



## KCRC Freightyard Extension Hung Hom Bay Bored Piling and Basement Cap Works

Project : Proposed KCRC Freightyard Extension

and Property Development Above, at 5-hectare site, Hung Hom Bay

Client : Kowloon-Canton Railway Corporation/

Cheung Kong (Holdings) Limited (JV)

[Vigour Limited]

Architect : Ronald Lu & Partners (HK) Limited

Engineer : Maunsell Consultants Asia Limited

Quantity Surveyor : Davis Langdon & Seah HK Limited

Construction Period: March 1997 to January 1998

Location : K.I.L. 11077 Hung Hom Bay Kowloon

## 擴建紅磡灣九廣鐵路紅磡貨倉 鑽孔樁及地庫樁帽工程

工 程:於紅磡灣五公頃之地盆內擬興建 九廣鐵路紅磡貨倉擴建工程 及其上蓋物業發展項目

客 戶:九廣鐵路公司/ 長江實業(集團)有限公司 (合資建設)[Vigour Limited]

建築師: 呂元祥建築師事務所

工程師:茂盛(亞洲)工程顧問有限公司

測計師:威寧謝香港有限公司

興建時間:一九九七年三月至

一九九八年一月

位 置: 九龍紅磡灣K.I.L.11077地段



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This project involved the installation of 186 bored piles of diameters 2M, 2.5M and 2.8M to form the foundation of the proposed development. To facilitate this work, a section of the existing railway track had to be diverted. The bored piling work itself especially the 96 piles of 2.8M in diameter were constructed using the latest state of the art heavy vibratory hammer and hydraulic oscillators. Since the area was reclaimed from the sea, the pile excavation work not only had to overcome the strong frictional resistance due to the sandfill but also had to go through numerous underground obstructions both naturally occuring and also manmade. Sheet piles were installed along the entire perimeter of the site in order to facilitate the subsequent cap construction which involved excavation up to 9M below existing ground level. About 100,000 cubic meters of earthwork and 8,000 cubic meters of concrete were involved in the cap works which were completed in phases within an overall construction period of 100 days. The entire project was completed 20 days ahead of schedule and to the client's satisfaction.

## 擴建紅磡灣九廣鐵路紅磡貨倉 鑽孔椿及地庫樁帽工程

此工程主要為擬興建之發展項目進行地 基工程,包括裝置186支直徑由2米、 2.5米以至2.8米之鑽孔椿,為方便工程 之進行,需要將現存一段火車軌轉移。 而工程中特別有96支2.8米直徑之鑽孔椿 是以最新款之重型震鎚及油壓式磨樁機 建造。由於地盤土地是由填海所得,鑽 椿之挖掘過程不單要克服由填沙所引致 之強大磨擦阻力,亦要面對地層內多種 天然及人為障礙。為了興建底部深達地 面下9米之椿帽,於地盆四周安裝了閘 板,以便挖掘泥土。而整項樁帽工程 共涉及約100,000立方米之泥土及 8,000立方米之混凝土, 並於建築期之 100日內分段完成,比原定計劃提早 20日竣工,且令到業主相當滿意。

