



BECENTIA
CONSULTING ENGINEERS

CONTACT

 07 2802 1850

PROFESSION

Electrical and Lighting
Engineering

QUALIFICATIONS

BEng (Hons) Electrical
Engineering

Masters of Design Science
(Illumination Design)

RPEQ, RPEV, CPENG, NPER

PROFESSIONAL ASSOCIATIONS

MIEAust

Engineers Australia

DIRECTOR

CAITLYN YOUNG

Caitlyn prioritises regular interaction with her clients, and this provides her with perspective. She believes the people you are designing for are the people you should be designing with.

EXPERIENCE

Caitlyn is enthusiastic about electrical engineering and believes it is her responsibility to provide an electrical design which is both functional and economic. She believes practical design and construction approaches should be integrated into all aspects of a project at the very early design stages so that a project can be delivered in a manner which not only meets the original design intent but also considers the users and maintainers of the space.

Caitlyn specialises in Building Services Project Management, Electrical Engineering Services, Architectural Lighting Design, Sustainable Lighting Design, Lightning Protection and Health Electrical Engineering.

RELEVANT PROJECTS

Ipswich Hospital MSB-2 Replacement, Ipswich, Queensland

Client-side electrical engineer for the replacement of the existing MSB-2 serving approximately 1/3 of the Ipswich Hospital. Caitlyn's role was to assist the client with the review and delivery of replacement of the Main Switchboard and minimise interruptions to the existing facility. During construction of the new MSB, the existing MSB failed and forced the hospital to operate on Generator for 3-4 weeks full time which required Caitlyn to provide immediate, on the ground advice to ensure all buildings were up and operational on the day of failure, ascertain the cause of the failure and instigate a solution, and to assist with any unexpected failures throughout this period.

West Moreton ICC Switchboard Assessments

Lead Electrical Engineer for the assessment of all existing electrical infrastructure across three (3) buildings within the West Moreton Hospital and Health Service portfolio. Building age ranged from 1970 to 1990 with most of the electrical assets matching the building age. Caitlyn's role included all on site assessments and the provision of a detailed report defining items of immediate risk/rectification, items which needed to begin planning for rectification and items which should be planned for a 5-10 year replacement period.

Transport and Main Roads Main Switchboard Review and Approval

RPEQ Engineer for the review and certification of a new Transport and Main Roads Switchboard. The role included calculations for thermal properties of the switchboard to AS/NZS 60890, discrimination settings of circuit breakers, FAT test & compliance with AS/NZS 61439 and TMR Standards



ADDITIONAL RELEVANT PROJECTS

Gold Coast City Council Aquatic Centre Switchboard Upgrades

RPEQ Engineer for the upgrade of existing switchboards to accommodate heat pump replacements and minimise impacts on the existing switchboards. The project involved AS/NZS 60890 calculations, discrimination studies and compliance reviews to both AS/NZS 61439 and AS/NZS 3439 based on the particular switchboard. Through her site involvement, Caitlyn was also able to identify compliance issues to AS/NZS 3000 which had been in evidence for over 8 years to the general installation and prevent future site issues stemming from these non-compliances.

Logan Central Health Facility Mechanical Services Switchboard Upgrade

RPEQ Engineer for the replacement of a 630A mechanical services switchboard due to a site chiller upgrade. The project involved discrimination studies and compliance reviews to AS/NZS 61439 including final RPEQ sign off of the proposed switchboard. Through her site involvement, Caitlyn was also able to identify compliance issues to AS/NZS 3000 which had been in evidence since 2016 to the general installation and prevent future site issues stemming from these non-compliances.

West Moreton Health Plaza Electrical Infrastructure Assessment

Lead Electrical Engineer for the assessment of the existing electrical infrastructure within the West Moreton Health Plaza. The complexities on this project involved the age of the building (1960s), the continued use of the original electrical infrastructure and the Main Switchboard shared with the local underground train station. Caitlyn's role included all on site assessments of all electrical equipment and the provision of a detailed report defining items of immediate risk/rectification (with a particular focus on aged switchboards and aged cabling), items which needed to begin planning for rectification and items which should be planned for a 5-10 year replacement period.

Private Health Facility – Switchboard Failure Investigation

An existing health facility underwent a catastrophic failure of a 1250A bus plug without tripping of the existing circuit breaker. Caitlyn's role was to investigate the existing Main Switchboard, review the downstream services for possible causes and to provide advice on the methodology for bringing this circuit breaker back online at full capacity while maintaining compliance with AS/NZS 3439 and AS/NZS 61439.

Mackay Base Hospital Redevelopment, Mackay, Queensland

Lead Electrical Engineer for the design and construction of a \$400 million hospital redevelopment. Caitlyn's role involved the design development of the electrical services, liaison with the hospital user groups to define the specific needs of the spaces and to continue the project through construction via direct communication with the onsite team.

Gold Coast Private Hospital Stage 1, Gold Coast, Queensland

Building Services Project Manager and Lead Electrical Engineer for the new Gold Coast Private Hospital. This project involved the design and construction assistance of a 284 bed hospital with multiple medical specialities requiring detailed design and coordination.

Gold Coast Aquatic Centre – Commonwealth Games

Building Services Project Manager, Electrical Engineer and Sports Lighting Engineer for the Gold Coast Aquatic Centre for the Pan Pac Games and Commonwealth Games. This project involved the design of an “everyday” solution and a “bump in” solution for normal operation and games overlay