Geotechnical Planning Review Report on

Lot No. 126 (Part) & 128 in D.D. 128

Kai Pak Ling Road

Fung Kong Tsuen

Yuen Long

Table of Contents

Co	Contents		
1.	Introduction	1	
2.	Site Location, Topography and Surrounding Environment	2-7	
3.	Impact of proposed works on existing Features and natural hillside	8-11	
4.	Conclusions	12	
5.	References	13	

Figures

LP-01 Site Layout Plan

LP-02 Sections

Figure 3 & 4 Part Print of Hong Kong Geological Survey (HKGS) Map & Sheet

6 (Yuen Long)

Appendix

Appendix A – Slope information retrieved from SIS of CEDD

1.0 Introduction

1.1 Background

Warehouses are proposed at Lot No. 126 (Part) & 128 in D.D. 128, Kai Pak Ling Road, Yuen Long. The proposed development calls for specific geotechnical engineering inputs for the assessment of its engineering effects on the adjacent slope, wall and natural hillside.

This Geotechnical Planning Review Report (GPRR) is made based on desk study and review of available documentary information and proposed development plan. The geology and site conditions are described. Potential geotechnical constraints are identified in the assessment.

To support the development proposal, this assessment is aimed at identifying the geotechnical feasibility of the proposed development and the existing slope, wall and hillside which may be affecting or be affected by the proposed development.

2.0 Site Location, Topography and Surrounding Environment

2.1 Site Description

The site is at a sloping ground with level platform at Yuen Long. The site layout plan of the proposed development site is presented in Figure 1.

According to the available SIMAR reports retrieved from Lands Department and SIS records obtained from Geotechnical Engineering Office (GEO), there are 6 registered geotechnical feature lies within or in the vicinity of the site.

2.1.1 Feature No. 6NW-A/C38

At the mid-portion of the site, there is a cut slope with Feature No. 6NW-A/C38. The slope is max. 3.2m high and 120m long with average angle of 48°. Non-dangerous goods storage site is situated on slope crest and lightly-used open area is situated at slope toe. The owner of Lot No. 126 in D.D. 128 is responsible for the maintenance of sub-division 1 of the Feature and Lands Department is responsible for the maintenance of sub-division 2 of the Feature. The location of the Feature is presented in Drawing No. LP - 01.

2.1.2 Feature No. 6NW-A/C39

At the mid-portion of the site, there is a cut slope with Feature No. 6NW-A/C39. The slope is max. 3m high and 70m long with average angle of 46°. Non-dangerous goods storage site is situated on slope crest and district open space is situated at slope toe. The owner of Lot No. 126 in D.D. 128 is responsible for the maintenance of sub-division 1 of the Feature, owner of Lot No. 127 in D.D. 128 is responsible for the maintenance of sub-division 2 of the Feature, and Lands Department is responsible for the maintenance of sub-division 3 of the Feature. The location of the Feature is presented in Drawing No. LP-01.

2.1.3 Feature No. 6NW-A/C75

At the south-eastern portion of the site, there is a cut slope with Feature No. 6NW-A/C75. The slope is max. 4m high and 150m long with average angle of 65°. Cemetery is situated on slope crest and densely-used open area is situated at slope toe. The owner of Lot No. 130 in D.D. 128 is responsible for the maintenance of sub-division 1 of the Feature, and Lands Department is responsible for the maintenance of sub-division 2 of the Feature. The location of the Feature is presented in Drawing No. LP-01.

2.1.4 Feature No. 6NW-A/F67

Due north-east of the site, there is a fill slope with Feature No. 6NW-A/F67. The slope is max. 5.1m high and 90m long with average angle of 40°. A road with low traffic density is situated on slope crest and other non-crowded built-up facilities are situated at slope toe. The owner of Lot No. 130 in D.D. 128 is responsible for the maintenance of sub-division 1 of the Feature, and Lands Department is responsible for the maintenance of sub-division 2 of the Feature. The location of the Feature is presented in Drawing No, LP-01.

2.1.5 Feature No. 6NW-A/F93

At the north-western portion of the site, there is a fill slope with Feature No. 6NW-A/F93. The slope is max. 6m high and 245m long with average angle of 40°. For portion of the Feature situated within the site, district open area is situated on slope crest and warehouses are situated at slope toe. The owner of Lot No. 129 s.B in D.D. 128 is responsible for the maintenance of sub-division 1 of the Feature, owner of Lot No. 126 in D.D. 128 is responsible for the maintenance of sub-division 2 of the Feature Lot No. 127 in D.D. 128 is responsible for the maintenance of sub-division 3 of the Feature, and Lands Department is responsible for the maintenance of sub-division 4 of the Feature. The location of the Feature is presented in Drawing No. LP-01.

2.1.6 Feature No. 6NW-A/F94

At the north-western portion of the site, there is a fill slope with Feature No. 6NW-A/F94. The slope is max. 4m high and 200m long with average angle of 35°. For the portion of the Feature situated within the site, carpark is situated on slope crest and district open space is situated at slope toe. The maintenance responsibility parties are given in the table below:-

Sub-division of Feature No. 6NW-A/F94	Maintenance Responsibility Parties
1	Lot 126 in D.D. 128
2	Lot 128 in D.D. 128
3	Lot 129 s.B in D.D. 128
4	Lot 270 s.A in D.D. 128
5	Lot 270 R.P. in D.D. 128
6	Lands Department

2.2 Proposed Development

The proposed development consists of the construction of a 3 warehouses, 1 open storage, 1 office and 1 lounge & toilet and 1 meter room. A layout plan and typical section of the proposed structure are attached in Dwg No. LP-01 and LP-02.

2.3 Desk Study

Desk study has been carried out, no relevant information could be retrieved from the Geotechnical Information Unit (GIU) of Geotechnical Engineering Office (GEO) Buildings Department (BD).

2.3.1 Geotechnical Map

The geology of the Study Area is shown on the Hong Kong Geological Survey (HKGS) Map Sheet 6 (Yuen Long), 1:20,000 – scale HGM20 Series: Edition II - 1988. The local geology of the Study Area is presented in Figure 1 and 2 and described below.

2.3.2 Solid Geology

The 1:20,000 scale geological maps indicated that regional area around the Site is underlain by Mesozoic Upper Jurassic Repulse Bay Volcanic Group block-bearing tuff and tuffite and andesite with tuff and tuffite, and Quaternary Pleistocene silt/sand, gravelly, clayey with cobbles and boulders.

2.3.3 Superficial Geology

Entire Site are surrounded by Quaternary Pleistocene debris flow deposits (Qpd) and terraced alluvium (Qpa).

2.4 Enhanced Natural Terrain Landslide Inventory

In 1995, the GEO compiled the Natural Terrain Landslide Inventory (NTLI) from an interpretation of high – altitude (8,000ft and above) aerial photographs dated from 1945 to 1994 (King, 1999). In 2007, the GEO produced an Enhanced Natural Terrain Landslide Inventory (ENTLI) using low-altitude (8,000ft and below) aerial photographs to update the NTLI.

In accordance with GEO Report No. 138 (GEO, 2016), landslides are classed as either "Relict" or "Recent", depending on their appearance in aerial photographs. "Relict" landslides are defined as those where the main scarp is well-defined but vegetation has re-established on the scar on the earliest set of available aerial photographs. "Recent" landslides are defined as having occurred within the timespan of the aerial photograph coverage. These are typically identified as having a light tone on the aerial photographs and are bare of vegetation.

The ENTLI has recorded none relict / recent landslides within and in the vicinity of the Site.

2.5 Historical Landslide Catchment (HLC) Inventory

Historical Landslide Catchments (HLCs) have been defined by GEO based on the results of the ENTLI. According to the inventory, there is no HLC within the Site.

2.6 Reported Landslide Incidents

The GEO landslide incidents database has no record of reported landslide incident within or in the vicinity of the Site.

2.7 Ground Investigation

No Ground Investigation Works within the site has been carried out. No nearby GI Information could be retrieved from GIU of CEDD nor Buildings Department.

3.0 Impacts of proposed works on existing Features and natural hillside

3.1 Feature No. 6NW-A/C38

Feature No. 6NW-A/C38 is located at mid-portion of the site. An open storage area and meter room are situated on slope crest. Warehouse, office and parking space are situated at slope toe. Stability assessment on the existing slope shall be checked to ensure the existing slope will not affect the proposed development or vice versa.

In order to fulfill the above-mentioned objectives for detailed design to be carried out in future, a comprehensive investigation programme will be implement comprising the following:-

- I Detailed ground investigation including in-situ and laboratory soil testing to identify the soil parameters together with the monitoring of groundwater table;
- II Establishment of geological and hydrogeological model based on the findings from topographic survey and the ground investigation works.

3.2 Feature No. 6NW-A/C39

Feature No. 6NW-A/C39 is located at mid-portion of the site. An office and parking space are on slope crest. Access road is situated along at slope toe. Stability assessment on the existing slope shall be checked to ensure the existing slope and toe wall will not affect the proposed development or vice versa.

In order to fulfill the above-mentioned objectives for detailed design to be carried out in future, a comprehensive investigation programme will be implement comprising the following:-

- I Detailed ground investigation including in-situ and laboratory soil testing to identify the soil parameters together with the monitoring of groundwater table;
- II Establishment of geological and hydrogeological model based on the findings from topographic survey and the ground investigation works.

3.3 Feature No. 6NW-A/C75

Feature No. 6NW-A/C75 is located at south-east portion of the site. An open storage area and meter room are situated at slope toe. Stability assessment on the existing slope shall be checked to ensure the existing slope and toe wall will not affect the proposed development or vice versa.

In order to fulfill the above-mentioned objectives for detailed design to be carried out in future, a comprehensive investigation programme will be implement comprising the following:-

- I Detailed ground investigation including in-situ and laboratory soil testing to identify the soil parameters together with the monitoring of groundwater table;
- II Establishment of geological and hydrogeological model based on the findings from topographic survey and the ground investigation works.

3.4 Feature No. 6NW-A/F67

Feature No. 6NW-A/F67 is located due north-east of the site. A staff lounge & restroom, warehouses and parking space are situaed near the slope toe. Stability assessment on the existing slope shall be checked to ensure the existing slope and toe wall will not affect the proposed development or vice versa.

In order to fulfill the above-mentioned objectives for detailed design to be carried out in future, a comprehensive investigation programme will be implement comprising the following:-

- I Detailed ground investigation including in-situ and laboratory soil testing to identify the soil parameters together with the monitoring of groundwater table;
- II Establishment of geological and hydrogeological model based on the findings from topographic survey and the ground investigation works.

3.5 Feature No. 6NW-A/F93

Feature No. 6NW-A/F93 is located at north-east portion of the site. Warehouses and parking space are situated at slope toe. A slope with Feature No. 6NW-A/F94 is situated. Stability assessment on the existing slope shall be checked to ensure the existing slope and toe wall will not affect the proposed development or vice versa.

In order to fulfill the above-mentioned objectives for detailed design to be carried out in future, a comprehensive investigation programme will be implement comprising the following:-

- I Detailed ground investigation including in-situ and laboratory soil testing to identify the soil parameters together with the monitoring of groundwater table;
- II Establishment of geological and hydrogeological model based on the findings from topographic survey and the ground investigation works.

3.6 Feature No. 6NW-A/F94

Feature No. 6NW-A/F94 is located at north-west portion of the site. An existing slope with Feature No. 6NW-A/F93 is situated at slope toe. For the portion of the Feature situated within the site, it is a sloping ground with maximum slope angle of 14°. It is considered that the Feature will not affect the proposed development or vice versa.

3.7 Impacts of the Proposed Works to the Natural Hillside

The proposed development is situated near toe area of natural hillside is 14m high approx with slope angle range from 26° to 33°. According to clause 2.3.3 of Geo Report No. 138 (2nd Edition) NTEHs Alert Criteria, the site does not meet the In-principle Objection Criteria, as the slope height is less than 50m. As such, the subject site not required for a Natural Terrain Hazard Study (NTHS).

4.0 Conclusions

Based on the above discussion, it can be concluded that the proposed development is considered to be feasible from geotechnical point of view. The construction would be straight forward unlikely posting particular problems to the surrounding area under careful planning, proper execution and vigilant supervision.

Site investigation is proposed to reveal/confirm the subsoils and the ground regime within and in the vicinity of the site as well as to determine the engineering properties of subsoils and rock. The ground investigation field works should be preceded under supervision of suitably qualified engineers and technically competent persons conforming the requirements specified in the "Code of Practice for Site Supervision 2009" published by the BD.

5.0 References

Geotechnical Engineering Office (2016). Guidelines for Natural Terrain Hazard Studies. Geotechnical Engineering Office, Hong Kong. GEO Report No. 138 2nd Edition.

Geotechnical Engineering Office (2004). Technical Guidance Note 22: Guidelines on Geomorphological Mapping for Natural Terrain Hazard Studies. Geotechnical Engineering Office, Hong Kong.

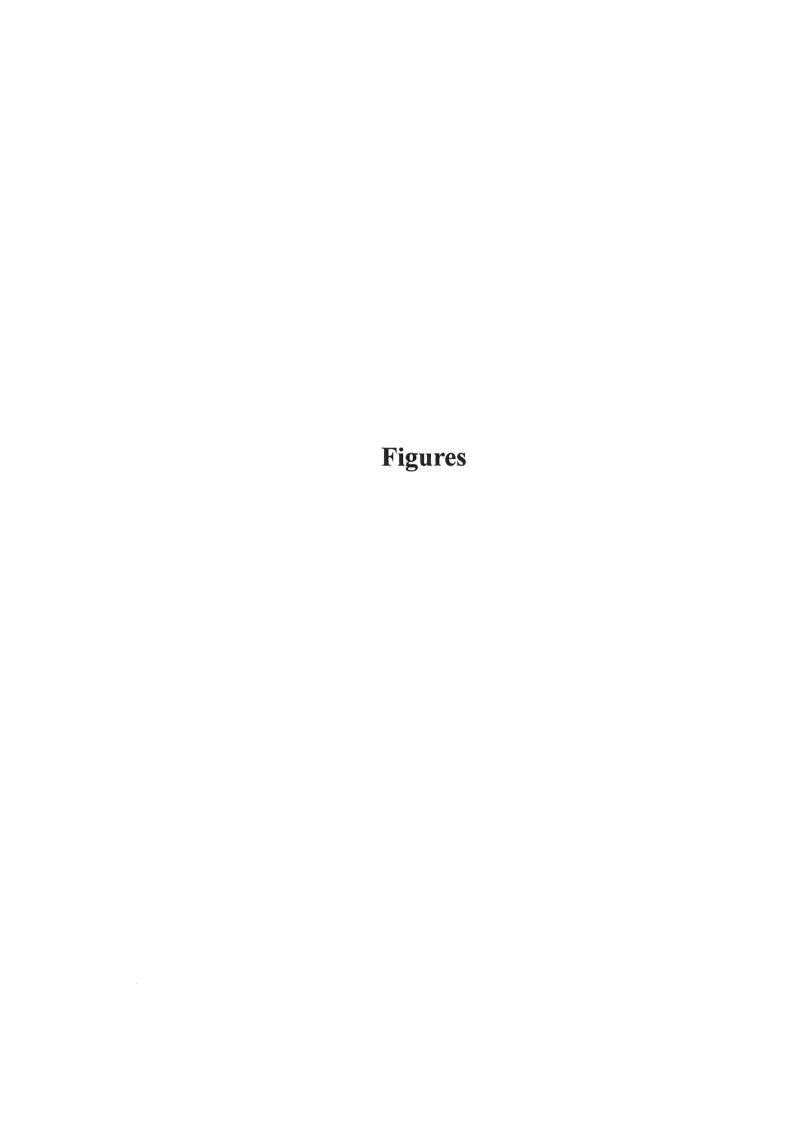
Geotechnical Engineering Office (2014). Technical Guidance Note No. 36: Guidelines on Enhanced Approach for Natural Terrain Hazard Studies. Geotechnical Engineering Office, Civil Engineering Department, Hong Kong.

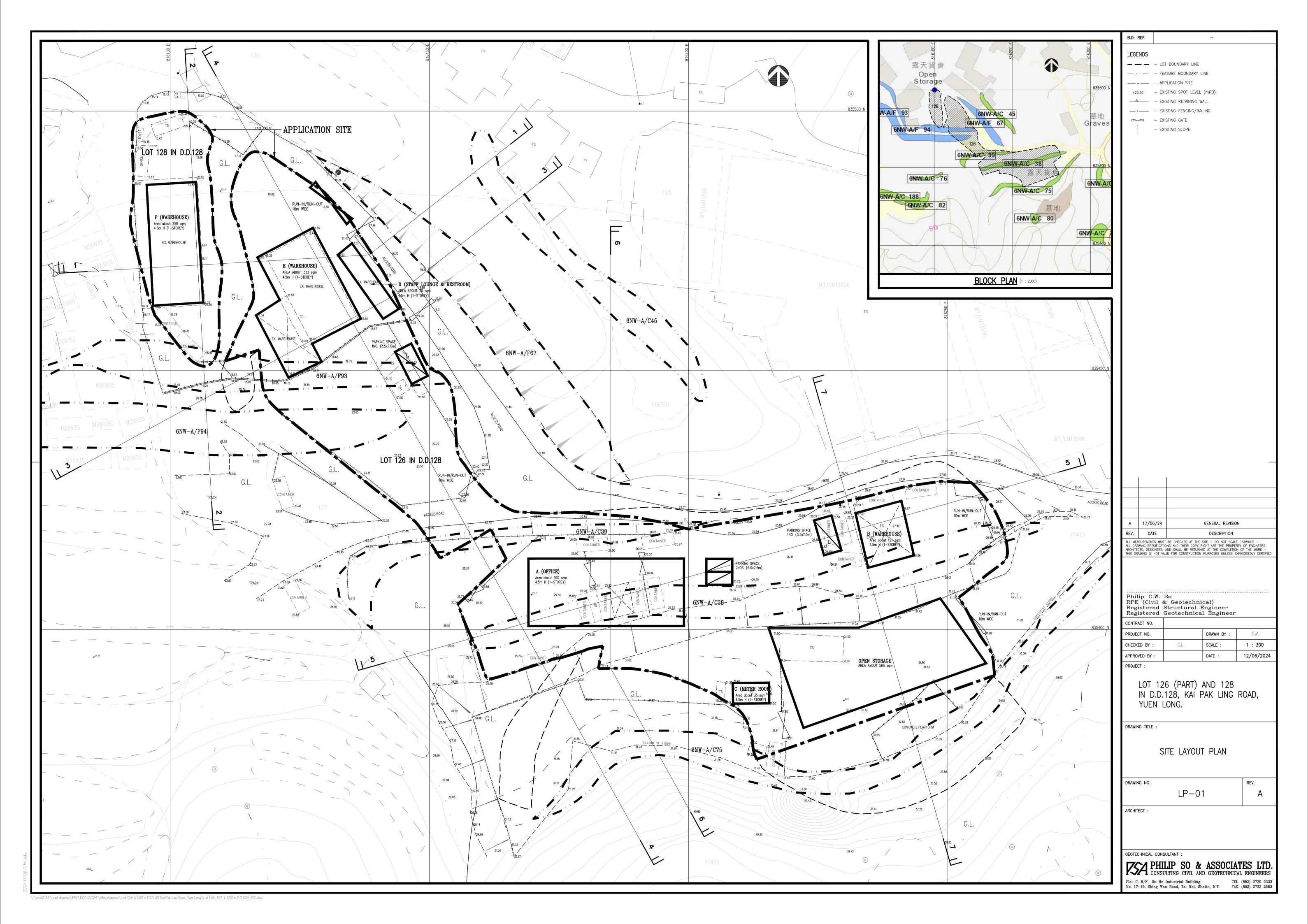
King, J.P. (1999). Natural Terrain Landslide Study The Natural Terrain Landslide Inventory. GEO Report No. 74, Geotechnical Engineering Office, Hong Kong.

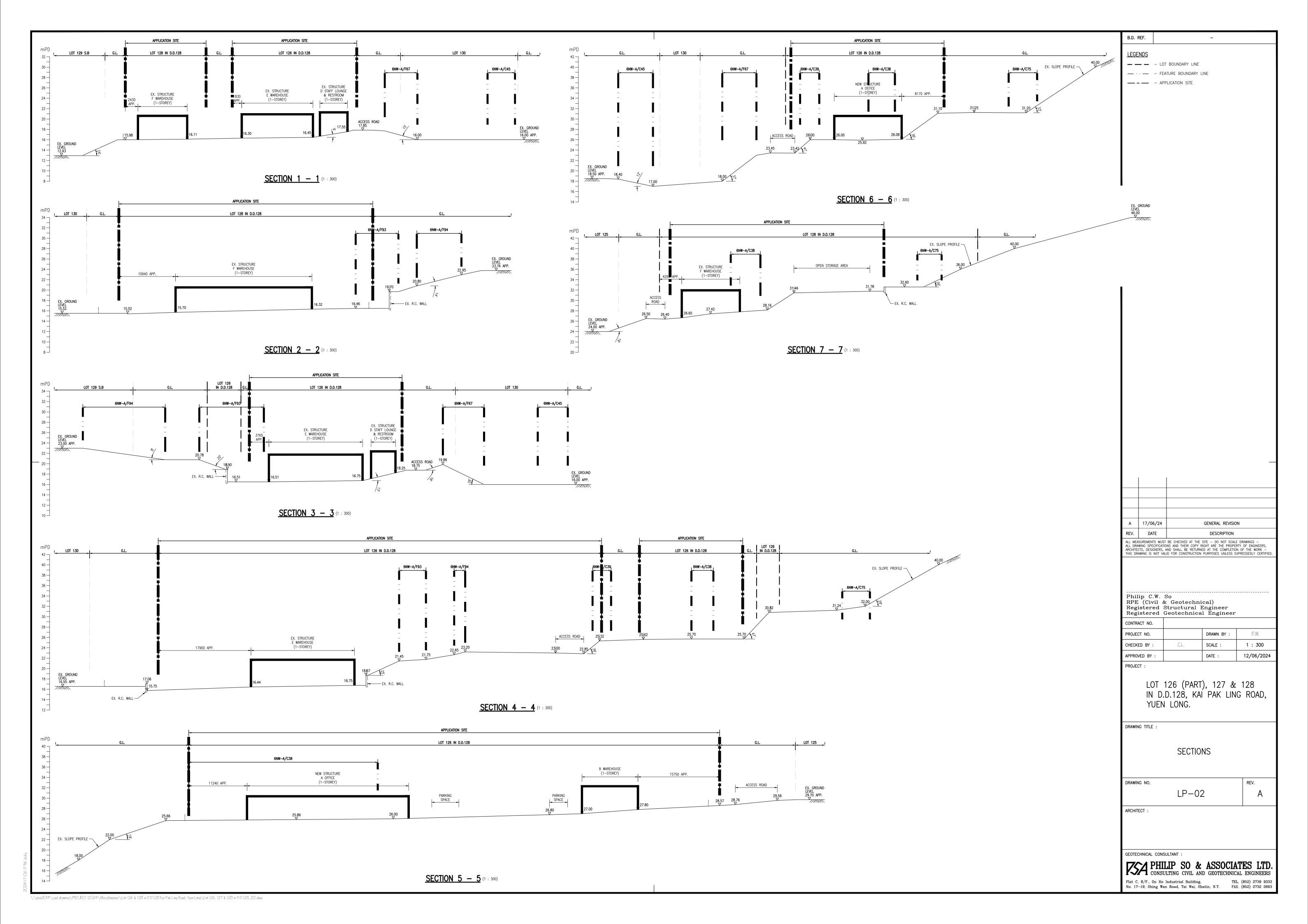
Landslide data for public retrieved from Location of Landslide Incidents of CEDD.

Geotechnical Engineering Office (2007). Technical Guidance Note No. 15. Guidelines for Classification of Consequence-to-life Category for Slope Feature.

GEO Report No. 337 – Review of Alert Criteria In Respect of Natural Terrain Hazards.







HONG KONG GEOLOGICAL SURVEY

香港地質調查

YUEN LONG 元朗

Sheet 6 編號

SOLID AND SUPERFICIAL GEOLOGY 基岩和表土地質圖

Series HGM20 組 別 Scale 1:20000 比 例

			Scale 1: 2	0000	比例	
SUPE	RFICIA	AL DE	POSITS 地表沉積			B-017-1
			GENETIC CLASSIFICATION 成因類型		主要物質成份	PRINCIPAL MATERIAL
		[Fai	次多数	填泥和窗物	Natural earth and wast
			Alluvium 海塘市	Qa	分离性夏野至中等的 粘土/粉砂、砂和铁石	Clay/silt, sand and grave well-sorted to semi-sorte
	全 新 HOLOCENE A		Beach deposits ···································	Qb	ij	
		{	Raised beach deposits ····· 高位海豚泥蜡	Qrb	u	San
		TAU NON		ОНН	主要湮灰色海相泥(朱介)	Undivided, main
		校日報 HANG HAU FORMATION	Manne sand ····································	ms	砂、部份特砂質	dark grey marine mu
ARY	7	(2 2				
QUATERNARY	P E E E E E E E E E E E E E E E E E E E		Debris flow deposits · · · · · · · · · · · · · · · · · · ·	Qd	未分离的砂、锉至蒸锉。 基質爲粘土/粉砂	Unsorted sand, gravel, cobble and boulders; clay/silt matr
O)	更新 - 全新統 PLEISTOCENE AND HOLOCENE		Talus (rockfall) deposits 岩部 暑商)推積物	Qt	牌石、中珠和洲牌	
	M - A	(
	144		Terraced allusium ····································	Qpa	分選性長昇至中等的 餘質、發質粘土/開發 未分選的確質、粘土質	Clay/silt, gravelly sand well-sorted to semi-sorte Silt/sand, gravelly, clayey with
	(基)	ŏΖ	Debris flow deposits ···································	Qpd		obbles and boulders; unsorte
	更新被 PIESTOCENE	高角語 LAP KOK MATION		фск	紅色·黃色却灰色的糕土·	Undivided; red, yellow and gre
	2	事 FORM		Lyck	前台、砂和设石(未介)	clay, silt, sand and grav
OLIE	O GEO	LOGY	基岩地質			
			SEDIMENTARY AND VOLCAN	IIC ROC	KS 沉積岩和火山岩	
	,	,	NAMED ROCK DIVISIONS 地港單位名稱		主要岩石類型/特徵 PRINCIPAL	ROCK TYPES/CHARACTER
			Tai Mo Shan Formation, 大帽山祖(未分)	JTM	相大山灰基层县灰岩	Coarse ash crystal tu
			正 Ap Lei Chau Formation、 輸銀測線(未分) andivided	JAC	植火山东坡川最灰岩	
		n.	HONG Shing Mun Formation	JSM	聯粒亜细粒火山灰粉灰岩 · 製灰角碟岩和階膜灰岩	Fine ash to coarse ash tuff tuff-breccia and tuff
		海水温料 BAY VOLCANIC GROUP	高女 Formation Ngau Liu Member - 牛茶段 民□ 報門相	Jnl	品班层最东岩	Crystal and vitric tu
	上朱骥铁 UPPER JURASSIC		Shek Lung Kung 石能無限	Jal	基灰角染岩	Tuff-breco
OIC			Yim Tin Tsai Formation。 独国任制: 未分: undivided	JYT	稳火山灰晶层要灰岩	Coarse ash crystal tu
MESOZOIC		AY VOI	體以 日本 Tuen Mun Formation, 电門線(未分)	JTU	安山岩英萩东岩和群荻东岩	· Andesite with tuff and tuffi
<				t	未分的破灰岩和层硅灰岩	Jadifferentiated toff and tuffi
		REPULSE		bt	食火山辣菜灰着和腊菜灰岩	· Block-bearing talf and fuffi
		-		s	64	Sandstor
				si	增砂岩和黑岩	Siltstone and mudstor
ļ				br	荒積角維岩	Sedimentary breco
SC	OUS	新田森 TIN GROUP				Manager and a finished
LAFOZOR	※ MEER MEER	N GR	Lok Ma 落馬灣雄	Cmp	受貨物發表和千枚若克量質發表	
PALA	石炭系 CARBONIFEROUS	a NAS	Yuen Long Formation, 元朝祖(未分) undivided	CYL	大曜岩	Mart
,		(0)	MAJOR INTRUSIVE IGNEOUS	ROCKS	主要侵入火成岩	
Î	1	(5	1g	细粒花回号·<2毫米	Fine-grained granite, < 2m
	57		Megacrystic 具大斑晶的	gtm	中组粒花刷岩 ······ F	ine- to medium-grained grani
	CEO			gm	中粒花崗岩・2 一 6 毫米	Medium-grained granite, 2-6m
MESOZOIC	難し			gc	樹粒花崗岩、>6毫米	Coarse-grained granite, > 6m
ESO	110	ĺ		gtg	营菱岩化硼粒花崗岩(Sreisenized fine-grained grani
¥	休福 - 自聖紀 JURASSIC-CRETACEOUS			d	選択商品花劍肉長署	Daci
	2			gdf	機粒花崗閃長岩·<2毫米······Fi	ne-grained granodiorite. < 2m
				gdm	中 拉花提問長者・2 - 6 老米・・・・・・	Medium-grain granodiorite, 2-5m
			MINOR INTRUSIVE IGNEOUS	ROCKS	次要侵入火成岩(脉岩)	
				b	有效者	Bass
RTI	ARY @	医三紀		a	閃長 场者 · · · · · · · · · · · · · · · · · ·	Andesi
					常明者	Lamprophy
1	ous	ĺ		rf	長石組岩	Feldsparphyric rhyoli
OIC	集羅-白皇紀 JURASSIC-CRETACEOUS			rq	石类斑岩	Quartzphyric rhyoli
205	4 S	{		ap	相晶湖	Apk
ME	### SSIC			р	像高端	Pegmati
l	JURA			q	石英脉 ······	Quartz ve
			METAMORPHIC ROCKS 變質	岩]	Figure 2
			- All Carrier and	F		

Appendix A

Slope Information retrieved from SIS of CEDD

BASIC INFORMATION

Location:

Storage area near Ngau Hom Shek, Yuen Long

Date of Formation:

pre-1977

Date of Construction/

Modification:

Approximate Coordinates:

Easting: 816212 Northing: 835405

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest:

Non-dangerous goods storage site

Distance of Facility from Crest (m):

Facility at Toe:

Lightly-used open area/facilities

Distance of Facility from Toe (m):

0.3

Consequence-to-life Category:

/: 3

Remarks:

TGN 15 case - provided by SP Division (31 MAR 2004)

SLOPE PART

(1) Max. Height (m): 3.2

Length (m): 120

Average Angle (deg): 48

WALL PART

N/A

MAINTENANCE RESPONSIBILITY

Mixed Feature Party: DD128 Lot126 Agent: N/A
Mixed Feature Party: Lands D Agent: Lands D

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection:

14-06-2001

Data Source:

El(Lands D)

Slope Part Drainage:

N/A

Wall Part Drainage:

N/A

SLOPE PART

Slope Part (1)

Surface Protection (%):

Bare: 0

Vegetated: 100

Chunam: 0

Geology: Decomposed granite

Shotcrete: 0

Other Cover: 0

Material Description:

Material type: Soil No. of Berms: N/A

Min. Berm Width (m): N/A

Weepholes:

Berm:

Size (mm): N/A

Spacing (m): N/A

STAGE 1 STUDY REPORT

Inspected On: 02-09-1997

Weather: Mainly Fine

District: MW

Section No: 1-1

Height(m): H1:3, H2:0

Type of Toe Facility: Lightly-used open area/facilities

Distance from Toe(m): 0.3

Type of Crest Facility: Non-dangerous goods storage site

Distance from Crest(m): 0
Consequence Category: 1

Engineering Judgement: U

Section No: 2-2

Type of Toe Facility: N/A

Distance from Toe(m): 0Type of Crest Facility: N/A

Distance from Crest(m): 0
Consequence Category: 1

Engineering Judgement:

Sign of Seepage:

Slope: No signs of seepage

Wall: N/A

Criterion A satisfied:

N

Sign of Distress:

Slope: N/A

Wall: N/A

Criterion D satisfied:

Note:

Non-routine maintenance required:

N/A

N

Masonry wall/Masonry facing:

N N/A

Note:

Consequence category (for critical section):

1

Observations:

TGN 15 case - provided by SP Division (31 MAR 2004)

Emergency Action Required:

N

Action By:

N/A

ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D:

N/A

Action By:

N/A

Further Study:

N

Action By:

N/A

OTHER EXTERNAL ACTION

Check / repair Services:

N

Action By:

N/A

Non-routine Maintenance:

N

Action By:

N/A



<u> PHOTO</u>









BASIC INFORMATION

Location: Storage area near Ngau Hom Shek, Yuen Long

Date of Formation:

post-1977

Date of Construction/

Modification:

Approximate Coordinates:

Easting: 816162 Northing: 835418

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest:

Non-dangerous goods storage site

Distance of Facility from Crest (m):

Facility at Toe:

District open space

Distance of Facility from Toe (m):

Consequence-to-life Category:

Remarks:

SLOPE PART

(1) Max. Height (m): 3 Length (m): 70

3

N/A

Average Angle (deg): 46

WALL PART

N/A

MAINTENANCE RESPONSIBILITY

Mixed Feature Party: DD128 LOT126 Agent: N/A
Mixed Feature Party: DD128 LOT127 Agent: N/A
Mixed Feature Party: Lands D Agent: Lands D

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection: 14-06-2001

Data Source: El(Lands D)

Slope Part Drainage: N/A

Wall Part Drainage: N/A

SLOPE PART

Slope Part (1)

Surface Protection (%): Bare: 0 Vegetated: 100 Chunam: 0 Shotcrete: 0 Other Cover: 0

Material Description: Material type: Soil Geology: Decomposed granite
Berm: No. of Berms: N/A Min. Berm Width (m): N/A

Weepholes: Size (mm): N/A Spacing (m): N/A

WALL PART

N/A

SERVICES

N/A

STAGE 1 STUDY REPORT

Inspected On:

Weather:

District: MW

Section No:

1-1

Height(m):

Type of Toe Facility:

District open space

Distance from Toe(m):

0

0

Type of Crest Facility:

Non-dangerous goods storage site

Distance from Crest(m):

Consequence Category:

Engineering Judgement:

Section No:

2-2

Type of Toe Facility:

Distance from Toe(m):

Type of Crest Facility:

Distance from Crest(m):

Consequence Category:

Engineering Judgement:

Sign of Seepage:

Criterion A satisfied:

Sign of Distress:

Criterion D satisfied:

Non-routine maintenance required:

Note:

Masonry wall/Masonry facing:

Note:

Consequence category (for critical section):

Observations: N/A

Emergency Action Required:

Action By: N/A

ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D:

N/A N/A

Further Study:

.....,.

Action By:

Action By: N/A

OTHER EXTERNAL ACTION

Check / repair Services:

Action By:

N/A

Non-routine Maintenance:

Action By:

N/A

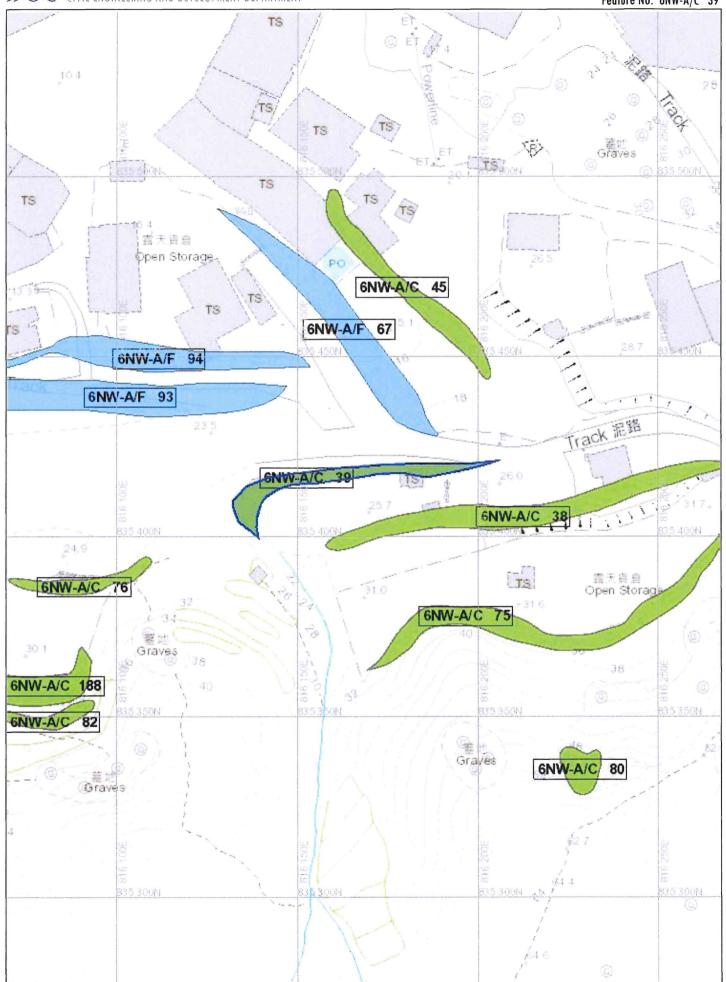
<u>PHOTO</u>







Feature No. 6NW-A/C 39



BASIC INFORMATION

Location:

350m West of Fung Kong Tsuen, Yuen Long

Date of Formation:

post-1977

Date of Construction/

Modification:

Approximate Coordinates:

Easting: 816233 Northing: 835370

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest:

Cemetery

Distance of Facility from Crest (m):

Facility at Toe:

Densely-used open area/facilities

Distance of Facility from Toe (m):

Consequence-to-life Category:

2

Remarks:

N/A

SLOPE PART

(1) Max. Height (m): 4

Length (m): 150

Average Angle (deg): 65

WALL PART

N/A

MAINTENANCE RESPONSIBILITY

Mixed Feature Party: Lands D Agent: Lands D
Mixed Feature Party: DD128 LOT 126 Agent: N/A

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection: 04-06-2015

Data Source: El(Lands D)

Slope Part Drainage: N/A

Wall Part Drainage: N/A

SLOPE PART

Slope Part (1)

Surface Protection (%): Bare: 0 Vegetated: 100 Chunam: 0 Shotcrete: 0 Other Cover: 0

Material Description: Material type: Soil Geology: N/A

Berm: No. of Berms: N/A Min. Berm Width (m): N/A

Weepholes: Size (mm): N/A Spacing (m): N/A

WALL PART

N/A

SERVICES

STAGE 1 STUDY REPORT

Inspected On: 25-02-2000

> Weather: Some Rain

District: MW

Section No:

1-1

Height(m):

H1:4, H2:0

Type of Toe Facility:

Densely-used open area/facilities

Distance from Toe(m):

0

1

U

Type of Crest Facility:

Cemetery

Distance from Crest(m):

Consequence Category: 3

Engineering Judgement:

Section No:

2-2

Type of Toe Facility:

N/A

Distance from Toe(m):

0

Type of Crest Facility:

N/A

Distance from Crest(m):

0

Consequence Category:

3

Engineering Judgement:

U

Sign of Seepage:

Slope: No signs of seepage

Wall: N/A

Criterion A satisfied:

M

N

Sign of Distress:

Slope: N/A

Wall: N/A

Criterion D satisfied:

Non-routine maintenance required:

Note: N/A

Masonry wall/Masonry facing: N

Note: N/A

Consequence category (for critical section): 3

Observations: N/A

Emergency Action Required:

N

Action By: N/A

ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D:

N/A N

N/A

Action By:

Further Study:

Action By: N/A

OTHER EXTERNAL ACTION

Check / repair Services: N

Action By:

N/A

Non-routine Maintenance:

N

Action By:

<u> PHOTO</u>



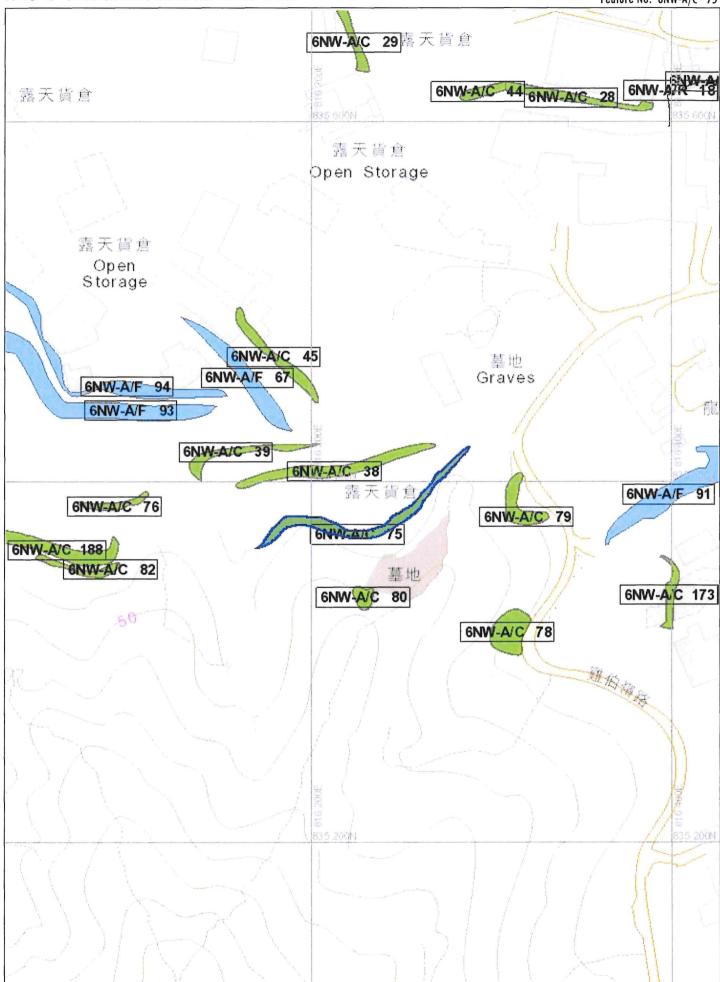








Feature No. 6NW-A/C 75



BASIC INFORMATION

Location: 300M SOUTH EAST OF TIN HAU TEMPLE, SHA KONG TSUEN, DEEP BAY

Date of Formation: post-1977

Date of Construction/

Modification:

Approximate Coordinates: Easting: 816155 Northing: 835470

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest: Other non-crowded built-up facilities

Distance of Facility from Crest (m): 0

Facility at Toe: Road/footpath with low traffic density

Distance of Facility from Toe (m): 0
Consequence-to-life Category: 2

Remarks: N/A

SLOPE PART

(1) Max. Height (m): 5.1 Length (m): 90 Average Angle (deg): 40

WALL PART

MAINTENANCE RESPONSIBILITY

Mixed Feature Party: DD128 LOT130 Agent: N/A Mixed Feature Party: Lands D Agent: Lands D

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection: 25-11-2002

Data Source: Agreement CE 59/2002 (GE)

Slope Part Drainage: N/A

Wall Part Drainage: N/A

SLOPE PART

Slope Part (1)

Surface Protection (%): Bare: 100 Vegetated: 0 Chunam: 0 Shotcrete: 0 Other Cover: 0

Material Description: Material type: Soil Geology: N/A

Berm: No. of Berms: N/A Min. Berm Width (m): N/A

Weepholes: Size (mm): N/A Spacing (m): N/A

WALL PART

N/A

SERVICES

STAGE I STUDY REPORT

Inspected On:

Weather:

District: MW

Section No:

1-1

Height(m):

Type of Toe Facility:

Road/footpath with low traffic density

Distance from Toe(m):

0

Type of Crest Facility:

Other non-crowded built-up facilities

Distance from Crest(m):

): U

 ${\it Consequence \ Category:}$

Engineering Judgement:

Section No:

2-2

Type of Toe Facility:

Distance from Toe(m):

Type of Crest Facility:

Distance from Crest(m):

Consequence Category:

Engineering Judgement:

Sign of Seepage:

Criterion A satisfied:

Sign of Distress:

Criterion D satisfied:

Non-routine maintenance required:

Note:

Masonry wall/Masonry facing:

Note:

Consequence category (for critical section):

Observations: N/A

Emergency Action Required:

Action By: N/A

ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D: N/A

Action By: N/A

Further Study:

Action By: N/A

OTHER EXTERNAL ACTION

Check / repair Services:

Action By: N/A

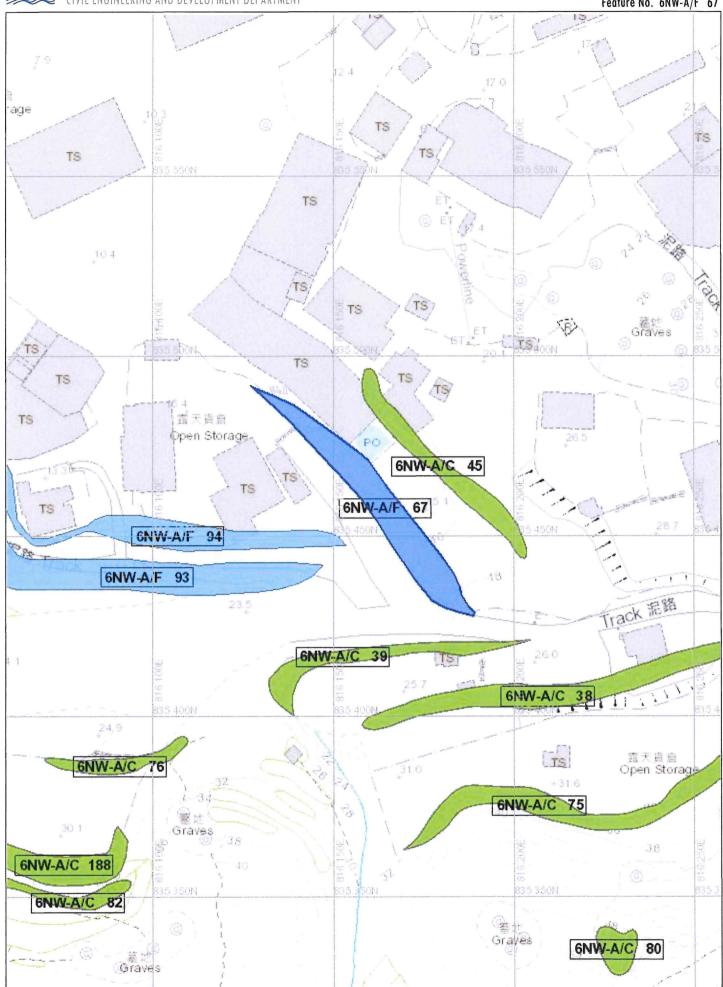
Non-routine Maintenance:

Action By: N/A

<u> PHOTO</u>



Feature No. 6NW-A/F 67



PAGE 7 OF 7

BASIC INFORMATION

Location: Lot 129 s.B, 126, 127 in DD128, Sha Kong Tsuen, Yuen Long

Date of Formation: pre-1977

Date of Construction/

Modification:

Approximate Coordinates: Easting: 816019 Northing: 835478

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest: Open car park

Distance of Facility from Crest (m): 0

Facility at Toe:

Cottage, licensed and squatter area

Distance of Facility from Toe (m): 0

Consequence-to-life Category:

Remarks: N/A

1

SLOPE PART

(1) Max. Height (m): 6 Length (m): 245 Average Angle (deg): 40

WALL PART

MAINTENANCE RESPONSIBILITY

Mixed Feature Party: DD128 LOT 129 S.B Agent: N/A
Mixed Feature Party: DD128 LOT 126 Agent: N/A
Mixed Feature Party: DD128 LOT 127 Agent: N/A
Mixed Feature Party: Lands D Agent: Lands D

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection: 2

25-05-2016

Data Source:

Districts

Slope Part Drainage:

N/A

Wall Part Drainage:

N/A

SLOPE PART

Slope Part (1)

Surface Protection (%):

Bare: 100

Vegetated: 0

Chunam: 0

Shotcrete: 0

Other Cover: 0

Material Description:

Material type: Soil No. of Berms: N/A Geology: N/A Min. Berm Width (m): N/A

Weepholes:

Berm:

Size (mm): N/A

Spacing (m): N/A

WALL PART

N/A

SERVICES

STAGE 1 STUDY REPORT

Inspected On:

Weather:

District: N/A

Section No: 1-1

Height(m):

Type of Toe Facility: Cottage, licensed and squatter area

Distance from Toe(m): 0

Type of Crest Facility: Open car park

Distance from Crest(m): 0

Consequence Category:

Engineering Judgement:

Section No: 2-2

Type of Toe Facility:

Distance from Toe(m):

Type of Crest Facility:

Distance from Crest(m):

Consequence Category:

Engineering Judgement:

Sign of Seepage:

Criterion A satisfied:

Sign of Distress:

Criterion D satisfied:

Non-routine maintenance required:

Note:

Masonry wall/Masonry facing:

Note:

Consequence category (for critical section):

Observations: N/A

Emergency Action Required:

Action By: N/A

ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D:

Action By: N/A

N/A

Further Study:

Action By: N/A

OTHER EXTERNAL ACTION

Check / repair Services:

Action By:

N/A

Non-routine Maintenance:

Action By:

<u> PHOTO</u>











Feature No. 6NW-A/F 93



BASIC INFORMATION

Location: Lot 129 s.B, 126, 127, 270 in DD128, Sha Kong Tsuen, Yuen Long

Date of Formation: pre-1977

Date of Construction/

Modification:

Approximate Coordinates: Easting: 816115 Northing: 835449

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest: Construction sites

Distance of Facility from Crest (m):

Facility at Toe: Cottage, licensed and squatter area

Distance of Facility from Toe (m): Consequence-to-life Category:

> Remarks: N/A

SLOPE PART

(1) Max. Height (m): 4 Length (m): 200 Average Angle (deg): 35

WALL PART

MAINTENANCE RESPONSIBILITY

Party: DD128 LOT 126 Mixed Feature Agent: N/A Party: DD128 LOT 128 Mixed Feature Agent: N/A Mixed Feature Party: DD128 LOT 129 S.B Agent: N/A Mixed Feature Party: DD128 LOT 270 S.A Agent: N/A Mixed Feature Party: DD128 LOT 270 RP Agent: N/A Mixed Feature Party: Lands D Agent: Lands D

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection:

25-05-2016

Data Source:

Districts

Slope Part Drainage:

N/A

Wall Part Drainage:

N/A

SLOPE PART

Slope Part (1)

Surface Protection (%):

Bare: 100

Vegetated: 0

Chunam: 0 S

Shotcrete: 0

Other Cover: 0

Material Description:

Material type: Soil No. of Berms: N/A Geology: N/A Min. Berm Width (m): N/A

Weepholes:

Berm:

Size (mm): N/A

Spacing (m): N/A

WALL PART

N/A

<u>SERVICES</u>

STAGE 1 STUDY REPORT

Inspected On:

Weather:

District: N/A

Section No:

1-1

0

2-2

Height(m):

Type of Toe Facility:

Cottage, licensed and squatter area

Distance from Toe(m):

- - ...

Type of Crest Facility:

Construction sites

Distance from Crest(m): 0

Consequence Category:

Engineering Judgement:

Section No:

Type of Toe Facility:

Distance from Toe(m):

Type of Crest Facility:

Distance from Crest(m):

Consequence Category:

Engineering Judgement:

Sign of Seepage:

Criterion A satisfied:

Sign of Distress:

Criterion D satisfied:

Non-routine maintenance required:

Note:

Masonry wall/Masonry facing:

Note:

Consequence category (for critical section):

Observations: N/A

Emergency Action Required:

Action By: N/A

ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D:

N/A

Action By:

N/A

Further Study:

Action By:

N/A

OTHER EXTERNAL ACTION

Check / repair Services:

Action By:

N/A

Non-routine Maintenance:

Action By:

<u> PHOTO</u>









