

PROJECT PROFILE

1. Basic Information

1.1 Project Title

Development at Mount Butler Quarry Site

1.2 Purpose and Nature of Project

The project is in response to Government policy with regard to the need to meet housing demand and also the need to rehabilitate disused quarry sites. The project comprises development at the quarry site and associated infrastructure improvement works (primarily the widening of Mount Butler Road).

1.3 Name of Project Proponent

Civil Engineering Office of the Civil Engineering Department

1.4 Location and Scale of Project

Mount Butler Quarry, formerly a Government operated quarry, was opened in 1954 and closed in March 1991. The quarry lies about one kilometre east of Jardine's Lookout and occupies a prominent site overlooking Victoria Harbour (see drawing no. HSD 9B). It is proposed that the quarry site be rehabilitated and be developed to accommodate about 1,000 high-class housing units. In association with the development, a section of Mount Butler Road between the quarry site and Henderson Road will be widened. Landscaping works for the rehabilitation of the quarry, and roadworks and slope works for the widening of Mount Butler Road will encroach upon the Tai Tam Country Park. The extent of this encroachment will be determined in the forthcoming feasibility study to be commissioned by Civil Engineering Department. The total area of the quarry site is in the region of 20 ha.

1.5 Number and Types of Designated Projects to be Covered

Three designated projects listed below are to be covered :

- ♦ A quarrying or quarry rehabilitation (see Schedule 2, Part I, Item J.3),
- ♦ Construction works partly or wholly in an existing country park (see Schedule 2, Part I, Item Q.1), and
- ♦ Engineering feasibility study of urban development projects with a study area covering more than 20 ha (Schedule 3, Item 1).

1.6 Name and Telephone Number of Contact Persons

2. Outline of Planning and Implementation Programme

- 2.1 The project proponent will engage consultants to undertake a feasibility study to confirm the viability of the project. The study is planned to commence in January 2000 for completion by April 2001.

3. Possible Impacts on the Environment

- 3.1 The project will include formation works for the development, construction of roads and retaining structures, and laying of stormwater drains, sewers and utilities. Possible impacts on the environment are as follows :

3.2 Construction Impacts

- (a) Dust impact from construction activities on the potential air sensitive receivers in the vicinity of the project area,
- (b) Noise impact from the construction plant/equipment on the potential noise sensitive receivers in the vicinity of the project area,
- (c) Water pollution to stream courses and/or drainage system within and downstream of the project area,
- (d) Disposal of a variety of wastes which may include contaminated material, construction and demolition waste, surplus excavated material, and general refuse,
- (e) Impact on natural habitat and wildlife within and near the project area due to construction activities, and
- (f) Noise and gaseous emissions associated with construction traffic.

3.3 Operational Impacts

- (a) Visual impact on surrounding areas after the site is developed.
- (b) Short-term and long-term impacts on natural habitat and wild life within and near the project area.
- (c) Noise and gaseous emissions associated with road traffic, and
- (d) Sewage from the proposed developments within the project area.

4. Major Elements of the Surrounding Environment

- 4.1 Sensitive receivers and sensitive parts of the natural environment, which might be affected by the proposed project in the surrounding environment, include the following :

- (a) Residential development to the west of the project area and the proposed development itself,
- (b) Tai Tam Country Park, Wilson Trail Section 2 and Hong Kong Trail Section 5 to the southeast of the project area, and
- (c) Radio Communication Station to the north of the quarry site.

4.2 Major elements of the surrounding environment and existing and/or relevant past land uses in the project area, which might affect the area in which the project is proposed to be located, include the following :

- (a) Degraded landscape resulting from ex-quarrying activities,
- (b) Land contamination from ex-quarrying activities, and explosion practice by Hong Kong Police Force (HKPF),
- (c) Storage of explosives in magazines used by Mass Transit Railway Company and HKPF, and
- (d) Noise and gaseous emissions associated with road traffic.

5. Environmental Protection Measures to be Incorporated in the Design and Any Further Environmental Implications

5.1 Noise

- (a) The noise level of construction activities can be regulated by means of a construction noise permit during restricted hours, i.e. from 1900 to 0700 hours on weekdays and at any time on general holidays. For non-restricted hours, the daytime construction noise criteria stipulated in Table 1B of Annex 5 of the “Technical Memorandum on Environmental Impact Assessment Process” will be adopted.
- (b) The mitigation measures recommended in ProPECC PN 2/93 will be implemented, as appropriate, to control the noise impacts. In addition, quiet powered mechanical equipment and/or movable noise barriers could be used to reduce the noise level to about 75 dB(A) during the construction period.
- (c) The proposed widened Mount Butler Road will properly be designed, for example with the use of flexible pavement and/or road-side barriers (if necessary), to minimise the noise impacts.

5.2 Dust

The potential dust impacts arising from the construction activities will be controlled by the Air Pollution Control (Construction Dust) Regulation. Appropriate dust suppression measures such as watering will be enforced during construction. An Environmental Monitoring and Audit programme for dust monitoring will also be adopted, therefore, no insurmountable dust impacts are anticipated at the nearby Air Sensitive Receivers.

5.3 Water Quality

By implementing the Land Remediation Plan, with adequate construction site drainage according to good practices outlined in ProPECC PN 1/94 "Construction Site Drainage", the contaminated runoff and surface runoff can be controlled satisfactorily without adverse impact during construction.

5.4 Landscape and Visual

- (a) The quarry will be rehabilitated and a landscaped area will be provided at the interface between the quarry site and Tai Tam Country Park.
- (b) Buffer zones will be provided between the buildings and Tai Tam Country Park.
- (c) The provision and location of open space reserved for the development will be determined in accordance with Chapter 4 of the Hong Kong Planning Standards and Guidelines.
- (d) Retaining structures and surface drainage system will be designed to reduce adverse visual impact.

5.5 Ecological

The preservation of trees as far as possible is recommended. Transplanting should be considered for those trees with medium chance of survival. In addition, compensatory planting is recommended to be implemented along the proposed widening of Mount Butler Road, and development of Mount Butler Quarry.

5.6 Land Contamination

Experienced environmental consultants will be engaged to carry out a contamination assessment which will comprise the following procedures :

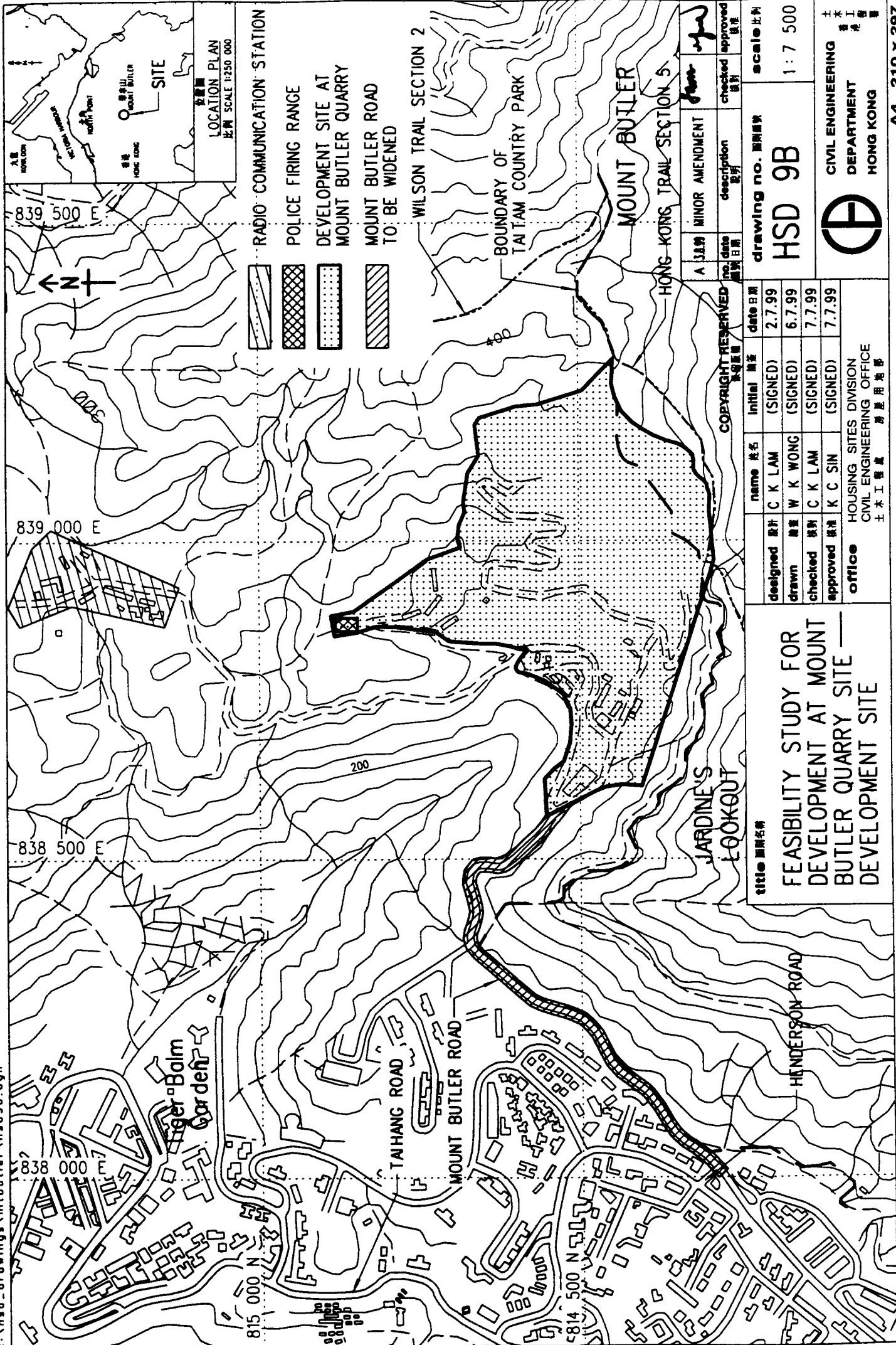
- (a) Site inspection and review of available background information - to provide a clear and detailed account of the relevant past land use and land history in relation to possible land contamination.
- (b) Site investigation and analysis - to collect soil samples by means of boreholes and/or trial pits, and to collect groundwater samples by means of groundwater monitoring wells. The samples will then be analysed chemically to determine parameters for indicative of contamination. The methodology shall be in general accordance with ProPECC PN 3/94 "Contaminated Land Assessment and Remediation".
- (c) Development of Land Remediation Plan - to develop options for remediation as required and to mitigate the impacts of soil and groundwater contamination. The remediation plan shall provide methodology,

contaminated soil and groundwater volumes, detailed drawing and recommended specification. The remediation plan will be developed in consultation with relevant agencies and submitted to EPD for agreement.

There should not be any significant residual impacts due to land contamination after the implementation of the remediation measures.

5.7 Solid Waste Management

- (a) Waste management in the way of avoiding, minimising, reusing and recycling shall be adopted to reduce waste generation.
- (b) During the construction stage, different types of waste will be separated, handled and removed properly so as to minimise the impacts. On site sorting of demolition debris will be carried out in accordance with WBTC No. 5/98.
- (c) The removal and disposal of the contaminated wastes are covered by the Land Remediation Plan. No significant impact is expected in this regard.



A 33號	MINOR AMENDMENT	no. date	description	checked	approved
		圖號	說明	圖則	核准

drawing no. 圖號
HSD 9B
 scale 比例
 1 : 7 500

CIVIL ENGINEERING DEPARTMENT HONG KONG

designed	name	initial	date
設計	姓名	縮寫	日期
(SIGNED)	C K LAM	(SIGNED)	2.7.99
(SIGNED)	W K WONG	(SIGNED)	6.7.99
(SIGNED)	C K LAM	(SIGNED)	7.7.99
(SIGNED)	K C SIN	(SIGNED)	7.7.99

office HOUSING SITES DIVISION
 CIVIL ENGINEERING OFFICE
 土木工程處 房屋用地處

title 圖名
FEASIBILITY STUDY FOR DEVELOPMENT AT MOUNT BUTLER QUARRY SITE — DEVELOPMENT SITE