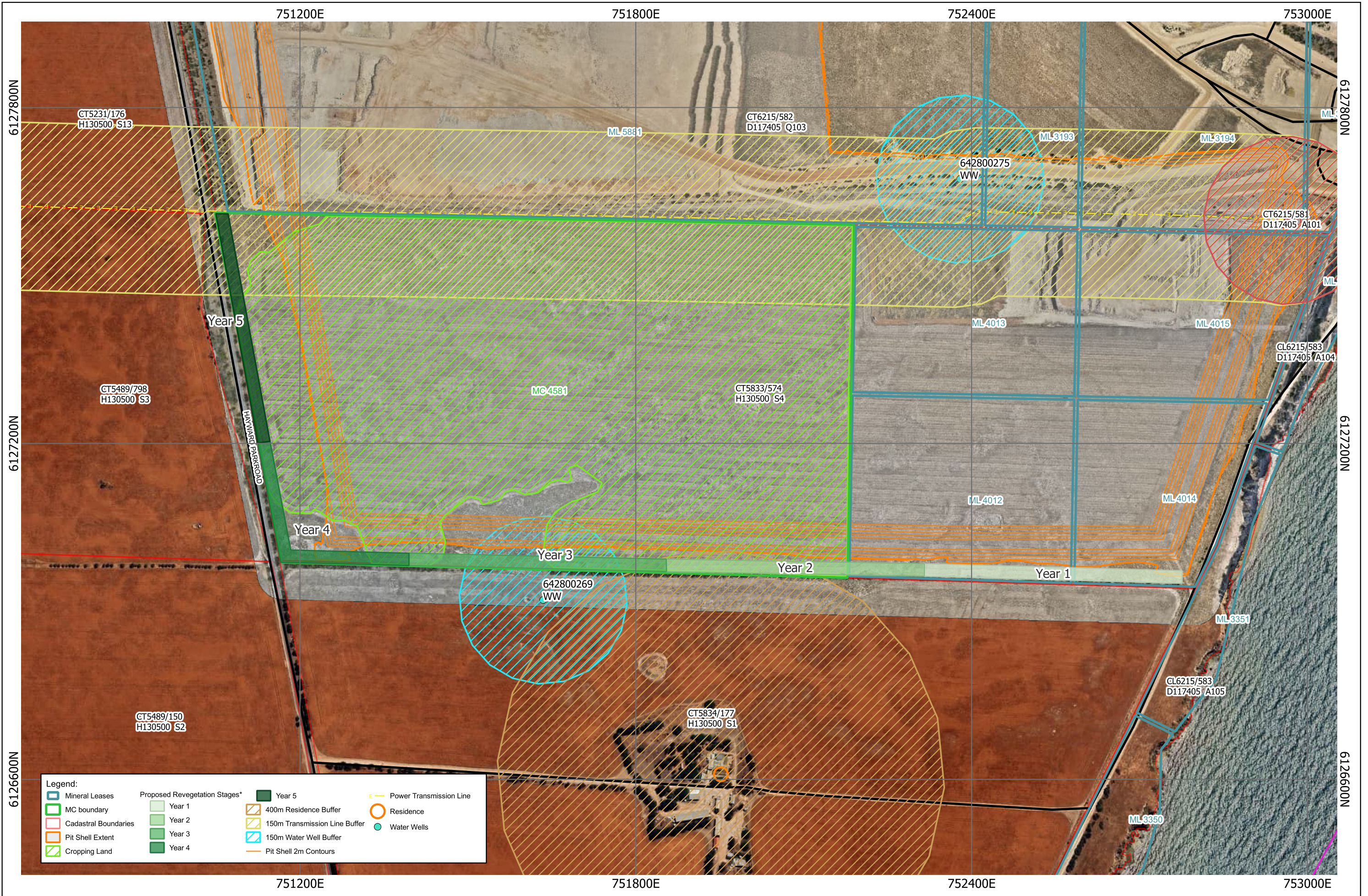
SCALE: 1:21,000
 When Printed On A3

DATE: 21-January-2025
 PRINTED: 21-January-2025

DRAWN: MB
 CHECKED: JR

DRAWING NUMBER: 1940.DRG.051
 DATUM: HORIZONTAL / VERTICAL / EPSG:7853
 MGA / AHD / 53

SLR
 PH: +61 3871 0411



Legend:

Mineral Leases	Proposed Revegetation Stages*	Year 5	Power Transmission Line
MC boundary	Year 1	400m Residence Buffer	Residence
Cadastral Boundaries	Year 2	150m Transmission Line Buffer	Water Wells
Pit Shell Extent	Year 3	150m Water Well Buffer	
Cropping Land	Year 4	Pit Shell 2m Contours	

REV	DESCRIPTION	DATE	BY
1	Issue of this map	04/01/2020	CL
2	Included Proposed Revegetation Stages, included updated of this, and amended CRS	28/01/2020	LO
3	Updated Proposed Revegetation Stages	13/02/2020	CL

Data Sources:
 Photography: Google Satellite Imagery accessed: 13 February 2020
 Topography: Data.sa.gov.au/Boundaries are indicative only, not at boundaries shown
 Cadastral: Data.sa.gov.au/Boundaries are indicative only, not at boundaries shown
 Ecosystems: Other: SARIG, 2020

*Does not constitute exempt land

PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

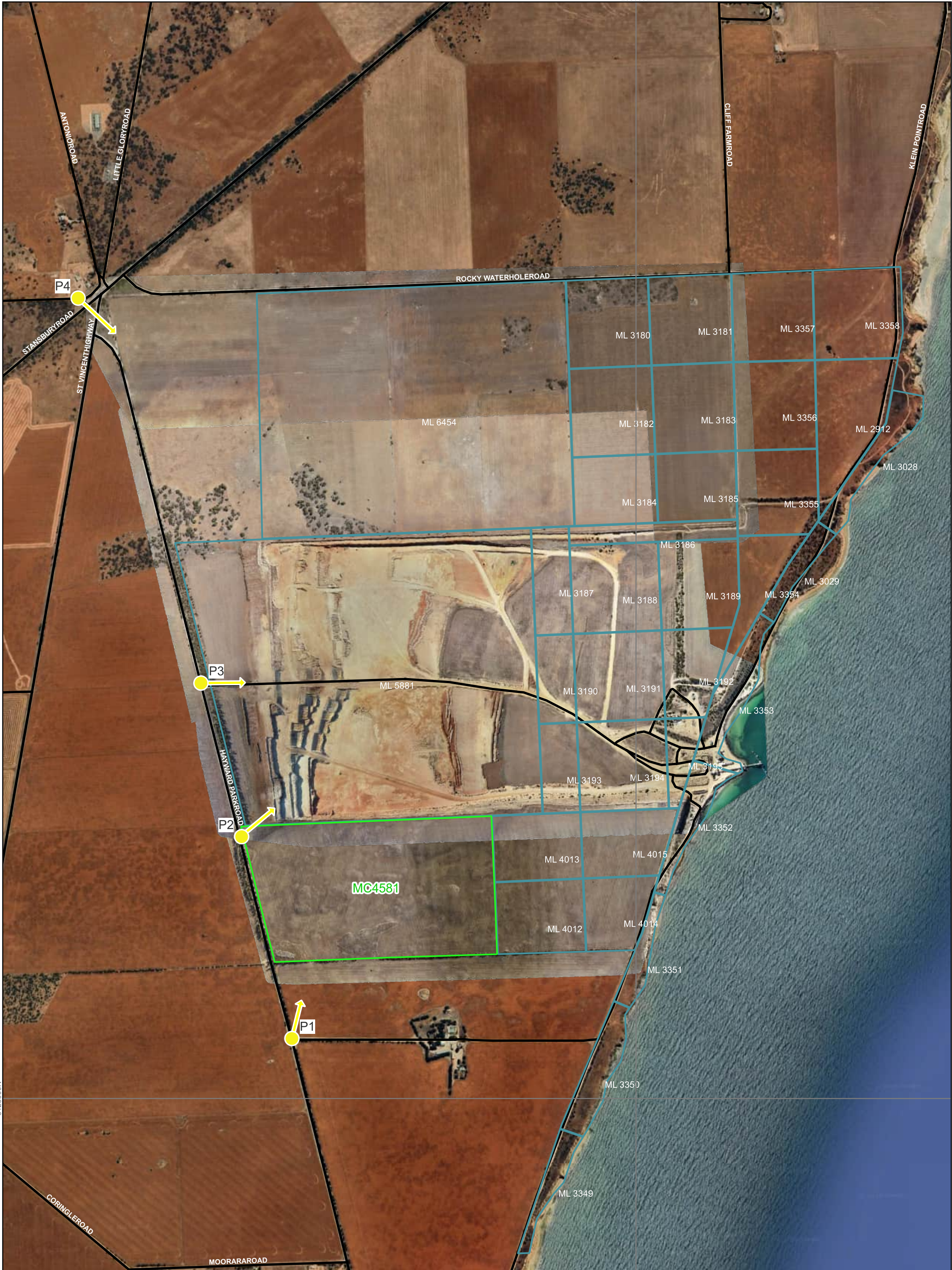
TITLE: Exempt Land Map

SLR
 PH +61 3071 0411
 WWW.GROUNDWORKPLUS.COM.AU

SCALE: 1:6,000
 0 30 60 90 120 m

DRAWING NUMBER: 1940.DRG.043B
 REVISION: 3

DATE: 13 February 2020
 PRINTED: 13 February 2020
 DRAWN: CL
 CHECKED: CM
 DATUM: HORIZONTAL / VERTICAL /
 MGA / AHD / 53
 EPSG:7824



REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: UAV Survey 2022-05-17; Google Satellite Imagery (2022) accessed 06-June-2025
 Topography: UAV Survey 2022-05-17
 Cadastre: Data as per ac; Boundaries shown are indicative only
 Ecosystem: SARG, 2025

Legend:

- Proposed MC boundary
- Mineral leases
- Photo Locations Proposed MC
- All Road Linework



PROJECT: **Klein Point**

CLIENT: **Adelaide Brighton Cement Ltd**

TITLE: **Visual Assessment Map**

PH: +61 3571 0411
WWW.GROUNDWORK.COM.AU

SCALE: **1:16,000**

When Printed On A3

DATE: 06-June-2025 DRAWN: MS
 PRINTED: 06-June-2025 CHECKED:

DRAWING NUMBER: **1940.DRG.050**

DATUM: HORIZONTAL / VERTICAL / ZONE
MGA / AHD / 54

REVISION: **EP562784**



LEGEND

- MC Boundary
- ML Boundary
- Cadastral Boundaries

Proposed Revegetation Stages old

- Year 1
- Year 2
- Year 3
- Year 4
- Year 5

REV	DESCRIPTION	DATE	BY

Photography: Google Satellite Imagery; Accessed 13 February 2026
 Topography: Data.sa.gov.au
 Cadastre: Data.sa.gov.au

All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

 Klein Point Quarry	Southern Planting Schedule Map
Adelaide Brighton Cement Ltd	
SCALE: 1:7,000 When Printed on A3	DRAWING NUMBER: 1940.DRG.093 DATE: 13-February-2026 PRINTED: 13-February-2026
CLIENT:	DESIGNER: MB CHECKED: CM GDA2020 / MGA zone 53 / AHD

201000E

204000E

207000E

Lime Kiln
 Register ID No.: 16680
 Location: Stansbury-Yorketown Road, 3.2 km north
 Details: Designated place of archaeological significance. Confirmed as a State Heritage Place.

H5440015

6129000N

6129000N

6126000N

6126000N

6123000N

6123000N

H5440003

H5440003

Wool Bay Lime Kiln and Jetty
 Register ID No.: 10112
 Location: The Esplanade Woold Bay, 2.8 km south
 Details: Confirmed as State Heritage Place

19 records for registered heritage places are present within the Yorke Peninsula Council District. Two (2) registered heritage places are located approximately three (3) km from the boundary of MC 4581.

201000E

204000E

207000E

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: Google Satellite Imagery accessed: 13-Jun-2025
 Topography: Data.sa.gov.au; Boundaries shown are indicative only; not all boundaries shown
 Esri: Esri, 2025
 Other: SARIG, 2025

- Legend:
- MC 4581
 - Mineral leases
 - SA Registered Heritage Places



PROJECT:	Klein Point
CLIENT:	Adelaide Brighton Cement Ltd

TITLE: Heritage Map		SCALE: 1:30,000	DRAWING NUMBER: 1940.DRG.086	REVISION:
PROJECT: Klein Point		0 100 200 300 400 m	DATE: 26-June-2024	DATE: 26-June-2024
CLIENT: Adelaide Brighton Cement Ltd		PRINTED: 26-June-2024	CHECKED: CM	DATUM: MGA / AHD / 54



FILE NAME: F:\Jobs\190001940 Adelaide Brighton Cement - Klein Point\Drawings\Drawing\1940.DRG.088 Groundwater Cross Section Map.dwg
 JOB SUB #
 CREATED: 6 August 2025

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09
 Topography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 1.5m
 Cadastre: © The Government of South Australia (C1) 2024
 Ecosystem: © 2024 Microsoft Corporation; © 2024 Maxar; © CNES (2024) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:
— Cadastral Boundary
— Mineral Claim



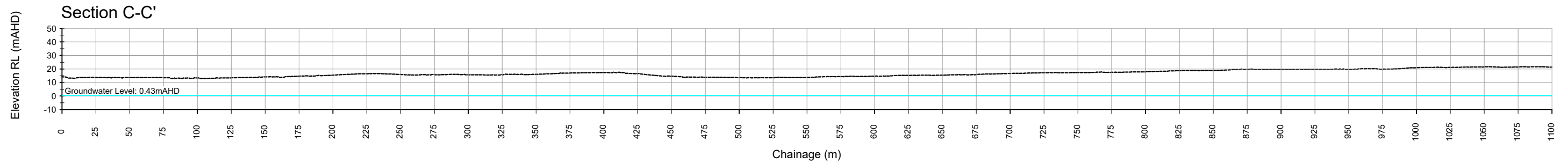
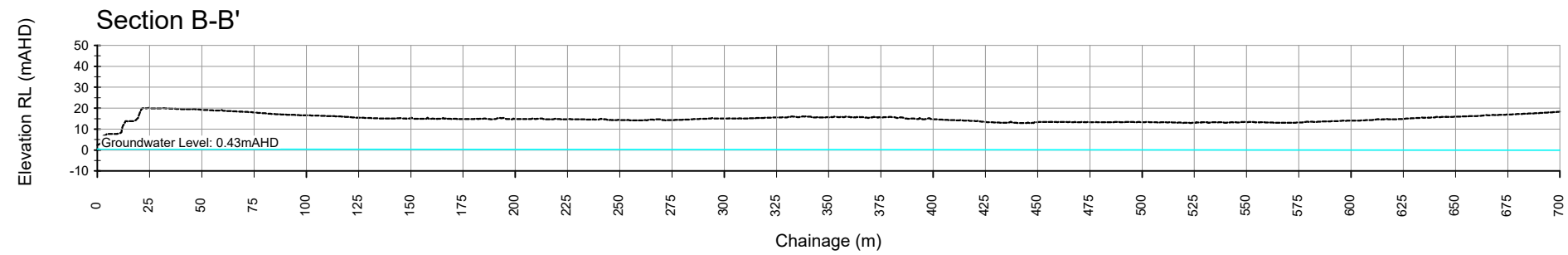
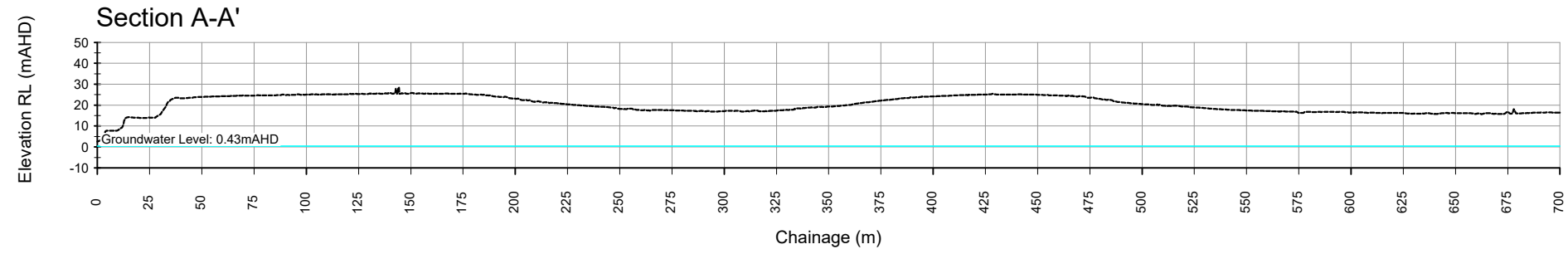
PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Groundwater Cross-Section Plan
 SCALE: 1:3,500
 DRAWING NUMBER: 1940.DRG.088A
 REVISION:

--

 DATE: 6 August 2025
 PRINTED: 16 October 2025
 DRAWN: TR
 CHECKED: TT
 DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA2020 / MGA / AHD / 53

FILE NAME: F:\Jobs\1940\1940 Adelaide Brighton Cement_Klein Point\Drawings\1940.DRG.088 Groundwater Cross Section Map.dwg
 CREATED: 6 August 2025
 JOB SUB #



REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 1.5m
 Cadastre: © The Government of South Australia (DIT) 2024
 Ecosystem: Other: © 2024 Microsoft Corporation; © 2024 Maxar; © CNES (2024) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:
 - - - Existing Topography
 — Groundwater Level

PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Groundwater Cross-Section Plan
 Sections A-A' to C-C'

2 & 3/16 SECOND STREET
 NURIOOTPA
 SA 5350
 AUSTRALIA
 T: 01 8 8562 4158
 www.slrconsulting.com

SCALE: 1:3,000
 0 60m
 When Printed On A3

DATE: 6 August 2025
 PRINTED: 16 October 2025

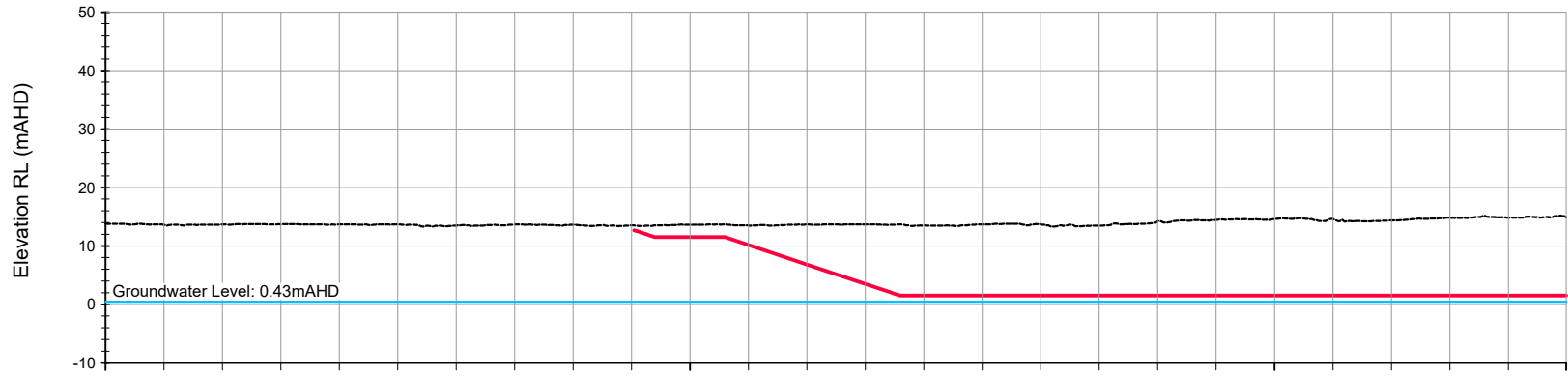
DRAWN: TR
 CHECKED: TT

DRAWING NUMBER: 1940.DRG.088B
 REVISION:

DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA2020 / MGA / AHD / 53

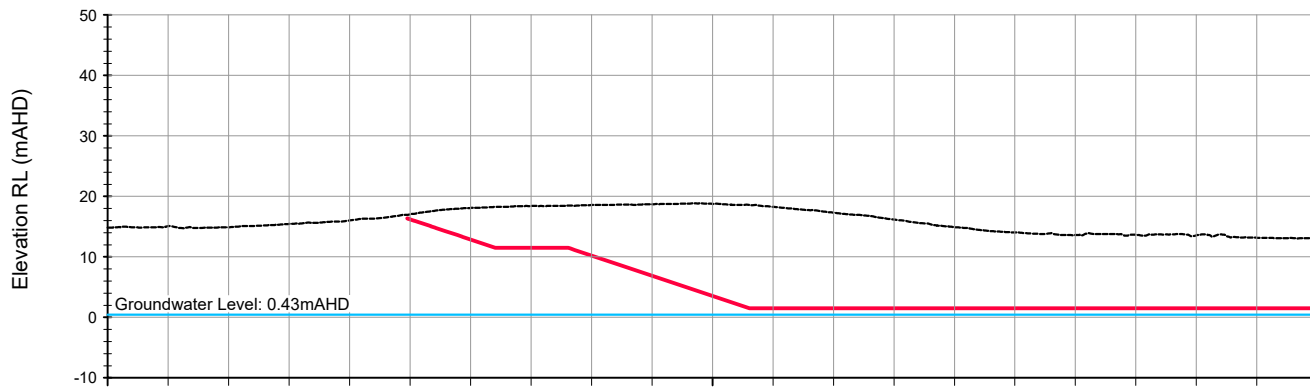
FILE NAME: F:\Jobs\1940 Adelaide Brighton Cement - Klein Point\Drawings\1940.DRG_084 Quarry Development Plan.dwg
 CREATED: 15 October 2025
 JOB SUB #:

Section A-A'



Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	
Design Level										11.5	10.2	6.8	3.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Existing Level	13.6	13.7	13.7	13.7	13.7	13.5	13.7	13.6	13.5	13.6	13.5	13.7	13.7	13.5	13.7	13.7	13.5	14.2	14.5	14.6	14.6	14.4	14.8	14.9	14.9	

Section B-B'



Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
Design Level					16.2	12.9	11.5	10.2	6.9	3.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Existing Level	15.1	14.9	15.4	16.0	17.0	18.1	18.4	18.6	18.7	18.8	18.3	17.3	16.2	14.9	14.0	13.6	13.7	13.6	13.2	13.0	

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photogrammetry: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 50cm
 Cadastre:
 Ecosystem:
 Other:

The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:

- Existing Ground Surface
- Pit Design Surface

PROJECT: **Klein Point**

CLIENT: **Adelaide Brighton Cement Ltd**

TITLE: **Sections A-A' to B-B'**

2 & 316 SECOND STREET
 NURIOOTPA
 SA 5359
 AUSTRALIA
 T: 61 8 8562 4155
 www.slrconsulting.com

SCALE: **1:1250**
 When Printed On A3

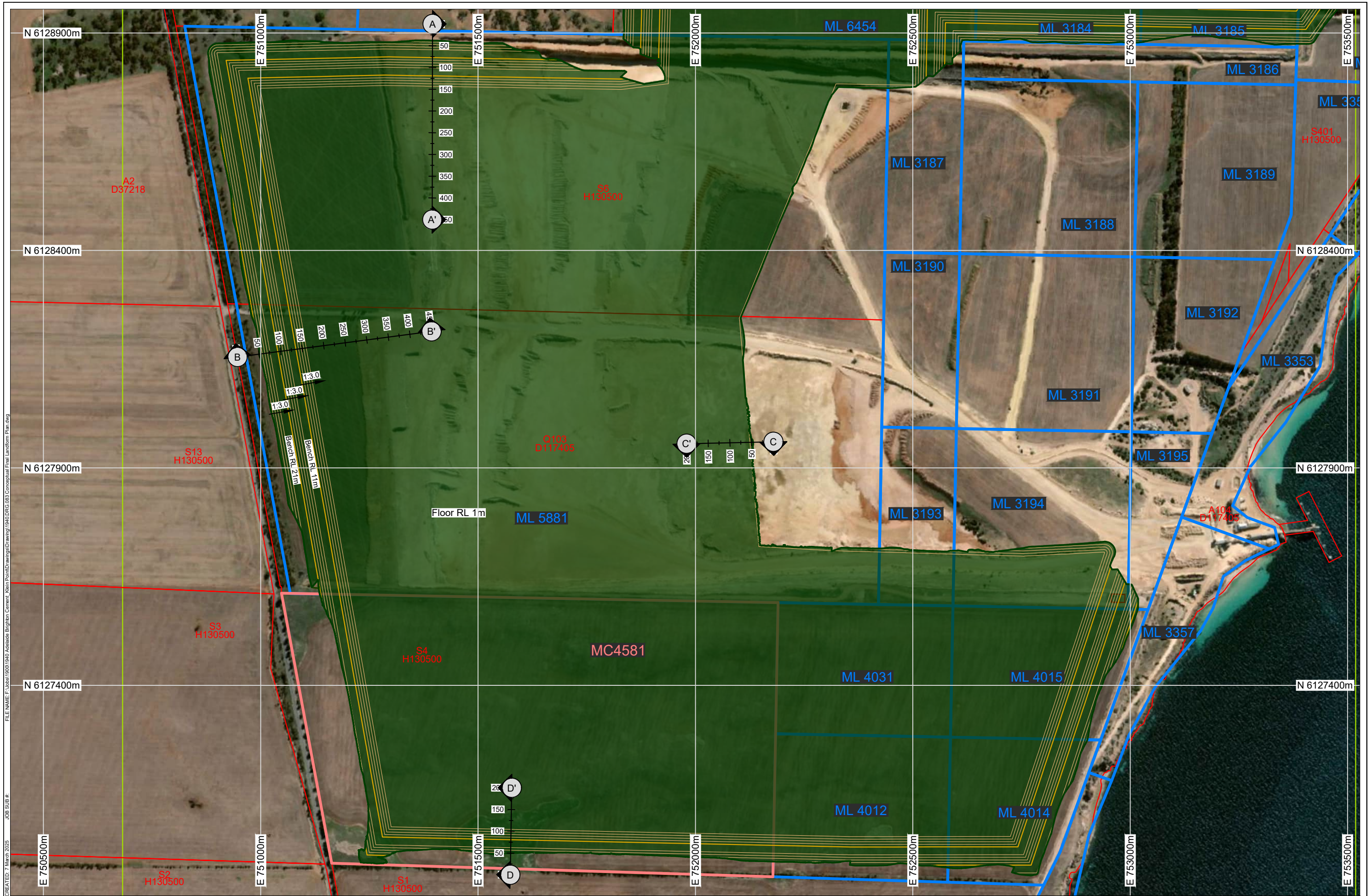
DRAWING NUMBER: **1940.DRG.084B**

REVISION:

DATE: 15 October 2025
 PRINTED: 16 October 2025

DRAWN: TR
 CHECKED: JR

DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA2020 / MGA / AHD / 53



FILE NAME: F:\Jobs\190001940 Adelaide Brighton Cement - Klein Point\Drawings\1940.DRG.083 Conceptual Final Landform Plan.dwg
 CREATED: 7 March 2025
 JOB SUB #

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09
 Topography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 50cm
 Cadastre: © The Government of South Australia (C) 2024
 Ecosystem: © 2024 Microsoft Corporation; © 2024 Maxar; © CNES (2024) Distribution Airbus DS
 The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:

- Cadastral Boundary
- Mineral Lease
- Mineral Claim
- Conceptual Rehabilitation Area

PROJECT: Klein Point

CLIENT: Adelaide Brighton Cement Ltd

TITLE: Conceptual Final Landform Plan

SCALE: 1:8,000

DRAWING NUMBER: 1940.DRG.083A

DATE: 7 March 2025

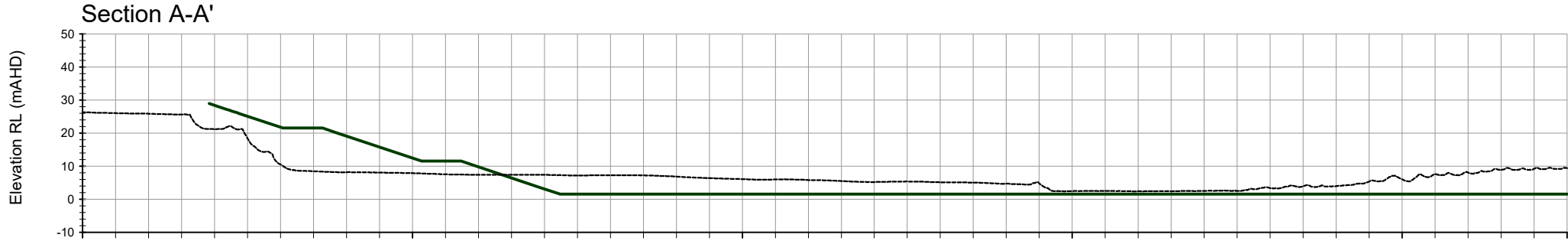
PRINTED: 16 October 2025

CHECKED: JR

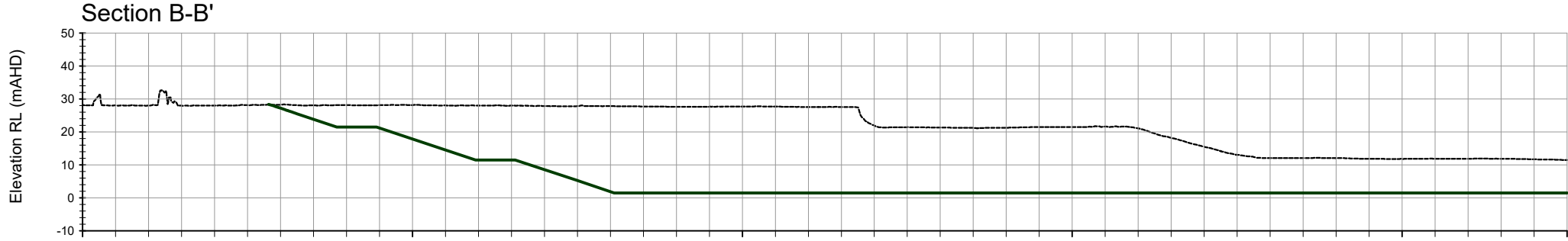
DATUM: HORIZONTAL / VERTICAL / ZONE

GDA2020 / MGA / AHD / 53

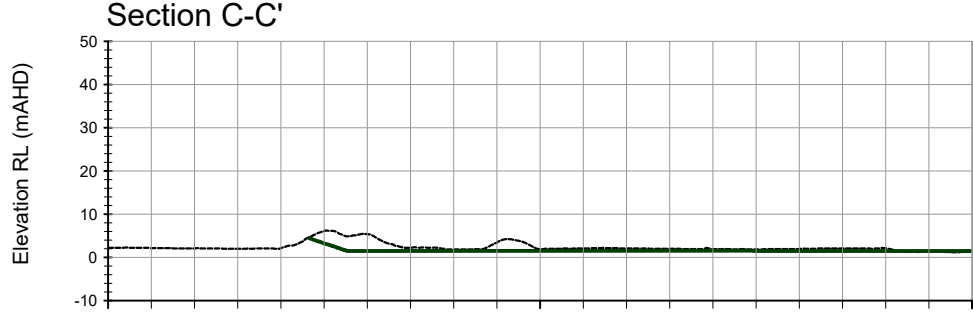
FILE NAME: F:\Jobs\19001940 Adelaide Brighton Cement_Klein_Point\Drawings\1940.DRG.083 Conceptual Final Landform Plan.dwg
 CREATED: 7 March 2025
 JOB SUB #



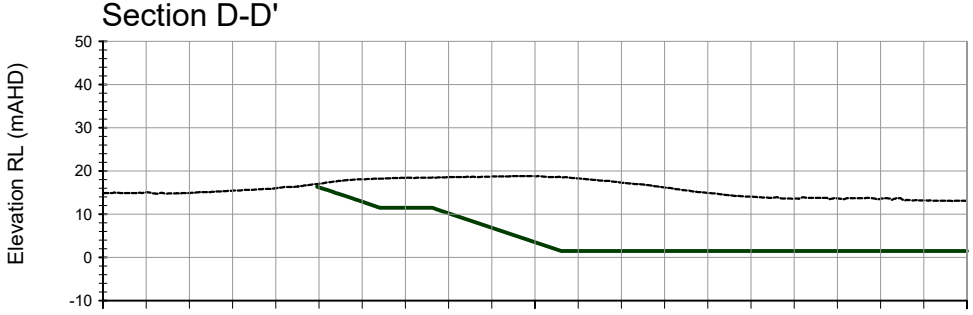
Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450
Design Level	26.0	25.9	25.6	21.2	18.4	10.5	8.4	8.2	8.1	7.9	7.5	7.4	7.4	7.4	7.1	7.2	7.2	6.8	6.4	6.1	6.0	5.8	5.5	5.2	5.4	5.1	5.0	4.7	4.8	2.4	2.5	2.4	2.4	2.5	2.5	3.4	3.9	4.0	5.3	6.0	7.6	8.1	8.9	9.2	9.4
Existing Level	26.0	25.9	25.6	21.2	18.4	10.5	8.4	8.2	8.1	7.9	7.5	7.4	7.4	7.4	7.1	7.2	7.2	6.8	6.4	6.1	6.0	5.8	5.5	5.2	5.4	5.1	5.0	4.7	4.8	2.4	2.5	2.4	2.4	2.5	2.5	3.4	3.9	4.0	5.3	6.0	7.6	8.1	8.9	9.2	9.4



Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450
Design Level	28.0	28.0	28.0	28.0	28.1	28.2	28.0	28.1	28.1	28.2	28.0	28.0	28.0	27.9	27.8	27.8	27.7	27.6	27.7	27.7	27.6	27.6	21.9	21.4	21.3	21.2	21.3	21.5	21.5	21.6	21.1	18.2	15.5	13.0	12.1	12.1	12.0	11.8	11.8	11.9	11.8	11.9	11.7	11.5	
Existing Level	28.0	28.0	28.0	28.0	28.1	28.2	28.0	28.1	28.1	28.2	28.0	28.0	28.0	27.9	27.8	27.8	27.7	27.6	27.7	27.7	27.6	27.6	21.9	21.4	21.3	21.2	21.3	21.5	21.5	21.6	21.1	18.2	15.5	13.0	12.1	12.1	12.0	11.8	11.8	11.9	11.8	11.9	11.7	11.5	



Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Design Level	2.2	2.1	2.0	2.1	6.1	5.4	2.2	1.9	3.4	1.9	2.1	2.1	2.0	2.0	1.9	2.0	2.1	2.1	1.4	1.3
Existing Level	2.2	2.1	2.0	2.1	6.1	5.4	2.2	1.9	3.4	1.9	2.1	2.1	2.0	2.0	1.9	2.0	2.1	2.1	1.4	1.3



Chainage	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Design Level	15.1	14.9	15.4	16.0	17.0	18.1	18.4	18.6	18.7	18.8	18.3	17.3	16.2	14.9	14.0	13.6	13.7	13.6	13.2	13.0
Existing Level	15.1	14.9	15.4	16.0	17.0	18.1	18.4	18.6	18.7	18.8	18.3	17.3	16.2	14.9	14.0	13.6	13.7	13.6	13.2	13.0

REV	DESCRIPTION	DATE	BY

Data Sources:
 Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2024/12/09, DSM 50cm
 Cadastre:
 Ecosystem:
 Other:

The content contained within this document may be based on third party data.
 SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Legend:
 - - - Existing Ground Surface
 — Conceptual Rehabilitation Surface



PROJECT: **Klein Point**
 CLIENT: **Adelaide Brighton Cement Ltd**

TITLE: **Conceptual Final Landform Plan**
Sections A-A' to D-D'

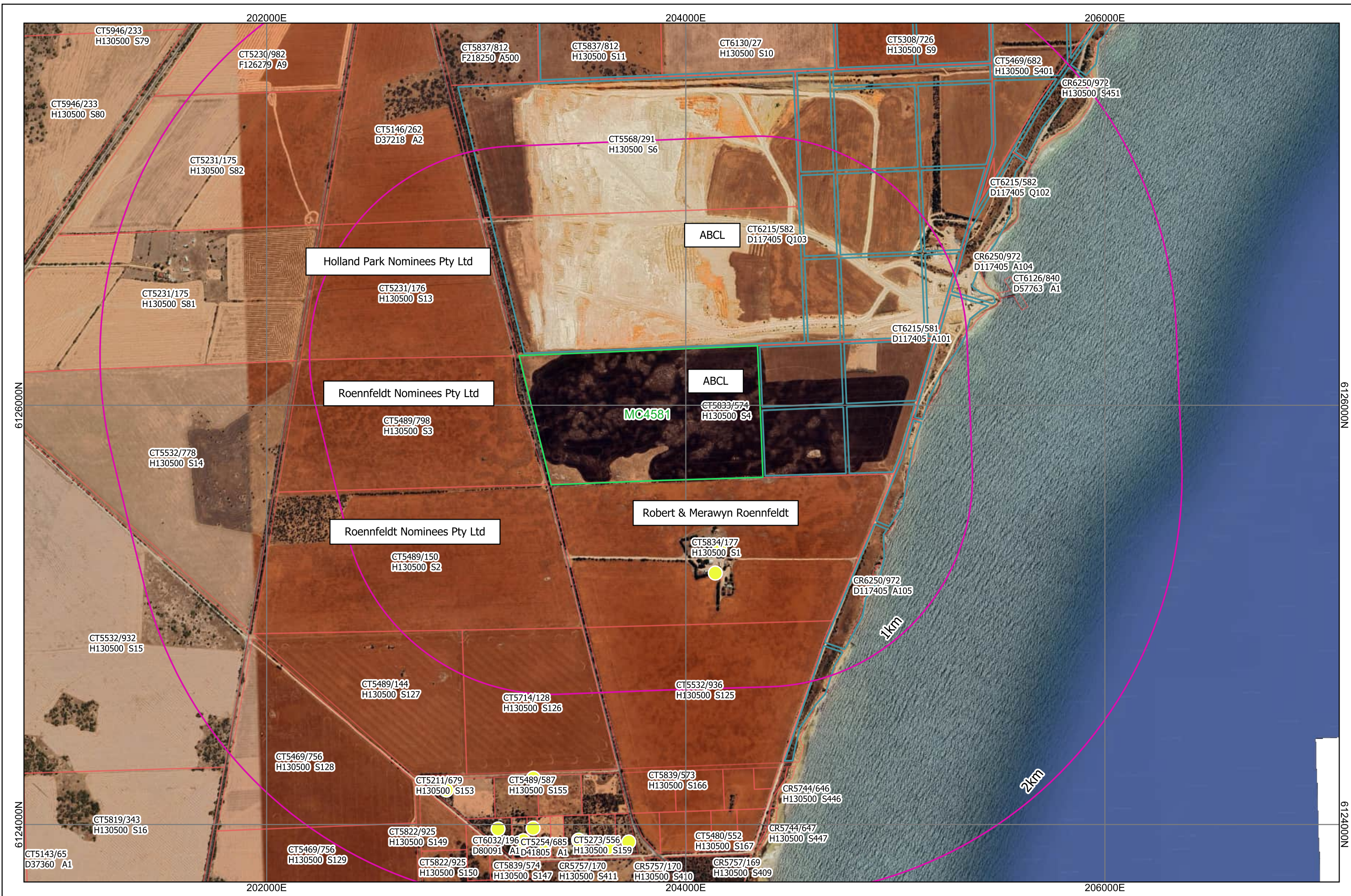
2 & 3/16 SECOND STREET, NURIOOTPA SA 5350 AUSTRALIA
 T: 01 8 8562 4158
 www.slrconsulting.com

SCALE: 1:1,750
 0 35m

DRAWING NUMBER: **1940.DRG.083B**
 REVISION:
 DATE: 7 March 2025
 PRINTED: 16 October 2025

DRAWN: JR
 CHECKED: JR

DATUM: HORIZONTAL / VERTICAL / ZONE
 GDA2020 / MGA / AHD / 53



REV	DESCRIPTION	DATE	BY

Legend:

- ▭ Mineral leases
- ▭ Mineral Claim 4581
- ▭ Cadastral Boundaries
- Residence
- ▭ Buffer

N

PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

TITLE: Stakeholder Engagement Map (Landowners)

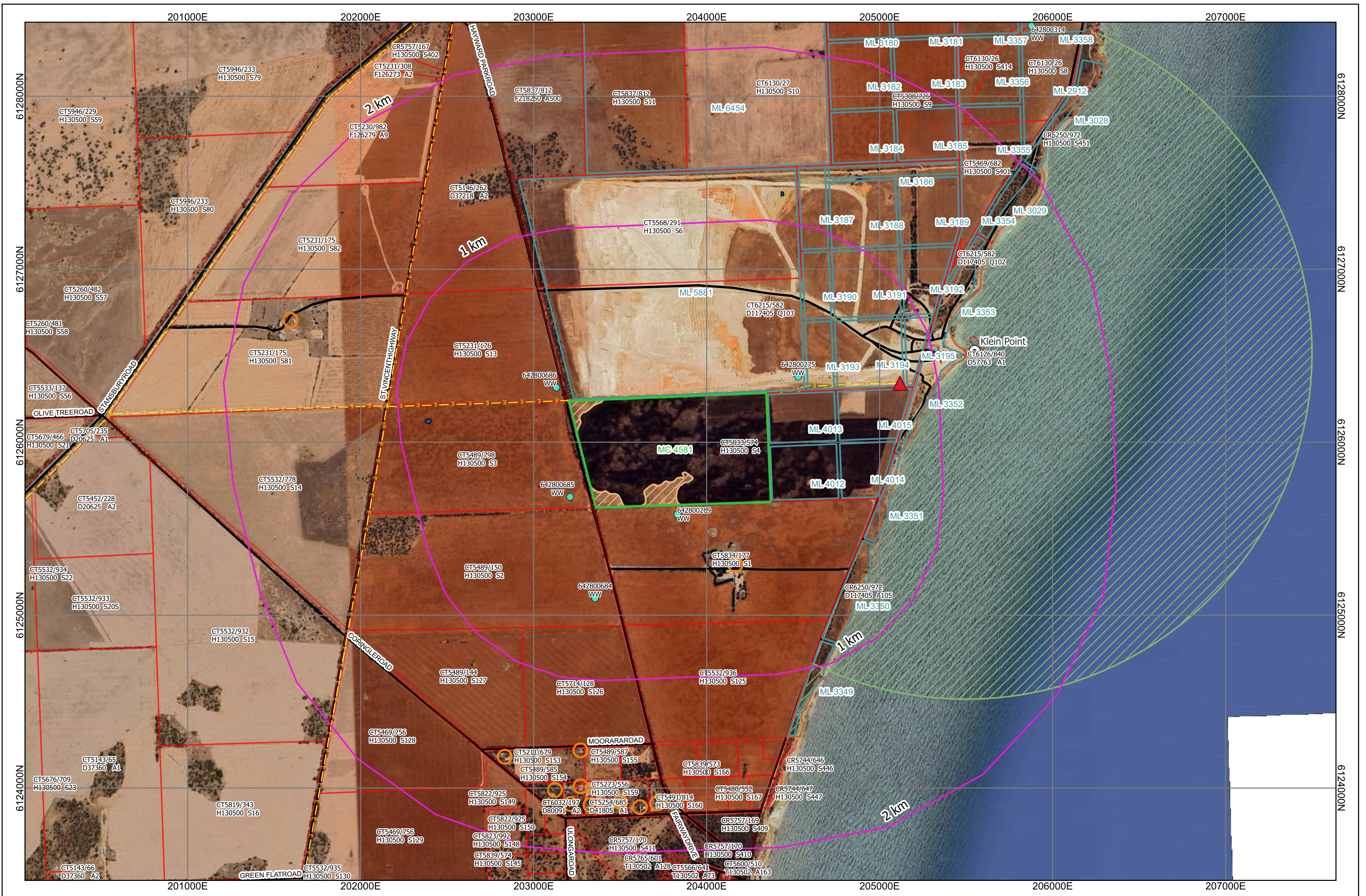
SLR

SCALE: 1:16,500
 When Printed On A3

DATE: 21-January-2025
 PRINTED: 21-January-2025

DRAWN: JC
 CHECKED:

DRAWING NUMBER: 1940.DRG.048
 DATUM: HORIZONTAL / VERTICAL /
 EPSG:7854
 MGA / AHD / 54



REV	DESCRIPTION	DATE	BY

Legend:

- Mineral Claim (MC)
- Native Vegetation
- Water Wells
- Power Transmission Line (SAPN)
- Mineral Leases
- Flinders Port Boundary (2 km)
- Residence
- ▲ Power Substation
- Buffer Area
- Waterbodies
- Cadastral Boundaries
- Port Locations

PROJECT: Klein Point

CLIENT: Adelaide Brighton Cement Ltd

TITLE: Proximity to Infrastructure and Housing Map

PH +61 3071 0411
WWW.GROUNDWORKSPLUS.COM.AU

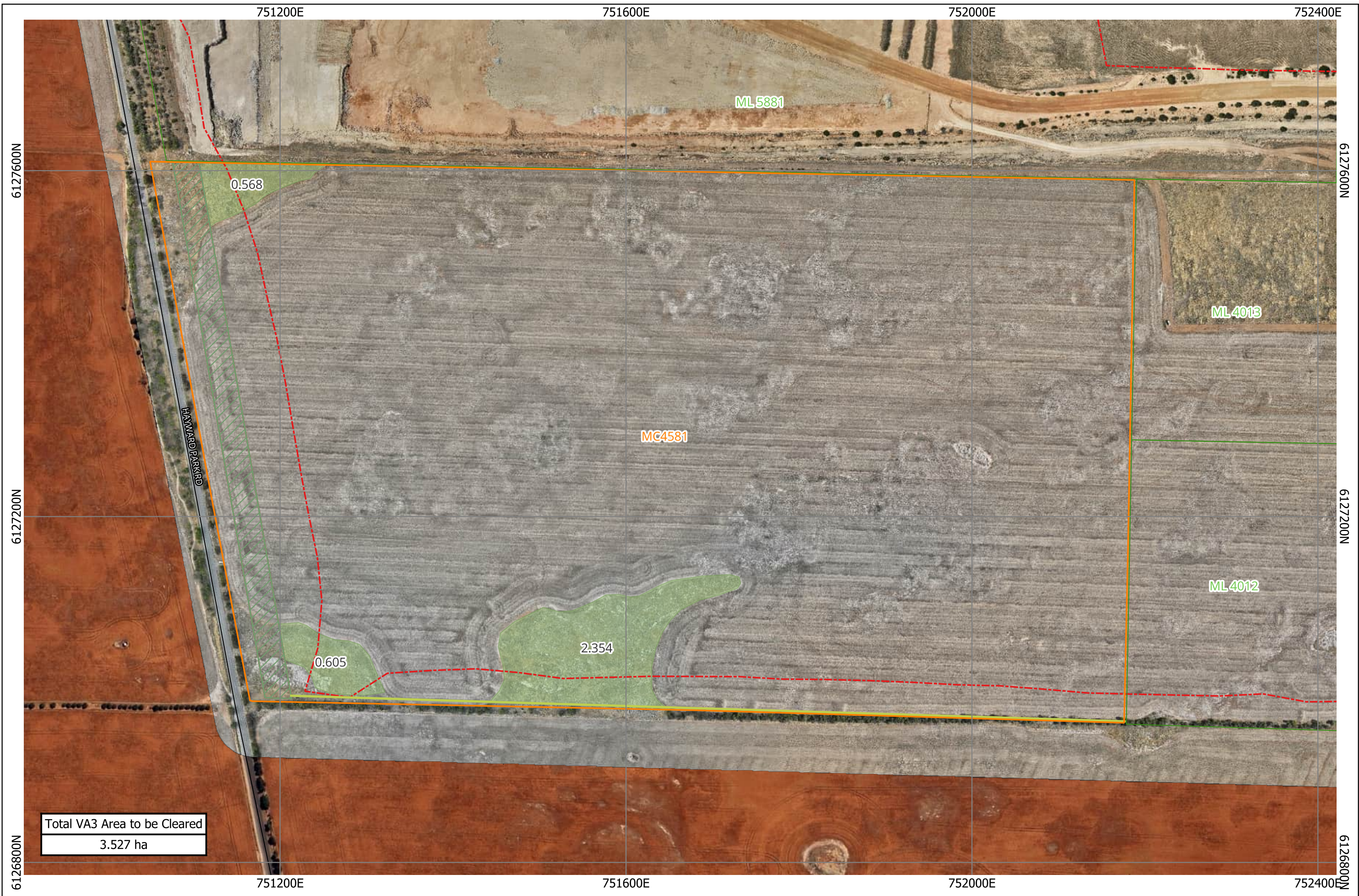
SCALE: 1:20,000

DATE: 15-August-2025
DRAWN: CL
PRINTED: 15-August-2025
CHECKED: CM

DRAWING NUMBER: 1940.DRG.089

DATUM: HORIZONTAL / VERTICAL / EPSG:7824
MGA / AHD / 54

REVISION:



Total VA3 Area to be Cleared
3.527 ha

REV	DESCRIPTION	DATE	BY

Photography: SLR Consulting Pty Ltd, UAV Survey, Captured 2025/12/10
 Topography:
 Cadastre:
 All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

Legend:

MC Boundary	Offset Buffer
ML Boundary	Vegetation Association 4 (Area in ha)
Pit Extent	Visual Amenity Bund

PROJECT:	Klein Point Quarry
CLIENT:	Adelaide Brighton Cement Ltd

		SCALE: 1:4,000 When Printed on A3		DRAWING NUMBER: 1940.DRG.094
		DATE: 27-January-2026 PRINTED: 27-January-2026	LAYER: LO CHECKED: CM	REVISION: GDA2020 / MGA zone 53 / AHD



Appendix B Wind Frequency Analysis

Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026

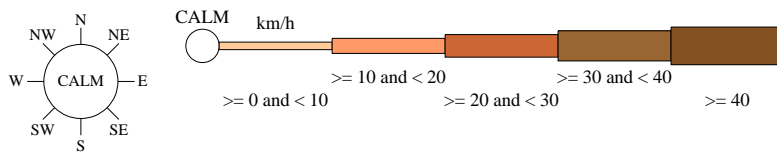
Rose of Wind direction versus Wind speed in km/h (01 Oct 1987 to 05 Aug 2024)

Custom times selected, refer to attached note for details

EDITHBURGH

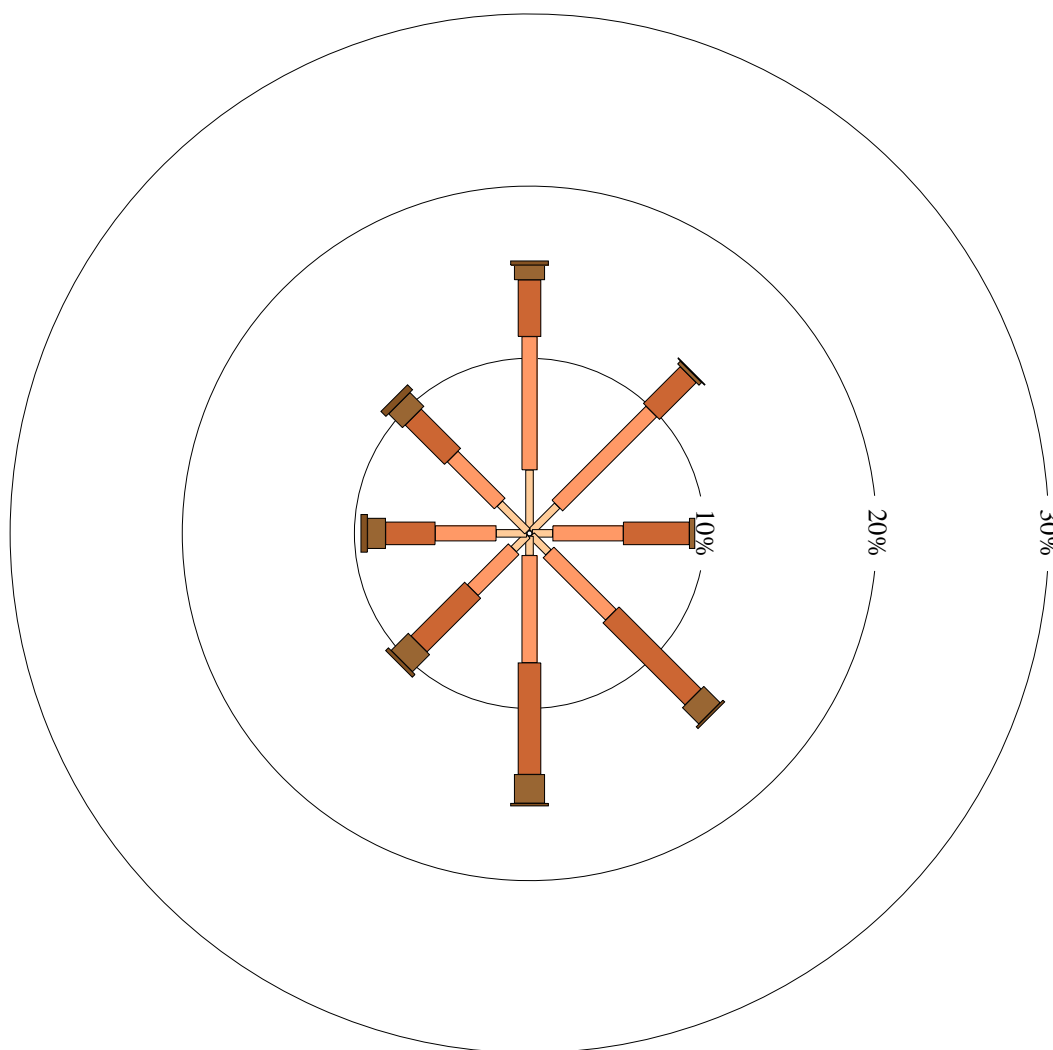
Site No: 022046 • Opened Jul 1984 • Still Open • Latitude: -35.1121° • Longitude: 137.7395° • Elevation 6m

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.



9 am
16051 Total Observations

Calm 1%



Rose of Wind direction versus Wind speed in km/h (01 Oct 1987 to 05 Aug 2024)

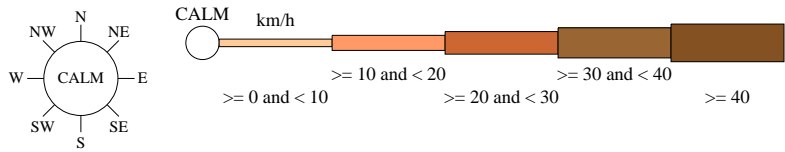
Custom times selected, refer to attached note for details

EDITHBURGH

Site No: 022046 • Opened Jul 1984 • Still Open • Latitude: -35.1121° • Longitude: 137.7395° • Elevation 6m

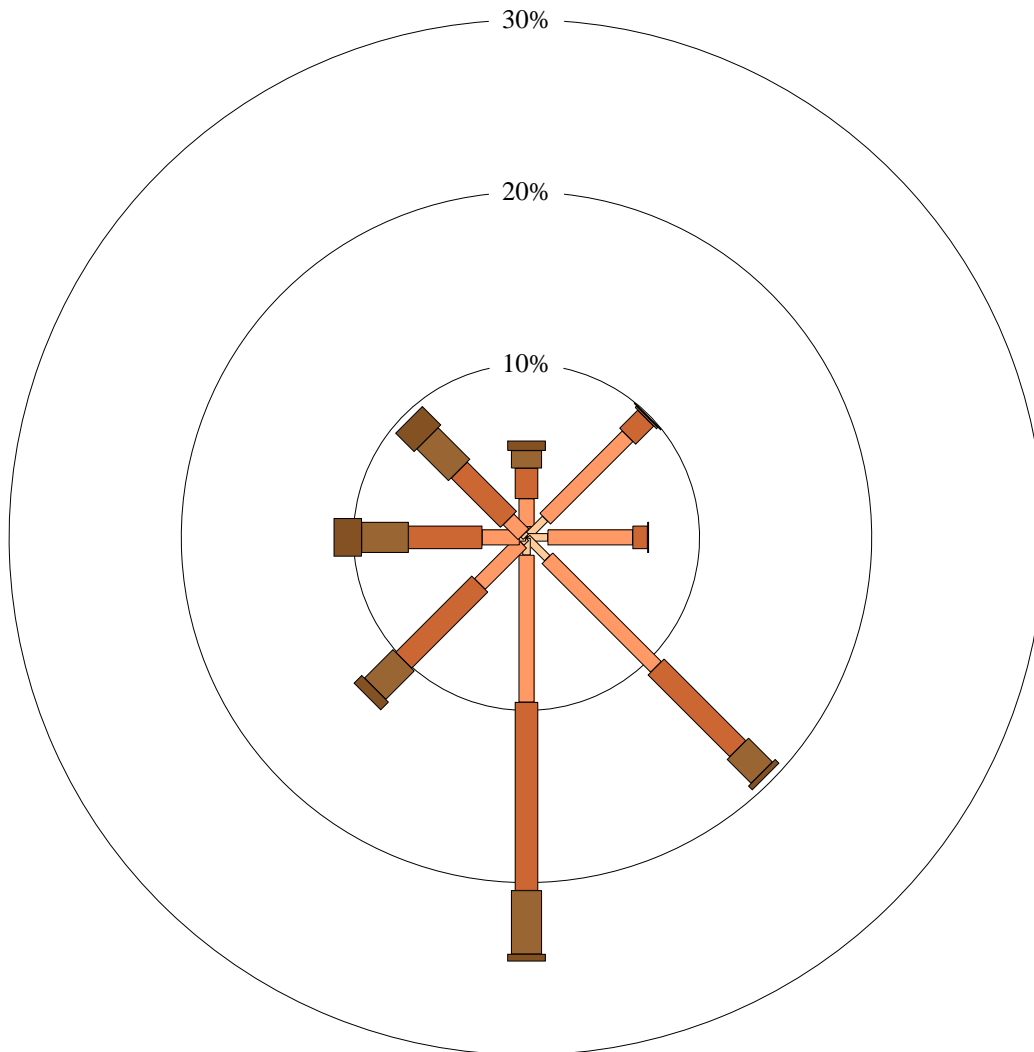
An asterisk (*) indicates that calm is less than 0.5%.

Other important info about this analysis is available in the accompanying notes.



3 pm
16081 Total Observations

Calm *





Appendix C Health Safety Environment Australia Pty Ltd Report

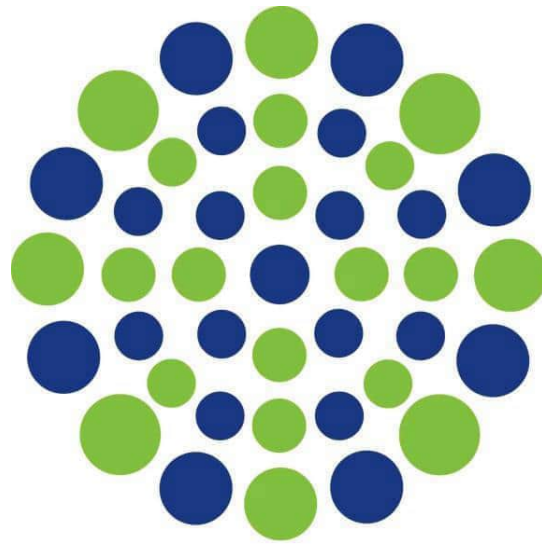
Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026



HSE

ADELAIDE BRIGHTON CEMENT, KLEIN POINT

**RESPIRABLE DUST, AND RESPIRABLE QUARTZ MONITORING
FOR ADELAIDE BRIGHTON CEMENT, KLEIN POINT.**

HJ.212095.SAa

April 2024

11th April 2024

Reference No: HJ.212095.SAa

Chad McLaren
Business Partner – Health and Safety
Adelaide Brighton Cement
ADBRI

Email: Adelaide Brighton Cement email

Dear Chad,

**RESPIRABLE DUST, AND RESPIRABLE QUARTZ MONITORING FOR ADELAIDE
BRIGHTON CEMENT, KLEIN POINT.**

Thank you for the opportunity to provide consultancy services for the Adelaide Brighton Cement.

The personal and positional respirable dust, and respirable quartz monitoring report conducted at Adelaide Brighton Cement, Klein Point is attached for your reference.

Should you have any queries regarding this work, please don't hesitate to contact us.

Yours sincerely,



Prepared by: Mr. Jack Crawford
Occupational Hygiene Consultant
Occupational Hygiene & Risk Management
BSc (Double Chemistry)



Reviewed by: Dr. Michael Tkaczuk
Principal Occupational Hygienist
BSc(Hons) PhD, Grap Dip Occup Health MAIOH COH

Table of Contents

1.	INTRODUCTION	1
2.	SCOPE OF WORK	1
3.	SAMPLING METHODOLOGY	1
3.1.	RESPIRABLE DUST AND QUARTZ	1
4.	BACKGROUND INFORMATION.....	2
4.1.	RESPIRABLE QUARTZ (RESPIRABLE CRYSTALLINE SILICA, RCS)	2
5.	WORKPLACE EXPOSURE STANDARDS.....	3
6.	OBSERVATIONS AND COMMENTS	5
7.	MONITORING RESULTS.....	7
8.	DISCUSSION.....	10
9.	CONCLUSIONS AND RECOMMENDATIONS	10
	APPENDIX A: SITE PHOTOS.....	11
	APPENDIX B: CERTIFICATE OF ANALYSIS	12

1. INTRODUCTION

Health Safety Environment Australia Pty Ltd was requested by Chad McLaren, Business Partner – Health and Safety for Adelaide Brighton Cement to carry out personal respirable dust, and respirable quartz (RCS) monitoring for workers at the quarry run by Adelaide Brighton Cement.

The monitoring was undertaken on the 27th of February 2024 by Mr. Jack Crawford, Occupational Hygiene Consultant for Health Safety Environment Australia.

2. SCOPE OF WORK

Health Safety Environment Australia provided an Occupational Hygiene Consultant who undertook the following scope of work during normal operations, this included:

Respirable dust and Quartz monitoring.

- Collecting personal respirable dust and crystalline silica monitoring for seven (7) workers at Klein Point.
- Collecting positional respirable dust and crystalline silica monitoring at seven (7) locations within Klein Point Quarry.
- Analysis of the dust samples for respirable dust and crystalline silica (quartz).

This report was prepared, and details the monitoring methods, observations of work practices at the site including the use of respirators, interpretation of the respirable dust concentrations, and quartz (crystalline silica) with respect to the Workplace Exposure Limits (WES), and provides recommendations where appropriate.

3. SAMPLING METHODOLOGY

All sampling and assessment work was undertaken in accordance with the relevant Australian Standards and state regulatory requirements.

3.1. Respirable dust and quartz

Respirable dust and respirable quartz samples were collected using an air-sampling pump, calibrated to a flow rate of 2.2 L/min +/- 0.1 L/min drawn through a SIMPEDS Casella respirable dust cyclone head containing a pre-weighed 25 mm filter, based on AS2985.

Flow rates were checked with a field calibrator prior to, and at the completion of the sampling period. Respirable dust was determined gravimetrically and analysis for respirable quartz was determined by Frontier Transformation Infrared (FTIR) in accordance with National Institute for Occupational Safety and Health (NIOSH) Method 7603, at MPL Laboratories National Association of Testing Authority (NATA) accredited Perth laboratory.

The Safe Work Australia workplace exposure standard for respirable quartz (RCS) is 0.05 mg/m³ based on an 8-hour working shift.

4. BACKGROUND INFORMATION

4.1. Respirable Quartz (Respirable Crystalline Silica, RCS)

Silica is silicon dioxide (SiO₂), one of the most abundant minerals in the earth's crust. It is present in almost all types of rock, sands, clays, shales, and gravel. It is also a major constituent of construction materials such as bricks, tiles, and concrete. The amount of silica in these products ranges from 5–45%. The Safety Data Sheet (SDS) (if available) may list the total amount of silica present in the product.

Silicon dioxide occurs in non-crystalline and crystalline forms. Crystalline Silica is sometimes referred to as “free” silica. The main forms of crystalline silica are quartz, cristobalite, and tridymite, the most prevalent of which is quartz. Quartz is an aggressive, lung-damaging dust when it can penetrate deep into the lungs in sufficient quantities. The non-crystalline form of silica does not cause such lung damage.

For the crystalline dust particles to reach the extremities of the lung where they have the potential to cause damage, they must be very small (less than 10µm in diameter); this size is defined as “respirable”. Australian Standard 2985, also defines respirable dust and adopts the ISO 7708 definition of respirable dust, which is the percentage of inhalable matter collected by a device producing a sampling efficiency curve that is presented in chart 1 with the figures from table 1.

Chart 1: Respirable dust distribution graph.

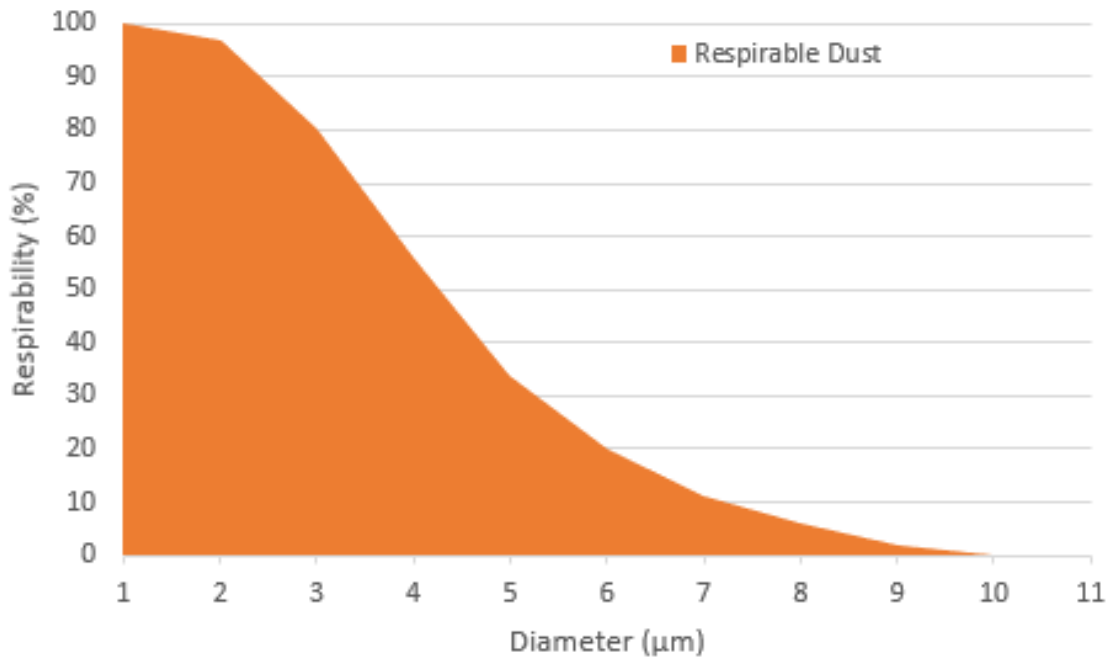


Table 1: Dust respirability and size (source: AS2985).

Equivalent Aerodynamic Diameter (µm)	Respirability (%)
0	100
2	97
3	80
4	56
5	34
6	20
7	11
8	6
10	2
16	0.1
18	0

5. WORKPLACE EXPOSURE STANDARDS

The criteria used in the assessment of occupational exposure to airborne contaminants are based on Exposure Standards as listed in Safe Work Australia's publication 'Workplace Exposure Standards for Airborne Contaminants' December 2019 & update for respirable quartz July 2020 and the "Guidance on the Interpretation of Workplace Exposure Standards for Airborne Contaminants". All exposure standards are based on the personal sampling of chemical substances in the breathing zone of the worker.

The response of the body from exposure to substances and mixtures depends on the nature of the substance, the health effects it can cause, and the amount of the substance or mixture absorbed by the body. Individuals also have differing abilities to metabolise chemicals which can cause considerable variation in the toxic effects between people. The extent to which a person is exposed depends on the concentration of the substance or mixture in the air, the amount of time exposed, and the effectiveness of controls.

Exposure standards do not identify a dividing line between a healthy or unhealthy working environment. Natural biological variation and the range of individual susceptibilities mean some people might experience adverse health effects below the exposure standard. Therefore, exposure standards should not be considered as representing an acceptable level of exposure to workers. They establish a statutory maximum upper limit.

Where there is no mandatory exposure standard established in Australia, other established exposure standards or action levels should be used by a PCBU to assist minimising exposure to chemicals.

Sections 17 and 19 of the WHS Act together require that exposure to substances in the workplace is kept As Low As Reasonably Practicable (ALARP).

The exposure standard can be of three forms; eight-hour Time-Weighted Average (TWA), peak limitation or Short-Term Exposure Limit (STEL, 15-minute TWA).

The relevant Safe Work Australia exposure standards are presented below in Table 2.

Table 2: Safe Work Australia Occupational Exposure Standards

Contaminant	Safe Work Australia WES (8-hour time-weighted average)
Respirable Dust	3* mg/m ³
Respirable Quartz	0.05 mg/m ³

*No Australian Exposure Standard; however, the SA WHS Regulations 2012 has an exposure standard of 3 mg/m³ for respirable dust applicable for quarries, which is used in this report.

6. OBSERVATIONS AND COMMENTS

Table 3: Weather conditions on the day of monitoring.

Date: 27/02/2024		Morning (9 am)		Afternoon (3 pm)	
Max temperature	Rain	Max Wind speed/direction	Average temperature	Wind speed/direction	Average temperature
30.0 °C	0 mm	North-East, 11 km/h	23.8 °C	East-South-East 17 Km/h	28.2 °C

*Weather was taken from the Edithburgh Weather station.

Adelaide Brighton Cement, Klein Point, requested HSE Australia to undertake respirable dust and quartz monitoring. The site has up to ten (10) workers present on site. The roles onsite are excavator operators, dozer operator, administration officers, maintenance, dump truck operator, site supervisor, drill operator, front end loader operator and crusher operator. The workers do 11-hour workdays 4 days on and 4 days off.

The author was informed that the crusher has a foam dust suppression system. Using this method compared to a water mister system prevents more mud from being produced and getting stuck within the system. However, this can cause other mechanical issues down the track. The dust production within the shed the author would consider this to be excessive.

While the monitoring was being conducted it was observed that the main entrance to the crusher shed was open and dust could be seen emanating out of this entrance. This dust would normally travel down toward the ocean and often cake the other areas at the facility. The crusher hut would get dusty very quickly and has to be cleaned out.

The operators of the mobile plant working within the quarry would remain inside their vehicles while positive pressure was created by the air conditioner unit. It is unclear which vehicles have HEPA filters. The older model of the drill rig does not have HEPA filters fitted.

While driving around it was noted that the main contribution of dust production was from the movements of vehicles and wind movement within the quarry. Working within cabins of these vehicles it reduces the exposure to the dust that is produced on site.

It was noted the tunnel and the bin area can get very dusty due to the raw material dropping into the shed or moving along the conveyor belt. The author observed the tunnel being very dusty. The author was informed of an extraction system that pulls the dust down the tunnel and helps reduce the suspension of dust.

The workers claim the cabins get cleaned out at the end of every shift. It was commented that not a lot of dust manages to enter the cabin and the air conditioner helps reduce this further.

The respirators provided by ABC were:

- Honeywell, 5111 series disposable respirator.

7. MONITORING RESULTS

The following table display the concentration of personal respirable dust, and quartz collected from workers at Adelaide Brighton Cement, Klein Point. The certificates of analysis are attached in Appendix B.

Table 4: Respirable dust and quartz concentrations measured at Klein Point Quarry on the 27th February 2024.

Name/ Location	Comments.	Sample ID	Monitoring Period (mins)	Respirable Dust Conc. (mg/m ³)	Respirable Quartz Conc. (mg/m ³)
Darryl Turner	Frontend Loader Operator Operated the front-end loader for the entire shift. Comments that the cabin seals well and the air conditioner is working well. The cabins get cleaned out at the end of the shift. No respirator was worn.	RHSE268	07:21-14:56 (455 mins)	0.050	< 0.005
Ethan Cleland	Dump Truck Operator and Grader Operator Operated the Grader for three hours and then operated the dump truck for four hours. Did operate the frontend loader for half an hour. No respirator was worn.	RHSE104	07:22-14:59 (457 mins)	0.149	< .0005
Trevor Maslin	Leading Hand and Dozer Operator. Spent one hour operating the dozer. The rest of the shift was up in the pill shed, unloading bags, sweeping out the shed and being a fort lift spotter (delivery was occurring). Comments the workshop shed can get very dusty.	RHSE180	07:25-14:42 (437 mins)	0.260	< 0.005
Tim Cross	Prepping Shot Walking around inspecting drilled holes all day. Comments they were out in the open and the wind is considered a dust production issue. This inspection is not conducted very often. Often operating the drill. The drill is considered to be very dusty. Did not wear a respirator.	RHSE159	07:27-14:39 (432 mins)	0.915	0.007

Name/ Location	Comments.	Sample ID	Monitoring Period (mins)	Respirable Dust Conc. (mg/m ³)	Respirable Quartz Conc. (mg/m ³)
Steven Drewer	Boom Operator/ Crusher Operator. Operated the Boom control while the ship was in dock this was about four and a half hours. Did inspection in the tunnel and then operated the Crusher for two hours. Did observe them wearing a respirator.	RHSE81	07:29-14:20 (471 mins)	0.444	< 0.005
Jason Longmire	Excavator Operator and Dump Truck Operator. Operated the excavator for four hours. Then operated the dump truck for half an hour. The rest of the time was spent tying up and untying the docking ship. Did not wear a respirator.	RHSE178	07:31-15:03 (452 mins)	0.050	< 0.005
Shaun Lloyd	Crusher Operator Operated the crusher for six hours, before doing site inspections across the plant. Generally tried to keep the cabin clean but dust builds up very quickly.	RHSE3	07:42-15:25 (463 mins)	1.374	< 0.005
Rom pad	The intersection where the dump trucks drive to unload the raw material.	RHSE29	08:39-15:17 (398 mins)	0.046	< 0.006
Crushing plant	Within the main access area. It was observed to be very dusty.	RHSE281	08:31-15:34 (423 mins)	18.693	< 0.005
Crusher hopper	Where the raw material is dumped into the hopper where it will lead to the crusher.	RHSE164	08:37-15:15 (398 mins)	0.057	< 0.006
Outside lunchroom	Outside the entrance to the lunchroom.	RHSE200	08:33-15:34 (421 mins)	0.108	<0.005
Centre tracks, main quarry pit.	One of the main roadways is an open space and can get incredibly dusty.	RHSE328	08:44-15:09 (385 mins)	0.047	0.007

Name/ Location	Comments.	Sample ID	Monitoring Period (mins)	Respirable Dust Conc. (mg/m ³)	Respirable Quartz Conc. (mg/m ³)
Bin	Very dusty area, caking the static equipment.	RHSE364	08:27-15:38 (431 mins)	0.410	<0.005
Transfer shed	Considered an incredibly dusty area.	RHSE316	08:29-15:40 (431 mins)	4.535	0.030
Blank	A Blank is submitted to ensure there is no previous contamination and quality control.	RHSE284	-	<0.040	<0.005
Safe Work Australia 40-hour TWA Workplace Exposure Standard				3*	0.05

*No Australian Exposure Standard; however, the SA WHS Regulations 2012 has an exposure standard of 3 mg/m³ for respirable dust applicable for quarries, which is used in this report.

*Shading indicates the results are above 50% of the exposure standard.

*Shading indicates the results are above the exposure standard.

8. DISCUSSION

Based on the dust monitoring two static sample areas had results above the exposure standard for respirable dust. These two areas were the crusher shed and the transfer shed. The highest result was within the crusher shed with a value of 18.693 mg/m³ with the exposure standard used in this report being 3 mg/m³. The dust produced from the crusher appears to be significant and can affect the lungs.

There was one area where the respirable quartz was above the action level that is established by Adelaide Brighton Cement and this was from the transfer shed. The raw material being disturbed could be the reason for the high respirable quartz concentration.

The rest of the site shows that both personal and positional results were below the exposure standard and action level. The highest respirable dust result occurred for Shaun Loyde with a value of 1.374 mg/m³ this is below the action level. Shaun was the crusher operator; this would be expected as the crusher shed had a high reading.

9. CONCLUSIONS AND RECOMMENDATIONS

On the day of monitoring the conditions being typical of the exposures experienced by the workers while carrying out quarrying work at the Adelaide Brighton Cement, Klein Point Site. The risk of exposure to respirable dust within the transfer shed and crusher shed is unknown as they are the positional sample.

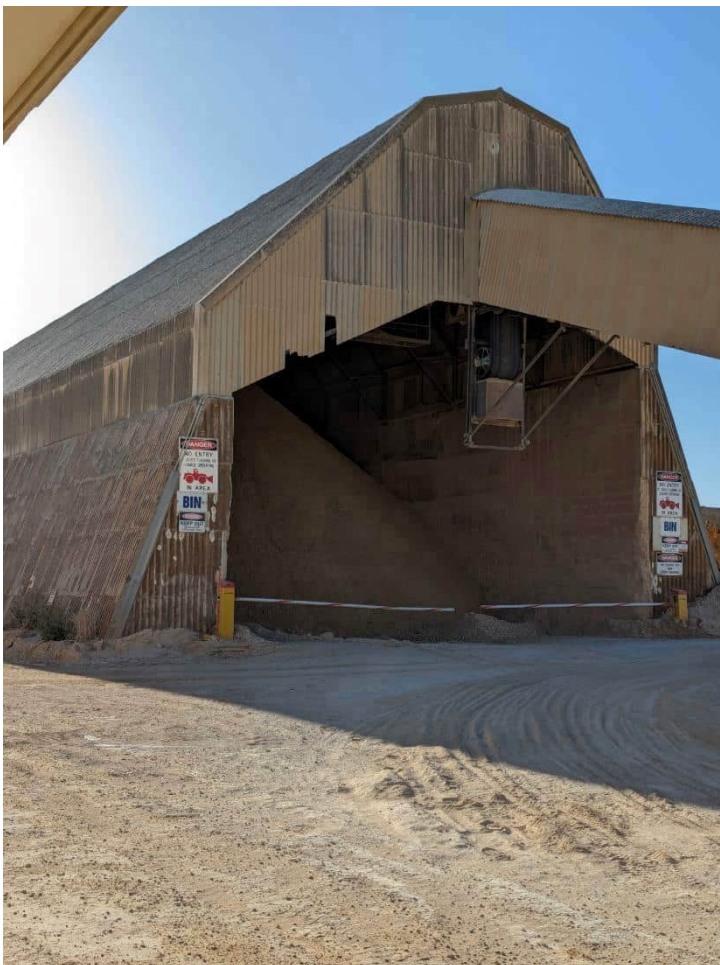
From the observations and results of the air contaminant monitoring carried out at the site, it is recommended that:

- Further monitoring for respirable dust and respirable quartz and a thorough review of the existing control measures should be carried out at least biennially, for potential variations in the task and environmental conditions. This would further assess the level of risk under variable operating conditions of the site.
- Personal inhalable dust levels should be measured for any worker spending time in the transfer shed or crusher shed.
- When entering the crusher shed, tunnel, and transfer shed a P2 respirator should be worn as a minimum.
- Investigate using an extraction hood system installed above the crusher to remove the excess dust produced. An external dust extraction system that can run and self-clean their filters would be beneficial in the long term.
- Investigate if the air conditioning system is functioning as expected to help provide a positive pressure environment, which can prevent dust ingress.
- Around the office and crusher plant, a sprinkler or mist system to help combat dust production around this area and reduce reliance on the water truck.

APPENDIX A: SITE PHOTOS



The main door open, where a large amount of dust does exit.



The transfer shed is where a large amount of dust can be produced and dissipate across the site. Only access with a front loader is permitted.

APPENDIX B: CERTIFICATE OF ANALYSIS



Envirolab Services (WA) Pty Ltd trading as MPL Laboratories

ABN 53 140 099 207

16-18 Hayden Court Myaree WA 6154

ph +61 8 9317 2505

lab@mpl.com.au

www.mpl.com.au

Certificate of Analysis PFC0021

Client Details

Client	Health Safety Environment Pty Ltd - HSE (Adelaide)
Contact	Jack Crawford
Address	155 Sir Donald Bradman Dr, HILTON, SA, 5033

Sample Details

Your Reference	HJ.212095.Saa
Number of Samples	15 Filter
Date Samples Received	01/03/2024
Date Instructions Received	01/03/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	11/03/2024
Date of Issue	08/03/2024

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025. Tests not covered by NATA are denoted with *.

Authorisation Details

Airborne Dust Approved By	Heram Halim
Results Approved By	Heram Halim, Operations Manager
Laboratory Manager	Michael Kubiak

Certificate of Analysis PFC0021

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PFC0021-01	RHSE268	Filter	01/03/2024	01/03/2024
PFC0021-02	RHSE104	Filter	01/03/2024	01/03/2024
PFC0021-03	RHSE180	Filter	01/03/2024	01/03/2024
PFC0021-04	RHSEB159	Filter	01/03/2024	01/03/2024
PFC0021-05	RHSE81	Filter	01/03/2024	01/03/2024
PFC0021-06	RHSE178	Filter	01/03/2024	01/03/2024
PFC0021-07	RHSE3	Filter	01/03/2024	01/03/2024
PFC0021-08	RHSE29	Filter	01/03/2024	01/03/2024
PFC0021-09	RHSE281	Filter	01/03/2024	01/03/2024
PFC0021-10	RHSE164	Filter	01/03/2024	01/03/2024
PFC0021-11	RHSE200	Filter	01/03/2024	01/03/2024
PFC0021-12	RHSE328	Filter	01/03/2024	01/03/2024
PFC0021-13	RHSE364	Filter	01/03/2024	01/03/2024
PFC0021-14	RHSE316	Filter	01/03/2024	01/03/2024
PFC0021-15	RHSE284	Filter	01/03/2024	01/03/2024

Sample Information

Sample ID	Filter ID	Flow Rate (L/min)	Time Sampled (min)	Air Volume (m3)
RHSE268	RHSE268	[NA]	[NA]	[NA]
RHSE104	RHSE104	[NA]	[NA]	[NA]
RHSE180	RHSE180	[NA]	[NA]	[NA]
RHSEB159	RHSEB159	[NA]	[NA]	[NA]
RHSE81	RHSE81	[NA]	[NA]	[NA]
RHSE178	RHSE178	[NA]	[NA]	[NA]
RHSE3	RHSE3	[NA]	[NA]	[NA]
RHSE29	RHSE29	[NA]	[NA]	[NA]
RHSE281	RHSE281	[NA]	[NA]	[NA]
RHSE164	RHSE164	[NA]	[NA]	[NA]
RHSE200	RHSE200	[NA]	[NA]	[NA]
RHSE328	RHSE328	[NA]	[NA]	[NA]
RHSE364	RHSE364	[NA]	[NA]	[NA]
RHSE316	RHSE316	[NA]	[NA]	[NA]
RHSE284	RHSE284	[NA]	[NA]	[NA]

Certificate of Analysis PFC0021

Respirable Dust (Filter)

Envirolab ID	Units	PQL	PFC0021-01	PFC0021-02	PFC0021-03	PFC0021-04	PFC0021-05
Your Reference			RHSE268	RHSE104	RHSE180	RHSEB159	RHSE81
Date Sampled			01/03/2024	01/03/2024	01/03/2024	01/03/2024	01/03/2024

Dust	mg	0.040	0.050	0.15	0.25	0.87	0.46
------	----	-------	-------	------	------	------	------

Envirolab ID	Units	PQL	PFC0021-06	PFC0021-07	PFC0021-08	PFC0021-09	PFC0021-10
Your Reference			RHSE178	RHSE3	RHSE29	RHSE281	RHSE164
Date Sampled			01/03/2024	01/03/2024	01/03/2024	01/03/2024	01/03/2024

Dust	mg	0.040	0.050	1.4	0.040	17	0.050
------	----	-------	-------	-----	-------	----	-------

Envirolab ID	Units	PQL	PFC0021-11	PFC0021-12	PFC0021-13	PFC0021-14	PFC0021-15
Your Reference			RHSE200	RHSE328	RHSE364	RHSE316	RHSE284
Date Sampled			01/03/2024	01/03/2024	01/03/2024	01/03/2024	01/03/2024

Dust	mg	0.040	0.10	<0.040	0.38	4.3	<0.040
------	----	-------	------	--------	------	-----	--------

Certificate of Analysis PFC0021

Respirable Crystalline Silica (Filter)

Envirolab ID	Units	PQL	PFC0021-01	PFC0021-02	PFC0021-03	PFC0021-04	PFC0021-05
Your Reference			RHSE268	RHSE104	RHSE180	RHSEB159	RHSE81
Date Sampled			01/03/2024	01/03/2024	01/03/2024	01/03/2024	01/03/2024

a-Quartz	µg/sample	5.0	<5.0	<5.0	<5.0	6.8	<5.0
----------	-----------	-----	------	------	------	-----	------

Envirolab ID	Units	PQL	PFC0021-06	PFC0021-07	PFC0021-08	PFC0021-09	PFC0021-10
Your Reference			RHSE178	RHSE3	RHSE29	RHSE281	RHSE164
Date Sampled			01/03/2024	01/03/2024	01/03/2024	01/03/2024	01/03/2024

a-Quartz	µg/sample	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
----------	-----------	-----	------	------	------	------	------

Envirolab ID	Units	PQL	PFC0021-11	PFC0021-12	PFC0021-13	PFC0021-14	PFC0021-15
Your Reference			RHSE200	RHSE328	RHSE364	RHSE316	RHSE284
Date Sampled			01/03/2024	01/03/2024	01/03/2024	01/03/2024	01/03/2024

a-Quartz	µg/sample	5.0	<5.0	5.8	<5.0	28	<5.0
----------	-----------	-----	------	-----	------	----	------

Certificate of Analysis PFC0021

Method Summary

Method ID	Methodology Summary
DUST-004_QTZ	Respirable Quartz (and/or Cristobalite) is determined after ashing, redeposition and FTIR determination. The Quartz exposure standard is 50µg/m ³ , therefore where sampling follows MDHS 101 guidelines and at least 500L of air is sampled, this is equivalent to a dust weight of 25µg/filter. The estimated measurement uncertainty for the laboratory analysis of Quartz is 40% at 25µg at 95% confidence limit (i.e. statistically the true value lies between 15-35µg / filter (30 – 70 µg/m ³) at 95% confidence). The estimated measurement uncertainty was determined during method validation. NSW Resources Regulator have licenced (MLA0017505) Envirolab/MPL for the Analysis of Inhalable & Respirable Dust and Respirable Crystalline Silica.
INORG-100_RESP	Gravimetric determination of Respirable dust as per AS2985. NSW Resources Regulator have licenced (MLA0017505) Envirolab/MPL for the Analysis of Inhalable & Respirable Dust and Respirable Crystalline Silica.

Certificate of Analysis PFC0021

Result Definitions

Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)
##	Indicates a laboratory acceptance criteria outlier, for further details, see Result Comments and/or QC Comments

Quality Control Definitions

Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

Certificate of Analysis PFC0021

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria. Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction. Spikes for Physical and Aggregate Tests are not applicable. For VOCs in water samples, three vials are required for duplicate or spike analysis.

General Acceptance Criteria (GAC) - Analyte specific criteria applies for some analytes and is reflected in QC recovery tables.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% - see ELN-P05 QAQC tables for details (available on request); <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase. Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was typically insufficient in order to satisfy laboratory QA/QC protocols.

Miscellaneous Information

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached. We have taken the sampling date as being the date received at the laboratory.

Two significant figures are reported for the majority of tests and with a high degree of confidence, for results <10*PQL, the second significant figure may be in doubt i.e. has a relatively high degree of uncertainty and is provided for information only.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS where sediment/solids are included by default.

Urine Analysis - The BEI values listed are taken from the 2022 edition of *TLVs and BEIs Threshold Limits by ACGIH*.

Air volume measurements are not covered by Envirolab's NATA accreditation.

Data Quality Assessment Summary PFC0021

Client Details

Client	Health Safety Environment Pty Ltd - HSE (Adelaide)
Your Reference	HJ.212095.Saa
Date Issued	08/03/2024

Recommended Holding Time Compliance

No recommended holding time exceedances

Quality Control and QC Frequency

QC Type	Compliant	Details
Blank	Yes	No Outliers
LCS	Yes	No Outliers
Duplicates	Yes	No Outliers
Matrix Spike	Yes	No Outliers
Surrogates / Extracted Internal Standards	Yes	No Outliers
QC Frequency	Yes	No Outliers

Surrogates/Extracted Internal Standards, Duplicates and/or Matrix Spikes are not always relevant/applicable to certain analyses and matrices. Therefore, said QC measures are deemed compliant in these situations by default. See Laboratory Acceptance Criteria for more information

Data Quality Assessment Summary PFC0021

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
Gravimetric Dust Filter	1-15	01/03/2024	07/03/2024	07/03/2024	Yes
Quartz Filter	1-15	01/03/2024	07/03/2024	08/03/2024	Yes

Quality Control PFC0021

DUST-004_QTZ | Respirable Crystalline Silica (Filter) | Batch BFC0750

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %
				BFC0750-DUP1# Samp QC RPD %	PFC0021-05 Samp QC RPD %	
a-Quartz	µg/sample	5.0	<5.0	12.3 13.3 8.07	<5.0 <5.0 [NA]	96.4

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

DUST-004_QTZ | Respirable Crystalline Silica (Filter) | Batch BFC0751

Analyte	Units	PQL	Blank	DUP1	DUP2	LCS %
				PFC0021-15 Samp QC RPD %	BFC0751-DUP2# Samp QC RPD %	
a-Quartz	µg/sample	5.0	<5.0	<5.0 <5.0 [NA]	18.4 19.2 4.41	96.4

The QC reported was not specifically part of this workorder but formed part of the QC process batch.



Appendix D Groundwater Monitoring Summary Report

Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026

Job No.:	1940	Category:	Bi-Annual Groundwater Monitoring
Site Name:	Klein Point	Client:	Adbri Limited
Site Address:	Wool Bay 5575	Approvals:	
Monitoring Date:	1 Jan 2018 - 30 Sep 2025	Monitored by:	Client
Report Requested by:	Rachel Hall		

Purpose: B-annual monitoring of well (6428-690) to capture seasonal variations in groundwater levels taking into account any water extraction from well (6428-690) and inform if additional investigations are required as determined by DPC.

05-05-2025	Bore No. 6428-690
Water Level	17.74
Target	

Comments / Field Observations

5/5/2025 Bore No. 6428-690: Total depth >100 m. Purge volume 3 L. EC: 10.80 mS/cm, pH: 7.65. Temp: 20.3. Water very sedimented

04-11-2024	Bore No. 6428-690
Water Level	17.78
Target	

Comments / Field Observations

4/11/2024 Bore No. 6428-690: Water murky with sediment on first sample but clear on second. Data taken from second (clear) sample. EC 10.27 mS/cm, DO 50.00 mg/L, pH 7.51

17-05-2024	Bore No. 6428-690
Water Level	17.73
Target	

Comments / Field Observations

17/5/2024 Bore No. 6428-690: Total depth >100 m. EC: 9073, pH: 7.17.

Event Discussion

Biannual groundwater monitoring was undertaken on 17 May 2024 at Klein Point Quarry. No significant changes to the quality and quantity of groundwater were noted when compared with previous assessments.

08-08-2023	Bore No. 6428-690
Water Level	17.71
Target	

Comments / Field Observations

8/8/2023 Bore No. 6428-690: Bore not running - currently utilised for sheep feedlot.

09-05-2023		Bore No. 6428-690
Water Level		17.75
Target		

24-03-2023		Bore No. 6428-690
Water Level		17.73
Target		

Comments / Field Observations

24/3/2023 Bore No. 6428-690: Bore not running- Currently utilised for sheep feedlot. Bore dipper serial# 348904

17-02-2023		Bore No. 6428-690
Water Level		17.73
Target		

Comments / Field Observations

17/2/2023 Bore No. 6428-690: Bore running - Currently utilised for sheep feedlot .Bore dipper serial# 4095. Bore depth confirmed to be at 18 m through weighted rope.

22-08-2022		Bore No. 6428-690
Water Level		17.85
Target		

17-08-2021		Bore No. 6428-690
Water Level		17.8
Target		

Comments / Field Observations

17/8/2021 Bore No. 6428-690: minimal use

05-02-2021	Bore No. 6428-690
Water Level	17.75
Target	

Comments / Field Observations

5/2/2021 Bore No. 6428-690: Bore currently utilised for sheep feed lot

26-08-2020	Bore No. 6428-690
Water Level	17.74
Target	

Comments / Field Observations

26/8/2020 Bore No. 6428-690: Increasing bore utilisation by Landowner continued . Landowner has been monitoring water level and no change observed.

12-03-2020	Bore No. 6428-690
Water Level	17.78
Target	

Comments / Field Observations

12/3/2020 Bore No. 6428-690: Bore currently utilised for sheep feed lot. Landowner increasing bore use over summer for sheep. Has been monitoring water level and no change observed .

26-07-2019	Bore No. 6428-690
Water Level	17.74
Target	

Comments / Field Observations

26/7/2019 Bore No. 6428-690: Bore currently utilised for sheep feed lot. Landowner planning on increasing bore use to feed another paddock

05-02-2019	Bore No. 6428-690
Water Level	17.8
Target	

Comments / Field Observations

5/2/2019 Bore No. 6428-690: Bore currently utilised for sheep feed lot

10-07-2018	Bore No. 6428-690
Water Level	17.75
Target	

Comments / Field Observations

10/7/2018 Bore No. 6428-690: Bore currently utilised for sheep feed lot

31-01-2018	Bore No. 6428-690
Water Level	17.76
Target	

Comments / Field Observations

31/1/2018 Bore No. 6428-690: Bore depth check, as per PEPR

Bore No. 6428-690



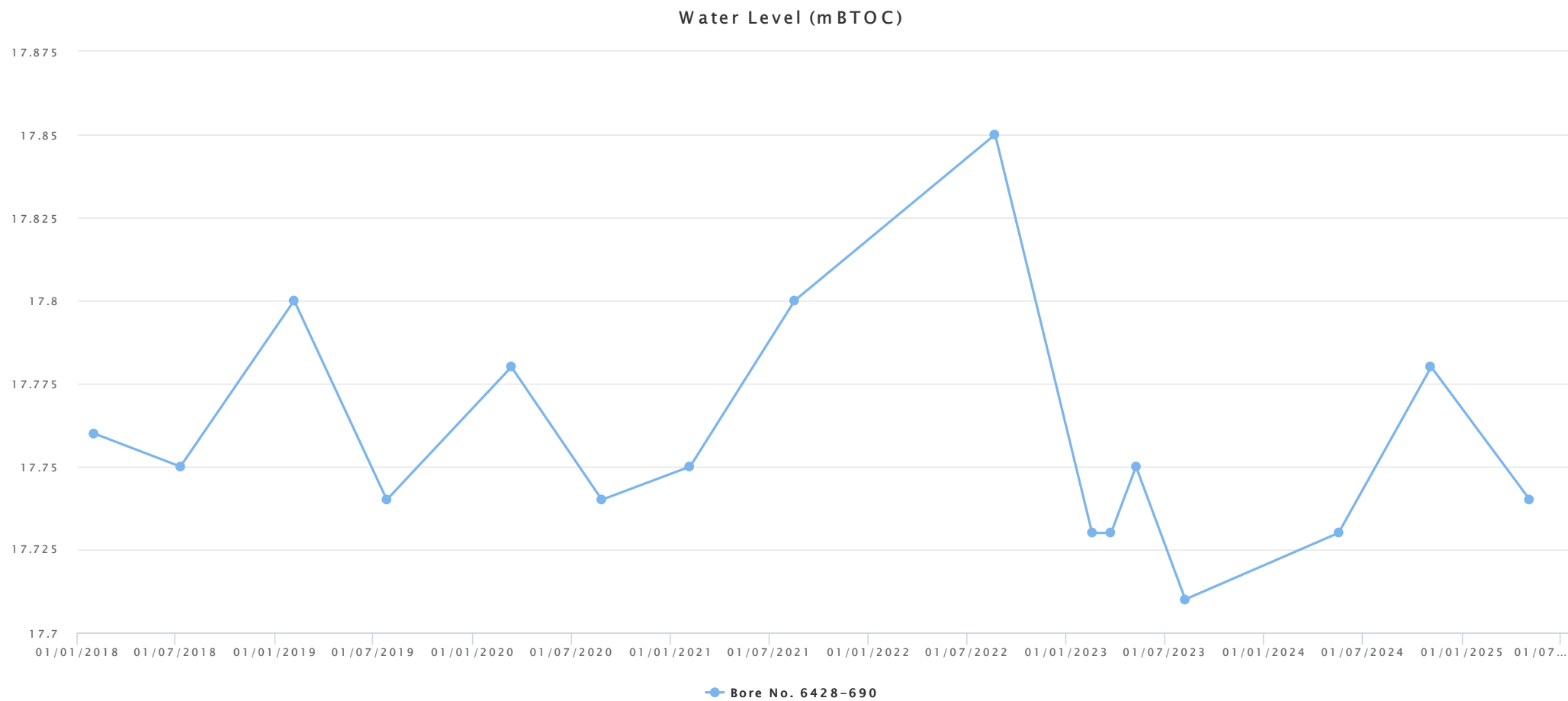
05/05/2025

Bore No. 6428-690




04/11/2024

Historical Results Graphing



Monitoring Location Map



 Bore No. 6428-690



Appendix E Native Vegetation Clearance Data Report

Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026



Native Vegetation Clearance Data Report – Klein Point Quarry (Stage 8)

Clearance under the *Native Vegetation Regulations 2017*

Adelaide Brighton Cement Limited

Level 4, 151 Pirie Street
Adelaide SA 5000

Prepared by:

SLR Consulting Australia Pty Ltd

SLR Project No.: 655.010515.00006

Client Reference No.: R02

26 September 2025

Revision: 1.0

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1.0	26 September 2025	Louise Jaunay & Monique Bury	Matthew Jones & Carly Monaghan	Matthew Jones

Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Adelaide Brighton Cement Limited (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work



Table of Contents

Basis of Report	i
1.0 Applicant Information	1
2.0 Purpose of Clearance	3
2.1 Description	3
2.2 Background	3
2.2.1 Interim Biogeographical Regionalisation of Australia (IBRA)	3
2.2.2 Climate	4
2.3 General Location Map	4
2.4 Details of the Proposal	4
2.5 Approvals Required or Obtained	4
2.6 Native Vegetation Regulation	5
2.7 Development Application Information (if applicable)	5
3.0 Method	6
3.1 Flora assessment	6
3.2 Fauna assessment	6
4.0 Assessment Outcomes	6
4.1 Vegetation Assessment.....	6
4.2 Threatened Species Assessment.....	9
4.3 Cumulative Impact.....	10
4.4 Address the Mitigation Hierarchy	10
4.5 Principles of Clearance (Schedule 1, Native Vegetation Act 1991).....	11
4.6 Risk Assessment.....	12
5.0 Clearance Summary	13
6.0 Significant Environmental Benefit	14
7.0 Closure	15
8.0 Feedback	16

Tables

Table A: Application Details	1
Table B: Summary of Proposed Clearance	1
Table C: Details of the Vegetation Associations Proposed to be Impacted.....	7
Table D: Threatened Species Likelihood of Occurrence Summary.....	9
Table E: Criteria for the Likelihood of Occurrence within the Study Area.....	9



Table F: The Principles of Clearance – Considerations	11
Table G: Risk Assessment	12
Table H: Clearance Area(s) Summary table	13
Table I: Totals Summary Table	13
Table J: Economies of Scale	13

Appendices

- Appendix A** **Figures**
- Appendix B** **Bushland Vegetation Assessment Scoresheet**
- Appendix C** **EPBC Act Protected Matters Search Report**



1.0 Applicant Information

Table A: Application Details

Applicant:	Adelaide Brighton Cement Limited		
Key contact:	Name:	Daniel Baillie, Manager – Quarry Operations	
	Contact details:	0432 178 869 Daniel.Baillie@adbri.com.au	
Landowner:	Name:	Adelaide Brighton Cement Limited (ABCL)	
	Contact details:	0432 178 869 Daniel.Baillie@adbri.com.au	
Site address:	Hayward Park Road, Wool Bay SA 5575		
Local Government Area:	Yorke Peninsula Council	Hundred:	Dalrymple
Title ID:	CT 5833/574	Parcel ID:	H 130500 S4

Table B: Summary of Proposed Clearance

Purpose of clearance	Quarry Extraction
Native Vegetation Regulation	Part 5, Division 1, Regulation 12(28) – Operations
Description of the vegetation under application	3.53 ha of highly degraded <i>Austrostipa sp.</i> grassland.
Total proposed clearance - area (hectares (ha)) and number of trees	3.53 ha is proposed to be cleared.
Level of clearance	Level 3
Overlay (Planning and Design Code)	Hazards (Bushfire – General), Dwelling Excision, Coastal Areas, Resource Extraction Protection Area, Hazards (Flooding – Evidence Required), Native Vegetation, Limited Dwelling



<p>Map of proposed clearance area</p>	<p>The map displays an aerial view of the Klein Point Quarry site. A red dashed line indicates the 'Proposed MC boundary' for Mineral Claim 4581. A yellow dashed line shows the 'Visual Amenity Bund'. A green hatched area represents 'Screening Planting'. A green shaded area indicates 'Vegetation Association 4'. The map also shows 'Site Mineral Leases' as red solid lines. A scale bar and north arrow are present. Project details include: Projection: GDA 2020 MGA Zone 54, Scale: 1:5,000, Project Number: 655.010515.00006, Date: 25-06-2025, Drawn by: LJ, Sheet Date: 04. The SLR logo and website are also visible.</p>
<p>Mitigation hierarchy</p>	<p>The Mineral Claim (MC) 4581 is located on the land parcel Certificate of Title (CT) CT 5833/574 H 130500 S4 (the Site). The Site is primarily located over historical agricultural land, minimising the requirement for impacts to native vegetation, with no intact remnant vegetation to be impacted. The native vegetation existing on the Site is reduced to scattered native grasses in isolated patches that have been avoided by cropping practices due to the rocky nature of the soil. The native grass patches exist close to the edge of Hayward Park Road, along the western side of the Site, and a screening planting is planned through this area, which will therefore result in the avoidance of native vegetation within this area.</p> <p>Vegetation clearance has been minimised to the extent of resource availability and to highly degraded native vegetation. The area has been minimised through the planned off-set buffer that will be located along the western side of the Site. The off-set buffer will result in the preservation of native grass patches.</p> <p>As the clearance will be conducted as part of a mineral extractive operation in accordance with the <i>Mining Act 1971</i>, progressive rehabilitation is required to be undertaken in support of the ongoing land use of the area. It is understood that ABCL intend to return the land to agricultural cropping consistent with the current use and rehabilitation activities undertaken within the adjacent quarry.</p>
<p>Significant Environmental Benefit (SEB) Offset proposal</p>	<p>The Client intends to make a single payment of \$6,007.80 (including an admin fee of \$313.20) into the Native Vegetation Fund (NVF).</p>



2.0 Purpose of Clearance

2.1 Description

SLR have been engaged by ABCL to undertake a Native Vegetation Assessment of vegetation located within Mineral Claim (MC) 4581 located on land parcel Certificate of Title (CT) CT 5833/574 H 130500 S4.

The Site is located within the District Council of Yorke Peninsula (Council) within the Northern and Yorke Landscape Board (Landscape Board), approximately 77 kilometres (km) west of Adelaide. The nearest town, Stansbury, is located approximately four (4) km southwest of the Site, refer to Figure 1. The extraction of Limestone is proposed to be carried out within MC 4581 held by ABCL, which will form an extension of the adjacent quarry operations known as Klein Point Quarry. Progressive development will be undertaken within the area via a single-stage Quarry Development Plan (QDP), refer to Appendix A. The Site will be extracted using traditional open-cut benched quarry techniques in accordance with the existing wider Klein Point Quarry operation. Native Vegetation clearance will be required in sections of the Site not actively cropped where natural regeneration of native grass species has occurred, as per Figure 3 in Appendix A.

2.2 Background

The Yorke Peninsula in South Australia comprises of agricultural, mining, commercial and tourism activities. The surrounding agricultural land is utilised predominantly for cropping and grazing purposes.

The Site is located on the lower east coast of the Yorke Peninsula in the Wool Bay Land System (WOB) and described as being stony coastal plains with some depressions and some slight rises. The overall landscape within the region consists of high agricultural land with little native vegetation surrounding areas of the MC area.

Historical clearance of vegetation is evident within the Site, with the land being highly disturbed, no presence of native overstorey Eucalyptus species and only scattered grassland species within the Site. The Site is relatively isolated and is not in proximity to other larger stands of native vegetation, with the surrounding land being utilised for extensive cropping and quarrying activities.

Extensive quarry extraction activities occur within the adjacent Mineral Leases (ML) operated by ABCL to the north of the Site. The current MC is proposed to enable the expansion of these operations with reference to the relevant Mining Lease Proposal (MLP). Subsequent to this, a Program for Environment Protection and Rehabilitation (PEPR) will then be established. Subsequent to the approval of the MLP, a ML will be granted, and an updated PEPR combining the operations on all ML's will then be established.

2.2.1 Interim Biogeographical Regionalisation of Australia (IBRA)

A search of the Government of South Australia Enviro Data (2023) application *NatureMaps* (NatureMaps) confirmed the Site is located within the Eyre Yorke Block IBRA bioregion, the Southern Yorke subregion and the Urania Association. Eighteen percent of the subregion has been mapped as remnant vegetation, of which 35 percent is formally conserved within Department for Environment and Water (DEW) reserves and Heritage Agreements (HA) under the *Native Vegetation Act 1991*. Six (6) percent of the Barung Environmental Association is mapped as remnant native vegetation, of which six (6) percent is formally conserved.



2.2.2 Climate

Climate data has been sourced from the Bureau of Meteorology (BoM) Edithburgh station (no.022046) located approximately 13 kilometres (km) South of the Site.

The annual average rainfall is 376 millimetres (mm) based on the records obtained from the Edithburgh weather station, which is represented as the closest weather station recording daily rainfall records. The climate is described as Mediterranean, with the majority of rainfall experienced between the months of May and September, whilst the summer period is generally hot and dry with minimal rainfall experienced. The average monthly temperature varies, with warm summers and moderately cool winters. Temperature data obtained from the Edithburgh weather station are as low as 15.1 degrees Celsius in winter and extend to an average of 25.5 degrees Celsius in summer.

2.3 General Location Map

The proposed vegetation clearance is to occur at Klein Point near Wool Bay, South Australia. The Site is approximately 215 km from Adelaide, South Australia.

2.4 Details of the Proposal

Native Vegetation clearance is required for the purpose of Limestone extraction within the Site. The extraction process will be an open-cut extraction process, consistent with adjacent quarry operations.

Topsoil will be preserved from the very top layer of material extracted and stockpiled no more than three (3) metres (m) high to preserve micro-organisms in the soil profile in readiness for rehabilitation.

The entire top bench at the Site will be drilled and blasted using traditional drill and blast techniques. Nonel initiation blasting systems will be used with the application of initiating Ammonium Nitrate Fuel Oil (ANFO) that is licensed to be stored onsite. In some areas of the Site, material will be able to be pushed with a bulldozer without drilling and blasting.

Limestone will then be loaded onto rigid dump trucks (CAT 777) using a Front End Loader (CAT 992) and hauled to the crushing and processing facility. Dump trucks will then tip either directly into the primary crusher or place material on one of two (2) Run of Mine (ROM) stockpiles for crushing at a later date.

Processed material will be transported via conveyor to the limestone cargo vessel (Accolade 2) or to the storage bin. Approximately 7,400 tonnes (t) of material is transported daily from Klein Point to the dock at Birkenhead for cement manufacture.

Final Site rehabilitation following closure of the quarry will aim to return the land to agricultural use consistent with the current use of the land.

2.5 Approvals Required or Obtained

ABCL operate the existing quarry within a previously approved PEPR; however, plans for the ongoing development of the MC area necessitate the submission of the MLP, which will encompass all future operations within the MC area. The development of the MLP has been informed through the undertaking of detailed resource and environmental investigations, community consultation and engagement with State Government agencies. If approved, operations within the Site will not be able to be undertaken until a PEPR for the Site has been developed and approved by the Department for Energy and Mining (DEM).



Native Vegetation removal within the adjacent quarry operations has previously been approved in accordance with the provisions of the current approved PEPR, which was approved on the 8th of December 2017 as Program No. MPEPR2017/010. This document refers to what has been referenced as ‘Stage 8’ of quarry development, encompassing MC 4581, and is specifically developed for submission with the MLP. Additional vegetation clearance will be required for Stage 1-7 and Stage 9 of the adjacent quarry development plans, and this will be documented in a separate, updated Native Vegetation Management Plan as part of a revised PEPR for the whole site

2.6 Native Vegetation Regulation

Provisions for clearance of native vegetation associated with approved mining operations are provided under the *Native Vegetation Regulations 2017, Part 5, Regulation 12, Division 1, Subclause 28 – Operations* – Clearance of vegetation incidental to operations authorised under the *Mining Act 1971* or the *Geothermal Energy Act 2000*.

2.7 Development Application Information (if applicable)

Development approvals are not required for activities associated with the approved PEPR, which was approved on the 8th of December 2017 as Program No. MPEPR2017/010 (ref).



3.0 Method

3.1 Flora assessment

An online search was undertaken for *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) Matters of National Environmental Significance (MNES), along with a review of *NatureMaps* for historical records of any rare or endangered flora species within five (5) km of the Site.

Following a review of the background information and literature, an assessment of the Site was undertaken on 6 February 2023 by an Accredited Consultant involving a general assessment of the Site and identification of habitat for species of conservation significance. A reassessment was undertaken by SLR on 26 June 2025.

The proposed works areas were surveyed for:

- Remnant and regrowth native vegetation
- Introduced plant species

Representative photographs of the vegetation within the Site are provided in Section 4.1 Vegetation Assessment.

3.2 Fauna assessment

An online search was undertaken for EPBC Act MNES, as well as a review of *NatureMaps* to determine the presence of any rare or endangered fauna species recorded within five (5) km of the Site. A summary of the key EPBC Act listed species potentially present within the area is found in Appendix C. An assessment of the Site was undertaken on 17 March 2023 to record opportunistic sightings or signs of fauna species present within the Site. A reassessment was undertaken by SLR on 26 June 2025.

4.0 Assessment Outcomes

Provide information on the following assessment criteria. For more information, see the Native Vegetation Council (NVC) *Guide for Applications to Clear Native Vegetation*.

4.1 Vegetation Assessment

The topography of the Site is characterised by low, gentle, undulating hills, with the Site generally sloping in a south-westerly direction. Height elevations of the Site range from 26 m Australian Height Datum (AHD) along the northeastern boundary of the Site, dipping to elevations of approximately 13 m AHD.

The closest Heritage Agreement (HA) to the Site is located approximately 8.5 km to the northwest (HA 1331). Minlacowie Conservation Park is located approximately 12.5 km northwest of the Site.

Full assessment of the vegetation attributes and condition scores is provided within Appendix B.

A total of one (1) Vegetation Association was identified across the Site:

- *Austrostipa* sp. grassland over introduced weeds.


The vegetation under application is isolated from any other remnant vegetation, with the majority of the vegetation occurring as isolated clumps on unproductive cropping sections of the Site. Historically planted revegetation has been established adjacent to the Site, with a



screening planting extending from the northwestern corner boundary of the Site, originally planted to screen the existing quarry operations to the north of the current MC. Roadside vegetation also runs along the western side of the Site, as well as a narrow strip of vegetation along the southern boundary. All the adjacent vegetation is historical revegetation on top of the central dune formation. As the Site has a long history of grazing, other patches of native vegetation exist as small, scattered clumps of native grasses. Remnant vegetation throughout the adjacent landscape is highly fragmented and predominantly comprises of Eucalyptus Mallee woodlands with isolated patches of saline-tolerant vegetation bordering scattered salt pans.

Weather conditions preceding the survey were warm, with minimal rain. Annual germination and growth were not present on the Site to enable accurate identification. Dry biomass on the ground layer was high, predominantly comprising of introduced grassy weeds. Ambient air temperatures were mild, with no reptile activity noted. Upon reinspection on the 25th and 26th of June, 2025, the Site conditions remained consistent with the previous assessment undertaken. The second survey was conducted in cool air temperatures with inconsistent patches of rain. Dry biomass on the ground layer was consistent with the previous assessment, and minimal fauna activity was noted.

Table C: Details of the Vegetation Associations Proposed to be Impacted

Vegetation Association	Vegetation Association 1; <i>Austrostipa</i> sp. grassland over introduced weeds
	
<p>Photo Point 1 – Vegetation Association 1 (MGA Zone 54 S34° 58.079' E137° 45.074')</p>	
General description	Highly degraded native vegetation reduced to scattered clumps of <i>Austrostipa</i> sp. +/- <i>Rytidosperma</i> spp. most likely colonising since original land clearance. Situated within sections of the Site not subject to regular cropping due to their rocky soil composition. Predominately on the fringes of the Site. Association



	<p>dominated by weed species, particularly annual grassy weed species such as <i>Avena barbata</i> (Bearded Oat), <i>Hordeum marinum</i> (Sea Barley-grass), and <i>Lolium rigidum</i> (Wimmera Ryegrass). No overstorey, midstorey, or herbaceous understorey present. Soil shallow over limestone, with no lichen or moss crust found to be present.</p> <p>Native species restricted to:</p> <p><i>Austrostipa</i> sp.</p> <p><i>Rytidosperma</i> spp.</p>				
Threatened species or community	<p>A search of <i>NatureMaps</i> reported no threatened fauna species and two (2) threatened flora species recorded within the preceding 20 years and within a five (5) km radius of the Site.</p> <p>Of the two (2) threatened flora species identified within the desktop assessment, both were considered 'unlikely' to occur based on current known distributions, barriers to seed movement, habitat preferences (including soil types), and Site characteristics identified during the Site inspections.</p> <p>No threatened plant communities were recorded in the Site inspection.</p>				
Landscape context score	1.15	Vegetation Condition Score	1.99	Conservation significance score	1.00
Unit biodiversity Score	2.29	Area (ha)	3.53	Total biodiversity Score	8.08



4.2 Threatened Species Assessment

A search of *NatureMaps* report identified no threatened fauna species recorded within the preceding 20 years and within a five (5) km radius of the Site. This is despite survey effort occurring within this radius as recently as 2021. Two (2) threatened flora species have been recorded within the preceding 20 years and within a five (5) km radius of the Site. An EPBC Act protected matters search report listed nine (9) threatened fauna species and 13 threatened flora species additional to those identified through *NatureMaps*, refer to Appendix C. Only species identified through *NatureMaps* where location and record date are known have been included in the below summary. Aquatic species and species with listed subspecies with known distributions outside of the project area have also been excluded.

Table D: Threatened Species Likelihood of Occurrence Summary

Species (common name)	NP&W Act*	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
<i>Leptorhynchus elongatus</i> (Lanky Buttons)	E	2009	Grows in woodland or grassland, sometimes on the margins of swamps.	Unlikely. No suitable habitat present on Site.
<i>Podolepis decipiens</i> (Common Podolepis)	R	2006	Found in a wide range of non-arid habitats, including near coastal, alpine, sub-alpine and plains country grasslands, woodlands and open forests.	Unlikely. Current and historical management regime makes it unlikely the species would be present, given proximity to previous records and barriers to seed movement.
*NP&W ACT: <i>National Parks and Wildlife Act 1972</i> E: Endangered, R: Rare				

Table E: Criteria for the Likelihood of Occurrence within the Study Area

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provides limited habitat or feeding resources for the species. Recorded within 20 - 40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provides no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 - 40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area.



Likelihood	Criteria
	No records despite adequate survey effort.

4.3 Cumulative Impact

The current clearance application encompasses the majority of the MC, which will allow for all extraction and operational areas adjoining the existing quarry operations. Access to the Site will be gained through existing Mineral Leases currently in operation to the North of the Site. Additional clearance will be required in staged sections of the existing Quarry operations for some areas of scattered trees that were not previously identified for removal. A separate clearance application as an updated Native Vegetation Management Plan will be submitted with an updated PEPR for the adjacent operations.

Indirect impacts on surrounding vegetation may include dust deposition, an increase in weed abundance and diversity, and general rubbish incursions from operational activities. However, the Site is adjacent to predominantly planted vegetation. The indicated impacts caused by dust, weeds or rubbish will be mitigated through control measures outlined within the MLP and the PEPR once finalised.

The clearance of native vegetation will add to the cumulative cleared area of the surrounding landscape; however, this is a very minor impact given the size and quality of the vegetation. Clearance will be minimised to the available resource and is wholly restricted to areas that have been subject to previous historical clearance.

4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimise, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance – outline measures taken to avoid clearance of native vegetation

There is minimal native vegetation within the Site chosen for the MC, with no intact remnant to be impacted. The native vegetation existing on the Site is reduced to scattered native grasses in isolated patches that have been avoided from cropping practices due to the rocky nature of the soil. The native grass patches exist close to the road edge, along the western side of the Site, and an off-set buffer is planned through this area, which will therefore result in the avoidance of some native vegetation, as no vegetation will be cleared in this area.

b) Minimisation – if clearance cannot be avoided, outline measures taken to minimise the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).

Vegetation clearance has been minimised to the extent of resource availability and to highly degraded native vegetation. The area has been minimised through the planned off-set buffer that will be located along the western side of the Site.

c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimised, such as allowing for the re-establishment of the vegetation.



As the clearance will be conducted as part of a mineral extractive operation, rehabilitation of the land must occur and be documented within the approved MLP and the subsequent PEPR. This is likely to occur over an extended timeframe and not be eligible for any reduction in offset amounts, as the land will be rehabilitated to suit agriculture and cropping.

- d) **Offset – any adverse impact on native vegetation that cannot be avoided or further minimised should be offset by the achievement of a significant environmental benefit that outweighs that impact. *The NVC will only consider an offset once avoidance, minimisation and restoration have been documented and fulfilled. The SEB Policy explains the biodiversity offsetting principles that must be met.***

The Client intends to pay into the NVF the amount required for the SEB, as calculated in Table I. This will be made as one (1) single payment, according to the Quarry Development Plans, after the MLP and the PEPR have gained approval.

4.5 Principles of Clearance (Schedule 1, *Native Vegetation Act 1991*)

The NVC will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the *Native Vegetation Regulations 2017*. The Native Vegetation Council will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

Table F: The Principles of Clearance – Considerations

Principle of clearance	Relevant information
Principle 1b - significance as a habitat for wildlife	<u>Relevant information</u> The vegetation under application may provide habitat for fauna species, particularly common birds and reptiles. The vegetation is not well connected with surrounding vegetation, and due to the level of disturbance that has historically occurred within the Site, it is unlikely to contain any significant habitat for any threatened species.
	Threatened Fauna Score (all associations) – 0
	<u>Assessment against the principles</u> <u>Seriously at Variance</u> No <u>At Variance</u> – No
	<u>Moderating factors that may be considered by the NVC</u> N/A
Principle 1c - plants of a rare, vulnerable or endangered species	<u>Relevant information</u> All threatened flora species identified within the desktop assessment were considered unlikely to occur based on current known distributions, barriers to seed movement, habitat preferences (including soil types), and Site characteristics identified during the Site inspections.
	Threatened Flora Scores (all associations): 0
	<u>Assessment against the principles</u> <u>Seriously at Variance</u>



	No <u>At Variance</u> – No
	<u>Moderating factors that may be considered by the NVC</u> N/A
Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered:	No threatened communities under the EPBC Act or threatened ecosystems under the DEW Provisional list were recorded within the application area.
	Threatened Community Score (all associations) – 1
	<u>Assessment against the principles</u> <u>Seriously at Variance</u> No
	<u>At Variance</u> – No
	<u>Moderating factors that may be considered by the NVC</u> N/A

Principles of Clearance (h-m) will be considered by comments provided by the local NRM Board or the relevant Minister. The Data Report should contain information on these principles where relevant and where sufficient information or expertise is available.

4.6 Risk Assessment

Determine the level of risk associated with the application.

Table G: Risk Assessment

Total clearance	No. of trees	N/A
	Area (ha)	3.53
	Total Biodiversity Score	8.08
Seriously at variance with principle 1(b), 1(c) or 1 (d)		None
Risk assessment outcome		Level 3



5.0 Clearance Summary

Table H: Clearance Area(s) Summary table

Block	Site	Species diversity score	Threatened Ecological community Score	Threatened plant score	Threatened fauna score	Unit Biodiversity Score	Area (ha)	Total Biodiversity score	Loss factor	SEB Points required	SEB payment	Admin Fee
A	1	4	1	0	0	2.29	3.53	8.08	1	8.89	\$5,694.60	\$313.20
Total							3.53	8.08		8.89	\$5,694.60	\$313.20

Table I: Totals Summary Table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	8.08	8.89	\$5,694.60	\$313.20	\$6,007.80

Table J: Economies of Scale

Economies of Scale Factor	0.5
Rainfall (mm)	388



6.0 Significant Environmental Benefit

AnSEB is required for approval to clear under Division 5 of the *Native Vegetation Regulations 2017*. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that an SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

Achieving an SEB

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

- Establish a new SEB Area on land owned by the proponent. Provide information below.
- Use SEB Credit that the proponent has established. Provide the SEB Credit Ref. No.

- Apply to have SEB Credit assigned from another person or body. The application form needs to be submitted with this Data Report.
- Apply to have an SEB to be delivered by a Third Party. The application form needs to be submitted with this Data Report.
- Pay into the NVF. Provide details below

Payment SEB

The Client intends to make a single payment amount of \$6,007.80 (including admin fee of \$313.20) into the NVF. Due to the available land being required for quarry operations and future rehabilitation of cropping land, an on-ground SEB is not achievable.



7.0 Closure

Thank you for retaining SLR to provide this service. We wish you well and look forward to working with you again. Should you have questions or require additional information, please do not hesitate to contact the below.

Sincerely,

SLR Consulting Australia



Louise Jaunay, BApSc
Associate Consultant – Ecology & Biodiversity



Monique Bury, BSc
Project Consultant – Ecology & Biodiversity



8.0 Feedback

At SLR, we are committed to delivering professional quality service to our clients. We are constantly looking for ways to improve the quality of our deliverables and our service to our clients. Client feedback is a valuable tool in helping us prioritise services and resources according to our client needs.

To achieve this, your feedback on the team's performance, deliverables and service are valuable and SLR welcome all feedback via <https://www.slrconsulting.com/en/feedback>. We recognise the value of your time and we will make a \$10 donation to our Charity Partner - Lifeline, for every completed form.





Appendix A Figures

Native Vegetation Clearance Data Report – Klein Point Quarry (Stage 8)

Clearance under the

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00006

26 September 2025

751000E

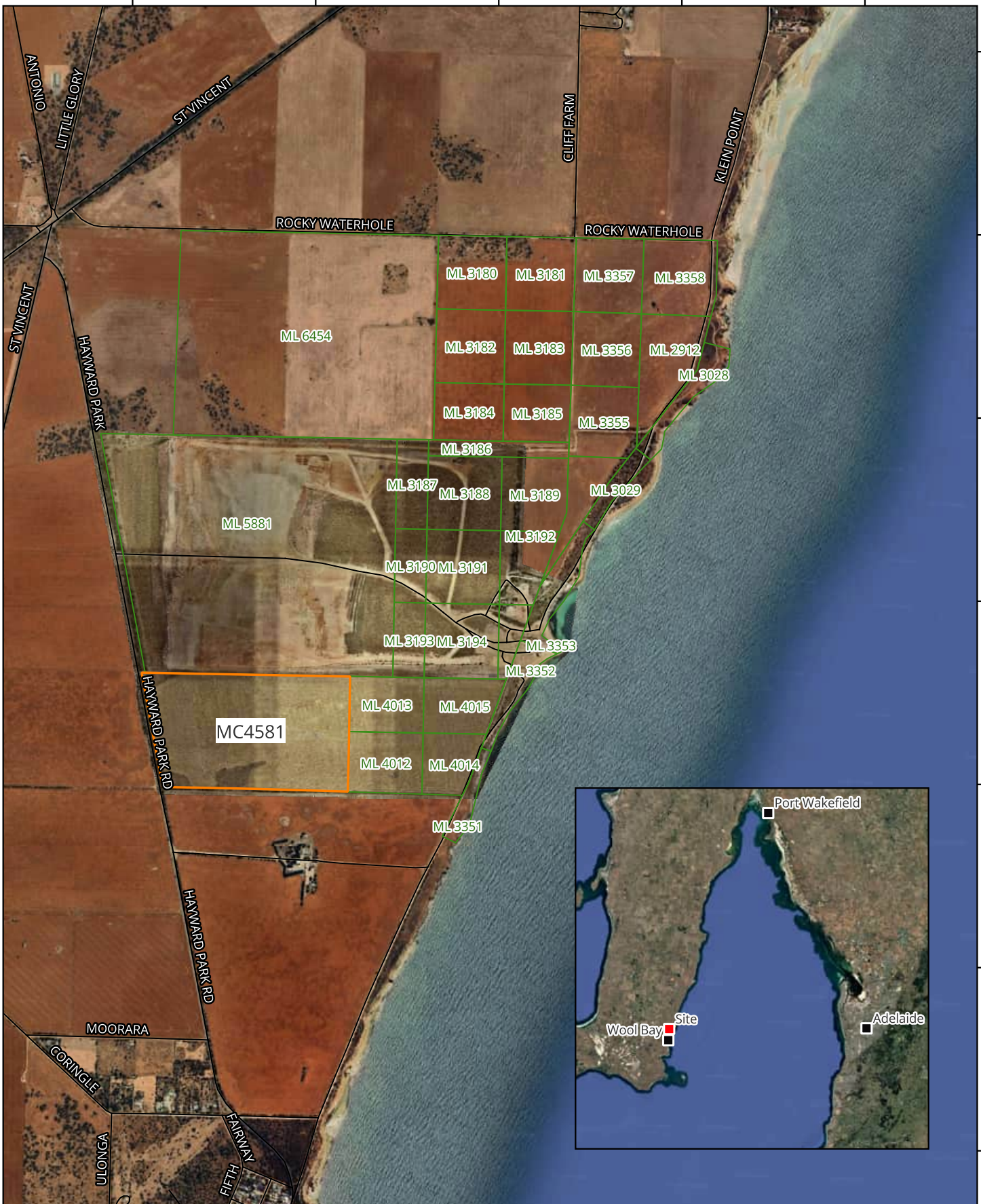
752000E

753000E


754000E

755000E

6131000N
6130000N
6129000N
6128000N
6127000N
6126000N
6125000N



H:\Projects\SLR\655-NUR\655.010615.00001_Adbri Klein Point\00006 Native Vegetation Assessment\106 SLR Data\01 GIS\GIS Data\Native Vegetation Clearance Assessment\tdgz



 0 300 600 m

 Projection: GDA 2020 MGA Zone 53

 Scale: 1:28,000


 Project Number: 655.010515

 Date: 25-08-2025

 Drawn by: MB

 Sheet Size: A4

LEGEND

 Site (MC4581)

 Mineral Leases

 Roads

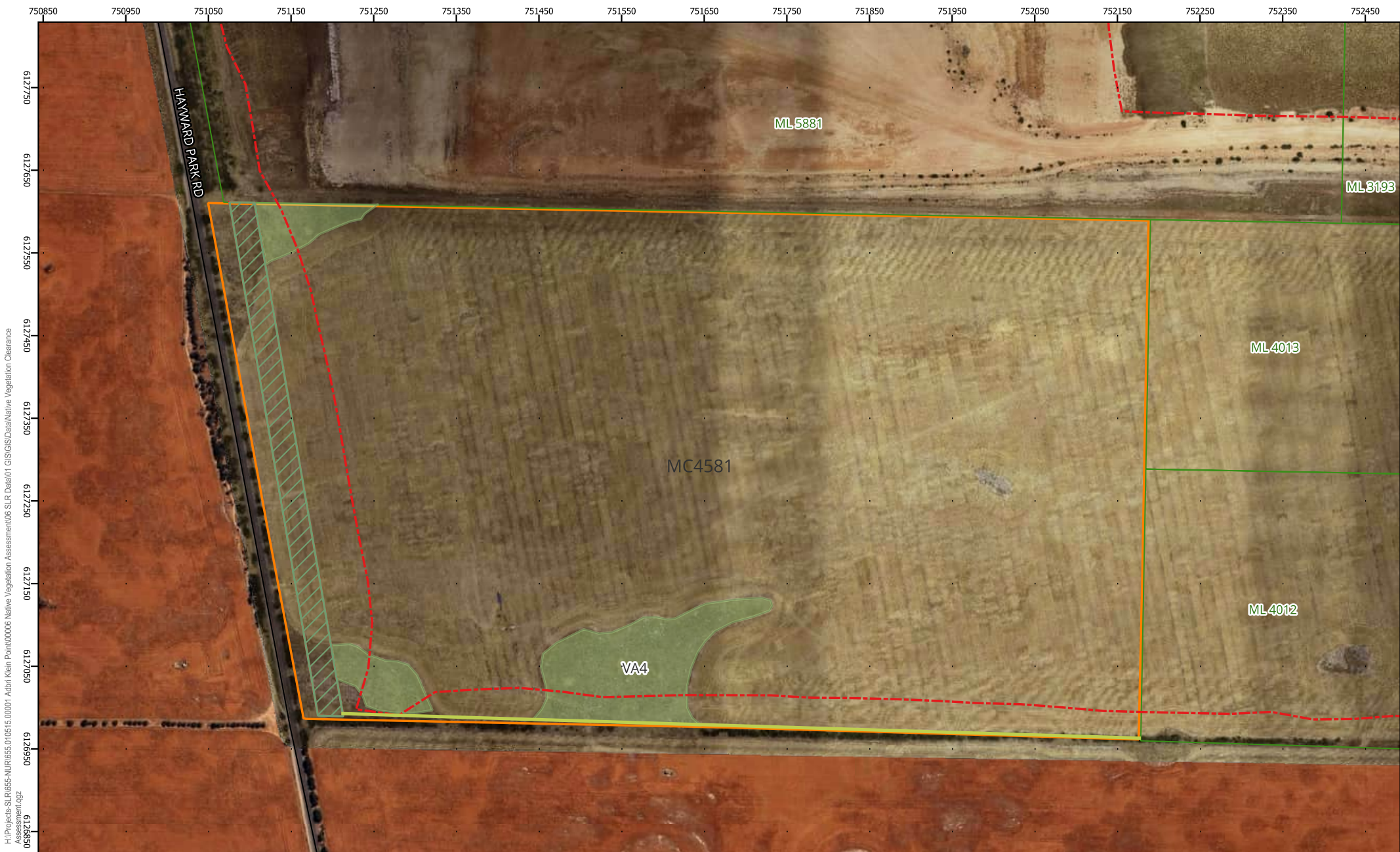


Project Location



www.slrconsulting.com

FIGURE 1



H:\Projects-SLR\655-NU\655-010615-00001_Abri Klein Point\000006 Native Vegetation Assessment\06 SLR Data\01_GIS\GISData\Native Vegetation Clearance Assessment.gdz



www.slrconsulting.com

Projection: GDA 2020 MGA Zone 54
 Scale: 1:6,000
 Project Number: 655.010515.00001
 Date: 25-08-2025
 Drawn by: LJ
 Sheet Size: A4

LEGEND

- Pit Extent Site Mineral Leases
- Visual Amenity Bund Proposed MC boundary
- Offset Buffer
- Vegetation Association 4

Stage 8 Native Vegetation Clearance

FIGURE 2



Appendix B Bushland Vegetation Assessment Scoresheet

Native Vegetation Clearance Data Report – Klein Point Quarry (Stage 8)

Clearance under the

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00006

26 September 2025

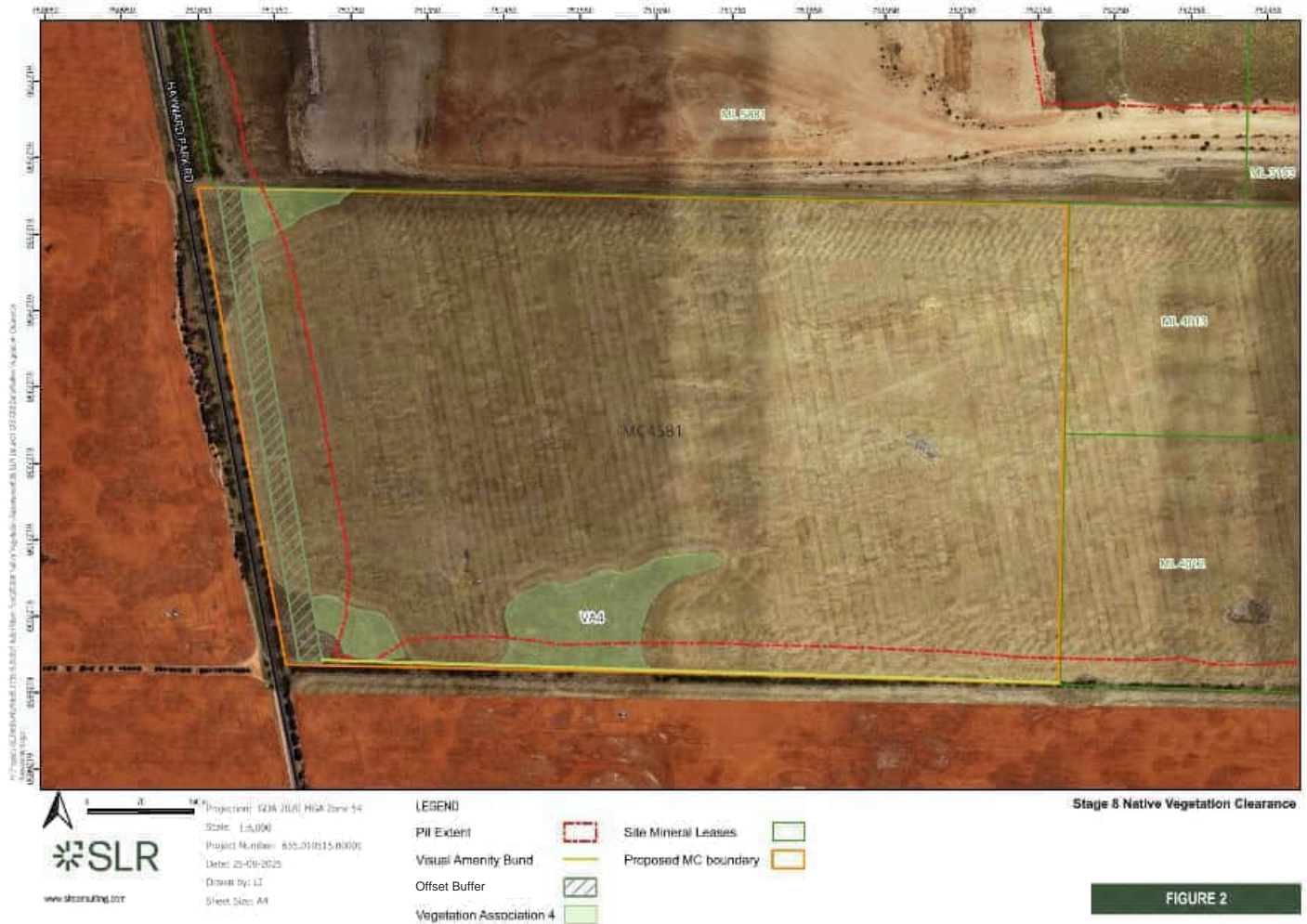
Bushland Assessment Scoresheet

(Version - 1 September 2024)

Block	A
Size of Block (Ha)	3.5
Landscapes Region	Northern & Yorke
BCM Region	Northern Agricultural & Yorke Peninsula
IBRA Association	Urania
IBRA Subregion	Southern Yorke

ASSESSOR(S)	M. Bury, G. Wilson and L. Jaunay
DATE OF ASSESSMENT	26/06/2025

Map of the Block (Including the Sites)



Landscape Context Scores

		% native veg. remaining in IBRA Assoc.	6
		% native veg. remaining in IBRA subregion	18
		0 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; > 60 = 0 pts	
		Score	0.09
Score received for both IBRA assoc. and subregion then summed			
Percent Vegetation Cover (5km radius) (%)	9		
0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts			
Score	0.02		
		% native veg. protected IBRA Assoc.	6
		0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0	
		Score	0.03
Block Shape Cleared perimeter:Area (km/km ²)		Wetland or Riparian Habitat present	
Cleared Perimeter (m) =	500	Riparian zone present (Yes/No) = 0.02 pt	No
Cleared Perimeter to area ratio	14.29	Swamp/wetland present (Yes/No) = 0.03 pts	No
<6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt		(Swamp/wetland may be +/- riparian zone)	
Score	0.01	Score	0
Note; Blocks will score a minimum Landscape Context Score of 1		LANDSCAPE CONTEXT SCORE (max 1.25)	1.15

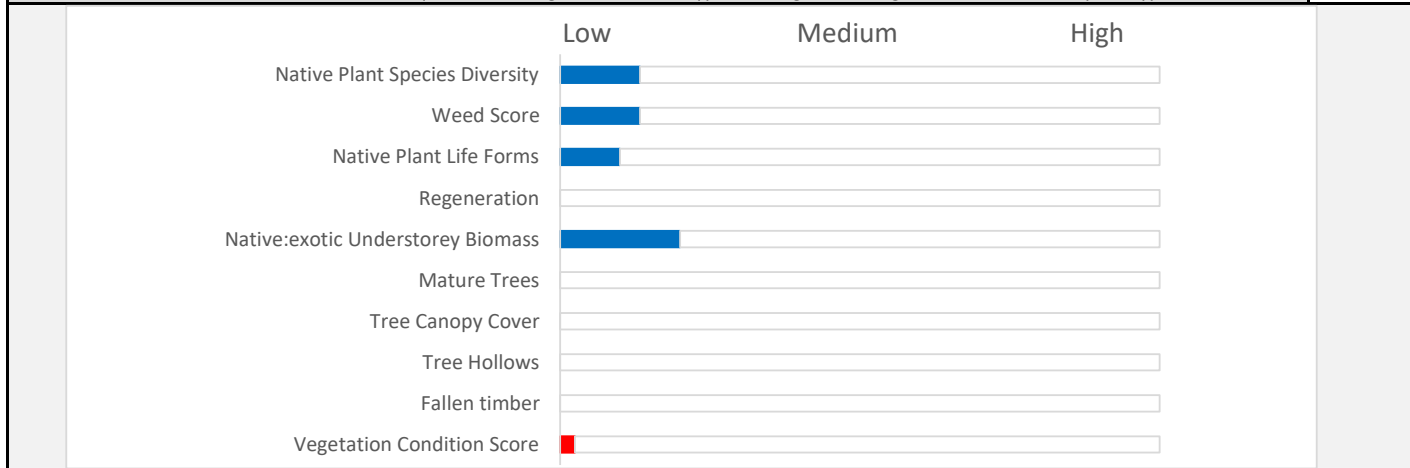
Vegetation Condition Scores

SITE:	A4
BCM COMMUNITY	YP 3.1 Mallee Box or Red Gum Woodland with an Open Grassy Understorey
VEGETATION ASSOCIATION DESCRIPTION	Scattered native grass sp. Amongst introduced weeds
SIZE OF SITE (Ha)	3.53

Benchmarked attributes (Scores determined by comparing to a Benchmark community)				Native Plant Life Forms	Cover rating
Number of Native Species (Minus herbaceous annuals for spring Surveys)			3	Trees > 15m	
Native Plant Species Diversity Score (max 30) from benchmark score <i>weighted by a factor of 2</i>			4.0	Trees 5 - 15 m	
				Trees < 5m	
Number of regenerating native species			0	Mallee > 5m	
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5			0	Mallee < 5m	
				Shrubs > 2m	
				Shrubs 0.5 - 2m	
				Shrubs <0.5m	
				Forbs	
Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I	Mat Plants	
<i>Marrubium vulgare</i>	2	3	6	Grasses > 0.2m	
<i>Salvia verbenaca var.</i>	4	2	8	Grasses < 0.2m	2
<i>Hordeum sp.</i>	4	1	4	Sedges > 1m	
<i>Brassica sp.</i>	3	2	6	Sedges < 1m	
<i>Asparagus asparagoides f.</i>	3	5	15	Hummock grasses	
	Cover x Threat		39	Vines, scramblers	
Weed Score (max 15) from benchmark community			2	Mistletoe	
				Ferns	
				Grass-tree	
				Total	2
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2					2.0

Non-Benchmarked Attributes (Scores determined from direct field observations)		<i>Is the community naturally treeless?</i>	<input type="checkbox"/>
Native:exotic Understorey biomass Score (max 5)	1	Fallen Timber/Debris (max 5)	
		Hollow-bearing trees Score (max 5)	
		Mature Tree Score (max 8)	
		Tree Canopy Cover Score (max 5)	


Vegetation Condition Score calculation	
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees - If the community Score is Not Benchmarked (SNB) for regeneration this score is multiplied 1.24 - If the community is naturally treeless this score is multiplied by 1.29	6.00
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - Biomass score - Tree Canopy Cover Score)exp2/2)	53.50
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80))	1.99



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	<input type="checkbox"/>
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	<input type="checkbox"/>
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	<input type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)	<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	<input type="checkbox"/>
<i>Note: all sites will score a minimum Conservation Significance Score of 1</i>	
Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
<i>*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
<i>*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
State Rare species observed or locally recorded (1 pt each)	0
State Vulnerable species observed or locally recorded (2.5 pt each)	0
State Endangered species observed or locally recorded (5 pt each)	0
Nationally Vulnerable species observed or locally recorded (10 pts each)	0
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	0
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	0
Threatened Fauna Score	0
CONSERVATION SIGNIFICANCE SCORE	1

Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance =	
LANDSCAPE CONTEXT SCORE	Score 1.15	UNIT BIODIVERSITY SCORE	2.29
VEGETATION CONDITION SCORE	1.99	Total Biodiversity Score	8.08
CONSERVATION SIGNIFICANCE SCORE	1.00	(Biodiversity Score x hectares)	

Photo Point and Vegetation Survey Location	Direction of the Photo	
	West	
	GPS Reference	
	Datum	
	Zone (52, 53 or 54)	53
	Easting (6 digits)	
Northing (7 digits)		
	Description	
	Highly degraded native vegetation reduced to scattered clumps of <i>Austrostipa</i> sp. +/- <i>Rytidosperma</i> spp. most likely colonising since the original land clearance.	

SEB Offset Calculations (when assessing a proposed clearance site)

SEB Points required for offset	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	8.89

SEB - Payment in the Native Vegetation Fund	
SEB Points of Gain/ha Factor	7.5
Approximate SEB hectares required	1.19
Management Cost Factor (\$/ha)	\$24,764
Economies of Scale Factor	0.5
Mean annual rainfall for the site (mm)	388
Payment into the Fund (GST exclusive)	\$5,694.60
Administration fee (GST inclusive)	\$313.20
Total Payment Required	\$6,007.80

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground

What is the risk of decline or loss of vegetation in the next 20 years?

Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?

Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?

There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).

Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?

Likely % Loss

7.3%

Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?

Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?

Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?

Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?

Are the proposed management actions and their scale of impact already required by duty of care or legislation?

Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019*.

Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited some way?

Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?

Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.

Likely Improvement Due to Management

15.602

In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?

Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?

Are there other risk factors which make the outcome uncertain? **NVB assessment only**

Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose risks to the delivery of the offset that are not already addressed by the above questions?

Likelihood of Achieving the Outcome

12.0%

Future Negative UBS Score	2.12
Future Positive UBS Score	4.44
UBS Gain Score	2.32
Estimate of SEB Points provided	8.19

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.



Appendix C EPBC Act Protected Matters Search Report

Native Vegetation Clearance Data Report – Klein Point Quarry (Stage 8)

Clearance under the

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00006

26 September 2025



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 13-Oct-2022

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	45
Listed Migratory Species:	44

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	78
Whales and Other Cetaceans:	11
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	1
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	6
Key Ecological Features (Marine):	None
Biologically Important Areas:	6
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[[Resource Information](#)]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Drooping sheoak grassy woodland on calcrete of the Eyre Yorke Block Bioregion	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species

[[Resource Information](#)]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat may occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pedionomus torquatus Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Thinornis cucullatus cucullatus Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	Species or species habitat likely to occur within area	In feature area
FISH			
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In feature area
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat likely to occur within area	In feature area
MAMMAL			
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat likely to occur within area	In feature area
PLANT			
Acacia enterocarpa Jumping-jack Wattle [17615]	Endangered	Species or species habitat may occur within area	In feature area
Caladenia brumalis Winter Spider-orchid [54993]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Caladenia conferta Coast Spider-orchid [55000]	Endangered	Species or species habitat may occur within area	In feature area
Caladenia intuta Ghost Spider-orchid [82821]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Caladenia macroclavia Large-club Spider-orchid [55012]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Caladenia tensa Greencomb Spider-orchid, Rigid Spider-orchid [24390]	Endangered	Species or species habitat likely to occur within area	In feature area
Euphrasia collina subsp. osbornii Osborn's Eyebright [3684]	Endangered	Species or species habitat may occur within area	In feature area
Olearia pannosa subsp. pannosa Silver Daisy-bush, Silver-leaved Daisy, Velvet Daisy-bush [12348]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Senecio macrocarpus Large-fruit Fireweed, Large-fruit Groundsel [16333]	Vulnerable	Species or species habitat may occur within area	In feature area

REPTILE

Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area

SHARK

Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
--	------------	---	-----------------

Listed Migratory Species

[[Resource Information](#)]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Ardenna grisea Sooty Shearwater [82651]		Species or species habitat may occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In feature area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In feature area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardena carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardena grisea as Puffinus griseus Sooty Shearwater [82651]		Species or species habitat may occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris acuminata Sharp-tailed Sandpiper [874]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In buffer area only
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area overfly marine area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]		Species or species habitat likely to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In feature area
Phalacrocorax fuscescens Black-faced Cormorant [59660]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Stercorarius skua as Catharacta skua Great Skua [823]		Species or species habitat may occur within area	In buffer area only
Sternula albifrons as Sterna albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat likely to occur within area overfly marine area	In feature area
Thinornis cucullatus cucullatus as Thinornis rubricollis rubricollis Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area overfly marine area	In feature area
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In feature area
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area	In feature area
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In feature area
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In feature area
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In feature area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In feature area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In feature area
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area	In feature area
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area	In feature area
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In feature area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In feature area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In feature area
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In feature area
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In feature area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In feature area
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In feature area
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area	In feature area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In feature area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In feature area
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In feature area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In feature area
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In feature area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Longsnout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In feature area
Vanacampus vercoi Verco's Pipefish [66286]		Species or species habitat may occur within area	In feature area
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In feature area
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In feature area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat likely to occur within area	In feature area
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area

Whales and Other Cetaceans

[Resource Information]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In feature area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In feature area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In feature area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In feature area

Extra Information

State and Territory Reserves [\[Resource Information \]](#)

Protected Area Name	Reserve Type	State	Buffer Status
Lower Yorke Peninsula	Marine Park	SA	In buffer area only

EPBC Act Referrals [\[Resource Information \]](#)

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
-------------------	-----------	------------------	-------------------	---------------

Controlled action

Port Giles Development	2002/641	Controlled Action	Completed	In buffer area only
--	----------	-------------------	-----------	---------------------

Not controlled action

Construction of 29km distribution line servicing Troubridge Point wind farm	2004/1410	Not Controlled Action	Completed	In buffer area only
---	-----------	-----------------------	-----------	---------------------

Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
--	-----------	-----------------------	-----------	-----------------

INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
---	-----------	-----------------------	-----------	-----------------

Walk the Yorke Leisure Trail Project, Yorke Peninsula, SA	2013/7059	Not Controlled Action	Completed	In feature area
---	-----------	-----------------------	-----------	-----------------

Not controlled action (particular manner)

INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
---	-----------	---	---------------	-----------------

Biologically Important Areas

Scientific Name	Behaviour	Presence	Buffer Status
-----------------	-----------	----------	---------------

Seabirds

Eudyptula minor			
---------------------------------	--	--	--

Little Penguin [1085]	Foraging (provisioning young)	Known to occur	In feature area
-----------------------	-------------------------------	----------------	-----------------

Scientific Name	Behaviour	Presence	Buffer Status
Phalacrocorax fuscescens Black-faced Cormorant [59660]	Foraging	Known to occur	In buffer area only
Sternula nereis Fairy Tern [82949]	Foraging	Known to occur	In buffer area only
Seals			
Neophoca cinerea Australian Sea Lion [22]	Foraging (male)	Known to occur	In feature area
Whales			
Eubalaena australis Southern Right Whale [40]	Calving buffer	Known to occur	In buffer area only
Eubalaena australis Southern Right Whale [40]	Seasonal calving habitat	Known to occur	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

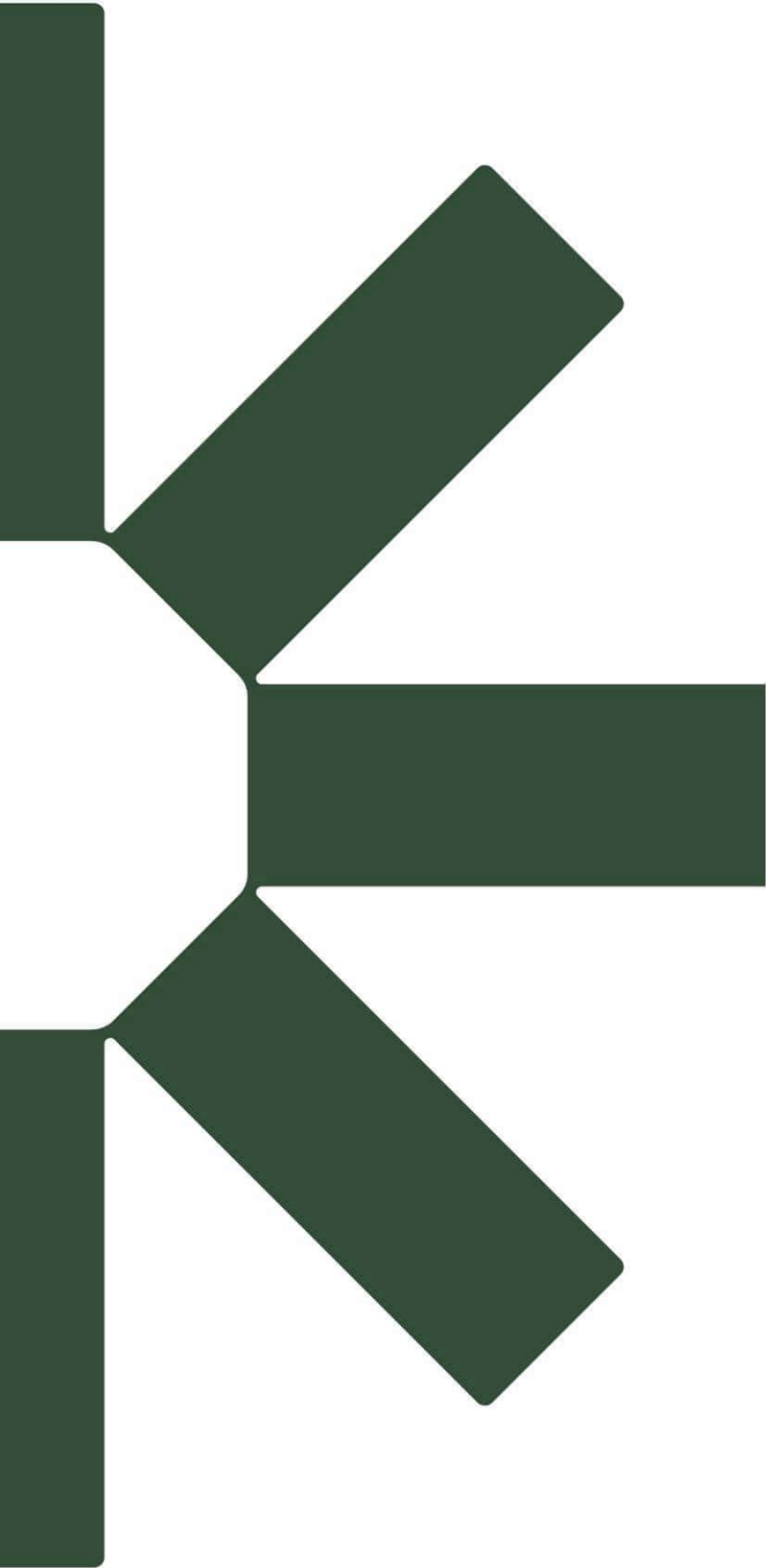
[© Commonwealth of Australia](#)

Department of Agriculture Water and the Environment

GPO Box 858

Canberra City ACT 2601 Australia

+61 2 6274 1111



Making Sustainability Happen



Appendix F EPBC Act Protected Matters Search Report

Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026



Australian Government

Department of Climate Change, Energy,
the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 28-May-2025

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	54
Listed Migratory Species:	45

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	79
Whales and Other Cetaceans:	11
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	1
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	6
Key Ecological Features (Marine):	None
Biologically Important Areas:	4
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[[Resource Information](#)]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Drooping sheoak grassy woodland on calcrete of the Eyre Yorke Block Bioregion	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species

[[Resource Information](#)]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat may occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pedionomus torquatus Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Sternula albifrons Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Thinornis cucullatus cucullatus Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
FISH			
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In feature area
MAMMAL			
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat known to occur within area	In feature area
PLANT			
Acacia enterocarpa Jumping-jack Wattle [17615]	Endangered	Species or species habitat may occur within area	In feature area
Caladenia brumalis Winter Spider-orchid [54993]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Caladenia conferta Coast Spider-orchid [55000]	Endangered	Species or species habitat may occur within area	In feature area
Caladenia intuta Ghost Spider-orchid [82821]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Caladenia macroclavia Large-club Spider-orchid [55012]	Endangered	Species or species habitat likely to occur within area	In feature area
Caladenia tensa Greencomb Spider-orchid, Rigid Spider-orchid [24390]	Endangered	Species or species habitat likely to occur within area	In feature area
Euphrasia collina subsp. osbornii Osborn's Eyebright [3684]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Olearia pannosa subsp. pannosa Silver Daisy-bush, Silver-leaved Daisy, Velvet Daisy-bush [12348]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Senecio macrocarpus Large-fruit Fireweed, Large-fruit Groundsel [16333]	Vulnerable	Species or species habitat may occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
SHARK			
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Listed Migratory Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Sternula albifrons Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In feature area
Carcharias taurus Grey Nurse Shark [64469]		Species or species habitat may occur within area	In feature area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status	
Bird				
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area	
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area	
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area	
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area	
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only	
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area	
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area	
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area	

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In buffer area only
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago megala Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In feature area
Phalacrocorax fuscescens Black-faced Cormorant [59660]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Stercorarius antarcticus as Catharacta skua Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only
Sterna striata White-fronted Tern [799]		Migration route may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Sternula albifrons as Sterna albifrons Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat likely to occur within area overfly marine area	In feature area
Thinornis cucullatus cucullatus as Thinornis rubricollis rubricollis Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area	In feature area
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In feature area
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In feature area
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In feature area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In feature area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In feature area
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area	In feature area
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area	In feature area
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area	In feature area
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In feature area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In feature area
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In feature area
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In feature area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In feature area
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In feature area
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area	In feature area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In feature area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In feature area
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area	In feature area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In feature area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In feature area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Longsnout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In feature area
Vanacampus vercoi Verco's Pipefish [66286]		Species or species habitat may occur within area	In feature area

Mammal

Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In feature area
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In feature area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat known to occur within area	In feature area

Reptile

Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area

Whales and Other Cetaceans

[[Resource Information](#)]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In feature area

Current Scientific Name	Status	Type of Presence	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In feature area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In feature area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In feature area

Extra Information

State and Territory Reserves [[Resource Information](#)]

Protected Area Name	Reserve Type	State	Buffer Status
Lower Yorke Peninsula	Marine Park	SA	In buffer area only

EPBC Act Referrals [[Resource Information](#)]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
-------------------	-----------	------------------	-------------------	---------------

Controlled action

Port Giles Development	2002/641	Controlled Action	Completed	In buffer area only
--	----------	-------------------	-----------	---------------------

Not controlled action

Construction of 29km distribution line servicing Troubridge Point wind farm	2004/1410	Not Controlled Action	Completed	In buffer area only
---	-----------	-----------------------	-----------	---------------------

Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
--	-----------	-----------------------	-----------	-----------------

INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
---	-----------	-----------------------	-----------	-----------------

Walk the Yorke Leisure Trail Project, Yorke Peninsula, SA	2013/7059	Not Controlled Action	Completed	In feature area
---	-----------	-----------------------	-----------	-----------------

Not controlled action (particular manner)

INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
---	-----------	---	---------------	-----------------

Biologically Important Areas [[Resource Information](#)]

Scientific Name	Behaviour	Presence	Buffer Status
-----------------	-----------	----------	---------------

Seabirds

[Eudyptula minor](#)

Little Penguin [1085]	Foraging (provisioning young)	Known to occur	In feature area
-----------------------	-------------------------------	----------------	-----------------

[Phalacrocorax fuscescens](#)

Black-faced Cormorant [59660]	Foraging	Known to occur	In buffer area only
-------------------------------	----------	----------------	---------------------

[Sternula nereis](#)

Fairy Tern [82949]	Foraging	Known to occur	In buffer area only
--------------------	----------	----------------	---------------------

Seals

Scientific Name	Behaviour	Presence	Buffer Status
Neophoca cinerea Australian Sea Lion [22]	Foraging (male)	Known to occur	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

[© Commonwealth of Australia](#)

Department of Climate Change, Energy, the Environment and Water

GPO Box 3090

Canberra ACT 2601 Australia

+61 2 6274 1111



Appendix G Visual Assessment

Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026

Visual Amenity Photographic Plates

Photo 1: View from Hayward Park Road/Landowner driveway facing north-east. View of working faces and minor view of operations (04/11/2024)



Photo 2: View from Hayward Park Road facing north-east. Views of stockpiling present but no views of operations (04/11/2024)



Photo 3: View looking east from Hayward Park Road. No views of Site present due to vegetation screening (04/11/2024)



Photo 4: Facing south east from Hayward Park Road. No views of operations due to established vegetation screening (04/11/2024)





Appendix H DPC Aboriginal Heritage Response (Confidential – Provided Separately)

Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026



Appendix I Community Engagement Plan

Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 February 2026



Community Engagement Plan

Klein Point Quarry MC 4581

Adelaide Brighton Cement Limited

Prepared by:

SLR Consulting Australia

SLR Project No.: 655.010515.00005

16 October 2025

Revision: 01

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
01	30 September 2025	Jessica Cooney	Carly Monaghan	James Rowe

Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Adelaide Brighton Cement Limited (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



Table of Contents

Basis of Report	i
1.0 Introduction	1
1.1 Engagement Goal / Purpose	1
1.1.1 Engagement purpose statement.....	1
1.1.2 Engagement objective(s).....	1
1.2 Engagement Undertaken to Date	2
2.0 Engagement Procedure	3
2.1 Scoping	3
2.2 Identifying Stakeholders	3
2.3 Engagement Implementation.....	3
3.0 Evaluation and Feedback	6
3.1 Evaluation and feedback	6
3.2 Ongoing engagement.....	7

Tables

Table 1 Engagement Strategies	4
-------------------------------------	---

Appendices

Appendix A Drawings

Appendix B Stakeholder Register

Drawings

*Note: All drawings are provided within **Appendix A**.*

Stakeholder Engagement Map
Site Layout Map (MC Area)

(Drawing No. 1940.DRG.048)
(Drawing No. 1940.DRG.056R1)



1.0 Introduction

Adelaide Brighton Cement Ltd (ABCL) operate the Klein Point Limestone extraction operation (the Quarry), located approximately four (4) kilometres (km) to the south west of the township of Stansbury, South Australia (SA) which has a population of 603 people (2021 Australian Bureau of Statistics Census). The Quarry has been operated by ABCL since 1913 and has been an instrumental asset for the delivery of clinker and cement production throughout South Australia. The Quarry consists of 35 Mineral Leases (MLs) and is accessed via Rocky Waterhole Road and Hayward Park Road (off the St Vincent Highway), Wool Bay, South Australia. The Quarry however only transports products via ships direct off the east coastline of the Site to their cement manufacturing plant in Birkenhead. In the event of a breakdown, which is unlikely, the use of road transport may be considered.

The immediately surrounding area is primarily used as farming land with only two (2) residential properties within one (1) – two (2) km of the Site. Refer to **Drawing No. 1940.DRG.048 – Stakeholder Engagement Map**.

Mineral Claim (MC) 4581 (the Site) is located approximately 100 km north west of Adelaide on the Yorke Peninsula and accessed via Klein Point Road, Klein Point, South Australia. MC 4581 was registered by ABCL on 13th November 2024 comprising an area size of 66.67 hectares (ha). **Drawing No. 1940.DRG.056R1 – Site Layout Map (MC Area)** is presented and provides visual representation of the Site boundary. The MC has been granted and will unlock a further eight (8) years of reserve for the Quarry, providing essential high grade limestone for blending with other grades found within the Quarry that will be critical in prolonging the limestone resource for cement production at Birkenhead.

Engagement was undertaken as part of the 2017 Program for Environment Protection and Rehabilitation (PEPR) for the Quarry, and there is already a positive relationship built with adjacent landowners over the years of the Quarry being in operation.

Formal engagement will occur prior to any new MCs, MLs or PEPR reviews, as outlined in this Community Engagement Plan (CEP). This document details the engagement undertaken (and further engagement to be undertaken) as part of the process of submitting a Mining Lease Proposal (MLP) for the MC. Following this, a combined and updated PEPR will be submitted for the whole of the Quarry (including the Site) which will allow for operations to occur on the MC. Within the updated PEPR, updated staged Quarry Development Plans (QDPs) will be developed to further refine the staging across the Site and Quarry.

1.1 Engagement Goal / Purpose

1.1.1 Engagement purpose statement

The purpose of engagement is to support ABCL in informing and consulting with stakeholders regarding the proposed works. Feedback will be sought from stakeholders to understand community values and concerns to inform the outcome and measurement criteria for environmental impacts addressed at the current project stage.

1.1.2 Engagement objective(s)

Objectives of this CEP include:

- To gain stakeholders feedback on the proposed plans of the Site to gauge their concerns on the proposed works and environmental impacts considered most relevant to them.



- To support the development of control and measurement criteria for environmental impacts in the current project stage by stakeholders concerns and technical advice received from Stakeholders.

1.2 Engagement Undertaken to Date

Significant formal engagement has not yet been completed, with engagement undertaken during the PEPR process (approved in 2017), and ad-hoc engagement being undertaken by the Quarry on an as needs basis. There is already a positive relationship built with adjacent landowners over the years of the Quarry being in operation.

The following Sections provide a summary of engagement undertaken as part of the MLP application process. This engagement will continue as part of the future combined PEPR development.



2.0 Engagement Procedure

2.1 Scoping

A community engagement scoping report has been produced for ABCL, identifying roles and responsibilities of all participants involved, limitations and potential risks of community engagement, and key messages and benefits to be delivered throughout engagement.

2.2 Identifying Stakeholders

The process and consideration for identifying stakeholders to consult included:

- Stakeholders most likely to be directly impacted.
- People or groups who make up the broader community / represents the local area.
- Who the Quarry has had prior / ongoing engagement with.
- Mandatory stakeholders who are required to be consulted with.

The following stakeholder groups with varying levels of potential interest and power have been identified to be consulted:

- Landowner
- Adjacent Landowners
- Heritage Representatives – Narungga Nation Aboriginal Corporation (NNAC)
- Flinders Port Authority
- SA Power Networks
- Government Agencies – Department for Energy and Mining (DEM), Yorke Peninsula Council

2.3 Engagement Implementation

Multiple levels of engagement will be required throughout the life of the Site, dependent on the message being delivered or feedback being sought. The stages of engagement which are likely to occur are outlined in **Table 1**.



Table 1 Engagement Strategies

Project Stage	Engagement Level	Objectives of Engagement Stage	Target Group	Methods of Engagement	Key Materials
Initial Planning of extension / change to operations	Inform	To provide stakeholders with balanced and objective information to understand the project.	<ul style="list-style-type: none"> Landowner Adjacent Landowner Local Government DEM Heritage Representatives Regional Development and Landscape Boards 	<ul style="list-style-type: none"> Initial contact via phone and /or email. 	<ul style="list-style-type: none"> Brief information on the Site, proposed activities, and timeframes of project.
New MC / ML or PEPR review (Once plans and technical assessments completed)	Consult	<p>To obtain stakeholder feedback on areas of concern or lack of.</p> <p>To obtain stakeholder feedback on control and measurement criteria.</p>	<ul style="list-style-type: none"> Adjacent Landowners. Local Government. DEM. Heritage Representatives. 	<ul style="list-style-type: none"> One (1) on one (1) meeting with nominated Local Government representatives. One (1) on one (1) meeting with adjacent landowners. Presentation at community group meeting. Written and verbal correspondence with Heritage Representatives. 	<ul style="list-style-type: none"> Quarry Development and Rehabilitation Plans. Draft control and measurement criteria (if required). Provide stakeholders with contact information to provide written feedback / comment.



Project Stage	Engagement Level	Objectives of Engagement Stage	Target Group	Methods of Engagement	Key Materials
Pre-lodgement for MLP or PEPR review	Involve	To work directly with the stakeholders to ensure that concerns are consistently understood and considered.	<ul style="list-style-type: none"> • Adjacent landowners of interest. • DEM. 	<ul style="list-style-type: none"> • One (1) on one (1) meetings with stakeholders as required. • Email communication providing updates. • Workshop / pre-lodgement meetings. 	<ul style="list-style-type: none"> • Updated QDPs and Rehabilitation Plans (if required). • Updated draft control and measurement criteria (if required). • Provide stakeholders with contact information to provide written feedback / comment. • Technical assessments (if required).



3.0 Evaluation and Feedback

This evaluation and feedback will focus on recent engagement that has occurred prior to the submission of the MLP.

3.1 Evaluation and feedback

Recent engagement took place which identified stakeholders of interest to MC 4581, to gain feedback and address any concerns prior to the submission of the MLP to DEM.

Initial emails and phone calls were made to the identified stakeholders of interest, refer to **Appendix B – Stakeholder Register**, explaining the upcoming expansion of the operations. For the interested stakeholders, an offer of a face to face meeting was proposed. Out of five (5) stakeholders, three (3) accepted the face to face meetings. **Diagram 1** below shows the breakdown of the type of consultation undertaken with all interested Stakeholders.

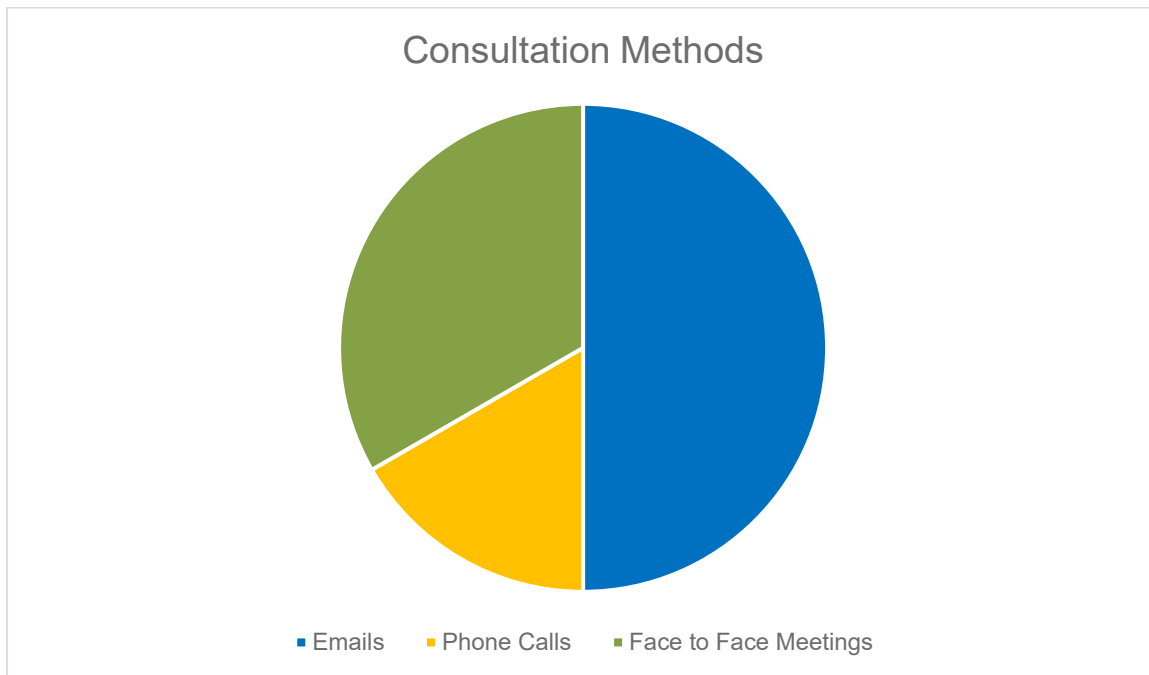


Diagram 1 – Consultation methods

Three (3) face to face meetings were all positive, with no significant concerns over MC 4581. One Stakeholder requested to be provided further modelling on the intended extraction over the life of the Site. One Stakeholder raised queries regarding groundwater. ABCL have committed to supporting their groundwater bores to be dipped during the next monitoring round that occurs at the Quarry, with the results to be provided to the Stakeholder. One Stakeholder raised concerns regarding visual amenity, and ABCL have committed to the installation of a two (2) metre (m) high visual amenity bund to be placed on the southern boundary of the MC prior to extraction occurring within the MC.

All stakeholders requested to receive continued engagement and visibility on further maps of the QDPs. ABCL have committed to all stakeholders of interest to continue on going engagement throughout the life of the Site.



The engagement overall was positive and helped further strengthen relationships with interested Stakeholders. As no formal complaints have been received for the current Quarry, it is anticipated the expansion into MC 4581 will not cause any further impacts to Stakeholders.

A meeting with a representative of NNAC raised concerns over the area being a high-risk Site, with a likelihood of an Aboriginal heritage site being discovered. ABCL are currently in the process of engaging with RAW Group (at recommendation of the NNAC Representative) around supervision during topsoil stripping, and the development of a Cultural Heritage Management Plan (CHMP) for the Site and will continue to work with NNAC to determine the most appropriate approach going forward, prior to the submission of the PEPR.

Consultation with SA Power Networks (SAPN) regarding the relocation of the powerlines to the north of MC 4581 is currently in progress. SAPN have raised no concerns and are currently in the process of raising a fee offer for the relocation.

3.2 Ongoing engagement

Ongoing engagement will occur with stakeholders of interest to keep them informed of the Site development and operations through to rehabilitation of the Site, prior to mine closure.

Adjacent landowners have been provided with contact information of a nominated representative of the Site to discuss any concerns regarding the operations. If identified within the environmental impact assessments as part of the MLP, stakeholders will receive appropriate notification regarding the particular environmental aspect for which they may potentially experience impact.

ABCL will continue to work closely with NNAC representatives around concerns of the area being a high-risk area.





Appendix A Drawings

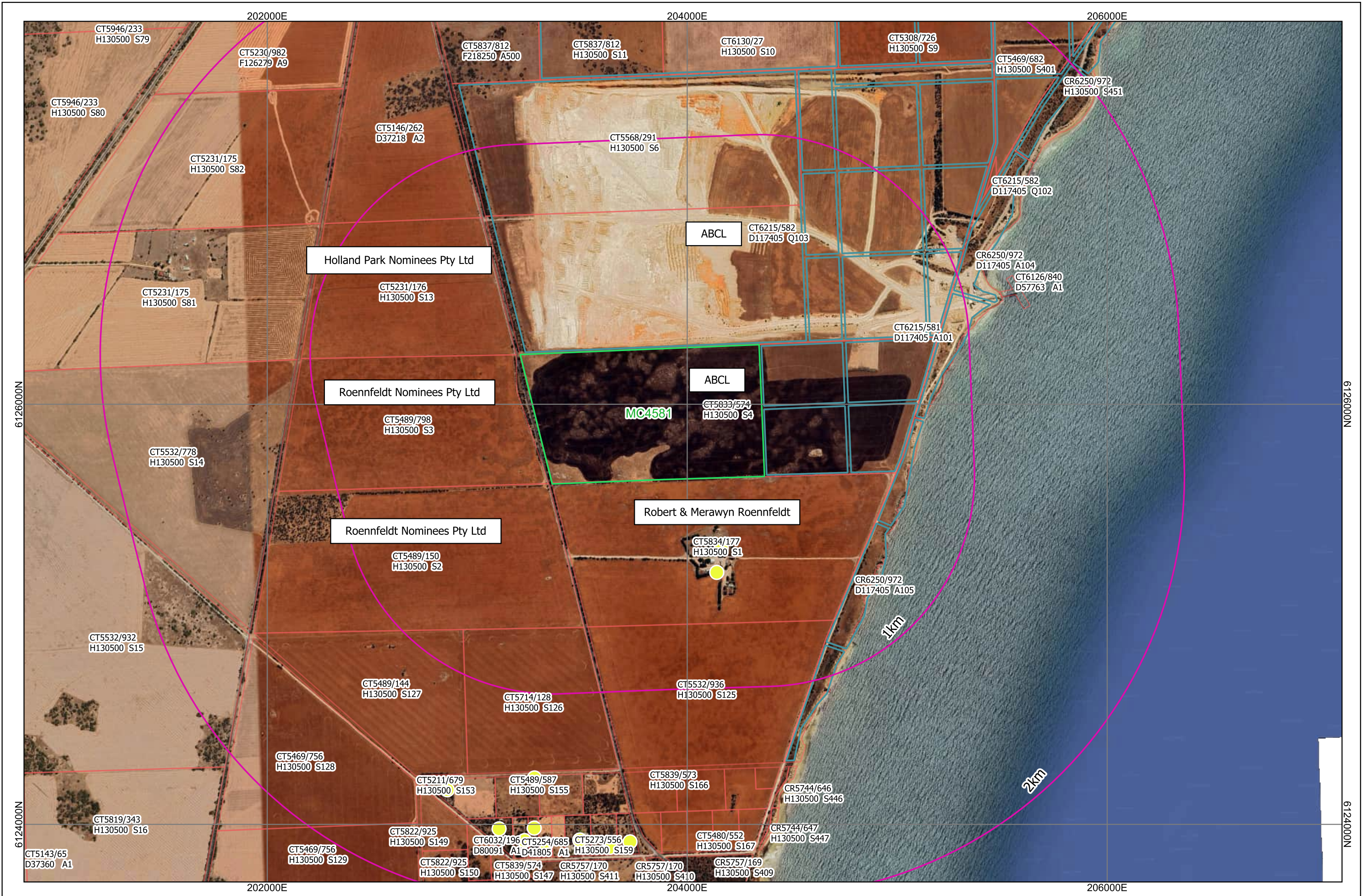
Community Engagement Plan

MC 4581

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 October 2025



REV	DESCRIPTION	DATE	BY

Legend:

- Mineral leases
- Mineral Claim 4581
- Cadastral Boundaries
- Residence
- Buffer

N

PROJECT: Klein Point
 CLIENT: Adelaide Brighton Cement Ltd

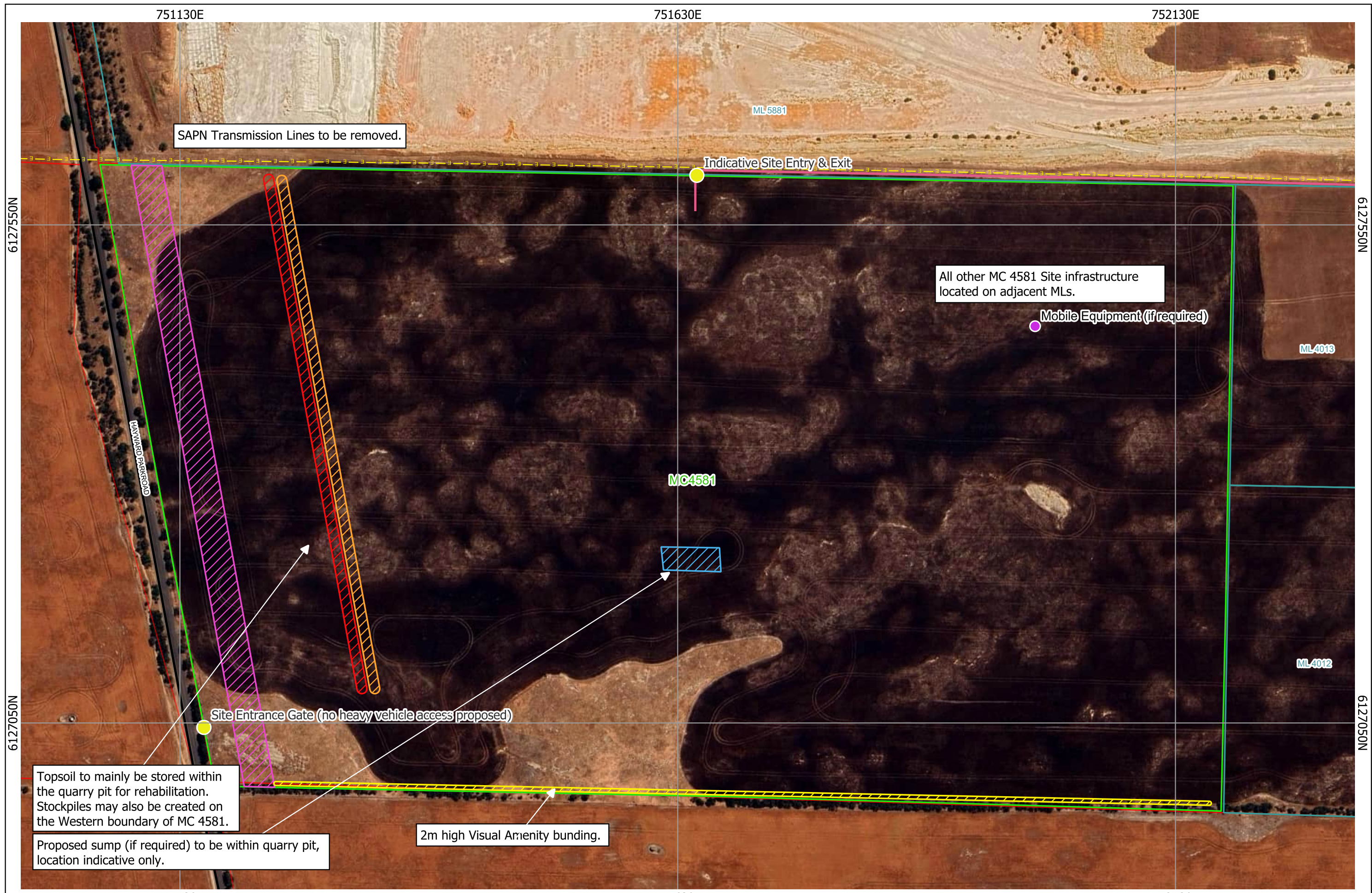
TITLE: Stakeholder Engagement Map (Landowners)

SLR

SCALE: 1:16,500
 When Printed On A3

DATE: 21-January-2025 DRAWN: JC
 PRINTED: 21-January-2025 CHECKED:

DRAWING NUMBER: 1940.DRG.048
 DATUM: HORIZONTAL / VERTICAL / EPSG:7854
 MGA / AHD / 54



REV	DESCRIPTION	DATE	BY
1	Zoomed in to MC 4581, added site features and notes	04/08/2025	CL

Legend:	Proposed Sump	Proposed Stockpile Locations
— Road Linework	□ Proposed Sump	● Proposed Stockpile Locations
— Access Road	□ 30m Offset Buffer	■ Overburden
— Power Transmission Network (SAPN)	□ Mineral Claim (MC)	■ Topsoil
□ Cadastral Boundaries	□ Mineral Leases (ML)	● Site Entry & Exit
□ Mineral Claim (MC)	□ Visual Amenity Bund	● Mobile Equipment

PROJECT: Klein Point	TITLE: Site Layout Map (MC Area)
CLIENT: Adelaide Brighton Cement Ltd	SCALE: 1:3,500 When Printed On A3
DATE: 15-October-2025	DRAWN: CL
PRINTED: 15-October-2025	CHECKED: CM
DRAWING NUMBER: 1940.DRG.056	REVISION: 1
DATUM: HORIZONTAL / VERTICAL / EPSG:7853	
MGA / AHD / 53	



Appendix B Stakeholder Register

Community Engagement Plan

Klein Point Quarry MC 4581

Adelaide Brighton Cement Limited

SLR Project No.: 655.010515.00005

16 October 2025

Stakeholder Register

The development of this stakeholder register has been guided by **MG 34 - Preparing a Community Engagement Plan** and **IAP2 Planning for Effective Public Participation Framework**.

The key elements include:

- The Stakeholder Register
- The Power-interest Grid
- Stakeholder Consultation Map References.

The Stakeholder Register is designed to be used as an internal tool, and forms part of an overarching "Community Engagement Framework" used by GW+. The framework is applied when consultation is a required for a project.

NOTE

Extracts from the relevant guidelines are included throughout this document to help guide the development of the Stakeholder Register.

When using this Stakeholder Register, note that all items highlighted in YELLOW are for the purposes of the template only and can be deleted if required.

Guiding questions when identifying community stakeholders (source: MG 34).

Task/element

Which landowners are directly and indirectly impacted by the mining operation, including landowners, adjoining landowners and native title holders?

Which landowners and adjoining landowners have legal rights under the Mining Act -eg native title, exempt land, crown land?

What other individuals or organisations are potentially impacted by the project?

Who makes up the broader community surrounding the physical location of the mining operation?

Which communities may be impacted by other related activities such as transport or Infrastructure?

Which groups or individuals represent the community or the public interest in the environment or other relevant fields?

Which community members have concerns about mining operations?

Who has an interest locally?

Who are the project partners?

What is the project's authorising environment?

What is the prior history of engagement with local stakeholders in the community?

Who are the stakeholders who have generally not been involved in decision-making?

How can the project ensure a diverse group of stakeholders?

Who are the stakeholders critical to project delivery?

Some potential stakeholders could be:

- Landowners
- Adjoining landowners
- Pastoralists
- Traditional owners or native title holders
- Mineral and petroleum tenement or lease holders
- Primary Producers of South Australia / Grain Producers SA / Livestock SA
- Local, state and national environmental groups
- Tourist organisations
- Utility providers
- Transport groups - eg South Australian Freight Council
- Local government
- Ratepayers associations
- Local companies
- Elected representatives
- Local businesses and progress associations
- Local schools
- Relevant media
- Clubs – sporting, service, ethnic, historical etc.
- Community associations

Table A.1 - External Stakeholder Register

Stakeholder Name	Identifier	Role	Role in Project	Project Phase	Contact Information	Power (1 to 10)	Interest (1 to 10)	Engagement Classification	Main Expectations / Issues	Management Strategy / Priority	Key Message	Column1	Column2	Column3	Column4	Column5	Column6	Column7
Adelaide Brighton Cement Ltd	LO1	Landowner	Landowner	Initial consultation, MLP review, feedback on Pit design and final rehab, control and management strategy review	Refer Consultation Map references sheet	10	10	Neutral	Inform QDP and rehabilitation plans / final land use	Manage closely (priority 1)	Maintain existing good relations, maintain transparent information, consideration of concerns in development of QDPs, MLP							
Robert and Merawyn Roennfeldt	LS1	Lessee	Lessee	Initial project consultation, review of control and management strategies, Statutory MLP review opportunity, ongoing operational notification	Refer Consultation Map references sheet	9	9	Neutral	No environmental nuisance impacts (noise, air quality, run-off). Inform QDP and rehabilitation plans / final land use	Manage closely (priority 1)	Maintain transparent communication, consideration of concerns in MLP.							
Robert and Merawyn Roennfeldt	AL1	Adjacent Landowner	Adjacent Landowner	Initial project consultation, review of control and management strategies, Statutory MLP review opportunity, ongoing operational notification	Refer Consultation Map references sheet	3	8	Unaware	No environmental nuisance impacts (noise, air quality, run-off).	Keep informed (Priority 3)	Maintain transparent communication, consideration of concerns in MLP.							
Roennfeldt Nominees Pty Ltd	AL2	Adjacent Landowner	Adjacent Landowner	Initial project consultation, review of control and management strategies, Statutory MLP review opportunity, ongoing operational notification	Refer Consultation Map references sheet	3	8	Unaware	No environmental nuisance impacts (noise, air quality, run-off).	Keep informed (Priority 3)	Maintain transparent communication, consideration of concerns in MLP.							
Ian David Holie and Vernioica Jane Holie	AL3	Adjacent Landowner	Adjacent Landowner	Initial project consultation, review of control and management strategies, Statutory MLP review opportunity, ongoing operational notification	Refer Consultation Map references sheet	3	7	Unaware	No environmental nuisance impacts (noise, air quality, run-off).	Keep informed (Priority 3)	Maintain transparent communication, consideration of concerns in MLP.							
Narungga Nation Aboriginal Corporation (NNAC)	TO1	Traditional Owners	Native Title Body / ILUA, notification of future act	Initial Consultation, Statutory MLP Review,	Refer Consultation Map references sheet	9	9	Unaware	Protect environment by preventing / minimising environmental harm	Manage closely (priority 1)	Maintain good relationship and transparent communication, consideration of concerns in MLP.							
Yorke Peninsula Council	GA1	Local Council	Local Government, road owner of transport route	Initial Consultation, Statutory MLP Review	Refer Consultation Map references sheet	2	4	Neutral	Traffic movements, awareness of projects in local area	Monitor (Priority 4)	Maintain good relationship and transparent communication, consideration of concerns in MLP.							
DEM	GA2	Principal Regulator	MLP approval and compliance enforcement	All stages	DEM Assessment Officer	10	10	Neutral	Protect environment by preventing / minimising environmental harm	Manage closely (priority 1)	Regulatory requirements met and environmental aspects considered in development, operation and site closure.							
Regional Development Australia - Yorke and Mid North	GA3	Regional Development	Regional development board	Initial Consultation	Refer Consultation Map references sheet	3	3	Unaware	Awareness of projects in local area	Monitor (Priority 4)	Maintain good relationship and transparent communication, consideration of concerns in MLP.							
Northern and Yorke Landscape Management Region	GA4	Regional Landscape Management	Regional landscape management board	Initial Consultation, MLP Review	Refer Consultation Map references sheet	3	3	Unaware	Awareness of projects in local area	Monitor (Priority 4)	Maintain good relationship and transparent communication, consideration of concerns in MLP.							
Flinders Port Authority (Klein Point)	PV1	Transport	Transport of product	Initial Consultation	Refer Consultation Map references sheet	3	9	Neutral	Awareness of project increase	Keep informed (Priority 3)	Maintain good relationship and transparent communication, consideration of concerns in MLP.							
SA Power Networks (SAPN)	PV2	Electricity Supply	Substation and transmission line through MLs	Initial Consultation, ongoing operational notification	Refer Consultation Map references sheet	3	8	Neutral	Awareness of project increase	Keep informed (Priority 3)	Maintain good relationship and transparent communication, consideration of concerns in MLP.							

To engage successfully, it is important to develop an understanding of stakeholder's key issues and concerns about the mining operation. Do this by meeting regularly with them to better understand their views and positions and work to gain an understanding of the region, its history, local issues, challenges and strengths. Understanding these issues from a local perspective shows respect for local values, history and opinions that may not necessarily align with your own.

Common community concerns:

- **Assessment process:** concerns about the assessment process itself and the perception that some issues are not been adequately addressed.
- **Environmental impacts:** concerns about the impact of mining-related activities such as vibrations, noise, blasting, dust, clearing vegetation, pollution and so on, and the effect on animals and the local environment.
- **Rehabilitation and closure:** concerns pressure it will put on local services, who and how many people it will provide employment opportunities for, whether it will encourage business growth and whether there will be support for small businesses in the area.
- **Infrastructure impacts:** includes concerns about the impacts of mining operations on adjoining roads, and the development of infrastructure such as pipelines, power lines and transport corridors.

Notes:
 Power (1 low to 10 high) = Level of authority in guiding project Interest
 Interest (1 low to 10 high) = Level of concern regarding project outcomes

Management Strategy / Priority:
 Manage Closely (Priority 1)
 Keep Satisfied (Priority 2)
 Keep Informed (Priority 3)

Engagement Classification:
 Unaware = Unaware of project and potential impacts
 Resistant = Aware of project and potential Impacts and resistant to change
 Neutral = Aware of project yet neither supportive nor resistant
 Supportive = Aware of project and potential Impacts and supportive of change
 Leading = Aware of project and potential Impacts and actively engaged in ensuring the project success

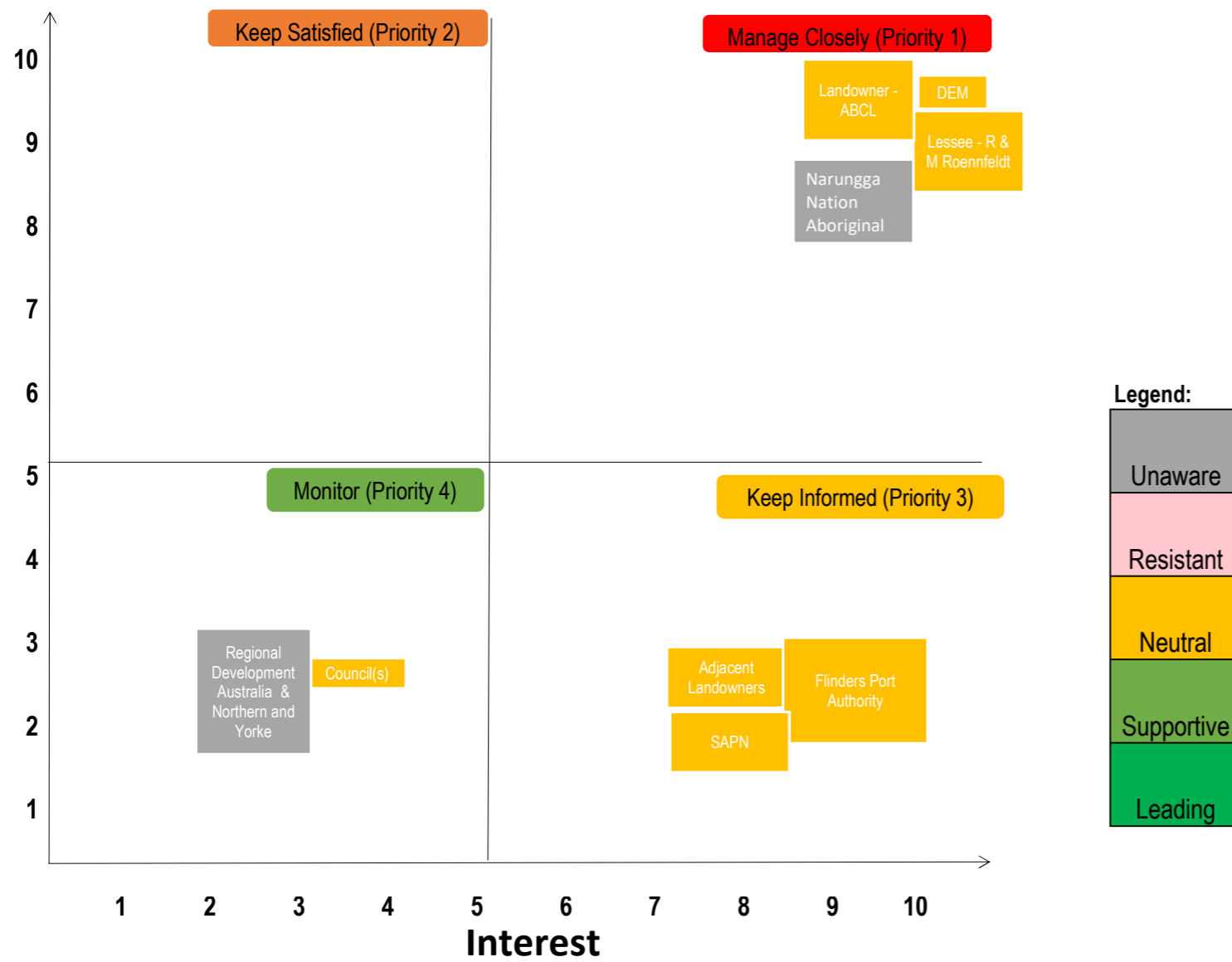
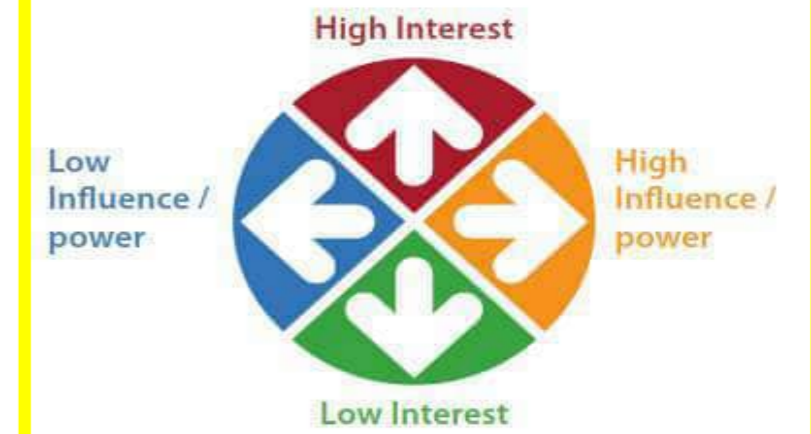


Figure 1 Power / Interest Grid

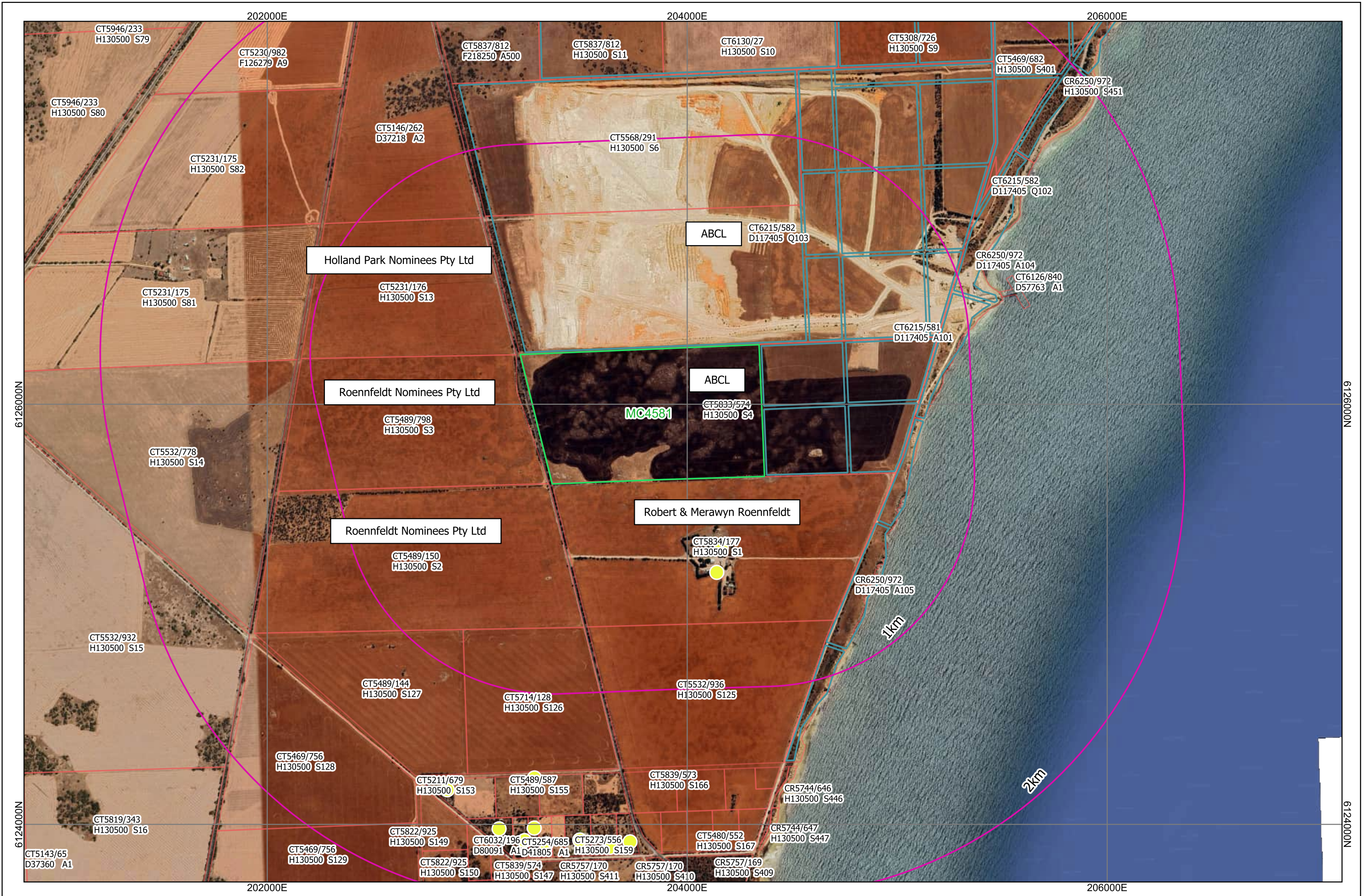
Within each community, there are different groups and individuals with varying levels of interest in, and influence on, the mining project. When developing your community engagement plan, it's important to carefully consider the mix of stakeholders. Use the Power and Interest Mapping quadrant below to determine the appropriate level of stakeholder engagement for different groups and individuals. This mapping is an ongoing activity and levels of engagement may change as the mining operation progresses, particularly if stakeholders identified as being low interest/high influence develop greater interest in the project.



Tier	Strategy	Description
Top right hand corner: High interest/high influence	Proactively and consistently engage	Stakeholders important to the mining project and need to be informed of project status, schedules - eg blasting, and issues.
Top left hand corner: High interest/low influence	Engage regularly	Stakeholders involved in the decision-making process for the mining project or have the ability to influence the decision-making process.
Bottom right hand corner: Low interest/high influence	Keep Informed	Stakeholders important to the mining project.
Bottom left hand corner: Low interest/low influence	Monitor and inform	Stakeholders who have low influence and low interest in the mining project but may like to be kept informed of the mining operation's progress.

(source: DEM, MG 34)

PARCEL IDENTIFIER	TITLE	PROPERTY ST NAME	PROPERTY SUBURB	Notes	Landowner Name 1	Landowner Name 2	Contact Address Line 1	Suburb	State	Postcode	Results from White Pages search	Email	Meeting Date and time	Items discussed
Section 4 Hundred of Dalrymple	CT 5833/574	Hayward Park Road	Wool Bay	*Land is leased back to Roennfeldt's for cropping	Adelaide Brighton Cement Ltd (ABCL)				SA		Robert Roennfeldt: 08 8852 4280	ABCL Contact: Dainel Baillie, Daniel.Baillie@adbri.com.au		
Section 1 Hundred of Dalrymple	CT 5834/177	Hayward Park Road	Wool Bay		Robert Roennfeldt	Merawyn Roennfeldt	PO Box 15	Wool Bay	SA	5575	Robert: 08 8852 4280			
Section 3 Hundred of Dalrymple	CT5489/798	Hayward Park Road	Wool Bay		Roennfeldt Nominees Pty Ltd		185 Fullarton Road	Dulwich	SA	5065				
Section 2 Hundred of Dalrymple	CT 5489/150	Hayward Park Road	Wool Bay		Roennfeldt Nominees Pty Ltd		185 Fullarton Road	Dulwich	SA	5065				
Allotment 102 & 103 of DP 117405 Hundred of Dalrymple	CT 6215/582	Hayward Park Road	Wool Bay	*Land is leased back to Roennfeldt's for cropping	ABCL Pty Ltd		L1, 157 Grenfell Street	Adelaide	SA	5000	Mark: 0439 871 225	ABCL Contact: Dainel Baillie, Daniel.Baillie@adbri.com.au		
Section 12 of Dalrymple	CT 5231/176		Wool Bay		Ian David Holie	Veronica Jane Holie	36 Esplanade	Point Turton	SA	5575				
Yorke Peninsula				Native Title Group: Narungga Local Government Contact: South Australian Native Title Services Jacob Habner - representative			Level 4, 345 King William Street	Adelaide	SA	5000	SA Native Title Services: 08 8110 2800			
Yorke Peninsula				Yorke Peninsula Council	Andre Kompler - Director Assets and infrastructure services		PO Box 57	Maitland	SA	5573	Office: 08 8832 0000	admin@yorke.sa.gov.au info@yorkeandmidnorth.com.au		
Yorke Peninsula				Regional Development Australia - Yorke and Mid North			85 Ellen Street	Port Pirie	SA	5540	Office: 1300 742 414			
Yorke Peninsula				Landscape SA Northern and Yorke			155 Main North Road	Clare	SA	5453	Office: 08 8841 3444			
Yorke Peninsula				Flinders Port Holdings			296 St Vincent Street	Port Adelaide	SA	5015	Office: 08 8447 0611			
Yorke Peninsula				SA Power Networks Contact is Jordan Summers (Graduate looking after project) E: jordan.summers@sapowernetworks.com.au							Ph: Subra Kuppa (Network Manager) 04 jordan.summers@sapowernetworks.com.au subrahmanyam.kuppa@sapowernetworks.com.au			



REV	DESCRIPTION	DATE	BY

Legend:

- Mineral leases
- Mineral Claim 4581
- Cadastral Boundaries
- Residence
- Buffer

N

PROJECT: Klein Point

CLIENT: Adelaide Brighton Cement Ltd

TITLE: Stakeholder Engagement Map (Landowners)

SLR

SCALE: 1:16,500
When Printed On A3

DATE: 21-January-2025
DRAWN: JC
PRINTED: 21-January-2025
CHECKED:

DRAWING NUMBER: 1940.DRG.048

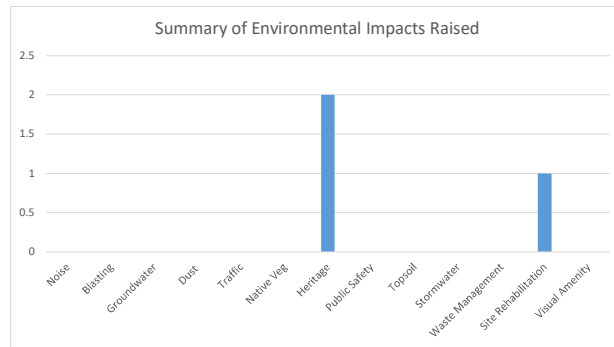
DATUM: HORIZONTAL / VERTICAL / EPSG:7854
MGA / AHD / 54

Event	Date	Attendee	Issue Raised - General	Noise	Blasting	Groundwater	Dust	Traffic	Native Veg	Heritage	Public Safety	Topsoil	Stormwater	Waste Management	Visual Amenity	Site Rehabilitation
YP Council Meeting	27/06/2025	Michael McCauley	Nil													
Roennfeldts Stakeholder Meeting	27/06/2025	Nigel (Roennfeldts attendee)	Visual Amenity Buffer, rehabilitation rate.													1
Andersons Stakeholder Meeting	27/06/2025	Shanina (Andersons attendee)	Groundwater - request for bores to be dipped													
NNAC Representative Meeting	19/06/2025	Jacob Habner	Heritage risk							1						
SAPN ongoing emails	Ongoing	Jordan Summers	Nil - raising a quote for powerline removal													
RAW Impact Representative Meeting	15/08/2025	Allan Jones (RAW Impact)	Heritage risk							1						
Total phone calls		1														
Total In person meetings		3														
Total Email		4														

Nuber of queries raised per element

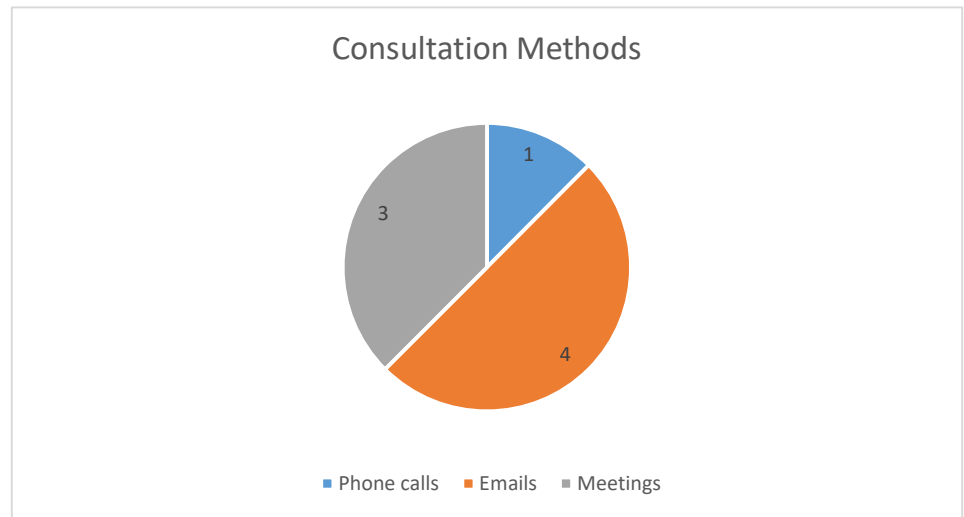
0 0 0 0 0 0 2 0 0 0 0 1 0

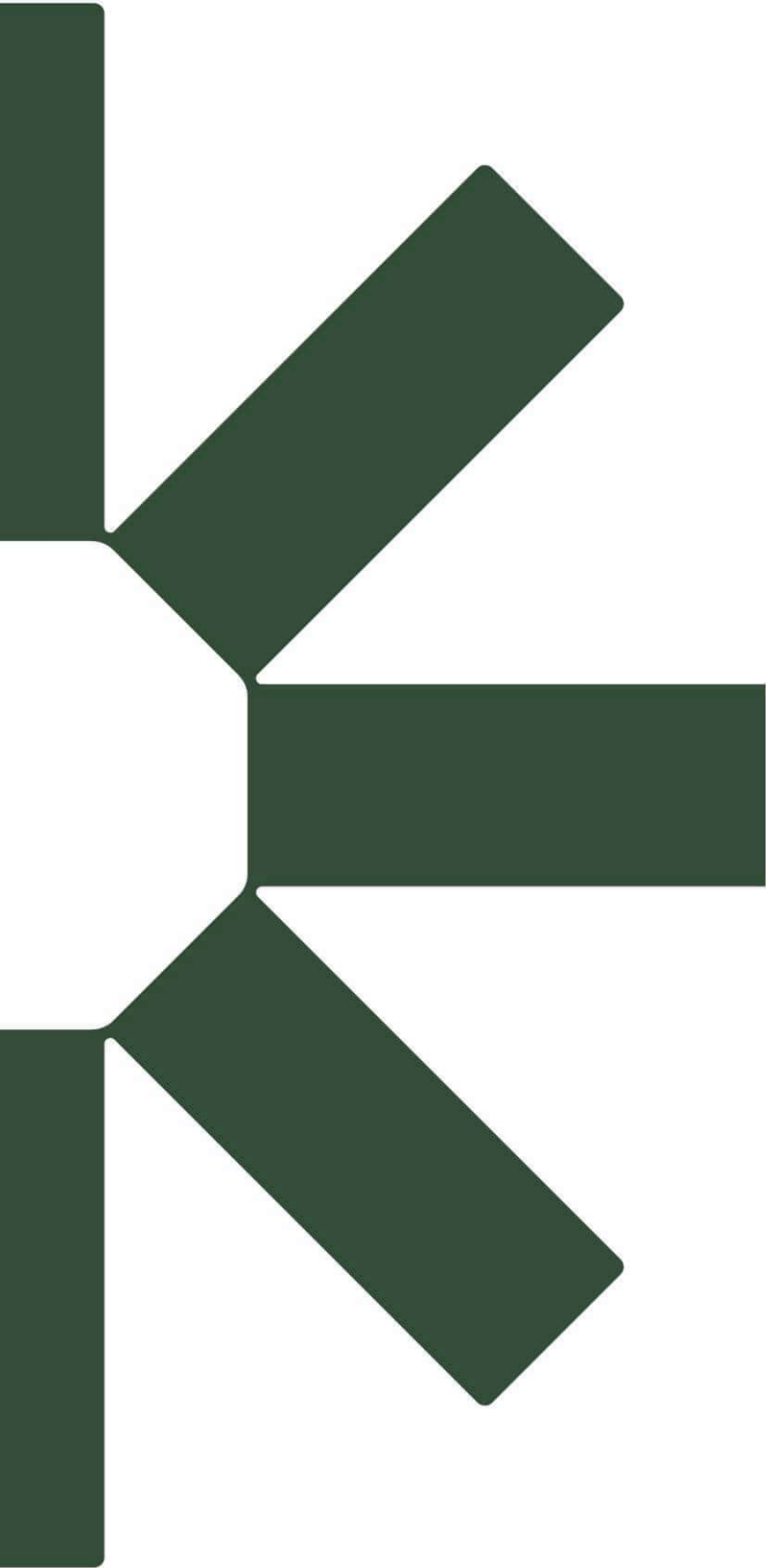
Noise	0
Blasting	0
Groundwater	0
Dust	0
Traffic	0
Native Veg	0
Heritage	2
Public Safety	0
Topsoil	0
Stormwater	0
Waste Management	0
Site Rehabilitation	1
Visual Amenity	0



Phone calls
Emails
Meetings

1
4
3





Making Sustainability Happen



Appendix J Applicable Legislation and Standards

Mining Lease Proposal (MLP)

ABCL Klein Point (MC 4581)

Adelaide Brighton Cement Limited

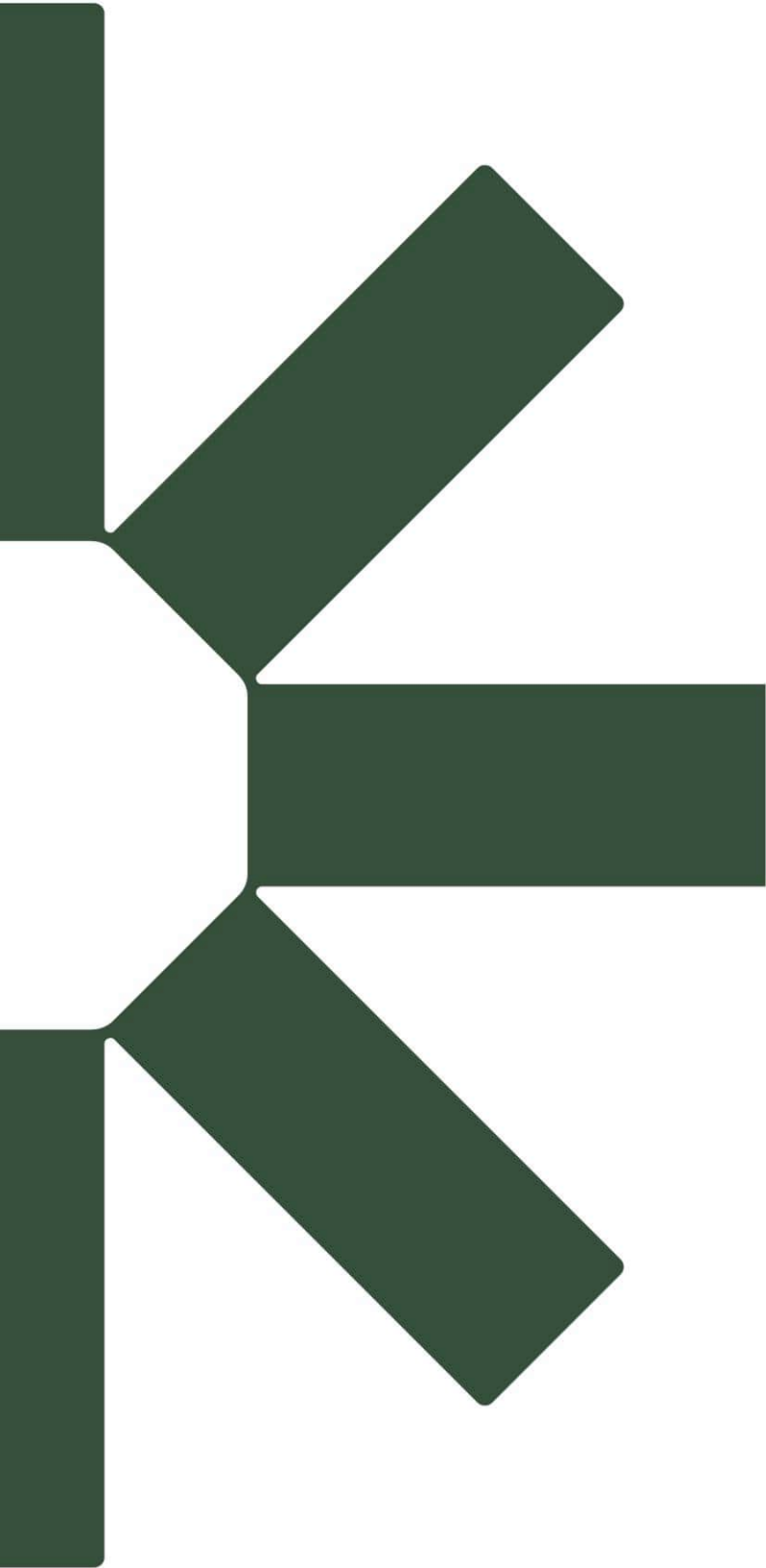
SLR Project No.: 655.010515.00005

16 February 2026

Environmental Aspect	Applicable Legislation	Applicable Non-Legislated Standard/s
Public Safety	<p><i>Work Health and Safety Act 2012 (SA) and Regulations</i></p> <p><i>Mining Act 1971 (SA)</i></p> <p><i>Local Government Act 1999 (SA)</i></p>	Mine Closure and Completion: Leading Practice Sustainable Development Program for the Mining Industry (Department of Industry, Tourism and Resources, 2016).
Traffic	<p><i>Work Health and Safety Act 2012 (SA) and Regulations</i></p> <p><i>Road Traffic Act 1961 (SA)</i></p> <p><i>Local Government Act 1999 (SA)</i></p>	N/A
Protection of Third Party Property	<p><i>Work Health and Safety Act 2012 (SA) and Regulations</i></p> <p><i>Mining Act 1971 (SA)</i></p> <p><i>Local Government Act 1999</i></p> <p><i>Electricity Act 1996</i></p> <p><i>Electricity (General) Regulations 2012</i></p>	Network Information for Customers and Contractors (NICC) 404 – Working in the Vicinity of SA Power Networks Infrastructure – Network Access Permit Process (January, 2015)
Heritage	<p><i>Aboriginal Heritage Act 1988 (SA)</i></p> <p><i>Heritage Places Act 1993 (SA)</i></p> <p><i>Mining Act 1971 (SA) and Regulations</i></p> <p><i>Planning, Development and Infrastructure Act 2016 (SA)</i></p> <p><i>Aboriginal and Torres Strait Island Heritage Protection Act 1987 (Cth)</i></p>	<p>Cultural Heritage Guidelines, A handbook for Staff and Contractors, (Transport SA 1999)</p> <p>Section 20 of the <i>Aboriginal Heritage Act 1988</i>: Discovery of sites, objects or remains</p>
Weeds, Pests and Plant pathogens	<p><i>Landscape South Australia Act 2019</i></p> <p><i>Controlled Substances Act 1984 (SA) and Regulations (SA) 2017</i></p> <p><i>Agricultural and Veterinary Products Act (Control of Use) Act 2002 (SA) and Regulations 2017</i></p>	Weed control handbook for declared plants in South Australia (Government of South Australia, 2017)
Topsoil management	<i>Landscape South Australia Act 2019</i>	Mine Closure and Completion: Leading Practice Sustainable Development Program for the Mining Industry (Department of Industry, Tourism and Resources, 2006).

Environmental Aspect	Applicable Legislation	Applicable Non-Legislated Standard/s
Waste management	<p><i>Zero Waste SA Act 2004 (SA)</i></p> <p><i>Environmental Protection Act 1993 (SA)</i></p> <p><i>Environment Protection (Waste to Resources) Policy 2010 (SA)</i></p> <p><i>Environment Protection (National Pollutant Inventory) Policy 2008 (Cth)</i></p>	<p>EPA Guideline: Site contamination – what is site contamination? (EPA, 2009)</p> <p>EPA Guideline: EPA080/16 Bunding and spill management (EPA, 2016)</p>
Visual amenity	<p><i>Mining Act 1971 (SA) and Regulations</i></p>	<p>Corporation of the Planning and Design Code (Barunga West Council) (30 July 2020)</p>
Noise	<p><i>Environment Protection Act 1993 (SA)</i></p> <p><i>Environment Protection (Commercial and Industrial Noise) Policy 2023</i></p>	<p>Corporation of the Planning and Design Code (Barunga West Council) (30 July 2020)</p>
Dust	<p><i>Environment Protection Act 1993 (SA)</i></p> <p><i>Environment Protection (Air Quality) Policy 2016 (SA)</i></p> <p><i>The South Australian Public Health Act 2011 (SA)</i></p> <p><i>Local Government Act 1999 (SA)</i></p>	<p>World Health Organisation (WHO) Air Quality Guidelines, 2005</p> <p>National Environment Protection (Ambient Air Quality) Measure</p> <p>Australian Standard AS 3580.10.1 Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter – Gravimetric method</p> <p>Australian Standard AS 3580.9.6 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM10 high volume sampler with size-selective inlet – Gravimetric method</p>
Blast vibration and overpressure	<p><i>Mining Act 1971 (SA) and Regulations</i></p> <p><i>Explosives Act 1936 (SA) and Regulations</i></p> <p><i>Dangerous Substances Act 1979 (SA)</i></p> <p><i>Environment Protection (Commercial and Industrial Noise) Policy 2023</i></p>	<p>Australian Standard AS 2187 Explosives—Storage, transport and use</p> <p>Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC, 1990)</p>
Groundwater	<p><i>Environment Protection Act 1993 (SA)</i></p> <p><i>Environment Protection (Water Quality) Policy 2015 (SA)</i></p> <p><i>Landscape South Australia Act 2019</i></p>	<p>Australian and New Zealand Guidelines for Fresh and Marine Waters (ANZECC and ARMCANZ, 2000)</p>

Environmental Aspect	Applicable Legislation	Applicable Non-Legislated Standard/s
Native vegetation	<i>Landscape South Australia Act 2019</i> <i>Native Vegetation Act 1991 (SA)</i> <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>	Guide to the <i>Native Vegetation Regulations 2017</i> , Native Vegetation Council (July, 2019)
Surface water (Erosion, Sediment and Stormwater Management)	<i>Environment Protection Act 1993 (SA)</i> <i>Environment Protection (Water Quality) Policy 2015 (SA)</i>	Australian and New Zealand Guidelines for Fresh and Marine Waters (ANZECC and ARMCANZ, 2000) Code of practice for wastewater overflow management (EPA, 2017) Stormwater pollution prevention: Code of practice for the building and construction industry (EPA, 1999)
SA Coastal Reserve	<i>South Australia Coast Protection Act 1972</i>	<i>SA Coastal Reserve Proclamation of 1973</i>



Making Sustainability Happen