



# Port Botany Container Terminal Expansion

## Overview

### Sydney Ports

Sydney Ports Corporation is responsible for managing the commercial ports of Sydney located in Sydney Harbour and Botany Bay.

The two ports combined handle over \$50 billion worth of trade each year, providing a valuable contribution to the economy and facilitating the direct and indirect employment of 17,000 people. One of the key roles of Sydney Ports is to ensure that port facilities are in place to cater for existing and future trade needs.





# Trade and Port Botany

**Port Botany as we know it today was developed in the 1970s as the first stage of a strategy to provide for the long-term trade and port requirements for Sydney and New South Wales. Since then we have seen enormous change in global trade patterns and growth in Australia's economy.**

Container trade has been growing steadily worldwide since the introduction of the container around 50 years ago. Trade growth is a global phenomenon and many ports have recently completed expansion projects or are planning to expand with ports such as Rotterdam, Singapore, Barcelona, Shanghai and Long Beach investing in major expansion projects. Within Australia the Port of Brisbane is currently expanding its capacity to provide three extra container berths.

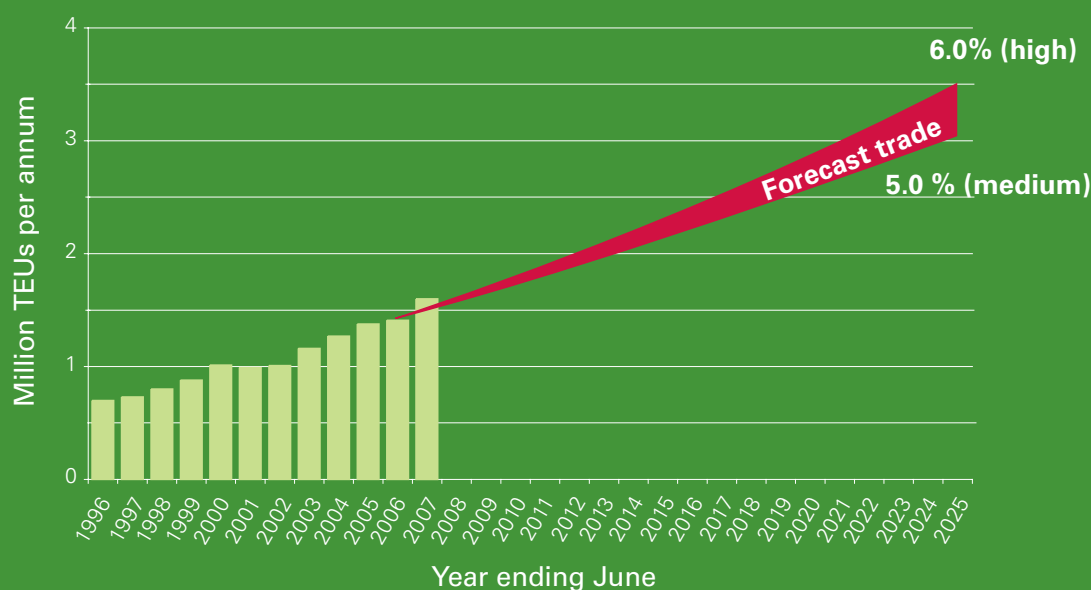
For 30 years Port Botany has been able to meet changes and the demands of our growing economy with its purpose built container and bulk liquid facilities. By keeping abreast with evolving technology and significantly improving productivity, the port has been able to handle

Sydney's container throughput which has grown from about 175,000 TEUs\* in 1970 to 1.62 million TEUs in 2007 with growth particularly strong over the last five years. Productivity will continue to improve, but it will not be able to keep pace with rapidly growing trade demands. Port infrastructure needs to be expanded to cater for forecast demand of over 3 million TEUs by around 2020 (or earlier if current growth rates continue).

Expansion of the container terminal at Port Botany will ensure that the needs of the logistics chain will be serviced, especially the needs of the shipping industry which can suffer costs associated with delays from port congestion. Eighty-five per cent of the containers traded through Port Botany contain cargo which has originated from, or is destined for, locations within a 40 kilometre radius of the port. As the city of Sydney continues to grow and more products are manufactured offshore, the need for containers traded through the port also grows.

\* TEU – Twenty-foot Equivalent Unit.

## Container trade growth



Source: Sydney Ports Corporation

# Port Botany

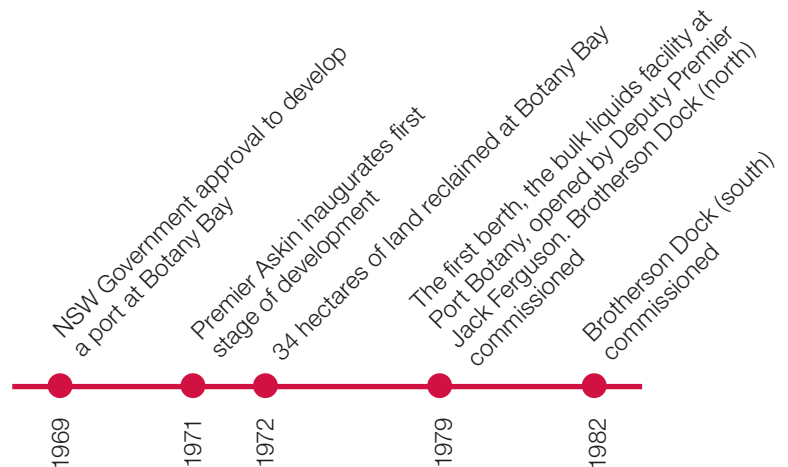
**Port Botany, located 12 kilometres south of Sydney's CBD, was first commissioned in 1979. It currently handles the second largest container volumes in Australia and generates \$1.5 billion a year in economic activity. Over \$2 billion in infrastructure is in place at the port which is a vital asset and pivotal to the State's international trade.**

The port's location within Botany Bay is advantageous as it is characterised by deep water channels and a short sailing distance to open waters. The port is also linked to the rest of Sydney by a dedicated port road and rail freight line.

The port covers an area of 210 hectares and is an integrated area with facilities for stevedoring, trucking, warehousing, bulk liquid trade and storage, customs container examination and empty container storage. Stevedoring services for six berths are provided by two stevedores Patrick and DP World. The port also handles bulk liquids, gases and chemicals through a port-operated, common user bulk liquids berth.

On the southern side of Port Botany, Caltex Australia operates a jetty with two berths and a multi-buoy mooring, for crude oil and other petrochemical products imports.

Other facilities provided by Sydney Ports at Port Botany include navigation services, pilotage services, emergency response, security and dangerous goods handling. Private contractors provide tug and lines facilities for shipping.



## Port Botany tenants

- A** Austate Logistics
  - B** Vopak Terminals
  - C** Orica Australia
  - D** Elgas
  - E** Terminals
  - F** Origin Energy
  - G** Patrick Port Services
  - H** P&O Trans Australia
  - I** DP World
  - J** Patrick Stevedores
  - K** Caltex Australia
  - L** Svitzer
  - M** Australian Customs Service
  - N** Warehouse Solutions International
  - O** Randwick City Council
  - P** Australian Maritime Services
  - Q** Vacant
- 1** Berth numbers



# The expansion of Port Botany

**Sydney Ports needs to ensure that Port Botany will continue to operate efficiently in the future. To avoid congestion from the forecast increase in trade, Sydney Ports is expanding facilities at the port.**

In 2005, Sydney Ports obtained Government approval for the expansion of the existing port through the reclamation of 60 hectares of land. This expansion is to be constructed adjacent to the existing berths and will provide significant additional capacity to meet projected long-term trade growth.

## Features of the expansion

- 1,850 metres of additional wharf face for five extra shipping berths
- 60 hectares of reclaimed terminal land
- deep water berths with depths of up to 17 metres
- dredging of approximately 7.5 million cubic metres of fill material to create shipping channels and berth boxes
- dedicated road access to the new terminal area
- additional rail sidings to provide rail access to the new terminal area
- additional tug berths and facilities
- additional berth capacity to be available from 2011/2012.

## Approved expansion



## Economic benefits

The expansion of the port will have significant economic benefits for the State, improving the efficiency of cargo handling, making exports more competitive and avoiding congestion costs. An efficient port will be an advantage in attracting trade and supporting the economic growth of Sydney.

Additionally, during the construction of the project more than 2,000 direct and indirect jobs are expected to be created and once fully operational, the expanded terminal is forecast to generate another 9,000 direct and indirect jobs.

Trade-related industry will benefit from the expansion as vital goods needed to keep the economy running will continue to be brought into Sydney without undue delays.

The shipping industry and prospective stevedores have welcomed the expansion foreseeing the negative impacts of not expanding the port. Shipping will continue to be carried out through Sydney efficiently and on schedule thereby minimising the costs of consumer goods and raw materials.

## Design and construction

Sydney Ports is delivering this expansion through a Design and Construct Contract and has appointed the joint venture of the Australian construction company Baulderstone Hornibrook and Belgian dredging experts Jan de Nul to design and construct the works. The contract for these works was signed in December 2007. Consulting engineers Parsons Brinckerhoff have also been appointed as independent project verifiers. The joint venture partners will develop detailed designs and obtain the required licences and permits prior to commencement of construction. The terminal is designed for large, modern-generation container ships capable of carrying up to 8,000 TEUs. These ships will require deep water berths and be serviced by specially designed quay cranes.

The critical structural elements will be designed to provide a 100-year design life. The design and construction will be in accordance with the requirements of the marine environmental conditions. The construction will also be staged and managed to ensure there is minimal interference with existing port operations. Protection of marine habitats require that specific works be done within seasonal windows, which will influence the staging of the works.

## Artist's impression of the expanded port





# Community benefits

**As a part of this project a number of facilities are to be provided for the benefit of the local community. These include:**

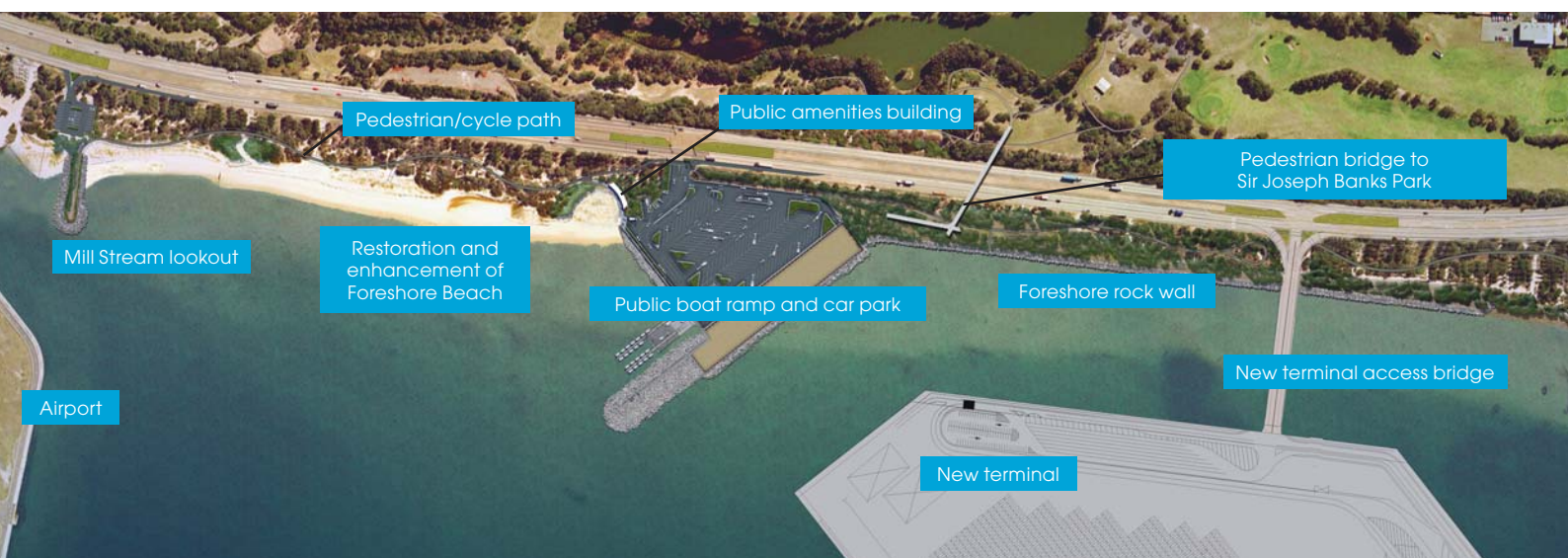
- a modern four-lane boat ramp, with two pontoons, a car park and viewing platform
  - enclosed fish cleaning facilities which prevent birds from being attracted to the area, an important feature because of the proximity to the airport
  - boat engine and brake washing facilities provided by recycled water
  - enhancement of Foreshore Beach with new native vegetation plantings
  - a kilometre long pedestrian and cycle path
  - a new amenities building with toilets, shower/foot wash, water bubbler, dog bowl and bicycle racks
  - a new pedestrian bridge to link Sir Joseph Banks Park with the beach
  - a new groyne and lookout at the Mill Stream with parking for beach users and a pathway linking it to the beach
  - a specially designed bird watching platform with access via a boardwalk and seating at Penrhyn Estuary
- the establishment of a \$3 million enhancement fund for the construction of a new gymnasium at J.J. Cahill Memorial High School at Mascot
  - a pedestrian rail overpass at Banksia Street over the Botany Freight Line.

Sydney Ports will take over the long-term maintenance and management of Foreshore Beach and the Penrhyn Estuary areas.

Consultation with the community is integral to the project and Sydney Ports has established a Community Consultative Committee to work with them and the Contractor for the delivery of the project. Local community and environment groups, residents, business representatives and local Councils are all part of this committee which meets regularly to discuss progress and issues of concern.

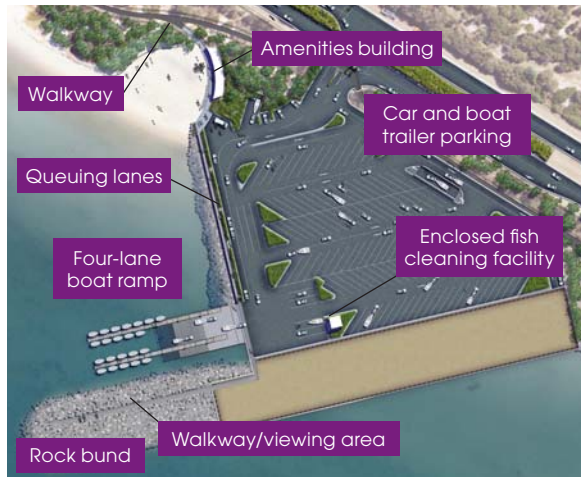
A toll-free hotline has been established for the project for members of the community to ring and voice their opinions and concerns.

## Foreshore Beach enhancement works

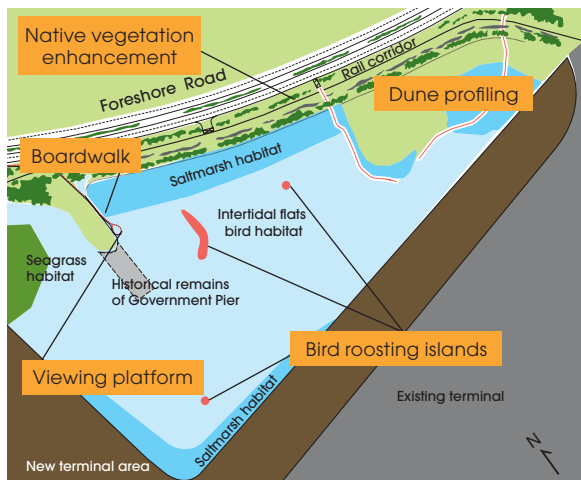


# Environmental initiatives

## The new boat ramp



## Penrhyn Estuary design



The expansion project is located on the northern side of Botany Bay, adjacent to Penrhyn Estuary and Foreshore Beach, which are degraded areas with potential for enhancement. Penrhyn Estuary is a locally significant site for migratory shorebirds and contains saltmarsh and seagrass habitat.

Sydney Ports is committed to protecting and enhancing the habitats and has prepared the *Penrhyn Estuary Habitat Enhancement Plan*, which details all measures to be taken before, during and after construction to protect and enhance Penrhyn Estuary.

Key features of this plan include:

- saltmarsh habitat will be expanded to around 3.5 hectares and the existing intertidal sand and mudflats are to be expanded to approximately 14 hectares. These areas will provide additional bird habitat and help attract migratory birds
- the seagrass habitat will be increased to approximately 6.5 hectares in the project area to attract additional fish and marine life.

Other environmental initiatives at these sites include:

- stormwater run-off from the amenities building and boat ramp will be collected and reused
- solar lighting will be provided along the entire length of the pedestrian/cycle way.

## Estuary bird lookout



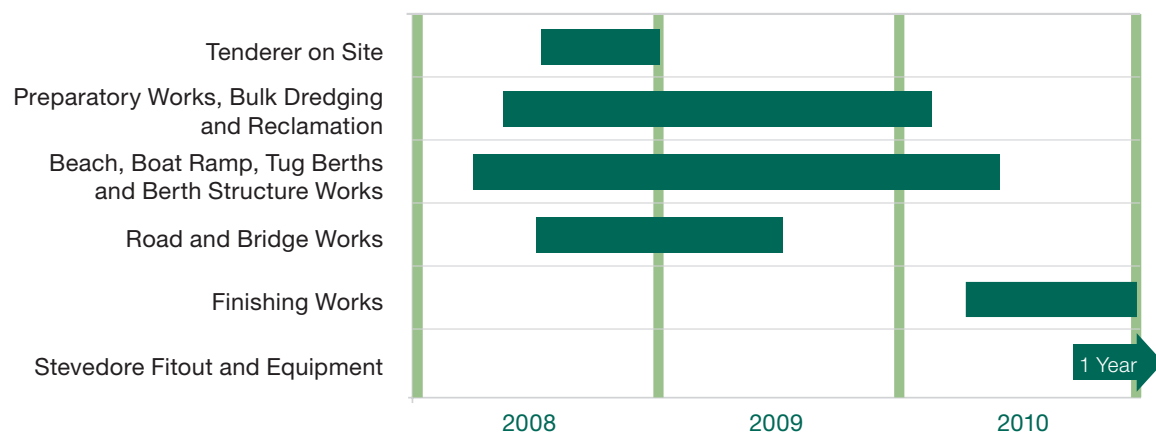
## Timing and delivery

Construction of the terminal area will commence in mid-2008 with completion expected early in 2011.

It is expected that the first new berths will be commissioned in 2011/2012.

Sydney Ports will conduct a tender process to select a stevedoring operator for the expanded area. This process is expected to be concluded in 2008. Following the construction of the wharf infrastructure, the successful stevedore will equip the terminal ready for operations.

### Indicative construction program



## Contacts

For further information on the Port Botany Expansion Project contact:

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