



QCLNG PIPELINE FOC INSTALL

IN 2011, Dunstans Construction Group was awarded a contract to install 540km of 6 core, 48 fibre, armoured Fibre Optic Cables (FOC) for the largest diameter gas pipeline project ever commissioned in Australia.

Due to challenging geology and diverse geographical characteristics – from semi-urban farmland and towns to the Great Dividing Range – a diverse range of installation methodologies were required.

- A D10 Bulldozer prepared the FOC alignment. An in-house designed and constructed Zero-Tension Plough system attached to a D7 Bulldozer simultaneously installed the a 50mm HDPE split duct, FOC and marker tape to a depth of up to 1500mm. When geology dictated, a rock hammer opened up the trench.
- Horizontal Directional Drills completed more than 100 crossings of roads, creeks and buried utilities including live gas, power and communications lines.
- Excavators installed pits, opened up rock areas and trenched dry watercourses and secondary roads, as well as compacting and re-instating the right-of-way after the cable was installed.
- A specialised 4WD splicing van with state-of-the-art equipment followed the plough, splicing the cable and terminating connections in electrical rooms along its route. End-to-end testing was then completed to ensure the integrity of the installed cable and compliance with specification.

The project is the largest FOC turnkey installation we have performed to date, with great success. The project finished on time and on budget with no reported safety issues.

Project facts

Client

MCJV (MacDow and CCC Joint Venture) for QGC

Description

Installation of a 540km network of FOC and associated infrastructure.

Project Date

November 2011 – October 2013

Project Location

Queensland

Fibre Type

6 core, 48 fibre armoured cable

Fibre Length

540 km

Project Value

\$10 million

DUNSTANS

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