
One experienced team all the way

Defence Capability Statement

Buildings | Australia & New Zealand





A community of experts

Stantec's global network of designers, engineers, scientists and project managers work together at the intersection of community, creativity and client relationships. Careful balancing of these priorities results in projects that advance the quality of life in communities across the globe.

But wherever Stantec is located it is our local teams who have the skills, experience and knowledge to drive the projects in their own back yards. In Australia and New Zealand (ANZ), our local offices of award-winning multi-disciplinary engineers have been helping both private and government clients build communities for over 60 years.

Our people have long-standing client relationships and are inspired to advance the communities in which they live, delivering cost-effective, quality consultancy services.

Whether we're partnering with clients to design a hospital or mixed-use development, a research facility or industrial park, an education campus or airport, we design with community in mind because we believe in the **power of places to transform lives, to meet the needs of a community today, to help fulfil its potential tomorrow.**

Our global business

25K

Employees

400+

Locations

6

Continents

#01

From start to finish. Our team leaders continue to manage the projects for which they tender, right through to completion. Change in team management causes delays and undermines a project's stability and design direction. Continuity is more conducive to achieving your goals within programme and budget.

#02

Value-adding innovation. Stantec's Creativity & Innovation program encourages our global network of engineers to develop tools, processes and technology. These creative ideas might save time at the design stages of a project, reducing client costs. Others offer powerful marketing potential for stakeholder engagement. Celebrating our best ideas with investment means they are fully developed to benefit all our clients and communities, wherever they may be.

#03

The right experience. From research stations in Antarctica to solar projects in rural Australia. From bespoke luxury residences to affordable high-rise apartments. From stadiums to play parks... and everything imaginable in between. We have the right skillsets to help you achieve your construction goals.

#04

Focus on buildability. Engaging with engineers in the early stages can save time and money in the long-term. Pragmatic spatial considerations, site-appropriate construction methods, informed materials selection, compliance with legislation and consideration of the operational environment. Our advice gives reassurance to stakeholders, boards and financiers that all factors have been fully considered.

#05

We're at the right tables. Our people are active proponents within Australia's property industry, seeking positive change on behalf of their communities. The influential tables at which we sit include the Urban Development Institute of Australia, the Property Council of Australia, Consult Australia and Green Building Council of Australia.



We don't just say we deliver outstanding solutions and client service. We prove it.

Stantec has been recognised numerous times at the independently assessed Beaton Client Choice Awards in Australia and New Zealand.

2022 Beaton Client Choice Awards Winner:

- Best Provider to Property

2019 Beaton Client Choice Awards Winner:

- Most Client Focused Consulting Engineer

2017 Beaton Client Choice Awards Winner:

- Best Consulting Engineering Firm (revenue \$50m-\$200m)

2016 Beaton Client Choice Awards Winner:

- Best Provider to Property Sector



27

Locations

Across ANZ

1800+

People

Regionally

60+

Years in the region

Across ANZ

8x

Best Employer

Aon

95+

**Projects in the last
3 years**

Across ANZ

6x

**Client Choice
Awards since 2015**

Across ANZ

Building a Secure Future

Our nationwide approach and wealth of experience with Defence project requirements ensures we are well positioned to add considerable value in delivering future projects.

We understand the unique functional requirements of defence facilities, and are committed to making a positive impact in our whole-of-life approach.

Our experience includes:

- Delivered over \$1.5 billion (CapEx) in the defence environment
- Involved in numerous additional projects by providing assistance in the pre-planning phase
- Strategic Business Case (SBC) Reports that inform the Functional Design Briefing documentation and the Technical Scope that form part of the foundation of new defence tenders

We go the extra mile to understand the fundamental requirements of the end users. At the start of the project, we seek out and actively encourage communication with key user groups and project stakeholders to inform the design and ensure the service requirements and budget considerations are raised and incorporated as the project develops.

We draw from our previous experience in working on defence projects to anticipate the functional requirements of the development and mitigate potential issues in advance.

We understand that defence sites permit little down time. Our design team work closely with stakeholders to fully understand the project requirements, plan the project timeline and structure the design to deliver a staged construction where necessary.

We understand the various Defence Security Pass categories and requirements. Many of our people already have active passes or have previously held combinations of Red, Yellow and Day passes.

We are committed to making a positive impact in environmental management. Best environment practices are incorporated into our core business plans and management procedures, including our firm-wide Environmental Management System (EMS) which has been developed as an overarching document to guide sustainability and environmental management.

We undertake 'whole of life' assessments by engaging the wider project team to facilitate informed client decision making in regard to cost of materials at time of construction, versus ongoing operational and maintenance costs.





Our Approach

Exceptional service and high performance

At Stantec, it is our people that set us apart. We have built an outstanding and unique culture based on providing exceptional service and high performance.

We pride ourselves on delivering:

- Coordinated documentation
- Senior Engineers continuously available for each individual discipline
- Committed team of senior and experienced engineers from start to finish
- Quality in-house engineering systems

Understanding the functional requirements

Our civil, structural and building services teams understand the fundamental philosophies of design and the detailed requirements of the end users.

At the start of the project, we seek out and actively encourage communication with key user groups, stakeholders and key project members, to inform the design and ensure the services requirements and budget considerations are raised and incorporated as the project develops.

We draw from our previous experience in working on Defence facilities and similar buildings to anticipate the functional requirements of the project.

Coordinated approach

Our multi-discipline approach ensures efficient in-house building and civil services coordination and integration.

This allows design efficiencies and an integrated approach to services through a single point of contact.

Building Information Modelling (BIM)

Using BIM 3D design and documentation to aid project delivery and risk management through early spatial planning and co-ordination, phased construction and design for manufacturing and assembly off-site if required.

Our Management Strategies

We understand defence

We have wide-ranging experience working with the Defence Manual of Infrastructure Engineering Electrical (MIEE), Manual of Fire Protection Engineering (MFPE), Standard Clauses on Civil Engineering for inclusion in Functional Design Briefs (2006) as well as all other applicable AS/NZ standards and guidelines.

We understand that the Australian Defence Force recognise the need for sustainable development and using renewable and alternative energy and water resources where available.

Working on live operational sites

We understand that defence sites permit little or no down time. Our design team work closely with the project team and the Department of Defence to fully understand the project requirements, plan the project timeline and structure the design to deliver a staged construction where necessary.

Security

We understand the various Defence Security Pass categories and requirements. Many employees currently have active passes or have previously held combinations of Red and Day passes.

Environmental management

We are committed to making a positive impact in sustainability and environmental management. Best Environment Practices are incorporated into our core business plans and management procedures including our firm-wide Environmental Management System (EMS) which has been developed as an overarching document to guide sustainability and environmental management.

Whole of life

We undertake 'whole of life' assessments (engaging the wider project team) to facilitate informed client decision making in regard to cost of materials at time of construction, versus ongoing operational and maintenance costs.

Quality Assurance

The ISO9001 accredited Quality System that we use has been developed "in-house", around the fundamental principles of first understanding our clients' needs and ensuring that they are satisfied.

Methodology

Our methodology to provide the best possible service to our clients includes:

- Personal commitment by our key personnel from start to finish
- Early identification of key issues with accompanying suggested solutions
- Understanding client needs via actively encouraging clear and open communication
- Thorough briefing/return briefing, as necessary between ourselves, the architect and principal
- Coordinated approach (clash detection / pre-emptive solutions)
- Single point of communication if appointed for more than one discipline
- A Nationally accredited Quality Assurance and Quality Control management system minimising design and deliverability risk



Stantec Defence Experience

WESTERN AUSTRALIA

RAAF Learmonth

New modular accommodation buildings

RAAF Pearce

RAAF Pearce Redevelopment Stage 1 electrical works (power, lighting, fire detection and alarm) including:

- Live in Accommodation Blocks
- Mess Building
- Hanger 95 Facility
- Air movements Facility
- Squadron 79 HQs
- Squadron 25 HQs
- Temporary Hanger
- Fuel Quality Control Centre
- Flight Arrestor Pits

Northam Army Camp

Irwin Barracks

RAAF Base Pearce

Replacement of existing in-ground diesel fuel tanks with above-ground trans-tanks

Campbell Barracks

Annual Mechanical Reviews

Upgrade Indoor Range ventilation systems

Strategic Business Case

HMAS Stirling

HMAS Stirling Helicopter Support Facility

Electrical review works (power, lighting, fire detection and alarm)

Strategic business case report

NORTHERN TERRITORY

RAAF Darwin

Electrical supply infrastructure for Defence Housing land development (including street lighting)

Flood remediation works – 30% design

Robertson Barracks

Structural alterations to Health Centre

Cold Water Storage Feasibility Study

RAAF Tindal

Electrical supply infrastructure for Defence housing land development (including street lighting)

LAND121 Stage 2 – Unit Sustainment Facilities Project

Shoal Bay

Peer review of an 11KB power supply upgrade

Delamere Air Weapons Range

AIR5349 Phase 3 Growler Airborne EA Capability Facility

QUEENSLAND

RAAF Townsville

LAND121 Stage 2 – Unit Sustainment Facilities Project

RAAF Amberley

Base Redevelopment new C-17 Heavy Air Lift (HAL) Facilities

C17A Cargo Compartment Trainer Facility

AIR5349 Phase 3 Growler Airborne EA Capability Facility

Strategic Business Case Battlefield Airlifter Facilities

Strategic Business Case Defence Deployable Air Traffic Management & Control System (DDATMCS)

Strategic Business Case AIR5349 Phase 3 Growler Airborne EA Capability Facility

Oakey Airbase

AIR5349 Phase 3 Growler Airborne EA Capability Facility

Greenbank Military Range

Peer review – ELF 2C documentation

Gallipoli Barracks

LAND121 Stage 2 – Unit Sustainment Facilities Project

LAND154 Weapons Technical Intelligence (WTI) shelter for the Counter Joint Improvised Explosion Device

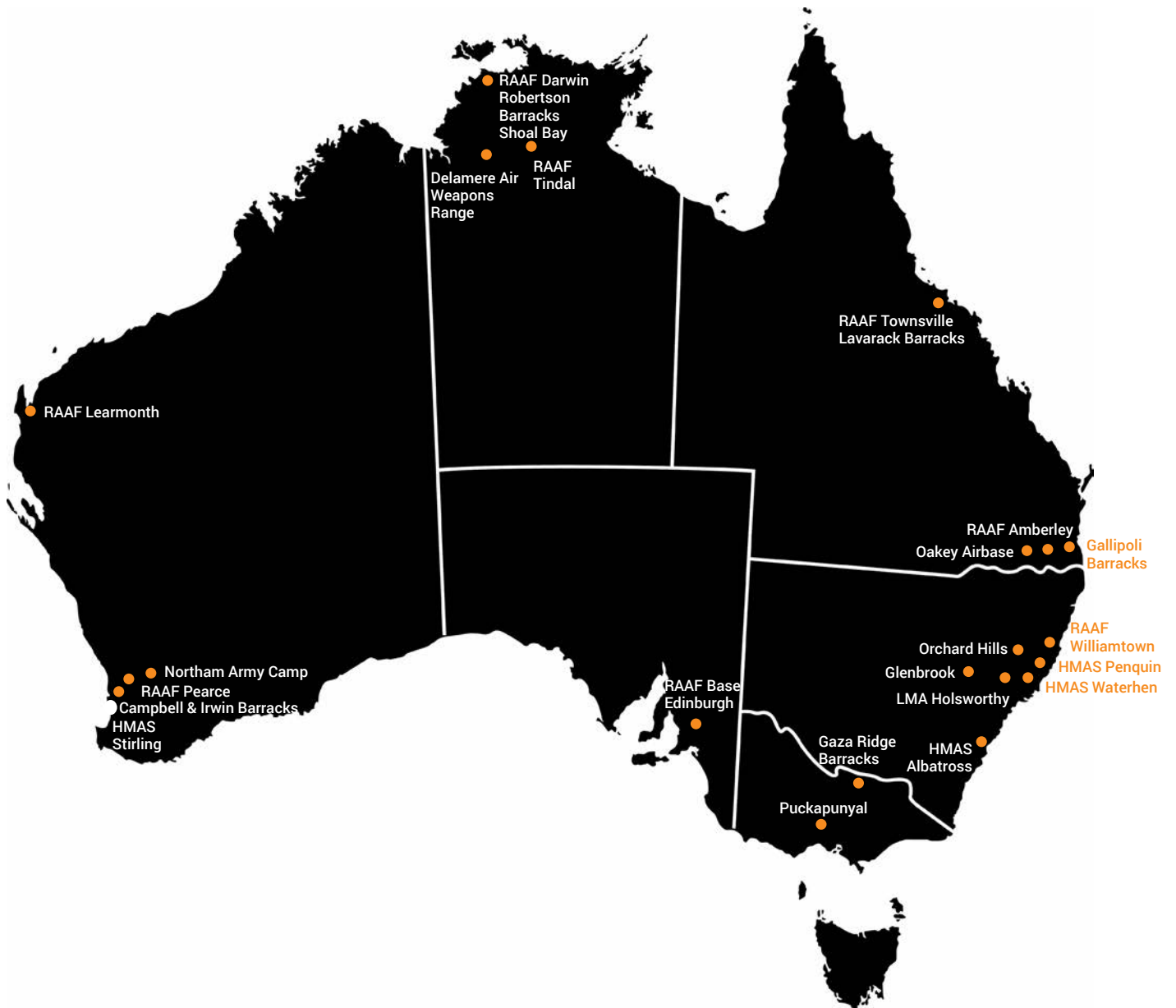
Capability Project

SOUTH AUSTRALIA

RAAF Base Edinburgh

LAND154 Weapons Technical Intelligence (WTI)

shelter for the Counter Joint Improvised Explosion Device Capability Project



VICTORIA

Puckapunyal Military Area

- LAND121 Stage 2 – Unit Sustainment Facilities Project
- Bridges Barracks Mess – Heating Water & Steam Generation Upgrade
- Building 855 Chiller and Cooling Tower System
- Building 20 Abrams tank Fume Extraction
- Building 355 – HHW Plant
- Buildings 855, 355, 827 & 20 Engineering Reports

Gaza Ridge Barracks

- Defence Logistics Transformation Program (DLTP)
- Electrical and Mechanical works

NEW SOUTH WALES

RAAF Williamtown

- LAND121 Stage 2 - Unit Sustainment Facilities Project
- Electrical Pillar upgrade works
- Control tower generator replacement works

HMAS Penquin

- Building Works and Emergency power works

Orchard Hills

- Storage building asbestos removal and electrical upgrade works

Glenbrook

- Building works

HMAS Waterhen

- Building works

HMAS Albatross

- Strategic Business Case Future Naval Aviation
- Combat Systems Facilities project

LMA Holsworthy

- Electrical infrastructure upgrade works
- Coral Lines refurbishment
- Barracks Building works

Augility, project delivery service provider, estate works program

Stantec are assisting Augility in delivering a portfolio of projects for the Australian Defence Force under the Estate Works Program (EWP).

Over 50 projects are currently being delivered by Stantec within our national portfolio. The EWP is focussed on providing facility maintenance through restoring or sustaining capabilities and also addresses safety and compliance requirements of facilities and infrastructure.

Projects include design of maintenance and repairs to roads, heritage works, water infrastructure works, electrical infrastructure upgrades and multiple building refurbishments.



We undertake 'whole of life' assessments to facilitate informed client decision making in regard to cost of materials at time of construction, versus long-term maintenance costs

Rob Sansbury
Defence Sector Leader, Director



Project value:
\$300 million

Completion:
2019

Growler

Airborne Electronic Attack Capability Facilities Project

The EA-18G Growler is an electronic warfare variant of the F/A-18F Super Hornet that possess the ability to disrupt or jam a range of systems, including radars and communications. The introduction of this technology is significantly enhancing battlespace situational awareness and provides important capability to support air, land and sea operations. Australia is the only country in the world, other than the United States, operating the Growler.

The purpose of the Growler Facilities Project provided the buildings and infrastructure to support the acquisition and introduction into service of the EA-18G. The project scope included work at RAAF Base Amberley (QLD), Oakey Army Aviation Centre (QLD) and Delamere Air Weapons Range (NT).

The project required extensive refurbishment of several existing facilities along with the construction of a number of new buildings to expand the current capabilities for mission, training and support systems to service the new fleet of EA-18G aircraft. The facilities incorporated highly technical specifications in order to operate and maintain the world-class electronic warfare system.



Defence Logistics Transformation Program

The project consisted the redevelopment of a series of buildings, firing range, ADE facility, 4,000m2 headquarters facility and 33 KV, 22 KV and 11 KV networks in the Moorebank and Bandiana Victoria JLUV(V) bases.

During the design process, all equipment and fittings underwent a whole-of-life costing exercise to determine what systems would be best suited over expected 30 year

life spans of the facilities.

The successful completion of this portion of the project was achieved through detailed coordination between all parties involved.

Project value: \$300 million
Completion: 2015



Land 121 Stage 2 Unit Sustainment Facilities Project

LAND 121 is a multi-phased project providing the ADF with current-generation, high-capability field vehicles, modules and trailers.

Approximately 7,500 protected and unprotected vehicles providing battlefield mobility, logistics support and tactical training will be procured.

LAND 121 Unit Sustainment Facilities Project will support the delivery of vehicles with

new or upgraded facilities at nine defence locations nationally.

These facilities will improve the maintenance, support and ongoing operation of the new vehicle capability results of the former industrial, commercial and railway uses.

Project value: \$276.5 million
Completion: 2020



Greenbank Training Area

Stantec were engaged to undertake a review of documentation prepared by the design consultant against the Department of Defence brief for the ELF 2C Greenbank Training Area in Queensland to ensure compliance with all required stages of design completion.

The documentation reviewed included a Safe Driver Training Area (SDTA), engineer minefield training area,

reorientation of the current Marksmanship Training Range (MTR-B), 320 man scale A training camp, new range entry including roads, engineering services, range control facilities and wash point and new working accommodation for 24/49 Royal Queensland Regiment.

Project value: \$102.9 million
Completion: 2013



Project value:
\$220 million

Completion:
2011

**Greenfield
Development of the
new C-17 Heavy Air
Lift (HAL) Facilities**

RAAF Amberley Development

This project comprised the planning, design, documentation, construction and commissioning of the C-17 HAL Facilities and the upgrade of the Amberley airfield to accommodate the C-17 Aircraft. The landside elements of the project consisted of seven stages.

The first stage included the completion of the Simulator Building and Training Facilities and was completed on time in 2009. The second major stage was those elements that were located in the heavy air lift precinct.

This included the construction of an air movements terminal and supporting facilities, 36 Squadron Headquarters Building and Logistics Management Unit (LMU) Building, the warehouse and workshop facilities, the Precinct Café, carparking and road networks. This stage was completed ahead of time and handed to defence in the same year.



RAAF Base Pearce, WA

This project comprised the redevelopment of the existing training base including the provision of new combined mess facility, fuel quality control centre, accommodation modules and redevelopment of the existing Hanger 95.

Project value: \$140 million
Completion: 2011



RAAF Base Amberley C17 Cargo Compartment Training Facility & C17A Maintenance Hangar

Stantec were engaged to produce the FDB for the new C17 Cargo Compartment Training Facility at RAAF Base Amberley.

Stantec also carried out a review of documentation prepared by the design consultant against the Department of Defence brief to ensure compliance with all required stages of design

completion. More recently, Stantec also carried out an investigation to propose an establishment of new working, logistics, maintenance and technical facilities to support the ongoing operations of the C17A Aircraft at RAAF Base Amberley.

Project value: \$10 million
Completion: 2014



Strategic Business Cases

Stantec are regularly engaged via a Project Management/ Contract Administration (PMCA) arrangement to assist in the delivery of Initial business cases for defence projects. Stantec's scope of involvement includes carrying out a detailed site investigation, analysis of several design options, provision of preliminary costing information and an overall project risk assessment.

Through our project experience, our team has gained insight into the defence design processes and funding procedures as well as the opportunity to access multiple defence bases and meet an array of defence personnel in various locations nationally.

Project value: Undisclosed
Completion: 2017



Project value:
\$11 million

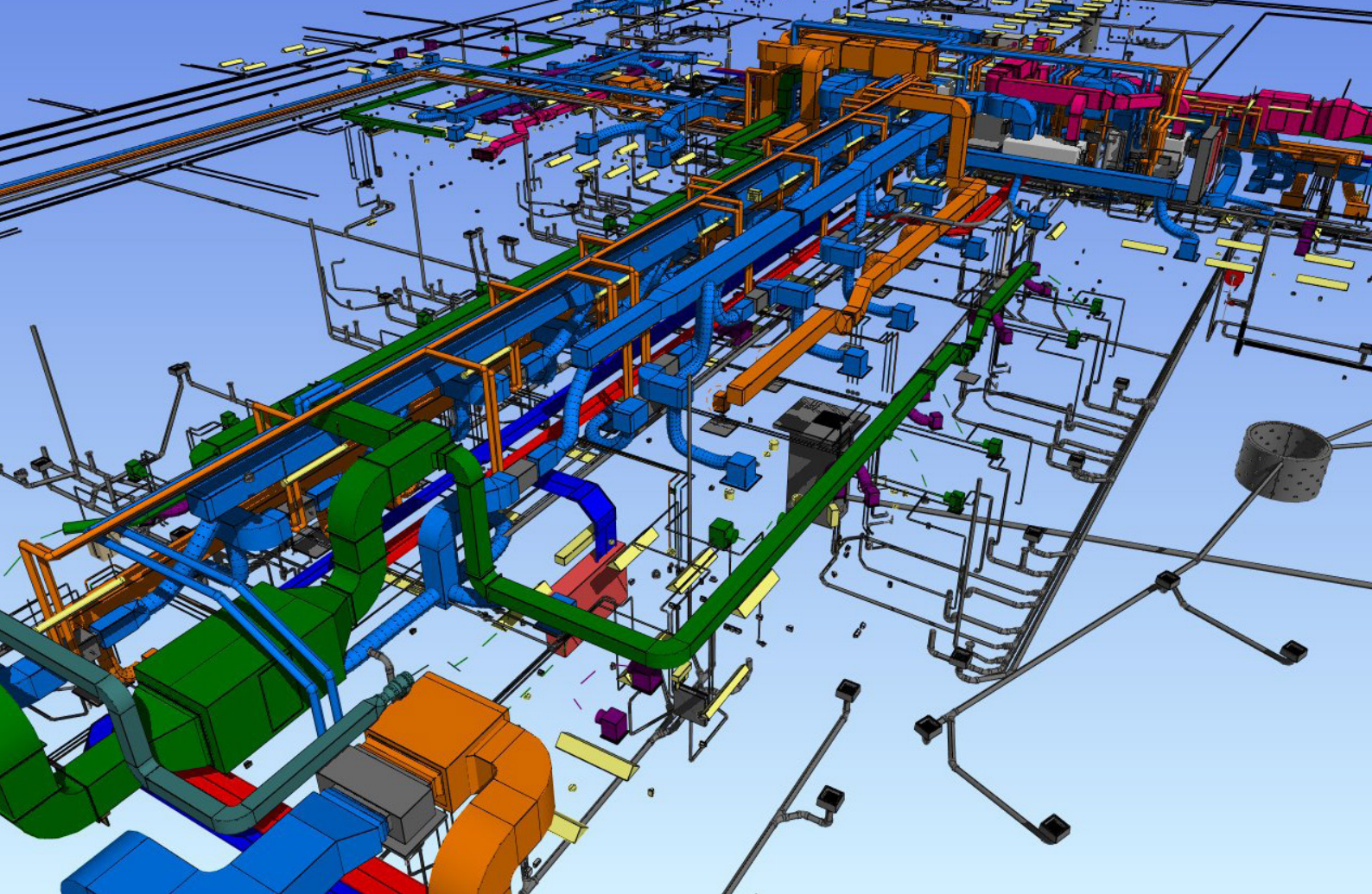
Completion:
2013

RAAF Base Darwin Flood Remediation

Stantec was engaged by Point Project Management to undertake a technical investigation to establish flood remediation options for the RAAF Base Darwin.

The investigation aimed to improve the overland flow immunity of existing facilities within the RAAF base, prepare 30% designs and specifications of several options to allow for the tendering of a design and construct contract.

Using innovative ideas, Stantec provided defence with a solution that fit within their budget and project scope which met the base personnel user requirements. As well as this, Stantec provided a secondary option which gave defence future planning flexibility and more developable space.



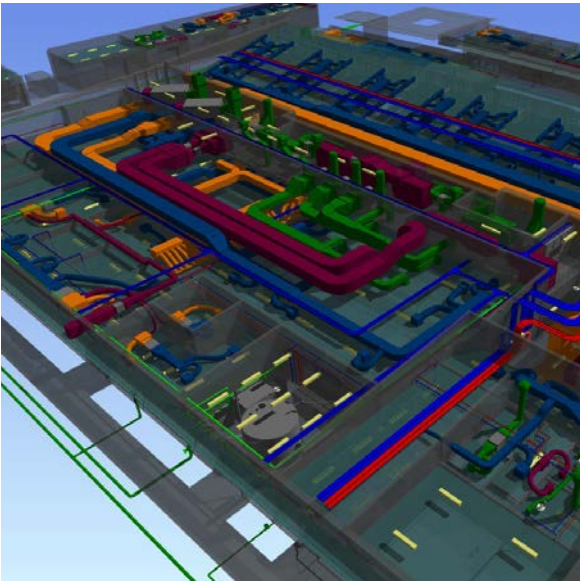
BIM & Revit coordination

Stantec is at the forefront of Building Information Modelling (BIM), 3D design and documentation.

Primarily BIM aids project delivery and risk management through early spatial planning and co-ordination, phased construction and design for manufacturing and assembly off-site if required.

The advantage of BIM is It allows projects to be built virtually before they are constructed physically (otherwise known as a digital twin), eliminating many inefficiencies, and problems that arise during construction, saving time and money during the building lifecycle.

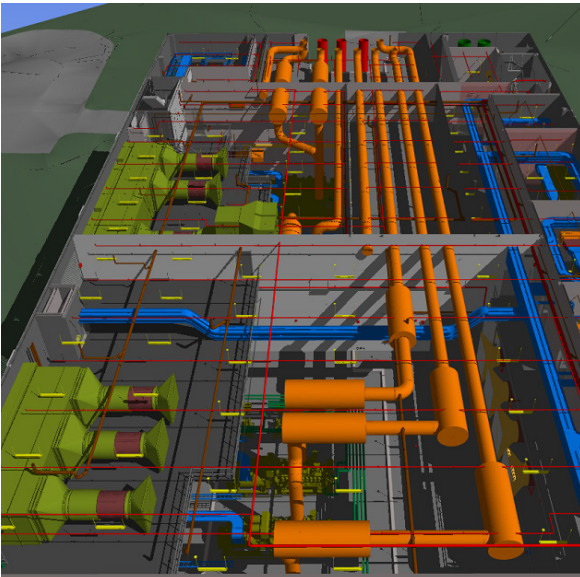
It also has the ability to evolve as the market does.



Added Value

BIM offers a range of benefits including:

- Transparent understanding of design intent
- Coordinated building structure services design
- Reduced construction related variations due to clashes
- Improved spatial planning
- More competitive tender pricing
- Reduced project risk for both clients and designers
- Plant and equipment optimisation
- Future facility management strategy
- Monitor, control, facilitate and update systems across the lifetime of an asset



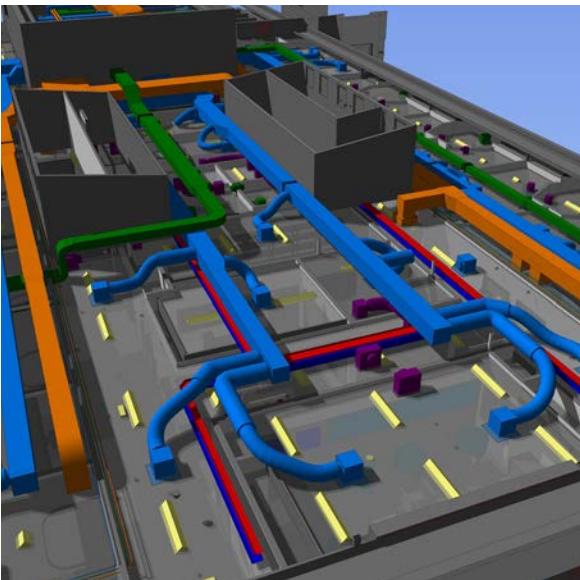
Utilising Revit

Stantec is capable of fully utilising the powerful engineering tools in BIM such as Revit. Platforms like Revit include analysis and design tools such as thermal modelling, airflow and water flow summation pressure loss calculations, and lighting calculations tools (Elumtools).

Stantec are continually open to the technological developments in the BIM field whether it be add-on programs, integrated analysis visualisation technology, and

coordination tools (Navisworks).

Stantec are actively involved in the use of BIM and understand the need to collaborate with the wider design team to unlock the full value of BIM. Clients can be assured that Stantec's broad BIM experience enables accurate and detailed design and analysis to occur throughout the projects life, planning and construction.



Recent Projects Coordinated in Revit

- Edith Cowan University, Ngoolark Building 34, Perth
- Queen Elizabeth II Medical Centre, Central Energy Plant, Perth
- St Stephen's Hospital, Hervey Bay
- Cambridge Residences, Robina
- 5 Markham Place, Ashfield
- Port Macquarie Base Hospital, NSW
- Waverley Private Hospital Expansion, VIC
- Presbyterian Ladies College – Performing Arts Centre, Melbourne
- The Jewel Residences, Surfeers Paradise
- TAE Bundamba, Turbine Engine Maintenance



Project delivery and offering

Buildings ANZ project coordination

No matter what the project, no matter what your needs are, we have the team to help make it happen.

A Stantec Project Engineer will be:

- Responsible for ensuring cohesive team delivery
- The first point of contact for the client

What does this mean for our clients?

Not only will you receive the very best from all Stantec consultants, you will receive seamless design integration across all Stantec disciplines. This will result in identifying and minimising scope-gap, cost or programme risks.



Working together

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.



Connect with us



stantec.com/australia