



### Key achievements

- Construction completed in Sydney's busiest water transport corridor while the terminal remained in operation with ships berthed alongside.
- Design and Construction of the wharf within 6 months demonstrating internal capability in engineering and construction excellence
- Stakeholder management operating adjacent to high-end hotels, restaurants in one of Australia's most iconic locations.

### The project

60 metre extension of an existing wharf involving:

- Installation of a sheet pile wall (50 x Double AZ36 -700N sheets)
- Installation of 40 tubular piles up to 1200mm diameter
- Over 100 precast elements including headstocks and infill panels
- Drilling 14 ground anchors through installed tubular piles
- Construction of 6m diameter x 3m deep circular mooring dolphin
- 250 cubic metre insitu concrete deck pour
- Commercial diving works, concrete remediation, fender installations and electrical works

### The challenge

Design and construction within a tight time frame in a high profile and constrained location with the majority of deliveries and work conducted over water.

### The solution

- Utilisation of both land-based and marine based plant to expedite the program.
- Intricate co-ordination between work activities- piling, off-site precast concrete fabrication and installation, insitu concrete pours.
- Design management from in-house engineers to optimize constructability into design.

"The design and construct project was undertaken within a period of six months. The process was required to conform to strict Consent Conditions, limited available work space and to keep the facility operational. The project was completed to a high standard, within budget and time, aided by innovative design and construction by Waterway Constructions." **Tony Navaratne, Port Authority of NSW Principal's Representative**

### Application

Marine constructions

### Technique

Driven piling  
Precast and insitu concrete  
Permanent anchors

### Market

Infrastructure – Ports & Harbours

### Client

Port Authority of NSW  
(formerly Sydney Ports Corporation)

### Main contractor

Waterway Constructions

### Contract Value

A\$14.6 million

### Keller business unit (s)

Waterway Constructions  
Keller (Australia)