

When a company aims for the heights of achievement and backs it up with a focus on best solutions, Altitude at Belconnen is the result. This outstanding ACT mixed-use residential project incorporates innovation on many levels, from the delivery methods of Hindmarsh Construction Australia (HCA) through to the broader goals of Hindmarsh Development Australia (HDA), who initiated and steered the project to completion.

HCA undertook the project as a Design and Construct, working closely with all the consultants and the Architect to develop a program methodology which met the HDA brief, prioritising functionality and construction simplicity. Quality is also a primary imperative for HDA, who focus on customer service not only to completion, but beyond.

"Hindmarsh Construction and Hindmarsh Development are effectively autonomous companies under the one Board of Directors, who work together to deliver projects collaboratively," explained Hindmarsh Development Manager, Brett Smith.

"Hindmarsh has a unique opportunity of incorporating the expertise of both a Developer and Builder to produce very successful, high-quality, practical and functional outcomes for our customers.

"HCA provides significant early inputs into the buildability of each project that results in detailed direction for primary structural and facade elements. This then aids the programme and time, and results in a thoroughly researched suite of details that appear seamless to the customer. "Hindmarsh has a wealth of experience in D&C projects. Our proven delivery record is based on quality, cost and programme, and our experience enables us to accurately forecast project costs and time in a manner that minimises deviation throughout construction.

"This provides clients with a higher level of confidence from the outset that the project will be delivered on time and on budget to the highest standards.

"We have a diverse depth of experienced staff with skills in various construction fields. This diversity allows us to cross-collateralise experiences to approach individual projects from more than one direction. The results provide options that may not have been evident from a more linear or standardised approach to construction."

More than 40 Hindmarsh staff across both HDA and HCA worked on Altitude, including the development team who followed the project from inception to post-completion; construction staff who expertly managed delivery of Altitude's 32,500sqm of concrete steel and glass; and administrative staff.

"The contract required the project to be delivered in two separable portions," explained David Colbertaldo, Hindmarsh's Manager Construction Operations ACT.

"To achieve the required program dates, there was a strong focus on ensuring that all trades could resource the project to ensure that the works across both stages were concurrent. Prototyping played an important role to set standard and consistent design details, which then achieved consistency in the quality of finish across the project"

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"The project was constructed without a single masonry element. Pre-cast concrete was identified as a viabel option for the project during early considerations. The design was then evolved to maximise repetition of these elements including clever use of the curved pre-cast elements. These have been incorporated into the podium and landscape to complement the building's architectural lines at various levels," said Brett Smith.

"The double glazed windows were also a major innovation for the project due to the curved facade. The procurement and installation posed a number of significant challenges that were largely overcome to achieve outstanding results.

"Hindmarsh works very hard to develop and maintain strong procurement networks. To deliver high quality projects, it is imperative that we are able to source the best products available at rates that provide our customers with excellent value for money. "Once collaborative relationships are formed and operational experiences gained, the specific needs of the developer, builder and supplier are better understood, and this expedites delivery of our projects."

Altitude is one of the tallest buildings and the largest Owners Corporation in the ACT. In terms of fitout and finish, it sets high standards, including a unique purpose-built information platform which enhances the owners' amenity and adds a new dimension to HDA's ongoing customer service.

"As a developer, Hindmarsh is proud of its contribution to the economic life and vibrant growth of the Belconnen Town Centre," said Brett Smith. "It terms of social sustainability, the project is located in an ideal position between the Town Centre and the Lake to enhance the liveability of the Town Centre. The completion of this landmark project augments the recent growth of Belconnen with an additional 500 people set to enjoy and utilise existing amenities around the area afterhours.

"The increased demand on local retail, services and amenities is likely to result in greater investment in the area by businesses and services seeking a broader population base for its own success. This increase in investment in and around the Town Centre will benefit the greater Belconnen community and ACT as a whole by providing a local employment hub that enhances opportunities for alternate, more sustainable modes of transport (walk, cycle, bus) to work and recreational activities."

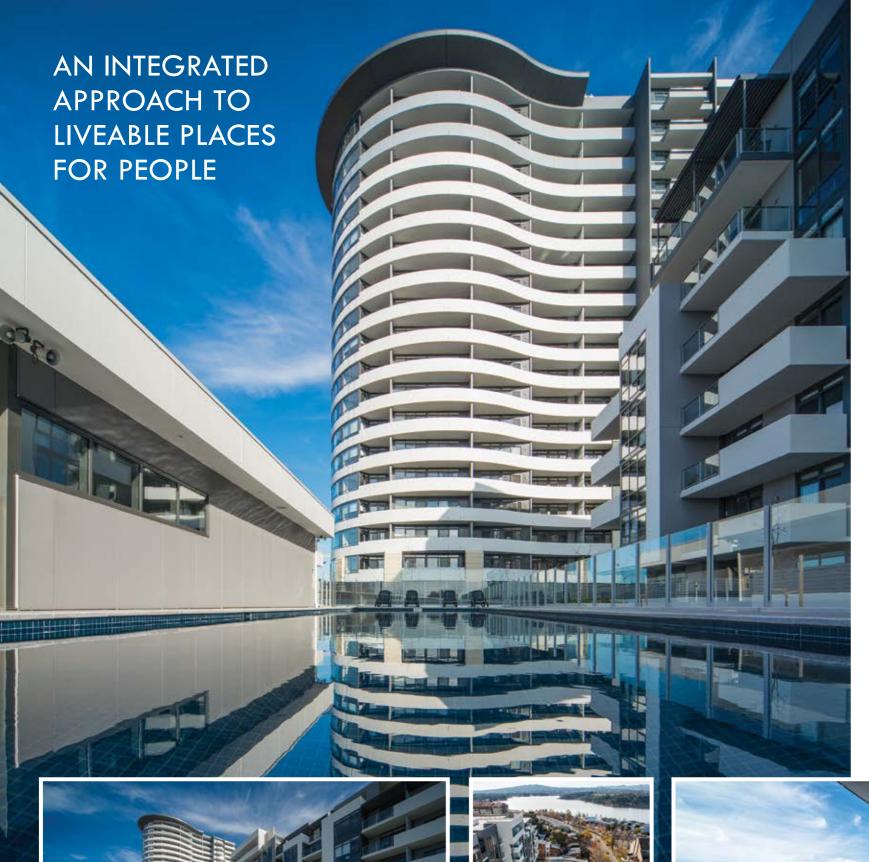
"At Hindmarsh, we believe our completed residential projects reflect our DNA and stand as our greatest marketing asset for future developments. Every project we embark on is considered in such a way that it must stand behind our brand and reputation. This is why Hindmarsh has developed a reputation unsurpassed for quality and customer service."

Hindmarsh's excellent reputation has seen it grow from strength to strength over its 35-year history. The completion of Altitude provides another stellar example of the combined expertise as developer and builder which have enabled Hindmarsh to successfully undertake and deliver projects of any scale and complexity.

For more information contact Hindmarsh, 71 Constitution Avenue Campbell ACT 2612, phone 02 6129 1500, website: www.hindmarsh.com.au

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The physical landscape is not the only one architects Scott Carver considered when designing Altitude at Belconnen - there was also considerable thought given to the social world it belongs to and the broader economic terrain of risk and rewards for the developer and builder, Hindmarsh. Scott Carver Director Bob Perry and Senior Associate Ben Pomroy and the team worked on the project for seven years, from earliest design stages and development approvals, through to engagement under an Early Contractor Involvement arrangement with Hindmarsh Property Group and their contracting arm, Hindmarsh Constructions, who undertook the building as a Design and Construct.

Scott Carver brought an interdisciplinary approach to the task, providing architecture, interior design and landscape design. "The integrated approach was critical to the success of the project," commented Ben Pomroy.

Close collaboration between the architects, the developer, the contractor and the engineers enabled creative, cost-effective and practical solutions while still delivering a visually distinctive, socially-relevant project. The project comprises several buildings: the Altitude tower, with 229 apartments and 7 penthouses over an 18 storey tower with a distinct curved profile; the 7-storey Chandler Building with over 100 apartments and a mixed-use retail and public space offering; and a small commercial office building. The process of gaining both Development Approval and public acceptance of the 18-storey tower set a new benchmark for high density mixed-use projects in outer suburban locations.

"There was a whole question of how to do tall buildings in the bush. At the time the Development Consent was being applied for, there was not really a precedent for high rise buildings in the outer suburbs of Canberra with views over both bush and the lake (Gininderra). Altitude was pioneering," explained Bob Perry.

"Our interest in high density is in building active communities, in mixed-use developments. Visually with this project the contrast of the tower with nature made it a challenge to deal with people's preconceptions.

"The interesting thing about the tower is we made it very horizontal intentionally, to make it fit into the landscape. We felt that if the building had reach, like it was reaching out into the landscape, the horizontality would fit into the landscape as a form. We also had to sell the client on having a reasonable amount of solidity in facade. From the public point of view, to make something sellable and liveable, you have to consider you have the community looking back at you (the occupants). To earn the right to be there and own the view there has to be an exchange with the public domain. As architects we commit to that, we become mediators between the occupants and the public."

"Our design was driven with social agendas in mind," said Ben Pomroy.

Some of the key design aspects which relate to social benefit include the private park which is located on the podium rooftop, and includes the pool, a gymnasium and a variety of outdoor spaces which offer opportunities for both large groups and privacy – all with stunning views.

The project team also landscaped the pedestrian connection which runs between Altitude and Chandler, which is the main pedestrian spine between the Colleges of Canberra University and the Belconnen town centre, and this public land has been rejuvenated. As part of the retail space, a cafe addresses the public and brings a meeting place to the space.

A degree of future-proofing was also incorporated, with eight apartments along Chandler Street designed and constructed to the standards required for retail, with removable timber privacy partitions enabling future conversion to retail space.

Sustainability measures in the project include two tanks in the basement for storage of harvested rainwater, which will be used for irrigating the expansive green roof space and the public landscaping; compact fluorescent lighting in the apartments; LED lighting for public areas; double glazed low-E windows throughout; a louvre system which shades the western facade; and the curved concrete balconies which provide shade from the summer sun on the Southern and Western facades.

The overall design of Altitude was also shaped by the rational approach Hindmarsh took to procurement and construction, with all elements of the building prefabricated offsite. The use of precast concrete elements and prefabricated glazing units enabled the project to finish six months ahead of schedule, while still allowing Scott Carver to specify some unique and difficult design features, such as the curved double-glazed glazing for the Altitude windows.

"The curved double-glazed glass was a critical item, and as we understand it, a first in Australia," said Ben. "Prefabrication and systemisation allowed for the big design moves, including the curved precast concrete balustrades. We worked with the manufacturer and subcontractors to hide the joints in the curved precast."

"We earned the consensus of the curves by the systematization of the rest, with an innovative construction company such as Hindmarsh, we were able to push our imaginations," said Bob. "As an architect, you need that strong client relationship with the developer and contractor."

As part of their collaborative approach, Scott Carver hold client design reviews where the project is modelled on BIM software, and the builder can immediately address any issues which become apparent.

"Our ethos as a practice is about design within context - being calm and sensible. With the new mixed-use projects, we are context creators, and because it is new, we have to put into the mix what's good for the community," said Bob.

"We see that we are designing for eventual owner/occupiers, that is an intellectual rigour we should bring to the concept. We can't afford mixed-use to fail, and Australians are still uncomfortable with the idea.

"Our point of difference (as a practice) is we offer integrated architecture, interior design, and landscape design for mixed-use projects. We work across all sectors and markets, take all of the learning from those and put it into a mixed-use paradigm.

"High Density mixed-use in Australian cities is about collaboration and listening to everybody. As projects in Australia are getting bigger, the risks are getting bigger, and collaboration with different minds and perspectives is the way to work it all out. Creating socially functional places is the biggest challenge."

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DESIGNED TO SATISFY HIGH STANDARDS

A project like Altitude requires high quality inclusions, which is exactly what ACT Shower Screens and Wardrobes take pride in delivering, with Australian designed and manufactured products customised to meet the needs of builders, architects and interior designers. The company supplied and installed close to 450 semi-frameless shower screens and frameless mirrors for all the apartment bathrooms. The company used a new product they developed and patented themselves, Kolder Perimeter framed 6mm Semi-Frameless screen, delivering a stunning result.

ACT Shower Screens and Wardrobes established their Mitchell facility in 2011, after 20 years of successful operation in Sydney working on projects across the Sydney and Newcastle area. Since opening the ACT operation the team of tradesmen, talented designers and fabrication staff have worked on projects including Manhattan Apartments for Chase, Juliana House for Gedcon, Dunroon for Watpac, and Maddison Apartments, Envy Apartments and Friday Apartments for BLOC.

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SAFETY & INNOVATION ON THE LEADING EDGE

For Mario Carrabs, working on the edge of multi-storey buildings in the formwork trade inspired a major innovation which provides for faster and safer materials delivery and removal by crane. His patented invention, Multi Deck, was recently used by Hindmarsh to improve efficiency and safety at Altitude. The Australian-made Multi Deck bolts onto the slab edge, fitting flush with the floor and eliminating any need for ramps. Push-button controls operate the fold up deck, which provides multi floor access between crane deliveries and a stable work space for dogmen during crane loading and unloading.

"The platform is fully automated therefore increasing the speed with which material can be loaded or unloaded, it makes the crane more efficient, saving man hours," said Mario. "Hindmarsh uses Multi Deck frequently, as do Doma, Lend Lease, Morris Group, Leightons, Construction Control and G. E. Shaw & Associates.

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