## **Bungalow @ Bukit Tungku**

## (Hill Slope Development Solution)

Platform creation and strengthening of slope stability using multi-tier caisson pile wall

The Construction and Completion of two tiers high contiguous caisson pile wall for a bungalow development at Bukit Tungku

(by Ir. Oh Chin Wah, Executive Director) (2010 Jan-Mar)



## Two tier caisson pile wall design configurations:

- 1. Upper tier: caisson pile 1500mm diameter space at 3.00m c/c.
- 2. Lower tier: caisson pile 1500mm diameter space at 2.25m c/c.
- 3. The free-standing height of upper tier wall is 8m and the lower tier wall is 8.95m respectively.
- 4. These two rows of caisson pile wall are spaced at approximately 16.5m between each other.
- 5. The total pile length for upper tier caisson pile is 24m length with 16m penetration length below platform level.
- 6. The total pile length for lower tier caisson pile is 25m length with 16m penetration length below platform level.
- 7. Upon successfully completion, the final maximum wall displacement at the top wall for the upper tier wall is 15.07mm and the lower tier wall is 16.60mm.



