Program for Environment Protection and Rehabilitation

Date:	2nd April 2025
Version Number:	02
Name of Tenement Holder(s):	M A Skinner Contracting Pty
Name of Operation:	Ninnes Sandpit
Tenement No:	EML 6559
Size (Ha):	87.9
Contact Details for Tenement Holder	Name: Mark Skinner Phone: 0408 810 454 Email: mas@skinners.net.au

Section 1: Mining Operations

This section specifies proposed mining operations as per Section 70B(2)(a) of the *Mining Act 1971*.

1. Mining Operations	
1.1 Resource description, production and mine life.	Following is a geological description of the resource: Siliceous sand (H2a) The resource/commodity being extracted and sold is: Sand. Statement of the estimated resource or reserve and details of the basis of this estimate: The volumetric estimate of the sand is approximately 30,000m^3. At a SG of ~2.65 for siliceous sand this equates to approximately 79,500 tonnes. The volumetric estimate was derived by eye, based on operator experience (MA Skinner). The mined resource will be used for the following products, end use: The material to be extracted will be used for house foundations, bulk fill, garden soil, and as trench bedding sand (TS4) for electricity cables and water and stormwater pipes (i.e. low conductivity for high voltage power trenches). The estimated annual production is up to 40,000 tonnes per annum. The estimated mine life is 2 – 5 years, depending upon demand for product.
1.2 Processing	The following is a description of processing: Processing of the sand is not proposed and there will be no fixed plant located at the site. The sand will be screened on site before loading onto trucks for transport to end use or to existing MA Skinner operations at Kadina or Wallaroo.
1.3 Product Transport	The estimated size of haulage trucks are: 0-12 tonne Heavy Rigid and 28-32 tonne Heavy Combination The estimated truck movements per operational day is 2-4 loads per operational day. As per the Location Plan, Mine trucks will access the site via the following route: Access to and from the site will be via an existing gate on Old Well Road approximately 900m east of Upper Yorke Highway. No new access roads are required. Trucks entering or leaving the site will travel on the existing road

	networks to Old Well Road. All trucks will exit right towards Upper Yorke Highway for loads to be delivered in all directions.
1.4 Water Use	The amount of water required for mining operations is estimated at: 0 litres per day, unless dust suppression is required on windy days (estimated usage rate of 40L/min). Water will be sourced from: If dust suppression is required during windy days, water will be trucked to the site via water tanker.

1.6 Mining and Rehabilitation Description

The height of the sand dune or surface outcrop above surrounding land not greater than 10 metres.

The maximum are of un-rehabilitated land will be less than 3 hectares at any one time.

Following is a description of how mining will occur over the life of the mine using a staged approach:

Mining will occur on a campaign basis, depending on demand. Extraction will commence from the north-western end of the sand dune and proceed in sections in a south-easterly direction. Extraction will occur across the shorter face of the sand dune. Depth of extraction of the sand dune will be down to the surrounding ground level. The maximum height of the sand dune is estimated at 2.5 metres.

Topsoil will be removed and stockpiled for use in rehabilitation (refer Figure 2 of Section 7 for location). Stockpiles will be no more than 2 m in height. Vegetative cover will be maintained to protect stockpiles from wind and water erosion. Product stockpile will be located in the northern part of the main area of operations (refer Figure 2 of Section 7 for location) and will be no more than 5 metres in height.

The sand will be screened on site before loading onto trucks for transport to end use or to existing MA Skinner operations at Kadina or Wallaroo.

Following is a description of the proposed post mining land use and landform:

At completion of quarrying, the site will be returned to agricultural (cropping) use. After the sand dune has been removed and topsoil replaced the underlying area will generally match the surrounding natural ground level.

Staged progressive rehabilitation is planned in the following sequence to achieve the post mining landform design and allow for the proposed land use:

Each mining stage will produce approximately 7,500m3. Each stage will occur in an approximately 100m length x 37.5m width (average) x 2m depth block and there will be approximately 4 stages over the life of the mine. Rehabilitation will occur immediately following each stage of mining. As each 7,500m3 area of sand dune is removed and stockpiled, the topsoil will be replaced and vegetative cover encouraged to reduce erosion from wind and rain. This will continue in 7,500m3 stages until the sand dune has been completely removed and all underlying area has been rehabilitated. Upon completion, the site will be returned to agricultural use (refer Figure 5 for mining direction and stages).

1.7 Hours of operation	
☐ Regular/continuous/ongoing Mining will occur on a regular/ continuous/ ongoing basis with the following operating hours: Monday – Friday: …….. Saturday:…… Sunday:…… Public Holidays:……..	☒ Campaign Mining will occur on a campaign basis within the following operating hours during campaigns: Monday – Friday: 7am – 6pm Saturday: 7am – 6pm Sunday: N/A Public Holidays: N/A

Section 2: Consultation

The following additional consultation occurred post lease grant:

Adjacent Landowner: Adam Cock

Date of consultation: 3rd March 2025

Issue(s) raised:

The condition of Old Well Road – concerned the road will become seriously degraded by the increased number of trucks delivering loads from the quarry.

Resolution(s) proposed:

The gate entrance will be reinforced with rubble hard stand extending into the paddock to allow trucks to enter and exit safely.

To prevent degradation of Old Well Road, all trucks will exit right towards Upper Yorke Road for loads to be delivered in all directions.

A dilapidation program will be conducted before trucks commence carting. MASC will maintain the approximately 900 metres of Old Well Road on an as-needed basis for the duration of the mine's operation. Upon closure of the mine, MASC will reshape Old Well Road to its original condition for local use.

Trucks will be restricted to a speed limit of 60km/h on Old Well Road to ensure safety and minimise wear and tear on the road.

Section 3: Management of Environmental Impacts

This section sets out the environmental outcomes, measurement criteria and strategies as per Regulation 63(1) of the Mining Regulations 2020.

3.1 Heritage

Outcome	**Measurement Criteria**
No damage, disturbance or interference to Aboriginal or Non-Aboriginal heritage sites, objects or remains as a result of mining operations unless it is authorised under the relevant legislation.	Production records and Mine Logbook will demonstrate that upon discovery within the tenement of any possible Aboriginal or Non-Aboriginal: - sites of significance; - objects; - remains; that work ceased until the relevant authorities were notified and work recommenced only once authorisation was received.

Control and Management Strategies

All contractors and employees operating within the tenement will understand their obligations in regard to the *Aboriginal Heritage Act 1988* with regards to the discovery of Aboriginal sites, objects or remains and the *Heritage Places Act 1993* with regards to the discovery of places or objects of significance.

Mandatory strategies:
All contractors and employees operating with the tenement will understand their obligations in regards to the *Aboriginal Heritage Act 1988* with regards to the discovery of Aboriginal sites, objects or remains and the *Heritage Places Act 1993* with regards to the discovery of places or objects of significance.

Provide any additional strategies:
N/A

3.2 Traffic

Outcome	Measurement Criteria
No traffic accidents involving members of the public and mine related traffic that could have been reasonably prevented by the Tenement Holder.	All traffic accidents involving the public at mine access points are recorded in Mine Logbook. All accidents will be investigated by a suitably qualified independent third party within one calendar month (or other time as agreed with Mining Regulator) and the results of the investigation show that the accident could not have been reasonably prevented by the Tenement Holder.

Control and Management Strategies

Mandatory strategies:

All operators will be made aware of the dangers of mine machinery and mine vehicles entering public roads during the site induction.

Optional strategies:

Road signs will be displayed at mine entry and exit points, warning the public of the dangers of large trucks entering and exiting the tenement.
Vehicles and machinery will be parked inside the tenement, not along road verges.

Provide any additional strategies:

Vehicles and machinery will be required to adhere to a site speed limit of 10km/hour within the tenement. 10km/hour speed limit will be signposted on entry to site.
The gate entrance will be reinforced with rubble hard stand extending into the paddock to allow trucks to enter and exit safely.
To prevent degradation of Old Well Road, all trucks will exit right towards Upper Yorke Road for loads to be delivered in all directions.
A dilapidation program will be conducted before trucks commence carting. MASC will maintain the approximately 900 metres of Old Well Road on an as-needed basis for the duration of the mine's operation. Upon closure of the mine, MASC will reshape Old Well Road to its original condition for local use.
Trucks will be restricted to a speed limit of 60km/h on Old Well Road to ensure safety and minimise wear and tear on the road.

3.3 Public Safety (Construction and Operation of the Mine)

Outcome	**Measurement Criteria**
No public injuries and/or deaths resulting from unauthorised entry to the Land that could have been reasonably prevented.	All public injuries and/or deaths resulting from unauthorised access to the mine site are recorded in Mine Logbook and investigated by a suitably qualified independent third party within one calendar month (or other time as agreed with Mining Regulator) and the results of the investigation show that the incident could not have been reasonably prevented by the Tenement Holder.

Control and Management Strategies (Construction and Operation Phase)

Access to the Tenement will be controlled through fencing and gates will be locked when not operational

Mandatory strategy:

Access to the Tenement will be controlled through fencing and gates will be locked when not operational.

Optional strategy:

Site is sign posted making the public aware of hazards associated with the mine.

Provide any additional strategies

All visitors to site will be required to sign in and out of the onsite diary.

3.3a Public Safety (Post Mine Completion)

Outcome	**Measurement Criteria**
The risks to the health and safety of the public, so far as it may be affected by mining operations, are as low as reasonably practicable.	Following final rehabilitation work an appropriate person will inspect the site and verify in a report (to be stored in the Mining Logbook) that final rehabilitation has been undertaken in accordance with the Mining Plan.

Control and Management Strategies (Post Mine Completion)

Mandatory strategies:

Mining operations will be progressively rehabilitated as per Mining Plan.
All plant and equipment will be removed from the site.

Optional strategies:

All slopes will be battered to a slope ratio of at least 1:3 (18.4 Degrees).

Provide any additional strategies
N/A

3.4 Weeds and Pests

Outcome	**Measurement Criteria**
No introduction of new species of weeds, or pests (including feral animals), nor increase in abundance of existing weed or pest species on the Land.	Mine Logbook records of annual inspections (in Spring) by the Tenement Holder will demonstrate no introduction of new weeds or pests and no increased abundance of existing weeds and/or pests.

Control and Management Strategies

Mandatory Strategy:

Weed spraying and pest animal control will be conducted by a suitably experienced person as required

Provide any additional Strategies:

N/A

3.5 Soil

Outcome	**Measurement Criteria**
The existing (pre-mining) soil quality and quantity is maintained.	Annual inspection records in the Mine Logbook of all soil stockpiles will demonstrate that all stockpiles are less than 2 metres high and are maintained at the height when established.

Control and Management Strategies

Mandatory Strategies:

Soil stockpiled to a maximum of 2m in height to preserve seed stock and micro-organism function.
Soil stockpiles vegetated to prevent erosion and retain soil quality.

Optional Strategies:

Prior to mining, the amount of soil required for successful rehabilitation will be calculated.
Machinery will only be refuelled in a bunded area in accordance with EPA requirements.

Provide any additional Strategies
N/A

3.6 Waste

Outcome	**Measurement Criteria**
All commercial, industrial and domestic waste is disposed of in accordance with relevant legislation.	Waste disposal receipts demonstrate that all commercial, industrial (including contaminated soil) and domestic waste within the tenement was disposed of offsite in accordance with *Environment Protection Act 1993* requirements.

Control and Management Strategies

Mandatory Strategy:

Any general rubbish brought onto the tenement by workers or contractors will be removed on a daily basis or will be stored in rubbish bins and disposed of offsite at an EPA licensed waste facility.

Provide any additional Strategies:

N/A

3.7 Noise

Outcome	**Measurement Criteria**
No public nuisance impacts from noise as a result of mining operations.	Records from Mine Logbook will demonstrate that any noise complaints received were resolved with the complainant within 48 hours (or other time as agreed with Mining Regulator). If complaints are not resolved the Tenement Holder will conduct noise monitoring at the sensitive receptor to demonstrate noise emissions comply with the *Environment Protection (Noise) Policy 2007*.

Control and Management Strategies

Optional Strategies:

Mining operations will only be carried out between the hours of 7am and 6pm Monday to Saturday

Trucks will be advised to avoid using air brakes in built up areas.

Provide any additional Strategies:

N/A

3.8 Air Quality

Outcome	**Measurement Criteria**
No public health and/or nuisance impacts from dust generated by mining operations.	Records from Mine Logbook will demonstrate that any dust complaints received were acknowledged within 48 hours and resolved with the complainant within 7 days (or other time as agreed with Mining Regulator). If complaints are not resolved to the satisfaction of the Mining Regulation, air quality monitoring is to occur at locations, and using methods, as agreed with the Mining Regulator, to demonstrate: • PM10* concentrations leaving the tenement are less than 50 µg/m^3, when measured over a 24-hour period (midnight to midnight) as specified in the *Environment Protection (Air Quality) Policy 2016,* **and/or** • dust deposition leaving the tenement does not exceed 4g/m^2/month, when monitored in accordance with Australian Standard AS 3580.10.1 Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter – Gravimetric method *Particulate matter with an aerodynamic diameter of ten micrometres of less

Control and Management Strategies

Mandatory Strategies:

Rehabilitation will occur progressively in accordance with the Mining Plan.

All loaded trucks leaving the Tenement will be covered.

Mining will not occur during extreme wind days (i.e. dry conditions and wind speeds over 50km/hr)

Haul roads will be watered when required to control dust.

Provide any additional Strategies:
N/A

3.9 Surface Water

Outcome	**Measurement Criteria**
No adverse impact to surface water quality and water dependent ecosystems on or off the Land as a result of contamination and sedimentation caused by mining operations.	Photographic records in the Mine Logbook, following rainfall events resulting in run-off will demonstrate that surface water coming into contact with mining operations is retained within the tenement.

Control and Management Strategies

Mandatory strategies:

Rehabilitation will occur progressively in accordance with the Mining Plan.

Any material amount of surface water impacted by mining operations will be captured and retained within the tenement.

Optional strategies:

Mining operations will not capture or retain any material amounts of surface water which would require management.

Clean surface water runoff will be diverted around the working area

A sump will be created to capture and hold surface water within the pit.

Provide any additional strategies:

N/A

3.10 Visual Amenity

Outcome	**Measurement Criteria**
The form, contrasting aspects and reflective aspects of mining operations are visually softened to blend in with the surrounding landscape.	Annual site inspection records demonstrate that: • the maximum area of un-rehabilitated land at any one time is 3 hectares; and • progressive and final rehabilitation has been completed in accordance with the approved Mining Plan.

Control and Management Strategies

Mandatory Strategies:

Mining operations will be progressively rehabilitated as per the Mining Plan.

The maximum area of un-rehabilitated land will be less than 3 hectares at any one time.

Provide any additional Strategies:

N/A

3.11 Post Mining Land Use

Outcome	**Measurement Criteria**
All land disturbed by mining operations is rehabilitated to achieve the post mining land use.	Following final rehabilitation work an appropriate person will inspect the site and verify in a report (to be stored in the Mine Logbook) that final rehabilitation has been undertaken in accordance with the Mining Plan to achieve the approved post mining land use.

Control and Management Strategies

Mandatory Strategies:

Mining operations will be progressively rehabilitated to achieve post mining land use as per Mining Plan.

Optional Strategies:

The land will be revegetated with:

- native vegetation
- crops
- pasture
- as agreed with the landowner

Provide any additional Strategies:

N/A

3.12 Groundwater

Outcome	**Measurement Criteria**
No adverse impact to groundwater caused by mining operations.	Annual inspection or survey (as agreed with Mining Regulator) of the pit floor recorded in the Mine Logbook will demonstrate that mining operations do not exceed the mine depth levels stated in the Mining Plan.

Control and Management Strategies

Mandatory Strategy:
No mining to be undertaken within 2 metres of the estimated highest seasonal groundwater level.

Provide any additional Strategies:
N/A

3.13 Protection of Third party Property, Infrastructure and Adjacent Land Use

Potential impacts from mining on third party property and Infrastructure, including adjacent land use, were identified as a concern during stakeholder consultation.

Outcome No unauthorised damage (including that caused by fire) to adjacent public or private property, infrastructure and adjacent land use.	**Measurement Criteria** Any complaints of unauthorised damage to adjacent public or private property, infrastructure or impact to adjacent land use from mining operations will be recorded in the Mine Logbook at time of complaint and investigated within 7 days (or other time as agreed with Mining Regulator) to show that the mine operator did not cause the damage or impact through mining operations.

Control and Management Strategies

Mandatory Strategy:
Machinery will not be operated on the tenement during total fire ban days.

Provide any additional Strategies:
N/A

3.14 Caves
The Tenement is located in an area of known caves ☐ Yes ☒ No (No further action required in this table)

3.15 Native Vegetation

Native vegetation is located within the Tenement

Outcome	**Measurement Criteria**
No loss of abundance or diversity of native vegetation on or off the tenement through; • clearance, • dust/contaminant deposition, • fire, • other damage, unless a significant environmental benefit (SEB) has been approved in accordance with the relevant legislation.	*If native vegetation is retained:* Annual site survey/photographic evidence (stored in the Mine Logbook) will show no clearance of native vegetation identified and shown in the Mining Plan.

Control and Management Strategies

Optional Strategies:

If native vegetation is retained:

A buffer zone of a minimum 5m from the canopy drip line of native vegetation will be maintained and flagged during operations, where no excavation, stockpiling or other earthworks will be undertaken within this buffer zone.

Provide any additional Strategies:

N/A

3.16 Blasting
Blasting is to occur during mining operations ☐ Yes ☒ *No (No further action required in this table)*

Section 4: Records

Records related to measurement criteria will be kept in a Mine Logbook. All records will be kept for the duration of the lease.

Section 5: Lease Conditions

The following outlines how specific lease conditions or requirements that are not outcomes will be addressed in the PEPR (if relevant) or demonstrate how otherwise they have or will be complied with.

Lease Condition	Where in the PEPR and how will the lease condition be addressed:

Section 6 Operator Capability

I, the Tenement Holder (and any other person who may be acting on behalf of the tenement holder as an operator), have the following appropriate experience, processes and procedures in place to be able to operate the tenement to achieve the environmental outcomes:

MA Skinner Contracting Pty Ltd is a well-established and reputable civil construction company with over 40 years of experience in the industry. With a strong focus on safety, quality, and environmental sustainability, we have built a reputation for delivering reliable, high-quality services across a range of projects.

Processes and Procedures

We are proud to be certified with the following ISO standards:

- ISO 14001 – Environmental Management
- ISO 45001 – Occupational Health and Safety Management
- ISO 9001 – Quality Management

These certifications demonstrate our commitment to maintaining and continually improving our management systems, ensuring the highest standards of safety, environmental responsibility, and quality across all aspects of our operations.

Our robust Integrated Management System includes a portfolio of policies and procedures to assist our workers with the adherence to legislation, codes of practice and industry standards. We have a comprehensive approach to risk management and safety, prioritizing the well-being of our team and the protection of our stakeholders.

Our commitment to quality and environmental sustainability is reflected in our ISO certifications and daily operations. We follow stringent quality control and environmental procedures on all our projects to minimise our impact and uphold the highest industry standards.

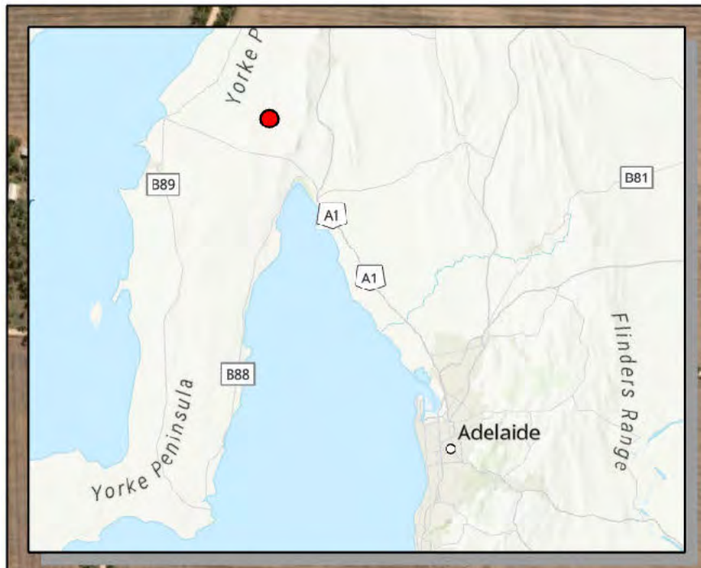
Experience and Expertise

With a team of experienced and skilled plant operators, MA Skinner Contracting is equipped to manage a wide range of construction, crushing, and mining projects. Our operators bring a wealth of knowledge and experience, allowing us to consistently achieve optimal project outcomes.

Mark Skinner, the owner of MA Skinner Contracting, who has been leading the company for over 40 years, brings extensive industry experience, including the operation of a sand quarry in Bute and the current management of a limestone quarry in Kadina. This hands-on leadership, combined with a deep

understanding of the industry, enables us to approach projects with insight and expertise that ensures success.

Section 7: Maps and Plans



Old Well Road

160m

Linton Road

Fenced Area

Lime Kiln Road

Prevailing wind direction

Upper Yorke Road

Bullock Track

DataGrow DESIGN	Project:DGD2024005_Kinesis_NinnesSandpit	**Legend** Parcel Boundary EML 6559
	Location: 3990 Upper Yorke Road, Ninnes, South Australia	
	Drawn By: AS / Client: Kinesis	
	Version: 1 / Date: 30 Jul 2024	
	Source: Esri Imagery Basemap.	

N

0 70 140 280 m

Scale A3: 1:10,000

Coordinates: GDA2020 MGA Zone 54

SITE LOCATION

Figure: 1A 1

SARIG Map

August 13, 2024

SAPN transmission line

SA Water main

1:30,000

0 0.2 0.4 0.8 mi

0 0.33 0.65 1.3 km

Figure 1B

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 05 Aug 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary

Proposed Mine Layout

- Deposit Boundary
- Mobile Plant
- Product Stockpile
- Road Access
- Stockpile Topsoil
- Direction of mining
- Fenced Area

N

0 70 140 280

m

Scale A3: 1:10,000

Coordinates: GDA2020 MGA Zone 54

PROPOSED MINE LAYOUT

Figure: 2 1

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 12 Aug 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559 (1)
- Parcel Boundary (1)
- Site Buffer 5km (1)

Flora

- Aizoaceae (3)
- Anacardiaceae (4)
- Apiaceae (1)
- Asteraceae (2)
- Boraginaceae (3)
- Brassicaceae (7)
- Chenopodiaceae (31)
- Cupressaceae (1)
- Euphorbiaceae (1)
- Fabaceae (15)
- Hemerocallidaceae (6)
- Lamiaceae (1)
- Malvaceae (1)
- Myrtaceae (47)
- Orchidaceae (3)
- Pittosporaceae (4)
- Poaceae (50)
- Polygalaceae (1)
- Proteaceae (1)
- Santalaceae (1)
- Solanaceae (2)

Fauna

- Acanthizidae (1)

N

0 362.5 725 1,450 m

Scale A3: 1:50,000

Coordinates: GDA2020 MGA Zone 54

FLORA & FAUNA

Figure:3A 6

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 12 Aug 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Site Buffer 5km

Native Vegetation

- Allocasuarina forest and woodland
- Eucalyptus forest and woodland
- Eucalyptus mallee forest and mallee woodland
- Melaleuca forest and woodland
- Unknown
- Planted Native Vegetation

N

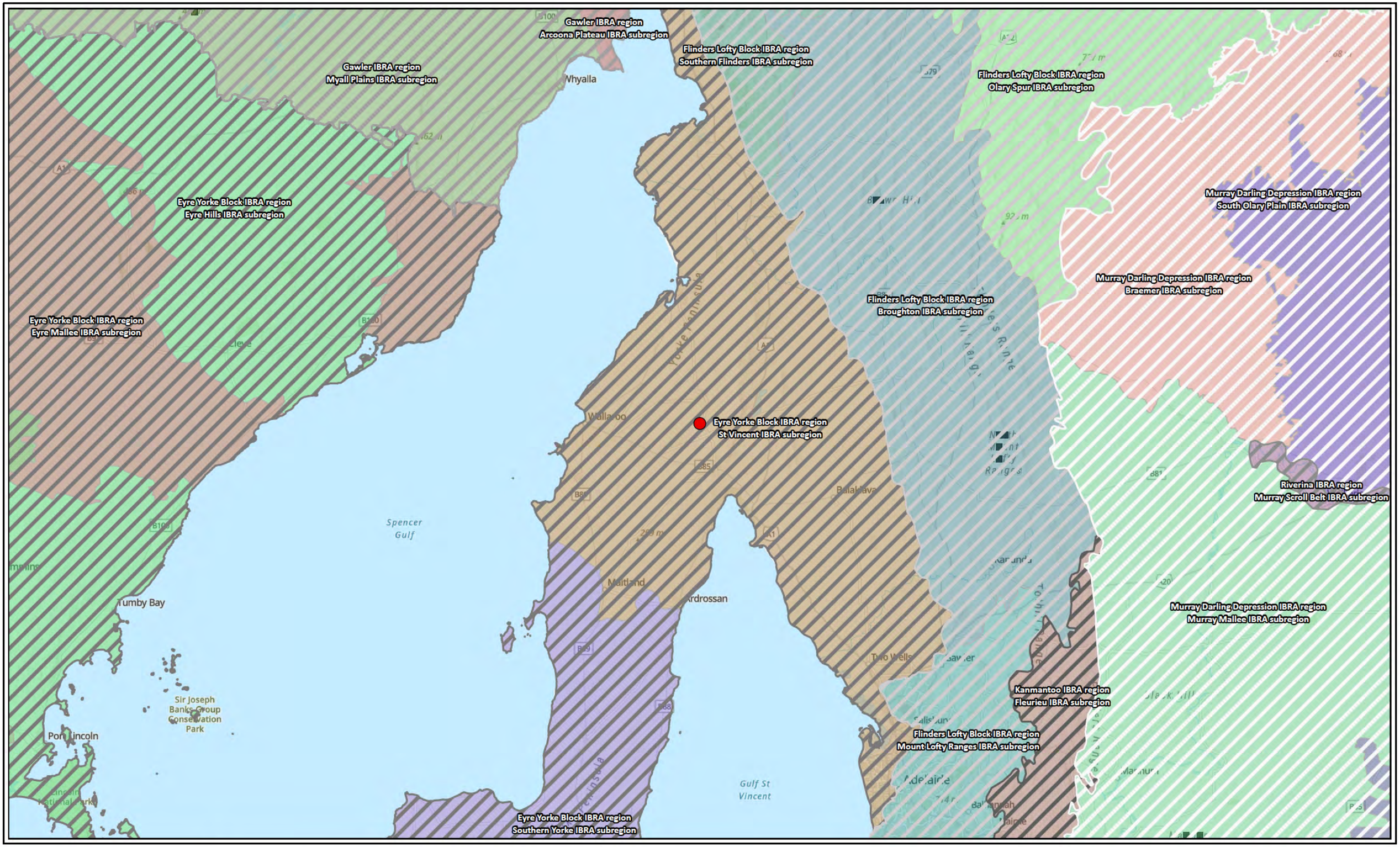
0 362.5 725 1,450 m

Scale A3: 1:50,000

Coordinates: GDA2020 MGA Zone 54

NATIVE VEGETATION

Figure:3B 8



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 16 Jul 2024
Source: Esri Imagery Basemap.	

Legend

EML 6559

IBRA7 regions
- Eyre Yorke Block
- Flinders Lofty Block
- Gawler
- Kanmantoo
- Murray Darling Depression

IBRA7 subregions
- Arcoona Plateau
- Braemer
- Broughton
- Eyre Hills
- Eyre Mallee
- Riverina
- Fleurieu
- Lowan Mallee
- Mount Lofty Ranges
- Murray Mallee
- Murray Scroll Belt
- Myall Plains
- Olary Spur
- South Olary Plain
- Southern Flinders
- Southern Yorke
- St Vincent
- Talia

N

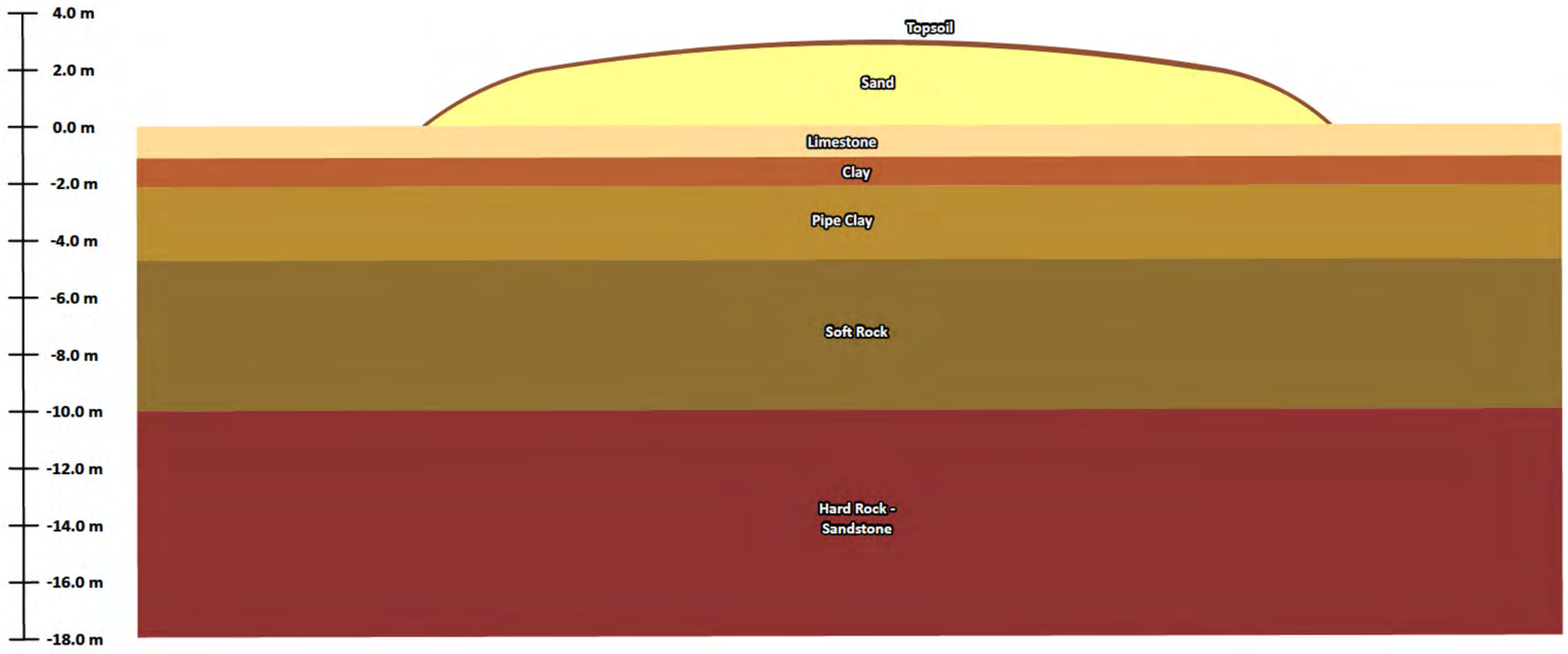
0 5,000 10,000 20,000 m

Scale A3: 1:1,000,000

Coordinates: GDA2020 MGA Zone 54

IBRA 7.0 REGIONS & SUBREGIONS

Figure: 3C



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 17 Jul 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Deposit Boundary

Geology

- Topsoil
- Sand
- Limestone
- Clay
- Pipe Clay
- Soft Rock
- Hard Rock - Sandstone
- Transect Line

Note: Groundwater Water at ~28 m based on Well Log 6430-76.

N

0 12.5 25 50 m

Scale A3: 1:2,000

Coordinates: GDA2020 MGA Zone 54

QUARRY X-SECTION

Figure: 4

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 2	Date: 01 April 2025

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Proposed Mine Layout
- Deposit Boundary
- Mobile Plant
- Product Stockpile
- Road Access
- Stockpile Topsoil
- Direction of mining
- 7,500m3 stage

N

0 70 140 280

m

Scale A3: 1:10,000

Coordinates: GDA2020 MGA Zone 54

PROPOSED MINE LAYOUT

MINING STAGES

Figure: 5

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 17 Jul 2024

Source: Esri Imagery Basemap.

Legend

- Site Buffer 5km
- Parcel Boundary
- EML 6559
- Waterbody
- Watercourses

N

0 0.5 1 2 km

Scale A3: 1:100,000

Coordinates: GDA2020 MGA Zone 54

SURFACE WATER

Figure: 6

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 16 Jul 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Site Buffer 2km
- Groundwater Bore (16)

N

0 175 350 700 m

Scale A3: 1:24,000

Coordinates: GDA2020 MGA Zone 54

GROUNDWATER WELL LOCATIONS WITHIN 2km

Figure: 7

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 30 Jul 2024

Source: Esri Imagery Basemap.

Legend

Parcel Boundary

EML 6559

Rehabilitated area

N

0 70 140 280 m

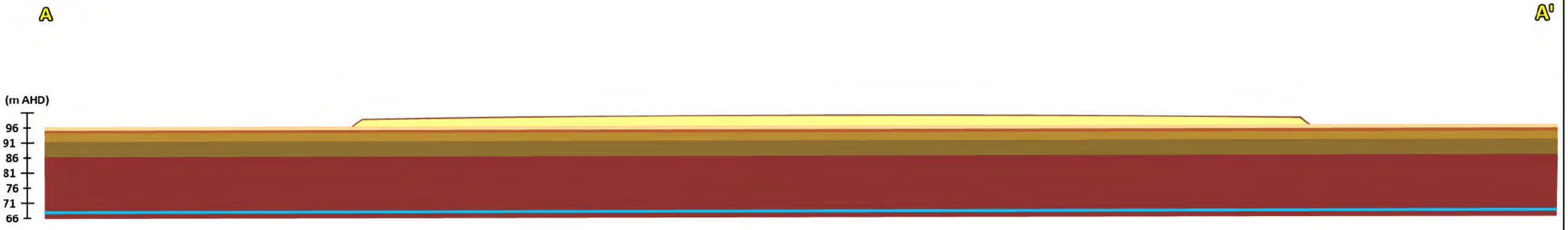
Scale A3: 1:10,000

Coordinates: GDA2020 MGA Zone 54

SITE LOCATION

Proposed Final Landform Plan

Figure: 8 1



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 13 Aug 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Deposit Boundary

Geology

- Topsoil
- Sand
- Limestone
- Clay
- Pipe Clay
- Soft Rock
- Hard Rock - Sandstone
- Transect Line
- Groundwater Table (~68 mAHD)

Note: Groundwater Water at ~28 mbgs based on Well Log 6430-76.

N

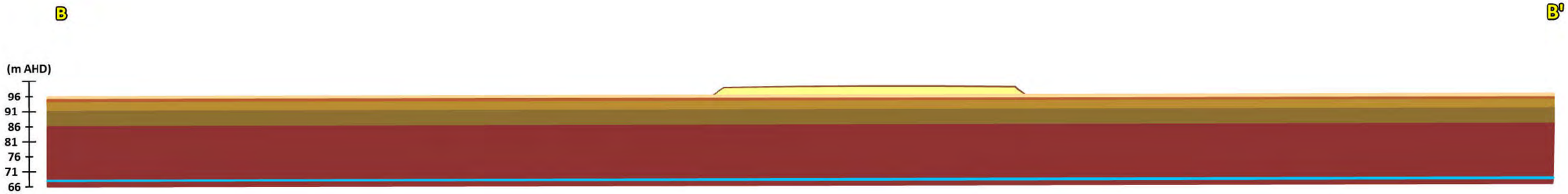
0 5 10 20 m

Scale A3: 1:1,300

Coordinates: GDA2020 MGA Zone 54

QUARRY X-SECTION A-A'

Figure: 9A 2



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 13 Aug 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Deposit Boundary

Geology

- Topsoil
- Sand
- Limestone
- Clay
- Pipe Clay
- Soft Rock
- Hard Rock - Sandstone
- Transect Line
- Groundwater Table (~68 mAHD)

Note: Groundwater Water at ~28 mbgs based on Well Log 6430-76.

N

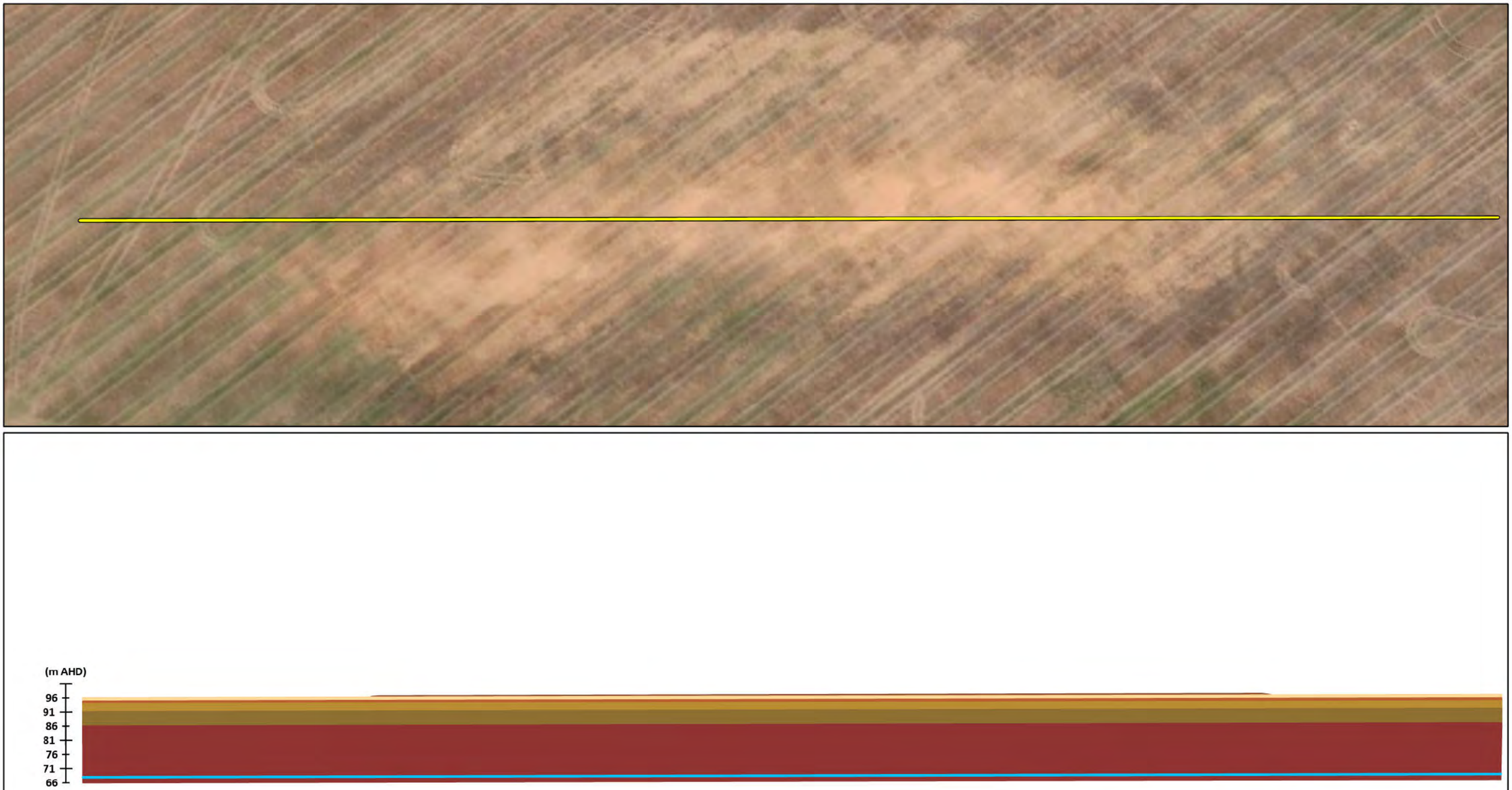
0 5 10 20 m

Scale A3: 1:1,300

Coordinates: GDA2020 MGA Zone 54

QUARRY X-SECTION B-B'

Figure: 9B 2



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 05 Aug 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Deposit Boundary

Geology

- Topsoil
- Sand
- Limestone
- Clay
- Pipe Clay
- Soft Rock
- Hard Rock - Sandstone
- Transect Line
- Groundwater Table (~68 mAHD)

Note: Groundwater Water at ~28 mbgs based on Well Log 6430-76.

N

0 5 10 20 m

Scale A3: 1:1,300

Coordinates: GDA2020 MGA Zone 54

QUARRY X-SECTION REHABILITATED

Figure: 9C3

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 12 Aug 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary

Proposed Mine Layout

- Deposit Boundary
- Mobile Plant
- Product Stockpile
- Road Access
- Stockpile Topsoil

Elevation Conoutr Intervals

- 1 (mAHD)
- 5 (mAHD)

N

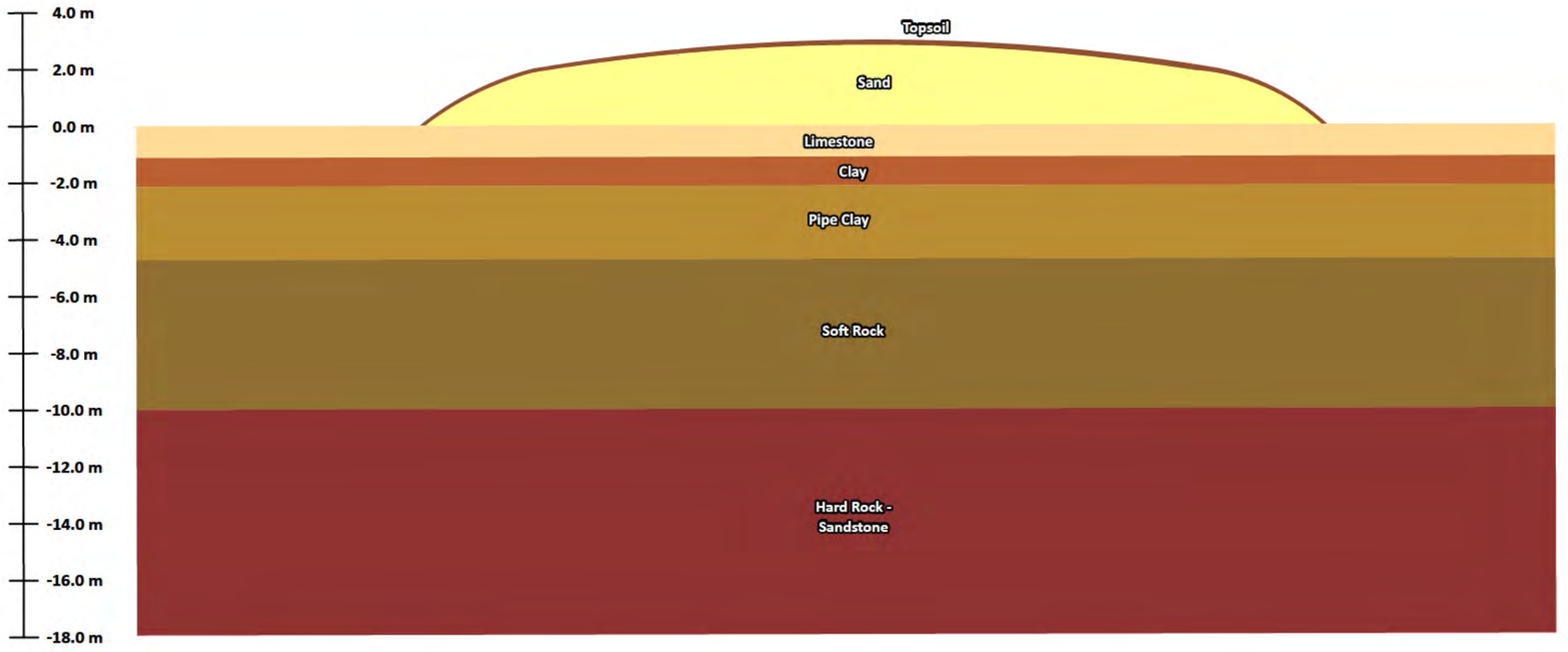
0 70 140 280 m

Scale A3: 1:10,000

Coordinates: GDA2020 MGA Zone 54

TOPOGRAPHY

Figure: 2 . 1



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 17 Jul 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Deposit Boundary

Geology

- Topsoil
- Sand
- Limestone
- Clay
- Pipe Clay
- Soft Rock
- Hard Rock - Sandstone
- Transect Line

Note: Groundwater Water at ~28 m based on Well Log 6430-76.

N

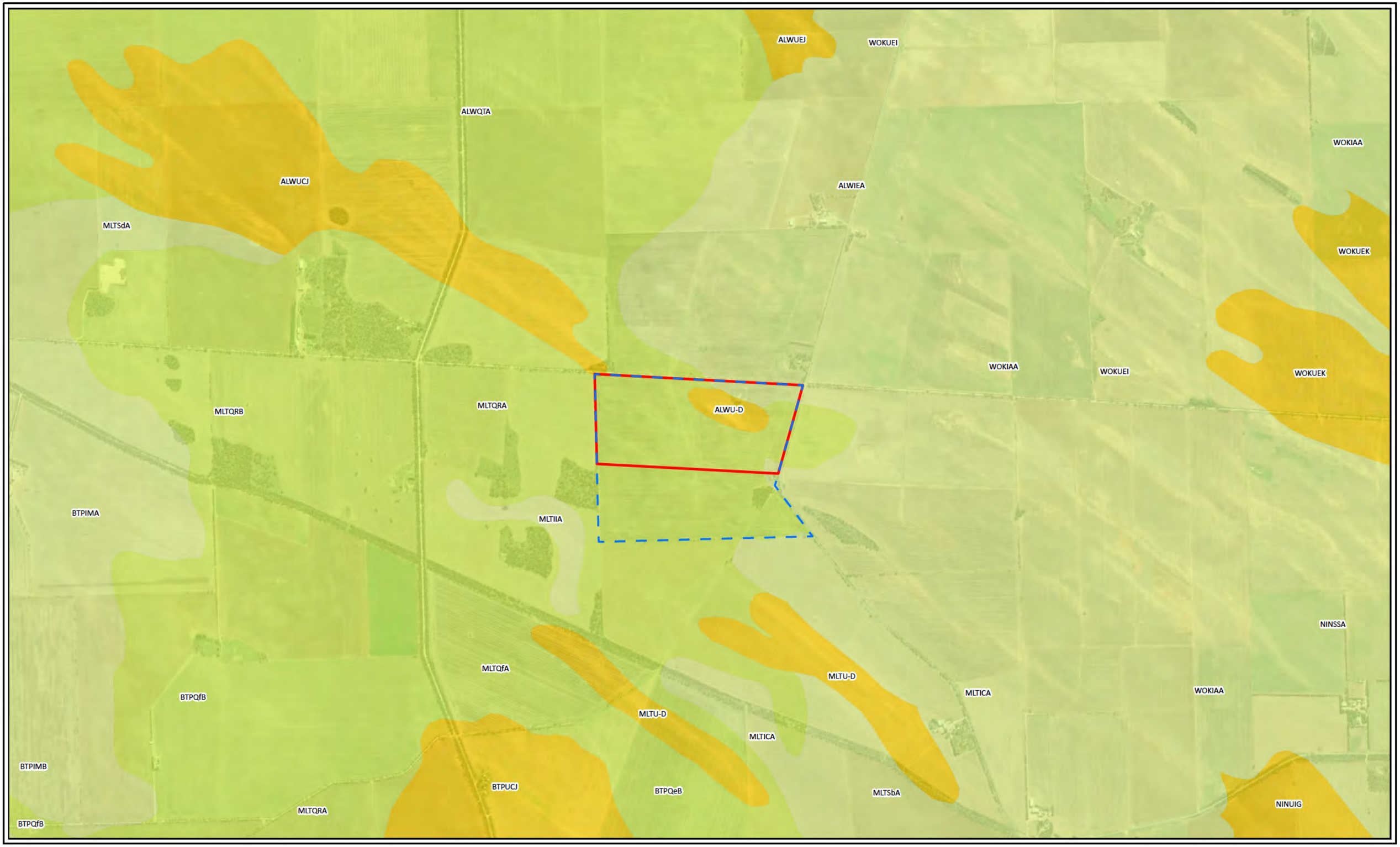
0 12.5 25 50 m

Scale A3: 1:2,000

Coordinates: GDA2020 MGA Zone 54

QUARRY X-SECTION

Figure: 3.2



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 16 Jul 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary

Soil Group

- Calcareous soils
- Shallow soils on calcrete or limestone
- Deep sands

N

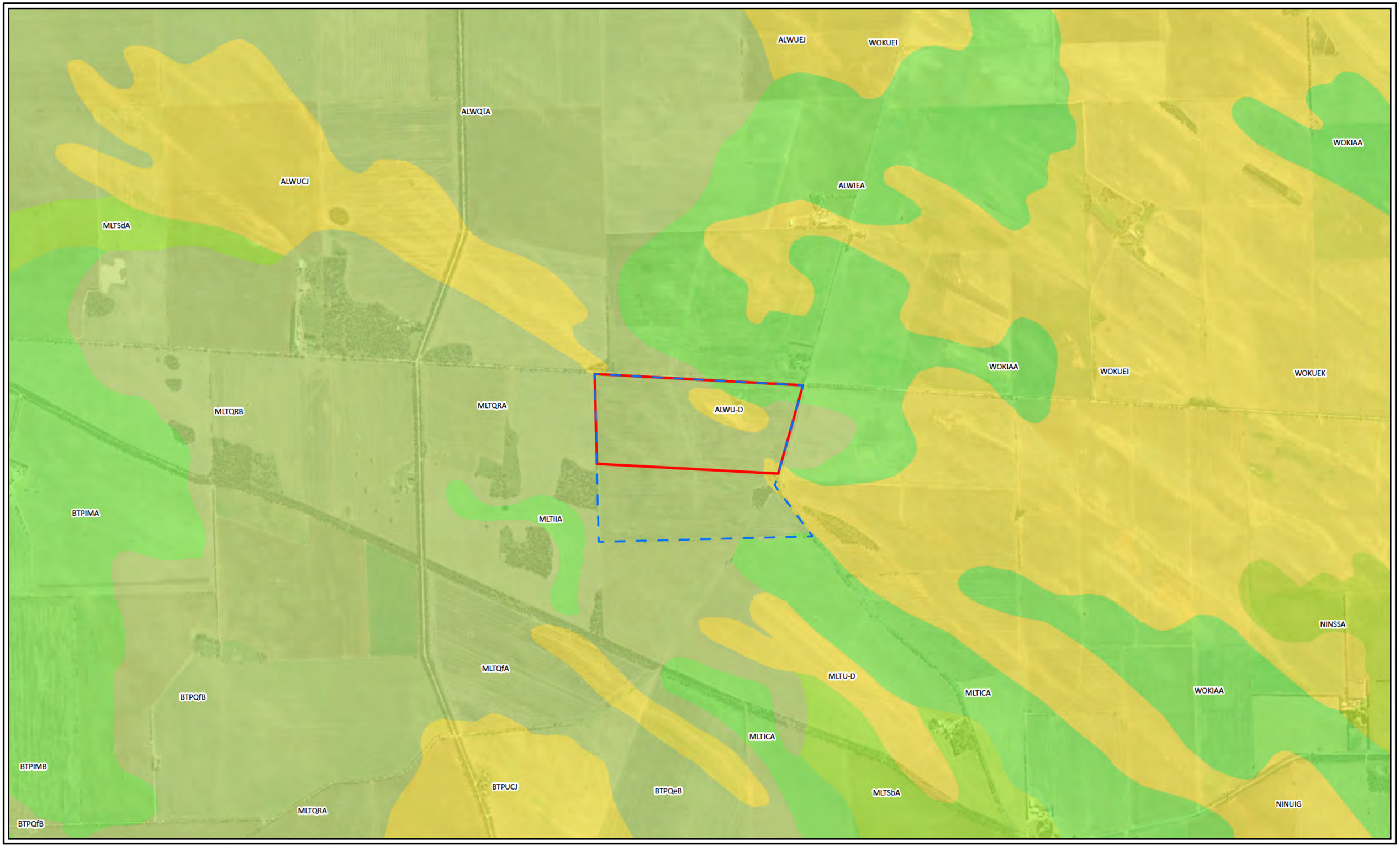
0 175 350 700 m

Scale A3: 1:24,000

Coordinates: GDA2020 MGA Zone 54

SOIL GROUP

Figure: 4A



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 16 Jul 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary

Soil Subgroup

Calcareous soils
- Calcareous loam
- Calcareous loam on clay
- Calcareous gradational clay loam

Shallow soils on calcrete or limestone
- Shallow calcareous loam on calcrete

Deep sands
- Siliceous sand

N

0 175 350 700 m

Scale A3: 1:24,000

Coordinates: GDA2020 MGA Zone 54

SOIL SUBGROUP

Figure: 4B

DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 16 Jul 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Site Buffer 2km
- Groundwater Bore (16)

N

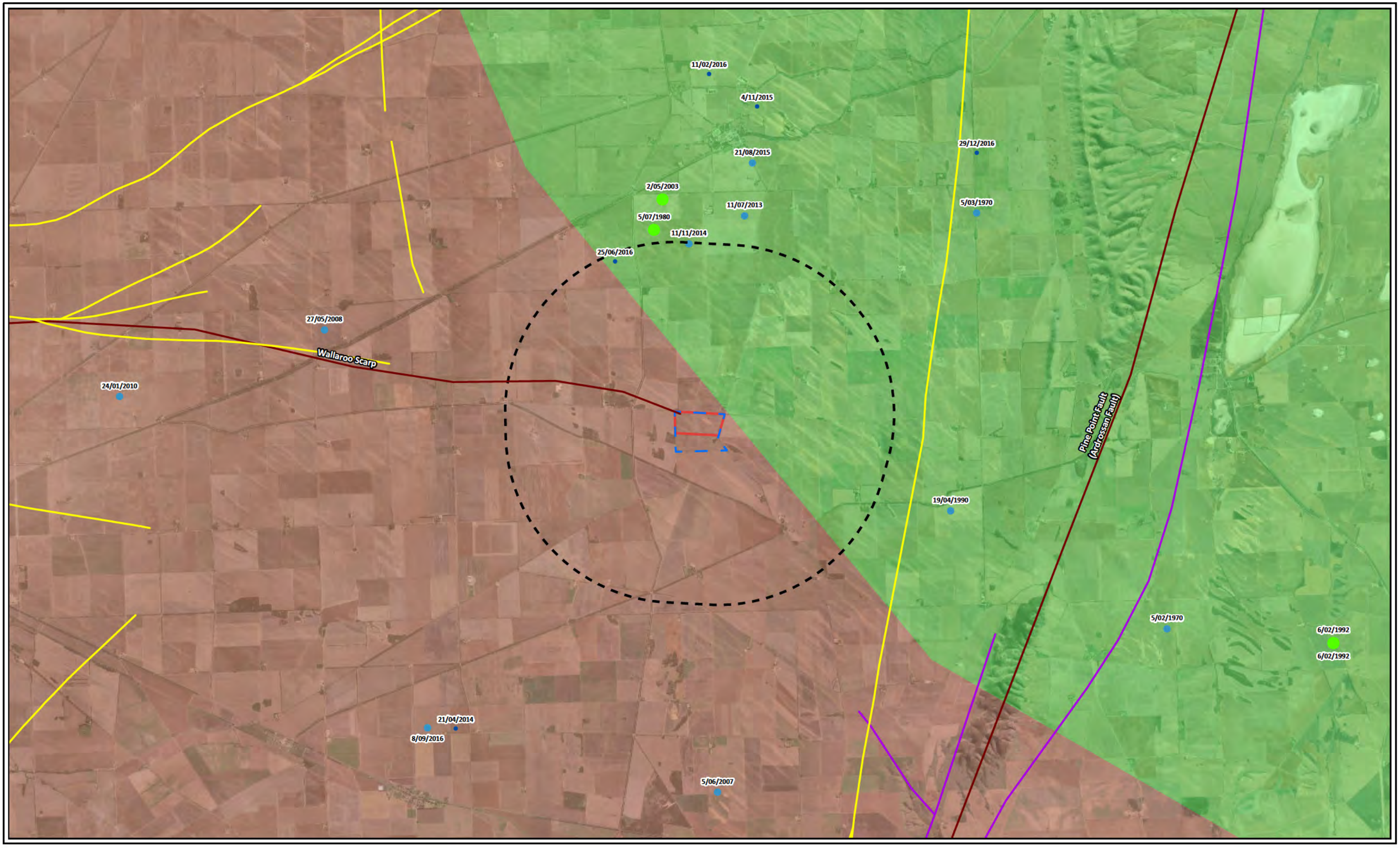
0 175 350 700 m

Scale A3: 1:24,000

Coordinates: GDA2020 MGA Zone 54

GROUNDWATER WELL LOCATIONS WITHIN 2km

Figure: 4C



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 16 Jul 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Site Buffer 5km

Earthquake Hazard Zones

- Areas identified as having a hazard factor (Z) of 0.11 or less
- Areas identified as having a hazard factor (Z) of more than 0.11

- Archaean - Early Mesoproterozoic faults
- Neoproterozoic - Ordovician faults
- Neotectonic Feature

Earthquake Magnitude

- Less than 1
- 1.00 - 1.99
- 2.00 - 2.99

N

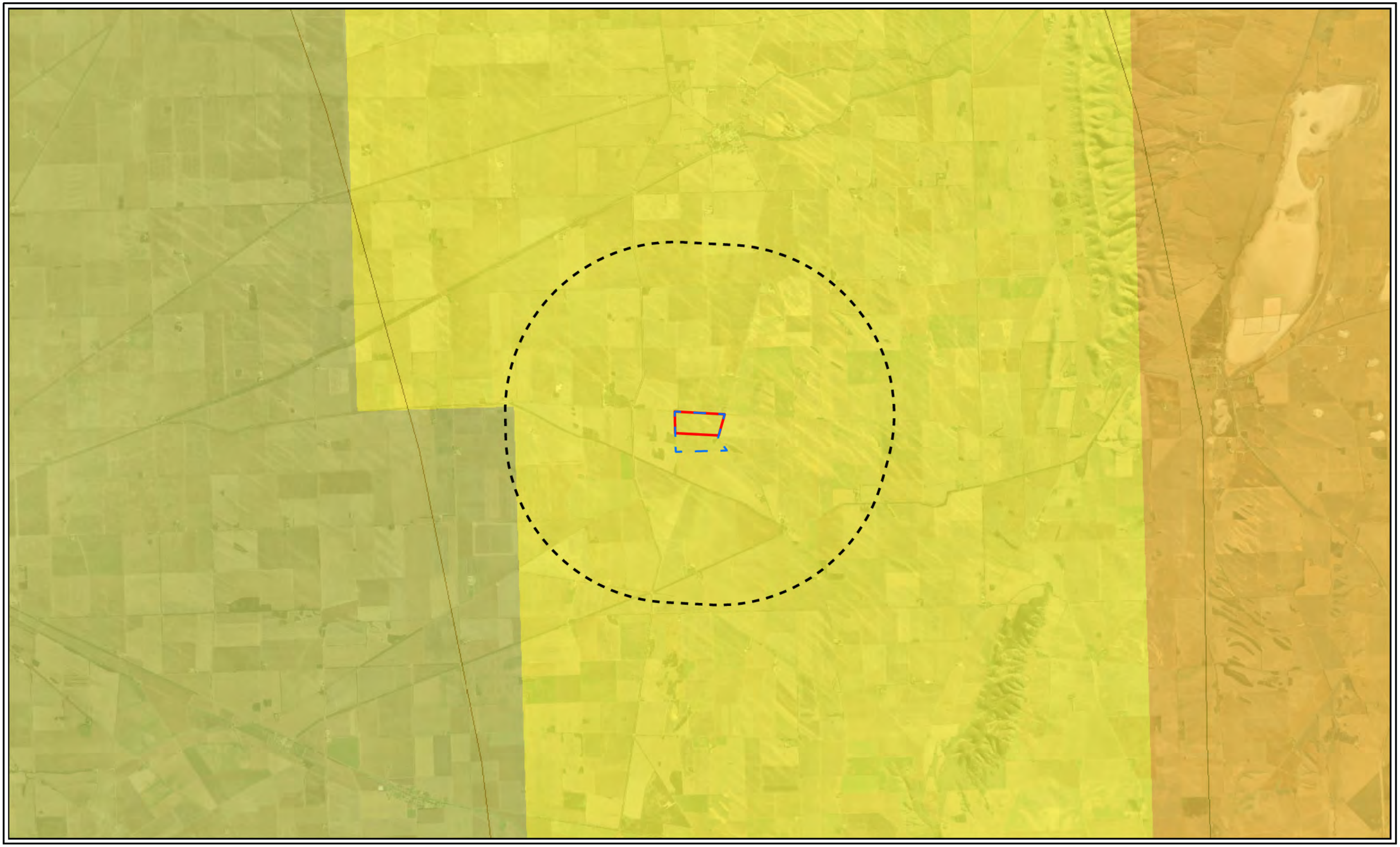
0 0.5 1 2 Km

Scale A3: 1:100,000

Coordinates: GDA2020 MGA Zone 54

EARTHQUAKES & FAULTS

Figure: 6



DataGrow DESIGN

Project:DGD2024005_Kinesis_NinnesSandpit	
Location: 3990 Upper Yorke Road, Ninnes, South Australia	
Drawn By: AS	Client: Kinesis
Version: 1	Date: 16 Jul 2024

Source: Esri Imagery Basemap.

Legend

- EML 6559
- Parcel Boundary
- Site Buffer 5km
- 2pct_in_50_Years
- Spectral_Acceleration_0_2_contours_2pct

0.00 - 0.02	0.12 - 0.16	
0.02 - 0.04	0.16 - 0.2	
0.04 - 0.06	0.2 - 0.3	
0.06 - 0.08	0.3 - 0.5	
0.08 - 0.1	0.5 - 0.7	
0.1 - 0.12	0.7 - 1	

N

0 5001,000 2,000 m

Scale A3: 1:100,000

Coordinates: GDA2020 MGA Zone 54

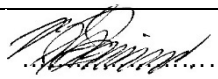
NSHA18 - 2% OVER 50 YEARS

Figure: 7

Section 8: Tenement Holder Declaration

This declaration must be signed by all tenement holders.

☒ We/ I have taken reasonable steps to review the information to ensure its accuracy and all statements made and information given in this application is true and correct.

Signature:  ……

Print name: Mark Skinner

Date: 2nd April 2025

Position: Managing Director

Appendix 1 – Native Vegetation Assessment and Native Vegetation Management Plan

If native vegetation will be cleared, please provide the native vegetation assessment undertaken by a Native Vegetation Council Accredited Consultant.

If the Significant Environmental Benefit (SEB) will be met via provided an on ground off-set, please provide a Native Vegetation Management Plan

Not required.