

# MAKING WAVES

**Built Environment Collective (BEC) merged with Geoff Ninnes Fong & Partners (GNFP) in early 2022 – combining 50-years of multi-discipline engineering consultancy practice.** The expanded operation is delivering projects globally from offices in Sydney, Canberra, Perth, Brisbane, Cairns and Shenzhen, providing structural, civil, MEP and ESD engineering consultancy, along with project management.

Executive Director, John Tuxworth, explained that, “The merger has expanded the geographical coverage of GNFP’s original Aquatic Engineering specialty, and also facilitates full multi-discipline support for sports and leisure projects. It optimally positions us to apply our leading aquatic expertise for the new and upgraded facilities required for the 2032 Olympic Games from our head office in Brisbane.”

Over recent years the team has been working on projects in four countries, including several projects for the United Nations, and most recently on a major new aquatic centre in Perth. Recent east coast projects include the Waves Fitness and Aquatic Centre in western Sydney and Frasers Keperra in Brisbane.

## Waves

Saturday, September 3, 2022 marked an historic day for The Hills Shire Council as hundreds of people celebrated the opening of the highly anticipated, new, state-of-the-art Waves Fitness and Aquatic Centre in Baulkham Hills.

Mayor of The Hills Shire, Dr Peter Gangemi said, “Waves is the largest project ever undertaken by The Hills Shire Council and it also highlights what the local government sector can achieve for the community. Our builders, designers, contractors and Council staff have done a fantastic job at creating a versatile centre, that features ramps and wheelchair accessible pathways, as well as accessible change rooms, gym equipment and toilets. Waves also has a portable pool hoist and two aquatic wet chairs – making the centre perfect for all abilities.”

The facility includes a 50m, 10-lane Olympic swimming pool (FINA-approved: Fédération Internationale de Natation, now called World

Aquatics), a 25m indoor learn-to-swim pool, a 20m warm-water pool, outdoor waterplay splash pad, gym and fitness centre, and spa and sauna facilities. Supporting infrastructure includes a reception, retail facilities, clubhouse, and 52-space carpark.

The BEC/GNFP team designed the pool structures for the project, which needed to accommodate for the reactive clay soils at the site. The differential movement of pools is often a controlling criterion, and needs to be limited to 4mm to achieve even water flow along a perimeter wetdeck. For this project the pools were piled to rock, with a sacrificial void former under the floors, to limit differential movements which were likely due to reactive clay heave.

Like BEC/GNFP the contractor, ADCO Constructions, has been involved in the development of aquatic and leisure centres for Australian communities for 50 years. ADCO Constructions NSW State Manager, John Basilisco, said “It’s a huge pleasure for the ADCO team to see the community already loving the new Centre.”

## The Quarry, by Frasers Property

With a heritage that dates back to 1924, Frasers Property Australia has delivered award-winning communities and created stronger, smarter, happier neighbourhoods for more than 150,000 Australians.

The opportunity to breathe new life into thriving cities doesn’t come along that often, however, Frasers Property delivers transformative results when they do. From abandoned breweries and disused docks, to former hospital grounds and even a colonial immigration building, the company has a defining talent for superlative urban renewal.

The Quarry at Keperra transforms a granite quarry into a 48.7ha masterplanned residential community with breathtaking panoramas of the D’Aguilar Ranges, Glasshouse Mountains, Moreton Bay and beyond. With over 170m of level change, The Quarry is taking shape as Brisbane’s most elevated new neighbourhood, just 9.5km from the city.

The landscape architects at LatStudio have intended for 40% of the community to be

dedicated to lush greenery, where more than 100,000 plants will be reintroduced to the hillside. The project has received a 6-star Green Star Communities rating, highlighting a commitment to sustainable building practices and a focus on health and well-being for residents.

The private, architecturally designed resident amenity centre, ClubQ, is the heart of the community and presents a sweeping tree-lined northern aspect. As a focal point for health and wellbeing, the 4,609m<sup>2</sup> hub includes an entertainer’s kitchen, dining rooms, event spaces, library and work zones.

There is also a 25m lap pool and two additional resort-style, walk-in pools with an integrated waterfall and kids splash and play area. The residents’ wellness space includes a fully equipped gymnasium and meditation area, and on the opposite side there is a generous kick and throw oval with surrounding nature play zones.

BEC provided all engineering disciplines for ClubQ (structural, civil, building services & ESD) for the principal contractor Integral Constructions.

BEC’s John Tuxworth says, “As always, our engineering contribution is just the ‘supporting act’. Our multi-discipline delivery model provides two key advantages. The first is a reduced administrative burden for the principal consultant or contractor. The second is enhanced quality assurance and reduced construction risk afforded by internal coordination.”

“In this instance we are delighted to have aided the realisation of architecture by national practice Rothelowman, which is embraced lovingly by landscape designed by LatStudio.”

*For more information on Waves contact BEC/GNFP*

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