

## Case Study

# Kuala Lumpur International Airport

## Malaysia

### Market Sector

**INFRASTRUCTURE**



### Application

**THICK LAYER FILL COMPACTION**



### Site Conditions

**HIGHLY COMPRESSIBLE CLAYS**



# LANDPAC

INTELLIGENT GROUND ENGINEERING SOLUTIONS

## Project

Malaysia's new LCCT (Low Cost Carrier Terminal) facility at KLIA (Kuala Lumpur International Airport) was developed to facilitate the growing demand for Air Asia's fleet of commercial aircrafts. The project included the placement of 12 million m<sup>3</sup> of fill over an area of approximately 250Ha with the use of Impact Compaction.

## Geotechnical Solution

To enable the placement of 12 million m<sup>3</sup> of fill in the required period a Deep Lift fill methodology was used with Impact Compaction. To optimise the number of passes applied the fill was placed in 1.2m layers. Landpac 3-sided Impact Compactors with a kinetic energy rating of 135kJ were used.

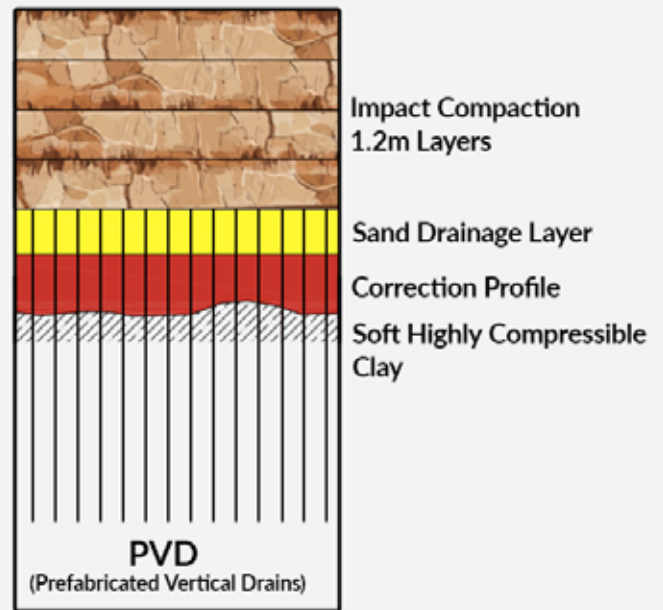
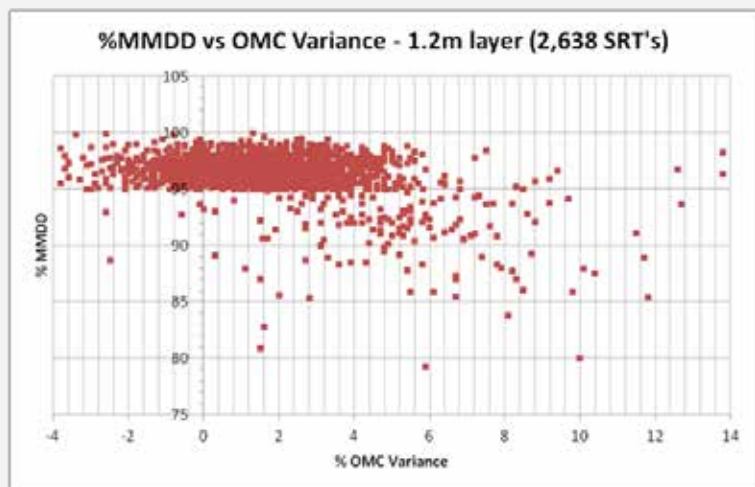
**Client: Malaysian Airports Holdings Bhd**

**Principal Civil Contractor: WCT Construction Bhd**

**Compaction Contractor : Landpac**

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## Monitoring & Verification / QA

The fill compaction was monitored with Landpac's Intelligent Compaction Measurement (ICM) system. The compaction levels were verified with sand replacement density testing. The soil response and density test results have shown that the required compaction levels were achieved consistently with a pass rate in excess of 95%.



## Summary

- ✓ Placement of 12 million m<sup>3</sup> of fill
- ✓ 250Ha with the use of Impact Compaction
- ✓ wick drains installed at 1.1m square grid
- ✓ Density of 95% Modified MDD

## Get in touch

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