



DEFENCE CAPABILITY STATEMENT



green building council australia
MEMBER



Hydraulic Fire Environmental

STEVE PAUL & PARTNERS

HYDRAULIC & FIRE PROTECTION CONSULTANTS

ADELAIDE OFFICE

Level 1, Tenancy 5A
257 Sturt Street
Adelaide SA 5000
Ph: 0413 156 874

Email: adelaide@sppgroup.com.au

BRISBANE OFFICE

95 Leichhardt Street
Spring Hill QLD 4000
Ph: (07) 3846 3077
Fax: (07) 3844 4665

Email: brisbane@sppgroup.com.au

GOLD COAST OFFICE

144 Campbell Street
Bundall QLD 4217
Ph: (07) 5539 9806
Fax: (07) 5526 8798

Email: goldcoast@sppgroup.com.au

MASCOT OFFICE

Suite 8, Level 2 56 Church Avenue
MASCOT NSW 2020
Ph: (02) 9669 4206
Fax: (02) 96694207

Email: admin@lipscombe.com.au

MELBOURNE OFFICE

221 Moray Street
South Melbourne VIC 3205
Ph: (03) 9682 7499
Fax: (03) 9682 3499

Email: melbourne@sppgroup.com.au

PERTH OFFICE

Suite 54/55 City West Centre
102 Railway Parade
West Perth WA 6005
Ph: (08) 9322 9514
Fax: (08) 9486 7428

Email: perth@sppgroup.com.au

SUNSHINE COAST OFFICE

Tenancy 4A, Level 1
5 Lutana Street
Kawana Waters QLD 4701
Ph: (07) 5452 5027
Fax: (07) 5452 5456

Email: sunshinecoast@sppgroup.com.au

SYDNEY OFFICE

Level 3, 432 Kent Street
Sydney NSW 2000
Ph: (02) 9261 1300
Fax: (02) 9261 1600

Email: Sydney@sppgroup.com.au

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COMPANY PROFILE

Steve Paul & Partners is a dynamic, Australian Owned, Quality Assured company incorporated in 1978, operating in the highly competitive field of Hydraulic and Fire Protection Services, Steve Paul & Partners' fresh approach to problem solving, together with technical expertise and cost effectiveness, have earned the company an enviable track record as well as that all important vote of Client confidence, repeat business.

With established offices in Brisbane, Melbourne, Sydney, Perth, the Gold & Sunshine Coasts the company is well placed geographically to service Local and National Clients with the ability to offer an equivalent level of service to the industry from each office.

The company over the past thirty (30) years has designed documented and supervised projects in Queensland, New South Wales, Victoria and Western Australia to a project construction value of in excess of \$5 Billion.

Amongst the countless reasons for our success. Innovation is one reason. Textbook solutions to problems are often suited only to textbook projects. We look beyond these constraints for more practical solutions. Technical skill is another reason, which coupled with our experience in the many market sectors; construction administration of projects is another of our strengths.

Cost effectiveness is another critical consideration not only in design and execution, but also in problem solving, programming and client service in itself. With our progressive approach we are able to handle all hydraulic consultancy functions, from research and feasibility studies through cost effective design, to commissioning and regulatory responsibilities.

The Steve Paul & Partners team have extensive experience in the design documentation and construction of infrastructure and building services for specialist use buildings such as correctional facilities incorporating varying methods of procurement

Steve Paul & Partners believe in encouraging staff on all levels to contribute to the effectiveness of the company by nurturing their input and endorsing their interest in further studies, and industry committees. This helps to maintain pride and commitment from employees, which is inevitably transferred to you, our valued Client.

Our teams provide an unequalled level of service on projects of technical difficulty, paying particular attention to our client needs which is the hallmark of Steve Paul & Partners' approach. We have an unrivalled reputation for creating outstanding hydraulic solutions while managing major design projects to tight programmes and budgets.

Steve Paul & Partners maintain our status at the various prequalification and approval for Federal, State and Local Government Departments.

THE SERVICES

The scope of services that our Company can offer consists of the design, documentation, specification and construction quality control of the following:-

Hydraulic Services

- Sewer Drainage, Gravitational, Pump and Vacuum Assisted
- Trade Waste Drainage and Trade Waste Treatment Plants
- Specialist Waste Treatment
- Stormwater Drainage
- Sub-Soil Drainage
- Rainwater Downpipes and Gutters
- Sanitary Plumbing
- Trade Waste Plumbing
- Cold Water Supply, Including Storage and Pressurisation
- Hot Water Supply, Including Boilers and Calorifiers
- Waste Heat Recovery
- Natural Gas Service
- Vacuum Drainage Systems
- LP Gas Service
- RO Water Generation And Reticulation Systems
- Treated Water Systems
- Sanitary Ware
- Taps, Outlets and Controls
- Thermostatic Mixing Valve Assemblies
- Landscape Watering and Irrigation Water Supply
- Water Feature Display Fountains
- Swimming Pool Systems
- Steam Service
- Compressed Air Service

Civil Hydraulics

- Stormwater Drainage Detention Systems
- Domestic Water Treatment Plants and Reticulation
- Water Harvesting
- Bore Pumping
- Soil Management
- Nutrient Management Control
- Sewage Treatment Plants
- Treated Sewage Effluent Spray Irrigation

Fire Services

- Fire Hydrant and Fire Hose Reel Systems
- Fire Sprinkler Service
- External Fire Sprinkler Services
- Pre Action Fire Sprinkler Systems for Computer Rooms
- Deluge Fire Suppression Systems
- Fire Alarm Services
- Smoke Detection Services
- Emergency Warning Intercommunication Systems
- Vesda Systems for Computer Rooms
- Fire Extinguishers
- Water Sensing Devices for Computer Rooms Under Floor Space
- Carbon Dioxide Fire Suppression Systems
- Foam Fire Suppression Systems

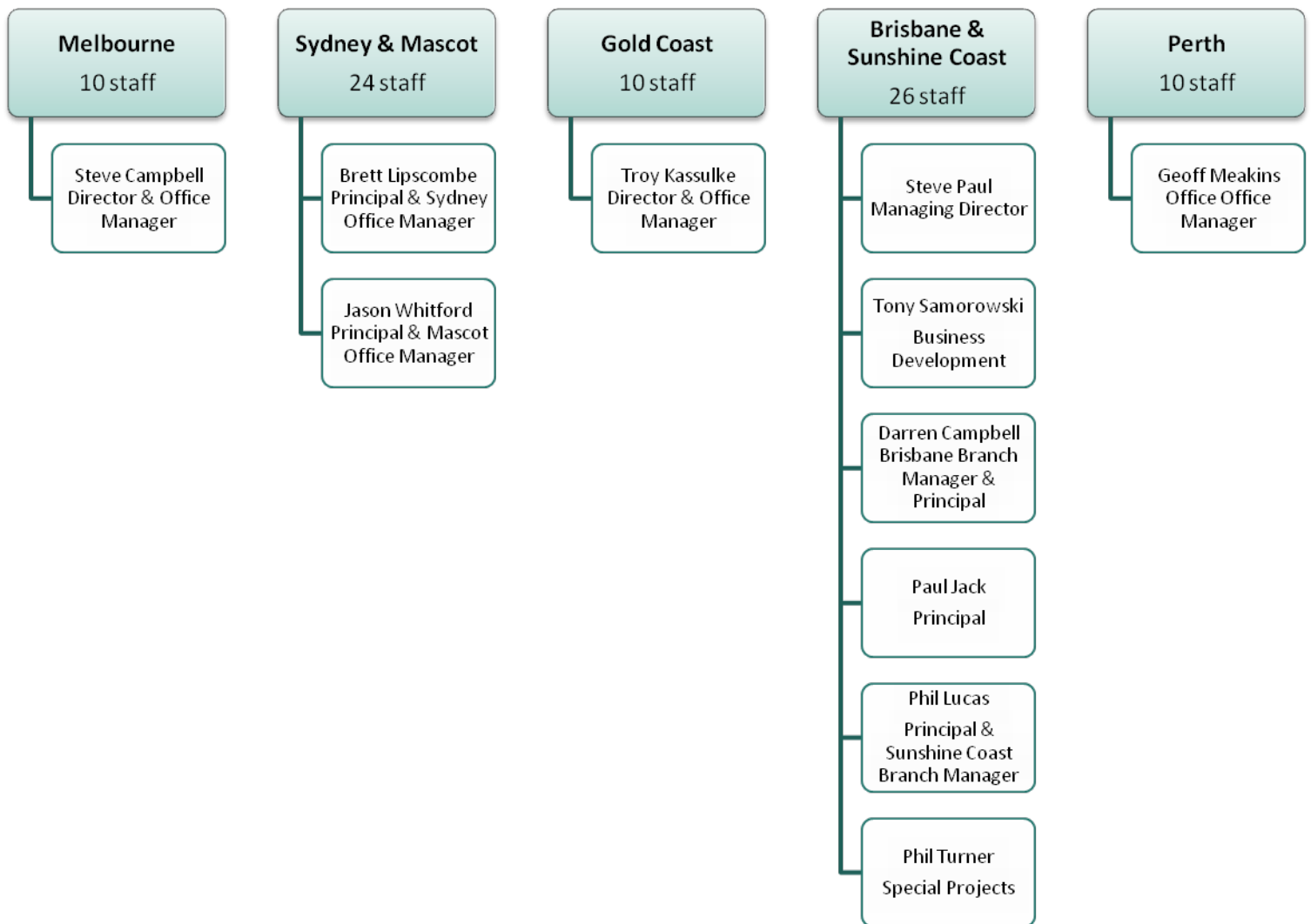
THE TEAM

BOARD OF DIRECTORS

Steve Paul - Managing Director

Steve Campbell - Director

Troy Kassulke - Director



Total Staff 80

All offices are fully linked via ADSL Internet connections utilise the latest software packages for AutoCAD and office administration.

Following are CV's of the key personnel involved with Defence projects:

CURRICULUM VITAE

STEVE CAMPBELL

CURRENT POSITION	DIRECTOR / OFFICE MANAGER MELBOURNE
EXPERIENCE	Steve Campbell has 22 years experience in the building services industry in Melbourne, Sydney, Hong Kong, Jakarta and New Zealand. Steve has gained expertise on a wide range of projects including Correctional facilities. Steve's core competencies are hydraulic engineering and project management.
PROFESSIONAL QUALIFICATIONS & AFFILIATIONS	<ul style="list-style-type: none">• Diploma of Engineering (NZ)• Registered Building Practitioner Mechanical Engineer• Fellow, Institute of Plumbing (UK)• Member of the Association of Hydraulic Services Consultants of Australia (Vic Chapter)
RELEVANT EXPERIENCE	<p>Some of these projects are detailed under the Relevant Experience Section of this Capability Statement.</p> <ul style="list-style-type: none">• Tank/Armoured Personnel Carrier Service Defence Centre Building – Puckapunyal – Seymour• Victoria Barracks Refurbishment – Defence Melbourne

CURRICULUM VITAE

TONY SAMOROWSKI

CURRENT POSITION	DIRECTOR / REGIONAL MANAGER QUEENSLAND / CORRECTIONAL MARKET SECTOR MINDER
EXPERIENCE	<p>Tony Samorowski commenced his career in 1978 in the construction industry obtaining his relevant trade licences in 1982. He then progressed in the design and consultancy field where he worked for major Hydraulic and Fire Consultants and the Department of Housing and Local Government. From 1994 to 2004 he was the manager of GHD building hydraulics services in Brisbane and also International service line leader for GHD in his field. Tony now manages the Brisbane office of the SPP Group Pty Ltd in his role as Director he is also responsible for the Queensland, Northern Territory and Pacific Region.</p>
PROFESSIONAL QUALIFICATIONS & AFFILIATIONS	<ul style="list-style-type: none"> • Associate Diploma of Applied Science, Construction Hydraulics • Member, Green Building Council Of Australia • Licenced Plumber, Drainer and Gasfitter, Backflow Accreditation • Board Member of the Association of Hydraulic Building Services Consultants of Australia • Member of the Fire Protection Contractors Registration Board of Queensland Inc.
RELEVANT EXPERIENCE	<p>Some of these projects are detailed under the Relevant Experience Section of this Capability Statement.</p> <ul style="list-style-type: none"> • C17 Associated Facilities – Edinburgh, Darwin & Townsville Defence • C17 Interim Facilities Amberley Defence • RAAF Base Amberley Defence • Oakey Redevelopment Project Defence • Project Bushranger – Enoggera Dept of Defence • Backflow Audit RAAF Base Townsville Defence • RAAF Base Darwin and Tindal Earth Mounded Structures Defence • RAAF Base Townsville Redevelopment Stage 1 Defence • AAFCANS, RAAF Amberley Dept of Defence • Recladding of Bellman Hangers RAAF Base Amberley Defence

CURRICULUM VITAE

PHIL TURNER

CURRENT POSITION	SPECIAL PROJECTS / OFFICE MANAGER – BRISBANE																				
EXPERIENCE	<p>Phil Turner is a recognized leader in plumbing and fire protection engineering and is experienced in project management of major complex projects with over 25 years of experience.</p> <p>Phil has recently returned to Brisbane from our New York office as the partner in charge of production. He also lead the hydraulic and fire design efforts with an emphasis on introducing several innovative Australian plumbing, drainage and fire protection services worldwide.</p> <p>In Australia, Phil completed numerous major projects including the expansion of the Sydney Airport International Terminal – Sydair 2000. Phil also recent was leading a multidiscipline team providing for the design of the Global Switch Internet Data Centre. That project pioneered innovative 3-D CADD technology and produced over \$11,000,000 savings to the client. Other Australian assignments include, Star City Casino in Sydney, ABC Headquarters, and Westpac's KENS Site Development. All of which are large complex projects that are owner occupied developments.</p>																				
PROFESSIONAL QUALIFICATIONS & AFFILIATIONS	<ul style="list-style-type: none">• Plumbing Trade Certificate• Plumbing Services Certificate																				
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CURRICULUM VITAE

PHIL LUCAS

CURRENT POSITION	ASSOCIATE / SENIOR HYDRAULIC SERVICES DESIGNER / OFFICE MANAGER SUNSHINE COAST																																
EXPERIENCE	Philip Lucas commenced his career in 1991 in the construction industry obtaining his relevant trade licences in 1995. He then progressed in the design and consultancy field where he worked for GHD Consulting Engineers from 1997 to 2004. During this period, Philip obtained his Diploma of Engineering in Construction Hydraulics.																																
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CURRICULUM VITAE

PAUL JACK

CURRENT POSITION	ASSOCIATE / SENIOR HYDRAULIC SERVICES DESIGNER
EXPERIENCE	<p>Paul Jack commenced his career in 1990 in the construction industry. He then progressed in the design and consultancy field where he worked for Funnell Hydraulics for 3 years and then joined SPP Group in 1996. During this period, Paul has started his Diploma of Engineering in Construction Hydraulics and completed his business degree. Paul has worked in all 3 states along the eastern seaport gaining valuable experience across all areas of SPP Groups core business.</p>
PROFESSIONAL QUALIFICATIONS & AFFILIATIONS	<ul style="list-style-type: none"> • Bachelor Business (Computing) - QUT • Diploma of Engineering, Construction Hydraulics – Yeronga • Member of the Fire Protection Contractors Registration Board of Queensland Inc. • Member AHSCA (Vic Chapter)
RELEVANT EXPERIENCE	<p>Some of these projects are detailed under the Relevant Experience Section of this Capability Statement .</p> <ul style="list-style-type: none"> • Cooran Cove Development – South Stradbroke Island Commercial • Art Gallery of Victoria – Melbourne Commercial • Arkley, Nolan, Boyd and Paladio and Condor Towers – Docklands Melbourne Residential • Liberty Grove Development – Sydney Residential • Concept Blue Redevelopment – Melbourne Residential • Melbourne & City Towers – Melbourne Residential • Diggers Rest Nursing Home Residential • Royal Women’s Hospital Melbourne Health • Riverlink Shopping Centre – Ipswich Retail • Harvey Norman – Penrith & Auburn Retail

THE APPROACH

UNDERSTANDING DEFENCE PROJECTS

New Buildings

From our knowledge of Defence projects, the following solutions to the hydraulics component consistently stand out.

- a) Compliance with the relevant Defence and Australian Standards and the individual Defence guidelines.
- b) Recognition of the need to and our ability to follow due process through the design process, which is fundamental to maintaining project control.
- c) Participation in the preparation of the various Defence milestones such as the Functional Design Brief
- d) Aware of environmental considerations when dealing with Defence specific systems.
- e) In depth review of environmentally efficient systems and their potential application into Defence projects.
- f) Adherence to Manual for Fire Protection Engineering.
- g) Provision of the appropriate water supply and pressure along with the specific waste treatment for vehicle wash areas.
- h) Maintaining potable water throughout the base, ensuring that hazardous operational zones do not compromise the safety of the potable water.
- i) Maintaining the functionality of the application whilst ensuring that the items identified here in are included.
- j) In some instances the recognition of the need for treated water in varying levels/types throughout the building, suitable for specific applications such as aircraft washing.
- k) Identification & treatment of specific individual wastes generated within each area. Clearly recognising the need for separation of these wastes to confirm with relevant legislation and reduce operational issues due to the nature of the wastes.
- l) The analysis of specific wastes and the selection of the appropriate materials to convey the waste from the building, taking into consideration the projected life span of the building.
- m) Identification of the relevant zones within the building, the provision of the appropriate water supply, pressure, flows, temperatures and redundancy (where applicable).
- n) Ensure good accessibility of services for maintenance and future extension.

Other relevant issues that Steve Paul & Partners address on each individual project include:-

- a) The implementation of electronic flushing devices and flow control devices to conserve water usage.
- b) That a system of syphonic drainage is investigated for the disposal of roof and stormwater run off, as against a traditional gravity system where large roof areas and box gutters exist.
- c) The provision of warm water via thermo-static mixing valves or a warm water system although well known, as a mandatory requirement is generally not addressed in a holistic approach to rationalize their locations and maintenance needs. We approach each project on its merits and in conjunction with the associated user groups provide the right system to meet the client's needs within the guidelines of the required standards.
- d) The possible use of stormwater detention for landscape watering and fire fighting purposes.
- e) The investigation of the use of high-density polyethylene pipes for the transportation of Liquid Wastes. This material is known for its ability to take waste at extreme temperatures or of a

corrosive nature providing the ability to relocate any department to any location without the need to up grade the services.

- f) The use of polypropylene for the transportation of water supplies to ensure longevity and to aid in the prevention of bacterial growth in the potable water supply.
- g) Adopting maximum use of mains pressure water supply to minimize Mechanical Supplementation

Approach to ESD - With Australia being one of the driest nations in the world it is appropriate that we as engineering consultants should be leading the way in the implementation of water conservation technology. We at SPP can provide water balance models and provide indicative pay back periods based on any level of participation that the client may wish to consider and implement in their projects.

This can consist of any combination of the following:-

- Rainwater harvesting and reuse systems
- Flow control
- Fire test water harvesting and reuse
- Solar Hot Water
- Reduction in uPVC bases materials
- Water less or reduced water flow urinals
- Sub-metering requirements
- Grey water harvesting
- Black water harvesting, treatment and reuse.
- Implementation of vacuum sewerage systems that reduce operational toilet flushing to 2l per flush.

Implementation of a total water management system that aids in crowd control as well as providing a solid ground platform for water conservation to the project in total.

Steve Paul & Partners identify areas of repetitive work and endeavour to refine their simplicity in cost through careful detailing of the constructability and prefabrication of the elements.

We also identify pipeline systems that could utilize common bracketing within the project. This assists in reducing both cost and time components in the overall installation.

During the **Design Development Stage**, and after initial approval of proposed fixtures and tapware schedule, we establish a complete set of samples for review by the Project Team and most importantly the 'users'. The samples displayed include pipe materials, safety equipment, floor grates, flushing devices etc, in addition to the customary taps and basins.

Finally, we implement our own internal peer review process, whereby an independent Designer objectively reviews, comments and discusses all of the noted areas above in a value adding approach.

Existing Buildings

When dealing with existing buildings additional factors come into play along with those identified for new buildings, the following are areas of significant importance.

Carry out detailed surveys of **all** existing services locations and condition to provide a lifetime invaluable record to form the foundation of the future.

Establish a condition report of the findings which identifies a base level prior to proceeding into any design phase of the project.

Other issues that relate to dealing with Existing Buildings that are of equal importance and should be carried out as part of any significant project within an existing building (if they do not already exist) include:-

- A detailed programme for the implementation of Backflow Prevention.
- A programme for the implementation of water conservation devices.
- A programme for the implementation of thermostatic mixing valves is introduced in conjunction with the redesign of the hot/warm water system.

Of paramount importance to any project is the continued assessment of the estimated construction cost of all elements of the hydraulic services installation against the project's cost plan.

Quality Assurance and Management

Since June 1995, Steve Paul & Partners have held accreditation of AS/NZS ISO 9001 Quality Management System. Over the years, Steve Paul & Partners have maintained and continued to improve on our Quality System, to provide the services and commitment we offer to our valued clients.

In general terms, our processes for each and every project have a number of important procedures, however internal Audits held on a regular basis focus heavily on such procedures as Document and Data Control, Design Control and Inspection and Testing to ensure the highest standard of documentation is maintained throughout the period of the project.

All documents received are checked and stamped upon receipt and these documents then become part of the designers project file for reference.

Steve Paul & Partners drawing office procedures require the CAD Operators to check all preliminary drawings for fundamental requirements such as layout, title block format drawing scale and sheet size. Upon completion of preliminary design the designer passes the documentation over to a nominated independent design validator for checking along with all relevant calculations.

On completion of final documentation for Building Approval, the drawings are again checked against the updated Architecturals and the Architectural drawing number is noted in the title block for reference.

During construction, our project administration procedures require the completion of an inspection and test plan to be submitted by the Hydraulic Services Contractor to allow for a well formulated method of inspections by Steve Paul and Partners.

Research and Development

Another facet to Steve Paul & Partners is the tradition and culture of allocating considerable, and an increasing level of resources to Research & Development, in response to our changing environment, improved materials and new technology.

With this in mind, Steve Paul & Partners have created new products, ideas and systems resulting in direct sub-contract cost and time savings, decreased maintenance costs and reduced operating costs to the projects.



PROJECT EXPERIENCE

The following is a listing of Defence projects that our Key design staff has been involved in:

- C17 Interim & Associated Facilities at Amberley, Edinburgh, Darwin & Townsville.
- HMAS Cairns Redevelopment, Wharf upgrades to comply with the new Armidale craft.
- RAAF Air Base – Amberley, Redevelopment (addition of 17 Multipurpose Building)
- Oakey Redevelopment Project – hydraulics, trade waste, fire, AFFF treatment, design, documentation & construction.
- RAAF Base Lavarack New Barrack & Kitchen Extension
- Victoria Barracks New Kitchen & Laundry
- Lavarack Barracks Stage 2, \$130 million Redevelopment
- RAAF 5th Aviation - Townsville, Helipad shelter & washer
- Enoggera Army Barrack, New Barrack & Kitchen
- Submarine Base Cairns, New Submarine Base
- H M A S Albatross, New Barrack, kitchen & Laundry
- Project Bushranger, Enoggera – hydraulics, trade waste, fire, design, documentation & construction.
- Backflow Audit RAAF Base Townsville– audit and report.
- RAAF Base Darwin & Tindal Earth Mounded Structures– hydraulics, trade waste, fire, design & documentation.
- RAAF Base Townsville Redevelopment Stage 1– hydraulics, trade waste, fire, design & documentation.
- AAFCANS, RAAF Amberley Department of Defence– hydraulics, trade waste, fire, gas, design, documentation & construction.
- Recladding of Bellman Hangars RAAF Base Amberley, site supervision, project management and contract administration.
- D & C Submissions for DHA Darwin consisting of three multi level apartment buildings– hydraulics, trade waste, fire, design & documentation concepts.
- D & C Submissions for Ausbatt Timor deployment– hydraulics, trade waste, fire, design & documentation concepts.
- Apin Stage 1 Health Facilities– hydraulics, trade waste, fire, design & documentation.
- Sewerage Infrastructure for Apin Stage 2

