

### PROJECT **DETAILS**

PROJECT LOCATION: Malabar, NSW

COMMENCEMENT DATE: March 2015

COMPLETION DATE: March 2016

TYPE OF CONTRACT: Low Voltage

CONTRACT VALUE: \$1 Million +

PROJECT MANAGER: Kevin Raffler

E&I MANAGER: Phil Tilden

### OVERVIEW TRADE PACKAGE

The Malabar Process and Reliability/ Renewal (PARR) Improvement Project will provide Malabar Waste treatment Plant with the appropriate process capability, reliability and operability to ensure its compliance with current EPA licence requirements to 2031, and ensure the continued protection of beach water quality and improve operational conditions.

Sydney Water granted Star Group the contract to implement the entirety of the Electrical Installation Works for:

- The Screenings & Grit Outloading Area and
- The Biosolids Dewatering & Outloading Area.

### COMMERCIAL FACTORS

The scope of the Malabar PARR Project includes the supply and installation and commissioning of electrical and control for plant and equipment.

The Screenings & Grit Outloading Area and The Biosolids Dewatering & Outloading Area.

Complete electrical installation of ALL electrical, instrumentation, control and related equipment, consisting of

- Supply and installation of Cable Supports – Aluminium NEMA 2 Cable ladder
- Installation and termination of electrical, instrumentation and controls cables between the Main Electrical Centre and the Washpress Room, Vehicle Tunnel 3, Conveyor Portal Building, Screenings Bin Area, Grit Washer Area and Grit Bin Area, Biosolids Bins, Conveyors and Outloading.



# PROJECT CHALLENGES

- Installation and termination of earthing and equipotential bonding conductors
- Installation of General Light & Power
- Installation of Flow & Pressure Switches, Level Sensors, Limits & warning devices.
- Supply and installation of field handstations
- Hazardous Area Equipment, Terminations & Inspections
- Point-to-point testing of all control system signals
- Installation of new switchboards including:
  - Biosolids Motor Control Centre
  - PLC Control Panel
  - PLC Power Supply Panel
  - Communications Panel
  - Four (4) new free-standing variable speed drives
  - Two (2) centrifuge control panels
  - One (1) weight controller

- Interaction with an operational Waste Water facility.
- Contact daily with Waste Products
- Program Delays (Construction Activities)
- Environmentally sensitive flora and fauna
- Material Long Lead Times

## PROJECT SPECIFICS

- Installation of over 500m of NEMA 2 Aluminium Cable Ladder
- Over 1,500 terminations
- Installation of over 15,000 m of power, instrument and control cabling
- Installation of over 250 Instruments, motors and devices.

