

24 January 2023

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

[REDACTED]

Application to amend clearing permit CPS 9707/1

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). An NVCP CPS 9707/1 was granted on 23 August 2022.

2 Document purpose

The purpose of this document is to provide supporting information to amend the CPS 8819/1 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 9707/1 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 hectare of the native vegetation within the yellow cross-hatched area shown in Figure 1 is proposed to be cleared under this amendment application. The purpose of clearing is to:

- Facilitate access to topsoil stockpiles and vegetative matter required to complete rehabilitation at Lynton. After the works, the cleared area is intended to be rehabilitated to the previous vegetation type.
- Instate a narrow corridor for a new 110 mm HDPE water pipeline. The pipeline is required as part of the Lynton water supply upgrade. The proposed pipeline will be laid on the cleared surface; no topsoil stripping is needed.

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



Legend

- GMA Mining Tenements
- NVCP 9707 Amendment

Rehabilitation - Stockpile Topsoil and vegetation

Proposed Water Pipeline



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

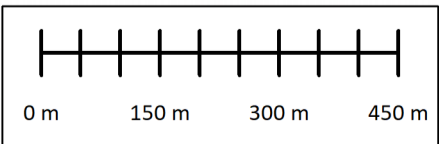


Figure 1
 GMA Garnet
 Port Gregory Mine Site
 Clearing Application Amendment
 CPS 9707/1

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.

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) has adapted and digitised the pre-European mapping. The extent of vegetation associations has been determined by the State-Wide vegetation extents 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.

Some areas within the application area were previously cleared, rehabilitated, or comprised of previously cleared regrowth (GHD, 2020). 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
Rehabilitation	VT01, Cleared	-
Lynton Water Supply Pipeline	VT01, Rehabilitated	Part of 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 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.

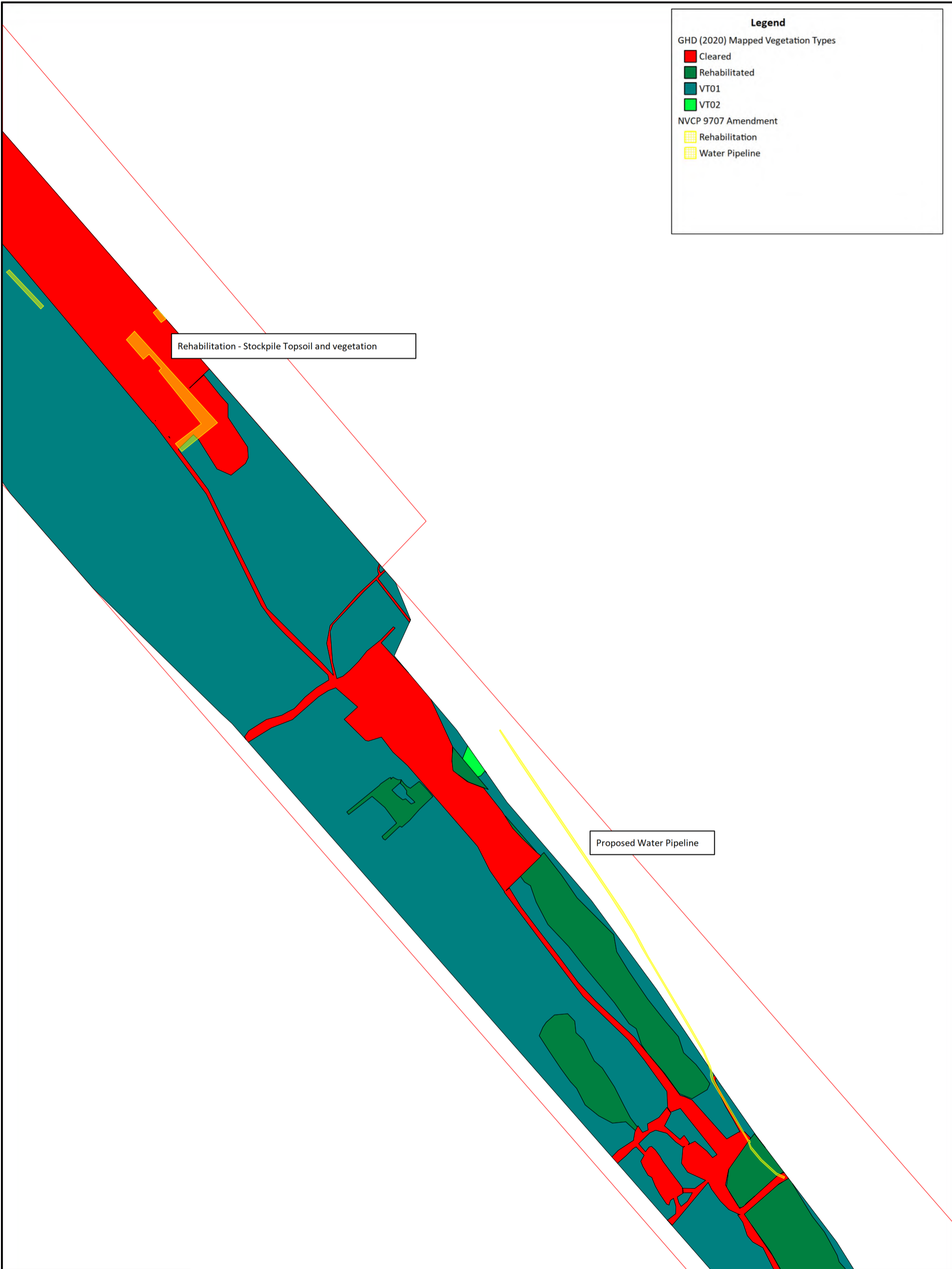
Legend

GHD (2020) Mapped Vegetation Types

- Cleared
- Rehabilitated
- VT01
- VT02

NVCP 9707 Amendment

- Rehabilitation
- Water Pipeline



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

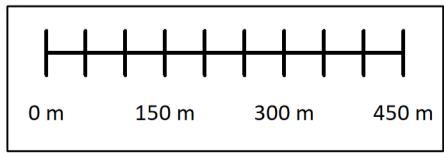


Figure 2
GMA Garnet
Port Gregory Mine Site
Mapped Vegetation Types

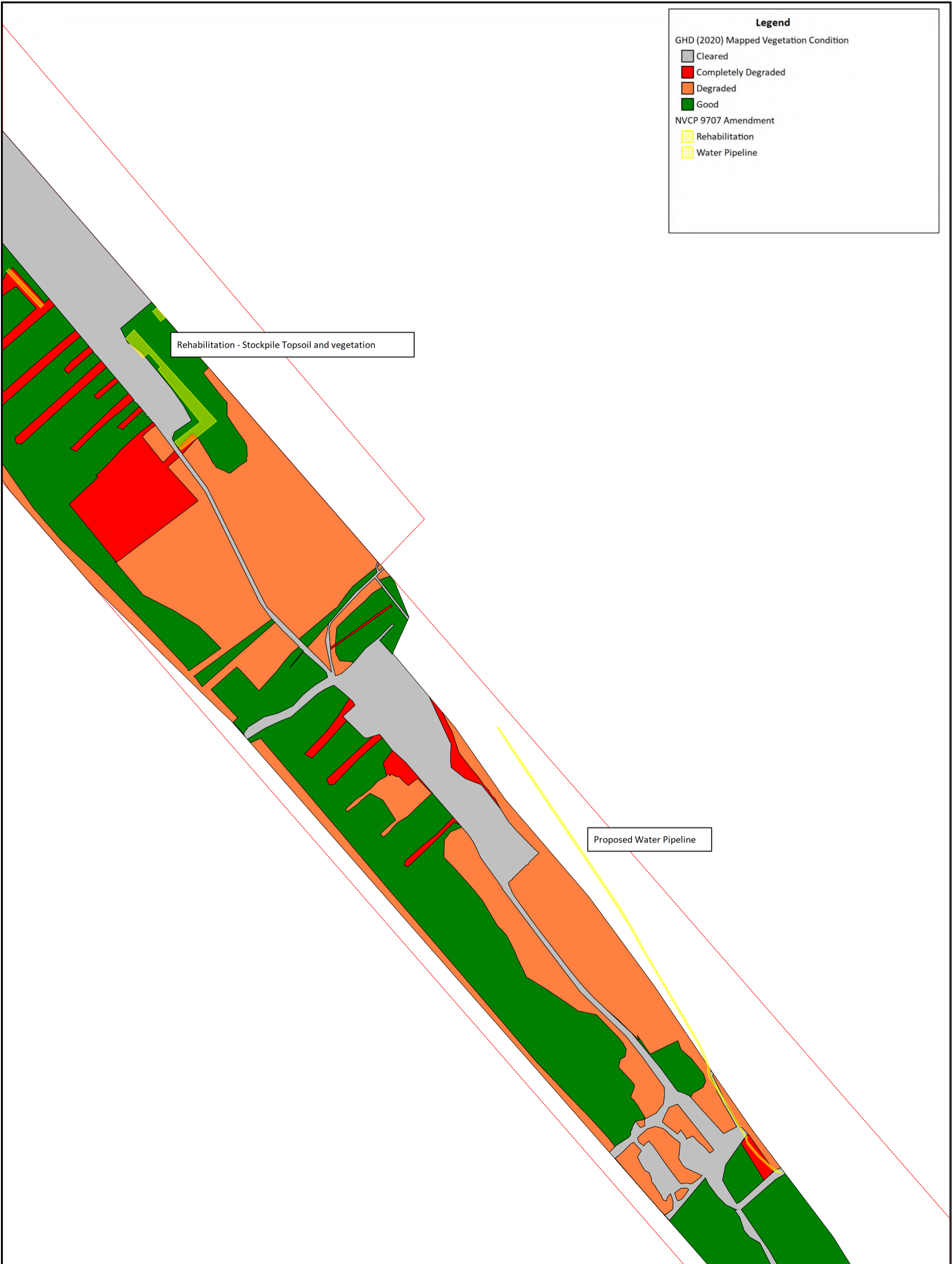
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GHD (2020) Mapped Vegetation Condition

- Cleared
- Completely Degraded
- Degraded
- Good

NVCP 9707 Amendment

- Rehabilitation
- Water Pipeline



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 Horizontal Datum: GDA 1994
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 Survey: GHD (2020)

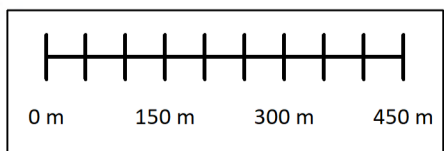


Figure 3
GMA Garnet
Port Gregory Mine Site
Mapped Vegetation Conditions

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