

**GEOTECHNICAL PLANNING REVIEW REPORT  
FOR S16 APPLICATION**

**FOR PROPOSED ACCESS ROAD ADJOINING  
58 TAI HANG ROAD,  
HONG KONG**

**TSW Consulting Engineers Ltd.**

**February 2025**

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## **1. INTRODUCTION**

The application is new access road adjoining 58 Tai Hang Road, Hong Kong. The proposed area of new access road and external staircases is about 652m<sup>2</sup>. Site Location Plans is included as Figure 1.

This report is to present an assessment on geotechnical feasibility in connection with Section 16 Planning Application for the development. The geotechnical planning review is generally in accordance with “GEO Advice Note for Planning Applications under Town Planning Ordinance (Cap. 131). It covers discussions on the existing site conditions, the geology, geotechnical features around which may affect or be affected by the proposed development and relevant information reviewed.

## **2. DESCRIPTION OF THE SITE**

The site is roughly rectangular shape and is located on sloping ground of gradient about 1 in 2.

The site is bounded by Tai Hang Road at SW and adjoining buildings at NE and SE. They include a 18-storey building at 60 Tai Hang Road, a 31-storey building at 10 Tai Hang Road and a 13-storey building at 12-14 Tai Hang Road which are on in-situ concrete Cassion foundation, bored piles with mini piles foundation and pad footing respectively.

Site Layout refers Figure 1.

Photos are shown in Appendix B.

## 2.1 ADJACENT BUILDINGS

Records of adjacent buildings can be retrieved from Buildings Department (BRAVO). Information of 3 buildings at close vicinity is summarized in Table 1.

Layout refers Figure 2 while photos are shown in Appendix B-2.

Table 1 Adjacent Buildings

Building Mark	Address	BD ref. no.	Storey (Height)	Completion Year (Age)	Foundation Type	Clear Distance Away
#B1	60 Tai Hang Road	3013/79	18 Storeys (60.2m)	1986 (38 years)	Cassion	1.7m
#B2	10 Tai Hang Road	3038/95	31 Storeys (111m)	2001 (23 years)	Bored Piles and Mini Piles	13.6m
#B3	12-14 Tai Hang Road	2055/96	13 Storeys (44m)	1965 (59 years)	Pad Footing on Soil	28.3m

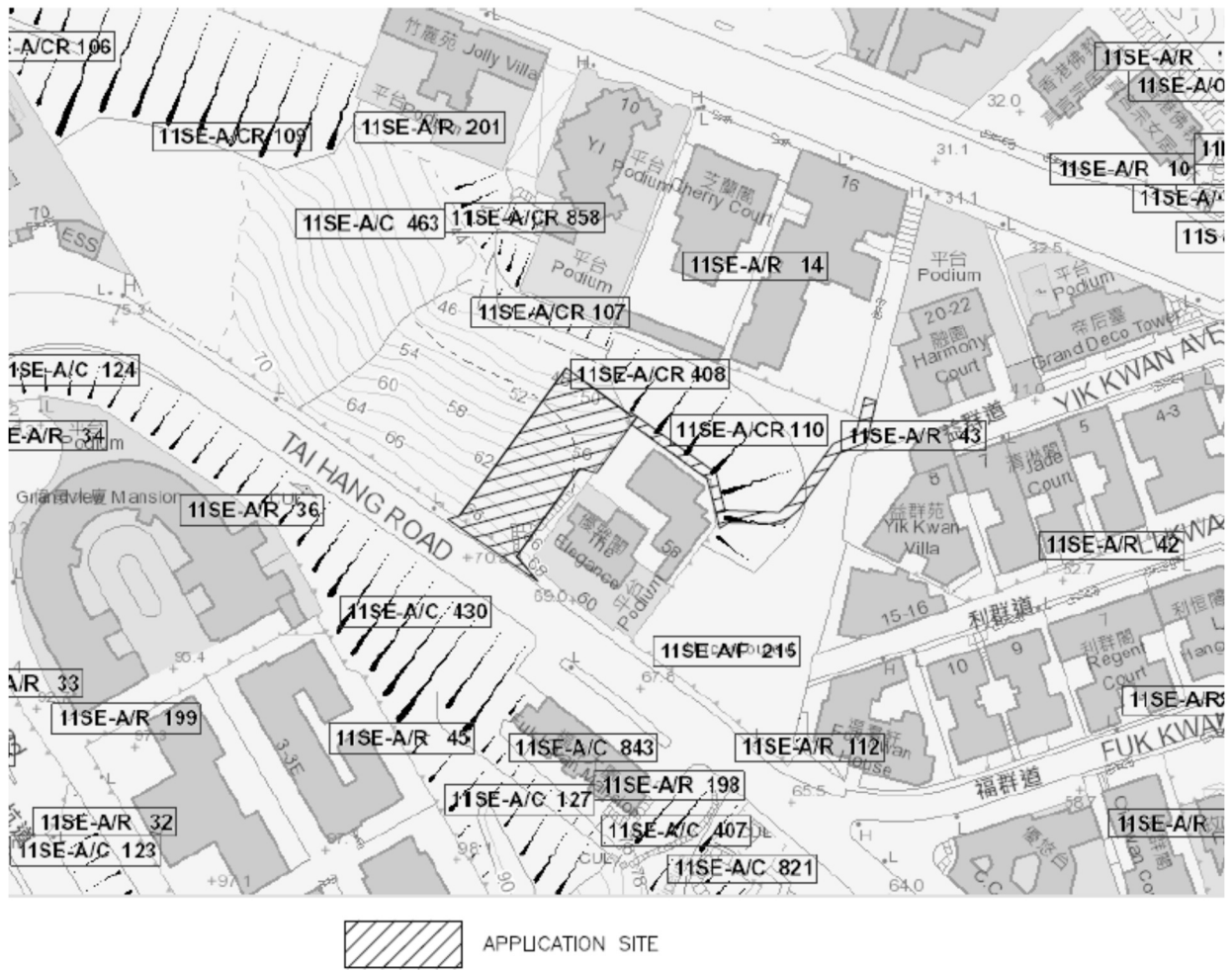


Figure 1 Site Location Plan



Figure 2 Layout of Adjacent Buildings with BD reference nos.

## 2.2 ADJACENT GEOTECHNICAL FEATURES

According to GEO's Slope Information System (SIS), there are eleven registered wall features within 50m from the site. Information of these features is summarized in Table 2 while extracts of SIS are shown in Appendix C.

Table 2 Adjacent Geotechnical Features

Feature Mark	Feature no.	Location	Descriptions	Nearest Distance Away
#F1	11SE-A/C 463	North East of Grandview Mansion, Below Tai Hang Road, Peak	34m(H) x 45m(L) 45° Slope with Vegetated and Shotcrete Cover	17.9m
#F2	11SE-A/CR 107	I.L. 8886 No. 8B-10 Tai Hang Road, Hong Kong	5m(H) x 18.7m(L) 55° Slope with Shotcrete cover and 4m(H) x 18.7m(L) Concrete Wall	8.3m
#F3	11SE-A/CR 408	South of Cherry Court, Tai Hang, Hong Kong	10m(H) x 18m(L) 45° Slope and 9m(H) x 18m(L) Concrete Retaining Wall	1m
#F4	11SE-A/CR 110	Back of 16-18 Tai Hang Road, Tai Hang, Hong Kong	13m(H) x 32m(L) 50° Slope with mainly Chunam Cover and 4.2m(H) x 28m(L) Concrete Wall	6.2m
#F5	11SE-A/F 215	Tai Hang Road, HV	10m(H) x 36m(L) 30° Slope with Vegetated Cover	25.5m
#F6	11SE-A/C 430	Tai Hang Road, Hong Kong East	25m(H) x 95m(L) 50° Slope with Shotcrete Cover	10.5m
#F7	11SE-A/C 127	53-55 Tai Hang Road, Tai Hang, Hong Kong	21m(H) x 45m(L) 55° Slope with mainly Vegetated Cover	11.2m
#F8	11SE-A/C 843	No. 55 Tai Hauj Road, Tai Hang, Hong Kong	12m(H) x 45m(L) 50° Slope with Chunam Cover	26.9m
#F9	11SE-A/R 198	East of Tai Hang Road 53-55, Tai Hang	7.1m(H) x 5.7m(L) Masonry Retaining Wall	47.7m
#F10	11SE-A/R 36	Grandview Mansion, Tai Hang Road, Tai Hang, HK	5m(H) x 40m(L) Retaining Wall	34.4m
#F11	11SE-A/R 45	No. 4A-4D, Wang Fung Terrace, Tai Hang Road	8m(H) x 54.5m(L) Masonry Retaining Wall	35.8m

Layout refers Figure 2 while photos are shown in Appendix B.

## 2.3 EXISTING GROUND INVESTIGATION INFORMATION

According to Geological Map of Hong Kong published by GCO, CEDD, the geology of the site comprises of equigranular medium-grained granite.

Records of ground investigation works of the area are also retrieved from GIU of CEDD. Ground investigation information at two adjacent locations is found. They are respectively for area adjoining 60 Tai Hang Road and Feature 11SW-A/C430. It is confirmed that the area is covered with thin layer of fill/residual soil generally of silty sand overlaying thick layer of completely decomposed granite of medium silty sand. Depth of N  $\geq$ 200 CDG and MDG/SDG are at 10m to 14.5m and 14.5m to 31.15m below ground respectively.

Summary of subsurface geological information are shown in Table 3 and the records are attached in Appendix C

Table 3 Summary of Geological Information Retrieved

	Location /Project Name	Clear Distance Away from the Site	Geological Information						
			Depths (m) / N-values						
			Fill/ Residual Soil	CDG			MDG	MDG/SDG	Tip of Borehole
#A	Area adjoining 60 Tai Hang Road	10m	1.5 - 3.5m	1.5-3.5m to 5m	5m to 10m	10m to 15m	7m to 14.5m	14.5m-31.15m	20.5 – 31.15m
			N= 5 - 14	18 - 45	60 - >200	72 - >200	-	-	
#B	11SE-A/CR430	35.8m	3.95m	3.95m to 6.5m	-	-	-	6.5m to 12.11m	12.11m
			N = 16	5	-	-	-	-	



### **3. GEOTECHNICAL WORKS ANTICIPATED FOR THE PROPOSED DEVELOPMENT**

#### **3.1 GROUND INVESTIGATION WORKS**

To affirm geological conditions, ground water levels and information of adjoining retaining wall features, ground investigation works will be carried out by a GIFW contractor at a later stage. The works will include vertical boreholes and trial pits inclusive of relevant field tests and soil laboratory tests.

#### **3.2 FOUNDATION WORKS**

Given the geological information available and load intensity of the proposed development, raking mini piles socketed in rock are considered the most appropriate foundation system to carry both vertical and lateral loads in order to avoid additional load to existing slope and to minimize lateral and vertical deformation.

Design shall accord “Code of Practice for Foundations 2017”. Effects on pile installation on adjoining grounds and geotechnical features shall be assessed in detail design stage and appropriate precautionary measures shall be implemented to minimize ground borne vibration. AAA system will be implemented to monitor ground water levels, ground settlement, building settlement/tilting and vibration where applicable.

Prior to foundation works, condition surveys will be carried out to ascertain conditions of adjoining buildings and features.

#### **3.3 SITE FORMATION AND ELS WORKS**

Site formation works and ELS works would be minimal, since the proposed pile caps with raking mini piles would basically be above ground surface in order to minimize disturbance to existing slope.

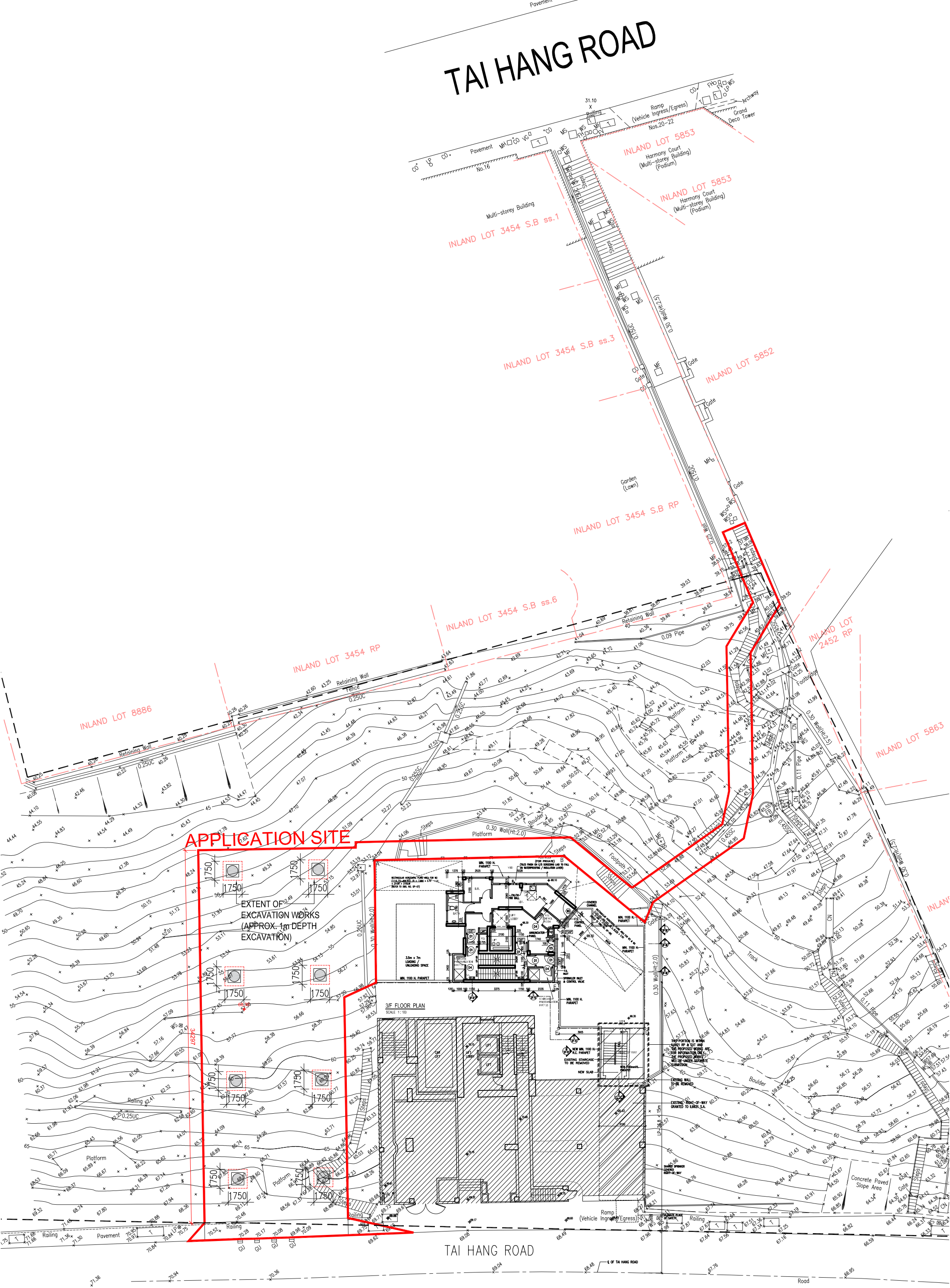
#### **4. CONCLUSION**

Based on the above assessment, it is concluded that the proposed development is geotechnically feasible and would have no adverse effects on adjoining grounds, buildings and wall features. Detail assessment will be addressed at detail design stages.

## APPENDIX A

### SCHEMATIC BUILDING PLANS

# TAI HANG ROAD



**APPLICATION SITE**

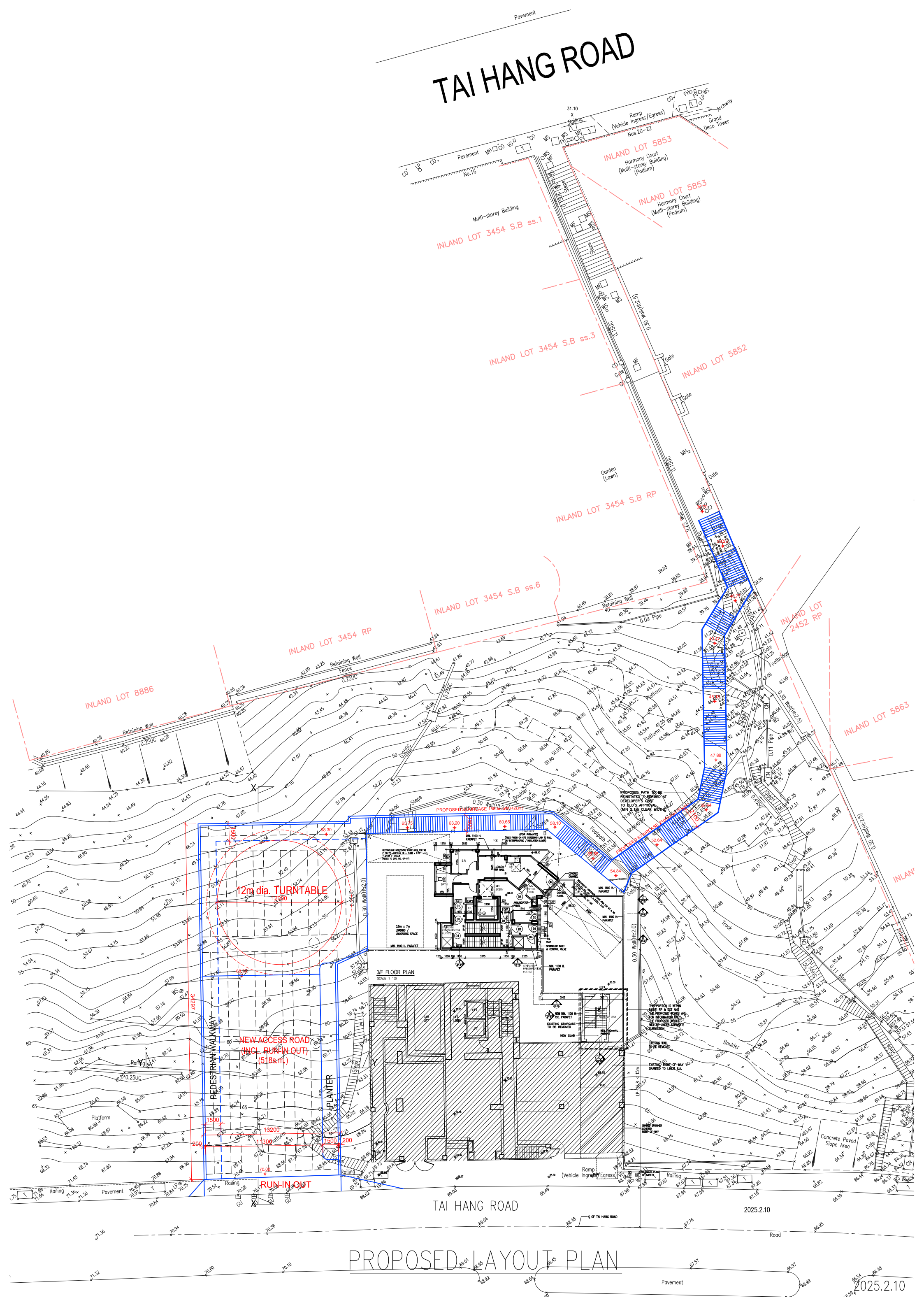
EXTENT OF EXCAVATION WORKS (APPROX. 1m DEPTH EXCAVATION)

3/4 FLOOR PLAN  
SCALE 1:100

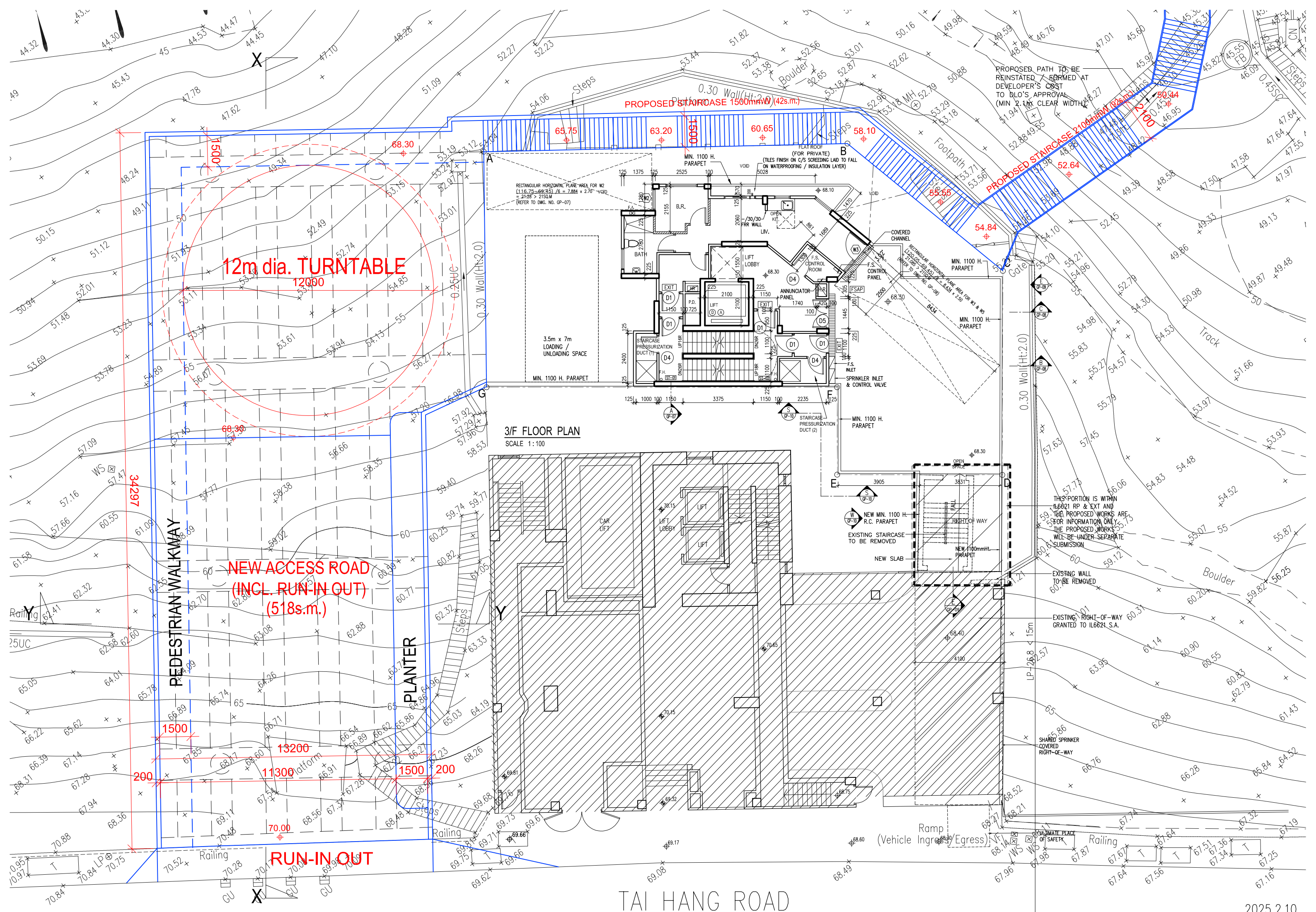
TAI HANG ROAD

INDICATIVE LOCATION FOR EXCAVATION OF LAND

# TAI HANG ROAD



## PROPOSED LAYOUT PLAN



12m dia. TURNTABLE  
12000

PROPOSED STAIRCASE 1500mmW (42s.m.)

PROPOSED STAIRCASE 2100mmW (2s.m.)

NEW ACCESS ROAD  
(INCL. RUN-IN OUT)  
(518s.m.)

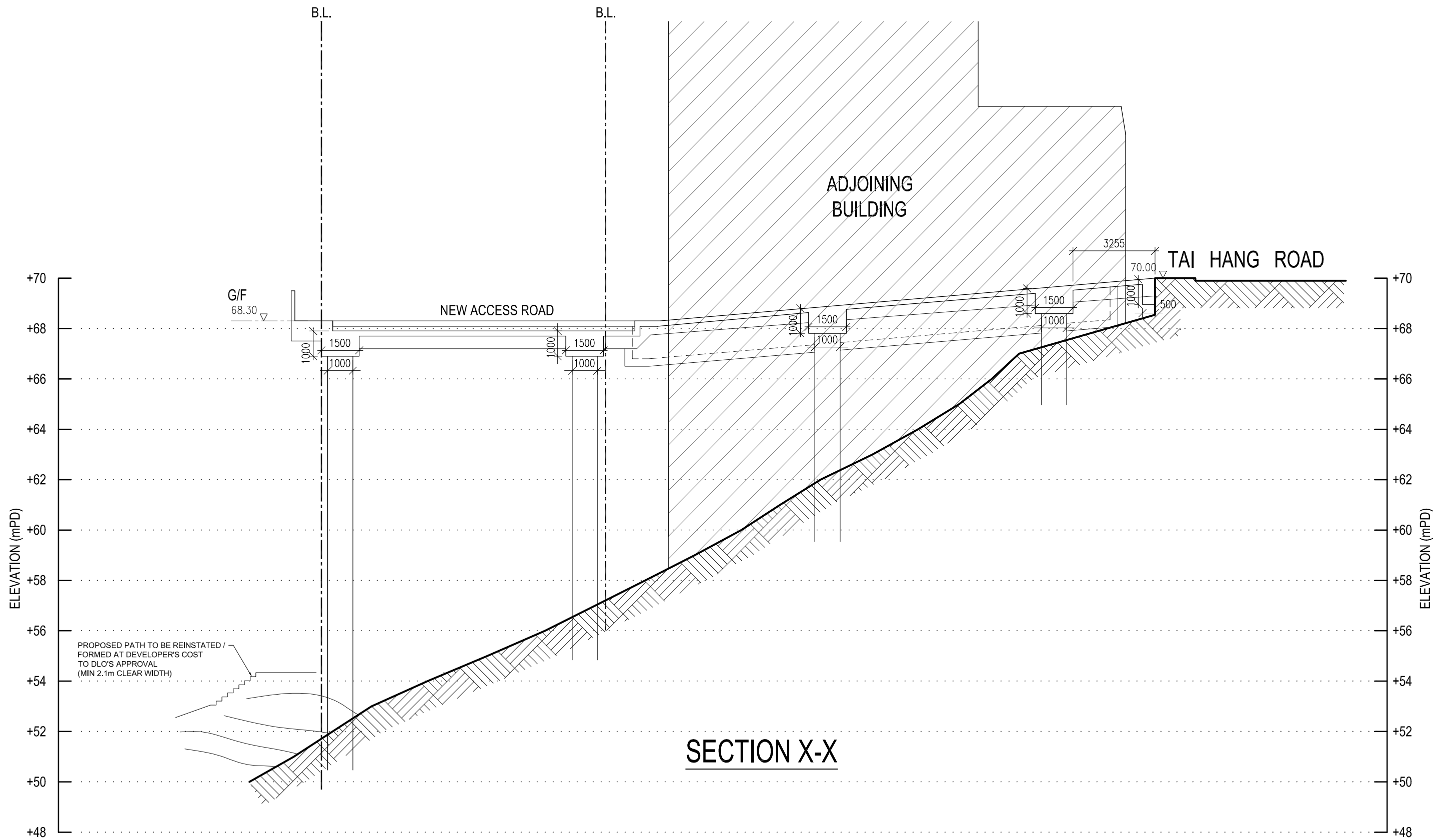
PEDESTRIAN WALKWAY

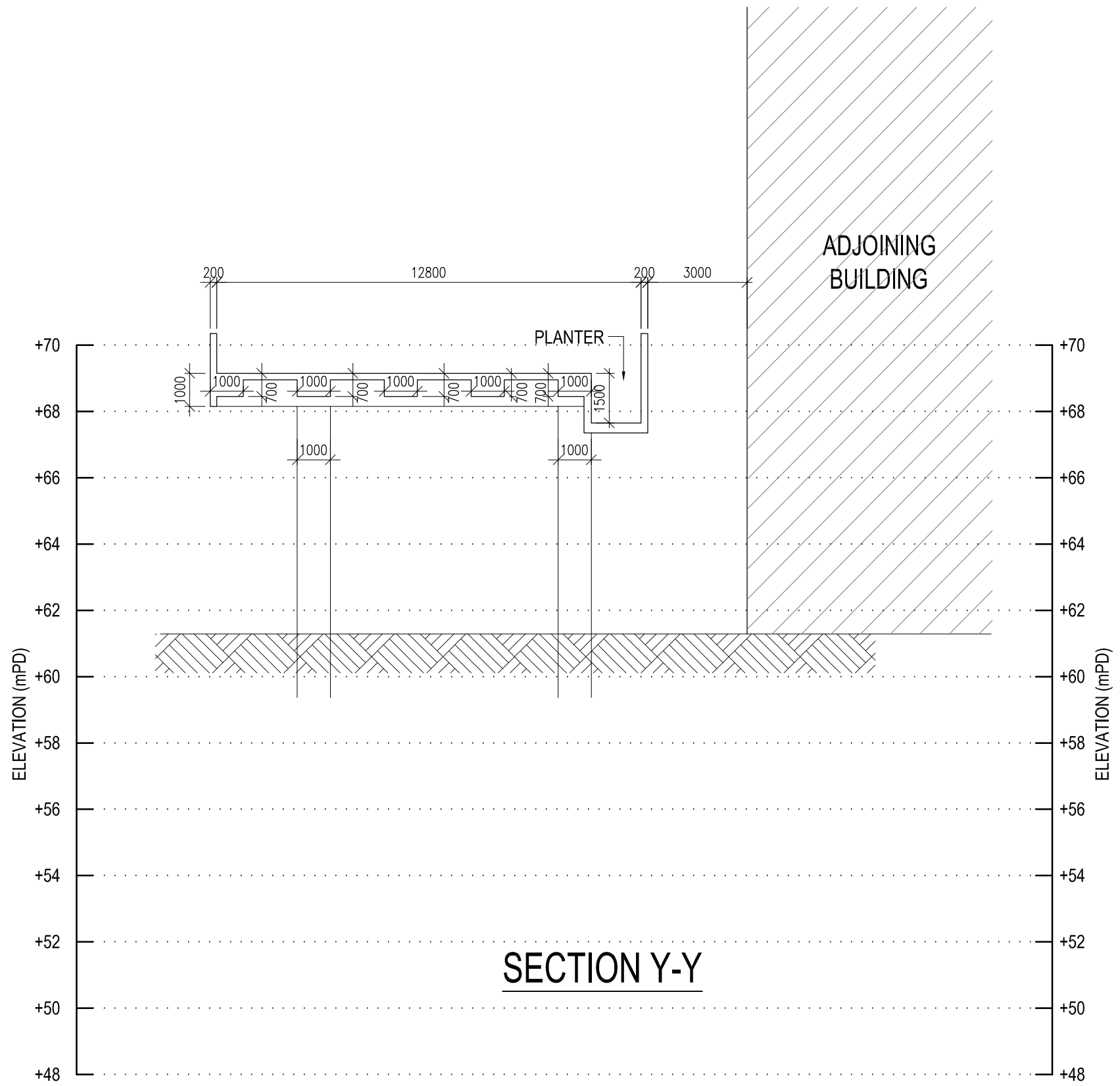
PLANTER

RUN-IN OUT

3/F FLOOR PLAN  
SCALE 1:100

TAI HANG ROAD





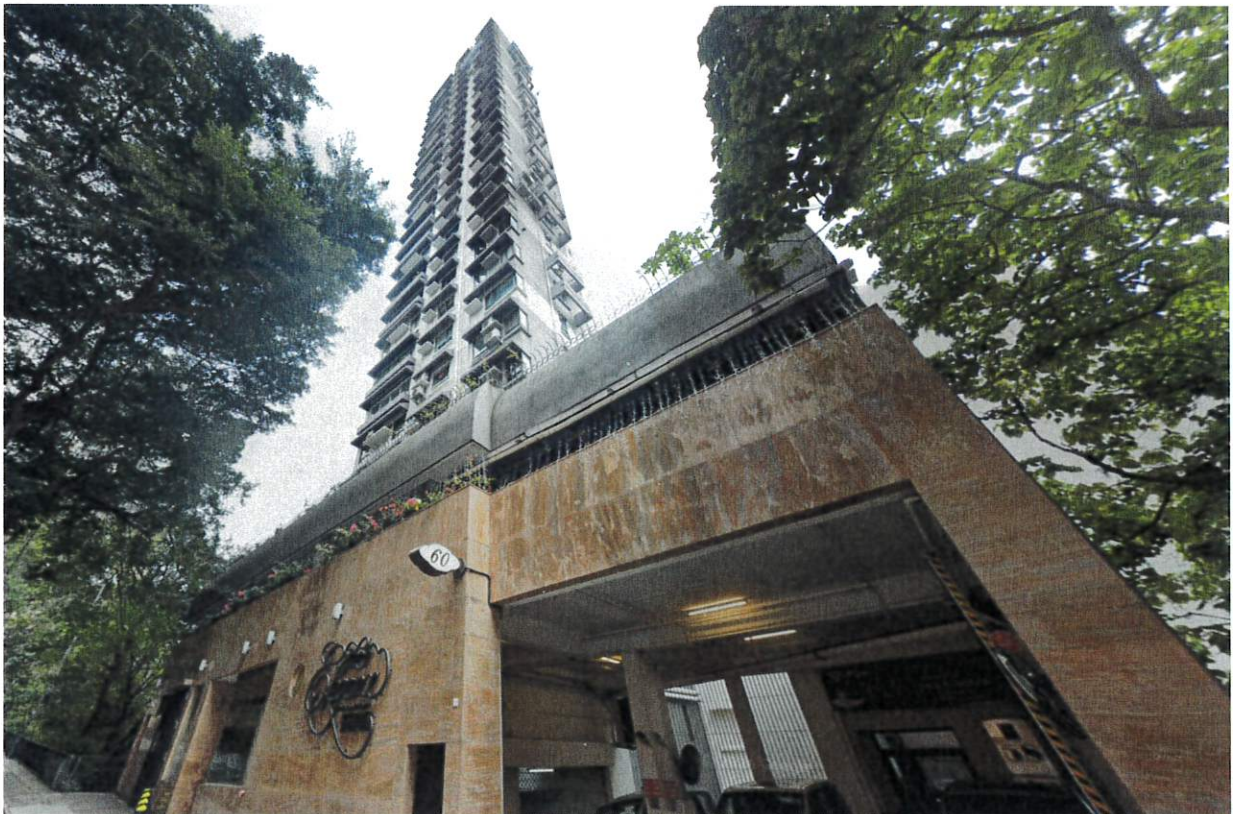


## APPENDIX B

### PHOTOS OF ADJOINING BUILDINGS



Front View of Area adjoining 60 Tai Hang Road



#B1 60 Tai Hang Road



#B2 10 Tai Hang Road



#B3 12-14 Tai Hang Road

## APPENDIX C

### GEOTECHNICAL FEATURE INFORMATION EXTRACTED FROM SLOPE INFORMATION SYSTEM

**BASIC INFORMATION**

Location: North East of Grandview Mansion, Below Tai Hang Road, Peak

Date of Formation: pre-1977

Date of Construction/Modification: 23-11-2007

Approximate Coordinates: Easting : 837850 Northing : 815350

**MAINTENANCE RESPONSIBILITY**

Mixed Feature Party: IL 7426 Agent: N/A  
 Mixed Feature Party: IL 8756 Agent: N/A  
 Mixed Feature Party: Lands D Agents: Lands D  
 Mixed Feature Party: IL 8886 Agent: N/A

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Road/footpath with moderate traffic density

Distance of Facility from Crest (m): 1.5

Facility at Toe: Residential building

Distance of Facility from Toe (m): 0

Consequence-to-life Category: 1

Remarks: N/A

**SLOPE PART**

(1) Max. Height (m): 34 Length (m): 45 Average Angle (deg): 45

**DETAILS OF SLOPE / RETAINING WALL**

Date of Inspection: 06-09-2018

Data Source: Project Office

Slope Part Drainage: (1) Position: Berm Size(mm): 300  
 (2) Position: On slope Size(mm): 600  
 (3) Position: Toe Size(mm): 300

Wall Part Drainage: (1) Position: Crest Size(mm): 225  
 (2) Position: Toe Size(mm): 225

**SLOPE PART**

Slope Part (1)

Surface Protection (%): Bare: 0 Vegetated: 70 Churnam: 0 Shotcrete: 30 Other Cover: 0  
 Material Description: Material Type: Soil Geology: N/A  
 Berm: No. of Berms: 1 Min. Berm Width (m): 1  
 Weepholes: Size (mm): 65 Spacing (m): 1.2

**WALL PART**

N/A

**WALL PART**

N/A

**STAGE 1 STUDY REPORT**

Inspected On:  
 Weather:  
 District: N/A

Section No: 1-1  
 Height(m):  
 Type of Toe Facility: Residential building  
 Distance from Toe(m): 0  
 Type of Crest Facility: Road/footpath with moderate traffic density

Distance from Crest(m): 1.5  
 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:

**SERVICES**

(1) Utilities Type: Sewer/Drain Size(mm): 300 Location: On slope Remark: N/A

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:

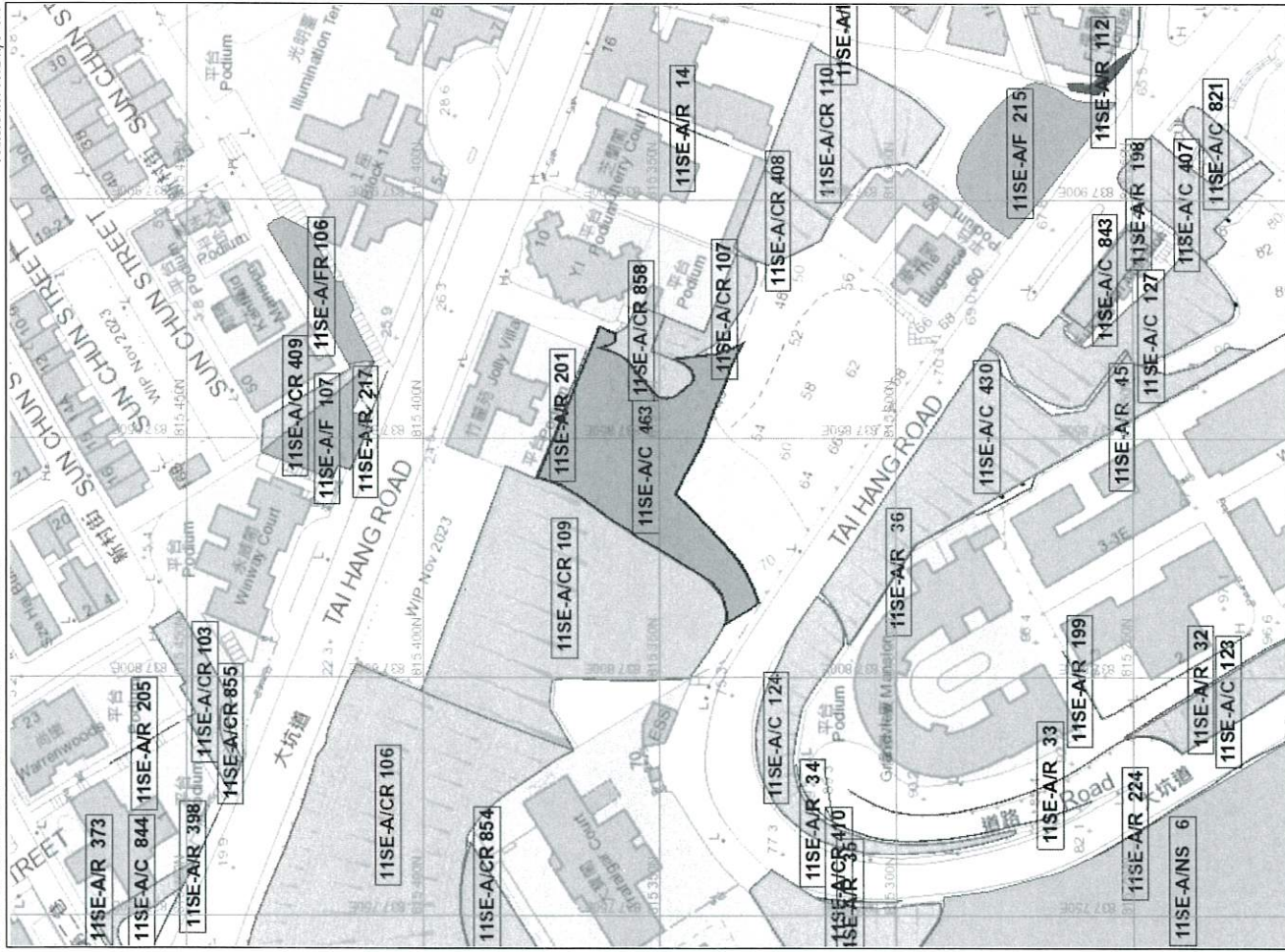
Action By: N/A

Non-routine Maintenance:

Action By: N/A

PHOTO







**BASIC INFORMATION**

Location: I.L. 8886 No. 8B-10 Tai Hang Road, Hong Kong

Date of Formation: pre-1977

Date of Construction/Modification: 01-06-1978

Approximate Coordinates: Easting : 837875 Northing : 815338

**MAINTENANCE RESPONSIBILITY**

Private Feature Party: IL8886 Agent: N/A

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Undeveloped green belt

Distance of Facility from Crest (m): 0

Facility at Toe: Residential building

Distance of Facility from Toe (m): 0

Consequence-to-life Category: 1

Remarks: N/A

**SLOPE PART**

(1) Max. Height (m): 5 Length (m): 18.7 Average Angle (deg): 55

**DETAILS OF SLOPE / RETAINING WALL**

Date of Inspection: 22-11-2000

Data Source: GCS2/E1/RA21/1/2004

Slope Part Drainage: (1) Position: Berm Size(mm): 251

(2) Position: On slope Size(mm): 251

Wall Part Drainage: (1) Position: Crest Size(mm): 275

**SLOPE PART**

Slope Part (1)

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

Material Description: Material type: Soil Geology: Decomposed granite

Berm: No. of Berms: 1 Min. Berm Width (m): 1

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

**WALL PART**

(1) Max. Height (m): 4 Length (m): 18.7 Face Angle (deg): 90



**WALL PART**

Wall Part (1)  
 Type of Wall: Wall Material: Concrete Wall Location: Wall at toe  
 Berm: No. of Berms: N/A Min. Berm Width (m): N/A  
 Weepholes: Size (mm): 65 Spacing (m): 1.2

**STAGE 1 STUDY REPORT**

Inspected On: 14-03-2001  
 Weather: Mainly Fine  
 District: I

Section No: 1-1  
 Height(m): H1 : 16 , H2 : 11  
 Type of Toe Facility: Residential building

Distance from Toe(m): 0  
 Type of Crest Facility: Undeveloped green belt

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): 0  
 Type of Crest Facility: N/A

Distance from Crest(m): 0  
 Consequence Category: 1  
 Engineering Judgement: U

**SERVICES**

N/A

Sign of Seepage: Slope : No signs of seepage  
 Wall : No sign of seepage

Criterion A satisfied: N

Sign of Distress: Slope : N/A  
 Wall : N/A

Criterion D satisfied: N

Non-routine maintenance required: N

Note: N/A

Masonry wall/Masonry facing: N

Note: N/A

Consequence category (for critical section): 1

Observations: N/A

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

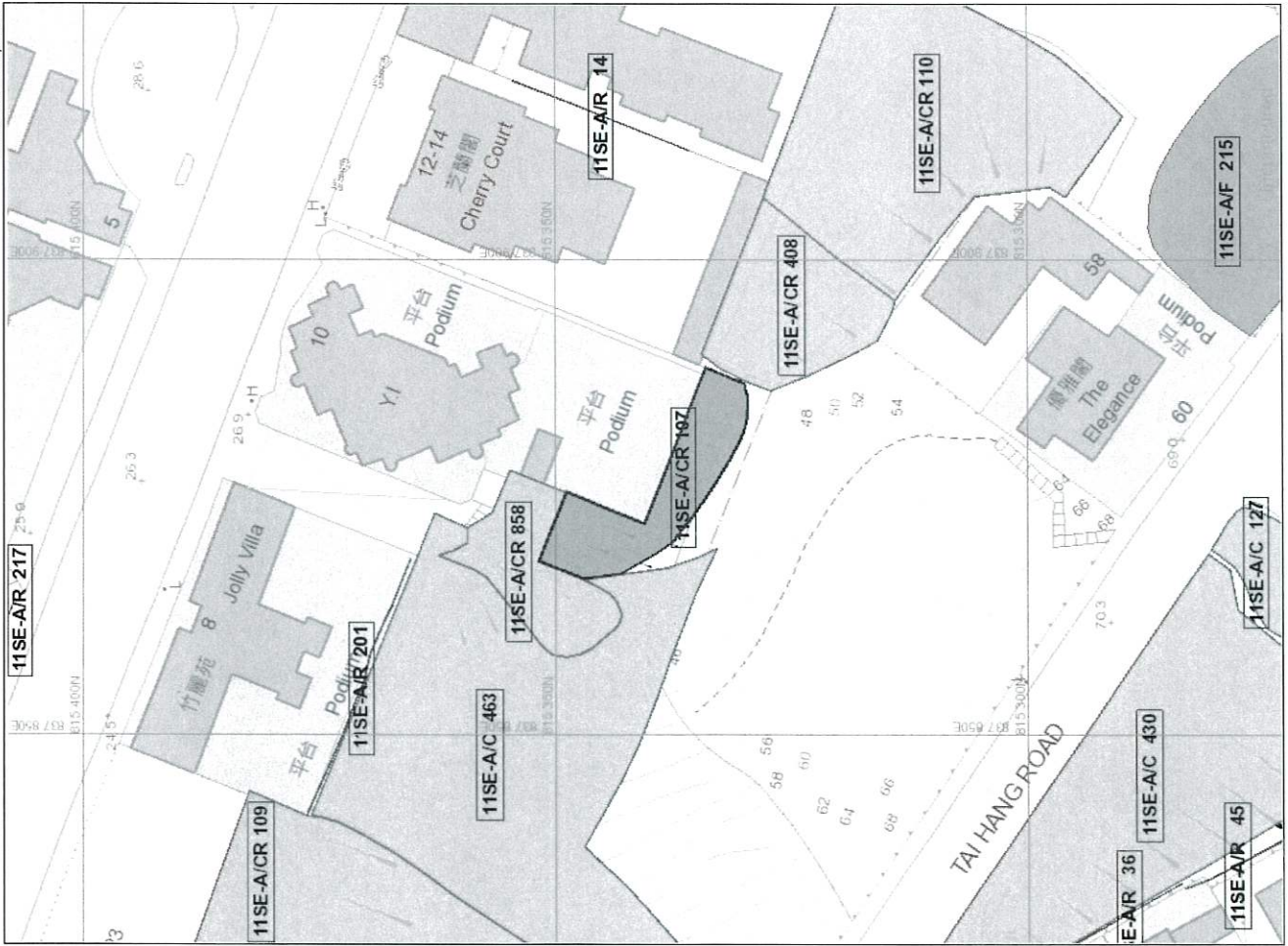
Action By: N/A

Non-routine Maintenance: N

Action By: N/A

**PHOTO**







**BASIC INFORMATION**

Location: SOUTH OF CHERRY COURT, TAI HANG, HONG KONG

Date of Formation: pre-1977

Date of Construction/  
 Modification:

Approximate Coordinates: Easting : 837895 Northing : 815325

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Residential building

Distance of Facility from Crest (m): 2

Facility at Toe: Open car park

Distance of Facility from Toe (m): 0

Consequence-to-life Category: 1

Remarks: N/A

**SLOPE PART**

(1) Max. Height (m): 10 Length (m): 18 Average Angle (deg): 45

**MAINTENANCE RESPONSIBILITY**

Mixed Feature Party: IL 3454 RP Agent: N/A  
 Mixed Feature Party: Lands D Agent: Lands D

**DETAILS OF SLOPE / RETAINING WALL**

Date of Inspection: 27-03-2019

Data Source: LPM

Slope Part Drainage: (1) Position: Stepped Size(mm): 251

Wall Part Drainage: (1) Position: Stepped Size(mm): 175  
 (2) Position: Toe Size(mm): 175

**SLOPE PART**

Slope Part (1)

Surface Protection (%): Bare: 30 Vegetated: 20 Chunam: 0 Shotcrete: 0 Other Cover: 50  
 Material Description: Material Type: Soil & Rock Geology: N/A  
 Berm: No. of Berms: N/A Min. Berm Width (m): N/A  
 Weepholes: Size (mm): 65 Spacing (m): 1.2

**WALL PART**

(1) Max. Height (m): 9 Length (m): 18 Face Angle (deg): 90

**WALL PART**

Wall Part (1)  
 Type of Wall:            Wall Location: Wall at toe  
 Berm:                      No. of Berms: N/A    Min. Berm Width (m): N/A  
 Weepholes:              Size (mm): 65      Spacing (m): 1.2

Inspected On: 18-04-1996  
 Weather: Mainly Fine  
 District: I

**STAGE 1 STUDY REPORT**

**SERVICES**

N/A

Section No: 1-1  
 Height(m): H1 : 19 , H2 : 0  
 Type of Toe Facility: Open car park  
 Distance from Toe(m): 0  
 Type of Crest Facility: Residential building

Distance from Cres(m): 2  
 Consequence Category: 1  
 Engineering Judgement: P

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: 1  
 Engineering Judgement: P

Sign of Seepage: Slope : No signs of seepage  
 Wall : Signs of seepage

Criterion A satisfied: N

Sign of Distress: Slope : N/A  
 Wall : N/A

Criterion D satisfied: N

Non-routine maintenance required: N

Note: N/A

Masonry wall/Masonry facing: N

Note: N/A

Consequence category (for critical section): 1

Observations: N/A

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: Y

Action By: Mixed

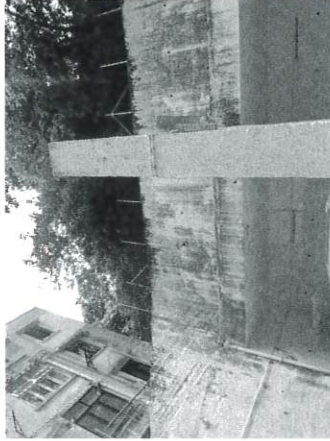
**OTHER EXTERNAL ACTION**

Check / repair Services: N

Action By: N/A

Non-routine Maintenance: N

Action By: N/A









**BASIC INFORMATION**

Location: BACK OF 16-18, TAI HANG ROAD, TAI HANG, HONG KONG

Date of Formation: pre-1977

Date of Construction/  
 Modification:

Approximate Coordinates: Easting : 837915 Northing : 815312

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Residential building

Distance of Facility from Crest (m): 2

Facility at Toe: Residential building

Distance of Facility from Toe (m): 2

Consequence-to-life Category: 1

Remarks: N/A

**SLOPE PART**

(1) Max. Height (m): 13 Length (m): 32 Average Angle (deg): 50

**WALL PART**

(1) Max. Height (m): 4.2 Length (m): 28 Face Angle (deg): 85



**MAINTENANCE RESPONSIBILITY**

Private Feature Party: IL 3454 RP Agent: N/A

Private Feature Party: IL 3454 S.B ss.6 Agent: N/A

Private Feature Party: IL 3454 S.B RP Agent: N/A

Private Feature Party: IL 6621 S.A Agent: N/A

**DETAILS OF SLOPE / RETAINING WALL**

Date of Inspection: 05-01-1998

Data Source: SIRST

Slope Part Drainage: (1) Position: Stepped Size(mm): 325

Wall Part Drainage: (1) Position: Toe Size(mm): 125

**SLOPE PART**

Slope Part (1)

Surface Protection (%): Bare: 20 Vegetated: 20 Chunam: 60 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**

Wall Part (1)  
 Type of Wall: Wall Material: Concrete Wall Location: Wall at toe  
 Berm: No. of Berms: N/A Min. Berm Width (m): N/A  
 Weepholes: Size (mm): 65 Spacing (m): 1.2

**SERVICES**

- (1) Utilities Type: Water Main Size (mm): 50 Location: On slope Remark: N/A
- (2) Utilities Type: Water Main Size (mm): 50 Location: On crest Remark: N/A

**STAGE 1 STUDY REPORT**

Inspected On:  
 Weather:  
 District: 1

Section No: 1-1  
 Height(m):  
 Type of Toe Facility: Residential building

Distance from Toe(m): 2  
 Type of Crest Facility: Residential building

Distance from Crest(m): 2  
 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:

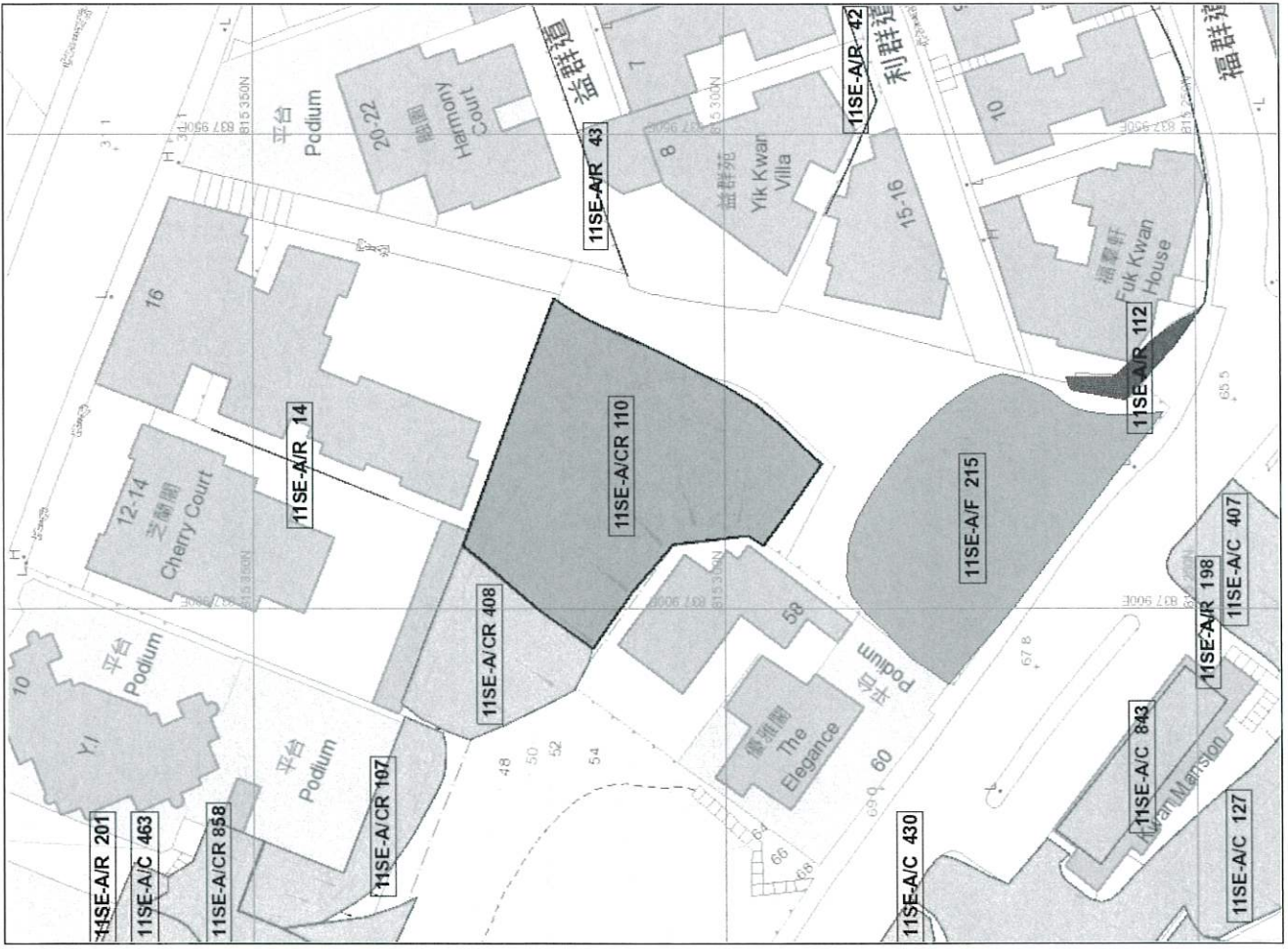
Action By: N/A

Non-routine Maintenance:

Action By: N/A

**PHOTO**





**BASIC INFORMATION**

Location: TAI HANG ROAD, HV

Date of Formation: pre-1977

Date of Construction/  
Modification:

Approximate Coordinates: Easting : 837910 Northing : 815271

**MAINTENANCE RESPONSIBILITY**

Government Feature Party: HyD Agent: HyD

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Road/footpath with moderate traffic density

Distance of Facility from Crest (m): 0

Facility at Toe: Undeveloped green belt

Distance of Facility from Toe (m): 0

Consequence-to-life Category: 2

Remarks: N/A

Date of Inspection: 21-10-2011

Data Source: LPM

Slope Part Drainage: N/A

**DETAILS OF SLOPE / RETAINING WALL**

**SLOPE PART**

(1) Max. Height (m): 10 Length (m): 36 Average Angle (deg): 30

Wall Part Drainage: N/A

**WALL PART**

N/A

**SLOPE PART**

Slope Part (1)

Surface Protection (%): Bare: 0 Vegetated: 100 Churnam: 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

**STAGE 1 STUDY REPORT**

Inspected On:  
Weather:  
District: I

Section No: 1-1  
Height(m):  
Type of Toe Facility: Undeveloped green belt  
Distance from Toe(m): 0  
Type of Crest Facility: Road/footpath with moderate traffic density  
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:

**SERVICES**

- (1) Utilities Type: Cable Size(mm): 0 Location: On crest Remark: Size cannot be determined
- (2) Utilities Type: Electricity Size(mm): 0 Location: On crest Remark: Size cannot be determined
- (3) Utilities Type: Gas Size(mm): 0 Location: On crest Remark: Size cannot be determined
- (4) Utilities Type: Sewer/Drain Size(mm): 150 Location: On crest Remark: N/A
- (5) Utilities Type: Telecom Size(mm): 0 Location: On crest Remark: Size cannot be determined
- (6) Utilities Type: Telecom Size(mm): 0 Location: On crest Remark: Size cannot be determined
- (7) Utilities Type: Telecom Size(mm): 0 Location: On slope Remark: Size cannot be determined
- (8) Utilities Type: Water Main Size(mm): 50 Location: On slope Remark: N/A
- (9) Utilities Type: Water Main Size(mm): 100 Location: On crest Remark: N/A

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:

N/A

Action By:

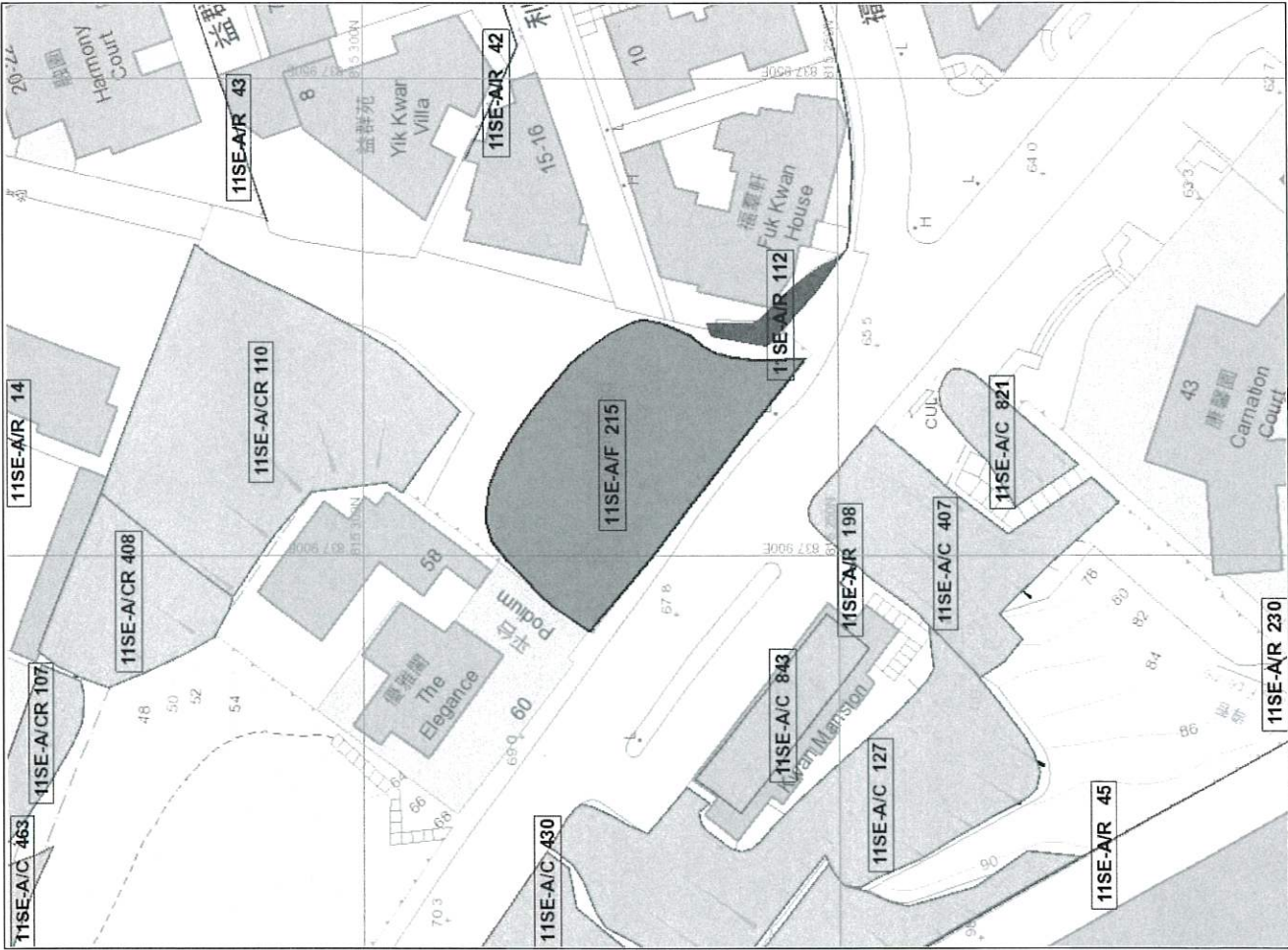
N/A

Non-routine Maintenance:

Action By: N/A

**PHOTO**







**BASIC INFORMATION**

Location: Tai Hang Road, Hong Kong East  
 Date of Formation: post-1977  
 Date of Construction/Modification: 04-11-2004  
 Approximate Coordinates: Easting : 837845 Northing : 815281

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Residential building  
 Distance of Facility from Crest (m): 0  
 Facility at Toe: Residential building  
 Distance of Facility from Toe (m): 17  
 Consequence-to-life Category: 1  
 Remarks: N/A

**SLOPE PART**

(1) Max. Height (m): 25 Length (m): 95 Average Angle (deg): 50

**WALL PART**

N/A

**MAINTENANCE RESPONSIBILITY**

Mixed Feature Party: Hyd Agent: Hyd  
 Mixed Feature Party: Lands D Agent: Lands D  
 Mixed Feature Party: I. 3289 S.J Agent: N/A  
 Mixed Feature Party: I. 8226 Agent: N/A

**DETAILS OF SLOPE / RETAINING WALL**

Date of Inspection: 17-09-2020  
 Data Source: Project Office  
 Slope Part Drainage: (1) Position: Berm Size(mm): 300  
 (2) Position: Crest Size(mm): 300

Wall Part Drainage: (1) Position: Toe Size(mm): 225

**SLOPE PART**

Slope Part (1)  
 Surface Protection (%): Bare: 0 Vegetated: 10 Churnam: 0 Shotcrete: 90 Other Cover: 0  
 Material Description: Material type: Soil Geology: N/A  
 Berm: No. of Berms: 3 Min. Berm Width (m): 0.4  
 Weepholes: Size (mm): 50 Spacing (m): 1.2

**WALL PART**

N/A

**STAGE 1 STUDY REPORT**

Inspected On: 16-02-2000  
 Weather: Mainly Fine  
 District: I

Section No: 1-1  
 Height(m): H1: 28, H2: 8  
 Type of Toe Facility: Residential building

Distance from Toe(m): 17  
 Type of Crest Facility: Residential building

Distance from Crest(m): 0  
 Consequence Category: I  
 Engineering Judgement: P

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: I  
 Engineering Judgement: P

**SERVICES**

N/A

Sign of Seepage: Slope : Signs of seepage  
 Wall : N/A

Criterion A satisfied: N

Sign of Distress: Slope : Reasonable (near crest, mid-portion, at toe)  
 Wall : N/A

Criterion D satisfied: N

Non-routine maintenance required: N

Note: N/A

Masonry wall/Masonry facing: N

Note: N/A

Consequence category (for critical section): I

Observations: N/A

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: Y

Action By: Government

**OTHER EXTERNAL ACTION**

Check / repair Services: N

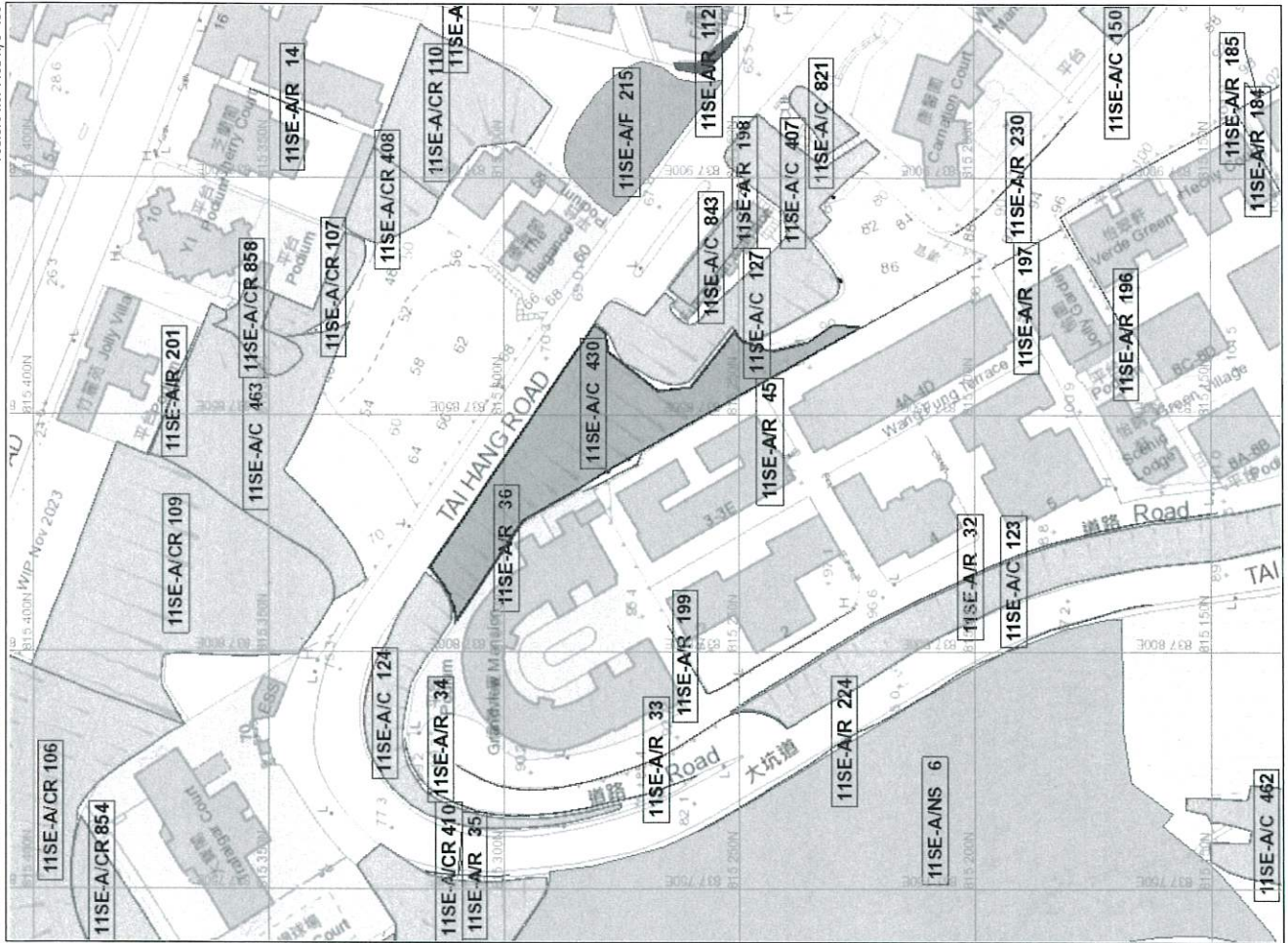
Action By: N/A

Non-routine Maintenance: N

Action By: N/A

**PHOTO**





**BASIC INFORMATION**

Location: 53-55, Tai Hang Road, Tai Hang, Hong Kong  
 Date of Formation: pre-1977  
 Date of Construction/Modification:  
 Approximate Coordinates: Easting - 837875 Northing - 815247

**MAINTENANCE RESPONSIBILITY**

Mixed Feature Party: IL 8226 Agent: N/A  
 Mixed Feature Party: Lands D Agent: Lands D  
 Mixed Feature Party: Hyd Agent: Lands D

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Residential building  
 Distance of Facility from Crest (m): 13  
 Facility at Toe: Residential building  
 Distance of Facility from Toe (m): 2  
 Consequence-to-life Category: 1  
 Remarks: N/A

**DETAILS OF SLOPE / RETAINING WALL**

Date of Inspection: 22-03-2019  
 Data Source: Project Office  
 Slope Part Drainage: (1) Position: On slope Size(mm): 300  
 (2) Position: Toe Size(mm): 230

**SLOPE PART**

(1) Max. Height (m): 21 Length (m): 45 Average Angle (deg): 55

Wall Part Drainage: (1) Position: Toe Size(mm): 225

**SLOPE PART**

Slope Part (1)  
 Surface Protection (%): Bare: 20 Vegetated: 65 Churnam: 0 Shotcrete: 15 Other Cover: 0  
 Material Description: Material Type: Soil & Rock Geology: N/A  
 Berm: No. of Berms: N/A Min. Berm Width (m): N/A  
 Weepholes: Size (mm): 50 Spacing (m): 1.5

**WALL PART**

N/A

**WALL PART**

N/A

**STAGE 1 STUDY REPORT**

Inspected On:  
 Weather:  
 District: I

**SERVICES**

(1) Utilities Type: Water Main      Size(mm): 40      Location: On Slope      Remark: N/A

Section No: 1-1  
 Height(m): Residential building  
 Type of Toe Facility: Residential building  
 Distance from Toe(m): 2  
 Type of Crest Facility: Residential building  
 Distance from Crest(m): 13  
 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:

N/A

Action By:

**OTHER EXTERNAL ACTION**

Check / repair Services:

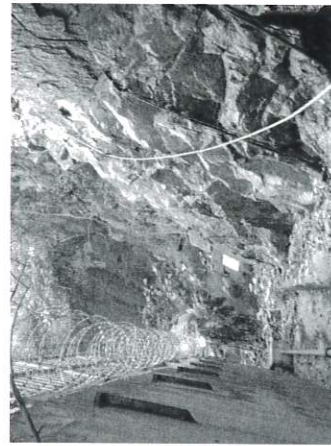
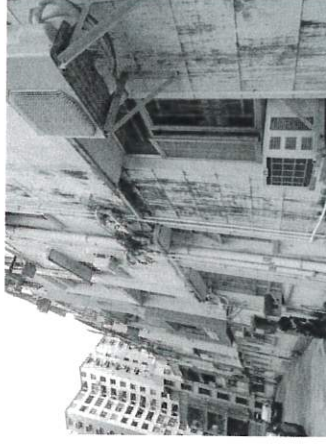
N/A

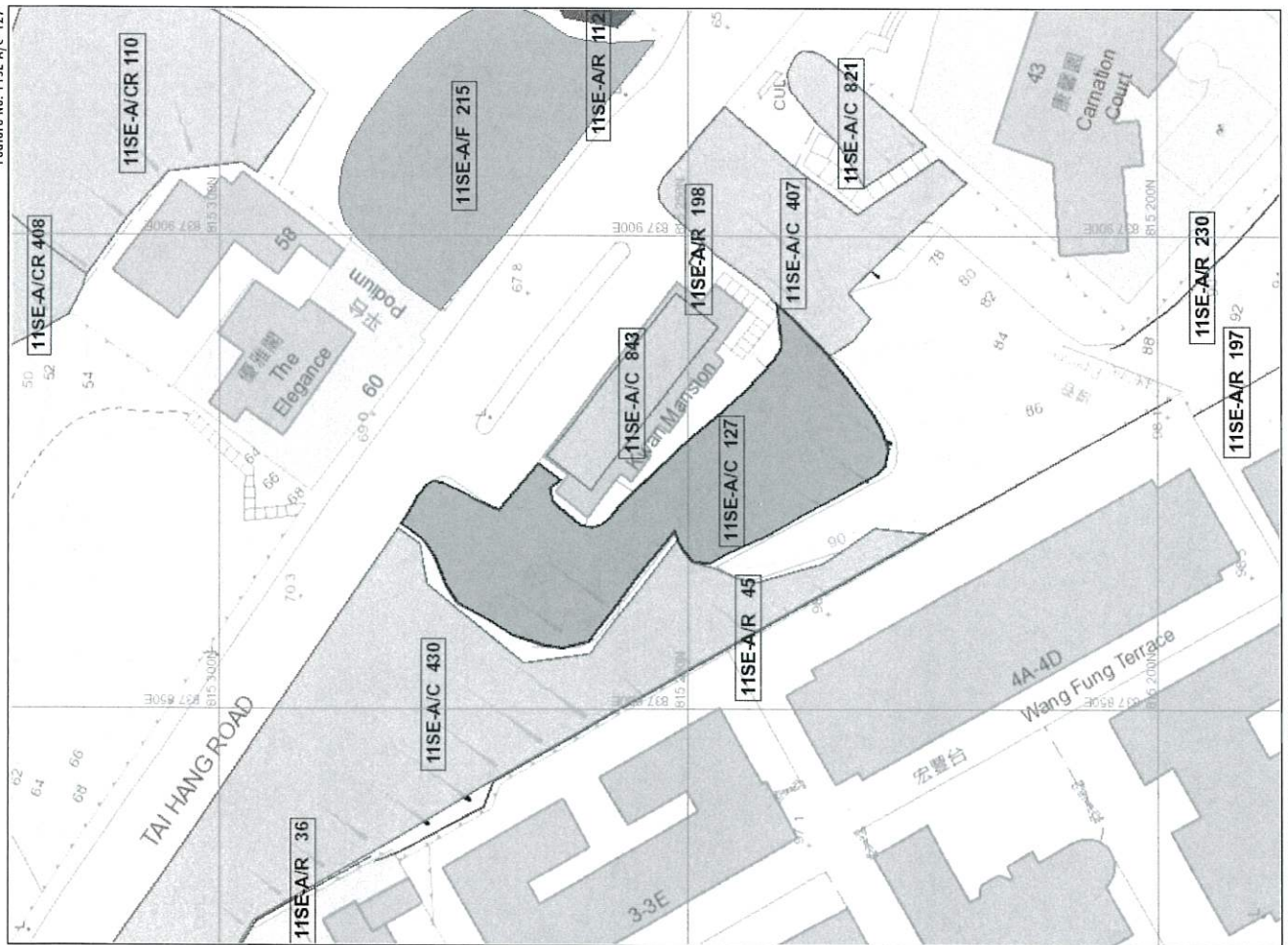
Action By:

Non-routine Maintenance:

N/A

Action By:









**BASIC INFORMATION**

Location: NO.55 TAI HAU ROAD, TAI HANG

Date of Formation: pre-1977

Date of Construction/  
 Modification:

Approximate Coordinates: Easting : 837882 Northing : 815256

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Residential building

Distance of Facility from Crest (m): 0

Facility at Toe: Road/footpath with moderate traffic density

Distance of Facility from Toe (m): 10

Consequence-to-life Category: 1

Remarks: N/A

**SLOPE PART**

(1) Max. Height (m): 12 Length (m): 45 Average Angle (deg): 50

**WALL PART**

N/A

**MAINTENANCE RESPONSIBILITY**

Private Feature Party: IL8226 Agent: N/A

**DETAILS OF SLOPE / RETAINING WALL**

Date of Inspection: 01-02-2000

Data Source: SIRST

Slope Part Drainage: N/A

Wall Part Drainage: N/A

**SLOPE PART**

Slope Part (1)

Surface Protection (%): Bare: 0 Vegetated: 0 Churnam: 100 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

STAGE 1 STUDY REPORT

Inspected On: 01-02-2000  
 Weather: Some Rain  
 District: I

Section No: 1-1  
 Height(m): H1 : 14 , H2 : 0  
 Type of Toe Facility: Road/footpath with moderate traffic density

SERVICES

- (1) Utilities Type: Electricity Size(mm): 0 Location: On crest Remark: Size cannot be determined
- (2) Utilities Type: Electricity Size(mm): 0 Location: On slope Remark: Size cannot be determined
- (3) Utilities Type: Sewer/Drain Size(mm): 40 Location: On slope Remark: N/A
- (4) Utilities Type: Sewer/Drain Size(mm): 0 Location: On crest Remark: Size cannot be determined
- (5) Utilities Type: Telecom Size(mm): 0 Location: On crest Remark: Size cannot be determined
- (6) Utilities Type: Water Main Size(mm): 20 Location: On slope Remark: N/A
- (7) Utilities Type: Water Main Size(mm): 0 Location: On crest Remark: Size cannot be determined

Distance from Toe(m): 10  
 Type of Crest Facility: Residential building  
 Distance from Crest(m): 0  
 Consequence Category: 1  
 Engineering Judgement: P

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: 1  
 Engineering Judgement: P

Sign of Seepage: Slope : Signs of seepage  
 Wall : N/A  
 Criterion A satisfied: N  
 Sign of Distress: Slope : Reasonable (near crest, mid-portion, at toe)  
 Wall : N/A  
 Criterion D satisfied: N  
 Non-routine maintenance required: N  
 Note: N/A  
 Masonry wall/Masonry facing: N  
 Note: N/A  
 Consequence category (for critical section): I  
 Observations: N/A  
 Emergency Action Required: N  
 Action By: N/A

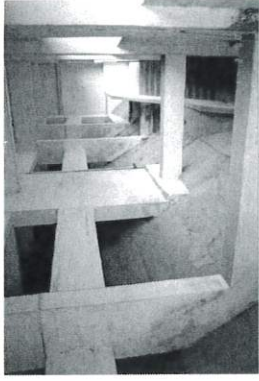
**ACTION TO INITIATE PREVENTIVE WORKS**

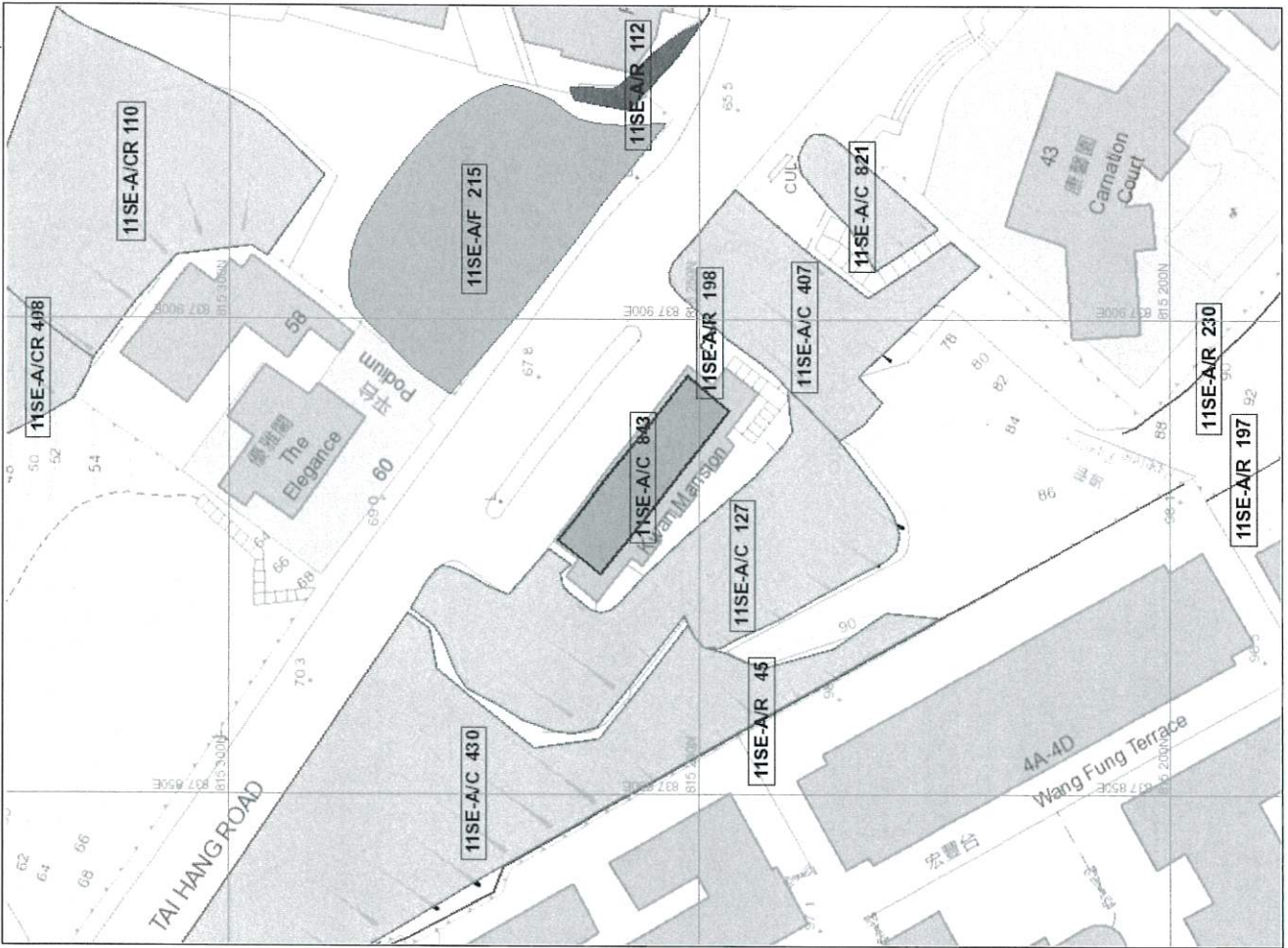
Criterion A/Criterion D: N/A  
 Action By: N/A  
 Further Study: Y  
 Action By: Private

**OTHER EXTERNAL ACTION**

Check / repair Services: N  
 Action By: N/A  
 Non-routine Maintenance: N  
 Action By: N/A

**PHOTO**





**BASIC INFORMATION**

Location: East of Tai Hang Road 53-55, Tai Hang  
 Date of Formation: pre-1977  
 Date of Construction/Modification: 01-06-1978  
 Approximate Coordinates: Easting : 837898 Northing : 815249

**MAINTENANCE RESPONSIBILITY**

Private Feature Party: IL8226 Agent: N/A

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Open car park  
 Distance of Facility from Crest (m): 0  
 Facility at Toe: Residential building  
 Distance of Facility from Toe (m): 1  
 Consequence-to-life Category: 1  
 Remarks: N/A

**DETAILS OF SLOPE / RETAINING WALL**

Date of Inspection: 12-07-2011  
 Data Source: LPM  
 Slope Part Drainage: N/A

**SLOPE PART**

N/A  
 Wall Part Drainage: (1) Position: Stepped Size(mm): 275  
 (2) Position: Toe Size(mm): 225

**SLOPE PART**

N/A

**WALL PART**

(1) Max. Height (m): 7.1 Length (m): 5.7 Face Angle (deg): 80

**WALL PART**

Wall Part (1)  
Type of Wall:  
Berm:  
Weepholes:  
Wall Material: Masonry  
Wall Location: Retaining wall with level platform  
No. of Berms: N/A  
Min. Berm Width (m): N/A  
Size (mm): N/A  
Spacing (m): N/A

**STAGE 1 STUDY REPORT**

Inspected On: 07-01-1997  
Weather: Mainly Fine  
District: I

Section No: 1-1  
Height(m): H1 : 7, H2 : 7  
Type of Toe Facility: Residential building

- SERVICES**
- (1) Utilities Type: Sewer/Drain Size(mm): 0 Location: On slope Remark: Size cannot be determined
  - (2) Utilities Type: Water Main Size(mm): 0 Location: On slope Remark: Size cannot be determined

Distance from Toe(m): 1  
Type of Crest Facility: Open car park  
Distance from Crest(m): 0  
Consequence Category: 1  
Engineering Judgement: P

Section No: 2-2  
Type of Toe Facility:

Distance from Toe(m):  
Type of Crest Facility:

Distance from Crest(m):  
Consequence Category: 1  
Engineering Judgement: P

Sign of Seepage: Slope : N/A  
 Wall : No sign of seepage

Criterion A satisfied: N  
 Sign of Distress: Slope : N/A  
 Wall : N/A

Criterion D satisfied: N  
 Non-routine maintenance required: N  
 Note: N/A

Masonry wall/Masonry facing: Y  
 Note: N/A

Consequence category (for critical section): I  
 Observations: N/A  
 Emergency Action Required: N  
 Action By: N/A

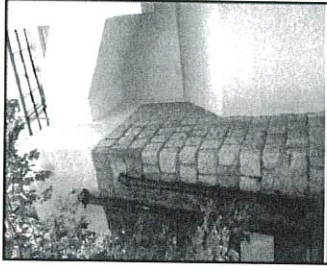
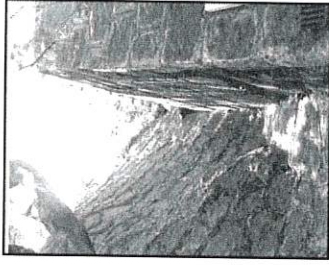
**ACTION TO INITIATE PREVENTIVE WORKS**

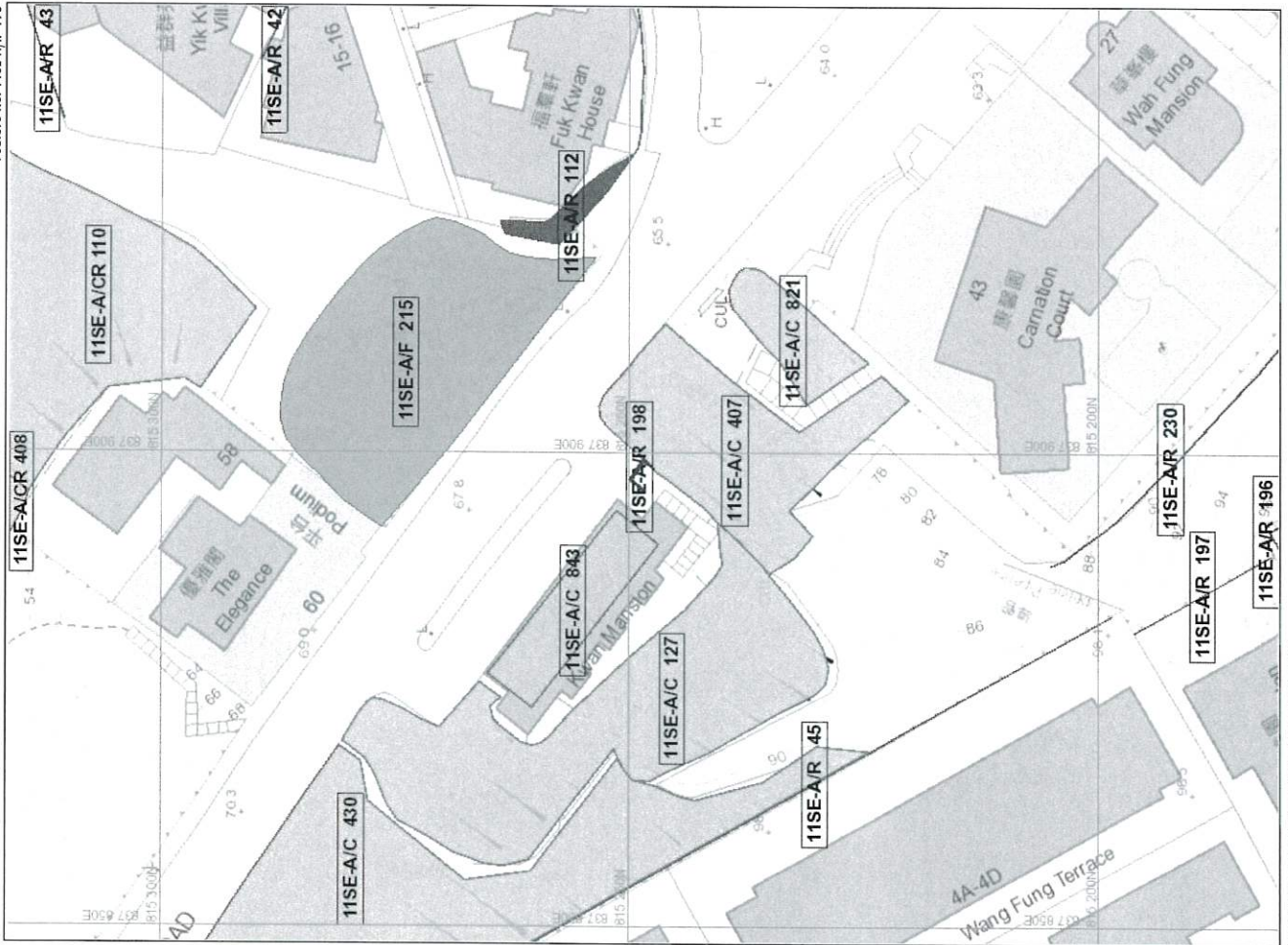
Criterion A/Criterion D: N/A  
 Action By: N/A  
 Further Study: Y  
 Action By: Mixed

**OTHER EXTERNAL ACTION**

Check / repair Services: N  
 Action By: N/A  
 Non-routine Maintenance: N  
 Action By: N/A

**PHOTO**







BASIC INFORMATION

Location: GRANDVIEW MANSION, TAI HANG ROAD, TAI HANG, HK.

Date of Formation: post-1977

Date of Construction/  
Modification:

Approximate Coordinates: Easting : 83781.6 Northing : 815304

Private Feature Party: L 3289 S.K.RP Agent: N/A

MAINTENANCE RESPONSIBILITY

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest: Residential building

Distance of Facility from Crest (m): 2.5

Facility at Toe: Road/footpath with moderate traffic density

Distance of Facility from Toe (m): 10

Consequence-to-life Category: 1

Remarks: N/A

Date of Inspection: 21-04-2001

Data Source: SIRST

Slope Part Drainage: N/A

DETAILS OF SLOPE / RETAINING WALL

SLOPE PART

N/A

Wall Part Drainage: (1) Position: Toe Size(mm): 225

WALL PART

(1) Max. Height (m): 5 Length (m): 40 Face Angle (deg): 90

SLOPE PART

N/A

**WALL PART**

Wall Part (1)

Type of Wall:                      Wall Location: Retaining wall with level platform  
 Berm:                                      No. of Berms: N/A                      Min. Berm Width (m): N/A  
 Weepholes:                              Size (mm): 65                      Spacing (m): 1.2

**STAGE 1 STUDY REPORT**

Inspected On: 21-04-2001  
 Weather: Some Rain  
 District: I

Section No: 1-1  
 Height(m): H1 : 5 , H2 : 5  
 Type of Toe Facility: Road/footpath with moderate traffic density

**SERVICES**

- (1) Utilities Type: Electricity                      Size(mm): 0                      Location: On crest                      Remark: Size cannot be determined
- (2) Utilities Type: Sewer/Drain                      Size(mm): 0                      Location: On crest                      Remark: Size cannot be determined
- (3) Utilities Type: Sewer/Drain                      Size(mm): 0                      Location: On slope                      Remark: Size cannot be determined
- (4) Utilities Type: Water Main                      Size(mm): 0                      Location: On slope                      Remark: Size cannot be determined
- (5) Utilities Type: Water Main                      Size(mm): 0                      Location: On crest                      Remark: Size cannot be determined

Distance from Toe(m): 10  
 Type of Crest Facility: Residential building  
 Distance from Crest(m): 2.5  
 Consequence Category: 1  
 Engineering Judgement: P

Section No: 2-2  
 Type of Toe Facility:

Distance from Toe(m):  
 Type of Crest Facility:

Distance from Crest(m):  
 Consequence Category: 1  
 Engineering Judgement: P

Sign of Seepage: Slope : N/A  
 Wall : Slight to moderate seepage at or above mid-height

Criterion A satisfied: N  
 Sign of Distress: Slope : N/A  
 Wall : N/A

Criterion D satisfied: N  
 Non-routine maintenance required: N  
 Note: N/A

Masonry wall/Masonry facing: Y  
 Note: SQUARE RUBBLE WITH POINTING & CONCRETE TIE

Consequence category (for critical section): 1  
 Observations: N/A  
 Emergency Action Required: N  
 Action By: N/A

**ACTION TO INITIATE PREVENTIVE WORKS**

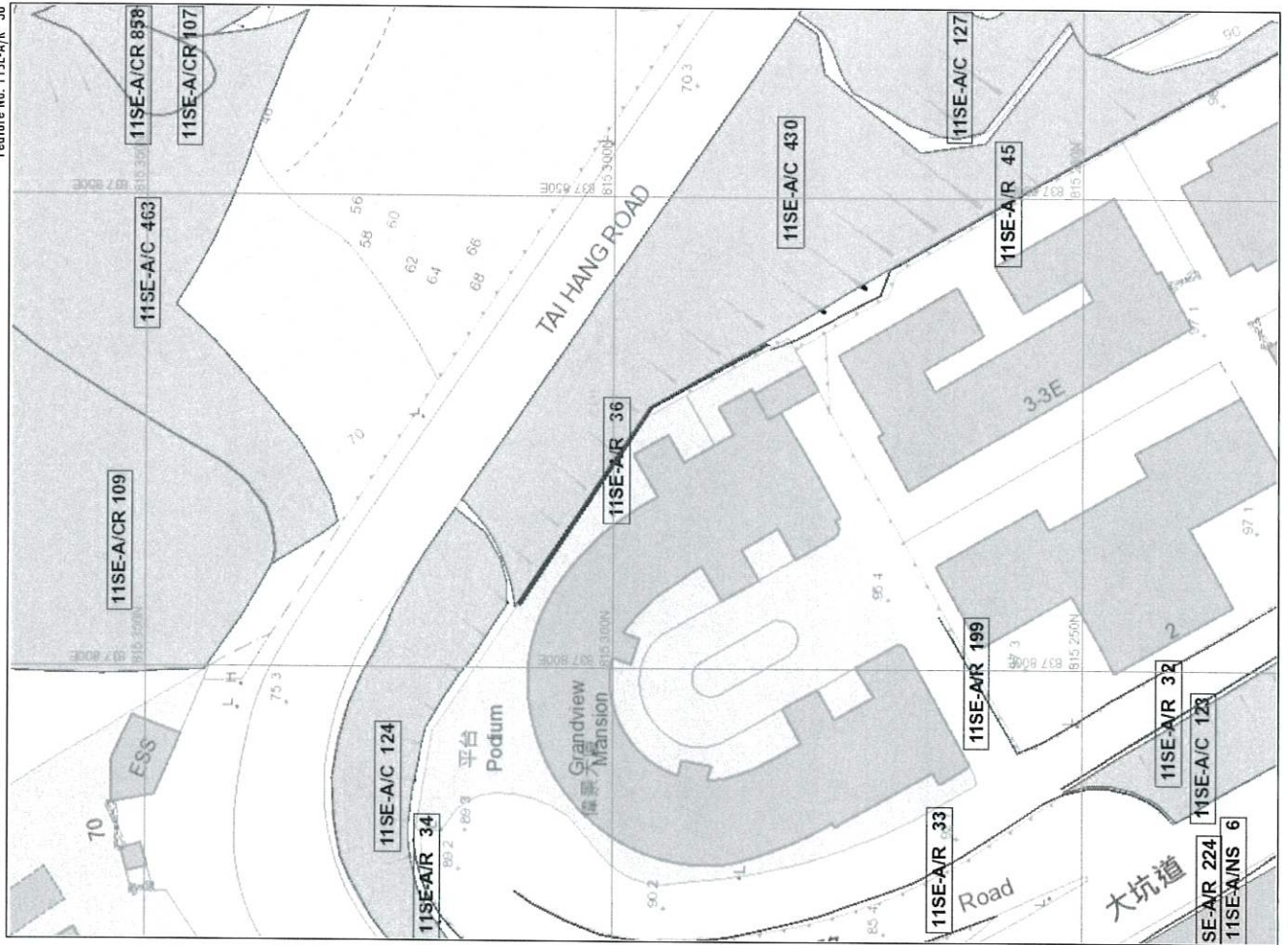
Criterion A/Criterion D: N/A  
 Action By: N/A  
 Further Study: Y  
 Action By: Private

**OTHER EXTERNAL ACTION**

Check / repair Services: N  
 Action By: N/A  
 Non-routine Maintenance: N  
 Action By: N/A



**PHOTO**



**BASIC INFORMATION**

Location: NO.4A-4D, WANG FUNG TERRACE, TAI HANG HANG ROAD.

Date of Formation: post-1977

Date of Construction/  
 Modification:

Approximate Coordinates: Easting : 837879 Northing : 815206

**MAINTENANCE RESPONSIBILITY**

Private Feature Party: IL 3289 S.W.S.D.S.P. & RP Agent: N/A  
 Private Feature Party: IL 3289 S.J Agent: N/A  
 Private Feature Party: IL 3289 S.K.RP Agent: N/A

**CONSEQUENCE-TO-LIFE CATEGORY**

Facility at Crest: Residential building  
 Distance of Facility from Crest (m): 6  
 Facility at Toe: Remote area or abandoned facilities

Distance of Facility from Toe (m): 0  
 Consequence-to-life Category: 1  
 Remarks: N/A

**SLOPE PART**

N/A

Wall Part Drainage: (1) Position: Crest Size(mm): 125

**SLOPE PART**

N/A

**WALL PART**

(1) Max. Height (m): 8 Length (m): 54.5 Face Angle (deg): 90

WALL PART

Wall Part (1)  
 Type of Wall: Wall Material: Masonry Wall Location: Retaining wall with level platform  
 Berm: No. of Berms: N/A Min. Berm Width (m): N/A  
 Weepholes: Size (mm): 65 Spacing (m): 1.2

SERVICES

N/A

STAGE 1 STUDY REPORT

Inspected On:  
 Weather:  
 District: I

Section No: 1-1  
 Height(m):  
 Type of Toe Facility: Remote area or abandoned facilities

Distance from Toe(m): 0  
 Type of Crest Facility: Residential building

Distance from Crest(m): 6  
 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:

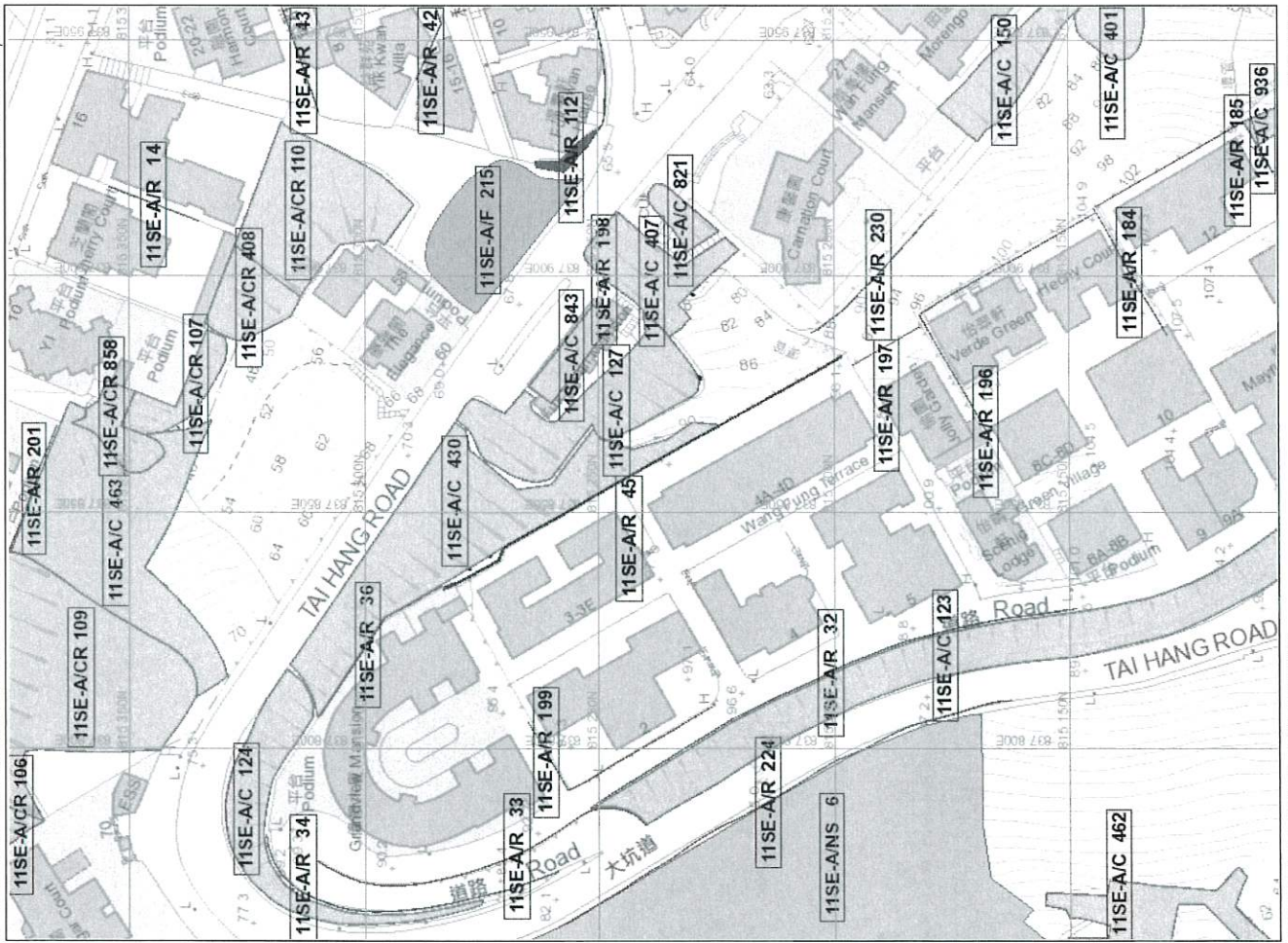
Action By: N/A

Non-routine Maintenance:

Action By: N/A



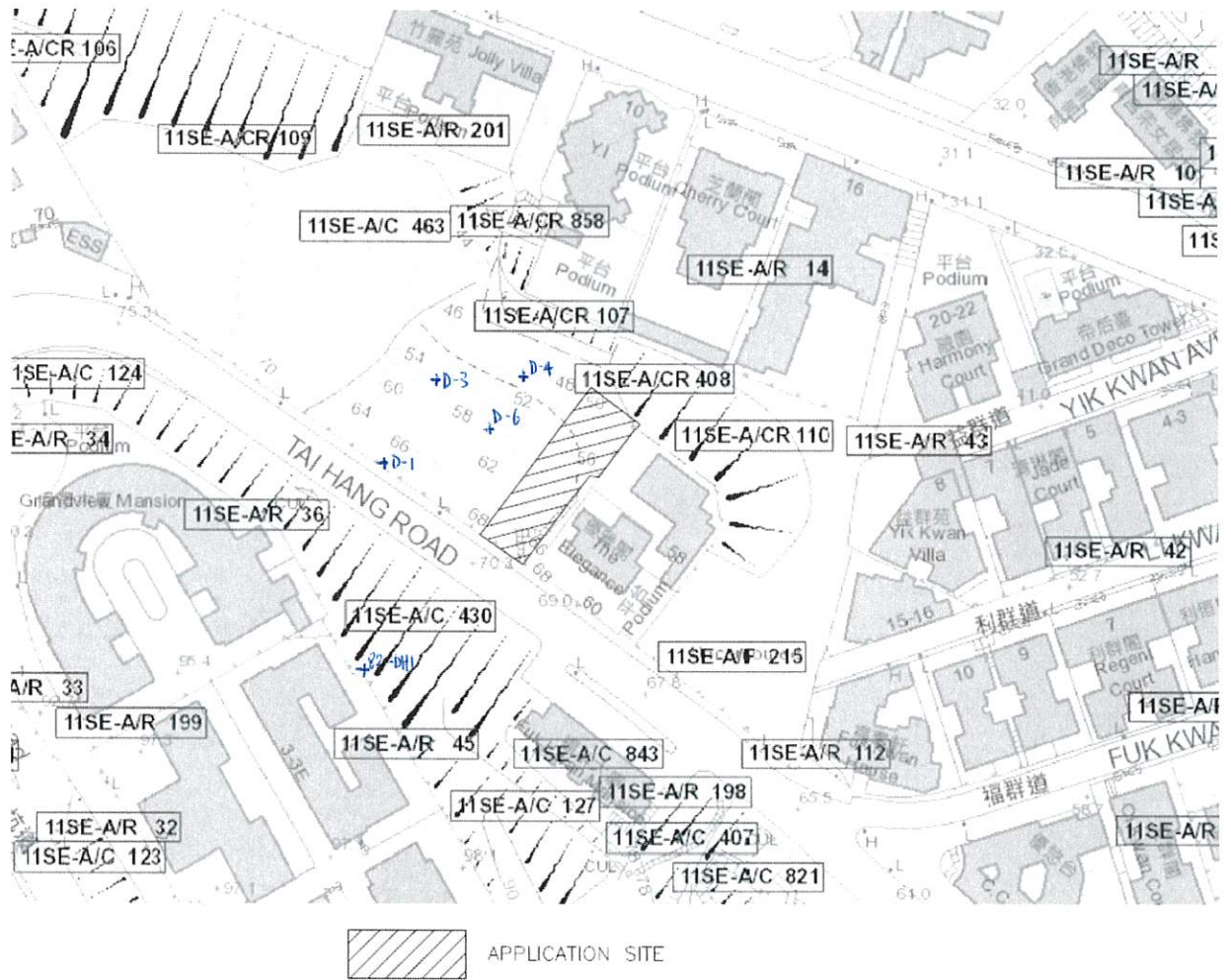
PHOTO





## APPENDIX D

### EXISTING GROUND INVESTIGATION RECORD



PROJECT: LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 2 OF 4

METHOD: ROCK COREBIT

CO-ORDINATES: E 837842.89  
 N 815311.07

MACHINE & No.: D2G-17  
 0.00m-3.20m PX  
 3.20m-10.40m HX  
 10.40m-25.15m NX

FLUSHING MEDIUM: WATER

ORIENTATION: VERTICAL

GROUND-LEVEL: +68.91mPD

Drilling Progress	Casing depth/ m	Water level/ time/ date	Water Recor y X	Total core K	Total core X	R. Q. D.	Fracture Index /m	Tests	Samples	Reduced Level	Depth (m)	Legend	Zone	Description
10.40m HX	10.40m HX			100	100	84	3				10.56			
18.30m HX	18.30m HX			100	100	100	0				11.04			
24/12/88				100	100	100	0				12.01			
				100	100	100	1				13.00			
				100	100	100	2				13.81			
				100	100	100	0				14.50			Grey mottled pink speckled white and black fine to coarse grained slightly decomposed GRANITE CORESTONE. (S.D.G. CORESTONE)
				100	100	100	0				16.31			
28/12/88				100	100	100	0				17.68			
				100	100	100	0				18.64			
				81	100						19.00			
				100	100						19.70			

REMARKS: LOGGED C.S.KONG DATE 31/12/88  
 CHECKED C.LUN DATE 13/2/89

SMALL DISTURBED SAMPLE  
 BULK DISTURBED SAMPLE  
 S.P.T. LINER SAMPLE  
 U 100 UNDISTURBED SAMPLE  
 U 76 UNDISTURBED SAMPLE  
 WATER SAMPLE (76mm)

WATER SAMPLE  
 WATER LEVEL  
 STANDARD PENETRATION TEST  
 PISTON SAMPLE  
 PERMEABILITY TEST

PROJECT: LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 1 OF 4

METHOD: ROCK COREBIT

CO-ORDINATES: E 837842.89  
 N 815311.07

MACHINE & No.: D2G-17  
 0.00m-3.20m PX  
 3.20m-10.40m HX  
 10.40m-25.15m NX

FLUSHING MEDIUM: WATER

ORIENTATION: VERTICAL

GROUND-LEVEL: +68.91mPD

Drilling Progress	Casing depth/ m	Water level/ time/ date	Water Recor y X	Total core K	Total core X	R. Q. D.	Fracture Index /m	Tests	Samples	Reduced Level	Depth (m)	Legend	Zone	Description
3.20m HX	3.20m HX										07.41			Loose brown to reddish brown silty fine to medium SAND.  (FILL)
3.20m HX	3.20m HX										08.71			Reddish brown speckled yellowish brown silty fine to medium SAND.  (R.S.)
											09.71			
											10.50			
											11.27			
											12.57			Grey mottled pink speckled white and black fine to coarse grained slightly decomposed GRANITE CORESTONE. C.D.G. at 8.5m-9.3m. (S.D.G. CORESTONE)
											14.30			
											15.30			
											16.30			
											17.30			
											18.30			
											19.30			

REMARKS: LOGGED C.S.KONG DATE 31/12/88  
 CHECKED C.LUN DATE 13/2/89

SMALL DISTURBED SAMPLE  
 BULK DISTURBED SAMPLE  
 S.P.T. LINER SAMPLE  
 U 100 UNDISTURBED SAMPLE  
 U 76 UNDISTURBED SAMPLE  
 WATER SAMPLE (76mm)

WATER SAMPLE  
 WATER LEVEL  
 STANDARD PENETRATION TEST  
 PISTON SAMPLE  
 PERMEABILITY TEST

Piezometer at 3.20m & 23.0m.

**BACHY SOLETANCHE**  
 BACHY SOLETANCHE GROUP  
 SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD W.O. PWT/2/19.219  
 HOLE No. D-1  
 CONTRACT GC/87/02 OF C.E.S.D.D.A.TE from 22/12/88 to 30/12/89

PROJECT: LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 3 OF 4  
 METHOD: ROCK COREBIT  
 CO-ORDINATES: E 837842.89 N 815311.07  
 MACHINE & No.: D2C-17  
 HOLE DIA. 0.00m-3.20m PX  
 3.20m-10.40m HX  
 10.40m-23.15m HX

FLUSHING MEDIUM: WATER  
 ORIENTATION: VERTICAL  
 GROUND-LEVEL: +88.91mPD

Drilling Progress	Coring depth / m	Water level / time / date	Water Recovery %	Total core %	Solid core %	R. Q. D.	Fracture Index / m	Test	Samples	Reduced Level	Depth (m)	Legend	Zone	Description
21	07:30		36	36	36	21	5	N=50	72-76	21.00		III		See sheet 2 of 4. (S.D.G. CORESTONE)
22										21.45		V		Yellowish brown mottled light speckled white and black fine to medium SAND. (C.D.G.)
23										22.00				
24										22.45				
25										23.00				
26										23.50				
27										24.50				Yellowish brown mottled light speckled white and black fine to medium SAND with M.D.G. cobbles. (H.D.G.)
28										24.80				
29										43.76				
30										43.76				Strong pink mottled gray speckled yellowish brown, white and black fine to medium grained slightly to moderately decomposed GRANITE, closely to medium spaced joints, with limonite stained. Joints are dipping 20°-40°. (N/S.D.G.)

REMARKS: END OF DRILLHOLE AT 31.15m.  
 LOGGED C.S.KONG DATE 31/12/88  
 CHECKED C.LUN DATE 13/2/89

**BACHY SOLETANCHE**  
 BACHY SOLETANCHE GROUP  
 SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD W.O. PWT/2/19.219  
 HOLE No. D-1  
 CONTRACT GC/87/02 OF C.E.S.D.D.A.TE from 22/12/88 to 30/12/89

PROJECT: LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 4 OF 4  
 METHOD: ROCK COREBIT  
 CO-ORDINATES: E 837842.89 N 815311.07  
 MACHINE & No.: D2C-17  
 HOLE DIA. 0.00m-3.20m PX  
 3.20m-10.40m HX  
 10.40m-23.15m HX

FLUSHING MEDIUM: WATER  
 ORIENTATION: VERTICAL  
 GROUND-LEVEL: +88.91mPD

Drilling Progress	Coring depth / m	Water level / time / date	Water Recovery %	Total core %	Solid core %	R. Q. D.	Fracture Index / m	Test	Samples	Reduced Level	Depth (m)	Legend	Zone	Description
27	07:30		36	36	36	21	5	N=50	72-76	21.00		III		See sheet 2 of 4. (S.D.G. CORESTONE)
28										21.45		V		Yellowish brown mottled light speckled white and black fine to medium SAND. (C.D.G.)
29										22.00				
30										22.45				
31										23.00				
32										23.50				
33										24.50				Yellowish brown mottled light speckled white and black fine to medium SAND with M.D.G. cobbles. (H.D.G.)
34										24.80				
35										43.76				
36										43.76				Strong pink mottled gray speckled yellowish brown, white and black fine to medium grained slightly to moderately decomposed GRANITE, closely to medium spaced joints, with limonite stained. Joints are dipping 20°-40°. (N/S.D.G.)

REMARKS: END OF DRILLHOLE AT 31.15m.  
 LOGGED C.S.KONG DATE 31/12/88  
 CHECKED C.LUN DATE 13/2/89

**DRILLHOLE RECORD** W. O. PW7/2/19.219  
 HOLE No. D-3  
 CONTRACT GC/87/02 OF C.E.S.D.D.A.TE from 3/1/89 to 5/1/89

PROJECT: LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 1 OF 3  
 METHOD: ROCK COREBIT  
 CO-ORDINATES: E 837855.95, N 815322.93  
 MACHINE & No.: D2C-17  
 HOLE DIA.: 0.00m-7.00m PX, 7.00m-14.60m HX  
 FLUSHING MEDIUM: WATER  
 ORIENTATION: VERTICAL  
 WATER: +55.29mPD

Drilling Progress	Coaming depth	Water level/Time/Date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture/m	Tests	Sampling	Reduced Level	Depth (m)	Legend	Zone	Description
1	PX		100	100	100					10.23			III	
2			100	100	100					11.02			III	
3			100	100	100					11.47			III	
4			100	100	100					12.80			V	Moderately strong pink mottled yellowish brown speckled with coarse grained moderately decomposed granite with weak zone at: 11.47m-13.56m, 14.35m-14.60m. (M.D.G.)
5			100	100	100					13.00			V	
6			100	100	100					13.45			III	
7			100	100	100					13.56			III	
8			100	100	100					14.35			IV	
9			100	100	100					14.60			IV	
10			100	100	100					15.77			III	
11			100	100	100					16.81			III	
12			100	100	100					18.31			III	
13			100	100	100					19.39			III	
14			100	100	100					20.00			III	
15			100	100	100					21.00			III	
16			100	100	100					22.00			III	
17			100	100	100					23.00			III	
18			100	100	100					24.00			III	
19			100	100	100					25.00			III	
20			100	100	100					26.00			III	

REMARKS: Strong, pink mottled grey speckled yellowish brown and black medium to coarse grained slightly to moderately decomposed GRANITE with medium spaced joints stained with limonite and manganese, joints are dipping 20°-50° (M/S.D.G.)

LOGGED C.S.KONG DATE 24/1/89  
 CHECKED C.LUN DATE 13/2/89

**DRILLHOLE RECORD** W. O. PW7/2/19.219  
 HOLE No. D-3  
 CONTRACT GC/87/02 OF C.E.S.D.D.A.TE from 3/1/89 to 5/1/89

PROJECT: LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 1 OF 3  
 METHOD: ROCK COREBIT  
 CO-ORDINATES: E 837855.95, N 815322.93  
 MACHINE & No.: D2C-17  
 HOLE DIA.: 0.00m-7.00m PX, 7.00m-14.60m HX  
 FLUSHING MEDIUM: WATER  
 ORIENTATION: VERTICAL  
 WATER: +55.29mPD

Drilling Progress	Coaming depth	Water level/Time/Date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture/m	Tests	Sampling	Reduced Level	Depth (m)	Legend	Zone	Description
1	PX		100	100	100					1.30				
2			100	100	100					1.90				
3			100	100	100					2.00				
4			100	100	100					2.45				
5			100	100	100					3.00				
6			100	100	100					4.00				
7			100	100	100					4.45				
8			100	100	100					5.00				
9			100	100	100					6.00				
10			100	100	100					6.45				
11			100	100	100					7.00				
12			100	100	100					8.00				
13			100	100	100					8.45				
14			100	100	100					9.00				
15			100	100	100					9.45				
16			100	100	100					10.00				
17			100	100	100					11.00				
18			100	100	100					12.00				
19			100	100	100					13.00				
20			100	100	100					14.00				

REMARKS: Loose brown to dark brown silty fine to medium SAND with gravel and cobbles. (FILL?)  
 Yellowish brown mottled pink and black speckled white fine to medium SAND. (C.D.G.)  
 Moderately strong pink mottled yellowish brown speckled white and black fine to coarse grained moderately decomposed GRANITE with weak zone at 8.00m-9.60m. (M.D.G.)

LOGGED C.S.KONG DATE 24/1/89  
 CHECKED C.LUN DATE 13/2/89



**DRILLHOLE RECORD** W. O. PWZ/2/19.2/19  
 HOLE No. D-3  
 CONTRACT GC/87/92 OF C.E.S.D.D.A.TE from 3/1/89 to 5/1/89

PROJECT: LPM 1989/90 SLOPE 11SE-A/E62 AT 6-8 TAI HANG ROAD SHEET 3 OF 3

METHOD: ROTARY  
 MACHINE & No.: E 837856.95  
 DZG-17 N 815322.93  
 FLUSHING MEDIUM: CO-ORDINATES  
 WATER: ORIENTATION: VERTICAL  
 GROUND-LEVEL: +55.29mPD

Drilling Progress	Casing depth	Water temp (°C)	Water flow (l/min)	Total Recovery %	Soil core Recovery %	R. D. I.	Fracture Index /m	Test Status	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
21				100	100	100	0				20.38				
22				100	100	100	0				21.32				
23				100	100	100	0		Z-101		22.15				Moderately strong to strong, pink mottled gray speckled yellowish brown and black medium to coarse grained slightly to moderately decomposed GRANITE, with jointe stained with limonite and manganese. Jointe are widely spaced. Weak at 23.09m. W.C. at 23.75m-24.75m. (M/S.D.G.)
24				61	59	38	0				23.09		III		
25				100							23.25		IV		
26				100							24.75		V		
27				86	86	46	0		Z-101	30.19	25.10		IV		
28															End of drillhole at 25.10m.

REMARKS: LOGGED C.S. / CONC. DATE 24/1/89  
 CHECKED C. LUN DATE 13/2/89

SMALL DISTURBED SAMPLE  
 BULK DISTURBED SAMPLE  
 S.P.T. LNER SAMPLE  
 U 100 UNDISTURBED SAMPLE  
 U 75 UNDISTURBED SAMPLE  
 MAZER SAMPLE (75mm)  
 WATER SAMPLE  
 WATER LEVEL  
 STANDARD PENETRATION TEST  
 PISTON SAMPLE  
 PERMEABILITY TEST

**BACHY SOLETAICHE**  
BACHY SOLETAICHE GROUP  
SOIL & FOUNDATION ENGINEERS

**DRILLHOLE RECORD** W.O. PW7/2/19.219  
HOLE No. D-4  
CONTRACT GC/87/02 OF C.E.S.D.D.A.TE from 12/1/89 to 16/1/89

PROJECT: LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 1 OF 3  
METHOD: ROCK COREBIT  
MACHINE & No. E 837870.54  
D2G-17 N 815326.41  
FLUSHING MEDIUM: WATER  
ORIENTATION: VERTICAL  
GROUND-LEVEL: +48.82mPD

Drilling Program	Casing depth/ m	Water level/ time/ date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index /m	Tests	Samples	Reduced Level	Depth (m)	Legend	Zone	Description
11	13.0m 13/1/89	18.30 07:30	100	72	100	100	3	72-101	10.00 10.01	10.00 10.01	10.00 10.01	IV	Moderately strong yellowish brown mottled pink and grey speckled black fine to medium grained highly to moderately decomposed GRANITE with widely to medium spaced joints. (H/M.D.G.)	
12	13.0m 13/1/89	18.30 07:30	100	99	100	98	2	72-101	11.90 11.91	11.90 11.91	11.90 11.91	III	Brown to dark brown silty fine to medium SAND. (R.S.)	
13	13.0m 13/1/89	18.30 07:30	100	100	100	93	2	72-101	13.00 13.01	13.00 13.01	13.00 13.01	II	Yellowish brown mottled dark brown and pink speckled silty fine to medium SAND. (C.D.G.)	
14	13.0m 13/1/89	18.30 07:30	100	100	100	100	1	72-101	14.72	14.72	14.72	I	Pink mottled white speckled yellowish brown and black silty fine to medium SAND. (C.D.G.)	
15	13.0m 13/1/89	18.30 07:30	100	100	100	92	3	72-101	16.11	16.11	16.11	II	Strong pink mottled grey, speckled black and white fine to medium grained highly to moderately decomposed GRANITE with closely spaced joints, stained with manganese and limonite, joints are dipping 30°-50°. (M/S.D.G.)	
16	13.0m 13/1/89	18.30 07:30	100	100	100	100	0	72-101	17.63	17.63	17.63	II	Sub-vertical joint at 14.92m-18.21m.	
17	13.0m 13/1/89	18.30 07:30	100	100	100	100	0	72-101	19.06 19.07	19.06 19.07	19.06 19.07	II		
18	13.0m 13/1/89	18.30 07:30	100	100	100	100	0	72-101	20.84	20.84	20.84	II		

REMARKS: LOGGED C.S.KONG DATE 23/1/89  
CHECKED C.LUN DATE 13/2/89  
 SMALL DISTURBED SAMPLE  
 BULK DISTURBED SAMPLE  
 S.F.T. LINER SAMPLE  
 U 100 UNDISTURBED SAMPLE  
 U 70 UNDISTURBED SAMPLE  
 WAZER SAMPLE (76mm)  
 WATER SAMPLE  
 WATER LEVEL  
 STANDARD PENETRATION TEST  
 PISTON SAMPLE  
 PERMEABILITY TEST

**BACHY SOLETAICHE**  
BACHY SOLETAICHE GROUP  
SOIL & FOUNDATION ENGINEERS

**DRILLHOLE RECORD** W.O. PW7/2/19.219  
HOLE No. D-4  
CONTRACT GC/87/02 OF C.E.S.D.D.A.TE from 12/1/89 to 16/1/89

PROJECT: LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 2 OF 3  
METHOD: ROCK COREBIT  
MACHINE & No. E 837870.54  
D2G-17 N 815326.41  
FLUSHING MEDIUM: WATER  
ORIENTATION: VERTICAL  
GROUND-LEVEL: +48.82mPD

Drilling Program	Casing depth/ m	Water level/ time/ date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index /m	Tests	Samples	Reduced Level	Depth (m)	Legend	Zone	Description
11	13.0m 12/1/89	18.30 07:30	100	90	100	100	3	72-101	47.32 47.33	47.32 47.33	47.32 47.33	VI	Brown to dark brown silty fine to medium SAND. (R.S.)	
12	13.0m 12/1/89	18.30 07:30	100	100	100	100	2	72-101	48.95 48.96	48.95 48.96	48.95 48.96	V	Yellowish brown mottled dark brown and pink speckled silty fine to medium SAND. (C.D.G.)	
13	13.0m 12/1/89	18.30 07:30	100	100	100	100	2	72-101	50.50 50.51	50.50 50.51	50.50 50.51	IV	Pink mottled white speckled yellowish brown and black silty fine to medium SAND. (C.D.G.)	
14	13.0m 12/1/89	18.30 07:30	100	100	100	100	1	72-101	52.12 52.13	52.12 52.13	52.12 52.13	III	Strong pink mottled grey, speckled black and white fine to medium grained highly to moderately decomposed GRANITE with closely spaced joints, stained with manganese and limonite, joints are dipping 30°-50°. (M/S.D.G.)	
15	13.0m 12/1/89	18.30 07:30	100	100	100	100	0	72-101	53.75 53.76	53.75 53.76	53.75 53.76	II	Sub-vertical joint at 51.92m-55.21m.	
16	13.0m 12/1/89	18.30 07:30	100	100	100	100	0	72-101	55.38 55.39	55.38 55.39	55.38 55.39	II		
17	13.0m 12/1/89	18.30 07:30	100	100	100	100	0	72-101	57.01 57.02	57.01 57.02	57.01 57.02	II		
18	13.0m 12/1/89	18.30 07:30	100	100	100	100	0	72-101	58.64	58.64	58.64	II		

REMARKS: LOGGED C.S.KONG DATE 23/1/89  
CHECKED C.LUN DATE 13/2/89  
 SMALL DISTURBED SAMPLE  
 BULK DISTURBED SAMPLE  
 S.F.T. LINER SAMPLE  
 U 100 UNDISTURBED SAMPLE  
 U 70 UNDISTURBED SAMPLE  
 WAZER SAMPLE (76mm)  
 WATER SAMPLE  
 WATER LEVEL  
 STANDARD PENETRATION TEST  
 PISTON SAMPLE  
 PERMEABILITY TEST



BACHY SOLENTANICHE GROUP  
SOIL & FOUNDATIONS PREPARATE

# DRILLHOLE RECORD

W. O. PW7/2/19.219  
HOLE No. D-4

CONTRACT GC/87/02 OF C.E.S.D. DATE from 12/1/89 to 19/1/89

PROJECT:

LPM 1989/90 SLOPE 11SE-A/F62 AT 6-8 TAI HANG ROAD SHEET 3 OF 3

METHOD: ROTARY  
MACHINE & No.: D20-17  
CO-ORDINATES: E 837870.54 N 815326.41  
ROCK COREBIT: T2-101  
HOLE DIA.: 0.00m-7.50m PX  
7.50m-13.1m HX

FLUSHING MEDIUM: WATER  
ORIENTATION: VERTICAL  
GROUND-LEVEL: +48.82mPD

Drilling Process	Casing depth	Water level/ m/	Water level/ m/	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Bore Zone	Description
				100	100	98	1				20.00			See sheet 2 of 3. Sub-vertical joint at: 22.67m-23.00m (S.D.C.)
				100	100	87	3		72-101		21.50			
				99	91	71	6			23.67	23.00			
														End of drillhole at 23.00m.

REMARKS

LOGGED C.S. KING DATE 23/1/89  
CHECKED C. LUN DATE 13/2/89

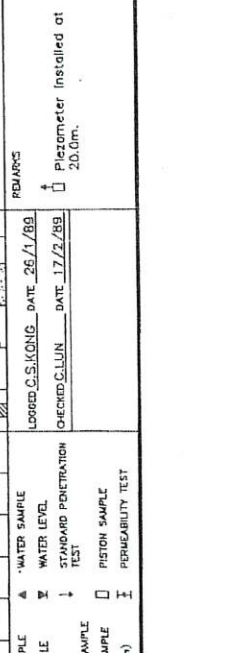
SMALL DISTURBED SAMPLE  
 BULK DISTURBED SAMPLE  
 S.P.T. UNDR SAMPLE  
 U 100 UNDISTURBED SAMPLE  
 U 76 UNDISTURBED SAMPLE  
 WAZER SAMPLE (76mm)

WATER SAMPLE  
 WATER LEVEL  
 STANDARD PENETRATION TEST  
 PISTON SAMPLE  
 PERMEABILITY TEST



PROJECT:		DRILLHOLE RECORD		W. O. P/7/2/19,219	
BACHY SOLTAIR		BACHY SOLTAIR		HOLE NO. D-6	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		DATE OF C.E.S. DATE FROM 25/1/89 TO 26/1/89	
CONTRACT 90/87/02		CONTRACT 90/87/02		SHEET 1 OF 3	
PROJECT:		DRILLHOLE RECORD		W. O. P/7/2/19,219	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		HOLE NO. D-6	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		DATE OF C.E.S. DATE FROM 25/1/89 TO 26/1/89	
CONTRACT 90/87/02		CONTRACT 90/87/02		SHEET 1 OF 3	
PROJECT:		DRILLHOLE RECORD		W. O. P/7/2/19,219	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		HOLE NO. D-6	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		DATE OF C.E.S. DATE FROM 25/1/89 TO 26/1/89	
CONTRACT 90/87/02		CONTRACT 90/87/02		SHEET 1 OF 3	
PROJECT:		DRILLHOLE RECORD		W. O. P/7/2/19,219	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		HOLE NO. D-6	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		DATE OF C.E.S. DATE FROM 25/1/89 TO 26/1/89	
CONTRACT 90/87/02		CONTRACT 90/87/02		SHEET 1 OF 3	

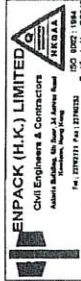
PROJECT:		DRILLHOLE RECORD		W. O. P/7/2/19,219	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		HOLE NO. D-6	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		DATE OF C.E.S. DATE FROM 25/1/89 TO 26/1/89	
CONTRACT 90/87/02		CONTRACT 90/87/02		SHEET 2 OF 3	
PROJECT:		DRILLHOLE RECORD		W. O. P/7/2/19,219	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		HOLE NO. D-6	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		DATE OF C.E.S. DATE FROM 25/1/89 TO 26/1/89	
CONTRACT 90/87/02		CONTRACT 90/87/02		SHEET 2 OF 3	
PROJECT:		DRILLHOLE RECORD		W. O. P/7/2/19,219	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		HOLE NO. D-6	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		DATE OF C.E.S. DATE FROM 25/1/89 TO 26/1/89	
CONTRACT 90/87/02		CONTRACT 90/87/02		SHEET 2 OF 3	
PROJECT:		DRILLHOLE RECORD		W. O. P/7/2/19,219	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		HOLE NO. D-6	
BACHY SOLUTIONS GROUP		BACHY SOLUTIONS GROUP		DATE OF C.E.S. DATE FROM 25/1/89 TO 26/1/89	
CONTRACT 90/87/02		CONTRACT 90/87/02		SHEET 2 OF 3	



REMARKS

- WATER SAMPLE
- WATER LEVEL
- STANDARD PENETRATION TEST
- PISTON SAMPLE
- PERMEABILITY TEST

LOGGED C.S.KONG DATE 26/1/89  
 CHECKED C.LUN DATE 17/2/89



# DRILLHOLE RECORD

HOLE NO. **82-DH 1**  
SHEET **3** of **3**

Civil Engineers & Contractors  
Address: Building 20, Road 24, Science Park  
Tuen Mun, New Territories  
Tel: (854) 21111 Fax: (854) 21113  
C.P. License No. CC254

CONTRACT NO. **GE2000/12**

PROJECT Feature No. 115E-MC730, Opposite Elegance Residential Building, Tai Hang Road, Tai Hang.

METHOD		CO-ORDINATES		ORIENTATION		VERTICAL		Description	
W-H-R-C		E 837,847.17 N 815,253.58		Reduced Level		Depth (m)		mPD	
MACHINE & No. DR 84									
FLUSHING MEDIUM WATER		T.C.R. (%)		S.C.R. (%)		R.Q.D. (%)		F.L.	
Water level (m)		Shift (m)		Casing size		Progress			
10.9.01	17.95m	00	00	90	0.0				
21	18.04m	07	07	90	0.0				
10.9.01	18.00m								
22									
23									
24									
25									
26									
27									
28									
29									
30									

As sheet 2 of 3  
From 20.36-20.61m. Moderately strong and moderately decomposed.  
End of investigation hole at 21.28m.

LOGGED F.S. Woo  
DATE 11/09/2001  
CHECKED P. Barry  
DATE 12/09/2001

REMARKS

ENPACK (H.K.) LIMITED Civil Engineers & Contractors 401-403, 4th Floor, 222 Des Voeux Road Tel: (852) 2171 2222 Fax: (852) 2171 2223		DRILLHOLE RECORD		HOLE NO. 82-DH 1		SHEET 1 of 3									
PROJECT Feature No. 115E-A/C430, Opposite Elegance Residential Building, Tai Hang Road, Tai Hang.				CONTRACT NO. GE2000/12											
METHOD W/R-C		CO-ORDINATES		W.O. No 00 12/311/G082		HOLE NO. 82-DH 1									
MACHINE & No. DR 84		E 837,847.17 N 815,263.58		DATE: 07/09/2001 to 10/09/2001		SHEET 1 of 3									
FLUSHING MEDIUM WATER		ORIENTATION		GROUND LEVEL +94.47		mPD									
Dilling Progress	Casing size	Water level (m) start/end	T.C.R.(%)	S.C.R.(%)	R.O.D.(%)	F.L.	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Description	CO-ORDINATES	
														W.O. No	DATE
1	100	1.00	80	80	80	80		1	+94.47	0.00				00 12/311/G082	07/09/2001
2	100	2.00	80	80	80	80		2	+92.37	2.10			Soft, grey and yellowish brown, sandy, silty CLAY with some concrete fragments. (FILL)	00 12/311/G082	10/09/2001
3	100	3.00	90	90	90	90		3	+91.27	3.20			Soft to firm, yellowish brown, very sandy SILT. (RESIDUAL SOIL)		
4	100	4.00	90	90	90	90		4	+89.07	4.40			Extremely weak, yellowish brown and red, completely decomposed, medium grained GRANITE. (Sandy, clayey SILT)		
5	100	5.00	85	85	85	85		5	+88.07	5.40			Extremely weak, red, completely decomposed, medium grained GRANITE. (Silty SAND)		
6	100	6.00	90	90	90	90		6	+87.57	6.50			Extremely weak, locally very weak, yellowish brown, completely decomposed, medium grained GRANITE (Coarse SAND with many angular medium to coarse gravel sized moderately weak rock fragments)		
7	100	7.00	85	85	85	85		7	+85.77	7.70			Extremely weak to very weak, red and yellowish brown, completely decomposed, medium grained GRANITE. (Coarse SAND with some coarse gravel and cobble sized moderately weak rock fragments)		
8	100	8.00	0	0	0	0		8	+85.77	8.70					
9	100	9.00	98	98	98	98		9	+85.77	9.70					
10	100	10.00	100	100	100	100		10	+85.77	10.70					

Small Disturbed Sample	Standard Penetration Test	LOGGED	F.S. Woo
Field Sample	Rock Vane Shear Test	DATE	11/09/2001
U10 Undisturbed Sample	Permeability Test	CHECKED	P. Barry
U100 Undisturbed Sample	In-situ Pore Test	DATE	12/09/2001
UPT Layer Sample	Pressure Test		
Water Sample	Slenderness Test		

REMARKS  
 1. Prior to drilling an inspection pit was excavated by hand to 0.5m depth.  
 2. Placemeter tip installed at 13.10m depth.  
 3. Standpipe installed at 2.70m depth.

ENPACK (H.K.) LIMITED Civil Engineers & Contractors 401-403, 4th Floor, 222 Des Voeux Road Tel: (852) 2171 2222 Fax: (852) 2171 2223		DRILLHOLE RECORD		HOLE NO. 82-DH 1		SHEET 2 of 3									
PROJECT Feature No. 115E-A/C430, Opposite Elegance Residential Building, Tai Hang Road, Tai Hang.				CONTRACT NO. GE2000/12											
METHOD W/R-C		CO-ORDINATES		W.O. No 00 12/311/G082		HOLE NO. 82-DH 1									
MACHINE & No. DR 84		E 837,847.17 N 815,263.58		DATE: 07/09/2001 to 10/09/2001		SHEET 2 of 3									
FLUSHING MEDIUM WATER		ORIENTATION		GROUND LEVEL +94.47		mPD									
Dilling Progress	Casing size	Water level (m) start/end	T.C.R.(%)	S.C.R.(%)	R.O.D.(%)	F.L.	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Description	CO-ORDINATES	
														W.O. No	DATE
11	100	11.00	98	98	98	98		11	+83.57	10.90			As sheet 1 of 3.	00 12/311/G082	07/09/2001
12	100	12.00	80	80	80	80		12	+83.57	12.90			Extremely weak to weak, yellowish brown and grey, completely to highly decomposed, medium grained GRANITE. (Coarse SAND with some coarse gravel sized moderately weak rock fragments)		
13	100	13.00	0	0	0	0		13	+80.87	13.80			Moderately strong to strong, grey, spotted black, moderately to highly decomposed, fine to medium grained GRANITE. (CONESTONE)		
14	100	14.00	100	96	83	4.5		14	+79.55	14.82			Extremely weak to very weak, grey and light pinkish brown, completely to highly decomposed, fine to medium grained GRANITE. (GRAVEL sized rock fragments)		
15	100	15.00	35	19	19	NR		15	+78.64	15.53			Extremely weak to very weak, grey and light pinkish brown, completely to highly decomposed, fine to medium grained GRANITE. (GRAVEL sized rock fragments)		
16	100	16.00	100	100	100	0.6		16	+78.64	16.53			Extremely weak to very weak, grey and light pinkish brown, completely to highly decomposed, fine to medium grained GRANITE. (GRAVEL sized rock fragments)		
17	100	17.00	100	100	100			17	+78.64	17.53			Extremely weak to very weak, grey and light pinkish brown, completely to highly decomposed, fine to medium grained GRANITE. (GRAVEL sized rock fragments)		
18	100	18.00	98	98	98			18	+78.64	18.53			Extremely weak to very weak, grey and light pinkish brown, completely to highly decomposed, fine to medium grained GRANITE. (GRAVEL sized rock fragments)		
19	100	19.00	100	100	100			19	+78.64	19.53			Extremely weak to very weak, grey and light pinkish brown, completely to highly decomposed, fine to medium grained GRANITE. (GRAVEL sized rock fragments)		
20	100	20.00	100	100	100			20	+78.64	20.53			Extremely weak to very weak, grey and light pinkish brown, completely to highly decomposed, fine to medium grained GRANITE. (GRAVEL sized rock fragments)		

Small Disturbed Sample	Standard Penetration Test	LOGGED	F.S. Woo
Field Sample	Rock Vane Shear Test	DATE	11/09/2001
U10 Undisturbed Sample	Permeability Test	CHECKED	P. Barry
U100 Undisturbed Sample	In-situ Pore Test	DATE	12/09/2001
UPT Layer Sample	Pressure Test		
Water Sample	Slenderness Test		

REMARKS  
 From 18.30-18.44m: Moderately strong and moderately decomposed.  
 From 15.85-17.14m, 19.22-19.80m and 21.16-21.28m: Medium grained GRANITE.  
 From 15.18-16.32m: Quartz vein.