

Telfer-Havieron Gold Mining Project

Proposal Content Document

Table 1: General proposal content description

Proposal title	Telfer – Havieron Gold Mining Project
Proponent name	Greatland Pty Ltd (ABN 92 108 498 997)
Short description	<p>Greatland Pty Ltd acquired the Telfer Gold Mine with existing approval for the recommencement and expansion of operations to include the mining and processing of 400 million tonnes of gold ore at a rate of up to 23 million tonnes per annum, and the transport of copper concentrate to Port Hedland by road. The Telfer project also includes a power supply of up to 100 megawatts to the Telfer Gold Mine using a 440 km long power supply and infrastructure corridor from Port Hedland.</p> <p>The Telfer – Havieron Gold Mining proposal is for the expansion of the Telfer Gold Mine to include the Havieron underground mine, within a development envelope encompassing both the Telfer and Havieron operations and inclusive of a haul road for trucking of ore from Havieron to Telfer for processing, waste rock landforms, evaporation ponds and expanded ground water abstraction, for a combined total of 32 million tonnes of ore production.</p> <p>The proposal is located about 400 km south-east of Port Hedland, in the Great Sandy Desert region of Western Australia. The Telfer Mine is located about 55 km west of the Havieron Gold Mine.</p>

Table 2: Proposal content elements

Proposal element	Location	Existing Proposal extent, capacity, or range (Telfer MS 605, 606 and 650)	Existing Proposal extent, capacity, or range (Havieron Stage 1 approved under secondary approvals)	Proposed amendment (Consolidation of Telfer MS 605, 606 and 650, continued operation of approved Havieron Stage 1, and development and operation of Havieron Stage 2)	Amendments sought under s. 43A	Combined max extent, capacity, or range
Physical elements						
Development Envelope	Figure 1	No Development Envelope previously defined	No Development Envelope previously defined	A single Development Envelope encompassing: <ul style="list-style-type: none"> • Telfer power supply corridor (MS 605 and 650) • Telfer mine operations and associated infrastructure (MS 606) • Havieron stage 1 (mining proposals 89453 and 121684) • Proposed Havieron stage 2 and infrastructure corridor between Havieron and Telfer 	Increase of 1,124 ha from 35,523 to 36,647 ha	36,647 ha
Disturbance Footprint	Figures 6-9	6,607 ha comprising: <ul style="list-style-type: none"> • Telfer power supply infrastructure corridor – 1,500 ha (completed under MS 605, with issuance of MS 650 to amend MS 605 with additional fauna management conditions) 	279 ha comprising: <ul style="list-style-type: none"> • Havieron stage 1 mining proposal rev3 (Registration ID 89453) 203 ha • Havieron stage 1 mining proposal rev4 (Registration ID121684) 76 ha 	Additional 630 ha disturbance	No change	No more than 7516 ha disturbance within a 36,647 ha Development Envelope

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		<ul style="list-style-type: none"> Telfer Mine operational footprint – 4,921 ha (completed under MS 606) 186 ha of historic unaccounted for disturbance at Telfer (prior to MS 605 and MS 606) 				
Waste rock landforms	Figures 6-9	Up to 1,562 million tonnes of waste rock (MS 606)	Up to 260,000 m ³ of waste rock	Addition of five million tonnes of waste rock	No change	Up to 1,567 million tonnes of waste rock
Infrastructure corridor	Figures 6-9	NA	55 km track between Havieron and Telfer	Widening and sealing of track to form a 55 km infrastructure corridor (transport, electricity and water) between Havieron and Telfer	No change	55 km infrastructure corridor
Evaporation ponds	Figure 9	NA	Three evaporation pond cells (ponds 1-3) (maximum operating volume of 132,420 m ³)	Addition of three evaporation pond cells (ponds 4-6) (maximum operating volume of 477,130 m ³)	No change	Six evaporation ponds with a total maximum operating volume of 609,550 m ³ and an evaporation surface area of 60 ha
Raw water ponds	Figure 9	NA	NA	Addition of raw water storage ponds (5 ha)	No change	Up to 5 ha raw water storage ponds

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Havieron permanent camp	Figure 9	NA	NA	NA	Addition of permanent camp at Havieron (9 ha)	Up to 9 ha permanent camp at Havieron
Operational elements						
Clearing of secondary habitat for Greater Bilby Clearing of critical habitat that may be used by Greater Bilby	Figures 6-9		No clearance of secondary habitat	465 ha associated with clearance for the infrastructure corridor	Removed as per discussion with EPAS. Clearance is covered in Physical Elements (Land disturbance footprint)	NA
Clearing of secondary seasonal foraging habitat for Night Parrot	Figures 6-9		No clearance of secondary seasonal foraging habitat	509 ha associated with clearance for the infrastructure corridor	Removed as per discussion with EPAS. Clearance is covered in Physical Elements (Land disturbance footprint)	NA
Mining of gold copper ore	Within Development Envelope	Up to 29 million tonnes of ore per year (including dump leach ore)	NA	Addition of up to three million tonnes of ore per year from the Havieron project		Up to 32 million tonnes of ore per year (including dump leach ore)
Processing throughput of gold copper ore		Up to 26 million tonnes per year	NA	No change	No change	Up to 26 million tonnes per year
Electrical power generation		Up to 160 MW	NA	No change	No change	Up to 160 MW

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Waste rock production		Up to 90 million tonnes per year	NA	No change	No change	Up to 90 million tonnes per year
Tailings production		Up to 550 million tonnes	NA	No change	No change	Up to 550 million tonnes
Tailings to paste plant (for underground backfill)		NA	NA	Up to 21.6 million tonnes	No change	Up to 21.6 million tonnes
Groundwater abstraction for water supply and mine dewatering		Up to 200 ML/year (MS 605) Up to 29,700 ML/year (MS 606)	Abstraction of up to 1,550 ML/year (GWL 202749)	Continued abstraction of up to 1,550 ML/year (GWL 202749) Additional abstraction of up to 450 ML/year at Havieron	No change	Abstraction of up to 31,900 ML/year
Greenhouse gas emissions						
Construction						
Scope 1		Estimated at less than 30,000 t CO ₂ -e	27,132 t CO ₂ -e	A predicted addition of less than 20,000 t CO ₂ -e	No change	Predicted to be less than 77,132 t CO ₂ -e
Scope 2		0 t CO ₂ -e	0 t CO ₂ -e	0 t CO ₂ -e	No change	0 t CO ₂ -e*
Scope 3		Not assessable at that time	Included in combined Havieron GHG assessment	Predicted to be 311 kt CO ₂ -e	No change	Predicted to be 311 kt CO ₂ -e
Operation						

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Scope 1 Annual average ¹		127,356 t CO ₂ -e	Included in combined Havieron Stage 1 and Stage 2 assessment	A predicted addition of 123,510 t CO ₂ -e	No change	250,865.2 t CO ₂ -e per year
Scope 1 Total Life of Mine		1,655,625 t CO ₂ -e	Included in combined Havieron Stage 1 and Stage 2 assessment	A predicted addition of 1,605,626 t CO ₂ -e	No change	A predicted total of 3,261,251 t CO ₂ -e
Scope 2		No scope 2 emissions due to electricity generation from the onsite power station			No change	0 t CO ₂ -e
Scope 3		Included as combined assessment			No change	A predicted annual average of 185 kt CO ₂ -e per year
Rehabilitation						
Progressive rehabilitation at completion or redundancy of feature will be undertaken over the life of the mine to achieve a safe stable and functioning landform which is consistent with the surrounding landscape and other environmental values. Rehabilitation complete within 10 years of cessation of operations.						
Commissioning						
NA						
Decommissioning						
Removal of all above-surface and buried infrastructure within 5 years of cessation of operations. Closure of the project will leave the site in a safe stable condition such that tenements can be relinquished without any future liability for the proponent or the community.						
Other elements which affect extent of effects on the environment						

¹ Peak annual average is equivalent to annual average LOM. Electricity is generated on site and there is no peak/off peak draw from the state power grid.

* No purchased electricity at either Telfer or Havieron and construction power is diesel generators therefore included in Scope 1 estimation.

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Maximum Project Life		Approximately 25 years (MS 606) scheduled depletion of mineral resource 2027	NA	Additional 18 years	No change	43 years
Construction Phase		NA	NA	~ 2.5 years	No change	~ 2.5 years
Operations phase		NA	NA	13 years	No change	13 years
Decommissioning phase		NA	NA	5 years	No change	5 years

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Figure 1 – Comparison of referred s40AA and s43A Development Envelopes - Regional view

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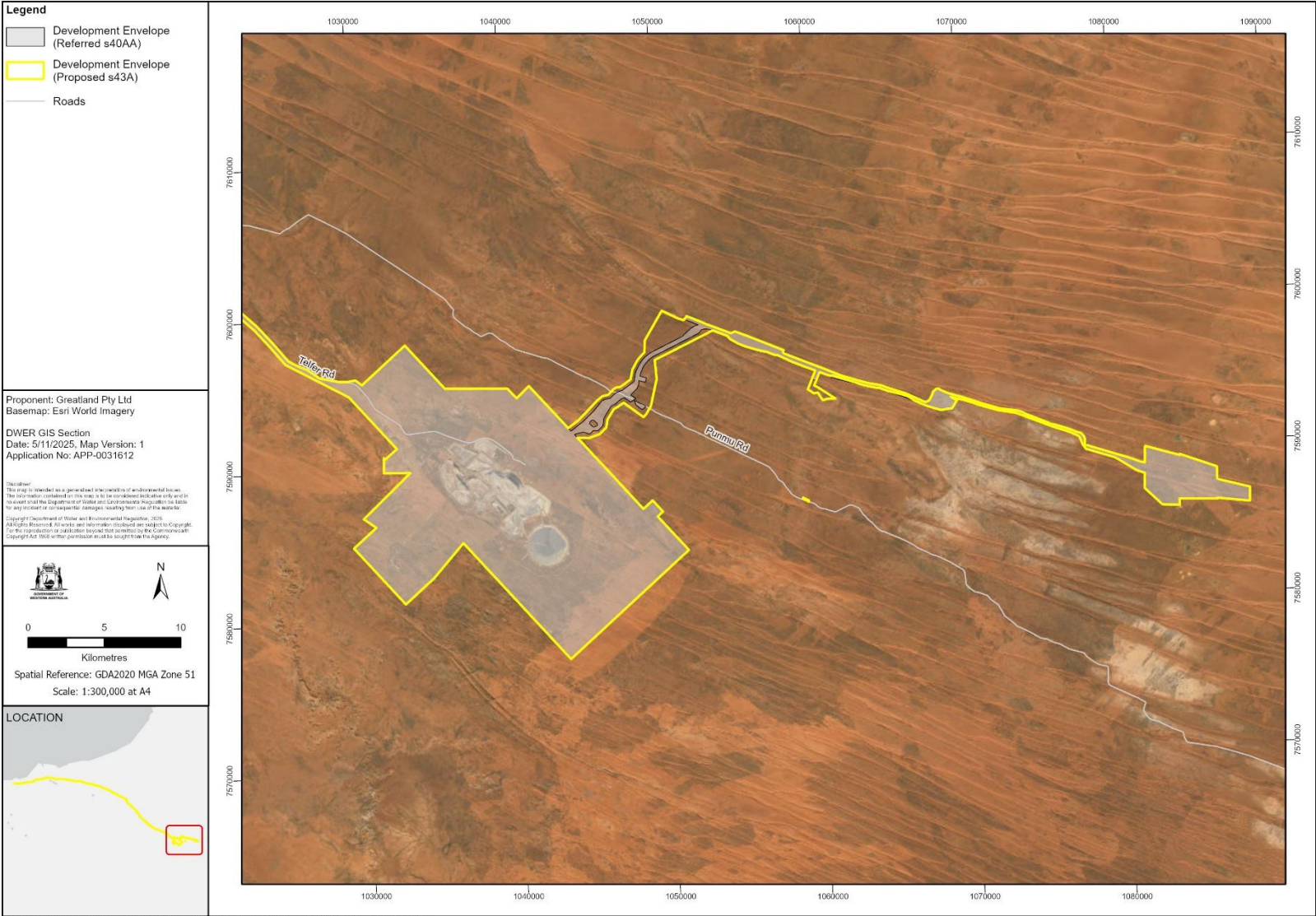


Figure 2 – Comparison of referred s40AA and s43A Development Envelopes – Telfer - Havieron Project Overview



Figure 4 – Comparison of referred s40AA and s43A Development Envelopes – Infrastructure Corridor

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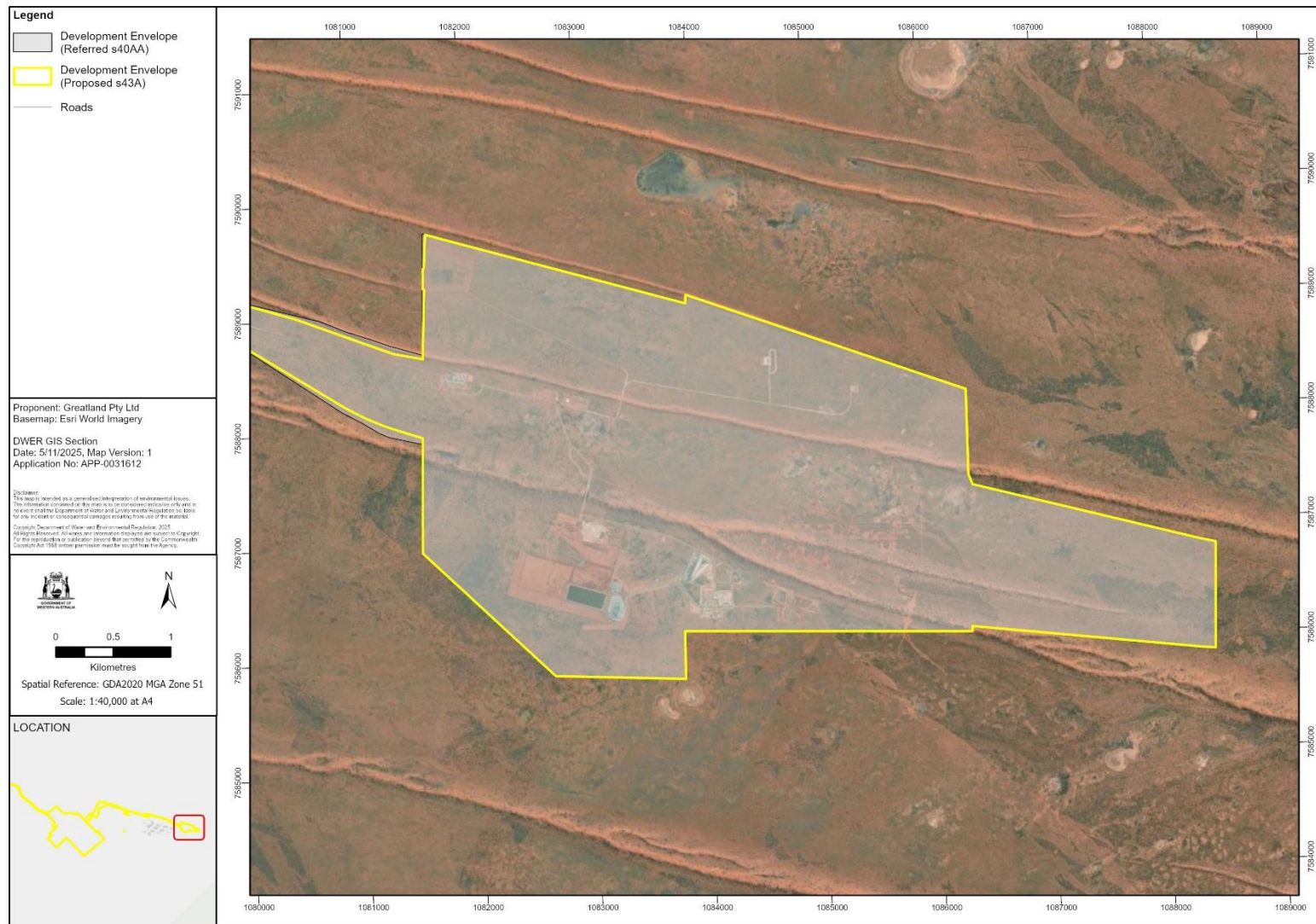


Figure 5 – Comparison of referred s40AA and s43A Development Envelopes – Havieron Mine

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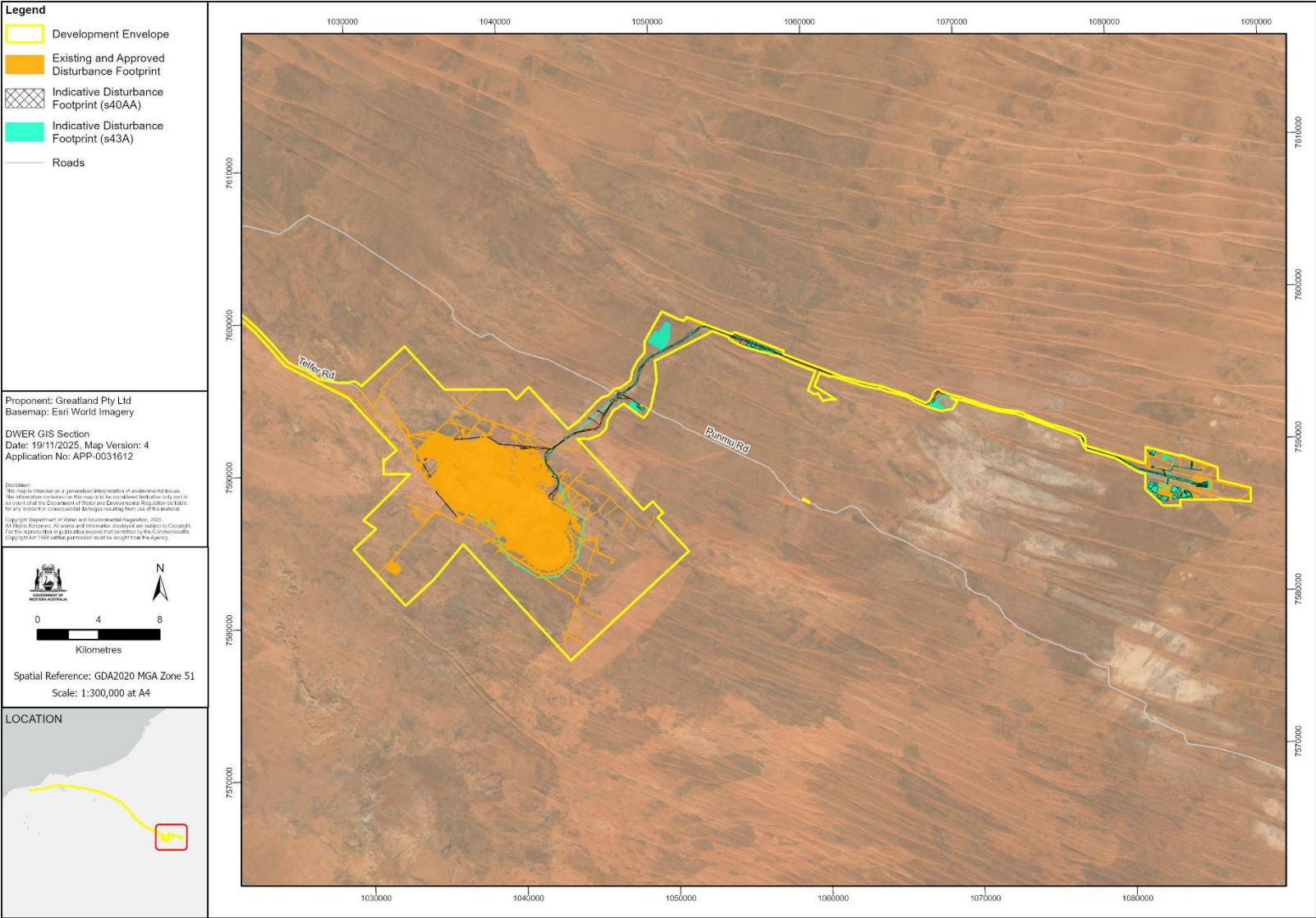
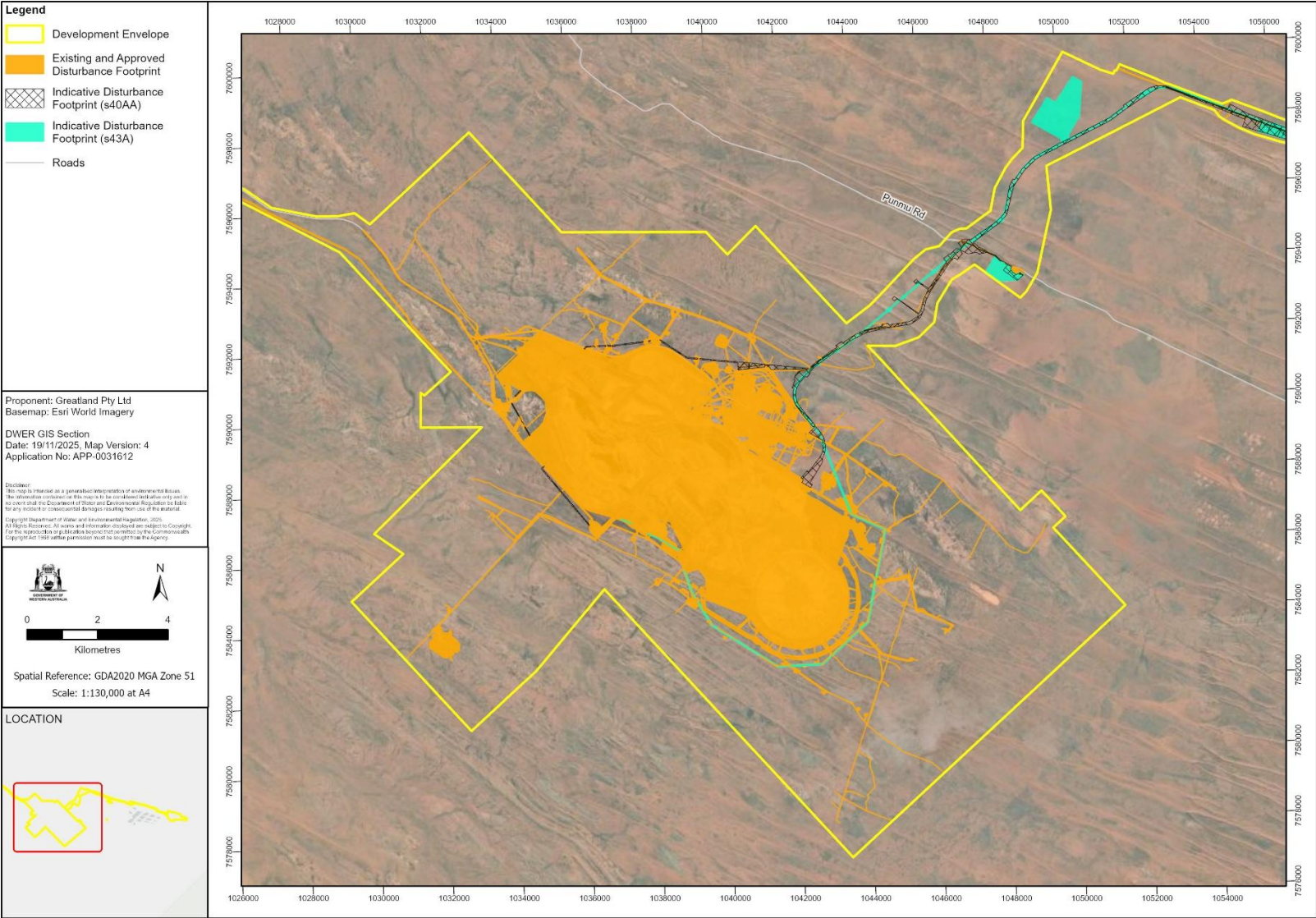


Figure 6 – Comparison of referred s40AA and s43A Indicative Disturbance Footprints – Telfer - Havieron Project Overview

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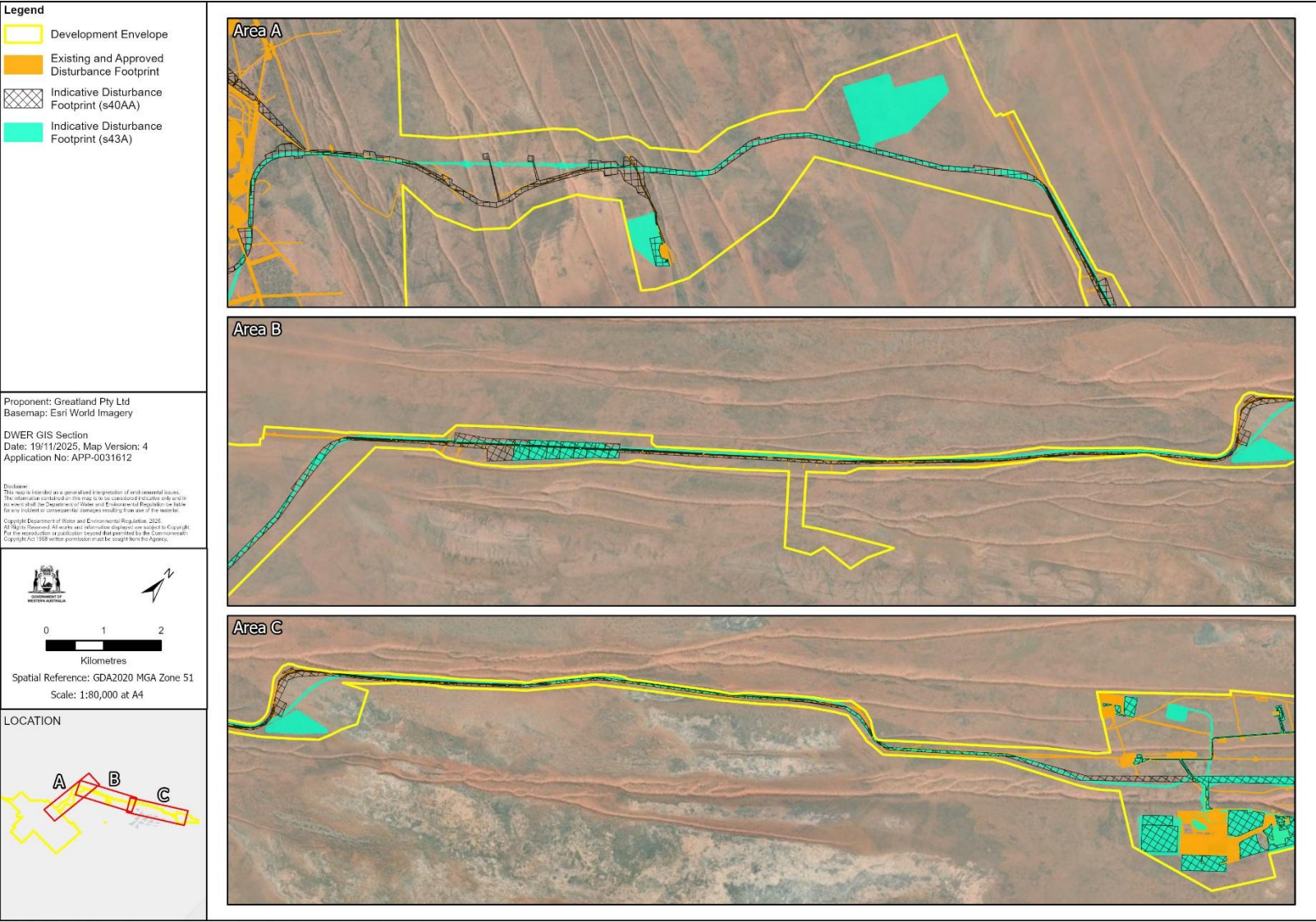


Figure 8 – Comparison of referred s40AA and s43A Indicative Disturbance Footprints – Infrastructure Corridor

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Figure 9 – Comparison of referred s40AA and s43A Indicative Disturbance Footprints – Havieron Mine