

PENNY'S BAY

Hong Kong - CHINA

Monitoring of the settlement of 290 hectares of reclaimed land

In Penny's Bay, 290 hectares of land between the Hong Kong airport and central Kowloon were to be reclaimed on the Lantau Island to build a Walt-Disney theme park. This large project affected 330 hectares of foreshore and seabed.

The Monitoring of the reclaimed land with accurate instrumentation was of major importance in order to prevent the site from future settlement problems. The main contribution of SolData was to measure the 80 million cubic meters of sand fill as they were placed and compacted.

SolData was one of the first contractors onsite setting up a control network and surveying the existing land area.

The first step was to install over 1500 settlement monitors on the seabed throughout the project area, a total area of two square kilometres were to be monitored by points sunk onto the sea bed prior to the reclamation works.

The second step was the survey of the placement of the banking.

In addition to this monitoring system, a precise leveling system has been installed in order to be aware, in real time, of soil displacements. The monitoring installation was completed by inclinometers and piezometers.

During this period, the group had to manage more than 125,000 compaction points (including testing, analysing and reporting) and more than 2000 penetrometer tests.



OWNER :	HONG KONG GOVERNMENT
CONTRACTOR:	SOLETANCHE BACHY
PROJECT DURATION:	2001-2004
SCOPE OF WORKS:	
<ul style="list-style-type: none">• 1500 settlements monitors• 2000 penetrometers tests• penetrometer, inclinometer and piezometer tests• Data management and reporting.	