

Warren
Smith &
Partners

CONSULTING ENGINEERS

CAPABILITY STATEMENT

HYDRAULIC

FIRE

CIVIL

SYDNEY WATER ACCREDITED
WATER SERVICING
CO-ORDINATOR AND DESIGNER

COMPANY STRUCTURE AND EXPERTISE

Warren
Smith &
Partners



Warren Smith and Partners Pty Limited, Consulting Hydraulic, Fire and Civil Engineers, was incorporated and registered on the 10th August, 1981. We have been involved with over 4,600 projects of all development classifications and scale. Our project experience extends to not only NSW, but throughout Australia and abroad.

Our firm provides specialist engineering services as follows:-

- Due diligence, compliance, condition and investigation reporting
- Strategic services master planning
- Master planning, concept and schematic design
- Design development and contract documentation
- Sustainable and strategic system capex and opex analysis
- Construction administration
- Project management
- Feasibility studies
- Risk management
- Safety in design analysis
- Fit for purpose analysis

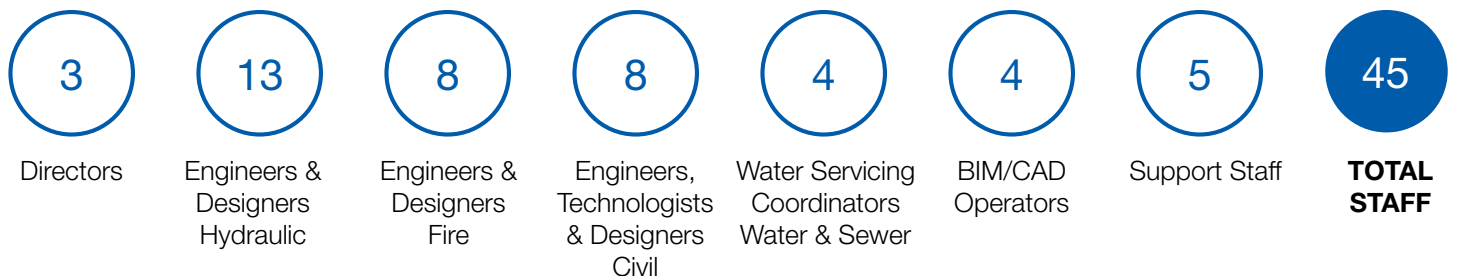
COMPANY STRUCTURE AND EXPERTISE

Our key personnel and directors have comprehensive industry experience and knowledge.

Our managers, without exception are all long term employees of the firm. Our key personnel are:

		Years in industry	Years with WS+P
Mr Warren Smith	Managing Director	45	35
Mr Andreas Heintze	Chief Operating Officer	33	26
Mr Michael Cahalane	Director – Civil & Water Engineering	15	11
Mr Tom Wise	Technical Manager – Hydraulic	9	7
Mr Ian Stone	Expertise Leader & Project Manager – Fire	35	29
Mr David Bolt	Project Manager – Fire	22	20
Mr Peter Brawley	Project Manager – Fire	22	21
Mr Mark Price	Design Manager – Hydraulic	35	33
Mr Grahame Barnes	Project Manager – Hydraulic	33	32
Mr Dirk Nagelschmidt	Project Manager – Hydraulic	25	14
Mr Campbell Hazelton	Project Manager – Hydraulic	20	7
Laura Shaughnessy	Engineer – Civil	6	4

Currently, our firm consists of the following directly employed staff:-



Our engineers, technologists and designers are qualified professional members of the following organisations:-

- Engineers Australia
- Association of Hydraulic Services Consulting (NSW) inc (AHSCA)
- Fire Protection Association Australia (FPAA)
- Chartered Institution of Building Services Engineers (CIBSE)
- American Society of Plumbing Engineers (ASPE)
- Water and Wastewater Association
- Stormwater Industry Association



COMPANY STRUCTURE AND EXPERTISE

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Warren Smith and Partners offer skilled professionals, who are effective communicators and valued members of any team. Our team is supported by our progressive design and quality assurance systems.

With access to decades of design and engineering experience, matched by our young innovative staff, we present a dynamic team capable of delivering significant projects.

Through our experience, we have developed design intelligence to seamlessly assimilate form and function, innovation, and management, within the built environment.

Our team applies our design intelligence to ensure that the documentation we produce, and the advice we provide, is appropriate for your facility and its specific function, operational and technical requirements, whilst ensuring business continuity.

We focus on the delivery of a premium product to our clients, which in the long term is proven to be the most cost effective option. We also recognise that it is not only engineering that makes for an effective outcome. Engineering needs to be backed up by astute management and understanding of the scope and deliverables.

We work very closely with the other services engineers in the industry, and understand the integration of services within the facility; specifically mechanical and electrical services. Having this high degree of understanding enables us to anticipate the specific services the other engineers require to support their systems within the facility.

Our methodologies recognise the importance of pre-planning as a continuous risk mitigation measure, and therefore we focus on detailed pre-planning and management to protect business continuity and enable the maintenance of operational buildings.

COMPANY STRUCTURE AND EXPERTISE

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Given our project experience, we are well versed in the different procurement and bid processes, and with our understanding of the objectives and required outcomes, we are best able to customise our service and deliverables to suit the project. Our customised deliverables also extend to complex brownfield and greenfield projects.

We see it as vital to identify specific project risks and general tender risks that pertain to a project and the selected tender delivery method. As part of our customised deliverables we focus on de-risking the items we identify prior to the project tender being delivered. We identify risk through use of our design intelligence and understanding of the tenderers' needs, we therefore aim to ensure the most accurate cost allowances by the tenderer.

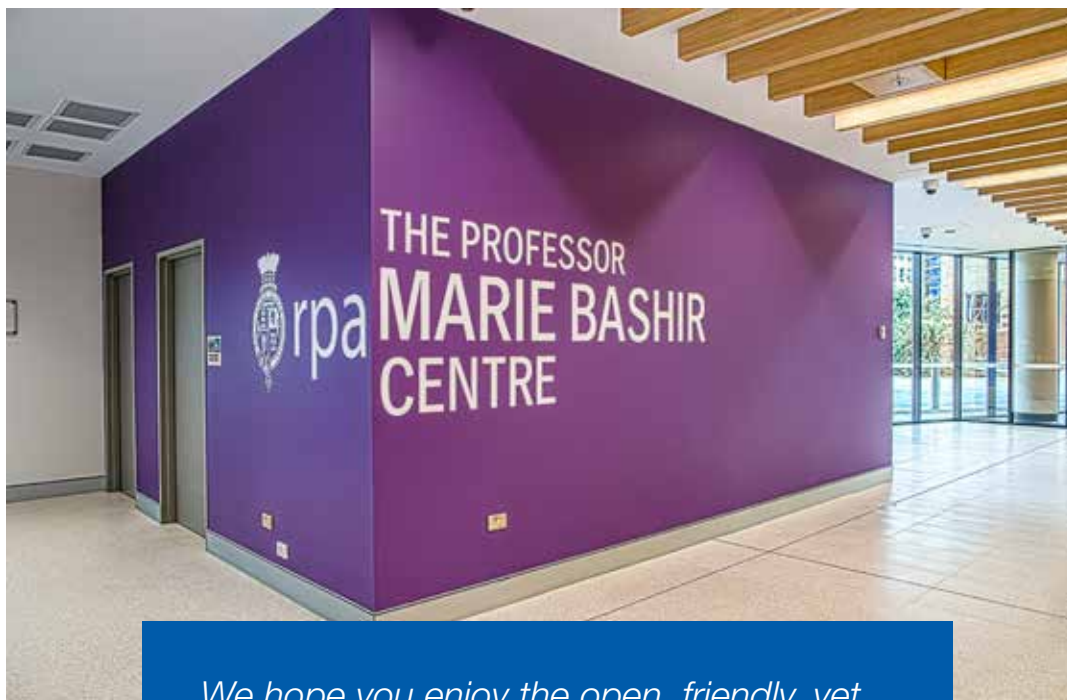
To maintain our high quality outcomes, we retain and expand our expertise by investing in our staff's professional development. We involve

ourselves intensively within the broader engineering community and research institutions, and contribute to the development of industry technical standards.

We are constantly striving for excellence and our company's objectives reflect our continued pursuit toward this aim.

Our objectives are:-

- To produce and deliver excellent cost effective design;
- To provide dependable professional service with unquestionable integrity;
- To continually research and develop new design techniques;
- To maintain our position as leaders in our profession.



We hope you enjoy the open, friendly, yet professional and skilled culture of our team, when embarking on your next project.

HYDRAULIC SERVICES

Warren
Smith &
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Warren Smith and Partners hydraulic services team has a proud history of providing accurate and cost effective innovative documentation and advice including negotiations with authorities for cost saving dispensations for our clients. The excellent and thorough service we provide is reflected in the number of repeat clients that our practice continues to work closely with.

Hydraulic services specialise in:

- Cold water services
- Heated water services
- Non-drinking water services
- Sanitary plumbing systems
- Sanitary drainage systems
- Roof drainage systems (internal to the building)
- Surface and subsurface drainage systems (internal to the building)
- On-site wastewater management systems
- On-site liquid trade waste systems
- Natural gas services
- Liquid petroleum gas services
- Speciality water systems, sanitary plumbing systems, sanitary drainage systems and on-site treatment systems for healthcare facilities

Software for design and analysis:

- Revit – design documentation and analysis
- Pipes building services – water pipe network hydraulic analysis
- Gas – gas pipe network analysis
- HW – domestic hot water system fuel energy analysis

Key personnel

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FIRE SERVICES

Warren Smith and Partners fire services team has a long and proud history of providing accurate and cost effective documentation and advice including negotiations with authorities for cost saving dispensations for our clients.

Our practice provides a fully integrated design of fire sprinkler services, emergency warning services, fire alarm and control wiring within our documentation package to ensure that there are no loose ends between fire electrical and mechanical services which provides a major benefit in cost savings to our clients.

All fire sprinkler pipework sizing is hydraulically calculated by our engineers with computer software to ensure fire sprinkler systems will function correctly and in the most efficient way.

The excellent and thorough service we provide is reflected in the number of repeat clients that our practice continues to work very closely with.

Fire services specialise in:

- Fire sprinkler systems including deluge and dry pipe pre-action systems
- Combined fire sprinkler / hydrant systems for high rise buildings
- Fire hydrant systems
- Fire detection and alarm systems
- Fire hose reel systems
- Portable fire extinguishers
- Emergency warning and intercom systems (EWIS)
- Gaseous fire suppression systems
- Special hazards for fire protection including kitchen hood suppression systems
- Special hazards fire sprinkler deluge systems including fire detection and alarm systems in association for fire protection of road and rail tunnels

Software for design and analysis:

- Revit – Design documentation and analysis
- Hydra cad – Sprinkler pipe network analysis
- Hyena – Fire services hydraulic analysis

Key personnel

Ian Stone

Expertise Leader & Project Manager – Fire

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CIVIL SERVICES

Warren Smith and Partners civil team was established in 1994 and has completed a range of projects in NSW, ACT and QLD.

Services are provided from master planning, feasibility and development applications, authority negotiations and approvals from design through to construction.

The civil group is registered with Sydney Water Corporation, Hunter Water Corporation and Government with a mission to provide thorough design and prompt service to our clients.

Civil services specialise in:

- Hydrological, hydraulic and river systems modelling
- Flood studies
- Design of hydraulic structures, culverts, weirs etc
- On site detention modelling and design
- Water sensitive urban design (WSUD)
- Rainwater reuse modelling and design
- Urban drainage and overland flow design
- Stormwater management plans
- Road geometric design
- Flexible and rigid pavement design
- Intersection and roundabout design
- Linemarking and street signage design
- Bulk earthworks
- Erosion and sedimentation management plans

Software for design and analysis:

- CIVIL 3D and ARD – survey, road geometric, bulk earthworks and drainage analysis
- DRAINS AND ILSAX – hydrologic, hydraulic and on-site detention analysis
- HEC RAS – river and channel hydraulic analysis
- MUSIC – water quality modelling
- LiDAR – 3D satellite imagery
- CIRCLY – road pavement design
- Pipeclass – pipeline design

Key personnel

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WATER AND SEWER ENGINEERING

Sydney Water Corporation Accredited Water Servicing Co-Ordinator And Designer

Warren Smith & Partners is a licensed Water Servicing Coordinator and designer. We co-ordinate, project manage, design and control construction quality for a wide range of projects.

Water and wastewater engineering:

- Feasibility, strategy studies and investigations
- Water network modelling and design
- Effluent reuse systems
- Sewerage reticulation and distribution pipe networks

The types of infrastructure services include:

- Watermains
- Sewer mains
- Pumping stations
- Stormwater channels
- Amplifications and renewals
- Master planning

We offer a full in house service by our expert team which is quality assured by professional engineers.

Management:

- Project management services specialising in civil works, water and sewerage infrastructure.

Sydney Water Section 73 Application

A Section 73 Certificate is issued by Sydney Water confirming that sewer and water is available for connection at a development site. All large scale commercial and residential developments require a Section 73 Certificate.

Warren Smith and Partners is a listed Water Servicing Co-ordinator with Sydney Water and can undertake the following:

- Submit a Feasibility Application with Sydney Water to obtain requirements prior to a Development Application submission
- Submit an application for a Notice of Requirements once the Development Application is submitted
- Review the requirements and advise on any upgrades or adjustments to Sydney Water infrastructure
- Undertake the design (if required) and project manage the construction
- Submit all necessary paperwork to obtain the Section 73 Certificate

To start the process, you will need to submit relevant architectural plans and the Development Consent for review. There are some developments that are exempt from requiring a Section 73 Certificate and these can be advised by contacting us.

For a Sydney Water Section 73 Application go to the **Express Section 73 Form radio button** on our website. For more information about the Section 73 Application process, please contact Warren Smith & Partners on (02) 8234 8611 or jane@warrensmith.com.au.

Sydney Water building plan approval

Warren Smith and Partners provides approval and stamping of building plans. We undertake this service for sewer assets up to 300mm in size and provide the following

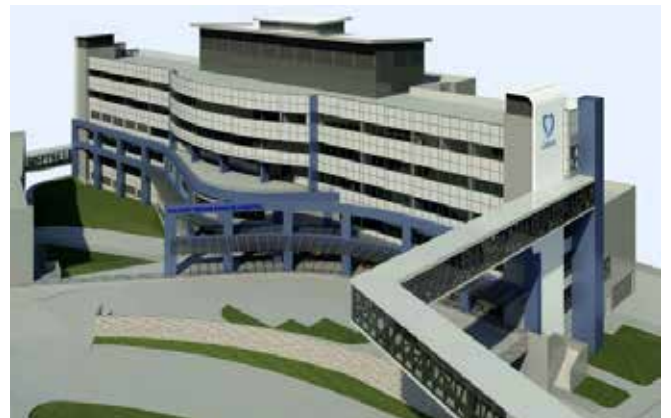
- Consultation with Sydney Water Corporation
- Receipt of the required documents including the Development Application, architectural and structural drawings
- Coordinate the application for the Service Protection (Sewer Peg Out) Report
- Coordinate to show the relevant Sydney Water sewer on the plans
- Complete the Certification form
- Submit a complete package to Sydney Water Corporation for approval

For a Sydney Water Building Plan Approval Application go to the **Express Building Plan Approval radio button** on our website or Contact us. For more information about the Building Plan Approval process, please contact Warren Smith & Partners on (02) 8234 8611 or jane@warrensmith.com.au.

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PROJECTS



PROJECT OVERVIEW

Project Name	Hydraulic	Fire	Civil	Water Servicing Co-ordinator	Master planning	Concept Design	Schematic Design	Design Development	Contract Documents	Construction Administration	Peer Review	Workshop Drawings	Bid Documentation	Remediation
International Departures – Sydney Airport	✓	✓				✓	✓	✓	✓	✓				
Charles Ulm Building – Sydney Airport	✓	✓				✓	✓	✓	✓	✓				
Mercedes Benz – Sydney Airport	✓	✓	✓	✓		✓	✓	✓	✓	✓				
Airport Qantas Fitout – Stage 2 – Sydney Airport	✓	✓				✓	✓	✓	✓	✓				
Sydney Airport Centre – Stage 4 – Sydney Airport	✓	✓				✓	✓	✓	✓	✓				
Sydney Airport Centre – Stages 5 & 6 – Sydney Airport	✓	✓				✓	✓	✓	✓	✓				
Sydney Airport Centre – Stage 2 – Sydney Airport Park Royal Hotel	✓	✓					✓	✓	✓	✓				
Head Office for Australian Federal Police & Australian Customs – Sydney Airport	✓	✓				✓	✓	✓	✓	✓				
Sydney Airport Centre – Domestic Airport Fire Hydrant – Sydney Airport		✓				✓	✓	✓	✓	✓				
Sydney Opera House Upgrade Works	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓		
Art Gallery, NSW	✓	✓	✓		✓	✓	✓	✓	✓	✓				
The Concourse, Chatswood	✓	✓	✓		✓	✓	✓	✓	✓	✓				
Barangaroo South Commercial Towers T1, T2 & T3	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓		
Barangaroo Headland Park	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		
Darling Walk Redevelopment, Harbour Street, Sydney	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		
Liberty Place, 161 Castlereagh Street, Sydney	✓	✓		✓	✓	✓	✓	✓	✓	✓				
Mid City Centre Redevelopment, 420 George Street, Sydney	✓	✓		✓	✓	✓	✓	✓	✓	✓				
Charles Perkins Centre, The University of Sydney	✓	✓		✓							✓			✓
Australian Institute for Nanoscience, The University of Sydney	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Materials Science & Engineering Building, UNSW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Tyree Building, UNSW	✓	✓		✓	✓	✓	✓	✓	✓	✓				
Sussex Street Hotel, 65 Sussex Street, Sydney	✓	✓			✓	✓	✓	✓	✓	✓				
ICC Hotel, Darling Harbour	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓		
Sheraton Hotel, 161 Sussex Street, Sydney	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓		
Sydney Airport – new Sydney Water watermain 1.1kL					✓									
Review of fire sprinkler service replacement in baggage handling area – Sydney International Airport											✓			✓



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