



Showcasing the best in Stadiums and Venues

CAPABILITY STATEMENT





Building on strong foundations

DELIVERING EXCELLENCE IN COMPLEX MULTI-DISCIPLINARY PROJECTS







Employees



Countries



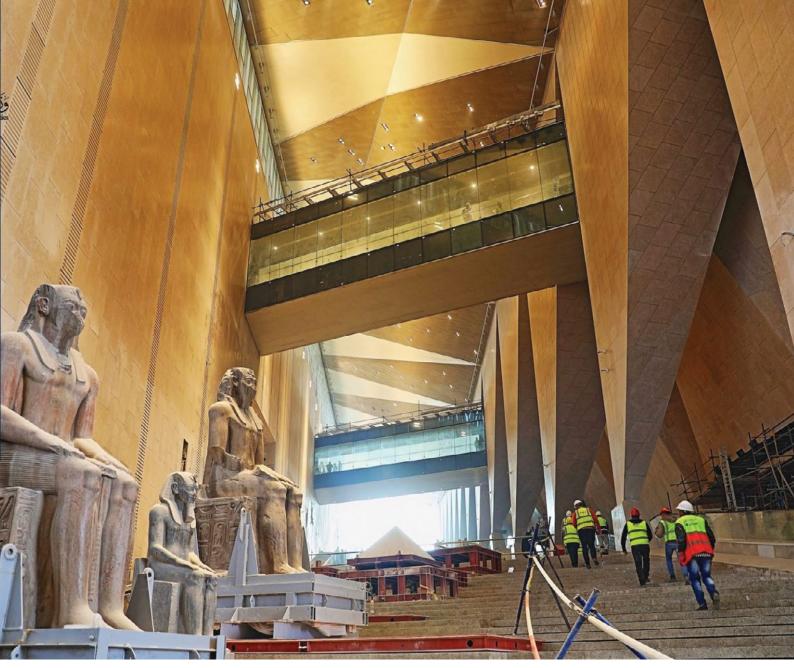
Continents

Global experience delivered locally

BESIX Watpac is a leading multi-disciplinary construction company with four decades of experience in Australia backed by a century of global expertise and financial strength through the award-winning international contractor, BESIX Group. Celebrating 40 years of operations, the company has delivered over \$25 billion worth of projects since establishing as Watkins Pacific in the early 1980's.

Now as part of BESIX Group, we are focused on delivering major projects across all sectors in Australia and New Zealand. Combining Watpac's four decades of local knowledge, delivery excellence, and trusted partnerships, with BESIX Group's international experience and strong balance sheet, 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. We have received local, state and national industry recognition for our approach to achieving the best outcome for our clients. A private company with a flat structure, our lean, agile approach guarantees innovative and cost effective solutions. - Grand Egyptian Museum, Giza, Egypt



Local content specialists

We bring 40 years of in-depth local knowledge and understand that the legacy a project creates extends well beyond the end of construction. 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 >>





Stadiums and venues delivered in Australia and internationally



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

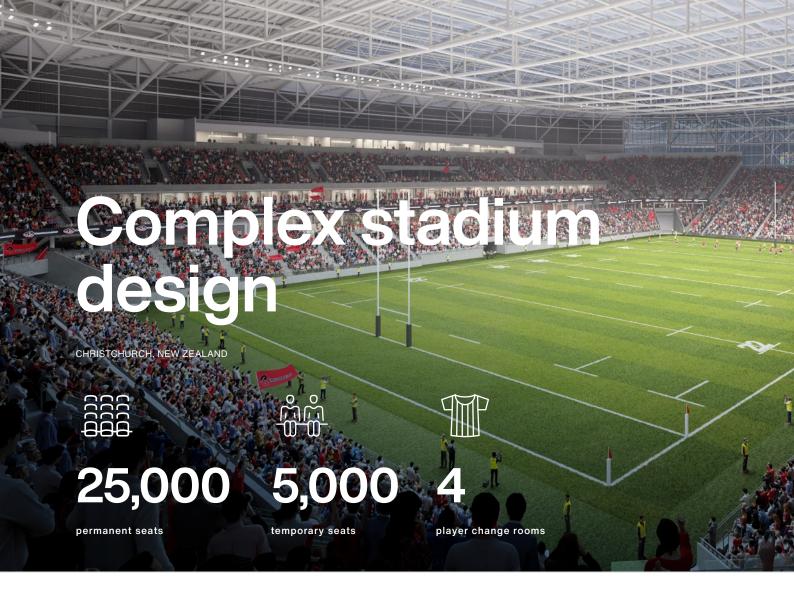
High profile, once-in-a-generation projects attract enormous community interest and scrutiny. Factors such as cost, time and safety issues can all impact the project and the client's reputation. Together with our industry leading community and stakeholder engagement professionals we monitor, identify 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.



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.

6 <u>8</u> 2	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.³⁹

Lianne Dalziel Christchurch Mayor

Delivering a Norm Queensland icon

TOWNSVILLE, QUEENSLAND



Indigenous

participation



11.9% 2,000+ 85%+

lo

local jobs

local subcontractors



injected into the economy through local business

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.

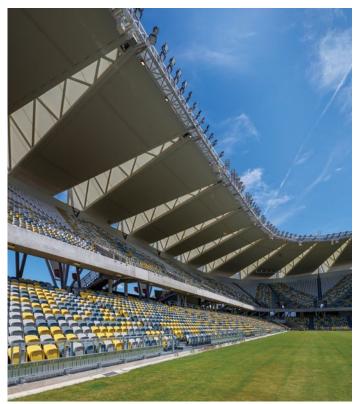
The project also created employment pathways for local workers and apprentices, along with supporting jobs for more than 135 Aboriginal and Torres Strait Islander people. Through our Indigenous Participation Strategy, we effectively doubled our original target of 6.6 per cent - achieving an impressive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

ξ ⁸ β	CLIENT Queensland Government
	value \$318M
₹₽	EXPERTISE Managing Contractor
	TIMELINE 2017 - 2020



C 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





- 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



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





Creating loca opportunities

GEELONG, VICTORIA



91%

local content target



subcontractors from Geelong region aspirational Indigenous participation target

GMHBA stadium at Kardinia Park Stage 5 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.

á g g g g g g g g g g g g g g g g g g g	CLIENT Kardinia Park Stadium Trust
	VALUE \$121M
¥.	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

11,000

BRISBANE, QUEENSLAND





successful client relationship of glass

concrete blocks

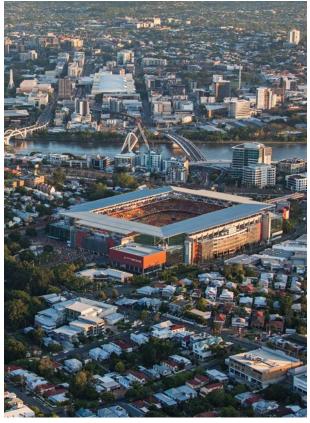
Suncorp Stadium

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.







"

There's no doubt that this is the best rugby league or rugby union field in the world – it is just fabulous. ³³

Terry Mackenroth Former QLD Treasurer

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. ³⁹

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



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





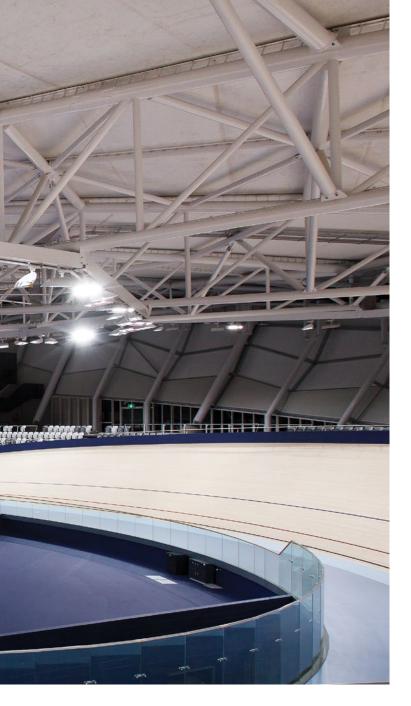


Anna Meares Velodrome

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.

égè	CLIENT Queensland Government
	value \$55M
¥.	EXPERTISE Managing Contractor
	TIMELINE 2014 - 2016



"

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



- 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)
- 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

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



FED GOLD

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

6 <u>8</u> 9	CLIENT Queensland Government
	value \$40M
¥ ¥	EXPERTISE Managing Contractor
	TIMELINE 2012 - 2014



Australia's first solar stadium.

of energy needs produced

through solar

GOLD COAST, QUEENSLAND

275K KW

solar panel system



\$600K \$1

cost saving through water cistern system

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.

á á b b	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



energy reduction through sustainability initiatives 96%

locally sourced materials

of project budget spent with local trades

50%

Al Janoub Stadium

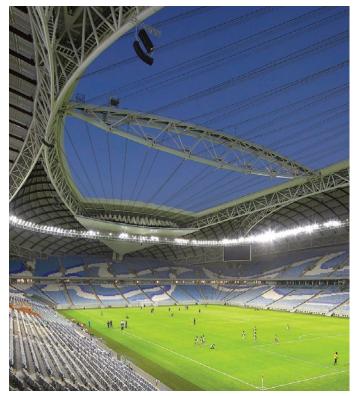
One of eight stadiums to host the 2022 FIFA World Cup in Qatar, AI Janoub is an ultra-modern masterpiece with its architecture echoing the hull of the culturally significant dhow, a local pearl fishing boat.

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.









- 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

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



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

8 <u>8</u> 9	CLIENT Wyndham City Council
	value \$43M
¥.	EXPERTISE Design + Construct
	TIMELINE 2014 - 2016



World's largest Guggenheim Museum

ABU DHABI, UAE

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

é é g g	CLIENT Department of Culture and Tourism
	EXPERTISE Construct Only
	TIMELINE 2021 - 2025

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

ééééé	CLIENT Museum of Contemporary Art
	VALUE \$47M
¥ ¥	EXPERTISE Construct Only
	TIMELINE 2010 - 2012



World's largest museum

GIZA, EGYPT











lost time injuries

total construction hours

workers at peak construction

high ceilings

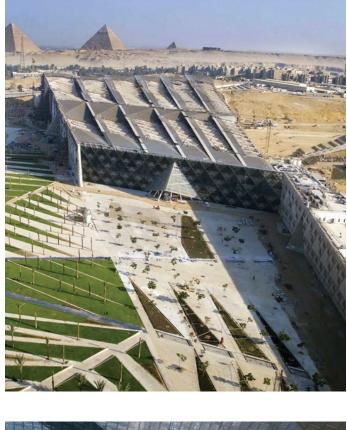
Grand Egyptian Museum

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.









- 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. ³³

Osama Bishai Chief Executive Officer, Orascom Construction

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)



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

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
V.E.	EXPERTISE Design + Construct
	TIMELINE 2011 - 2013



Creating an immersive experience

R.F.

GIZA, EGYPT





tropical plant and animal species

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

The Green Planet

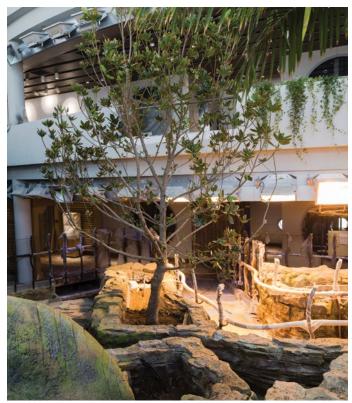
The Middle East's first ever science museum, this biodome replicates the natural habitats of the world's tropical rainforests offering an engaging and informative experience to its visitors as well as forming a significant part of Dubai's city walk expansion.

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.









- 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.



- Queensland Country Bank Stadium, Townsville, QLD





The Green Planet, Dubai



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.



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.



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.

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.

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.

Partnering with an experienced contractor who genuinely collaborates to deliver excellence on every project.

Sustainability

OUR PURPOSE IS TO EXCEL IN CREATING SUSTAINABLE SOLUTIONS FOR A BETTER WORLD

We are committed to protecting and preserving our way of life and play our part to make our operations more sustainable. Our actions are guided by our Sustainability Strategy which outlines our approach and key priorities across Environment, Social and Governance (ESG).

Our goal is for our projects to leave a positive legacy for the environment, our people, communities and future generations.





The BESIX Watpac Community Fund is a way for us to align with like-minded organisations to fund and support projects across a range of initiatives. Our focus areas are Community Health, Education & Literacy and Environment & Food Rescue – prioritising opportunities for First Nations people.



80%+

Average portion of total construction hours by local trades and businesses



800+

Jobs created for Indigenous people



Indigenous spend



ZN+ Training hours achieved

across 60 projects



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
- Benefits are created beyond construction such as support for community programs

 BESIX Watpac's Reconciliation Action Plan artwork

Experience you can count on



2011





2012

- •• Melbourne Park Redevelopment Eastern Plaza Melbourne, Vic
- RSCA Stadium FIFA UEFA Upgrade Anderlecht, Be
- State Sports Facilities Project Albert Park Vic
- Museum of Contemporary Art Development Sydney, NSW

2014 King Abdullah

- Sports City Jeddah, SAU
- Gold Coast Aquatic Centre Redevelopment Southport, Qld

2017

2020

Queensland Country • • Bank Stadium Townsville, Qld

Brisbane Cricket Ground Refurbishment Woolloongabba, Qld

Grand Egyptian Museum Giza, EGY

Qantas Founders Museum Airpark Roof - Stage 1 Longreach, Qld

2022 & beyond

Te Kaha Multiuse Stadium Christchurch, NZ

GMHBA Stage 5 Redevelopment Geelong, Vic



Discover more at besixwatpac.com