

A SMOOTH SUCCESS

DEVELOPER : GWH Build

BUILDER : GWH Build

CONSTRUCTION VALUE : \$15 million

The \$15M Aero Apartments project is an impressive 14-storey tower development comprising of 45 apartments with modern interiors situated in Hunter Street, Newcastle West. Owner-occupiers and tenants enjoy beautifully appointed, spacious and stylish one, two and three-bedroom apartments that deliver comfort, elegance and sophistication.

GWH Build is an independent, commercial, industrial and residential property builder and developer providing high quality end-to-end solutions in New South Wales' Lower Hunter region.

With its head office located in Newcastle, GWH Build are busy contributing to the boom in revamping and continued beautification of the former industrial city.

GWH Build bought the 1,100m² site for the Aero Apartments project on Newcastle's thoroughfare, Hunter Street, for its proximity to the CBD and foreseen upcoming developments in civic infrastructure such as the rail interchange and light rail.

Aero Apartments is a 14-storey tower development of 10,100m² gross building area comprising 45-apartments of one, two and three-bedrooms and a spectacular residents rooftop terrace and BBQ area with sweeping 360 degree views. The podium has two commercial tenancies at ground level and three levels of car parking and individual units. The contemporary design established a new standard of architecture for Newcastle with striking off-form patterned precast concrete façades, floor to ceiling glazing and stylish on trend modern interiors. To showcase their work, GWH Build now has set up its own headquarters in one of Aero's ground floor commercial tenancies.

Aero stands out as one of the tallest buildings in Newcastle but will soon be surpassed by yet another of GWH Build's own developments, with the 19-storey *SKY Residences* soon to commence in the city's Civic centre.

Using precast concrete in all the vertical load bearing elements for the construction of Aero contributed to the project being completed in the blistering pace of 51 weeks. GWH Build's efficiencies are largely due to the group's vertically integrated model.

George Araujo, Construction Manager of multi-storey projects for GWH Build explained, "The speed with which we delivered Aero has a great deal to do with not only our hard working and committed

team, but also our vertically integrated innovative building techniques and supply chain. We work closely in conjunction with our sister companies in the Hunter Group for example Frontline Windows, who supplied the commercial grade windows for Aero, Hunter Precast for the precast concrete elements and Hunter Structural Steel for the structural steel components."

"We also have a select group of tried and tested, preferred suppliers and subcontractors who we have a valued working relationship with. They all know our methods, cycling expectations, processes and the quality of work we and our stake holders expect. We drive our projects to run as efficiently as possible, which our preferred subcontractors are attuned with and appreciate. The project as a whole went really well."

One of the challenges of the project was the logistics of the construction process. "Newcastle hasn't had a great number of high rise developments in the CBD so team Aero and our subcontractors had to work closely together to ensure constant achievement of milestones in such a tight space with multiple facets going on at all hours of the day. We had 820 workers inducted on the site, communication, managing the timeline and the sequencing of trades was critical to the success of the job," said George.

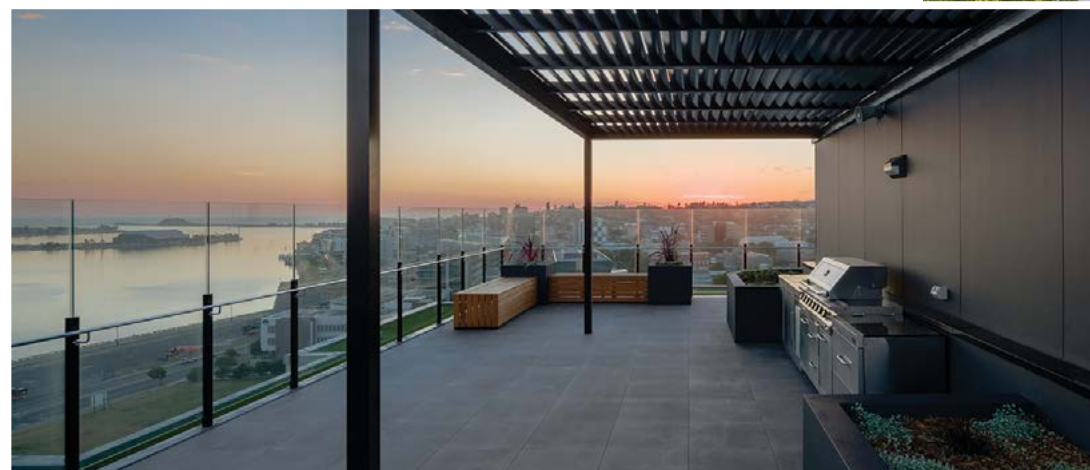
GWH Build has over 22 years experience in development and construction with over

\$1 billion worth of projects delivered to date. The Build arm has over 60 direct employees, from draftsmen, town planners, development and project managers, real estate agents to carpenters and landscapers to name a few, and all experts in their chosen fields. The resultant inhouse capabilities enable GWH Build to maintain its professional standards and efficiencies across all its projects.

Similar to Aero Apartments development is GWH Build's recently completed Soho Central at Islington, a mixed use development of two smaller towers connected by a large landscaped terraced garden on Level 1. The 41 residential apartments and two ground floor commercial tenancies were built on a site chosen for its proximity to Beaumont Street cafés, pubs, retail areas and a major transport hub.

GWH Build also operates lessee businesses and manages completed developments and assembled investors, one such example is the Newcastle Airport Unit Trust, which developed the \$22 million Mercure Hotel at Newcastle Airport in 2015. GWH Build acted as the developer and D&C contractor and is now part of managing the Mercure franchise with the support of operator Accor.

For more information contact GWH Build, 770 Hunter Street, Newcastle NSW 2302, phone 02 4966 3766, email admin@gwhbuild.com.au, website www.gwhbuild.com.au



RISING UP

BG&E is a consulting engineering practice specialising in designs for infrastructure, structural and civil engineering and façades as well as providing construction support. BG&E service the property, transport, mining, marine and civil sectors and offer advice and reports in materials technology and structural assessments.

BG&E were contracted for structural engineering services at Aero Apartments providing designs of concept drawings to building completion. The company assisted with the handling and construction sequencing of the double storey 6m high precast concrete wall panels and columns and designed the propping mechanisms to implement a quick and safe building process. As a result, the tower construction progressed at approximately a level a week.

A challenging venture for BG&E was the detailing and construction of the central core which was built with precast concrete and steel

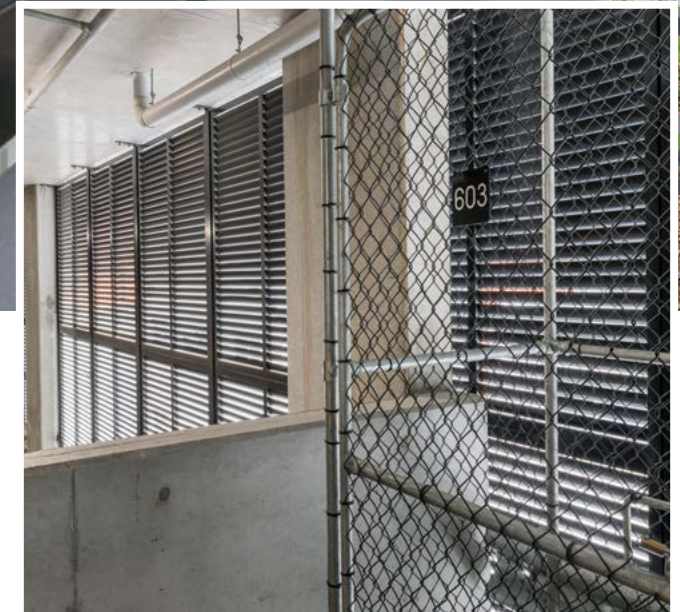
plate. The detailing of the columns beneath the Level 4 podium also required an innovative solution with block-outs made in the precast columns to key in the slab.

“We consider ourselves a builder’s engineer,” said Peter Shrewsbury, Structural Engineer (Associate) at BG&E. “We like to start working at the concept stage to ensure the architect’s design is realised in a structurally economic fashion. We focus on buildability and cost saving.”

BG&E has five offices across Australia as well as in Singapore, London and the United Arab Emirates where it has provided engineering for some spectacular high rise structures such as the 330m high Index Building in Dubai. BG&E has earned itself a reputation for technical excellence winning a string of awards including Winner of the Consult Australia Medium Firm Award for Excellence in 2012, 2013, 2014 and 2016.

Projects completed for GWH Build include Waterview Apartments at Belmont, The Millhorn at Wickham and Soho Central at Islington. Currently BG&E is working on Highpoint in Charlestown and Centrale at Broadmeadow.

For more information contact BG&E, Level 1, 163 King Street, Newcastle NSW 2300, phone 02 4902 3000, email newcastle@bgeeng.com, website www.bgeeng.com



EXPERTS IN FENCING

Chainwire Fencing Specialist was contracted to fabricate, supply and install aluminium architectural elements and security cages at the Aero Apartments development in June 2017. The company worked onsite with four team members installing aluminium louvres, 200m² of aluminium screens around the rear car parking area and a 9m x 6m aluminium tube framed awning for the BBQ area on the roof. Chainwire Fencing Specialist also fabricated and installed 45 internal lockable chain wire storage cages for the individual units.

Aluminium screens are a new product for Chainwire Fencing Specialist and assembling such a large number of panels, over 80 altogether, each measuring 2.4m high by 1.5m wide, was a challenge. The design detailing of the posts to enable efficient installation of the screens tested the skills of the fabricators.

The quality of work achieved by Chainwire Fencing Specialist is reflected in repeated contracts with GWH Build. At Soho Central it installed aluminium privacy screens between the apartment’s balconies and aluminium screens over service machinery such as the air conditioning units. Chainwire Fencing Specialist installed chain wire enclosures and privacy screens at Eastside, Charlestown and are currently working at The Millhorn installing, sliding aluminium louvres, internal storage cages and an aluminium rooftop awning.

Chainwire Fencing Specialist also offers design, engineering, fabrication, and installation of permanent and temporary fencing including construction site fencing with banner mesh showing company logos. With over 20 years experience Chainwire Fencing Specialist is expert in long installations of tube and mesh fences for industrial estates, commercial property, schools, sporting and secure facilities and for wildlife barriers along highways and roads. A successful project for Woodbury Civil in 2016 involved the supply and installation of 1,265m of 1.8m high security chain wire fencing along a rail corridor.

Walters Fencing (Aust) Pty Ltd trading as Chainwire Fencing Specialist, services the Newcastle and Lake Macquarie areas, the Hunter Valley and regional New South Wales.

For more information contact Chainwire Fencing Specialist, 15 Grattoir Place, Toronto NSW 2283, mobile 0425 201 252, email jono@chainwire-fencing.com, website www.chainwire-fencing.com

POWERING ON

Nelson Bay Electrical Services, the largest electrical contracting business in Port Stephens, provides electrical service work and specialised contracting to the residential, commercial, industrial, hotel and education sectors. In December 2016, Nelson Bay Electrical Services started work on the design and construct contract for electrical services at Aero Apartments, with the power connection to GWH Build's site office.

In the apartment block the scope of the work included the design, supply and installation of electrical services to the 45-apartments and two commercial tenancies as well as supply and installation of the switchboard, fire indicators, emergency and exit lighting and the early warning indicator system as well as connection to Foxtel and fibre optic cables for NBN.

The challenge at Aero Apartments was managing the logistics of the construction in the CBD.

"We have experience working on large projects but usually on bigger sites, the Aero site was more condensed," said Director, Matt McGary. "Also Newcastle has become a very busy city, materials handling was a difficulty."

Most of Nelson Bay Electrical Services' work is design and construct contracts on new developments, particularly residential apartments however it has completed large civil works such as on the Hunter Expressway for Lendlease, a two year job completed in 2016. This project involved street lighting installation, rest area power supply, viaduct lighting and connecting the power supply to intelligent traffic systems.

Nelson Bay Electrical Services have worked with GWH Build on previous projects including providing the complete electrical service for the 4 Star Mercure Hotel at Newcastle Airport and 110 units at Greenside Retirement Village where it installed electrical infrastructure, the main switchboard, street lighting and communication conduits. The company is currently contracted to supply and install electrical services at Highpoint Apartments at Charlestown.

For more information contact Nelson Bay Electrical Services, 3/16 Shearwater Drive, Taylors Beach NSW 2316, phone 02 4981 9811, email office@nbes.com.au, website www.nbes.com.au



TESTING TIMES

Douglas Partners' clear understanding of client requirements and sound understanding of the ground conditions in the Newcastle area minimises costs and increases efficiency for its clients. Douglas Partners were contracted to investigate the ground conditions and provide geotechnical design and construction advice for Aero Apartments to allow the structural engineers to design a footing system for the building.

During the project's early design stage, there was limited space available to undertake geotechnical investigations prior to demolition of the existing buildings. In order to allow structural design to continue, Douglas Partners provided early geotechnical advice by drawing upon geotechnical data and practical experience from several nearby projects. This early advice was then used to formulate a targeted subsurface investigation to confirm the earlier advice and avoid unnecessary investigation costs for GWH Build.

One of the benefits that Douglas Partners added to the project was their flexible approach to the timing of the investigation. Utilising their own drilling and testing company, Ground Test, they were able to work around a variable demolition programme to obtain the necessary geotechnical data. Douglas Partners continued to provide construction phase support until the ground works were completed.

"We conducted cone penetration tests which provide quick, reliable data which can be used to assess pile design parameters for engineers, BG&E, to design the footings. Good communication between Douglas Partners, GWH and BG&E contributed to a successful outcome," said Scott McFarlane, Newcastle Branch Manager.



Douglas Partners is one of the largest privately owned geotechnical engineering consultancies in Australia, working across a range of sectors including property, transport, defence, mining, marine, water and waste management, healthcare and telecommunications. Their specialist disciplines include geotechnical engineering, rock mechanics, contaminated land, groundwater, geophysics and earthworks.

In the Newcastle area, Douglas Partners is at the forefront of the geotechnical industry with a comprehensive database of information about the region going back 50 years. The company can quickly access this database to provide integrated and efficient service and solutions for their clients. With over 450 employees across 19 offices nationwide Douglas Partners distinguishes itself by having a large skill set to draw upon with a network of professionals across the breadth and depth of the company.

Douglas Partners has worked on a number of projects with GWH Build performing geotechnical investigations for Waterview Apartments, Soho Central, Highpoint Apartments, The Millhorn at Wickham and the Mercure Hotel site at Newcastle Airport.

For more information contact Douglas Partners, 15 Callistemon Close, Warabrook NSW 2310, phone 02 4960 9600, email newcastle@douglaspartners.com.au, website www.douglaspartners.com.au

STAYING STRONG

Platinum RC provides earthworks, steel fixing, formwork and concreting services on large residential, civil, commercial and retail developments across the Hunter region. At Aero Apartments, Platinum RC started work onsite in November 2016 with a foreman and six workers carrying out reinforcement place and fix, 400 tonnes of reinforcement. Platinum RC also provide additional labourer to complete civil for the basements, finishing the work by June 2017.

The challenge of the job was the tight space of the 1,200m² site and the sheer weight of steel reinforcing to be manoeuvred. For the transfer slab at podium level, Platinum RC had six tradesmen placing and fixing 30 tonnes of steel for the bottom layer in one day, with another 20 tonnes for the top layer.

Platinum RC employs 48 workers in steel fixers, concretors and foreworkers including machine operators for excavators, diggers. “All Platinum RC’s employees have trade tickets, yet my aim is to have our workers multi-skilled,” said Franck Vili, Owner Operator of the company. “I encourage competency assessments to increase the qualified skill set.”

Franck is involved at the early planning stage in every project, organising the construction scheduling, programs and dealing with potential difficulties with clients. “I’m onsite every day talking with the major contractors and Platinum workers,” said Franck. “The personal approach makes the job run smoother – it’s the teamwork at Platinum RC that contributes to the success of the company.”

Platinum RC’s rapid growth since its inception in 2015 is testament to its quality and team work. Successful contracts for the company include the Newcastle University, Hunter Sports Redevelopment, Huxley, Soho and Millhorn, Centrale Apartments, also of steel fixing, formwork and concreting NACC RAAF Williamtown, Cessnock 300 Project Stage 2, Highpoint, Parry Grande Apartment, Platinum RC has contacts in the pipeline until mid 2020.

For more information contact Platinum RC, 34 Throsby Street, Wickham NSW 2293, phone 02 4197 3797, email fvili@platinum-rc.com.au



NOW YOU'RE COOKING

Euroform is a family operated business established by directors Rodger Green and Brothers Daniel and David Galea in 2003. The company works with project management teams to design, manufacture, and install kitchen joinery, stone benchtops, two pack cupboard doors, bathroom vanities and bedroom furniture and joinery for the wholesale market.

Euroform started work on the Aero Apartments in June 2017, preparing designs, refining the finishes schedule and cost planning in collaboration with GWH Build. Onsite the job was run by Conception Interiors, installing two pack polyurethane kitchen cabinets and bathroom vanities for all 45 units as well as coordinating the supply and installation of Smartstone kitchen bench tops. The project was a highly successful one for Euroform, with the company finishing on time and to budget.

Euroform combined black melamine for the shadowlines, fillers and fingerpull details on the kitchen cabinets along with two pack polyurethane natural white satin doors. The contrasting black melamine with white two pack surfaces and Smartstone Nieve white 20mm benchtops and Callacuta Blanco splashbacks gave the kitchens quite a striking appearance whilst remaining within a tight budget.

Euroform runs a design office and automated manufacturing facility based at Tomago in the Hunter region supplying product for large commercial projects, student accommodation, residential apartments, universities, hospitals and aged care facilities. With 110 employees the company produces a wide range of quality kitchen, furniture and joinery products including kitchen benchtops in stone, and painted polyurethane doors.

Euroform works across Sydney, Newcastle, Canberra and Melbourne with plans to expand into the Brisbane market. Currently their largest

residential apartment development being project managed and installed by the team at Trademark Kitchens is an 827 unit project consisting of three residential towers in Sydney for Watpac.

As a GWH Build preferred contractor Euroform has been selected to supply joinery and stone on a variety of projects including the Mercure Hotel at Newcastle Airport including bedheads, bedside tables, bedroom cabinets and bathroom vanities and stone for the 95 rooms. They have also recently supplied the cabinet doors and stone benchtops for the kitchens and joinery in the 20 luxury apartments at Waterview Apartments, Belmont. Currently Euroform is contracted by GWH Build to supply joinery and stone for the Millhorn and Centrale residential developments.

For more information contact Euroform, 20 Kennington Drive, Tomago NSW 2322, phone 02 4964 9505, email sales@euroform.com.au, website www.euroform.com.au



SCRUBBING UP WELL

Established in 2015 Supplied Pty Ltd and its Newcastle and Lake Macquarie Builders Cleans arm have grown at blistering pace due to their unique client focused Builders Clean Model and the outstanding support of the management and staff of several local building companies – Core Projects Group, GWH Build, Basebuild, Reitsma, North Constructions and more recently Richard Crookes Constructions, Taylor Constructions and Bloc.



The company has grown from a single Core Projects Group, 18-unit Wren Apartments Clean in Hunter Street Newcastle to today, a multi-site project involving simultaneously cleaning 210 units and approximately 16 commercial spaces/carpark levels in four high rise towers in Wickham, and a multi level preschool in Hunter Street Newcastle – for builders GWH Build (Millhorn Apartments), Basebuild (West End Apartments), BLOC (Bishopgate Apartments), and Core Projects Group (Hunter Street Preschool).

Supplied together with their business partners, ‘try to separate the contenders from the pretenders’ turning out some spectacular units for the ultimate owners occupancy.

For more information contact Supplied Pty Ltd, PO Box 701, Hamilton NSW 2303, mobile (Pat) 0475 332 136, website www.suppliedservices.com.au or www.newcastleandlakemacquariebuilderscleans.com.au



SO PUMPED

Hunter Valley Concrete Pumping Service started as a family business 38 years ago. Today it is a successful company with 44 employees, specialising in concrete pumping services for high rise apartment buildings, commercial, civil and industrial projects.

Hunter Valley Concrete Pumping Service had a team of 15 workers onsite. Pumping started with a high pressure line on the street, attached to a static line, using various line pumps to pump concrete for the 14-storey structure.

Hunter Valley Concrete Pumping Service's recently completed a 26-storey tower in Homebush, started work on two 12-storey buildings for Parkview – New Life at Ultimo and the redevelopment of a mine at Tarago, near Goulburn, with pours to various elements of the mine structure. Recently the company carried out an experiment with a high pressure line pump to see how far it could pump. The result was resoundingly successful, pumping concrete a distance of 1.025km.

For more information contact Hunter Valley Concrete Pumping Service, Lot 118 Enterprise Drive, Tomago NSW 2322, phone 02 4964 8552, fax 02 4964 8102, website www.hvcps.com



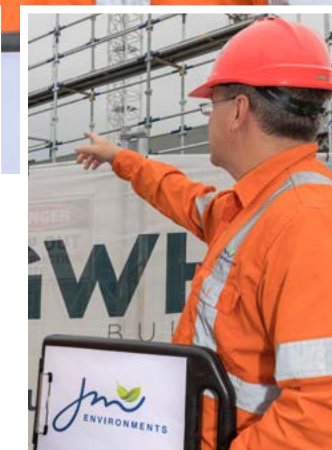
A GREEN EYE FOR DETAIL

JM Environments is an environmental consultancy of 20 years experience specialising in the assessment and remediation of contaminated sites. The company advises on the removal and disposal of hazardous materials, including asbestos, and conducts tests to ensure environmental standards on groundwater and air quality are met. JM Environments offer environmental planning and approvals to satisfy council requirements for Development Applications.

JM Environments started work at Aero Apartments with three permanent employees performing an assessment of soil contaminants, a soil vapour intrusion assessment as well as planning and directing remediation works on the old commercial site. During excavation when the unexpected find of an old fuel tank threatened to delay the construction process, James McMahon, JM Environments' Principal and Director, responded straight away to assess the hazard and approached council for permission to safely remove the tank.

“We’re a small and experienced company,” said James. “Individually we complete all the aspects of each project, we know the details of all our jobs and respond immediately. We can make the necessary decisions onsite rather than waiting for the go ahead from an office. We keep the job moving, avoiding delays and extra costs.”

A challenge occurred onsite when pile drivers dug through old estuary sand to deep rock for the footings, James tested the ground



and found potential acid sulfate soil and supervised the neutralisation with lime.

JM Environments have extensive experience working on sites of new developments in Newcastle, Lake Macquarie and Port Stephens and have worked repeatedly with the local Councils and Hunter Water. The company recently completed remediation work for GWH Build on a site that was a truck yard, to be developed for a residential building project. “We hope to continue developing our strong relationship with GWH Build,” said James.

JM Environments is currently engaged by Lendlease Bouygues Joint Venture to undertake waste classification services for the North Connex Tunnel Project. “We have delivered timely results and reporting for this project, which goes to show that our experience and dedication can support large construction projects” said James.

For more information contact JM Environments, 37 Tooke Street, Cooks Hill NSW 2300, mobile (James) 0427 893 668, website www.jmenvironments.com



Aero Apartments, New South Wales

FINISHING TOUCH

Established in 2009, Alerce operates across Sydney, Hunter and Central Coast markets, with offices in Sydney and Newcastle they specialise in multi-storey internal and external linings as well as complete bespoke fitouts.

Alerce were engaged by GWH Build to undertake the lump sum supply and installation of all internal and external ceilings, partitions, linings and carpentry on their Newcastle landmark Aero Apartments, which included GWH's very own new corporate headquarters.

Alerce's scope was inclusive of detailed acoustic and fire rated plasterboard linings, Speed Panel risers and shafts, external

cementitious cladding as well as all timber moldings and PC items fit off.

Work started onsite in May 2017, lasting for seven months with up to 30 tradesmen working at peak period. "The main challenge we faced was the aggressive construction programme which was an important prerequisite for our client, we made a commitment to it on award, so closely monitored our scope to ensure all milestones were achieved on time and to GWH's premium quality expectations," said Rod Meneses, Managing Director of Alerce.

GWH completed the tower in commendable time of 51 weeks. Alerce formed part of the critical path and kept up with the schedule producing timely and quality work.

Alerce work across Sydney, Newcastle and Wollongong, have over 50 men at their disposal and have been involved in a number of multi-storey residential developments in the booming Newcastle area. Similar to Aero, Alerce performed similar scopes on other local projects, Soho Central at Islington, Waterview Apartments at Belmont, Eastside Apartments at Charlestown and The Millhorn at Wickham.

For more information contact Alerce, Unit 6/1345 The Horsley Drive, Wetherill Park NSW 2164, phone 1800 207 747, email rod@alerce.net.au

