

Proposal Content Document

Table 1: General proposal content description

Proposal title	St Ives Renewable Energy Project
Proponent name	St Ives Gold Mining Company Pty Limited (SIGMC)
Short description	<p>The St Ives Gold Mining Company Pty Ltd (SIGMC) proposes to construct a hybrid energy-source powered microgrid on the existing St Ives Gold Mine (SIGM) site, which is located to the South of the town of Kambalda East.</p> <p>The SIGMC operation currently consists of land and lake based mining activity on Lake Lefroy and adjacent land. The operation includes the discharge of mine dewatering to the lake surface, and the construction of mine infrastructure, including open pits, underground operations waste rock dumps and tailings storage facilities.</p> <p>The St Ives Hybrid Microgrid Project (SIHMP - the Project) will consist of a wind farm comprising wind turbine generators (WTG's), a solar farm, thermal generation plant, battery energy storage system (BESS), new substation and associated transmission, power conditioning and supporting infrastructure.</p>

Table 2: Proposal content elements

Proposal element	Location / description	Existing Proposal extent, capacity or range	Proposed amendment	Combined extent, capacity or range
Physical elements				
Existing mine elements, including: <ul style="list-style-type: none"> • Open Pits • Underground portals and mining • Haul roads and access roads • Waste Rock Landforms (WRLs) • Topsoil stockpiles 	Figure 1a, 1b, 1c	Up to 4,061 ha of disturbance for lake-based operations, 5,085 ha of disturbance for land based operations, and 110 ha of riparian zone disturbance within a development envelope of 45,585 ha	No change	Up to 4,061 ha of disturbance for lake-based operations, 5,085 ha of disturbance for land based operations, and 110 ha of riparian zone disturbance within a development envelope of 45,589 ha
Existing processing elements, including: <ul style="list-style-type: none"> • Ore stockpiles • Processing Plant (Lefroy Mill) • Tailings storage facilities • Heap Leach • Process water ponds 			No change	
Existing infrastructure elements, including: <ul style="list-style-type: none"> • Accommodation village • Buildings, including offices, ablutions and crib rooms • Supporting infrastructure 			No change	

Proposal element	Location / description	Existing Proposal extent, capacity or range	Proposed amendment	Combined extent, capacity or range
Renewable infrastructure, including: <ul style="list-style-type: none"> Solar Farm, Thermal Generation Plant and BESS Wind farm (including contingency) Supporting Infrastructure 	Figure 2	Up to 4,061 ha of disturbance for lake-based operations, 5,085 ha of disturbance for land based operations, and 110 ha of riparian zone disturbance within a development envelope of 45,585 ha	Increase of 3.9 ha for supporting infrastructure	Up to 4,061 ha of disturbance for lake-based operations, 5,085 ha of disturbance for land based operations, and 110 ha of riparian zone disturbance within a development envelope of 45,589 ha
Construction elements				
Concrete batching plants	N/A	N/A	N/A	N/A
Operational elements				
Groundwater abstraction for water supply and mine dewatering	A number of groundwater extraction bores across the site	Abstraction of up to 34.015 GL/a	No change	Abstraction of up to 34.015 GL/a
Management of surplus water	Discharged to lake Lefroy	Discharge of up to 30,000,000 tonnes per annum to Lake Lefroy	No change	Discharge of up to 30,000,000 tonnes per annum to Lake Lefroy
Waste rock backfilling	N/A	A minimum of approximately 95 million tonnes and backfilling of sterilised pits	No change	No change

Processing throughput capacity	N/A	Up to 9,000,000 tonnes per annum	No change	No change
TSF capacity	Figure 1a, 1b, 1c	Up to 9,000,000 tonnes of tailings deposited per annum.	No change	No change
Proposal element	Location / description	Existing Proposal extent, capacity or range	Proposed amendment	Combined extent, capacity or range
Wind energy production	Figure 1a, 1b, 1c	Up to 10 x 6 to 7MW* Wind Turbine Generators Total approx. 60MW Wind Farm	N/A	No change
Solar farm energy production	Figure 1a, 1b, 1c	40MW Nominal	N/A	No change
Thermal Generation Plant	Figure 1a, 1b, 1c	40MW Nominal	N/A	No change
Battery Energy Storage System (BESS)	Figure 1a, 1b, 1c	30MW Nominal	N/A	No change
Overhead powerlines	Figure 2	33kV and 66kV	66kV and 132kV and increase footprint by 3.9 ha	66kV and 132kV within a revised development envelope of 45,589 ha

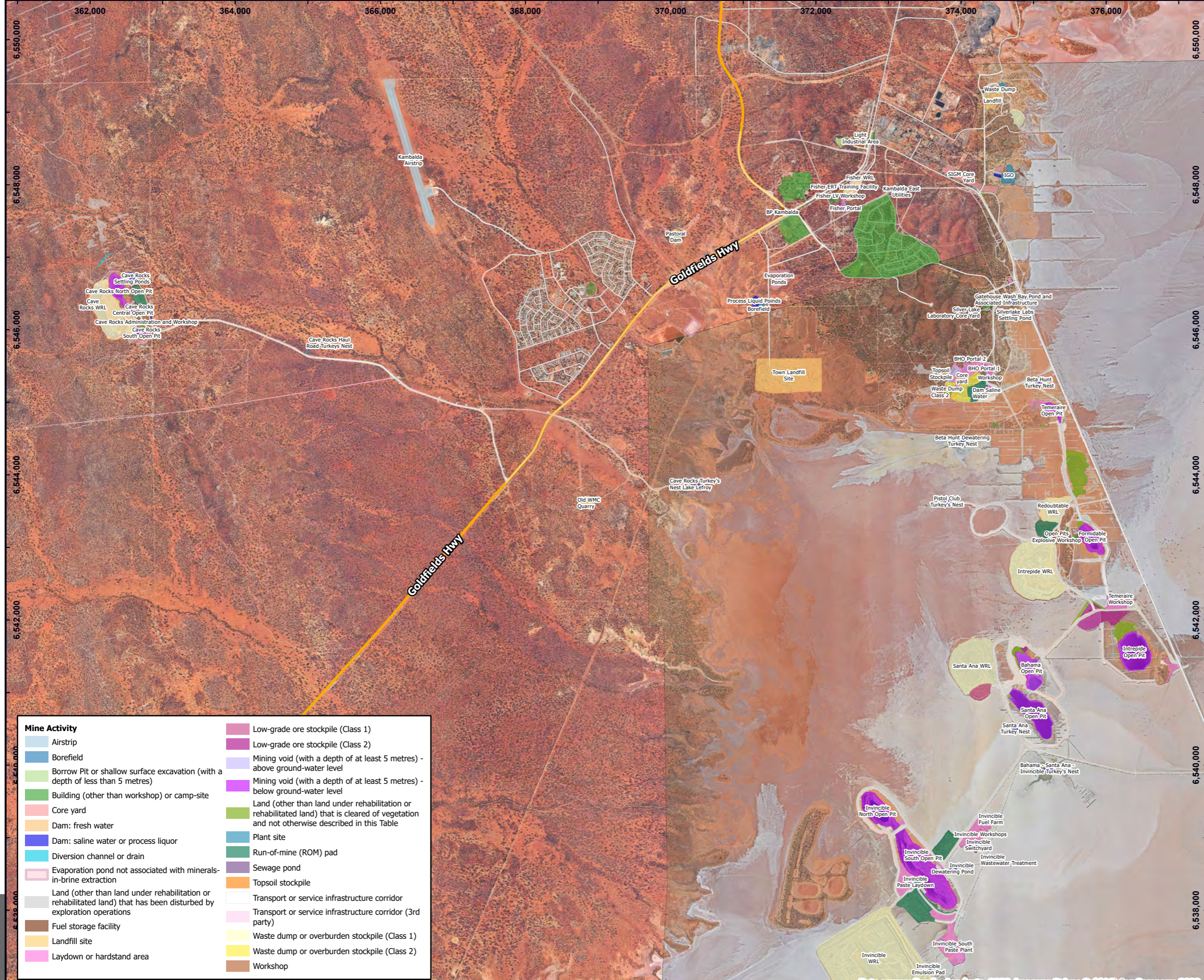
Proposal elements with greenhouse gas emissions		
Construction elements:		
Emissions	Original Proposal (tCO₂-e/per annum)	Proposed Amendment (tCO₂-e/per annum)
Scope 1	4,282	No change
Scope 2	NA	No change
Scope 3	8,815.5	No change
Operation elements:		
Emissions	Original Proposal (tCO₂-e/per annum)	Proposed Amendment (tCO₂-e/per annum)
Scope 1	21,949	No change
Scope 2	0	No change
Scope 3	NA	No change
Rehabilitation		
<p>The post-construction phase rehabilitation may be restricted to construction laydown areas no longer required in the operational phase.</p> <p>SIGM is committed to the rehabilitation of all disturbed areas to be agreed final land use(s), this is extended to include disturbance and any potential contamination management throughout the operational life expectancy of Project specific infrastructure.</p> <p>Due to the nature and relatively small/narrow SIHMP operational footprint, post construction phase rehabilitation may be restricted to small construction laydown areas utilised during construction phase only but are no longer required during the operational phase.</p>		
Commissioning		
Project commissioning is planned for Q3 2024.		
Decommissioning		
If decommissioning and demolition is required, phased activities are to be supported by suitably qualified and experienced specialists and documented reports.		

Other elements which affect extent of effects on the environment				
Proposal time*	Maximum project life	N/A	~29.5 years from granting of all required regulatory approvals	~29.5 years from granting of all required regulatory approvals
2024-2025	Construction phase	N/A	~ 1.5 years	~ 1.5 years
2025-2050	Operations phase	N/A	25 years	25 years
2053	Decommissioning phase	N/A	~ 3 years post operations	~ 3 years post operations

* Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).

N/A: Not Applicable

NA: Not Available



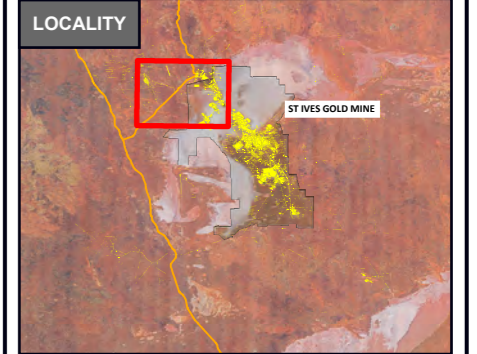
Mine Activity	
	Airstrip
	Borefield
	Borrow Pit or shallow surface excavation (with a depth of less than 5 metres)
	Building (other than workshop) or camp-site
	Core yard
	Dam: fresh water
	Dam: saline water or process liquor
	Diversion channel or drain
	Evaporation pond not associated with minerals-in-brine extraction
	Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations
	Fuel storage facility
	Landfill site
	Laydown or hardstand area
	Low-grade ore stockpile (Class 1)
	Low-grade ore stockpile (Class 2)
	Mining void (with a depth of at least 5 metres) - above ground-water level
	Mining void (with a depth of at least 5 metres) - below ground-water level
	Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and not otherwise described in this Table
	Plant site
	Run-of-mine (ROM) pad
	Sewage pond
	Topsail stockpile
	Transport or service infrastructure corridor
	Transport or service infrastructure corridor (3rd party)
	Waste dump or overburden stockpile (Class 1)
	Waste dump or overburden stockpile (Class 2)
	Workshop

LEGEND

Western Australian Roads

- Freeway / Highway
- Minor Road

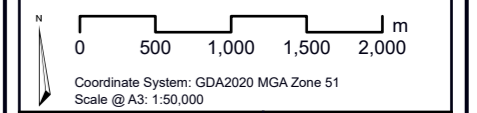
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SITE ELEMENTS (A)

SIGM Renewables Project
Proposal Content Document

St Ives Gold Mining Company

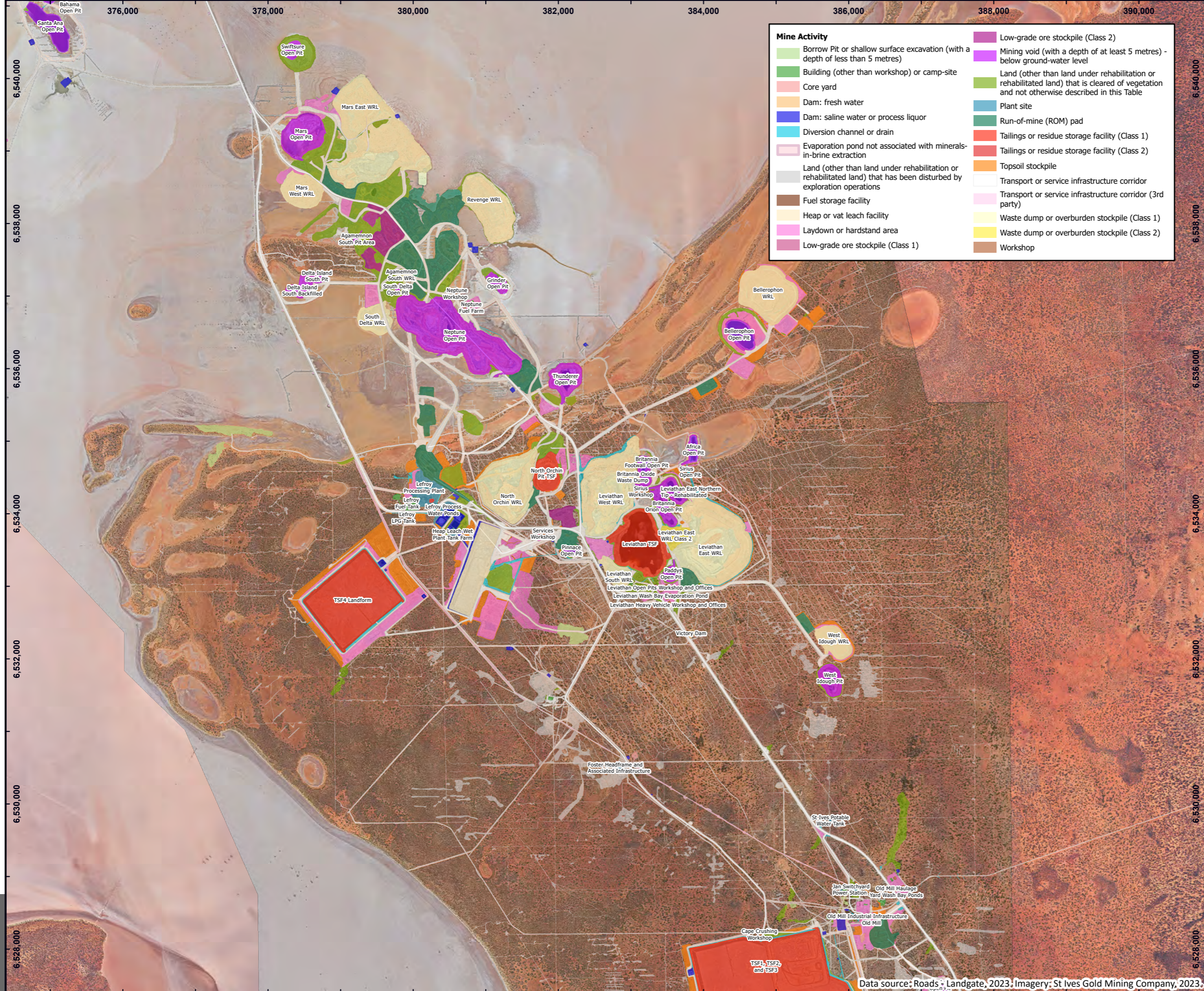


Prepared: E Jackson	Date: 7/09/2023
Reviewed: A Jamieson	Revision: A
Project: TE22003	



Figure 1A

Data source: Roads - Landgate, 2023. Imagery: St Ives Gold Mining Company, 2023.



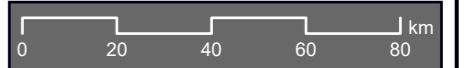
Mine Activity	
	Borrow Pit or shallow surface excavation (with a depth of less than 5 metres)
	Building (other than workshop) or camp-site
	Core yard
	Dam: fresh water
	Dam: saline water or process liquor
	Diversion channel or drain
	Evaporation pond not associated with minerals-in-brine extraction
	Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations
	Fuel storage facility
	Heap or vat leach facility
	Laydown or hardstand area
	Low-grade ore stockpile (Class 1)
	Low-grade ore stockpile (Class 2)
	Mining void (with a depth of at least 5 metres) - below ground-water level
	Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and not otherwise described in this Table
	Plant site
	Run-of-mine (ROM) pad
	Tailings or residue storage facility (Class 1)
	Tailings or residue storage facility (Class 2)
	Topsoil stockpile
	Transport or service infrastructure corridor
	Transport or service infrastructure corridor (3rd party)
	Waste dump or overburden stockpile (Class 1)
	Waste dump or overburden stockpile (Class 2)
	Workshop

LEGEND

Western Australian Roads

Minor Road

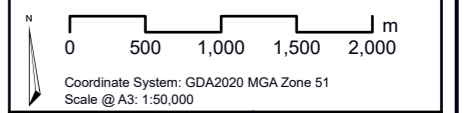
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SITE ELEMENTS (B)

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St Ives Gold Mining Company

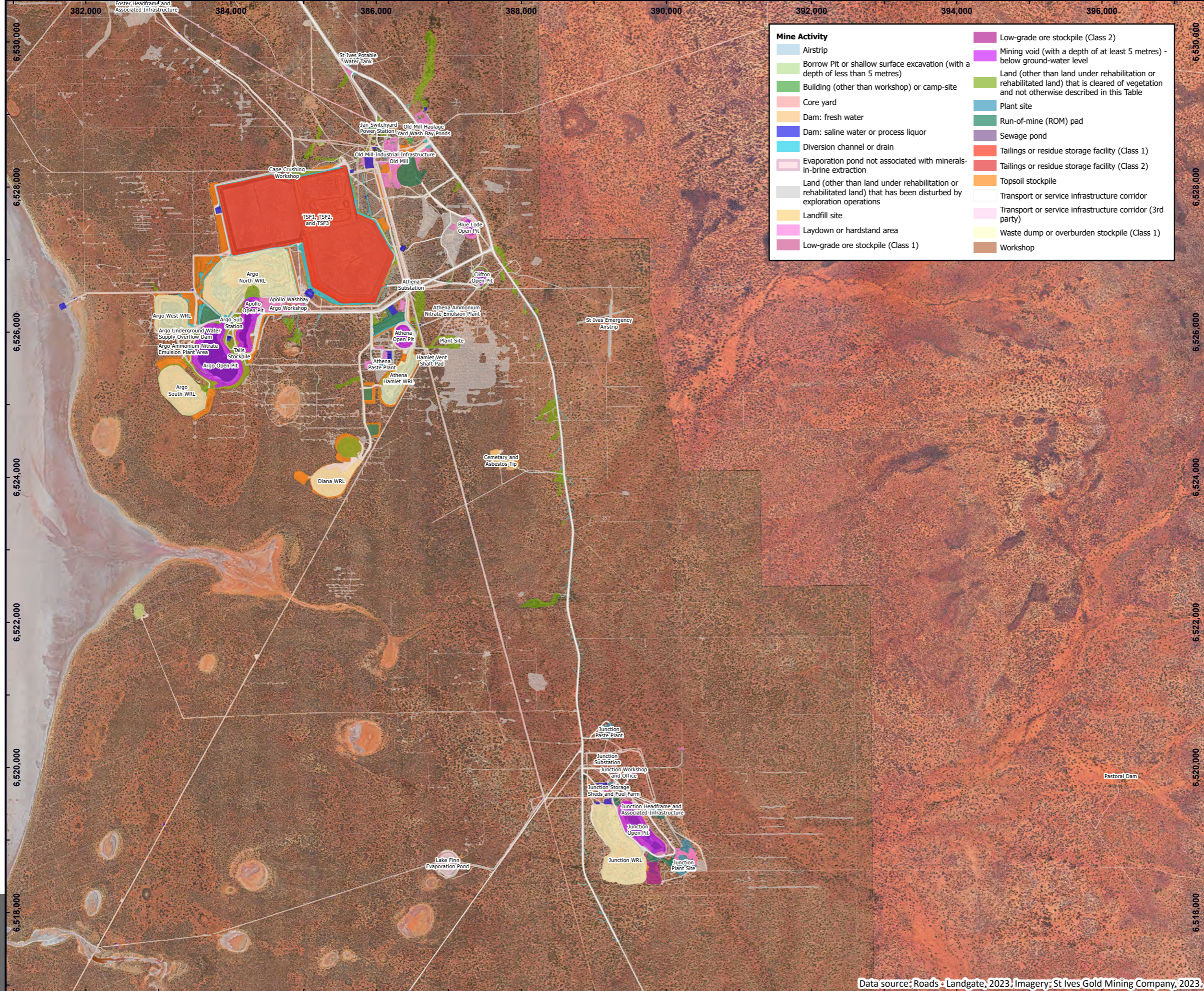


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Reviewed: A Jamieson	Revision: A
Project: TE22003	



Figure 1B

Data source: Roads - Landgate, 2023; Imagery: St Ives Gold Mining Company, 2023.



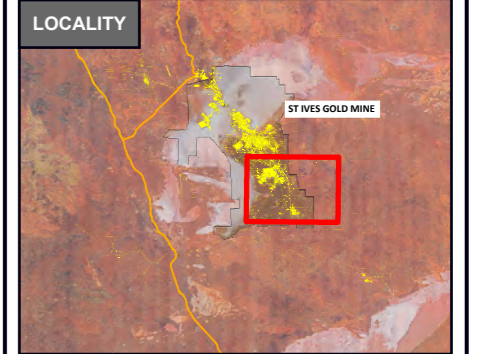
Mine Activity	
	Airstrip
	Borrow Pit or shallow surface excavation (with a depth of less than 5 metres)
	Building (other than workshop) or camp-site
	Core yard
	Dam: fresh water
	Dam: saline water or process liquor
	Diversion channel or drain
	Evaporation pond not associated with minerals-in-brine extraction
	Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations
	Landfill site
	Laydown or hardstand area
	Low-grade ore stockpile (Class 1)
	Low-grade ore stockpile (Class 2)
	Mining void (with a depth of at least 5 metres) - below ground-water level
	Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and not otherwise described in this Table
	Plant site
	Run-of-mine (ROM) pad
	Sewage pond
	Tailings or residue storage facility (Class 1)
	Tailings or residue storage facility (Class 2)
	Topsoil stockpile
	Transport or service infrastructure corridor
	Transport or service infrastructure corridor (3rd party)
	Waste dump or overburden stockpile (Class 1)
	Workshop

LEGEND

Western Australian Roads

Minor Road

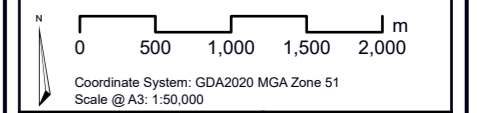
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SITE ELEMENTS (C)

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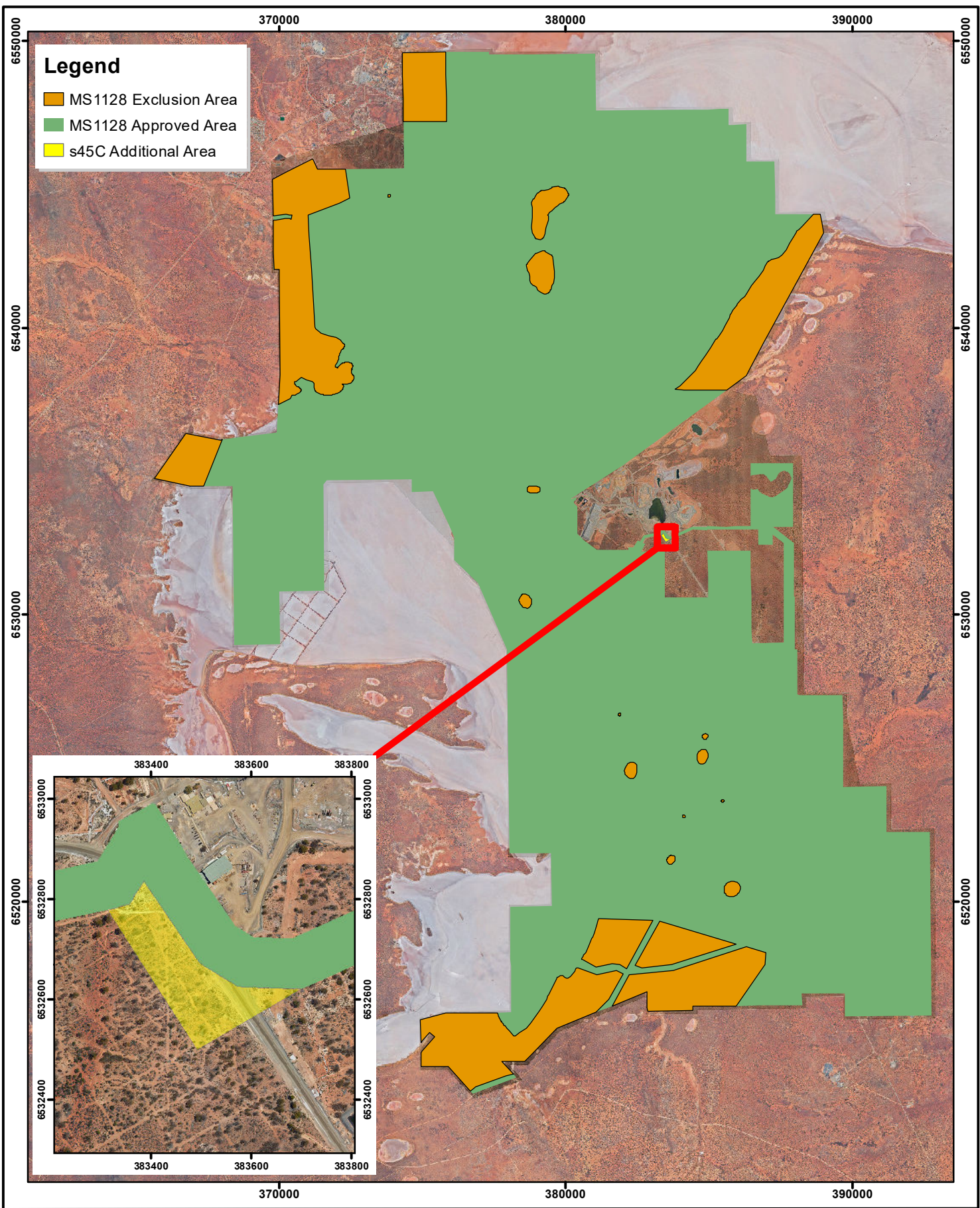
St Ives Gold Mining Company



Prepared: E Jackson	Date: 7/09/2023
Reviewed: A Jamieson	Revision: A
Project: TE22003	



Figure 1C

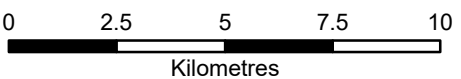


GOLD FIELDS
 Coordinate System:
 GDA 1994 MGA Zone 51



ST IVES GOLD MINE

s45C Additional Area



Date: 05/04/2024

Scale 1:175,000

Author: pedlerch

Figure: **2**

