

ARROW ENERGY / CPECC WDS JV

PROJECT: DAANDINE EXPANSION PROJECT CENTRAL GAS PROCESSING FACILITY INLET SEPERATOR

LOCATION: DALBY, SURAT BASIN QLD

VALUE: \$0.5 MILLION INCL.

IN BRIEF

Based on the Pipemech teams knowledge and experience in pipeline installation and deep excavations in confined/restricted areas on operational sites, CPECC WDS JV requested Pipemech's assistance with the installation methodology, risk management, estimating and installation supervision of the Daandine Central Gas Processing Facility (CGPF) gas inlet separator pipe.

Pipemech developed and assessed 7 separate options and estimated 2 of these prior to finalising the agreement of EPC Clough Amec JV (CAJV) and Arrow Energy for the selected installation methodology.

CUSTOMER BENEFITS

Pipemech's experience and input into this project allowed for the safe, on time and under budget installation of this complex element of work within a live gas facility.



Consideration to the proximity of existing life gas infrastructure, as close as 1.4m to the proposed new pipe, underground electrical cables at the edge of the excavation and installation of the inlet pipe under the CGPF Flare line was given to the safe methodologies and risk management

Procedures employed prior to and during installation by Pipemech.

Pipemech proposed the installation of the pipe within a 4.7m deep trench, straight walled on one side to avoid impacting existing infrastructure and 1 bench on the opposite side to allow for personnel access to the side of the trench. This trench arrangement combined with the use of a large trench box at the gathering tie in under the CGPF Flare line, accurate excavation and flowable bedding and padding allowed for the elimination of the entry of personnel into the trench until within safe depths.

Vacuum excavation and use of zero slew excavators was employed to minimise the risk of live infrastructure strikes during the excavation of the trench.

Using a 50t crane and 11m spreader bar Pipemech was able to ensure the pipe was lifted in an approved manner and installed at exactly the correct position for the gathering and CGPF tie ins.

TECHNICAL FEATURES

- + 20m long, 5T, 100mm dia. HDPE pipe with 600 and 315mm dia. risers and 80mm dia. drain line, 5m height when fabricated
- + 28m long 4.7m deep excavation for inlet separator pipe
- + 25m long gathering tie in trench
- + Pre installation fabrication of risers, drain line and gathering tie in
- + Excavation through fill, clay and rock
- + Constrained site with just 1.4m clearance to existing live infrastructure