



Redevelopment at 16 Westlands Road, Quarry Bay Basement Excavation and Lateral Support Works

Project : Redevelopment of 16 Westlands Road,

Quarry Bay

Client : Cherry Blossom Int. Ltd (Swire Group)

Architect : Wong & Ouyang (HK) Ltd

Engineer : Ove Arup & Partners Hong Kong Ltd

Construction Period: November 2004 to March 2006

Location : Quarry Bay, Hong Kong

鰂魚涌華蘭路16號重建項目 地庫挖掘及裝頂工程

工程:鰂魚涌華蘭路16號重建項目

客 戶: Cherry Blossom Int. Ltd

(Swire Group)

建築師:王歐陽(香港)有限公司

工程師: 奧雅納工程顧問香港有限公司

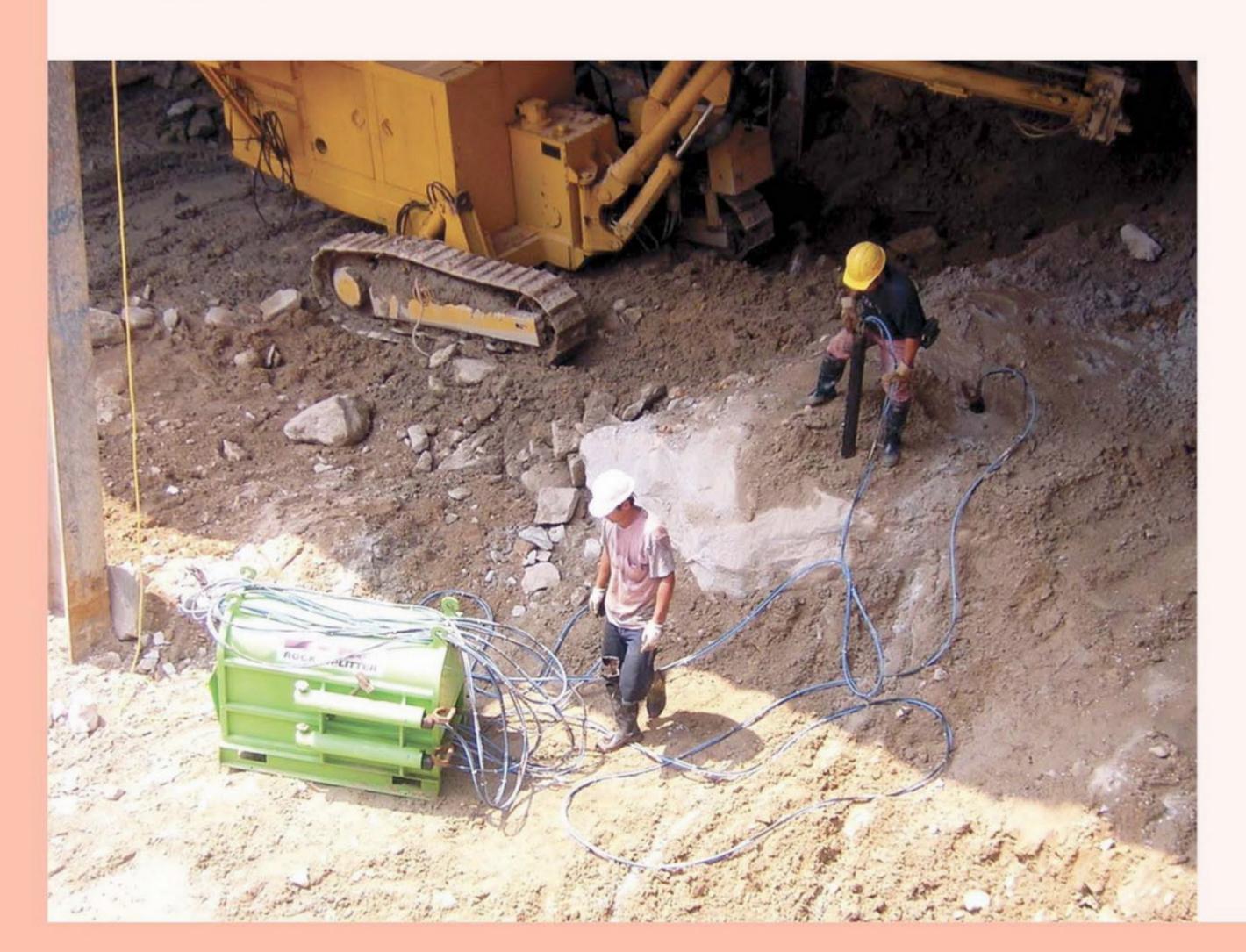
施工期:2004年11月至2006年3月

位 置:香港鰂魚涌



Redevelopment at 16 Westlands Road, Quarry Bay Basement Excavation and Lateral Support Works

To facilitate the basement excavation works, perimeter wall comprising 186 nos. steel H-piles installed inside 609mm dia. temporary casing and 82 nos. steel H-piles king post were installed first. At the same time, 84 nos. prebored socketted H-piles and tension piles were also installed as part of the foundation elements. Also a full coverage steel working platform was erected over the site prior to the commencement of excavation works. Basement excavation comprised installing 1,500 tons shoring and excavating 76,000m³ all-in material (35,000m³ rock) to a maximum depth of 17m below existing ground level. Environmental issues were also very important at this site. There was remediation measures for contaminated soil and both fixed and movable noise barriers were also constructed for the works. Innovative hydraulic rock splitters were used to allow rock breaking to be carried out in extreme quiet manner.



鰂魚涌華蘭路16號重建項目 地庫挖掘及裝頂工程

此項工程內容主要涉及建造部份地基工 程及進行地庫挖掘工程。地基部份包括 建造84支預鑽石孔工字椿及拉力工字 椿,為了進行地庫挖掘工程,186支以 609毫米直徑臨時鋼通預先裝置於地盤周 界的工字鐵椿及於開挖時安裝的水閘板 組成了臨時的地下擋土墻。而在挖掘 工程開始之前,建造了一座全面覆蓋由 鋼造的工作台。地庫挖掘工程包括裝置 1,500噸裝頂鋼材,開挖前裝妥的82支工 字鋼柱及挖走地盤內最深達17米之76,000 立方米物料(當中包括35,000立方米硬 石)。環境保護是這項工程非常重要的要 求之一,在進行工程當中,曾涉及原有 污染泥土的處理及移走和裝置固定/可移 動的噪音消減屏障。與此同時, 創新的 水壓式切割器被使用,令石頭碎裂後能 在極度寧靜的方式下被帶出。

