

FOUNDATIONS

Biannual Newsletter

Bird bath a first for RAAF

Australia's first Aircraft Clear Water Rinse Facility has just been completed for the Royal Australian Air Force at their Williamstown Base near Newcastle, NSW.

Thomas & Coffey's Newcastle Projects team constructed the 22-metre high and 56-metre wide rinse station which accommodates a range of aircraft from the FA-18 to a Boeing 737.



The company's local Services operation in Newcastle was engaged to deliver various water-related components of the job. 500 metres of stainless steel pipe work was supplied and installed, along with overhead and underground sprays. 120 metres of intricate galvanised steel drainage grates and frames were fabricated to protect the underground sprays.

Known around site as the bird bath, the \$5 million steel giant was constructed over a nine month period. It will rinse up to 20 aircraft per day.

Sydney Water's super depot

A \$6.5 million super depot at St Mary's in Sydney will see the centralisation of three separate depots into one. The facility includes a 1,000 square metre warehouse, a 600 square metre two-storey building containing an office and amenities, and a truck wash facility.

Sydney Water's project manager, Eldon Davison, said the facility's design provides a practical solution to the multi-user requirements of the operational depot.

"The new St Marys depot is modern and usable thanks to the flexible and collaborative relationship between Thomas & Coffey's design team and Sydney Water stakeholders. We're very pleased with the project," said Mr Davison.

Another depot is currently underway at Daceyville in Sydney's east, which is the last of four similar projects for this customer.



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From the Managing Director



Welcome to the first edition of Foundations for 2009.

As everyone is well aware, we're experiencing some economic conditions that are unprecedented in our working lives. As with most businesses, the current environment presents a great deal of uncertainty for Thomas & Coffey. However, I remain optimistic that the

industry specialisation strategy we have been pursuing for the past few years has positioned us well to trade through the downturn.

Now more than ever, cost pressures are forcing businesses to think differently about the way they approach and do things. Our goal is to deliver efficiencies and cost savings for our customers by deeply understanding their business and operating issues, and focussing on how we can add value for them. This could be through an improved design or construction methodology, an alternative maintenance delivery program that minimises production shutdowns, or a plant modification that improves safety.

The current environment may also create opportunities for our customers. For example, the reducing demand for trade-qualified people and construction materials will deliver project and maintenance cost savings that were unthinkable at the height of the mining and construction boom last year. This is easier said than done in the tight

credit markets we are experiencing, but I can't imagine there will ever be a better time for those who can secure funds to invest money in plant and asset upgrades which will ultimately improve efficiencies and cost competitiveness.

My message to our people is to remain positive and work hard at ensuring we have satisfied customers for whom we are hopefully doing great work that can be promoted to new customers.

This edition of Foundations overviews a number of recent projects where our growing suite of specialist capabilities has provided our customers with value-adding solutions. I hope you enjoy reading it and I'll be reporting on our progress again in June when we release our Services division newsletter, Blueprint.

Martin Whittaker

Port Kembla cooler commissioned

BlueScope Steel Limited (BSL) is expanding their sintering plant (a very large facility which produces fuel for their blast furnace) at Port Kembla. As a result of this, their sinter cooler needed replacing.

Thomas & Coffey worked with BSL's representative, engineering company Hatch, to trial assemble a new \$1.7 million sinter cooler measuring 40 metres in diameter. The cooler was assembled in a separate location

so that it could have a trial commissioning prior to its installation at the plant.

The Thomas & Coffey Wollongong team worked 13,679 man hours installing 680 tonnes of steel components. The trial commissioning took place in December over two eight-hour periods. The cooler's operational commissioning will take place during plant downtime over a 35-day period during 2009.



Boyne Smelter crane upgrade

Boyne Smelters Limited (BSL) in Gladstone is Australia's largest aluminium smelter. The smelter produces more than half a million tonnes of aluminium each year.

After 26 years of continuous production at the plant, an upgrade programme is in place to improve various pieces of production-critical plant and equipment. One component of this programme is upgrades to the cranes and runways used extensively throughout the aluminium production process.

Thomas & Coffey's Gladstone engineering projects team has been working with SNC-Lavalin and Sinclair Knight Merz in a joint venture known as the SSJV. The work is being delivered in three phases - Crane Assembly Workshop (CAW), Runway Upgrade Platform (RUP) and Runway Upgrade work.

The project requires teams to work around the clock in an ever-changing operating environment. Thomas & Coffey's first portion of the work saw the construction of a new crane assembly area to hold the 12 new cranes. The second phase was to use this workshop for the assembly of the Runway Upgrade Platform (RUP) which was completed in March 2009. In addition, the

team was awarded the smelter's Ergonomic Improvement Award for their innovative work on a runway upgrade simulator which allows for testing of maintenance tasks prior to carrying them out at height on the actual platform. The simulator will result in improved safety outcomes and reduced maintenance costs. The team also designed an ergonomic variable height chair for welders to use while repairing column heads from the platform as part of the third phase of works.

This third phase, crane rail replacement and runways upgrade is currently underway. Over seven kilometres of crane rail will be replaced on two one-kilometre long aluminium smelter lines as part of this work.

Energy Australia's largest capital project

A ground breaking ceremony was held late last year by client, Energy Australia, to celebrate the commencement of work on their largest capital project.

The ceremony marked the start of excavation works at the Kurnell sub-transmission substation upgrade in Sydney's south, managed by Thomas & Coffey's NSW Projects – Utilities team.

T&C representatives joined senior executives from Energy Australia at the milestone event, which concluded with an address from Energy Australia's Executive General Manager – Major Projects & Engineering – Geoff Lilliss.

This \$6 million job forms part of the Botany Bay Cable Project - a key element in Energy Australia's plan to maintain and improve the electricity supply for homes and businesses in Sydney's Sutherland shire, right through to the CBD. According to Energy Australia's Project Manager, Wade Cooke, works are progressing well.

"The job has started out really well. The T&C team's commitment to overcoming the site's challenges and meeting schedule targets has been great. We're looking forward to a continuing successful relationship throughout the project," said Mr Cooke.

A comprehensive environmental management plan has been implemented to pre-empt some of the inevitable environmental challenges of the site. The Kurnell substation is adjacent to a wetland habitat for migratory birds which is of international importance and protected under the Ramsar Convention.

The Kurnell sub-transmission substation is due for completion late this year.



Ground breaking ceremony

Infrastructure for new Hunter mine



A new mine infrastructure project for Xstrata Mt Owen was recently completed by Thomas & Coffey's Newcastle Mining & Industrial Projects division.

Thomas & Coffey worked with Parsons Brinckerhoff on the new infrastructure work at Glendell Open Cut Mine in the upper Hunter Valley. Works included a huge high-bay mine truck workshop with a 20-tonne overhead crane and an internal administration area, civil works for a fuel depot, potable water and sewer reticulation throughout the site and a light vehicle wash facility.

Extensive piling was required underneath the workshop in order to support the 17-metre high columns and the weight of the mine trucks to be serviced inside them. The project team came up with an innovative solution for pouring the concrete foundations by altering the order in which tasks took place. Once they built the piling and installed the pile caps, they erected the roof of the workshop so they could pour the concrete regardless of weather conditions.

Thomas & Coffey also acted as the site head contractor for all the other site works.

Simulator facility underway for Defence



Work in progress at site

Construction of a high security facility at Brisbane's Amberley RAAF Base is currently underway. It will house a flight simulator and several other training devices for pilots and refuelling technicians to operate a fleet of five recently-purchased Airbus A330 Multi Role Tanker Transport (MRTT) aircraft. The new Airbus A330 MRTT is a military derivative of an Airbus A330 airliner (commercial passenger plane). It is designed as a dual-role air refuelling tanker and cargo transport aircraft.

The A330 MRTT was developed by Spanish aircraft manufacturer, EADS-CASA, and the aircraft's training simulator is being designed by CAE Australia Pty Limited. Thomas & Coffey was contracted by CAE to build the simulator accommodation at RAAF Amberley.

Thomas & Coffey's component of this contract is valued at \$11.5 million and is due for practical completion in late August this year. CAE will then commence installation and commissioning of the simulator which, after completion, will be handed over to Defence as a turn-key fully functioning 4-star green rated training facility.

The project team have overcome some challenges relating to the complexity of mechanical, hydraulic, electrical and building monitoring services. The facility will be constructed to very tight tolerances, as little as +/-2mm in the simulator hall due to the relationship between building structure and simulator access.

Project team praised by fire service

On 16 December last year, Queensland Minister for Emergency Services the Hon Neil Roberts officially opened two state-of-the-art fire stations built by Thomas & Coffey for the Queensland Fire and Rescue Service (QFRS).

Located in the Brisbane suburbs of Kippa-Ring and Burpengary, the \$3 million stations feature an engine room and modern accommodation, amenities, gym, office and recreation areas.

Environmental considerations were a high priority for the design. Rain water tanks capture the water used for toilets, hot water is heated via solar roof panels, and an Enviro Save Water System was installed to automatically divert the cold water (which would ordinarily go down the drain whilst waiting for the hot water to arrive at the tap) back into the reticulated system. The entire station also has fully insulated walls and ceilings to cut down on power for heating and cooling.



The team were praised by QFRS officials at the station openings for their approach to project quality and management.

"We've been very happy with the way Thomas & Coffey have performed. They have identified and resolved any issues throughout the project; acting with integrity to address problems or

mistakes early," said Inspector Ted Ireland – QFRS Project Manager. Acting Deputy Commissioner Ian Mitchell also took the opportunity to publicly praise the team. "It's not often you have people praise the work of your builder. I thank you very much for that – Steve, Andrew and Darryn – you've got a lot to be proud of," he said.

Hunter aluminium sector acquisition

Thomas & Coffey has made another acquisition, this time a specialist hopper and pneumatic services provider for Tomago Smelter at Tomago in the Hunter Valley. The business, Pintab Pty Ltd, has provided Tomago Smelter, majority owned by Rio Tinto, with maintenance and fabrication services for over 20 years. In 2007, they won Tomago Smelter's annual award for best major services provider.

This purchase follows another similar acquisition - Holcan, an aluminium specialist in Gladstone, QLD, and will further strengthen the Company's presence in the aluminium sector.

Tomago location: 32 Enterprise Drive, Tomago NSW 2322. T 02 4964 8747

New office locations

Due to significant growth, the Newcastle Projects and Townsville Projects offices have moved to bigger and better premises.

New details: Newcastle

11, 26 Balook Drive, Beresfield NSW 2322
T 02 4905 1511

Townsville

Unit 4, 125-133 Dalrymple Road, Garbutt
QLD 4814
T 07 4700 6000

Employee Profile: Paul Lake

Paul is a fourth year apprentice boilermaker at the Moranbah operation in central Queensland's Bowen Basin. He was the recipient of Thomas & Coffey's annual Chairman's Individual Safety Champion Award for his all-round vigilance regarding his own personal safety and that of his colleagues. Moranbah supervisor, Scott Urquhart, describes Paul as a fine asset to the team, but Paul says, "I just think about my work mates. I want to trust my work mates so I feel safe working and so do they."

What does your role entail? As a fourth year apprentice Boilermaker, I'm hovering between being an apprentice and working as a tradesman both in the workshop and out on site. I'm gaining as much on-the-job experience as possible to lead me into the role of a tradesman.

What sites / projects are you currently working on? Currently, I'm working on a long wall move at Anglo Coal's Moranbah North Mine, fabricating all the long wall components in our workshop. I'm also involved in site and breakdown work throughout the Bowen Basin.

What do you like most about Thomas & Coffey? I love the variety and range of work – I'm learning new skills on a daily basis.

What are your top five reasons for staying safe at work?

1. My girlfriend
2. Safety of my fellow workers
3. Living a fulfilling life
4. Catching up with mates
5. Family



Photo: L to R:
Scott Urquhart –
Moranbah Supervisor,
Paul Lake – Moranbah
boilermaking apprentice,
Bob Critchley – Chairman.