


nswPorts

Sustainability Aspects of Brotherson Dock Life Extension Project

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Asset Management and Sustainability

- We are aware that significant amounts of resources are used in building port structures.
- We know that assets are passed on through the generations; careers are much shorter than the lifespan of port assets.
- We realise that we can achieve significant sustainability outcomes by maintaining existing port assets and by investing in life-extension of assets to meet current and future needs.
- This intergenerational and whole-of-life approach means that we can deliver tangible sustainability outcomes while meeting our corporate objectives.
- In addition, we look for opportunities in each asset management project that can further improve sustainability outcomes. The Brotherson Dock Life Extension project is a great example of this approach.

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Brotherson Dock Life Extension - Objectives



- Extend the operational life of a 40 year old asset by a further 20 years minimum
- Remove all delaminated concrete and repair
- Protect areas of high risk of corrosion onset, with anodes
- Remove old fittings and fixtures that have become redundant

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Brotherson Dock Life Extension Project-Outline

- Concrete quay structures constructed in 1970's
- Negligible ongoing maintenance conducted over the years
- Very high quay utilisation
- Main revenue earning asset for NSW Ports
- Defined as a critical asset



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Brotherson Dock Life Extension Project-Features



chatswood portography

- Protection of concrete above and below tidal levels
- Solution developed through a trial implementation
- Discrete hybrid anodes adopted for above water protection
- Impressed Current anodes adopted for below water protection

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Brotherson Dock Life Extension Project-Features

- 23,538 hybrid anodes installed
- 10 water impressed current anodes installed
- 5 reference electrodes installed
- Remote system monitoring



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Sustainability Measures - General



chatswood portography

- First project undertaken by NSW Ports to apply for ISCA Rating
- Sustainability a key decision driver in project development
- Sustainability driven through construction and operation

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Sustainability Measures - Specifics

- Maximisation of recycling throughout project delivery
- Minimisation of resource consumption throughout project delivery
- Design incorporating minimum resource consumption throughout project life



Sustainability Measures - Specifics



- Project to include solar photovoltaic panels to offset power consumption
- All power consumption by NSW Ports purchased through renewable power generation agreement

Questions ?

