Proposed Installation of

Integrated Mobile Phone Base Station

Nearby

Wu Kau Tang Country Trail

Plover Cove Country Park

New Territories

Project Profile

China Mobile Hong Kong Company Limited

Prepared by: JEG Engineering Co. Ltd. (Tel. no. : 2117 9500)

May 2009

Table of Contents

1.	Basic	Information	Page no.		
	1.1	Project Title	1		
	1.2	Propose and Nature of the Project	1		
	1.3	Name of Project Proponent	1		
	1.4	Location and Scale	1		
	1.5	Number and Types of designated projects to be covered by the project profile	e 1		
	1.6	Name and Telephone Number of Contact Person	1		
2.	Outline of Planning and Implementation Programme				
	2.1	Planning and Implementation of the Proposed Project	2		
	2.2	Work Schedules	2		
	2.3	Interactions with Broader Programme Requirements Other Projects	2		
3.		Elements of the Surrounding Environment			
	3.1	Noise	3		
	3.2	Air Quality	3		
	3.3	Ecology	3		
	3.4	Landscape and Visual	3		
4.	Possible Impacts on the Environment				
	4.1	Process Involved	4		
	4.2	Summary of Potential Environment Impacts	4		
	4.3	Environmental Protection Measures to be Incorporated in the Design and any Further Environmental Implications			
	4.3.1	Noise	4		
	4.3.2	Liquid Effluents, Discharges, or Contaminated Runoff	4		
		Generation of Waste or By-products	5		
	4.3.4	Unsightly Visual Appearance	5		
	4.3.5	Ecological Impacts	5		
	4.3.6	Risk of Accidents which Result in Pollution or Hazard	6		
	4.3.7	Others	6		
5.	Previo	ously Approval Similar Environmental Assessments	7		
6.	Concl	usion	7		
List o	f Attach	iments			

Site Location Plan and Details of Construction Works Attachment I

- Works Schedule Attachment II
- Attachment III Site Mark-up Photo
- Attachment IVPower Supply Facilities Proposal from China Light & Power Company LimitedAttachment VTelecom Facilities Proposal from PCCW Hong Kong Limited

1.0 BASIC INFORMATION

1.1 Project Title

Proposed installation of Integrated Mobile Phone Base Station nearby Wu Kau Tang Country Trail, Plover Cove Country Park, New Territories.

1.2 <u>Purpose and Nature of the Project</u>

The project is a development involving mobile phone network operator China Mobile Hong Kong Company Limited (open for participation by other mobile operators) aimed to improve the mobile phone coverage for hikers and visitors and to ensure that tele-communications for the general public is maintained in case of emergency. This requires a Integrated Mobile Phone Base Station to be constructed nearby Wu Kau Tang Country Trail.

1.3 <u>Name of Project Proponent</u>

China Mobile Hong Kong Company Limited (CMHK)

1.4 Location and Scale of Project

The proposed Integrated Mobile Phone Base Station will be constructed nearby Wu Kau Tang Country Trail, Plover Cove Country Park, New Territories as shown in the location plan at Attachment I. The station will comprise of an equipment platform $(4.5m(L) \times 3.0m(W) \times 0.8m(D))$ with an area of 13.5 square meters. The equipment platform, consist one stainless steel equipment shelter and one transmission antenna post of 12 metres in height, will be erected on the hill at level 143.1mPD.

Also, a service trench of 0.3 metre in depth and 335 metres in length will be constructed from the proposed CLP & PCCW facilities box located at junction of Bride's Pool Road & Wu Kau Tang Country Trail to the proposed Integrated Mobile Phone Station for installation of proposed power and telephone conduits.

The details of the construction works are shown in Attachment I.

1.5 <u>Number and Types of Designated Projects to be Covered by the Project Profile</u>

Only one designated project to be covered by this project profile. The proposed project is a designated project in accordance with EIAO, Schedule 2, Part 1, Section Q as it involves building works in an existing country park and it is not considered exempt under Section Q1 (a) to (j). Therefore, an Environment Permit under the EIA Ordinance must be obtained prior to the commencement of construction.

1.6 Name and Telephone Number of Contact Person

The contact person for this project is Mr. Samuel Chuang of China Mobile Hong Kong Company Limited, Telephone number 2945 8441 and facsimile number 2421 4962 & Mr. Lam Man Kit of JEG Engineering Company Limited, Telephone number 2117 9500 and facsimile number 3103 8077.

2.0 OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

2.1 Planning and Implementation of the Proposed Project

The project is planned and managed by China Mobile Hong Kong Company Limited and they will install their own mobile phone network at the proposed station.

Upon the grant of a Short Term Tenancy and Environmental Permit by the District Lands Office (DLO) and Environment Protection Department (EPD) respectively, China Mobile Hong Kong Company Limited will start and complete the construction work in accordance with the work schedule.

Besides, CMHK will obtain BD approval before commencement of work.

2.2 Work Schedule

The construction works including the equipment and antennae installation are proposed to commence at the end of 2009 and to be completed within 2 months. It is proposed that the mobile phone station will be put into operation in the beginning of 2010. The proposed work schedule as shown in Attachment II.

2.3 Interactions with Broader Programme Requirements Other Projects

There is no planning project near our proposed site. As such, cumulative environmental impacts would not result.

3.0 MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

3.1 <u>Noise</u>

The proposed mobile base station will be located in remote hilltop locations. The separation distance of the nearest Noise Sensitive Receivers (NSRs) from the works area are over 1100m (at Wu Kau Tang Tsuen).

3.2 <u>Air Quality</u>

The proposed mobile base station will be located away from Wu Kau Tang Tsuen which are over 1100m, therefore, not expected to be affected. Also, hikers in the country parks will only be subject to negligible nuisances.

3.3 Ecology

During the ecological survey it was noted that the site (the equipment platform and the receiver pole) and surrounding areas have habitats mainly of wild grass of common habitats in Hong Kong.

3.4 Landscape and Visual

The main visual sensitive receivers in the area are located to the Wu Kau Tang Country Trail. The relative impact on the visual landscape of this station is small due to its small scale in the landscape and the visual landscape of this station is viewed.

4.0 POSSIBLE IMPACTS ON THE ENVIRONMENT

4.1 Process Involved

The Station base will be traditional reinforced concrete raft with all concrete works cast in-situ. The antenna tower will be made of galvanized mild steel members and will be prefabricated members to be bolt connected on site.

Raft Foundation will be proposed for the station building as the structure is not large and massive.

No haul road will be formed for the construction and operation of the project. Delivery of construction materials and equipments will be by hand-carry only. Entrance to the proposed site location will be by existing country trail.

A small-sized excavator will be arranged for the site formation works and excavation works as the excavation work is mainly to excavate the raft of size 6.5m x 5m x 0.8m depth, the excavation work will be completed within two days. The excavation work will only start when the forecast weather for the coming week is good. During the excavation work, the exposed base soil surface will be covered by canvas sheeting to avoid environmental pollution.

4.2 <u>Summary of Potential Environmental impacts</u>

The construction and operational impacts associated with the mobile base stations are summarized in below and described in details in the following sections:

- Noise
- Liquid Effluents, Discharges, or Contaminated Runoff
- Generation of Waste or By-products
- Unsightly Visual Appearance
- Ecological Impacts
- Risk of Accidents which Result in Pollution or Hazard
- Others

4.3 <u>Environmental Protection Measures to be Incorporated in the Design and</u> any Further Environmental Implications

4.3.1 <u>Noise</u>

Noise Sensitive Receivers (NSRs) are not closed to the Project Works Sites and the site works are expected to be small in scale. Thus noise generated during the construction works are not expected to result in impacts to NSRs. The nearest Noise Sensitive Receivers (NSRs), Wu Kau Tang Tsuen, which is located over 1100m from the Project Works.

4.3.2 Liquid Effluents, Discharges, or Contaminated Runoff

During construction phase, measures will be undertaken to avoid untreated site discharges from inadvertently entering stream courses, including the implementation of temporary site drainage measures to control runoffs from the site in according with the ProPECC Note PN 1/94 "Construction Site Drainage". Actually, these would not be any major activity for this project for liquid effluents, and only a few workers are

required for this work. Constructor will be required to provide chemical toilets on-site with no kitchen or canteen allowed.

However, there will be no effluent discharge during the operation of the mobile base station and no water quality impacts are expected.

Based on the above, water quality impacts would be insignificant.

4.3.3 Generation of Waste or By-products

During construction phase, only a small amount of construction and demolition (C&D) materials such as timber formwork, general refuse etc. will be generated during construction of the mobile base station. As this design is mainly pre-fabricated members to be bolted on site, very small amount of waste will be expected. Disposal of the non-inert portion of C&D materials will be removed by site worker.

Only very small quantities of chemical waste will be generated along with municipal waste from construction works. Correct handling, storage and removal of this waste will be undertaken and adverse impacts on the environment are not anticipated. The remains will be removed by site worker.

During operation phase, the mobile base station will be unmanned with no waste generation expected during the operation. Debris that may be generated from the annual maintenance works, such as general building maintenance, footpath repair & grass cutting, they will be removed by contractors directly upon completion of works and disposed of properly. No environmental issues are anticipated.

4.3.4 Unsightly Visual Appearance

The new transmission tower will rise to a height of approximately 12m on the hill at level 143.1 mPD. In order to further minimize the visual impact of the station, the transmission pole will be painted or coated in "Antique" (B.S. 10B25 or Pantone 462U) or similar colour to match the surroundings.

The new mobile base station structure will only be visual from limited parts from the Wu Kau Tang Country Trail. The distance from the sensitive receivers will further reduce the dominance of this new structure and thus the magnitude of visual changes is considered to negligible.

4.3.5 Ecological Impacts

In order to further minimize the primary ecological impacts from the construction and operation of the mobile base station, the site boundary and work sites have been minimized.

4.3.6 Risk of Accidents which Result in Pollution or Hazard

The operation of the proposed Mobile Base Station will strictly comply with the code "Code of Practice for the Protection of Workers and Members of Public Against Non-Ionizing Radiation Hazards from Radio Transmitting Equipment" issued by OFTA. The proposed location of the antenna transmitter and microwave receiver are quite remote is at least 10 meters above the human head pointing away from human activities or inhabitancies. In this case, the non-ionizing radiation has no signification impact on the public.

4.3.7 <u>Others</u>

Odour

No odour impacts are expected to occur as a result of this project.

Disruption of Water Movement or Bottom Sediment

By nature of the project, it will not result in my impact on water movement or bottom sediment.

Gaseous Emissions & Dust

Only a small quantity of gaseous emissions (SO₂ and NOX) from the equipment would be generated during construction. These emissions will not impact Air Sensitive Receivers (ASRs). The site was considered as small scale and these is no major excavation work around this area. Limited amount of soil stockpiling is expected but will be covered by tarpaulin sheets and have them bonded to ground. Therefore generation of dust would be within acceptable limit

Night-time Operations

It is expected that all construction works will be performed during normal working hours only.

Traffic Generation

Hand-carry method to be used for transport of materials, no serious traffic jam for vehicular access will be occurred.

Manufacturing, Storage, Use, Handling, Transport, or Disposal of Dangerous Goods

No dangerous goods will be involved in this Project.

Hazardous Materials or Washers

No Hazardous Materials or Washers will be generated by this Project.

5.0 PREVIOUSLY APPROVAL SIMILAR ENVIRONMENTAL ASSESSMENTS

References have been made to the following Project Profiles submitted for Applications for Permission to Apply Directly for an Environmental Permit:

- Proposed Installation of Integrated Mobile Phone Base Station at Tai Tong Nursery, Tai Tong Shan Road, Yuen Long, N.T. (Application no. DIR 176/2009)
- 2) Proposed Installation of Integrated Mobile Phone Base Station at Shek Pik Fire Lookout, Lantau Island, N.T. (Application no. DIR 152/2007)
- Proposed Installation of Integrated Mobile Phone Base Station at Tai Long Au, Sai Kung East Country Park, Tai Po, N.T. (Application no. DIR 151/2007)
- Proposed Installation of Integrated Mobile Phone Base Station at South Lantau Island Country Park, Man Cheung Po, Tai O, Hong Kong (Application no. DIR 148/2007)
- 5) Proposed Installation of Integrated Mobile Phone Base Station at Pat Sin Leng Country Park Chung Pui, Tai Po (Application no. DIR 144/2006)
- Proposed Installation of Integrated Mobile Phone Base Station at Twisk Management Centre within Tai Lam Country Park, Tsuen Wan. (Application no. DIR 111/2004)
- 7) Proposed Installation of Integrated Mobile Phone Base Station at Yuen Ng Fan, Sai Kung East Country Park (Application no. DIR 110/2004)

6.0 CONCLUSION

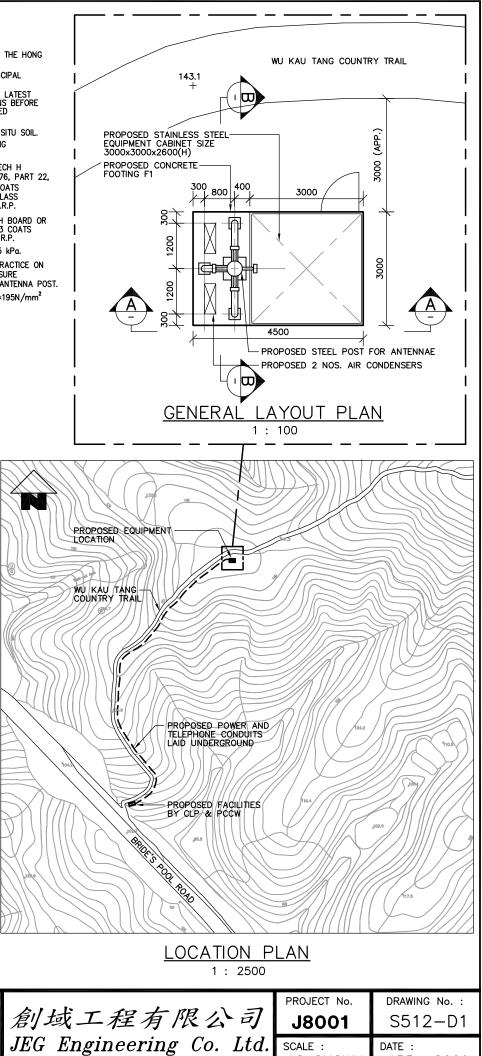
The environmental impacts expected from the mobile base station are considered to be minor. With the implementation of the recommended mitigation measures, no adverse residual environmental impacts are anticipated.

As impacts are not expected to be adverse and with the mitigation measure proposed, the requirements of the Technical Memorandum on Environmental Impact Assessment Process will be achieved and complied with full. As such, CMHK is applying directly for an Environmental Permit under Section 5(11) of the EIAO.

Attachments

GENERAL NOTES:

- 1. ALL DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE HONG KONG BUILDING (CONSTRUCTION) REGULATIONS 1990.
- 2. ALL LEVELS ARE IN METERS ABOVE HONG KONG PRINCIPAL DATUM, AND ALL DIMENSIONS SHALL BE IN METER.
- 3. ALL SETTING OUT DIMENSIONS MUST BE VERIFIED THE LATEST RELEVANT ARCHITECT'S DRAWING AND SITE DIMENSIONS BEFORE WORK COMMENCES. THE ARCHITECT MUST BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES DISCOVERED.
- 4. ALLOWABLE SOIL BEARING = 50 kPa formed on IN-Situ Soil. 5. Excavation to be inspected by RSE prior to placing
- BLINDING CONCRETE.
 6. INTERIOR OF CABINET SHOULD BE PROVIDED PROMATECH H BOARD OR EQUIVALENT FIXED ON TO MEET WITH BS476, PART 22, EXTERIOR OF CABINET SHOULD BE PAINTED WITH 3 COATS OF JACTARD FLAME TO MEET WITH BS476, PART 7 CLASS 1 OR CLASS 2 OR EQUIVALENT TO HAVING 1 HOUR F.R.P.
- 7. THE DOOR SHALL HAVE ONE LAYER OF PROMATECH H BOARD OR EQUIVALENT AND BE COVERED AT BOTH SIDES WITH 3 COATS OF JACTARD FRAME OR EQUIVALENT FOR 1 HOURS F.R.P.
- MAX. IMPOSED LOADING AT ROOF OF CABINET = 0.75 kPa.
 WIND PRESSURE IS IN ACCORDANCE WITH CODE OF PRACTICE ON WIND EFFECTS HONG KONG 2004. DESIGN WIND PRESSURE = 3.05 kPa, Cf = 1.0 FOR CABINET, Cp = 2.0 FOR ANTENNA POST. STAINLESS STEEL PLATE TO BE GRADE 304 WITH Py=195N/mm² COMPLY WITH BS EN 10088:1-3:2005.
- 11. MAX. IMPOSSED LOAD ON CONCRETE FOOTING: i) EQUIPMENT = 2.0 kPa. ii) OPERATION = 0.75 kPa.

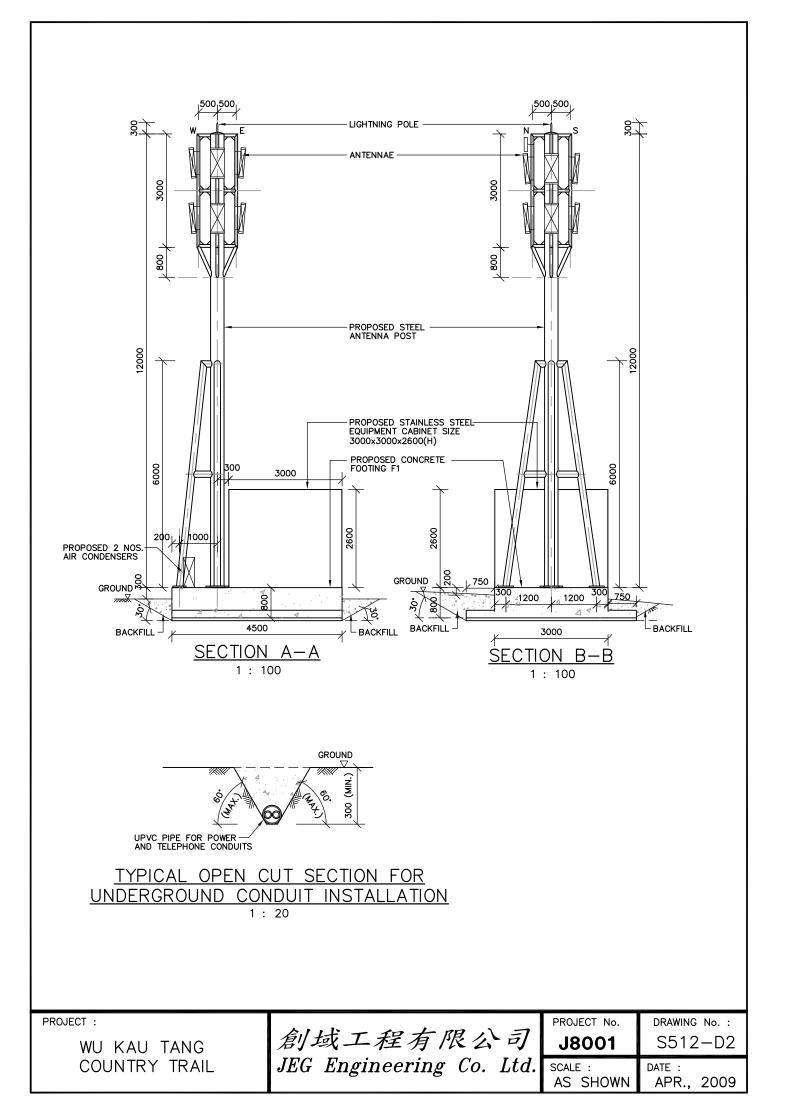


AS SHOWN

APR., 2009

PROJECT :

WU KAU TANG COUNTRY TRAIL



₽	Proposed Installation of Integrated Mobile Pho	none Statio	n nearby Wu K	au Tang Countr	one Station nearby Wu Kau Tang Country Trail, Plover Cove Country Park, N.T.	ark, N.T.
Tack Name		Duration	Ctart	Einich	2009	2010
		רעומוטו	Otal L		May Jun Jul Dec Ji	Jan Feb Mar
ubmission of P apply directly	Submission of Project Profile (PP) / Apply for permission to apply directly for Environmental Permit (EP)		45 days Mon 11/5/2009 Wed 24/6/2009	Wed 24/6/2009		
ermission from	Permission from EPD for apply for EP directly	5 days	Thu 25/6/2009 Mon 29/6/2009	Mon 29/6/2009		
Apply for EP		30 days	Tue 30/6/2009 Wed 29/7/2009	Wed 29/7/2009		
lotification of co	Notification of commencement work	7 days	7 days Wed 9/12/2009 Tue 15/12/2009	Tue 15/12/2009		
Mobilization		7 days	7 days Wed 16/12/2009 Tue 22/12/2009	Tue 22/12/2009		
Carry out excavation work	ation work	26 days	26 days Wed 23/12/2009 Mon 11/1/2010	Mon 11/1/2010		
Construction of footing	footing	24 days	Tue 12/1/2010	Thu 4/2/2010		
quipment and	Equipment and antenna installation	7 days	Fri 5/2/2010	Thu 11/2/2010		Ē_
Testing and commission	mmission	5 days	Fri 12/2/2010 Tue 17/2/2010	Tue 17/2/2010		

Title: Work Schedule table Date: Apr-09 Remark: China Mobile Hong Kong Company Limited will obtain BD approval before commencement of work



Photo 1: Showing the proposed equipment and antenna post location

CLP **伊**中電

23729

中華電力有限公司 CLP Power Hong Kong Limited

北區 North Region

香港新界上水嘉富坊16號 16 Ka Fu Close, Sheung Shui New Territories, Hong Kong

電話 Tel (852) 2678 2156 傳真 Fax(852) 2678 2180 網址 Website www.clpgroup.com

20 April, 2009

China Mobile Hong Kong Company Limited Level 20 Tower 1 Kowloon Commerce Centre No 51 Kwai Cheong Rd Kwai Chung NT

Our Ref. : SS2009011501

Dear Sirs,

Electricity Supply to Telecom, Country Trail Near Bride's Pool Wu Kau Tang Country Park Wu Kau Tang Sha Tau Kok NT ZIT order no. 2001004113 A/C no. 82812744492

Thank you for the above application of electricity supply.

Please be informed that after site inspection, your proposed supply location is found not feasible. There are trees and graves situated along the path to your proposed premises. If any excavation and/or construction work around this area would lead to objections from villagers and disapprove from the relevant government authorities. Therefore, we propose a feasible supply location which is shown in the attached drawing no. SS-090115-01 for your consideration.

Based on the above change, we shall carry out all necessary work to afford a low voltage three phase four wire 380/220 volt 50 hertz supply subject to our Supply Rules and the following conditions: -

- 1. That permission be obtained from Government and from owners of any private property concerned for us to carry out the work.
- 2. All materials provided by us will remain our property and be maintained in good order by this Company.
- 3. Unobstructed free access to any of our equipment must be maintained at all times.
- 4. Any reinstatement necessary on your property will be carried out by you at no cost to this Company.

Cont'd Page 2 of 2 Our Ref : SS2009011501

- 5. You are required to provide and install, at no cost to this Company, a typical concrete meter kiosk and dual locks shown on the enclosed drawing nos. SS-090115-01, T/GEN/25500/D/E33/3045/01/-/A and T/GEN/25500/D/E33/0238/01/-/A.
- 6. Under the Electricity Supply Regulation, you are required to submit the work completion certificate on completion of your work.

This condition letter is valid for 3 months from the date of this letter. We look forward to receiving your acceptance of our terms and conditions. To facilitate this, please sign and return the copy of this letter to us as soon as possible before the supply connection is required.

Should you have queries, please contact our Mr. Ricky Lo at 2678 1948 or e-mail hklo@clp.com.hk.

Yours faithfully,

W.M. Yim Planning & Design Manager, North Region

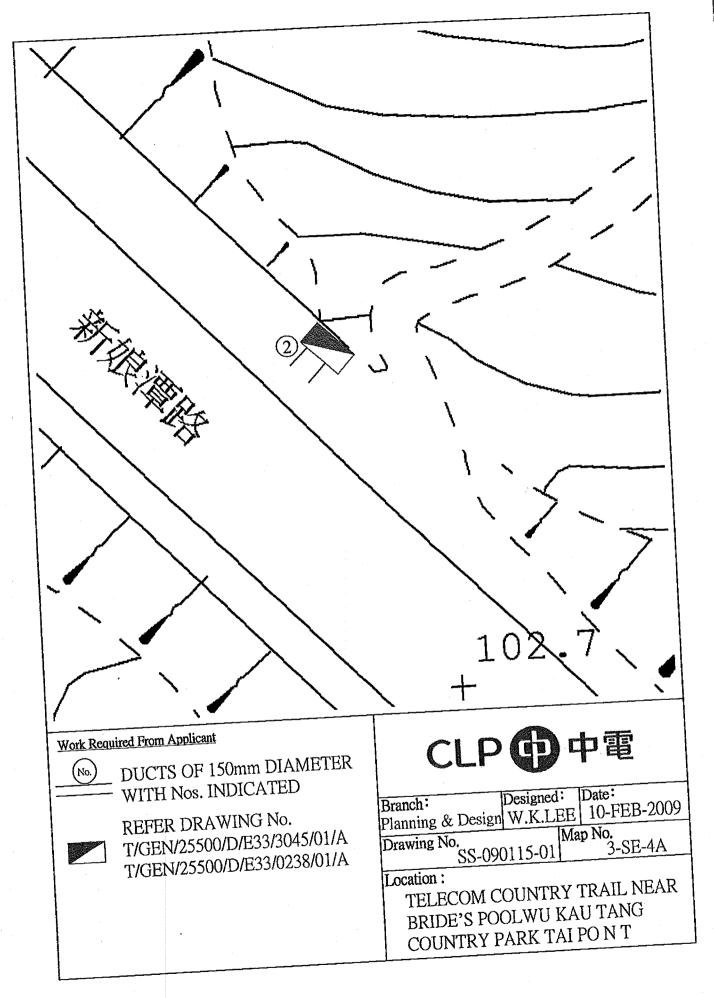
wmy/rk/cy

Encl. as stated.

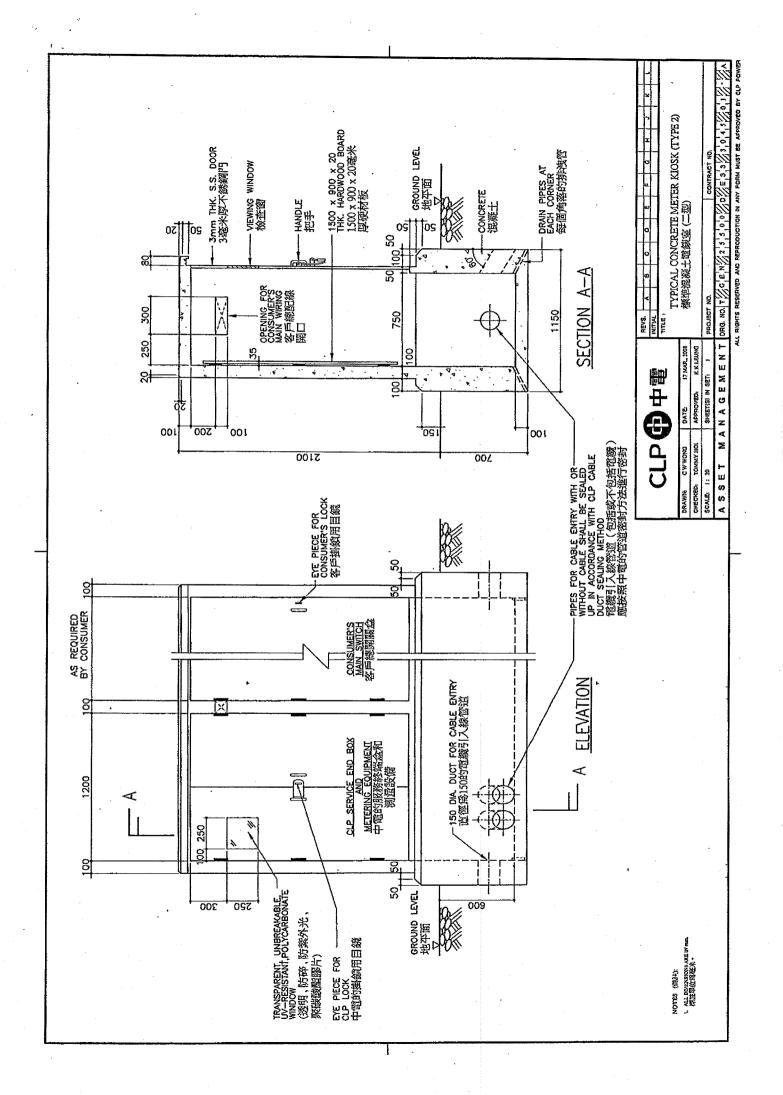
I/we accept the above Terms and Conditions.

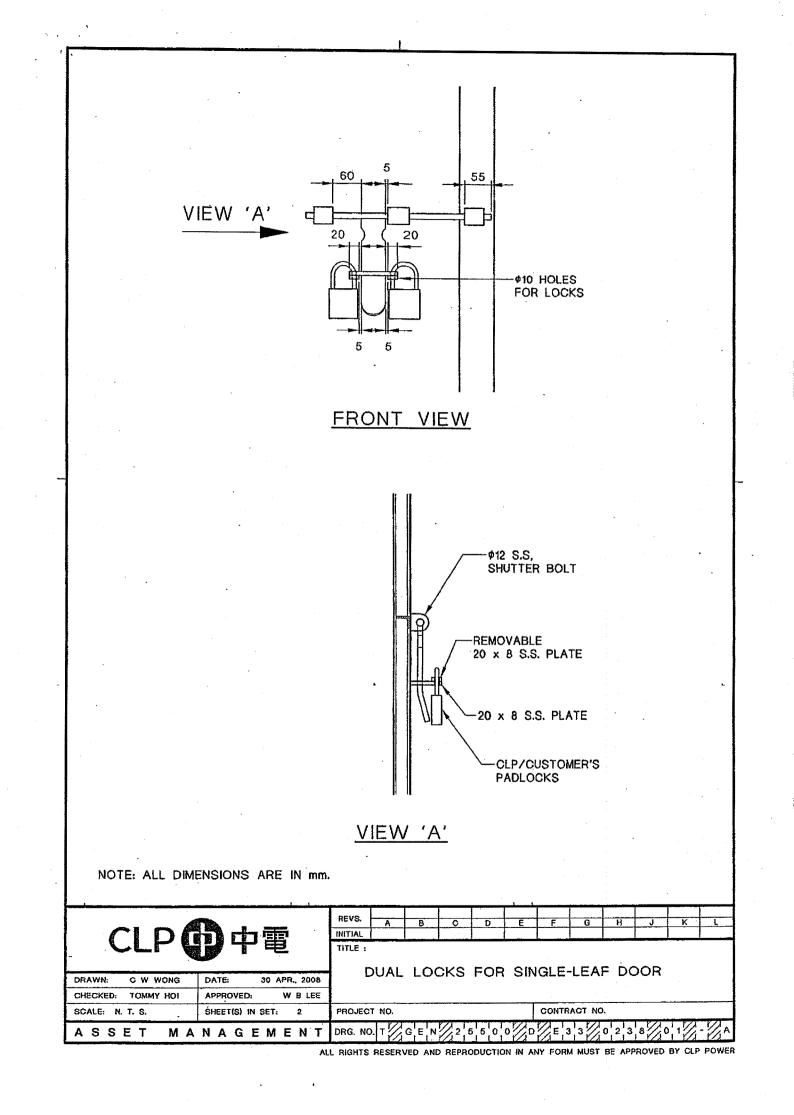
Signature/Chop:

Date:



.







By Fax & Post

MR. CALVIN CHAN CHINA MOBILE (HK) LIMITED 8TH FLOOR, MANHATTAN CENTRE 8 KWAI CHEONG ROAD KWAI CHUNG KOWLOON HONG KONG

Your Reference :

Our Reference : Telephone :	OPS/NT/WB/STK001/ 09/ KKC 2888 0568
Fax :	2677 0047
Date :	2 March, 2009

Dear Mr Chan

Cabling Facilities Proposal for the People Cell Site At Wu Kau Tang Country Trail, Sha Tau Kok, New Territories

We refer to the site meeting held between you and our Y K Chow on 23 January 2009.

Enclosed herewith a set of Drawing No. WB/STK001/09, showing the required facilities for your provision.

Please note that we require the working permit from concerned parties for providing service to this site, so we have proposed the cable required date to September 2009. Your company is requested to complete the required facilities for us a month in advance. Delay in provision of the facilities will affect the service provision.

Should your require further information, please contact me or our Mr Y K Chow at Tel. No. 2888 0577.

Yours sincerely,

K K Cheung For and on behalf of PCCW-HKT Telephone Limited

bcc Mr C S Wong Project File DND - By Fax Only 2827-5060 WB/STK001/09

