



DEFENCE

AURECON RAAF DARWIN SEWER WORKS

INFORMATION

PROJECT NUMBER
61.10.0156

LOCATION
Northern Territory

CONTRACT DURATION
Nov 20 – Aug 21

VALUE
\$1,879,272

CLIENT CONTACT
Jodie Crawley
0411 843207

SERVICE OFFERING

Civil works
Drainage system
Electrical system installation and upgrades
Hydraulic system installation and upgrades
Sewerage system upgrades

PROJECT SUMMARY

Electrical and hydraulic upgrades to fifteen sewer pump stations. Thirteen of the pump stations consist of single pumps and local control panel and the remaining two pump stations have dual pumps and local control panels which operate in a duty/standby configuration. Key hydraulic scope items include the provision of overflow storage facilities to the two larger pump stations. A new telemetry system was installed to report real time pump status and alarms to ensure timely responses and reporting.

SCOPE OF WORKS

Hydraulic Scope

- Provision of overflow storage to one pumping station and one new combined pumping station and emergency storage structure.
- Modification of one pumping station into a valve chamber.
- Provision of duty/standby pumps to two pump stations.
- Replacement of corroded and damaged pump station hardware, pipes, fittings and other accessories.
- Provision of discharge pipework and fittings, including the provision of external valve pits.
- Replacement of all pumps.
- Epoxy lining concrete chambers.
- Provision of new access covers and lids to pump stations.
- Removal of abandoned septic tank.

Electrical Scope

- Provision of electrical services to support upgrades to all Sewage Pumping Stations (SPS), including local control panels, level switches (float type), power and control cables, motors, and mini UPS.
- Provision for installation of new telemetry hardware systems at all SPS.
- Installation of new hardware including receiver/transmitter modem, antenna, telecom cabling, supporting structure to fix antenna, and radio survey.
- Provision of new PLC and touch screen Human Machine Interfaces (HMIs) at EMOS office (C0120) and BCP (C0121) for monitoring, acknowledging and clearing alarms received from each SPS.

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HIGHLIGHTS

- Provides stakeholders with real time telemetry and monitors pump hours, tank levels, overflow levels.
- Providing a reliable system.
- Reduction in maintenance requirements for EMOS and real time reporting of faults.



Sewer pump chamber



Sewer overflow chamber



Control panel



Overflow chamber