

Invisible Solution for North Terrace

North Terrace, SA

The Adelaide City Council-funded North Terrace Redevelopment encompasses the recently completed University of Adelaide. This is a significant upgrade to the celebrated North Terrace frontage. Two prominent pedestrian links now connect with the university's hub and lower campus.

The architectural design implemented significant principles recommended by the 2002 North Terrace Campus Development Strategy. The most important was for the provision of a pedestrian friendly environment. This includes improved safety along its existing roads and newly designed shared pathways with additional lighting and low under-storey landscaping.

The design showcases the forecourts but is sensitive to the value and character of the three heritage buildings (Mitchell, Bonython Hall and Elder Hall). The paving materials and the various forms of street furniture complement the neutral colours and textures of the buildings whilst enhancing their ceremonial character.

Throughout its open grounds and pathways, engineers specified a number of cable pits to accommodate the precinct's numerous communication and electrical services. ACO supplied an assortment of pits in a variety of sizes to provide the necessary protective enclosure for cables. Tayler Cullity Lathlean (landscape architects) selected ACO's discrete **PAVERMATE™** access covers to provide accessibility to these pits for maintenance whilst preserving the visual continuity of the pavers along the walkways.

ACO CABLEMATE™ comprises a comprehensive range of electrical cable jointing pits and ducting manufactured in Australia from rigid polymer concrete and thermoplastic. A selection of the industry's widest range of access covers complements this range with systems made from ductile iron, galvanised steel and composite materials. ACO's recessed covers are designed to be filled with pavers or tiles for all sizes and configurations.

In front of the museum, art gallery and hospital, ACO also supplied over 250 metres of **KLASSIKDRAIN™** grated trench drains complete with stainless steel **HEELGUARD™** and Slotted grates for stormwater drainage.

This Issue



Unique batter drainage for Hume Highway - Page 3



ACO, registered suppliers to Main Roads - Page 2



New Site Manual - Page 2



Bribie Island - Page 3



Klassik story for an expanding business - Page 3



ACO launches ACCTRIX™ Back page

For more information on ACO's products or services, contact our sales office or visit:
www.acoaus.com.au



Brisbane, QLD

SLABDRAIN™ makes it to head office

Brisbane Airport commenced a \$340 million dollar expansion of the International Terminal in October 2006, which will be completed by the end of 2008. The expansion includes two new gates, additional check-in, arrival facilities and carousels; extended apron areas; an increase in the number of retail outlets and a new multi-storey carpark.

To complement the expansion, a new business park has been developed to increase business growth and opportunity as a result of its strategic proximity to Brisbane Airport, Brisbane City and other key infrastructure. This scheme is in association with the QLD Government, to develop a thriving business park as part of Brisbane's gateway to new business under the Australian Trade Coast Infrastructure Plan. Part of the upgrade is to construct Brisbane Airport's Corporation's (BAC's) new head office in the centre of the park. The new \$4 million facility houses BAC's staff and the project design team for the expansion.

In the paved areas outside the building and adjacent to the water features, ACO's **SLABDRAIN™** (300mm wide) trench system complete with stainless steel **HEELGUARD™** Antislip grates was installed as the surface drainage system to ensure safe pedestrian access whilst maintaining a highly aesthetic finish. **SLABDRAIN™**, available in 3 widths is typically selected in areas where hydraulics are of equal concern to the designer as are installation constraints. The range is ideal for suspended slabs or in applications where there are depth restrictions due to other services crossing beneath the drainage line.

ACO products drawing architects

In addition to exhibiting at Designbuild, Melbourne, ACO by the end of 2008, will have debuted in 3 new architectural shows, 2 of which are located in Asia.

Architect '08, (Thailand) and Archidex '08, (Kuala Lumpur) are 2 of the most prominent events on the Asian architectural calendar.

DesignEx, part of Form & Function (Sydney) is integrated with the RAI conference.

In all 3 shows, ACO will have displayed its new **SHOWERDRAIN™** range, architectural covers and grates. This already has generated unprecedented interest resulting in many enquiries for current project design work



Architect '08



DesignEx '08

ACO, registered suppliers to Main Roads

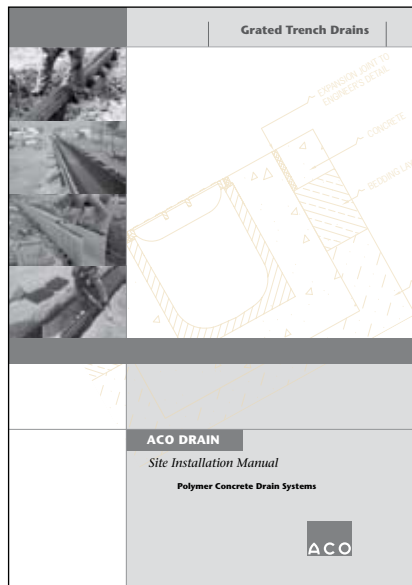
ACO is the first approved registered supplier of pit covers to Queensland Main Roads.

The covers are part of a dedicated range of products for this niche market. ACO's upgraded Type(s) 1, 3, 4, 7, 8 and 60 cable pits now comply with Main Roads Specification MRS 11.78 Fabrication of Structural Steelwork; MRS 11.91 Ducts and Pits; and manufactured to Main Roads standard drawings. All lids are tested to AS3996-2006; have an electrical insulation coating to AS/NZS1580.408.5-2006; and supplied with a certificate of compliance.

This was a collaborative process which required ACO to develop new product components and work flow procedures in consultation with the Main Roads Structures Division. For specific contracts, complete systems are currently delivered with batch related material and test certification providing full traceability to every step in ACO's supply chain.



For more information, visit <http://www.acoaus.com.au/accreditation.htm>



New Site manual

ACO, manufacturers of **ACO DRAIN™**, the world's most popular trench drain, has released a new site installation manual.

Fully illustrated, the guide is designed to assist the installer from excavation, right through to final inspections and general channel maintenance.

There is also a section on site-fabrications to ensure the system is easily adapted to each individual project and neatly connected to the underground stormwater pipework.

For more information, visit http://www.acoaus.com.au/pdf/site_installation_manual.pdf

Unique batter drainage for Old Hume Highway



Mittagong, NSW

The Hume Highway is the main link between Sydney and Melbourne. From Sydney, the road slowly climbs up into the Southern Highlands, bypassing towns such as Mittagong where sections of the original route (Old Hume Highway) still exist as dual carriageway thoroughfares. In Mittagong, the highway is an important strategic link for many businesses.

The Highlands Marketplace, situated on the Old Hume Highway, opened in 2007 and is home to Woolworths Supermarket, Big W and 35 specialty stores. The centre is the principal fresh food, fashion and service outlet for the Southern Highlands communities.

Recently completed remediation roadworks on the highway, have allowed the NSW Roads and Traffic Authority (RTA) to select ACO's **KERBDRAIN™** surface drainage system along the median strip to improve the roadwork surrounding the shopping centre.

ACO liaised closely with the project's engineers to provide hydraulic information to ensure the width of flow was minimised for public safety for a 100 year design storm

Unlike conventional kerb and gutter systems, **KERBDRAIN™** transforms kerbs into continuous inlet structures with minimal excavation. Manufactured from durable, polymer concrete, the **KERBDRAIN™** system consists of 500mm long pre-cast modular units each comprising an integrally cast channel and batter with inlets for continuous drainage. The underlying channel then transfers captured flow to the stormwater often eliminating the need for multiple pits.

During the design and planning phase, ACO liaised closely with the project's engineers to provide hydraulic information to ensure the width of flow was minimised for public safety for a 100 year design storm. The project showcases over 150 metres of KerbDrain in the super elevated section of the highway, where in some locations; units are assembled to tight radii near turning bays subject to regular accidental wheel contact.

Measured solution for Bribie Island Road



Bribie Island, QLD

In 2005, the QLD Government released its South East Queensland Infrastructure Plan for the upgrade of the remaining sections of Bribie Island Road from Aerodrome Road to the existing four-lane section, east of Saint Road. The implementation program covers the period 2009-10 to 2014-15. The first stage of this upgrade was the Bribie Island Road and Bestmann Road Interchange.

Bribie Island Road is a major arterial road, connecting the Bruce Highway at Caboolture with Bribie Island. The region is experiencing significant growth in tourism and commercial/residential development thereby resulting in heavy traffic on this key route. The upgrade allows safer, free-flowing traffic along Bribie Island Road whilst improving its flood immunity.

The project was carefully designed to minimise the impact on existing properties along the road such as the one adjacent to Bestmann Rd. At this intersection, the road alignment passes through flat terrain where over 250 metres of **POWERDRAIN™** (200mm wide) trench drain was installed to provide continuous surface drainage along its length. This is critical for eliminating potential aquaplaning at the super-elevated section.

designed with anti shunt lugs and shock absorbing features to hold the grates in place whilst providing restraint from longitudinal wheel movement and general traffic vibration

POWERDRAIN™, manufactured in Australia, comprises durable heavy duty polymer concrete modular drainage channels. To ensure optimum hydraulic efficiency for this project, the precast channels were assembled to produce sloped runs, allowing fall in the flat sections of Bribie Island Road. **POWERDRAIN™** also provides security locking with the patented **POWERLOK™** locking system, enabling quick and effortless fitting and removal of grates to facilitate road maintenance operations. The system is also designed with anti shunt lugs and shock absorbing features to hold the grates in place whilst providing restraint from longitudinal wheel movement and general traffic vibration. The extra heavy duty grates are ideal for the repetitive nature of the carriageway traffic. In the pedestrian access sections of the carriageway, AS1428.2-1992 compliant grates were selected for safety of pedestrian passage.

A Klassik story for an expanding family business



Dixons Creek, VIC

The De Bortoli winery and vineyard is located at Dixons Creek just 8 kilometers along the Melba Highway, from the small township of Yarra Glen. The property was purchased by the De Bortoli family in 1987 and since then, they have added another 150 hectares of grapes to the original 13 hectares. Today it has the distinction of being the biggest winery in the Yarra Valley.

For two decades, the winery has undergone regular expansion and upgrades in line with its growing success. At the various construction stages, ACO **KLASSIKDRAIN™** (100mm wide with stainless steel edge rail) trench drain was installed. Composite, ductile iron and galvanised grates have been selected for various parts of the facility, dependent on the application.

One of the latest installations is in the barrel store rooms, where the drainage system is used to collect spills as well as support regular traffic. The system is fitted with Class D210kN (AS3996) Slotted ductile iron grates and locked with **QUICKLOK™** boltless mechanisms for the quick fitting and removal of grates, ideal for regular cleaning operations.

One of the key reasons why ACO's **KLASSIKDRAIN™** is constantly specified for Australian wineries is for its renowned ease of rapid installation. Modular precast systems require 4 steps whereas traditional cast in situ trench drains require a rigorous 8 step process.

The trench system comprises interlocking precast channels made from polymer concrete, a resin composite with excellent corrosion resistance. For most systems, each unit is sloped to allow for the efficient removal of surface liquids from level slabs. Channels also come complete with integrally cast wearing edges and have smooth impervious walls to ensure liquids are transferred quickly and safely to the secondary stage of drainage.

When taking into account labour, material costs and superiority of the finished appearance, ACO's precast trench drain systems are the obvious choice for wineries and breweries. For over 30 years they have been supplied to these applications worldwide.

ACO STAINLESS™ Upgrade



WaterMark
SPEC MPS2 WMK 20042

ACO Polycrete, member of the Australian Stainless Steel Development Association (ASSDA) has recently upgraded its WaterMark accredited range of stainless steel building drainage systems.

The **ACO STAINLESS™** range comprises channels, grates, waste pipe systems and floor gullies for both residential and commercial applications where corrosion resistance, aesthetics and hygiene are important. These products are particularly suited for use in commercial kitchens, abattoirs, food processing areas, breweries, bottling plants, hospitals, hotels, restaurants, chemical and pharmaceutical plants, leisure facilities and residential applications.

SHOWERDRAIN™ is Australasia's most popular range of floor grate and trough systems specifically designed for bathroom drainage. Five grate options are available including **LINÉAIRE™**, a unique patented grate with anti slip features.

ACO's commercial grate and trough systems are available in standard 100mm, 200mm & 300mm internal widths. A broad selection of corrosion resistant grates, including **HEELGUARD™** Antislip, ensures that these high performance systems are suited to any application. **HEELGUARD™** is a trademark of ACO Polycrete.

There is a choice of 4 edge profile options for each channel system enabling seamless adaptation to any floor surface. For efficient drainage and discrete run positioning, systems can be manufactured to any length and depth; with corner and branch units; and with sloped inverts.

HEELGUARD™ is a trademark of ACO Polycrete.

Visitors to the website will have access to straight run drawings for those wishing to select and customise systems to a project's specific requirements.

For more information, visit www.acoaus.com.au/stainless

ACCTRIX™ – ACO's online multipart configurator

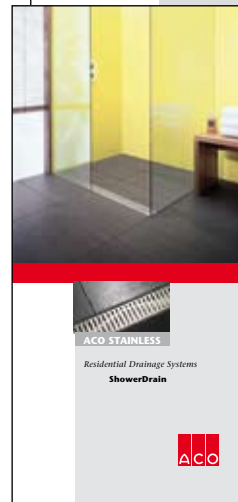
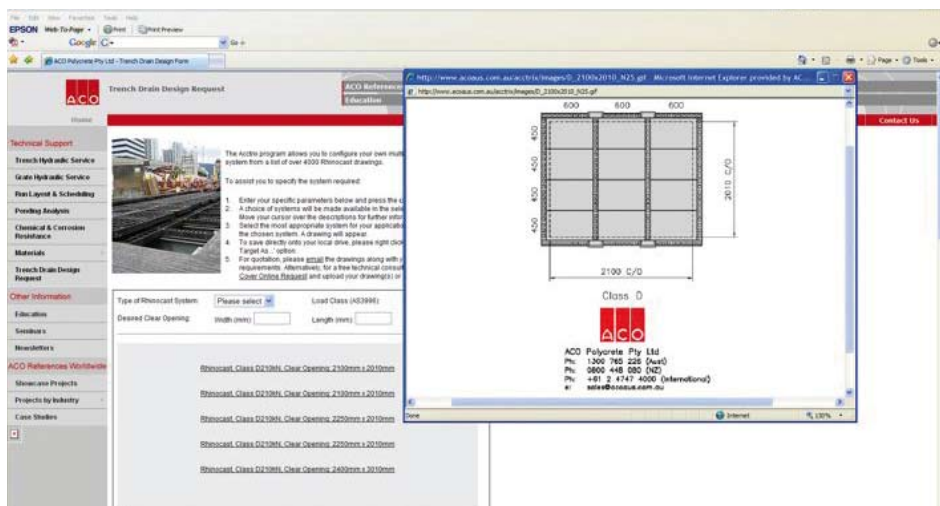
ACO Polycrete has upgraded its website to include an Australian first online programme for the selection of custom designed multipart covers.

For ease of specification and pricing, the **ACCTRIX™** programme will enable engineers and contractors to design their own multipart or trench run system. The visitor will be given an option of 5 systems based on the enclosure's size and load class requirements. These may vary in configuration and individual cover lifting weights, criteria driven by OH&S considerations.

Finally, once a preference is made, a drawing is generated for specification purposes and for submission to ACO for quotation.

The website also provides useful information to assist specifiers in selecting the correct access cover solution for the project application so that potential problems, such as failures during service, are eliminated. A number of key factors are explored in detail. To further assist installers, an audio visual installation tutorial is also accessible.

For more information, visit: <http://www.acoaus.com.au/access>



ACO's RESIDENTIAL & COMMERCIAL BUILDING DRAINAGE CATALOGUES

For further information, visit our website:

www.acoaus.com.au

or phone us on:

1300 765 226 (Aus)

0800 448 080 (NZ)

+61 2 4747 4000 (Export)

or email us at:

sales@acoaus.com.au



ACO Polycrete Pty Ltd

ACN 050 102 942

Head Office Administration

134-140 Old Bathurst Road

Emu Plains NSW 2750

Telephone

02 4747 4000

Facsimile

02 4747 4040