



THE SITE

A bird's eye view shows the site. In the background is the Musandam Gas Plant (MGP). In the foreground is an overall view of the plot that was levelled to build upon the new powerhouse and its facilities.



TIERS

Starting from the highest point and working their way down, excavators loaded blasted materials on dumpers leaving behind them tiers to designed slopes.



MANLIFT

Housed in a basket, trained labour would be lifted to their work area by mobile cranes that were regularly maintained and checked for reliability and good performance, to cater for the risk taken.

EXCAVATION

Footprints of buildings and civil structures were marked and the formation excavated to accommodate the foundations.

Civil works progressed with enabling works to gain time.



MUSANDAM IPP (CIVILS)

The same strategy of cutting the mountain side and reclaiming land on sea, a technique used on a previous contiguous site was also used on this project that consists of building a new 120 MW power station.

The scope is basically enabling works, slope stabilization, gabion retaining walls, surface drainage, perimeter road, and security fencing.

The materials generated through excavation were dumped in the sea and a revetment was built to protect the reclaimed areas.

Explosives were used to break the rock and large stones were sorted and placed as rock armour.

The last two meters of fill consisted of carefully selected materials screened and wetted on site.

As the works progressed and the rock face examined, the designers recommended that rock anchors be used in certain weak areas where shotcrete treatment was insufficient.

The presence of so many faults in this formation and the inconsistency of the stratas made the task of stabilizing the slopes very challenging.

SHOTCRETE

The geology of the site varied from solid to weathered rock and sometimes loose formation.

Shotcrete techniques were used to stabilize these vulnerable slopes.

