

LOT 1, 2 AND 803 BALDIVIS ROAD, BALDIVIS

REHABILITATION MANAGEMENT PLAN

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pgv
ENVIRONMENTAL

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1 INTRODUCTION

1.1 Background

Lots 1, 2 and 803 Baldivis Road, Baldivis (the site) are located in the City of Rockingham, approximately 38km south of the Perth Central Business District (Figure 1). The site is generally bounded by Baldivis Road to the east, Kulija Road to the south, the Rockingham Millar Road Landfill Site to the west and the Rockingham Memorial Park to the north (Figure 2).

Sand mining has occurred on Lots 1 and 2 Baldivis Road and is due be extended into Lot 803 to the south under Development Approval Reference No. 20. 2021. 79.1 AD21/164080 as Amended and approved in May 2024 (Appendix 1).

An Environmental Management Plan (EMP) was prepared in 2015 to support an Extractive Industries License Application over Lots 1 and 2. The license was granted in 2015 and mining commenced in 2017. The EMP was updated in 2024 to cover the expanded footprint and was approved by the City of Rockingham on 3 July 2024.

The Rehabilitation Management Plan has been prepared as a requirement of the EMP to guide the rehabilitation of the site.

1.2 Purpose and Scope

The RMP recognises the likely future re-zoning and development of the site and includes the following actions:

- Shaping the batters to ensure they are safe;
- Preparation of the site to control dust for the period prior to development commencing;
- Removal of equipment and materials;
- Clean-up of any oil spills or other obvious areas of contamination; and
- Weed control measures.

2 EXISTING ENVIRONMENT

2.1 Historical Land Use

The site has had a history of clearing for rural activities as well as sand mining. In the earliest available historical aerial photography from 1953 the site appears to be cleared and parkland cleared with some remnant trees likely to be native (Plate 1).

Plate 1: Aerial Photograph from 1953 (Landgate, 2024).



Between 1965 and 1974 (Plate 2) approximately half of Lot 1 was cleared and excavated for sand. The depth of excavation was approximately 10m. During this period Lot 2 and Lot 803 were largely cleared with a few scattered trees remaining (Plate 2).

Plate 2: Aerial Photograph from 1974 (Landgate, 2024).



The clearing over 1 Baldivis Road was extended between 1985 and 1995 and dwellings were established on both lots (Plate 3). Lot 803 remained mostly cleared with some scattered trees.

Plate 3: Aerial Photograph from 1995 (Landgate, 2024).



Sand extraction commenced on Lot 1 Baldivis road in 2017 and extended onto Lot 2. Plate 4 shows the current status of the site.

Plate 4: Aerial Photograph from 2024 (Landgate, 2024).



2.2 Topography

The topography of Lots 1 and 2 have been significantly altered by the recent sand mining. The perimeter of the lots slopes up steeply to the property boundary from the pit floor. Lot 803 slopes gently down to the south towards Kulija Road. The elevation on the site varies from 4.5m Australian Height Datum (AHD) to 28m (Ochrewest, 2015).

2.3 Geology and Soils

The majority of the site is mapped on the Spearwood system which contains sand dunes and plains and consists of aeolian sand and limestone over sedimentary rocks. These soils overlay Tamala limestone (Bolland, 1998).

The Spearwood soils are mapped by the Department of Agriculture and Food Western Australia (DAFWA) as Spearwood S1b Phase (211Sp_S1b) located on dune ridges with slopes up to 15%. These soils are described as deep siliceous yellow brown sands or pale sands with yellow-brown subsoil (DAFWA, 2015).

The soils are an excellent resource for the provision of yellow fill sand, earthy yellow sand for maximisation of phosphate retention, brick laying sand and white sand.

2.4 Hydrology

2.4.1 Groundwater

The groundwater under the site has geological formations that have been grouped into three distinct aquifers:

- Superficial Aquifer (unconfined);
- Leederville Aquifer (confined); and
- Yarragadee north (confined) (DoW, 2014a).

The Superficial Aquifer is part of the Jandakot Mound and the Kardinya Shale Member of the Osborne Formation separates this from the Leederville Aquifer (DoW, 2015).

Groundwater flows generally from the north-east to the south-west of the site. The Perth Groundwater Atlas (DWER, 2024) shows a snapshot of groundwater levels as measured in May 2003 which are an indication of low groundwater levels and are measured at 3mAHD under the site. The depth to groundwater from the natural surface ranges from approximately 1.5 to 25m (DWER, 2024).

2.4.2 Surface Water

The soils on the site are free draining and infiltration of rainfall is the dominant hydrological process (DPIRD, 2024). Therefore, surface water runoff is minimal.

Three small surface water features occur on Lot 1 at the eastern end and are man-made ponds which are not mapped as wetlands in the Geomorphic Wetlands of the Swan Coastal Plain Dataset.

2.5 Vegetation

2.5.1 Bioregional Data

The site is in the Southwest Botanical Province within the Swan Bioregion. According to Heddle *et al.* (1980), the site is in the Karrakatta Central and South Complex. The Karrakatta Central and South Complex is comprised of predominantly Low Open forest of *Eucalyptus marginata* – *Eucalyptus gomphocephala* – *Eucalyptus* (now *Corymbia*) *calophylla* and Woodland of *Eucalyptus marginata* – *Banksia* spp.

2.5.2 Vegetation Type

Native vegetation within Lots 1 and 2 has mostly been cleared. The vegetation on the southern boundary of Lot 2 is planted eucalypts. A site assessment undertaken by PGV Environmental on 3 February 2023 shows that native vegetation within the extraction footprint is limited to Lot 803 and is predominately a paddock of weedy pasture species. The excavation footprint contains one Jarrah (*Eucalyptus marginata*) tree, one Marri (*Corymbia calophylla*) tree and a small stand of *Acacia pulchella* (Prickly Moses) shrub. The remaining trees in the excavation footprint area have been planted and do not constitute native vegetation.

A native vegetation Clearing Permit has been applied for (CPS 10185/1). Assessment of the application will be completed upon finalisation of the Development Approval. Clearing will be undertaken in accordance with the requirements of the approved clearing permit.

2.5.3 Vegetation Condition

Most of the site has no intact vegetation and is considered to be Completely Degraded as per the rating scale by Keighery published in Bush Forever (Government of Western Australia, 2000) shown in Table 1.

Table 1: Vegetation Condition Rating Scale.

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.

Condition	Description
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Source: Government of Western Australia, 2000.

Some native understorey species, mostly *Acacia pulchella*, occur in a small area on Lot 803 but all vegetation is rated as Completely Degraded.

3 REHABILITATION MANAGEMENT PLAN

3.1 Rehabilitation Objectives

The three lots subject of this management plan are likely to be developed in the near future. Therefore, a plan to rehabilitate the sand mine to a diverse native vegetation cover is considered unnecessary in terms of time and cost when the rehabilitation works are likely to be cleared for development in the near future.

Acknowledging the likely future development of the site, which will result in the rehabilitation works being cleared, the site will be stabilised but not revegetated.

3.2 Sand Mine Decommissioning

3.2.1 Batters

Decommissioning of the site will occur at the conclusion of mining. At completion, batters and finished levels will be constructed as per the Bulk Earthworks Plan at Appendix 2.

The Plan provides for:

- a) A finished depth between RL13.2 (south west) to RL 8.0m AHD in the north east; and
- b) Proposed finished slopes on the batters will be graded to 1:3 batters.

As per the Excavation Management Plan the batters will be deep ripped to facilitate rehabilitation after final landform contouring.

3.2.2 Topsoil Management

In accordance with the Excavation Management Plan topsoil will be removed to a nominal depth of 150mm and transported to a designated stockpile. Topsoil will be respread to a depth of 100mm following completion of sand extraction and earthworks.

3.2.3 Dust Control

Hydromulch will be sprayed at the completion of rehabilitation earthworks (battering, ripping etc).

The hydromulched areas will be monitoring quarterly to ensure it remains intact over the 18 months period. Hydromulch will be re-applied in areas where it has broken down and does not provide effective dust control.

3.2.4 Oil Spillage

Any areas of oil spillage will be remediated in accordance with the *Contaminated Sites Act 2007*. If soil contaminated with oil is to be removed it will be characterised under the definitions as outlined in the *Landfill Waste Classification and Waste Definitions 1996* (amended 2019). Disposal of topsoil must be undertaken in accordance with the *Environmental Protection Regulations 1987* (EP Regulations).

3.2.5 Weed Control

The site will be inspected quarterly following the completion of sand mining for 18 months.

Any Weeds of National Significance (WoNS), Declared Pests under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) or significant weeds identified in the City of Rockingham will need to be controlled.

Weed control measures for the most likely weeds to occur on the Baldivis site are outlined in Table 4.

Weeds will be monitored quarterly during the 18 month period.

The completion criteria for weeds is to have no WoNS or Declared Pest species from Table 4 present on the site at the completion of the 18 month period.

3.2.6 Fencing

In accordance with the Excavation Management Plan perimeter fencing will be provided around the extraction areas for security and safety. The fence will be lined with Enviro Mesh to enhance dust amelioration and containment. The Enviro Mesh will be inspected quarterly to ensure it is maintained and attached to the perimeter fence at all times.

The fence will be signposted with warning signs in accordance with Condition 19 of the Development Approval.

4 CONTINGENCY PLANTING

4.1 Rehabilitation Planting

In the event that the proposed redevelopment has not commenced within 18 months of the completion of extraction, the land will be seeded with a native seed mix.

The native species recommended for use (Table 3) have been selected based on the following criteria:

1. The species will be consistent with native species of the Karrakatta – Central and South Vegetation Complex that would have been present on the site prior to historic clearing;
2. The species used will be able to tolerate the site conditions without the requirement for water; and
3. The species will be quickly established to ensure the soil is stabilised.

Table 3: Native Species Recommended for Rehabilitation

Species	Common Name	Life Form
<i>Eucalyptus gomphocephala</i>	Tuart	Tree
<i>Corymbia calophylla</i>	Marri	Tree
<i>Eucalyptus marginata</i>	Jarrah	Tree
<i>Banksia attenuata</i>	Slender Banksia	Tree
<i>Banksia menziesii</i>	Menzies Banksia	Tree
<i>Acacia pulchella</i>	Prickly Moses	Sedge to 1m
<i>Patersonia occidentalis</i>	Purple Flags	Herb to 1m
<i>Calothamnus quadrifidus</i>	One-sided Bottlebrush	Shrub to 2m
<i>Eremaea pauciflora</i>	Orange Flowered Eremaea	Shrub to 2m
<i>Daviesia divaricata</i>	Bitter-peas	Shrub to 2m
<i>Daviesia triflora</i>	Three Flowered Pea	Shrub to 1m
<i>Hardenbergia comptoniana</i>	Native Wisteria	Climber
<i>Bossiaea eriocarpa</i>	Common Brown Pea	Shrub to 1m

4.2 Weeds

Weeds most likely to infest a sandy rehabilitation site in the Baldivis area are outlined in Table 4. Weeds were deemed as likely to occur as there are known infestations around the site such as Cotton Bush or the species have been previously planted on the site and may have a seed bank in topsoil, such as Olives. These weeds will need to be removed if found to occur on the site.

In addition, any Weeds of National Significance (WoNS), Declared Pests under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) or significant weeds identified in the City of Rockingham will need to be controlled.

Table 4: Weed Species and Management

Scientific Name	Common Name	Management*	Timing
<i>Cenchrus setaceus</i>	Fountain Grass	Dig out small infestations, slash in winter and/or spray with 1% glyphosate + penetrant in spring to autumn. Follow up seedling control and treatment until regrowth ceases.	Mar to May and Nov to Dec
<i>Cortaderia selloana</i>	Pampas grass	Cut out small plants, remove uprooted plants to avoid them resprouting. Treat young plants with 13ml/L Fusilade Forte® + spray oil or for generic fluazifop-p (212g/L active ingredient) 8mL/L + spray oil. May require more than one application. Alternatively foliar spray glyphosate at 4%. Remove flower heads. Slash/burn clumps. Spray regrowth with 1% glyphosate in spring.	Jul to Nov
<i>Gomphocarpus fruticosus</i>	Narrowleaf Cotton Bush	Hand pull small plants, ensuring removal of as much root material as possible. Hand removing plants with mature fruits can lead to release and rapid spread of wind dispersed seed. Foliar spray with 1.5% glyphosate or try cut and paint using 50% glyphosate.	Year round
<i>Gaudium laevigatum</i>	Coastal Tea Tree	Hand pull seedlings. Fell mature plants. Resprouting has been recorded in some areas. Where resprouting has been observed, apply 250 ml Access® in 15 L of diesel to bottom 50 cm of trunk (basal bark). Slash, fell, mulch. Spray regrowth until just wet – 100mL Grazon® plus Pulse® in 10L water. Standing plants (thickets) 10L/ha glyphosate plus 0.25% Pulse® for overall spraying or 100mL glyphosate (450g/L) plus 25mL Pulse® in 10L water – spot spraying. Individual plants 200mL Access® in 10L diesel applied to the lower 50cm of each trunk in spring. Seedlings Manually remove seedlings 1 – 2 years. Older seedlings cut 2cm below the soil surface.	Year round
<i>Olea europaea</i> subsp. <i>cuspidata</i>	Wild Olive	Hand pull or dig out seedlings and small plants ensuring removal of all roots. For mature plants cut to base and paint 50% glyphosate or apply 250 ml Access® in 15 L of diesel to base 50 cm of trunk (basal bark).	Oct to Jun
<i>Ricinus communis</i>	Castor Oil Plant	Hand pull seedlings and small plants, ensuring roots are removed. Cut and paint using 50% glyphosate or apply 250 ml Access® in 15 L of diesel to base 50 cm of trunk. Foliar spray seedlings and small plants using 1% glyphosate.	Nov to Jun

Scientific Name	Common Name	Management*	Timing
<i>Schinus terebinthifolia</i>	Brazilian Pepper Tree	Hand pull seedlings ensuring removal of all root material. Stem inject older plants using 50% glyphosate or basal bark with 250 ml Access® in 15 L of diesel to bottom 50 cm of trunk during summer. Avoid root disturbance until trees are confirmed dead	Dec to Mar
<i>Tribulus terrestris</i>	Caltrop	Hand removal can be effective for small infestations, care must be given to removing the deep tap root and the seeds should be burnt. Herbicide use can also be effective, spraying needs to be done before seeds set and repeated for each germination of seedlings. Pasture management or renovation to provide competition is often the key to caltrop control in pasture.	Year round
<i>Watsonia meriana</i> var. <i>bulbillifera</i>	Watsonia	Wipe individual leaves with glyphosate 10% or spray dense infestations with 2,2-DPA 10 g/L + Pulse®. Apply just as flower spikes emerge at corm exhaustion.	Sep

* Sourced from Florabase, 2024

4.3 Completion Criteria

The rehabilitation will be considered to be complete when the following have been achieved:

- An average of two plants per square metre after 3 years from the initial seeding;
- Stabilised surface that mitigates dust; and
- No WoNS or Declared Pest species from Table 4 present on the site.

4.4 Monitoring

The site will be monitored in winter and spring for 3 years following initial seeding to assess the establishment and cover of the seeded species.

The winter and spring monitoring will also identify and map any infestations of Priority weeds as identified in Section 3.6.

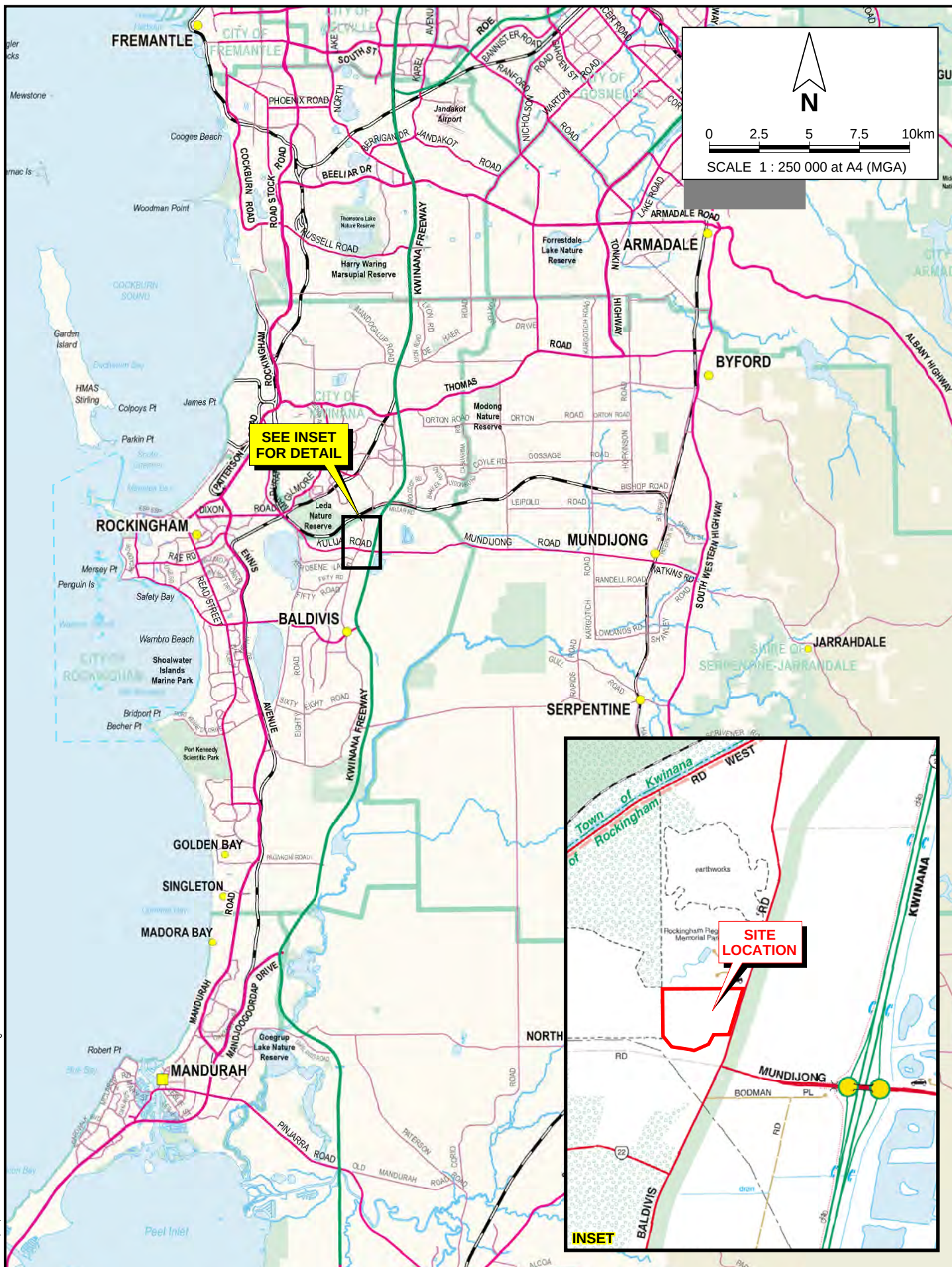
4.5 Contingency Plan

Any areas greater than 100m² that do not meet the completion criteria one year after seeding or are deemed to not be growing sufficiently to meet the completion criteria in the near future will be re-seeded.

5 REFERENCES

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FIGURES



pgv ENVIRONMENTAL

Aigle Royal
ENVIRONMENTAL MANAGEMENT PLAN
LOTS 1, 2 AND 803 BALDIVIS ROAD, BALDIVIS

Drawn: J. Cabot

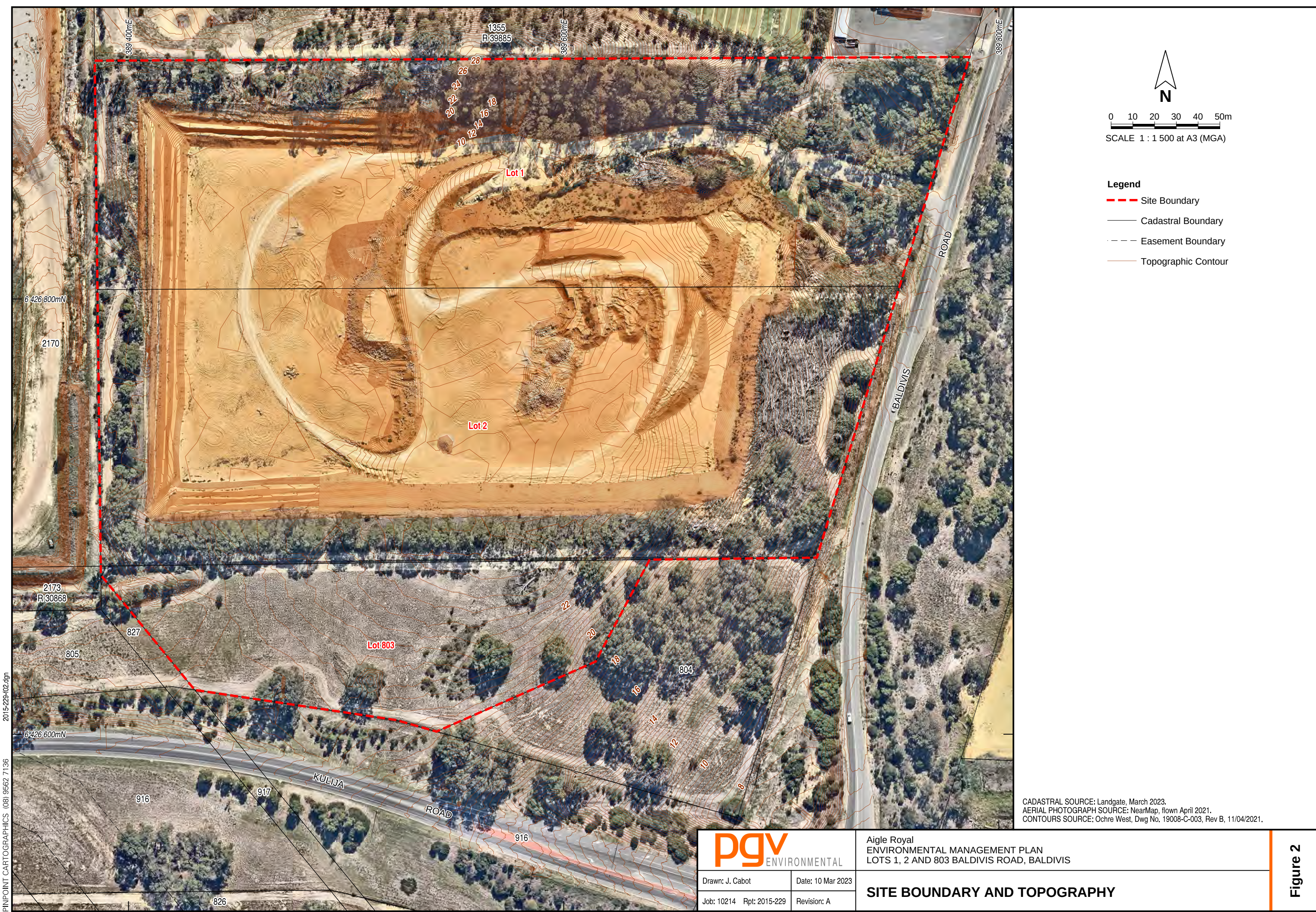
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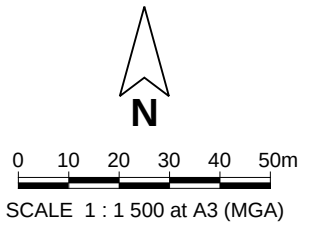
Job: 10214 Rpt: 2015-229

Revision: A

SITE LOCATION

Figure 1





- Legend**
- Site Boundary
 - Cadastral Boundary
 - - - Easement Boundary
 - ▨ Proposed Excavation Footprint

CADASTRAL SOURCE: Landgate, March 2023.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown April 2021.
EXCAVATION SOURCE: Ochre West, Dwg No. 19008-C-003, Rev B, 11/04/2021.

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Drawn: J. Cabot
Date: 10 Mar 2023
Job: 10214 Rpt: 2015-229
Revision: A

Aigle Royal
ENVIRONMENTAL MANAGEMENT PLAN
LOTS 1, 2 AND 803 BALDIVIS ROAD, BALDIVIS

PROPOSED EXCAVATION FOOTPRINT

APPENDIX 1

Sand Extraction Development Approval

3. All vehicles, equipment and machinery used on the site must not use reversing beepers unless those beepers are required for the safe conduct of operations on the site (in accordance with the provisions of the *Occupational Safety and Health Regulations 1996* (WA) and the *Environmental Protection (Noise) Regulations 1997* or it is demonstrated to the written satisfaction of the City that no acceptable alternative exists. Any reversing alarm on any vehicle, piece of equipment or machinery shall be broad-band reversing alarms, for example, 'croakers'.
4. The Excavation Management Plan prepared by Ochrewest Consulting Engineers, Revision C, dated September 2021 and approved by the City of Rockingham must be observed and performed in accordance with the tenor of its provisions at all times.
5. Dust management (provisions, contingency arrangements and monitoring) is to comply with Classification 3 requirements from 1 April to 30 September, and Classification 4 requirements from 1 October to 31 March, as specified in "*A guideline for managing the impacts of dust and associated contaminants from land development sites, contaminated sites remediation and other related activities*" (DEC 2011).

If in the opinion of the City, any of the extraction operations on the site are generating an unreasonable amount of dust, or that any of those operations are not compliant with any of the conditions of this approval the City may direct in writing that:

- (i) All operations must cease on site immediately; and/or
 - (ii) Remediation works be undertaken to rectify the non-compliance within a specified time period; and/or
 - (iii) An amended Dust Management Plan is to be submitted and approved; and/or
 - (iv) The activities on the site are brought into compliance with this approval.
6. In accordance with the approved Extraction Management Plan referred in condition 4 of this Approval, no crushing or blasting is permitted on site at anytime for the duration of the Approval.
7. All Extractive Industry traffic access and egress must be obtained from a paved and drained access point at Lot 1 Baldivis Road. This access point shall remain free and clear at all times.
8. All vehicle movements along Baldivis Road must not obstruct or impede the movement of funeral processions or mourner's vehicles from entering and exiting the Rockingham Regional Memorial Park at any time. The applicant/owner is to liaise with the Metropolitan Cemetery Board to coordinate vehicle movements on Baldivis Road.
9. Haulage vehicles are not permitted to park along Baldivis Road or Kulija Road at any time.
10. The hours of operation for haulage of material and operation of earth moving equipment associated with the extractive industry, the subject of this approval, is only permitted between the hours of 7:00am to 5:00pm Monday to Saturday, and not at all on Sunday or Public Holidays, in accordance with the endorsed plans and management reports referred in this Approval.
11. A minimum AHD of 8.7m shall be maintained across the extraction site at all times.
12. No stormwater drainage is to be discharged onto the Kulija Road Reserve.

13. A vegetated earth bund shall be established and maintained for the duration of the development on the south western corner of the site, as shown on the approved plan referred to in condition 1 of this approval, to provide screening from Kulija Road. Detailed drawings of the screening treatment/s and bund shall be provided including the types, sizes, density and heights of vegetation and fencing. Elevations and sectional drawings shall be provided to the City prior to any extraction activities commencing on site.
14. A landscape plan must be submitted to and approved by the City, prior to any extraction activities occurring on site, for the revegetation of the designated boundary setbacks, and to the batters between the approved development area and the setback area.

The landscape plan must:

- (i) Be prepared by a suitably qualified and experienced Landscape Architect;
 - (ii) Identify existing vegetation to be retained within the setbacks;
 - (iii) Demonstrate sufficient screening is maintained along the eastern, northern and western boundaries;
 - (iv) Include the earth bund and treatments required by condition 13;
 - (v) Include all proposed fencing treatments for the site, inclusive of heights and any materials to be used to protect view amenity;
 - (vi) Detail the specifications of any proposed fill material and/or topsoil proposed to be applied within the development area, including depth, stabilisation measures and compaction, soil permeability and slope stabilisation and erosion management measures, including measures to mitigate potential impacts on embankment drainage;
 - (vii) Include overstorey and understorey vegetation endemic to the Baldivis area and associated with the Karrakatta, Cottesloe (Central and South) or Serpentine River Vegetation Complexes (as mapped by Heddle *et al* 1980);
 - (viii) Planting plan must include plant species list with plant size at time of planting; and
 - (ix) Implemented at an agreed time and maintained at all times to the satisfaction of the City (suggested implementation to occur at the onset of winter 2022).
15. The batter at the extraction area boundary is to be suitably stabilised with organic mulch material and planted with groundcover species endemic to the Baldivis area and associated with the Karrakatta, Cottesloe (Central and South) or Serpentine River Vegetation Complexes (as mapped by Heddle *et al* 1980).
16. The batter slope abutting Kulija Road is to be a minimum 1:4 slope. No earth works shall encroach onto the Kulija Road Reserve. The ground levels on the Kulija Road reserve are to be maintained as existing.
17. No vegetation removal is permitted outside the approved excavation area. The excavation area shall be clearly delineated on site and in accordance with the setbacks and site boundaries as shown on the approved plans referred to in condition 1 of this approval.
18. Secure fencing to the extraction area shall be installed prior to extraction commencing on site. Any gateways shall be locked when not in operation. All fencing and gates shall be maintained in good repair for the duration of the use to the satisfaction of the City of Rockingham.
19. Warning signs shall be erected and maintained along the boundaries of each area to be excavated so that each sign:
 - (i) is not more than 200m apart;
 - (ii) is not less than 1.2m in height and not less than 1m wide; and
 - (iii) bears the words "DANGER EXCAVATIONS KEEP OUT".

20. The applicant/landowner shall have a Complaints procedure in place for the duration of the Extractive Industry that addresses, but is not limited to, the following:
- (i) A telephone number or numbers and an email address or addresses must be maintained through which complaints concerning the development may be made at any time. These details shall be clearly displayed on site at the entry to the site and at the site office.
 - (ii) The owners and occupiers of properties within 500 metres of any boundary of the land must be advised not less than once every calendar year in writing of the telephone number or numbers and the email address or addresses.
 - (iii) A complaints log must be kept in which the following is to be recorded:
 - a) The date and time of each complaint made and received;
 - b) The means (telephone or email) by which the complaint was made;
 - c) Any personal details of the complainant that were provided or, if no details were provided a note to that effect;
 - d) The nature of the complaint;
 - e) The steps or actions taken in, and the time of, the response of each complaint, including any follow up contact with the complainant; and
 - f) If no actions or steps were taken in relation to the complaint or enquiry, then the reasons why no action or steps were taken.
 - (iv) A response must be made to every complaint received as soon as possible but in any event within 3 working days after receipt of the complaint.
 - (v) The complaints log must be provided to the City on demand.
 - (vi) A copy of any report prepared and submitted to the Department of Environment Regulation (as required by and forming part of the operator's monitoring and reporting requirements contained in any licence or approved issued by the Department must be provided to the City concurrently with the report being provided to the Department.
21. Within 45 days of the commencement of extraction works, a Rehabilitation Management Plan is must be prepared and submitted to the City and Main Roads WA for approval. All Rehabilitation work specified in the approved Rehabilitation Management Plan must be completed no later than 6 months after the earlier of:
- (i) the expiry of the approval period; and
 - (ii) the lapse of this approval.
- All works shall cease upon the expiry of the 45 day period where a rehabilitation management plan has not been submitted to the City for its approval.
22. In accordance with the staging of the extraction, as shown on the approved plans referred to in condition 1 of the approval, no excavation work is to be commenced on the second or any subsequent stage unless:
- (i) all excavation work on the previous stage has ceased; and
 - (ii) rehabilitation work on the previous stage has commenced.

23. Within six months of completion of all extraction works on site, the subject of this approval or the lapsing of this approval, whichever occurs first, a Report certifying that all landfill and rehabilitation works have been carried out must be submitted to the City of Rockingham.
24. Within 21 days of the date of this Approval (being 7th October, 2021), the applicant/landowner shall remove all waste/debris/rubble associated with the demolition of the pre-existing dwellings on Lot 1 and Lot 2 Baldivis Road and other stockpiles (including green waste) from the site to the satisfaction of the City. Photographic evidence shall be provided to the City demonstrating compliance.
25. If Baldivis Road is damaged from haulage vehicles attributed to the Extractive Industry, the applicant shall rectify such damage to the satisfaction and specifications of the City at their full cost.
26. This approval is valid for a period of 2 years only, commencing on the date of the issue of this approval. No further development inclusive of any works associated with this approval are to be undertaken upon expiry with the exception of rehabilitation works.
27. Approval to Commence Development must be separately obtained from the Western Australian Planning Commission under the provisions of the Metropolitan Region Scheme prior to the commencement of any development on site.

Date of determination: 16th September 2021

FOOTNOTES TO APPROVAL

1. Where an approval has so lapsed, no development must be carried out without the further approval of the local government having first been sought and obtained.
2. If an applicant or owner is aggrieved by this determination there is a right of review by the State Administrative Tribunal in accordance with the *Planning and Development Act 2005* Part 14. An application must be made within 28 days of the determination.
3. This Approval relates to the details provided in the application; to undertake the development in a different manner to that stated in the application a fresh application for Planning Approval must be submitted to the City.
4. A Building Permit must be obtained prior to construction; the applicant and owner should liaise with the City's Building Services in this regard.
5. The subject area is located in the Stakehill Groundwater area (Tamworth Swamp subarea) as proclaimed under the Rights in Water and Irrigation Act 1914. Any groundwater abstraction in this proclaimed area for purposes other than domestic and/or stock watering taken from the superficial aquifer, is subject to licensing by the Department. The issuing of a groundwater licence is not guaranteed but if issued will contain a number of conditions that are binding upon the licensee.
6. In relation to Condition 11, a minimum vertical separation distance of 2m to the highest-known water table level, must be maintained for the duration of the development.

7. Under section 51C of the Environmental Protection Act 1986 (EP Act), clearing of native vegetation is an offence unless undertaken under the authority of a clearing permit, or the clearing is subject to an exemption. Exemptions for clearing that are a requirement of written law, or authorised under certain statutory processes, are contained in Schedule 6 of the EP Act. Exemptions for low impact routine land management practices outside of environmentally sensitive areas (ESAs) are contained in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (the Clearing Regulations).
8. In relation to Condition 8, please contact the Western Australian Metropolitan Cemeteries Board on 1300 793 109; email mcb@mcb.wa.gov.au.
9. The development must comply with the Environmental Protection (Clearing of Native Vegetation) Regulations 2004; the applicant and owner should liaise with the Department of Environment and Conservation in this regard.
10. A Permit to Take Water for the use of groundwater may need to be obtained; the applicant should liaise with the Department of Water in this regard.
11. A Works Approval may be required for Prescribed Premises from the Department of Environment Regulation. Further information on licenced is available at. The applicant is advised to liaise with the Department of Environment Regulation in this regard.
12. If the clearing of native vegetation is likely to impact on significant habitat for threatened black cockatoo species, it may be considered a controlled action under the Environmental Protection and Biodiversity Conservation Act 1999. The applicant should liaise with the Commonwealth Department of the Agriculture, Water and the Environment in this regard.
13. The remnant vegetation on the Lot is protected according to *AS4970-2009 Australian Standard – Protection of Trees on Development Sites* Existing street trees adjacent to the development site and those within the site identified for retention must be protected throughout the course of the project in accordance with Australian Standard AS 4970-2009 Protection of Trees on Development Sites.

Signed:

Date: 16th September 2021



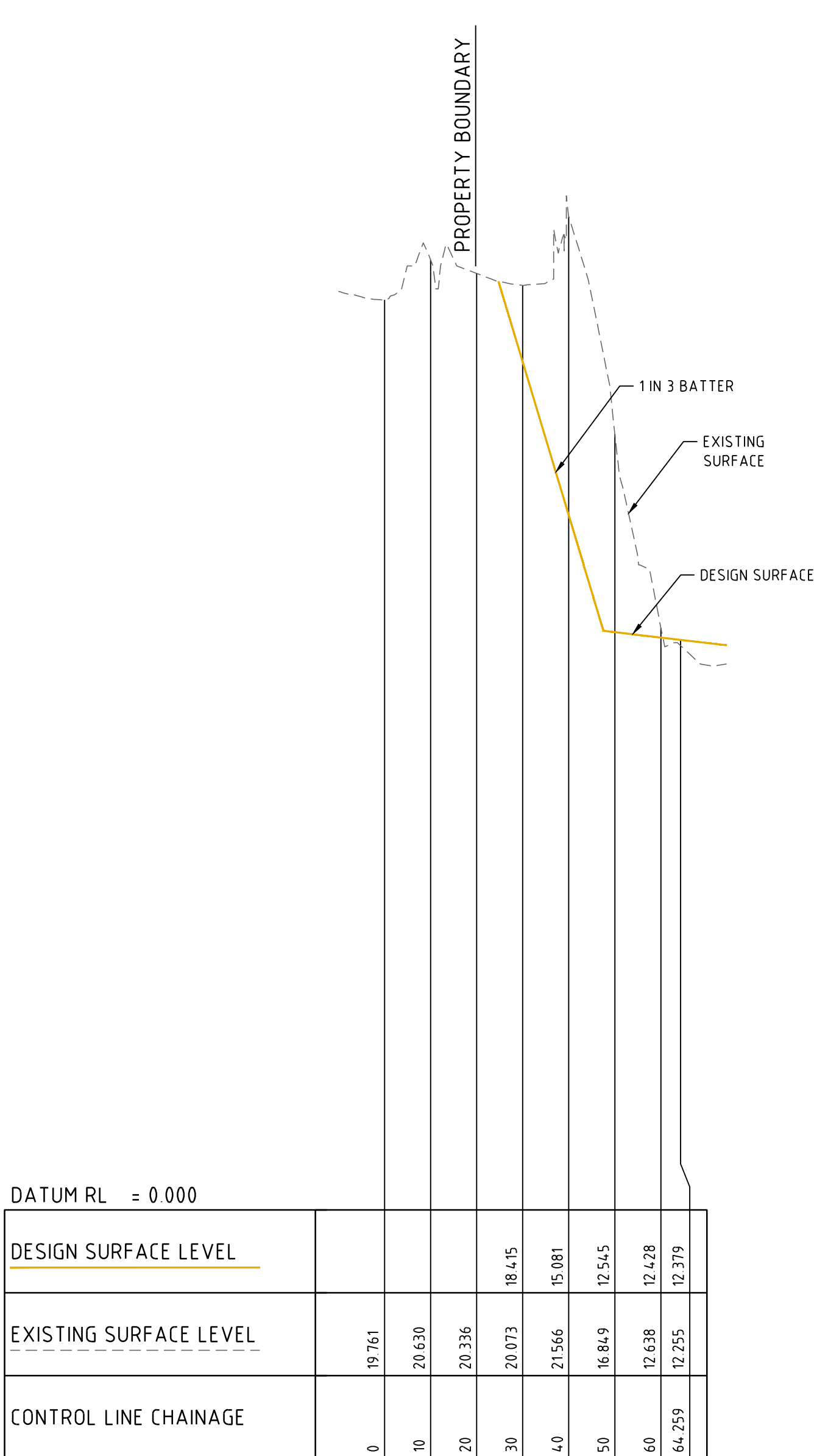
M ROSS
MANAGER STATUTORY PLANNING

for and on behalf of the City of Rockingham

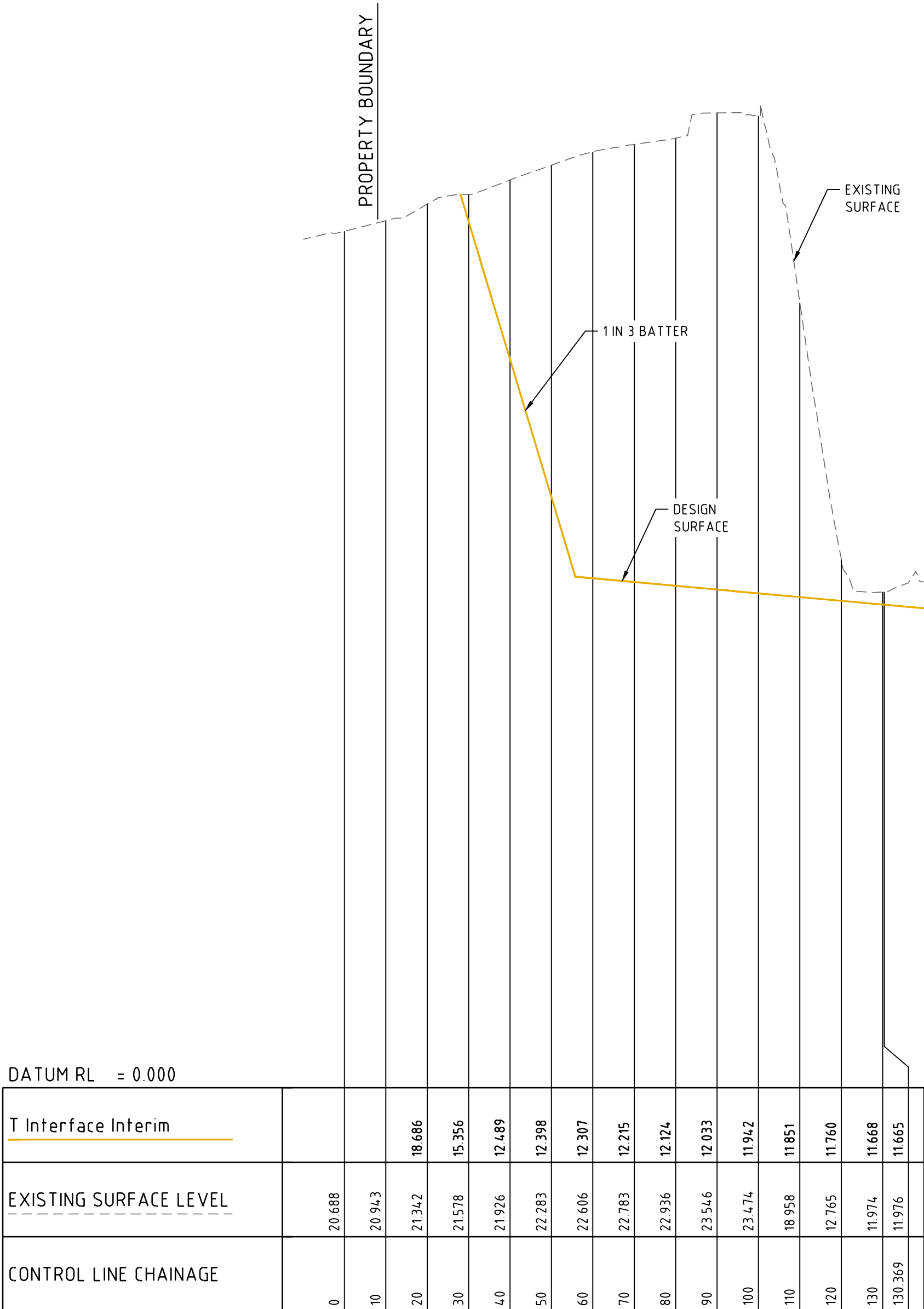
APPENDIX 2

Bulk Earthworks Plan

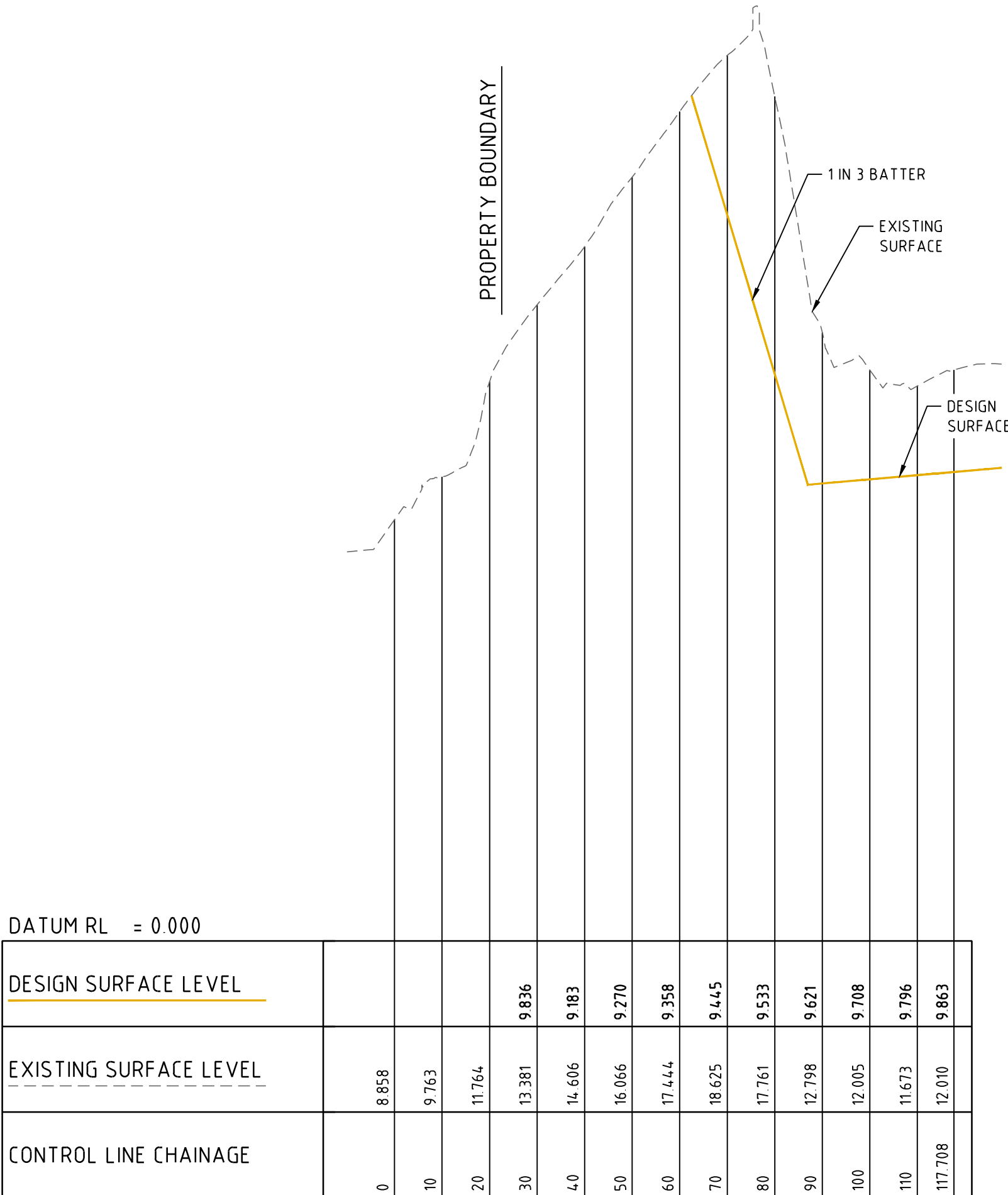
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SECTION A
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

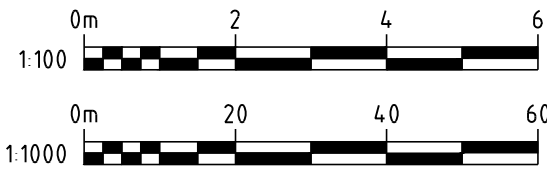
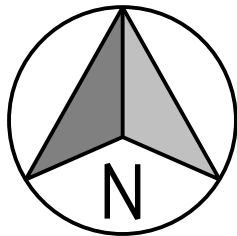


SECTION B
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100



SECTION C
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

D	25 09 24	CT	TL	-	EARTHWORKS AND BATTER BUFFER UPDATED
C	26 08 24	CT	TL		DRAWING TITLE UPDATED
B	16 07 24	CT	TL		SECTION B UPDATED
A	29 11 23	CT	TL		ISSUED FOR INFORMATION
REV	DATE	DRN	CKD	APP	AMENDMENT



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CLIENT AIGLE ROYAL		PROJECT LOT 1, 2 BALDIVIS ROAD, BALDIVIS	
APPROVED	DESIGNED CT	TITLE CROSS SECTIONS FOR FINAL REHABILITATION LEVELS	
	SCALE AS SHOWN	WAPC No.	DRAWING No. 6311-BP-SK02
		REVISION D	

ORIGINAL SIZE
A1