

Appendix 1

Approved Drainage Proposal and Approval Letter for Partial Compliance with
Approval Condition of Last Application No. A/SK-PK/268

**Drainage Design Report for
Proposed Temporary
Private Swimming Pool and Garden for
a Period of 3 Years at
Lot 1122 Ext and Adjoining Government Land in D.D. 217,
House 5B, Habitat, Pak Sha Wan,
Sai Kung, New Territories
(2nd Resubmission)**

*Philip So & Associates Consulting Civil & Geotechnical Engineers Ltd.
August 2024*

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Responses to DSD's Comments

DSD's Comments	Our responses to DSD's Comments
<p>1) The applicant should demonstrate, with the support document, that the existing drainage system all the way down to the ultimate discharge point (i.e to the sea) has sufficient capacity and in good condition to cater for the surface runoff/water being discharged from the proposed development. However, such information is not covered in the revised report.</p>	<p>It is noted that swimming pool at House B5, Habitat, Pak Sha Wan has been approved by Building Authority on 28 Jun 1994, the overflow water from the swimming pool will be discharged through a $\phi 50$ over flow pipe to existing u-channel (see Vertical Line Diagram in Drawing No. P-1A in Appendix C). Although the dimension of the existing swimming pool is different from the approval drawing, the plan area of the existing swimming pool (35.7m^2) is approximately the same as the approved swimming pool (35.9m^2). As such, the existing drains are capable to discharge the overflow from the swimming pool.</p>
<p>2) According to the part print of the Buildings Department's approval drawing dated 8 July 1975, it appears that there is no swimming pool mentioned in the drawing. As such, we consider that the existing drainage system was not intended to deal with the discharge of the pool water at the time of approval. In view of additional flow being discharged to the existing drainage system, please critically review, with the supporting document, whether the existing drainage system is capable of dealing with the surface runoff/pool water being discharged from the proposed development.</p>	<p>Ditto.</p> <p>In addition, discharge from the $\phi 50$ over flow pipe has been considered in the drainage checking.</p>

DSD's Comments	Our responses to DSD's Comments
3) Please confirm whether there is any flow being discharged to the existing slope drainage system for the feature no. 7SE-D/C86.	No any flow being discharged to the existing slope drainage system for Feature No. 7SE-D/C86.
4) Please clarify the maintenance responsibilities of the reinstated 300mm U-channel.	Owners of Lot 1122 & 1122 Ext. in D.D. 217 are responsible for the maintenance of the 300 u-channel.
5) Please supplement site photos showing the current conditions of the existing 300mm U-channels and stepped U-channel as well as the associated catchpits for our consideration.	Site photos indicate that the existing u-channels and the associated catchpits are blocked and covered by dense vegetation. Dense vegetation shall be removed, and the u-channels and the associated catchpit shall be unblocked. Repair works for the drainage network shall be carried out by the lot owners if deterioration found.
6) Please be advised that limited desk-top checking by Government on the drainage proposal covers only the fundamental aspects of the drainage design. The AP shall ensure that his proposed drainage works will not cause any adverse drainage or environmental impact in the vicinity. The AP shall check and ensure that the proposed drainage works and the downstream drainage systems have adequate capacity and are in good condition to accommodate all discharge water collected from his lot and all upstream catchments. The lot owner shall be responsible to effect any subsequent upgrading of these proposed works and the downstream drainage systems in respect of design, construction and maintenance.	Noted.

1. Introduction

Philip So & Associates Ltd. is appointed by the subject Lot owner to prepare the drainage proposal for the proposed temporary swimming pool to replace the existing swimming pool with the same dimensions at Lot 1122 Ext and Adjoining Government Land in D.D. 217, House 5B, Habitat, Pak Sha Wan, Sai Kung, New Territories

2. Drainage Design

Site inspection reveals that the existing u-channels and catchpits situated along the existing wall toe of House B5 are blocked and covered by dense vegetation. The layout of the drains match with the drainage plan approved by Buildings Department on 8 July 1975 with BD Ref No.: 4/9098/74. The approval drawing is attached in Appendix B.

The concerned u-channels and the associated catchpits shall be unblocked. Repair works for the drainage network shall be carried out if deterioration found.

The hydraulic capacity of the existing surface drainage was checked by using “Rational Method” as recommended in “Geotechnical Manual for Slopes”. Runoff was calculated by assuming the runoff coefficient K to be 1.0 for concrete pavement areas and 0.30 for grassland area, and time of concentration was calculated by using Bransby William’s equation. The proposed drainage system was conservatively checked and designed for 1-in-50 years return period storm for Urban Drainage Branch System. The calculation and checking of the proposed surface drainage for the feature is presented in Appendix A.

Details of the proposed drainage works are presented in the Figure 1.

FIGURE

Figure 1
Site Location Plan

PHOTOS

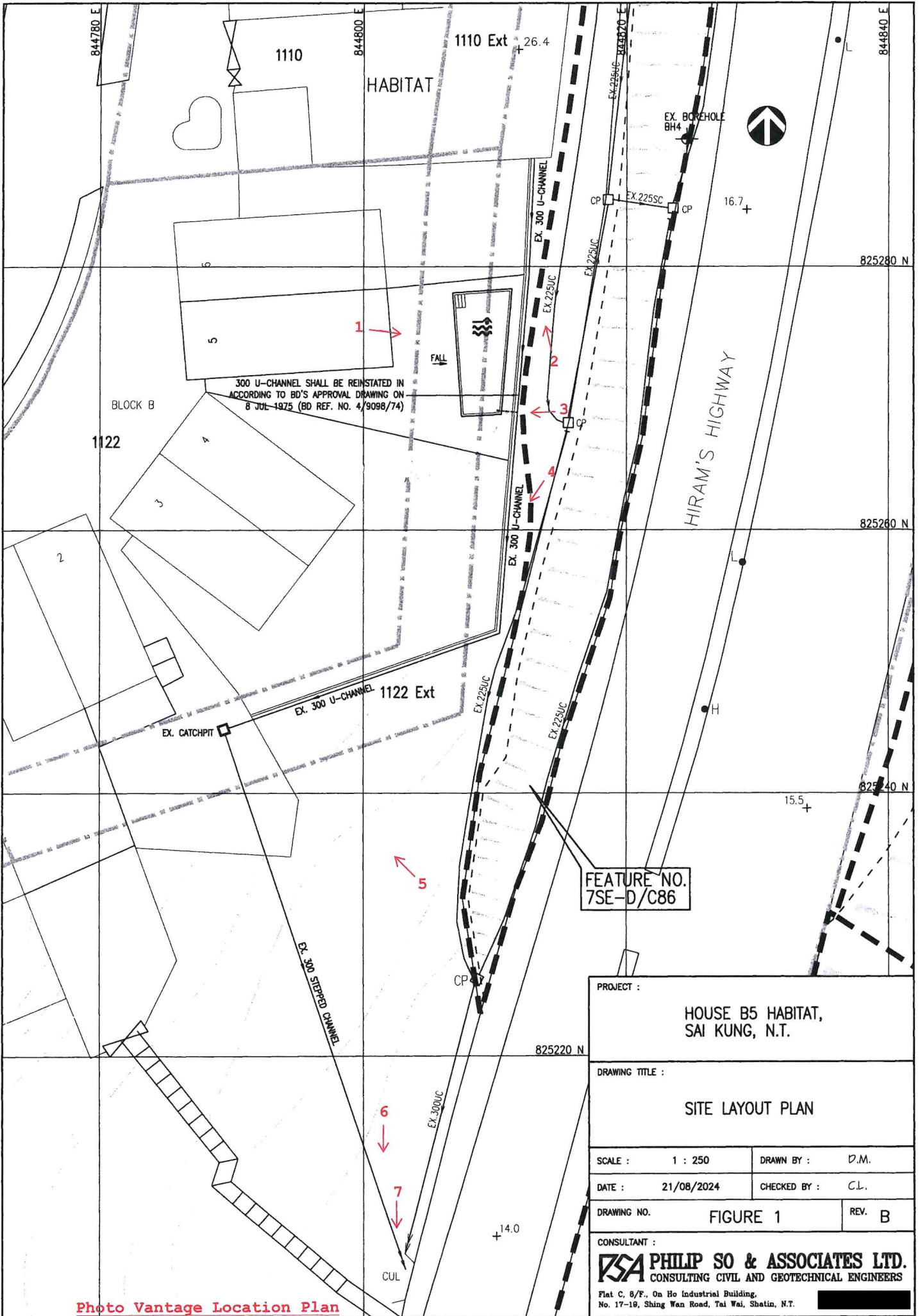



Photo Vantage Location Plan

PROJECT :		HOUSE B5 HABITAT, SAI KUNG, N.T.	
DRAWING TITLE :			
SITE LAYOUT PLAN			
SCALE :	1 : 250	DRAWN BY :	D.M.
DATE :	21/08/2024	CHECKED BY :	C.L.
DRAWING NO.	FIGURE 1		REV. B
CONSULTANT :			
 PHILIP SO & ASSOCIATES LTD. CONSULTING CIVIL AND GEOTECHNICAL ENGINEERS Flat C, 8/F., On Ho Industrial Building, No. 17-19, Shing Wan Road, Tai Wai, Shatin, N.T.			

2024-08-09 11:27 ddk



Photo 1: Photo showing the existing swimming pool



Ex. 300UC

Photo 2: Photo showing existing u-channel situated along the wall toe



Photo 3: Photo showing the existing 300UC and ϕ 50 over flow pipe

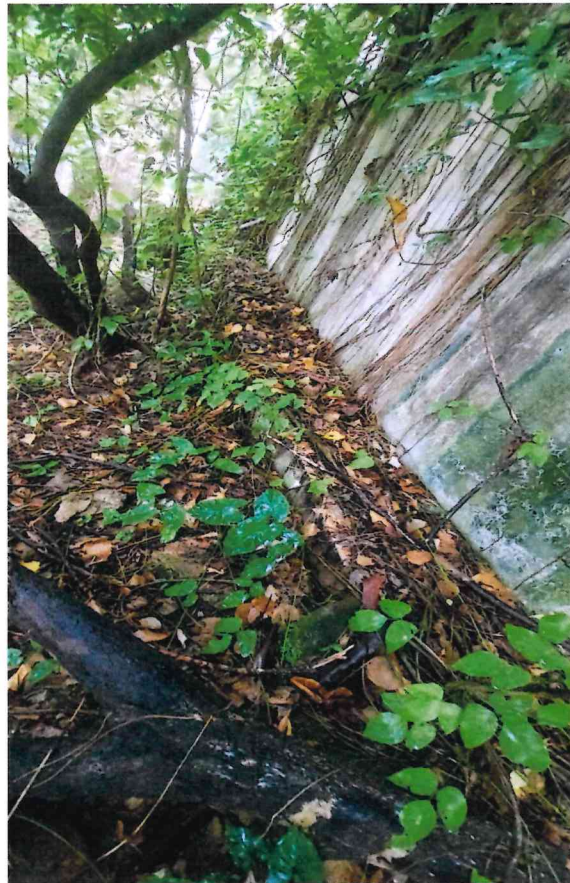


Photo 4: Photo showing the existing 300UC

Ex. 300 stepped channel

Ex. Catchpit



Photo 5: Photo showing the existing 300 stepped channel and catchpit



Photo 6: Photo showing the existing 300 stepped channel



Photo 7: Photo showing the existing outlet

Appendix A
Hydraulic Checking

Design Parameters and Assumptions for Stormwater Drains

1. The design of surface drainage system is based on the guidelines given in the TGN43, Stormwater Drainage Manual & Corrigendum No. 1/2022
2. Concrete for the drainage channel shall be Grade 20D or better.
3. All design pipe are using concrete pipe / DI pipe
4. Maximum velocities of flow is 4.0 m/s.
5. The design intensity is based on a 50-years return period (Ref. Stormwater Drainage Manual 2018 p.137)
The design intensity is based on a 10-years return period for temporary drains (Ref. Slope Manual 1984).
6. The flow in the catchment area is calculated using the 'Rational Method'.

The formula is $Q = k \times i \times A / 3600$

where

Q	=	Maximum Runoff (litres / sec)
i	=	Design mean intensity of rainfall (mm / hr)
A	=	Area if catchment (m ²)
k	=	Runoff coefficient
		*(Ref. Stormwater Drainage Manual 2018 P.37)
k	=	1 for paved area
	=	0.3 steep grassland with heavy soil
	=	0.2 steep sandy soil ground
	=	0.1 flat sandy soil ground

7. The time of concentration is calculated using the modified form of original Bransby - Williams equation.

$$t = 0.14465 \times L / (H^{0.2} \times A^{0.1})$$

where

t	=	Time of concentration (min)
H	=	Average fall (m / 100m) from the summit of catchment to the pt. of design.
A	=	Area of catchment (m ²)
L	=	Distance in (m) measured on the line of natural flow between the design section and that pt. of the catchment from which water would take the longest time to reach the design section.

8. The stormwater collected by the surface drainage system is connected to the existing public channels or manholes.
9. Area is divided into sub-catchment areas for the calculation of surface runoff. Runoff is collected by U-channels.

Design of Pipes

The velocity of flow in pipe is calculated using the Manning's equation as follows :

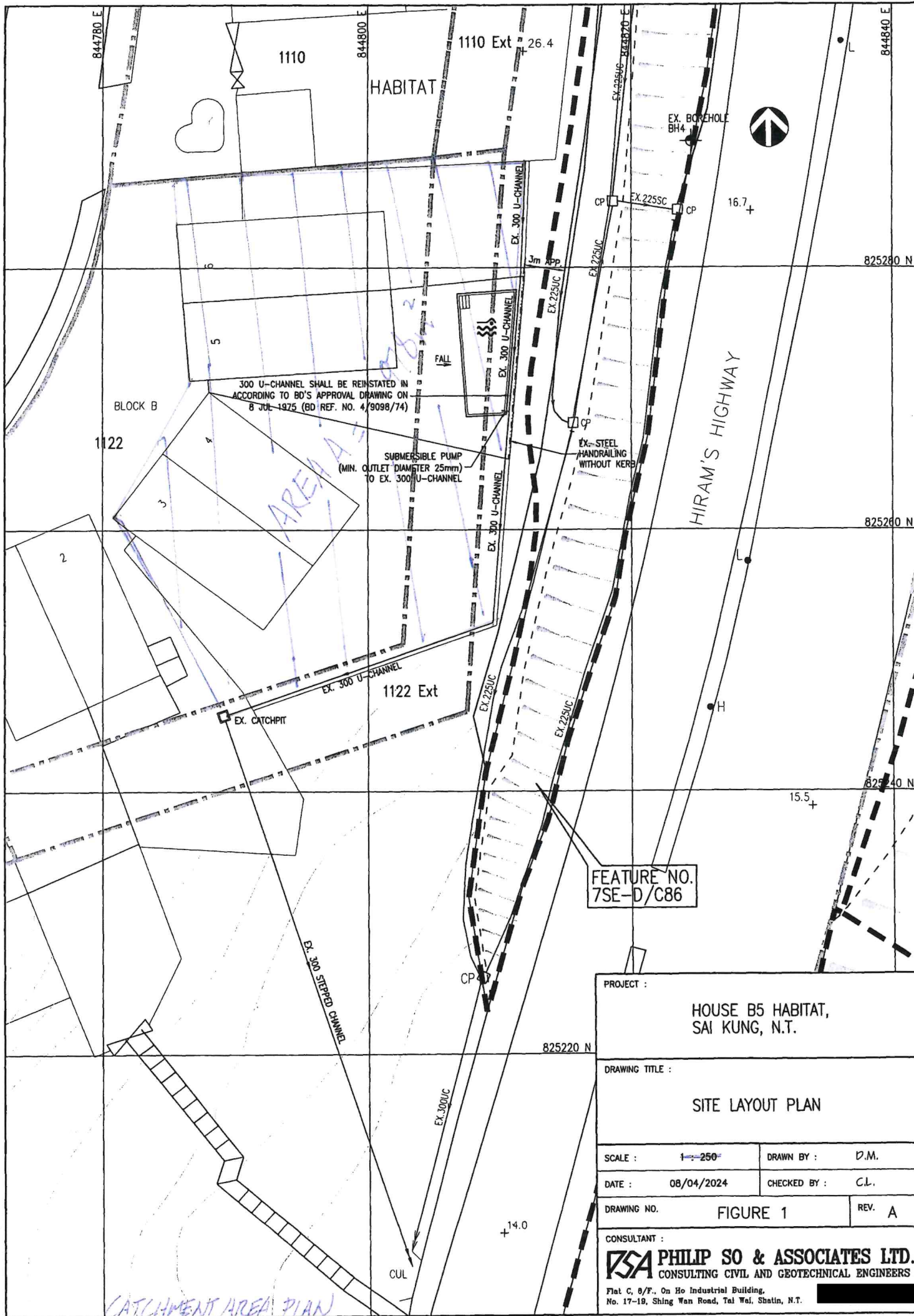
$$v = \frac{m^{2/3} \times s^{1/2}}{n}$$


where m = Hydraulic mean depth (i.e. d/4 for full flow)
s = Gradient of pipe
n = Roughness factor (0.013 for cement mortar finishing / DI Pipe)
d = Diameter of pipe

Therefore, for laws of continuity, we have

$$Q = A \times v$$

$$\therefore d = \left(\frac{4Qn}{0.25^{2/3} \times \pi \times s^{1/2}} \right)^{3/8}$$



PROJECT :		HOUSE B5 HABITAT, SAI KUNG, N.T.	
DRAWING TITLE :			
SITE LAYOUT PLAN			
SCALE :	1:250	DRAWN BY :	D.M.
DATE :	08/04/2024	CHECKED BY :	C.L.
DRAWING NO.	FIGURE 1	REV.	A
CONSULTANT :			
 PHILIP SO & ASSOCIATES LTD. CONSULTING CIVIL AND GEOTECHNICAL ENGINEERS			
Flat C, 9/F., On Ho Industrial Building, No. 17-19, Shing Wan Road, Tai Wei, Shatin, N.T.			

2024-05-08 10:55:55.dwg

PSA	PHILIP SO & ASSOCIATES		Date
Job Title	Habitat, Pak Sha Wan		
	Permanenet Drains		
Climate change factor increases =	16.0 %	HKO Headquarters	
Return period =	50 years	storm constant a = 451.3	b = 2.46
a) Channel Design	c = 0.337		
Catchment	A	UPVC Pipe	All
Area (m2)	978.0	-	-
H(m/100m)	1.0	-	-
L (m)	35.0	-	-
t (min)	2.5	-	-
i (mm/hr)	262.3	-	-
k1	1.00	-	-
Q (l/sec)	82.7	-	-
Q (l/min)	4960	154	5114
Channel	300U	UPVC Pipe	300U
Capacity (l/min)	8000	154	8000
Check	OK	OK	OK

j) Capacity of Ex. Pipe :

50 DIA

A = 0.00196 m²

s = 0.1

P = 0.15708 m

n = 0.013

UPVC Pipe

m = 0.0125 m

$$v = \frac{m^{2/3} \times s^{1/2}}{n}$$

$$v = 1.31018 \text{ m/s}$$

$$Q = vA =$$

154 l/min

Capacity

Table 3a – Storm Constants for Different Return Periods of HKO Headquarters

Return Period T (years)	2	5	10	20	50	100	200	500	1000
a	499.8	480.2	471.9	463.6	451.3	440.8	429.5	414.0	402.1
b	4.26	3.36	3.02	2.76	2.46	2.26	2.05	1.77	1.55
c	0.494	0.429	0.397	0.369	0.337	0.316	0.295	0.269	0.251

Table 3b – Storm Constants for Different Return Periods of Tai Mo Shan Area

Return Period T (years)	2	5	10	20	50	100	200
a	1743.9	2183.2	2251.3	2159.2	1740.1	1307.3	1005.0
b	22.12	27.12	27.46	25.79	19.78	12.85	7.01
c	0.694	0.682	0.661	0.633	0.570	0.501	0.434

Table 3c – Storm Constants for Different Return Periods of West Lantau Area

Return Period T (years)	2	5	10	20	50	100	200
a	2047.9	1994.1	1735.2	1445.6	1107.2	909.1	761.8
b	24.27	24.23	21.82	18.36	13.01	8.98	5.40
c	0.733	0.673	0.619	0.561	0.484	0.428	0.377

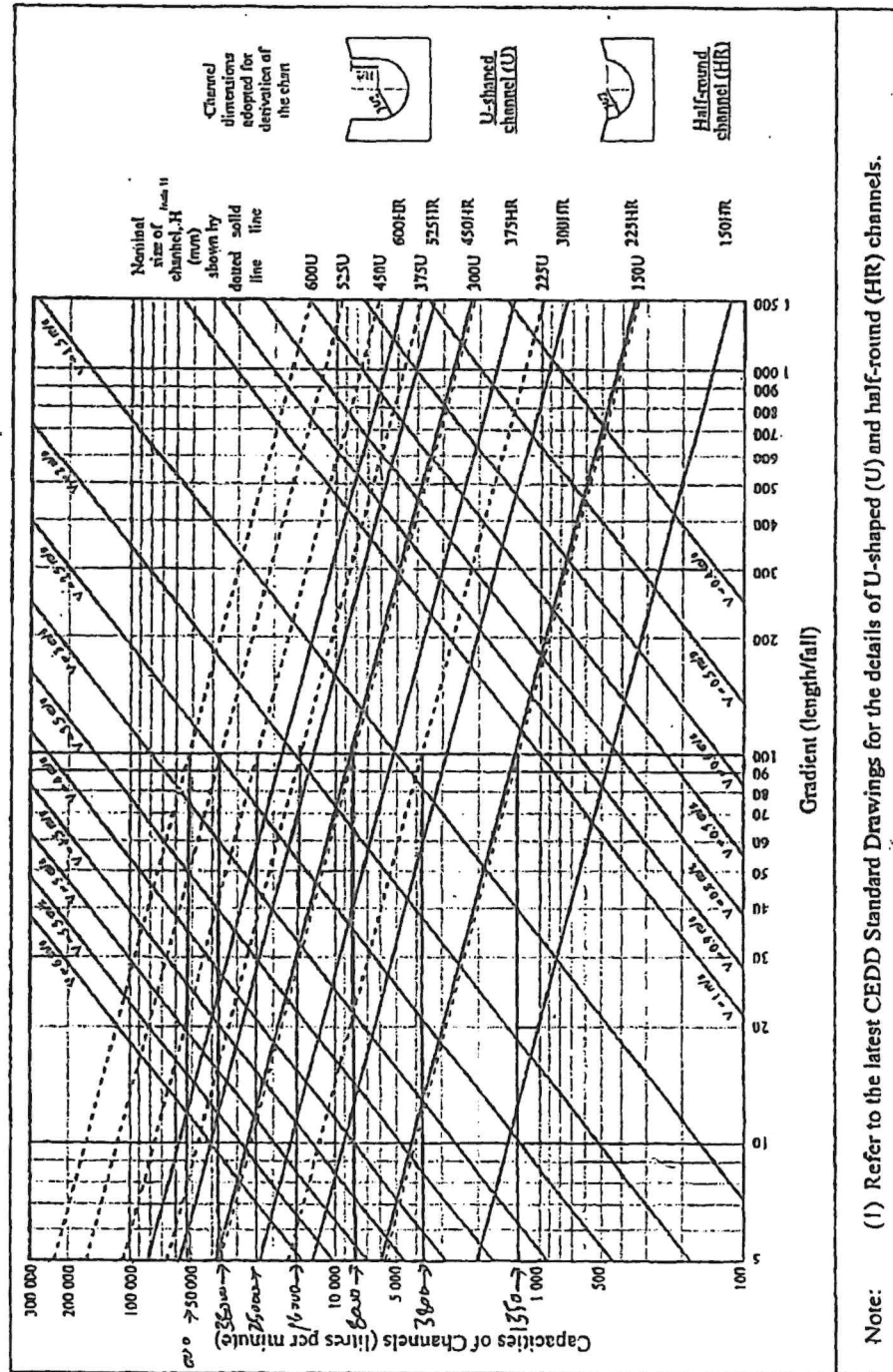
Table 3d – Storm Constants for Different Return Periods of North District Area

Return Period T (years)	2	5	10	20	50	100	200
a	1004.5	1112.2	1157.7	1178.6	1167.6	1131.2	1074.8
b	17.24	18.86	19.04	18.49	16.76	14.82	12.47
c	0.644	0.614	0.597	0.582	0.561	0.543	0.523

GEO Technical Guidance Note No. 43 (TGN 43)
Guidelines on Hydraulic Design of U-shaped and Half-round Channels on Slopes

Issue No.: 1 Revision: - Date: 05.06.2014 Page: 3 of 3

Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm



statistical distribution models include, but are not limited to, Log-normal, Pearson Type 3, Log-Pearson Type 3, Generalized Extreme Value (GEV), Generalized Pareto, Generalized Logistic and Gumbel.

4.3.2 Variation of Rainfall

The mean annual rainfall from 1981 to 2010 in Hong Kong is about 2400mm. However, there are some variations in extreme rainfall across the Territory. For instance, Tai Mo Shan acquired with the highest mean annual rainfall of more than 3000mm. For some areas such as in North District, a relatively lower annual rainfall is recorded. It is revealed that orographic effect is the major reason for the large spatial variation of rainfall in Hong Kong. Similar pattern of variation has also been observed on different rainstorm durations. It is therefore recommended to adopt different synthetic rainstorms to reflect rainfall characteristics at various rainfall zones. The rainfall statistics at HKO Headquarters* are recommended for application in the whole Territory except Tai Mo Shan area, West Lantau area and North District area. Different design rainfall profiles are established for Tai Mo Shan area, West Lantau area and North District area. Delineation of rainfall zones is presented in Figure 3 and digital files of the rainfall zones can also be downloaded at DSD webpage.

4.3.3 Intensity-Duration-Frequency (IDF) Relationship

The rainfall statistics at HKO Headquarters* are recommended for general application (except Tai Mo Shan area, West Lantau area and North District area) because of its long-term and good quality records. The recommended IDF Relationship is based on the GEV distribution model, which is the best-fit model for different rainstorm durations on average and also adopted by HKO, in the frequency analysis of the annual maximum rainfall recorded at HKO Headquarters*. The relationships are presented in Table 2a and Figure 4a for various durations not exceeding 4 hours.

For Tai Mo Shan, West Lantau and North District areas, it is recommended to adopt the annual maximum rainfall for various durations recorded by the local rain gauges within the 3 areas in the statistical analysis. The distribution models which fit the respective durations the best are applied and regional frequency analysis of extreme rainfall has also been employed to develop the IDF Relationships. These relationships are presented in Tables 2b, 2c and 2d and Figures 4b, 4c and 4d for various durations not exceeding 4 hours.

The IDF data can also be expressed by the following algebraic equation for easy application:

$$i = \frac{a}{(t_d + b)^c}$$

where i = extreme mean intensity in mm/hr,
 t_d = duration in minutes ($t_d \leq 240$), and
 a, b, c = storm constants given in Tables 3a, 3b, 3c and 3d.

* See Notes 2 & 3 of Table 2a

For durations exceeding 4 hours, the rainfall depth instead of the mean intensity is normally used. The Depth-Duration-Frequency (DDF) Relationships for duration exceeding 4 hours are given in Tables 4a, 4b, 4c and 4d. The IDF data can be generated by dividing rainfall depth with duration.

4.3.4 Storm Duration

The design rainstorm duration should make reference to the time of concentration or time to peak water level of the catchment under consideration as appropriate. The time of concentration is defined as the time for a drop of water to flow from the remotest point in the catchment to its outlet. For computational modeling analysis, a longer storm duration may be required if the recess arm of the hydrograph is required.

4.3.5 Design Rainstorm Profile

The time distribution of the design rainstorm should be taken as:

- (a) For the Rational Method of runoff estimation, a uniformly distributed rainfall with an intensity determined by the IDF relationship should be used.
- (b) For other methods of runoff estimation and for storm durations equal to or shorter than 4 hours, a symmetrically distributed rainfall is recommended with the following formulation based on RO (1991):

$$F(t) = \begin{cases} \frac{a[b + 2(1-c)t]}{(2t+b)^{c+1}} & , \quad 0 \leq t \leq \frac{t_d}{2} \\ F(-t) & , \quad -\frac{t_d}{2} \leq t \leq 0 \end{cases}$$

- where $F(t)$ = rate of rainfall or instantaneous intensity in mm/hr at time t (in minutes)
- t_d = rainstorm duration (in minutes) ($t_d \leq 240$)
- a, b, c = storm constants given in Tables 3a, 3b, 3c and 3d, which are the same as those given for the algebraic equation of the IDF relationship

The recommended rainstorm profiles for various return periods are given in Figures 5a, 5b, 5c and 5d and tabulation of the relationships are shown in Tables 5a, 5b, 5c and 5d. The connection between the tabulated data in Tables 5a, 5b, 5c and 5d and the curves in Figures 5a, 5b, 5c and 5d is elaborated in Figure 6.

For storm durations longer than 4 hours, the rainstorm profile can be derived from the IDF or DDF relationship for the portions outside the middle 4 hours.

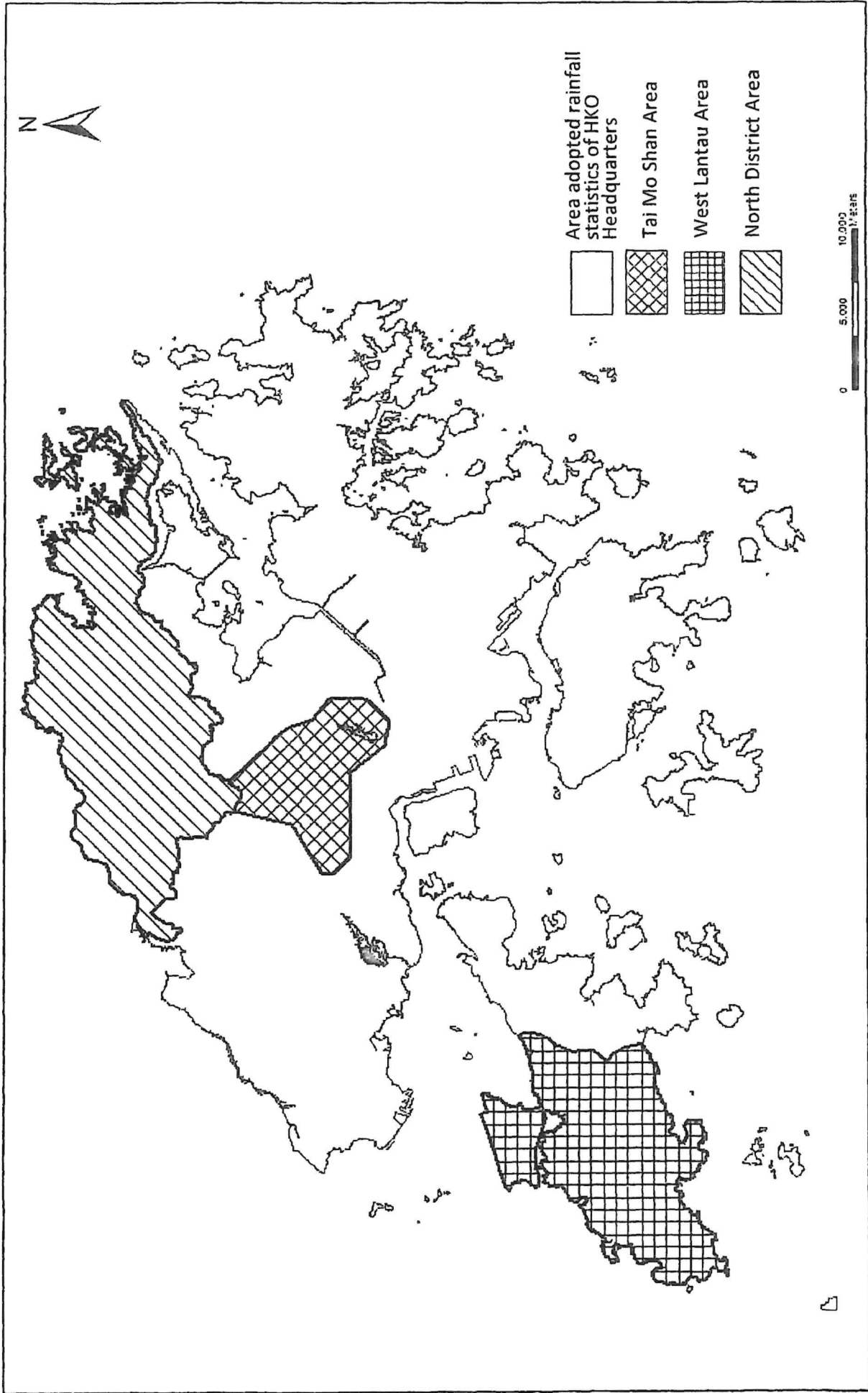


Figure 3 Delineation of Rainfall Zones

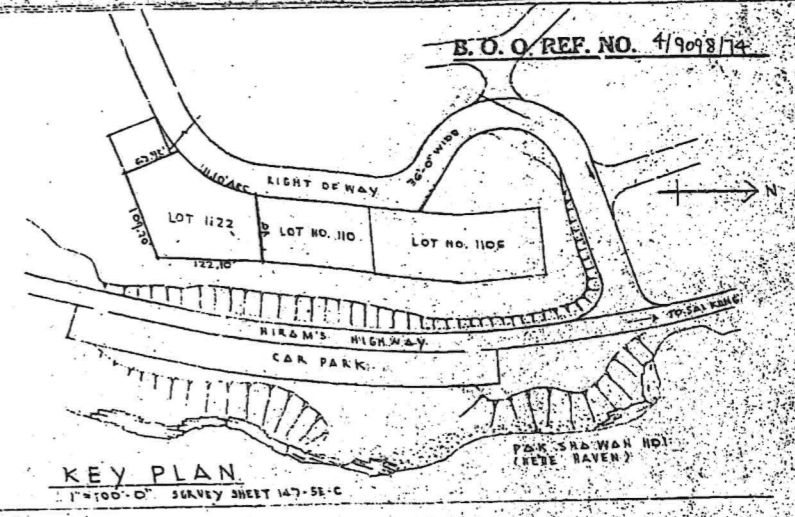
Appendix B

Drainage plan approved by Buildings Department

on 8 July 1975

with BD Ref No.: 4/9098/74

B.O.C. REF. NO. 4/9018/74

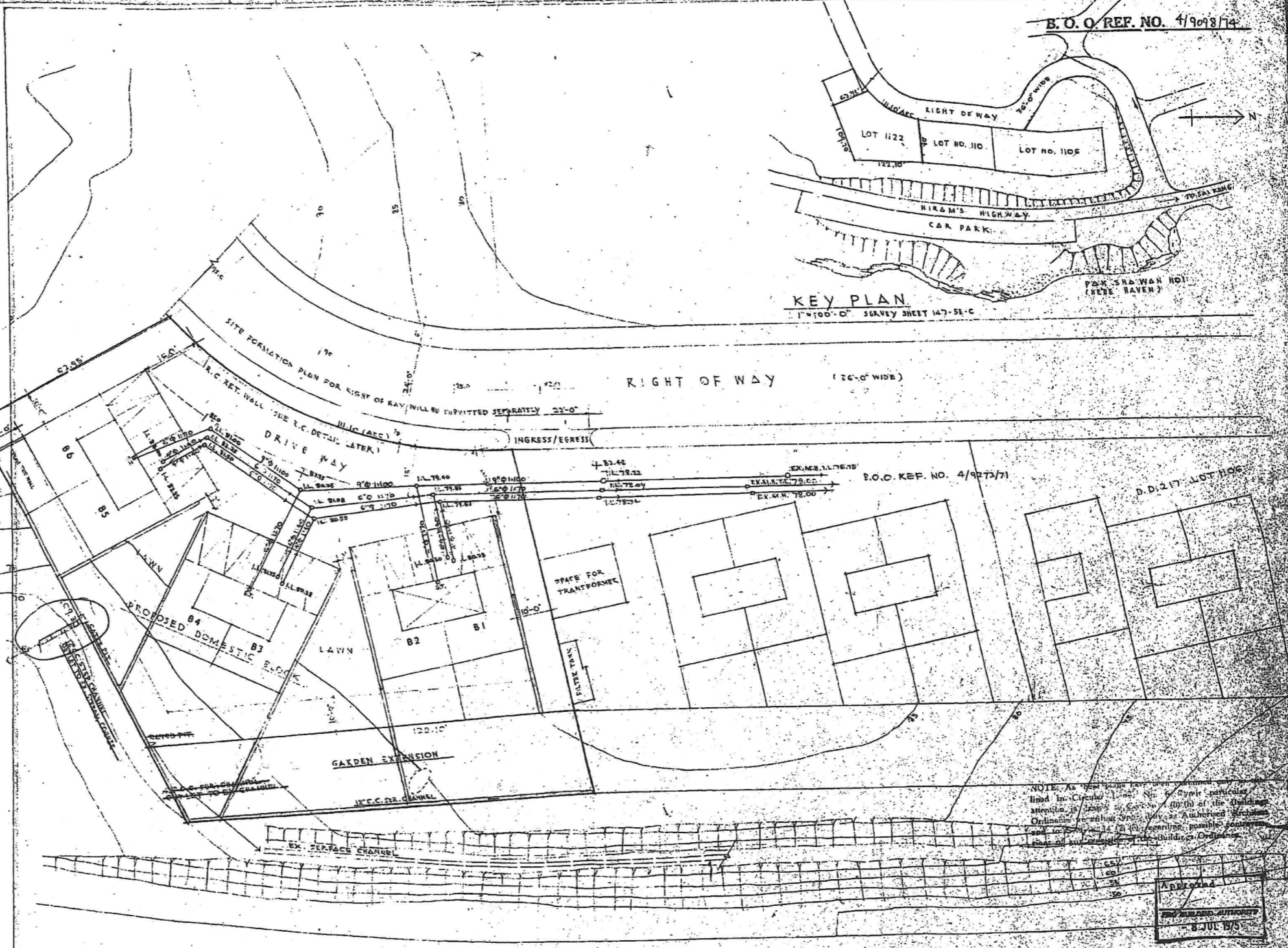


NOTES

1. ALL PIPES UNDER BUILDING TO BE CAST IRON.
2. FLOOR DRAIN SHOULD BE PROVIDED FOR ALL LAVATORIES.
3. 2" - 0" (FOR 4" Ø) RADIUS BENDS SHOULD BE PROVIDED AT FOOT OF ALL SOIL & WASTE PIPE.
4. TAR YARN RINGS SHOULD BE PROVIDED AT EVERY PIPE JOINTS BETWEEN SOCKET & SPIGOT & COVERED WITH 1:1 CEMENT MOTOR.
5. ALL MANHOLE TO BE RENDERED WITH WATER-PROOFING INTERNALLY & WITH 9" CEM. CONC. BEDDING.
6. MANHOLE INSIDE THE BUILDING TO BE DOUBLE SEALED HEAVY GREASE C. I. COVER.
7. ALL BENDS IN SOIL & WASTE PIPES SHOULD HAVE THE LARGEST PRACTICABLE RADIUS OF CURVATURE.
8. ALL MANHOLES COVERS TO BE SUBJECTED TO TRAFFIC TO HAVE HEAVY DUCT COST IRON COVERS.

INDICATIONS

— C.I.S.P.	CAST IRON SOIL PIPE
— C.I.W.P.	CAST IRON WASTE PIPE
— C.I.R.W.P.	CAST IRON RAIN WATER PIPE
— G.I.V.P.	GALVANIZED IRON VENT PIPE
F.D.	FLOOR DRAIN
B.S.	BRASS STRAINER
G.T.	GULLY TRAP
B.I.G.T.	BACK INLET GULLY TRAP
A.S.P.	ANTI-SYPHONAGE PIPE
M.H.	MAN HOLE
---	APPROVED WORK TO BE OMITTED



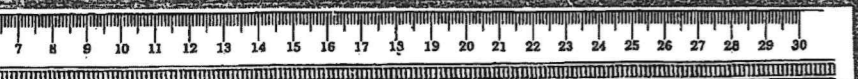
RECEIVED AT
Mr 18 12 04 75
BUILDING ORDINANCE
OFFICE, N.T.

APPROVED
8 JUL 1975

BLOCK PLAN 1/16"=1'-0"
PROPOSED APARTMENT HOUSES ON D.D. 217
LOT 1122 PAK SHA WAN, N.T.

DESIGNED BY:	REVISION:	KEY PLAN & BLOCK PLAN
DRAWN BY:		SCALE: 1/16" = 1'-0"
CHECKED BY:		DATE OF ISSUE: 13 JAN 1975
DATE: OCT/75		18 JUN 1975

HSIN-YIEN ARCHITECTS & ASSOCIATES
Hsin Yien Architects & Associates
111, WING ON LITE BUILDING, HONG KONG

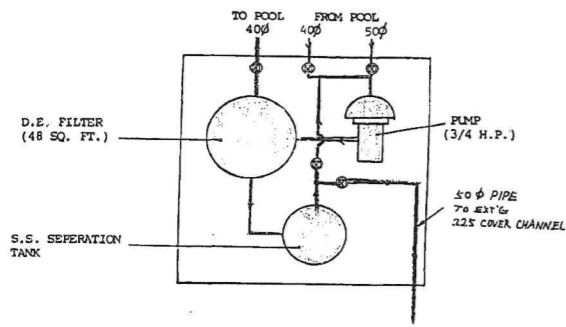


Appendix C

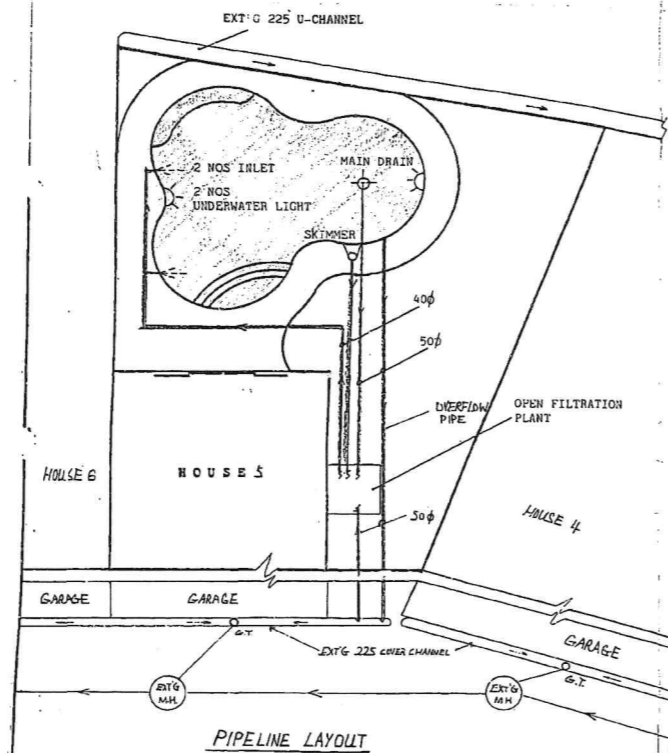
Swimming pool (A&A Works) approved by

Buildings Department

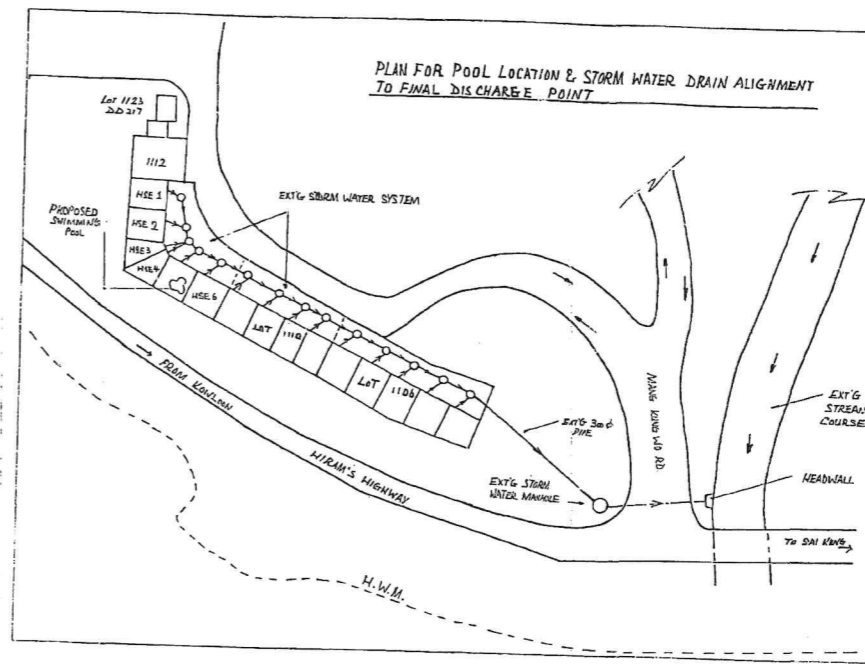
On 28 Jun 1994 with BD Ref No.: 2-3/9098/74



FILTRATION PLANT AREA DETAILS
(N. T. S.)



PIPELINE LAYOUT



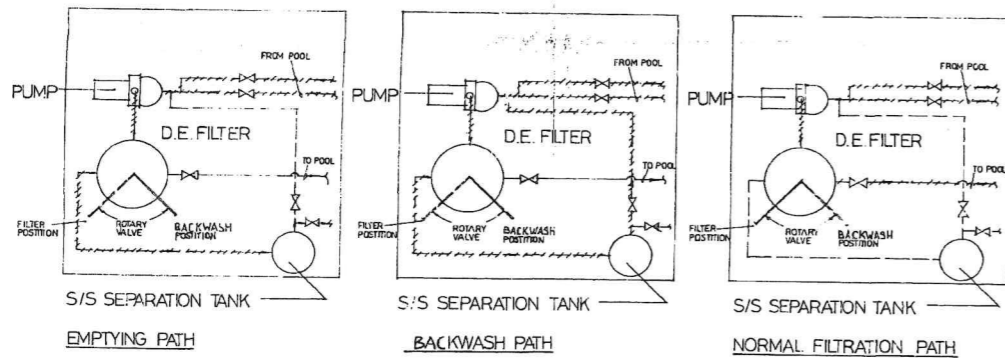
PLAN FOR POOL LOCATION & STORM WATER DRAIN ALIGNMENT
TO FINAL DISCHARGE POINT

GENERAL NOTES: FILTRATION SYSTEM

- Swimming Pool capacity to be 58000 Litres.
- Filtration Turnover rate at least to be 6.4 Hours.
- Filtration backwash rate to be 183 Litres/Min.
- The supply source pipe is G.I. pipe to B.S. 1387 class 'B'. All other piping is UPVC pipe to B.S. 3505 class 'D'.
- The backwash water from the filter will be treated in the stainless steel separation tank where backwash waste will be deposited in the double-walled polypropylene bag of the S/S separation tank and to be discharged into dustbin afterwards. Whereas the water will be cleaned by the tank and then the filter before returning the pool.
- Pool water will be discharged to Existing 225 U-CHANNEL through 50φ UPVC pipe in the event that the pool needs to be emptied by the pool pump which has a Max. output of 40 Litres/Min. (Emptying is limited to a maximum of one time per year).
- Pool water will be maintained at all time to a standard of purity whereby E. Coli shall be absent in 100 c.c. of water, the turbidity will not exceed 2PPM Free chlorine will be within 1-2 PPM, and PH value will be within 7.2 - 7.6.
- Existing U.C. channel capacity figure 8.7 of the GCO manual for slopes is 3000 Litres/Min.
- Approximate water consumption per month
= Pool Area x Average Total Evaporation
= 37 M² x 0.150M/ Month
= 5.6 M³/Month

SCHEMATIC DIAGRAM

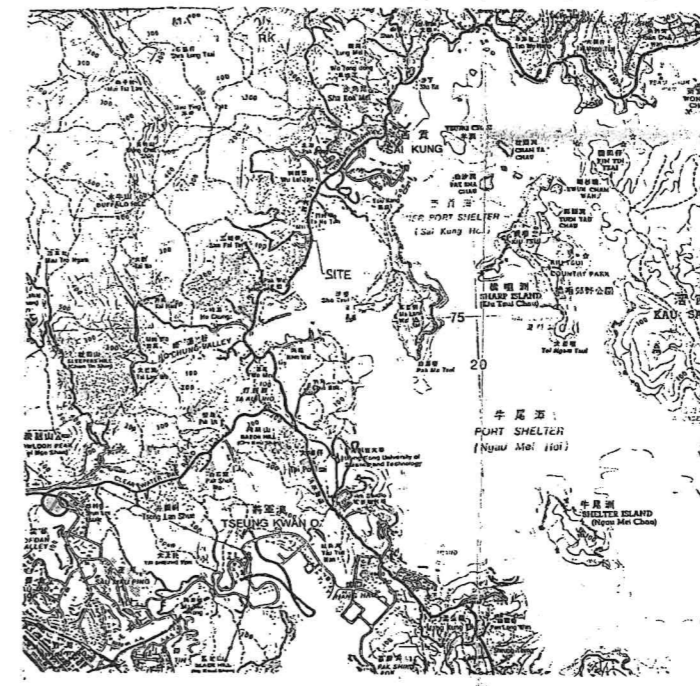
- CREATING PIPE
- CONTROL VALVE OPEN POSITION
- CONTROL VALVE CLOSE POSITION



S/S SEPARATION TANK
EMPTYING PATH

S/S SEPARATION TANK
BACKWASH PATH

S/S SEPARATION TANK
NORMAL FILTRATION PATH



R.M. Kennard
R. M. Kennard (Eng) PEO FICE
CHARTERED CIVIL ENGINEER
REGISTERED STRUCTURAL ENGINEER
AUTHORIZED PERSON

A 26MAY 94 DRAINAGE DISCHARGE DETAIL ADDN
NO. DATE AMENDMENT

CENTURY POOLS LTD.
SWIMMING POOLS • WATER FEATURES

Job Title
SWIMMING POOL AT HOUSE B5, HABITAT HEBE HAVEN SAI KUNG, N.T. LOT 1122 DD 217

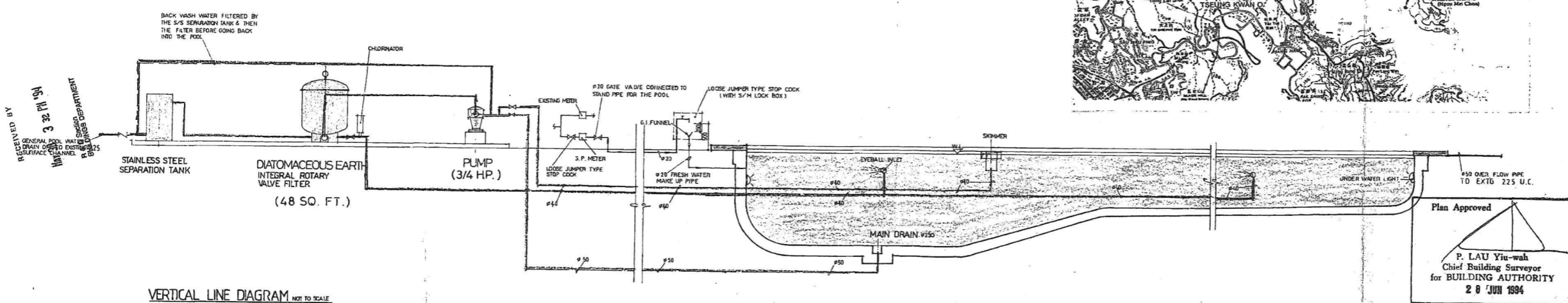
B.O.D. Ref.
Drawn by
Checked by
Date **MARCH 94**
Scale **AS SHOWN**

Drawing Title
SWIMMING POOL FILTRATION SYSTEM

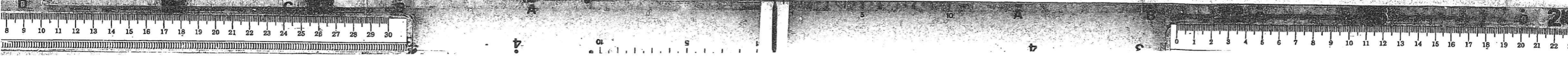
Plan Approved
P. LAU Yiu-wah
Chief Building Surveyor
for BUILDING AUTHORITY
28 JUN 1994

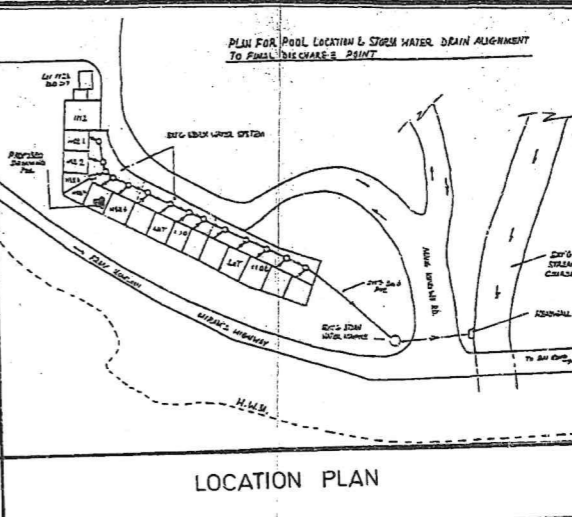
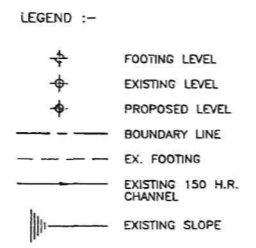
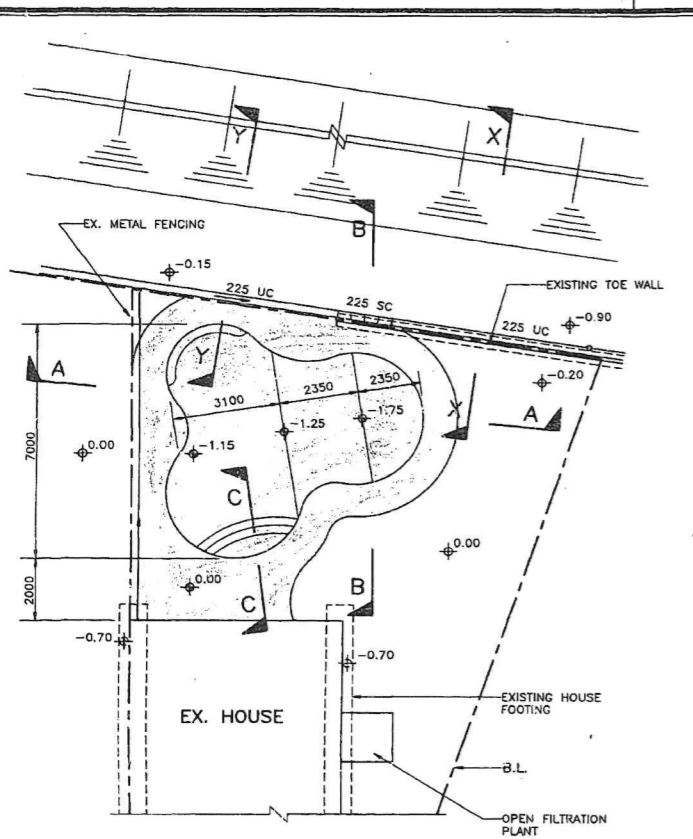
Job Number **CP J009/94** Sheet

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VERTICAL LINE DIAGRAM NOT TO SCALE

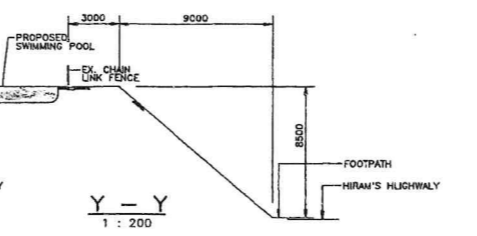
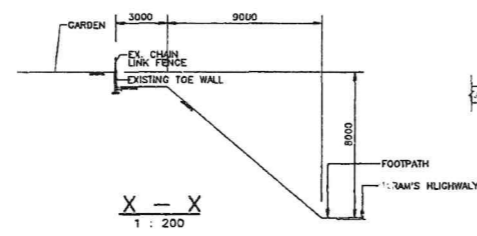




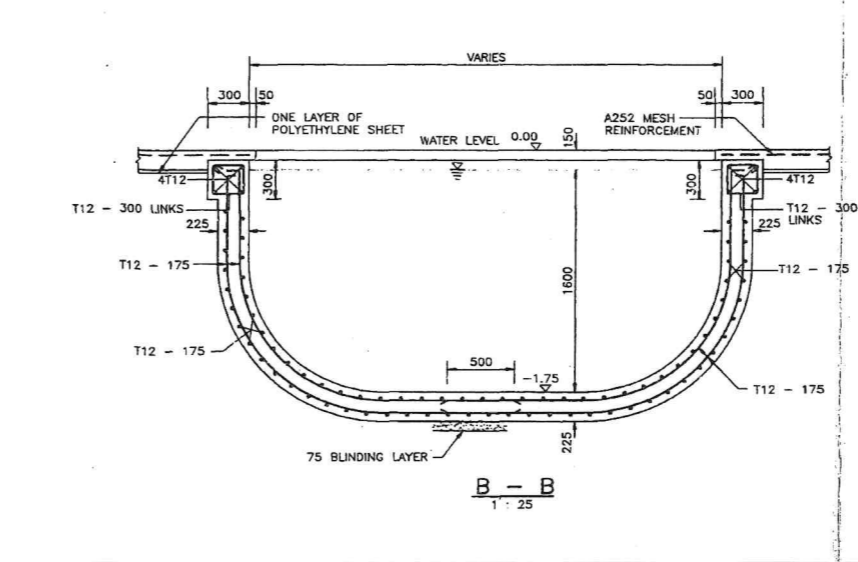
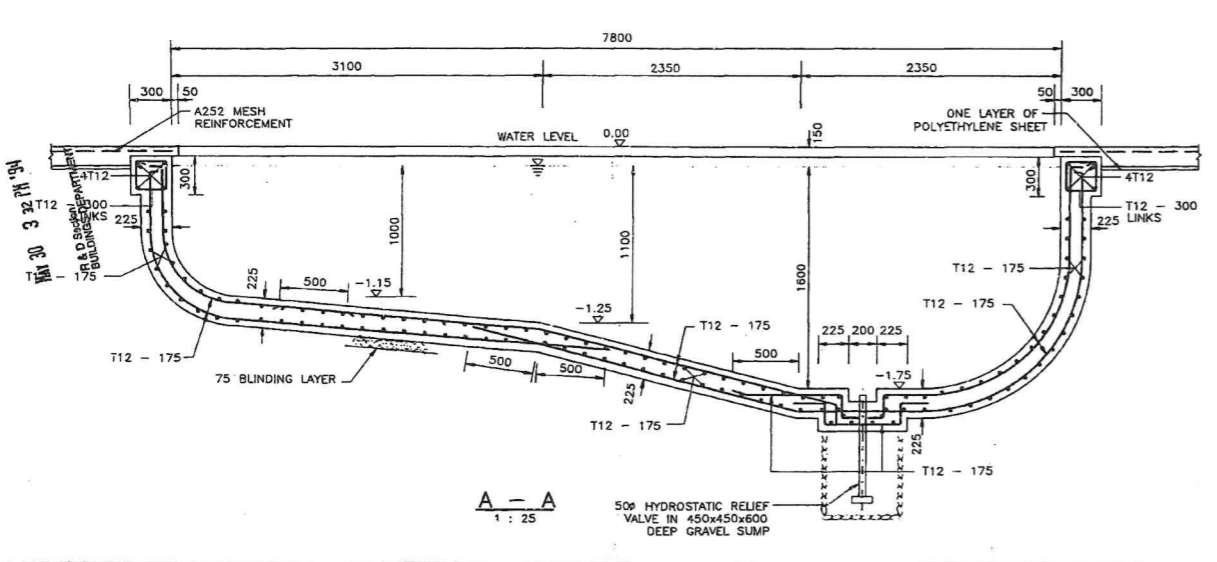
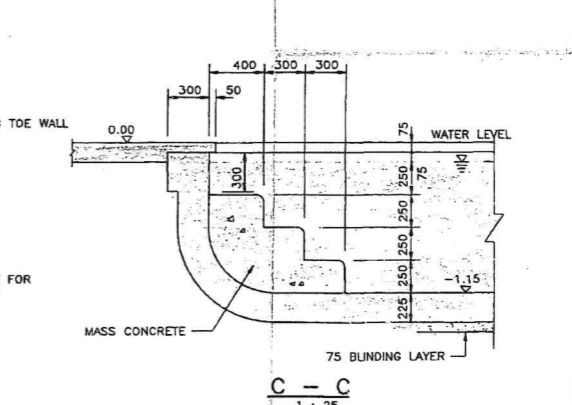
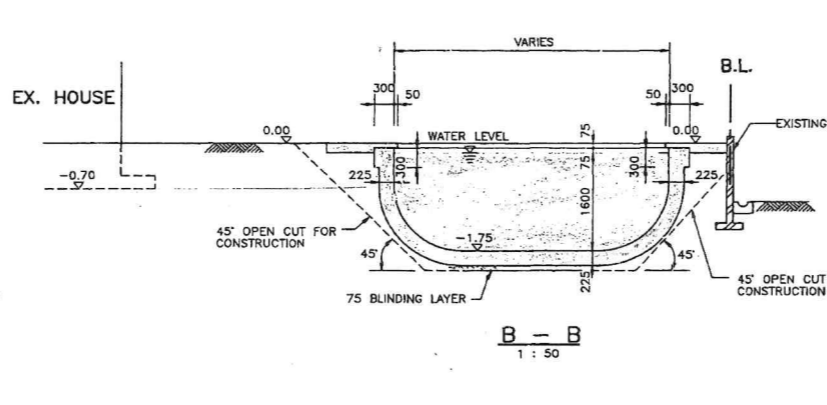
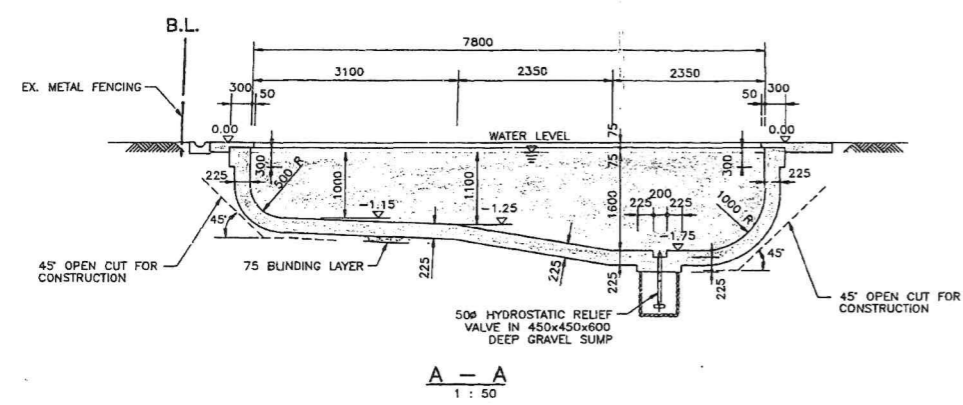
- Notes**
- ALL DIMENSIONS ARE IN MILLIMETRES
 - FOR DRAINAGE AND PUMPING DETAILS REFER TO DRG. NO. P-1
 - HYDROSTATIC RELIEVE VALVE TO BE USED TO RELIEVE ANY UPLIFT PRESSURE CAUSED BY POSSIBLE UPRISING OF GROUND WATER IN THE EMPTY POOL CONDITION
 - ALL LEVELS ARE IN METRES REFERRING TO EXISTING GARDEN LEVEL
 - NO DANGEROUS GOODS WILL BE USED IN THE SWIMMING POOL FILTRATION PLANT SYSTEM
 - CONCRETE FOR POOL SHALL BE GUNITE CONCRETE TO B.S. 5337 CL. 28 WITH MIN. CRUSHING STRENGTH 30 MPa AT 28 DAYS. AND SHALL BE EQUIVALENT TO GRADE 30D.
 - ALL BLINDING LAYER SHALL BE GRADE 15P CONCRETE 75 THK. MIN.
 - CONCRETE COVER:
EXTERNAL FACE OF POOL 75
OTHERS 40
 - ONE TEST PANEL SHALL BE SHOT PER EACH 40m² OR PART THERE OF NINE CYLINDERS ϕ 100x150 SHALL BE TAKEN FROM EACH PANEL. THREE CYLINDERS TO BE TESTED AT 7 DAYS. THREE CYLINDERS TO BE TESTED AT 28 DAYS. THREE ADDITIONAL CYLINDERS TO BE TAKEN AND HELD IN RESERVE.
 - REINFORCEMENT SHALL BE HIGH TENSILE DEFORMED BARS DENOTED BY "T" COMPLYING WITH B.S. 4448.
 - ALLOWABLE SOIL BEARING CAPACITY = 80 kN/m². FOUNDING CONDITION SHALL BE INSPECTED, PRIOR TO CONCRETING OF BLINDING LAYER, BY AP OR RSE.
 - FILLING MATERIAL TO BE PROPERLY COMPACTED.

Rev	Description of Revision	Date	By
A	ADDITIONAL TOPOGRAPHICAL INFORMATION ADDED	5/94	S.O.

PLAN
1 : 100



- CONSTRUCTION PROCEDURES FOR OPEN EXCAVATION**
- EXCAVATION IS TO BE CARRIED OUT BY OPEN EXCAVATION TO FORMATION LEVEL.
 - 50 THICK GUNITE PROTECTION LAYER IS THEN APPLIED TO THE 45° TEMPORARY CUT SLOPE.
 - CONSTRUCTION OF SWIMMING POOL TO BE CARRIED OUT AS SOON AS FINAL FORMATION LEVEL IS REACHED.



Plan Approved

F. LAU Yu-wah
Chief Building Surveyor
for BUILDING AUTHORITY
26 JUN 1994

CENTURY POOLS LTD.

R. M. Kennard BSc (Eng) PhD FICE
CHARTERED CIVIL ENGINEER
REGISTERED STRUCTURAL ENGINEER
AUTHORIZED PERSON

Harris & Sutherland
Consulting Engineers
15th Floor, Cornwell House, 28 Tong Chung Street, Quarry Bay, Hong Kong
Tel: 8509760

Date	Designed	Drawn
MARCH, 1994	C.L.	MC

Project
HOUSE B5, HABITAT,
SAI KUNG,
NEW TERRITORIES

Title
BUILDING PLAN
&
REINFORCEMENT DETAILS

Drawing No.	Revision
G939.37 / 01	A

規 劃 署

西貢及離島規劃處
新界沙田上禾輦路1號
沙田政府合署15樓



Planning Department

Sai Kung and Islands District Planning Office
15/F, Sha Tin Government Offices,
1 Sheung Wo Che Road, Sha Tin,
New Territories

來函檔號 Your Reference PSA0569/24/21082/M
本署檔號 Our Reference TPB/A/SK-PK/268

21 October 2024

Philip So & Associates Ltd.
Flat C, 8/F, On Ho Industrial Building
No. 17-19 Shing Wan Road
Tai Wai, Sha Tin
New Territories
(Attn.: Mr. SO Chi Wai)

Dear Mr. SO,

**Temporary Private Swimming Pool and Garden
for a Period of 3 Years in “Green Belt” Zone,
Lot 1122 & Ext. (Part) in D.D. 217 and Adjoining Government Land,
House B5, Habitat, Pak Sha Wan, Sai Kung
(Application No. A/SK-PK/268)**

**Submission of Revised Drainage Proposal
for Partial Compliance with Approval Condition**

I refer to your submission dated 10.9.2024 for partial compliance with the approval condition of the captioned planning application, i.e. the submission and implementation of a drainage proposal to the satisfaction of the Director of Drainage Services or of the Town Planning Board (TPB).

I am pleased to inform you that the Director of Drainage Services has no further comment on the submission. In this regard, the approval condition of the captioned application is considered partially complied with. Please note that full compliance with the approval condition rests upon the implementation of the drainage proposal to the satisfaction of the Director of Drainage Services or of the TPB. For the avoidance of doubt, I would like to point out that the approval condition of application No. A/SK-PK/268 has not been fully complied with for the time being.

Should you have any queries, please contact Mr. Adrian CHIU of this Office at [REDACTED].

Yours sincerely,

(Walter W. N. KWONG)
for and on behalf of Director of Planning

c.c.
CE/MS, DSD (Attn.: Mr. Henry YEUNG) ([REDACTED])

WWNK/TK/AC/BL/bl