Winu Copper and Gold Project

Proposal Content Document

Table 1: General proposal content description

Proposal title	Winu Project
Proponent name	Rio Tinto Winu Pty Limited
Short description	The Winu Project (the Proposal) is a copper-gold mine located approximately 300 km south of Broome and 320 km east of Port Hedland in the northern Pilbara region of Western Australia within both the Nyangumarta People's and the Martu People's Native Title Determination Areas (Figure 1-1). The Proposal includes, but is not limited to, the following: • An open pit that extends below the watertable • Mineral waste management (Waste rock landforms [WRL] and Tailings Storage Facility [TSF]) • Material stockpiles (ore and topsoil) • Groundwater abstraction for water supply and pit dewatering • Ore processing facilities (crushing, reclaiming, grinding, flotation, concentrate dewatering and handling, gold extraction, tailings thickening etc) • Water supply (mine dewatering, regional borefield, on-site dams) • Water management infrastructure (bores, pumps, pipelines, diversion channels, ponds/dams) • Surplus water management (controlled discharge of excess water to designated infiltration areas and managed aquifer recharge bores) • Support facilities (accommodation camp, power supply [including diesel-fired generation, wind turbines, solar panels, and battery storage], aerodrome facilities including an airstrip, warehouse-workshops, explosives storage, laydown areas, hydrocarbon storage, offices, waste-water treatment plant(s), drill core processing and storage facilities, information and communications technology, laboratories, site roads, waste management, and site fire, emergency, medical facilities) • Linear infrastructure (heavy vehicle and light vehicle access roads, upgrades to existing access roads, pipelines, powerlines, fibre-optic cable, communications distribution networks) Concentrate will be transported by truck via the access road and Great Northern Highway to port by a third party for export. Doré (unrefined gold bar) is expected to be transported via the regular air charter. The Proposal is located within a 23,649 ha Development Envelope and will require the clearing of up to 4,878 ha of new native vegetation.

Table 2: Proposal content elements

Proposal Element	Location/Description	Maximum Extent, Capacity or Range
Physical elements		
Mine elements, including: ▪ A below watertable open pit	Mining Lease 45/1288 Figure 2-1 Figure 3-1	Clearing up to 4,878 ha of new native vegetation for the Conceptual Footprint within the 23,649 ha Development Envelope.
Mineral waste elements, including: ▪ Waste rock landform (WRL) ▪ Topsoil stockpiles ▪ Tailings Storage Facility (TSF)	Mining Lease 45/1288 Figure 2-1 Figure 3-1	
Processing elements, including: ▪ Run of Mine (ROM) pad ▪ Crushing, stockpiling, and reclaiming ▪ Grinding with oversized recycle pebble crushing ▪ Flotation, concentrate dewatering and handling ▪ Carbon-in-leach (CIL), carbon acid washing and gold elution/desorption ▪ Carbon reactivation, electrowinning, doré production and cyanide detoxification ▪ Tailings thickening ▪ Reagent receival, storge and delivery systems	Mining Lease 45/1288 Figure 2-1 Figure 3-1	
Water management elements, including: ▪ Dewatering of pit ▪ Borefield and associated infrastructure ▪ Process water dams/ponds ▪ Water storage dams ▪ Water diversion channels and catchment ponds ▪ Infiltration areas	Mining Lease 45/1288 Miscellaneous licence 45/755 Figure 2-1 Figure 3-1	
Infrastructure elements, including: ▪ Accommodation Camps ▪ Energy supply infrastructure	Mining Lease 45/1288 Miscellaneous licences 45/476, 45/491, 45/494, 45/548, 45/549, 45/550,	

Proposal Element	Location/Description	Maximum Extent, Capacity or Range
▪ Mine workshops and maintenance infrastructure ▪ Bores, pipelines, turkeys nests and supporting facilities ▪ Haul, heavy and light vehicle roads ▪ Ancillary buildings ▪ Waste water treatment plants and reverse osmosis plants ▪ Hydrocarbon storage ▪ Explosives storage and preparation facilities and hydrocarbon storage ▪ Laydown areas ▪ Drill core processing and storage facilities ▪ Information and communications technology ▪ Aerodrome facilities including airstrip ▪ Site fire emergency and medical facilities ▪ Waste Management and landfill facilities	45/551, 45/552, 45/559, 45/623, 45/722, 45/723, 45/725, 45/755 & 45/857 Figure 2-1 Figure 3-1	
Operational elements		
Groundwater abstraction for mine dewatering	Mining Lease 45/1288 Figure 2-1 Figure 3-1	Lowering the groundwater table to no greater than a standing water level of -250m RL.
Groundwater abstraction from the Rimfire regional borefield	Miscellaneous licence 45/755 Figure 2-1 Figure 3-1	Abstraction of no more than 2.8 gigalitres per annum (GL/a).
Waste Rock Landform	Mining Lease 45/1288 Figure 2-1 Figure 3-1	Up to 490 Mt of waste rock will be mined throughout the life of the Proposal.
Management of surplus water	Mining Lease 45/1288 Figure 2-1 Figure 3-1	Surplus water, exceeding the operational requirement, is discharged to infiltration areas or managed aquifer recharge bores within the Development Envelope except in emergency

Proposal Element	Location/Description	Maximum Extent, Capacity or Range
		circumstances linked to major rainfall events.
Proposal elements with greenhouse gas emissions		
Peak annual		
Scope 1	Plant and equipment: 66,802 t CO_2-e	
Scope 2	Electricity generation: 42,903 t CO_2-e	
Annual average life of mine		
Scope 1	Plant and equipment: 50,018 t CO_2-e	
Scope 2	Electricity generation: 37,691 t CO_2-e	
Scope 3	Estimated 158,465 t CO_2-e	
Rehabilitation and Closure		
Where practicable, progressive rehabilitation will be undertaken over the life of the mine. Areas disturbed through the implementation of the Proposal will be designed to be safe and non-polluting and will be constructed so the final shape, size and stability meet the closure objectives documented in the Mine Closure Plan.		
Commissioning		
Commissioning of the processing facility will be undertaken subject to the operational limits above.		
Other elements which affect extent of effects on the environment		
Proposal timeframe	Maximum project life	Approx. 32 years

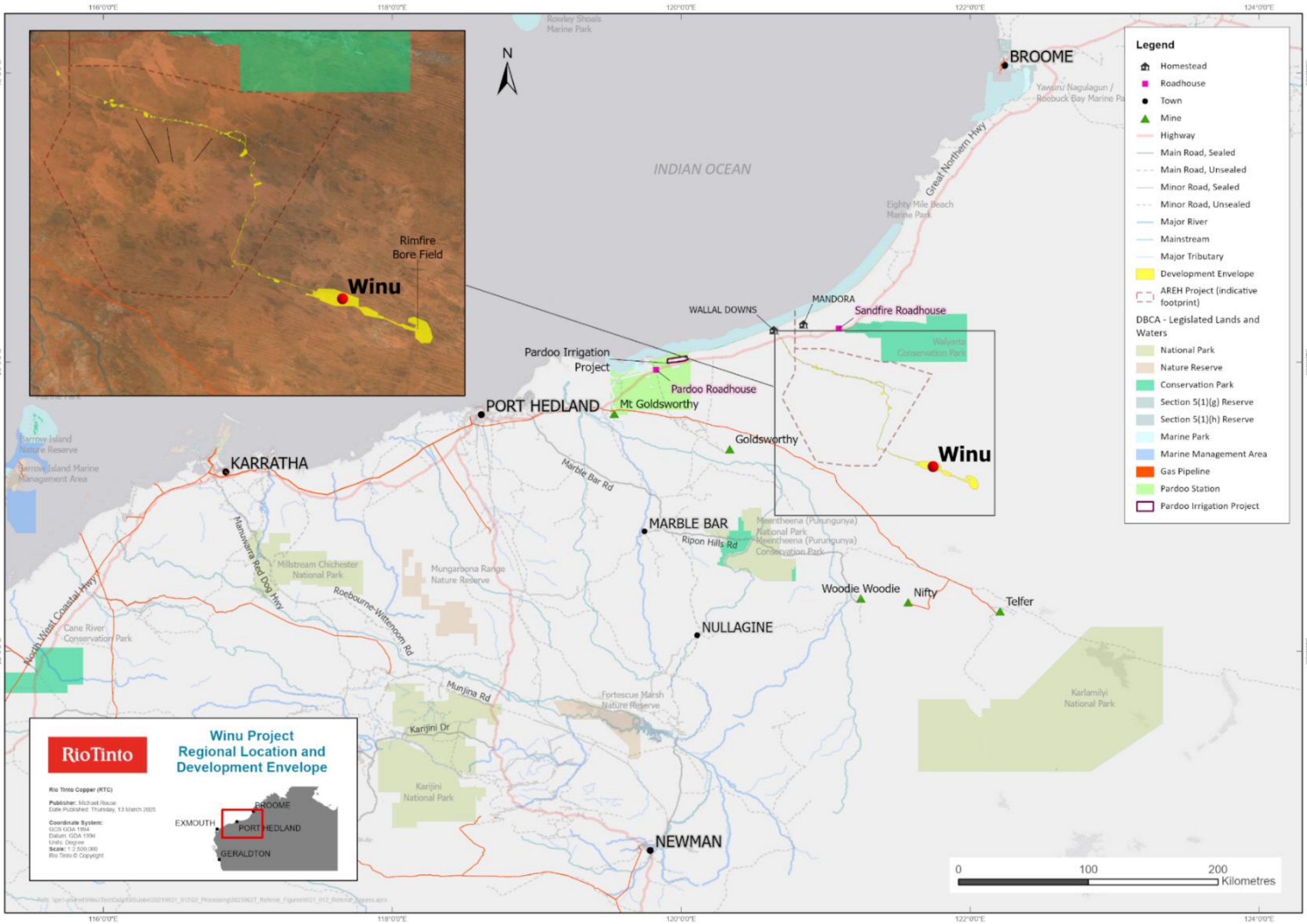

Figure 1-1: Regional Location of the Proposal

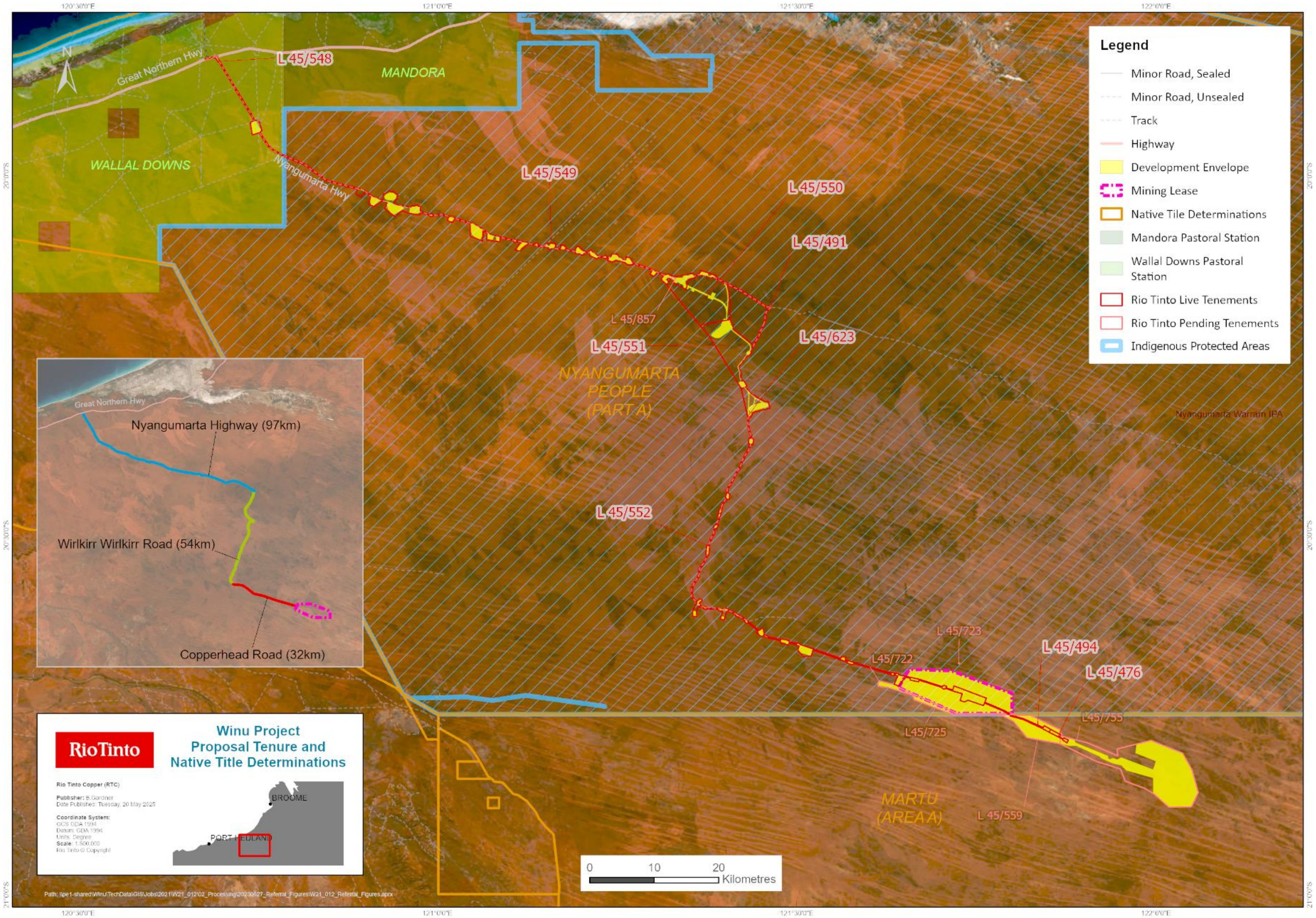

Figure 2-1: Proposal Tenure and Native Title Determination

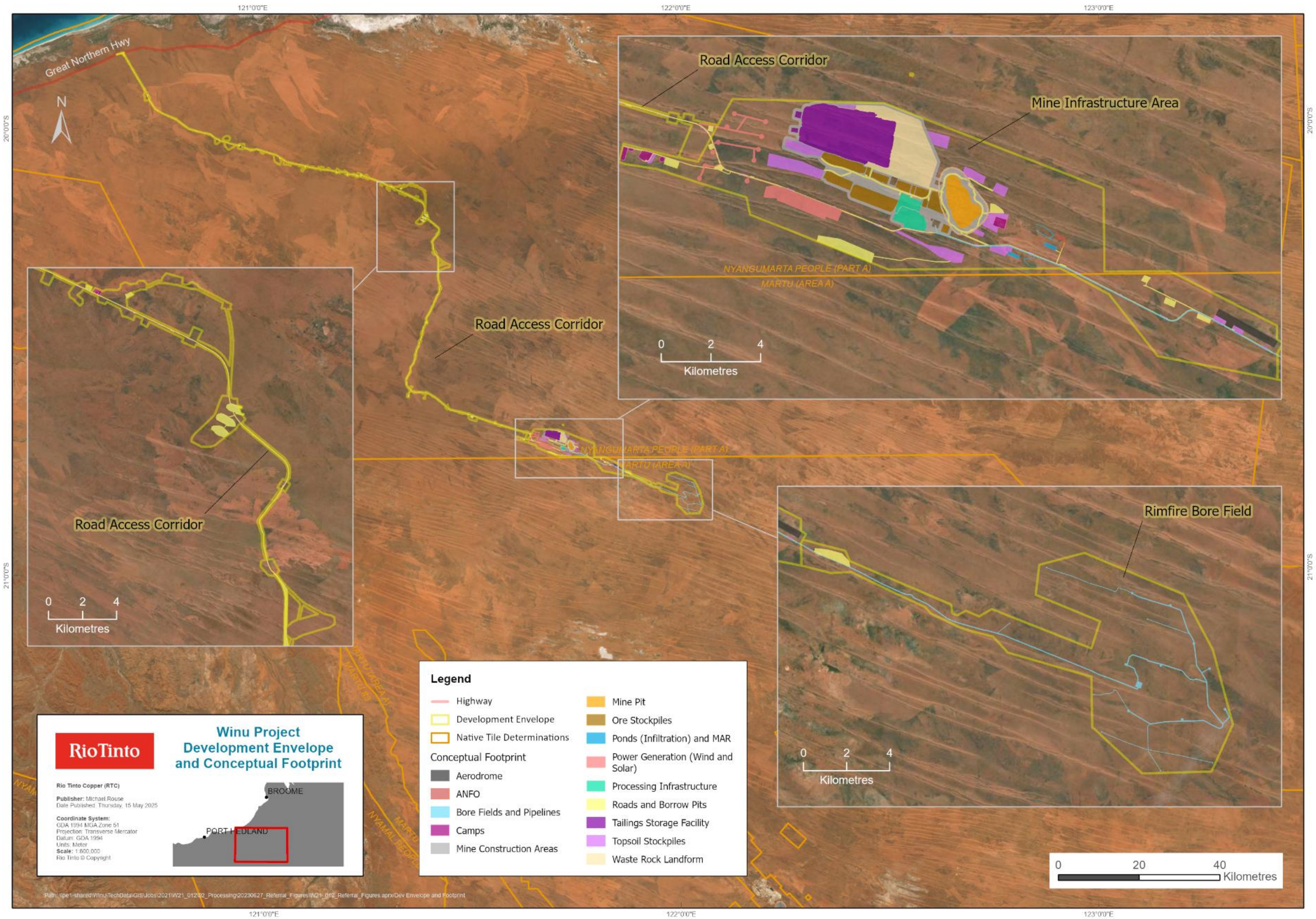

Figure 3-1: Proposal Development Envelope and Conceptual Footprint