

Project Role: Design of Sewer Rising Main & Pump Stations

Construction Cost: \$4,500,000

Client: Gold Coast Water



Project Description:

Yeats Consulting was commissioned by Gold Coast Water to undertake detailed design of stage 2 of the overall Helensvale Sewerage Upgrade Scheme. Stage 2 consisted of the design and documentation of 1.2 kilometres of rising main and gravity sewer between the existing OX19 and N16 pump stations.

The Helensvale Sewerage Upgrade Scheme is proposed due to the lack of existing system capacity, damaged services, overflow issues and anticipated increase in hydraulic load in the system from wastewater pump stations N16 and OX19. Wet weather storage at both N16 and OX19 pump stations have been deemed inadequate.

This project required the design and documentation of a new sewer rising main and gravity main between wastewater pump stations N16 and OX19, the replacement/upgrade of pump stations N16 and OX19 and the installation of sufficient storage at these sites.

The rising main and gravity main included a complex route through environmentally sensitive areas, under existing rail and road corridors and adjacent to significant waterways. This sewer alignment also had to be designed to accommodate the future extension of the recycled water main.

Yeats Consulting Involvement:

Yeats Consulting was the principle consultant for managing the delivery of the design and documentation package to complete the Helensvale Sewerage System upgrade. Their scope of works included engineering design, project management, cost estimate of works, preparation of contract specifications and obtain relevant statutory approvals.

Project Summary:

- 1.2km of sewer rising main and gravity main;
- 100m of tunnel boring under Queensland Rail corridor;
- Replacement/Upgrade of existing N16 and OX19 pump stations;
- Emergency storage tanks;
- 11kV electrical installation to new 750kVA transformer;
- Significant input required to obtain various statutory approvals from Main Roads, Queensland Rail, Gold Coast City Council, and the Department of Natural Resources and Mines.