

27 October 2023

Mr Richard Smetana
Environmental Officer
Resource and Environmental Compliance Division
Department of Mines, Industry Regulation and Safety
100 Plain Street
East Perth WA 6004

Dear Richard

Application to amend clearing permit CPS 9707/2

1 Introduction

1.1 Background

GMA Garnet Pty Ltd (GMA) is a wholly owned subsidiary of Garnet International Resources Pty Ltd. GMA owns and operates the garnet mineral sand mining and processing operations in the Mid-West Region, Port Gregory, Western Australia.

GMA previously submitted a native vegetation clearing permit (NVCP) application to clear native vegetation for mining within M70/204 (Figure 1). A NVCP CPS 9707/2 was granted on 30 March 2023.

2 Document purpose

The purpose of this document is to provide supporting information to amend the CPS 9707/2 clearing permit under Section 51k of Part V of the *Environmental Protection Act 1986* to amend the existing clearing permit boundary and increase the clearing extent.

This document is to be read in conjunction with the supporting documentation provided to DMIRS as part of the CPS 9707/2 clearing application – GMA Mining Australia (2022) *Mining Tenement M70/204 and M70/1330 Supporting Documentation for Native Vegetation Clearing Permit Application*.

This document outlines a summary of the survey findings and recommendations.

3 Description of clearing activities

No more than 1.49 hectares of the native vegetation within the green cross-hatched area shown in Figure 1 is proposed to be cleared under this amendment application. The purpose of clearing is to:

- Clearing vegetation for installing a small solar array to power a water bore.
- Clearing vegetation to facilitate the installation of temporary mining infrastructure and relocate existing infrastructure to enable rehabilitation.

Clearing of native vegetation will be undertaken using earthmoving machinery such as a dozer with a scrub rake.

3.1 Flora and vegetation



The following section summarises the vegetation types and conditions mapped within the amendment application area. Information on the conservation of significant flora, ecosystems and fauna is provided in the GMA (2022) *Mining Tenement M70/204 and M70/1330 Supporting Documentation for Native Vegetation Clearing Permit Application*.

230000 m



Legend

CPS 9707-2 Amendment

-  Mining Infrastructure
-  Solar Array

Proposed Mining Infrastructure

Proposed Solar Array



Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Imagery: GoogleMaps 2021
 Grid: GDA 1994 MGA Zone 50

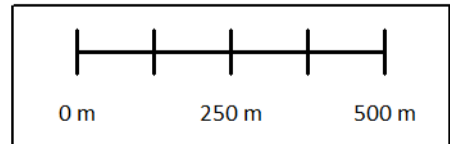


Figure 1
 GMA Garnet
 Port Gregory Mine Site
 Clearing Application Area

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3.1.1 Broad vegetation mapping and extents

Broadscale mapping (1:1,000,000) pre-European vegetation mapping (Beard, 1976) indicates two Beard Vegetation Associations (BVA) were mapped within the application area, including:

- BVA 371 - Low forest.
- BVA 17 – Thicket.

Shephard et al. (2002) have adapted and digitised the pre-European mapping. The extent of vegetation associations has been determined by the State-Wide vegetation extent calculations maintained by the DBCA (current as of March 2019 – GoWA, 2019).

As shown in Table 2, the current extent of BVA 371 is below the 30% retention target of the pre-clearing size at all levels except LGA shown in the table below.

Table 1 Pre-European Vegetation Extent Association (GoWA, 2019)

Pre-European Vegetation Extent Association	Pre-European (ha)	Current extent (ha)	Remaining pre-European extent (%)
Greenough_371			
State	32,816.04	3,499.60	10.66
IBRA Bioregion: Geraldton Sandplains	32,807.53	3,499.10	10.67
Sub-IBRA: Geraldton Hills	32,807.53	3,499.10	10.67
LGA: Shire of Northampton	5,749.92	2,142.08	36.94

3.1.2 Mapped vegetation types and conditions

GHD (2020) mapped one vegetation type within the amendment area, vegetation type 1: *Acacia rostellifera* open woodland to woodland. The vegetation types mapped within the application area are shown in Figure 2.

The vegetation condition within the application area ranged from good to completely degraded (GHD 2020). The application area has been subject to historical grazing and clearing. The vegetation conditions mapped within the application area are shown in Figure 3.

GHD (2020a) undertook a comparison of mapped BVA with the vegetation type recorded within the applications amendment area and concluded the following:

- *Acacia rostellifera* open woodland to woodland with brown to orange sands mapped in the amendment application area and aligns with BVA 17 (*Acacia rostellifera* dense thicket at 6 m in height, principal species comprise of *Alyogyne cuneiformis*, *Pimelea floribunda* and *Melaleuca cardiophylla*).
- BVA 371 (*Acacia* low forest) is located on some flats north of the Hutt River and is a taller version of the *A. rostellifera* thicket exceeding 10 metres in height and is very dense. The *Acacia rostellifera* seems to be a pure stand of that species (Beard and Burns 1976).

Table 2 summarises the GHD (2020) vegetation types mapped in each clearing activity.

Table 2 Mapped Vegetation Types in each Clearing Activity

Clearing Activity	Mapped vegetation type	Comment
Temporary mining infrastructure	VT01, Cleared	
Solar array	VT01	The area has not been previously mapped. The extrapolated vegetation type is vegetation type 1 and is consistent with the vegetation type mapped north and west of the proposed clearing area.

4 Risk Assessment and Management

No additional risks were identified, or management required. Information about the risk assessment is provided in the GMA (2022) Mining Tenement M70/204 and M70/1330 Supporting Documentation for Native Vegetation Clearing Permit Application.

5 Clearing Status

Table 17 summarises the clearing activities and extent undertaken under CPS 9707/2, and Figure 4 identifies the areas where clearing activities have been undertaken. Rehabilitation has not commenced under this clearing permit.

Table 3 Clearing Activities CPS 9707/2

Reporting Periods 1 July to 30 June	Clearing extent (ha)	Date Cleared	Clearing Purpose
2023 -	0.3	21/08 – 20/10/2023	Progress rehabilitation
	3.70	7/08 – 7/09/2023	Pit progression

6 References

EPA (2016) Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment

GMA (2022) Mining Tenement M70/204 and M70/1330 Supporting Documentation for Native Vegetation Clearing Permit Application.

GHD (2020b) Lynton Mine Expansion Biological Survey. Unpublished. Prepared for GMA Garnet.

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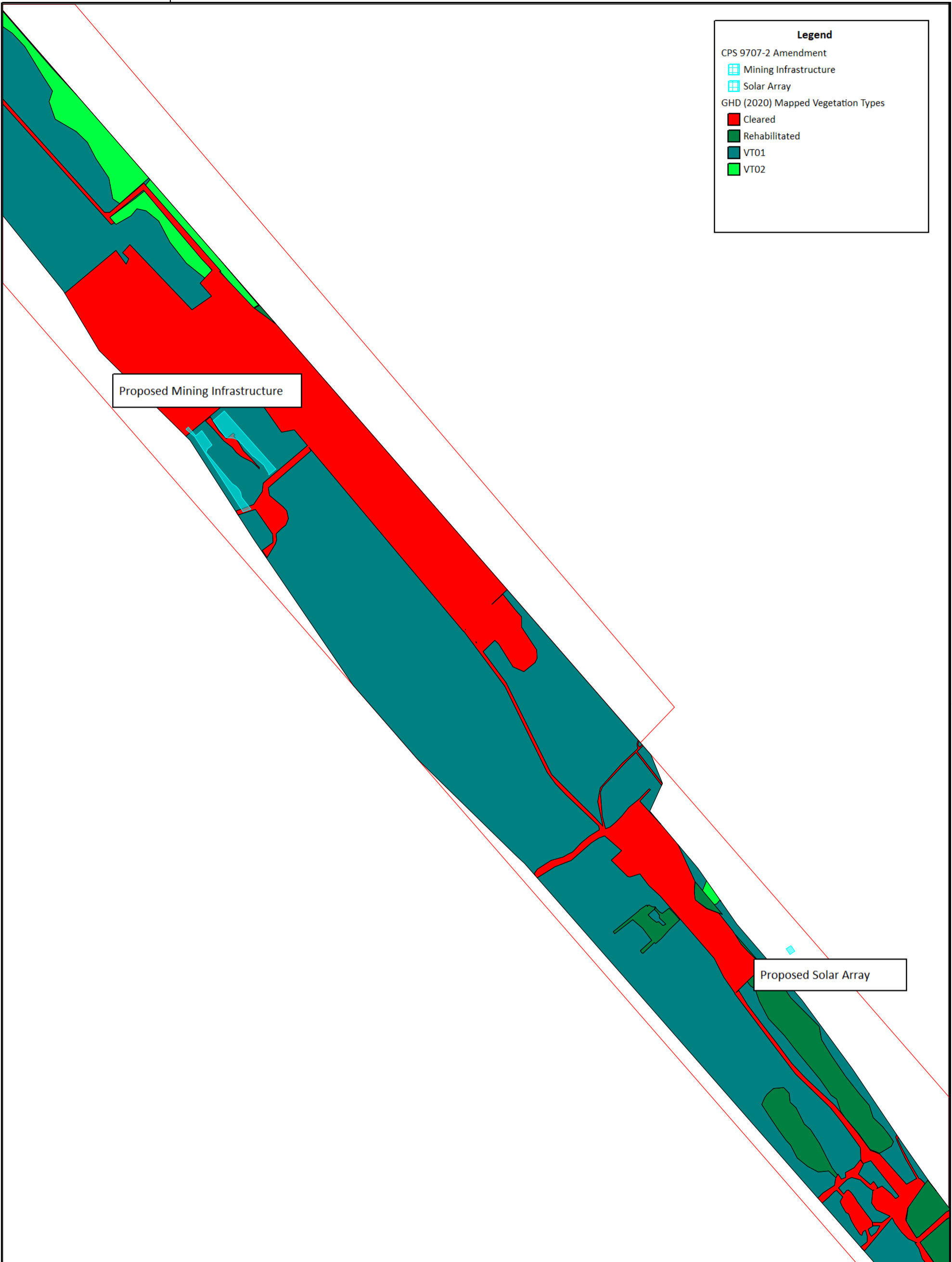
Legend

CPS 9707-2 Amendment

- Mining Infrastructure
- Solar Array

GHD (2020) Mapped Vegetation Types

- Cleared
- Rehabilitated
- VT01
- VT02



Proposed Mining Infrastructure

Proposed Solar Array



Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Imagery: GoogleMaps 2021
 Grid: GDA 1994 MGA Zone 50
 Survey: GHD (2020)

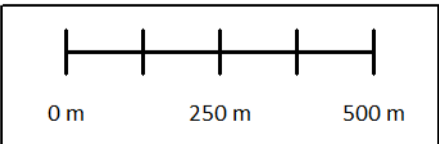


Figure 2
GMA Garnet
Port Gregory Mine Site
Mapped Vegetation Types

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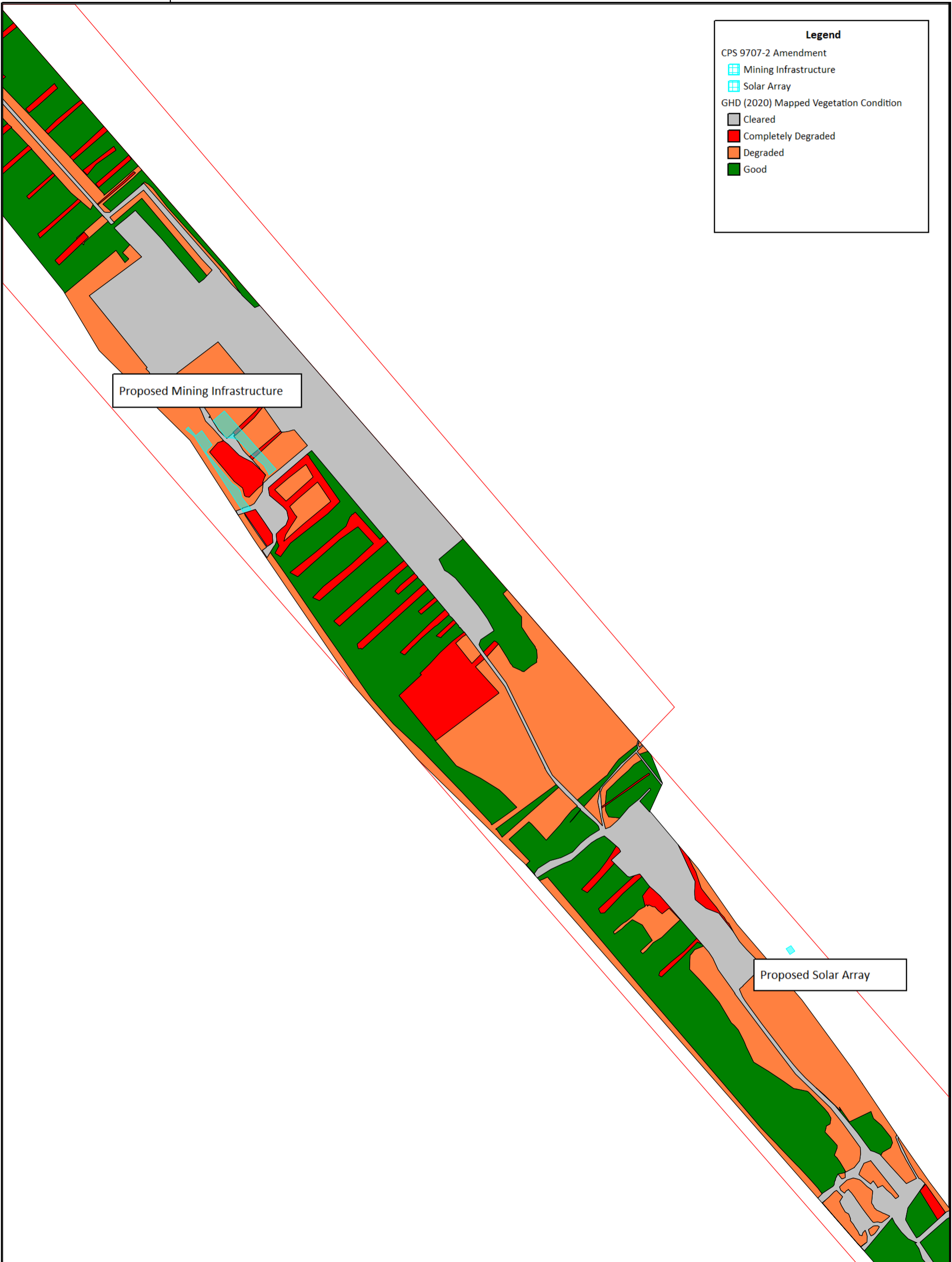
Legend

CPS 9707-2 Amendment

- Mining Infrastructure
- Solar Array

GHD (2020) Mapped Vegetation Condition

- Cleared
- Completely Degraded
- Degraded
- Good



Proposed Mining Infrastructure

Proposed Solar Array



Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Imagery: GoogleMaps 2021
 Grid: GDA 1994 MGA Zone 50
 Survey: GHD (2020)

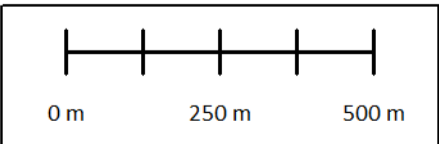





Figure 3
GMA Garnet
Port Gregory Mine Site
Mapped Vegetation Conditions

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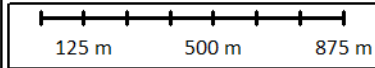
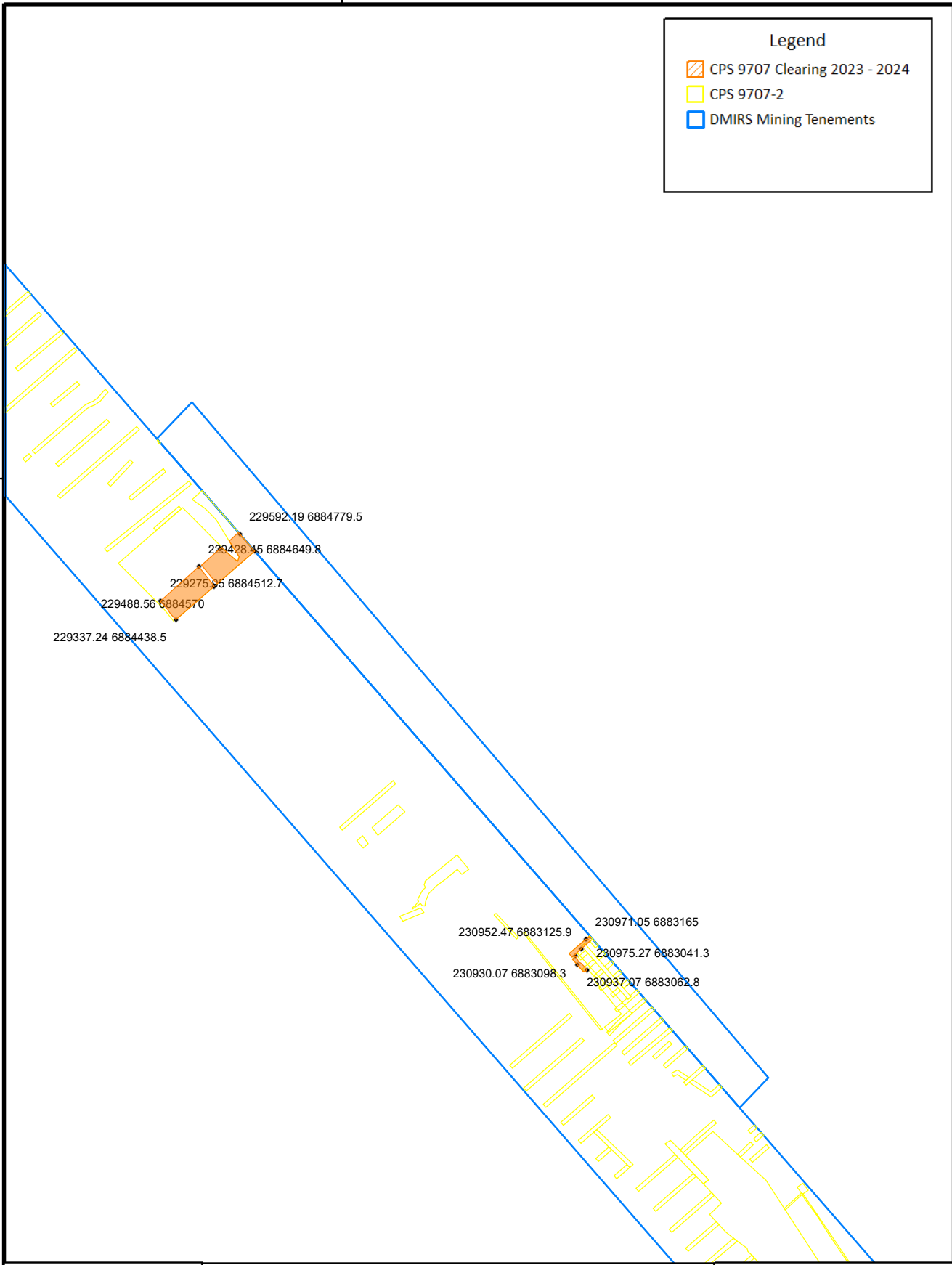
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Legend

-  CPS 9707 Clearing 2023 - 2024
-  CPS 9707-2
-  DMIRS Mining Tenements

6885000

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Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 50



Figure 4
GMA Garnet
Port Gregory Garnet
CPS 9707/2
Clearing
2023 - today

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Should you require any further information, please do not hesitate to contact me.

A handwritten signature in black ink, appearing to read 'SPetts'.

Steven Petts
Environmental Specialist
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