2022年 11月 7 日
此文件在_____收到，城市規劃委員會
[illegible]此文件後才正式確認收到
[illegible]

7 NOV 2022
[illegible] formally acknowledge
[illegible] application only upon receipt
of all the required information and documents.

Form No. S16-III
表格第 S16-III 號

APPLICATION FOR PERMISSION
UNDER SECTION 16 OF
THE TOWN PLANNING ORDINANCE
(CAP.131)

根據《城市規劃條例》(第131章)
第16條遞交的許可申請

Applicable to Proposal Only Involving Temporary Use/Development of Land and/or Building Not Exceeding 3 Years in Rural Areas or Renewal of Permission for such Temporary Use or Development*

適用於祇涉及位於鄉郊地區土地上及/或建築物內進行為期不超過三年的臨時用途/發展或該等臨時用途/發展的許可續期的建議*

**Form No. S16-I should be used for other Temporary Use/Development of Land and/or Building (e.g. temporary use/developments in the Urban Area)and Renewal of Permission for such Temporary Use or Development.*

**其他土地上及/或建築物內的臨時用途/發展 (例如位於市區內的臨時用途或發展)及有關該等臨時用途/發展的許可續期，應使用表格第S16-I號。*

Applicant who would like to publish the notice of application in local newspapers to meet one of the Town Planning Board's requirements of taking reasonable steps to obtain consent of or give notification to the current land owner, please refer to the following link regarding publishing the notice in the designated newspapers: https://www.info.gov.hk/tpb/en/plan_application/apply.html

申請人如欲在本地報章刊登申請通知，以採取城市規劃委員會就取得現行土地擁有人的同意或通知現行土地擁有人所指定的其中一項合理步驟，請瀏覽以下網址有關在指定的報章刊登通知：https://www.info.gov.hk/tpb/tc/plan_application/apply.html

General Note and Annotation for the Form
填寫表格的一般指引及註解

\# "Current land owner" means any person whose name is registered in the Land Registry as that of an owner of the land to which the application relates, as at 6 weeks before the application is made
「現行土地擁有人」指在提出申請前六星期，其姓名或名稱已在土地註冊處註冊為該申請所關乎的土地的擁有人的人

& Please attach documentary proof 請夾附證明文件

^ Please insert number where appropriate 請在適當地方註明編號

Please fill "NA" for inapplicable item 請在不適用的項目填寫「不適用」

Please use separate sheets if the space provided is insufficient 如所提供的空間不足，請另頁說明

Please insert a「✔」at the appropriate box 請在適當的方格內上加上「✔」號

220270 1 19/10 by courier

Form No. S16-III 表格第 S16-III 號

For Official Use Only 請勿填寫此欄	Application No. 申請編號	A/YL-PH/1933
	Date Received 收到日期	7 NOV 2022

1. The completed form and supporting documents (if any) should be sent to the Secretary, Town Planning Board (the Board), 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong.
申請人須把填妥的申請表格及其他支持申請的文件 (倘有)，送交香港北角渣華道 333 號北角政府合署 15 樓城市規劃委員會(下稱「委員會」)秘書收。

2. Please read the "Guidance Notes" carefully before you fill in this form. The document can be downloaded from the Board's website at http://www.info.gov.hk/tpb/. It can also be obtained from the Secretariat of the Board at 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong (Tel: 2231 4810 or 2231 4835), and the Planning Enquiry Counters of the Planning Department (Hotline: 2231 5000) (17/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong and 14/F, Sha Tin Government Offices, 1 Sheung Wo Che Road, Sha Tin, New Territories).
請先細閱《申請須知》的資料單張，然後填寫此表格。該份文件可從委員會的網頁下載 (網址：http://www.info.gov.hk/tpb/)，亦可向委員會秘書處 (香港北角渣華道 333 號北角政府合署 15 樓 – 電話：2231 4810 或 2231 4835)及規劃署的規劃資料查詢處(熱線：2231 5000) (香港北角渣華道 333 號北角政府合署 17 樓及新界沙田上禾輋路 1 號沙田政府合署 14 樓)索取。

3. This form can be downloaded from the Board's website, and obtained from the Secretariat of the Board and the Planning Enquiry Counters of the Planning Department. The form should be typed or completed in block letters. The processing of the application may be refused if the required information or the required copies are incomplete.
此表格可從委員會的網頁下載，亦可向委員會秘書處及規劃署的規劃資料查詢處索取。申請人須以打印方式或以正楷填寫表格。如果申請人所提交的資料或文件副本不齊全，委員會可拒絕處理有關申請。

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1. Name of Applicant 申請人姓名/名稱

(☐Mr. 先生 /☐Mrs. 夫人 /☐Miss 小姐 /☐Ms. 女士 /☑Company 公司 /☐Organisation 機構)

Huge Great International Limited

2. Name of Authorised Agent (if applicable) 獲授權代理人姓名/名稱（如適用）

(☐Mr. 先生 /☐Mrs. 夫人 /☐Miss 小姐 /☐Ms. 女士 /☑Company 公司 /☐Organisation 機構)

Prudential Surveyors International Limited

3. Application Site 申請地點

(a) Full address / location / demarcation district and lot number (if applicable) 詳細地址／地點／丈量約份及地段號碼（如適用）	Sub-Section 1 of Section B of Lot.82 (Part) in DD108, Fan Kam Road, Pat Heung, Yuen Long
(b) Site area and/or gross floor area involved 涉及的地盤面積及／或總樓面面積	☑Site area 地盤面積 2,802 sq.m 平方米 ☑About 約 ☑Gross floor area 總樓面面積 116 sq.m 平方米 ☑About 約
(c) Area of Government land included (if any) 所包括的政府土地面積（倘有）	..... sq.m 平方米 ☐About 約

(d)	Name and number of the related statutory plan(s) 有關法定圖則的名稱及編號	Approved Pat Heung OZP (S/YL-PH/11)
(e)	Land use zone(s) involved 涉及的土地用途地帶	Residential (Group D)
(f)	Current use(s) 現時用途	Vacant (If there are any Government, institution or community facilities, please illustrate on plan and specify the use and gross floor area) (如有任何政府、機構或社區設施，請在圖則上顯示，並註明用途及總樓面面積)

4. "Current Land Owner" of Application Site 申請地點的「現行土地擁有人」

The applicant 申請人 –

☑ is the sole "current land owner"#& (please proceed to Part 6 and attach documentary proof of ownership).
是唯一的「現行土地擁有人」#&(請繼續填寫第 6 部分，並夾附業權證明文件)。

☐ is one of the "current land owners"#& (please attach documentary proof of ownership).
是其中一名「現行土地擁有人」#&(請夾附業權證明文件)。

☐ is not a "current land owner"#.
並不是「現行土地擁有人」#。

☐ The application site is entirely on Government land (please proceed to Part 6).
申請地點完全位於政府土地上（請繼續填寫第 6 部分）。

5. Statement on Owner's Consent/Notification
就土地擁有人的同意/通知土地擁有人的陳述

(a) According to the record(s) of the Land Registry as at ..... (DD/MM/YYYY), this application involves a total of ..... "current land owner(s)"#.
根據土地註冊處截至 ..... 年 ..... 月 ..... 日的記錄，這宗申請共牽涉 ..... 名「現行土地擁有人」#。

(b) The applicant 申請人 –

☐ has obtained consent(s) of ..... "current land owner(s)"#.
已取得 ..... 名「現行土地擁有人」#的同意。

Details of consent of "current land owner(s)"# obtained 取得「現行土地擁有人」#同意的詳情		
No. of 'Current Land Owner(s)' 「現行土地擁有人」數目	Lot number/address of premises as shown in the record of the Land Registry where consent(s) has/have been obtained 根據土地註冊處記錄已獲得同意的地段號碼／處所地址	Date of consent obtained (DD/MM/YYYY) 取得同意的日期 (日/月/年)

(Please use separate sheets if the space of any box above is insufficient. 如上列任何方格的空間不足，請另頁說明)

☐ has notified ..... "current land owner(s)"#
已通知 ..... 名「現行土地擁有人」#。

Details of the "current land owner(s)"# notified 已獲通知「現行土地擁有人」#的詳細資料		
No. of 'Current Land Owner(s)' 「現行土地擁有人」數目	Lot number/address of premises as shown in the record of the Land Registry where notification(s) has/have been given 根據土地註冊處記錄已發出通知的地段號碼／處所地址	Date of notification given (DD/MM/YYYY) 通知日期(日/月/年)

(Please use separate sheets if the space of any box above is insufficient. 如上列任何方格的空間不足，請另頁說明)

☐ has taken reasonable steps to obtain consent of or give notification to owner(s):
已採取合理步驟以取得土地擁有人的同意或向該人發給通知。詳情如下：

Reasonable Steps to Obtain Consent of Owner(s) 取得土地擁有人的同意所採取的合理步驟

☐ sent request for consent to the "current land owner(s)" on _____ (DD/MM/YYYY)#&
於_____(日/月/年)向每一名「現行土地擁有人」#郵遞要求同意書&

Reasonable Steps to Give Notification to Owner(s) 向土地擁有人發出通知所採取的合理步驟

☐ published notices in local newspapers on _____ (DD/MM/YYYY)&
於_____(日/月/年)在指定報章就申請刊登一次通知&

☐ posted notice in a prominent position on or near application site/premises on _____ (DD/MM/YYYY)&
於_____(日/月/年)在申請地點／申請處所或附近的顯明位置貼出關於該申請的通知&

☐ sent notice to relevant owners' corporation(s)/owners' committee(s)/mutual aid committee(s)/management office(s) or rural committee on _____ (DD/MM/YYYY)&
於_____(日/月/年)把通知寄往相關的業主立案法團/業主委員會/互助委員會或管理處，或有關的鄉事委員會&

Others 其他

☐ others (please specify)
其他（請指明）

_____

_____

_____

_____

Note: May insert more than one「✔」.
Information should be provided on the basis of each and every lot (if applicable) and premises (if any) in respect of the application.
註: 可在多於一個方格內加上「✔」號
申請人須就申請涉及的每一地段（倘適用）及處所（倘有）分別提供資料

6. Type(s) of Application 申請類別

(A) Temporary Use/Development of Land and/or Building Not Exceeding 3 Years in Rural Areas 位於鄉郊地區土地上及/或建築物內進行為期不超過三年的臨時用途/發展

(For Renewal of Permission for Temporary Use or Development in Rural Areas, please proceed to Part (B)) (如屬位於鄉郊地區臨時用途/發展的規劃許可續期，請填寫(B)部分)

(a) Proposed use(s)/development 擬議用途/發展	Proposed Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) and Filling of Land (Please illustrate the details of the proposal on a layout plan) (請用平面圖說明擬議詳情)
(b) Effective period of permission applied for 申請的許可有效期	☑ year(s) 年 3 ☐ month(s) 個月 .....

(c) Development Schedule 發展細節表

Proposed uncovered land area 擬議露天土地面積	2,730	sq.m ☑About 約
Proposed covered land area 擬議有上蓋土地面積	72	sq.m ☑About 約
Proposed number of buildings/structures 擬議建築物／構築物數目	3	
Proposed domestic floor area 擬議住用樓面面積	.....	sq.m ☐About 約
Proposed non-domestic floor area 擬議非住用樓面面積	116	sq.m ☑About 約
Proposed gross floor area 擬議總樓面面積	116	sq.m ☑About 約

Proposed height and use(s) of different floors of buildings/structures (if applicable) 建築物/構築物的擬議高度及不同樓層的擬議用途 (如適用)-(Please use separate sheets if the space below is insufficient) (如以下空間不足，請另頁說明)

One 2-storey temporary structure for office and storage use (about 5.61m in height)
One 1-storey dry toilet (about 2.6m in height)
One 1-storey dry toilet (about 2.5m in height)

Proposed number of car parking spaces by types 不同種類停車位的擬議數目

Private Car Parking Spaces 私家車車位	.....
Motorcycle Parking Spaces 電單車車位	.....
Light Goods Vehicle Parking Spaces 輕型貨車泊車位	.....
Medium Goods Vehicle Parking Spaces 中型貨車泊車位	10
Heavy Goods Vehicle Parking Spaces 重型貨車泊車位	5
Others (Please Specify) 其他 (請列明)	.....
	.....

Proposed number of loading/unloading spaces 上落客貨車位的擬議數目

Taxi Spaces 的士車位	.....
Coach Spaces 旅遊巴車位	.....
Light Goods Vehicle Spaces 輕型貨車車位	.....
Medium Goods Vehicle Spaces 中型貨車車位	.....
Heavy Goods Vehicle Spaces 重型貨車車位	.....
Others (Please Specify) 其他 (請列明)	.....
	.....

Proposed operating hours 擬議營運時間

Monday to Saturday 7:00 a.m. to 7:00 p.m., no operation on Sunday or public holidays

(d)	Any vehicular access to the site/subject building? 是否有車路通往地盤／有關建築物？	Yes 是	☑ There is an existing access. (please indicate the street name, where appropriate) 有一條現有車路。(請註明車路名稱(如適用)) Fan Kam Road ☐ There is a proposed access. (please illustrate on plan and specify the width) 有一條擬議車路。（請在圖則顯示，並註明車路的闊度）
		No 否	☐

(e) Impacts of Development Proposal 擬議發展計劃的影響

(If necessary, please use separate sheets to indicate the proposed measures to minimise possible adverse impacts or give justifications/reasons for not providing such measures. 如需要的話，請另頁註明可盡量減少可能出現不良影響的措施，否則請提供理據/理由。)

(i)	Does the development proposal involve alteration of existing building? 擬議發展計劃是否包括現有建築物的改動?	Yes 是	☐ Please provide details 請提供詳情
		No 否	☑
(ii)	Does the development proposal involve the operation on the right? 擬議發展是否涉及右列的工程?	Yes 是	☑ (Please indicate on site plan the boundary of concerned land/pond(s), and particulars of stream diversion, the extent of filling of land/pond(s) and/or excavation of land) (請用地盤平面圖顯示有關土地／池塘界線，以及河道改道、填塘、填土及／或挖土的細節及/或範圍) ☐ Diversion of stream 河道改道 ☐ Filling of pond 填塘 Area of filling 填塘面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填塘深度 ..... m 米 ☐About 約 ☑ Filling of land 填土 Area of filling 填土面積 2,802 sq.m 平方米 ☑About 約 Depth of filling 填土厚度 0.3 m 米 ☑About 約 ☐ Excavation of land 挖土 Area of excavation 挖土面積..... sq.m 平方米 ☐About 約 Depth of excavation 挖土深度 .....m 米 ☐About 約
		No 否	☐ Re: This application does not include additional filling of land. As the existing filling was conducted by the preivous owner before 2004 (the Applicant bought the Site in 2021), no actual filling infromation could be provided.
(iii)	Would the development proposal cause any adverse impacts? 擬議發展計劃會否造成不良影響？	On environment 對環境	Yes 會 ☐ No 不會 ☑
		On traffic 對交通	Yes 會 ☐ No 不會 ☑
		On water supply 對供水	Yes 會 ☐ No 不會 ☑
		On drainage 對排水	Yes 會 ☐ No 不會 ☑
		On slopes 對斜坡	Yes 會 ☐ No 不會 ☑
		Affected by slopes 受斜坡影響	Yes 會 ☐ No 不會 ☑
		Landscape Impact 構成景觀影響	Yes 會 ☐ No 不會 ☑
		Tree Felling 砍伐樹木	Yes 會 ☐ No 不會 ☑
		Visual Impact 構成視覺影響	Yes 會 ☐ No 不會 ☑
		Others (Please Specify) 其他 (請列明)	Yes 會 ☐ No 不會 ☑

	Please state measure(s) to minimise the impact(s). For tree felling, please state the number, diameter at breast height and species of the affected trees (if possible) 請註明盡量減少影響的措施。如涉及砍伐樹木，請說明受影響樹木的數目、及胸高度的樹幹直徑及品種(倘可) ....

(B) Renewal of Permission for Temporary Use or Development in Rural Areas 位於鄉郊地區臨時用途/發展的許可續期	
(a) Application number to which the permission relates 與許可有關的申請編號	A/_____/_____
(b) Date of approval 獲批給許可的日期	..... (DD 日/MM 月/YYYY 年)
(c) Date of expiry 許可屆滿日期	..... (DD 日/MM 月/YYYY 年)
(d) Approved use/development 已批給許可的用途/發展	
(e) Approval conditions 附帶條件	☐ The permission does not have any approval condition 許可並沒有任何附帶條件 ☐ Applicant has complied with all the approval conditions 申請人已履行全部附帶條件 ☐ Applicant has not yet complied with the following approval condition(s): 申請人仍未履行下列附帶條件： _____ _____ _____ Reason(s) for non-compliance: 仍未履行的原因： _____ _____ _____ (Please use separate sheets if the space above is insufficient) (如以上空間不足，請另頁說明)
(f) Renewal period sought 要求的續期期間	☐ year(s) 年 ..... ☐ month(s) 個月 .....

7. Justifications 理由

The applicant is invited to provide justifications in support of the application. Use separate sheets if necessary.
現請申請人提供申請理由及支持其申請的資料。如有需要，請另頁說明）。

Please refer to the Supporting Planning Statement.

8. Declaration 聲明

I hereby declare that the particulars given in this application are correct and true to the best of my knowledge and belief.
本人謹此聲明，本人就這宗申請提交的資料，據本人所知及所信，均屬真實無誤。

I hereby grant a permission to the Board to copy all the materials submitted in this application and/or to upload such materials to the Board's website for browsing and downloading by the public free-of-charge at the Board's discretion.
本人現准許委員會酌情將本人就此申請所提交的所有資料複製及/或上載至委員會網站，供公眾免費瀏覽或下載。

Signature 簽署 ☐ Applicant 申請人 / ☑ Authorised Agent 獲授權代理人

Michael C K Lee
Name in Block Letters 姓名（請以正楷填寫）

Associate Director
Position (if applicable) 職位 （如適用）

Professional Qualification(s) 專業資格
☑ Member 會員 / ☐ Fellow of 資深會員
☐ HKIP 香港規劃師學會 / ☐ HKIA 香港建築師學會 /
☑ HKIS 香港測量師學會 / ☐ HKIE 香港工程師學會 /
☐ HKILA 香港園境師學會/ ☐ HKIUD 香港城市設計學會
☐ RPP 註冊專業規劃師
Others 其他 .....

on behalf of 代表 Prudential Surveyors International Limited
☑ Company 公司 / ☐ Organisation Name and Chop (if applicable) 機構名稱及蓋章（如適用）

Date 日期 17/10/2022 (DD/MM/YYYY 日/月/年)

Remark 備註

The materials submitted in this application and the Board's decision on the application would be disclosed to the public. Such materials would also be uploaded to the Board's website for browsing and free downloading by the public where the Board considers appropriate.
委員會會向公眾披露申請人所遞交的申請資料和委員會對申請所作的決定。在委員會認為合適的情況下，有關申請資料亦會上載至委員會網頁供公眾免費瀏覽及下載。

Warning 警告

Any person who knowingly or wilfully makes any statement or furnish any information in connection with this application, which is false in any material particular, shall be liable to an offence under the Crimes Ordinance.
任何人在明知或故意的情況下，就這宗申請提出在任何要項上是虛假的陳述或資料，即屬違反《刑事罪行條例》。

Statement on Personal Data 個人資料的聲明

1. The personal data submitted to the Board in this application will be used by the Secretary of the Board and Government departments for the following purposes:
委員會就這宗申請所收到的個人資料會交給委員會秘書及政府部門，以根據《城市規劃條例》及相關的城市規劃委員會規劃指引的規定作以下用途：
   (a) the processing of this application which includes making available the name of the applicant for public inspection when making available this application for public inspection; and
   處理這宗申請，包括公布這宗申請供公眾查閱，同時公布申請人的姓名供公眾查閱；以及
   (b) facilitating communication between the applicant and the Secretary of the Board/Government departments.
   方便申請人與委員會秘書及政府部門之間進行聯絡。

2. The personal data provided by the applicant in this application may also be disclosed to other persons for the purposes mentioned in paragraph 1 above.
申請人就這宗申請提供的個人資料，或亦會向其他人士披露，以作上述第 1 段提及的用途。

3. An applicant has a right of access and correction with respect to his/her personal data as provided under the Personal Data (Privacy) Ordinance (Cap. 486). Request for personal data access and correction should be addressed to the Secretary of the Board at 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong.
根據《個人資料(私隱)條例》(第 486 章)的規定，申請人有權查閱及更正其個人資料。如欲查閱及更正個人資料，應向委員會秘書提出有關要求，其地址為香港北角渣華道 333 號北角政府合署 15 樓。

Gist of Application 申請摘要

(Please provide details in both English and Chinese as far as possible. This part will be circulated to relevant consultees, uploaded to the Town Planning Board's Website for browsing and free downloading by the public and available at the Planning Enquiry Counters of the Planning Department for general information.)
(請盡量以英文及中文填寫。此部分將會發送予相關諮詢人士、上載至城市規劃委員會網頁供公眾免費瀏覽及下載及於規劃署規劃資料查詢處供一般參閱。)

Application No. 申請編號	(For Official Use Only) (請勿填寫此欄)
Location/address 位置／地址	Sub-Section 1 of Section B of Lot.82 (Part) in DD108, Fan Kam Road, Pat Heung, Yuen Long
Site area 地盤面積	2,802 sq. m 平方米 ☑ About 約 (includes Government land of 包括政府土地 sq. m 平方米 ☐ About 約)
Plan 圖則	Approved Pat Heung OZP (S/YL-PH/11)
Zoning 地帶	Residential (Group D)
Type of Application 申請類別	☑ Temporary Use/Development in Rural Areas for a Period of 位於鄉郊地區的臨時用途/發展為期 ☑ Year(s) 年 3 ☐ Month(s) 月 _____ ☐ Renewal of Planning Approval for Temporary Use/Development in Rural Areas for a Period of 位於鄉郊地區臨時用途/發展的規劃許可續期為期 ☐ Year(s) 年 _____ ☐ Month(s) 月 _____
Applied use/ development 申請用途/發展	Proposed Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) and Filling of Land

(i)	Gross floor area and/or plot ratio 總樓面面積及／或地積比率		sq.m 平方米	Plot Ratio 地積比率
		Domestic 住用	☐ About 約 ☐ Not more than 不多於	☐About 約 ☐Not more than 不多於
		Non-domestic 非住用	116 ☑ About 約 ☐ Not more than 不多於	0.04 ☑About 約 ☐Not more than 不多於
(ii)	No. of block 幢數	Domestic 住用		
		Non-domestic 非住用	3	
(iii)	Building height/No. of storeys 建築物高度／層數	Domestic 住用		m 米 ☐ (Not more than 不多於)
				Storeys(s) 層 ☐ (Not more than 不多於)
		Non-domestic 非住用	5.61	m 米 ☑(Not more than 不多於)
			2	Storeys(s) 層 ☑(Not more than 不多於)
(iv)	Site coverage 上蓋面積		2.57 %	☑About 約
(v)	No. of parking spaces and loading / unloading spaces 停車位及上落客貨車位數目	Total no. of vehicle parking spaces 停車位總數 Private Car Parking Spaces 私家車車位 Motorcycle Parking Spaces 電單車車位 Light Goods Vehicle Parking Spaces 輕型貨車泊車位 Medium Goods Vehicle Parking Spaces 中型貨車泊車位 Heavy Goods Vehicle Parking Spaces 重型貨車泊車位 Others (Please Specify) 其他 (請列明) _____ _____		15 10 5
		Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數 Taxi Spaces 的士車位 Coach Spaces 旅遊巴車位 Light Goods Vehicle Spaces 輕型貨車車位 Medium Goods Vehicle Spaces 中型貨車位 Heavy Goods Vehicle Spaces 重型貨車車位 Others (Please Specify) 其他 (請列明) _____ _____		

Submitted Plans, Drawings and Documents 提交的圖則、繪圖及文件	Chinese 中文	English 英文
Plans and Drawings 圖則及繪圖		
Master layout plan(s)/Layout plan(s) 總綱發展藍圖／布局設計圖	☐	☑
Block plan(s) 樓宇位置圖	☐	☐
Floor plan(s) 樓宇平面圖	☐	☐
Sectional plan(s) 截視圖	☐	☐
Elevation(s) 立視圖	☐	☐
Photomontage(s) showing the proposed development 顯示擬議發展的合成照片	☐	☐
Master landscape plan(s)/Landscape plan(s) 園境設計總圖／園境設計圖	☐	☐
Others (please specify) 其他（請註明）	☐	☐
_____		
_____		
Reports 報告書		
Planning Statement/Justifications 規劃綱領/理據	☐	☑
Environmental assessment (noise, air and/or water pollutions) 環境評估（噪音、空氣及／或水的污染）	☐	☐
Traffic impact assessment (on vehicles) 就車輛的交通影響評估	☐	☑
Traffic impact assessment (on pedestrians) 就行人的交通影響評估	☐	☐
Visual impact assessment 視覺影響評估	☐	☐
Landscape impact assessment 景觀影響評估	☐	☐
Tree Survey 樹木調查	☐	☐
Geotechnical impact assessment 土力影響評估	☐	☐
Drainage impact assessment 排水影響評估	☐	☐
Sewerage impact assessment 排污影響評估	☐	☐
Risk Assessment 風險評估	☐	☐
Others (please specify) 其他（請註明）	☐	☐
_____		
_____		

Note: May insert more than one「✔」. 註：可在多於一個方格內加上「✔」號

Note: The information in the Gist of Application above is provided by the applicant for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

註： 上述申請摘要的資料是由申請人提供以方便市民大眾參考。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。

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Supporting Planning Statement

Planning Application under Section 16 of Town Planning Ordinance

For

Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land

At

Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road,

Pat Heung, New Territories

Prepared by : Prudential Surveyors International Limited
Date : October 2022

Executive Summary

This Supporting Planning Statement is to supplement the application for permission from Town Planning Board (the "TPB") under Section 16 of the Town Planning Ordinance for temporary vehicle park (medium and heavy goods vehicle) and open storage (operational tools and materials) use for 3 years and filling of land (the "Subject Application") at Sub-Section 1 of Section B of Lot No.82 (Part) in Demarcation District 108, Fan Kam Road, Pat Heung, New Territories (the "Application Site"). The Site falls within an area zoned "Residential (Group D)") under the Approved Pat Heung Outline Zoning Plan No.S/YL-PH/11 whilst temporary use not exceeding a period of three years requires permission from the TPB.

Details of the site/development parameters are listed as follow:-

Application Site Area	2,802 s.m. (about)
Covered Area	72 s.m. (about)
Uncovered Area	2,2730 s.m. (about)
Site Coverage	2.57% (about)
No. of Structure	One 2-storey temporary structure for ancillary office and storage use Two single-storey dry toilet
Non-Domestic GFA	116 s.m (about)
Plot Ratio	0.04 (about)
Maximum Building Height	5.61 m (about)
No. of Parking Spaces	15 goods vehicle parking spaces, including 10 nos. of 7.5m x 2.5m spaces and 5 nos. of 9.5m x 2.8m spaces
Main Vehicular Access	via a local access off Fan Kam Road

To safeguard the enjoyment of nearby residents and having balanced the operational needs, the Applicant proposes the operation hours be limited to Monday to Saturday 7:00 a.m. to 7:00 p.m. whereas no operation will be conducted on Sunday or public holidays.

The Application Site has been filled to a level of about 47.3m above Hong Kong Principal Datum on or before 2004. No additional filling of land will be carried out on site.

In summary of this Supporting Planning Statement, the Subject Application is justified on following grounds:

- In Compliance with the Surrounding Land Use
- Better Utilization of Land Resources
- Would Not Result in Undesirable Precedent Case
- No adverse impact on Visual, Sewerage, Drainage, Noise and Traffic

行政摘要

(內文如有差異，應以英文版本為準)

本規劃許可申請尋求城市規劃委員會（「城規會」）批准於新界八鄉粉錦路丈量約份第 108 約地段第 82 號 B 分段第 1 小分段（部份）（「申請地盤」）用作臨時停車場(中型及重型貨車泊車位)及露天貯物用途(業務用工具及物資)（為期 3 年）及填土工程。現誠根據城市規劃條例第 16 條提交規劃申請。 申請地盤位於八鄉分區計劃大綱核准圖編號 S/YL-PH/11 範圍，被劃作「住宅（丁類）」的用途地帶，而臨時用途為期不超過三年，須向城規會申請規劃許可。

地盤及擬議發展參數如下:

申請地盤面積	約 2,802 平方米
有蓋面積	約 72 平方米
露天面積	約 2,730 平方米
上蓋面積比率	約 2.57%
建築物數目	1 座 2 層高臨時建築物作附屬辦公室及貯物用途 2 座 1 層高旱廁
非住用樓面面積	約 116 平方米
地積比率	約 0.04
最大建築物高度	約 5.61 米
停車位數目	15 個貨車泊車位, 當中包括 10 個 7.5 米 x 2.5 米泊車位 5 個 9.5 米 x 2.8 米 泊車位
主要行車出入口	粉錦路經地區道路

為保障附近居民的享受以及平衡了申請人的業務運作需要，申請人提議申請地盤的運作時間為星期一至星期六早上 7 時至晚上 7 時，星期日及公眾假期則不會運作。

申請地點在 2004 年或之前已經填土至大約香港水平基準以上 47.3 米。申請地點不會再進行額外的填土工程。

總括而言，本規劃申請有充分理據支持，是次規劃申請:

- 符合現有周邊環境用途
- 善用珍貴土地資源
- 不會造成不良先例
- 不會對視覺，排污，排水，噪音及交通造成不利影響

基於本規劃所提出的理據支持，我們懇請城規會對本規劃申請作出正面積極的考慮。

1. Background

This application for permission under Section 16 of the Town Planning Ordinance (TPO) is prepared and submitted on behalf of the Applicant to the Town Planning Board (TPB) for a proposed temporary private car park (with ancillary office) and open storage use (operational tools and materials) for 3 years (the "Subject Application") at Sub-Section 1 of Section B of Lot No.82 (Part) in Demarcation District 108, Fan Kam Road, Pat Heung, New Territories (the "Application Site").

2. Site Context

The Application Site, having an area of about 2,802 s.m., is located to the east of and abutting Fan Fam Road in an area locally known as Ta Shek Wu, at its junction with an unnamed local vehicular access branching off Fan Kam Road. The Application Site is located in the midway between Sheung Shui and Pat Heung which are situated at about 15 minutes' driving distance to the northeast and southwest respectively. The vicinity of the Application Site is rural in nature with mixed users including open storage, open car parking, temporary structure for industrial and storage use, intermingled with a small amount of village houses in various forms. Access to the Application Site is via the aforementioned local road branching off Fan Kam Road which is concrete-paved. The Application Site was fenced by mesh wire fencing along its perimeter as per our inspection on 17 May 2022. According to the Lands Department's Survey Sheet, the existing ground level of the Application Site is about 47.5m above Hong Kong Principal Datum. Location Plan of the Site is attached in **Appendix 1**.

3. Planning Context

The Application Site falls within an area zoned "Residential (Group D)" ("R(D)") under the Approved Pat Heung Outline Zoning Plan No.S/YL-PH/11 dated 27 October 2006 (the OZP).

According to the Schedule of Uses of the OZP, planning intention of R(D) zone is primarily for improvement and upgrading of existing temporary structures within the rural areas through redevelopment of existing temporary structures into permanent buildings. It is also intended for low-rise, low-density residential developments subject to planning permission from the Town Planning Board.

As vehicle park and open storage uses are not specified either under Column 1 or Column 2 of the R(D) zone, according to the Notes of the OZP, for temporary uses not exceeding a period of 3 years, permission from the TPB is required.

4. Previous Planning Application relevant to the Application Site

The Application Site (including portions of it) had been involved in 6 planning applications from 1993 to 2005 and the summary of the applications are listed as follow:

No.	Application No.	Applied Use	Location	Zone	Decision Date	Decision
1	A/DPA/YL-PH/19	Open Storage of Vehicles and General Goods	DD 108 LOT 82B, Fan Kam Road, Pat Heung	Undetermined	13/08/1993	**Approved** with condition(s) on a temporary basis
2	A/YL-PH/252	Temporary open storage of private cars and lorries (excluding containers and container vehicles) for a period of 12 months	DD 108 LOT 82B(P) & GOVT LAND, Fan Kam Road, Pat Heung, Yuen Long	Residential (Group D)	08/01/1999	**Approved** with condition(s) on a temporary basis
3	A/YL-PH/354	Proposed temporary open storage of private cars and lorries for a period of 3 years	DD 108 LOT 82SB(P) & GOVT LAND, Fan Kam Road, Pat Heung, Yuen Long	Residential (Group D)	02/02/2001	**Approved** with condition(s) on a temporary basis
4	A/YL-PH/459	Temporary open storage of private cars and lorries and Machinery for a period of 3 years	DD 108 LOT 82B(P), Pat Heung, Yuen Long, N.T.	Residential (Group D)	26/03/2004	**Approved** with condition(s) on a temporary basis
5	A/YL-PH/499	Temporary Open Storage of Private Cars and Lorries for a Period of 3 Years (Minor Amendments to a Previously Approved Development Scheme Application No. A/YL-PH/459)	DD 108 Lot 82B(Part) and Adjoining Government Land, Pat Heung, Yuen Long	Residential (Group D)	29/07/2005	**Approved** with condition(s) on a temporary basis
6	A/YL-PH/459-1	Temporary open storage of private cars	DD 108 LOT 82B(P), Pat	Residential (Group D)	4/8/2005	**Approved**

		and lorries and Machinery for a period of 3 years Class B Amendment - extension of time limit	Heung, Yuen Long, N.T.			

5. Planning Application for Open Storage or Car Parking (or similar uses) in subject R(D) Zone

No.	Application No.	Applied Use	Location	Zone	Decision Date	Decision
1	A/YL-PH/852	Proposed Temporary Private Vehicle Park (Private Cars Only) for a Period of 3 Years	Lots 163 (Part), 164 (Part) and 166 (Part) in D.D. 108, Fan Kam Road, Pat Heung, Yuen Long	Residential (Group D)	18/09/2020	**Approved** with condition(s) on a temporary basis
2	A/YL-PH/862	Proposed Temporary Public Vehicle Park and Office for a Period of 3 Years	Lots 78 S.A (Part), 93 (Part) and 94 (Part) in D.D. 108, Fan Kam Road, Pat Heung, Yuen Long	Residential (Group D)	18/12/2020	**Approved** with condition(s) on a temporary basis
3	A/YL-PH/849	Proposed Temporary Public Vehicle Park (Private Cars only) with Ancillary Site Office for a Period of 3 Years	Lot 139 RP (Part) in D.D. 108, Fan Kam Road, Pat Heung, Yuen Long, New Territories	Residential (Group D)	04/09/2020	**Approved** with condition(s) on a temporary basis
4	A/YL-PH/869	Proposed Temporary Open Storage of Construction Machinery for a Period of 3 Years	Lot 55 (Part) in D.D. 108, Pat Heung, Yuen Long.	Residential (Group D)	22/01/2021	**Approved** with condition(s) on a temporary basis

5	A/YL-PH/878	Temporary Open Storage of Construction Materials, Machinery, Second-Hand Vehicles, Vehicle Parts and Ancillary Office for a Period of 3 Years	Lots 2879 (Part), 2881 (Part), 2888 (Part), 2889 (Part), 2890 (Part) and 2900 (Part) in D.D. 111, Wing Ning Lei, Wang Toi Shan, Pat Heung, Yuen Long	Residential (Group D)	09/07/2021	**Approved** with condition(s) on a temporary basis
6	A/YL-PH/908	Proposed Temporary Storage of Construction Materials with Ancillary Office for a Period of 3 Years and Land Filling	Lots 22 (Part) and 24 (Part) in D.D. 111, Pat Heung, Yuen Long	"Residential (Group D)"	06/05/2022	**Approved** with condition(s) on a temporary basis
7	A/YL-PH/909	Renewal of Planning Approval for Temporary Open Storage of Excavators and Loaders for a Period of 3 Years	Lots 159 (Part), 160 (Part), 162 (Part), 163 (Part) and 164 (Part) in D.D. 108 and Adjoining Government Land, Ta Shek Wu, Pat Heung, Yuen Long	"Residential (Group D)"	06/05/2022	**Approved** with condition(s) on a temporary basis

6. Land Status

The Application Site includes only portion of Sub-Section 1 of Section B of Lot No.82 in Demarcation District 108, and is solely owned by the Applicant.

7. Development Proposal

The Application Site is currently vacant and concrete-paved, with vehicular access via an unnamed local road branching off Fan Kam Road at south of the Application Site.

Details of the site/development parameters are listed as follow:-

Application Site Area	2,802 s.m. (about)
Covered Area	72 s.m. (about)
Uncovered Area	2,730 s.m. (about)
Site Coverage	2.57% (about)
No. of Structure	One 2-storey temporary structure for office and storage use Two single-storey dry toilet
Non-Domestic GFA	116 s.m (about)
Plot Ratio	0.04 (about)
Maximum Building Height	5.61 m (about)
No. of Parking Spaces	15 goods vehicle parking spaces (including 10 nos. of 7.5m x 2.5m spaces and 5 nos. of 9.5m x 2.8m spaces)
Proposed Operating Hours	Monday to Saturday 7:00am – 7:00pm (Only)

The details on structure are listed below :-

Structure	Use	Covered Area (about)	GFA (about)	Building Height
B1	Office and Storage	44 s.m.	88 s.m.	5.61 m (2-storey)
B2	Dry Toilet	15 s.m.	15 s.m.	2.6 m (1-storey)
B3	Dry Toilet	13 s.m.	13 s.m.	2.5 m (1-storey)
	Total :	**72 s.m.**	**116 s.m.**	

The Site Layout Plan, Fire Service Installation Plan and Carpark Layout Plan are attached in **Appendices 2, 3 & 4** respectively.

The type of operational tools and materials to be stored on site is at **Appendix 5**.

8. Technical Issues

8.1 Visual Impact

Major portion of existing site level is about 2m lower than the level of Fan Kam Road. There are some 2-3m height trees growing along the Government land between the Application Site and Fam Kam Road, which serve as a nature visual barrier. Therefore, no adverse visual impact would be created. At the same time, there are numerous similar temporary open storages or car park sites along Fan Kam Road, thus the proposal will not be incompatible to the surrounding visual context. Photos showing the existing conditions of the Application Site is attached in **Appendix 6**.

8.2 Sewerage Impact

Dry toilets are proposed to be used and the waste would be collected and disposed properly and regularly. Therefore, no adverse sewerage impact would be created to the nearby environment.

8.3 Drainage Impact

As shown on the Drainage Plan in **Appendix 7**, U-channels have been installed along the boundary within the Application Site and the stormwater would be discharged to the existing local drainage system. Therefore, no adverse impact to the local drainage system would be generated.

8.4 Noise Impact

Basically, the operation of the Applicant requires no construction work but involves only parking of motor vehicles and open storage and as such, no construction noise would be generated and the main source of noise would be the maneuvering of vehicles and the loading and unloading activities, which would be similar to the existing road traffic noise. Furthermore, to safeguard the enjoyment of nearby residents and having balanced the operational needs of the Applicant, it is proposed that the operation hours be limited from 7:00 a.m. and 7:00 p.m. only from Monday to Saturday, and no operation would be conducted on Sunday and public holidays. Nuisances induced by noise to the nearby locality at night time could be avoided. Therefore, no adverse noise impact to the surrounding during the operation stage would be generated.

8.5 Traffic Impact

With reference to the Traffic Impact Assessment ("TIA") Report in **Appendix 8**, the proposal would not generate adverse traffic impacts to the adjacent road network. Adequate manoeuvring space is provided within the Application Site whereas no vehicle queueing outside the Application Site is expected.

9. Filling of Land

According to the Notes of the OZP, any filling of land shall be subject to Town Planning Board's approval under section 16 of the Town Planning Ordinance. The existing ground level of the Application Site is about 47.3m above Hong Kong Principal Datum and in Subject Application, no additional filling of land will be carried out on site. However, as advised by the Planning Department, the existing filling of land on the site has not been covered in the previous planning approval, therefore filling of land has be included in this application.

As per the Lands Department's Survey Sheet, the existing ground level of the Application Site is about 47.3?m above Hong Kong Principal Datum which is same as in 2004 (no site level of the site has been shown on the Survey Sheets before 2004), therefore the existing filling of land should have been conducted on or before 2004. Also, as refer to the aerial photos, the existing paving of the site was also appeared in 2004. As mentioned in Section 4 above, six S.16 planning applications for carparking / open storage use have been approved on the Application Site in 1993, 1999, 2001, 2004 and 2005 respectively, therefore the existing filling of land should have been noted and considered by the Planning Department, as well as the Town Planning Board.

The Historical Survey Sheets and Aerial Photos are attached in **Appendices 9 & 10** respectively.

10. Justification

10.1 In Compliance with the Surrounding Land Use

The adjacent area is dominated by open storage, warehouse, car park and temporary industrial uses. It is anticipated that the area cannot be transformed into a residential area in short period of time in view of the existing mixed brownfield users. Therefore, it is considered that the proposal is in compliance with the current surrounding land use.

10.2 Better Utilization of Land Resources

The R(D) Zone is intended for low-rise, low-density residential developments. However, the area currently is still a mixed user area and is difficult to change into proper residential development and the support utility facility is still insufficient. Therefore, temporary open-air use can better utilize the precious land resources and would not decline the land until the area is suitable for permanent development.

10.3 Would Not Result in Undesirable Precedent Case

With reference to Paras. 4 and 5 above, the desktop review on previous planning cases found that numerous applications similar in nature within the same zonings were approved. Particularly, applications of similar use have been approved within the Site

between 1993-2005. In this connection, the proposal would be unlikely to result in undesirable precedent case.

10.4 Sustainable in Visual, Sewerage, Drainage, Noise and Traffic Impact

As demonstrated in Section 8 above, it was concluded that there will be no insurmountable problems for the implementation of the proposal at the Application Site.

11. Conclusion

In light of this Supporting Planning Statement, the Subject Application is justified on following grounds:

- In Compliance with the Surrounding Land Use
- Better Utilization of Land Resources
- Would Not Result in Undesirable Precedent Case
- Sustainable in Visual, Sewerage, Drainage, Noise and Traffic Impact

This Supporting Planning Statement demonstrates that the Subject Application deserves the favourable consideration by the TPB in light of the justifications provided. We trust that the TPB will see fit to approve the application.

List of Appendices

1. Location Plan
2. Site Layout Plan
3. Fire Service Installation Plan
4. Carpark Layout Plan
5. List of Operational Tools and Materials
6. Photo of the Site
7. Drainage Plan
8. Traffic Impact Assessment Report
9. Historical Survey Sheets
10. Historical Aerial Photos

Appendix 1

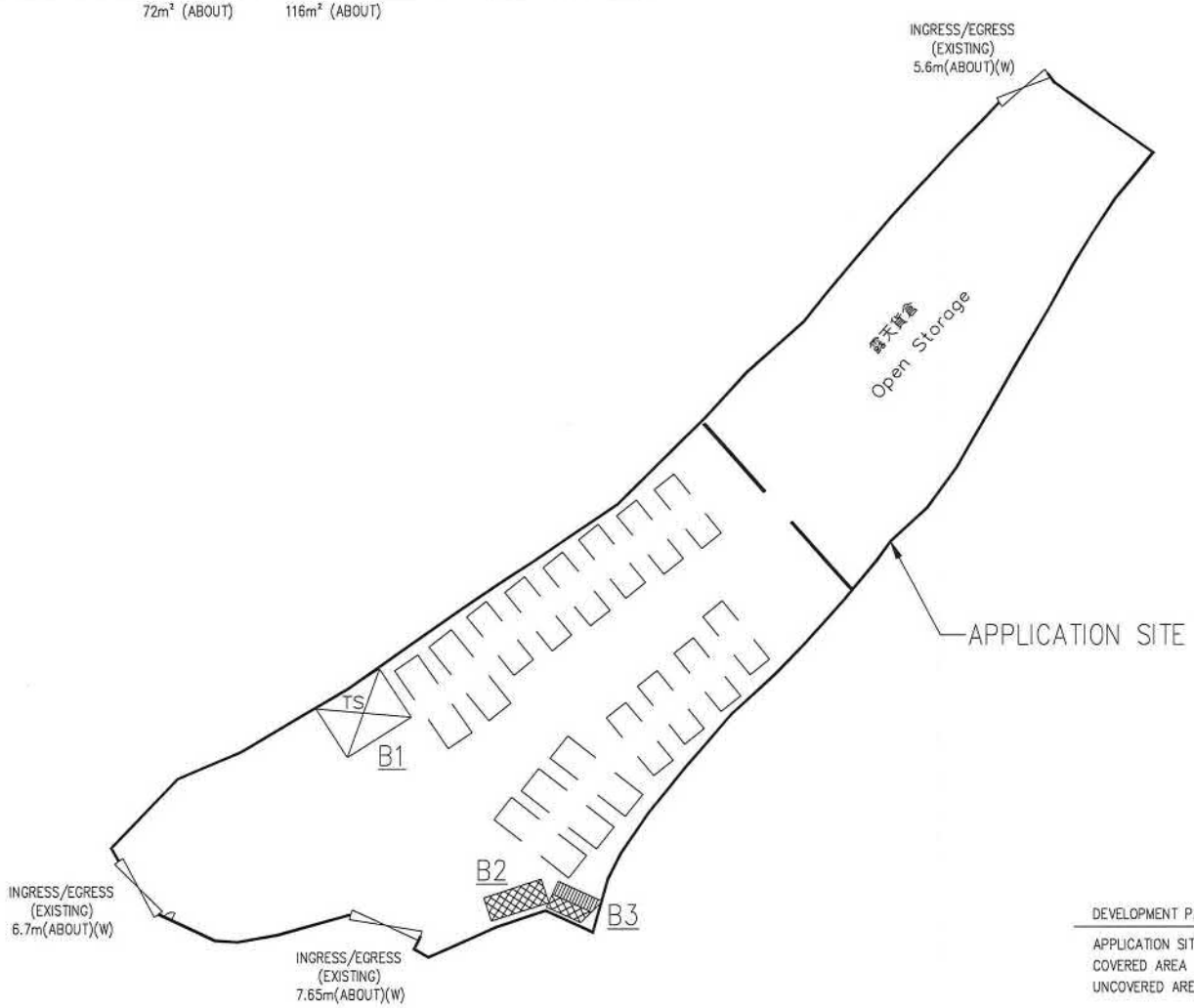
Location Plan

CONSULTANT : 測建行 PRUDENTIAL SURVEYORS (INTL) LTD TEL. 25078333 FAX. 25986576	PROJECT TITLE : **Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at DD 108 Lot 82 s.B ss.1 (Part), Fan Kam Road, Pat Heung, Yuen Long, NT**	DRAWING TITLE : LOCATION PLAN	DATE	DRAWN	DESIGNED / CHECKED / SCALE
			21/JUN/22	LW	/ DW 1:1000@A3
			JOB NO. : B8354		DRAWING NO. : A01
			FILING CODE: N:\Advisory Section\Job Files\PSIL\B8354...\Proj\act team\CAD		

Appendix 2

Site Layout Plan

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	SITE OFFICE	44m² (ABOUT)	88m² (ABOUT)	5.61m (APPROX.)(2-STOREY)
B2	SHOWER AND DRY TOILET	15m² (ABOUT)	15m² (ABOUT)	2.6m (APPROX.)(1-STOREY)
B3	DRY TOILET	13m² (ABOUT)	13m² (ABOUT)	2.5m (APPROX.)(1-STOREY)
	TOTAL	72m² (ABOUT)	116m² (ABOUT)	



LEGEND

- APPLICATION SITE
- STRUCTURE (ENCLOSED)
- STRUCTURE (CANOPY)
- POTABLE FLUSHING TOILETS / PORTABLE DRY TOILETS
- PROPOSED PARKING SPACE

DEVELOPMENT PARAMETERS

APPLICATION SITE	: 2802m² (ABOUT)
COVERED AREA	: 72m² (ABOUT)
UNCOVERED AREA	: 2730m² (ABOUT)
NO. OF STRUCTURE	: 3
DOMESTIC GFA	: N/A
NON-DOMESTIC GFA	: 116m² (ABOUT)
BUILDING HEIGHT	: 5.61m (ABOUT)
NO. OF STOREY	: 1 TO 2
PLOT RATIO	: 0.041 (ABOUT)
SITE COVERAGE	: 2.570% (ABOUT)

CONSULTANT :

測建行

PRUDENTIAL SURVEYORS (INTL) LTD
TEL. 25078333 FAX. 25986576

PROJECT TITLE :

Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at DD 108 Lot 82 s.B ss.1 (Part), Fan Kam Road, Pat Heung, Yuen Long, NT

DRAWING TITLE :

LAYOUT PLAN

DATE	DRAWN	DESIGNED	CHECKED	SCALE
31/AUG/22	LW	/	DW	1:500@A3

JOB NO. : B8354

DRAWING NO. : A02

FILING CODE: N:\Advisory Section\Job Files\PSIL\B8354...\Project Team\CAD

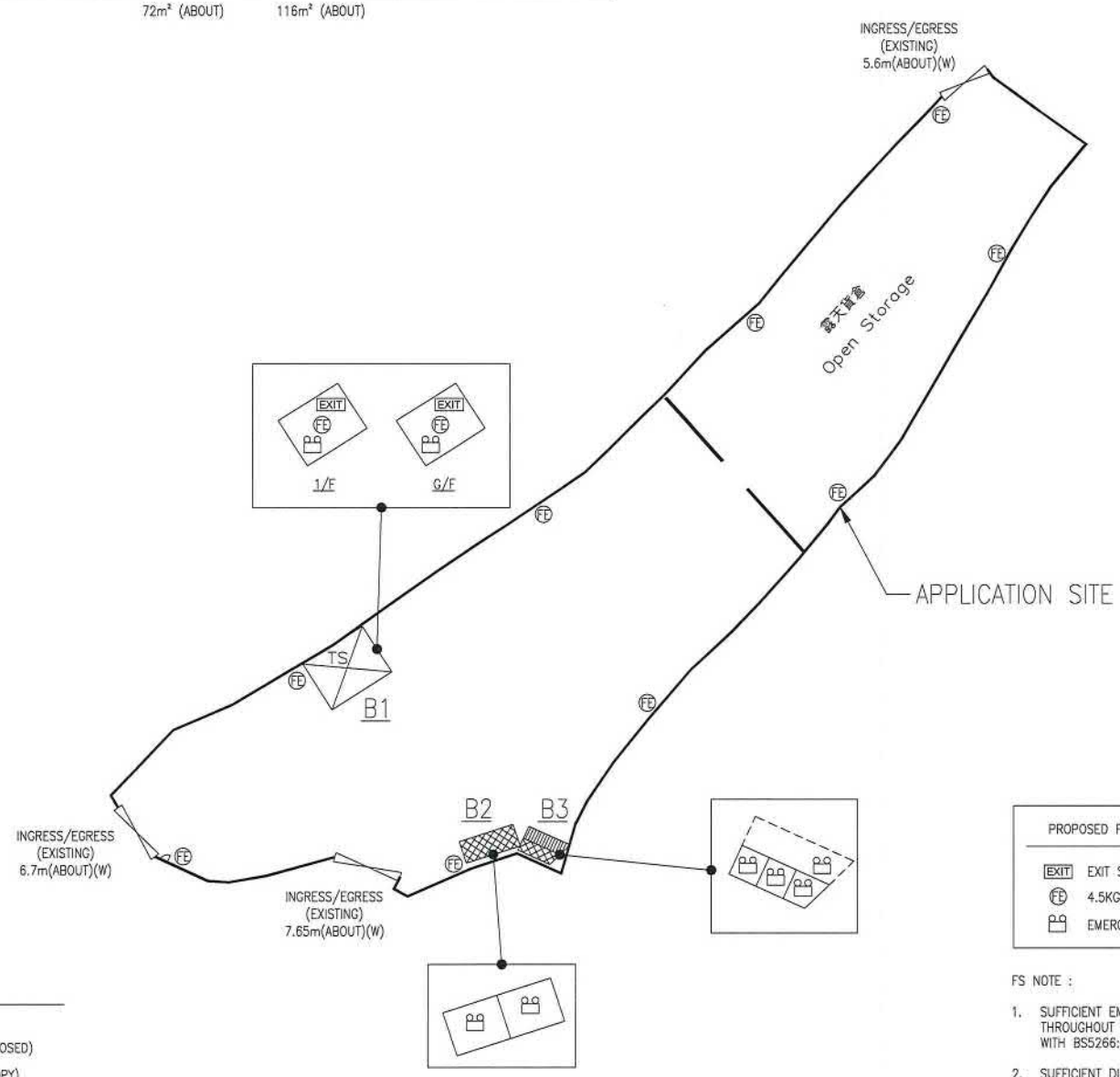
STATUS : REV. 1

Appendix 2

Appendix 3

Fire Service Installation Plan

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	SITE OFFICE	44m² (ABOUT)	88m² (ABOUT)	5.61m (APPROX.)(2-STOREY)
B2	SHOWER AND DRY TOILET	15m² (ABOUT)	15m² (ABOUT)	2.6m (APPROX.)(1-STOREY)
B3	DRY TOILET	13m² (ABOUT)	13m² (ABOUT)	2.5m (APPROX.)(1-STOREY)
	TOTAL	72m² (ABOUT)	116m² (ABOUT)	



LEGEND

- APPLICATION SITE
- STRUCTURE (ENCLOSED)
- STRUCTURE (CANOPY)
- POTABLE FLUSHING TOILETS / PORTABLE DRY TOILETS

PROPOSED FIRE SERVICE INSTALLATIONS

- EXIT EXIT SIGN
- FE 4.5KG GAS TYPE FIRE EXTINGUISHER
- EMERGENCY LIGHTING

FS NOTE :

1. SUFFICIENT EMERGENCY LIGHTING SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH BS5266: PART 1 AND BS EN 1838.
2. SUFFICIENT DIRECTIONAL AND EXIT SIGN SHALL BE PROVIDED IN ACCORDANCE WITH BS5266: PART 1 AND FSD CIRCULAR LETTER 5/2008.

CONSULTANT :

測建行
PRUDENTIAL SURVEYORS (INTL) LTD
TEL. 25078333 FAX. 25986576

PROJECT TITLE :

Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at DD 108 Lot 82 s.B ss.1 (Part), Fan Kam Road, Pat Heung, Yuen Long, NT

DRAWING TITLE :

FIRE SERVICE INSTALLATIONS LAYOUT

DATE	DRAWN	DESIGNED	CHECKED	SCALE
25/JUL/22	LW	/	DW	1:500@A3

JOB NO. : B8354

DRAWING NO. : A05

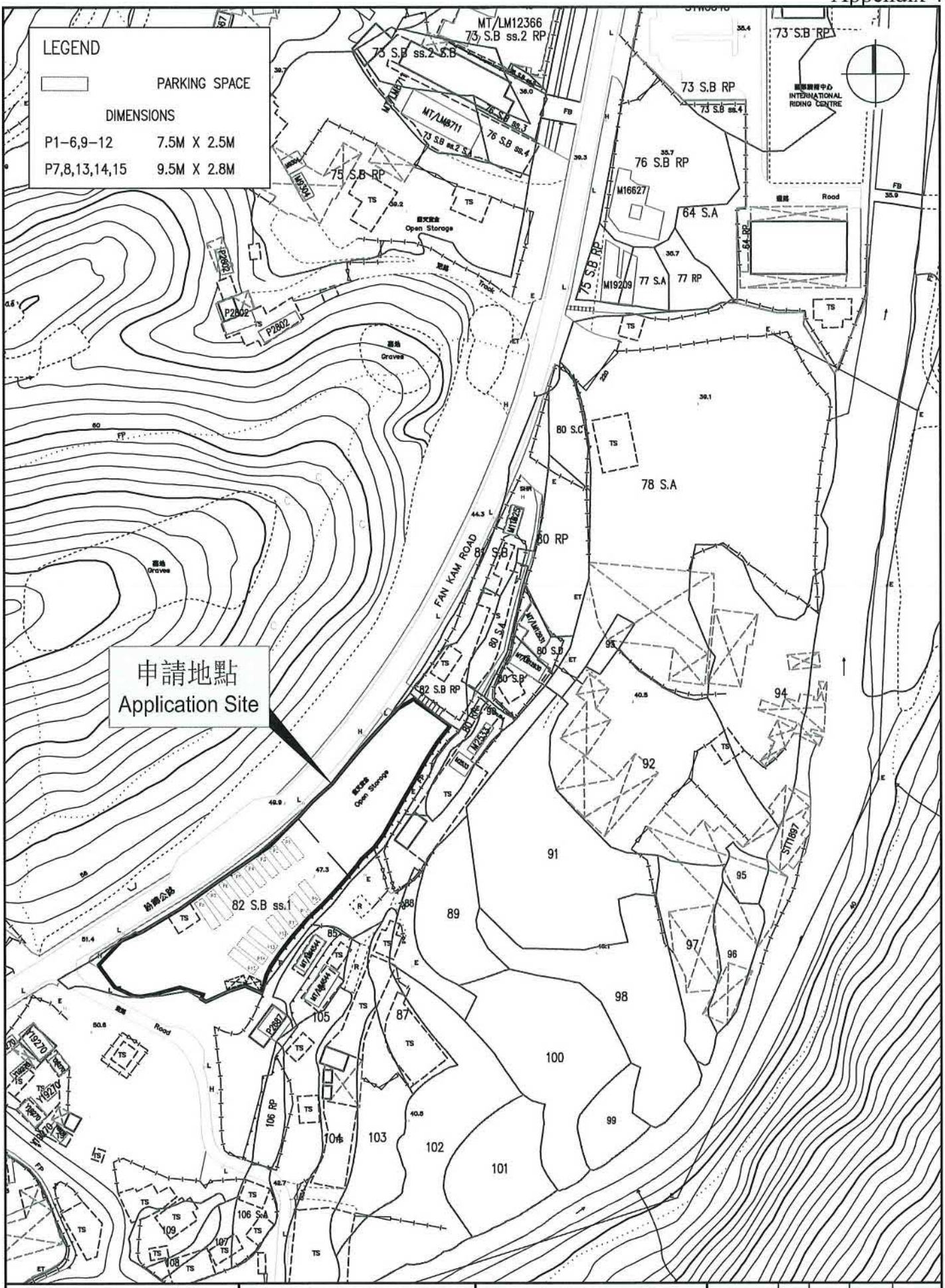
FILING CODE: N:\Advisory Section\Job Files\PSIL\B8354...\Project Team\CAD

STATUS : /

Appendix 3

Appendix 4

Carpark Layout Plan



CONSULTANT : 測建行 PRUDENTIAL SURVEYORS (INTL) LTD TEL. 25078333 FAX. 25986576	PROJECT TITLE : Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at DD 108 Lot 82 s.B ss.1 (Part), Fan Kam Road, Pat Heung, Yuen Long, NT	DRAWING TITLE : PARKING SPACE ARRANGEMENT	DATE	DRAWN	DESIGNED / CHECKED / SCALE
			21/JUL/22	IY	/ CC 1:1000@A3
			JOB NO. : B8354		DRAWING NO. : A04
			FILING CODE:		

Appendix 5

List of Operational Tools and Materials

類別 Category	貨品描述 Item Description
CCTV 裝備	CCTV車仔電池(o)
CCTV 裝備	CCTV鏡頭套(o)
CCTV 裝備	CCTV鏡頭 (大)(o)
CCTV 裝備	CCTV鏡頭 (細)(o)
CCTV 裝備	CCTV車仔(o)
CCTV 裝備	CCTV手推機電腦(o)
CCTV 裝備	CCTV車仔電腦(o)
CCTV 裝備	CCTV40米推藤 (SPP-40)(o)
CCTV 裝備	CCTV60米推藤 (SPP-60)(o)
CCTV 裝備	CCTV80米推藤 (SPP-80)(o)
工具-服務	泊洛(1.5噸)
工具-服務	擋水板
工具-服務	快駁 (2.5吋公)
工具-服務	快駁 (2吋雌)
工具-服務	快駁 (2吋公)
工具-服務	快駁 (3吋雌)
工具-服務	快駁 (3吋公)
工具-服務	快駁蓋 (放水喉蓋)(4吋)
工具-服務	4吋公外瓦
工具-服務	3吋雌外瓦
工具-服務	2.5吋刁2"
工具-服務	3吋刁2.5"
工具-服務	4吋雌外瓦
工具-服務	4吋快駁雌
工具-服務	4吋快駁公
工具-服務	3吋公外瓦
工具-服務	3吋雌內瓦
工具-服務	2.5吋公外瓦
工具-服務	2吋公外瓦
工具-服務	2.5吋雌外瓦
工具-服務	三星架 (開井蓋用)
工具-服務	鐵撬
工具-服務	玻璃膠
工具-服務	手提式通渠機機轆
工具-服務	手提式通渠機渠滕
工具-服務	鈎 (通渠用)(短)
工具-服務	鈎 (通渠用)(長)
工具-服務	井匙 (大)
工具-服務	井匙 (中)
工具-服務	井匙 (細)
工具-服務	手搖泊洛
工具-服務	照明燈
工具-服務	18" 元形雙止口輕身沙井(淨蓋面)
工具-服務	高壓水槍(o)
工具-服務	鋁梯 (5級)(o)
工具-服務	鋁梯 (7級)(o)
工具-服務	爬齒(o)
工具-服務	刷(吸油箱仔用)
工具-服務	鐵殼
工具-服務	樹葉杷
工具-服務	膠圈 (4吋)
工具-服務	膠圈 (2吋)
工具-服務	4吋波子閘掣
工具-服務	4齒鋤耙
工具-服務	3吋防漏膠圈

類別 Category	貨品描述 Item Description
工具-服務	淡水泵(細)
工具-服務	剷 (吸井用)(短)
工具-服務	小心地滑牌
制服	高級 / 服務員 - 黑色 長斜布褲 (30碼)
制服	高級 / 服務員 - 黑色 長斜布褲 (32碼)
制服	高級/服務員-黑色長斜布褲(34碼)
制服	高級/服務員-黑色長斜布褲(36碼)
制服	高級/服務員-黑色長斜布褲(42碼)
制服	STI-紅色polo衫(加加加加大碼)
制服	送貨員T-Shirt (大) 短袖
制服	送貨員T-Shirt (大)長袖
制服	送貨員T-Shirt(中) 短袖
制服	送貨員T-Shirt(中) 長袖
制服	送貨員T-Shirt (加大) 短袖
制服	送貨員T-Shirt (加大) 長袖
制服	送貨員T-Shirt (加加大) 短袖
制服	送貨員T-Shirt (加加大) 長袖
消耗品-服務	喉箍 (2吋)
消耗品-服務	喉箍 (2.5吋)
消耗品-服務	喉箍 (3吋)
消耗品-服務	保護衣(藍色)
消耗品-服務	DT215保護衣
消耗品-服務	Fogger - Filter
消耗品-服務	Fogger - Mask
消耗品-服務	黑色膠圈 (2.5吋)
消耗品-服務	油渣手套(藍)
消耗品-服務	馬路膠紙
消耗品-服務	引水帶
消耗品-服務	百潔布-中國(紅)
消耗品-服務	海棉
消耗品-服務	VACUUM HOSE-2
消耗品-服務	VACUUM HOSE-2.5
消耗品-服務	VACUUM HOSE-2-01
消耗品-服務	VACUUM HOSE-3
消耗品-服務	漁夫褲(半身)
消耗品-服務	漁夫褲(全身)
消耗品-輔助	手套 (黑色膠手套)
密閉空間/個人防護裝備	寶露華連風喉 (12吋)
密閉空間/個人防護裝備	寶露華連風喉 (8吋)
密閉空間/個人防護裝備	GAS DETECTOR
密閉空間/個人防護裝備	安全帽(到期日: 2024)
密閉空間/個人防護裝備	安全帽(到期日: 2024/11)
密閉空間/個人防護裝備	醫療急救箱(密閉空間專用)
密閉空間/個人防護裝備	充氣救生衣(一次性)
密閉空間/個人防護裝備	個人警報器(救命鐘)
密閉空間/個人防護裝備	復甦器
密閉空間/個人防護裝備	安全帶
密閉空間/個人防護裝備	眼罩
密閉空間/個人防護裝備	擔架床
機件-服務	發電機(o)
機件-服務	電磨機(o)
機件-服務	電攪機(o)
機件-服務	中國焗霧機件(0)
機件-服務	手提式通渠機(o)
機件-服務	電吊機(o)

類別 Category	貨品描述 Item Description
機件-服務	水泵 (清洗水缸用)(o)
機件-服務	吸水機 (小露寶)
機件-服務	吸水機 3600w,90L(小露寶)
機件-服務	(小露寶)-長駁頭(光嘴)40mm
機件-服務	(小露寶)-短接頭(凹凸嘴)40mm

Appendix 6

Photo of the Site

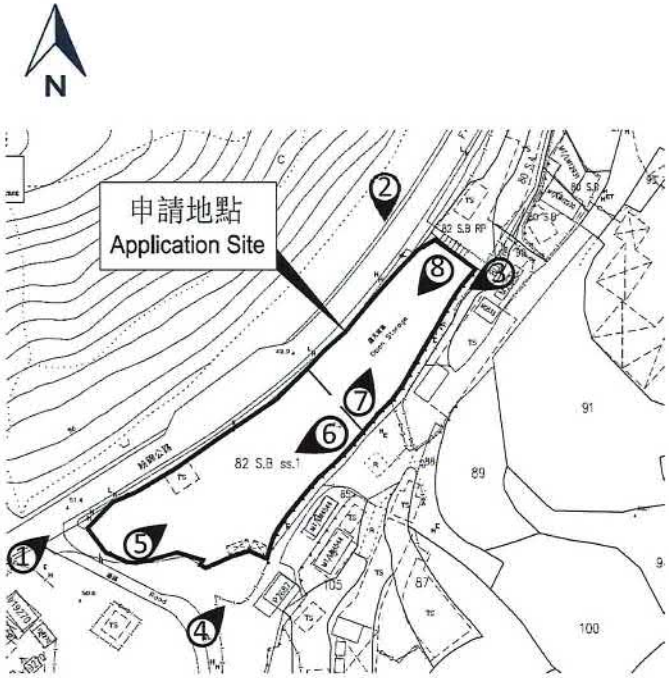
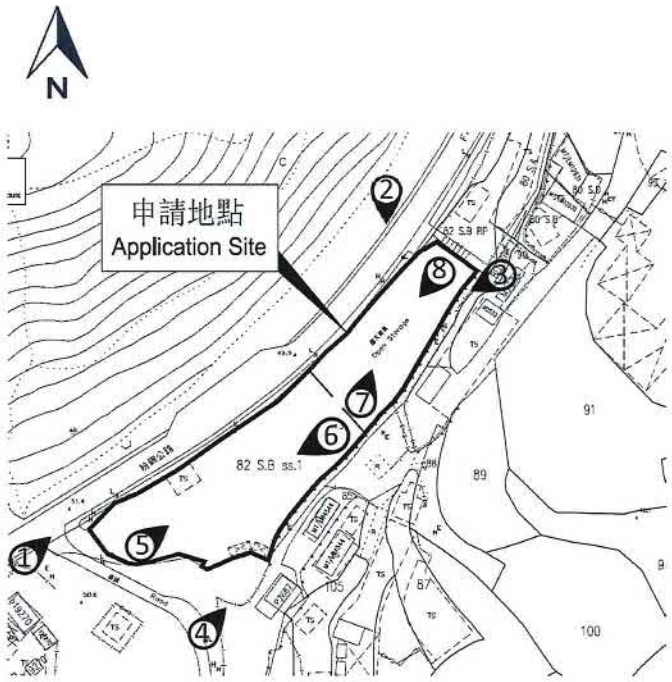


Photo Mark

View Point 1

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Site Photo
Not To Scale – For Identification Only



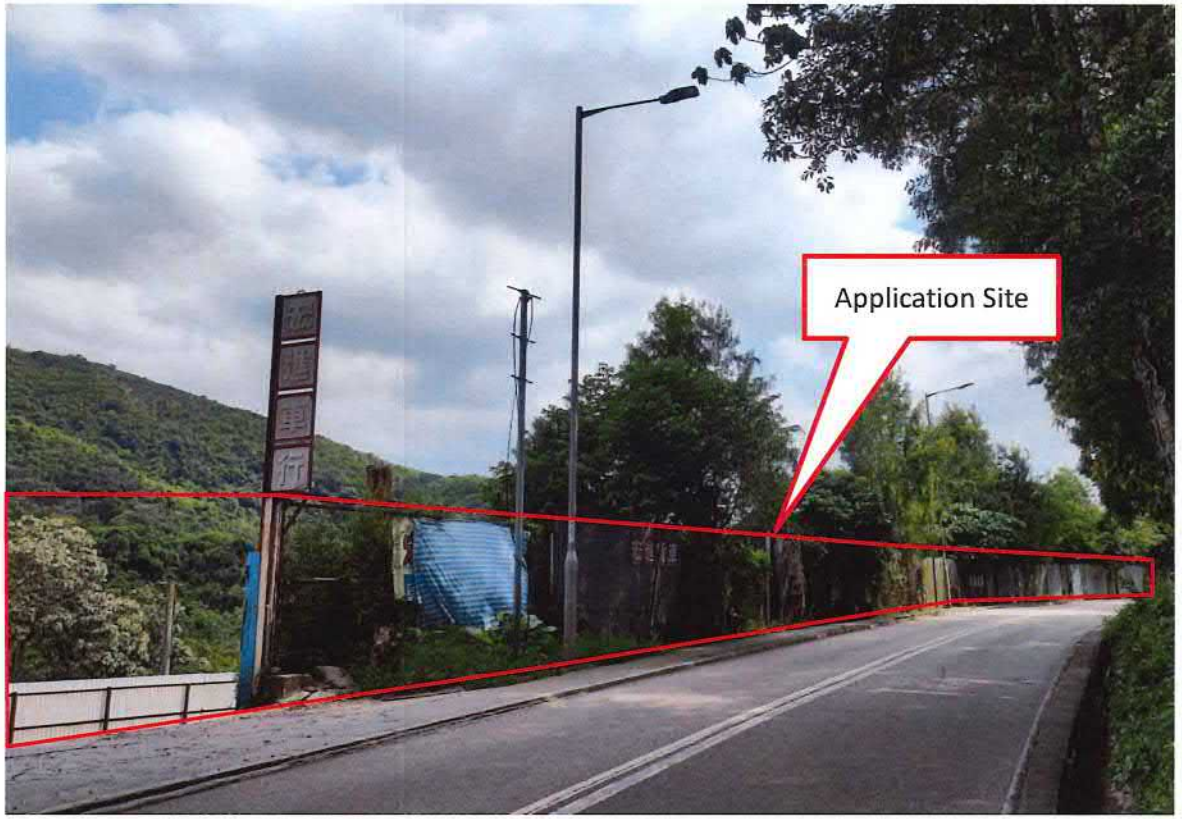


Photo Mark

View Point 2

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Site Photo
Not To Scale – For Identification Only

Photo Mark

View Point 3

PRUDENTIAL 測定行
SURVEYING · LAND ADVISORY · VALUATION

Site Photo
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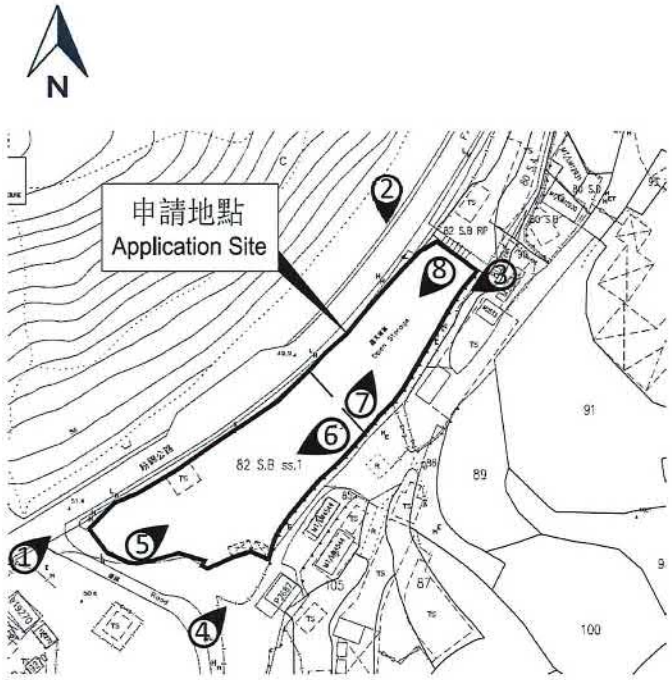


Photo Mark

View Point 4

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Site Photo
Not To Scale – For Identification Only

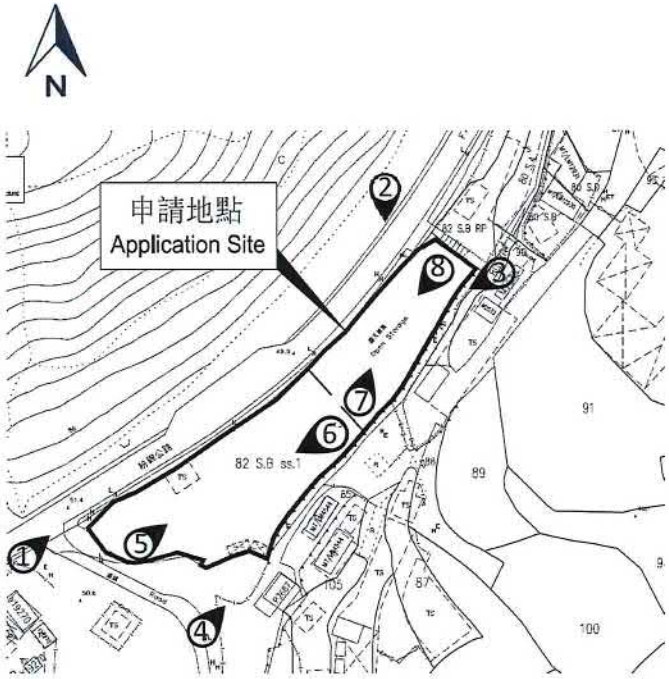


Photo Mark

View Point 5

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Site Photo
Not To Scale – For Identification Only

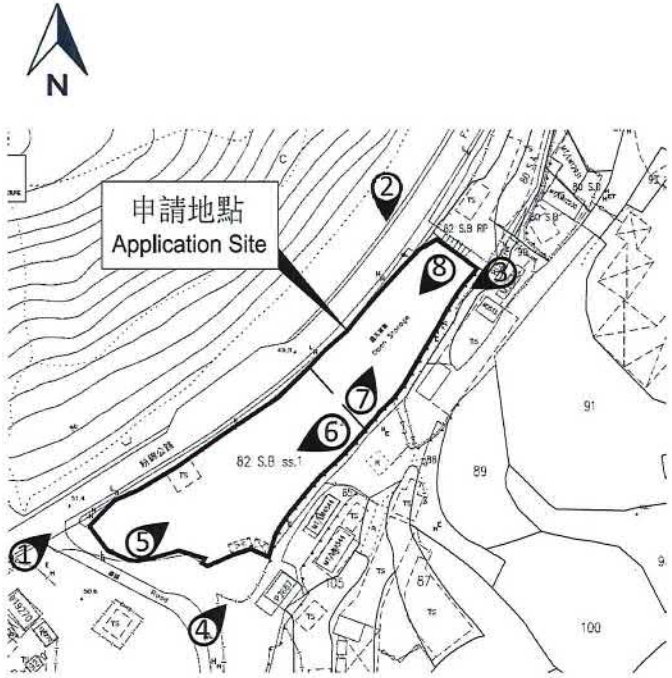


Photo Mark

View Point 6

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Site Photo
Not To Scale – For Identification Only

Photo Mark

View Point 7

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Site Photo
Not To Scale – For Identification Only

Photo Mark

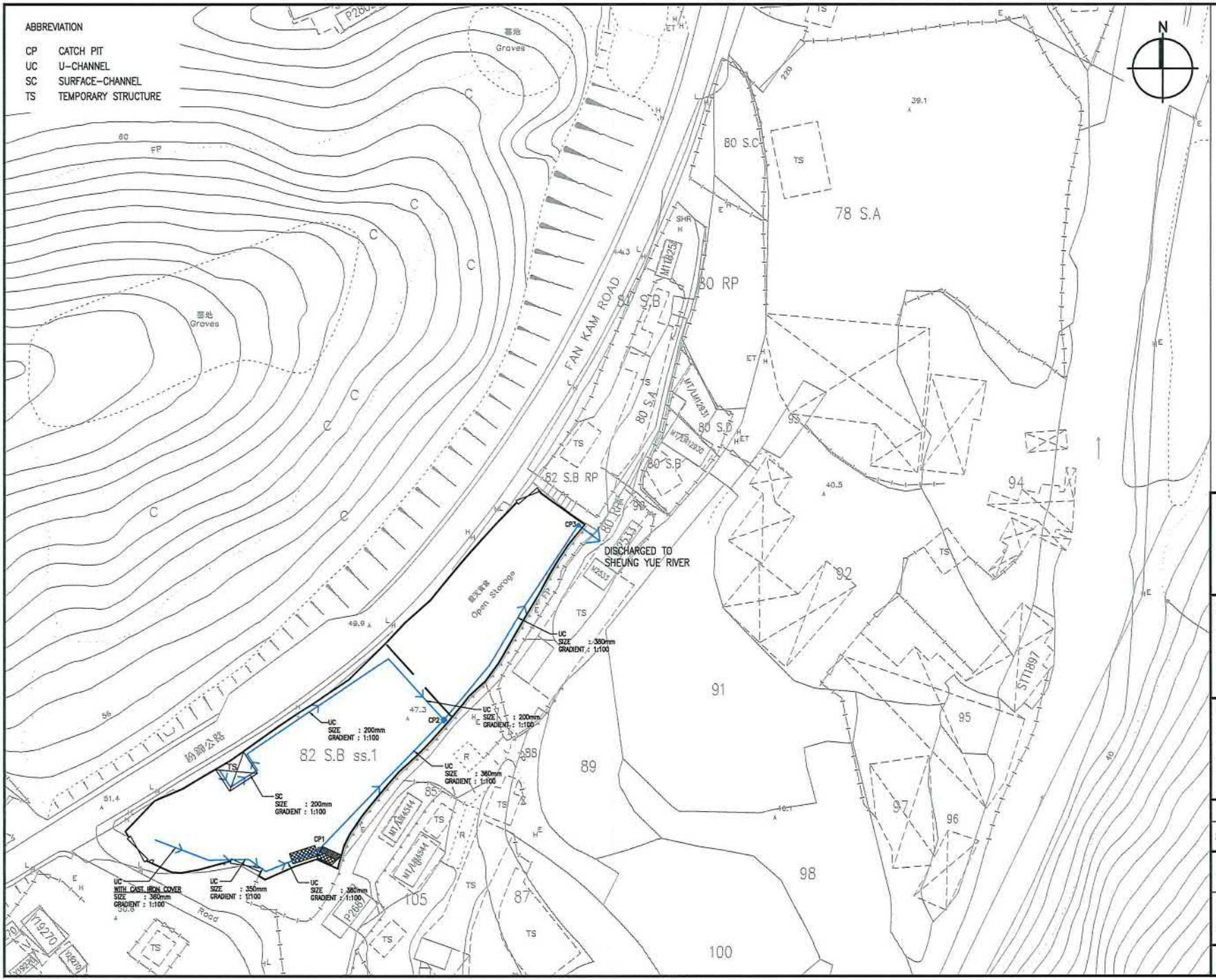
View Point 8

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Site Photo
Not To Scale – For Identification Only

Appendix 7

Drainage Plan



CONSULTANT :

測建行

PRUDENTIAL SURVEYORS (INTL) LTD
TEL. 25078333 FAX. 25986576

PROJECT TITLE :

Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at DD 108 Lot 82 s.B ss.1 (Part), Fan Kam Road, Pat Heung, Yuen Long, NT

DRAWING TITLE :

DRAINAGE PROPOSAL

DATE	DRAWN	DESIGNED	CHECKED	SCALE
21/JUN/22	LW	/	DW	1:800@A3

JOB NO. : B8354

DRAWING NO. : A03

FILING CODE: N:\Advisory Section\Job Files\PSIL\B8354...\Project Team\CAD

STATUS : /

Appendix 7

Appendix 8

Traffic Impact Assessment Report

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Traffic Impact Assessment

Planning Application under Section 16 of Town Planning Ordinance

For

Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land

At

Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories

Proposed by: Prudential Surveyors International Limited
Revision: 1
Date: October 2022

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LIST OF FIGURES

Figure 1 Site Location Plan
Figure 2 Study Area and Critical Junction

APPENDIX

Appendix A Swept Path Analysis
Appendix B Junction Calculation

1. Introduction

1.1 Purpose of this Report

1.1.1 The Site falls within an area zoned "Government, Institute or Community" ("G/IC") under the Approved Kwai Chung Zoning Plan No. S/KC/30 (the Approved OZP). [**Figure 3.1**]

1.1.2 This Traffic Impact Assessment is to support a planning permission from the Town Planning Board (TPB) under Section 16 of the Town Planning Ordinance (CAP. 131) for Proposed Open Storage and Parking of Vehicle (Temporary Base) (the Proposed Development) at Sub-Section 1 of Section B of Lot No.82 in DD108, Fan Kam Road, Pat Heung, Yuen Long (the Site).

1.1.3 The applicant has the intention to operate the Site as a Open Storage and Parking of Vehicle (Temporary Base).

1.2 Structure of this Report

1.2.1 Following this introductory section, the TIA Report is structured as follows:

- **Chapter 2** – The Preferred Development Scheme, presents the Site and internal transport facilities;
- **Chapter 3** – Existing Traffic Context, describes the road network and traffic condition in the vicinity;
- **Chapter 4** – Traffic Forecasts, describes the methodology of traffic forecasting;
- **Chapter 5** – Traffic Impact Assessment, presents the assessment results of the TIA at the adopted design year and recommend any improvement measure to alleviate the foreseeable problems, if considered necessary;
- **Chapter 6** – Summary and Conclusion, summarizes the findings of the study and presents the conclusion accordingly.

2. The Preferred Development Scheme

2.1 Site Location

2.1.1 The subject site is located at the junction of Fan Kam Road and local road to Ta Shek Wu Tsuen. The location of the subject site is indicated in **Figure 1**.

2.2 Development Schedule

2.2.1 The area of subject site is about 2,943 m². It was previously used as parking site for vacuum pumping vehicles.

2.2.2 The northern part of the site is proposed for "Open Storage" use.

2.2.3 The southern part of the site would contain 10 numbers of 7.2-metre goods vehicle parking spaces of 7.5m X 2.5m in dimensions and 5 numbers of 9.3-metre goods vehicle parking spaces of 9.5m x 2.8m in dimensions to accommodate 15 numbers of dedicated vehicles as shown in **Table 2.1.**

Table 2.1: List of Parking Vehicles

Vehicle#	License Plate	Dimensions			
		Length (m)	Width (m)	Height (m)	Weight (tonne)
1	SX2534	9.3	2.5	2.9	24
2	WD5200	8.9	2.5	3.25	24
3	UR1333	8.38	2.49	3.02	24
4	WM7737	8.3	2.5	3.15	24
5	SL5808	8.6	2.5	2.9	24
6	RB8146	7.2	2.2	2.5	14
7	UX1398	7.04	2.39	2.51	14
8	WK6901	6.9	2.3	2.7	14
9	UX2055	6.3	2.03	2.11	9
10	VZ5526	6.5	2	2.2	9
11	VC4421	6.78	2.16	2.24	7
12	WD564	5	1.9	1.97	VAN
13	XH3313	5	1.9	1.97	VAN
14	UE4390	5	1.9	1.97	VAN
15	XT6670	5	1.9	1.97	VAN

2.2.4 The swept path analysis as shown in **Appendix A** showed that there will be adequate manoeuvring space within the proposed carpark, no vehicle queueing outside the Site is expected.

2.3 Vehicular Access Arrangement

2.3.1 The vehicular access for Open Storage in northern part of the Site is directly located at Fan Kam Road.

2.3.2 As shown in **Appendix A**, there are two existing run-in/out for southern part of the Site along access road to Ta Shek Wu Tsuen. For ease of management, the southeast access is used for run-in/out of vehicles as listed in **Table 2.1**. The southwest access (close to Fan Kam Road) is not used.

3. Existing Traffic Context

3.1 Study Area

3.1.1 In order to assess the junction(s) and link(s) which may be affected by the proposed development, the extent of study area is therefore proposed to cover the junction(s) and link(s) that along the major vehicular access routes of the Site. The extent of study area for the TIA are indicated on **Figure 2**.

3.2 Existing Road Network

3.2.1 The anticipated vehicular traffic trips of the Site would pass through the following key road links:

- Fan Kam Road, is a rural road connecting Kam Tin Road in south and Fanling Highway in north. The carriageway of Fan Kam Road along the site is single-2 with about 6m width.
- At the south of the site is the access road connecting Fan Kam Road and Ta Shek Wu Tsuen, which is a local road in one-lane-two-way operation.

3.3 Existing Public Transport Services

3.3.1 The Site is covered by the existing public transport facilities serving the adjacent local area. Bus stops for Fanling bound and Yuen Long bound are located within 100m walking distance from the subject site. The service details are summarized in **Table 3.1**.

Table 3.1: Existing Public Transport Services

RouteNo.	Destinations	Peak Frequency (mins)	Remarks
Franchised Bus			
KMB			
77K	Sheung Shui <> Yuen Long	20-30	-

3.4 Traffic Survey

3.4.1 Manual classified traffic count surveys have been conducted on a normal weekday in June 2022 during the morning and evening peak period (0700 to 1000 and 1600 to 1900 hours) at the identified key junction, i.e. priority junction of Fan Kam Road and local road to Ta Shek Wu Tsuen.

3.4.2 As indicated by the survey results, the peak hour traffic of the local area would occur during 0800 to 0900 and 1700 to 1800 in the morning and evening periods respectively.

3.5 Existing Traffic Conditions

3.5.1 Junction capacity assessments were carried out at the key junctions as listed in Table 3.3 based on the observed peak hour traffic flows. The results are summarized in below **Table 3.2** and the detailed calculation sheets are shown in **Appendix B**.

Table 3.2: Existing Junction Performance

Junction	Location	Control Method	Reserved Capacity	
			AM Peak	PM Peak
J1	Fan Kam Road / Local Road to Ta Shek Wu Tsuen	Priority	0.01	0.01

3.5.2 The road link(s) were assessed based on the capacity of nearest width stipulated in Ch.2.4, Vol.2 of TPDM and the Volume to Capacity (V/C) ratio are shown in **Table 3.3**:

Table 3.3: Existing Link Performance

Road	Section	Capacity (pcu/hr)	2022 AM Peak		2022 PM Peak	
			Flow (pcu/hr)	V/C ratio	Flow (pcu/hr)	V/C ratio
Fan Kam Road	Outside the Site	1,400	870	0.62	940	0.67

3.5.3 The assessment result showed that the identified key junction and road link are currently operating with spare capacities during peak hour periods.

4. Traffic Forecast

4.1 Methodology

4.1.1 The construction works of the Site is limited for proposed use and expected to be completed by 2023. Therefore, it is proposed to adopt 2026 (3 years after completion) as the design year for this TIA study.

4.1.2 The background traffic forecasts for the design year 2026 were derived according to the existing traffic flows obtained from traffic survey and then projected by applying a growth rate. The growth rate used was derived by referring to the past traffic growth trend and the latest Territorial Population and Employment Data Matrix (TPEDM).

4.1.3 Trip generation of the Site were estimated based on the proposed development schedule and actual operation as advised by the Client. The traffic generations were then assigned to the surrounding road network based on the existing traffic pattern and superimposed onto the reference traffic forecasts to create the design year forecasts for assessment use.

4.2 Growth Rate Determination

4.2.1 The background traffic forecasts at design year 2026 were projected by applying a growth rate to the observed traffic flow. The growth rates were determined with reference to the Annual Traffic Census (ATC) Reports published by TD and 2019-based TPEDM planning data published on the website of Planning Department (PlanD). The derivation of the growth rate is presented in the following paragraphs.

Annual Traffic Census

4.2.2 The historical traffic growth trend of the major roads in the vicinity of the Site was reviewed by making reference to the ATC reports. The Annual Average Daily Traffic (AADT) data from year 2015 to year 2020 were extracted and the estimated average annual growth rate is given in **Table 4.1**.

Table 4.1: Annual Traffic Census Data

Station No.	Road Link	Average Annual Daily Traffic (AADT)						Growth Rate (p.a.)
		2015	2016	2017	2018	2019	2020	
6212	Fan Kam Road	12,420	11,900	10,780	11,570	11,660	12,250	-0.28%

4.2.3 The average annual growth rate determined from ATC data is about -0.28% p.a. from year 2015 to year 2020.

Territorial Population and Employment Data Matrix

4.2.4 Reference was also made to the open version of the latest 2016-based TPEDM from year 2016 to year 2026 in the Eastern area of Hong Kong Island. The average annual growth rates in terms of population and employment from year 2016 to 2026 and the estimated growth rates are illustrated in **Table 4.2**.

Table 4.2: Territorial Population and Employment Data

District	Population		Employment		Population + Employment	
	2019	2026	2019	2026	2019	2026
NORTHWEST NEW TERRITORIES	1,154,400	1,233,700	292,350	320,850	1,446,750	1,554,550
NORTHEAST NEW TERRITORIES	1,316,700	1,431,950	421,000	411,500	1,737,700	1,843,450
Total	2,471,100	2,665,650	713,350	732,350	3,184,450	3,398,000
Growth rate (p.a.)	1.09%		0.38%		0.93%	

4.2.5 The annual growth rate determined from sum of TPEDM population and employment are about +0.93% p.a. from year 2019 to year 2026.

Adopted Growth Rate

4.2.6 From the derived growth rates from ATC and the annual growth rate determined from TPEDM, a growth rate of +1% per annum will be adopted to produce the year 2026 background traffic flows in order to conduct a conservative assessment.

4.3 Background Traffic Forecast

4.3.1 Applying the adopted growth rate of +1% p.a. to the year 2022 observed traffic flow, the 2026 background traffic forecasts during the peak hours are derived.

4.4 Development Traffic Generation

4.4.1 As advised by the Client, the assignment of the vehicles is by-appointment basis and mainly occur in late-night period, after opening hours of shops and restaurants. For conservative assessment, 1 time of moving in/out for each of the 15 dedicated vehicles as listed in Table X is assumed during AM/PM peak hour.

4.4.2 Also for conservative assessment, same number of traffic generation is assumed for "Open Storage" in north part of the Site since the site area is similar. The actual generated traffic is expected lower in certain extend, depends on the exact usage of the spaces.

5. Traffic Impact Assessment

5.1 Methodology

5.1.1 The operational performance of junction(s) has been assessed based on the traffic forecast produced in Section 4 according to the procedures outlined in TPDM under both Reference (without the Site) and Design (with the Site) scenarios at the design year 2026.

5.2 Junction and Link Operational Assessment

5.2.1 Junction operational assessment has been carried out at the key junction(s) for the year 2026 Reference and Design scenarios. The results of different assessment scenarios are shown in **Table 5.1** and the detail calculation sheets are shown in **Appendix B**.

Table 5.1: Year 2026 Junction Performance

Junction	Location	Control Method	Junction Capacity			
			Reference		Design	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Fan Kam Road / Local Road to Ta Shek Wu Tsuen	Priority	0.01	0.01	0.05	0.03

5.2.2 The road links performance for the year 2026 Reference and Design scenarios are summarized in **Table 5.2**:

Table 5.2: Year 2026 Link Performance

Road	Section	Capacity (pcu/hr)	2026 Reference Scenario				2026 Design Scenario			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Flow (pcu/hr)	V/C ratio	Flow (pcu/hr)	V/C ratio	Flow (pcu/hr)	V/C ratio	Flow (pcu/hr)	V/C ratio
Fan Kam Road	Outside the Site	1,400	914	0.65	988	0.71	944	0.67	1,018	0.73

5.2.3 As shown in above tables, all of the identified key junctions and links are still operated within its capacity limit even with the operation of the Site in design year 2026.

6. Summary and Conclusions

6.1 Summary

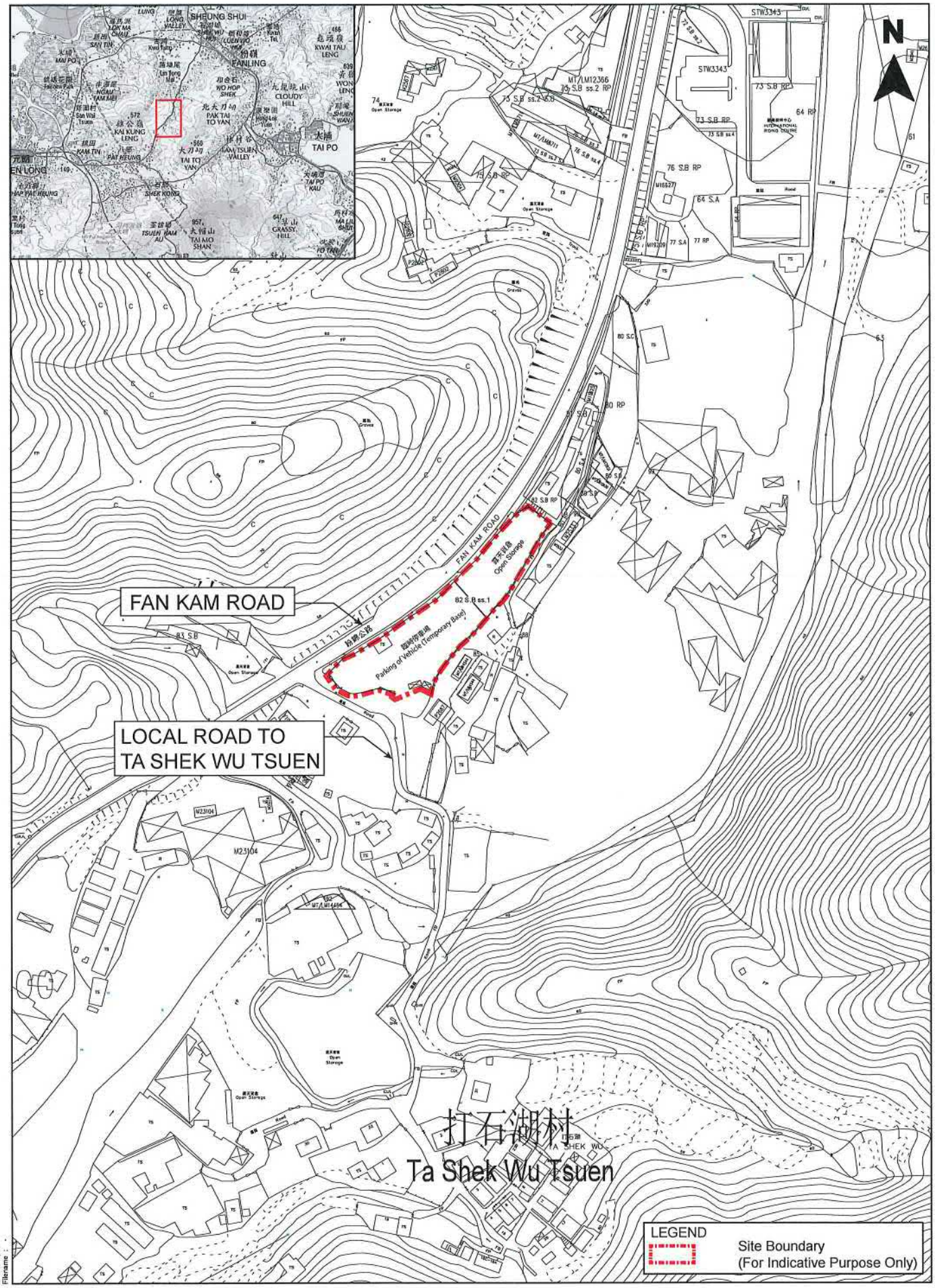
6.1.1 The applicant has the intention to operate the Site as Open Storage and Temporary Private Car Park containing ten 7.2-metre goods vehicle parking spaces and five 9.3-metre goods vehicle parking spaces.

6.1.2 The Site is served by village access road currently with limited local traffic. With the estimated traffic generated by the proposed carpark, the local road and its junction with Fan Kam Road shall perform properly in design scenario.

6.2 Conclusion

6.2.1 It is concluded that the Proposed Development would not generate adverse traffic impacts to the adjacent road network and therefore supported from engineering point of view.

Figures



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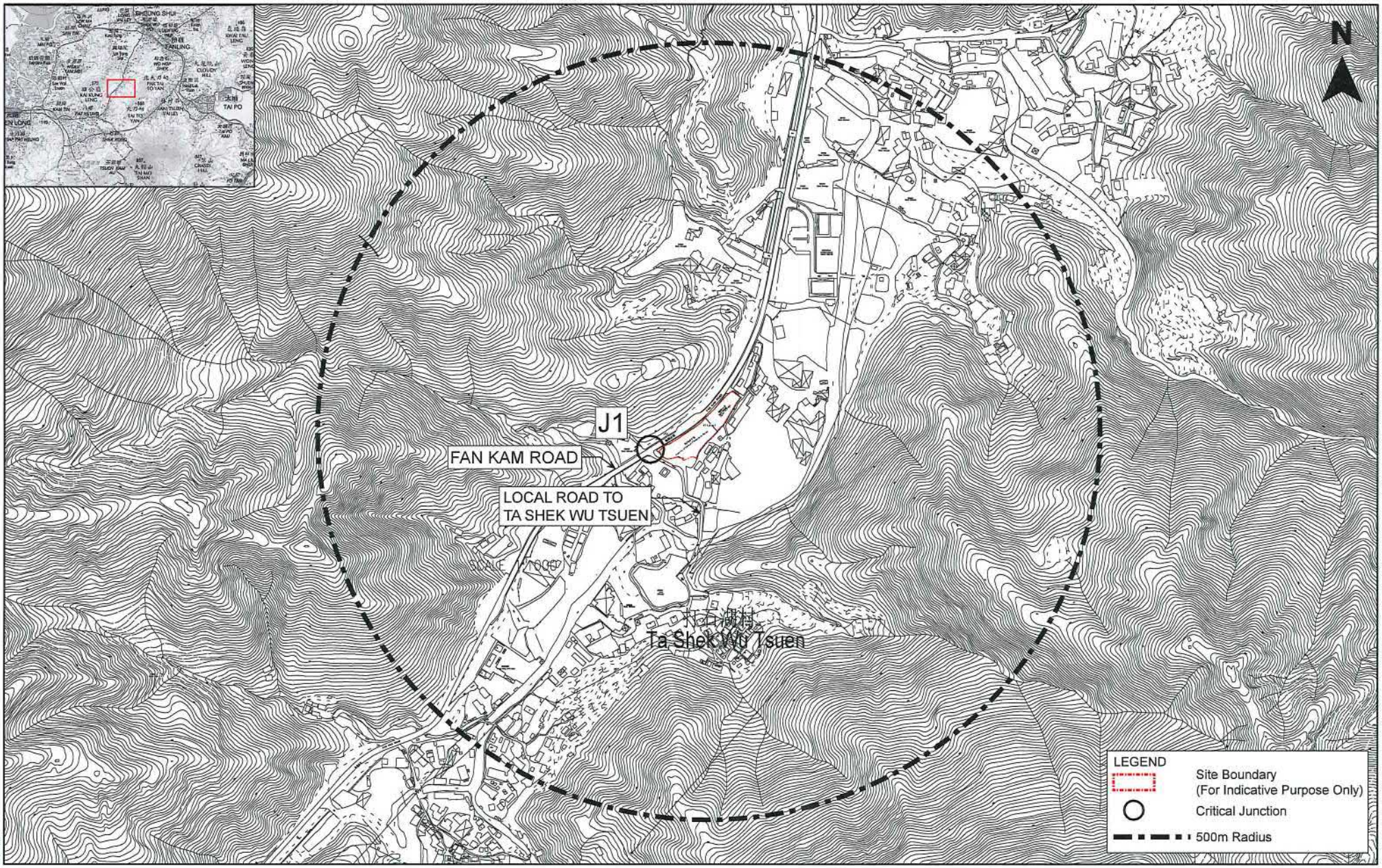

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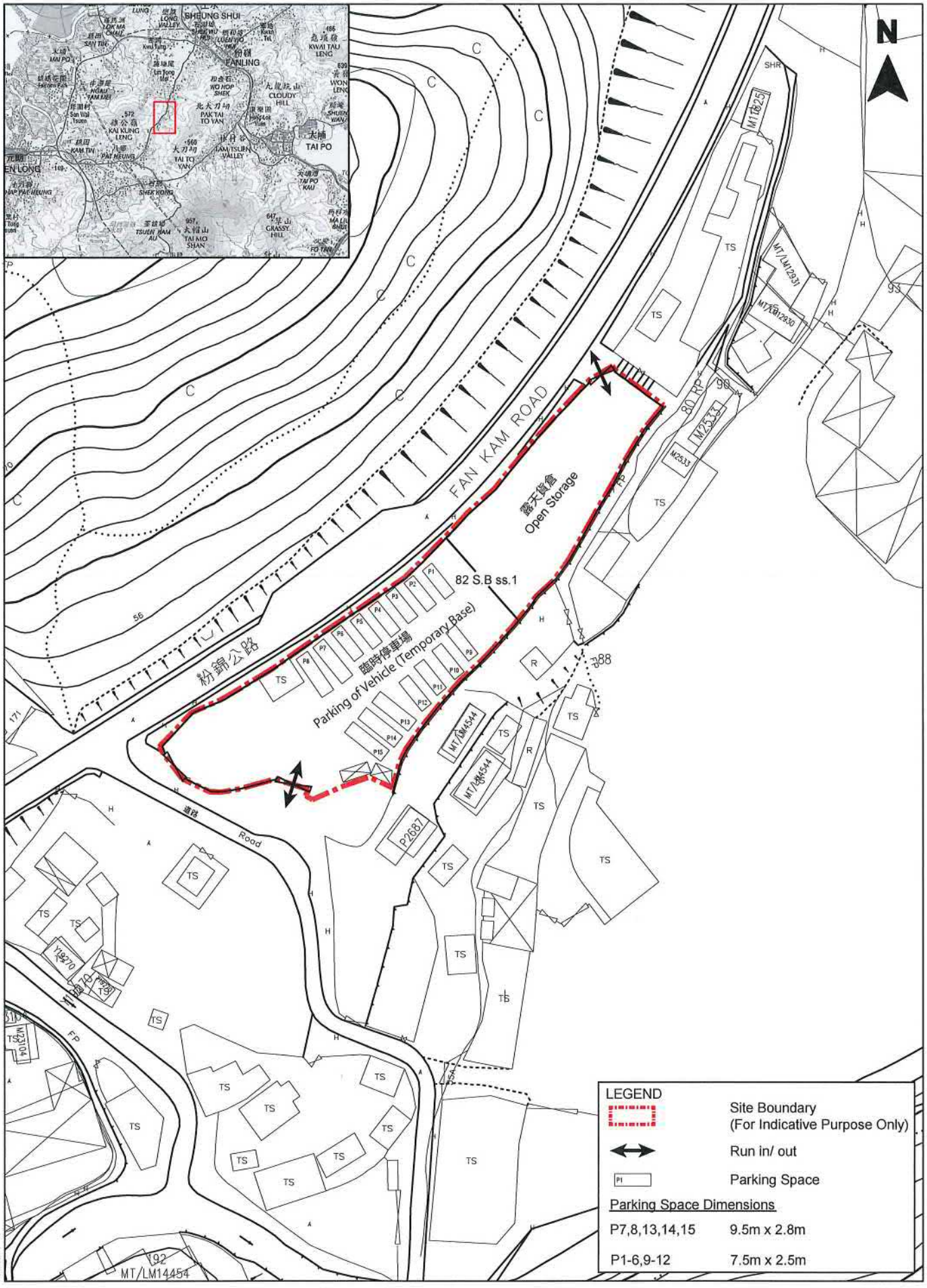
Drawing Title
FIGURE 2
STUDY AREA AND CRITICAL JUNCTION

Rev	Description	Date

Drawn	IY
Date	15/07/22
Checked	CH
Approved	CH
Scale	1:1000 @ A3
Drawing No.	TKYLCP_TIA_02
Rev.	

Appendix A

Swept Path Analysis



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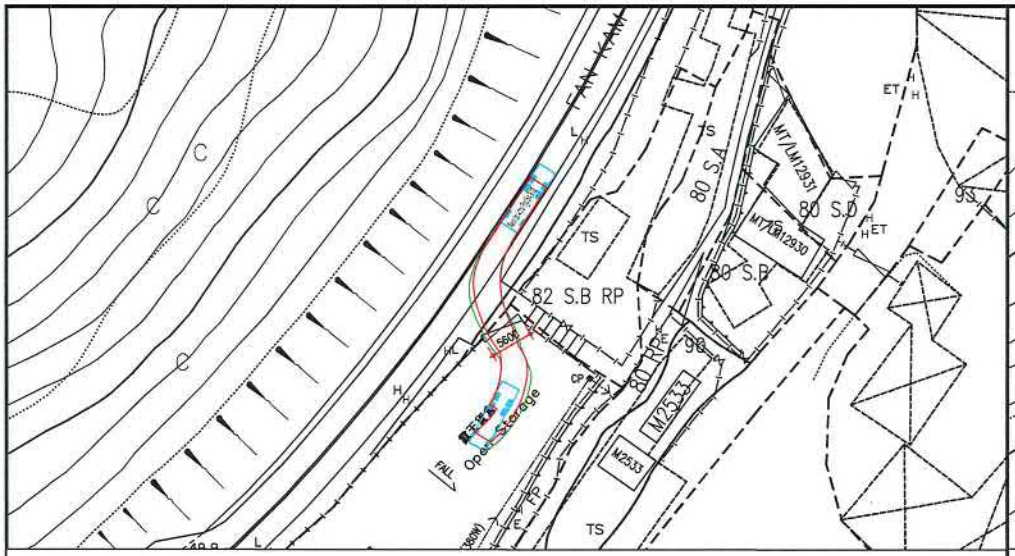

9.3–METRE GOODS VEHICLE MANOEUVRING (ENTER FROM THE RIGHT)
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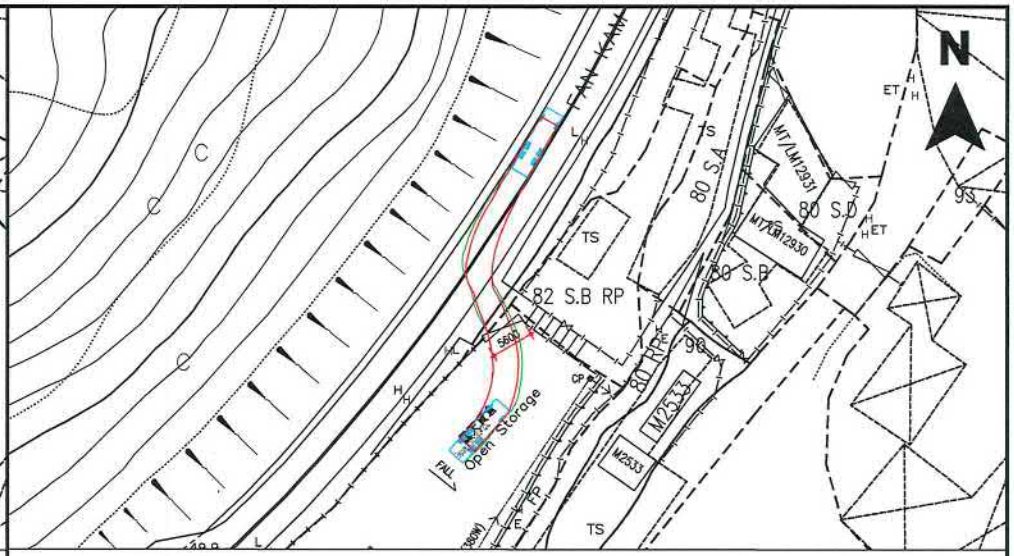

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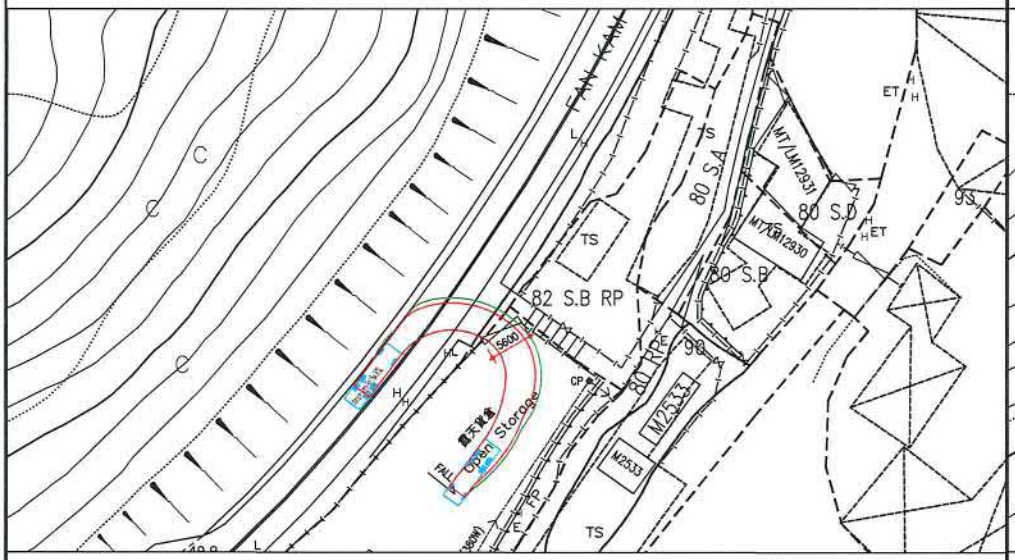

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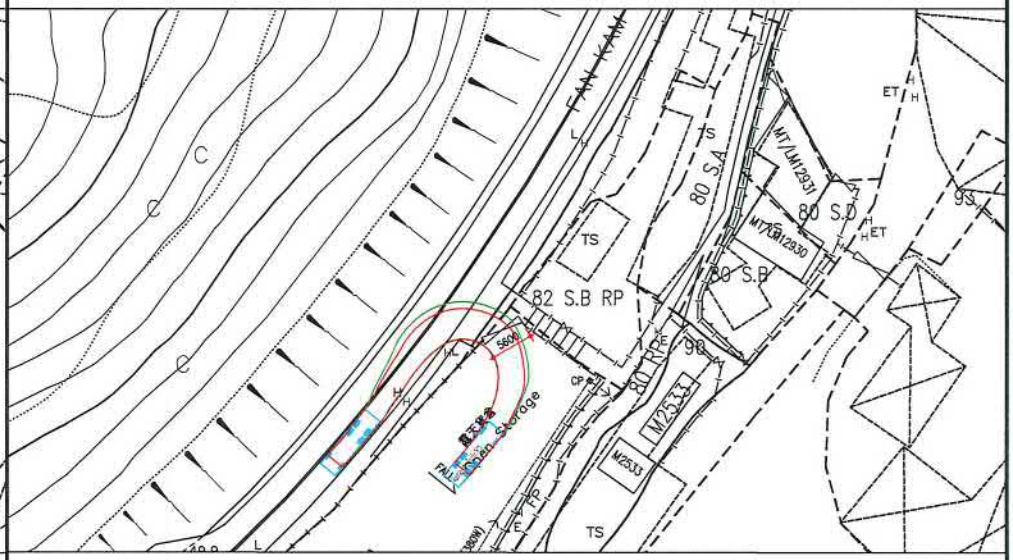

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Drawing Title
SWEPT PATH DEMONSTRATION –
ENTRANCE AND EXIT (OPEN STORAGE PORTION)

Rev	Description	Date

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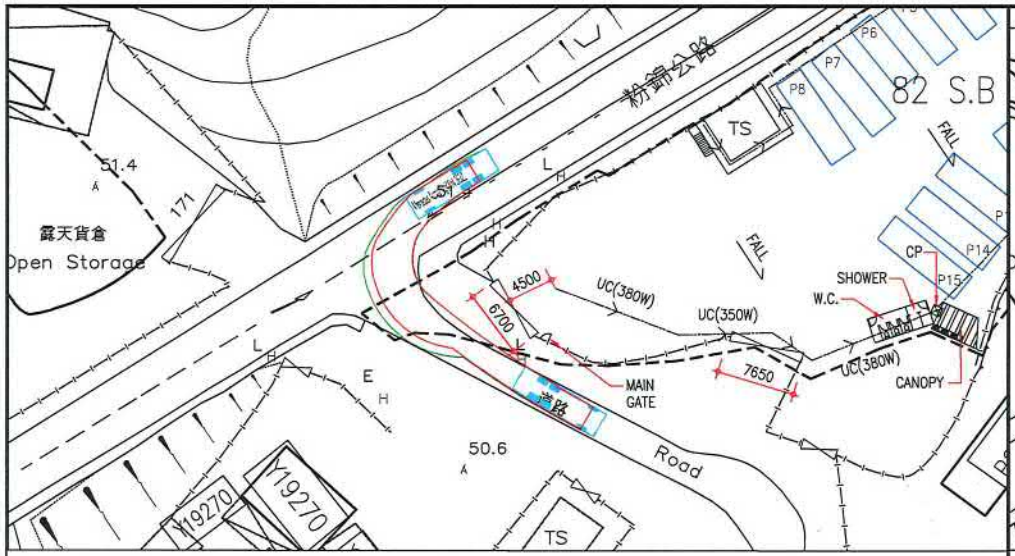
Scale: 1:1000 @ A3	

Drawing No.: TKYLCP_SP_ENTRANCE AND EXIT (OPEN STORAGE PORTION)
Rev.: –



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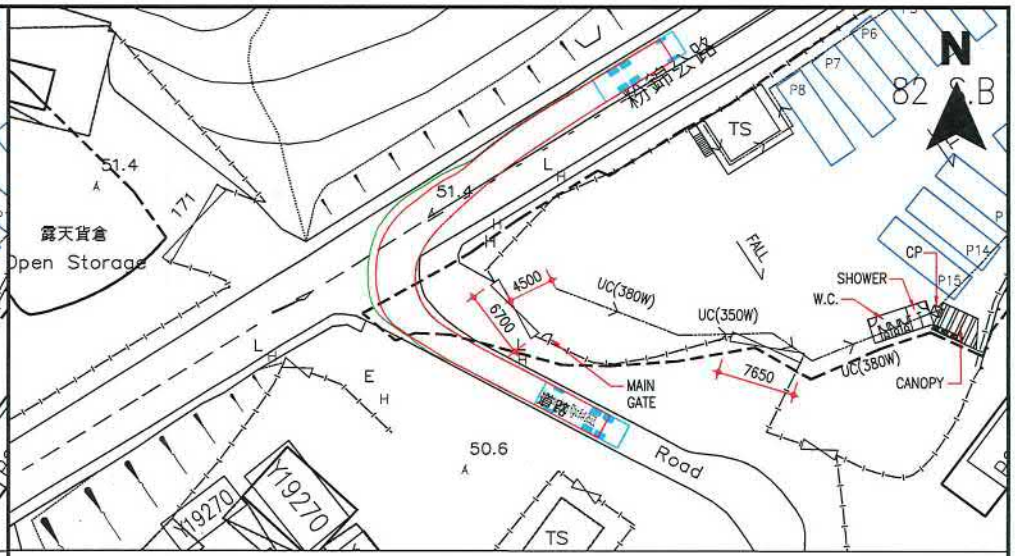

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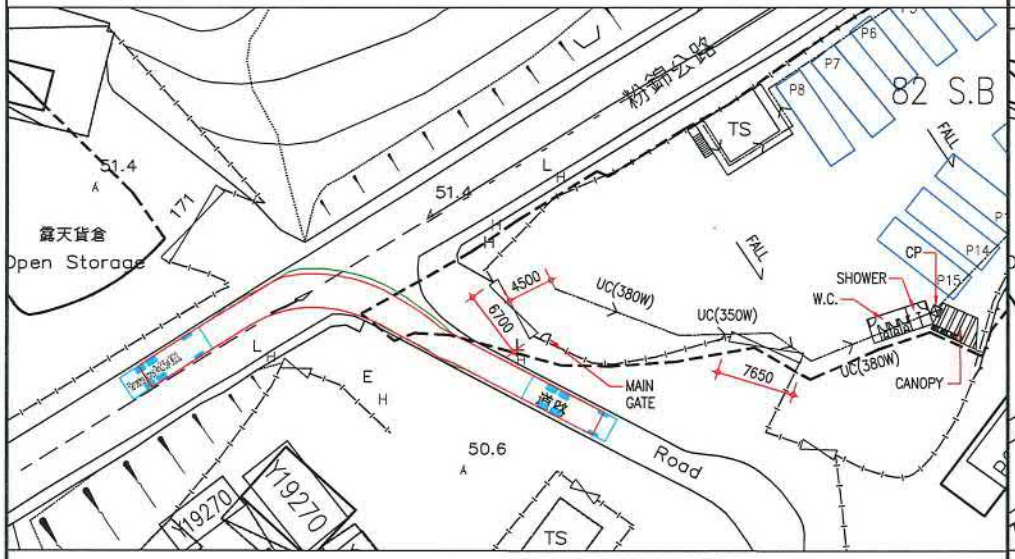

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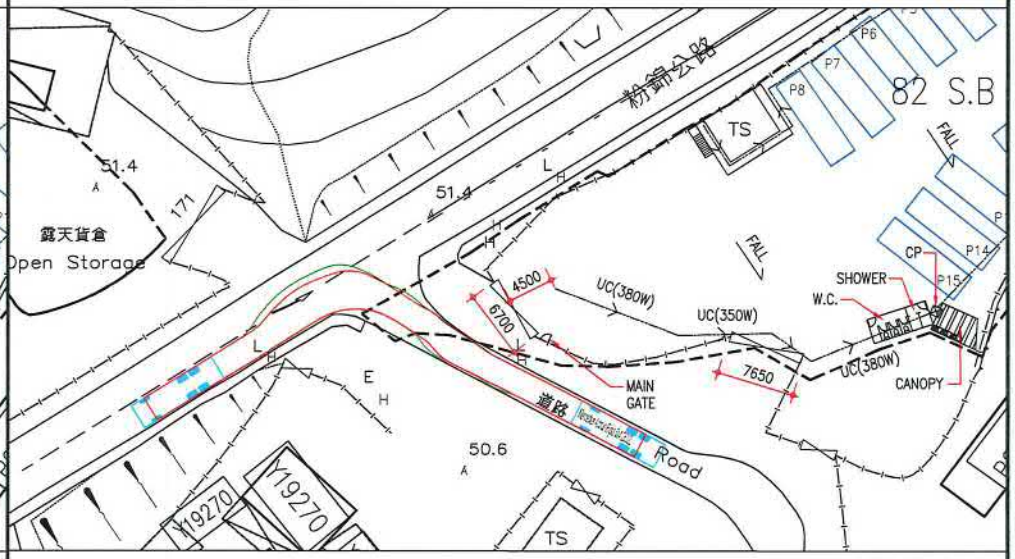

9.3–METRE GOODS VEHICLE MANOEUVRING (EXIT TO THE LEFT)
SPEED: 5KM/HR

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Drawing Title
SWEPT PATH DEMONSTRATION –
ENTRANCE AND EXIT (CARPARK PORTION)

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Scale	1:1000 @ A3

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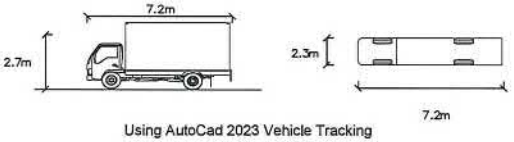
LEGEND

Path of Innermost Path

Path of Outermost Path

Swept Path Test:
7.2-metre Goods Vehicle



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7.2–METRE GOODS VEHICLE MANOEUVRING (IN)
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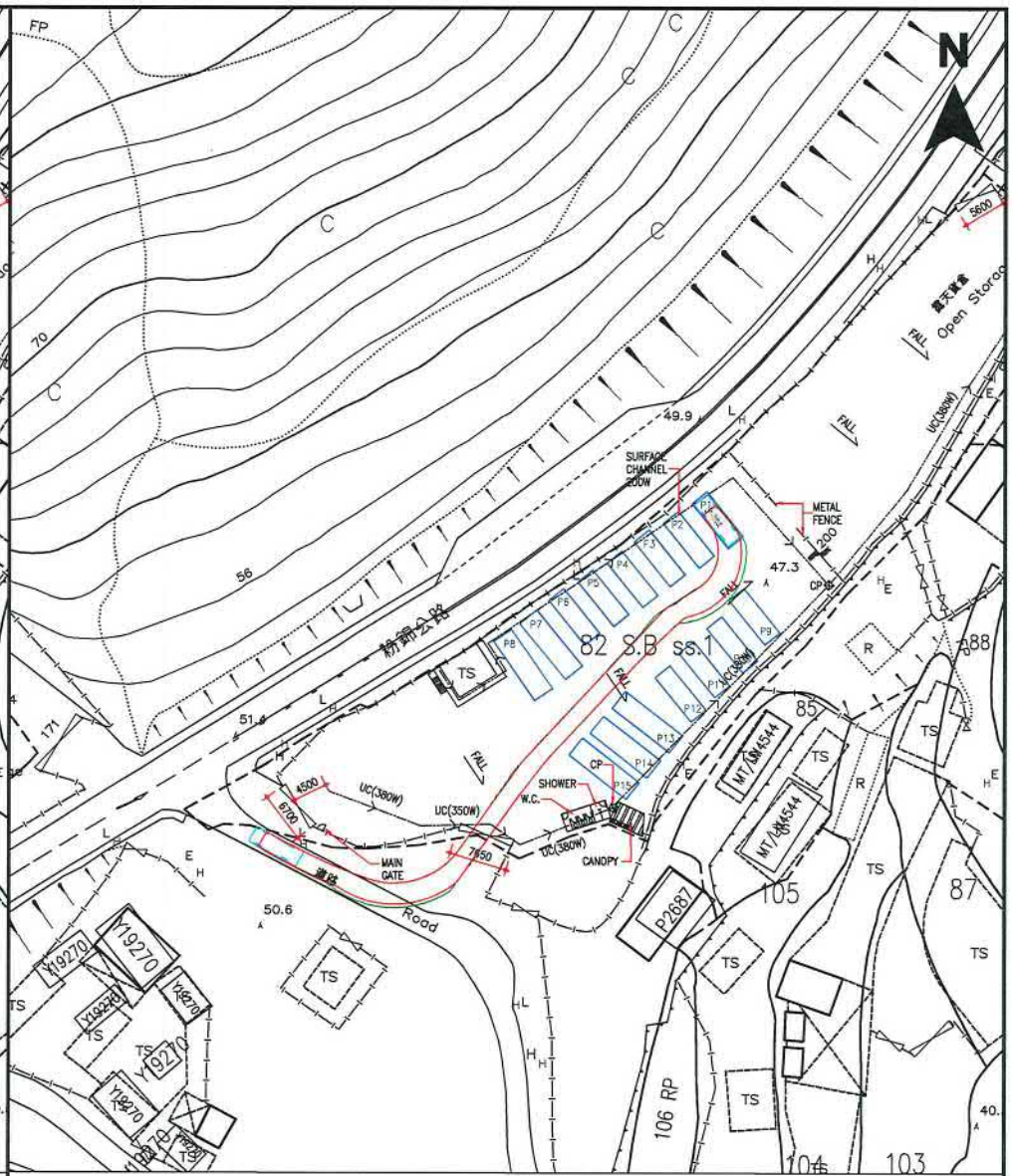

7.2–METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

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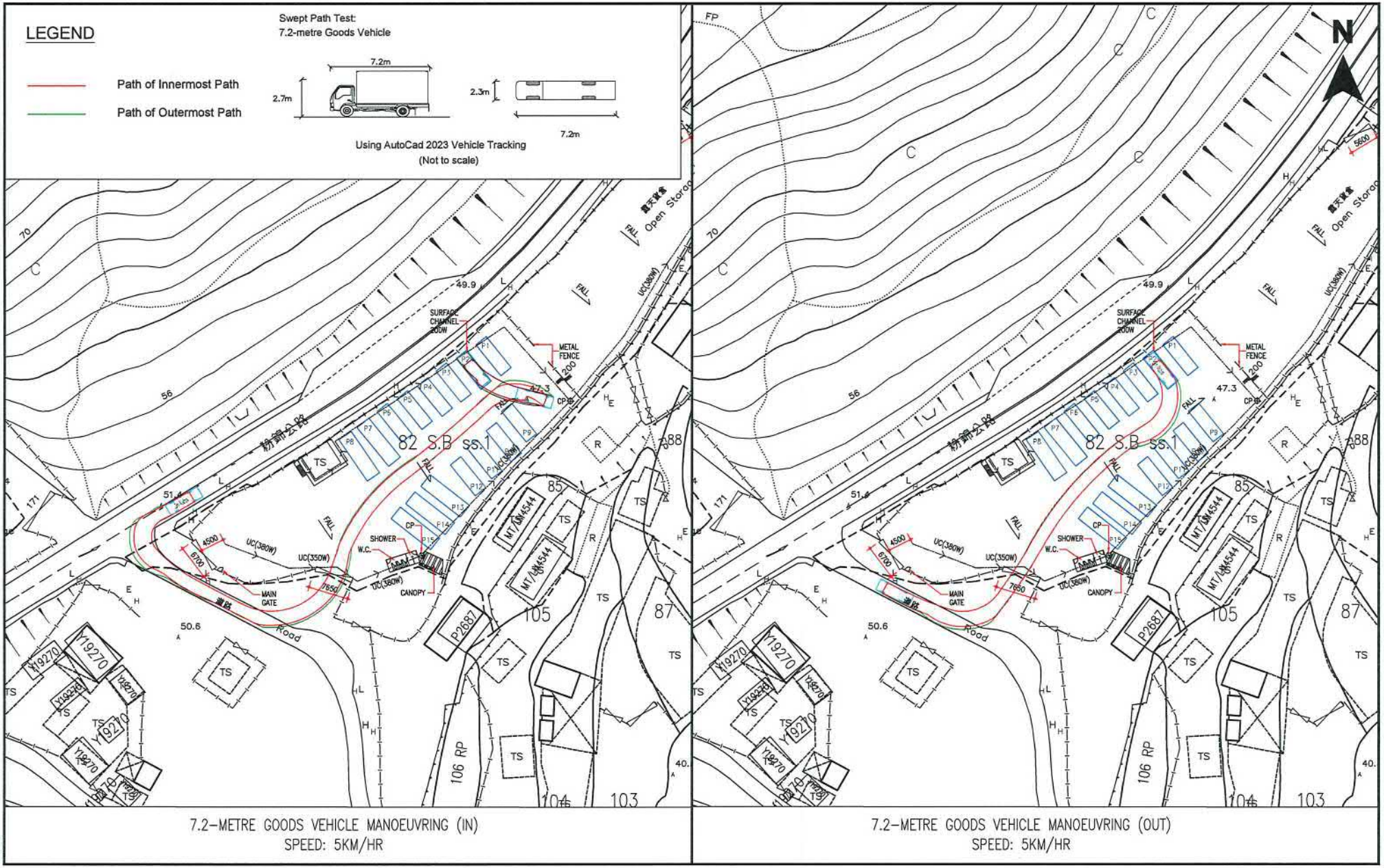

7.2–METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR

7.2–METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

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Drawing Title
SWEPT PATH DEMONSTRATION OF PARKING SPACE P2

Rev	Description	Date

Drawn: IY	Date: 05/07/22
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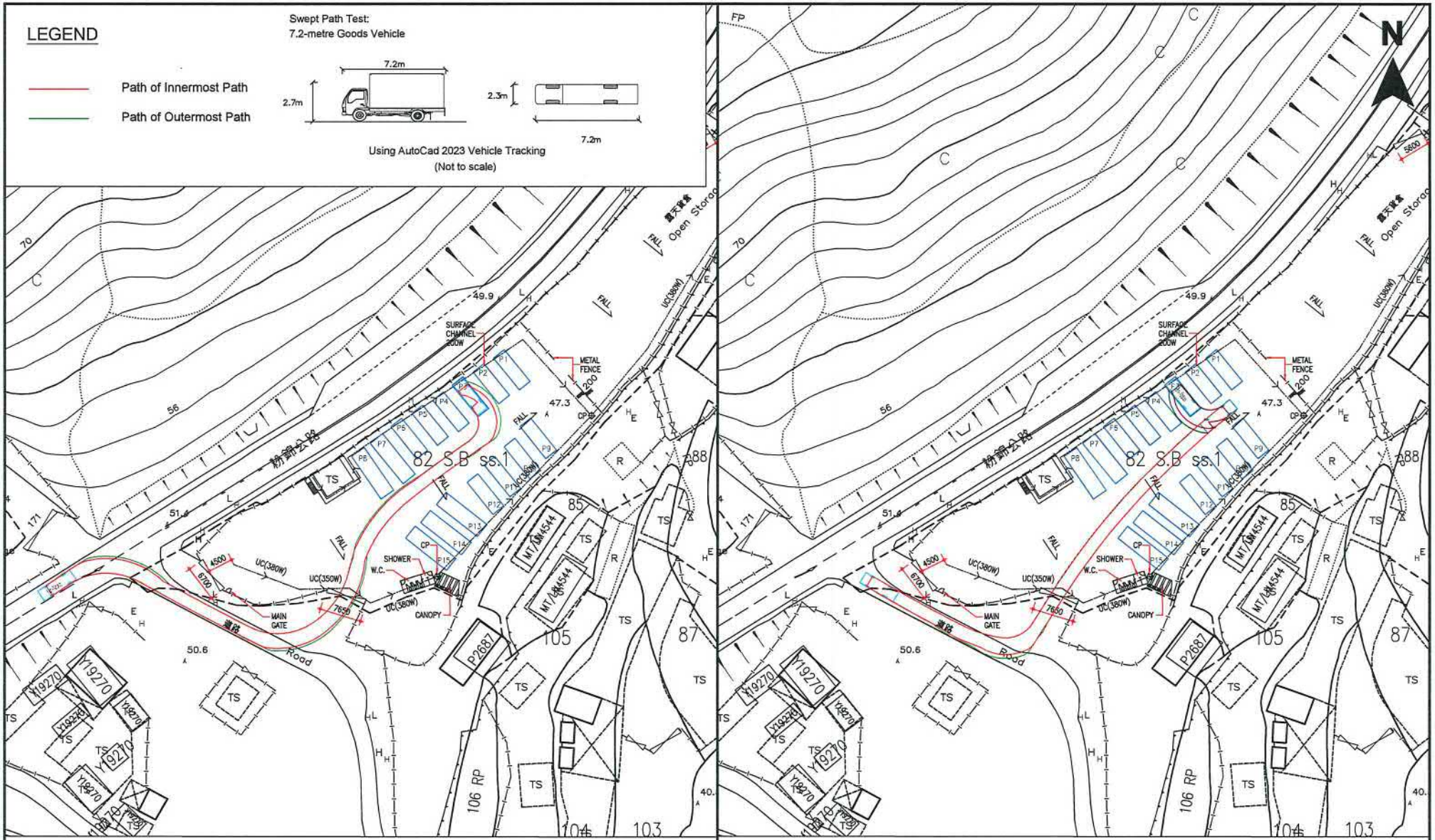
Drawing No.: TKYLCP_SP_P2

Rev.: –



7.2-METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR

7.2-METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

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Drawing Title
SWEPT PATH DEMONSTRATION OF PARKING SPACE P3

Rev	Description	Date

Drawn	IY
Date	05/07/22
Checked	CH
Approved	CH
Scale	1:1000 @ A3
Drawing No.	TKYLCP_SP_P3
Rev.	-

LEGEND

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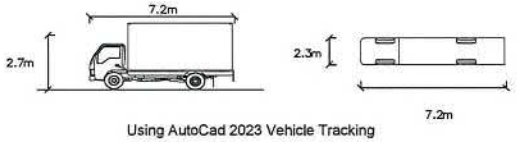
Path of Outermost Path

Swept Path Test:
7.2-metre Goods Vehicle



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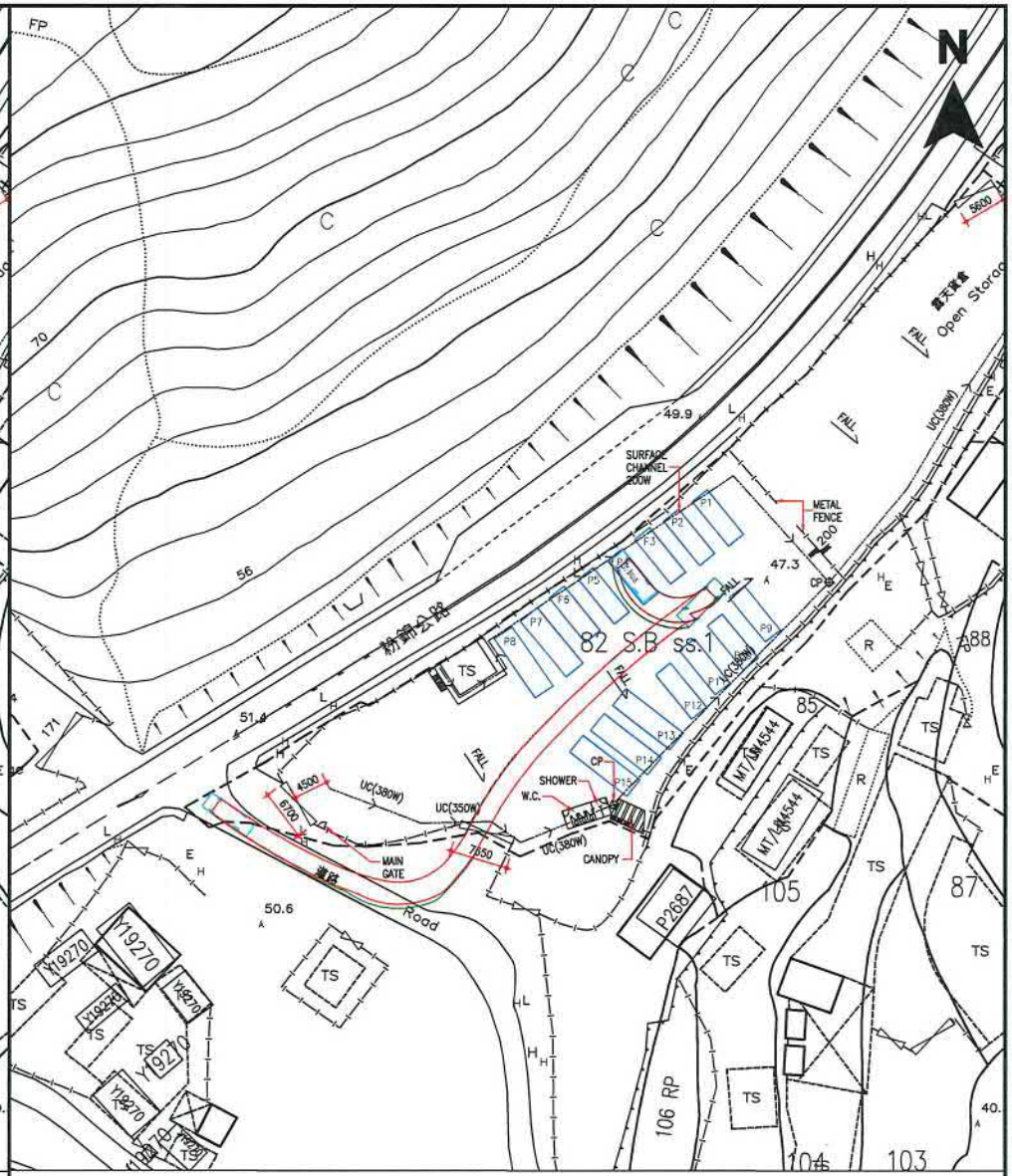
SPEED: 5KM/HR



7.2–METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

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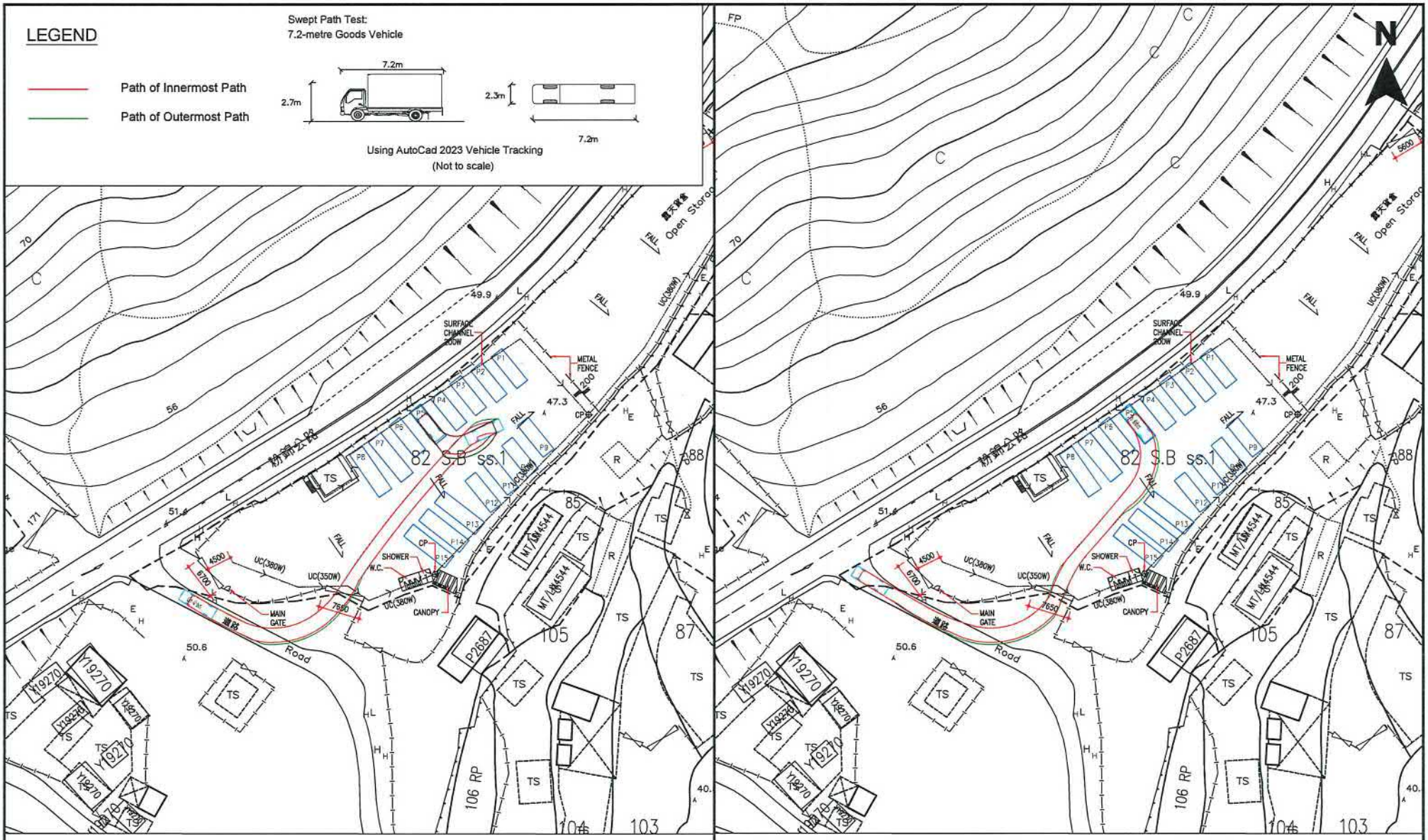

7.2–METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR

7.2–METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

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Drawing Title:
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Rev	Description	Date

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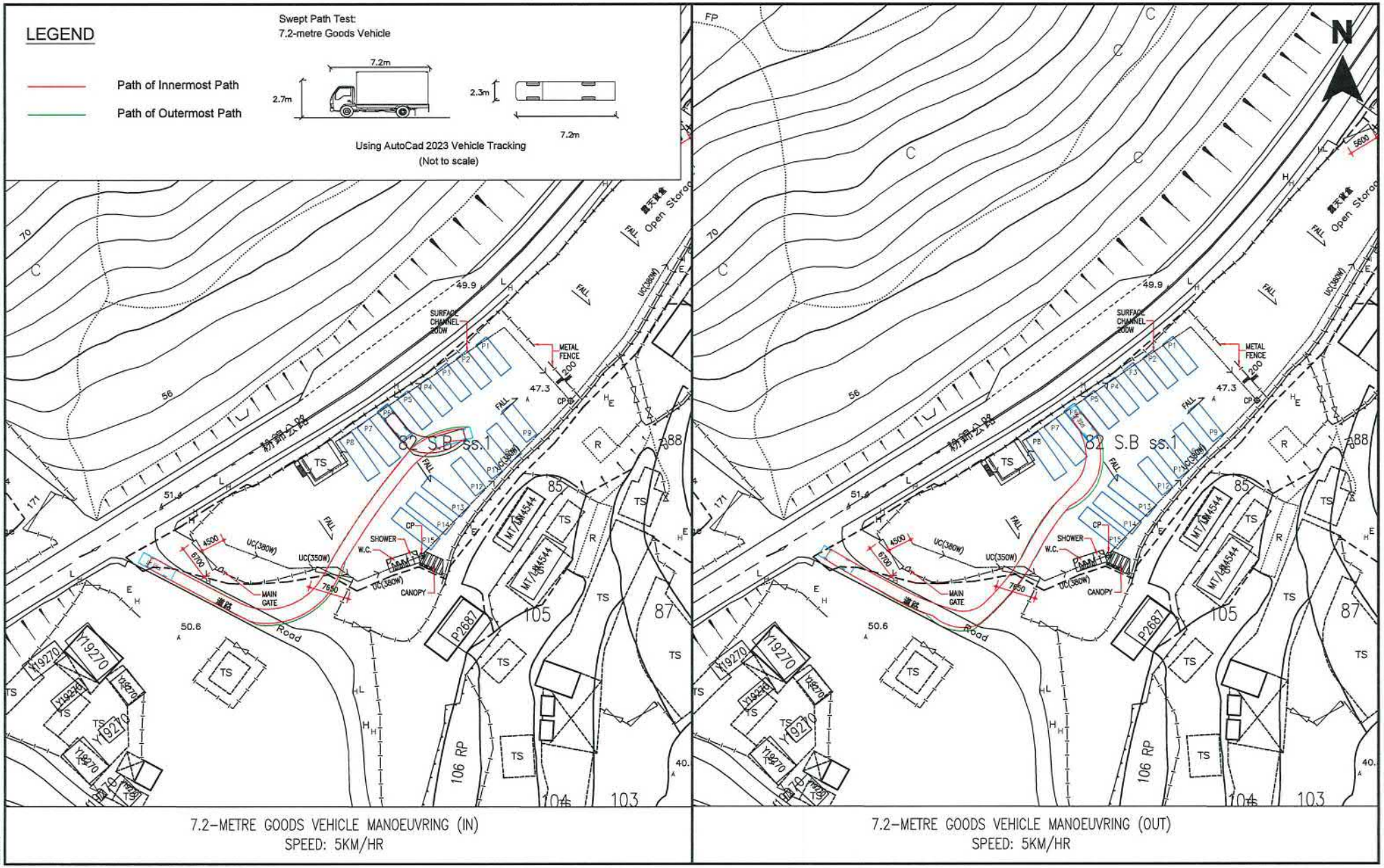
Rev.	-



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Drawing Title
SWEPT PATH DEMONSTRATION OF PARKING SPACE P6

Rev.	Description	Date

Drawn	IY	Date	05/07/22
Checked	CH	Approved	CH
Scale	1:1000 @ A3		

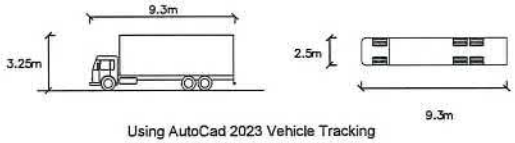
Drawing No.: TKYLCP_SP_P6
Rev.: -

LEGEND

Path of Innermost Path

Path of Outermost Path

Swept Path Test:
9.3-metre 24-tonne Goods Vehicle



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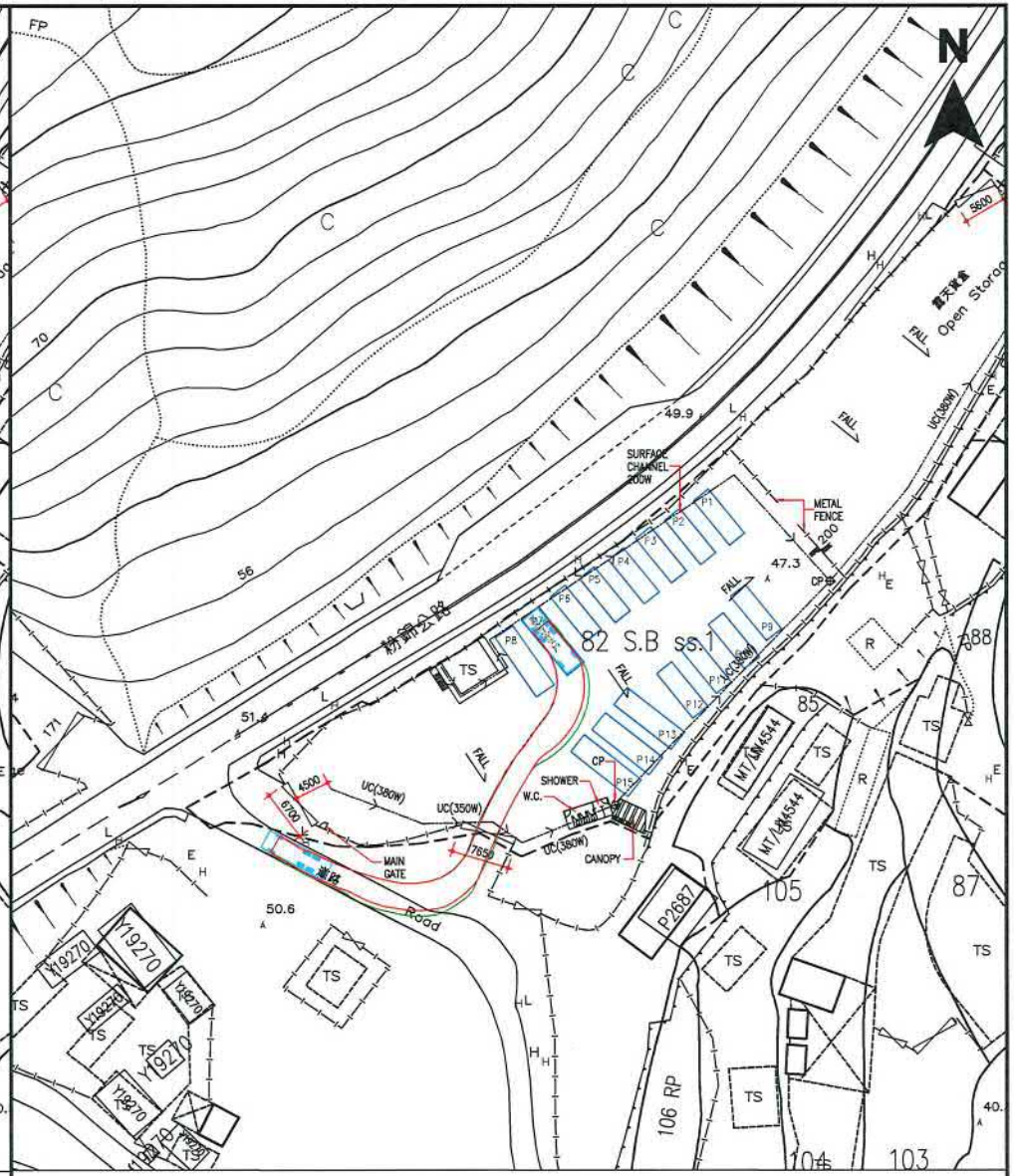
(Not to scale)

9.3-METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR



9.3-METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

Plotted by :
Filename :

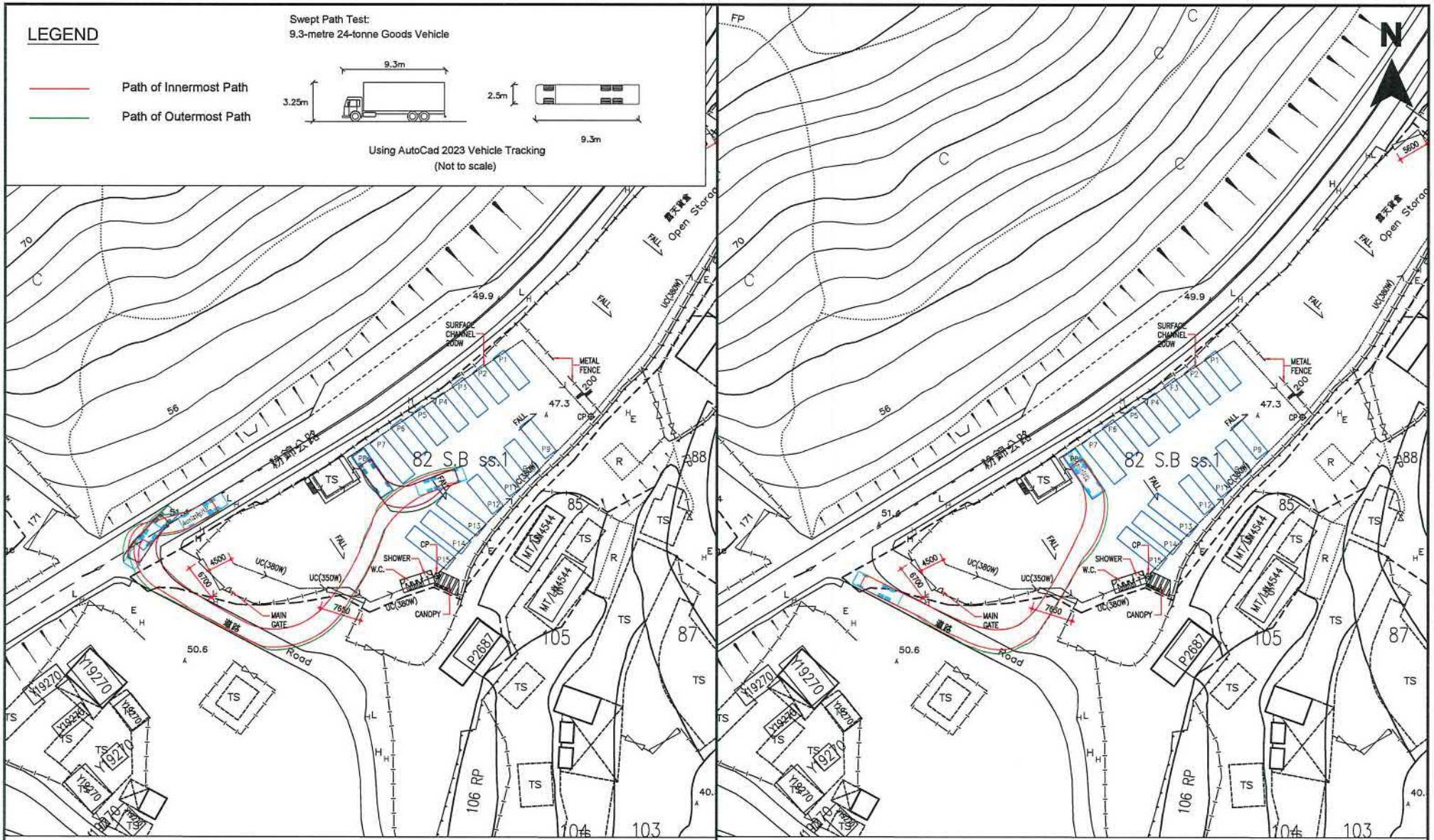
PRUDENTIAL 謹慎
SURVEYING • LAND ADVISORY • VALUATION
ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING 244 DES VOEUX ROAD CENTRAL HONG KONG
TEL: 2507 8333
FAX: 2598 6578

JOB TITLE:
TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD10B, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES

Drawing Title
SWEPT PATH DEMONSTRATION OF PARKING SPACE P7

Rev	Description	Date

Drawn	IY
Date	05/07/22
Checked	CH
Approved	CH
Scale	1:1000 @ A3
Drawing No.	TKYLCP_SP_P7
Rev.	-



Printed by :
Filename :

PRUDENTIAL 謙信
SURVEYING · LAND ADMINISTRY · VALUATION 行

ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING
244 DES VOEUX ROAD CENTRAL HONG KONG
TEL: 2507 8333
FAX: 2598 8378

JOB TITLE:
TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD108, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES

Drawing Title:
SWEPT PATH DEMONSTRATION OF PARKING SPACE P8

Rev	Description	Date

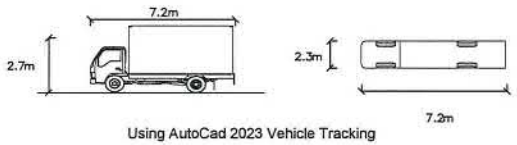
Drawn	IY	Date	05/07/22
Checked	CH	Approved	CH
Scale	1:1000 @ A3	Drawing No.	TKYLCP_SP_P8
		Rev.	-

LEGEND

Path of Innermost Path

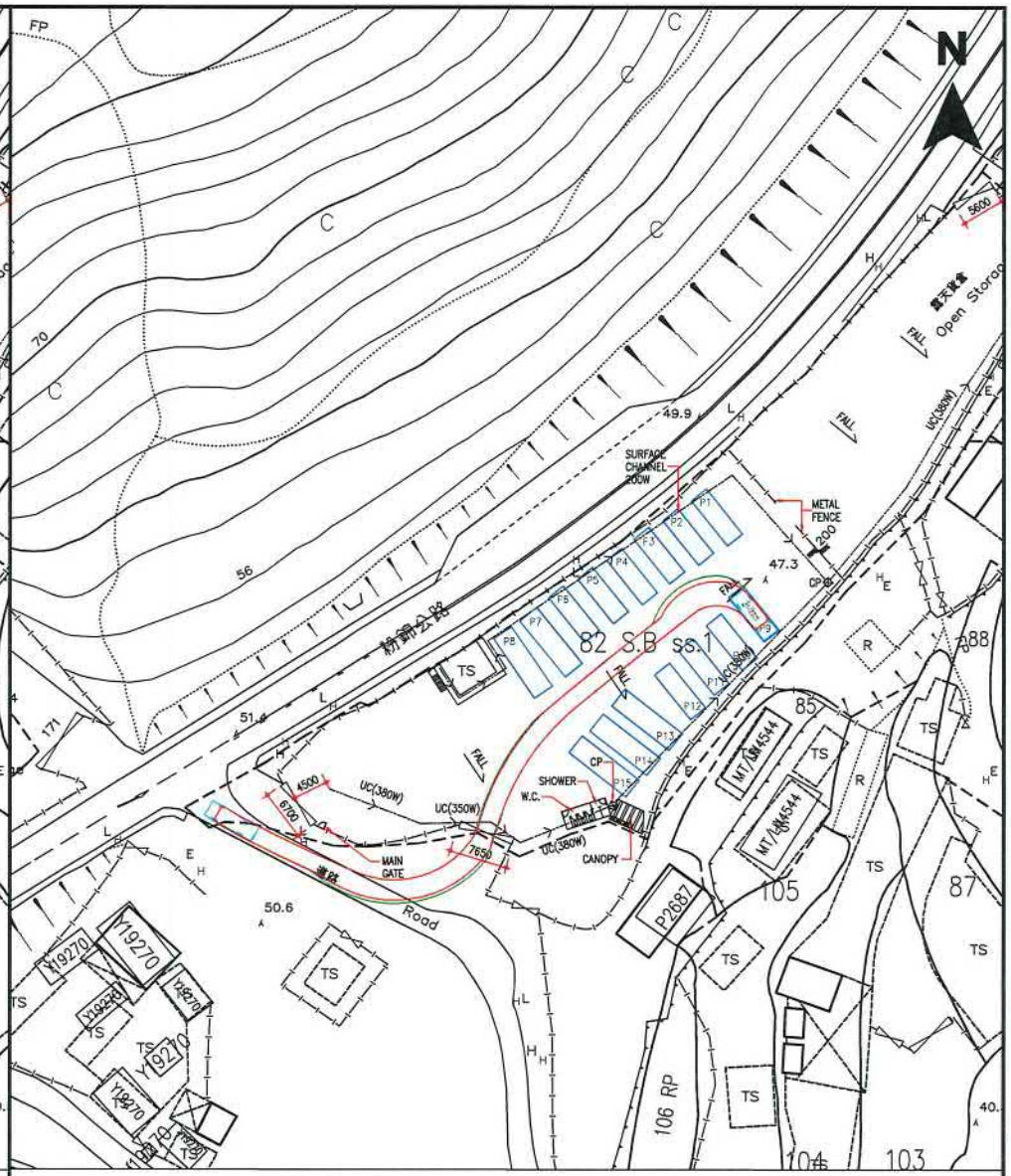
Path of Outermost Path

Swept Path Test:
7.2-metre Goods Vehicle



Using AutoCad 2023 Vehicle Tracking
(Not to scale)

7.2-METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR



7.2-METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

Printed by : Plotted :

PRUDENTIAL 謹慎 SURVEYING · LAND ADMINISTRATION · VALUATION 測量	ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING 244 DES VOEUX ROAD CENTRAL HONG KONG TEL: 2507 6333 FAX: 2548 6378	JOB TITLE: TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD108, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES	Drawing Title SWEPT PATH DEMONSTRATION OF PARKING SPACE P9	Rev / Description / Date	Drawn: IY; Date: 05/07/22 Checked: CH; Approved: CH Scale: 1:1000 @ A3 Drawing No.: TKYLCP_SP_P9 Rev.: -

7.2–METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR

7.2–METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

Plotted by : Filename :

PRUDENTIAL 測繪行
SURVEYING · LAND ADVISORY · VALUATION 測量 · 土地諮詢 · 估值

ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING 244 DES VOEUX ROAD CENTRAL HONG KONG
TEL: 2507 8333
FAX: 2598 8578

JOB TITLE
TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD10B, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES

Drawing Title
SWEPT PATH DEMONSTRATION OF PARKING SPACE P10

Rev.	Description	Date

Drawn	IY	Date	05/07/22
Checked	CH	Approved	CH
Scale	1:1000 @ A3		

Drawing No.
TKYLCP_SP_P10

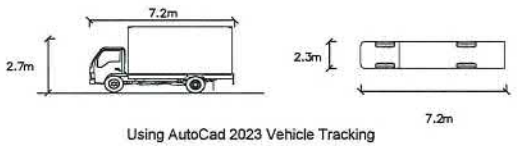
Rev.
-

LEGEND

Path of Innermost Path

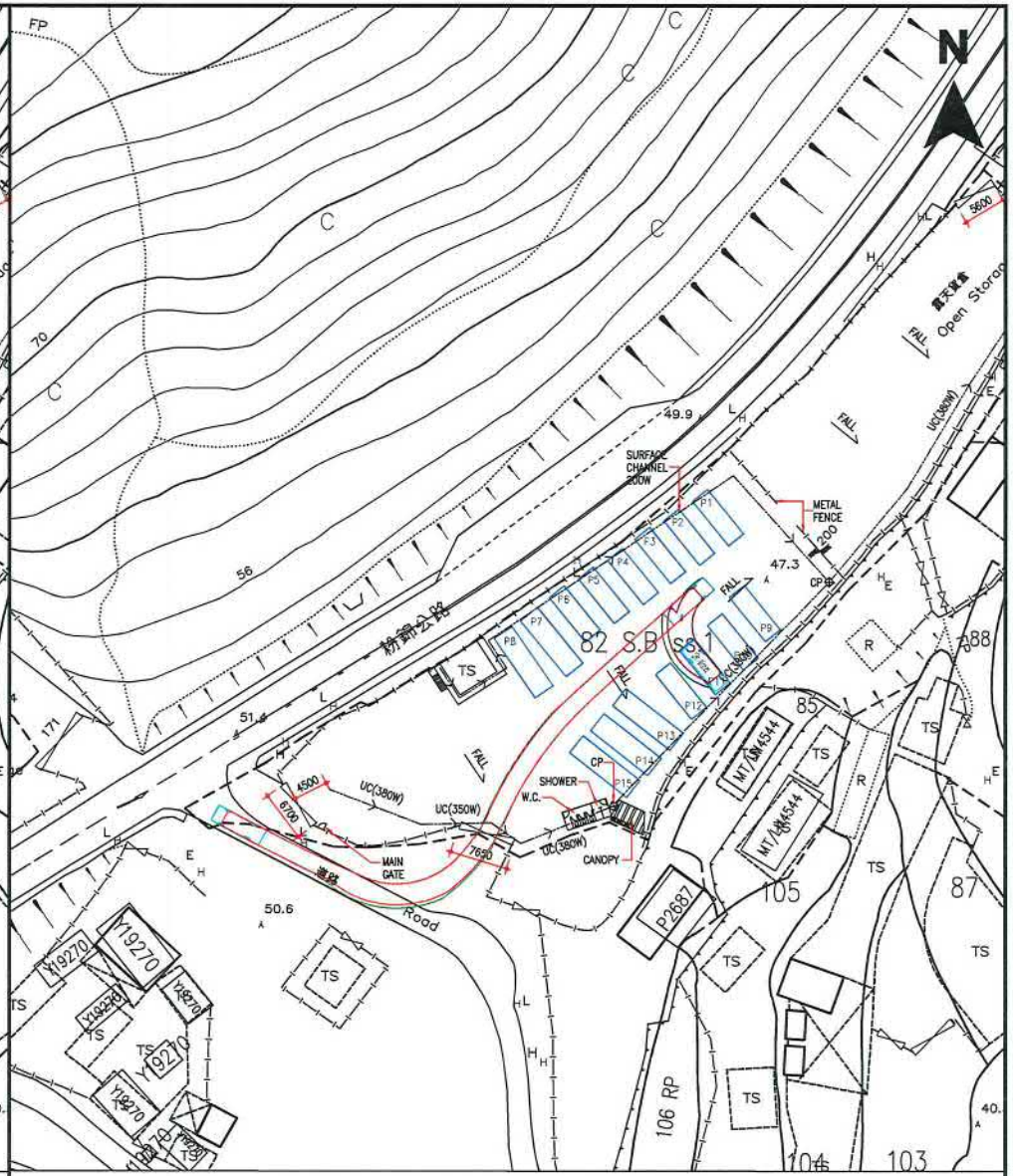
Path of Outermost Path

Swept Path Test:
7.2-metre Goods Vehicle



Using AutoCad 2023 Vehicle Tracking
(Not to scale)

7.2–METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR



7.2–METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

Plotted by :
Filename :

PRUDENTIAL
SURVEYING · LAND ADVISORY · VALUATION

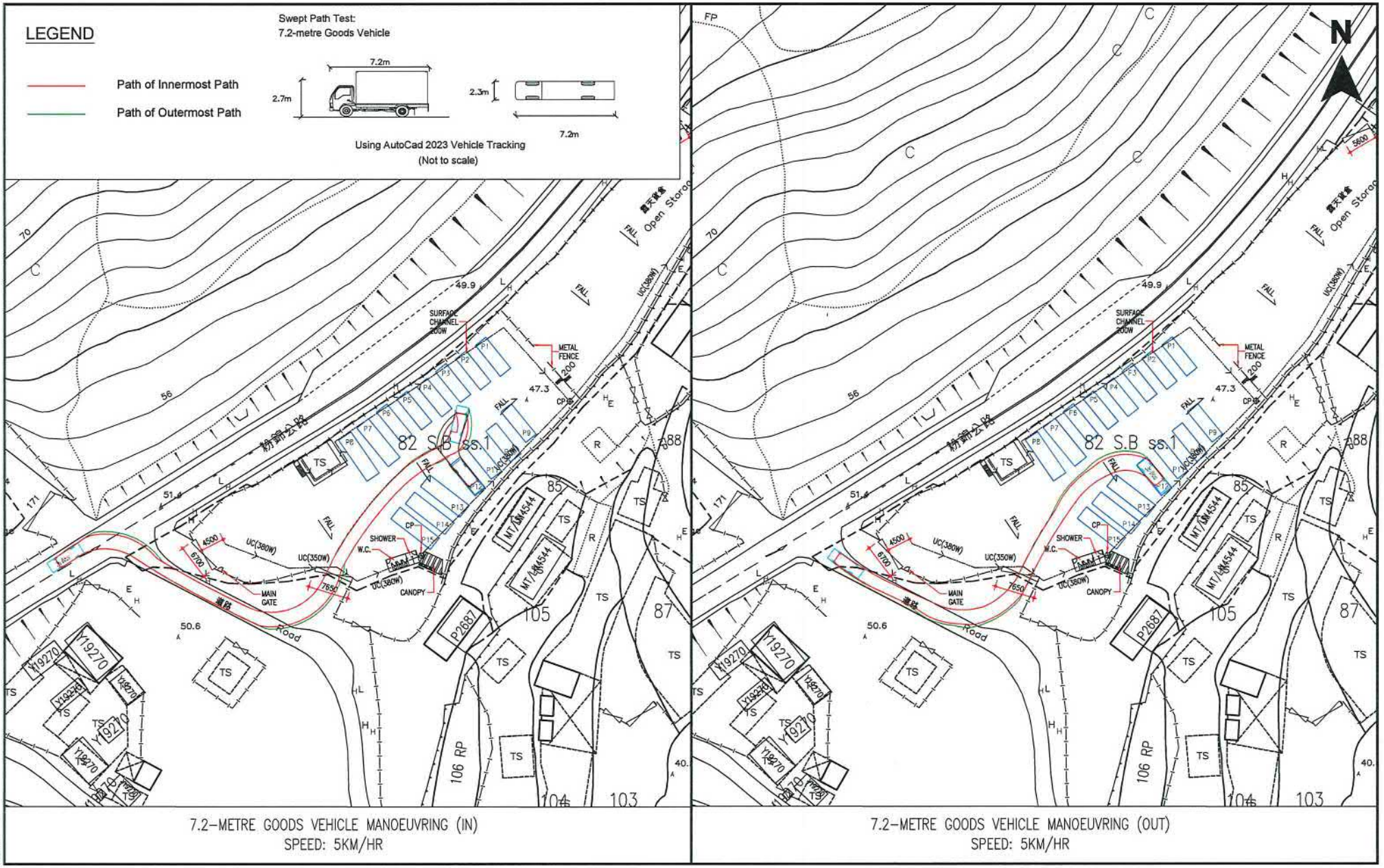
ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING
244 DES VOEUX ROAD CENTRAL HONG KONG
TEL: 2507 8333
FAX: 2598 8578

JOB TITLE:
TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD10B, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES

Drawing Title:
SWEPT PATH DEMONSTRATION OF PARKING SPACE P11

Rev	Description	Date

Drawn	IY
Date	05/07/22
Checked	CH
Approved	CH
Scale	1:1000 @ A3
Drawing No.	TKYLCP_SP_P11
Rev.	-



Plotted by : Filename

PRUDENTIAL SURVEYING · LAND ADVISORY · VALUATION

ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING 244 DES VOEUX ROAD CENTRAL HONG KONG
TEL: 2507 8333
FAX: 2598 6578

JOB TITLE:
TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD10B, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES

Drawing Title
SWEPT PATH DEMONSTRATION OF PARKING SPACE P12

Rev	Description	Date

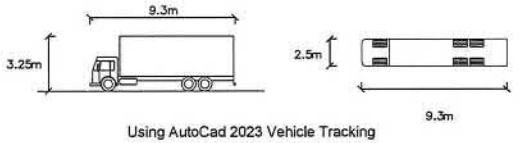
Drawn	IY
Date	05/07/22
Checked	CH
Approved	CH
Scale	1:1000 @ A3
Drawing No.	TKYLCP_SP_P12
Rev.	-

LEGEND

Path of Innermost Path

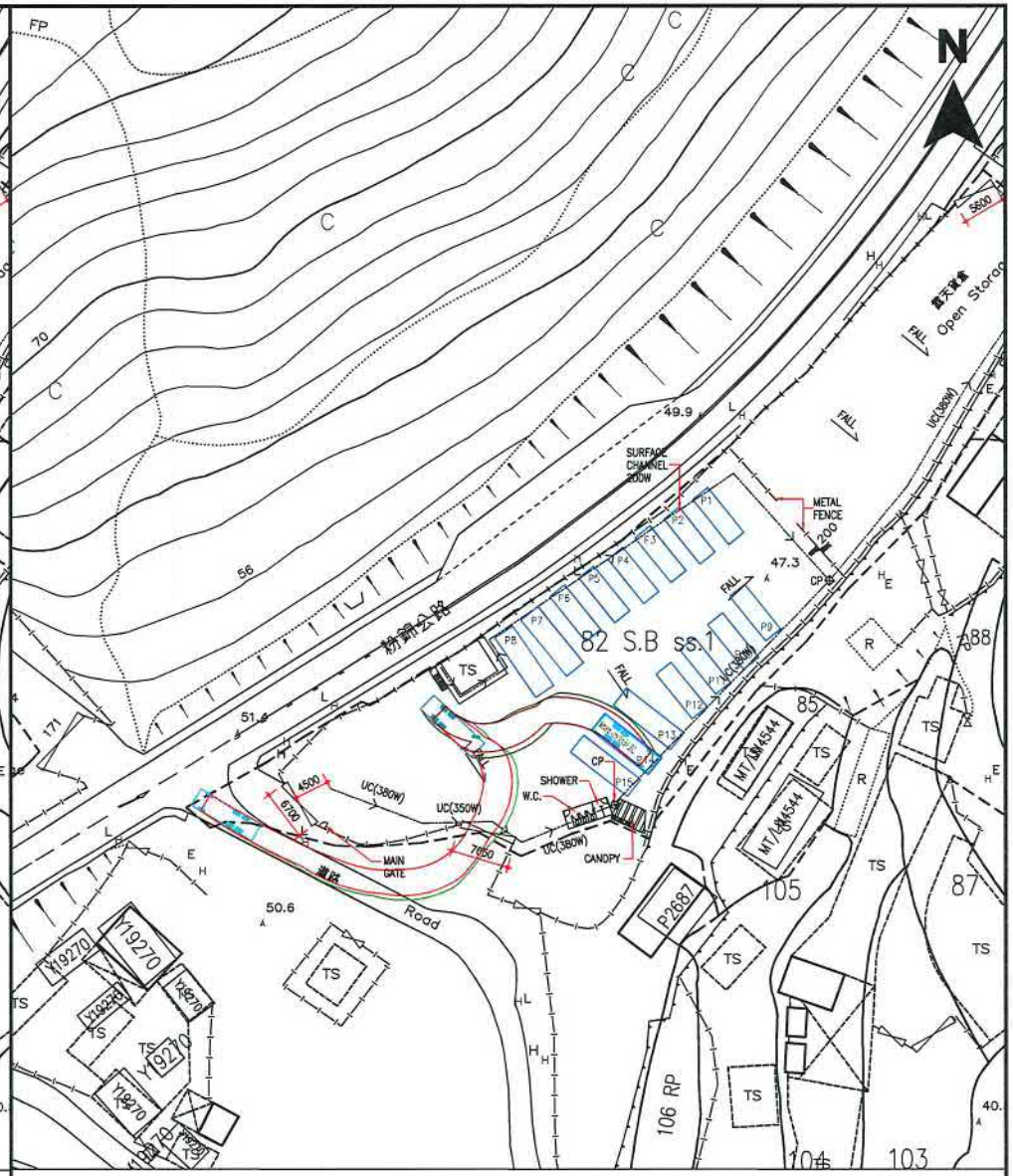
Path of Outermost Path

Swept Path Test:
9.3-metre 24-tonne Goods Vehicle



Using AutoCad 2023 Vehicle Tracking
(Not to scale)

9.3-METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR



9.3-METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

Printed by : . . .
Filename : . . .

PRUDENTIAL 測量行 SURVEYING · LAND ADVISORY · VALUATION 行	JOB TITLE: TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD108, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES	Drawing Title: SWEPT PATH DEMONSTRATION OF PARKING SPACE P14	Rev. / Description / Date	Drawn: IY; Date: 05/07/22; Checked: CH; Approved: CH; Scale: 1:1000 @ A3	Drawing No.: TKYLCP_SP_P14; Rev.: -

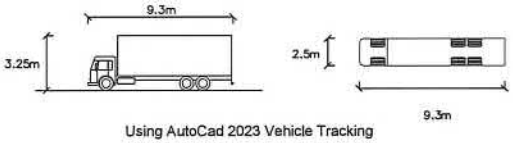
ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING 244 DES VOEUX ROAD CENTRAL HONG KONG
TEL: 2507 5333
FAX: 2598 6578

LEGEND

Path of Innermost Path

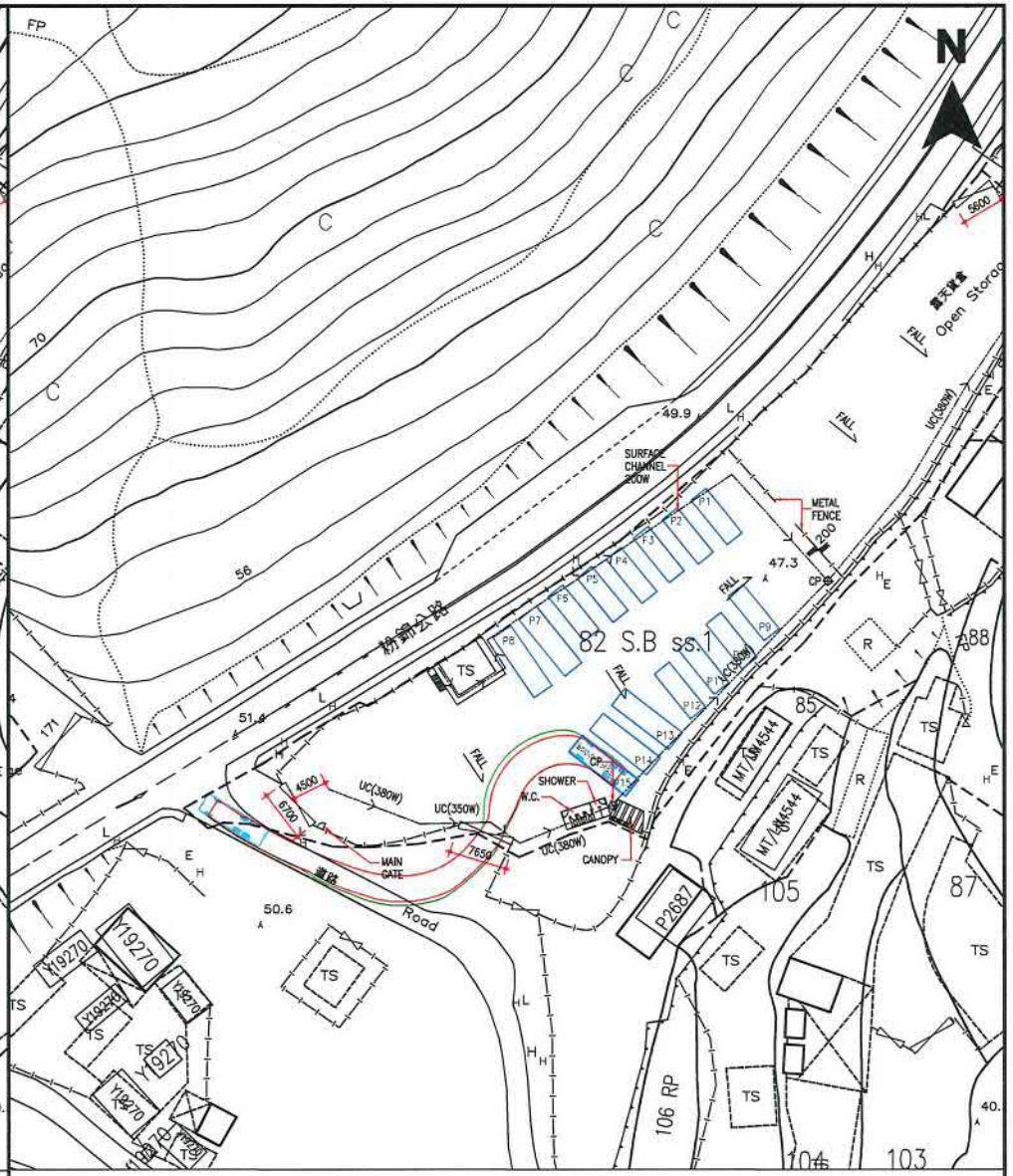
Path of Outermost Path

Swept Path Test:
9.3-metre 24-tonne Goods Vehicle



Using AutoCad 2023 Vehicle Tracking
(Not to scale)

9.3-METRE GOODS VEHICLE MANOEUVRING (IN)
SPEED: 5KM/HR



9.3-METRE GOODS VEHICLE MANOEUVRING (OUT)
SPEED: 5KM/HR

Printed by : Plotsmo

PRUDENTIAL 謙信 SURVEYING · LAND ADVISORY · VALUATION ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING 244 DES VOEUX ROAD CENTRAL HONG KONG TEL: 2507 8333 FAX: 2598 6578	JOB TITLE: TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD108, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES	Drawing Title SWEPT PATH DEMONSTRATION OF PARKING SPACE P15	Rev. / Description / Date	Drawn: IY; Date: 05/07/22. Checked: CH; Approved: CH Scale: 1:1000 @ A3	Drawing No.: TKYLCP_SP_P15 Rev.: -

Printed by Floriana

PRUDENTIAL 謙信行
SURVEYING · LAND AGGREGATE · VALUATION
ADDRESS: 2/F & 3/F TUNG HIP COMMERCIAL BUILDING 244 DES VOEUX ROAD CENTRAL, HONG KONG
TEL: 2507 8333
FAX: 2598 8579

JOB TITLE:
TEMPORARY VEHICLE PARK (MEDIUM AND HEAVY GOODS VEHICLE) AND OPEN STORAGE (OPERATIONAL TOOLS AND MATERIALS) USE FOR 3 YEARS AND FILLING OF LAND AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 (PART) IN DD108, FAN KAM ROAD, PAT HEUNG, NEW TERRITORIES

Drawing Title
SWEPT PATH DEMONSTRATION OF PARKING SPACE P13

Rev	Description	Date

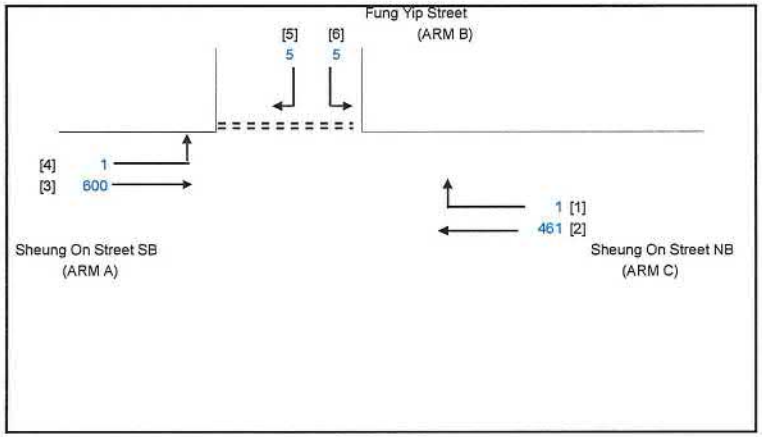
Drawn	Date	Drawing No.
IY	05/07/22	TKYLCP_SP_P13
Checked	Approved	
CH	CH	
Scale		Rev.
1:1000 @ A3		-

Appendix B

Junction Calculations

PRIORITY JUNCTION CALCULATION

					INITIALS	DATE
S16 for DD108 (Section) Fan Kam Road, Pat Heung, Yuen Long		2022AM	PROJECT NO.:	PREPARED BY:	IY	Jul-22
J1: Fan Kam Road / Local Road to Ta Shek Wu Tsuen			FILENAME :	CHECKED BY:	HY	Jul-22
2022 AM			J1_FKR-TSWT.xls	REVIEWED BY:	CH	Jul-22



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	6.00	(metres)
W cr	=	0	(metres)
q a-b	=	1	(pcu/hr)
q a-c	=	600	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	250	(metres)
q c-a	=	460.6	(pcu/hr)
q c-b	=	1	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	250	(metres)
Vr b-a	=	250	(metres)
Vr b-c	=	250	(metres)
q b-a	=	5	(pcu/hr)
q b-c	=	5	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.1116764
E	=	1.0487513
F	=	1.0487513
Y	=	0.793

THE CAPACITY OF MOVEMENT :

Q b-a	=	411			
Q b-c	=	600	Q b-c (O) =	598.2	
Q c-b	=	599			
Q b-ac	=	487.8			

TOTAL FLOW = 1072.3788 (PCU/HR)

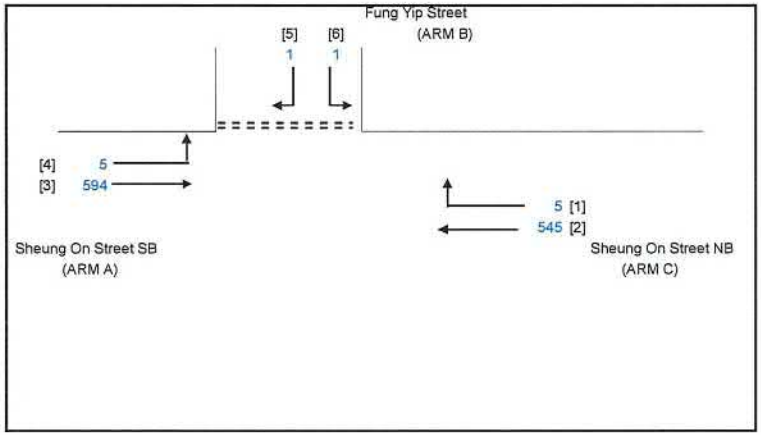
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0122
DFC b-c	=	0.0083
DFC c-b	=	0.0017
DFC b-c (share lane)	=	0.0102

CRITICAL DFC = 0.01

PRIORITY JUNCTION CALCULATION

					INITIALS	DATE
S16 for DD108 (Section) Fan Kam Road, Pat Heung, Yuen Long		2022PM	PROJECT NO.:	PREPARED BY:	IY	Jul-22
J1: Fan Kam Road / Local Road to Ta Shek Wu Tsuen			FILENAME :	CHECKED BY:	HY	Jul-22
2022 PM			J1_FKR-TSWT.xls	REVIEWED BY:	CH	Jul-22



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	6.00	(metres)
W cr	=	0	(metres)
q a-b	=	5	(pcu/hr)
q a-c	=	594	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	250	(metres)
q c-a	=	545.4	(pcu/hr)
q c-b	=	5	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	250	(metres)
Vr b-a	=	250	(metres)
Vr b-c	=	250	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	1	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.1116764
E	=	1.0487513
F	=	1.0487513
Y	=	0.793

THE CAPACITY OF MOVEMENT :

Q b-a	=	393			
Q b-c	=	601	Q b-c (O) =	600.6	
Q c-b	=	600			
Q b-ac	=	475.2			

TOTAL FLOW = 1151.28 (PCU/HR)

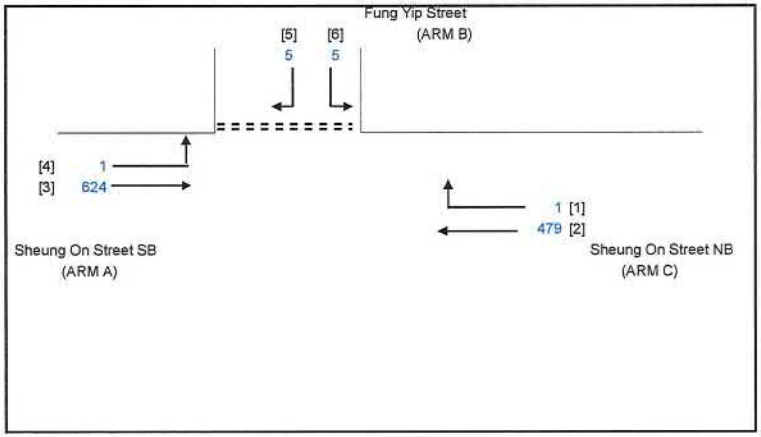
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0025
DFC b-c	=	0.0017
DFC c-b	=	0.0083
DFC b-c (share lane)	=	0.0021

CRITICAL DFC = 0.01

PRIORITY JUNCTION CALCULATION

			INITIALS	DATE
S16 for DD108 (Section) Fan Kam Road, Pat Heung, Yuen Long	2026AMref	PROJECT NO.: PREPARED BY:	IY	Jul-22
J1: Fan Kam Road / Local Road to Ta Shek Wu Tsuen		FILENAME : CHECKED BY:	HY	Jul-22
2026 AM ref		J1_FKR-TSWT.xls REVIEWED BY:	CH	Jul-22



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	6.00	(metres)
W cr	=	0	(metres)
q a-b	=	1	(pcu/hr)
q a-c	=	624	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	250	(metres)
q c-a	=	479.3	(pcu/hr)
q c-b	=	1	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	250	(metres)
Vr b-a	=	250	(metres)
Vr b-c	=	250	(metres)
q b-a	=	5	(pcu/hr)
q b-c	=	5	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.1116764
E	=	1.0487513
F	=	1.0487513
Y	=	0.793

THE CAPACITY OF MOVEMENT :

Q b-a	=	399		
Q b-c	=	592	Q b-c (O) =	590.1
Q c-b	=	592		
Q b-ac	=	476.7		

TOTAL FLOW = 1115.434431 (PCU/HR)

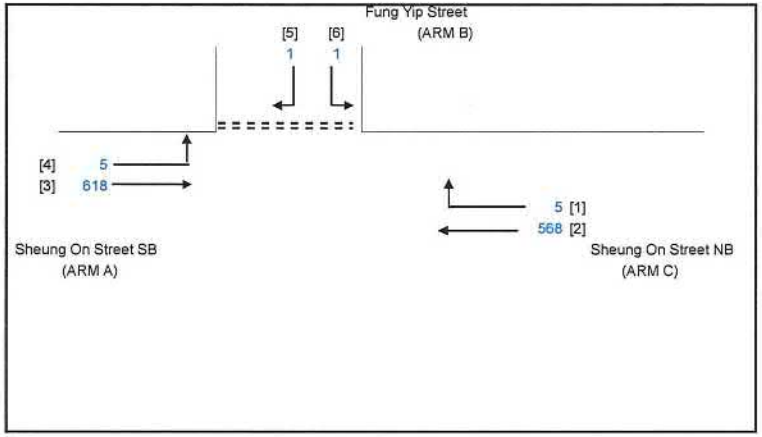
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0125
DFC b-c	=	0.0084
DFC c-b	=	0.0017
DFC b-c (share lane)	=	0.0105

CRITICAL DFC = 0.01

PRIORITY JUNCTION CALCULATION

					INITIALS	DATE
S16 for DD108 (Section) Fan Kam Road, Pat Heung, Yuen Long		2026PMref	PROJECT NO.:	PREPARED BY:	IY	Jul-22
J1: Fan Kam Road / Local Road to Ta Shek Wu Tsuen			FILENAME :	CHECKED BY:	HY	Jul-22
2026 PM ref			J1_FKR-TSWT.xls	REVIEWED BY:	CH	Jul-22



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	6.00	(metres)
W cr	=	0	(metres)
q a-b	=	5	(pcu/hr)
q a-c	=	618	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	250	(metres)
q c-a	=	567.5	(pcu/hr)
q c-b	=	5	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	250	(metres)
Vr b-a	=	250	(metres)
Vr b-c	=	250	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	1	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.1116764
E	=	1.0487513
F	=	1.0487513
Y	=	0.793

THE CAPACITY OF MOVEMENT :

Q b-a	=	381			
Q b-c	=	594	Q b-c (O) =	593.6	
Q c-b	=	593			
Q b-ac	=	464.2			

TOTAL FLOW = 1197.539337 (PCU/HR)

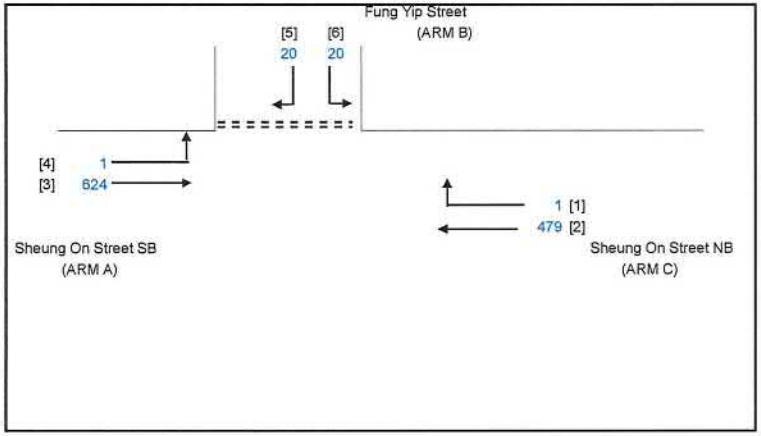
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0026
DFC b-c	=	0.0017
DFC c-b	=	0.0084
DFC b-c (share lane)	=	0.0022

CRITICAL DFC = 0.01

PRIORITY JUNCTION CALCULATION

			INITIALS	DATE
S16 for DD108 (Section) Fan Kam Road, Pat Heung, Yuen Long	2026AMdes	PROJECT NO.: PREPARED BY:	IY	Jul-22
J1: Fan Kam Road / Local Road to Ta Shek Wu Tsuen		FILENAME : CHECKED BY:	HY	Jul-22
2026 AM ref		J1_FKR-TSWT.xls REVIEWED BY:	CH	Jul-22



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	6.00	(metres)
W cr	=	0	(metres)
q a-b	=	1	(pcu/hr)
q a-c	=	624	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	250	(metres)
q c-a	=	479.3	(pcu/hr)
q c-b	=	1	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	250	(metres)
Vr b-a	=	250	(metres)
Vr b-c	=	250	(metres)
q b-a	=	20	(pcu/hr)
q b-c	=	20	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.1116764
E	=	1.0487513
F	=	1.0487513
Y	=	0.793

THE CAPACITY OF MOVEMENT :

Q b-a	=	399		
Q b-c	=	592	Q b-c (O) =	584.6
Q c-b	=	592		
Q b-ac	=	476.7		

TOTAL FLOW = 1145.434431 (PCU/HR)

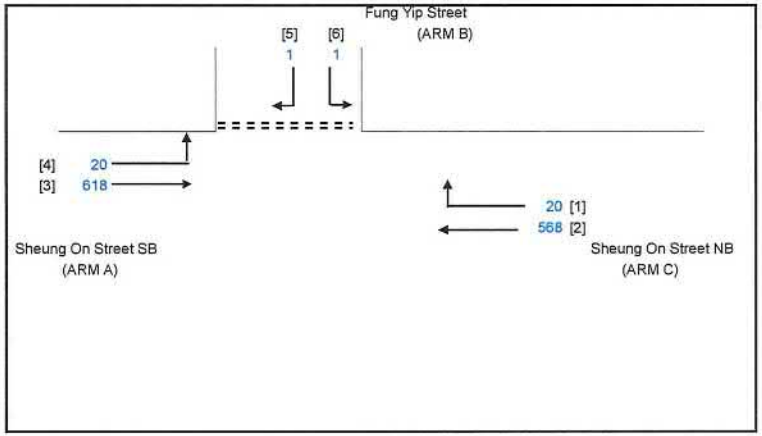
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0501
DFC b-c	=	0.0338
DFC c-b	=	0.0017
DFC b-c (share lane)	=	0.0420

CRITICAL DFC = 0.05

PRIORITY JUNCTION CALCULATION

						INITIALS	DATE
S16 for DD108 (Section) Fan Kam Road, Pat Heung, Yuen Long		2026PMdes	PROJECT NO.:	PREPARED BY:	IY	Jul-22
J1: Fan Kam Road / Local Road to Ta Shek Wu Tsuen			FILENAME :	CHECKED BY:	HY	Jul-22
2026 PM ref			J1_FKR-TSWT.xls	REVIEWED BY:	CH	Jul-22



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	6.00	(metres)
W cr	=	0	(metres)
q a-b	=	20	(pcu/hr)
q a-c	=	618	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	250	(metres)
q c-a	=	567.5	(pcu/hr)
q c-b	=	20	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	250	(metres)
Vr b-a	=	250	(metres)
Vr b-c	=	250	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	1	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.1116764
E	=	1.0487513
F	=	1.0487513
Y	=	0.793

THE CAPACITY OF MOVEMENT :

Q b-a	=	372			
Q b-c	=	592	Q b-c (O) =	591.6	
Q c-b	=	588			
Q b-ac	=	456.9			

TOTAL FLOW = 1227.539337 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0027
DFC b-c	=	0.0017
DFC c-b	=	0.0340
DFC b-c (share lane)	=	0.0022

CRITICAL DFC = 0.03

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Prudential Surveyors International Limited
測建行有限公司

20 February 2023

Your Ref: TPB/A/YL-PH/933
Our Ref: TPB200223OA-B8354

Secretary
Town Planning Board
15/F North Point Government Offices
333 Java Road
North Point
Hong Kong

Dear Sirs,

Re: A/YL-PH/933 – Further Information 1
Section 16 Application for Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories

We refer to the captioned Section 16 application.

We would like to submit our reply to the comments from the Transport Department and Drainage Services Department received on 13 December 2022 as attached.

If you have any enquiries, please feel free to contact our Mr. Ken Fong at or the undersigned at .

Yours faithfully
For and on behalf of
PRUDENTIAL SURVEYORS INTERNATIONAL LIMITED

Michael C K Lee
Associate Director
Advisory & Valuation
Encl

c.c. Client
DPO/FS&YLE Attention : Mr. PANG Yiu Fai, Christopher (Email : cyfpang@pland.gov.hk)

T info@prudens.com.hk www.prudens.com.hk

20 February 2023

Response to Departmental Comments
S.16 Application No. A/YL-PH/933

Re: Section 16 Application No. A/YL-PH/933 of
Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories

(A)	**Comments from Transport Department**	**Applicant/Consultant's Response**
1.	Please provide photos along local access to Ta Shek Wu Tsuen;	Photos along the local access to Ta Shek Wu Tsuen taken on 14.12.2022 are shown in ***Annex 1***;
2.	Please clarify whether the vehicles list in Table 2.1 of TIA report are the only ones accessing the site	As stated by the client and end-user of the site, the vehicles listed in Table 2.1 of TIA report are the only ones accessing the site, i.e. the longest vehicle is 9.3m long and therefore adopted in the swept path analysis.
3.	Due to the limited width of carriageway in Fan Kam Road and difficulties for the manoeuvring of long vehicles please consider to use only the local access in Ta Shek We Tsuen as the sole access to the site;	According to the DLO's Survey Sheet dated 23.02.2012 (Annex 2), the northern access had been used since 2012. Just like other similar sites, the ingress/egress of vehicles can be controlled by internal management to minimize influence to the public road
4.	Some of the swept paths appear to be in conflict with the surrounding, such as 9.3m GV exiting to the left on storage area, 9.3m GV exit to the left to Fan Kam Road. Please review and propose mitigation measures as necessary;	The swept path of 9.3m GV entering from the right (left-in) as shown in top-right of Drawing "TKLCP_SP_ENTRANCE AND EXIT" is revised ***(Annex 3)***. The wheels of the vehicle (red lines) could avoid conflict with the footpath, while the outer of vehicle (green line) shall slightly encroach onto the southwest footpath. Currently there are no vehicle restriction of entering local access to Ta Shek Wu Tsuen from Fan Kam Road. The existing site constraint leads to longer vehicles such as 11m GV or 12m coach inevitably encroach onto the footpath. With comparatively shorter vehicles stated in Table 2.1 of the TIA report, 9.3m GV shall encroach to opposite traffic lane during "left-in" or "left-out" movements, which is common traffic situation of accesses and junctions in the area. To enhance the safety of vehicles run-in/out of the local access, "right-in/right-out" arrangement can be enforced by the site operator;

5.	The applicant should note the local access between Fan Kam Road and the site is not managed by this Department	Noted.

(B)	**Comments from Drainage Services Department**	**Applicant/Consultant's Response**
1.	Please consider to adopt typical u-channel size such as 225UC, 300UC and 375UC. The applicant may refer to CET Technical Guidance Note No.43.	Revision of the proposed drainage design has been made as shown on Dwg No. A01(Rev. 1) & A02 (Rev. 1) in ***Annex 4***. The sizes of U-channel adopted are typical 225mm and 300mm.
2.	Please provide calculation to justify the dimensions of the proposed u-channel.	Please refer to ***Annex 5*** for the calculation to justify the dimensions of the proposed u-channel.
3.	Please advise why u-channel is not provided at the northern and western side of the site. Please advise how the overland flow the northern and western area of the site could be properly intercepted and discharged. Peripheral channels are suggested to be provided.	The topography of the subject site and surrounding is shown on Dwg No. A01 (Rev. 1) ***(Annex 4)***. The highest point of the site is generally at the northwest corner whilst the lowest point of the site is at the southeast corner. Therefore, u-channel arrangement is mainly along the eastern and southern sides of the site.
4.	Consideration should be given to provide catchpit at the turning points of the u-channel.	Catchpits are provided as shown on Dwg No. A01 (Rev. 1) ***(Annex 4)***.
5.	The cover levels and invert levels of the proposed catchpits should be shown on the drainage plan for reference.	The cover levels and invert levels of the proposed catchpits are shown in Dwg No. A01 (Rev. 1) ***(Annex 4)***.
6.	The proposal should indicate how the runoff (the flow directions) within the site would be discharged to the proposed u-channel.	Please refer to Dwg No. A01 (Rev. 1) ***(Annex 4).***
7.	The existing drainage facilities to which the stormwater of the development from the subject site would discharge, should be clearly indicated on plan.	The stormwater is discharge to **Tam Shui Hang** as shown on Dwg No. A01 (Rev. 1). Please also see Photos P1 to P7 in ***Annex 6***.
8.	The location and details of the proposed hoarding/peripheral wall should be shown on the proposed drainage plan.	Please refer to Dwg No. A01 (Rev. 1) ***(Annex 4)***.
9.	Cross sections showing the existing and proposed ground level of the captioned site with respect to the adjacent area should be given.	Please refer to Dwg No. A02 (Rev. 1) ***(Annex 4)*** showing the schematic diagram of the drainage design.

10.	Standard details should be provided to indicate the sectional details of the proposed u-channel and the catchpit.	Please refer to Dwg No. A03 (Rev. 1) and the standard drawings mentioned in General Notes of Dwg No. A01 (Rev. 1) ***(Annex 4)***.
11.	Sand trap or provision alike should be provided before the collected runoff is discharged to the public drainage facilities.	Please refer to Dwg No. A01 (Rev. 1) and A02 (Rev. 1) ***(Annex 4)***.
12.	The development should neither obstruct overland flow nor adversely affect existing natural streams, village drains, ditches and the adjacent areas, etc.	Your comments have been taken into consideration according to the revised drainage proposed.
13.	The applicant should consult DLO/YL and seek consent from the relevant owners for any drainage works to be carried out outside his lot boundary before commencement of the drainage works.	Noted.

Annex

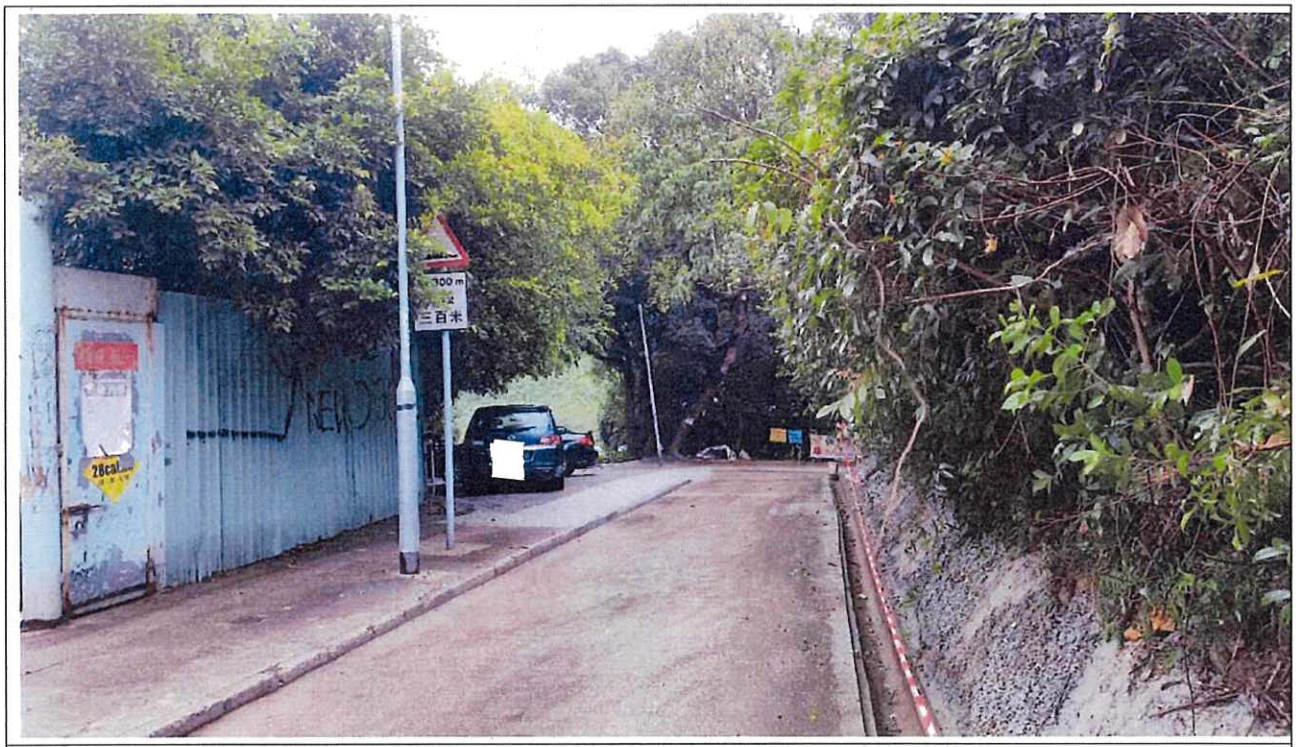
1. Photos of Local access to Ta Shek Wu Tsuen
2. Survey Sheet dated 23.02.2012
3. Revised Drawing "TKLCP_SP_ENTRANCE AND EXIT"
4. Revised Drainage Plan Dwg No. A01(Rev. 1) & A02 (Rev. 1)
5. Calculation of Drainage Proposal
6. Photos and Location Plans of Drainage Works outside site boundary

Annex 1

Photos of Local access to Ta Shek Wu Tsuen

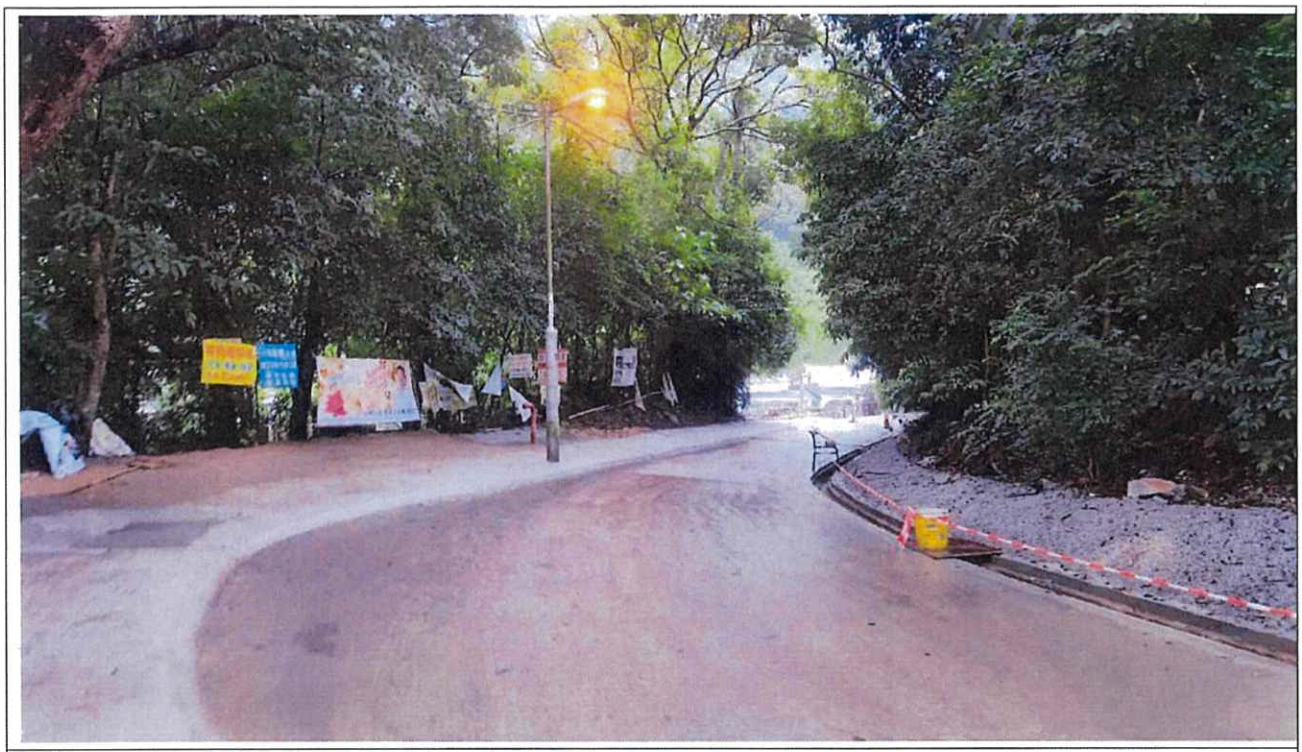
01. Fan Kam Road

02. Local Access to Ta Shek Wu Tsuen



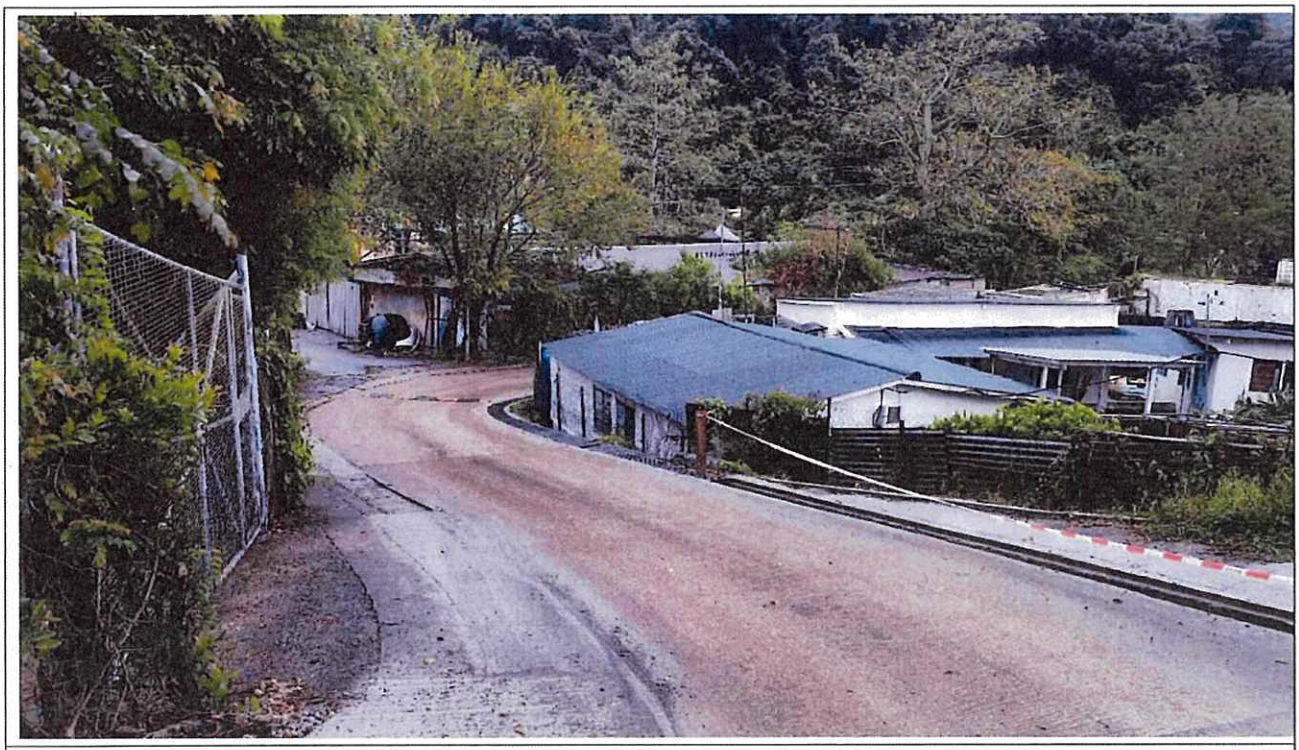
03. Local Access to Ta Shek Wu Tsuen

04. Local Access to Ta Shek Wu Tsuen

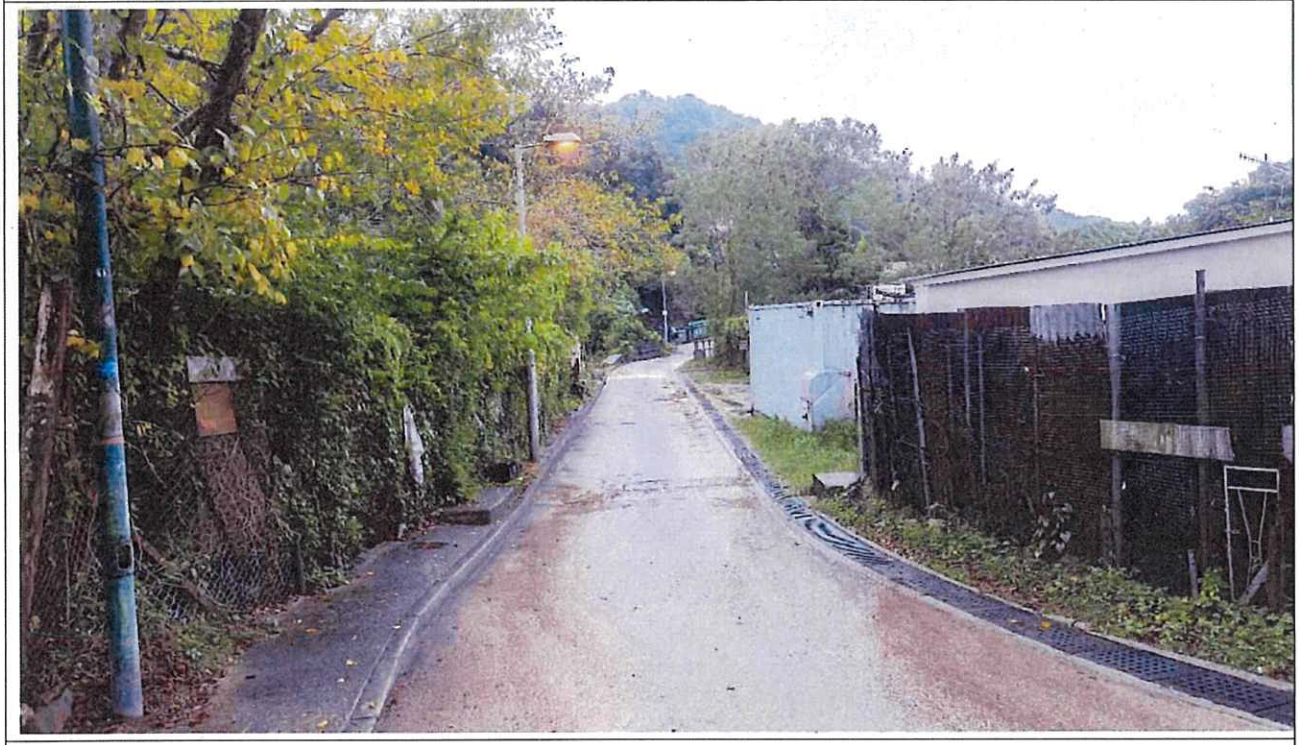


05. Local Access to Ta Shek Wu Tsuen

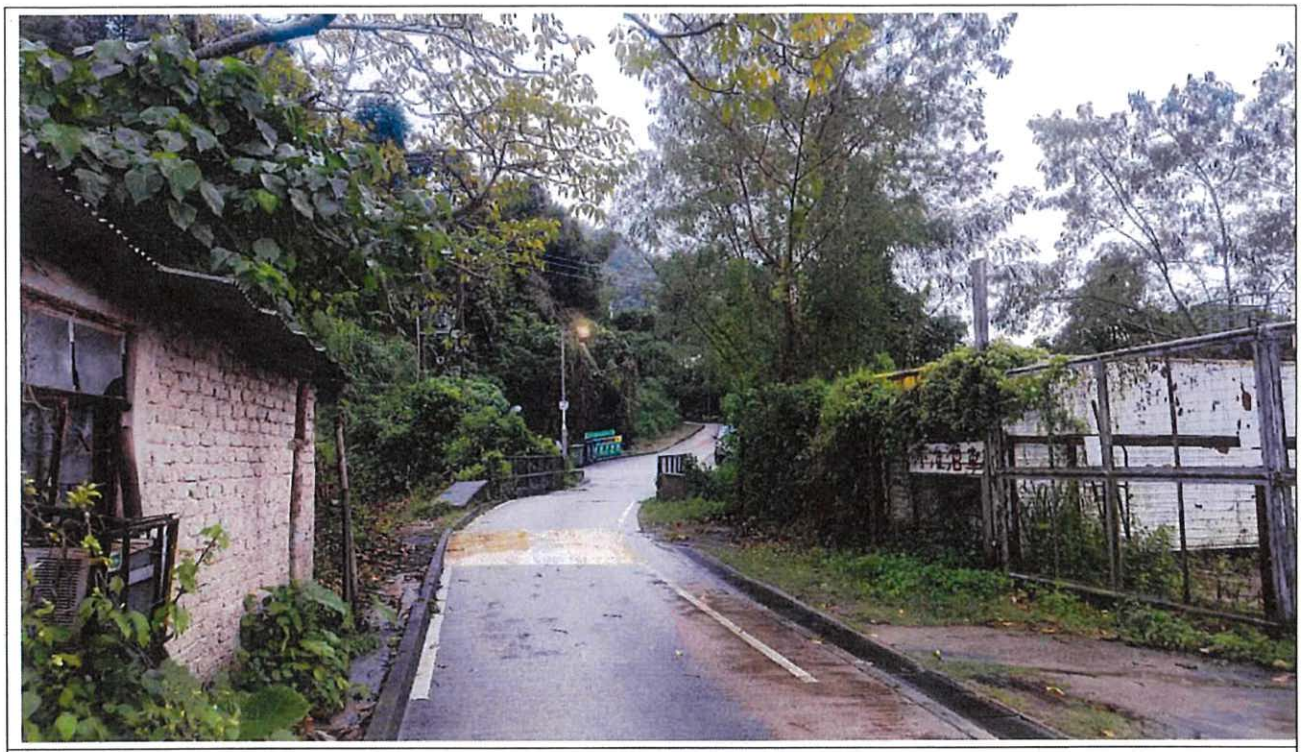
06. Local Access to Ta Shek Wu Tsuen



07. Local Access to Ta Shek Wu Tsuen



08. Local Access to Ta Shek Wu Tsuen

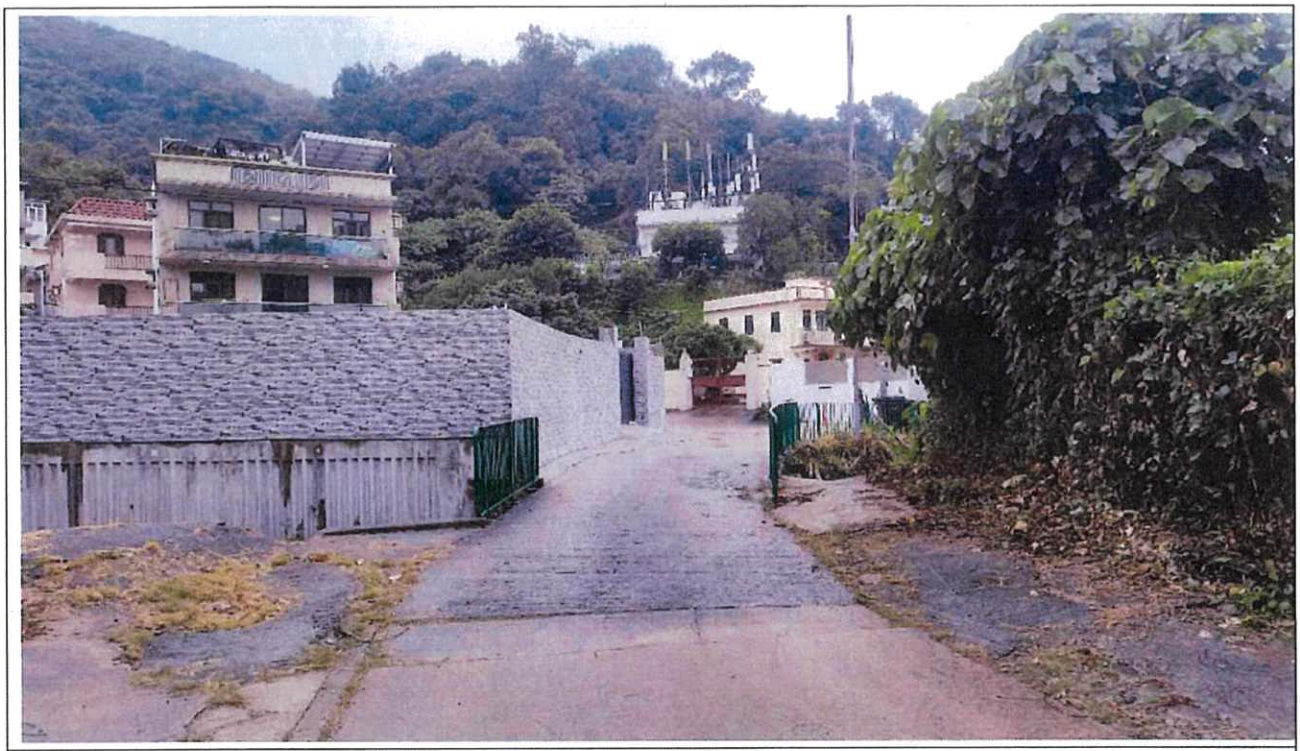


09. Local Access to Ta Shek Wu Tsuen

10. Local Access to Ta Shek Wu Tsuen

11. Local Access to Ta Shek Wu Tsuen

12. Local Access to Ta Shek Wu Tsuen

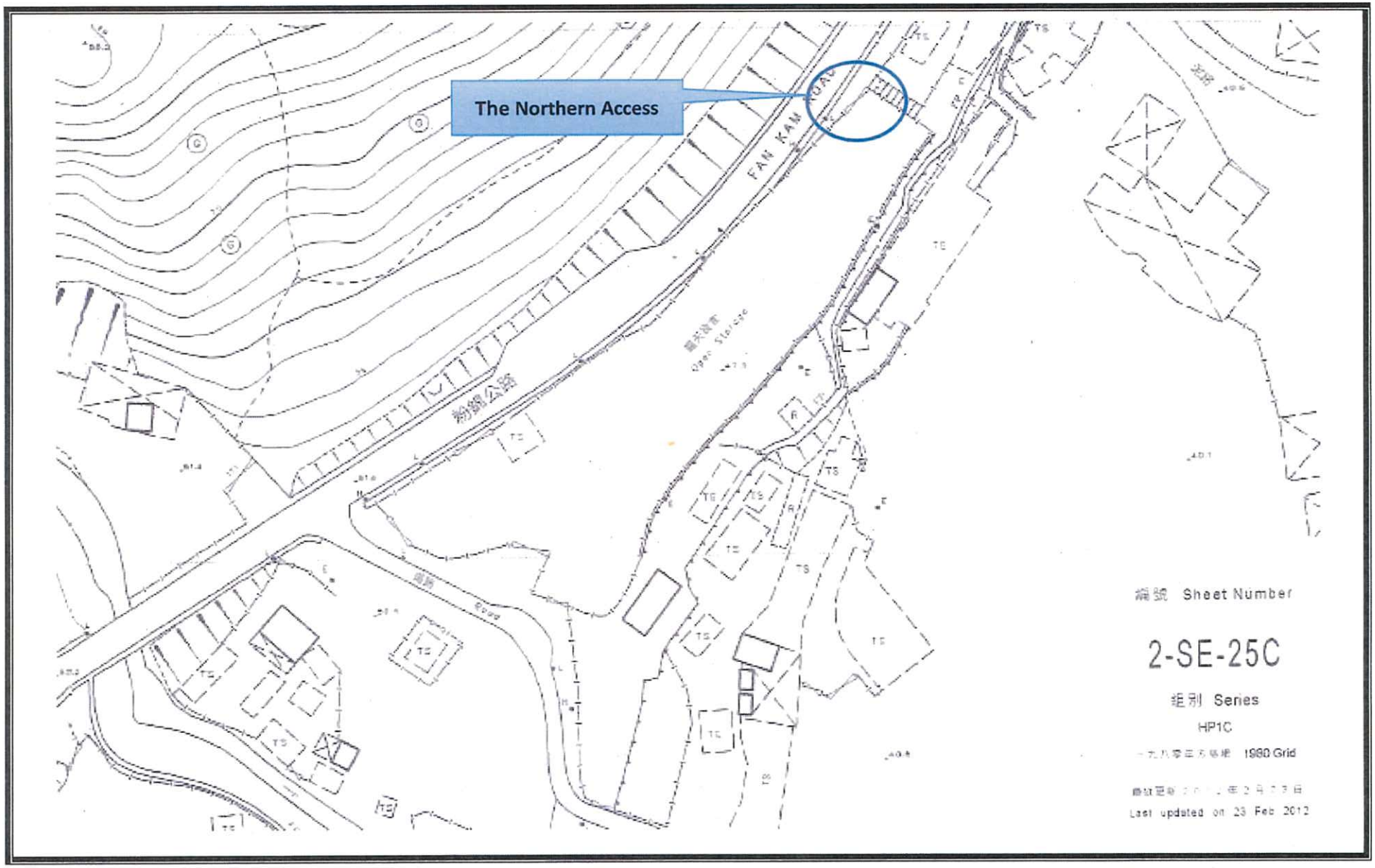


13. Ta Shek Wu Tsuen

Photos of the Local Access to Ta Shek Wu Tsuen
For Identification Only

Annex 2

Survey Sheet dated 23.02.2012



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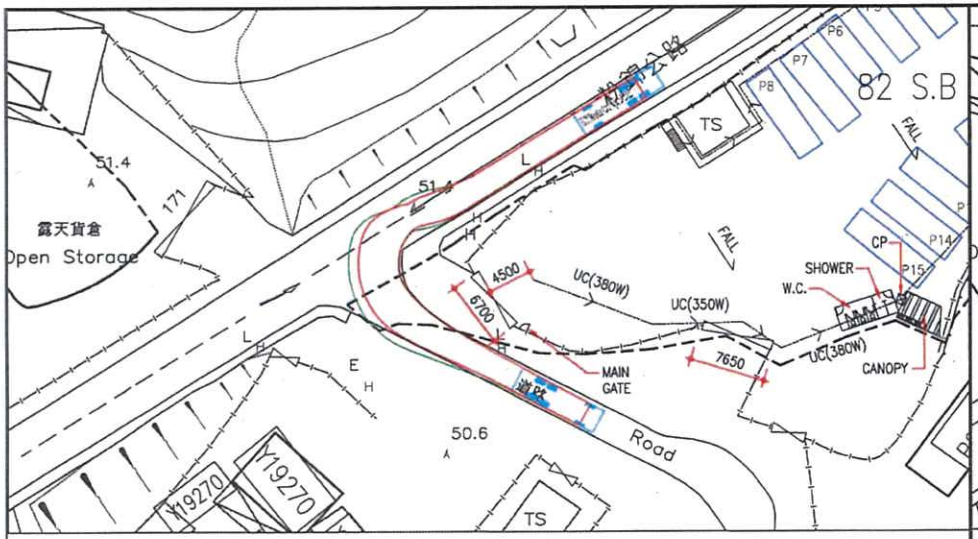
SURVEYORS (HONG KONG) LTD

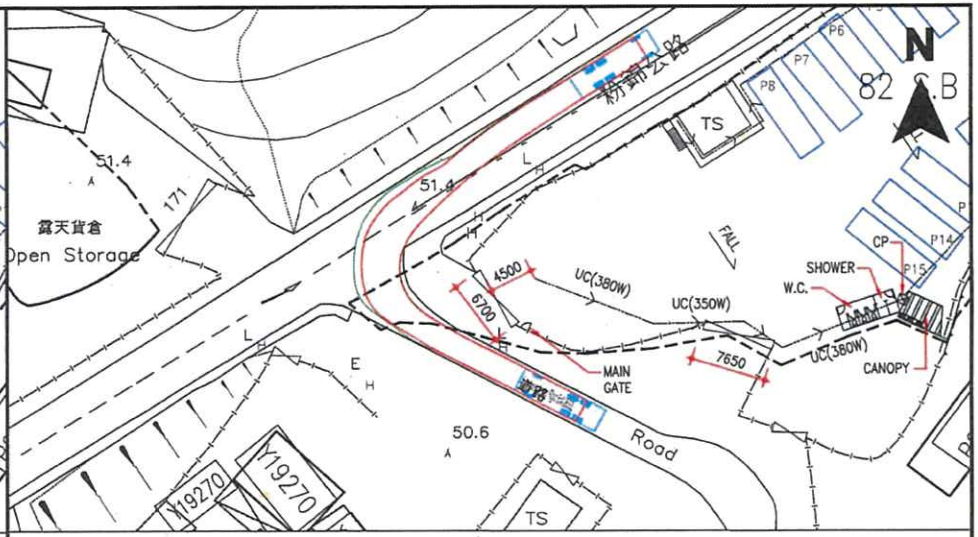
Survey Sheet - 2012
Not To Scale – For Identification Only

Annex 3

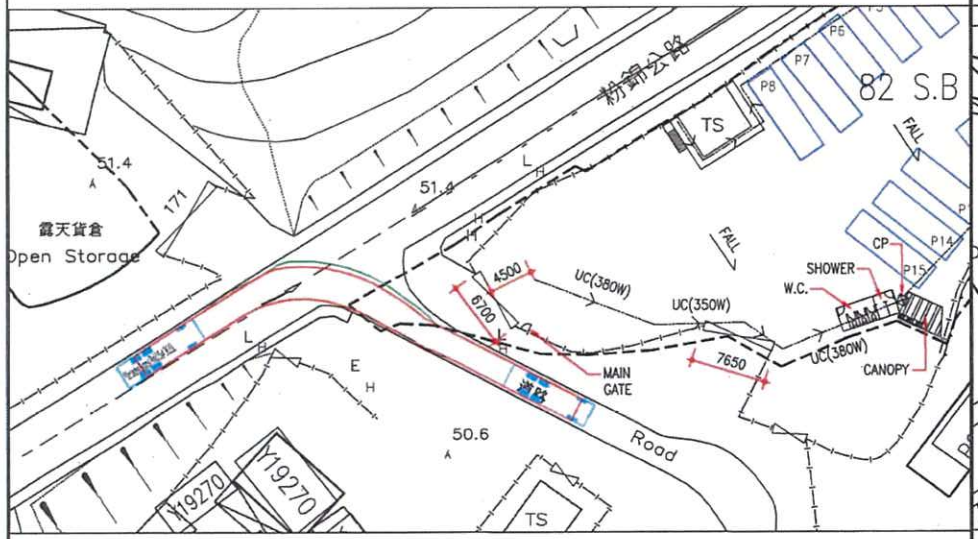
Revised Drawing "TKLCP_SP_ENTRANCE AND EXIT"



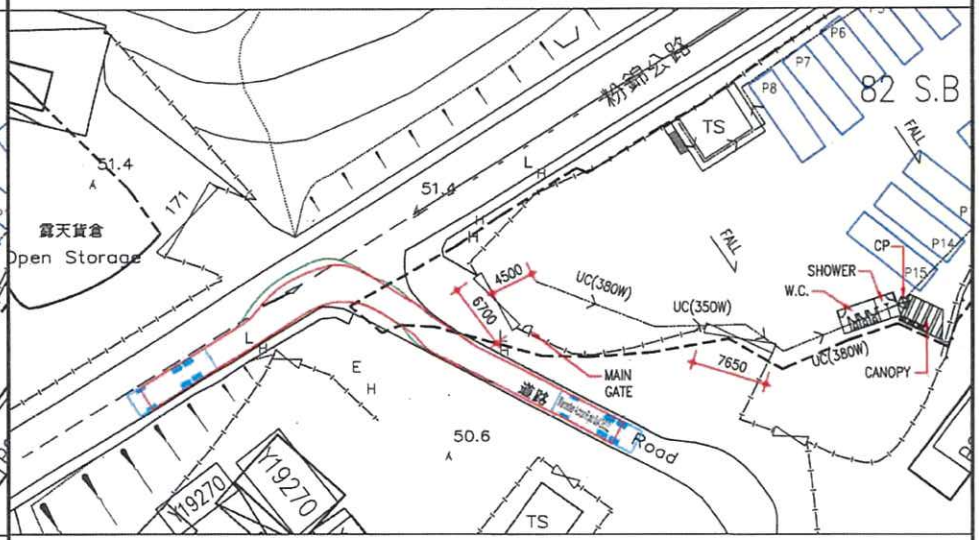
9.3–METRE GOODS VEHICLE MANOEUVRING (ENTER FROM THE RIGHT)
SPEED: 5KM/HR



9.3–METRE GOODS VEHICLE MANOEUVRING (EXIT TO THE RIGHT)
SPEED: 5KM/HR



9.3–METRE GOODS VEHICLE MANOEUVRING (ENTER FROM THE LEFT)
SPEED: 5KM/HR



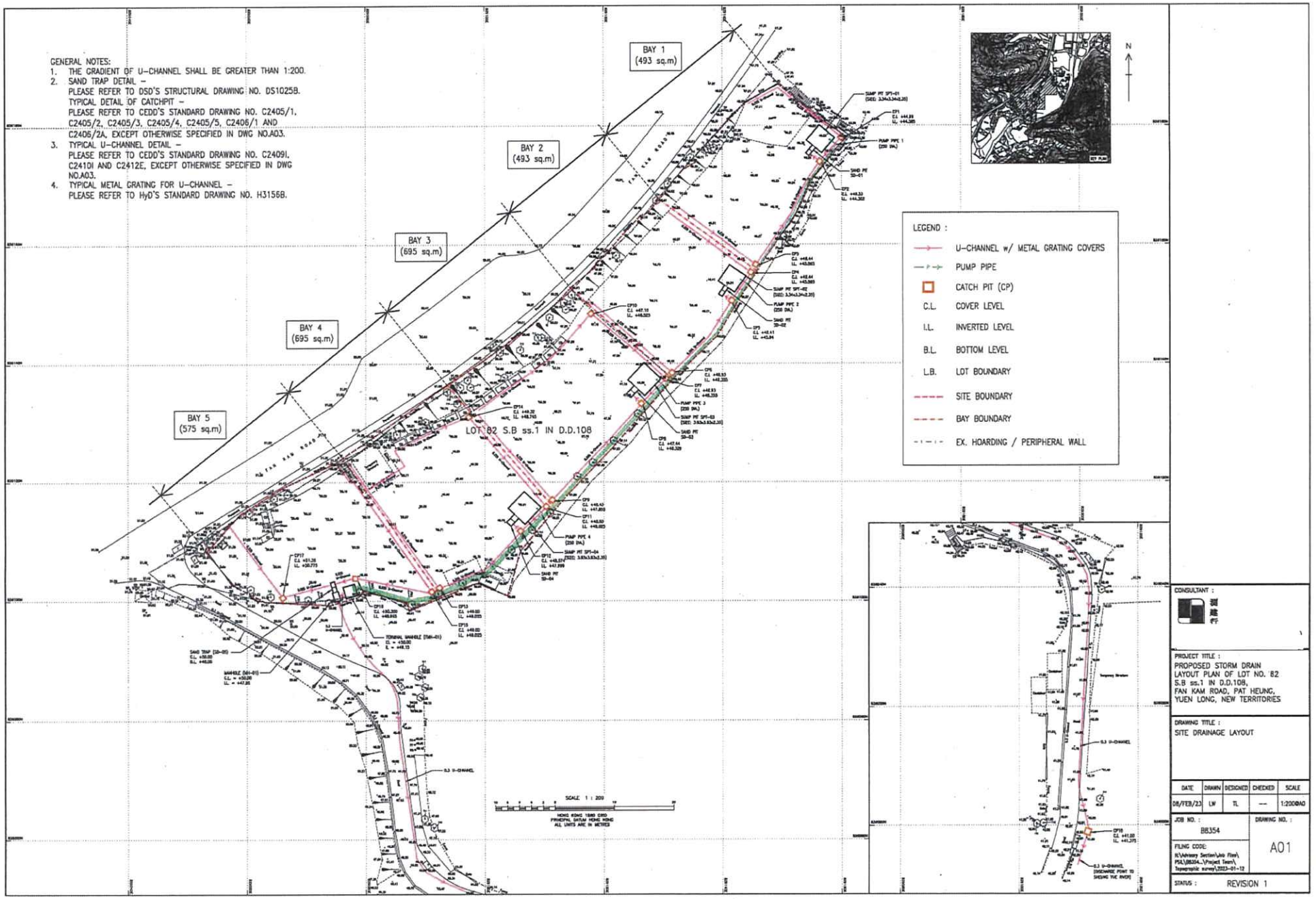
9.3–METRE GOODS VEHICLE MANOEUVRING (EXIT TO THE LEFT)
SPEED: 5KM/HR

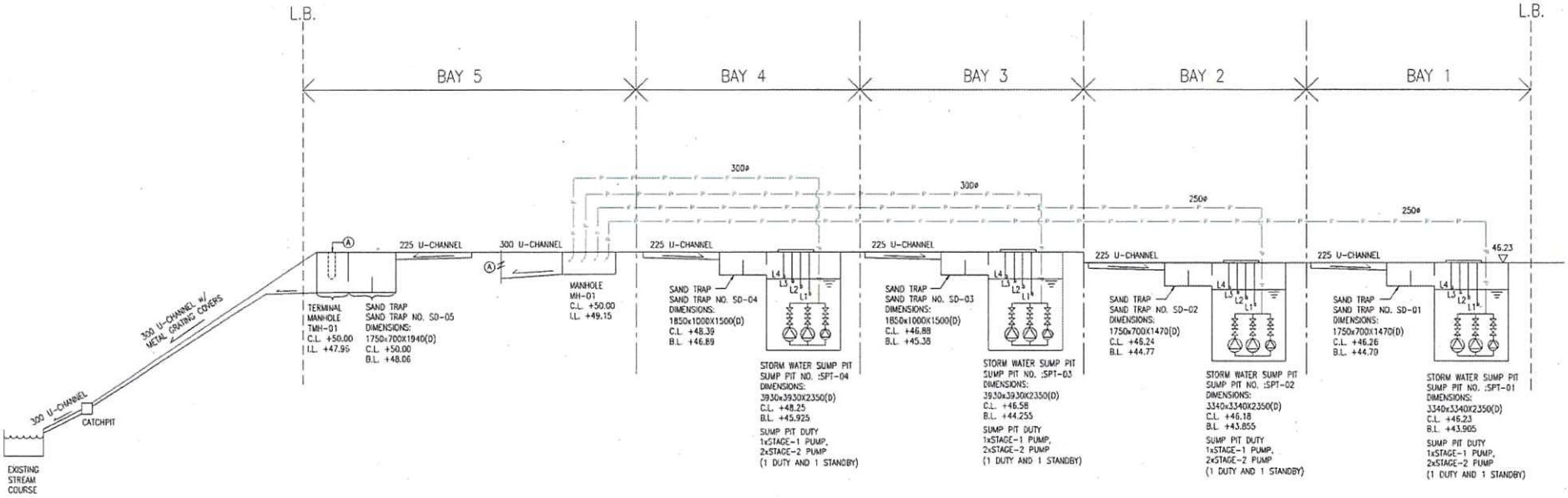
Printed by Plotsetter

PRUDENTIAL 謙信 SURVEYING · LAND ADVISORY · VALUATION	JOB TITLE: PROPOSED OPEN STORAGE AND PARKING OF VEHICLE (TEMPORARY BASE) AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 IN DD108, FAN KAM ROAD, PAT HEUNG, YUEN LONG	Drawing Title: SWEPT PATH DEMONSTRATION – ENTRANCE AND EXIT (CARPARK PORTION)	Rev	Description	Date	Drawn: IY; Date: 05/07/22; Checked: CH; Approved: CH; Scale: 1:1000 @ A3; Drawing No.: TKYLCP_SP_ENTRANCE AND EXIT (CARPARK PORTION); Rev.: –

Annex 4

Revised Drainage Plan Dwg No. A01(Rev. 1) & A02 (Rev. 1)


GENERAL NOTES:
1. THE GRADIENT OF U-CHANNEL SHALL BE GREATER THAN 1:200.
2. SAND TRAP DETAIL –
PLEASE REFER TO DSD'S STRUCTURAL DRAWING NO. DS1025B.
TYPICAL DETAIL OF CATCHPIT –
PLEASE REFER TO CEDD'S STANDARD DRAWING NO. C2405/1, C2405/2, C2405/3, C2405/4, C2405/5, C2406/1 AND C2406/2A, EXCEPT OTHERWISE SPECIFIED IN DWG NO.A03.
3. TYPICAL U-CHANNEL DETAIL –
PLEASE REFER TO CEDD'S STANDARD DRAWING NO. C2409I, C2410I AND C2412E, EXCEPT OTHERWISE SPECIFIED IN DWG NO.A03.
4. TYPICAL METAL GRATING FOR U-CHANNEL –
PLEASE REFER TO HyD'S STANDARD DRAWING NO. H3156B.
BAY 1 (493 sq.m)
BAY 2 (493 sq.m)
BAY 3 (695 sq.m)
BAY 4 (695 sq.m)
BAY 5 (575 sq.m)
LOT 82 S.B ss.1 IN D.D.108
FAN KAM ROAD
N
LEGEND :
U-CHANNEL w/ METAL GRATING COVERS
PUMP PIPE
CATCH PIT (CP)
C.L. COVER LEVEL
I.L. INVERTED LEVEL
B.L. BOTTOM LEVEL
L.B. LOT BOUNDARY
SITE BOUNDARY
BAY BOUNDARY
EX. HOARDING / PERIPHERAL WALL
SCALE 1 : 200
HONG KONG 1980 GRID
PRINCIPAL DATUM HONG KONG
ALL UNITS ARE IN METRES
CONSULTANT :
PROJECT TITLE :
PROPOSED STORM DRAIN
LAYOUT PLAN OF LOT NO. 82
S.B ss.1 IN D.D.108,
FAN KAM ROAD, PAT HEUNG,
YUEN LONG, NEW TERRITORIES
DRAWING TITLE :
SITE DRAINAGE LAYOUT
DATE 08/FEB/23
DRAWN LW
DESIGNED TL
CHECKED —
SCALE 1:200@A0
JOB NO. : BB354
DRAWING NO. : A01
FILING CODE:
STATUS : REVISION 1

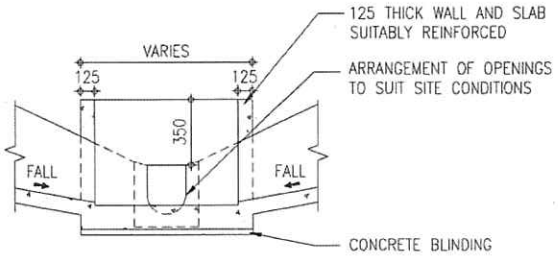


(NOT TO SCALE)

CONSULTANT : 測建行	PROJECT TITLE : PROPOSED STORM DRAIN LAYOUT PLAN OF LOT NO. 82 S.B ss.1 IN D.D.108, FAN KAM ROAD, PAT HEUNG, YUEN LONG, NEW TERRITORIES	DRAWING TITLE : SCHEMATIC DIAGRAM OF DRAINAGE SYSTEM	DATE	DRAWN	DESIGNED	CHECKED	SCALE	STATUS :
			08/FEB/23	LW	TL	--	N.T.S.	
			JOB NO. : B8354			DRAWING NO. : A02		REVISION 1
			FILING CODE : N:\B8354...					

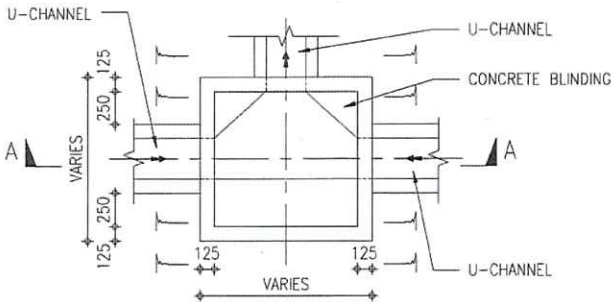
Annex 5

Calculation of Drainage Proposal



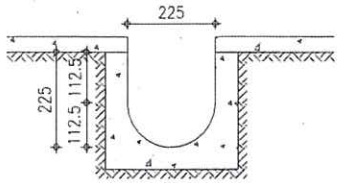
SECTION A–A

N.T.S



TYPICAL DETAILS OF CATCHPIT

N.T.S



TYPICAL DETAILS OF U-CHANNEL

N.T.S

CONSULTANT : 測建行	PROJECT TITLE : PROPOSED STORM DRAIN LAYOUT PLAN OF LOT NO. B2 S.B ss.1 IN D.D.108, FAN KAM ROAD, PAT HEUNG, YUEN LONG, NEW TERRITORIES	DRAWING TITLE : TYPICAL DETAILS OF CATCHPIT, TYPICAL DETAILS OF U-CHANNEL	DATE	DRAWN	DESIGNED	CHECKED	SCALE	STATUS :
			08/FEB/23	LW	TL	--	N.T.S.	REVISION 1
			JOB NO. : B6354			DRAWING NO. : A03		
			FILING CODE : N:\B6354...					

	Maximum Run Off (Litre/sec.)	Maximum Run Off (Litre/min.)	Area (m^2)
Bay 1	44.51	2670.42	493
Bay 2	44.51	2670.42	493
Bay 3	61.78	3706.67	695
Bay 4	62.74	3764.58	695
Bay 5	47.92	2875.00	575
Total	261.45	15687.08	2951

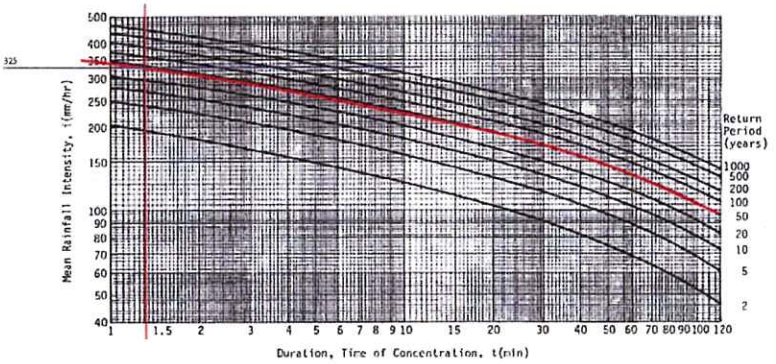
Summary

	Read Channel Required	Read Velocity (m/s)	Hydraulic Power (kW)	Sump Pit's Volume ($cu.m$)	Sump Pit's Side Length Assume 1.2m height (m)	Pump Pipe Diameter (mm)
Bay 1	150U or 225HR	4.25	5.14	13.35	3.34	238.1
Bay 2	225U or 225HR	2.35	4.14	13.35	3.34	238.1
Bay 3	225U or 300HR	2.75	4.10	18.53	3.93	280.5
Bay 4	225U or 225HR	3.25	2.77	18.82	3.96	282.6
Bay 5	150U or 225HR	3.1	1.69	14.38	3.46	247.0
Main Drainage	300U or 450HR	4.10	---	---	---	---

Calculation for Maximum Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH1)**

Assumed all runoff from Bay 1 is discharged into CH1

Bay	Catchmeat Area (m2)	Highest point level (with catchment bay)	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level)	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intensity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
1	493	48.87 mPD	46.23 mPD	26.80 m	9.85 m	1.32 min	325	44.51



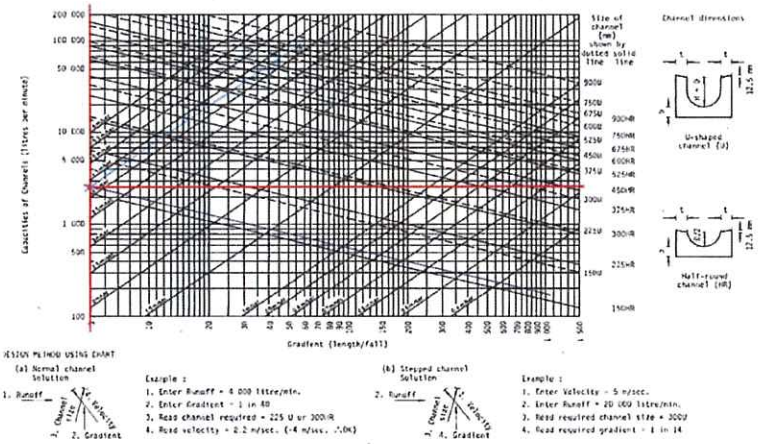
$$Q = \frac{KIA}{3600} \quad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),
i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14466 \left[\frac{A}{H^{0.2} A^{0.1}} \right] \quad \ldots\ldots (8.2)$$

where t = time of concentration (min),
A = area of catchment (m^2),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)
1	493	44.51	2670	47.83	44.61	14.7	4.57



Result

Enter Runoff	=	2670	litre/min
Enter Gradient	=	4.57	
Read Channel Required	=	150U or 225HR	
Read Velocity	=	4.25	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P = Hydraulic Power (kW)			
Q = Flow Rate (m^3/s)	=	0.045	
ρ = Water density (kg/m^3)	=	1	
g = Gravity (m/s^2)	=	9.81	
h = Level difference	=	5.89	
n = Efficiency	=	0.5	

Therefore: P = 5.14 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

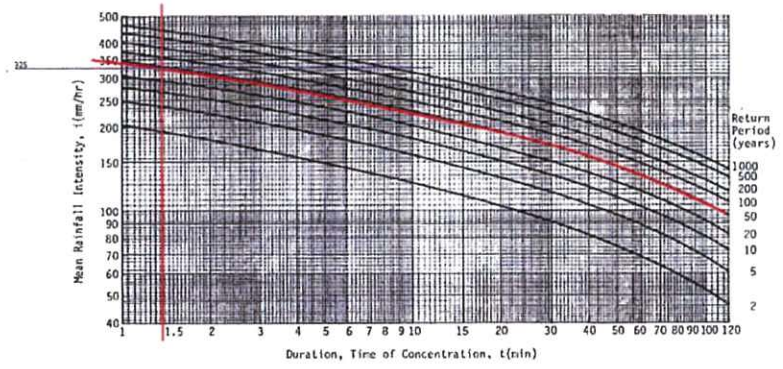
Q = Flow Rate (m^3/s)	=	0.045	
d = Pump pipe diameter (mm)	=	238.1	

Calculation of Sump Pit's Volume	=	13.35	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.34	$m^{\square}$	(Assume the height of tank = 1.2m)

Calculation for Maximum Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL (CH2)

Assumed all runoff from Bay 2 is discharged into CH2

Bay	Catchment Area (m2)	Highest point level (with catchment bay)	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level)	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intensity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
2	493	49.91 mPD	46.18 mPD	29.38 m	12.70 m	1.38 min	325	44.51



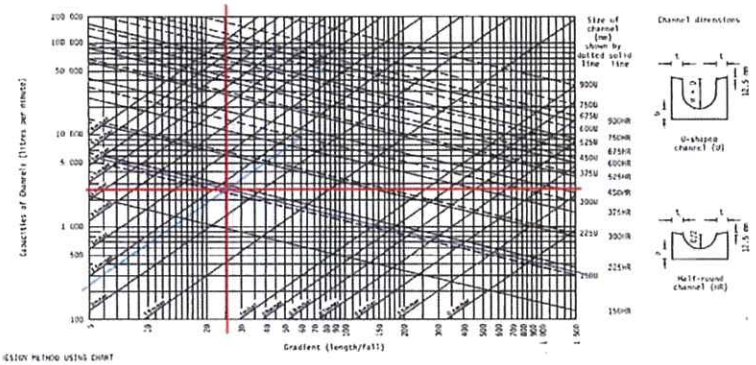
$$Q = \frac{KIA}{3600} \qquad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),
I = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \qquad \ldots\ldots (8.2)$$

where t = time of concentration (min),
A = area of catchment (m^2),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)
2	493	44.51	2670	46.81	46.07	18.7	25.27



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff
2. Gradient
3. Channel size
4. Velocity

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (< 4 m/sec. ∴OK)

(b) Stepped channel Solution

1. Runoff
2. Gradient
3. Channel size
4. Velocity

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	2670	litre/min
Enter Gradient	=	25.27	
Read Channel Required	=	225U or 225HR	
Read Velocity	=	2.36	m/sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate (m^3/s)	=	0.045
ρ =	Water density (kg/m^3)	=	1
g =	Gravity (m/s^2)	=	9.81
h =	Level difference	=	9.54
n =	Efficiency	=	0.5

Therefore: P = 4.14 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

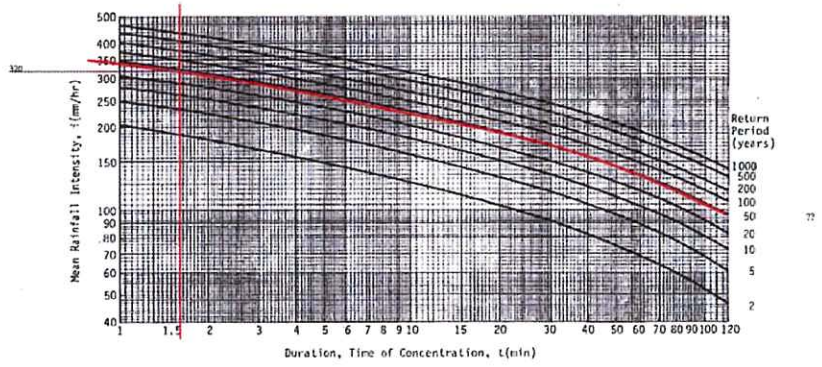
Q =	Flow Rate (m^3/s)	=	0.045
d =	Pump pipe diameter (mm)	=	238.1

Calculation of Sump Pit's Volume	=	13.35	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.34	$m^{\square}$	(Assume the height of tank = 1.2m)

Calculation for Maximum Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pai Heung, YL (CH3)

Assumed all runoff from Bay 3 is discharged into CH3

Bay	Catchment Area (m2)	Highest point level (with catchment bay)	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level)	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intensity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
3	695	51 mPD	46.58 mPD	36.97 m	12.25 m	1.64 min	320	61.78



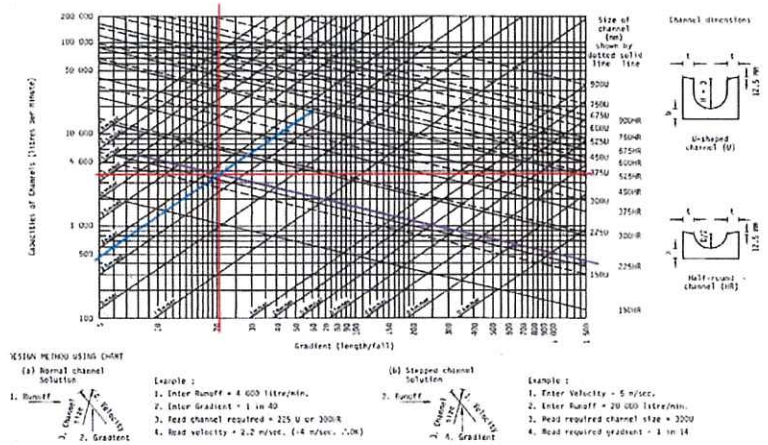
$$Q = \frac{CiA}{3600} \quad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),
i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14465 \left(\frac{1}{H^{1/2}} A^{0.1} \right) \quad \ldots\ldots (8.2)$$

where t = time of concentration (min),
A = area of catchment (m²),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)
3	695	61.78	3707	47.28	46.48	16.64	20.80



Result

Enter Runoff	=	3707	litre/min
Enter Gradient	=	20.80	
Read Channel Required	=	225U or 300HR	
Read Velocity	=	2.75	m /sec

Calculation of flow hydraulic power

$$P = Qpgh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate (m^3/s)	=	0.062
p =	Water density (kg/m^3)	=	1
g =	Gravity (m/s^2)	=	9.81
h =	Level difference	=	3.38
n =	Efficiency	=	0.5

Therefore: P = 4.10 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

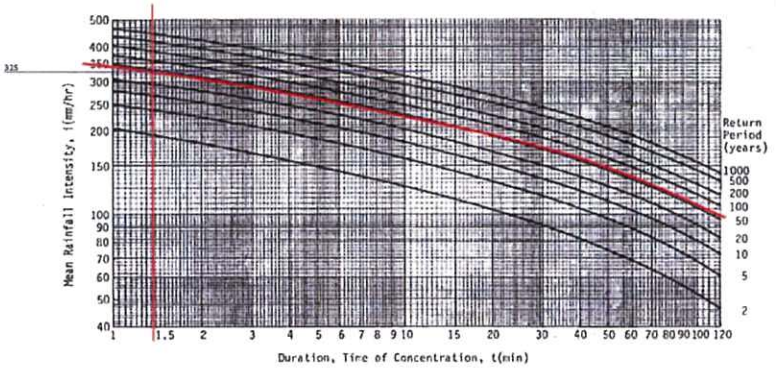
Q =	Flow Rate (m^3/s)	=	0.062
d =	Pump pipe diameter (mm)	=	280.5

Calculation of Sump Pit's Volume	=	18.53	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.93	m^2	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH4)**

Assumed all runoff from Bay 4 is discharged into CH4

Bay	Catchment Area (m2)	Highest point level (with catchment bay)	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level)	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intensity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
4	695	50.17 mPD	48.25 mPD	26.43 m	7.26 m	1.34 min	325	62.74



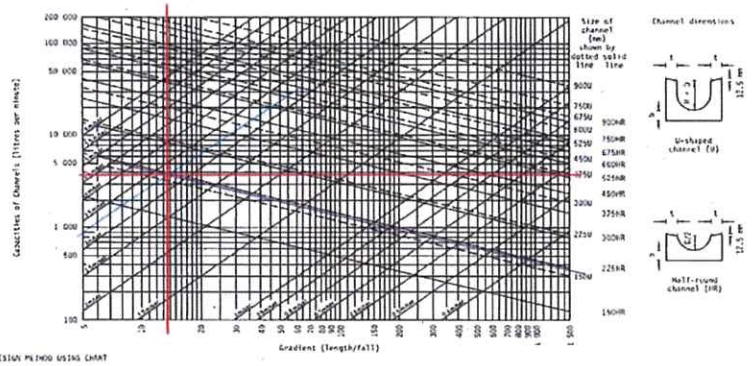
$$Q = \frac{KIA}{3600} \quad \ldots\ldots (8.1)$$

where Q = maximun runoff (litres/sec),
I = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14466 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \quad \ldots\ldots (8.2)$$

where t = time of concentration (min),
A = area of catchment (m^2),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)
4	695	62.74	3765	48.98	47.56	21.25	14.96



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff
2. Gradient
3. Channel size
4. Velocity

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (-4 m/sec. ∴OK)

(b) Stepped channel Solution

1. Runoff
2. Channel size
3. Velocity
4. Gradient

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	3765	litre/min
Enter Gradient	=	14.96	
Read Channel Required	=	225U or 225HR	
Read Velocity	=	2.25	m/sec

Calculation of flow hydraulic power

$$P = Qpgh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate (m^3/s)	=	0.063
p =	Water density (kg/m^3)	=	1
g =	Gravity (m/s^2)	=	9.81
h =	Level difference	=	3.25
n =	Efficiency	=	0.5

Therefore: P = 2.77 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

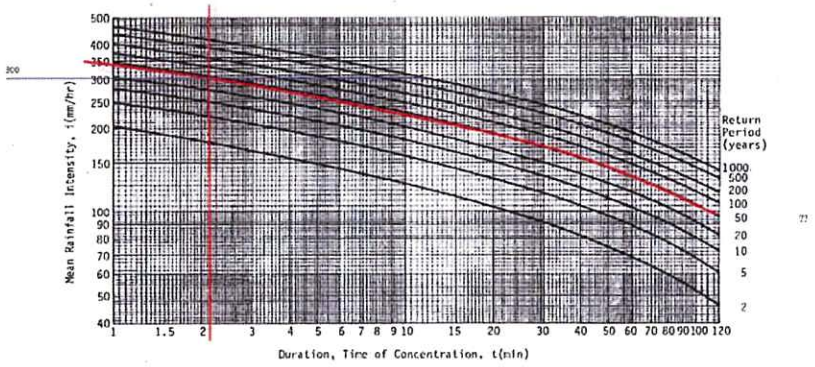
Q =	Flow Rate (m^3/s)	=	0.063
d =	Pump pipe diameter (mm)	=	282.6

Calculation of Sump Pit's Volume	=	18.82	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.96	$m^{\square}$	(Assume the height of tank = 1.2m)

Calculation for Maximum Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL (CH5)

Assumed all runoff from Bay 5 is discharged into CH5

Bay	Catchment Area (m2)	Highest point level (with catchment bay)	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level)	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intensity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
5	575	51.55 mPD	49.3 mPD	39.61 m	5.68 m	2.14 min	300	47.92



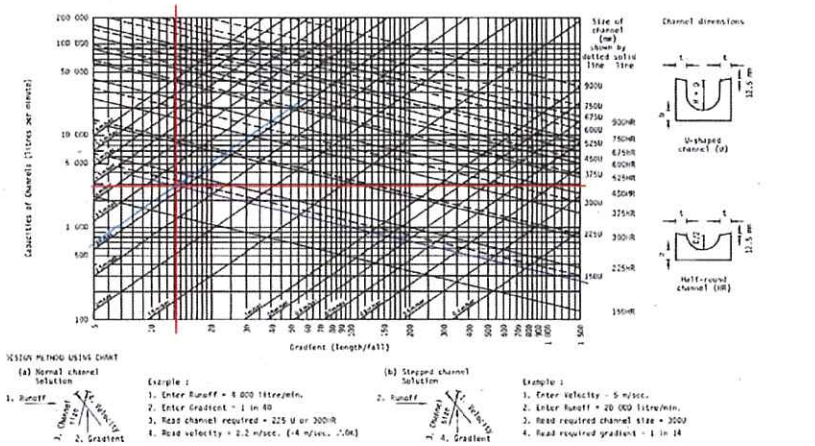
$$Q = \frac{KIA}{3600} \qquad \ldots\ldots \quad (8.1)$$

where Q = maximum runoff (litres/sec),
I = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \qquad \ldots\ldots \quad (8.2)$$

where t = time of concentration (min),
A = area of catchment (m²),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)
5	575	47.92	2875	50.16	48.61	20.59	13.28



Result

Enter Runoff	=	2875	litre/min
Enter Gradient	=	13.28	
Read Channel Required	=	150U or 225HR	
Read Velocity	=	3.1	m/sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate (m^3/s)	=	0.048
ρ =	Water density (kg/m^3)	=	1
g =	Gravity (m/s^2)	=	9.81
h =	Level difference	=	3.8
n =	Efficiency	=	0.5

Therefore: P = 1.69 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

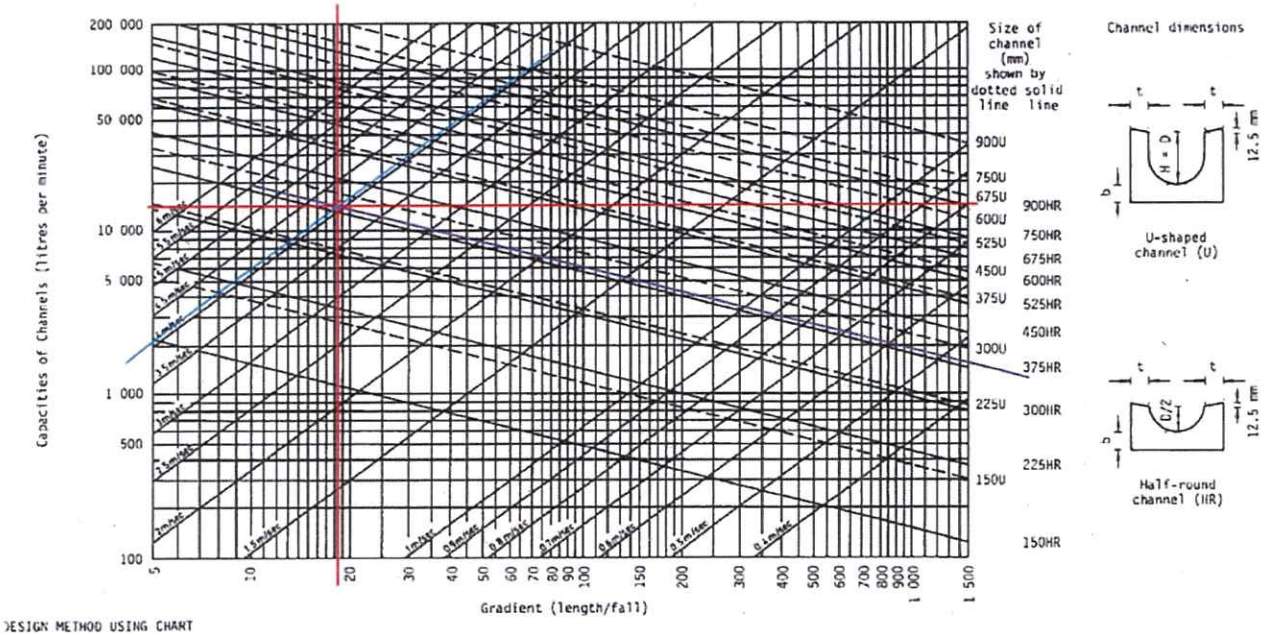
Where:

Q =	Flow Rate (m^3/s)	=	0.048
d =	Pump pipe diameter (mm)	=	247.0

Calculation of Sump Pit's Volume	=	14.38	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.46	m^2	(Assume the height of tank = 1.2m)

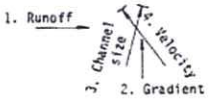
Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH5)**

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)
5	2951	**261.45**	**15687**	51.55	44.61	128.15	**18.47**



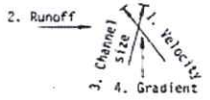
DESIGN METHOD USING CHART

(a) Normal channel Solution



Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution



Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	15687	litre/min
Enter Gradient	=	18.47	
Read Channel Required	=	**300U or 450HR**	
Read Velocity	=	**4.1**	m /sec

Annex 6

Photos and Location Plans of Drainage Works outside site boundary

ANNEX 3 – PHOTO SHOWING THE PROPOSED DRAINAGE WORKS OUTSIDE SITE BOUNDARY

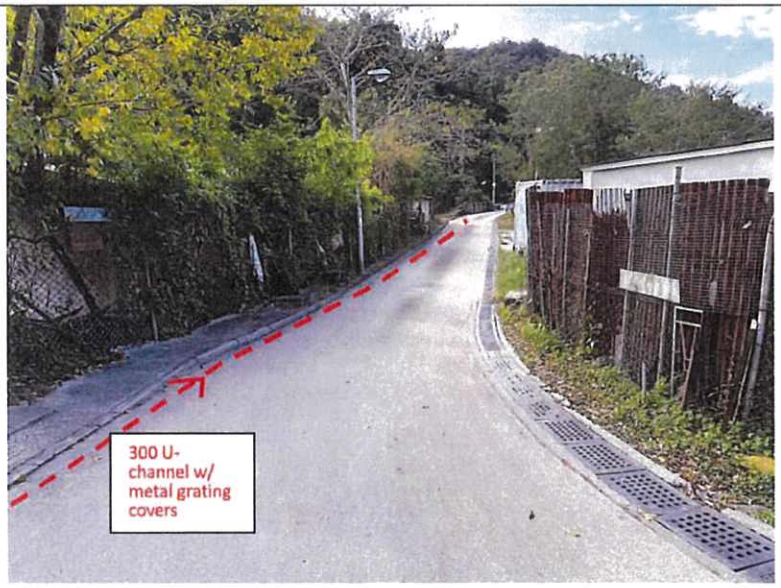
	P1
	P2

ANNEX 3 – PHOTO SHOWING THE PROPOSED DRAINAGE WORKS OUTSIDE SITE BOUNDARY

P3

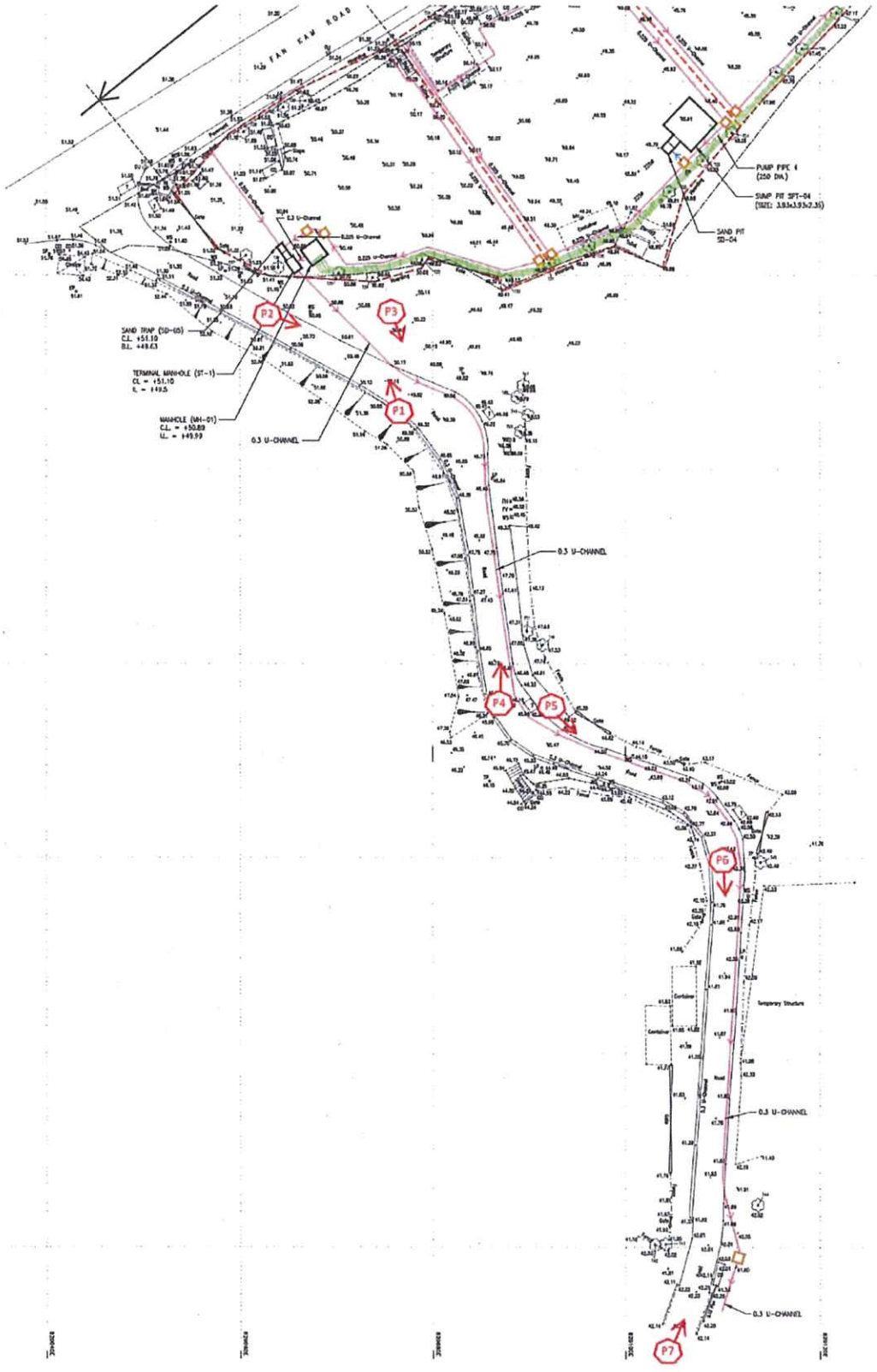
P4

ANNEX 3 – PHOTO SHOWING THE PROPOSED DRAINAGE WORKS OUTSIDE SITE BOUNDARY

	P5
	P6

ANNEX 3 – PHOTO SHOWING THE PROPOSED DRAINAGE WORKS OUTSIDE SITE BOUNDARY

P7



LOCATION PLAN OF PHOTO TAKEN

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Prudential Surveyors International Limited
測建行有限公司

22 May 2023

Your Ref: TPB/A/YL-PH/933
Our Ref: TPB220523OB-B8354

Secretary
Town Planning Board
15/F North Point Government Offices
333 Java Road
North Point
Hong Kong

Dear Sirs,

Re: A/YL-PH/933 – Further Information 3
Section 16 Application for Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories

We refer to the captioned Section 16 application and would like to submit our reply to the comments from Drainage Services Department received on 3 April 2023 as attached.

If you have any enquiries, please feel free to contact our Mr. Ken Fong at or the undersigned at

Yours faithfully
For and on behalf of
PRUDENTIAL SURVEYORS INTERNATIONAL LIMITED

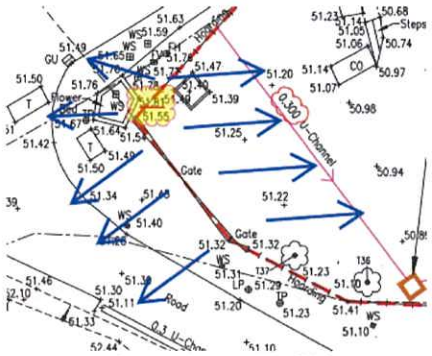
Michael C K Lee
Director
Valuation & Advisory
Encl

c.c. Client
DPO/FS&YLE Attention : Mr. YIP Long Ting (Email : ltyip@pland.gov.hk)

Proposed Storm Drain Layout Plan of Lot 82 S.B ss.1 (Part) in D.D.108, Fan Kam Road, Pat Heung, Yuen Long

Re: Response for the 2nd Comments from Drainage Services Department
Planning Application for
Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at
Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories (the "Premises")

Comments from the Director of Drainage Services dated 24.3.2023		
Item	**DSD's Comments**	**PSIL's Reply**
1	Consideration should be given to provide catchpit at the turning points of the u-channel (i.e. the turning point before CP1, the turning points in Bay 4).	Revised and updated. Catch pits are provided. (See **Dwg No. A01 (Rev. 1) in Annex 1**)
2	For Bay 5, please review to provide u-channel at the northern side next to the retaining wall to intercept the overland flow.	Revised and updated. U-channels at the northern side next to the retaining wall to intercept the overland flow are provided. (See **Dwg No. A01 (Rev. 1) in Annex 1**)
3	Annex 5 - Please review all enter gradient in UC chart which should be equal to the design gradient.	Revised and updated (see **Design Report (Rev. 1)** in **Annex 2**) The calculation report attached provides additional details on the design principle used. Specifically, for the calculation of the time of concentration, the geotechnical manual for slopes recommends considering the average fall from the catchment's summit to the design point, which indicates the average slope gradient. For instance, let's consider CH1: the average fall is determined by dividing the maximum fall by the distance between the highest and lowest point levels, resulting in (48.87mPD - 43.5mPD) / 26.8 x 100 = 20.04m per 100m. Furthermore, to calculate the channel dimensions, the design chart suggests using the channel gradient, as outlined in clause 8.3.4 of the slope manual. The channel gradient is determined by dividing the distance between the highest and lowest points of the channel by the fall between these two points, resulting in

		14.7 / (47.83mPD - 44.61mPD) = 1 in 4.57.
4	Please further review the UC size for Bays 3 to 5 as they might be undersized considering the catchment areas provided.	The UC size for all bays has undergone a thorough review, and in order to ensure a conservative approach and account for contingency measures, an additional upgrade size of 300UC is proposed. The catchment area for each bay within the site boundary has been carefully calculated. In the case of the slope area situated at the northwest side of Fan Kam Road, it has been determined that the runoff from this area can be adequately drained by the Road gullies positioned along Fan Kam Road. The precise locations of these road gullies are clearly indicated in the plans and can be referenced in **Appendix P of Design Report (Rev. 1)** in **Annex 2**. Furthermore, with regard to the land area near the northwest corner of Bay 5, as depicted in the provided picture, it is evident that the runoff originating from outside the site boundary line will fall significantly far away from the actual site area. As a result, the catchment area for Bay 5, measuring 575 sq.m, is deemed to be ample, particularly when taking into account the conservative design considerations for UC.  Northwest corner of bay 5

Proposed Storm Drain Layout Plan of Lot 82 S.B ss.1 (Part) in D.D.108, Fan Kam Road, Pat Heung, Yuen Long

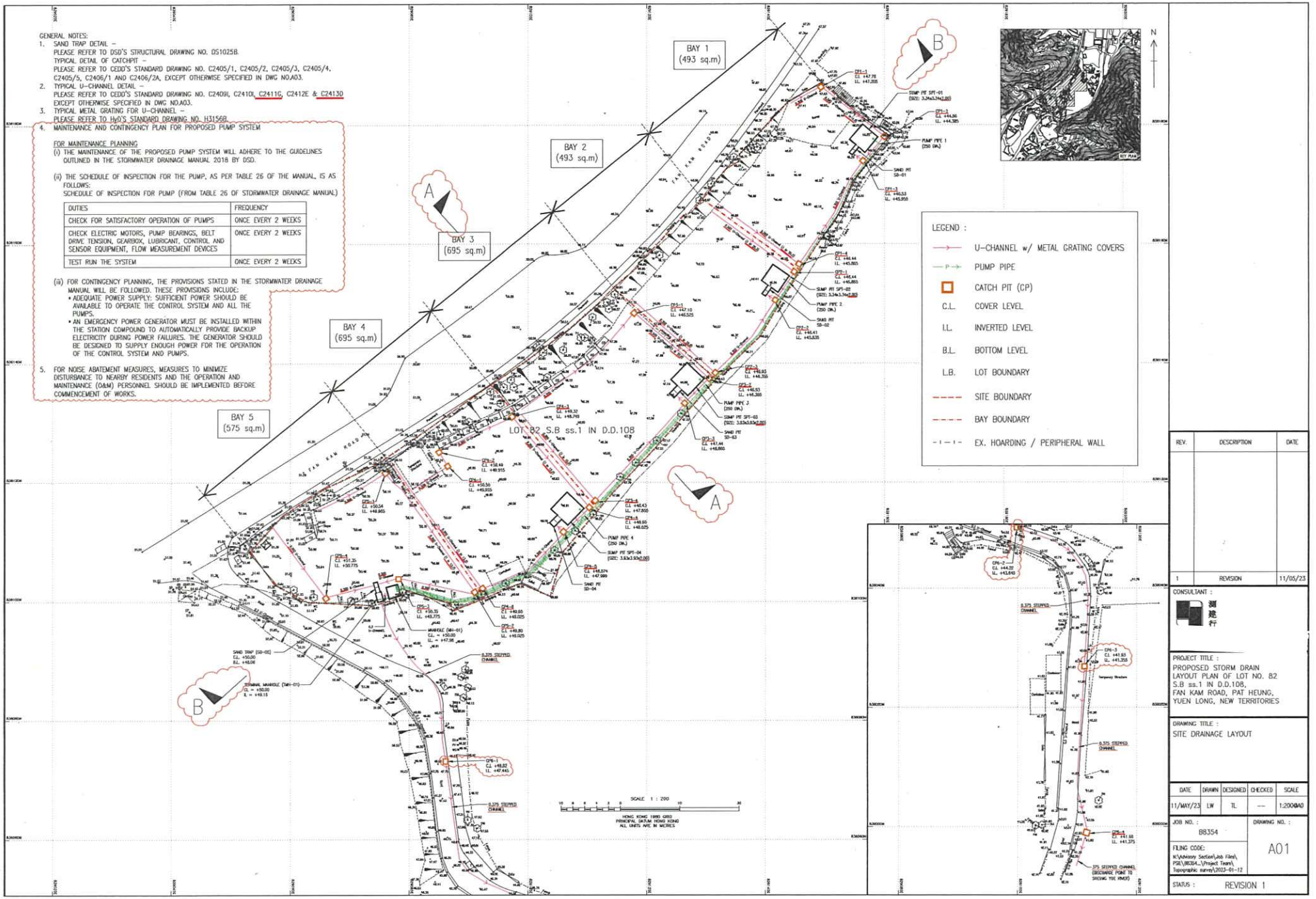
5	Please provide more cross sections showing the existing and proposed ground level of the captioned site with respect to the adjacent area for reference.	Revised and updated. (See new dwg no. **A04 (Rev. 1)** in **Annex 1**)
6	Schematic Diagram of Drainage System & Drainage Plan - The arrangement in Bay 5 is not consistent between schematic diagram and drainage plan. Please review the location of TMH-01 and MH-01.	Revised and updated. (See revised Dwg No. **A01 (Rev. 1) & A02 (Rev. 1)**) in **Annex 1**).
7	Please check the capacity of proposed 300UC if it's sufficient to discharge the entire site's runoff.	Revised and updated. The calculation report has been updated to include the design of a stepped channel. After a thorough review, it has been determined that either a 300UC or 325 Stepped Channel would be sufficient to handle the runoff. However, for a conservative design approach, it is proposed to use a 375U-shape channel or 375 Stepped Channel for the proposed works. (See **Design Report (Rev. 1)** in **Annex 2**, Dwg No. **A01 (Rev. 1) & A02 (Rev. 1)** in **Annex 1**)
8	The existing drainage facilities, to which the stormwater of the development from the subject site would discharge, are not maintained by this office. The applicant should identify the owner of the existing drainage facilities to which the proposed connection will be made and obtain consent from the owner prior to commencement of the proposal works. In the case that it is a local village drains, DO/YL should be consulted.	Noted.
9	General Notes No. 1 - Please confirm the proposed gradient of each UC and indicate on plan. Greater than 1:200 is considered	The proposed gradient for each UC is clearly indicated on the plan (see Dwg No. **A01 (Rev. 1)** in **Annex 1**), following the design guidelines provided in the

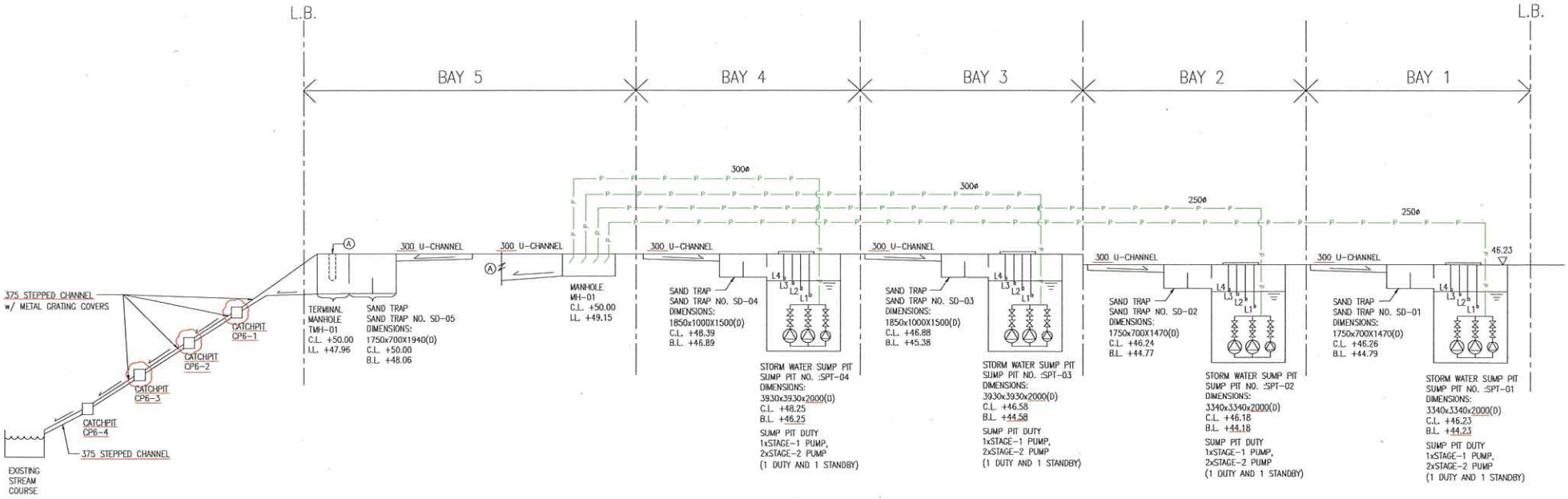
	too flat. Please further review. Gradient of 1:100 to 1:200 is normally adopted.	slope manual. In order to effectively discharge the entire runoff from the site, a stepped channel is recommended as a suitable measure for energy dissipation. The gradients of CH1 to CH5 channels have been carefully selected to align with the slope gradient, minimizing the need for additional site formation works. These proposed gradients are within the acceptable range defined in the slope manual's UC design chart. Additionally, for a conservative design approach, an extra grade for the UC size is proposed. This ensures that the system can accommodate potential peak flows and provides an added margin of safety in the design.
10	Please advise the length of the proposed long discharging 300UC. You may provide certain catchpits along the alignment to reduce the depth of channel from safety and maintenance viewpoint.	Revised and updated. Catch pits are provided. (See revised Dwg No. **A01 (Rev. 1)** in **Annex 1**)
11	Please provide sections and details of MH-01 and TMH-01.	Revised and updated. (See revised **Dwg No. A03 (Rev. 1)**)
Additional Comments via Phone Conversation		
1	Consider eliminate the depth of tanks to reduce maintenance safety risks.	The depth of sump pit tank is reduced to be 2m depth to reduce risk from working at height. (See revised Dwg No. **A01 (Rev. 1)** in **Annex 1**)
2	Contingency plan for sump pit	Provided and indicated in plans. (See **Annex 3** and revised Dwg No. **A01 (Rev. 1)** in **Annex 1**)

Annex 1

Revised Drainage Plans:

Dwg No. A01(Rev. 1) to A04 (Rev. 1)


GENERAL NOTES:
1. SAND TRAP DETAIL –
PLEASE REFER TO DSD'S STRUCTURAL DRAWING NO. DS1025B.
TYPICAL DETAIL OF CATCHPIT –
PLEASE REFER TO CEDD'S STANDARD DRAWING NO. C2405/1, C2405/2, C2405/3, C2405/4, C2405/5, C2406/1 AND C2406/2A, EXCEPT OTHERWISE SPECIFIED IN DWG NO.A03.
2. TYPICAL U-CHANNEL DETAIL –
PLEASE REFER TO CEDD'S STANDARD DRAWING NO. C2409I, C2410I, C2411G, C2412E & C24130 EXCEPT OTHERWISE SPECIFIED IN DWG NO.A03.
3. TYPICAL METAL GRATING FOR U-CHANNEL –
PLEASE REFER TO HyD'S STANDARD DRAWING NO. H3156B.
4. MAINTENANCE AND CONTINGENCY PLAN FOR PROPOSED PUMP SYSTEM
FOR MAINTENANCE PLANNING
(i) THE MAINTENANCE OF THE PROPOSED PUMP SYSTEM WILL ADHERE TO THE GUIDELINES OUTLINED IN THE STORMWATER DRAINAGE MANUAL 2018 BY DSD.
(ii) THE SCHEDULE OF INSPECTION FOR THE PUMP, AS PER TABLE 26 OF THE MANUAL, IS AS FOLLOWS:
SCHEDULE OF INSPECTION FOR PUMP (FROM TABLE 26 OF STORMWATER DRAINAGE MANUAL)
DUTIES | FREQUENCY
CHECK FOR SATISFACTORY OPERATION OF PUMPS | ONCE EVERY 2 WEEKS
CHECK ELECTRIC MOTORS, PUMP BEARINGS, BELT DRIVE TENSION, GEARBOX, LUBRICANT, CONTROL AND SENSOR EQUIPMENT, FLOW MEASUREMENT DEVICES | ONCE EVERY 2 WEEKS
TEST RUN THE SYSTEM | ONCE EVERY 2 WEEKS
(iii) FOR CONTINGENCY PLANNING, THE PROVISIONS STATED IN THE STORMWATER DRAINAGE MANUAL WILL BE FOLLOWED. THESE PROVISIONS INCLUDE:
• ADEQUATE POWER SUPPLY: SUFFICIENT POWER SHOULD BE AVAILABLE TO OPERATE THE CONTROL SYSTEM AND ALL THE PUMPS.
• AN EMERGENCY POWER GENERATOR MUST BE INSTALLED WITHIN THE STATION COMPOUND TO AUTOMATICALLY PROVIDE BACKUP ELECTRICITY DURING POWER FAILURES. THE GENERATOR SHOULD BE DESIGNED TO SUPPLY ENOUGH POWER FOR THE OPERATION OF THE CONTROL SYSTEM AND PUMPS.
5. FOR NOISE ABATEMENT MEASURES, MEASURES TO MINIMIZE DISTURBANCE TO NEARBY RESIDENTS AND THE OPERATION AND MAINTENANCE (O&M) PERSONNEL SHOULD BE IMPLEMENTED BEFORE COMMENCEMENT OF WORKS.
BAY 1 (493 sq.m)
BAY 2 (493 sq.m)
BAY 3 (695 sq.m)
BAY 4 (695 sq.m)
BAY 5 (575 sq.m)
FAN KAM ROAD
LOT 82 S.B ss.1 IN D.D.108
A
B
N
LEGEND :
U-CHANNEL w/ METAL GRATING COVERS
PUMP PIPE
CATCH PIT (CP)
C.L. COVER LEVEL
I.L. INVERTED LEVEL
B.L. BOTTOM LEVEL
L.B. LOT BOUNDARY
SITE BOUNDARY
BAY BOUNDARY
EX. HOARDING / PERIPHERAL WALL
SCALE 1 : 200
HONG KONG 1980 GRID
PRINCIPAL DATUM HONG KONG
ALL UNITS ARE IN METRES
REV. | DESCRIPTION | DATE
1 | REVISION | 11/05/23
CONSULTANT :
PROJECT TITLE :
PROPOSED STORM DRAIN LAYOUT PLAN OF LOT NO. 82 S.B ss.1 IN D.D.108, FAN KAM ROAD, PAT HEUNG, YUEN LONG, NEW TERRITORIES
DRAWING TITLE :
SITE DRAINAGE LAYOUT
DATE | DRAWN | DESIGNED | CHECKED | SCALE
11/MAY/23 | LW | TL | — | 1:200@A0
JOB NO. : B8354
DRAWING NO. : A01
FILING CODE: K:\Advisory Section\Job Files\P&S\B8354...\Project Team\Topographic survey\2023-01-12
STATUS : REVISION 1



(NOT TO SCALE)

CONSULTANT : 測建行	PROJECT TITLE : PROPOSED STORM DRAIN LAYOUT PLAN OF LOT NO. 82 S.B ss.1 IN D.D.108, FAN KAM ROAD, PAT HEUNG, YUEN LONG, NEW TERRITORIES	DRAWING TITLE : SCHEMATIC DIAGRAM OF DRAINAGE SYSTEM	JOB NO. : B8354	DRAWING NO. : A02	DATE	DRAWN	DESIGNED	CHECKED	SCALE
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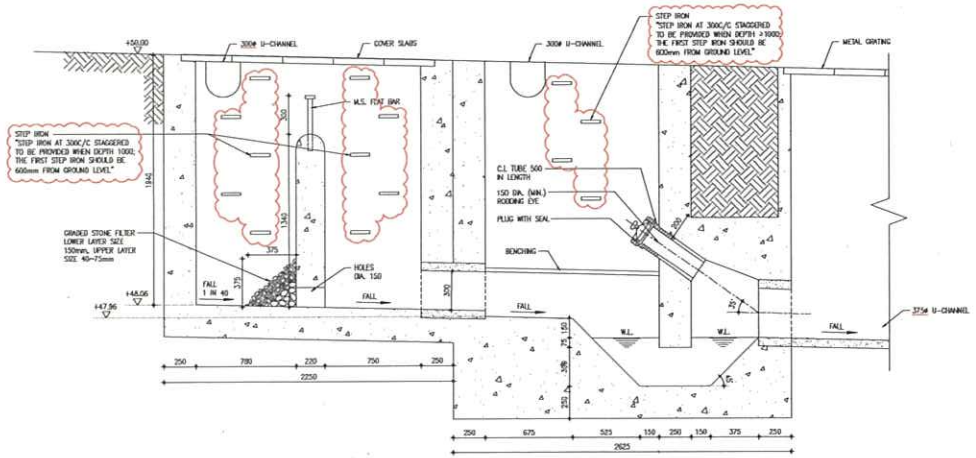
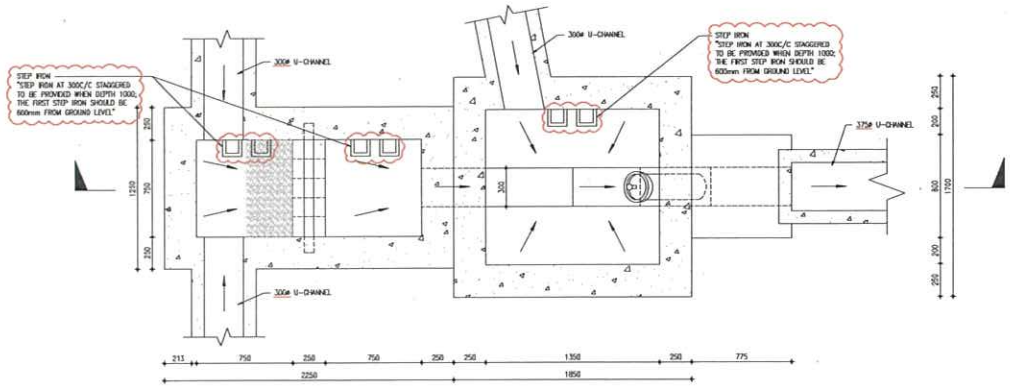
					STATUS : REVISION 1				

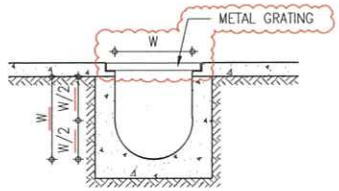


SECTION



PLAN

DETAIL OF SAND TRAP & TERMINAL MANHOLE



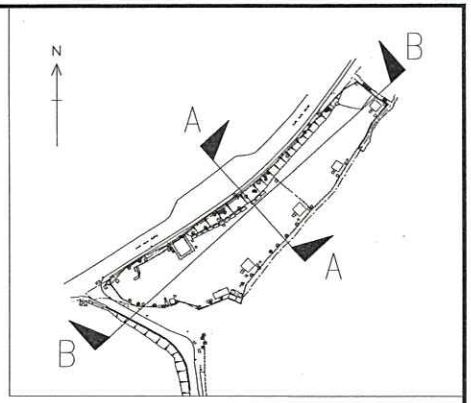
W = WIDTH OF U-CHANNEL

TYPICAL DETAILS OF U-CHANNEL

N.T.S

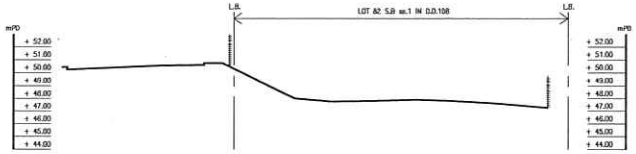
(PLEASE ALSO REFER TO CEDD'S STANDARD DRAWING NO. C2411G & C2413g FOR STEPPED U-CHANNEL FOR DETAIL)

CONSULTANT : 測雄行	PROJECT TITLE : PROPOSED STORM DRAIN LAYOUT PLAN OF LOT NO. 82 S.B ss.1 IN D.D.108, FAN KAM ROAD, PAT HEUNG, YUEN LONG, NEW TERRITORIES	DRAWING TITLE : TYPICAL DETAILS OF SAND TRAP & TERMINAL MANHOLE, TYPICAL DETAILS OF U-CHANNEL	JOB NO. : B8354	DRAWING NO. : A03	DATE	DRAWN	DESIGNED	CHECKED	SCALE
			FILING CODE : N:\Advisory Section\ Job Files\PSL\B8354...\ Project Team\Topographic survey\2023-01-12\CAD		11/MAY/23	LW	TL	—	N.T.S.
					STATUS : REVISION 1				



KEY PLAN

N.T.S



SECTION A–A

SECTION B–B

CONSULTANT :

測建行

PROJECT TITLE :

PROPOSED STORM DRAIN
LAYOUT PLAN OF LOT NO. 82
S.B ss.1 IN D.D.108,
FAN KAM ROAD, PAT HEUNG,
YUEN LONG, NEW TERRITORIES

DRAWING TITLE :

TOPOGRAPHY SECTION VIEW

JOB NO. :
B8354

FILING CODE :
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Project Team\Topographic
survey\2023-01-12\DWG

DRAWING NO. :
A04

DATE	DRAWN	DESIGNED	CHECKED	SCALE
11/MAY/23	LW	TL	—	1:200 @ A1

STATUS : REVISION 1

Annex 2

Design Report (Rev. 1)

	Maximum Run Off (Litre/sec.)	Maximum Run Off (Litre/min.)	Area (m^2)
Bay 1	46.56	2793.67	493
Bay 2	44.51	2670.42	493
Bay 3	61.78	3706.67	695
Bay 4	62.74	3764.58	695
Bay 5	47.92	2875.00	575
Total	263.51	15810.33	2951

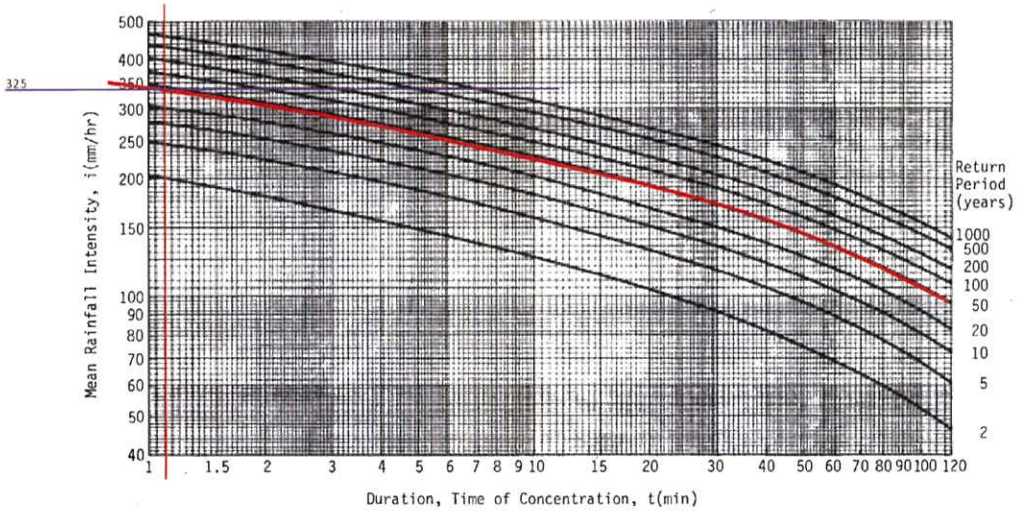
Summary

	Read Channel Require	Channel Provided	Read Velocity (m/s)	Hydraulic Power (kW)	Sump Pit's Volume ($cu.m$)	Sump Pit's Side Length Assume 1.2m height (m)	Pump Pipe Diameter (mm)
Bay 1	150U or 225HR	**300UC**	4.35	5.38	13.97	3.41	243.5
Bay 2	225U or 225HR	**300UC**	2.35	4.14	13.35	3.34	238.1
Bay 3	225U or 300HR	**300UC**	2.75	4.10	18.53	3.93	280.5
Bay 4	225U or 225HR	**300UC**	3.25	2.77	18.82	3.96	282.6
Bay 5	150U or 225HR	**300UC**	3.1	1.69	14.38	3.46	247.0
Main Drainage	300U or 450HR	**375UC or 375SC**	4.10	---	---	---	---

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH1)**

Assumed all runoff from Bay 1 is discharged into CH1

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) -	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intersity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
1	493	48.87 mPD	43.5 mPD	26.80 m	20.04 m	1.14 min	340	46.56



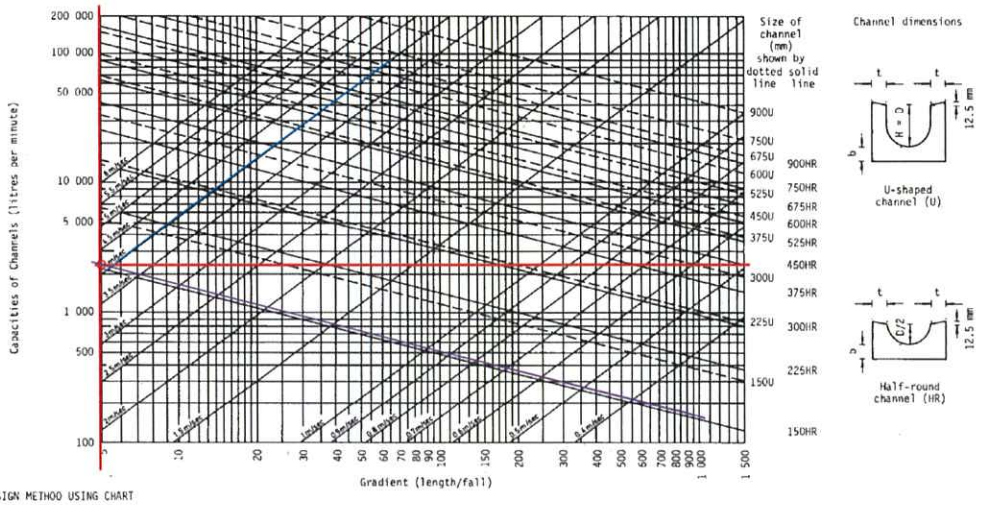
$$Q = \frac{KiA}{3600} \quad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),
i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \quad \ldots\ldots (8.2)$$

where t = time of concentration (min),
A = area of catchment (m^2),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
1	493	46.56	2794	47.83	44.61	14.7	1 In 4.57	12.36



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff → 2. Gradient → 3. Channel size → 4. Velocity

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution

2. Runoff → 3. Channel size → 1. Velocity → 4. Gradient

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	2794	litre/min
Enter Gradient	=	4.57	
Read Channel Required	=	**150U or 225HR**	**For conservative, 300U is provided**
Read Velocity	=	**4.35**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate(m^3/s)	=	0.047
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	5.89
n =	Efficiency	=	0.5

Therefore: P = 5.38 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

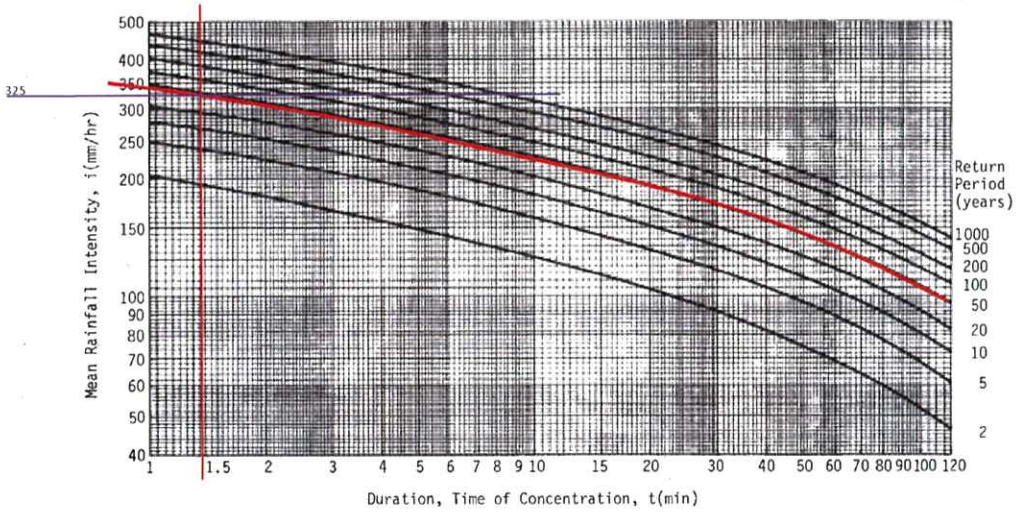
Q =	Flow Rate(m^3/s)	=	0.047
d =	Pump pipe diameter (mm)	=	243.5

Calculation of Sump Pit's Volume	=	13.97	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.41	$m^{1.1}$	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH2)**

Assumed all runoff from Bay 2 is discharged into CH2

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) -	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intersity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
2	493	49.91 mPD	46.18 mPD	29.38 m	12.70 m	1.38 min	325	44.51



$$Q = \frac{KiA}{3600} \quad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),

i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

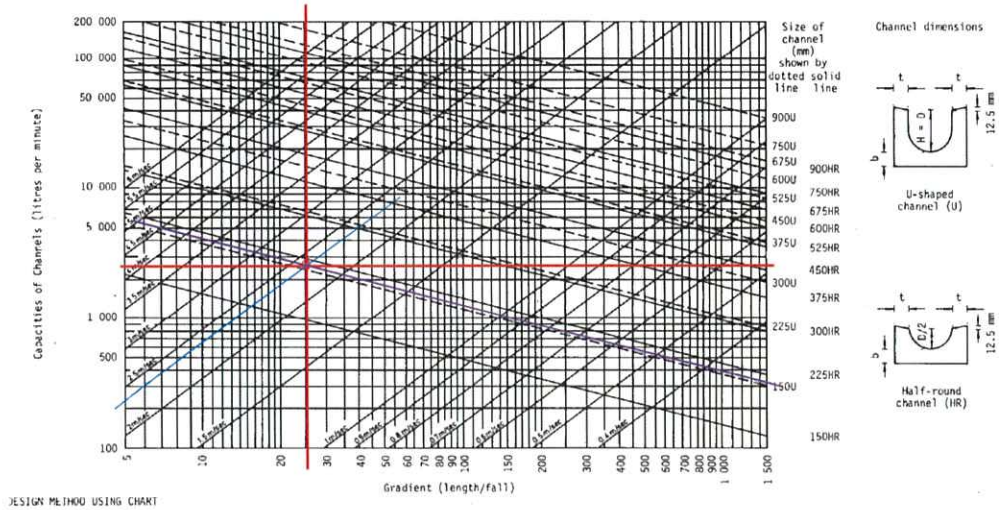
$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \quad \ldots\ldots (8.2)$$

where t = time of concentration (min),

A = area of catchment (m^2),

H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
2	493	**44.51**	**2670**	46.81	46.07	18.7	**1 in 25.27**	**2.27**



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff → 2. Gradient → 3. Channel size / Velocity

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution

2. Runoff → 4. Gradient → 3. Channel size / Velocity

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	2670	litre/min
Enter Gradient	=	25.27	
Read Channel Required	=	**225U or 225HR**	**For conservative, 300U is provided**
Read Velocity	=	**2.35**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate(m^3/s)	=	0.045
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	4.74
n =	Efficiency	=	0.5

Therefore: P = 4.14 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

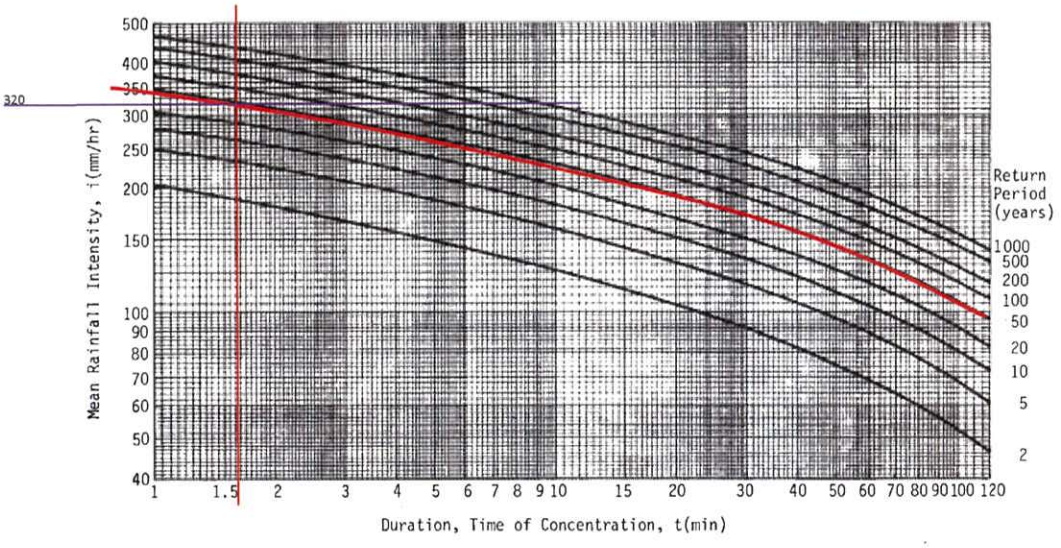
Q =	Flow Rate(m^3/s)	=	0.045
d =	Pump pipe diameter (mm)	=	238.1

Calculation of Sump Pit's Volume	=	13.35	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.34	$m^{[1]}$	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH3)**

Assumed all runoff from Bay 3 is discharged into CH3

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) -	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intensity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
3	695	51 mPD	46.58 mPD	36.07 m	12.25 m	1.64 min	320	**61.78**



$$Q = \frac{KiA}{3600} \quad . \ . \ . \ . \ . \ . \ (8.1)$$

where Q = maximum runoff (litres/sec),

i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

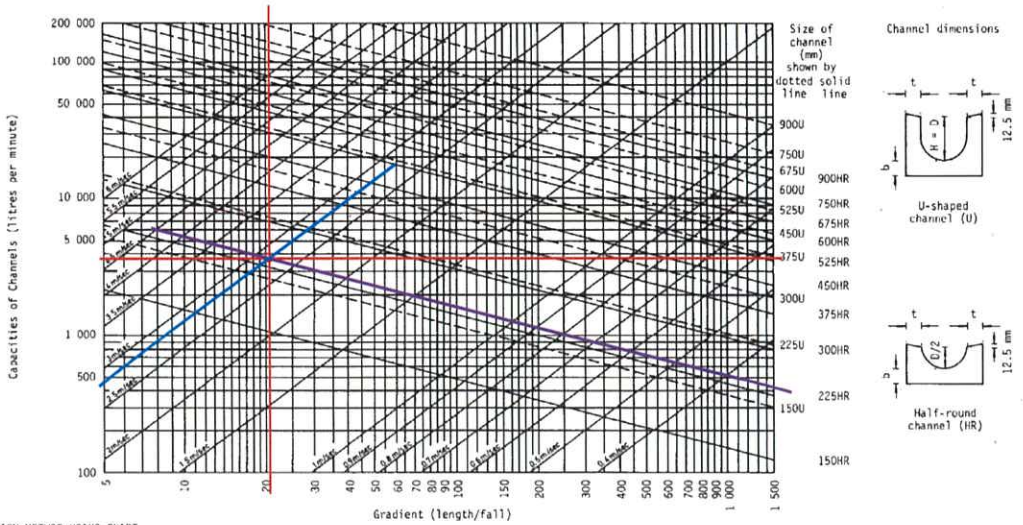
$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \quad . \ . \ . \ . \ . \ . \ (8.2)$$

where t = time of concentration (min),

A = area of catchment (m^2),

H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
3	695	**61.78**	**3707**	47.28	46.48	16.64	**1 in 20.80**	**2.75**



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff → 2. Gradient → 3. Channel size → 4. Velocity

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution

2. Runoff → 3. Channel size → 1. Velocity → 4. Gradient

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	3707	litre/min
Enter Gradient	=	20.80	
Read Channel Required	=	**225U or 300HR**	**For conservative, 300U is provided**
Read Velocity	=	**2.75**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate(m^3/s)	=	0.062
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	3.38
n =	Efficiency	=	0.5

Therefore: P= 4.10 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

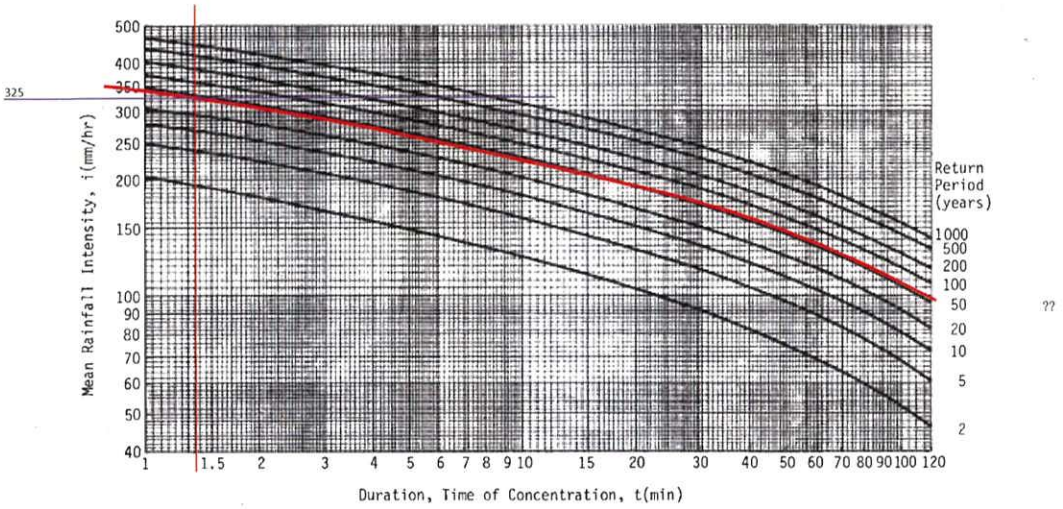
Q =	Flow Rate(m^3/s)	=	0.062
d =	Pump pipe diameter (mm)	=	280.5

Calculation of Sump Pit's Volume	=	18.53	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.93	m	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH4)**

Assumed all runoff from Bay 4 is discharged into CH4

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) - L	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intersity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
4	695	50.17 mPD	48.25 mPD	26.43 m	7.26 m	1.34 min	325	**62.74**



??

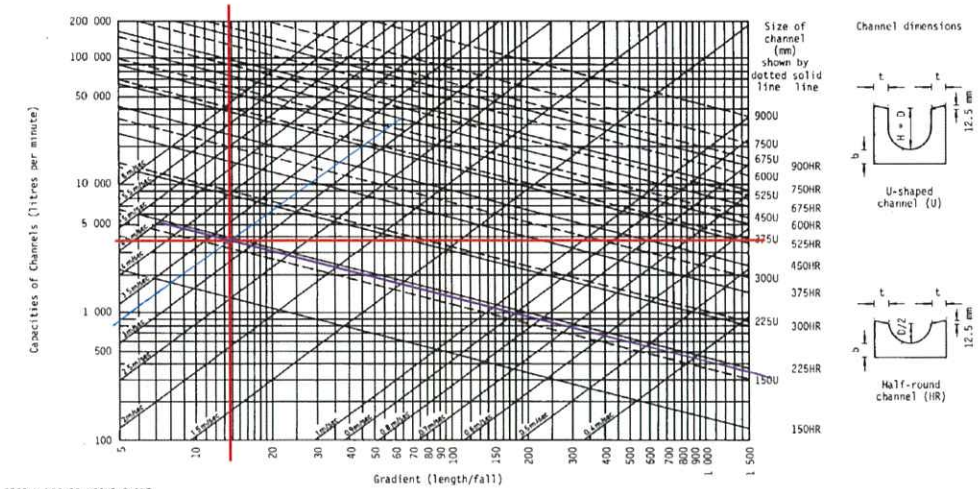
$$Q = \frac{K1A}{3600} \quad \ldots\ldots \quad (8.1)$$

where Q = maximum runoff (litres/sec),
i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14465 \left[\frac{L}{H^{0.7} A^{0.1}} \right] \quad \ldots\ldots \quad (8.2)$$

where t = time of concentration (min),
A = area of catchment (m²),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
4	695	**62.74**	**3765**	48.98	47.56	21.25	**1 in 14.96**	**3.82**



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff → 3. Channel size / Velocity → 2. Gradient

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution

2. Runoff → 3. Channel size / Velocity → 4. Gradient

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	3765	litre/min
Enter Gradient	=	14.96	
Read Channel Required	=	**225U or 225HR**	**For conservative, 300U is provided**
Read Velocity	=	**3.25**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:
P = Hydraulic Power (kW)

Q =	Flow Rate(m^3/s)	=	0.063
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	2.25
n =	Efficiency	=	0.5

Therefore: P = 2.77 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

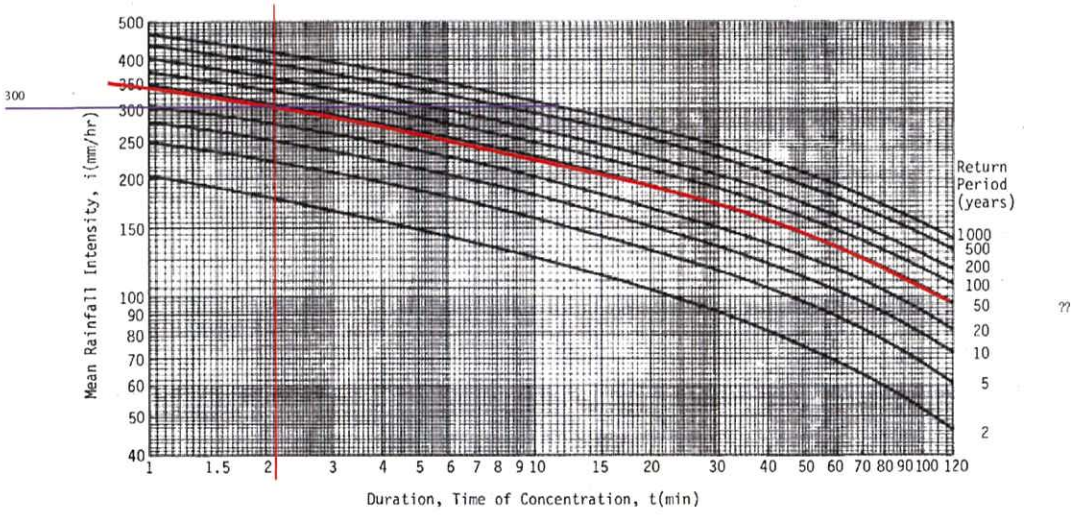
Q =	Flow Rate(m^3/s)	=	0.063
d =	Pump pipe diameter (mm)	=	282.6

Calculation of Sump Pit's Volume	=	18.82	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.96	$m^{\square}$	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH5)**

Assumed all runoff from Bay 5 is discharged into CH5

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) -	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intensity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
5	575	51.55 mPD	49.3 mPD	39.61 m	5.68 m	2.14 min	300	47.92



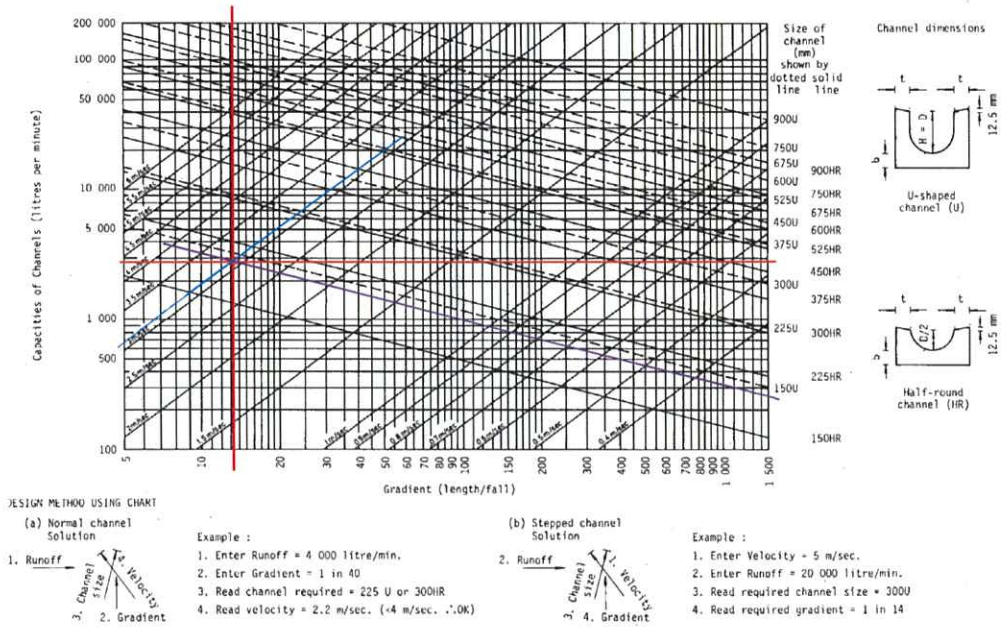
$$Q = \frac{KiA}{3600} \quad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),
i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \quad \ldots\ldots (8.2)$$

where t = time of concentration (min),
A = area of catchment (m^2),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
5	575	47.92	**2875**	50.16	48.61	20.59	**1 in 13.28**	**4.31**



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff → 4. Velocity → 3. Channel size → 2. Gradient

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution

2. Runoff → 1. Velocity → 3. Channel size → 4. Gradient

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	2875	litre/min
Enter Gradient	=	13.28	
Read Channel Required	=	**150U or 225HR**	**For conservative, 300U is provided**
Read Velocity	=	**3.1**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate(m^3/s)	=	0.048
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	1.8
n =	Efficiency	=	0.5

Therefore: P = 1.69 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

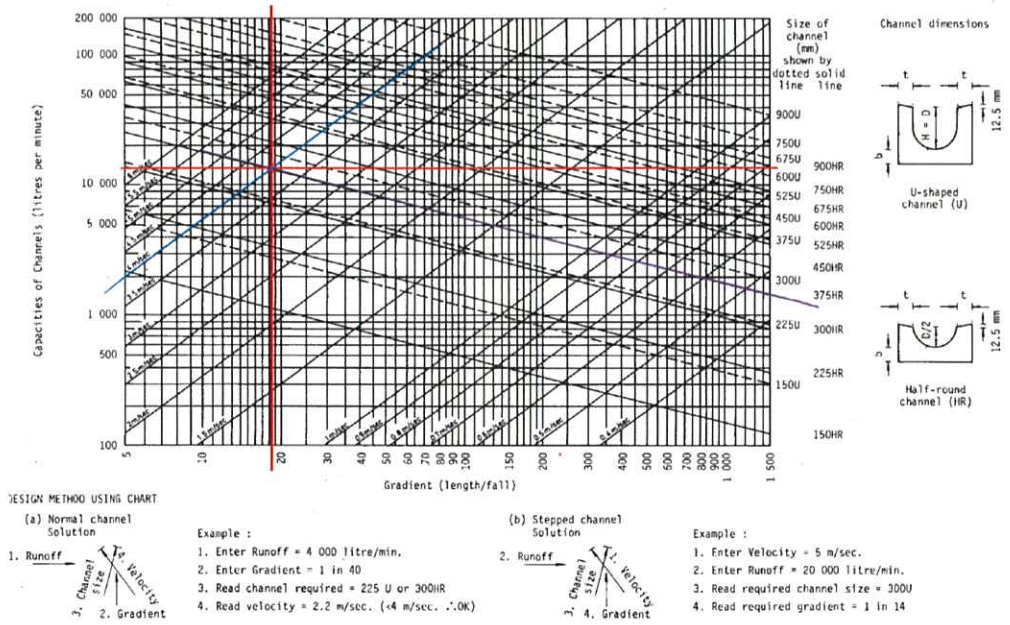
Where:

Q =	Flow Rate(m^3/s)	=	0.048
d =	Pump pipe diameter (mm)	=	247.0

Calculation of Sump Pit's Volume	=	14.38	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.46	$m^{(.)}$	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(Total)**

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	
5	2951	**263.51**	**15810**	51.55	44.61	128.15	**18.47**	**3.10**

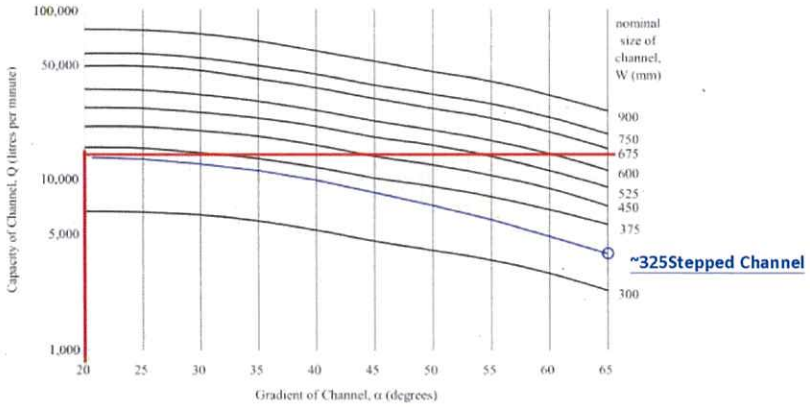


Result

Enter Runoff	=	15810	litre/min
Enter Gradient	=	18.47	
Read Channel Required	=	**300U or 450HR**	
Read Velocity	=	**4.1**	m /sec

Design chart for Stepped Channel

Figure 2 - Design Chart for Standard Sized Stepped Channels



Appendix P - Photo Record showing gullies along fan kam road


50cm x 45cm
Channel 35cm (Dia) x 40c
墓地
粉鎖公路
露天貨倉
TS
R
20 m

Annex 3

Maintenance and Contingency Plan for Proposed Pump System

Maintenance and Contingency Plan for Proposed Pump System -
Planning Application for
Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at
Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories (the "Premises")

For Maintenance Plan

The maintenance of the proposed pump system will adhere to the guidelines outlined in the STORMWATER DRAINAGE MANUAL 2018 by DSD.

The Schedule of Inspection for the pump, as per Table 26 of the manual, is as follows:

Schedule of Inspection for Pump (from Table 26 of STORMWATER DRAINAGE MANUAL)

Duties	Frequency
Check for satisfactory operation of pumps	Once every 2 weeks
Check electric motors, pump bearings, belt drive tension, gearbox, lubricant, control and sensor equipment, flow measurement devices	Once every 2 weeks
Test run the system	Once every 2 weeks

For contingency plan, the provisions stated in the STORMWATER DRAINAGE MANUAL will be followed. These provisions include:

- Adequate power supply: Sufficient power should be available to operate the control system and all the pumps.
- An emergency power generator must be installed within the station compound to automatically provide backup electricity during power failures. The generator should be designed to supply enough power for the operation of the control system and pumps.

For Noise abatement measures, Measures to minimize disturbance to nearby residents and the operation and maintenance (O&M) personnel should be implemented before commencement of works.

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Prudential Surveyors International Limited
測建行有限公司

26 June 2023

Your Ref: TPB/A/YL-PH/933
Our Ref: TPB260623OB-B8354

Secretary
Town Planning Board
15/F North Point Government Offices
333 Java Road
North Point
Hong Kong

Dear Sirs,

Re: A/YL-PH/933 – Further Information 4
Section 16 Application for Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories

We would like to supersede our letter dated 23 June 2023 with this letter.

We refer to the captioned Section 16 application and would like to submit our reply to the comments from Drainage Services Department (DSD) received on 16 June 2023 as attached. Also, the latest comments from DSD are mainly technical design issue, if DSD has further comments, the Applicant agreed to submit the drainage proposal to the satisfaction of the DSD as an approval condition. Also, requested by Mr. Ngan of DPO/FS&YLE, this submission has consolidated our previous rely to Fire Service Department and Transport Department submitted on 24 March 2023.

If you have anv enquiries, please feel free to contact our Mr. Ken Fong at or the undersigned at

Yours faithfully
For and on behalf of
PRUDENTIAL SURVEYORS INTERNATIONAL LIMITED

Michael C K Lee
Director
Valuation & Advisory
Encl

c.c. Client
DPO/FS&YLE Attention : Mr. YIP Long Ting (Email : ltyip@pland.gov.hk)

26 June 2023

Re: Response to Department Comments
Section 16 Application No. A/YL-PH/933 of
Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories

(A)	**Comments from Director of Drainage Services dated 15.6.2023 received on 16.6.2023**	**Applicant/Consultant's Response**
1.	It is noted that there is existing hoarding erected along the site boundary. Please advise if adequate opening has been provided to intercept the existing overland flow passing through the site. The development should neither obstruct overland flow nor adversely affect existing natural streams, village drains, ditches and the adjacent areas, etc.	Adequate openings will be provided at the existing hoarding to intercept the existing overland flow passing through the site.
2.	Section B-B, the ground profile of adjacent areas should also be presented in the section.	The latest drawing includes the group profile of adjacent areas in section B-B. (See **Dwg. No. A04 (Rev. 2) in Annex 1**)
3.	The TMH-01 I.L. does not tally with the one in schematic diagram. Please revise.	The I.L. of TMH-01 and MH-01 are revised. (See **Dwg. No. A01 (Rev. 2) in Annex 1**)
4.	Please confirm and include the maintenance responsibility of the proposed stepped channel outside the lot boundary on drainage plan.	The applicant is responsible for the maintenance of the proposed stepped channel outside the lot boundary.
5.	The I.L. of CP6-4 is higher than that of CP6-3, and the TMH-01 is higher than that of MH-01 which is not acceptable. Please review.	The I.L. of TMH-01, MH-01 and CP6-4 are revised. (See **Dwg. No. A01 (Rev. 2) in Annex 1**)
6.	The level difference between UC inlets and SD-05 & TMH-01 is greater than 600mm, backdrop manhole shall be provided.	Backdrop manhole is provided in the latest drawing. (See **Dwg. No. A03 (Rev. 2) in Annex 1**)

7.	The sump pit should be maintained properly and emptied before and after each heavy rainfall to ensure the proposed sump pit could function/perform properly to receive the surface runoff in each occasion so as to avoid adverse drainage impact to the vicinity.	A duty to maintain and empty sump pit before and after each heavy rainfall is added to the maintenance plan. (See **Schedule of Inspection for Pump in Annex 3**)
8.	A testing schedule is required to be included in the maintenance and contingency plan.	A testing schedule is already included in the maintenance plan. (See **Schedule of Inspection for Pump in Annex 3**)
9.	Please include the mechanism of the proposed sump pit, such as to which level the water will be pumped out, in the maintenance and contingency plan.	Surface runoff within Bay 1-4 will be transferred to and stored in the sump pits, which will be pumped out once the water level reached the level detector and the water will be transferred to the terminal manhole (TMH-01).
10.	Please include photos, sections, material and product manual in the maintenance and contingency plan.	The photos, sections, material and product manual will be added to the maintenance and contingency plan in the detailed design stage.
11.	Please consider to provide spare manual pump in case the electric power system is malfunction.	A provision for spare manual pumps has been added in the contingency plan. (See **Annex 3**)

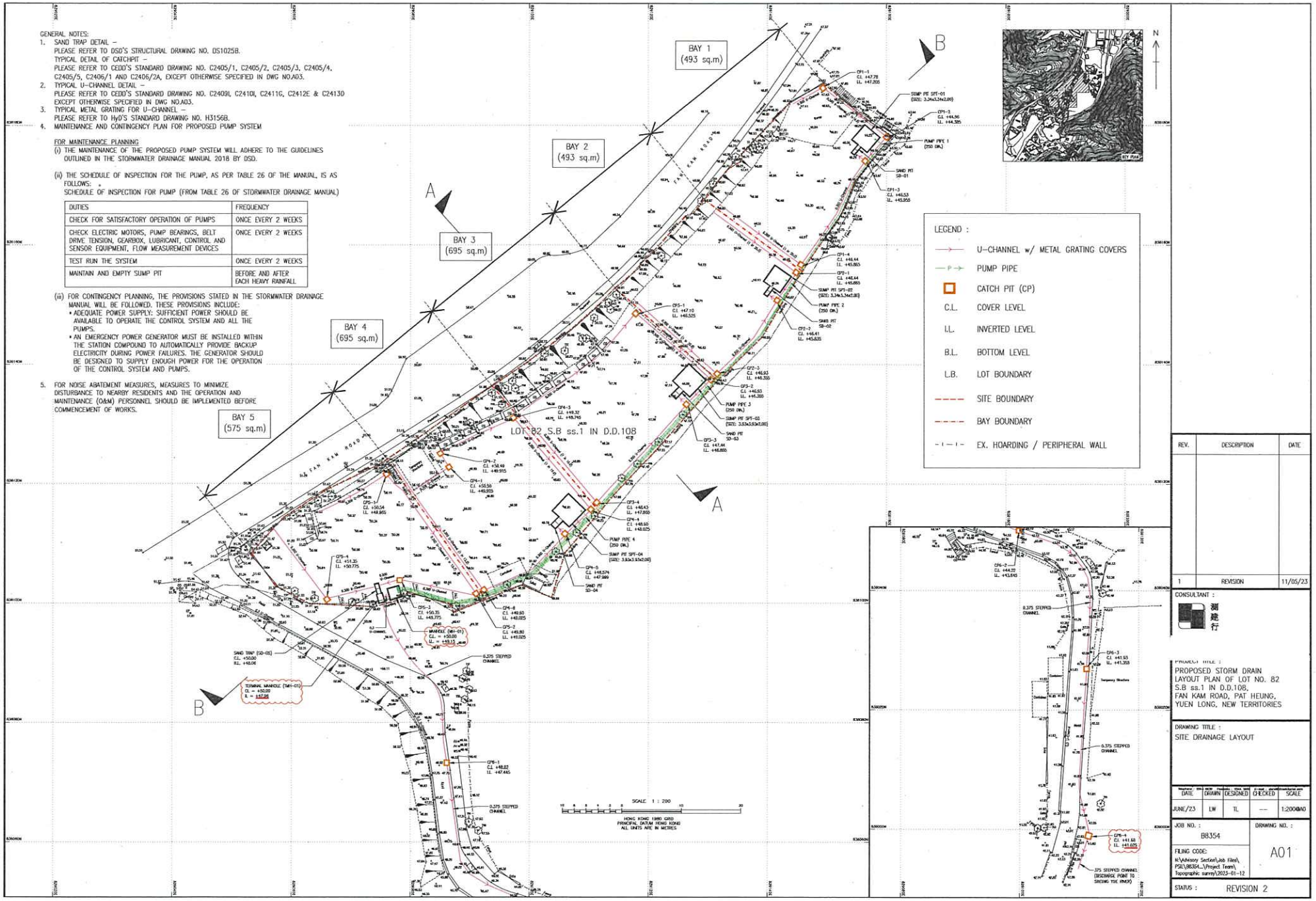
(B)	**Comments from Director of Fire Services dated 23.11.2022 received on 13.12.2023**	**Applicant/Consultant's Response**
1.	Based on the submitted FSI proposal, applicant is required to clarify the type of goods to be stored in the open storage area. Should it be combustible in nature, modified hose reel system and fire alarm system shall be provided.	The list of type of goods to be stored is attached in Appendix 5 of our S.16 Application. Goods proposed to be stored on site include operational tools and material that are not combustible in nature. The list is attached again in **Annex 4** herewith for easy reference.

(C)	**Comments from the Assistant Commissioner for Transport/NT dated 20.3.2023 received on 13.12.2023**	**Applicant/Consultant's Response**
1.	The reason for providing two ingress/egress for one development is not justified. To minimise the impact to Fan Kam Road, please consider to provide internal circulation within the development and use one run-in/out.	After review, the longest operating vehicle of 9.3m long shall perform satisfactory manoeuvring from/to the northern gate to/from Fan Kam Road without encroaching onto the opposite traffic lane. Attached swept path in **Annex 5** herewith refers. Therefore, one single run-in/out of the site is proposed to minimize traffic impact to the adjacent road network.
2.	The swept paths provided under this FI showed that the vehicles exit to the left and enter from the right to the local access will affect the traffic in Fan Kam Road. Please review.	Due to the local site constraints, long vehicles turning to/from the local access road connecting Ta Shek Wu Chuen near the southern gate shall inevitably encroach onto the opposite traffic lane of Fan Kam Road. After review, the operating vehicles shall not use this local road and related junction as elaborated in C(1) above.

Annex
1. Revised Drainage Plans: Dwg No. A01(Rev. 2), A03(Rev. 2), A04 (Rev. 2)
2. Design Report (Rev. 1)
3. Maintenance and Contingency Plan for Proposed Pump System (Rev. 1)
4. List of goods
5. Swept path analysis

Annex 1

Revised Drainage Plans:
Dwg No. A01(Rev. 2), A03(Rev. 2),
A04 (Rev. 2)



GENERAL NOTES:

1. SAND TRAP DETAIL –
   PLEASE REFER TO DSD'S STRUCTURAL DRAWING NO. DS1025B.
   TYPICAL DETAIL OF CATCHPIT –
   PLEASE REFER TO CEDD'S STANDARD DRAWING NO. C2405/1, C2405/2, C2405/3, C2405/4, C2405/5, C2406/1 AND C2406/2A, EXCEPT OTHERWISE SPECIFIED IN DWG NO.A03.
2. TYPICAL U-CHANNEL DETAIL –
   PLEASE REFER TO CEDD'S STANDARD DRAWING NO. C2409I, C2410I, C2411G, C2412E & C2413D EXCEPT OTHERWISE SPECIFIED IN DWG NO.A03.
3. TYPICAL METAL GRATING FOR U-CHANNEL –
   PLEASE REFER TO HyD'S STANDARD DRAWING NO. H3156B.
4. MAINTENANCE AND CONTINGENCY PLAN FOR PROPOSED PUMP SYSTEM

   FOR MAINTENANCE PLANNING
   (i) THE MAINTENANCE OF THE PROPOSED PUMP SYSTEM WILL ADHERE TO THE GUIDELINES OUTLINED IN THE STORMWATER DRAINAGE MANUAL 2018 BY DSD.

   (ii) THE SCHEDULE OF INSPECTION FOR THE PUMP, AS PER TABLE 26 OF THE MANUAL, IS AS FOLLOWS: *
   SCHEDULE OF INSPECTION FOR PUMP (FROM TABLE 26 OF STORMWATER DRAINAGE MANUAL)

DUTIES	FREQUENCY
CHECK FOR SATISFACTORY OPERATION OF PUMPS	ONCE EVERY 2 WEEKS
CHECK ELECTRIC MOTORS, PUMP BEARINGS, BELT DRIVE TENSION, GEARBOX, LUBRICANT, CONTROL AND SENSOR EQUIPMENT, FLOW MEASUREMENT DEVICES	ONCE EVERY 2 WEEKS
TEST RUN THE SYSTEM	ONCE EVERY 2 WEEKS
MAINTAIN AND EMPTY SUMP PIT	BEFORE AND AFTER EACH HEAVY RAINFALL

   (iii) FOR CONTINGENCY PLANNING, THE PROVISIONS STATED IN THE STORMWATER DRAINAGE MANUAL WILL BE FOLLOWED. THESE PROVISIONS INCLUDE:
   - ADEQUATE POWER SUPPLY: SUFFICIENT POWER SHOULD BE AVAILABLE TO OPERATE THE CONTROL SYSTEM AND ALL THE PUMPS.
   - AN EMERGENCY POWER GENERATOR MUST BE INSTALLED WITHIN THE STATION COMPOUND TO AUTOMATICALLY PROVIDE BACKUP ELECTRICITY DURING POWER FAILURES. THE GENERATOR SHOULD BE DESIGNED TO SUPPLY ENOUGH POWER FOR THE OPERATION OF THE CONTROL SYSTEM AND PUMPS.

5. FOR NOISE ABATEMENT MEASURES, MEASURES TO MINIMIZE DISTURBANCE TO NEARBY RESIDENTS AND THE OPERATION AND MAINTENANCE (O&M) PERSONNEL SHOULD BE IMPLEMENTED BEFORE COMMENCEMENT OF WORKS.

REV.	DESCRIPTION	DATE
1	REVISION	11/05/23

CONSULTANT :

測建行

PROJECT TITLE :
PROPOSED STORM DRAIN
LAYOUT PLAN OF LOT NO. 82
S.B ss.1 IN D.D.108,
FAN KAM ROAD, PAT HEUNG,
YUEN LONG, NEW TERRITORIES

DRAWING TITLE :
SITE DRAINAGE LAYOUT

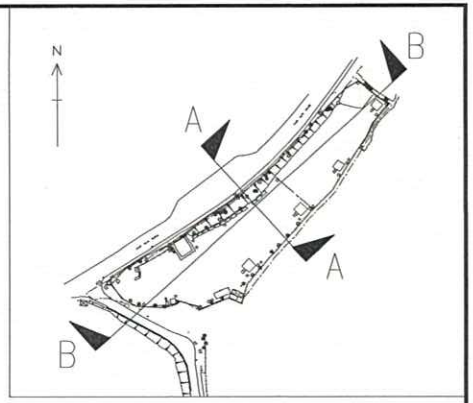
DATE	DRAWN	DESIGNED	CHECKED	SCALE
JUNE/23	LW	TL	—	1:200@A0

JOB NO. : B8354

DRAWING NO. : A01

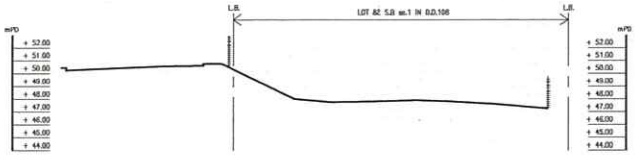
FILING CODE: N:\Advisory Section\Job Files\PSL\B8354...\Project Team\Topographic survey\2023-01-12

STATUS : REVISION 2

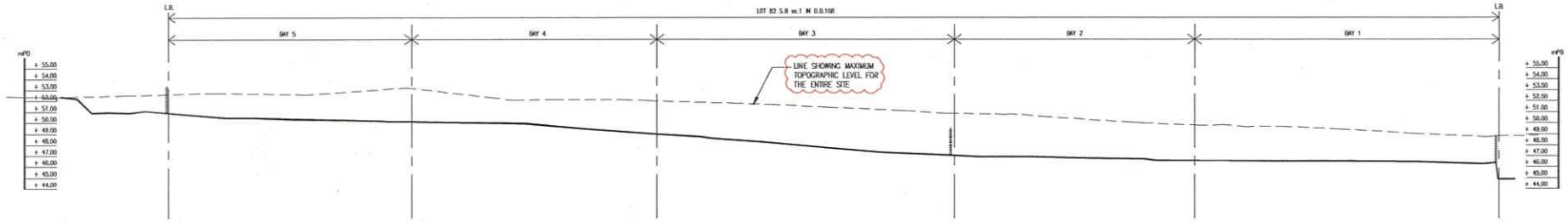


KEY PLAN

N.T.S

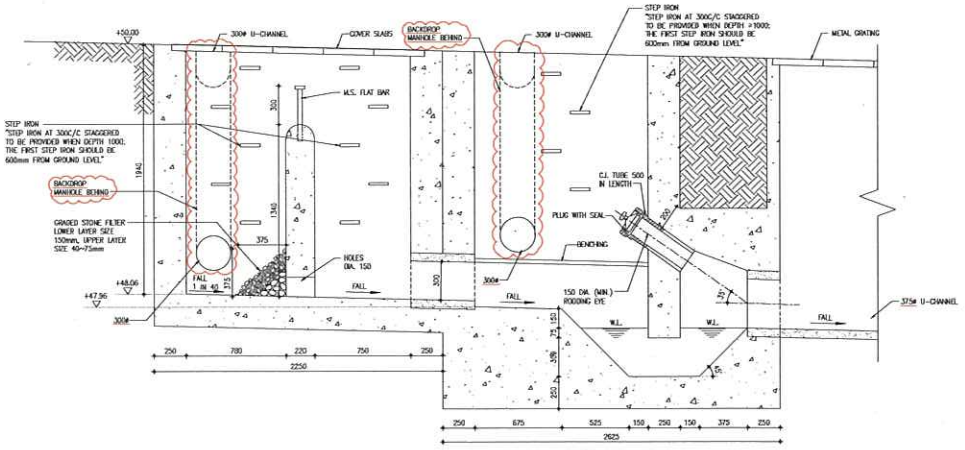


SECTION A–A

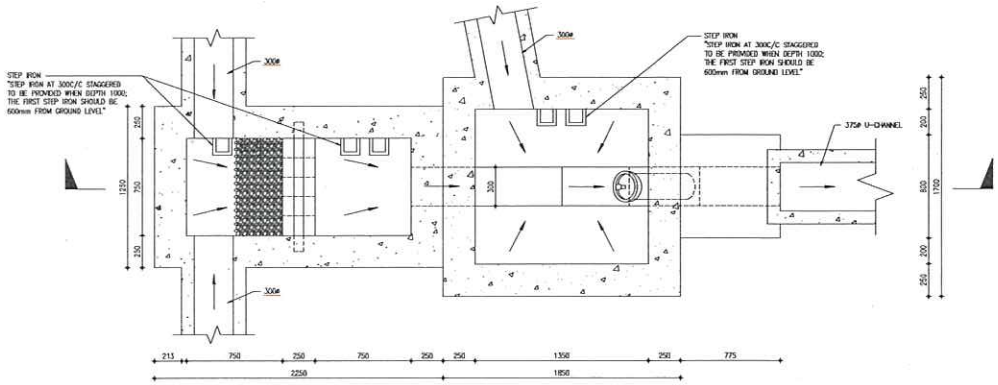


SECTION B–B

CONSULTANT : 測建行	PROJECT TITLE : PROPOSED STORM DRAIN LAYOUT PLAN OF LOT NO. 82 S.B ss.1 IN D.D.108, FAN KAM ROAD, PAT HEUNG, YUEN LONG, NEW TERRITORIES	DRAWING TITLE : TOPOGRAPHY SECTION VIEW	JOB NO. : B8354 FILING CODE : N:\Advisory Section\Job Files\PSL\B8354...\Project Team\Topographic survey\2023-01-12\DAD	DRAWING NO. : A04	DATE: JUNE/23 · DRAWN: LW · DESIGNED: TL · CHECKED: — · SCALE: 1:200 @ A1 STATUS : REVISION 2

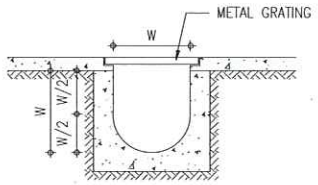


SECTION



PLAN

DETAIL OF SAND TRAP & TERMINAL MANHOLE



W = WIDTH OF U-CHANNEL

TYPICAL DETAILS OF U-CHANNEL

N.T.S

(PLEASE ALSO REFER TO CEDD'S STANDARD DRAWING NO. C2411G & C2413g FOR STEPPED U-CHANNEL FOR DETAIL)

CONSULTANT : 洞建行	PROJECT TITLE : PROPOSED STORM DRAIN LAYOUT PLAN OF LOT NO. 82 S.B ss.1 IN D.D.108, FAN KAM ROAD, PAT HEUNG, YUEN LONG, NEW TERRITORIES	DRAWING TITLE : TYPICAL DETAILS OF SAND TRAP & TERMINAL MANHOLE, TYPICAL DETAILS OF U-CHANNEL	JOB NO. : B8354	DRAWING NO. : A03	DATE	DRAWN	DESIGNED	CHECKED	SCALE
			FILING CODE : N:\Advisory Section\ Job Files\PS1\B8354...\ Project Team\Topographic survey\2023-01-12\CAD		JUNE/23	LW	TL	—	N.T.S.
					STATUS : REVISION 2				

Annex 2

Design Report (Rev. 1)

	Maximum Run Off (Litre/sec.)	Maximum Run Off (Litre/min.)	Area (m^2)
Bay 1	46.56	2793.67	493
Bay 2	44.51	2670.42	493
Bay 3	61.78	3706.67	695
Bay 4	62.74	3764.58	695
Bay 5	47.92	2875.00	575
Total	263.51	15810.33	2951

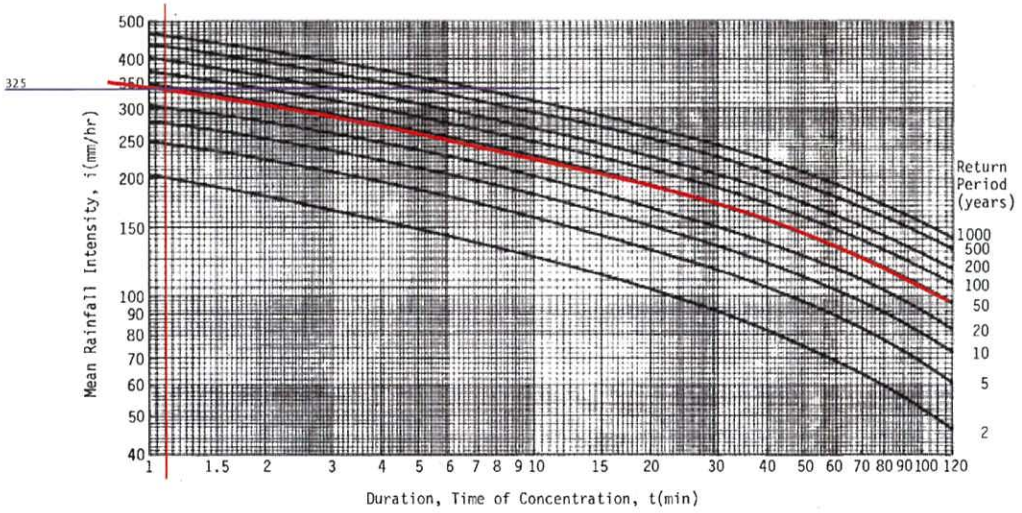
Summary

	Read Channel Require	Channel Provided	Read Velocity (m/s)	Hydraulic Power (kW)	Sump Pit's Volume ($cu.m$)	Sump Pit's Side Length Assume 1.2m height (m)	Pump Pipe Diameter (mm)
Bay 1	150U or 225HR	**300UC**	4.35	5.38	13.97	3.41	243.5
Bay 2	225U or 225HR	**300UC**	2.35	4.14	13.35	3.34	238.1
Bay 3	225U or 300HR	**300UC**	2.75	4.10	18.53	3.93	280.5
Bay 4	225U or 225HR	**300UC**	3.25	2.77	18.82	3.96	282.6
Bay 5	150U or 225HR	**300UC**	3.1	1.69	14.38	3.46	247.0
Main Drainage	300U or 450HR	**375UC or 375SC**	4.10	---	---	---	---

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH1)**

Assumed all runoff from Bay 1 is discharged into CH1

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) -	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intersity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
1	493	48.87 mPD	43.5 mPD	26.80 m	20.04 m	1.14 min	340	**46.56**



$$Q = \frac{KiA}{3600} \quad . \ . \ . \ . \ . \ . \ (8.1)$$

where Q = maximum runoff (litres/sec),

i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

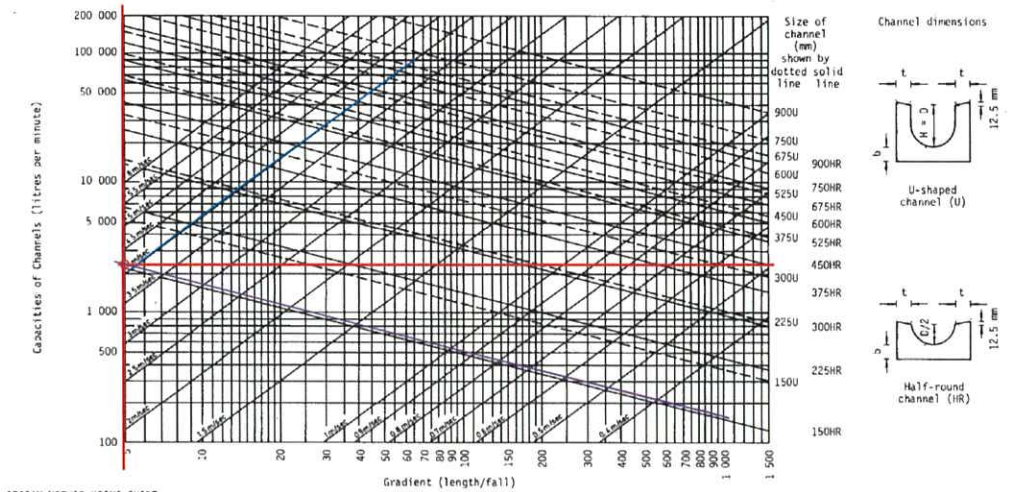
$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \quad . \ . \ . \ . \ . \ . \ (8.2)$$

where t = time of concentration (min),

A = area of catchment (m^2),

H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
1	493	**46.56**	**2794**	47.83	44.61	14.7	**1 in 4.57**	**12.36**



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff
2. Gradient
3. Channel Size
4. Velocity

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Splution

1. Runoff
2. Gradient
3. Channel Size
4. Velocity

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	2794	litre/min
Enter Gradient	=	4.57	
Read Channel Required	=	**150U or 225HR**	- **For conservative, 300U is provided**
Read Velocity	=	**4.35**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate(m^3/s)	=	0.047
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	5.89
n =	Efficiency	=	0.5

Therefore: P = 5.38 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

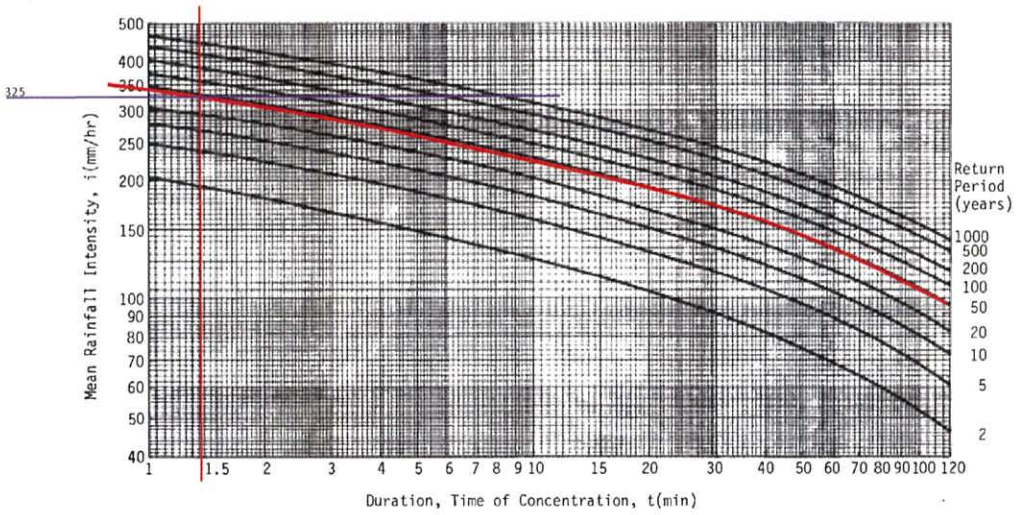
Q =	Flow Rate(m^3/s)	=	0.047
d =	Pump pipe diameter (mm)	=	243.5

Calculation of Sump Pit's Volume	=	13.97	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.41	$m^{\square}$	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH2)**

Assumed all runoff from Bay 2 is discharged into CH2

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) -	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intersity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
2	493	49.91 mPD	46.18 mPD	29.38 m	12.70 m	1.38 min	325	**44.51**



$$Q = \frac{KiA}{3600} \quad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),

i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

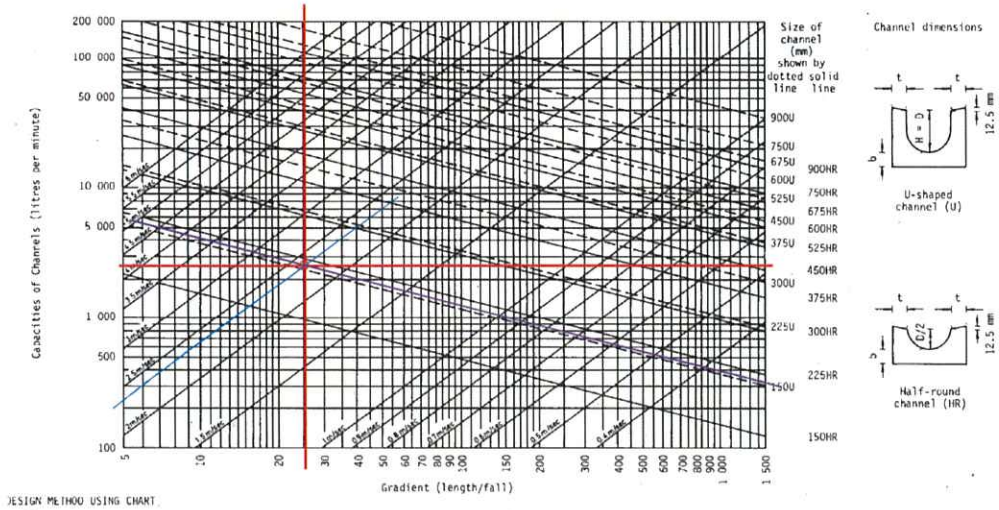
$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \quad \ldots\ldots (8.2)$$

where t = time of concentration (min),

A = area of catchment (m^2),

H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
2	493	**44.51**	**2670**	46.81	46.07	18.7	**1 in 25.27**	**2.27**



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff → 3. Channel size, 4. Velocity → 2. Gradient

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution

2. Runoff → 1. Velocity, 3. Channel size → 4. Gradient

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	2670	litre/min
Enter Gradient	=	25.27	
Read Channel Required	=	**225U or 225HR**	**For conservative, 300U is provided**
Read Velocity	=	**2.35**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate(m^3/s)	=	0.045
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	4.74
n =	Efficiency	=	0.5

Therefore: P = 4.14 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

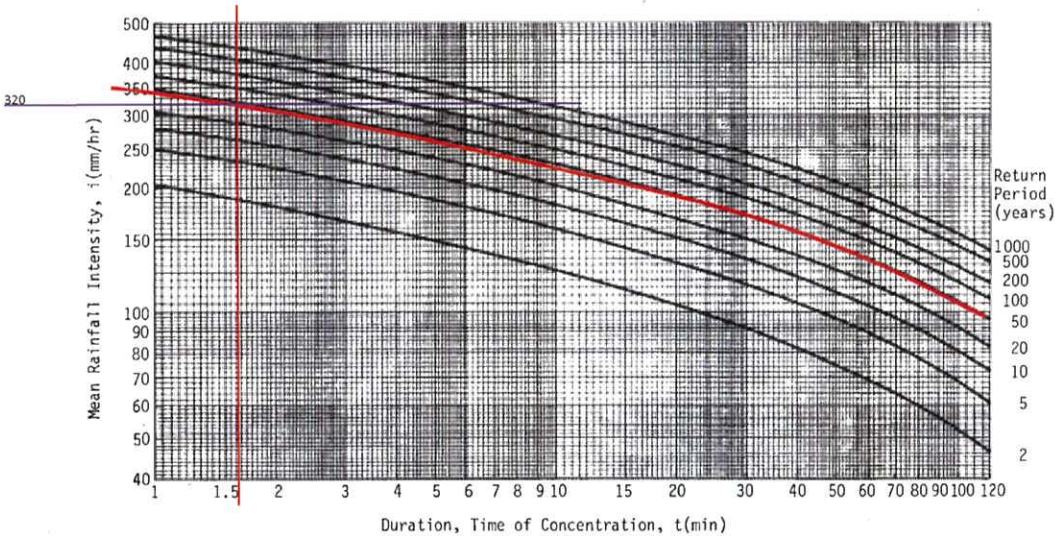
Q =	Flow Rate(m^3/s)	=	0.045
d =	Pump pipe diameter (mm)	=	238.1

Calculation of Sump Pit's Volume	=	13.35	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.34	$m^{\square}$	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH3)**

Assumed all runoff from Bay 3 is discharged into CH3

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) -	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intersity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
3	695	51 mPD	46.58 mPD	36.07 m	12.25 m	1.64 min	320	**61.78**



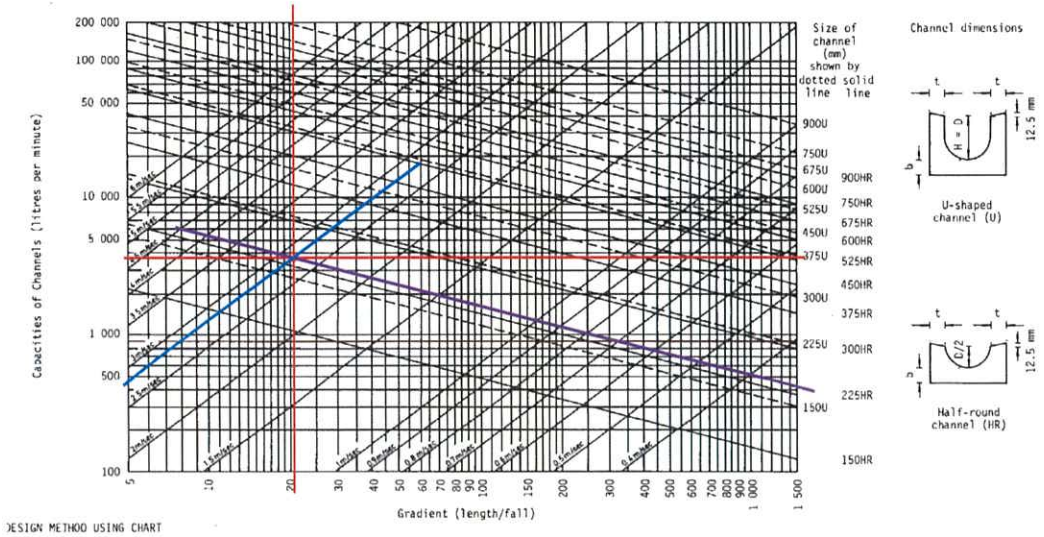
$$Q = \frac{KiA}{3600} \qquad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),
i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14465 \left[\frac{L}{H^{0.2} A^{0.1}} \right] \qquad \ldots\ldots (8.2)$$

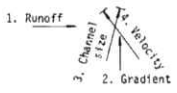
where t = time of concentration (min),
A = area of catchment (m^2),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
3	695	**61.78**	**3707**	47.28	46.48	16.64	**1 in 20.80**	**2.75**



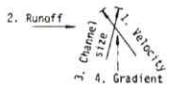
DESIGN METHOD USING CHART

(a) Normal channel Solution



Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution



Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	3707	litre/min
Enter Gradient	=	20.80	
Read Channel Required	=	**225U or 300HR**	**For conservative, 300U is provided**
Read Velocity	=	**2.75**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate(m^3/s)	=	0.062
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	3.38
n =	Efficiency	=	0.5

Therefore: P= 4.10 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

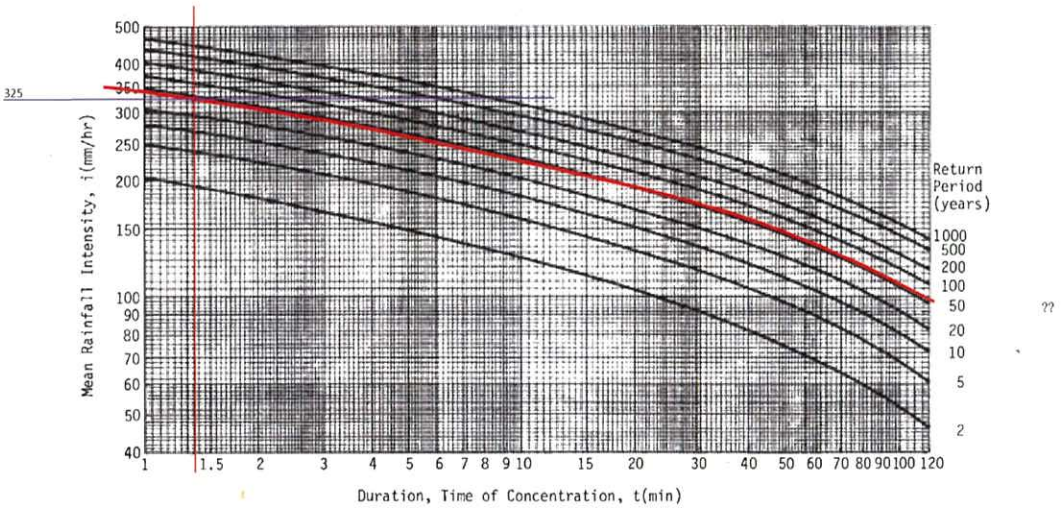
Q =	Flow Rate(m^3/s)	=	0.062
d =	Pump pipe diameter (mm)	=	280.5

Calculation of Sump Pit's Volume	=	18.53	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.93	m^2	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH4)**

Assumed all runoff from Bay 4 is discharged into CH4

Bay	Catchment Area (m2)	Highest point level (with catchment bay)	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) - L	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intersity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
4	695	50.17 mPD	48.25 mPD	26.43 m	7.26 m	1.34 min	325	**62.74**



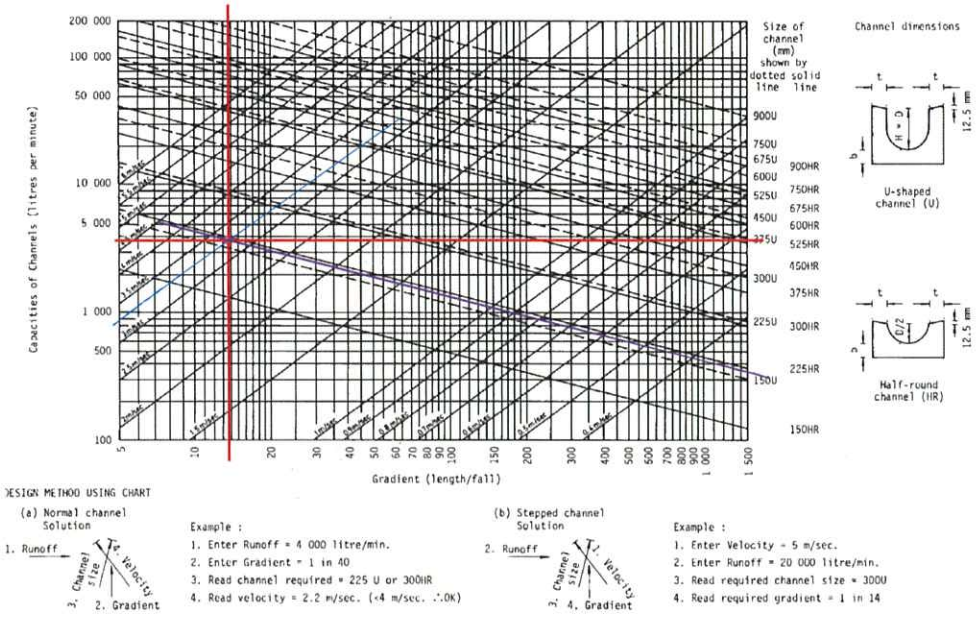
$$Q = \frac{K1A}{3600} \quad \ldots\ldots \quad (8.1)$$

where Q = maximum runoff (litres/sec),
i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

$$t = 0.14465 \left[\frac{L}{H^{0.3} A^{0.1}} \right] \quad \ldots\ldots \quad (8.2)$$

where t = time of concentration (min),
A = area of catchment (m²),
H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
4	695	**62.74**	**3765**	48.98	47.56	21.25	**1 In 14.96**	**3.82**



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff → 4. Velocity → 3. Channel size → 2. Gradient

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution

2. Runoff → 1. Velocity → 3. Channel size → 4. Gradient

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	3765	litre/min
Enter Gradient	=	14.96	
Read Channel Required	=	**225U or 225HR**	For conservative, 300U is provided
Read Velocity	=	**3.25**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:
P = Hydraulic Power (kW)

Q =	Flow Rate(m^3/s)	=	0.063
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	2.25
n =	Efficiency	=	0.5

Therefore: P = 2.77 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

Where:

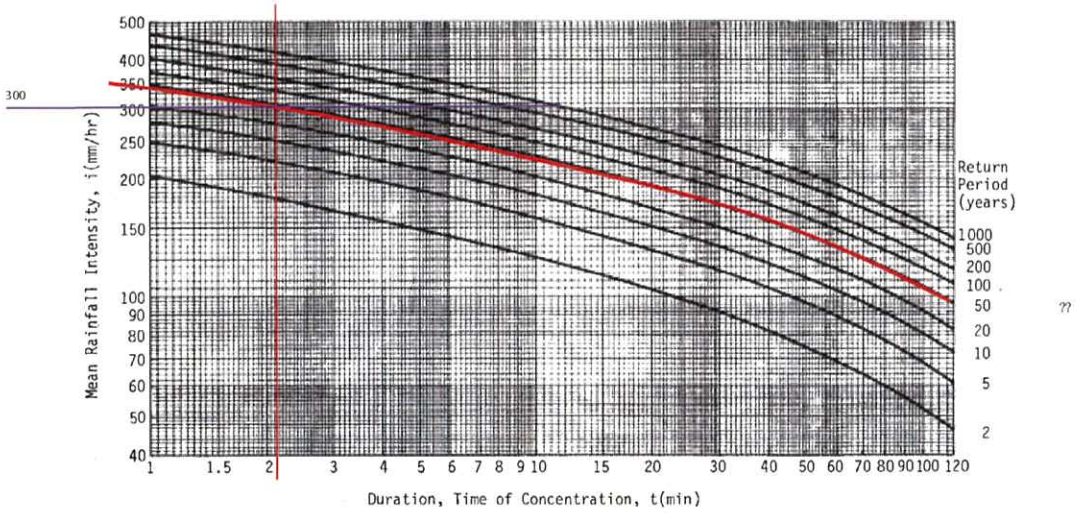
Q =	Flow Rate(m^3/s)	=	0.063
d =	Pump pipe diameter (mm)	=	282.6

Calculation of Sump Pit's Volume	=	18.82	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.96	m	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(CH5)**

Assumed all runoff from Bay 5 is discharged into CH5

Bay	Catchment Area (m2)	Highest point level (with catchment	Lowest point level (with catchment bay)	Distance btw Highest point level and Lowest point level) -	Average fall (m per 100m)	Time of concentration (by equ. 8.2.)	Design mean intensity of rainfall (from Figure 8.2)	Maximum runoff (litres / sec)
5	575	51.55 mPD	49.3 mPD	39.61 m	5.68 m	2.14 min	300	47.92



??

$$Q = \frac{KiA}{3600} \quad \ldots\ldots (8.1)$$

where Q = maximum runoff (litres/sec),

i = design mean intensity of rainfall (mm/hr) which is dependent upon the time of concentration,

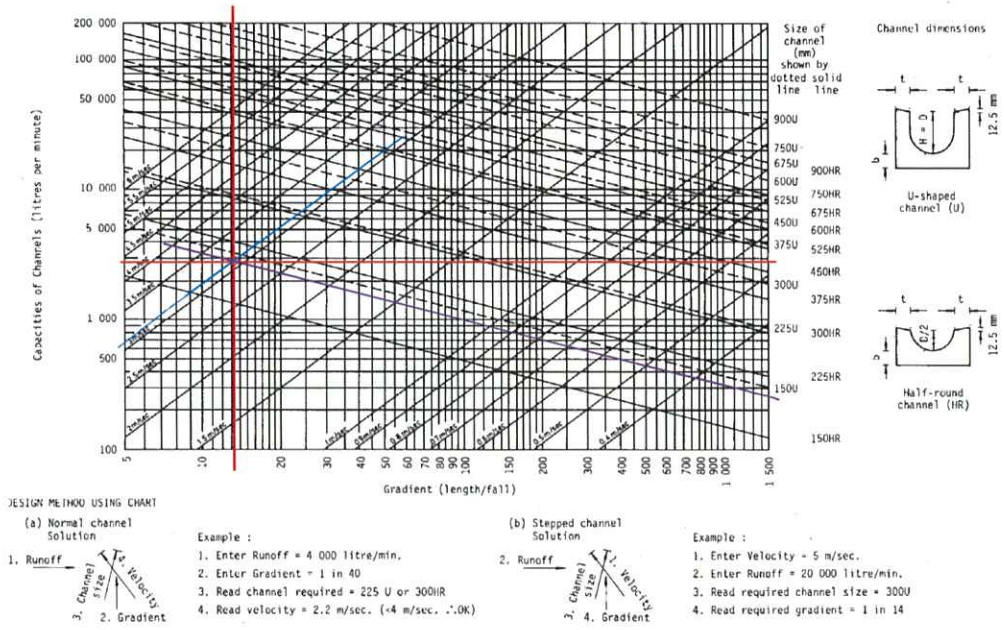
$$t = 0.14465 \left[\frac{L}{H^{0.1} A^{0.1}} \right] \quad \ldots\ldots (8.2)$$

where t = time of concentration (min),

A = area of catchment (m^2),

H = average fall (m per 100 m) from the summit of catchment to the point of design, and

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	Gradient in degree
5	575	47.92	2875	50.16	48.61	20.59	1 in 13.28	4.31



DESIGN METHOD USING CHART

(a) Normal channel Solution

1. Runoff → 3. Channel size / 4. Velocity → 2. Gradient

Example :
1. Enter Runoff = 4 000 litre/min.
2. Enter Gradient = 1 in 40
3. Read channel required = 225 U or 300HR
4. Read velocity = 2.2 m/sec. (<4 m/sec. ∴OK)

(b) Stepped channel Solution

2. Runoff → 3. Channel size / 1. Velocity → 4. Gradient

Example :
1. Enter Velocity = 5 m/sec.
2. Enter Runoff = 20 000 litre/min.
3. Read required channel size = 300U
4. Read required gradient = 1 in 14

Result

Enter Runoff	=	2875	litre/min
Enter Gradient	=	13.28	
Read Channel Required	=	**150U or 225HR**	**For conservative, 300U is provided**
Read Velocity	=	**3.1**	m /sec

Calculation of flow hydraulic power

$$P = Q\rho gh/n$$

Where:

P =	Hydraulic Power (kW)		
Q =	Flow Rate(m^3/s)	=	0.048
ρ =	Water density(kg/m^3)	=	1
g =	Gravity(m/s^2)	=	9.81
h =	Level difference	=	1.8
n =	Efficiency	=	0.5

Therefore: P = 1.69 kW

Calculation of pipe size

$$Q = \pi d^2/4$$

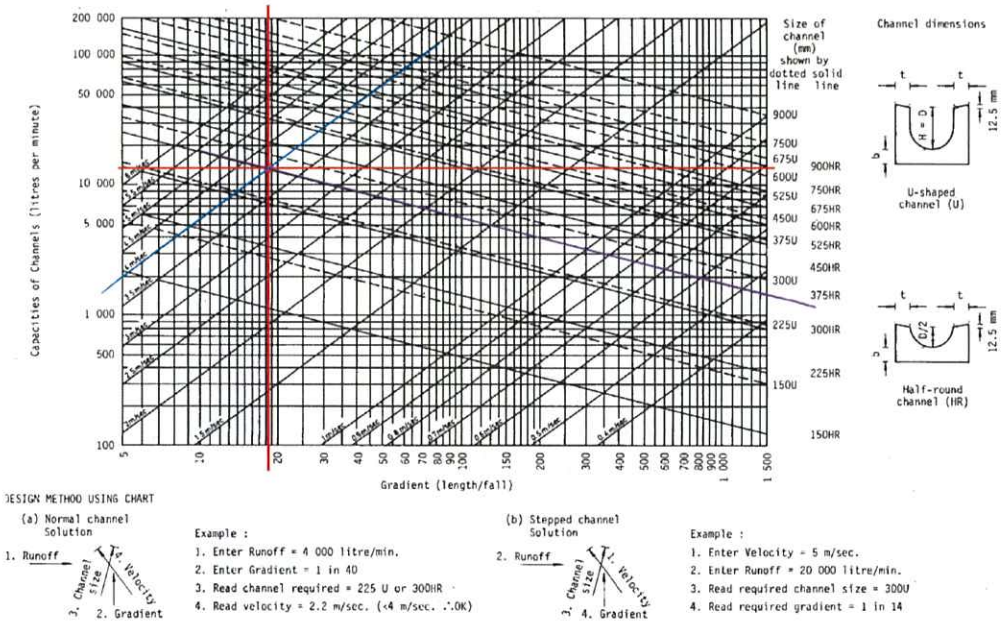
Where:

Q =	Flow Rate(m^3/s)	=	0.048
d =	Pump pipe diameter (mm)	=	247.0

Calculation of Sump Pit's Volume	=	14.38	cu.m	(To retain water for 5 mins)
Calculation of Sump Pit's Side Length	=	3.46	$m^{(-)}$	(Assume the height of tank = 1.2m)

Calculation for Maximun Runoff for DD108 Lot 82 s.B ss.1, Fan Kam Road, Pat Heung, YL **(Total)**

Bay	Catchment Area (m2)	Maximum runoff (litres / sec)	Maximum runoff (litres / min)	High End of Pipeline (m)	Low End of Pipline (m)	Distance between High End and Low End (m)	Gradient (Length / Fall)	
5	2951	**263.51**	**15810**	51.55	44.61	128.15	**18.47**	**3.10**

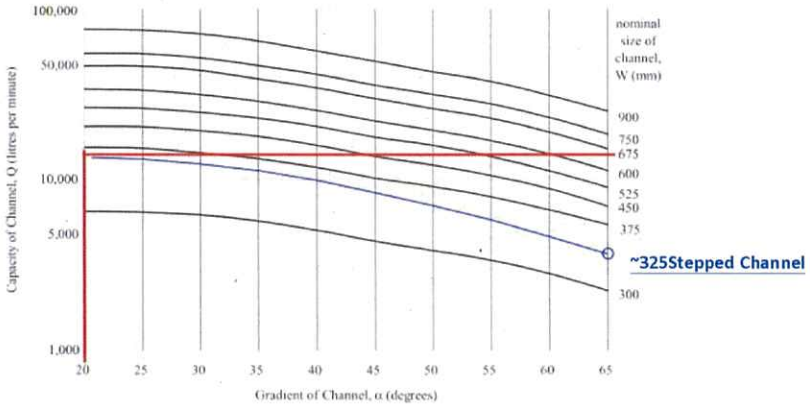


Result

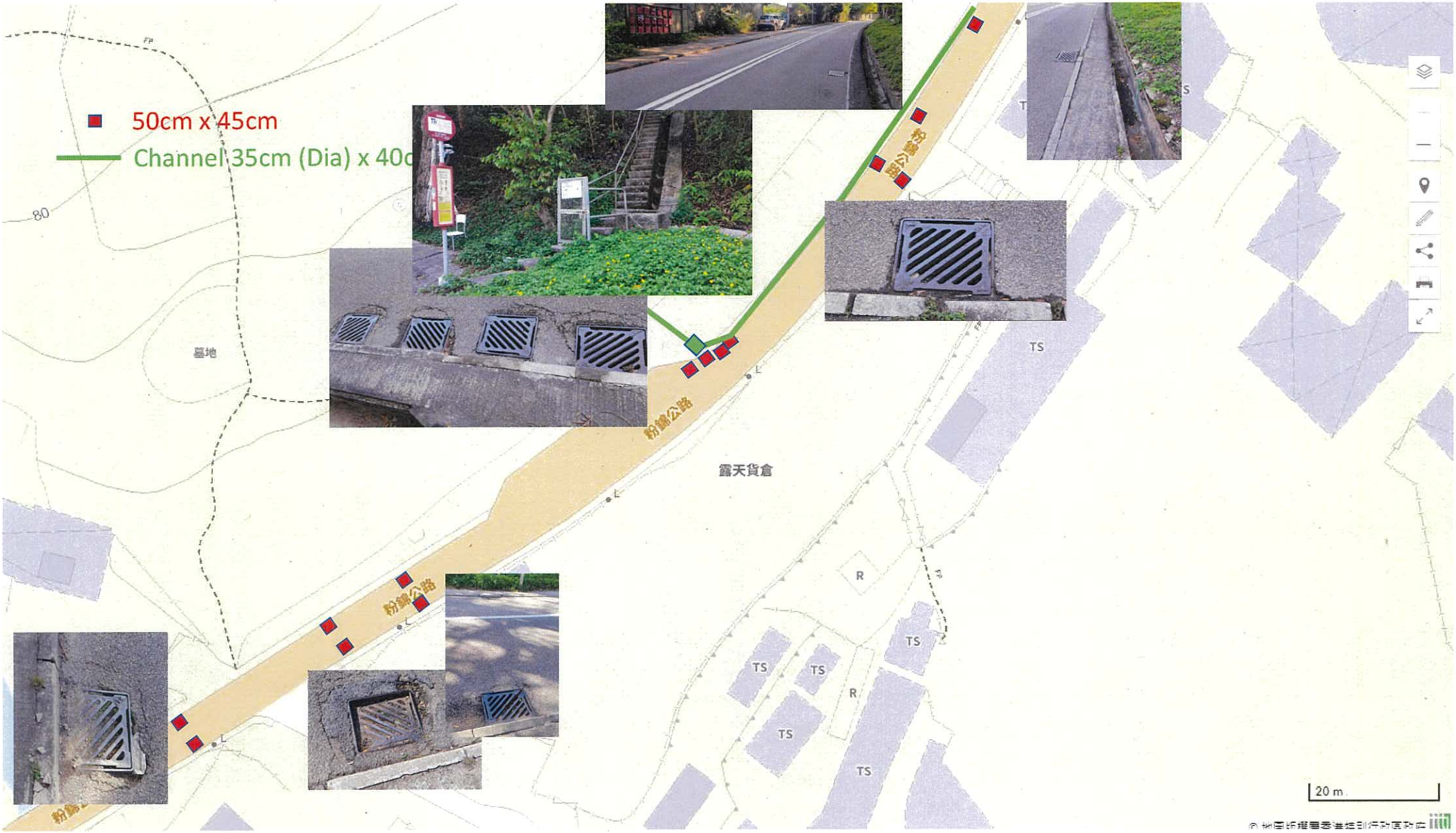
Enter Runoff	=	15810	litre/min
Enter Gradient	=	18.47	
Read Channel Required	=	**300U or 450HR**	
Read Velocity	=	**4.1**	m /sec

Design chart for Stepped Channel

Figure 2 - Design Chart for Standard Sized Stepped Channels



Appendix P - Photo Record showing gullies along fan kam road


50cm x 45cm
Channel 35cm (Dia) x 40c
粉錦公路
粉錦公路
粉錦公路
墓地
露天貨倉
TS
TS
TS
TS
TS
R
R
20 m

Annex 3

Maintenance and Contingency Plan for Proposed Pump System (Rev. 1)

Maintenance and Contingency Plan for Proposed Pump System -
Planning Application for
Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at
Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories (the "Premises") (Rev.1)

For Maintenance Plan

The maintenance of the proposed pump system will adhere to the guidelines outlined in the STORMWATER DRAINAGE MANUAL 2018 by DSD.

The Schedule of Inspection for the pump, as per Table 26 of the manual, is as follows:

Schedule of Inspection for Pump (from Table 26 of STORMWATER DRAINAGE MANUAL)

Duties	Frequency
Check for satisfactory operation of pumps	Once every 2 weeks
Check electric motors, pump bearings, belt drive tension, gearbox, lubricant, control and sensor equipment, flow measurement devices	Once every 2 weeks
Test run the system	Once every 2 weeks
Maintain and empty sump pit	Before and after each heavy rainfall

For Contingency Plan

The provisions stated in the STORMWATER DRAINAGE MANUAL will be followed. These provisions include:

- Adequate power supply: Sufficient power should be available to operate the control system and all the pumps.
- An emergency power generator must be installed within the station compound to automatically provide backup electricity during power failures. The generator should be designed to supply enough power for the operation of the control system and pumps.
- A spare manual pump must be installed within the station compound in case the electric power system is malfunction.

For Noise abatement measures, Measures to minimize disturbance to nearby residents and the operation and maintenance (O&M) personnel should be implemented before commencement of works.

Annex 4

List of Goods

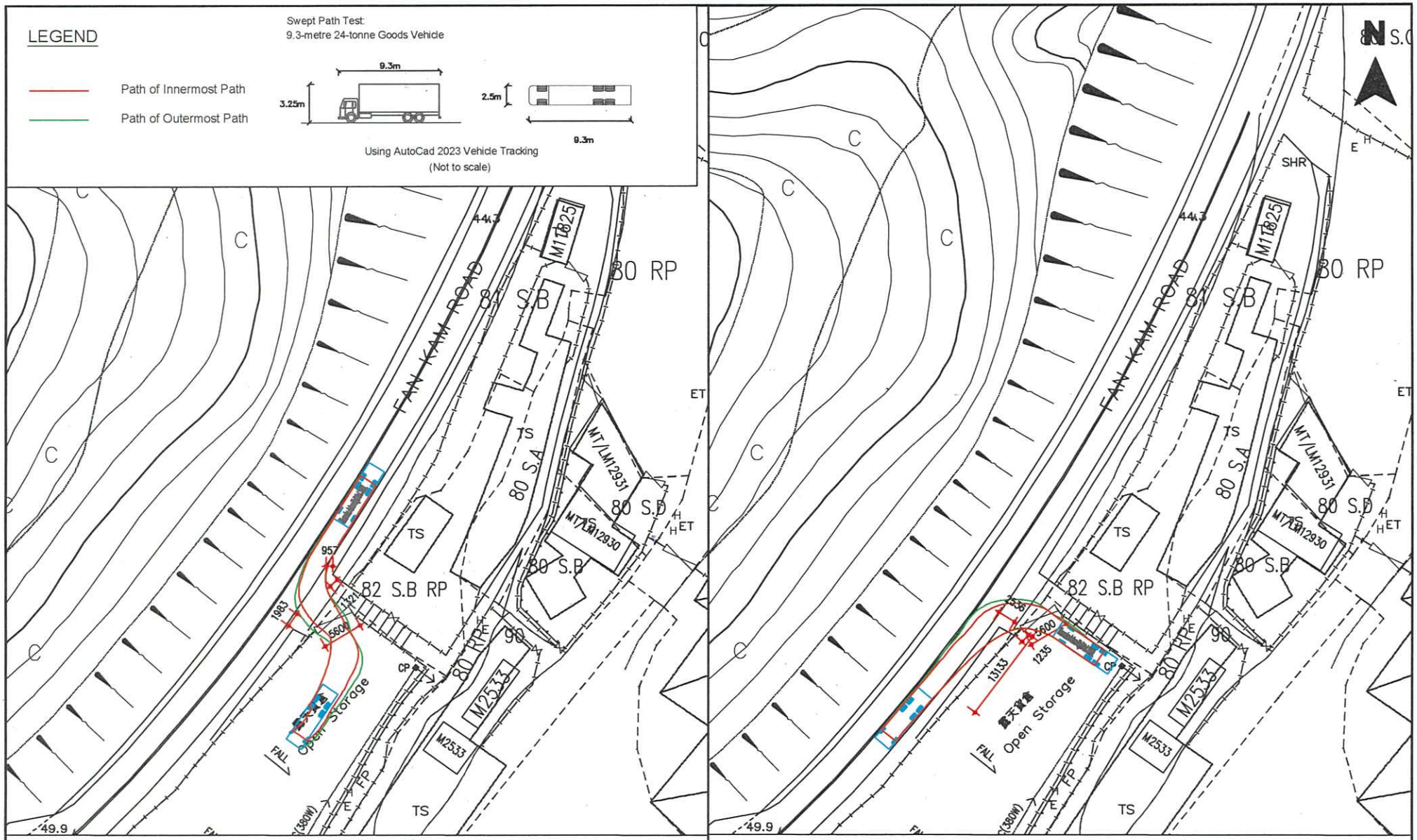
類別 Category	貨品描述 Item Description
CCTV 裝備	CCTV車仔電池(o)
CCTV 裝備	CCTV鏡頭套(o)
CCTV 裝備	CCTV鏡頭 (大)(o)
CCTV 裝備	CCTV鏡頭 (細)(o)
CCTV 裝備	CCTV車仔(o)
CCTV 裝備	CCTV手推機電腦(o)
CCTV 裝備	CCTV車仔電腦(o)
CCTV 裝備	CCTV40米推藤 (SPP-40)(o)
CCTV 裝備	CCTV60米推藤 (SPP-60)(o)
CCTV 裝備	CCTV80米推藤 (SPP-80)(o)
工具-服務	泊洛(1.5噸)
工具-服務	擋水板
工具-服務	快駁 (2.5吋公)
工具-服務	快駁 (2吋雌)
工具-服務	快駁 (2吋公)
工具-服務	快駁 (3吋雌)
工具-服務	快駁 (3吋公)
工具-服務	快駁蓋 (放水喉蓋)(4吋)
工具-服務	4吋公外瓦
工具-服務	3吋雌外瓦
工具-服務	2.5吋刁2"
工具-服務	3吋刁2.5"
工具-服務	4吋雌外瓦
工具-服務	4吋快駁雌
工具-服務	4吋快駁公
工具-服務	3吋公外瓦
工具-服務	3吋雌內瓦
工具-服務	2.5吋公外瓦
工具-服務	2吋公外瓦
工具-服務	2.5吋雌外瓦
工具-服務	三星架 (開井蓋用)
工具-服務	鐵撬
工具-服務	玻璃膠
工具-服務	手提式通渠機機轆
工具-服務	手提式通渠機渠滕
工具-服務	鈎 (通渠用)(短)
工具-服務	鈎 (通渠用)(長)
工具-服務	井匙 (大)
工具-服務	井匙 (中)
工具-服務	井匙 (細)
工具-服務	手搖泊洛
工具-服務	照明燈
工具-服務	18" 元形雙止口輕身沙井(淨蓋面)
工具-服務	高壓水槍(o)
工具-服務	鋁梯 (5級)(o)
工具-服務	鋁梯 (7級)(o)
工具-服務	爬齒(o)
工具-服務	刷(吸油箱仔用)
工具-服務	鐵殼
工具-服務	樹葉杷
工具-服務	膠圈 (4吋)
工具-服務	膠圈 (2吋)
工具-服務	4吋波子閘掣
工具-服務	4齒鋤耙
工具-服務	3吋防漏膠圈

類別 Category	貨品描述 Item Description
工具-服務	淡水泵(細)
工具-服務	剷 (吸井用)(短)
工具-服務	小心地滑牌
制服	高級 / 服務員 - 黑色 長斜布褲 (30碼)
制服	高級 / 服務員 - 黑色 長斜布褲 (32碼)
制服	高級/服務員-黑色長斜布褲(34碼)
制服	高級/服務員-黑色長斜布褲(36碼)
制服	高級/服務員-黑色長斜布褲(42碼)
制服	STI-紅色polo衫(加加加加大碼)
制服	送貨員T-Shirt (大) 短袖
制服	送貨員T-Shirt (大)長袖
制服	送貨員T-Shirt(中) 短袖
制服	送貨員T-Shirt(中) 長袖
制服	送貨員T-Shirt (加大) 短袖
制服	送貨員T-Shirt (加大) 長袖
制服	送貨員T-Shirt (加加大) 短袖
制服	送貨員T-Shirt (加加大) 長袖
消耗品-服務	喉箍 (2吋)
消耗品-服務	喉箍 (2.5吋)
消耗品-服務	喉箍 (3吋)
消耗品-服務	保護衣(藍色)
消耗品-服務	DT215保護衣
消耗品-服務	Fogger - Filter
消耗品-服務	Fogger - Mask
消耗品-服務	黑色膠圈 (2.5吋)
消耗品-服務	油渣手套(藍)
消耗品-服務	馬路膠紙
消耗品-服務	引水帶
消耗品-服務	百潔布-中國(紅)
消耗品-服務	海棉
消耗品-服務	VACUUM HOSE-2
消耗品-服務	VACUUM HOSE-2.5
消耗品-服務	VACUUM HOSE-2-01
消耗品-服務	VACUUM HOSE-3
消耗品-服務	漁夫褲(半身)
消耗品-服務	漁夫褲(全身)
消耗品-輔助	手套 (黑色膠手套)
密閉空間/個人防護裝備	寶露華連風喉 (12吋)
密閉空間/個人防護裝備	寶露華連風喉 (8吋)
密閉空間/個人防護裝備	GAS DETECTOR
密閉空間/個人防護裝備	安全帽(到期日: 2024)
密閉空間/個人防護裝備	安全帽(到期日: 2024/11)
密閉空間/個人防護裝備	醫療急救箱(密閉空間專用)
密閉空間/個人防護裝備	充氣救生衣(一次性)
密閉空間/個人防護裝備	個人警報器(救命鐘)
密閉空間/個人防護裝備	復甦器
密閉空間/個人防護裝備	安全帶
密閉空間/個人防護裝備	眼罩
密閉空間/個人防護裝備	擔架床
機件-服務	發電機(o)
機件-服務	電磨機(o)
機件-服務	電攪機(o)
機件-服務	中國焗霧機件(0)
機件-服務	手提式通渠機(o)
機件-服務	電吊機(o)

類別 Category	貨品描述 Item Description
機件-服務	水泵 (清洗水缸用)(o)
機件-服務	吸水機 (小露寶)
機件-服務	吸水機 3600w,90L(小露寶)
機件-服務	(小露寶)-長駁頭(光嘴)40mm
機件-服務	(小露寶)-短接頭(凹凸嘴)40mm

Annex 5

Swept Path Analysis



Printed by : Filename :

PRUDENTIAL
SURVEYING · LAND ADVISORY · VALUATION

JOB TITLE:
PROPOSED OPEN STORAGE AND PARKING OF VEHICLE (TEMPORARY BASE) AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 IN DD108, FAN KAM ROAD, PAT HEUNG, YUEN LONG

Drawing Title
SWEPT PATH DEMONSTRATION – ENTRANCE AND EXIT (NORTHERN GATE)

Rev	Description	Date

Drawn	Date
HF	22/03/2023
Checked	Approved
CH	CH
Scale	
1:200 @ A3	

Drawing No.
TKYLOP_SP_RTC3

Rev.
–

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Prudential Surveyors International Limited
測建行有限公司

4 July 2023

Your Ref: TPB/A/YL-PH/933
Our Ref: TPB040723OB-B8354

Secretary
Town Planning Board
15/F North Point Government Offices
333 Java Road
North Point
Hong Kong

Dear Sirs,

Re: A/YL-PH/933 – Further Information 5
Section 16 Application for Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories

We refer to the captioned Section 16 application and conversation with Mr. Yip of DPO/FS&YLE and would like to provide the following further information:

(1) The tentative user of the Application Site is LBS Group, a company provide hygiene related service. The Application Site is proposed to support the operation of the user's business.

(2) The material proposed to be stored within the Application Site would be placed on the site directly or within storage cans/tanks when considered necessary.

(3) The main open storage area and vehicle parking area of the Application Site is about 998 s.m. and 1,804 s.m. respectively.

(4) No workshop would be included in the Application Site, the Application Site will be used for parking and storage only.

(5) No existing tree within or adjoining the Application Site would be affect by the proposed development.

(6) Fencing/hoarding would be installed along the boundary of the Application Site in order to minizine any environment impact to the surrounding area.

(7) As referred to the comments from Transport Department and our reply on 24 March 2023, the operating vehicles of proposed development will only use the run-in/out at the Fan Kam Road (i.e. the northern gate of the Application Site). The revised layout plan is attached.

4 July 2023

Your Ref: TPB/A/YL-PH/933
Our Ref: TPB040723OB-B8354

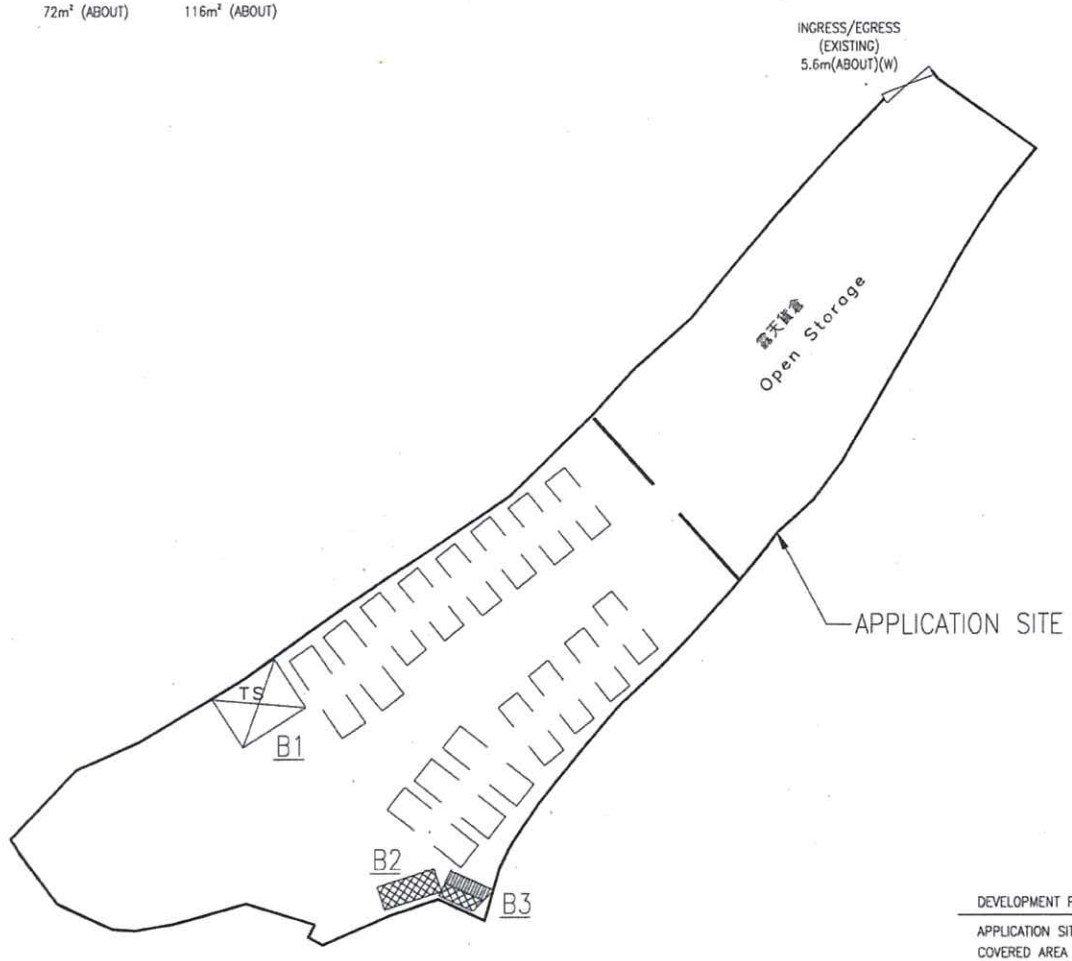
If you have any enquiries, please feel free to contact our Mr. Ken Fong at or the undersigned at

Yours faithfully
For and on behalf of
PRUDENTIAL SURVEYORS INTERNATIONAL LIMITED

Michael C K Lee
Director
Valuation & Advisory
Encl.

c.c. Client
DPO/FS&YLE Attention : Mr. YIP Long Ting (Email : ltyip@pland.gov.hk)

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	SITE OFFICE	44m² (ABOUT)	88m² (ABOUT)	5.61m (APPROX.)(2-STOREY)
B2	SHOWER AND DRY TOILET	15m² (ABOUT)	15m² (ABOUT)	2.6m (APPROX.)(1-STOREY)
B3	DRY TOILET	13m² (ABOUT)	13m² (ABOUT)	2.5m (APPROX.)(1-STOREY)
	TOTAL	72m² (ABOUT)	116m² (ABOUT)	



LEGEND

- APPLICATION SITE
- STRUCTURE (ENCLOSED)
- STRUCTURE (CANOPY)
- POTABLE FLUSHING TOILETS / PORTABLE DRY TOILETS
- PROPOSED PARKING SPACE

DEVELOPMENT PARAMETERS

APPLICATION SITE	: 2802m² (ABOUT)
COVERED AREA	: 72m² (ABOUT)
UNCOVERED AREA	: 2730m² (ABOUT)
NO. OF STRUCTURE	: 3
DOMESTIC GFA	: N/A
NON-DOMESTIC GFA	: 116m² (ABOUT)
BUILDING HEIGHT	: 5.61m (ABOUT)
NO. OF STOREY	: 1 TO 2
PLOT RATIO	: 0.041 (ABOUT)
SITE COVERAGE	: 2.570% (ABOUT)

CONSULTANT :

測建行

PROJECT TITLE :

PROPOSED OPEN STORAGE AND PARKING OF VEHICLE (TEMPORARY BASE) AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 IN DD108, FAN KAM ROAD, PAT HEUNG, YUEN LONG

DRAWING TITLE :

LAYOUT PLAN

DATE	DRAWN	DESIGNED	CHECKED	SCALE
04/JUL/23	LW	/	DW	1:500@A3

JOB NO. : BB354

DRAWING NO. : A02

FILING CODE: N:\Advisory Section\Job Files\PSIL\BB354...\Project Team\CAD

STATUS : REV. 2

PRUDENTIAL 測建行
SURVEYING · LAND ADVISORY · VALUATION

Prudential Surveyors International Limited
測建行有限公司

6 July 2023

Your Ref: TPB/A/YL-PH/933
Our Ref: TPB060723OB-B8354

Secretary
Town Planning Board
15/F North Point Government Offices
333 Java Road
North Point
Hong Kong

Dear Sirs,

Re: A/YL-PH/933 – Further Information 6
Section 16 Application for Temporary Vehicle Park (Medium and Heavy Goods Vehicle) and Open Storage (Operational Tools and Materials) Use for 3 years and Filling of Land at Sub-Section 1 of Section B of Lot No.82 (Part) in DD108, Fan Kam Road, Pat Heung, New Territories

We refer to the captioned Section 16 application and conversation with Mr. Yip of DPO/FS&YLE and would like to provide the following further information:

(1) No vehicle exceeding 9.3m in length will enter the Application Site.

(2) A revised layout plan with minor textural amendment is attached.

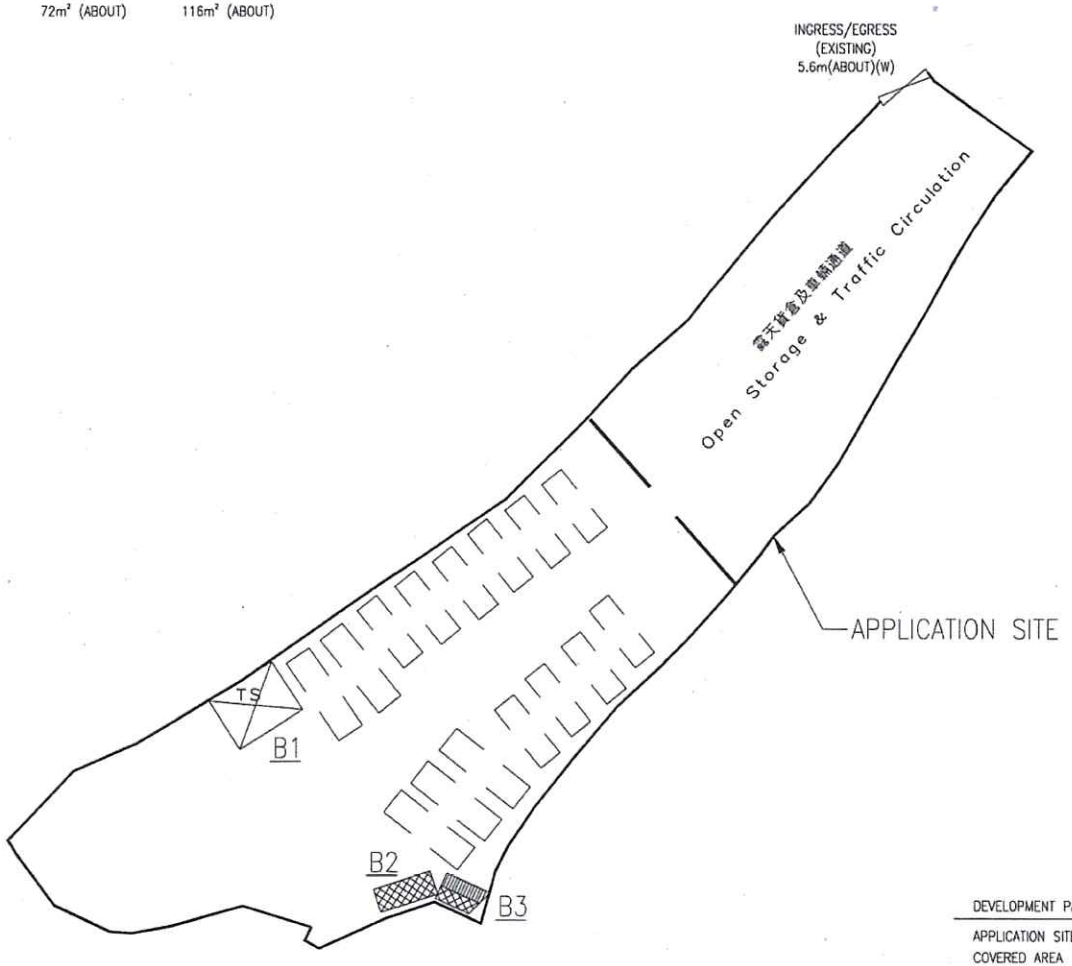
If you have any enquiries, please feel free to contact our Mr. Ken Fong at . or the undersigned at

Yours faithfully
For and on behalf of
PRUDENTIAL SURVEYORS INTERNATIONAL LIMITED

Michael C K Lee
Director
Valuation & Advisory
Encl.

c.c. Client
DPO/FS&YLE Attention : Mr. YIP Long Ting (Email : ltyip@pland.gov.hk)

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	SITE OFFICE	44m² (ABOUT)	88m² (ABOUT)	5.61m (APPROX.)(2-STOREY)
B2	SHOWER AND DRY TOILET	15m² (ABOUT)	15m² (ABOUT)	2.6m (APPROX.)(1-STOREY)
B3	DRY TOILET	13m² (ABOUT)	13m² (ABOUT)	2.5m (APPROX.)(1-STOREY)
	TOTAL	72m² (ABOUT)	116m² (ABOUT)	



DEVELOPMENT PARAMETERS	
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NON-DOMESTIC GFA	: 116m² (ABOUT)
BUILDING HEIGHT	: 5.61m (ABOUT)
NO. OF STOREY	: 1 TO 2
PLOT RATIO	: 0.041 (ABOUT)
SITE COVERAGE	: 2.570% (ABOUT)

LEGEND

- APPLICATION SITE
- STRUCTURE (ENCLOSED)
- STRUCTURE (CANOPY)
- POTABLE FLUSHING TOILETS / PORTABLE DRY TOILETS
- PROPOSED PARKING SPACE

CONSULTANT :

測建行

PROJECT TITLE :

PROPOSED OPEN STORAGE AND PARKING OF VEHICLE (TEMPORARY BASE) AT SUB-SECTION 1 OF SECTION B OF LOT NO.82 IN DD108, FAN KAM ROAD, PAT HEUNG, YUEN LONG

DRAWING TITLE :

LAYOUT PLAN

DATE	DRAWN	DESIGNED	CHECKED	SCALE
04/JUL/23	LW	/	DW	1:500@A3

JOB NO. : B8354

DRAWING NO. : A02

FILING CODE: N:\Advisory Section\Job Files\PSIL\B8354...\Project Team\CAD

STATUS : REV. 2

Relevant Extracts of Town Planning Board Guidelines on
Application for Open Storage and Port Back-up Uses
(TPB PG-No.13G)

1. On 14.4.2023, the Town Planning Board Guidelines for Application for Open Storage and Port Back-up Uses under Section 16 of the Town Planning Ordinance (TPB PG-No. 13G) were promulgated, which set out the following criteria for the various categories of area:

   (a) Category 1 areas: favourable consideration will normally be given to applications within these areas, subject to no major adverse departmental comments and local objections, or the concerns of the departments and local residents can be addressed through the implementation of approval conditions. Technical assessments should be submitted if the proposed uses may cause significant environmental and traffic concerns;

   (b) Category 2 areas: planning permission could be granted on a temporary basis up to a maximum period of 3 years, subject to no adverse departmental comments and local objections, or the concerns of the departments and local residents can be addressed through the implementation of approval conditions. Technical assessments, where appropriate, should be submitted to demonstrate that the proposed uses would not have adverse drainage, traffic, visual, landscaping and environmental impacts on the surrounding areas;

   (c) Category 3 areas: applications would normally not be favourably considered unless the applications are on sites with previous planning approvals (irrespective of whether the application is submitted by the applicant of previous approval or a different applicant). Sympathetic consideration may be given if genuine efforts have been demonstrated in compliance with approval conditions of the previous planning applications and/or relevant technical assessments/proposals have been included in the fresh applications, if required, to demonstrate that the proposed uses would not generate adverse drainage, traffic, visual, landscaping and environmental impacts on the surrounding areas. Planning permission could be granted on a temporary basis up to a maximum period of 3 years, subject to no adverse departmental comments and local objections, or the concerns of the departments and local residents can be addressed through the implementation of approval conditions; and

   (d) Category 4 areas: applications would normally be rejected except under exceptional circumstances. For applications on sites with previous planning approvals (irrespective of whether the application is submitted by the applicant of previous approval or a different applicant), and subject to no adverse departmental comments and local objections, sympathetic consideration may be given if genuine efforts have been demonstrated in compliance with approval conditions of the previous planning applications and/or relevant technical assessments/proposals have been included in the fresh applications, if required, to demonstrate that the proposed uses would not generate adverse drainage, traffic, visual, landscaping and environmental impacts on the surrounding areas. The intention is however to encourage the phasing out of such non-conforming uses as early as possible. A maximum period of 3 years may be allowed for an applicant to identify suitable sites for relocation. Application for renewal of approval will be assessed on its individual merits.

2. In assessing applications for open storage and port back-up uses, the other major relevant assessment criteria are also summarised as follows:

(a) port back-up sites and those types of open storage uses generating adverse noise, air pollution, visual intrusion and frequent heavy vehicle traffic should not be located adjacent to sensitive receivers such as residential dwellings, hospitals, schools and other community facilities;

(b) port back-up uses are major generators of traffic, with container trailer/tractor parks generating the highest traffic per unit area. In general, port back-up sites should have good access to the strategic road network, or be accessed by means of purpose built roads;

(c) adequate screening of sites through landscaping and/or fencing should be considered where sites are located adjacent to public roads or are visible from surrounding residential areas;

(d) there is a general presumption against conversion of active or good quality agricultural land and fish ponds to other uses on an ad-hoc basis. For flood prone areas or sites which would obstruct natural drainage channels and overland flow, advice should be sought; and

(e) for applications involving sites with previous planning approvals, should there be no evidence to demonstrate that the applicants have made any genuine effort to comply with the approval conditions of the previous planning applications, planning permission may be refused notwithstanding other criteria set out in the Guidelines are complied with.

Previous s.16 Applications covering the Application Site

Approved Applications

Application No.	Use/Development	Date of Consideration
A/DPA/YL-PH/19	Open Storage of Vehicles and General Goods	13.8.1993 [Approved for 3 years]
A/YL-PH/252	Temporary Open Storage of Private Cars and Lorries (excluding containers and container vehicles) for a Period of 12 Months	8.1.1999
A/YL-PH/354	Proposed Temporary Open Storage of Private Cars and Lorries for a Period of 3 Years	29.11.2001
A/YL-PH/459	Temporary Open Storage of Private Cars and Lorries for a Period of 3 Years	26.3.2004 [Revoked on 2.8.2005]
A/YL-PH/499	Temporary Open Storage of Private Cars and Lorries for a Period of 3 Years (Minor Amendments to a Previously Approved Development Scheme Application No. A/YL-PH/459)	29.7.2005

Similar s.16 Applications within the same "R(D)" Zone in the vicinity of the Site

Approved Applications

Open Storage

Application No.	Use/Development	Date of Consideration
A/YL-PH/801	Renewal of Planning Approval for Temporary Open Storage of Excavators and Loaders for a Period of 3 Years	8.3.2019
A/YL-PH/869	Proposed Temporary Open Storage of Construction Machinery for a Period of 3 Years	22.1.2021 [Revoked on 22.4.2023]
A/YL-PH/909	Renewal of Planning Approval for Temporary Open Storage of Excavators and Loaders for a Period of 3 Years	6.5.2022
A/YL-PH/953	Proposed Temporary Open Storage of Construction Machinery for a Period of 3 Years	23.6.2023

Vehicle Parks

Application No.	Use/Development	Date of Consideration
A/YL-PH/849	Proposed Temporary Public Vehicle Park (Private Cars only) with Ancillary Site Office for a Period of 3 Years	4.9.2020
A/YL-PH/852	Proposed Temporary Private Vehicle Park (Private Cars Only) for a Period of 3 Years	18.9.2020
A/YL-PH/862	Proposed Temporary Public Vehicle Park and Office for a Period of 3 Years	18.12.2020
A/YL-PH/922	Proposed Temporary Private Vehicle Park (Private Cars Only) for a Period of 3 Years and Filling of Land	15.7.2022

Rejected Applications

Open Storage

Application No.	Use/Development	Date of Consideration	Rejection Reasons
A/YL-PH/760	Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years	23.3.2018 [on review] 13.3.2019 [Dismissed by Appeal Board]	(1) to (4)

Vehicle Parks

Application No.	Use/Development	Date of Consideration	Rejection Reasons
A/YL-PH/819*	Proposed Temporary Public Vehicle Park for Medium Container Vehicles for a Period of 3 Years	1.11.2019	(1) to (4)
A/YL-PH/836	Proposed Temporary Public Vehicle Park (excluding container vehicle) for a Period of 3 Years	15.5.2020	(1)

*Site straddling "R(D)" zone and the adjoining "AGR" zone.

Rejection Reasons:

(1) The development was not in line with the planning intentions of the "Residential (Group D)" (and "Agriculture") zone(s). There was no strong justification for a departure from the planning intention even on a temporary basis.

(2) The development was not compatible with the surrounding areas; there was insufficient information to demonstrate that there would not be adverse drainage and/or environmental impacts.

(3) The development did not comply with the then Town Planning Broad Guidelines for 'Application for Open Storage and Port Back-up Uses' in that there is no previous planning approval for open storage use granted at the Site and there were adverse departmental comments and local objections against the proposed development

(4) Approval of the application would set an undesirable precedent for similar applications. The cumulative effect of approving such applications would result in a general degradation of the environment of the area

Government Departments' General Comments

1. Land Administration

Comments of the District Lands Officer/Yuen Long, Lands Department (DLO/YL, LandsD):

- no adverse comment on the application; and
- the application site (the Site) comprises an Old Schedule Agricultural Lot held under the Block Government Lease which contains the restriction that no structures are allowed to be erected without the prior approval of the Government.

2. Traffic

Comments of the Commissioner for Transport (C for T):

- no comment on the application from traffic engineering perspective; and
- should the application be approved, approval condition restricting vehicles to queue back to or reverse onto/ from public road at any time during the planning approval should be incorporated.

Comments of the Chief Highway Engineer/New Territories West, Highways Department (CHE/NTW, HyD):

- no adverse comment on the application from highways maintenance perspective.

3. Drainage

Comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD):

- no objection in-principle to the application from public drainage maintenance perspective; and
- should the application be approved, approval conditions requiring the submission of a revised drainage proposal and the implementation and maintenance of the drainage proposal for the development to the satisfaction of his department should be incorporated.

4. Fire Safety

Comments of the Director of Fire Services (D of FS):

- no objection in-principle to the application subject to the fire service installations being provided to the satisfaction of D of FS; and
- having considered the nature of the development, an approval condition on the provision of fire extinguisher(s) within 6 weeks from the date of planning approval should also be included.

5. **Water Supply**

Comments of the Chief Engineer/Construction, Water Supplies Department (CE/C, WSD):

- no objection to the application.

6. **Nature Conservation**

Comments of the Director of Agriculture, Fisheries and Conservation (DAFC):

- no comment on the application from nature conservation perspective noting that the Site has been paved.

7. **Landscape**

Comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD):

- the Site falls within "Residential (Group D)" zone, which is non-landscape sensitive zoning and no significant landscape impact arising from the proposed development is anticipated.

8. **Building Matters**

Comments of the Chief Building Surveyor/New Territories West, Buildings Department (CBS/NTW, BD):

- there is no record of approval by the Building Authority for the existing structures at the Site and BD is not in a position to offer comments on their suitability for the use related to the application.

9. **District Officer's Comments**

Comments of the District Officer (Yuen Long), Home Affairs Department (DO(YL), HAD):

- his office has not received any local's comment on the application and he has no particular comment on the application.

10. **Other Departments**

The following government departments have no objection to/no comment on the application:

- the Project Manager (West), Civil Engineering and Development Department;
- the Director of Food and Environmental Hygiene; and
- the Commissioner of Police.

Recommended Advisory Clauses

(a) prior planning permission should have been obtained before commencing the proposed development at the application site (the Site);

(b) the permission is given to the proposed development and structures under application. It does not condone any other use and structures which currently occur on the Site but not covered by the application. Immediate action should be taken to discontinue such development and remove such structures not covered by the permission;

(c) to note the comments of the District Lands Officer/Yuen Long, Lands Department (DLO/YL, LandsD) that:

- should planning approval be given to the application, the lot owner(s) will need to apply to his office to permit the structure(s) to be erected or regularise any irregularities on Site, if any. Besides, given the proposed development is temporary in nature, only application for regularisation or erection of temporary structure(s) will be considered. Applications for any of the above will be considered by LandsD acting in the capacity as the landlord or lessor at its sole discretion and there is no guarantee that such application(s) will be approved. If such application(s) is approved, it will be subject to such terms and conditions, including among others the payment of rent or fee, as may be imposed by the LandsD;

(d) to note the comments of the Commissioner for Transport (C for T) that:

- the Site is connected to the public road network via a section of a local access road which is not managed by the Transport Department. The land status of the local access road should be checked with LandsD. The management and maintenance responsibilities of the local access road should be clarified with the relevant lands and maintenance authorities accordingly;

(e) to note the comments of the Chief Highway Engineer/New Territories West, Highways Department (CHE/NTW, HyD) that:

- his office shall not be responsible for the maintenance of any access connecting the Site and Fan Kam Road;
- the applicant should ensure a run-in/out is constructed in accordance with the latest version of HyD Standard Drawings No. H1113 and H1114, or H5133, H5134 and H5135, whichever set if appropriate to match with the existing adjacent pavement; and
- adequate drainage measures should be provided to prevent surface water running from the Site to the nearby public roads and drains;

(f) to note the comments of the Director of Environmental Protection (DEP) that:

- the applicant is advised to follow the relevant mitigation measures and requirements in the revised "Code of Practice on Handling the Environmental Aspects of Temporary uses and Open Storage Sites" issued by DEP;

(g) to note the comments of the Director of Fire Services (D of FS) that:

- the installation/maintenance/modification/repair work of fire service installation (FSI) shall be undertaken by an Registered Fire Service Installation Contractor (RFSIC). The RFSIC shall after completion of the installation/maintenance/modification/repair

work issue to the person on whose instruction the work was undertaken a certificate (FS 251) and forward a copy of the certificate to D of FS;

- in consideration of the nature of open storage, the good practice guidelines (**Appendix VI**) shall be adhered to; and
- the applicant shall be reminded that if the proposed structure(s) is required to comply with the Buildings Ordinance (Cap. 123) (BO), detailed fire service requirements will be formulated upon receipt of formal submission of general building plans;

(h) to note the comments of the Chief Engineer/Construction, Water Supplies Department (CE/C, WSD):

- existing water mains will be affected as shown on **Plan A-2**. The cost of any necessary diversion shall be borne by the proposed development. In case it is not feasible to divert the affected water mains, a waterworks reserve within 1.5m from the centre line of the water main shall be provided to WSD. No structure shall be built or materials stored within this waterworks reserve. Free access shall be made available at all times for staff of the Director of Water Supplies or their contractor to carry out construction, inspection, operation, maintenance and repair works;
- no trees or shrubs with penetrating roots may be planted within the Waterworks Reserve or in the vicinity of the water main; and
- the Government shall not be liable to any damage whatsoever and howsoever caused arising from burst or leakage of the public water mains within and in close vicinity of the Site; and

(i) to note the comments of the Chief Building Surveyor/New Territories West, Buildings Department (CBS/NTW, BD) that:

- the Site shall be provided with means of obtaining access thereto from a street and emergency vehicular access in accordance with Regulations 5 and 41D of the Building (Planning) Regulations (B(P)R) respectively;
- the Site does not abut on a specified street of not less than 4.5m wide and its permitted development intensity shall be determined under Regulation 19(3) of the B(P)R at building plan submission stage;
- if the existing structures (not being a New Territories Exempted House) are erected on leased land without the approval of the BA, they are unauthorised building works (UBWs) under the BO and should not be designated for any proposed use under the application;
- for UBWs erected on leased land, enforcement action may be taken by BD to effect their removal in accordance with the prevailing enforcement policy against UBWs as and when necessary. The granting of any planning approval should not be construed as an acceptance of any existing building works or UBWs on the Site under the BO;
- before any new building works (including containers/open sheds as temporary buildings, demolition and land filling, etc.) are to be carried out on Site, prior approval and consent of the Building Authority should be obtained, otherwise they are UBWs under the BO. An Authorised Person should be appointed as the co-ordinator for the proposed building works in accordance with the BO;
- any temporary shelters or converted containers for office, storage, washroom or other

uses are considered as temporary buildings are subject to the control of Part VII of the B(P)R; and

- detailed checking under the BO will be carried out at building plan submission stage.

Fire Services Department's Good Practice Guidelines for Open Storage Sites

		Internal access for fire appliances	Lot boundaries (clear width)	Distance between storage cluster and temporary structure	Cluster size	Storage height
1.	Open Storage of Containers		2m	4.5m		
2.	Open Storage of non-combustibles or limited combustibles	4.5m	2m	4.5m		
3.	Open Storage of combustibles	4.5m	2m	4.5m	40m x 40m	3m

Remarks: Smoking and naked flame activities shall not be allowed within the open storage/recycling site.

就規劃申請/覆核提出意見 Making Comment on Planning Application / Review

參考編號 **Reference Number:**	221121-165523-84130
提交限期 **Deadline for submission:**	06/12/2022
提交日期及時間 **Date and time of submission:**	21/11/2022 16:55:23
有關的規劃申請編號 **The application no. to which the comment relates:**	A/YL-PH/933
「提意見人」姓名/名稱 **Name of person making this comment:**	先生 Mr. Lam Ka Hing

意見詳情
Details of the Comment :

反對，郊區設停車場必會增加附近車輛出入流量，引至附近交通阻塞，環境污染，增加引發火警危機，影響村民安全及生活質數。