

CASE STUDY

MIRRABOOKA BOREFIELD SCADA UPGRADE

PROJECT PROFILE

The Mirrabooka Borefields (Eastern and Western) are part of the overall Mirrabooka Groundwater Scheme.

The borefield collection system is comprised of 33 operational bores, which all deliver water to the Mirrabooka Groundwater Treatment Plant (GWTP).

PRODUCTS HANDLED

- Ground Water

WATERCORP STANDARDS

- DS 42-03 - SCADA Radio Equipment and Installation
- DS 42-04 - Communications Power Supplies
- DS 80 - WCX CAD Standard
- DS 20 - Design Process for Electrical Works
- DS 24 - Electrical Drafting
- DS 26-09 - Type Specification for Low Voltage Switchboards - General Requirements

PRODUCTS USED

- Schneider SCADAPack 535E
- 4RF Aprisa SR+ IP Radios
- Weidmuller DC UPS



SCOPE OF WORKS

The existing hardware and software in these sites have been deemed obsolete and in need of an upgrade which involved:

- Upgrade of existing PLC, RTU and Serial Radio
- Modification of existing panel wiring
- Upgrade of RTU code to latest standard
- Update of bore standard SCADA template
- Installation of new RF Infrastructure
- Installation of new Gateway Cubicle in the GWTP

OUR INVOLVEMENT

Perform in-situ upgrade within the bore control and instrumentation cubicles involving:

- Site Audits
- Electrical design to Water Corporation Standards
- Replacement of existing eNet RTU, Koyo PLC and Serial Based Radio with Schneider Electric SCADAPack 575 RTU and 4RF SR+ IP Radio
- Upgrade of IO to latest Water Corporation Standards
- Modification to Motor Control Circuits
- Installation of new RF Infrastructure
- Design, supply and installation of new Gateway Cubicle in the GWTP
- Onsite commissioning
- As-built Documentation