

Wallbridge Gilbert

Aztec Analysis



NEWSLETTER Number Twenty Five

December 2008

Rundle Place Redevelopment

Wallbridge & Gilbert has been appointed by the Gandel Group as civil and structural consultant for a major redevelopment of the site currently occupied by Harris Scarfe and other retailers in the centre of Adelaide.

The new development, to be known as Rundle Place, will provide a mix of retail shopping and commercial office space.



Perspective by The Buchan Group

Wetlands

W&G is presently carrying out two wetland projects for the City of Playford, SA.

The 3.8ha Andrews Farm wetland will treat and inject about 460ML of stormwater a year into the Aquifer Storage and Recovery (ASR) scheme for reuse.

Meanwhile, a 4.7ha wetland, presently under construction at Munno Para, will yield over 510ML of treated stormwater for re-use each year.



New Rapid Bay Jetty, SA

The SA Government is upgrading the Rapid Bay Jetty at a cost of \$3.9 million. Aztec Analysis has designed and is overseeing its construction. The pile-driving has been completed and the remaining superstructure is expected to be completed by late January.

Aztec was part of the successful Bardavcol/Maritime Constructions team in a competitive design-and-construct bid.

The 240 metre recreational jetty was designed with a focus on durability and ease of construction.



Adelaide Central Bus Station

Having won the Australian Steel Institute's state award for structural steel design, W&G received a High Commendation at the national level in September for the new Adelaide Central Bus Station.

The project also received the Award of Excellence (urban renewal) from the Urban Development Institute of Australia, SA branch.



Goyder Pavillion



The \$35 million Goyder Pavilion at the Adelaide Showground, opened in September, is one of Australia's most environmentally sustainable exhibition venues.

The 17,000 sq m facility includes Australia's largest underground water storage at 3.5 million litres, landscaped outdoor plazas, a feature gallery and four mezzanine meeting rooms. Wallbridge & Gilbert was responsible for civil and structural engineering.

Photos by Adelaide Showground



Darwin Office



City Heights perspective by Don Gordon Architect

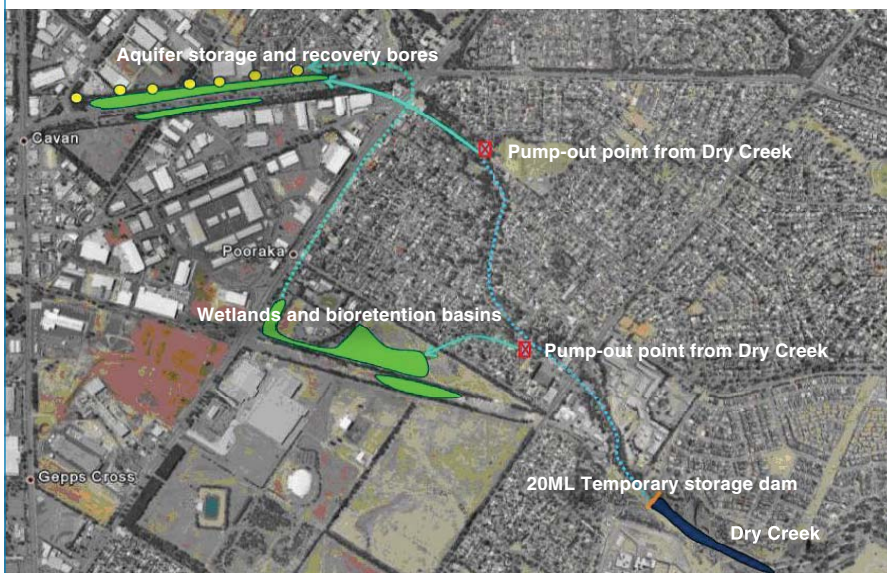
The Darwin office is working on a number of challenging projects:

- City Heights Apartments, Dashwood Place**
 Nine-level apartment building providing 28 quality residential units and a ground floor restaurant (*above*).
- Oceanfront Apartments, The Esplanade, Darwin Harbour**
 12-storey apartment building with two levels of basement carparking, a tennis court, swimming pool and office accommodation.

Lower Dry Creek Stormwater Harvesting Project

Wallbridge & Gilbert is part of a consortium engaged by the City of Salisbury to prepare a preliminary design for a stormwater harvesting scheme at Dry Creek. The project involves the design of a new weir in the middle reaches of Dry Creek at Walkley Heights to improve the rate of capture downstream at Pooraka and Montague Road. The wetlands will capture and harvest more than 1000ML of water each year which will be stored in local aquifers.

The wetland at Pooraka will also trial a bio-retention system for water quality improvement. If successful, the system will shorten treatment times and significantly reduce the land required for stormwater harvesting and treatment schemes in the future.



Ifould Apartments, Adelaide



Image by Brown Falconer

W&G has been engaged to carry out structural design for a new seven-storey apartment building in Ifould Street, Adelaide. Construction is due to start in early 2009.

Recent Appointments



Toorak Apartments image by Cox Architects and Little Project Developments

- **SA Film & Screen Centre, Glenside, SA**
W&G has been appointed civil and structural design engineer for the SA Film and Screen Centre at Glenside, which will replace the SA Film Corporation site at Hendon. The project will include new international standard film studios and sound stages as well as the refurbishment of the heritage-listed administration building and other historic buildings.
- **Stage 3, Amcor Glass Bottle Factory, SA**
Civil engineering design and structural site inspection services for the \$150 million expansion of the Glass Bottle factory at Gawler. A new furnace will add an additional base capacity of 360 tonnes per day with an electric boost capable of achieving up to 450 tonnes per day.
- **Victor Harbor TAFE, SA**
\$9.5 million relocation of the TAFE College on behalf of the Department for Transport, Energy and Infrastructure.
- **Tower Apartments, Alphington, Victoria**
Conversion of the Tower Hotel at Alphington to residential apartments. The two-storey heritage-listed building will be enlarged to four levels plus a new basement for car parking.

- **Ceduna Hospital Redevelopment, SA**
Civil and structural engineering for the redevelopment of the Ceduna Hospital. The project will incorporate a number of environmentally sustainable design initiatives to reduce reliance on mains water and energy consumption.
- **Adelaide Airport Infrastructure**
Following our supporting role in the Adelaide Airport Masterplan, W&G has been appointed as Traffic, Civil and Structural consultant for Stage 1 of the Adelaide Airport Landside Infrastructure Project which will include new carparking facilities and an improved road layout.
- **Balds Hill Road, SA**
Concept design for the upgrade of Balds Hill Road on the eastern edge of Mount Barker, and for a proposed new interchange linking Balds Hill Road with the South Eastern Freeway.
- **Blake's Crossing, SA**
Delfin Lend Lease has appointed Wallbridge & Gilbert as civil consultant for the Blake's Crossing development at Blakeview, north of Adelaide, involving more than 1400 allotments and a large district centre.

- **Apartment Building, Toorak, Vic.**
New 28-level apartment building behind an existing eight-level building which is to be extensively modified for shops and serviced apartments (*left*).
- **Adelaide Showground**
Following involvement with the Goyder Pavilion (*page 2*), W&G is now working on the new Rose Terrace Entrance and the Showground Solar Energy Project to provide 1 Megawatt of electricity from photo-voltaic panels, enough to power the Goyder Pavilion. W&G is assessing the capacity of existing structures throughout the site to support the panels and switching equipment.
- **Aspire Apartments, Darwin**
A 10 metre deep basement close to an embankment and a 9-storey building has required particular care by W&G in preparing an early works package for this 24-storey building (*below*).



Aspire Apartments image by Bell Gabbert Architects

Micasa8 Apartments, Carlton, Vic



This 13 level student housing building utilises "Trussdek" floor pans supported on load bearing precast concrete panels.

Market Street, Adelaide



Image by Liptak Projects

Wallbridge & Gilbert is providing structural engineering services for this new mixed-use development in Market Street, Adelaide.

It will include retail and carparking at ground level, two floors of commercial office space and five two-storey townhouse style apartments above.

Rundle Lantern, Adelaide

The lights of the \$2 million Rundle Lantern on the corner of Rundle and Pultney Streets in Adelaide were officially switched on by Adelaide Lord Mayor Michael Harbison on 24th October.

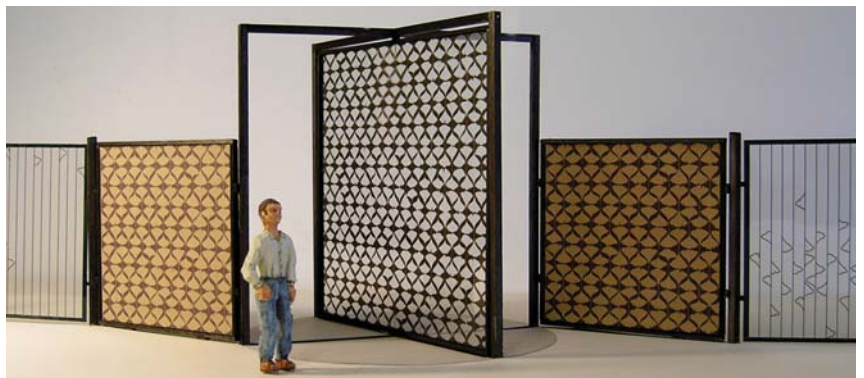
The Lantern uses 748 aluminium panels illuminated by computer- controlled LEDs to produce a digital art show nightly. W&G designed the structural system for mounting the array onto the building facade.



Photograph by Roy Van Der Vegt © Newspix

Adelaide Botanic Gardens Gate

An unusual job for Wallbridge & Gilbert has been the design of structural steel, framing, swivel bearings and footings for an ornamental gate which will become the new western entry to the Adelaide Botanic Gardens from Frome Road.



Photograph of model by Hossein Valamanesh

Techport Australia - Systems Centre, Osborne, SA

W&G has completed documentation of the Air Warfare Destroyer Systems Centre, which will be built at Techport Australia, Osborne.

The Centre will be the headquarters for the AWD Alliance, which will lead the design and delivery of three Air Warfare Destroyers for the Royal Australian Navy.

The project will also include office and warehousing for Raytheon Australia, a member of the Alliance team.



Perspective by Woods Bagot

Excellence Awards



Woodcroft College Administration Building photo by RAIA



Hawke Building photo provided by RAIA



Camberwell Girls Grammar School



Place on Brougham

Wallbridge & Gilbert is proud to have acted as the civil/structural consultant for a number of projects recognised at award ceremonies held since July.

Torrens System Upgrade, Adelaide *IEAust Engineering Excellence Awards (SA)*

- High Commendation for Project Management

Australian Water Association

- Award for Infrastructure Development and Management

Bakewell Underpass, Adelaide

Civil Contractors Federation

- The National CCF Earth Award (Category 4)

IEAust Engineering Excellence Awards (SA)

- Winner, Infrastructure Projects

Santos Centre Interior, Adelaide

SA RAIA Architecture Awards

- Award of Merit for Interior Architecture

The Queen Elizabeth Hospital Inpatient Building, Woodville West, SA

SA RAIA Architecture Awards

- Commendation for Public Architecture

Sacred Heart College Performing Arts Centre, Somerton Park, SA

SA RAIA Architecture Awards

- Award of Merit for Public Architecture

Port Augusta Courts Development

SA RAIA Architecture Awards

- Commendation for Collaborative Design

Place on Brougham, North Adelaide

Urban Development Institute of Australia (SA) Awards

- State Award for Excellence for High Density Housing

96 Esplanade, Hove, SA

SA RAIA Architecture Awards

- Commendation for Residential-Multiple Housing

Stirling Library, SA

SA RAIA Architecture Awards

- Award of Merit for Interior Architecture
- Commendation for Public Architecture

Camberwell Girls Grammar School, Victoria

Council of Education Facilities Planners International

- Award for New Schools (Australasia Region)
- International Award for Best New Elementary Facility

Woodcroft College Administration Building, SA

SA RAIA Architecture Awards

- Awards of Merit for Colorbond Steel Award and Commercial Architecture

Hawke Building, University of SA, Adelaide

SA RAIA Architecture Awards

- Award of Merit for Interior Architecture
- Jack McConnell Award for Public Architecture

Flinders University – Science & Innovation Learning Centre

Wallbridge & Gilbert has completed structural and civil engineering design for the new Science and Innovation Learning Centre at Flinders University. The work follows the successful completion of a secure stand-alone building for the University's mainframe computer.

The Learning Centre features a double curved roof and a linking pedestrian bridge over an existing roadway. Particular emphasis was placed on energy efficient design and materials.



Image provided by Swanbury Penglase

ABB Grain, Port Adelaide Terminal

Aztec has completed civil and structural design for this container loading facility at ABB's Port Adelaide grain terminal.

Photo by Kilic Engineering



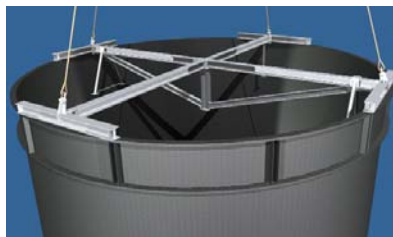
Tank Lifting



Photo by Built Environs

Aztec Analysis carried out heavy lifting and transport design services for the new Leach Tanks at BHP Billiton's Olympic Dam facility.

The two tanks stand 15.6 metres tall by 15.2 metres in diameter and weigh approximately 150 tonnes. The lifting frame allowed for an offset centre of gravity.



WALLBRIDGE & GILBERT
Consulting Engineers

www.wallbridgeandgilbert.com.au

Adelaide

60 Wyatt Street
Adelaide SA 5000

Telephone (08) 8223 7433 (W&G)
Telephone (08) 8223 5190 (Aztec)
Facsimile (08) 8232 0967

adelaide@wgeng.com
adelaide@aztecanalysis.com.au

Melbourne

20 Market Street
South Melbourne VIC 3205
Telephone (03) 9696 9522
Facsimile (03) 9696 9577
wgmelb@wgmelb.com

Darwin

Wallbridge & Gilbert RFP
Suite 7, 9 Keith Lane
Fannie Bay NT 0820
Telephone (08) 8941 1678
Facsimile (08) 8941 5060
rpf@rpfeng.com

Whyalla

Level 1, 15 Darling Terrace
Whyalla SA 5600
Telephone (08) 8644 0432
Facsimile (08) 8645 0544
admin@aztecanalysis.com.au

AZTEC
Aztec Analysis

Heavy Lift Consultants
Engineers and Planners