

Template

Proposal Content Document

Table 1: General proposal content description

Proposal title	Ocean Barramundi Expansion Project
Proponent name	Marine Produce Australia Pty Ltd
Short description	<p>MPA propose to expand its barramundi farm operations to 13 sites spread across the Buccaneer Archipelago, in the Kimberley region.</p> <p>The proposed expansion will be staged over a 10-year period. Each stage consists of the construction of one nursery site, supplying 4–5 ocean-based leases, each of which will contain 12 sea-cages.</p>

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Sea Cage Infrastructure Development Envelope: 13 separate aquaculture leases consisting of 156 cages (12 per lease area), each cluster with ~24 anchorages	Figure 1	<p>Direct disturbance of 0.06 ha within the total aquaculture lease area Development Envelope (consisting of 13 separate leases) from anchorage footprint.</p> <p>Development envelope (total extent of proposed leases) within which temporary disturbance of benthic environment via indirect effects is expected – 1213.1 ha</p>
Nursery Development Envelope: each nursery will consist of a bore for groundwater extraction, an outfall, 5-10 tanks for grow-out of barramundi, parking bays, power utilities for Ardyaloon and Arrow Pearling.	Figure 2	<p>Disturbance of no more than 3.37 ha of terrestrial native vegetation within the 5.52 ha Nursery Development Envelope (total for all three sites)</p> <p>Disturbance of no more than 0.02 ha of seabed within the 3.5 ha Nursery Development Envelope (total for all three sites) for the outfalls.</p>
Operational elements		
Sea cage fish production	Figure 3	<p>Expected maximum standing biomasses of ~4500 tonnes per lease (consisting of 13 separate leases).</p> <p>Expected maximum total annual production/standing biomass of 30,000 tonnes across all 13 leases once they are fully operational.</p>

Nursery groundwater extraction bore (1 per nursery)	Within the nursery infrastructure	Design capacity 1380 m ³ /day intake per bore
Nursery seawater outfall	Extending ~100 m from shore	Design capacity 2420 m ³ /day discharge per outfall
Proposal elements with greenhouse gas emissions		
Construction elements:		
Land use change – vegetation clearing	Scope 1 - <1 tCO ₂ e total	
Construction vessel usage	Scope 1 - 947 tCO ₂ e total	
None	Scope 2	
Operation elements:		
Operational vessel usage	Scope 1 – 6,050 tCO ₂ -e annual total	
Electricity usage	Scope 2 – 3,750 tCO ₂ -e annual total	
Rehabilitation		
NA		
Commissioning		
NA		
Decommissioning		
Removal and dismantling of all sea-cages, anchorages and vessels if aquaculture operations are discontinued. Decommissioning of aquaculture sites, if not undertaken by the lease holder, is completed by DPIRD, with any costs incurred recouped through legal means if necessary (pursuant to the relevant provisions of the Fisheries Resources Management Act (FRMA) and the Fish Resources Management Regulations 1995 (FRMR)).		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	>42 years (each lease is continued as long as the proponent complies with the licence and lease conditions)
	Construction phase	Total 10-year construction timeline, consisting of three phases each of which involves the construction of one nursery and 4-5 leases.

	Operations phase	>42 years (each lease is continued as long as the proponent complies with the licence and lease conditions)
	Decommissioning phase	~6 months if operations are discontinued

** 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).*

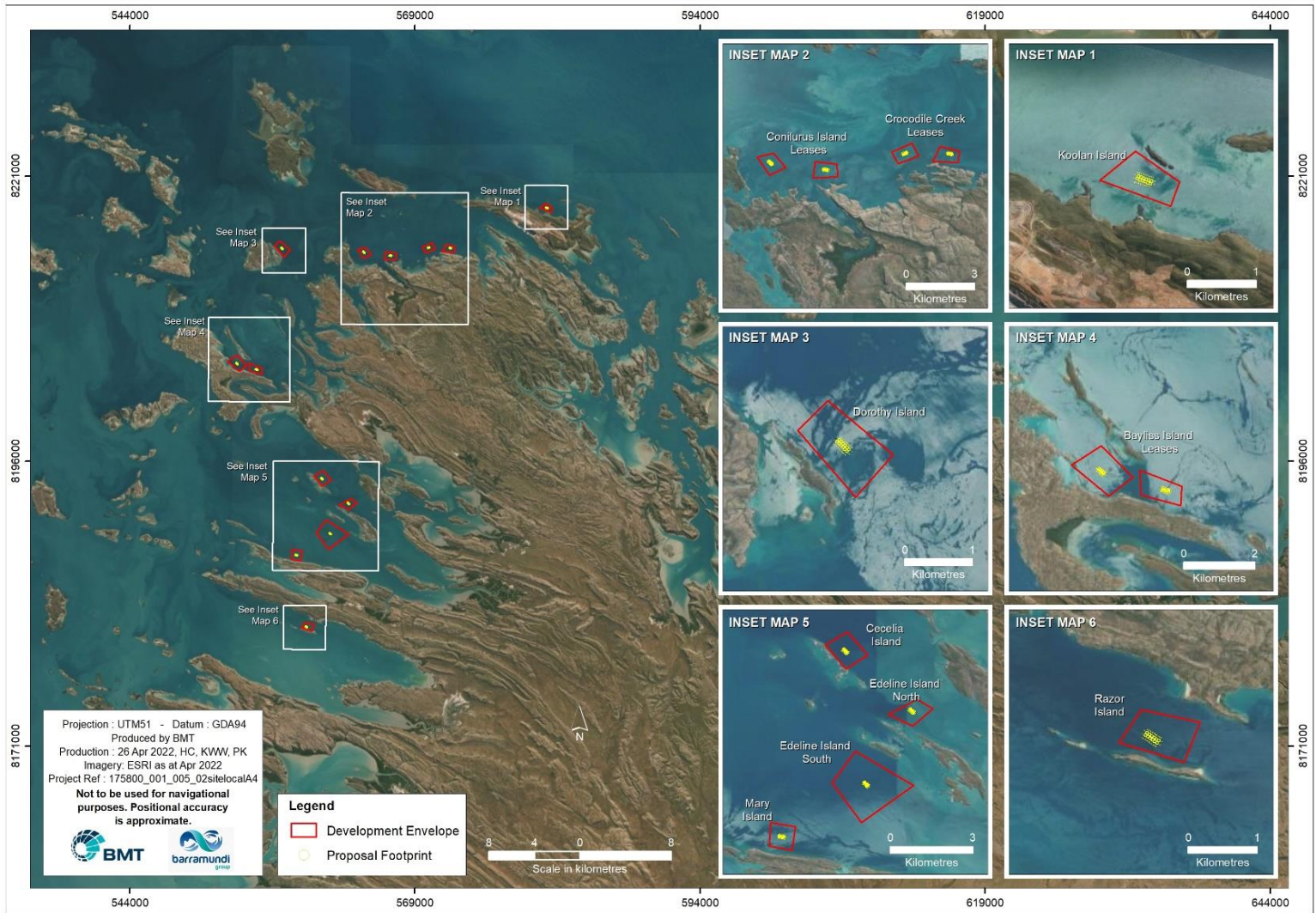


Figure 1 Proposed development envelope/footprint of the 13 leases

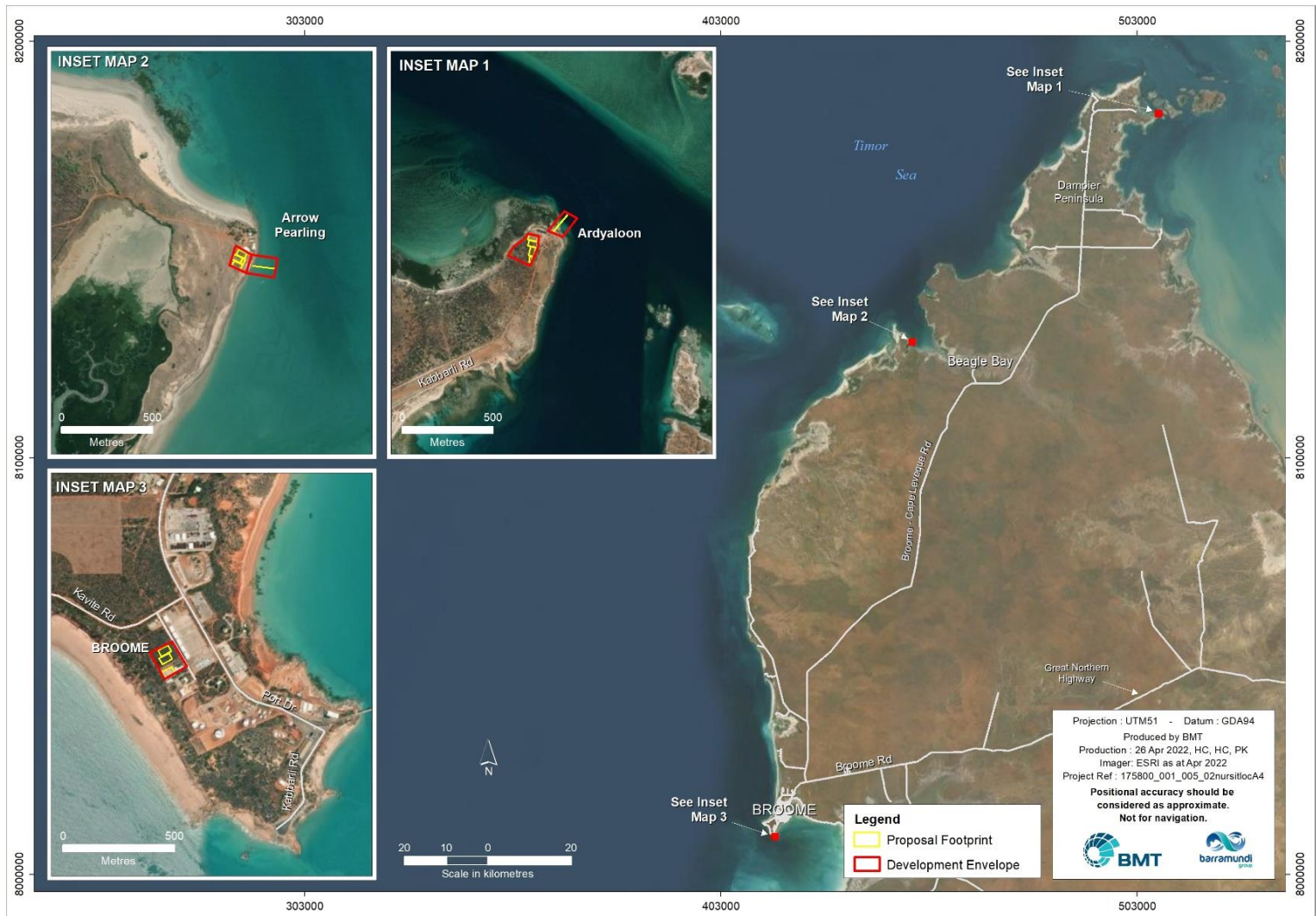
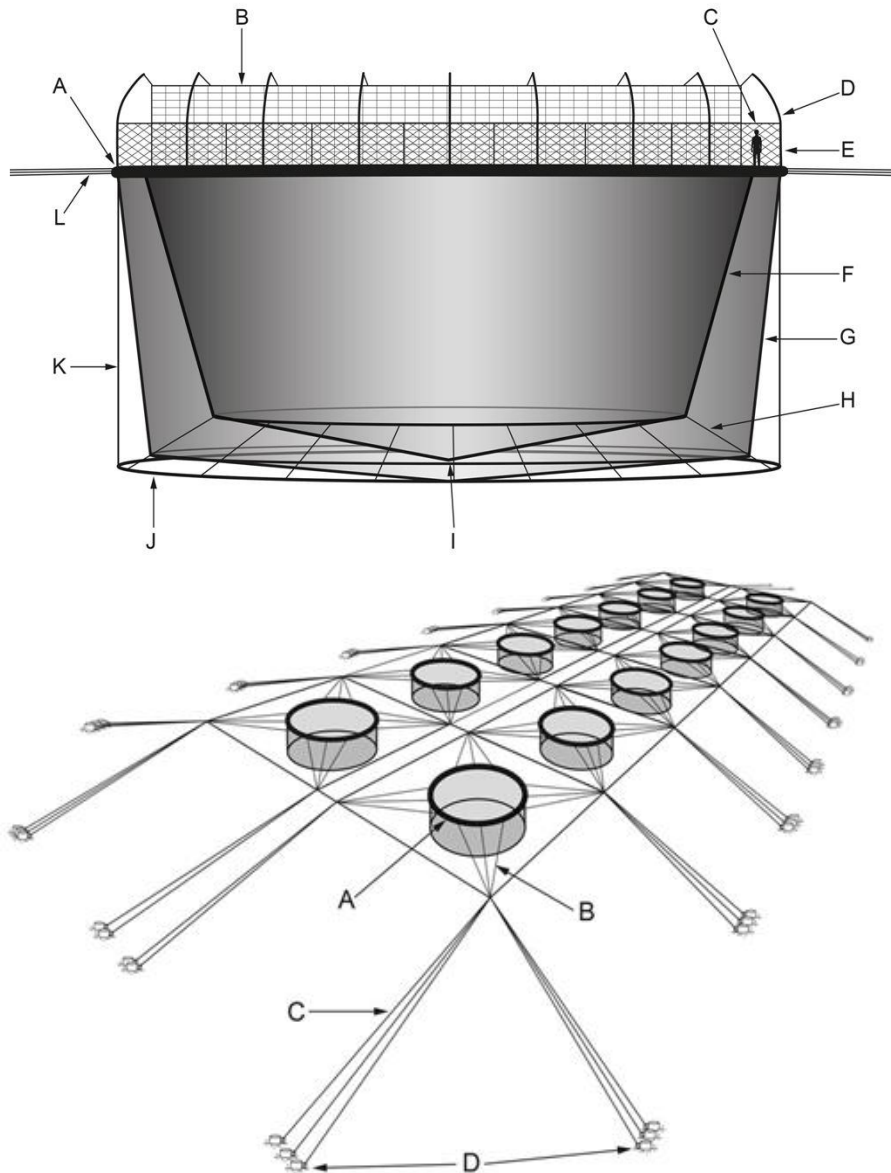


Figure 2 Proposed development envelope/footprint of the three nursery sites



Notes:

1. Upper Panel: All nets and mesh are durable and high tensile: A – Floating collar to suspends nets; B – Taut overhead net to prevent seabird access to stock and feed; C – High exclusion barrier to prevent wildlife from accessing the walkway; D – Long flexible net-poles to support, suspend and maintain tension of the overhead seabird-exclusion nets several metres above the water; E – Stanchions (posts) to support the sea lion-exclusion barrier; F – Stock containment net (fully enclosed); a component of the double net system; G – Marine-predator exclusion net (fully enclosed); a component of the double net system; H – Net-baseline rope to link nets to the sinker tube; I – False net-bottom, created by the double net system, to keep stock separated from marine predators; J – Sinker tube, suspended from the nets, to maintain tension and support the structure of the nets; K – Weight line to facilitate lifting the sinker tube and bottom of the nets; L -Mooring lines, connected to the anchoring system, to hold the sea-cage in position.
2. Lower Panel: All lines and cables are durable, high tensile and appropriate for an anchoring system designed to withstand extreme loads: A – Sea cage; B – Mooring lines; C – Anchor cables; D – Low profile mooring-anchors

Figure 3 Indicate sea-cage engineering (upper), configuration and anchoring (lower)