



RACING TOWARDS THE FUTURE

CLIENT : Blacktown City Council
MAIN CONSTRUCTION COMPANY : Buildcorp
CLIENT'S DESIGN AND DOCUMENTATION ARCHITECT : ARM
CONTRACTOR'S EXECUTIVE ARCHITECT : Co-Op
STRUCTURAL ENGINEER : Adams Engineering
CONSTRUCTION VALUE : \$100 million
TYPE : Sports and Health

Blacktown Exercise Sports and Technology Hub will take community health and sports innovation to a new level by delivering world-class sport facilities, patient care and rehabilitation services, leading education, research programs and more.

Blacktown City Council is building an integrated sports, health and education precinct in the heart of the Blacktown International Sports Park (BISP) in Rooty Hill. At the centre of this prolific development, the Blacktown Exercise Sports and Technology (BEST) hub is one of Blacktown City Council's exciting Transformational Projects, that identifies the community's key priorities and aims to provide high quality services, through long-term strategies.

In addition to the existing facilities within the BISP, which was originally developed for the Sydney 2000 Olympics, BEST will offer an array of public amenities and technical facilities that have been designed to improve the performance of athletes and the overall health of the community.

Some of these include rectangular synthetic and turf pitches, a strength and conditioning gym, an aquatic recovery facility, a neighbourhood health hub, a cafe and a sports medicine clinic. The project also features the Lodge which is a 37-room academy style accommodation development, comprising twin, dorm and fully-accessible bedrooms,

with the ability to accommodate up to 100 guests per night. This accommodation ensures athletes and teams of all standards are able to optimise their training and competition needs within the Sports Park, taking advantage of bespoke catering options, intensive training regimes and onsite recovery facilities.

There will also be a physical literacy area, a space for people of all ages to improve their health through movement, physiology labs, including an environmental chamber, treatment rooms, an auditorium and function space and a biomechanics laboratory, with a 60m indoor analysis track.

Partnering with the Australian Catholic University, Sydney West Sports Medicine, WentWest and the AFL, as well as the many sporting teams that call BISP home, Blacktown City Council and these industry-leading partners are combining their skills and knowledge in education, injury management and rehabilitation and community health through a \$100 million investment in BEST, which will enhance the community's way of life, through health and sports innovation.

Blacktown City Mayor, Tony Bleasdale OAM, said that through the creation of BEST and their partnerships within the industry, Blacktown City Council is delivering on its strategic direction and masterplan to enhance BISP and strengthen its position as a destination for sport and health, over a 20 year period.

“Blacktown City is proud of our sporting culture and we are determined to ensure everyone in our community has access to world-class sport and health facilities for generations to come,” said Tony.

“The collaboration between education, health, sports medicine, research and high-performance sport will foster a positive exchange of ideas that will drive positive sporting and health outcomes for the entire community.”

“BEST will be the stunning centrepiece of BISP and will become Australia's most innovative and integrated sport, health and education precinct,” he said.

With a contemporary design, inspired by the many cultures that make up Blacktown City, such as Indian temples, Turkish bathhouses and Chinese Gardens, ARM architecture has master-planned the precinct and designed Stage 1 of BEST, which is also being delivered by the



main construction contractor, Buildcorp. Featuring a series of striking, glass-reinforced concrete panels and a series of CFC and pic perf panels that form part of the Lodge's façade system, there is little doubt BEST will be a local landmark.

Additionally, BEST has also been inspired by sporting technology and high-performance gear, including 3D printed equipment and apparel, carbon fibre prosthetics and drag-reduction fabrics.

As BEST Hub Stage 2 adds further synergistic opportunities to bring together sport, health and education under the one roof, there is little doubt that this Blacktown City Council project will continue to boost the city's culture of active living and sporting excellence, for generations to come.

For more information contact Dr Neil Gibson, Blacktown City Council, 62 Flushcombe Road, Blacktown NSW 2148, phone 02 9839 6000, email council@blacktown.nsw.gov.au, www.blacktown.nsw.gov.au



MOULDED INTO SHAPE

Australian Cladding Specialists were contracted to supply and install the unique and eye-catching façade of the Blacktown Exercise Sports and Technology Hub.

“The façade was really well designed by ARM Architects and we were fortunate enough to be involved in the early planning stages with the head architect and Blacktown City Council,” explained Managing Director, Claus Maarschalk.

“Early planning and a great design was the key to ensuring the installation went smoothly. ACS worked proactively with the Buildcorp project team. The ACS design for the support systems and installation planning, resulted in seamless installation.”

The façade was created with glass reinforced concrete (GRC) cladding



panels, which are manufactured using glass reinforced concrete and a cement based composite material with alkali-resistant fibres.

The materials offer design flexibility and can be moulded into complex shapes such as curved, corrugated, ribbed, or contoured in a variety of ways with varying thickness. A traditional look such as stone, marble, copper, gold, or chrome, can be achieved at a fraction of the cost.

Australian Cladding Specialists were onsite for about 12 weeks with a team of eight. “ARM Architects, Blacktown City Council, and Buildcorp were really wonderful to work with,” said Claus.

Sydney-based, Australian Cladding Specialists supplies and installs most commercial cladding systems including aluminium composite, terracotta and sandwich panels, and Colorbond® cladding.

Claus Maarschalk founded the company in 2014. Originally from Denmark, has more than 30 years experience in the Australian construction industry. As a result Australian Cladding Specialists have been chosen for cladding projects nationwide for their high level of professionalism and expertise.

“Our level of quality is unparalleled,” said Claus. “We deliver high quality products that meet and exceed our client’s specifications.”

For more information contact Australian Cladding Specialists, 207, Suite F1 The Entertainment Quarter, 122 Lang Road, Moore Park NSW 2021, phone 1300 930 889, email claus@aucs.com.au, website www.aucs.com.au

BUILDING THE FUTURE FROM THE GROUND UP

Chalouhi is recognised as one of the most reputable civil engineering and construction companies in the industry and have been influencing the landscape of Sydney for the last decade. Buildcorp called upon their expertise for the Blacktown Exercise and Sports Hub.

Chalouhi were contracted to provide site remediation, bulk earthworks, detailed earthworks, stormwater drainage including design and construction, retaining wall construction and intricate pavement construction. The company also developed and delivered the foundations for synthetic sporting fields and the turf sporting fields.

“We worked closely with the team at Buildcorp and all other trades to deliver a successful project,” said Project Manger, Jordan.

Chalouhi successfully staged the infrastructure works to handover the key stages such as roadworks and stormwater whilst also maintaining access to the facility and the wider community. With over 50,000 cubic metres excavated, removed and replaced on this project, the team had to develop remediation and material management strategies to overcome the challenge of site-worn materials, resulting in fill being contained, treated and managed onsite.

“During this project we challenged our own Project Team to commit to an outstanding result in supporting women in the civil construction industry” said Jordan. “Our target of 15% female participation was reached and we increased our participation of female staff to 20.78%, including engineers, labourers and machine operators.”

Chalouhi is a leading civil construction company with extensive experience in the industry and a reputation for reliability and excellence. Chalouhi has built and delivered a portfolio of key projects in civil earthworks and construction, specialising in various sectors including roads, demolition, civil works, Government, land subdivision, infrastructure and environmental. Core services include Project Management, site preparation, deep excavation and civil construction.

Current projects include Bankstown Airport Upgrade, Melrose Park Precinct, Chatswood Golf Club and Course Upgrade, Gipps Street Sporting Complex and Canterbury Boys High School Upgrade.

For more information contact Chalouhi, Office 2, 22 Centenary Avenue, Moorebank NSW 2170, phone 02 9790 3799, email admin@chalouhi.com.au, website www.chalouhi.com.au

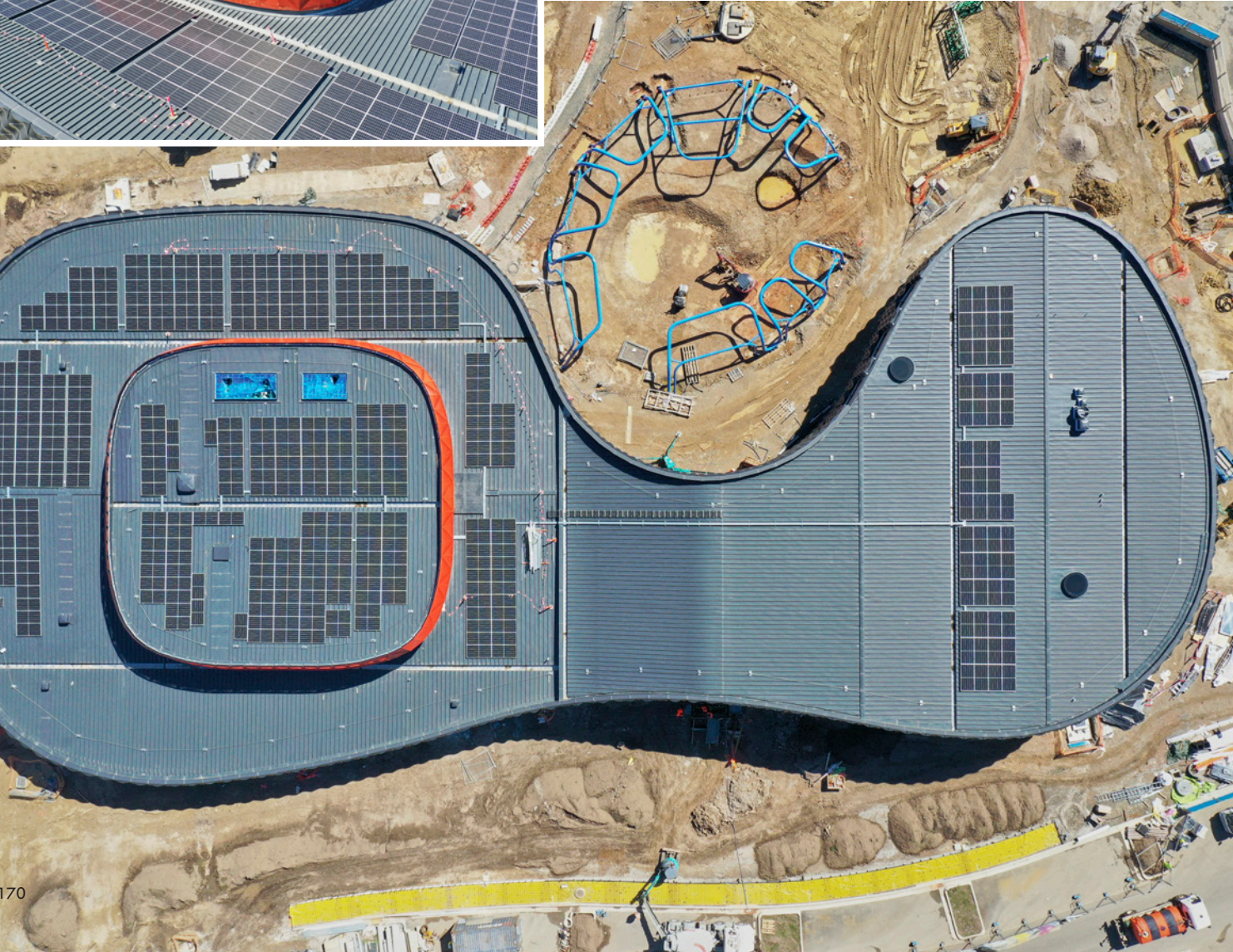


POWERED BY THE SUN

Solar Professionals is regarded as one of Australia’s leading and most innovative solar providers. The company used their vast experience to install a 200-kilowatt solar system at the Blacktown Exercise Sports Technology Hub.

“We installed the best and most efficient technology including two Sungrow inverters in the plant room, a PM Control grid Network Protection Board and 360 Jinko 560-watt Panels,” said Senior Project Manager, David Pugh.

Whilst the system is a straight-forward install, the unique design of the building presented a challenge for the installation. “There was only



one spot on the roof with space to land the pallets, however it had a maximum dead weight capacity of 200kg. Given the pallets weigh close to a ton, loading them on the roof wasn’t a viable option,” said David. “Instead, the panels were placed in a cage and hovered over the roof while the team installed them directly to the rooftop.”

Founded in Wagga Wagga in 2010, Solar Professionals operate in New South Wales, Victoria, Queensland, and Western Australia.

“Our team is led by skilled and experienced management, who understand the ins and outs of the process, given most have worked on the tools,” said David. “Solar Professionals has a long history of delivering diverse projects from small-scale residential properties to large-scale commercial and government installations, with a focus on delivering high quality, efficient systems.”

Solar Professionals also offer full solar life cycle services with ongoing service and maintenance to extend the life of solar systems.

The Solar Renew division is co-developing a first-of-its-kind automated recycling facility that will recover all raw materials and components from aging solar panels without cross contamination. Once a solar system has reached the end of its useful life the team will collect and convert the solar waste into reusable and new products.

For more information contact Solar Professionals, 2/28 Nagle Street, Wagga Wagga NSW 2650, phone 02 6925 6056, email info@solarprofessionals.com.au, website www.solarprofessionals.com.au



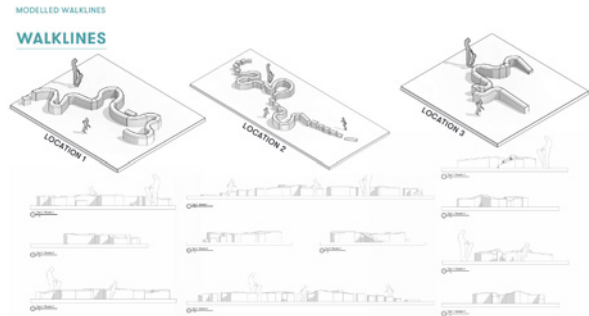
Image: XOXO Munges

LIVING ART YOU CAN EXPERIENCE

Nicole Voevodin-Cash is an artist, designer and creator of sculpted furniture, landscapes, installations and experiences – often in the context of urban environments. Nicole works with landscape designers and architects to activate spaces that encourage those that pass through them to engage more deeply and with greater curiosity.

Nicole was recently commissioned by Blacktown City Council to create a range of installations in the Blacktown Exercise, Sports and Technology (BEST) hub. Collaborating with landscape architects and the Darug people she developed an innovative concept that responded to the local landscape and cultural context. Her interactive designs are designed to encourage the community to visit and use the vast space that makes up BEST.

Her intention in her work is to encourage a sense of fun, interaction, and engagement with the space. The subtle designs integrate seamlessly with the land creating an ambiguity – are they artworks or part of the landscape?



“The sculptures are playfully built into the landscape of the ‘Great Western Walk’,” said Nicole. “Inspired by the concept of walking along a line or as a child along fences, and so inspired by the many fences in and around Blacktown, the installations are designed so that people can climb, balance, or sit on them.”

She was also commissioned to create a range of moveable, nature themed seating arrangements for the Lodge accommodation. ‘CliqueT’

is a series of modular 3D furniture pieces that can be rearranged – creating new ‘cliques’ where people can choose to sit in a group or individually. By covering the furniture in a high-quality artificial turf Nicole has created pieces that look as if they had naturally yet subtly grown from the landscape and are meant to be there.

“Working with the BEST team has been very rewarding,” said Nicole. “They have been wonderfully respectful of the nature of the artistic process and by collaborating with the landscape architects and the Dharug people we have been able to create a meaningful result.”



For more information contact Nicole Voevodin-Cash, phone 0415 497 699, email nicole@voevodin-cash.com, website www.voevodin-cash.com
© nvc.projects
Photos by Teddy Horton www.ptedodactyl.com
Drawing Designs of WALKlines by Scott Carver Landscape Architects

METAL ARTISANS

With their vision to push the creative boundaries of steel fabrication and provide unique and one of a kind designs, for both residential and commercial projects, iFab Steel is a brand known and respected by architects, builders and interior designers.

Renowned for their reliability, unrivalled quality and creative approach like no other, iFab Steel specialise in the design, fabrication and installation of complex steel architectural feature and staircases. Given their specialisation in spiral staircases, carefully constructed to be both functional and visually stunning, iFab Steel were also recently involved



on the Blacktown Exercise, Sports and Technology Hub, (BEST) \$100 million project, which will take community health and sports innovation to a new level, by delivering world-class sport facilities, patient care and rehabilitation services.

Responsible for the design, fabrication and installation of the large feature staircase, with a huge helical curve and elliptical void balustrade, Nathan Rice, Director of iFab Steel, said his experienced and astute team specifically tailored the staircase to suit the overall aesthetics of the building, ensuring they delivered both a unique and highly creative product.

“In order for this project to be the success that it was, we used our cutting-edge augmented reality technology for both project set out and quality control,” Nathan said.

“This industry-leading augmented reality software allows us to interact with a design, moving and changing it to give a real time visualisation of the final product. Consequently, our product for the BEST exceeded our client expectations and we worked closely with the architects, builders and interior designers onsite, ensuring our staircase brought their initial vision to life,” he said.

With a focus on using state-of-the-art augmented reality technology, as well as their already established reputation within the industry, iFab Steel go above and beyond in the design, fabrication and installation of their intricate staircases, ensuring quality and outstanding results every time.

For more information contact iFab Steel, 15 Ada Street, Coopers Plains QLD 4108, phone 07 3706 0767, email nathan@ifabsteel.com, website www.ifabsteel.com.au



Pictured: some of the Manly office team.



ENSURING A BETTER BUILT ENVIRONMENT

Since 2013, MBC Group has established a strong reputation as a clear, consistent, and contactable building surveyor consultancy, able to deliver building compliance projects across the office, retail, industrial, government, education, health, and aged-care sectors. MBC Group help their clients achieve high quality, cost-effective and functional developments within the required regulatory frameworks, delivering a better built environment for all.

Providing a range of services, such as NCC code compliance, building certification, due diligence, fire safety design reviews and performance-based solutions, MBC Group were also recently engaged as the Principal Certifier for the Blacktown Exercise Sports and Technology (BEST) hub in New South Wales, which involved multiple stages, from concept design through to project completion.

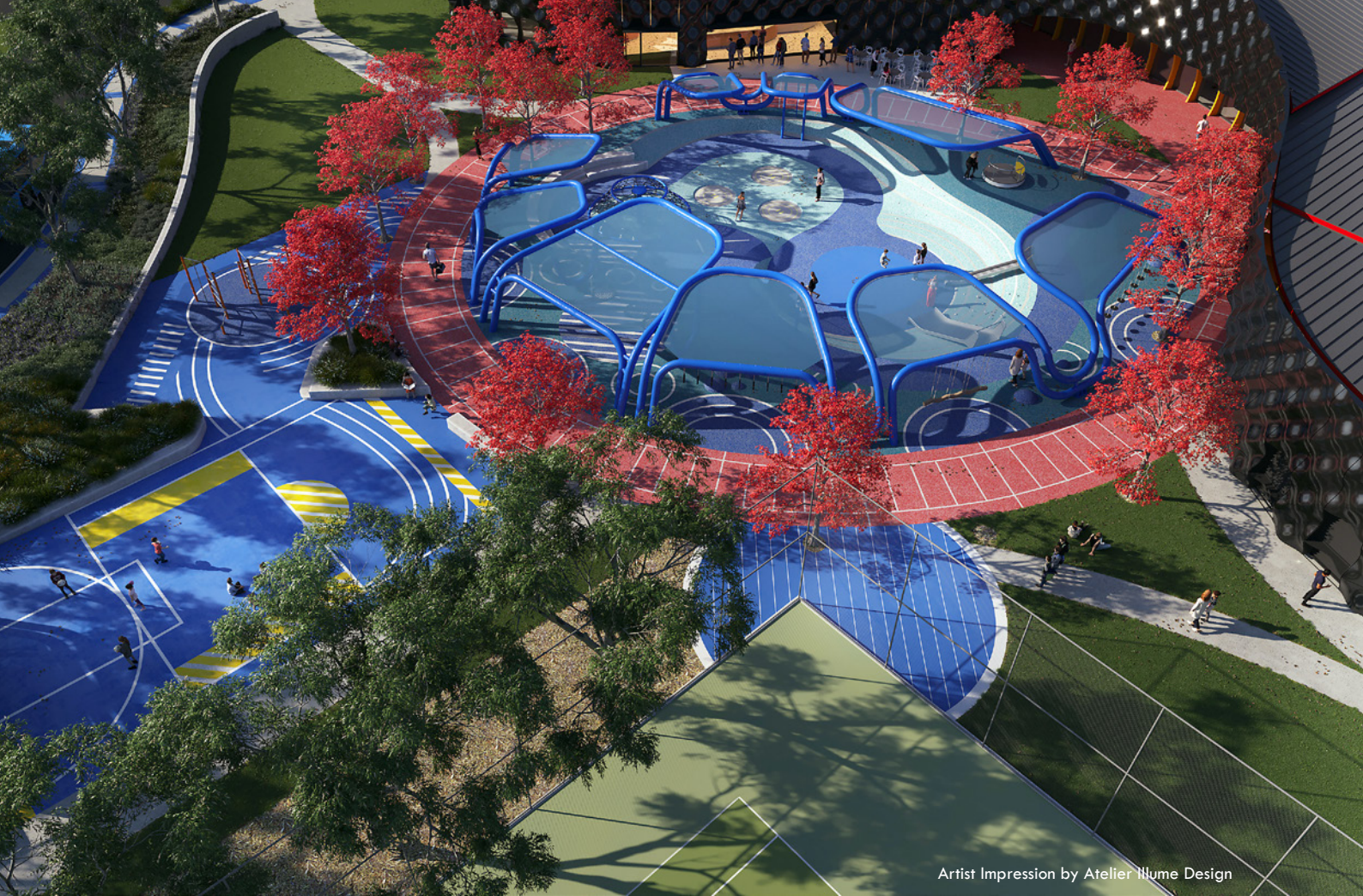
BEST represents a \$100 million investment in making lives better, through health and sports innovation, delivering world-class facilities, patient care and rehabilitation services alongside leading education and research programs, right in the heart of Western Sydney. Responsible for the provision of crown approval certification services for a range of buildings within ‘BEST’, such as the International Centre of Training Excellence (ICTE), accommodation, training facility and the

sports medical centre, MBC Group were able to provide clear advice and recommendations to ensure a smooth compliance pathway.

Along with MBC Group’s extensive experience with new structures of this type, they continually strive to adhere to the company’s guiding principles of being respectful, collaborative, grounded and reliable. This mix of hard-won project experience and ability to perform under pressure while maintaining open, reliable communication with clients allows the business to add considerable value to the broader development team for projects like BEST.

Working on a range of additional projects, such as Sydney Biomedical Accelerator, St John of God Hospital and the Google REVY Technology Precinct, and dedicated to ensuring the best possible compliance outcomes for their clients, MBC Group continue to help create built environments where everyone can flourish and where the best outcomes are achieved.

For more information contact MBC Group, Suite 3/18 Sydney Road, Manly NSW 2095, phone 02 9939 1530, email jmcgee@mbc-group.com.au, website www.mbc-group.com.au



Artist Impression by Atelier Illume Design

LOVE THE OUTDOORS

Founded in western Sydney in 1970, Fleetwood Urban has been delivering excellence in outdoor structures for over half a century, with a heavy focus on fully customised designs that are unique to their individual context.

With end-to-end inhouse design and delivery capability, Fleetwood Urban offer an astute senior project management team and a seamless oversight across all project stages, regardless of its scope or size.

Creating outstanding and unique outdoor structures, their project portfolio also includes outdoor Play, Access and Shade structures which have been delivered for many of Australia's largest and most respected councils, developers and landscape architecture firms. As a result, Fleetwood Urban also recently delivered iconic new play structures for the multi-million dollar BEST precinct, in Blacktown.



Appointed under Buildcorp, through the Project Manager, Savills, and in collaboration with Scott Carver Landscape Architects, Fleetwood Urban initially developed the concept design and associated construction costing of all of the required play structures.

Using their signature project methodology model, as well as incorporating a range of elements that increased the physical literacy of the users and enhanced cognitive and co-ordination skills, Fleetwood Urban delivered fully custom junior and senior play structures that seamlessly integrated into the wider BEST masterplan. They were also engaged to finalise the design and refine construction costs and processes, including manufacture, pre-assembly and installation.

The team created an entirely new play product for the dexterity panelling in the junior play section, using shaped steel tubing and high-density polyethylene (HDPE). Additionally, previous knowledge and IP gathered from delivering major outdoor structures, such as Aurora Entry Park and The Address located in Victoria, was also adapted to enable Fleetwood Urban to create innovative connection and footing systems.

With a design vision to enhance the 'physical literacy' of everyone who use the play structures, the team from Fleetwood Urban have delivered one-of-a-kind play experiences, whilst continuing to reflect the wider sporting excellence theme of the BEST hub and the Centre of Excellence building.

For more information contact Fleetwood Urban, phone 1300 989 100, website www.fleetwoodurban.com.au

EFFICIENT, INNOVATIVE AND THE BEST

Vent Mechanical Services is a Sydney based company specialising in innovative engineering design and construction of mechanical services (HVAC). They provide a complete service in engineering design, project management, installation and service maintenance of air conditioning, heating and ventilation systems for a variety of buildings.

Vent Mechanical Services designed and constructed the air conditioning and ventilation systems for the Blacktown Exercise Sports and Technology (BEST) Hub. "It was a fairly straightforward job," said Managing Director, Matthew Eaton. "Designing air conditioning for indoor pool areas is very much part of our core business."

Working across the commercial, industrial, healthcare and multi-residential sectors Vent Mechanical Services engage with their stakeholders on each project to ensure that the mechanical services are tailored to their specific requirements and then delivered to exceed their expectations.

The company is passionate about providing clients with innovative, workable design solutions and pride themselves in delivering installations of outstanding quality and cost effectiveness.

"We understand that our clients deserve the best possible level of service throughout the entire project journey – from proposal to handover – and that is why each of our project teams is led directly by one of the company's Principals," said Matthew.

Vent Mechanical Services realises each project represents an investment for the ultimate stakeholders. Their objective is to increase the long term value of that investment by incorporating only proven, reliable and robust technologies into each solution.

Whether it is design and construct or construction only project, a refurbishment or a new building Vent Mechanical Services can assist in all aspects of mechanical services.

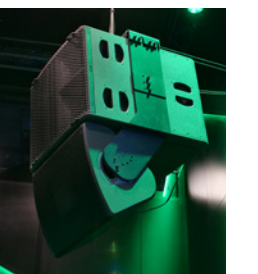
Current projects include the Aquatic Leisure Centre at Parramatta and the Wollondilly Performing Arts Centre in Picton, New South Wales.

For more information contact Vent Mechanical Services, Unit 2, Building 10, 256 New Line Road, Dural NSW 2158, phone 02 9042 0110, email admin@ventmechanical.com.au, website www.ventmechanical.com.au





Insets : The Avit Groups' Installation & fitout for Fortress Sydney. Racking, lighting array and speaker installation.



AV THAT PERFORMS

The AVIT Group are a forward thinking audio visual technology company that were recently involved on the Blacktown Exercise Sports and Technology Hub (BEST), a world leading high performance, sports medicine, education and accelerated recovery centre.

Given their 50 years of combined experience from different fields within the audio industry, as well as their experience regarding digital transformation, the AVIT Group delivered seamless and consistent design and installation solutions to the project.

Providing unique experiences that are unrivalled in Australia, and most importantly, are available for all residents to enjoy, the \$100 million BEST hub will become the centrepiece for the Blacktown International Sports park, making the city the sporting capital of Western Sydney and delivering state-of-the-art facilities to visiting international elite teams, local representative and community sports teams.

Working closely with the BEST team, Managing Director, Brad Magri, said the AVIT Group provided leading audio and visual technology for the extensive spaces across the hub. "Throughout our involvement, we were responsible for the design and construction of the audio-visual services, ranging from IPTV and digital signage, to the Meeting Room technology, DAS repeating system and complete (Cisco Meraki) network design, installation, commissioning and video distribution over HDBT using Lightware products," Brad said.

"Vitec, for IPTV, was chosen for both the main building and the accommodation, due to the technology's ease of management,

as well as its ability to deliver digital signage, internal video channels, Free-To-Air TV, Pay-Per-View Content and Chromecast support."

"Additionally, Samsung displays, with System-On-Chip implementation of the Vitec software were chosen, to allow them to directly connect to the network without the use of a set-top-box," he said.

Excited to be delivering their cutting-edge solutions to such a renowned project, the AVIT Group also provided top-of-the-range audio by QSC DSP, Tannoy speakers, and Lab Gruppen amplification, with control by Crestron, once again demonstrating their team's dedication and passion for audio.

For more information contact The AVIT Group, Unit 22, 105A Vanessa Street, Kingsgrove NSW 2208, phone 1300 028 482, email brad@theavitgroup.com.au website www.theavitgroup.com.au