

Hegigio Pipe Bridge

PROJECT DETAILS:

Location:	South East Mananda Papua New Guinea
Contract Value:	A\$20 million (2004)
Contract Period:	December 2004 - December 2005
Safety Statistics:	Manhours: 107,813 LTIFR: 0



CLIENT: Oil Search Limited

Scope of Work:

Clough is undertaking a technically challenging contract for client Oil Search to build a 470 metre-long pipe bridge in the rugged Southern Highlands of south east Mananda, Papua New Guinea.

The scope of work entailed the supply, fabrication, assembly and erection of a cable stayed suspension bridge spanning across the 500 metre deep Hegigio Gorge. Work included hydrocarbon transportation pipes, linking pipelines from the south east Mananda oil fields to the existing Agogo and Kutubu processing facilities.

The bridge comprises three catenary cables, two horizontal and one vertical cable, which are joined together by a series of wire stays and cross beams. Two parallel runway beams connect the series of cross beams together, which allows access along the bridge via a trolley. The main cable is connected to a 33 metre high A-frame tower at the southern abutment, and a 4 metre high tower at the northern abutment.

The southern abutment is being constructed within an existing live well pad area and due to extreme terrain conditions, access to the northern abutment is via helicopter.

Innovative temporary works structures were designed to facilitate the construction process. This included two temporary platforms bolted to the top of the south tower and two 12 storey 9 metre by 3 metre access towers. These access towers were also designed to allow the south tower A-frame to be raised using a specifically designed reeved system.

Clough and client Oil Search had an arrangement to undertake the project through a relationship form of contract agreement.