



# IN GOOD HANDS

DEVELOPER : Bolton Clarke  
MAIN CONSTRUCTION COMPANY : Hansen Yuncken  
CONSTRUCTION VALUE : \$50 million

The Bolton Clarke Fernhill Aged Care Facility is a state-of-the-art architecturally designed, master planned community over 7-storeys with 162 residential aged care beds. The project includes resident’s café, day spa, library, day therapy/rehabilitation centre, wellness centre, home support service, onsite commercial kitchen and laundry and extensive external landscaping, creating a world class aged care and memory support environment.

**Fernhill Residential Aged Care is Bolton Clarke’s newest addition to their portfolio of 25 aged care facilities across New South Wales and Queensland.**

Fernhill, in Caboolture, north of Brisbane, is a master planned community with Stage 1 comprising 162 residential aged care beds over 7-storeys. The development is a technologically sophisticated facility which sits amongst an existing retirement village. Future stages of the Fernhill master plan will provide further diversity on site with the inclusion of assisted living, build to rent, student housing, and co-living accommodation.

Hansen Yuncken began their involvement with the Fernhill Aged Care service with an ECI phase dealing with cost planning, stakeholder engagement and services infrastructure design throughout the wider brown field existing site. “It was interesting working with Bolton Clarke who have development experience of low rise aged care facilities. This

is their first high rise and it was exciting to go on that journey with them. Bolton Clarke are heavily invested in the design of Fernhill as it is to be an exemplar of their capabilities as they refine their unique model of aged care in Australia,” said Project Manager, Scott Butler.

The \$50 million master planned community was collaboratively designed with residents and their families, community neighbours and a team from the Queensland University of Technology who established a study on how the built environment affects the physical and physiological response of aged care residents.

Fernhill’s design is in the shape of a ‘W’, a single building made of separate forms, joined and angled around beautiful landscaped gardens. There are no straight walls which provides for some interesting spaces. The façade is predominantly of face brickwork, not common for Queensland, and provides familiarity for the residents with an architecture reminiscent of the 50s and 60s.



Onsite works started in July 2018 with an early works package that comprised the demolition of 15 buildings as well as the installation of new services, and relocation, of existing services. “There were a lot of different buildings there,” said Scott. “The old transformer was in the middle of the new building footprint so we moved it, we put in a new generator, site wide main switchboard and submain cabling throughout the entire facility..”

Excavation for the basement started in March 2019. In an unusual move for construction in Queensland, Hansen Yuncken used freestanding precast concrete for the structural cores at Fernhill, two fire stairs and two lift shafts. At 24m high, they believe these to be the tallest installation of its kind in Queensland at that time.

The choice to use precast, rather than in situ concrete, was due to the quality that can be achieved with the manufacture of precast products in a controlled environment and the quick installation. “We reduced 126 walls to 64 by using precast panels. Additionally, we changed the construction methodology for the 550 columns, by using the APTUS



coupler system instead of traditional poured insitu concrete columns. This method allows installation of precast columns which don’t require propping,” said Scott.

Queensland University of Technology has chosen Fernhill as the site for one of two Queensland based ‘Living Labs’ testing early commercial technologies to improve energy efficiency and enable renewable solutions. The project is focusing on the health care industry and will demonstrate how heating and cooling can be coordinated and controlled to more efficiently respond to demand, improving comfort for residents and reducing energy consumption.

The Fernhill redevelopment has been named runner-up in the Best Silver Architecture (In-Construction) category at the 6th Asia Pacific Eldercare Awards.

**For more information contact Hansen Yuncken**, Level 1, 639 Wickham Street, Fortitude Valley QLD 4006, phone 07 3872 4000, email [brisbane@hansenyuncken.com.au](mailto:brisbane@hansenyuncken.com.au), website [www.hansenyuncken.com.au](http://www.hansenyuncken.com.au)





**Argus Vision (Australia) Pty Ltd specialises in the design, manufacture and installation of Architectural Glazing Systems, servicing a wide variety of clients including all tier commercial builders, property developers and high end domestic builders.**

In May 2018, Argus Vision commenced discussions with Hansen Yuncken which led to the formulation of a design brief and contract negotiations. “We recommended design work in July 2019, continuing through to December when we commenced on site. We have supplied in excess of 300 windows and doors for the Fernhill Project.”

At the Aged Care Facility, the floor level remains the same throughout, achieving zero thresholds. To establish the same floor level across the exterior doorways Argus Vision (Australia) Pty Ltd incorporated the innovative Ezi Aluminium Systems InteGrate Product, a flush floor drainage solution for all door types, which requires no set downs.

Argus Vision (Australia) Pty Ltd also helped designed and install all windows from the North to East side of the facility, along with large banks of louvres, automatic doors coupled to manual sliding doors on the balconies, sliding and bi-fold doors including oversized glass panels.

There were extensive design challenges with the requirements of zero thresholds throughout the resident rooms and common areas. Hansen Yuncken and the Client were introduced to our idea’s integration allowing the detailing and construction phases of the project to run smoothly from start to finish.

Although, the Fernhill Aged Care Project was one of the largest Aged Care developments in the Southern Hemisphere, the project had to maintain progress and remain on schedule whilst meeting the highest standards of quality, health and safety. All those challenges in the midst of COVID-19 were overcome and delivered without any delays.

“This was our first venture with Hansen Yuncken, who we look forward to working with again in the future,” explained Argus Vision’s Senior Project Manager, Craig Hendy. Argus Vision (Australia) Pty Ltd custom

manufactures, windows, doors and all other aluminium joinery systems to suit a range of architectural designs. “Our 1,800m<sup>2</sup> manufacturing facility is located at Arundel, North Gold Coast, which allows us to service Brisbane, Gold Coast, The Sunshine Coast and Northern New South Wales. We fluctuate between 20-25 direct employees and over 20-30 subcontract installers, dependent on workload.”

“We predominantly work on large commercial projects; however, we also provide personal assistance in design, manufacturing, supply and installation of architectural glazing systems to all Tier Builders, Architects and Developers. Argus Vision (Australia) Pty Ltd is proud to be an accredited member of the Australian Glass and Window Association (AGWA) and we are recognised for excellence in our field.”

With years of experience of commercial aluminium fabrication Argus Vision (Australia) Pty Ltd work across a range of sectors including Government and Education, Industrial, Retail and Residential. Completing projects such as Miami Ice, an iconic site on the Gold Coast that has now become a 17-storey apartment building. Recently delivering a similar Aged Care Project, Lady Small Haven in Benowa, Gold Coast. Our portfolio includes Bond University’s Faculty of Health Sciences and Medicine in Robina, Volvo Trucks new headquarters and maintenance facility at Ipswich and BMW’s new state of the art showroom at Southport.

“Argus Vision (Australia) Pty Ltd has worked on several high-rise developments across South East Queensland. Current projects include The Queensland Government’s prestigious Pimpama Sports Hub, The Catalina Apartments on Chevron Island, East at Palm Beach and all stages at Anchorage, Hope Island” added Argus Vision’s CEO Darren Peacock.



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## CONCRETE CONNECTIONS THAT SAVE YOU TIME AND MONEY

APTUS was established in 2015 after recognising a unique opportunity to disrupt the status quo of conventional construction methods through innovative solutions and systems that achieve time and cost efficiencies not currently available in the market. Established in Toowoomba, Queensland, the family owned business is expanding the use of its patented technology in key Australian markets along the eastern seaboard.

### APTUS couplers:

The streamlined installation process enables the next level of vertical elements to be erected without any propping before the slab is poured. APTUS elements can be installed as soon as the horizontal formwork is placed.

- Elements are installed when crane demand is at its lowest
- Average one-and-a-half-day reduction in typical cycle times using the APTUS system
- Vertical elements are no longer on the critical path
- Substantially reduce floor cycle times
- Eliminate propping and grouting with no further work required after installation
- Are versatile and adaptable across all types and shapes of vertical elements.
- Significantly enhances site safety removing congestion and clutter

## QUEENS WHARF Multiplex

Queens Wharf is a world-class integrated resort being developed by Destination Brisbane Consortium and constructed by Multiplex. The project comprises of 5 Basement Levels, 7 Podium Levels and four towers of 42 Levels, 23 Levels, 23 Levels and 66 Levels respectively.

After the success of using APTUS' innovative technology on previous projects, Multiplex is leading the way by using APTUS in this development which is recognised as one of the largest private infrastructure projects currently undertaken in the Southern Hemisphere.



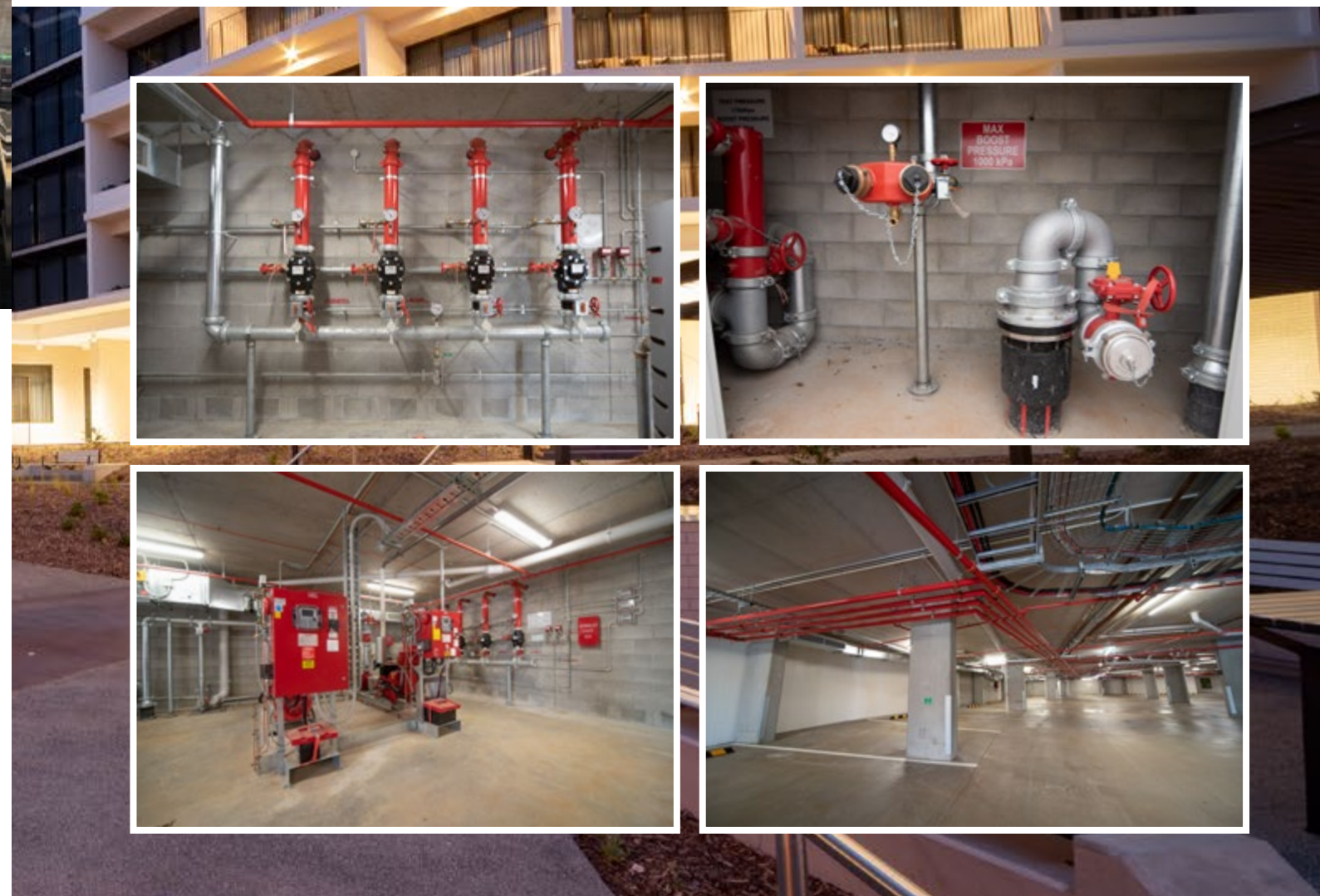
**Precast Elements**  
(Est. Qty)  
2778

**Aptus Couplers**  
(Est. Qty)  
19446

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Below RFS Fire Protection installed fire detection and occupant warning hardware, sprinkler system and duel diesel/electric pump set.



**The team at RFS Fire Protection (RFS) designed, installed and commissioned the automatic fire protection system throughout the building and carpark at the aged care center.**

RFS's scope of work included the installation of fire detection and occupant warning hardware, a sprinkler system as well as a duel diesel/electric pump set and booster assembly with connections for the fire brigade.

Two designers worked on the fire protection system for Fernhill for three months. The installation started in November 2019 and with a team of 10 onsite, practical completion was reached within 11 months.

"The design and coordination was done using 3D modelling software. It was a challenge to coordinate our installation with the many other services that were being installed in the same tight space," said Managing Director, Greg Bartlett. "We aimed to minimise the change of direction in our services and aligning our sprinklers with other fixtures in the rooms to ensure an aesthetically pleasing end product."

Greg has 30 years of experience within the fire protection industry and established RFS in 2001. Today the company employs 12, working

across Queensland and New South Wales, servicing the commercial, industrial and residential sectors. RFS offers a one-stop-shop for fire protection solutions and provide site assessments, design and fabrication, installation and commissioning. They also assist with acquiring the necessary permits, annual certification and continued maintenance and testing.

RFS have completed the design and installation of fire protection systems for retirement homes across Queensland including for Blue Care and Bolton Clarke developments, as well as large scale industrial commercial projects.

Recently RFS completed the Roadtek Depot for the Department of Transport and Main Roads and the Nolan Meat works, where the team designed, supplied, installed and commissioned a high hazard sprinkler system, 300,000L water storage tanks, diesel pumps and booster/suction assemblies, as well as a range of other associated services, including underground mains.

**For more information contact RFS Fire Protection,** PO Box 1300, Gympie QLD 4570, phone 1300 131 030, email [admin@rfsfire.com.au](mailto:admin@rfsfire.com.au), website [www.rfsfire.com.au](http://www.rfsfire.com.au)