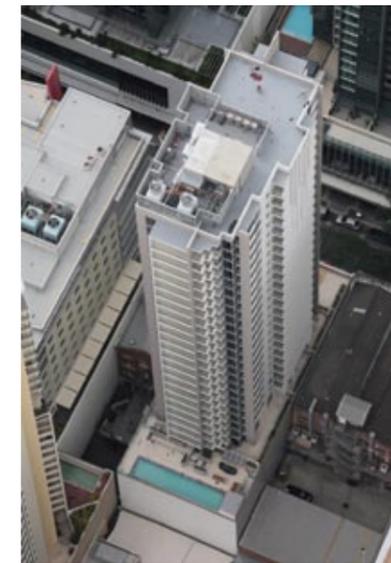


FROM LITTLE SITES BIG ACHIEVEMENTS CAN GROW

The Midtown Apartments comprises a 28-storey mixed use development located in the heart of Brisbane's CBD.

MAIN CONSTRUCTION COMPANY : Hutchinson Builders
CLIENT : Yanjian Group
ARCHITECT : Hutchinson Builders
STRUCTURAL ENGINEER: Alliance Design Group
COMPLETION : October 2012



Working on an extremely tight site in the Brisbane CBD added an extra dimension of challenge to the Midtown Apartments project for Hutchinson Builders, but their combination of innovativeness and a century of experience in the area ensured the job was completed in fine form.

The Midtown Apartments comprises 144 units, all with balconies, spread over 23 levels. There are also four levels of mezzanine carparks totalling 86 spaces; a podium level with pool, BBQ area, gymnasium and recreation area for residents; a basement level retail area, ground floor including entry lobby and lifts, and a double height retail area from Mezzanine 1 to Mezzanine 2 at the front of the building. There is a separate lift linking the basement and mezzanine level 1 retail areas.

The apartment complex has been constructed on the site of a four-level substation building, which required careful demolition before construction could commence. "The building site is surrounded by CBD office and Heritage buildings and had on it an existing building built in the 1970s for an Energex substation, which had structural steel concrete structure attached to surrounding buildings," explained Hutchinson Builders project spokesperson, Soo Kim.

"Due to this fact, demolition work was lengthy and manually hard work. A lot of works were done by hand rather than heavy machinery to reduce noise and vibration transfer to attached next buildings. "Further to this, in the aftermath of the January 2011 Brisbane flood, the substation was relocated from the basement to ground floor and podium levels, above the 100 year Qld flood level. This created a challenge to fit the Energex substation into the completed design layout.

"Due to the location, and the size of the site (22m wide x 45m long), only one tower crane could be erected and there was limited access from the 22m wide front loading zone. So we changed the design and construction method to minimise need for carnage, and simplified construction activities. It was also challenge to fit the number of tradesmen on site, and to load materials to one level. We resolved this through precise sequencing of work, and scheduling all deliveries for 30 minute intervals from Mondays to Saturdays."

The one internal tower crane was first situated on the liftcore, which was constructed using self-climbing jump form. The crane tower was removed when the lift core was completed, and moved to the fire stair core roof, with the car situated on beams spanning between the lift and staircore. This relocation allowed OTIS to complete the lift, while still providing carnage for the project.

In all, the structure comprises four self-climbing form columns, precast panel walls (some double height panels), post-tensioned slabs from the ground floor to podium level, and in-situ concrete slabs for floors L1 to L24, with one level achieved every week of the structural construction program. The typical concrete slab strength was increased, to allow props to be removed two levels below more quickly, so the finishing trades could more quickly start work on the fitout.

The fitout included aluminium glass windows, painted plasterboard walls and ceilings, carpeting through living and bedroom areas, tiled floors to kitchens with acoustic underlay, and high-end touches such as engineered stonotop to bathroom vanities and kitchen counters, and melamine finish kitchen joinery. Again, the trades

were coordinated in such a way that one floor's finishing and fitout was completed every week.

On the lower levels, the building façade from ground floor to mezzanine level 4 is alpolc panel with G.James windows, bringing a distinctive aesthetic element to the urban streetscape.

The demolition of the existing substation commenced in December 2010, and the final completion was achieved in October 2012.

High energy and water-efficiency has been achieved, with the energy efficiency report confirming all the units achieve at least a 4 star energy rating, and the entire building a 6.5 star energy efficiency rating. All the sanitaryware throughout is rated at minimum WELS 4 star, and rainwater harvesting will be used to supply irrigation, with an 11KL rainwater storage tank located under the podium.

Eleven Hutchinson Builders staff worked on staff, including site manager, structural foreman, safety officer, labourers, traffic control, contracts administration and an apprentice. The combined peak workforce was 120 persons with subcontractors.

Along with excellent construction outcomes, Hutchinson maintained an excellent safety record, with no major lost time injuries, and a successful Federal Safety Audit conducted in May 2012.

This is the first Australian project for Chinese developer, Yanjian Group, who have aimed for sales both to Chinese nationals and to locals looking to live close to their work to minimise commuting and take full advantage of all the lifestyle opportunities the CBD provides.

For Hutchinson Builders, it is yet another success story in their 100 year history of building commercial, residential, health, education, retail and infrastructure projects. From their original beginnings in Brisbane, the company has through hard work, skill and dedication to excellence grown into one of the nation's largest privately-owned construction companies, with offices from Cairns in the far north to down south as far as Melbourne, and a swag of awards including 2011 Employer of the Year.

For more information contact Hutchinson Builders, Head Office - Brisbane, Locked Bag 3002 Toowong DC Q 4006, phone 07 3335 5000, fax 07 3335 5005 email: info@hutchinsonbuilders.com.au, website: www.hutchinsonbuilders.com.au



NAVASKA PROVIDES THE COMPLETE PROFILE

Founded in 1997, Navaska is a privately owned, local company providing Air Conditioning, Refrigeration, Mechanical and Electrical Services with a strong focus on Customer Service.

Navaska's air conditioning solutions span typical commercial systems through to industrial air conditioning systems employing secondary and tertiary refrigerant systems. We install VRF, VRV, economy cycle and chilled water systems, ducted and cassette cooling systems, heat recovery / air exchange systems and absorption chillers.

Hutchinson Builders commissioned Navaska to design, supply and install all air conditioning and ventilation systems for the Midtown Apartments. Midtown is the largest Mitsubishi Electric, City Multi water cooled energy-recovery system installation in Australia. The system design incorporates a City Multi heat recovery water cooled VRF system, centralised power

monitoring and billing system with a gas fired reheat system during low ambient conditions. The apartment owners have benefited from a system design that has minimised the use of refrigerants, which is delivering high COP's with considerable savings in operating costs. Under certain conditions, the Mitsubishi Electric heat recovery systems allow the transfer of energy within the building; simultaneous heating and cooling requirements transfer the energy within the building without rejecting it to atmosphere.

Navaska's selection of Mitsubishi Electric, City Multi water cooled VRF equipment, has allowed for a compact installation of all common components and the use of low profile evaporators within apartments.

Navaska can design, supply and install a wide range of equipment in all areas of the HVAC & R industry. Current projects include multi story air cooled VRF residential installations in Nundah and Mt Gravatt. Navaska has been

successful in securing a Caltex Refinery central control building chilled water upgrade project, bread cooling tunnel expansion in Townsville and an ammonia / glycol milk chilling installation in North Queensland.

Navaska provide the complete profile of support from design and construction through to comprehensive service and maintenance of plant and equipment. We would welcome your enquiry if you have a further interest in our completed projects or require assistance in new projects.



For more information contact Navaska

68 Ives Street, Murarrie Qld 4172
(07) 3890 2633 www.navaska.com.au

RAISING THE BAR FOR SAFETY AND SERVICE

Building Industry Supplies (BIS) provide the lifting solutions and skilled manpower which get a project off the ground, using skill and innovation to resolve whatever challenges arise. For the Midtown Apartments project, they supplied a Favelle M220DX luffing diesel tower crane on an internal climbing frame for 62 weeks, and two 2032 PEGA man and materials hoists set up in a twin configuration to service the entire building for 40 weeks.

The biggest challenge was the need to slide the Favelle across the roof, which had not previously been done with this type of crane. BIS designed and fabricated a rail system, which was re-designed in-situ afterwards to become a grille the crane could be positioned on.

"This was a good project, which provided a challenge for us with the slide," said BIS Contracts Administration and safety Consultant, Gavin Cotterell.

"We have 80 staff, including qualified and experienced operators, and our own maintenance and fabrication division with qualified boilermakers, electrical fitters and welders.

"We use best practice lifting techniques, and are focused on safety, providing regular refresher training to all our staff. We were the first company to have all our crane crews trained in emergency height rescue, and all our cranes are fitted with emergency height rescue equipment."

BIS is a privately-owned company which has built a sterling reputation for quality, safety, and superior service. Their diversified operation provides tower cranes and hoists on a wet

and dry hire basis, along with fully-qualified riggers, electrical services, and diesel fitters. BIS' fabrication division designs and manufactures parts and specialist equipment, including building ties, crane bases, hoist car modifications, engineered lifting devices and a wide range of custom projects.

BIS' main yard in Brisbane comprises approximately 30,000m² of concrete hard stand, wash down bays, spray painting facilities and fully equipped workshops, and the company also has satellite facilities in Melbourne, Sydney, Tweed and Gold Coasts, Toowoomba, Sunshine Coast, Central Queensland, Townsville, Cairns, Darwin and Adelaide, servicing projects around Australia including Tasmania, and even smaller islands such as Groote Eylandt.

Other projects lifted by BIS include Brisbane City Hall; the QUT GCI project, where they are lifting very intricate panels for McNab Developments; Leighton's ABC Accommodation project at Southbank; Solomon Mine, Broadmeadow Mine; CTI Chatswood; Gladstone Central; the Ergon project in Townsville; and Docklands in Melbourne.

Every assignment BIS undertakes is approached according to their Total Quality Management System, this, combined with their innovative approach to crane and hoist applications and the newest fleet in the business, ensures the highest possible standards of client satisfaction.

For more information contact Building Industry Supplies, Head Office Locked Bag 3002 Toowong QLD 4066, phone 07 3382 7171, fax 07 3382 7575, website: <http://www.building-supplies.com.au>





EXCELLENCE IN A BOX

Being an efficient and experienced Australian manufacturer means Mailmaster can custom design, manufacture and install exactly what a project like the Midtown Apartments requires in less time than it takes to send a parcel from China to Brisbane. In fact, for this project, due to the limited window of opportunity the company had to access the mailroom to take measurements, they delivered within a fortnight.

They designed a mailbox cluster of 152 boxes, based on a standard portrait configuration which was modified to ensure all the boxes would fit. The boxes were made entirely from natural anodised aluminium, with laser engraved identification strips and a master key locking system. Eight Mailmaster staff worked on the project, comprising sales, CAD designer, manufacturing personnel, assembly personnel and two experienced installers.

“The challenge was fitting 152 mailboxes into the allocated area without compromise to the Australian Standards (AS/NZ 4253-1994),” said Mailmaster Spokesman, Mark Valentine. “These were supplied in three clusters of mailboxes; one cluster of seven mailboxes wide and seven mailboxes high, a second cluster six wide by seven high and a third cluster, eight mailboxes wide by seven high, with an additional add-on of three mailboxes centralised on the underside.

“We offer full design services and are a leader in supplying stainless steel solutions for mailbox bank units. We will work outside “the box” to come up with solutions to the most challenging projects. “While many projects are budget driven, and the ingress of imported product is on the rise,

we maximise our efficiencies and buying power, without compromise to quality and detail to our product.

They work closely with architects, builders, developers and project managers to design the best possible solution, and use the highest quality materials, such as austenitic stainless steel rather than the cheaper ferric product, thicker anodised extrusions, and epoxy-based powder coatings for greater UV stability.

The range of designs includes stand-alone single boxes, multiple boxes, high security boxes, and door-installed mail boxes. They also design and manufacture a range of name plates, numbers, tap protectors, clotheslines and other products. The keynote with Mailmaster is that quality is stamped all over everything they do.

For more information contact Mailmaster Letterboxes, phone 1300 794 555, fax 07 3847 3188, email: mailbox@mailmaster.biz, website: www.mailmaster.biz



EQUIPMENT AND EXPERTISE TO GET JOBS DONE

For major projects, a reliable and cost-effective supply of extra plant and skilled operators at crucial stages of the program is often essential. When Midtown Apartments needed assistance with civil works on the site, they called on G&H Plant Hire.

G&H provided machinery on both a wet hire and dry hire basis, with ten of their staff working on the project both onsite as operators and offsite in support and servicing roles.

In the two years they have been in operation, G&H have rapidly built a sustainable base for their business, contributing to some of the Sunshine State's largest construction undertakings, including the Bruce Highway Upgrade, the Gold Coast University Hospital, Gold Coast Light Rail and Drayton Shopping Centre.

Plant and equipment the company has to offer projects on both a wet and dry hire basis includes tracked excavators, wheeled excavators, dump trucks, back hoes, bobcats, loaders, trucks and water trucks. All of this fleet is scrupulously maintained to ensure that what gets hired to

do the job, can complete it reliably and without preventable mechanical or technical issues. And all of their hires are backed by a 24/7 on-call repair, breakdown and support service.

G&H are able to provide plant hire and operators across Queensland and New South Wales to numerous sectors and industries. Their capabilities include civil projects, bulk earthworks, site preparation, site works, contract cartage, heavy haulage, waste disposal and hard stand areas.

G&H employs 50 staff, with skills and experience across the civil construction and general construction fields. Their dedication to engaging with clients to achieve program goals in a safety-conscious, time-effective manner is backed by a determination to become one of the most reliable and trusted plant hire companies in the business.

For more information contact G&H Plant Hire, PO Box 461 Archerfield QLD 4108, phone 07 3630 0345, Directors: Noel Grealish and Padraig Haskins





SAFETY FIRST FOR SARRI PAINTERS

The Midtown Apartments project was not only an opportunity for Sarri Painters to demonstrate the quality workmanship which is their hallmark, it was also the second project on which they followed revised work practices based on the new safety guidelines for working from swing stages.

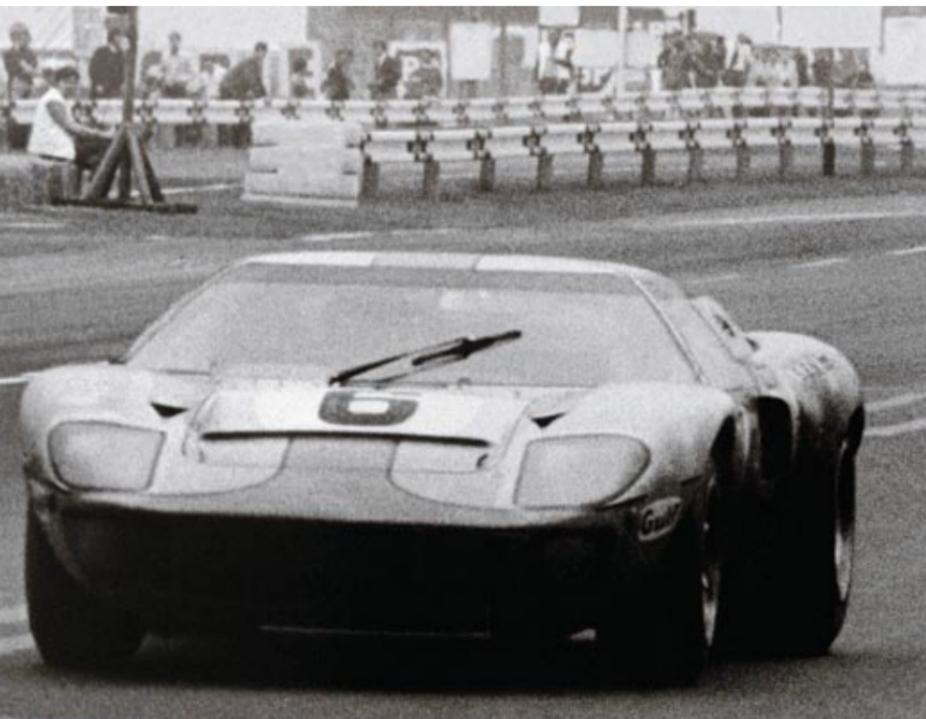
Their team of up to 20 trade-qualified painters completed both the interior and exterior painting and rendering for the 25 storey apartment development. Using swing stages for the exterior created a time management twist, with the new requirement that all loading of paint occur at ground level, rather than from balconies adjacent to the work area. All their staff underwent further training in at heights work before going on site, and completed the job using harnesses to prevent falls.

Sarri Painters have built a reputation for excellence, professionalism and superior trade skill over generations, providing major projects with all aspects of painting, rendering and finishes for both new work and ongoing maintenance or rectification. From the Brisbane Supreme Courts to multi-storey residential projects like this one, they give of their best, to produce outstanding outcomes.

For more information contact Sarri Painters, Unit 12 / Windsor Business Park, 104 Newmarket Road Windsor QLD 4030, phone 07 3861 1166, fax 07 3357 3155 website: www.sarripainters.com.au



The Midtown Apartments, QLD



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