



## PROJECT SHEET

# Engineering Support for State Water Corporation

A state government water corporation needed a means of transferring maintenance personnel and equipment down a 35m shaft inside a dam wall, which was subject to flooding. Previous attempts had been made by the client's staff to find a solution but poor specifications and confusion had resulted in expensive and vague quotes. Carnot consolidated all previous work and, working closely with the client, developed a clear and concise technical specification. Carnot then provided technical support through the tender and implementation phases. A novel rack & pinion type lift was successfully installed in accordance with relevant codes and standards.

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Creating clever engineering outcomes, for a diversity of clients across multiple industries.

### TECHNICAL SPECIFICATION

It was vital to identify the most appropriate standards (crane vs lift codes) – which was not immediately obvious. A functional specification was developed that didn't stipulate a particular design (e.g., rack & pinion vs cable vs hydraulic) allowing a variety of solutions to be proposed and compared. The client's specific site requirements and more general equipment requirements were integrated into the final specification.

### TENDER SUPPORT

Carnot generated a contract for the project based on AS4300 General conditions of contract for design and construct, which incorporated the client's policies around equal opportunity, supplier approval, etc. Carnot then responded to technical questions from tenderers, checked and refined Inspection & Testing Plans (ITPs), and evaluated bids to enable an award decision.

### IMPLEMENTATION

Carnot ensured design registration in accordance with OH&S regulations, review of design calculations and attendance at the supplier's factory to witness inspection and testing against the ITP. This included checking key dimensions, safety systems & interlocks, material grades against OH&S regulations.

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