

PROJECT :-

RECLAMATION WORKS AT JELUTONG, PULAU PINANG, 2002

The 14.5 ha site was located mainly on a coastal land. Some two-third of the site was on tidal land while the rest was covered by landfill (rubbish dump). The subsoil consisted of a layer of very soft clay of up to 10m thick. Average thickness of fill was 3m on the tidal land. Potential post construction settlement due to the underlying soft layer was a concern. In addition, the existence of the landfill would cause excessive settlement.



Time-settlement curve of fill
Ground treatment was carried out. The landfill was treated using dynamic compaction method. The soft layer was treated by surcharge method. Prefabricated vertical drains were used at part of the site, based on development plan, to expedite the consolidation of the soft clay.

The reclamation works was commenced in January 2002 and completed in July 2002. Monitoring of the platform performance was continued until July 2003. The monitoring results show that the post construction settlement would be insignificant. The settlement versus time plot of one monitoring point is given.

