

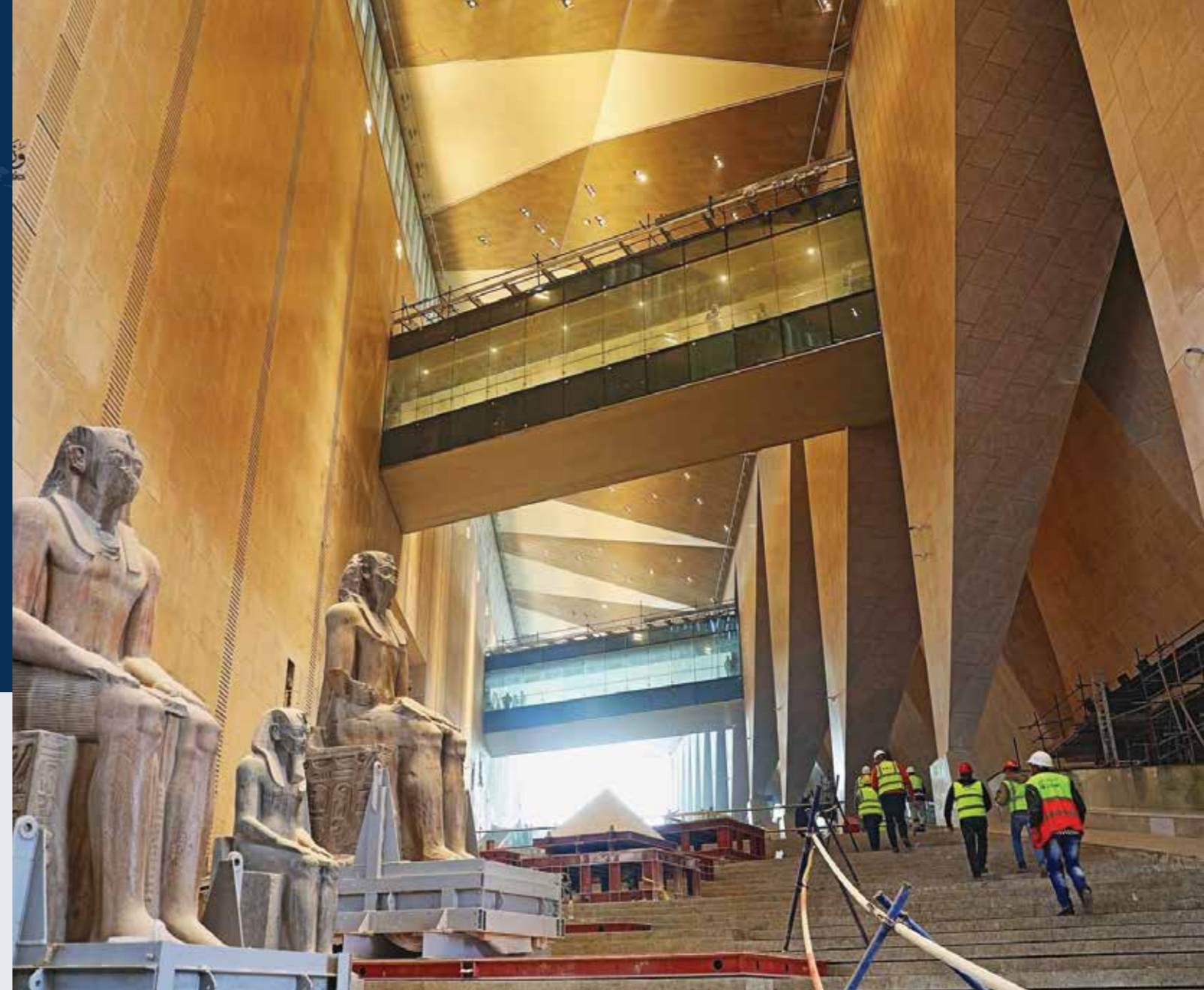


# Showcasing the best in **Stadiums and Venues**

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# Building on strong foundations

DELIVERING EXCELLENCE IN COMPLEX MULTI-DISCIPLINARY PROJECTS



Grand Egyptian Museum, Giza, Egypt



**\$7.2B+**

Work in hand



**11,000+**

Employees



**25+**

Countries



**5**

Continents

## Global experience delivered locally

**BESIX Watpac is an Australian multi-disciplinary contractor backed by a century of global expertise and financial strength. A wholly-owned subsidiary of the award-winning BESIX Group, we specialise in complex construction across all sectors.**

With vast international experience and a robust balance sheet we deliver large-scale complex infrastructure projects across Australia and New Zealand. Combining Watpac's four decades of intimate local knowledge, delivery excellence, and trusted long-standing partnerships, we bring the best of the world's capability together.

Whether it's the tallest building in the world, the iconic Burj Khalifa or the Grand Egyptian Museum - from stadiums to hospitals, schools, bridges, resource and industrial projects, port infrastructure, water treatment plants, secure facilities, airports, defence assets and more - *ours is a reputation built on quality.*



### In-house engineering expertise

Our in-house team of 150+ engineers operates from three global hubs in Brisbane, Dubai and Brussels. We set new standards in construction through expert structural, geotechnical, sustainability, digital and façade engineering as well as rapidly evolving concrete technology. Our specialists are embedded in project teams to interrogate the design; de-risking projects, maximising value and delivering certainty.



### Partner of choice

Leveraging our rich Australian history, we collaborate with our clients and partners to deliver excellence on every project. As genuine relationship contractors, we are invested in our client's success. A private company with a flat structure, our lean, agile approach guarantees innovative and cost effective solutions.



### Local content specialists

From urban centres to regional Australia, we actively support local jobs and Indigenous participation while building better communities. This is fundamental to our core beliefs and exemplifies our personalised approach to project delivery.

**Experts in Stadiums and Venues >>**



# Bringing cultural icons to life



55+

Stadiums and venues delivered in Australia and internationally



\$8.5B+

Total value of Australian and international stadiums and venues

*Creating a functional and much-loved community landmark.*

A stadium is much more than an architecturally aesthetic structure where people gather – it is an icon that represents a region, a landmark people identify with, and a theatre where dreams are realised.

At the heart of a successful stadium or venue is atmosphere and the patron experience; from proximity to the action and complete immersion in a cultural experience, to fit-for-purpose back of house facilities.

Equally important to creating exceptional ambience is a venue where operational functionality is effective and discreet, where patron thoroughfares are optimised and safe, and where visitor amenities are comfortable and practical.

While every venue is unique, the most significant element of a stadium is the field of play and its ability to meet elite international sporting standards. Efficient seating and scientifically calculated sight lines within the bowl are fundamental to the fan experience, along with ensuring fast and safe egress, and proximity to food and beverage outlets with minimal queuing.

Queensland Country Bank Stadium  
Townsville, Qld

With unrivalled experience delivering landmark stadiums and venues throughout Australia and internationally, BESIX Watpac has extensive knowledge of the unique requirements involved in building distinctive world-class facilities and the complexities associated with their design and construction.

From highly technical velodromes to magnificent multi-purpose community stadiums, and the largest museum in the world, we collaborate with our clients, specialist partners and facility operators - including sport or cultural bodies, broadcasters, caterers, police and security experts, and telecommunications specialists, to bring these multifaceted and elaborate constructions to life.

Key to delivering complex stadiums and venues to the highest quality is first and foremost an experienced team. We leverage tried and tested design management methodologies, backed by the early involvement of our in-house engineering specialists who provide expertise on constructability, suitability and availability of materials and resources, to ensure **we deliver on-time and on-budget, every time.**

Whether applying prefabricated structural elements or custom-made features that showcase the best in contemporary construction, our thorough interrogation of the design, the materials, and the methods by which they are assembled, guarantees our venues are delivered safely, economically and with the utmost certainty.

From inclusive and appropriately tailored bathroom amenities, to optimal ticketing facilities, turnstiles, drop-off points, wayfinding signage, facility-wide wi-fi, PA systems, and the latest in audio visual, right down to the crockery, cutlery and rubbish bins; we offer complete turnkey stadiums and venues that impress.



Queensland Country Bank Stadium  
Elton John Concert

# Unrivalled experience



## DELIVERING ONCE-IN-A-GENERATION PROJECTS

### Complex facility specialists

We have extensive world-class experience in designing, building and revitalising iconic venues and have mastered the methodologies for delivering these specialised projects. From complex facades and roof structures to unconventional shapes and forms, we apply our deep expertise to tailor each unique project. Our specialist team undertakes rigorous testing, modelling and engineering to ensure even the most technical element is optimised and delivered safely.



• Ferrari World  
Abu Dhabi, United Arab Emirates

### ✓ Sustainability-first approach

Smart solutions are required to manage the heavy use of resources required to operate large-scale stadiums and venues. Environmental responsibility, including sustainable material selection is front of mind and built into design wherever possible. We drive energy efficiencies through initiatives such as LED lighting and proudly delivered Australia's first 'solar stadium' featuring 600 custom-made solar panels to generate 20 per cent of Metricon's energy needs. Water harvesting from roof rainwater for bathroom amenities and the recycling of construction waste ensures our venues are delivered with maximum sustainability goals achieved.

### ✓ Local community engagement

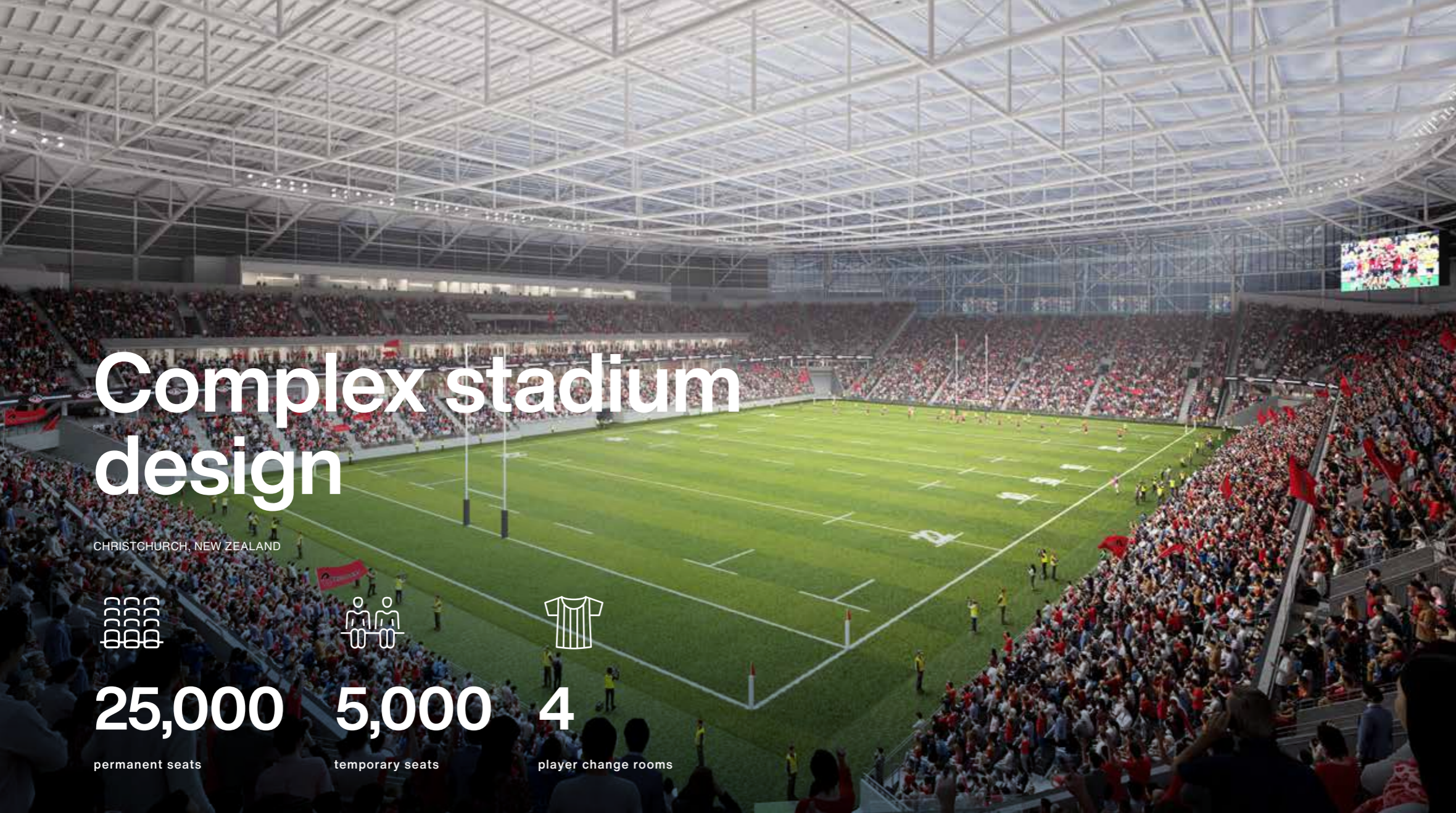
High profile, once-in-a-generation projects attract enormous community interest and scrutiny. Factors such as cost, time and safety issues can all impact the project and the client's reputation. Together with our industry leading community and stakeholder engagement professionals we monitor, identify and mitigate issues throughout the project life cycle. Through this, we successfully inform, engage and empower our neighbours, community leaders, government and industry representatives, utility providers, environmental and social groups among others to achieve positive community and project outcomes.

### ✓ Safety expertise

Our award-winning safety approach demonstrates our commitment to protecting people both on site and once the venue is operational. Stringent work safe practises apply particularly around high and heavy roof and façade structures. Enacting the International Sports Ground Safety Authority's Green Guide, we take every measure to safeguard lives at future events. This includes specialised crowd modelling to determine thoroughfare capability and egress times; ensuring even 40 thousand people can evacuate the bowl and field of play in 15 minutes. Counter-terrorism authorities review the design in conjunction with our Intelligent Risks specialist to identify and mitigate further potential issues.

### ✓ Technology-enhanced fan experience

Whether its broadcaster systems, ticketing, IPTV (control system for TVs) score boards, ribbon signage, lighting, sound, and wi-fi enablement, we provide the electronic and digital backbone for stadiums and venues through the integration of technology components. From real time ticket scanning at stadium entry, to paying for a beer using cashless point of sale technology, to watching game replays on mobile apps, or booking transport when the whistle blows - our systems enable a streamlined experience for patrons.



# Complex stadium design

CHRISTCHURCH, NEW ZEALAND



25,000

permanent seats



5,000

temporary seats



4

player change rooms



## Te Kaha/Canterbury Multi-Use Arena

We are the lead contractor in the Kōtui consortium to deliver the people of Canterbury a world-class stadium. The consortium also includes architects Warren and Mahoney, global stadium design experts Populous and Mott MacDonald, and New Zealand local construction company Southbase.

The unrivalled stadium expertise through the Kotui team will be invaluable in delivering this complex multi-use arena. Collaboration with a local seismic engineering specialist will ensure the stadium is built to withstand Christchurch's seismic activity not only on completion, but also during construction.



CLIENT  
**Christchurch City Council**



VALUE  
**\$683M**



EXPERTISE  
**Design + Construct**



TIMELINE  
**2021 - 2025**

- ✓ Rectangular permanent stitched hybrid in-situ turf Field of Play and a fully covered roof including a clear span over the entire area of the Field of Play and Bowl
- ✓ One of only two stadiums in the world with a fully enclosed roof and natural grass playing field
- ✓ 30,000 seats (25,000 permanent and 5,000 temporary)
- ✓ A minimum of four player changerooms
- ✓ Food and beverage amenity for 25,000 patrons



*Te Kaha will be such an enabler for the future of our city and region. We are the sporting and events capital of New Zealand, and with this amazing new facility, we'll be able to showcase to the world the very best of what we can offer."*

Lianne Dalziel  
Christchurch Mayor

# Delivering a North Queensland icon

TOWNSVILLE, QUEENSLAND



**11.9%**

Indigenous participation

**2,000+**

local jobs

**85%+**

local subcontractors

**\$163M+**

injected into the economy through local business

“ This is a magnificent contribution to the skyline of the city of Townsville, the likes of which we will probably not witness again for generations.”

Master Builders Awards Judges' comments



## Queensland Country Bank Stadium

Delivered on time and within budget, the Queensland Country Bank Stadium project provided a substantial boost to the North Queensland economy. By breaking up larger trade packages into smaller contracts, we created significantly more opportunities for local businesses to be part of this iconic community development.

The project also created employment pathways for local workers and apprentices, along with supporting jobs for more than 135 Aboriginal and Torres Strait Islander people. Through our Indigenous Participation Strategy, we effectively doubled our original target of 6.6 per cent - achieving an impressive 11.9 per cent participation.



CLIENT  
**Queensland Government**



VALUE  
**\$318M**



EXPERTISE  
**Managing Contractor**



TIMELINE  
**2017 - 2020**



- 2020 Project of the Year  
Master Builders (North Queensland)
- 2020 Excellence in Workplace Health & Safety  
Master Builders (North Queensland)
- 2020 Construction Awards Sporting Facilities  
Master Builders (North Queensland)

- ✓ Horseshoe shaped roof inspired by the pandanus plant – one of the most geometrically complex in Australia
- ✓ Extensive testing, modelling and engineering to ensure the roof can withstand cyclonic winds
- ✓ Each of the 36 roof trusses is geometrically unique and required a 14-day joint-effort between our team and subcontractors to assemble, before being installed using a rare 400-tonne crane
- ✓ 25,000 seats
- ✓ Home to the high-profile North Queensland Cowboys rugby league team



# Geotechnical specialist

GOLD COAST, QUEENSLAND

## Cbus Super Stadium

This highly prized and geotechnically complex project required extensive collaboration between our team and the Gold Coast City Council to develop a successful remediation strategy to address highly contaminated soil. The site was preloaded with clean soil and wick drains were installed to drain acid sulphate sub-soil from the landfill.

- ✓ Received 13 awards including the Australian Institute of Building's Professional Excellence Award (Technology and Innovation) and a High Commendation from Safe Work Australia
- ✓ Collaboration with Workplace Health and Safety to develop an award-winning approach to address the challenge of installing the innovative and large-scale membrane-vaulted roof
- ✓ Time and cost benefits created for our client through the use of prefabricated elements
- ✓ Delivered defect free and with no compliance issues
- ✓ 1 million litre rain and recycled water tank on site

### Multi-award Winner

- 2008 Professional Excellence (Technology and Innovation)  
Australian Institute of Building (National)
- 2008 Highly Commended  
Federal Government Safe Work Australia

CLIENT  
**Queensland Government**

VALUE  
**\$152M**

EXPERTISE  
**Managing Contractor**

TIMELINE  
**2006 - 2007**

# Superior spectator and player outcome

DOHA, QATAR

## Khalifa Stadium Redevelopment

Redeveloping an iconic stadium requires maintaining respect for the original design while integrating the latest state-of-the-art features. BESIX has delivered two major upgrades at Khalifa Stadium, the latest aligning it to strict FIFA standards.

- ✓ Second renovation included increasing the seating capacity to 40,000 in preparation for the 2022 FIFA World Cup
- ✓ Features an innovative cooling technology that maintains an optimal playing temperature of 26 degrees Celsius
- ✓ A sweeping canopy that covers all seated areas enhances the spectator experience
- ✓ Achieved GSAS 4 Star sustainability certification

CLIENT  
**Government of State of Qatar**

VALUE  
**\$500M**

EXPERTISE  
**Design + Construct**

TIMELINE  
**2003 - 2005 & 2014 - 2017**





# Creating local opportunities

GEELONG, VICTORIA



91%

local content target



50%

subcontractors from Geelong region



6%

aspirational Indigenous participation target

## GMHBA Stage 2 Redevelopment

A new northern stand will be delivered as part of the upgrade at GMHBA stadium, increasing the seating capacity by 14,000 to 40,000, and position the sports arena as the largest stadium in regional Australia.

Social procurement is at the project's heart. Our 'spend local' and 'spend social' economic initiatives are being implemented to create opportunities for local, Indigenous and disadvantaged groups as well as boost the local economy through local content.



CLIENT

Kardinia Park Stadium Trust



VALUE

\$142M



EXPERTISE

Design + Construct



TIMELINE

2021 - 2023

- ✔ Works include several major improvements including a new northern entry plaza, change rooms, and new media facilities
- ✔ The upgrade will deliver a regional cricket hub and replacement facilities for the Geelong Cricket Club
- ✔ The upgrade will position GMHBA Stadium as the largest regional stadium in Australia
- ✔ A local content target of 91% has been set for the project under the State Government's Local Jobs First policy
- ✔ BESIX Watpac is aiming to have more than 50% of subcontractors engaged from Geelong
- ✔ Targeting minimum 3% Indigenous employment with an aspirational goal of 6%
- ✔ \$1.2 million allocated to purchasing goods and services from social enterprises



*We are delighted to be extending the same 'spend local' and 'spend social' initiatives that we have on the nearby Civic Accommodation Building. We are extremely proud of the contribution we are making to the Geelong community and the local economy."*

Simon Ballard  
General Manager Victoria and South Australia,  
BESIX Watpac



# Decades-long partnership

BRISBANE, QUEENSLAND



27 YEAR

successful client relationship



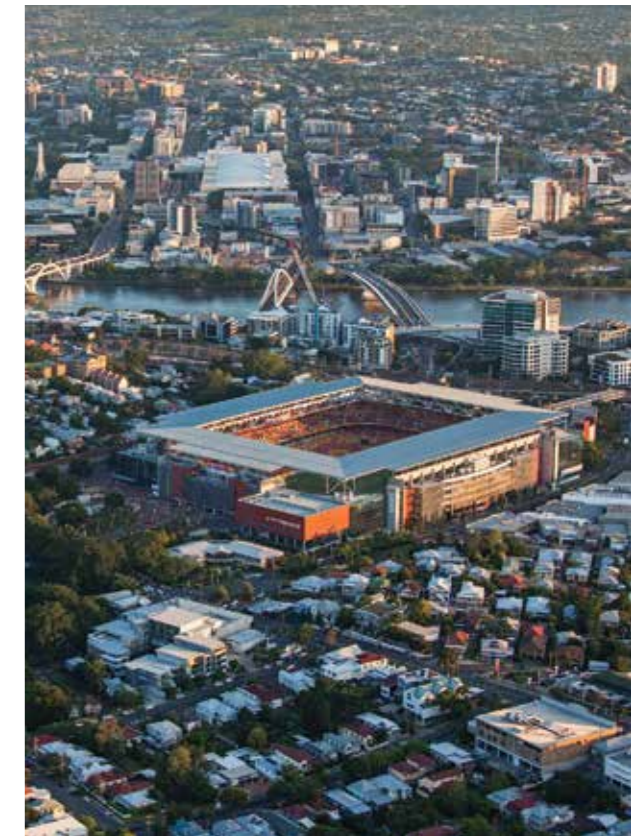
11,000 m<sup>2</sup>

of glass



500K

concrete blocks



*There's no doubt that this is the best rugby league or rugby union field in the world - it is just fabulous.*

Terry Mackenroth  
Former QLD Treasurer

## Suncorp Stadium

Our enduring partnership with Suncorp Stadium is testament to our skill and expertise in delivering world-class sporting venues. Originally contracted to deliver the new western grandstand in 1993, this was followed by a full \$280 million redevelopment ten years later.

This major redevelopment posed significant challenges including a tight and inflexible deadline to be ready ahead of the 2003 Rugby World Cup. The difficult site, in close proximity to homes, businesses and transport networks required careful planning, expertise and significant stakeholder engagement to deliver this full turnkey stadium on time and within budget. We have delivered multiple subsequent works, meticulously planning our program around active concert and sporting schedules.



CLIENT  
**Queensland Government**



VALUE  
**\$300M**



EXPERTISE  
**Managing Contractor**



TIMELINE  
**1993 - 2017**

TIMELINE	PROJECT	VALUE
1993-1994	Lang Park Western (Frank Burke) Stand	\$27M
2001-2003	Suncorp Stadium Redevelopment	\$280M
2008-2009	QRL Headquarters Fitout	\$3M
2011	Flood Rectification and Remedial Works	\$9M
2011-2012	Player Facilities	\$9M
2015-2016	Western Grandstand L5 Upgrade - Stage 1	\$3M
2016-2017	Western Grandstand L5 Upgrade - Stage 2	\$5M
2016-2017	Stadiums Queensland Workplace	\$1M
2017	Videoboard Replacement	\$3M

- ✓ Over seventeen million patrons since the completion of the major upgrade
- ✓ Over the course of our involvement the venue's capacity has increased from 14,000 to 52,500 seats, with 70 per cent undercover
- ✓ 258 car parking spaces
- ✓ 105 weeks of construction



# Live environment expertise

BRISBANE, QUEENSLAND

## The Gabba Brisbane Cricket Ground

Our experience at 'The Gabba' spans several decades with each stage delivered on time and within budget. No construction activity on site has interfered with the staged events, including football, cricket matches and the 2000 Olympic Games.

- ✔ Staged handovers ensured the maximum number of seats remained available during construction
- ✔ Works were carried out over, around and below an adjacent school and through our collaborative approach, the school remained fully operational throughout construction
- ✔ Seven separate stages over 26 years with the latest upgrade modernising the ground and enhancing public areas, signage, media areas and corporate spaces
- ✔ 42,000 seats



*The completed facilities are a credit to the workmanship of BESIX Watpac and the subcontractors it engaged. They have already attracted very favourable comments from those who have used them.*

Wayne Myers, Chairman  
Major Sports Facilities Authority  
(now Stadiums Queensland)



CLIENT  
**Queensland Government**



VALUE  
**\$167M**



EXPERTISE  
**Design + Construct**



TIMELINE  
**1994 - 2005; 2007 - 2009  
(Sundry works); 2020**

# Rapid construction program

JEDDAH, KINGDOM OF SAUDI ARABIA

## King Abdullah Sports City

A spectacular multi-purpose venue including a 60,000 seat world-class stadium, the project was completed in a record 22 months by implementing smart methodologies throughout design and construction while achieving the highest standard in quality, safety and comfort for the spectators.

- ✔ A full turnkey project including an international standard stadium, a 2,000 seat multi-purpose indoor stadium, external football pitches, tennis courts and an athletics track
- ✔ Associated infrastructure included 45,000 car parks, eight kilometres of roads, two kilometres of walkways as well as power, water and sewerage facilities
- ✔ Features a cutting-edge external design that promotes energy efficiency and natural cooling
- ✔ The precinct includes a 500 person mosque



CLIENT  
**Saudi Aramco**



VALUE  
**\$300M**



EXPERTISE  
**Design + Construct**



TIMELINE  
**2011 - 2014**



# Engineering excellence

BRISBANE, QUEENSLAND



1,500

seating capacity



250 m

timber track



69 km

of surface timber for the track



1,600 m<sup>2</sup>

of durable, fire resistant PTFE fabric in roof and façade



*I must say the Velodrome looks absolutely brilliant and will no doubt be one of the Gold Coast 2018 Commonwealth Games' highest profile, most photographed venues... world class.*

George Farrington,  
Manager Infrastructure and Overlay  
Gold Coast 2018 Commonwealth  
Games Corporation



## Anna Meares Velodrome

Our team expertly handled multiple challenges when delivering Queensland's first indoor velodrome. The combination of the hyperbolic paraboloid roof and the tessellated wall design created several design detailing issues. We overcame these through our considerable experience in delivering international standard sporting venues, extensive prototype modelling and collaboration with key design consultants.

We also conducted extensive risk management and value engineering workshops to ensure budget was met without compromising the design intent and functionality, which improved safety while delivering cost benefits.



CLIENT  
**Queensland Government**



VALUE  
**\$55M**



EXPERTISE  
**Managing Contractor**



TIMELINE  
**2014 - 2016**

- ✓ A climatic challenge was overcome by implementing a water misting system to produce an artificial climate, maintaining 70 per cent humidity, while the timber lathes were laid - this prevented the timber from buckling
- ✓ Building a concrete shell to precisely match timber dimensions while the track was prefabricated in Germany ensured installation was seamless and efficient
- ✓ 1,500 seats
- ✓ Hosted the cycling events at the Gold Coast 2018 Commonwealth Games



- **2017 National President's Award**  
Master Builders (National)
- **2017 Sporting Facilities Award**  
Master Builders (Queensland)
- **2016 Engineering Project Steel Design**  
Australian Steel Institute (ASI) Steel Design Awards (Queensland)
- **2016 Steel Excellence Award in Engineering Projects**  
Australian Steel Institute (ASI) (Queensland & Northern Territory)



Delivered  
3 months early

MELBOURNE, VICTORIA



# First Commonwealth Games venue

GOLD COAST, QUEENSLAND

## Gold Coast Aquatic Centre

This exceptional aquatic facility was the first competition venue to be completed for the Gold Coast 2018 Commonwealth Games and has positioned the city as a prime location for local, national and international events.

- ✔ Collaboration with the Gold Coast City Council and Queensland Government ensured minimal impact on local businesses, residents and major events such as the Gold Coast Marathon throughout construction
- ✔ 64 per cent of subcontractors were from the Gold Coast
- ✔ 90 per cent of subcontractors from South East Queensland
- ✔ 1,000 permanent seats with flexibility built into the design to accommodate an extra 9,000 temporary seats



CLIENT  
**Queensland Government**



VALUE  
**\$40M**



EXPERTISE  
**Managing Contractor**



TIMELINE  
**2012 - 2014**

## Melbourne Park Redevelopment Eastern Plaza

Home to the Australian Open, Melbourne Park is one of Australia's most recognisable sporting venues. We delivered the Eastern Plaza and Australia's National Tennis Centre amid a busy event schedule.

- ✔ First Australian stadium to achieve LEED Gold Rating
- ✔ Three months early delivery made possible through our smart approach to program management
- ✔ Designed to meet strict dimensional tolerance and vibration criteria to ensure compliance with international standards
- ✔ Solution for disposing 18,000 cubic metres of highly contaminated soil identified during early works using a burrow pit and applying a capping layer met EPA guidelines
- ✔ 560,000+ construction hours worked



Excellence in Commercial Buildings over \$80 million  
Master Builders Association  
Victoria Awards



CLIENT  
**Victorian Government**



VALUE  
**\$115M**

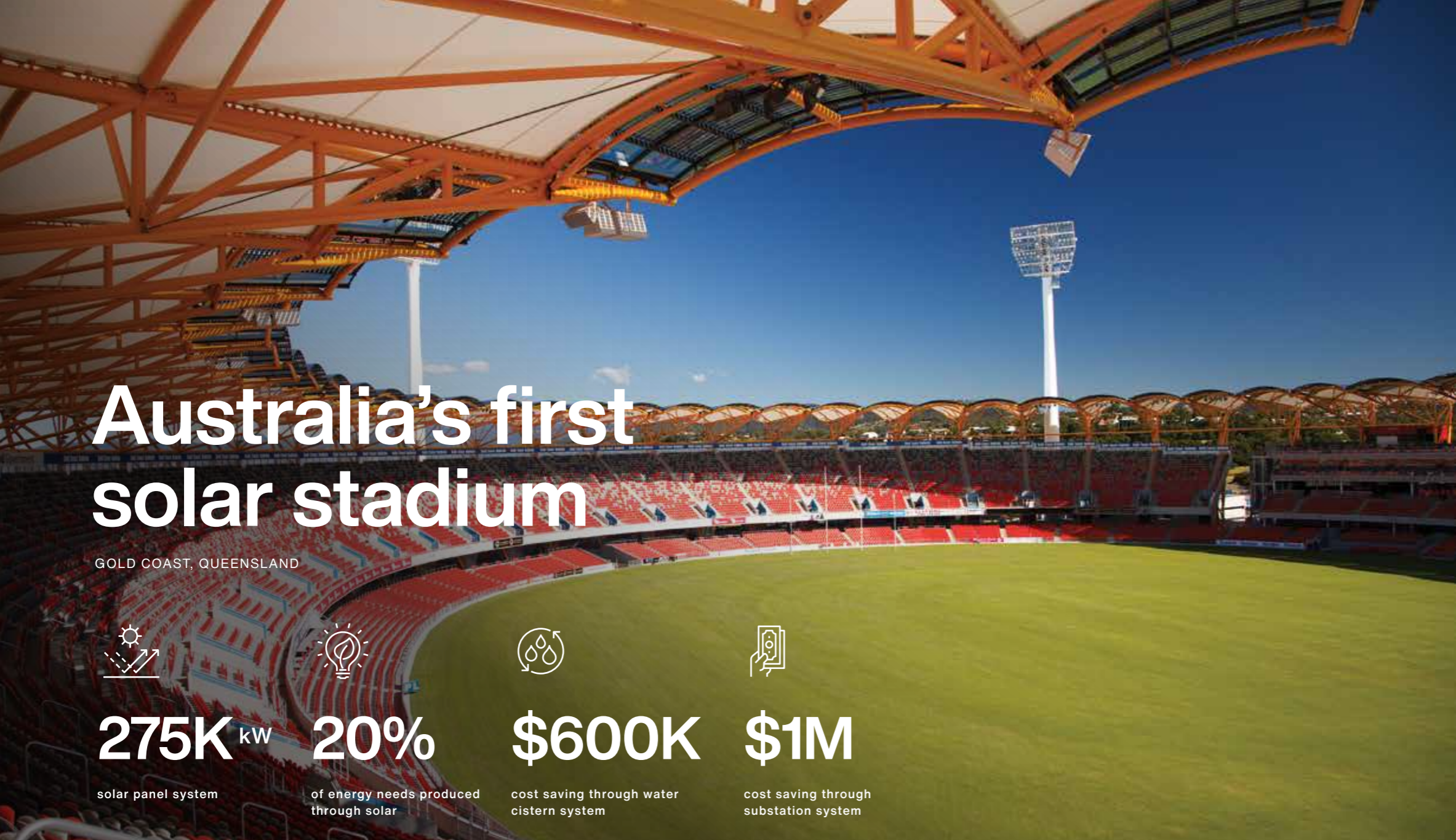


EXPERTISE  
**Design + Construct**



TIMELINE  
**2011 - 2012**





# Australia's first solar stadium

GOLD COAST, QUEENSLAND



**275K** kW

solar panel system



**20%**

of energy needs produced through solar



**\$600K**

cost saving through water cistern system



**\$1M**

cost saving through substation system

## Metricon Stadium

Host of the opening and closing ceremonies of the Gold Coast 2018 Commonwealth Games, Metricon Stadium was built to meet the international standards of six sporting codes. It is also Australia's first 'solar stadium' with 600 custommade solar panels with the ability to generate 20 per cent of its energy requirements.

Our project team's flexible and adaptable approach to the redevelopment of the existing stadium ensured issues were addressed early and efficiently to keep the project on schedule. We effectively accommodated a major change in scope, and safely handled asbestos and soil contamination.



CLIENT

**Queensland Government, AFL and Gold Coast City Council**



VALUE

**\$139M**



EXPERTISE

**Managing Contractor**



TIMELINE

**2009 - 2011**

- ✔ Saved our client millions of dollars through various innovations including using temporary bracing to support the roof during construction, installing substations to minimise the need for large cable systems, and a water-efficient cistern system
- ✔ Multiple award-winning including the Australian Institute of Building's Professional Excellence Award (Commercial Construction \$100 million plus) and Master Builders Queensland Award for Sporting & Community Services Facilities over \$20 million
- ✔ 25,000 seats



*The outcomes achieved at Metricon Stadium have exceeded client expectations with this stadium receiving very positive feedback from all visitors to date – a tribute to BESIX Watpac's management role.*

Don Hewitt, Principal Project Manager Project Services - Department of Public Works



# World-class sustainability

AL WAKRAH, QATAR



30%

cost reduction, reducing the stadium's footprint



23.5%

energy reduction through sustainability initiatives



96%

locally sourced materials



50%

of project budget spent with local trades



## Al Janoub Stadium

One of eight stadiums to host the 2022 FIFA World Cup in Qatar, Al Janoub is an ultra-modern masterpiece with its architecture echoing the hull of the culturally significant dhow, a local pearl fishing boat.

Working within the client's budget, BESIX's in-house engineering team thoroughly interrogated the design and identified opportunities to reduce costs by compressing the stadium's overall footprint while remaining compliant with strict FIFA criteria. Reducing the weight and radius of the steel structure, faster installation methods, and overall waste reduction resulted in a 30 per cent cost saving to the client.



CLIENT

The Qatar 2022 Supreme Committee for Delivery and Legacy



VALUE

\$950M



EXPERTISE

Design & Construct



TIMELINE

2016 - 2019

- ✓ Awarded a Class A rating from the Global Sustainability Assessment System (GSAS)
- ✓ Sustainability features include an innovative HVAC system, efficient district cooling plant, highly insulated walls and energy efficient lighting
- ✓ 100 per cent condensate water recovered and used for landscaping
- ✓ 71 per cent of materials responsibly sourced
- ✓ 20 per cent of permanent materials made from recycled content
- ✓ 92 metre fully retractable roof crucial for temperature control



*The design expresses its context, establishing a relationship with the city and its surrounding landscape."*

Zaha Hadid,  
Architect - Zaha Hadid Architects



# International-standard sports facilities

MELBOURNE, VICTORIA

# Enhancing communities

WERRIBEE, VICTORIA

## Werribee Sports and Fitness Centre

A major expansion and refurbishment of the Werribee Sports and Fitness Centre delivered an integrated, first-class sporting facility for the region with improved capacity to host major community sporting competitions.

- ✔ Fully equipped gym including a boxing studio
- ✔ Six multi-purpose indoor courts
- ✔ Two outdoor netball courts
- ✔ 1,500-seat show court



CLIENT

Wyndham City Council



VALUE

\$43M



EXPERTISE

Design + Construct



TIMELINE

2014 - 2016

## State Sports Facilities Project

This project involved the redevelopment of Lakeside Oval and Albert Park, providing a variety of facilities to be enjoyed by sporting clubs and the wider community

- ✔ Lakeside Oval transformed into the State Athletics Centre which features an International IAAF Class 1-approved synthetic eight lane running track
- ✔ Refurbishment of former South Melbourne Football grandstand and converting it into the home of the Victorian Institute of Sport
- ✔ Two new synthetic and two new grass playing fields
- ✔ 7,400-seat northern grandstand



CLIENT

Victorian Government



VALUE

\$50M



EXPERTISE

Construct Only



TIMELINE

2010 - 2012





# World's largest Guggenheim Museum

ABU DHABI, UAE

## CBD expertise

SYDNEY, NEW SOUTH WALES

### Museum of Contemporary Art Redevelopment

Located in one of Australia's busiest tourist locales, the refurbishment and extension of the Museum of Contemporary Art at The Rocks in Sydney was complex and challenging requiring close collaboration with stakeholders.

- ✔ Staged construction methodology enabled the maximum number of facilities to remain open throughout works
- ✔ Stringent noise and vibration mitigation strategies protected the museum's collection from damage
- ✔ Extensive engagement with local businesses and authorities to reduce impacts on this busy commercial, tourist and retail precinct

	CLIENT <b>Museum of Contemporary Art</b>
	VALUE <b>\$47M</b>
	EXPERTISE <b>Construct Only</b>
	TIMELINE <b>2010 - 2012</b>

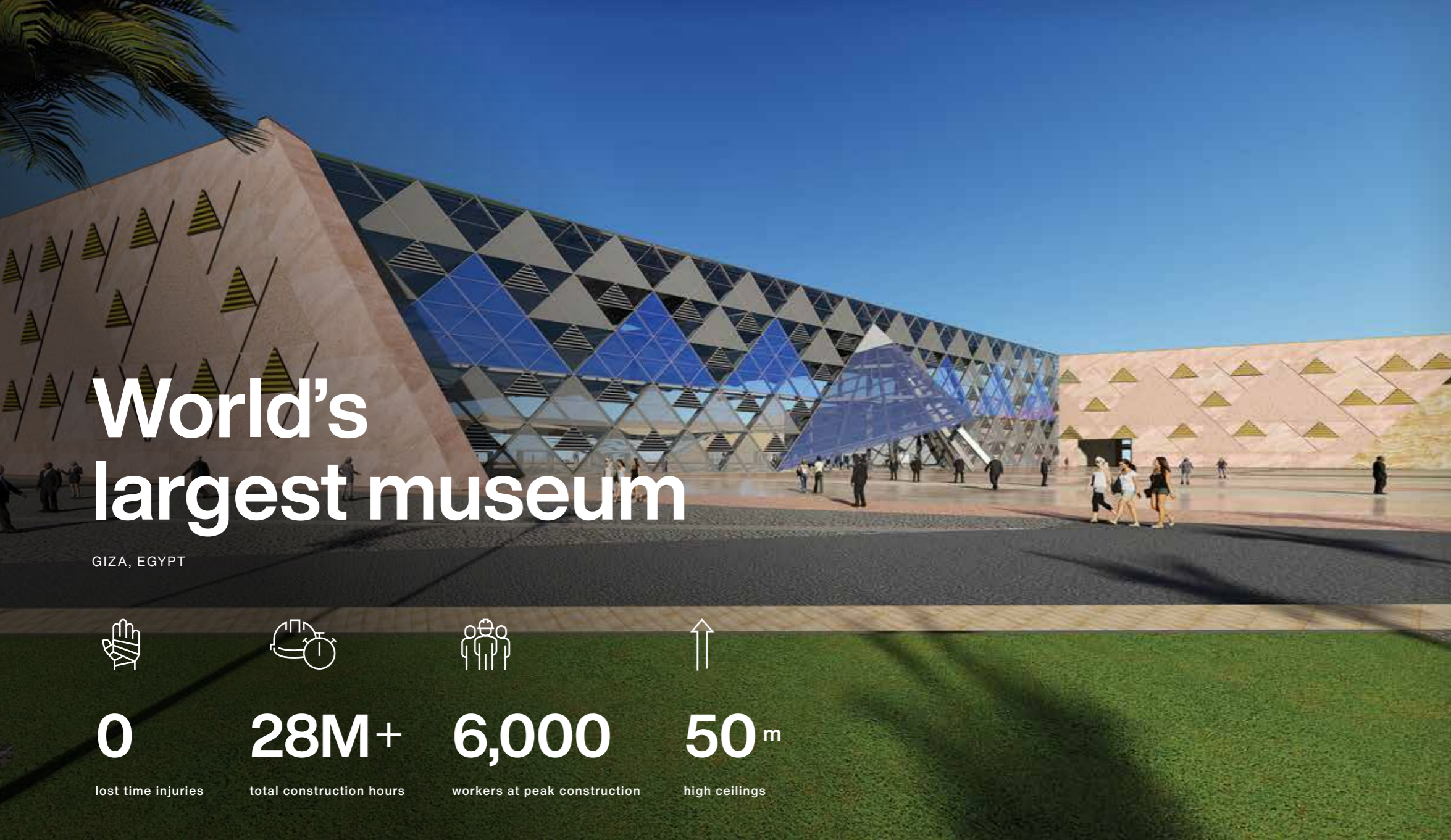
## Guggenheim Abu Dhabi

The largest of the four global Guggenheim museums, this spectacular building will comprise steel, concrete, wood and aluminium. Sustainable elements are incorporated into the design such as natural cooling and ventilation of the covered courtyards, which have been inspired by traditional Middle Eastern wind towers.

- ✔ Delivered as a joint venture between BESIX and Trojan General Contracting LLC
- ✔ The joint venture will deliver all construction work apart from the foundations, which are already complete
- ✔ Demonstrates the technical capability of our in-house engineering team to optimise planning, methods and procurement
- ✔ Designed by award-winning architect Frank Gehry
- ✔ Asymmetrical cones featured in the design will surround the main building and serve as both museum entrances and outdoor exhibition spaces

	CLIENT <b>Department of Culture and Tourism</b>
	EXPERTISE <b>Construct Only</b>
	TIMELINE <b>2021 - 2025</b>





# World's largest museum

GIZA, EGYPT



0

lost time injuries



28M+

total construction hours



6,000

workers at peak construction



50<sup>m</sup>

high ceilings



## Grand Egyptian Museum

The Grand Egyptian Museum (GEM) is an archaeological destination like no other, housing more than 100,000 priceless Ancient Egyptian antiquities such as the full King Tutankhamun collection and the 80-tonne, 13-metre-tall Statue of Ramses II.

The architecturally complex folded cover slab roof features 50,000 individual cascading triangular panels, and each square metre is unique. Our global team of 70 engineers dealt with this complex challenge by utilising numerous BIM's to calculate and illustrate the most precise structural relationships, ensuring the perfect alignment of the underside of the roof and its suspended ceilings.



CLIENT  
Egypt Ministry of State for Antiquities



VALUE  
\$1.1 B



EXPERTISE  
Construct Only



TIMELINE  
2012 - 2019

- ✓ Part of a 50 hectare masterplan for the Giza pyramid plateau
- ✓ Forming over 14,000 cubic metres of concrete into shape required complex formwork supported by reinforced beams and slab structures
- ✓ Months of concrete testing ensured the best compromise between functionality and surface quality
- ✓ The insulated concrete design can withstand extreme desert heat of up to 70 degrees Celsius, keeping the interior and precious artefacts a stable 23 degrees



*From a construction point of view, it is a building that has a purpose. This is a building that hosts a legacy and hosts a heritage of a great civilisation...I think it will open up a completely new concept of how to visit Cairo. ”*

Osama Bishai  
Chief Executive Officer, Orascom Construction

LONGREACH, QUEENSLAND

## Qantas Founders Museum (QFM) and Airpark Roof Stage 1

### Celebrating Australia's heritage

CLIENT **Qantas Foundation Memorial Trust**  
EXPERTISE **Construct Only**

- Two projects celebrating Qantas airline's outback heritage including the delivery of the 3,150-square-metre museum in 2001 as well as the Airpark Roof project in 2020
- The 8,000 square metre roof covers a collection of legendary Qantas aircraft, including the mighty Boeing 747, which were unable to be moved during construction
- The aircraft provide the backdrop for a light and sound exhibition
- Rapid seven month construction schedule undertaken in the hottest months of the year



- 2021 **Tourism and Leisure Facilities over \$10M** Master Builders Queensland Award (CQ)
- 2021 **Central Queensland Project of the Year** Master Builders Queensland Award (CQ)



# Inspiring design

ABU DHABI, UNITED ARAB EMIRATES

## Ferrari World

An amusement park dedicated to the iconic Italian car manufacturer, the visually distinctive form of the building's structure is directly inspired by the classic double curve side profile of the Ferrari GT body. Located within the 2,500 hectare man-made tourism hub of Yas Island, it was vital works did not interfere with other tourist attractions.

- Extensive collaboration and stakeholder engagement ensured minimal disruption to nearby venues as well as maintained both foot and vehicle traffic
- Sustainability features include a highly insulated roof as well as energy-efficient glass used in the main façade to reduce thermal loads and glare
- 150,000 square metre theme park
- 190,000 square metre gross floor area



CLIENT  
**Aldar Properties**



VALUE  
**\$690M**



EXPERTISE  
**Design + Construct**



TIMELINE  
**2011 - 2013**



BOONDALL, QUEENSLAND

## Brisbane Entertainment Centre

### Diverse cultural experiences

CLIENT **Brisbane City Council**  
EXPERTISE **Construct Only**

- 60,000 square metre multi-purpose venue providing four main auditoriums that cater to all types of entertainment from rock concerts and international sporting events to high school eisteddfods
- Designed and built to international standards for multiple sports as well as entertainment and convention needs
- Complex planning was required to accommodate the wide variety of needs for the diverse mix of end users
- Hosted some of the world's most recognised entertainers



# Creating an immersive experience

GIZA, EGYPT



3,000

25<sup>m</sup>

tropical plant and animal species

largest indoor, man-made and life sustaining tree in the world



## The Green Planet

The Middle East's first ever science museum, this biodome replicates the natural habitats of the world's tropical rainforests offering an engaging and informative experience to its visitors as well as forming a significant part of Dubai's city walk expansion.

The experience centres around a man-made Kapok tree with spiral walkways wrapping around its trunk and branches encouraging visitors to explore an aquarium and other ecosystems including plants, insects, birds and other animals.



CLIENT  
**Meraas Development LLC**



VALUE  
**\$55M**



EXPERTISE  
**Construct Only**



TIMELINE  
**2012 - 2015**

- ✓ Advanced life support and filtration systems, passive humidification and greywater recycling enabling the museum to be mostly self-sufficient and minimise its impact on local resources
- ✓ Accommodates 750,000 visitors annually
- ✓ Includes laboratories and classrooms for students to learn and conduct experiments
- ✓ The lighting both compliments the bespoke habitat within the biodome and also encourages plant growth
- ✓ The product of collaboration between specialist engineers, scientists and animal husbandry experts to create a sustainable and authentic educational experience



***Our client [Meraas] is visionary. It's a project with unique characteristics. There is nothing else like this in the Middle East. "***

Chris Davis  
Managing Partner,  
zoOceanarium Group

# Partner in excellence

## OUR PURPOSE

WE EXCEL IN CREATING SUSTAINABLE SOLUTIONS FOR A BETTER WORLD

## OUR VALUES



### Excellence

We are committed to operational excellence, high performance and delivering on our promises safely.



### Co-creation

We collaborate with our clients and partners to drive innovation that makes a difference.



### Respect

We are genuine, considerate and act with integrity and candour.



### Passion

We seek to inspire, going the extra mile to achieve results that exceed expectations.



### Unity

We work as one team to achieve our shared purpose.



• The Green Planet, Dubai



Queensland Country Bank Stadium, Townsville, QLD



### Best for project teams

Our teams are hand-picked specifically for each project. We bring together the best people, consultants, sub-contractors, delivery partners and networks to ensure the right technical skills, cultural fit and client focus to achieve on-time and on-budget project delivery.



### Culture of excellence

By investing in the development and wellbeing of our people, we create a culture focused on safety and exceeding client expectations. This is underpinned by our values and supported by our in-house leadership program, formal continuous improvement processes and structured knowledge sharing across the BESIX Group.



### Flexible, streamlined project delivery

We partner with our clients to deliver projects through various contracting methods, including Public Private Partnerships (PPPs), Managing Contractor, Early Contractor Involvement (ECI), Design and Construct (D&C), or Construct Only. Irrespective of the contract model, we embrace a flat management structure to enable streamlined communication between all project stakeholders to make clear and efficient decisions.



### Building Information Model (BIM)

Building Information Modelling affords numerous benefits to the design, construction and operation of a project. Our dedicated BIM Manager oversees design development and coordination of the BIM datasets. By working closely with the design team and cost planner, efficiencies are fully leveraged and any clash detection identified. This enables constructability issues to be resolved well before construction begins. BIM processes can be further utilised to verify BIM elements to the as-constructed form. Ideally the BIM datasets are then used to optimise asset life and facilities management.



### Safety, quality and sustainability

While our systems are certified to Australian, New Zealand and ISO standards, it is our commitment to continuous improvement that ensures we bring best-practice safety, quality and environmental outcomes to all our projects. We have experience in delivering commercial projects to achieve a minimum 5 Star Green Star Design and As-built Ratings.

**Partnering with an experienced, collaborative contractor is essential for a high-quality, future-proofed asset; delivered with excellence.**

# Maximising local benefits

SUPPORTING LOCAL JOBS AND PROCUREMENT OPPORTUNITIES

Project activity since 2014



*BESIX Watpac has taken a really personal approach with our local community. They have responded to anything the community wanted to talk about. Nothing has been too difficult.*

Client feedback



Meet the contractor barbecue



80%+

Average portion of total construction hours by local trades and businesses



640+

Indigenous workers on our projects



\$8.5M+

Indigenous spend



2M+

Training hours achieved across 60 projects



BESIX Watpac's Reconciliation Action Plan artwork

**We believe the benefits of social procurement should flourish during construction and long after the project is completed. This places jobs, diversity, training and skills development front of mind at every step of project delivery.**

With strong local connections, particularly through regional Australia, we are committed to maximising local jobs, Indigenous participation, social benefit and homegrown content.

Partnering with clients and community leaders, we inject millions of dollars into local economies through the creation of career pathways and apprenticeships and by enhancing local business capability.

Engaging early with local industry, we evaluate supply chain capability, training and skills development opportunities - delivering long-term economic and social benefits to the community.



Indigenous smoking ceremony at a BESIX Watpac project site - held within a designated safety exclusion zone with all works ceased.

## Our blueprint for vibrant communities

- ✓ Procurement and tendering processes are transparent, fair and locally driven
- ✓ Trade packages are broken down to reduce risk and create local opportunities
- ✓ Sub-contractors are connected with Indigenous people and are supported to succeed
- ✓ Training pathways are established through local tertiary institutions including universities and colleges
- ✓ The BESIX Watpac Community Fund initiative allows us to fund and support charitable projects where it is needed most.
- ✓ Benefits are created beyond construction such as support for community programs

BESIX Watpac's Community Fund branding



# Experience you can count on

**1983**  
Brisbane Entertainment Centre  
Boondall, Qld

**1993**  
QE II Stadium Roof  
Nathan, Qld

**1994**  
Lang Park Upgrade  
Frank Burke Stand  
Milton, Qld

**1992**  
Ballymore Eastern Grandstand  
Herston, Qld

**1995**  
King Baudouin Stadium Renovation  
Brussels, Be

**1998**  
De Vliert Sport & Recreation Centre  
's Hertogenbosch, NL

**1996**  
Brisbane Cricket Ground Redevelopment Stage 3  
Woolloongabba, Qld

**1999**  
Brisbane Cricket Ground Redevelopment Stage 4 & 5  
Woolloongabba, Qld

**2000**  
Brisbane Cricket Ground Olympic Overlay Works  
Woolloongabba, Qld

**2003**  
Suncorp Stadium Redevelopment  
Milton, Qld

**2001**  
Qantas Founders Outback Museum  
Longreach, Qld

**2004**  
Nunawading Aqualink  
Forest Hill, Vic

**2005**  
Khalifa Stadium Demolish & Rebuild  
Doha, Qa

**2007**  
CBUS Stadium  
Robina, Qld

**2006**  
Carrara Stadium Upgrade  
Carrara, Qld

**2008**  
Brisbane Cricket Ground Additional Works  
Woolloongabba, Qld

**2008**  
Rosehill Pavilion  
Rosehill, NSW

**2008**  
Suncorp Stadium - QRL Headquarters Fitout  
Milton, Qld

**2009**  
Brisbane Cricket Grounds, Additional Works  
Woolloongabba, Qld

**2010**  
Ferrari World Phase 1  
Abu Dhabi, UAE

**2010**  
Skilled Stadium Premiership Stands  
Geelong, Vic

**2010**  
Thomastown Recreation & Aquatic Centre  
Thomastown, Vic

**2011**  
Metricon Stadium  
Carrara, Qld

**2013**  
Suncorp Stadium Player Facilities and Flood Remedial Works  
Milton, Qld

**2013**  
National Cricket Centre  
Albion, Qld

**2012**  
Melbourne Park Redevelopment Eastern Plaza  
Melbourne, Vic

**2014**  
RSCA Stadium FIFA UEFA Upgrade  
Anderlecht, Be

**2014**  
State Sports Facilities Project  
Albert Park Vic

**2014**  
Museum of Contemporary Art Development  
Sydney, NSW

**2015**  
The Green Planet  
Dubai, UAE

**2016**  
Anna Meares Velodrome  
Chandler, Qld

**2016**  
Ferrari World - Phase 2  
Abu Dhabi, UAE

**2017**  
Khalifa Stadium 2022 FIFA WC Upgrade  
Doha, Qa

**2020**  
Queensland Country Bank Stadium  
Townsville, Qld

**2020**  
Brisbane Cricket Ground Refurbishment  
Woolloongabba, Qld

**2020**  
Grand Egyptian Museum  
Giza, EGY

**2020**  
Qantas Founders Museum Airpark Roof - Stage 1  
Longreach, Qld

**2018**  
Al Janoub New 2022 FIFA WC Stadium (formerly Al Wakrah)  
Doha, Qa

**2022 & beyond**  
Te Kaha Multiuse Stadium  
Christchurch, NZ

**2022 & beyond**  
GMHBA Stage 5 Redevelopment  
Geelong, Vic



 **BESIX Watpac**

Discover more at [besixwatpac.com.au](https://besixwatpac.com.au)