

Mulga Downs Hub and Rail Spur

Proposal Content Document

Table 1: General proposal content description

Proposal title	Mulga Downs Hub and Rail Spur
Proponent name	Roy Hill Infrastructure Pty Ltd
Short description	<p>The Mulga Downs Hub and Rail Spur (the Proposal) is located approximately 210 km south of Port Hedland and 180 km northwest of Newman in the Pilbara region of Western Australia (Figure 1). The Proposal is for the development of a hub and rail spur to connect into the existing Roy Hill Railway for the transport of iron ore to Port Hedland.</p> <p>The Proposal includes, and is not limited to, truck unloading and train loading facilities, product rehandling facilities, stockyards, a laboratory, a rail loop and rail service tracks, lateral access roads, rail associated infrastructure including a rail spur line, passing loops, sidings, fibre optic cable, telecommunications towers, access tracks, borrow pits and laydown areas. Additionally, the Proposal will contain bulk fuel storage and fuelling facility, energy supply infrastructure, ancillary buildings, wastewater treatment plant, accommodation village and an airstrip. Included are access roads for haul, construction, and light vehicles. Construction and operations water supply/bores and water storage will also be required. The Proposal is located within a Development Envelope no greater than 17,714.01 ha and will require clearing of no more than 2,304.74 ha of native vegetation.</p>

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
<p>The hub will consist of:</p> <ul style="list-style-type: none"> - Truck unloading facilities; - Product rehandling facilities; - Train loading facilities; - Product sampling facility; - Sedimentation pond(s); - Rail loop; - Stockyards; - Laboratory; - Bulk fuel storage and fuelling facility; - Borrow pits and laydown areas; - Construction offices and support buildings; - Energy supply infrastructure (power station); - Roads for construction and operational haul; - Ancillary buildings (e.g. workshops, telecommunications, offices, ablutions, warehouse, security gatehouse); - Construction and operational water supply/bores and water storage; - Telecommunication towers; - Wastewater treatment plant; - Water diversion channels and catchment ponds; - Accommodation; and - Airstrip. <p>The Rail spur will include:</p> <ul style="list-style-type: none"> - Rail Spur line; - Lateral access tracks and rail maintenance service tracks; - Rail associated infrastructure including passing loops, sidings, fibre optic cable, telecommunications towers, water bores; borrow pits and laydown areas; - Construction offices and support buildings; - Access tracks; and - Water storage for construction and operations water supply. 	<p>Within the Development Envelope. (Figure 2, and Figure 3)</p>	<p>Clearing footprint of up to 2,304.74 ha of native vegetation within a 17,714.01 ha Development Envelope.</p>
Construction elements		
Groundwater abstraction for construction	Within the Development Envelope (Figure 2, and Figure 3)	Up to 2 Gigalitres (GL) per annum.
Operational elements		
Groundwater abstraction for operations	Within the Development Envelope (Figure 2, and Figure 3)	Up to 0.25 Gigalitres (GL) per annum.
Proposal elements with greenhouse gas emissions		

Construction elements:		
Scope 1	Approximately 195,839 t CO ₂ -e over 2.5 years derived from diesel usage for electricity generation, vehicles and equipment associated with construction activities and loss of bio-sequestration due to vegetation clearing.	
Scope 2	Zero (construction electricity demand met by on-site generation and included in Scope 1 emissions).	
Scope 3	The most significant contributors to Scope 3 emissions are from emissions associated with manufacturing and supply of the rail track and train components. Due to high uncertainty Scope 3 emissions during construction have not been estimated.	
Operation elements – Annual average life of Proposal		
Scope 1	Maximum 64,470 t CO ₂ -e per annum derived from electricity generation for hub operations and diesel consumption by vehicles and trains.	
Scope 2	Maximum Scope 2 emissions of 589t CO ₂ -e per annum for charging of electric trains at port.	
Scope 3	Estimated ~54 Mt CO ₂ -e per annum from upstream extraction and processing of ore and downstream international sea freight and steel production.	
Commissioning		
Commissioning of the proposed facility will be undertaken subject to the operational limits above.		
Rehabilitation		
Construction areas will be rehabilitated upon completion of construction. Operational areas will be decommissioned and rehabilitated following completion of the Proposal.		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	30 years
	Construction phase	~2.5 years
	Operations phase	20+ years
	Decommissioning phase	~2 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).*