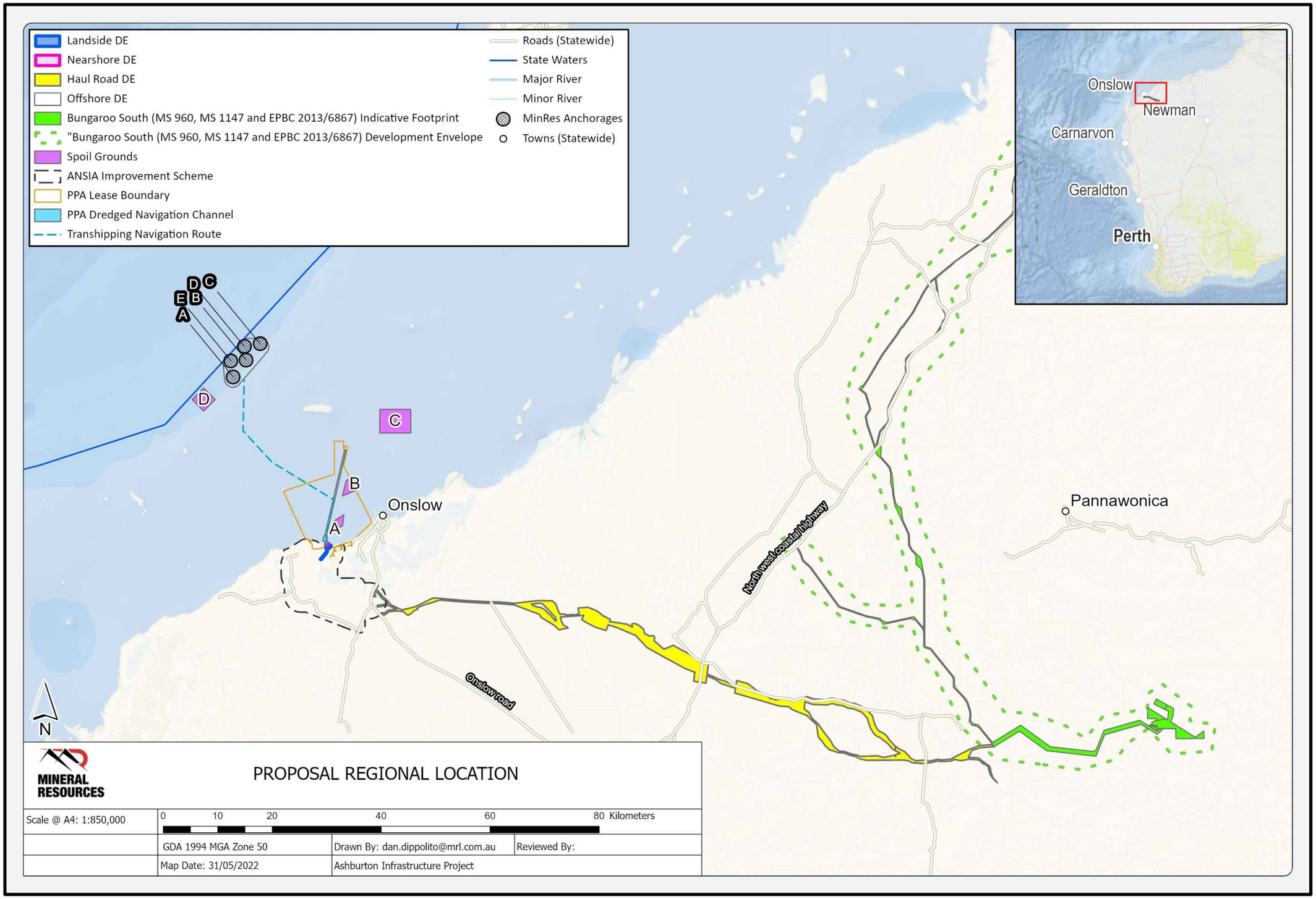
Ashburton Infrastructure Project

Proposal Content Document

Table 1: General Proposal Content Description

Proposal title	Ashburton Infrastructure Project (AIP)
Proponent name	Onslow Iron Pty Ltd (ACN 612 668 201, herein the Proponent), a wholly owned subsidiary of Mineral Resources Limited (MRL) (ACN 118 549 910).
Short description	The Proposal is to develop a fully sealed private haul road, approximately 125 km in length, starting from about 45 km southwest of Pannawonica to access the Port of Ashburton (**Figure 1**). Within the Port, landside and marine facilities will be developed to support export of up to 40 million tonnes of ore per annum (Mtpa) over a minimum 30-year period (**Figure 1**). This Proposal includes: • Development of a fully sealed private haul road; • Gas pipeline and ancillary haul road infrastructure; • Storage and bulk handling of ore at the Port of Ashburton (the Port); • Dredging a dedicated berthing pocket adjacent to the existing Material Offloading Facility and offshore disposal of dredge spoil to existing spoil disposal areas; • Development of a modular jetty wharf and ship loader; • Use of five offshore anchorage areas for transhipment of ore to Ocean Going Vessels; and • Ancillary landside infrastructure (seawater desalination plant, power station, bulk storage of fuel wastewater treatment plan (WWTP) etc). The Proposal will be implemented within a 20,821 ha Development Envelope (DE), including 16,327 ha for land-based elements and 4,494 ha for marine-based elements (**Figure 1**). The Proposal is located within an area of existing pastoral, mining and industrial land use. The Proposal's DE transects two pastoral stations, mining tenure and the operational Port of Ashburton.



Path: N:\21PER\GIS\19210 MRL Project Services - Approval Support and

FIGURE 1 PROPOSAL REGIONAL LOCATION

Table 2: Proposal Content Elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Haul Road elements: • Sealed Haul Road • AIP Gas Pipeline Consumer gas pipeline	Haul Road **Figure 2**	Clearing of no more than 1,564 ha of native vegetation within the 16,209 ha Haul Road DE.
• Landside elements: • Materials Handling Systems - Ore Loading and Supply, Fuel Tanker Loading Product (Ore) Storage	Landside DE **Figure 2**	30 Mtpa ore product for 30 years, with design and material handling capacity up to 40 Mtpa.
Nearshore elements: • Berth Pocket • Nearshore Infrastructure including Temporary Causeway and Jetty (excluding Dredging)	Nearshore DE **Figure 2**	TSV berth pocket with a target declared depth of up to 8 m. Direct disturbance of up to 3 ha of Bare Substrate BCH within the Nearshore DE.
Offshore elements: • Anchorage Points • Dredge Material Disposal	Offshore DE **Figure 2**	Anchorages will be located approximately 35 km offshore. Direct disturbance of up to 1,347 ha of Bare Substrate BCH from OGVs anchoring in the designated area within the Offshore DE. Dredge material disposal within the existing PPA Spoil Grounds. No additional disturbance.
Construction elements		
Bulk Earthworks	Haul Road DE **Figure 2**	Borrow works with crushing and screening, concrete-batching. Culverts, Drains and Levees will be installed and constructed to maintain flows. The Haul Road will be sealed with bitumen.
Temporary Causeway	Nearshore DE **Figure 2**	Construction of the dedicated nearshore berth facility will be undertaken from a temporary impermeable causeway that will be removed after construction and commissioning of the jetty is completed.

Proposal element	Location / description	Maximum extent, capacity or range
Dredging & Dredge Material Placement	Nearshore DE Spoil Ground C **Figure 2**	Removal/disturbance of up to 3 ha of Bare Substrate BCH. Capital dredging of up to 165,000m³ with dredge material disposal into existing Spoil Ground C.
Piling for Jetty / Wharf Construction	Nearshore DE **Figure 2**	Installation of approximately 71 piles for jetty/wharf construction. Direct disturbance of up to 0.2 ha of Bare Substrate BCH.
Water supply - Dust Suppression	Haul Road DE **Figure 2**	Water supply from haul road borefield (up to 2 GL/annum during construction.
Bulk Earthworks	Haul Road DE **Figure 2**	Borrow works with crushing and screening, concrete-batching. Culverts, Drains and Levees will be installed and constructed to maintain flows. The Haul Road will be sealed with bitumen.
Operational elements		
Materials Handling and Stockpiling	Landside DE **Figure 2**	Storage of up to 280,000 tonnes of ore product.
Power Generation	Landside DE **Figure 2**	Power generation capacity of up to 14 MW. A 1 MW (peak) roof top solar power system.
Bulk Material Loading	Landside DE Nearshore DE **Figure 2**	Operational throughput capacity of up to 100 kt/d of ore.
Dust Collection and Suppression Systems	Landside DE **Figure 2**	Water for operational dust suppression may be sourced from a third party operator to support 2GL/annum.
Seawater Intake	Landside DE Nearshore DE **Figure 2**	Seawater intake of up to 2 GL/annum for desalination and dust suppression.

Proposal element	Location / description	Maximum extent, capacity or range
Brine Outfall	Nearshore DE **Figure 2**	Discharge of up to 2 GL/annum of hypersaline brine. Discharge to ensure water quality meets the High Ecological Protection Level at the boundary of the Low Environmental Protection Area (LEPA).
Transshipment Vessels	Landside DE Nearshore DE Offshore DE **Figure 2**	Transport of product via TSVs and powered by tugboats on a 24-hours, seven days a week basis. The TSVs will operate at a maximum speed of nine knots.
Proposal elements with greenhouse gas emissions		
Construction elements:		
Scope 1	Haul Road and Port Construction (Year 1) Total GHG: 95,705 tCO2-e/yr	
Scope 2	None	
Scope 3	None	
Operation elements:		
Scope 1	Port Operations (From Year 2 emissions @ 30Mtpa) - Annual baseline GHG: 97,788 tCO2- e/yr*	
Scope 2	None	
Scope 3	Port Operations (From Year 2 emissions @ 30Mtpa): 54,602,377 tCO2-e/yr**	
Rehabilitation		
Topsoil will be collected in windrows and stored for rehabilitation of temporary construction areas.		
Progressive rehabilitation of temporary disturbance areas along the Haul Road DE will be undertaken (such as borrow pits and temporary construction areas).		
Progressive rehabilitation through topsoil respreading will be undertaken as areas become available and this will minimise the extent of cleared areas.		

Commissioning
The Port Landside facilities: • Will progressively undergo Functional Testing and No Load Commissioning; and • Load Commissioning will be completed in two stages, In-Loading System followed by Out-loading System.
Sea Water Desalination Plant: Water sourced from either ocean, bore or potable supply. Discharged to ocean via diffuser.
Decommissioning
End of project life closure strategies include either facilities being handed over to the relevant State or local government authority or decommissioned. Final outcomes will be developed through further consultation with key stakeholders and be undertaken as part of the regular review of closure commitments.

Proposal element	**Location / description**	**Maximum extent, capacity or range**
Other elements which affect extent of effects on the environment		
Proposal time	Minimum Project Life	30 years.
Construction phase	Haul road, and Port Nearshore facilities	Approximately 18 months (including early works and construction from multiple approval areas).
Commissioning phase (including commissioning and ramp-up)	Port landside facilities	Approximately 12 months.
Operational phase	Operating days	Up to 365 operational days per year over a minimum of 30-years

Reported Scope 1 emissions for years 11-30 are conservative based on estimates 2021 estimates - the Proponent will be reducing the CO2e during operations in line with its "Roadmap to Net Zero Emissions Climate Change - Mineral Resources '

** The GHG inventory for port operations includes the predicted emissions for the first 10 years (up to 30 Mtpa) and the next 20 (up to 40 Mtpa). Note that these emissions are conservative and do not include additional future emissions reduction and offset measures to be taken by the Proponent to achieve its target of net zero greenhouse gas emissions by 2050

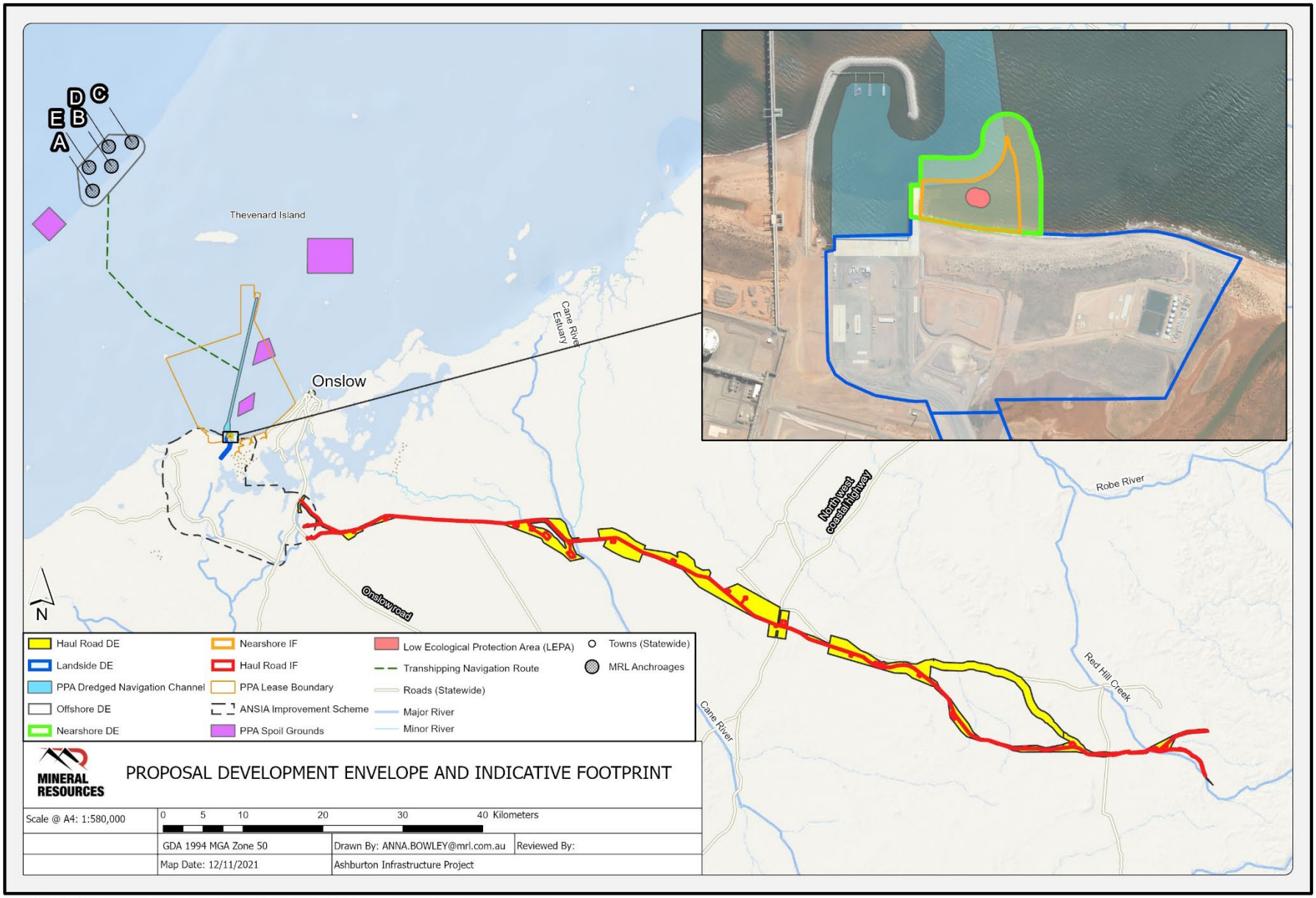


FIGURE 2 PROPOSAL DEVELOPMENT ENVELOPE AND INDICATIVE FOOTPRINT