



## **Tseung Kwan O Extension, Contracts 609A and B – Hong Kong**

### **1. Key Points**

- Construction performance was improved;
- An understanding of mutual objectives was reached between the various parties involved;
- Decision making was on a co-operative basis;
- Good working relationships were established; and
- Benefits for all parties, a "Win-Win" situation
- Partnering was facilitated by John Carlisle Partnerships.

### **2. Description of Project**

- These two contracts are specific examples of the partnering arrangements established by MTR Corporation Limited for the TKE project as a whole and which are set out generally in Case Study Number 1;
- The work required was the construction of a total of 820 bored piles ranging from 1.5 to 2.8 metres diameter extending down and into bedrock at depths ranging from 35 to 75 metres;
- The total value of the two contracts was HK\$591m;
- Contract 609A was 15 month's duration, Contract 609B 13 months;
- Lump Sum contracts using MTR standard conditions with an Engineer's design;
- The works were constructed between 1999 and 2000; and
- The client was MTR Corporation Limited who also provided construction Management, the designer was Ove Arup and Partners and the contractor was Gammon Skanska Ltd

### **3. Project Highlights**

The Contracts, which were managed as one, required the construction of a more than 800 number of large diameter deep piles in a relatively short space of time. A major benefit of the partnering approach was the logical reduction in the number of piles to be tested after trust and confidence had been established. Initial requirements were that an ultrasonic probe test was required on every pile bore. 150 bores were tested without problems and it was agreed that the test proportion could be reduced from 100 to 25%, with the proviso that the 100% requirement could be re-introduced if significant irregularities were observed. The 25% sample was selected by MTRC.

### **4. Partnering Performance**

Partnering brought the following benefits to the project :

- After 150 of the 820 piles were tested, with no obvious problems, the proportion of piles required to be tested was reduced. The Engineer reserved the right to resume original testing requirements if any irregularities were found;
- As a result of the above, piling work made faster progress, which eventually led to programme and cost savings, greater programme certainty and better plant utilization;
- Meetings were consolidated and the number of them reduced, which enabled staff to concentrate more effort on the construction work; and
- Improved communications between Gammon Skanska staff and MTR's Construction Management team fostered better understanding, which resulted in fewer disputes between inspectors and site engineers.

*Reference: Association for Project Management (Hong Kong) – Partnering Guidelines for Construction Projects in Hong Kong*

