



CIVMEC



Engineering Success

ENERGY



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TechnoPhac
Greater Western Flank Phase 2
Congratulations on the successful project completion - Nov 2017
WOODSIDE

WEIGHT 29000 KG

WHO WE ARE

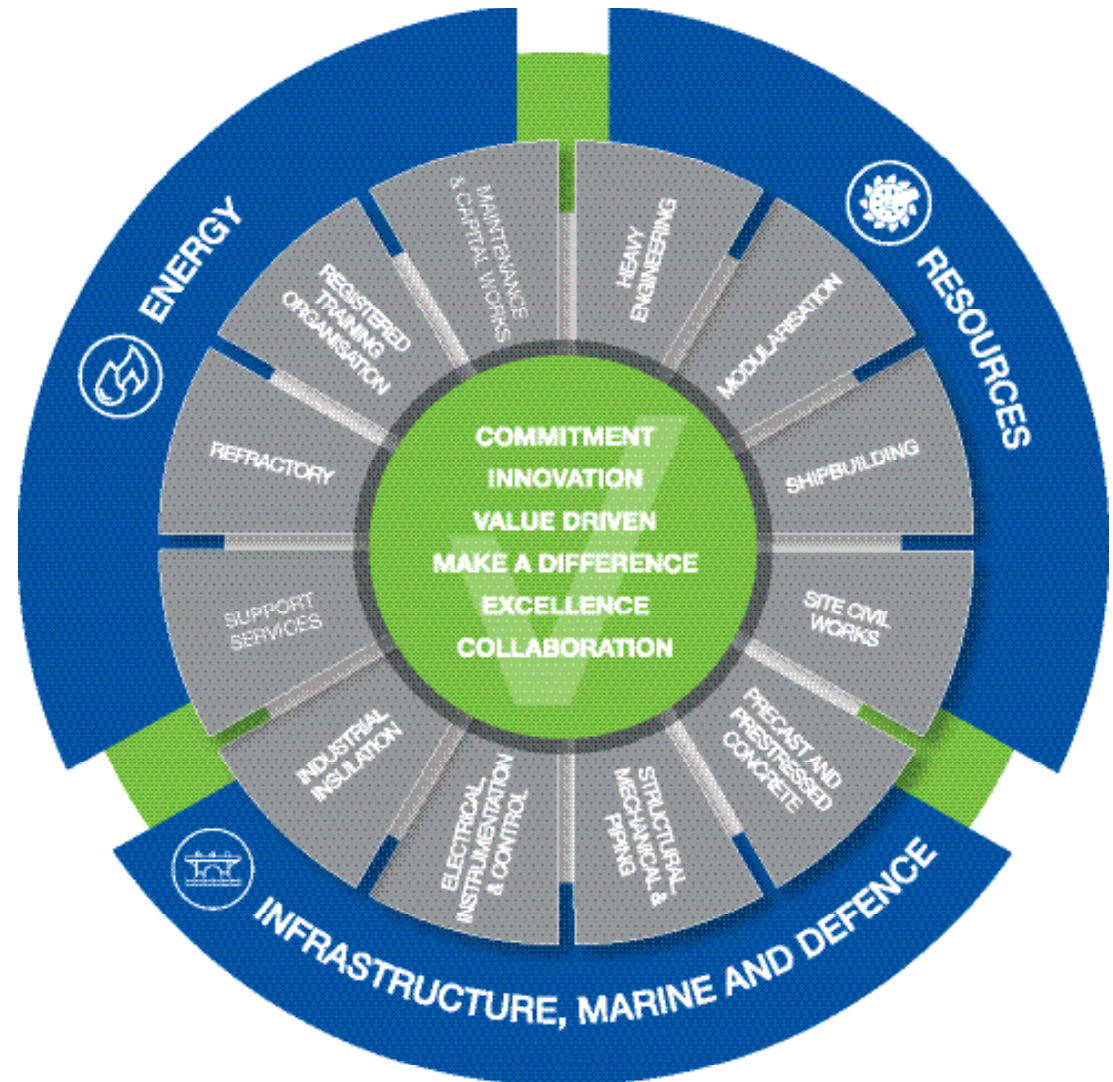
Civmec is an integrated, multidisciplinary construction and engineering services provider to the Energy, Resources, Infrastructure, Marine and Defence sectors.

Established in 2009, Civmec is one of Australia's leading providers of turnkey solutions across a range of core capabilities.

Our vast self-performance capability enables us to respond agilely to our clients' needs while our commitment to innovation and technology ensures we work smarter, providing value-driven solutions.

Focused on establishing long-term partnerships and working collaboratively with clients and delivery partners, we have played a significant role in the delivery of some of Australia's most complex projects. We are strongly committed to supporting Australian industry.

Civmec has been listed on the Singapore Exchange (SGX) since 2012, achieving dual listing on the SGX and the Australian Securities Exchange (ASX) in June 2018.



OUR VISION AND VALUES

Our vision is to grow sustainably, delivering mutually beneficial outcomes for all stakeholders. Our culture, the way we think and operate, is underpinned by our values.



COMMITMENT

Our individual commitment facilitates our success



INNOVATION

Our innovative approach drives continuous improvement



VALUE DRIVEN

Our performance driven culture delivers value



MAKE A DIFFERENCE

Our ability to influence and challenge drives sustainability



EXCELLENCE

Our pursuit of excellence makes us a world-class service provider



COLLABORATION

Our focus on working together drives sustainable partnerships





CRITICAL SAFETY ESSENTIALS



HEALTH, SAFETY AND ENVIRONMENT

Our strong safety culture is built on our *Never Assume* program, incorporating our core values and providing a framework for the behavioural expectations of our people across the business.



The program is designed to empower every person in the company to ensure their work practices are focused on achieving safe outcomes, reinforcing the right and responsibility of every employee to stop work and intervene if they see an unsafe act, condition or behaviour and be part of the solution.

Our Critical Safety Essentials outline the business' mandatory expectations for safe work practices. Every employee is expected to abide by these underlying rules, which form the foundation of how we operate.

Implementation of our health and safety systems is supported by our onsite fitness-for-work health centre and our internal Registered Training Organisation (RTO code 52645), which provides support and training specific to our safety culture and processes.

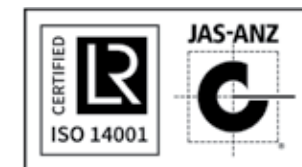
Our systems are certified to ISO 45001, the internationally recognised standard for health and safety management.

Environment

We acknowledge the diverse locations in which many of our projects are delivered, and remain committed to minimising our impact on the environment and meeting each project's unique environmental compliance requirements.

We also implement environmental best practice at our facilities, delivering resource and energy efficiency by measuring and monitoring our inputs (energy, water and materials) and outputs (waste and emissions) and developing improvement strategies.

We are certified to ISO 14001, the internationally recognised standard for environmental management and hold platinum status with the Australian Steel Institute Environmental Sustainability Charter, acknowledging us as an industry leader, with all Charter commitments met and environmental management and awareness evident across all levels of our business.



QUALITY

Providing quality products and project outcomes for our clients is a fundamental metric of success.

Utilising Civtrac, our proprietary web-based integrated business management system, we are able to provide 'live' tracking, ensuring a seamless flow from fabrication through to onsite installation and commissioning.

Managing all aspects of project delivery, Civtrac supports:

- document control
- material control
- project management (including monitoring progress and time)
- project reporting
- safety management
- quality control
- cost management.

Civtrac also enables our clients to directly monitor real-time progress via a remote login, providing transparency across the entire project life cycle, from material control to delivery and installation.

Our quality management systems are certified to ISO 9001, the internationally recognised standard for quality management, and our facilities in Perth and Newcastle hold CC3 certification to the requirements of AS/NZS 5131-2016, 'Structural Steelwork – Fabrication and Erection'.







OUR PEOPLE

Our talented and dedicated people underpin our success.

We have developed and grown a highly skilled and competent workforce capable of providing multidisciplinary construction and maintenance services to the Energy sector.

Offering sustainable career pathways enables us to retain and grow capability across our specialised disciplines. Our recruitment strategy is to attract, develop and retain the right people; those with values that are aligned to ours.

We ensure the right people manage the right projects, providing clients with the best technical knowledge, industry experience and capability to drive a high-performance culture and optimal project outcomes.

Our core value of *Collaboration* means we work in partnership with our people to identify their individual training and development needs, largely delivered through our in-house Registered Training Organisation (RTO code 52645).

Our commitment to supporting the future of our industry is reflected in our engagement of apprentices and trainees across the spectrum of our operations, including metal trades – such as boilermakers, welders, carpenters and electrical – and corporate services, including estimating, HSEQ, commercial, business administration, human resources and logistics.





INNOVATION AND TECHNOLOGY

At Civmec, we challenge existing processes and practices developing innovative and practical solutions to achieve better project outcomes for our clients.

We take a partnership approach to project delivery. Our experience tells us that early involvement during the project concept phase gives greater ability to influence design. This, in turn, can have a positive effect on methodology and construction outcomes, providing the opportunity for value engineering and resulting in schedule improvements and cost benefits for the project.

Optimum results are achieved through early contractor involvement, addressing areas such as:

- design and specification critique
- materials selection
- offsite fabrication and modularisation
- automation of installation process
- constructability improvements
- programming and scheduling refinements.

Our vast technical expertise and ability to drive efficient solutions has facilitated our growth in the Energy sector. We continually invest in technology, delivering critical improvements to plant and equipment to remain competitive and at the forefront of innovation within our industry. The introduction of automated machines and robotics across our business has also driven safety and productivity benefits, allowing us to reduce risk and increase value for our clients.

From fabrication and modularisation through to constructability improvements and routine inspections, we continually challenge industry norms, providing smarter and more cost-effective solutions for our clients.



ENERGY SERVICES



HEAVY ENGINEERING



MODULARISATION



EARTHWORKS AND CIVIL WORKS



**MAINTENANCE
AND CAPITAL WORKS**



REFRACTORY



INDUSTRIAL INSULATION

ENERGY SERVICES (CONTINUED)



**PRECAST AND PRESTRESSED
CONCRETE**



**STRUCTURAL, MECHANICAL
AND PIPING**



**ELECTRICAL, INSTRUMENTATION
AND CONTROL**



SURFACE TREATMENT



ACCESS SOLUTIONS



**REGISTERED TRAINING
ORGANISATION**

WEST COAST FACILITY

Our west coast facility in Henderson, Western Australia, is the largest heavy engineering facility of its kind in Australia.

Situated just 30 kilometres south of Perth, the facility is strategically located on 200,000m² of land with direct waterfront access in the Australian Marine Complex (AMC) precinct. The AMC also provides access to a further 440,000m² of Common User Facility (CUF) land.

With more than 100,000m² of undercover area, the facility includes:

- 53,000m² (usable floor area) assembly hall
- 29,300m² fabrication hall
- two surface treatment (blast & paint) facilities, including one specifically capable of housing large material handling equipment and integrated modules
- exotic metals and pipe cutting facilities
- site support logistics workshop
- multi-storey main office building.

Serviced by 52 overhead cranes, the facility has a single-lift capacity of up to 400 tonnes and is capable of handling a throughput of 80,000 tonnes of steel per annum.

The centre bay of the assembly hall is able to accommodate large modules, with an internal length of 187 metres and door clearance of 42 metres wide and over 60 metres high. 4,600-tonne self-propelled modular transporters provide direct access to the 3,000-tonne, 6,000-tonne and 15,000-tonne loadout wharves within the AMC.



Assembly Hall – 53,000m²
Usable Work Area

Blast & Paint 2 – 3,400m²

Blast & Paint 1 – 4,800m²

Exotic Metals – 1,200m²

Fabrication Hall – 29,300m²
Usable Work Area

High Bay Stores – 1,400m²

Site Support Logistics – 2,300m²

Pipe Cutting & Bevelling – 490m²

Main Office – 6,500m²

Low Bay Stores – 3,400m²

Total Office Space – 12,000m²
(Including Main Office)



EAST COAST FACILITY

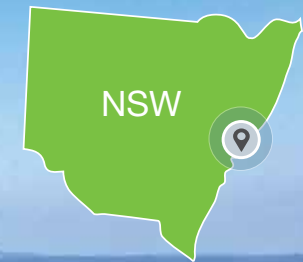
Our east coast facility is strategically located on 227,000m² of land, just 14 kilometres from the Port of Newcastle in New South Wales.

With direct access to the Hunter River, the site offers 535 metres of prime river frontage, with two ship basins.

The facility includes:

- 15,000m² heavy engineering workshop
- 7,500m² precast/prestressed concrete facility
- surface treatment facility
- offices.

Serviced by 24 overhead cranes, the facility has a single-lift capacity of 92 tonnes. The facility is capable of producing a throughput of 35,000 tonnes of steel and 75,000 tonnes of precast/prestressed concrete per annum and can accommodate modules up to 22 metres wide and 136 metres in length.



Precast/Prestressed Concrete Facility - 7,500m²

Module Surface Treatment Facility - 1,150m²

Heavy Engineering Workshop - 15,000m²

Offices



CONSTRUCTION

Providing tailored solutions for upstream and downstream Energy projects, we can deliver in remote, highly challenging environments, offering innovative construction and logistical solutions to enable the fundamental project metrics of time and cost to be achieved.

With our multidisciplinary capability, we can fabricate and modularise specialist subsea equipment and support onshore/offshore processing plant requirements through both the construction and operational phases.

We have the capacity to deliver works onsite and from our Henderson facility, which includes dedicated exotic metals workshops, enabling us to produce high-quality products without the threat of material cross-contamination. Our robust systems ensure we deliver quality products and services to the exacting standards required by the Energy industry.

Our significant heavy engineering capabilities in this sector include the fabrication and assembly, surface treatment and testing of high-integrity structural steel, carbon and exotic stainless/duplex/inconel steel lining for piping, subsea spools, manifolds, PLET and PLEM structures, offshore jackets and topsides, suction piles, process modules, vessels, and propane LNG spheres.

Through our involvement on some of the largest Energy projects undertaken in Australia, our expertise extends to the provision of multidisciplinary, in-house construction services, including structural, mechanical & piping; electrical, instrumentation & control; precast concrete solutions; thermal, acoustic and cryogenic insulation installation; refractory; and site civil works.

We specialise in delivering projects across the sector, including, but not limited to:

- energy plants (LNG)
- process infrastructure
- fuel stations
- power stations
- compressor stations
- subsea infrastructure
- wharfs and caissons
- refineries, including tank farms.





MAINTENANCE AND CAPITAL WORKS

— —

We provide integrated end-to-end maintenance and capital works solutions for the onshore and offshore Energy sector.

Offering the full range of industrial services including predictive analytics, monitoring, procurement, fabrication, and the delivery of routine maintenance and turnarounds through to commissioning and startup.

Working collaboratively with clients, we provide a seamless approach to the planning and execution of maintenance turnaround services, meeting the industry's stringent criteria in relation to safety, schedule, cost and quality. Combining our integrated solution with the Asset Owner's existing operations, we deliver world-class plant availability, reliability and production, whilst reducing operational expenditure.

Our Energy maintenance services include:

- structural, mechanical and piping
- electrical, instrumentation and control
- industrial insulation
- access solutions
- surface treatment
- refractory
- fabrication.

Our specialist maintenance division also has the expertise to provide end-to-end maintenance, turnaround and capital works solutions for our clients in the LNG market.







PROJECT EXPERIENCE - CHEVRON



Gorgon LNG Project Steelwork and Pipe Spooling

Client: KJVG and Chevron

Civmec provided fabrication, modularisation and sub-assembly of over 28,000 tonnes of structural steel, platforms, ladders and hand rails for mixed refrigerant compressor buildings, main cryogenic heat exchangers, amine absorbers, regenerator units, HP fuel gas mixing units, waste recovery units, condensate storage facility, MEG tank storage facility, pipe racks and supports, valve access platforms, and power generation units. We also delivered pipe spooling and modification of over 2,200 pipe spools, 650 tonnes of structural steel, regen mixing tees and commissioning test kits.



Gorgon LNG Plant Precast and Site Civil Works

Client: Leighton Contractors, Saipem Leighton JV, Murray and Roberts Marine Civil JV, and AMC

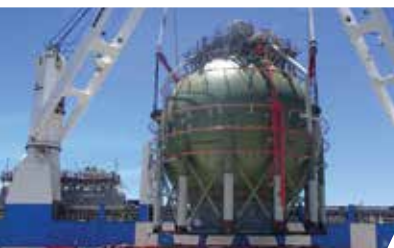
Civmec delivered a contract to supply 50,000m³ of precast concrete footings for the Gorgon LNG onshore process plant on Barrow Island. Additional contracts included the delivery of 11 precast caissons for the MOF wharf (each weighing up to 450 tonnes), caisson steel formwork, 120 anchor clump weights and large manholes, walls, culverts, slabs and seawater intake structures. Civmec later mobilised civil crews to assist with the delivery of the MOF wharf.



Wheatstone LNG Project ACCROPODE II Blocks and MOF Wharf

Client: BEST JV

Civmec delivered the contract for the supply and manufacture of 12,550 precast concrete ACCROPODE II units for use in the construction of a 980-metre long mass armour breakwater for the new material offloading facility (MOF). The units were manufactured over a 12-month period with innovation in constructability and the establishment of a precast concrete facility and associated quarry batch plant in Onslow, which proved critical in the project's success.



Gorgon LNG Project Propane Sphere

Client: KJVG

Civmec carried out the refurbishment and testing of a 500-tonne propane sphere. The scope included fit-up and installation of pipe supports, internal and external survey of the sphere, removal of existing spiral stairs, fabrication and install of platforms and deluge pipe work, blast and paint of the external sphere and fit-up, and the installation of the electrical and instrumentation supports.

PROJECT EXPERIENCE - CHEVRON (CONTINUED)



Wheatstone LNG Project Duct Banks

Client: Zinfra

Civmec manufactured and delivered approximately 5,000 precast spacer blocks for the Wheatstone LNG project. The blocks contained fibrous material to increase the structural integrity of the units. Innovation was delivered through specifically designed steel formwork which was utilised in the manufacturing process. In total, Civmec constructed 5.7 kilometres of precast duct banks and pull pits, including spacers, conduits, membrane, reinforcement, formwork and concrete placement for laying of electrical conjugate.



Wheatstone LNG Project Jumper Spools

Client: Technip Oceania

Civmec successfully delivered a contract for the fabrication and testing of 68 (5.5 kilometres) subsea jumper spools. The contract consisted of the fabrication of pipe spools of various materials such as CRA Inconel clad pipe, super duplex and carbon steel with pipe sizes ranging from 6" up to 44" in diameter. The welding of the spools was undertaken utilising semi-automatic TIG welders to increase productivity with rigorous quality standards maintained, including laser scanning of every weld.



Gorgon Jantz Project

Client: GE Oil & Gas

Civmec delivered the fabrication and testing of a 34" subsea pig launcher/receiver (SSPLR) across two stages. Stage 1 works involved the fabrication of a 34-inch barrel for a subsea pig receiver from supplied materials, with the stage 2 works being the fabrication of a 6" kicker header along with testing and retrofitting of the SSPLR.



Gorgon LNG Project Turnaround and Maintenance Services

Client: Chevron

Our specialist maintenance division successfully completed the Domgas turnaround for Chevron's Gorgon LNG plant. The project scope included initial planning, work pack preparation, procurement and site execution, which included direct hire and the management of other contractors. Peak manning across the project was approximately 200 people.

PROJECT EXPERIENCE - WOODSIDE



Greater Western Flank Phase 2 and Lambert Deep

Client: FMC Technologies

Civmec delivered several supply, fabrication and assembly contracts for the Greater Western Flank (GWF) Phase 2 and the Lambert Deep projects. The scope included early works engineering, with fabrication and assembly of three 4-slot subsea and one 2-slot subsea manifolds for GWF Phase 2, all complete with mudmat foundations. The Lambert Deep scope included one two-slot subsea manifold mudmat foundation (combined weight of 700t) complete with factory acceptance testing (FAT) and systems integration testing (SIT).



Pluto LNG Project Rectification Works

Client: Foster Wheeler JV

Civmec, as part of the CCIG joint venture, was awarded a contract for delivery of rectification works at Woodside's Pluto LNG plant. The scope included cryogenic insulation rectification works on equipment and piping (including dismantling of existing cladding and cryogenic insulation), re-lagging (installation), re-cladding (installation), pre-fabrication of sheet metal and pre-fabrication of PIR elbows for cryogenic insulation. Peak manning for this project was 200 people, including trades and site management.



Pluto Water Handling Project

Client: Technip FMC

The scope included the addition of a new module to the existing Pluto offshore platform (PLA). The new module was built to take wet production from one of the upstream flowlines via the existing wet gas manifold. Corrosion inhibitor (CI) is continuously injected into the wet flowline via an existing spare umbilical core. Civmec's scope was for the supply, fabrication and surface treatment of structural steel and piping. This extended into supporting the offshore installation and rectification works.



Xena Subsea Installation Project

Client: Fugro-TSM

Civmec successfully delivered the fabrication and FAT of two rigid diverless tie-in spools for the Xena subsea project. The scope of works included the fabrication of two 8-inch super duplex rigid tie-in spools complete with diverless connections, acoustic sand detectors and mudmats, along with cleaning, gauging and hydrotesting.



PROJECT EXPERIENCE - SANTOS



Balnaves and Greater East Spar Development Projects

Client: Cameron and Fugro

The scope included the supply, fabrication and assembly of one 3-slot oil manifold for the Balnaves subsea manifold, one oil production line end manifold and two goosenecks for the Greater East Spar project. Elements included fabrication and installation of duplex pipe spooling and duplex stainless steel tubing, site support services through to FAT and SIT. Additional scopes included supply, fabrication and surface treatment of two 6" DSS jumper spools, PLET and PLR, including FAT, SIT and loadout activities.



Coniston

Client: Cameron

Civmec's scope included supply, fabrication and assembly of one 6-slot oil manifold, one oil production line end manifold, seventeen goosenecks for the Coniston subsea manifold and one slot oil production line for the GPM Project. The scope of works included fabrication and installation of duplex pipe spooling, duplex stainless steel tubing, support and site services through factory acceptance (FAT) and systems integration testing (SIT).



Varanus Island Brownfield SMP Tie-In

Client: Santos

Civmec's scope included the fabrication and installation of tie-in points for the VICP process modules to the existing John Brookes arrival facilities within the East Spar gas plant on Varanus Island. This included structural and piping fabrication, and site installation of new structural columns, pipe supports, skid pipe support, decking modification, valves and piping, all conducted within the brownfield hazardous area of the gas plant. In addition, Civmec was responsible for hydrotesting and quarantine checks.



Varanus Island Compressor Rectification and Civil works

Client: Santos

Civmec completed the initial rectification works for the Varanus Island compression module, which was based at the Australian Marine Complex, with preservation of the module also undertaken. Civmec then mobilised a team to site for the associated civil works, which included minor mechanical and electrical works for the brownfields compression module installation.



PROJECT EXPERIENCE - SHELL



Prelude Floating LNG Project

Client: Technip Oceania

Civmec delivered a master service order contract for the supply, fabrication, assembly, testing and delivery of eight 12" pipeline end terminations (PLET) and eight pig launchers and receivers (PLR), totalling approximately 400 tonnes. This included factory acceptance testing (FAT), system integration testing (SIT), trial lifts, storage and delivery FAS (free along side) at the Australian Marine Complex in Henderson. The 12" pipe for the PLET and PLR flowline consisted of corrosion resistant alloy and duplex (2205) for the 2" PLR manifold.



Prelude Floating LNG Project

Client: Technip Oceania

Civmec delivered a contract for fabrication of seventeen 300nb and 250nb corrosion resistant alloy 625 clad rigid jumper spools, including pre- and post-metrology welds, FAT and SIT, and delivery FAS at the AMC Facility in Henderson.



Prelude Floating LNG Project

Client: Technip Oceania

Civmec was contracted to for the supply, fabrication, assembly and testing of four subsea suction piles, each measuring 11 metres by 18 metres. Works included trial lifting and delivery FAS at the Australian Marine Complex facility. The subsea suction piles weighed approximately 300 tonnes each, for a total of 1,200 tonnes.



Prelude Floating LNG Project

Client: Technip Oceania

Civmec delivered a contract for the supply, fabrication, assembly and trial lifting and delivery FAS at the AMC facility of eight buckle trigger subsea frames, weighing approximately 450 tonnes. An additional scope was delivered for the supply, fabrication and testing of fourteen spreader bars for the offshore installation of the jumper spools, with one section measuring 42 metres in length and weighing more than 400 tonnes.



PROJECT EXPERIENCE - JEMENA, INPEX, BOC



Jemena Northern Gas Pipeline

Client: Jemena

The scope included the establishment of a 200-man camp, site civil works (including underground services) and concrete works. SMP and E&I installation works were undertaken, including installation of gas treatment equipment, residue gas compressor packages, export gas compressor packages, inlet filter coalescer, inlet flow meter and fuel gas skids, control/switchroom, as well as a number of balance of plant items across piping, instrumentation, equipment and structures.



Ichthys Onshore LNG Project Precast Manholes, Foundations and Panels

Client: Leighton Contractors

Civmec was contracted for the supply and manufacture of precast reinforced manholes and foundations. The scope included over 2,000 precast underground service elements (including manholes, inspection pits, junction boxes and culverts) and over 2,300 structural foundations. Civmec's team established a purpose-built precast yard facility, delivering more than 30,000m³ of precast concrete to the project. An additional contract was awarded for the fabrication and installation of 312 precast concrete wall panels for twelve buildings.



Ichthys Onshore LNG Project Combined Cycle Power Plant

Client: JKC

Civmec was contracted to complete various packages for the Combined Cycle Power Plant (CCPP). The scope included civil works, excavating and trenching for in-ground services, form reinforcement and placement of precast and in-situ concrete, including foundations. Civmec was successful in securing further contracts for the CCPP with fabrication, pre-spooling and field weld elimination, supply and installation of insulation and cladding, onsite surface treatment, passive fire protection, and blasting and painting of pipe spools also undertaken.



Kwinana Gas Plant Upgrade

Client: BOC Limited

The contract involved the construction of an air separation unit (ASU) to replace an existing ASU, and construction of a nitrogen liquefaction unit. The civil scope included site clearing, bulk and detailed earthworks, along with installation and testing of underground piping. The SMP scope included installation of structural steel, process plant equipment, tank and vessels, fabrication and site installation of an ASU cooling water, instrument air and process piping, cryogenic insulation and cladding, and fabrication and installation of platforms.





Engineering Success

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