

Introducing

Matthew Gay

Position

Director / Senior Structural & Civil Engineer

Professional Qualifications

B.E. (Hons) University of Newcastle
(Civil Engineering)



Summary of Experience

Matthew has over 12 years of Structural Engineering experience and has been involved in a number of major projects in the Hunter and surrounding regions. Through these projects he has gained extensive experience in conceptual and detailed structural analysis and design, construction methodology and site works.

Matthew's involvement in all key stages of major projects, from development to delivery, allows him to deliver integrated and fully coordinated structural engineering solutions to the client.

Matthew has worked in design and construction across a number of sectors including industrial, commercial, residential, rail, road, temporary works, mining and electrical infrastructure.

Professional Experience

2018 – Present

Director / Senior Structural & Civil Engineer
MPC Consulting Engineers Pty Ltd

2016 – 2018

Associate / Senior Structural & Civil Engineer
MPC Consulting Engineers Pty Ltd

2013 – 2016

Senior Structural & Civil Engineer
MPC Consulting Engineers Pty Ltd

2009 – 2012

Structural Engineer
Robert Bird Group Pty Ltd

2007 – 2009

Graduate Engineer
Robert Bird Group Pty Ltd

Examples of projects for which Matthew has provided design and management expertise include:

Commercial and Residential Projects

- 1. Newcastle Royal Hospital Site – Apartments, Newcastle Beach NSW**
Detailed design and site construction phase engineering of three tower buildings over a double basement car park. Towers one and two comprise of a six and eight-storey residential building respectively with commercial space at ground level. The third tower is a sixteen storey building with combined hotel accommodation and private residential apartments.
- 2. Residential Developments, Hunter Region – NSW**
Projects include both the conceptual and detailed design of new and the assessment/upgrade for extensions to residential properties of various private clients.
- 3. Coles Retail Development, Port Macquarie NSW**
Structural design team leader managing the delivery of a new Coles supermarket, specialty shops and car park. The project includes a two-storey commercial development with a basement car park, retail level and roof top car park.
- 4. Cyclone Yasi Inspections – Far North Qld**
Inspection and reporting of structural elements of the properties that had undergone damage during the Cyclone Yasi event in North Queensland in 2011.

Industrial Projects

- 1. Fuchs Australasia NSW headquarters - Beresfield**
Procurement through to delivery of a \$33 million development located in Beresfield consisting of five main sections; state-of-the-art oil blending plant, warehouse/distribution centre, large scale tank farm, a multistorey office building and a single story laboratory.
- 2. House with No Steps – Commercial Laundry, Warabrook - NSW**
Structural engineering design of a new addition to a commercial laundry to include a new automated overhead laundry bag monorail system, lifting pit and sorting pit. Role included project Management overseeing all aspects of the Structural engineering design, analysis and documentation.
- 3. Tyree Industries Workshop – Braemar NSW**
Structural design and documentation and construction services for a new electrical transformer fabrication Workshop including 63T overhead crane and Office facilities.
- 4. Industrial Design Workshop at University of Newcastle - Newcastle Campus - NSW**
Design and site phase advice of an industrial building for use by engineering students at the University of Newcastle. It is a workshop with wood, metal and plastic working equipment and has part mezzanine levels.
- 5. Power Substation upgrades – NSW & ACT**
Design of new upgrades for the 330,000 volt substation at Williamsdale 132,000 volt Substation at Beryl NSW. The works include both civil and structural design from bulk earthworks and

drainage to footings and major steelwork components for the substation gantry structures.

6. Noamundi Train Loader (TLO) Site – Schenck Process, India

Structural design of a coal train loading facility and bulk solid containers (surge bin and weigh bin) for discharge loads for the specific bulk material.

Government / Health Projects

1. Rutherford Glen New Aged Care Facility – NSW

Structural engineering design of a new two-storey aged care facility providing 144 beds and ancillary facilities. Design included conventionally reinforced suspended concrete slabs, load bearing masonry walls, footings, slabs on ground and structural steelwork. Construction phase services included site inspections and advice.

2. Belmont Police Station - NSW

Structural Engineering Design and Documentation and Construction Services for a new 3 storey Police Station including underground basement carpark.

3. Mater Hospital Redevelopment, Newcastle – NSW

Detailed design of concrete and steelwork elements for the \$150 million hospital redevelopment project involving extensive coordination and reconfiguration of existing structure to maintain hospital operations during the delivery program. Works included a new emergency and extensive care unit, operating theatres, coronary care unit, 3 new wards, chemotherapy and radiation bunkers, and expansion of mental health facilities and cancer services.

4. Ourimbah Exercise Science Facility – NSW

Detailed design and site phase inspections for the two science buildings. Both buildings are two-storey and the larger of the two incorporates a 100 metre sprint track to be used by the client's researchers.

Road and Temporary Works Projects

1. Sapphire to Woolgoolga Highway Upgrade Temporary Works - NSW

Temporary works design package involved the design of formwork, lifting beams, scaffolding, walkway platforms, hoardings and fall restraint as well as analysis of construction methodologies for bridge structures. Design of Sheet piling, site specific steelwork arrangements and earthworks for the staged installation of numerous culverts and fauna crossings.

2. Various Scaffold Projects – NSW

Detailed design for a large range of scaffold systems for use in major construction. These include suspended platforms and scaffold for Port Authority conveyor maintenance, RTA bridge maintenance and lattice tower refurbishment.

3. Upper Hunter Valley Alliance - NSW

Detailed design and construction phase inspections of temporary formwork systems for use in construction. These include proprietary formwork and propping systems for culvert construction and installation in rail refurbishment projects in the Hunter Valley.