

STA Brookvale Bus Depot Redevelopment

CLIENT: NSW State Transit Authority
LOCATION: Brookvale, NSW
VALUE: \$13 million
DURATION: September 2008 to September 2009



The Brookvale Bus Depot is a triumph in the harmonious and cooperative relationship built by the Donnelley project management team and the NSW State Transit Authority and its employees.



PROJECT PROFILE

The new Brookvale Bus Depot on Pittwater Road, Brookvale, involved the demolition of the existing STA administrative facility, extensive new roadwork on Pittwater Road and the construction of new STA administration buildings on the same site. The depot houses 180 buses.

Significantly, all work on the site was carried out while the bus depot remained fully operational – requiring Donnelley Constructions to implement innovative and sophisticated project management methodology.

SCOPE OF WORKS

Construction consisted of a new double story administration building and single storey workshop amenities building. Two existing administration buildings required demolition to make way for increased bus parking and underground stormwater retention tanks.

The project also involved extensive road constructions on Pittwater road including a new bus lay-by, carpark deceleration lane, new bus entrance and free left-hand turn exit lane. It also required the construction of underground stormwater retention tanks and the installation of 170m² of rooftop solar panels to power external lighting in the bus yard and car park.

Other design features include:

- Depot inspector room for bus operation in and out of the depot.
- A range of offices for STA managers and administration staff.
- Meeting and conference rooms.
- Training rooms.
- Gymnasium.
- Locker rooms and amenities on both levels.
- Large staff common area.
- Large staff/lunch room with kitchen attached on the first floor, with operable Vergola roof over the outdoor balcony serving as lunch/barbecue area.
- Recreation room.



CONSTRUCTION DETAIL

The building comprises 2000m² of floor area over two levels. It is a concrete and steel framed building finished externally with:

- Face brickwork from Boral Escura Range as external walling for the administration and operation offices.
- Colorbond sandwich panels as walling materials for the amenities and entertainment area.
- Innovative use of steel screw piles to varying depths of up to 28metres were used as building foundations.
- Powder coated aluminium louvers and dressed timber battens as external sun shading devices.
- Colorbond metal roof.
- Large rooftop solar panels that feed into the grid for electricity regeneration as an ESD initiative
- Sandstone base for the building facade

CONSTRUCTION CHALLENGES

The major challenge faced in the construction of the Brookvale Bus Depot was the simultaneous demolition of the redundant depot buildings and the construction of the new facility while the depot remained fully operational.

Adam Donnelley of Donnelley Constructions commented: "The co-operation between STA staff and the Donnelley Constructions team in facilitating the build and smooth transition from the old facility to the new was pivotal in the success of the project "

"The relationship between the two teams was excellent and meant there were few disruptions to both the construction of the new facility and the day-to-day operations of the depot's services," he said.

The construction process, which covered more than half of the site, was contracted to be undertaken while maintaining full bus operations, including over 400 bus movements per day.

Donnelley Constructions project manager Jason Pfeiffer said other challenges on the project included:

- High-level water table approximately one metre below surface level, primarily at high tide.
- Due to poor ground conditions, ground bearing was a major issue for both the building structure and in-ground services.
- Contaminated soil management.
- Delivery of materials, parking and working on site with extremely tight site access due to continual bus movements.
- Specific security and CCTV requirements, both in the buildings and connected wirelessly to the buses.

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Adam Donnelley ”



The Donnelley Constructions team worked closely with a representative of the STA on a daily basis. Expectations and requirements were set out in a site-specific induction to ensure all activities throughout the project were coordinated and completed as prescribed. Deliveries of construction materials and other operations that affected bus movements were carried out during pre-arranged times.

Another significant achievement of the construction of the Brookvale Bus Depot was the low incidence of work-related injury and days lost to workplace accidents. In fact, there were no LTI incidents reported during the construction of the depot.



**BUILDING CONTRACTORS,
PROJECT MANAGERS AND
DEVELOPERS**

Phone: 02 9634 1233
 Fax: 02 9634 1190
 Email: builder@doncon.com.au
 www.doncon.com.au