



ROAM MARINE

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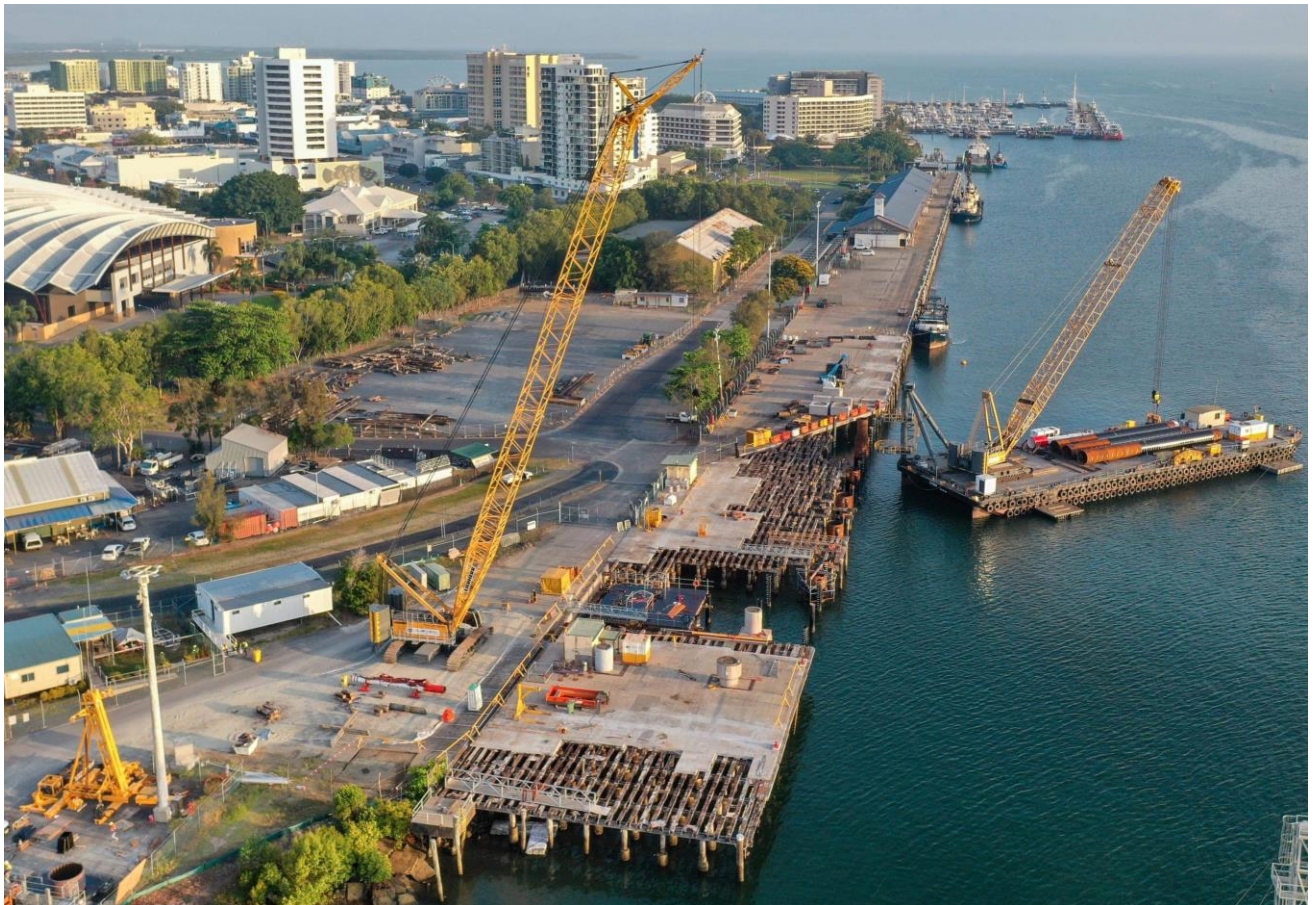
Project: Cairns

Client: Austral Construction

Project scope: Austral were contracted to upgrade 6 berths at Cairns including:

- Demolition of Berth 6 which is a dilapidated timber wharf with concrete deck
- Installation of new concrete wharf at Berth 6 on 610mm vertical piles
- Install 30 monopile dolphins 2.2m diameter with 40t concrete cap. Work included removal of a section of the existing deck and reinstating an insitu concrete slab over the new dolphin pile
- Miscellaneous services, mooring, fendering and walkway structures

The project was challenging because of the tight schedule, busy port, and partial collapse of the old timber berth.



Pile gate, 300t crane and Berth 6 demolition in foreground, new wharf in centre and monopile installation by piling barge in Berth 1-5

Roam Marine assisted with the temporary works design including:

- Assessment of the dilapidated timber wharf. In particular numerous piles were missing or seriously weathered
- Development of demolition method including testing of the old wharf deck and a C beam to remove the slab in sections
- Piling gates - onshore rig for work on the better sections of deck and a needle beam for working on the new piles where the deck is unsuitable.
- Formwork design for the insitu concrete deck
- Demolition method for removal of the concrete deck sections at dolphin locations
- Lifting and temporary support of the 40t dolphin pile caps

- Formwork for the reinstated deck slab
- Assessments of vehicle loads on the existing wharf



Berth Concrete deck removal



Needle beam pile gate



Berth 6 formwork, 40t pile caps and driving 2.2m 50t pile