



Name:	William McCormack Stage 2	Client:	Laing O'Rourke
Specifying Authority:	Projects Services	Site Location:	Cairns, Australia
Value at Completion:	\$6.5 million	Year Completed:	September 2010

Environmental Initiatives: Designed to achieve 6 Star Green Star–Office Design v2 rating, representing 'World Leadership' in sustainable design. Also Office As-built v2 and Office interiors v1.1.

Project Description: William McCormack Stage 2 is an 8 storey office building, located adjacent to the Stage One building in Cairns' CBD. Haden's construction team utilised leading edge technology and engineering principles to reduce both the energy consumption and CO2 emission of the mechanical services system.

This includes the use of a high efficiency chilled water plant that operates during the night (off peak) when power loads are low, then utilising a thermal energy storage tank to store and circulate the chilled water during peak operating hours during the day.

To achieve the efficiencies required, Haden installed a central Building Management System (BMS) integrating all mechanical, electrical, lift, security and access systems. The scope of Mechanical Services included the following:

- Air cooled chiller plant and associated equipment
- Chilled water pumping and reticulation systems
- Thermal Energy Storage (TES) tank
- New air conditioning and ventilation systems
- Interface with existing Stage 1 chilled water cooling and electrical services systems
- New Mechanical Services Switchboard (MSSB-1) and associated wiring and controls
- Standby diesel power generator, fuel system, and associated maintenance gantry.