

GATEWAY TO SHOPPING GREATNESS

MAIN CONSTRUCTION COMPANY : Cooper & Oxley
CLIENT : Perron Investments Pty Ltd
CONSTRUCTION VALUE : \$85 million
COMPLETION DATE : November 2014
ARCHITECT : The Buchan Group
STRUCTURAL ENGINEER : Airey Taylor Consulting
QUANTITY SURVEYOR : RBB



The new Stage 3 development will add additional 20,000m² of Retail space, and brings the centre to 50,000m² of retail usage. Internally the public areas will include natural sky lighting and specialist precincts with environmentally sensitive design principles.

The Cockburn Gateway Shopping Complex Stage 3 development continues the north-south direction of the existing Centre and accommodates a 7000m² Target Store in a new fashion precinct.

The new two-storey northern entry offers a focal point for food and activity creating a dominant civic presence to the northern aspect. This area will anchor the newly formed Main Street and vibrant Piazza zone. The additional 20,000m² of Retail space brings the Centre to a significant total of 50,000m² retail space. A basement for 500 cars and a first floor car deck of similar numbers provides customers with safe and accessible parking.

Internally the public areas include natural sky lighting and specialist precincts with environmentally sensitive design principles utilized

throughout. Special and themed dining and café experiences are provided to the Piazza zone, with protected and shaded areas for customers to enjoy the food experience. Public transport is provided through strategically located bus stops in close proximity to the new northern entry.

The new Shopping Centre was constructed using the top down method of construction enabling the superstructure to be completed prior to the excavation of the basement.

The perimeter retaining wall is constructed with a combination of CFA piles and grout columns whilst the internal load bearing columns are constructed in the ground using an innovative piling technique to ensure correct location, verticality and load bearing capacity.

Post tension slabs to the ground floor, and a combination of precast concrete planks and post tensioned concrete beams to the first floor, helped to lock the super structure in position prior to the excavation of the 17000 sqm. basement.

In brief, the Shopping Centre expansion includes; 41 Specialty Shops, Target Department Store, Food Outlets, Large Basement and Roof Deck Car Parking. The redevelopment of the existing car park and road re-alignment and new car parking areas

Cooper and Oxley possess the experience and expertise to provide services across the entire duration of any project from feasibility and design through to construction and whole life asset management. Their market includes all sectors and disciplines of commercial construction and contracting extending through to high end mixed use residential projects.

This expertise includes the following delivery strategies:

- Alliance/Relationship Contracting
- Project & Construction Management

- Cost Planning
- Value Engineering
- Design & Construction
- Fixed Price Contracts

With a distinguished history spanning over 60 years, Cooper & Oxley has progressed into a leading commercial construction company built on the foundation of teamwork, strong leadership and consistent high standards. Underpinned by experience, the consistent delivery of quality projects has earned Cooper & Oxley an enviable reputation in the commercial construction industry. They boast a respected and professional management team that provides certainty in delivering first-class projects for both public and private sector clients..

For more information contact Cooper & Oxley, 9 Bishop Street, Jolimont WA 6014, phone 08 9387 9000, fax 08 9387 9090, email info@cooperoxley.com.au, website www.cooperoxley.com.au



PURE SUCCESS

Pure Projects offers comprehensive project management & construction management services for a diverse range of industries including retail shopping malls, hotels and leisure, high-end retail and F&B fit-outs, clubs & casinos, commercial office building & fit-outs as well as residential (low & high rise).

Just recently, Pure Projects was appointed to carry out a number of project delivery roles for the Cockburn Gateway Shopping City Stage 3 expansion project.

The scope of works carried out included the following:

- Project Management and administration of the Contract between the Client, Perron Investments Pty Ltd and the Builder, Cooper & Oxley Builders Pty Ltd.
- Retail Tenancy Delivery for the specialty retail stores which involved working closely with the Leasing and Retail Design Management (RDM) team to deliver 70 tenancies in time for the grand opening.
- Tenancy Site Logistics co-ordination for the Tenant Fit-out Contractors ensuring that the contractors comply with all site rules.

Pure Projects is well placed to provide effective delivery of retail shopping mall redevelopments along with providing sound advice on the staging of critical construction works. The team has the ability to accurately assess the impact of buildability decisions on speed of construction and staging of works during Centre trading while providing minimal disruption to the Centre operations.

Buildability issues are crucial in the redevelopment of existing centres where careful consideration must be given to tenants who remain trading during each stage. It's also essential to ensure compliance with existing tenancy lease agreements.

Some other considerations in regards to the staging of the works include:

- Keeping mall entries visible to customers at all times (sight lines);
- Ensuring that pedestrian walkways are safe and easy to pass through to encourage shoppers to keep returning to do their shopping at their centre - but at the same time giving the Builder enough access to get on with the job in a reasonably cost effective way;
- The provision of temporary parking arrangements and staging of parking requirements

- Exploring and resolving temporary site entry and exit imperatives plus impacts on surrounding traffic;
- The location and access to temporary loading docks and centre operational requirements;
- Analysing and planning which tenants need to move and when;
- Understand that some tenancies may require more than one relocation in order to remain trading, temporary or pop up shops to be constructed to ensure continuous trade.

For this project, Pure Projects implemented a cloud based tenancy delivery system, which is a cost effective and systematic platform. This intuitive system streamlines processes by managing and minimising risk through identifying, reporting, tracking and ultimately mitigating delivery risk on one transparent platform.

Both nationally and internationally, Pure Projects is currently executing Project Management Services and Tenancy Coordination for a number of major projects including:

- Midland Gate Target Development & Midland Gate Stage 2A Redevelopment – (Novion Property Group)
- Brookfield Place Tower 2 – (Brookfield Office Properties)

- Wentworthville Leagues Club – (Wentworthville Leagues Club)
- Shangri-La Hotel Refurbishment Sydney – (The Shangri-La Group)
- Emirates Wolgan Valley Resort Expansion – (Emirates)
- 70 Castlereagh Street Façade Replacement – (Dunn Strata)
- Epworth Freemasons Theatres and Services Upgrade Works – (Epworth Freemasons)
- Retail Remix Programme, The Shoppes at Marina Bay Sands Integrated Resort, Singapore – (Marina Bay Sands)
- Crowne Plaza Vientiane Complex & Intercontinental Phu Quoc Resort – (BIM Group Vietnam)
- SC VivoCity, District 7 Ho Chi Minh City, Vietnam – (Mapletree Investments)
- Livat Shopping Centre, Wuxi China – (Inter Ikea Centre Group China)

For more information contact Pure Projects (WA) Pty Ltd, Suite 5, Churchill Court, 335 Hay Street, Subiaco WA 6008, phone 08 6460 8433, website www.pureprojects.com

SOLUTIONS OF SIGNIFICANCE

CLIENT : Perron Investments Pty Ltd
CONSTRUCTION VALUE : \$85 million
ARCHITECT : The Buchan Group



When it comes to Architectural Structures, Airey Taylor Consulting has earned a reputation for provision of alternative design models that produce substantial cost savings in capital costs. The company specialises in the design of architectural structures, light industrial, commercial and residential buildings.

Airey Taylor Consulting designed both the structural and civil engineering for the Cockburn Gateway Shopping Centre project, Stage 3. The project was headed by Managing Director Peter Airey and Director Bassam Matty.

The Cockburn Gateway Shopping Centre has a large ground floor area with commercial tenancies, an extensive basement car park, while the existing first floor car park is designed to be converted to provide more commercial tenancies.

Initially designed by others at an unacceptable cost to the owner, Airey Taylor Consulting was approached by the Architect to provide

an alternative preliminary design to allow the project to proceed. They responded with a dynamic, cutting edge design, utilising top down construction methodology to achieve outstanding cost and construction time savings. As a result Stage 3 of the project moved forward. A cost saving of 30% and a construction time saving of over 8 months over traditional design methodology was achieved by the adoption of this methodology.

The top down construction methodology adopted by Airey Taylor Consulting ensured that:

- the major issue of basement construction was removed from the critical design path: following creation of the surround for the basement and piles (eventually to become columns) and the casting of the future suspended ground floor on grade, construction of the superstructure and excavation of the basement and completion of the works in the basement could proceed simultaneously;
- there was therefore no necessity to acquire nearby land to provide temporary car parking for centre patrons;

- there was no need to underpin part of the existing building;
- there was no requirement for formwork to the ground floor suspended slab above the basement;
- minimal interruption occurred to essential operations of the shopping centre and allowed continued shopper access to all tenancies;
- the dramatic speed of construction made possible early completion of major tenancies, facilitating early leasing of that space;
- there was no re-routing of truck access to the shopping centre nor re-routing of major services located within the narrow corridor between the operating shopping centre and the proposed extension; and
- no major disruption to traders was caused by re-routing of services.

In addition to the above, Airey Taylor Consulting cooperated with Belpile to achieve accurately positioned, cost-effective placement of piles to the basement area. After mining out of soil takes place, the piles ultimately evolve into columns to the underground car park and in this case, fully met architectural requirements for aesthetically pleasing columns.

This project has set new performance standards and is an outstanding example of the power of gifted design and construction know-how. It is a benchmark in excellence and was awarded the Excellence for Engineering 2014 by the Concrete Institute of Australia, Western Australia Division.

Airey Taylor Consulting has worked on many award winning projects including the State Theatre Centre of Western Australia, St Quentin's Mixed use development Claremont, The Colonnade, Subiaco, Central TAFE Stage 3, Hawker Pacific Flight Centre Perth Airport, TVW Telethon Institute of Child Health Research, The Duxton Hotel and the iconic QV1 Building.

For more information contact Airey Taylor Consulting, Unit 12, 18 Harvest Terrace, West Perth WA 6005, phone 08 9265 0400, fax 08 9226 3775, website www.atconsulting.com.au

KEEP ON MOVING

Established by Fred Uloth in 1978 and taken over by Darren Levey in 1999, Uloth and Associates has been successfully providing Traffic Engineering and Transport Planning to clients in Western Australia for over 35 years.

For the Cockburn Gateway Shopping Centre upgrade, Uloth and Associates prepared conceptual designs for all of the car park areas and internal roads, together with required road and intersection upgrades adjacent to the site.

The main challenge faced by Uloth and Associates on this project was achieving sign off from both City of Cockburn and Main Roads WA for the required upgrades along Beeliar Drive, including significant modifications to the Kwinana Freeway Ramps and signalised intersections.

Detailed PARAMICS modelling was used to identify the required road upgrades and the operation of the traffic signals, including the installation of a new set of traffic lights on the corner of Wentworth Parade and Beeliar Drive and the widening of Beeliar Drive to three

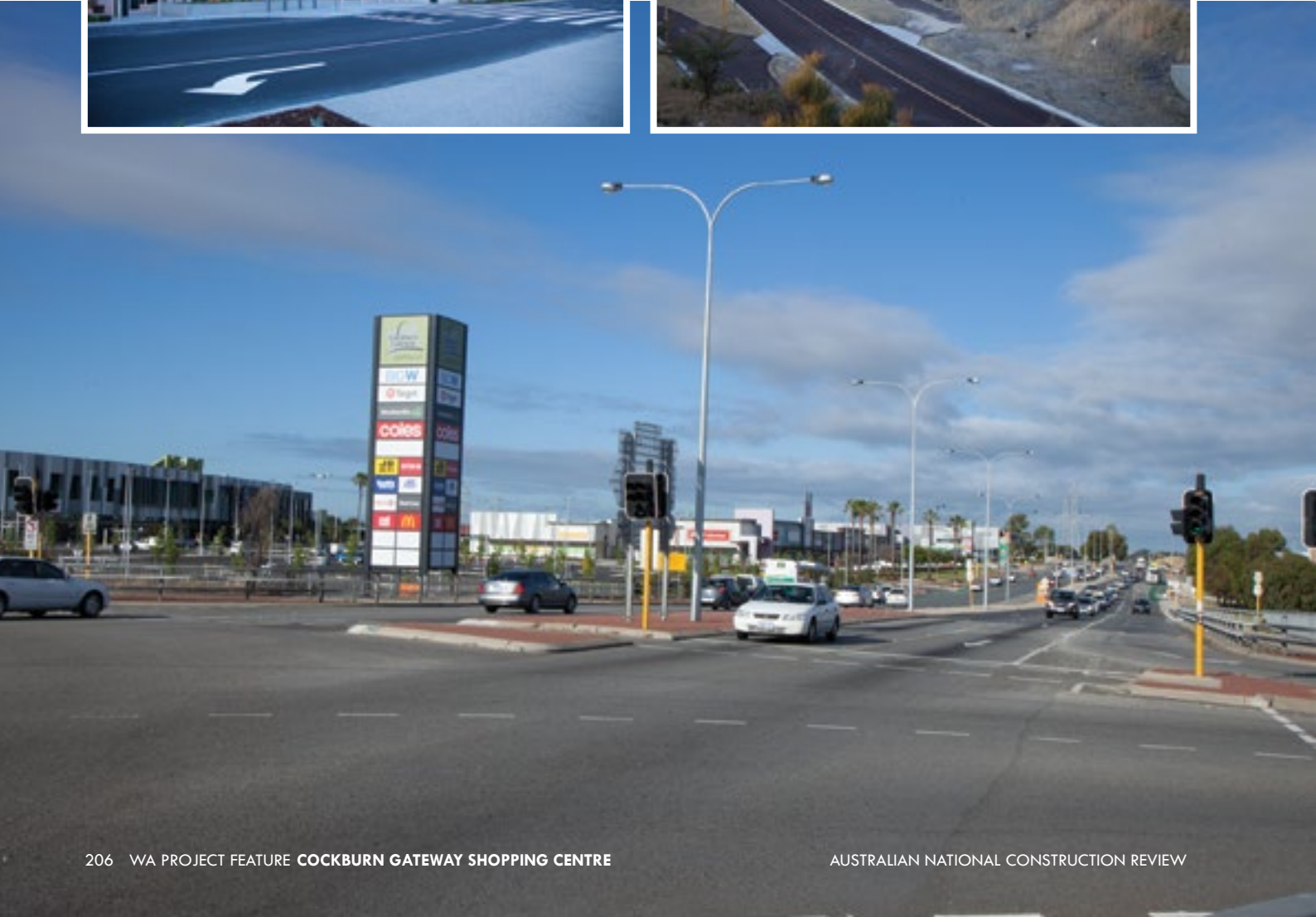
lanes in both directions between Wentworth Parade and the Kwinana Freeway interchange.

The project also includes the construction of a new Main Street along the frontage of the Shopping Centre, with strategically located bus stops in close proximity to the new northern Entry, and a 'Bus Only' underpass link beneath Beeliar Drive to Cockburn Central Station.

With extensive experience in all areas of traffic and transport planning, Uloth and Associates has the capability to not only achieve development approval but to also quickly identify realistic and effective outcomes for project design and implementation.

Darren Levey is available on 08 9321 4841 to discuss your traffic engineering and transport planning requirements.

For more information contact Uloth and Associates, Level 15, 207 Murray Street, Perth WA 6000, phone 08 9321 4841, email uloth@bigpond.net.au



SHAPING THE FUTURE

North Coast Concrete features a successful history of providing their services for major Shopping Centre developments and additions. Just recently the team were engaged to deliver services for the Cockburn Gateway Shopping Centre - Stage 3 Redevelopment project in Perth, Western Australia, on the back of previous successful handovers of Stage 1 in 2006 and Stage 2 in 2007.

The expansion includes more than 40 new specialty shops, a large Target department store, and numerous food outlets along with basement and roof car parking. It also includes the redevelopment of the existing car park and changes to the surrounding road alignments.

Other sites North Coast Concrete have worked on include Shopping Centres in Armadale, Rockingham, Booragoon, Halls Head, Joondalup, Landsdale, Ellenbrook along with the Wanneroo Shopping Centre.

North Coast Concrete have grown to become a thriving and well known concrete business in Western Australia. Their significant history has seen them work on notable projects and the team has been involved in the construction of a diverse range of major commercial projects in Western Australia during the last 35 years.

Their team of skilled tradesmen take pride in delivering quality workmanship, and apart from Shopping Centres, they have also delivered projects across many other industries including Airports, Bridges, Rail Freight, Mining, Water, Power, Education, Health, Retail, Residential, Warehouse and Commercial buildings.



Whilst offering a hands on approach to all their projects, North Coast Concrete take pride in providing an extensive skillset which meets rigorous standards at all times.

North Coast Concrete is experienced working with the top down construction method and is able to provide expert services with formwork, steel reinforcement and all concrete requirements.

For more information contact North Coast Concrete, 19 Giles Street, North Beach WA 6020, phone 08 9448 4632, fax 08 9448 9875, Steve Bevis 0407 877 777, Scott Bevis 0404 103 905



LATEST IN LIGHTING



STRENGTH THROUGH EXPERIENCE

Technically Designed Concrete (TDC) is an independent concrete supplier to the Western Australian premixed concrete market. The team recently supplied premixed concrete to the Cockburn Gateway project in Perth, which consisted of 20,000 cubic metres.

TDC is the only commercial wet batch plant in Western Australia and this state of the art facility features a fully automated wet batch system. The advantages of this system are greater slump control from batching station and efficient mixing of concrete before it is discharged into agitators. As a result, it's not reliant on the mixing capabilities of the truck and its operator; enabling high strength concrete to be produced with greater ease and control.

TDC offers a complete range of products to all industries including domestic, commercial, industrial and civil.

With innovation and environmental awareness in mind, TDC has the following measures in place:

- Recycle water stations
- Monitors to measure noise and dust
- Vegetative barriers for visual amenity and noise suppression.
- Wet batching to reduce dust emissions into the environment.

For more information contact Technically Design Concrete, 33 Miguel Road, Bibra Lake WA 6163, phone 08 9200 8800, fax 08 9200 2243, email mail@tdconcrete.com.au, website www.tdconcrete.com.au



Using the latest LED lighting, SJ Electric has provided an array of electrical works for the Cockburn Gateway Shopping Centre development.

The scope of works that SJ Electric carried out at the Cockburn Gateway Shopping Centre, Stage 3 includes:

- An extension to the High Voltage Ring Main
- A new switchboard room to allow for the expansion of the shopping centre which will see approximately 68 new retail stores
- Specialised lighting for the new target store
- Switchboards
- LED lighting for the fancy ceiling layout
- Relocation of Centre management utilities
- Gym and under cover parking, roof parking and outdoor parking
- New LED lighting extension to the security, CCTV and Public Address system
- Transformers

With 47 years experience in the Australian market, SJ Electric is proud to feature an experienced and dedicated team of 100 employees working from their branch in Western Australia.

As part of the Trivantage network, together they represent a strengthened buying power, a national presence, and a diverse yet specialised workforce. The group is dedicated to delivering world-class solutions to their valued customers.

Trivantage brings together the expertise of some of Australia's most experienced and respected electrical and security specialists

under one brand. As a group, Trivantage boasts 8 offices and service sites strategically positioned across Australia. From the remotest areas of Western Australia to central Melbourne and Sydney, their network covers the entire country.

Other recent projects carried out by SJ Electric in Western Australia include Osborne Park Hospital, Acacia Prison, Halls Head Community College, and Butler Train Station.

An extensive list of services can be found on the Trivantage website. A selection of capabilities are listed below:

- Switchboard design & manufacture
- PLC & motor control centres
- PLC & software engineering
- SCADA & telemetry design & drafting
- 24hr service to commercial & industrial industries
- Preventative maintenance, testing & tagging
- Electrical distribution & reticulation systems
- Water, sewerage & pumping stations
- Process control & automation
- Commercial Refrigeration
- Mining and power

For more information contact SJ Electric (WA), 9 Roberts Street (West), Osborne Park WA 6017, phone 08 9470 4292, fax 08 9204 7240, website www.trivantage.com.au