此文件在 14 SEP 2020 收到。城市規劃委員會
只會在收到所有資料及文件後才正式確認收到
申請的日期。

This document is received on 14 SEP 2020.
The Town Planning Board will formally acknowledge the date of receipt of the application only upon receipt of all the required information and documents.

Appendix I

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

For Official Use Only 請勿填寫此欄	Application No. 申請編號	A/YL-PH/857
	Date Received 收到日期	14 SEP 2020

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。

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)

Chief Force 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)

Top Bright Consultants 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）	Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP (Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories
(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 3,526 sq.m 平方米 ☑About 約 ☑Gross floor area 總樓面面積 30 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）	Nil 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	Pat Heung Outline Zoning Plan No. S/YL-PH/11
(e)	Land use zone(s) involved 涉及的土地用途地帶	"Agriculture" ("AGR")
(f)	Current use(s) 現時用途	Vacant Land (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
14/07/2020 (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 23/07/2020 (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	Temporary Public Vehicle Park with Ancillary Site Office (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	.....3,496.....sq.m ☑About 約
Proposed covered land area 擬議有上蓋土地面積	.....30.....sq.m ☑About 約
Proposed number of buildings/structures 擬議建築物／構築物數目	.....1.....
Proposed domestic floor area 擬議住用樓面面積	.....Nil.....sq.m ☐About 約
Proposed non-domestic floor area 擬議非住用樓面面積	.....30.....sq.m ☑About 約
Proposed gross floor area 擬議總樓面面積	.....30.....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)

Please refer to Figure 5 of the Supplementary Planning Statement

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	100 (2.5m x 5m)
Motorcycle Parking Spaces 電單車車位	Nil
Light Goods Vehicle Parking Spaces 輕型貨車泊車位	Nil
Medium Goods Vehicle Parking Spaces 中型貨車泊車位	Nil
Heavy Goods Vehicle Parking Spaces 重型貨車泊車位	Nil
Others (Please Specify) 其他 (請列明)	Nil

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

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

Proposed operating hours 擬議營運時間
24 hours daily

(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)) Kam Tin 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，請另頁表示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 ..... sq.m 平方米 ☐About 約 Depth of filling 填土厚度 ..... 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	☑

(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) NA

(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 Chapter 6 of the Supplementary 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 an application to the Board 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

Raymond Leung ..... Director .....

Name in Block Letters 姓名（請以正楷填寫） 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
Others 其他 RPP

on behalf of 代表 Top Bright Consultants Limited

☑ Company 公司 / ☐ Organisation Name and Chop (if applicable) 機構名稱及蓋章（如適用）

Date 日期 31/07/2020 ..... (DD/MM/YYYY 日/月/年)

Remark 備註

The materials submitted in an application to the Board 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 deposited 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存放於規劃署規劃資料查詢處以供一般參閱。)

Application No. 申請編號	(For Official Use Only) (請勿填寫此欄)
Location/address 位置／地址	Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories
Site area 地盤面積	3,526 sq. m 平方米 ☑ About 約 (includes Government land of 包括政府土地 Nil sq. m 平方米 ☐ About 約)
Plan 圖則	Pat Heung Outline Zoning Plan No. S/YL-PH/11
Zoning 地帶	"Agriculture" ("AGR")
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	Temporary Public Vehicle Park with Ancillary Site Office

(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	Nil ☐ About 約 ☐ Not more than 不多於	☐About 約 ☐Not more than 不多於
		Non-domestic 非住用	30 ☑ About 約 ☐ Not more than 不多於	☐About 約 ☐Not more than 不多於
(ii)	No. of block 幢數	Domestic 住用	Nil	
		Non-domestic 非住用	1	
(iii)	Building height/No. of storeys 建築物高度／層數	Domestic 住用	Nil m 米 ☐ (Not more than 不多於)	
			Nil Storeys(s) 層 ☐ (Not more than 不多於)	
		Non-domestic 非住用	2.5 m 米 ☑ (Not more than 不多於)	
			1 Storeys(s) 層 ☑ (Not more than 不多於)	
(iv)	Site coverage 上蓋面積	0.85 % ☑ 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	100	
		Motorcycle Parking Spaces 電單車車位	Nil	
		Light Goods Vehicle Parking Spaces 輕型貨車泊車位	Nil	
		Medium Goods Vehicle Parking Spaces 中型貨車泊車位	Nil	
		Heavy Goods Vehicle Parking Spaces 重型貨車泊車位	Nil	
		Others (Please Specify) 其他 (請列明)	Nil	
		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	Nil	
		Coach Spaces 旅遊巴車位	Nil	
		Light Goods Vehicle Spaces 輕型貨車車位	Nil	
		Medium Goods Vehicle Spaces 中型貨車位	Nil	
		Heavy Goods Vehicle Spaces 重型貨車車位	Nil	
		Others (Please Specify) 其他 (請列明)	Nil	

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）	☐	☑
Location Plan, Site Plan, Plan Showing General Area, Extract from Pat Heung Outline Zoning Plan No. S/YL-PH/11		
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。

Application for Permission under Section 16 of the Town Planning Ordinance (Cap. 131)

Temporary Public Vehicle Park with Ancillary Site Office for a Period of Three Years in "Agriculture" ("AGR") Zone at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories

SUPPLEMENTARY PLANNING STATEMENT

Applicant:
Chief Force Limited

Planning Consultant:
Top Bright Consultants Ltd.

July, 2020

TABLE OF CONTENTS

		Page
TABLE OF CONTENTS		i
LIST OF FIGURES		i
SUMMARY OF APPLICATION		1
1.	**INTRODUCTION**	2
2.	**SITE CONTEXT** Location Existing Site Conditions Surrounding Land Uses Access	3
3.	**LAND STATUS**	3
4.	**PLANNING CONTEXT** Statutory Plan Previous Applications	4
5.	**DEVELOPMENT PROPOSAL** Proposed Use Site Layout and Design Site Operation Drainage Proposal Environmental Considerations	5
6.	**JUSTIFICATIONS** Genuine Demand for Residents during the Pandemic Limitation of Existing Public Transport Options Compatible with Planning Intention and Surrounding Land Uses No Adverse Impacts on Surrounding Areas No Adverse Traffic Impact	6
7.	**CONCLUSION**	8

LIST OF FIGURES

Figure 1	Location Plan
Figure 2	Site Plan
Figure 3	Plan Showing the General Area
Figure 4	Extract from Pat Heung Outline Zoning Plan No. S/YL-PH/11
Figure 5	Layout Plan
Figure 6	Landscape Proposal

Executive Summary

This application is prepared on behalf of the Applicant to seek planning permission from the Town Planning Board (the "Board") for temporary public vehicle park with Ancillary Site Office for a period of 3 years at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories (the "Application Site").

The Application Site, with an area of approximately 3,526 square metres, falls within an area zoned "Agriculture" ("AGR") on the Approved Pat Heung Outline Zoning Plan No. S/YL-PH/11, which is intended to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. Owing to the lack of incentives in retaining agricultural land, and prevalence of open storage and infrastructure in the subject area, the owners of the Application Site have no immediate plan to redevelop their property for agricultural purposes.

In recent years, there is an increasing demand of car parking in rural New Territories mainly due to most land owners are more conscious about the restrictions of land uses under various government regulations. About 100 parking spaces will be provided in the Application Site for the nearby villagers. An ancillary site office will be erected at the Application Site. The proposed hours of operation at the Application Site are 24 hours daily.

The justifications of this application are: genuine demand for residents during the pandemic; limitation of existing public transport options; compatible with surrounding land uses; and no adverse environmental, air, noise, visual and traffic impacts on surrounding areas. The Applicant respectfully requests the Board to approve this application for a period of 3 years.

行政摘要

這宗規劃申請乃代表申請人向城市規劃委員會("城規會")呈交，擬議在新界元朗八鄉丈量約份第 111 約地段第 1869 號(部份)、第 1870 號(部份)、第 1872 號(部份)、第 1873 號(部份)、第 1875 號餘段(部份)、第 1876 號及第 1877 號 ("申請地點")，用作臨時公眾停車場連附屬辦公室 ("擬議發展")，為期三年。

申請地點的面積約3,526平方米，座落於八鄉分區計劃大綱圖編號S/YL-PH/11中的"農業"地帶，擬議用作住宅發展。基於缺乏作保存良好農地的誘因及申請地點毗鄰地方已廣泛用作露天存放及公共建設用途，申請地點的現行土地擁有人並沒有計劃把申請地點用作農業發展。

近年，因很多業主在不同政府條例下對土地用途的限制更為注意，新界鄉郊對停車場的需求亦不斷增加。申請地點將為附近的居民提供約 100 個停車位，亦設有一個附屬辦公室。申請地點的營運時間是每天 24 小時。

這宗規劃申請的理由為：附近的居民在武漢肺炎流行期間對泊車位有殷切的需求；現有公共交通選擇的限制；與附近土地用途協調；對附近環境、空氣、噪音、視覺及交通不會構成影響。因此，申請人懇請城規會批准有關申請三年的臨時用途。

SUMMARY OF APPLICATION

Applicant:	Chief Force Limited
Applied Use:	Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years
Existing Use:	Vacant
Location	Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories
Site Area:	Private Land: 3,526 square metres Government Land: Nil Total: 3,526 square metres
Lease:	Block Government Lease demised as agriculture land
Development Proposal:	No. of Parking Spaces for Private Cars: 100
Statutory Plan:	Approved Pat Heung Outline Zoning Plan No. S/YL-PH/11 gazetted on 27.10.2006
Zoning:	"Agriculture" ("AGR")
Town Planning Board Guidelines:	Nil
Previous Applications:	2 applications for temporary open storage yards of construction materials for a period of 12 months and 3 years respectively rejected by the Town Planning Board

1. INTRODUCTION

1.01 This application is prepared by Top Bright Consultants Ltd. on behalf of Chief Force Limited (the "Applicant") to seek planning permission for a temporary public vehicle park with ancillary site office for a period of 3 years at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories (the "Application Site").

1.02 The Application Site, with an area of approximately 3,526 square metres, falls within the "Agriculture" ("AGR") zone on the Approved Pat Heung Outline Zoning Plan No. S/YL-PH/11 (OZP). Under the prevailing OZP, there is a total area of approximately 112.40ha zoned "AGR" to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. This zone is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. The areas under this zoning are usually well served by irrigation and servicing facilities as well as marketing facilities for intensive farming including livestock rearing, fish culture and horticulture.

1.03 The areas under this zoning are located at the eastern, southern, south-western, and north-eastern parts of the OZP and comprise both land under active cultivation of vegetables and fallow agricultural land. As filling of land/pond may cause adverse drainage and environmental impacts on the adjacent areas, permission from the Board is required for such activities. However, at the immediate southwest of the Application Site, a large portion of the "AGR" has been used as the MTR XRL Shek Kong Stabling Sidings. No planning application has been submitted for the change of use or filling of land.

1.04 Although the Application Site is located in the "AGR" zone, it is a narrow strip of land being sandwiched by the "Village Type Development" ("V") zone and the MTR XRL Shek Kong Stabling Sidings at the northeast and southwest respectively (see **Figure 1**). The size of the remaining "AGR" zone, which includes the Application Site, provides no incentive for agriculture related developments and is too small for any economic farming activity. The piece of land may no longer serve the original planning intention due to the material change of the nearby development.

1.05 Moreover, there are parking needs in the area especially for Wang Toi Shan San Tsuen. Meanwhile the planning authority has a tighter enforcement standard on parking of vehicles in the nearby residential clusters, mostly within the "Village Type Development" zone. There are two approved planning applications related to parking of vehicle use in the adjacent "V" zone, but one is serving the Leung Uk Tsuen area (A/YL-PH/833), while the other is a private car park (A/YL-PH/832). In view of the genuine need for using the Application Site for the applied use to provide parking spaces to the villagers of Wang Toi Shan San Tsuen, the Application Site is considered suitable for the proposed development.

1.06 The following sections are intended to help facilitating the Town Planning Board's (the "Board") decision, and will briefly describe the Application Site and its surroundings,

give details of the Proposed Development and provide justifications in support of the application.

2. SITE CONTEXT

Location

2.01 The Application Site is situated at the south of Kam Tin Road, Pat Heung, Yuen Long, New Territories. It is situated at the fringe of the MTR XRL Shek Kong Stabling Sidings, village houses and open storage yards. **Figure 1** shows the Application Site in its regional context.

Existing Site Conditions

2.02 The Application Site covers an area of approximately 3,526 square metres and is in an irregular shape. It is currently flat and vacant. No land filling is required for the proposed use. Please refer to Site Plan at **Figure 2.**

Surrounding Land Uses

2.03 The Application Site is situated within an area surrounded by MTR XRL Shek Kong Stabling Sidings, open storage, port back-up and residential uses and in its close proximity to Kam Tin Road. Open storage is identified to the east of the Application Site. To the north of the Application Site is Kam Tin Road. To the southwest is the MTR XRL Shek Kong Stabling Sidings. The nearest village, Wang Toi Shan San Tsuen is located approximately 150 metres northeast of the Site. Figure 3 shows the existing land use surrounding the Application Site.

Access

2.04 The Application Site connects to Kam Tin Road via a local track with a 6-meter wide ingress/egress point. Meanwhile, Fan Kam Road leads out to the strategic road network.

3. LAND STATUS

3.01 According to the Land Registry, the Application Site comprises of Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111. A plan showing the configuration of the lots is at Figure 2.

3.02 The subject lots are held under Block Government Lease and demised as agricultural land with a lease term expiring on 30.6.2047. There are no user restrictions in the leases apart from the standard non-offensive trade clause.

4. PLANNING CONTEXT

Statutory Plan

4.01 According to the Approved Pat Heung Outline Zoning Plan (OZP) No. S/YL-PH/11, the Application Site falls within the "AGR" zone. An extract of the OZP is attached at **Figure 4.**

4.02 As stated in the Notes of the OZP, the planning intention of the "AGR" zone is "to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes."

4.03 Any filling of pond, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the interim development permission area plan without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

4.04 Any filling of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft Pat Heung Outline Zoning Plan No. S/YL-PH/9 without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance. This restriction does not apply to filling of land specifically required under prior written instructions of Government department(s) or for the purposes specified below: (i) laying of soil not exceeding 1.2m in thickness for cultivation; or (ii) construction of any agricultural structure with prior written approval issued by the Lands Department.

Previous Applications

4.04 The Application Site involves two previous applications for temporary open storage yards of construction materials, which is not relevant to the use of the current application. Details are shown as follows:

Application No.	Applied Use	Approval Date	Decision
A/YL-PH/235	Nine temporary open storage yards of construction materials for a period of 12 months	30.10.1998	Rejected
A/YL-PH/566	Temporary Open Storage of Construction Materials for a Period of 3 Years	01.08.2008	Rejected

5. DEVELOPMENT PROPOSAL

Proposed Use

5.01 The Applicant seeks the Board's permission to use the Application Site for a proposed temporary public vehicle park with ancillary site office for a period of 3 years.

5.02 The proposed use mainly includes a public vehicle park used by the villagers/residents living at the "V" zone adjoining the Application Site. No workshop, construction or vehicle repair activities will be carried out on the premises.

Site Layout and Design

5.03 As illustrated on the Layout Plan in **Figure 5**, the Application Site will provide 100 parking spaces for private cars/light goods vehicles not exceeding 5.5 tonnes. The vehicles will be parked according to the Layout Plan and each parking space is 2.5m x 5m in dimension. An ancillary site office (1-storey, 2.5m) would be erected at the entrance of the Application Site. The Application Site's boundary was drawn according to the physical settings such as the roads at the north and south boundaries of the site.

5.04 The Application Site will be fenced off to avoid nuisance to any potential receivers. The existing vehicle ingress/egress is about 6-meter wide and located at the northwest of the Application Site, which is connected to Kam Tin Road via a local track.

Site Operation

5.05 The Application Site will be used for public vehicle park to satisfy the parking needs of nearby residents. The proposed hours of operation at the Application Site are 24 hours daily.

Drainage Proposal

5.06 Peripheral drainage channels will be provided along the boundary to intercept all surface runoff within the Application Site. Catch pits with sand traps will be provided at the outlet before discharging the flow into the existing nullah, and a grease trap will be installed to remove potential sources of pollution, such as oil lubricants and grease. Details of the drainage proposal will be submitted to the relevant Government departments upon receipt of planning approval.

Environmental Considerations

5.07 The following measures will be adopted to minimize any potential impact on surrounding areas:

(a) Prohibiting noise generating activities, such as workshop, vehicle breaking, painting or repair, within the Application Site;
(b) Providing and implementing a landscape proposal;
(c) Providing drainage facilities around the Application Site; and
(d) Erection of perimeter fencing where necessary.

6. JUSTIFICATIONS

Genuine Demand for Residents during the Pandemic

6.01 During the current pandemic, the residents have raised awareness on personal safety. According to the South China Morning Post and the sale and marketing director of the Octopus Card, the usage of public transport recorded a drop of more than 40% year-on-year in public transport transactions in February as hundreds of thousands of workers and students stayed home and social gatherings were avoided. The epidemic took a heavy toll on the transport sector, with transactions for railways, franchised buses and mini buses down by 30-40% in January and February, and more than 40% for February alone. As a social reflection, the nearby residents withstand from using public transport, which the usage of private cars soared in the past months. Private cars are being parked on the local track and caused traffic concerns to the village.

6.02 The proposed development aims to facilitate the drivers from the neighbourhood, which are the residents from the Wang Toi Shan San Tsuen. The application deserves sympathetic consideration by the Board under such epidemic situation.

Limitation of Existing Public Transport Options

6.03 The nearest public transport options currently available at Fan Kam Road are bus/minibus routes, 251B and 608. The bus route 251B operates from 5:30am to approximately midnight with a time interval of 10-30 minutes, while the minibus route 608 operates from 6:00am to 21:15pm with a time interval of 18-20 minutes. Other means of public transportation is not available except taxi. Residents are suffering from the long travelling time, limited operation time of the public transport and limited capacities of the available public transport, hence the use of private cars is a more preferred option. The application deserves sympathetic consideration by the Board in relieving the stress of the residents.

Compatible with Planning Intention and Surrounding Land Uses

6.04 The Proposed Development is compatible with the surrounding land uses that are predominantly open storage yards and the MTR XRL Shek Kong Stabling Sidings. To the further north and east of the Application Site also consists of village houses and some open storage yards. As Wang Toi Shan San Tsuen is adjacent to the Application Site and the recent development (MTR XRL Shek Kong Stabling Sidings) has interrupted the planning intention of "AGR", the proposed development is considered appropriate to serve the nearby residents. The temporary nature of the proposed development would not frustrate the long term planning intention for the Application Site, and the Town Planning Board/Government could review the merits of the proposed development upon the expiry of the planning approval.

No Adverse Impacts on Surrounding Areas

6.05 Owing to the nature and size of the Proposed Development, no adverse impacts are anticipated on the surrounding areas, as discussed below:

Environmental

The Proposed Development is complied with the "Code of Practice on Handling the Environmental Aspects of Temporary Uses and Open Storage Sites" (Rev. Aug. 2005) as:

Air

(a) The Application Site is sandwiched by open storage yards and the MTR XRL Shek Kong Stabling Sidings. No adverse impacts would be done to the above-mentioned use.

Noise

(b) Erection of 2.5m corrugated metal fencing would be provided to minimize any possible noise nuisance on the surrounding settlements.

Visual

(c) The provision of fencing and landscaping to ensure that the Proposed Development be inconspicuous and not create an eyesore to the surrounding areas. Please refer to **Figure 6** for details of the landscape proposal. The proposal will be implemented upon receipt of planning approval.

Drainage

(d) There has been no history of flooding at the Application Site. The Applicant will provide periphery drainage channels on the Application Site to the satisfactory of Drainage Services Department. Therefore, no adverse drainage impacts on the surrounding area are anticipated.

No Adverse Traffic Impact

6.06 The Proposed Development, with 100 spaces for parking of private cars, is not a high traffic generating use. The frequency of vehicular trips to and from the Application Site is estimated to be around 100 trips per day. Since private cars are currently parked near by the Application Site in an unorganized manner along the local track and the existing road has already been enduring the traffic generated from the Application Site for a long time, the existing traffic condition is acceptable from traffic point of view. The proposed public car park would have no significant impact to the existing traffic condition, but would assist the residents to park their vehicles in an orderly manner.

7. CONCLUSION

7.01 With the limitation in public transport, it is clear that the Wang Toi Shan San Tsuen is not an easily reachable area. The surrounding villagers/residents have a genuine demand to drive to commute to work/school. Moreover, it is reasonable to predict that in the foreseeable future that the pandemic will remain as a new normality. The anxiety of the residents in using public transport should not be neglected.

7.02 Currently, the private cars are parked scattered at the roadside in the village, which may cause nuisance and pose safety concerns to other users of the road. The Proposed Development offers a temporary solution to meet the demand for vehicle parking in the Wan Toi Shan San Village area. Temporary uses such as the Proposed Development would not frustrate the long-term planning intention of the area, and instead, efficiently utilize scarce land resources and help alleviate the shortage of suitable site for parking in the area. In this regard, the Application Site is considered suitable for the proposed use in terms of its physical characteristics, location and surrounding land uses.

7.03 Given the strategic location of the Application Site can be accessed by a local track and Kam Tin Road, and the fact that it is surrounded by development area, storage/open storage facilities, residential use and the MTR XRL Shek Kong Stabling Sidings, the development of parking facility is considered appropriate.

7.04 The proposed development is solely for solving the needs of the Wang Toi Shan San Tsuen, a temporary vehicle park, which does not involve any additional noise generation, visually intrusive or environmental detrimental activities, and would not have any additional impact on the local traffic.

7.05 As the Proposed Development is considered as the most viable, sensible and fair utilization of the Application Site, the Applicant respectfully requests that the Board give sympathetic consideration and approve this application.

Top Bright Consultants Ltd.
July 2020

Top Bright Consultants Ltd.

Extract Plan Based on Map Series HM20C of Sheet 6

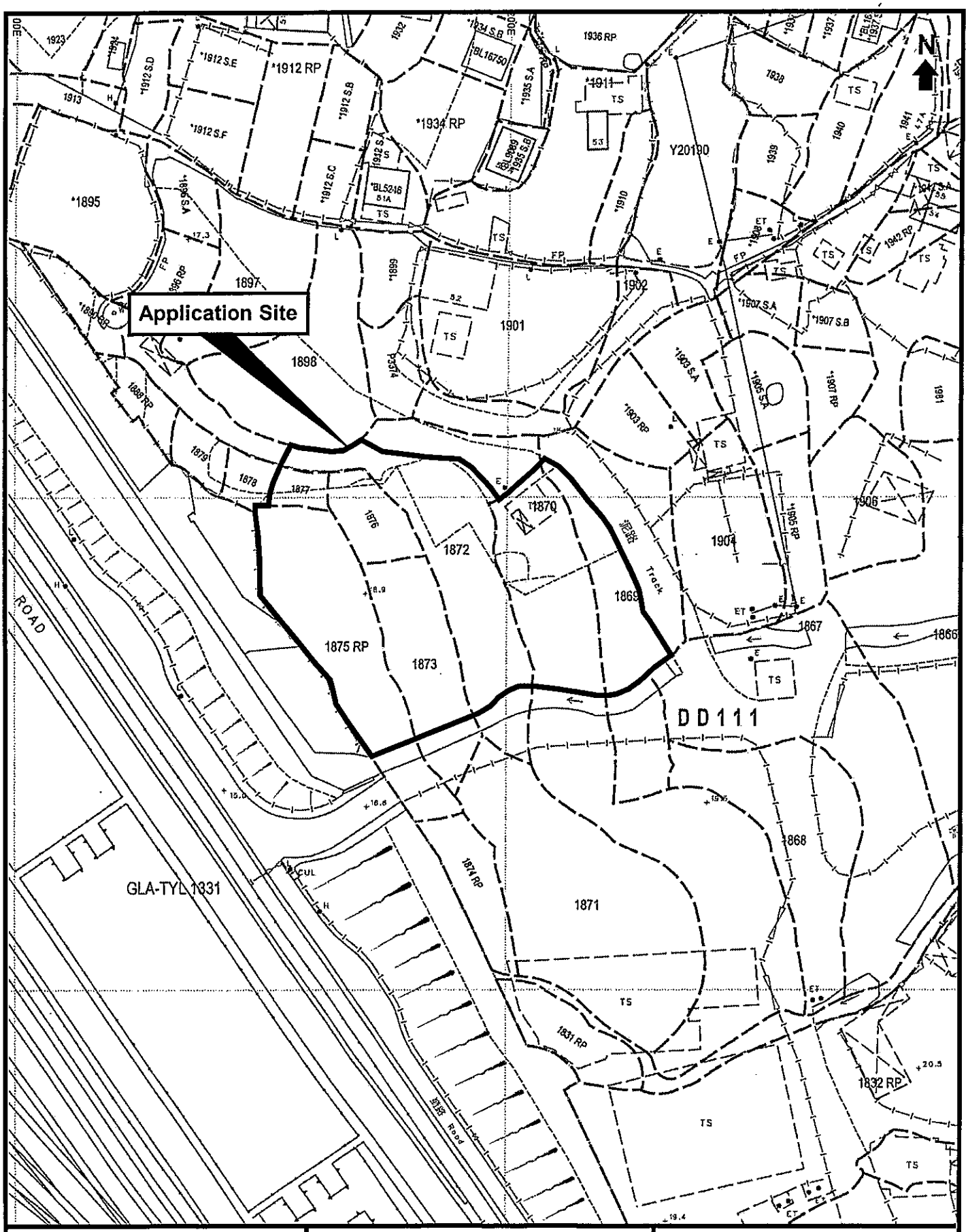
Location Plan

Scale 1 : 20 000

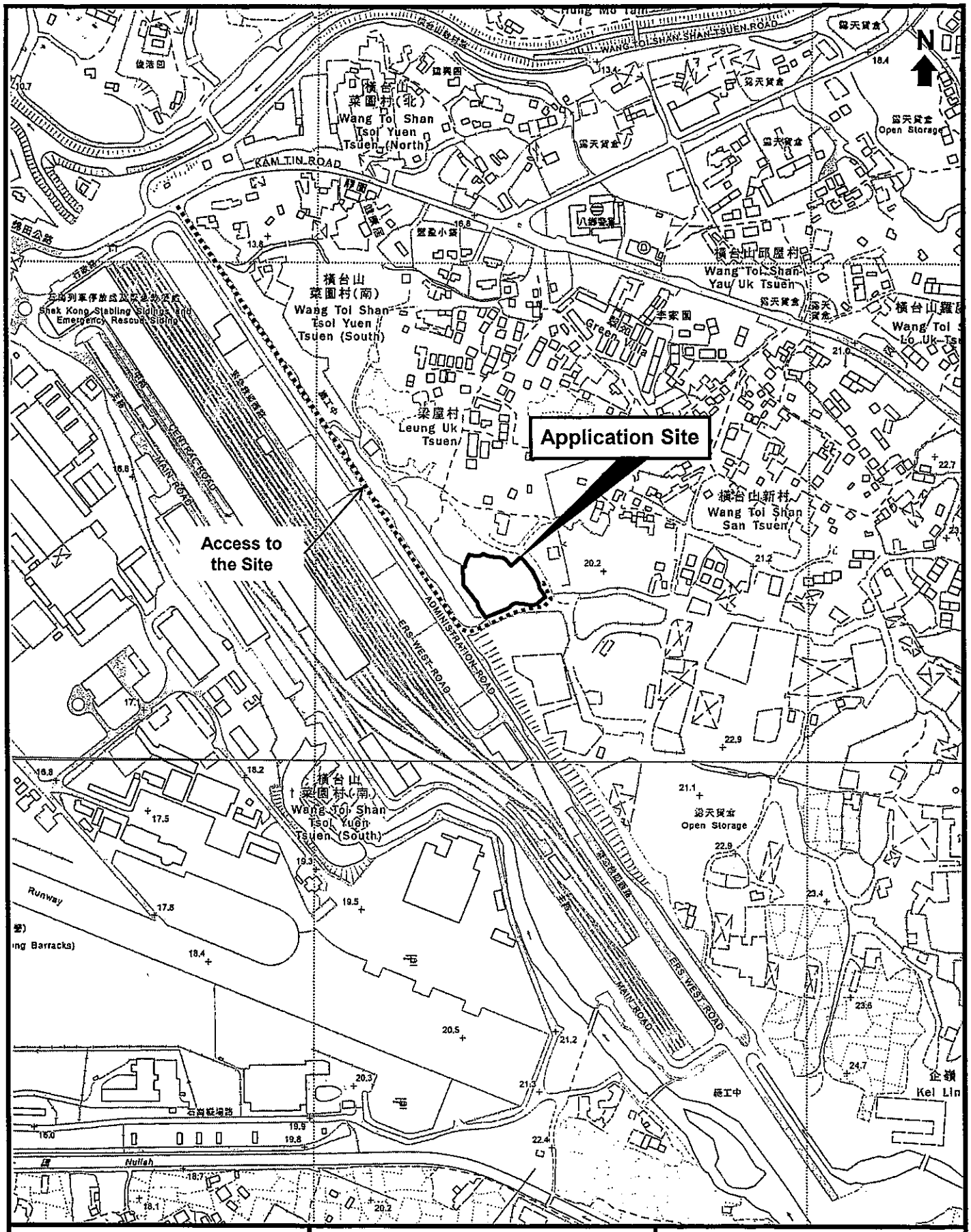
FIGURE 1

For Identification Purpose

Date: 4.5.2020



Top Bright Consultants Ltd. Extracted from Lot Index Plan No. 6-SE-14A	**Site Plan** **Scale 1 : 1 000**	**FIGURE 2** **For Identification Purpose** **Date: 4.5.2020**



Top Bright Consultants Ltd.

Extracted Plan Based on Map Series HP5C of Sheet Nos. 6-NE-B & D

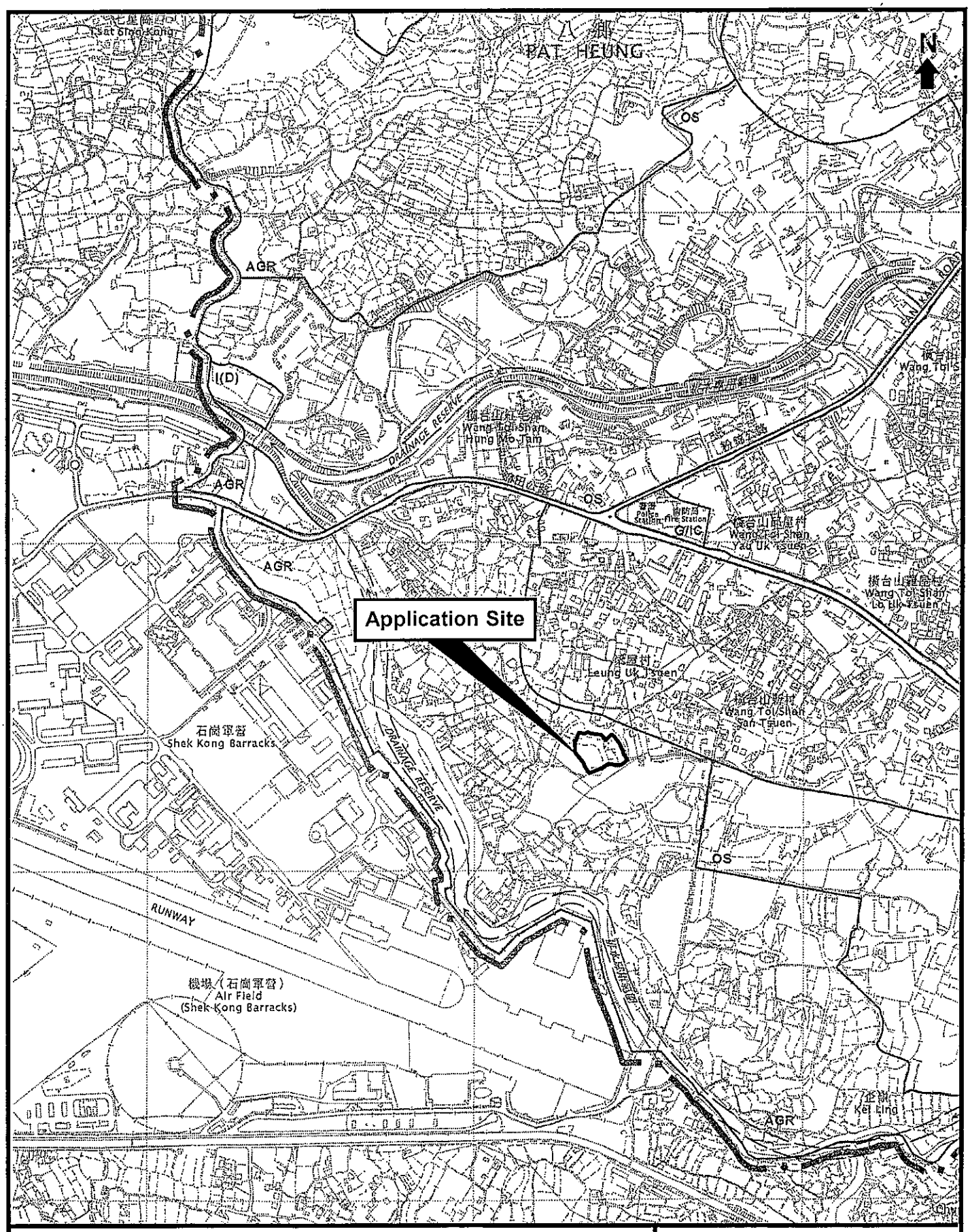
Plan Showing the General Area

Scale 1 : 5 000

FIGURE 3

For Identification Purpose

Date: 4.5.2020



Extract from Pat Heung Outline Zoning Plan No. S/YL-PH/11 gazetted on 27.10.2006

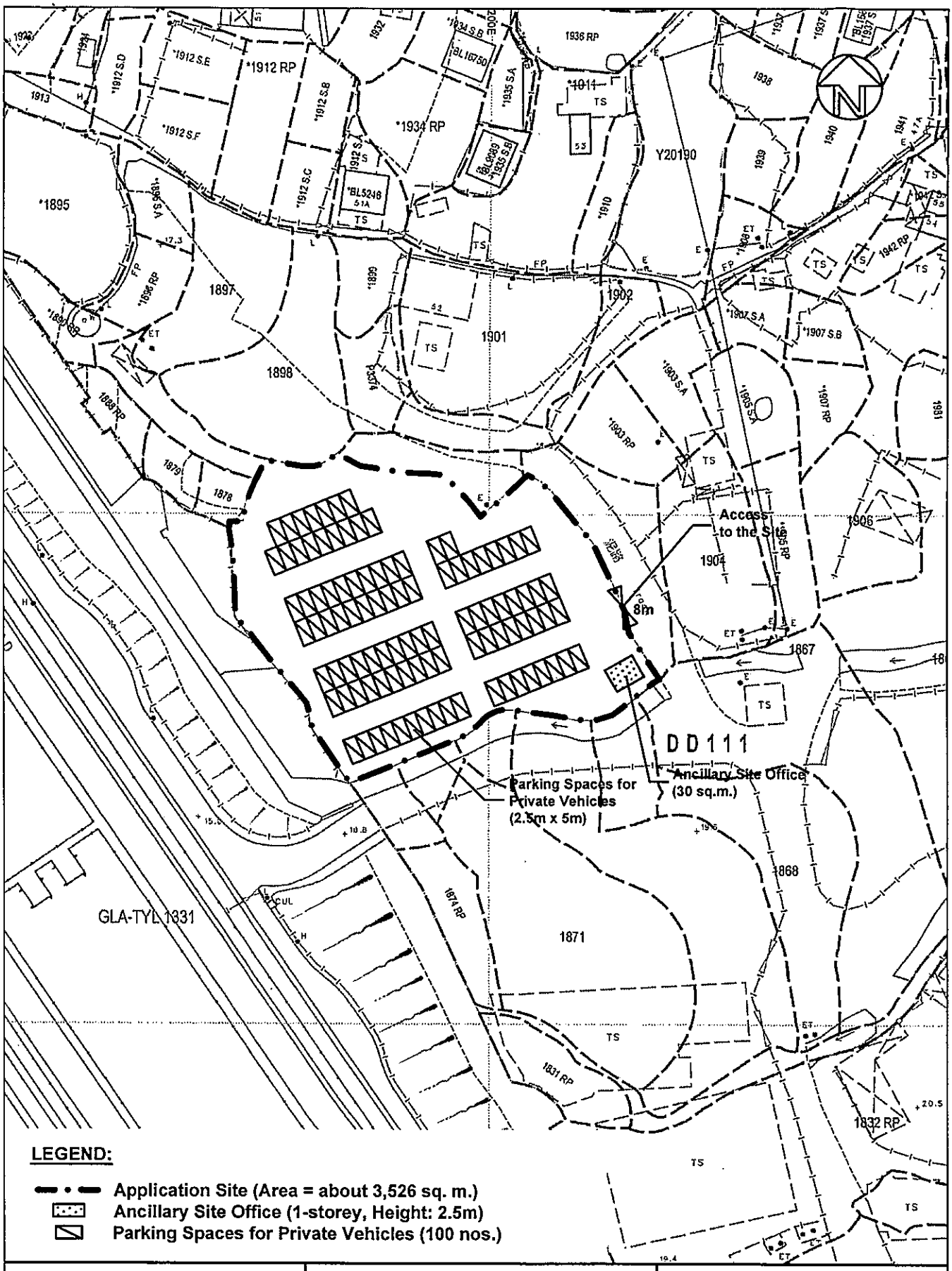
Top Bright Consultants Ltd.

Scale 1 : 7 500

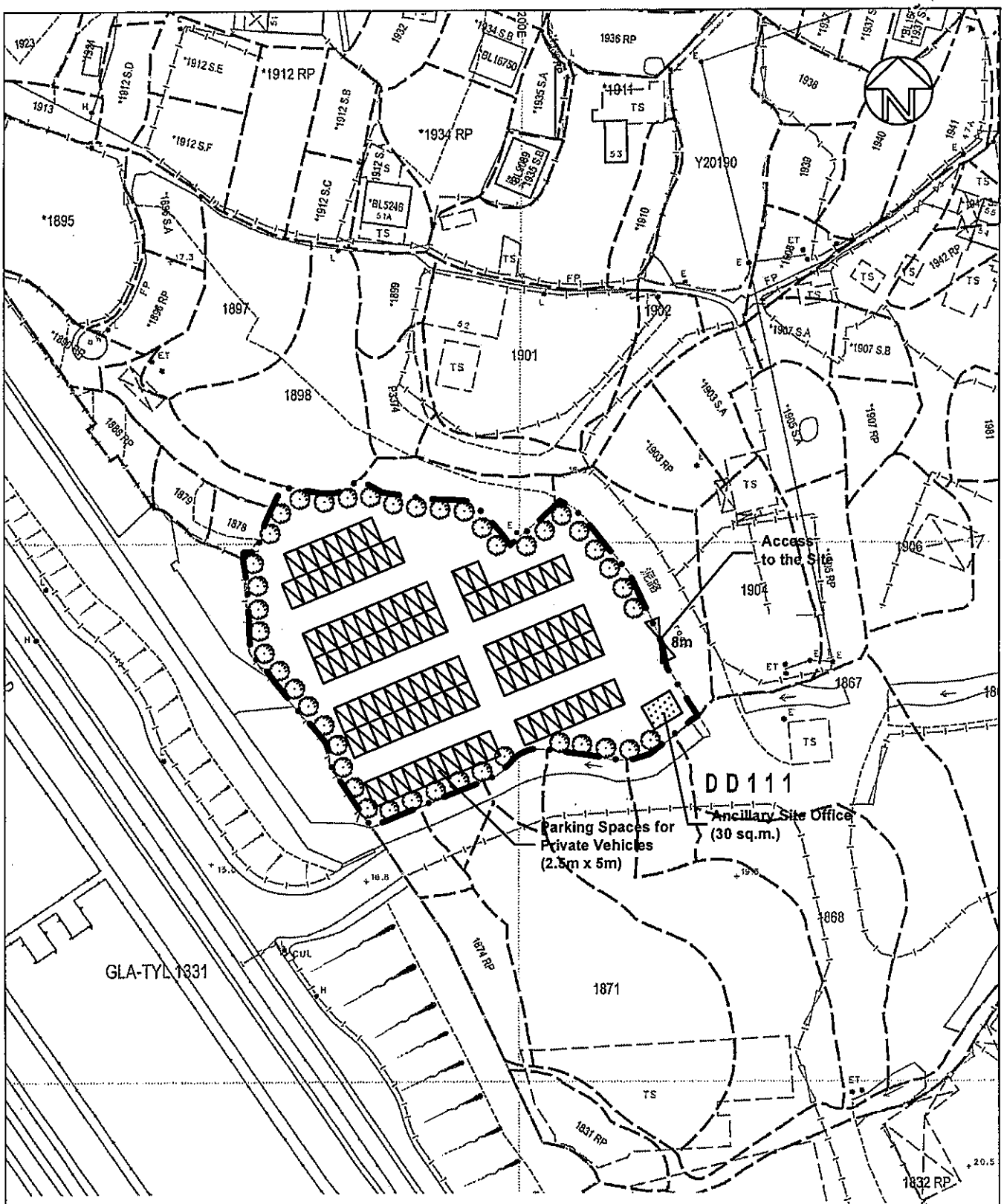
FIGURE 4

For Identification Purpose

Date: 4.5.2020



Top Bright Consultants Ltd. Drawing No. :TB/20/653/05	**Layout Plan** Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, N.T.	**FIGURE 5** FOR IDENTIFICATION PURPOSE Date: 4.5.2020 Scale: 1 : 1 000



Plant Schedule:

Recommended Species	Spacing (centre to centre)	Size (height / span)	Quantity
Proposed Trees: Ficus Microcarpa 細葉榕	3000-4000mm	2750-3750mm	44

Top Bright Consultants Ltd.

Drawing No. :TB/20/653/06

Landscape Proposal

Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, N.T.

FIGURE 6

FOR IDENTIFICATION PURPOSE
Date: 4.5.2020
Scale: 1 : 1 000

才鴻顧問有限公司
TOP BRIGHT CONSULTANTS LIMITED

Your Ref.: TPB/ A/YL-PH/857
Our Ref.: 20/653/L02

By Email and Post

October 29, 2020

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

Dear Sir/Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years in "Agriculture" ("AGR") Zone at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories

(Application No. A/YL-PH/857)

In response to the comments from the Transport Department, we submit herewith the Further Information (see **Annex 1-5**) for your consideration.

Should you have any queries or require further information, please feel free to contact the undersigned at .

Yours faithfully,
For and on behalf of
Top Bright Consultants Ltd.

Lo Ming Kong

Encl.

c.c. DPO/FSS & YLE (Attention: Mr. Wan Tou Wei, Todd) – By Email only
Chief Force Limited (the Applicant)

Responses to Comments from Transport Department on Planning Application No. A/YL-PH/857

COMMENTS	RESPONSES
1. Transport Department	
(a) The applicant should justify the proposed parking provisions with support of the local demand. Consideration should be given to a concurrent planning application no. A/YL-PH/856, which is provides 26 parking spaces for local villagers;	(a) The proposed parking provisions are supported by local communities. A letter from the District Council Member of Yuen Long – Mr. Tang Yung-Yiu, Ronnie of Pat Heung North is attached in **Annex 2**. According to the Town Planning Board's website, the planning application (No. A/YL-PH/856) provides only 15 parking spaces for private vehicles and 3 parking spaces for light goods vehicles (**Annex 3**). This car park is targeted to serve the villagers of Leung Uk Tsuen whereas the proposed car park under this application is mainly for Wang Toi Shan San Tsuen and Wang Toi Shan Lo Uk Tsuen (**Annex 4**). With the increasing parking demand due to the coronavirus as mentioned in paragraph 6.01 of our Planning Statement, the proposed public vehicle park would meet the local parking demand.
(b) The applicant should provide the trip generation and attraction with assessment to traffic impact on Kam Tin Road and Leung Shing Road;	(b) **Table 1: Traffic Generation from and to the Application Site**

Time	No. of Trips (Private Cars)	No. of Trips (Private Cars) Staff
07:00-09:00 (peak hours)	25	2
09:00-11:00	15	0
11:00-13:00	10	0
13:00-15:00	10	0
15:00-17:00	10	0
17:00-19:00 (peak hours)	25	0
19:00-21:00	15	1
21:00-23:00	10	0
23:00-07:00	10	1

COMMENTS	RESPONSES
	As the public car park intends to serve local villagers and staff from adjoining open storage sites so as to provide a more organized parking environment and avoid illegal parking on the local roads/tracks, most of the parking spaces will be rented out on monthly basis. It is not anticipated that the proposed public vehicle park will attract lots of traffic from outsiders/non-villagers.
(c) The applicant should demonstrate that smooth manoeuvring of vehicles to/from Kam Tin Road, along the local access and within the site;	(c) As indicated in **Figure 5A (Annex 5)** attached, sufficient spaces are available for manoeuvring of vehicles along the local access and within the Application Site. Five passing bays are also available in Leung Shing Road between the section from Kam Tin Road to the Application Site. As regard the junction of Kam Tin Road and Leung Shing Road, it is constructed in accordance with highway standard. Therefore, manoeuvring of vehicles to/from Kam Tin Road is considered acceptable.
(d) The applicant should indicate the clear width of the aisle of the parking spaces;	(d) The aisle width of parking space is shown in **Figure 5A (Annex 5)**, ranging from 5m to 8.4m. As only one-way traffic is allowed within the Application Site, the aisle width is sufficient for manoeuvring of private vehicles. To allow sufficient space for manoeuvring, 2 parking spaces are reduced and the total number of parking spaces is now 98.
(e) The applicant should note the local access between Kam Tin Road and the site is not managed by this Department.	(e) Noted.

Annex 2

鄧鎔耀區議員辦事處

通訊地址：新界元朗八鄉橫台山永寧里 200 號地下
電話：2483 3008　　傳真：2483 3638　　電郵地址：yungyiuoffice@gmail.com

檔案編號：D2020-100009WTSST_ML

新界荃灣青山公路 388 號
中染大廈 22 樓 2202 室
粉嶺、上水及元朗東規劃處
敬啟者：

擬議向城市規劃委員會申請在新界元朗八鄉
丈量約份第 111 約地段第 1869 號(部份), 1870 號(部份) , 1872 號(部份) ,
1873 號(部份) , 1875 號餘段(部份) , 1876 號(部份)及 1877 號
用作臨時公眾停車場連附屬辦公室為期三年的規劃申請　(A/YL-PH/857)

本人為元朗八鄉北區議員。知悉標題地段規劃申請，現特函　貴處，希能向有關政府部門，反映本區交通問題。

有關申請地點座落橫台山新村，該村及毗鄰村落，因歷史問題，土地用途比較廣泛，除村屋外亦包括露天存放、店鋪、老人中心等等。隨著地區發展，近年當地民居日益增加，因而對私家車泊車需求更大。

本人服務本區多年，深知在鄉郊地區私家車是村民/居民其中一項主要交通工具；唯村路偏窄，地權複雜，村民/居民為車輛阻塞及泊停問題，時有爭議。現知悉標題規劃申請公眾停車場，專為此區村民/居民而設，既可為本區提供合法泊車位，又可經由車輛不多的梁盛路出入錦田公路，有助紓緩村內交通問題。

因是項申請不會造成本區負面交通影響，本人表示支持是項申請。

鄧鎔耀

元朗（八鄉北）區議員
鄧鎔耀　謹啟
2020 年 10 月 28 日

Broad Development Parameters of the Applied Use/Development in respect of Application No. A/YL-PH/856
關乎申請編號 A/YL-PH/856 的擬議用途/發展的概括發展規範

Application No. 申請編號	A/YL-PH/856		
Location/address 位置／地址	Lot 1685 (Part) in D.D. 111, Pat Heung, Yuen Long 元朗八鄉丈量約份第 111 約地段第 1685 號(部分)		
Site area 地盤面積	About 約 1,570 sq. m 平方米		
Plan 圖則	Approved Pat Heung Outline Zoning Plan No. S/YL-PH/11 八鄉分區計劃大綱核准圖編號 S/YL-PH/11		
Zoning 地帶	"Village Type Development" 「鄉村式發展」		
Type of Application 申請類別	Temporary Use/Development in Rural Areas for a Period of 3 Years 位於鄉郊地區的臨時用途/發展為期 3 年		
Applied use/ development 申請用途/發展	Temporary Car Park for Villagers (Excluding Container Vehicle) for a Period of 3 Years 臨時村民停車場（貨櫃車除外）（為期 3 年）		
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	-	-
	Non-domestic 非住用	-	-
No. of block 幢數	Domestic 住用	-	
	Non-domestic 非住用	-	
Building height/ No. of storeys 建築物高度／層數	Domestic 住用	-	m 米
		-	mPD 米(主水平基準上)
		-	Storey(s) 層
	Non-domestic 非住用	-	m 米
		-	mPD 米(主水平基準上)
		-	Storey(s) 層
Site coverage 上蓋面積	-		

No. of parking spaces and loading / unloading spaces 停車位及上落客貨車位數目	Total no. of vehicle spaces 停車位總數	18
	Private Car Parking Spaces 私家車車位	15
	Light Goods Vehicle Parking Spaces 輕型貨車泊車位	3

* 有關資料是為方便市民大眾參考而提供。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。

The information is provided 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.

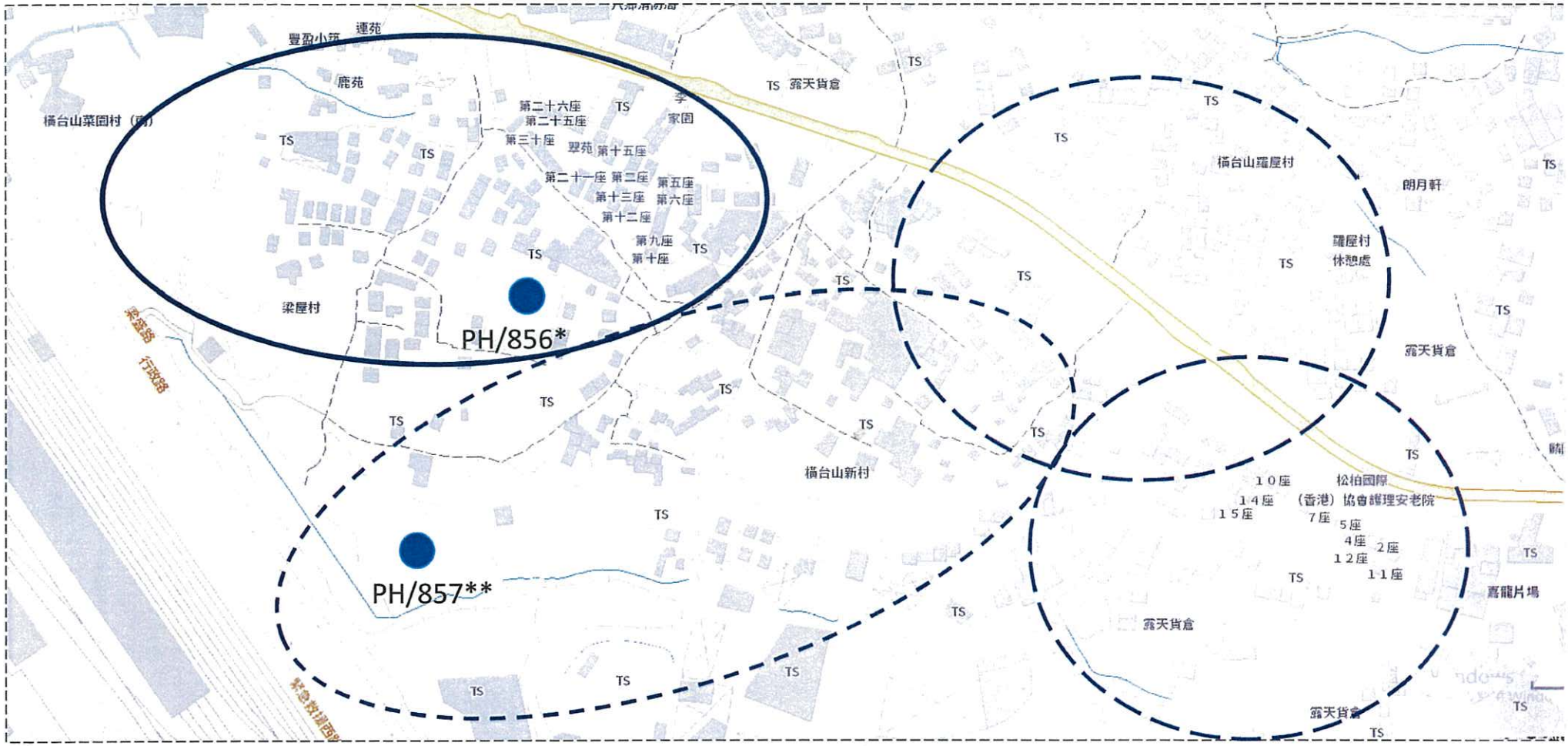
Annex 3

申請編號 Application No.: A/YL-PH/856

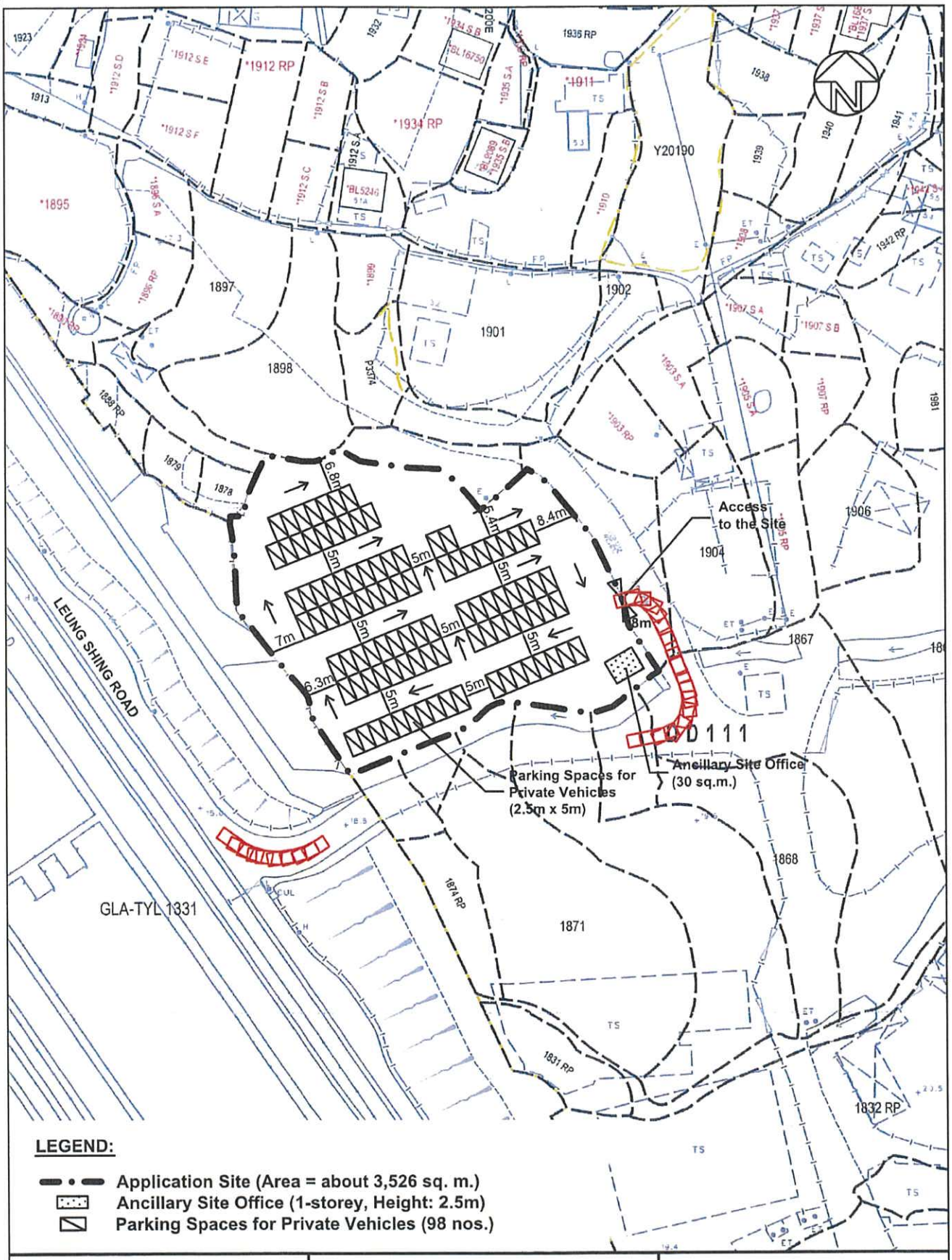
此頁摘自申請人提交的文件。

This page is extracted from applicant's submitted documents.

Annex 4



* Similar planning application in the vicinity **Current planning application ○ ( ) Catchment Area



LEGEND:

- Application Site (Area = about 3,526 sq. m.)
- Ancillary Site Office (1-storey, Height: 2.5m)
- Parking Spaces for Private Vehicles (98 nos.)

Top Bright Consultants Ltd. Drawing No. :TB/20/653/05A	**Layout Plan** Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, N.T.	**FIGURE 5A** FOR IDENTIFICATION PURPOSE Date: 28.10.2020 Scale: 1 : 1 000

才鴻顧問有限公司
TOP BRIGHT CONSULTANTS LIMITED

Your Ref.: TPB/ A/YL-PH/857
Our Ref.: 20/653/L04

By Email

January 6, 2021

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

Dear Sir/Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years in "Agriculture" ("AGR") Zone at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories

(Application No. A/YL-PH/857)

In response to the comments from the Transport Department dated on 30.10.2020, we submit herewith the Further Information for your consideration.

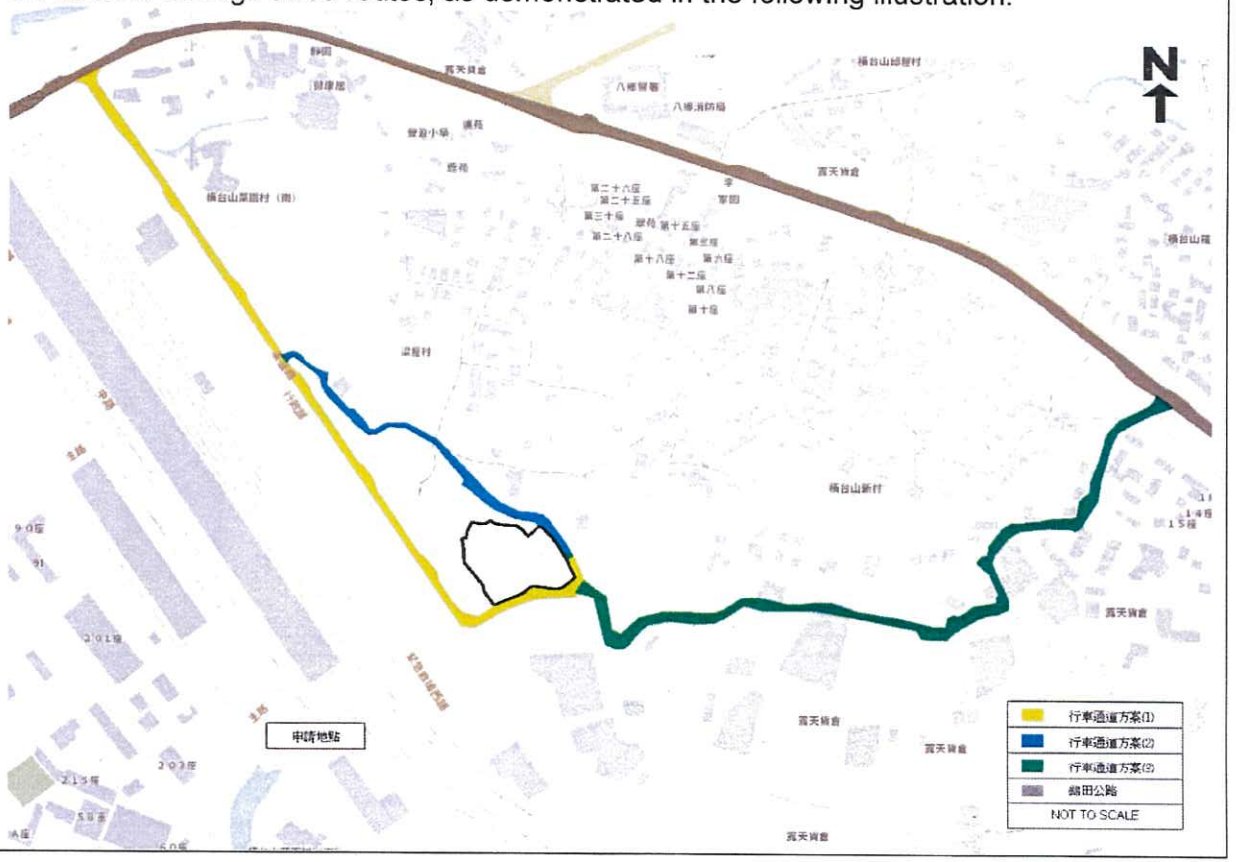
Should you have any queries or require further information, please feel free to contact the undersigned at .

Yours faithfully,
For and on behalf of
Top Bright Consultants Ltd.

Lo Ming Kong

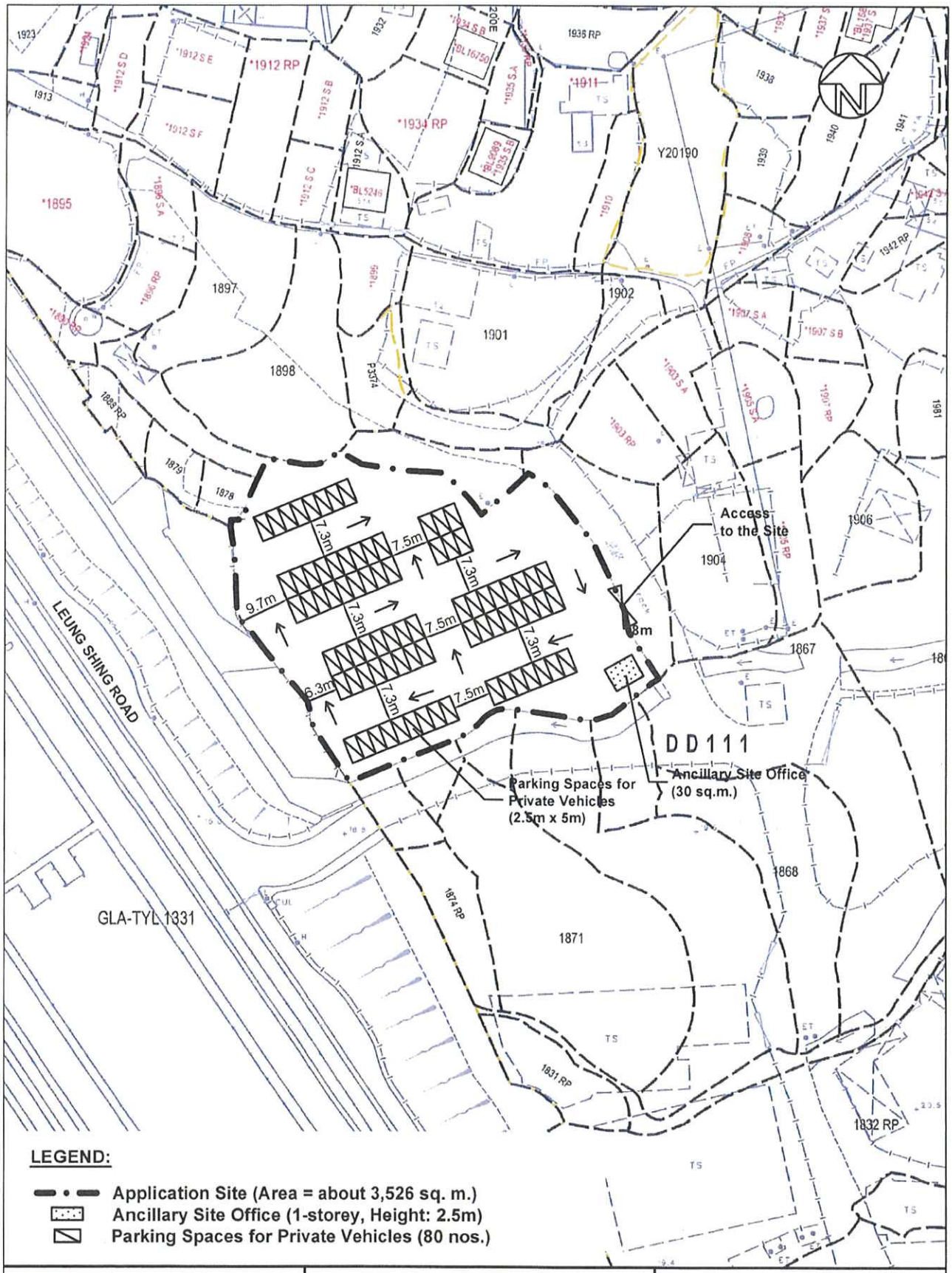
Encl.

c.c. DPO/FSS & YLE (Attention: Mr. Wan Tou Wei, Todd) – By Email only
Chief Force Limited (the Applicant)

Comments from Transport Department Dated 30 October 2020	Responses
a) The applicant should demonstrate there is a local demand for 100 car parking spaces with support of relevant site photos.	Noted. After reviewing the local demand and existing traffic conditions of the surrounding road network, the number of proposed car parking space will be reduced from 100 to 80, as shown in **Figure 5B**.
b) Given that 100 parking spaces would be provided, the applicant should review the reasonableness of the traffic generated in peak hours and provide an assessment to Kam Tin Road and Leung Shing Road to demonstrate the proposed PVP would not cause insurmountable traffic impact. In addition, the applicant should provide the existing traffic figures for both roads for reference.	Noted. To avoid overloading the capacity of road links at Leung Shing Road and the junction of Kam Tin Road / Leung Shing Road, the induced traffic of the proposed development will be diverted through three routes, as demonstrated in the following illustration: 

	Please note that a traffic consultant is currently conducting a traffic impact assessment (TIA) to review the anticipated traffic generation and traffic impact of the proposed development. The complete TIA report will be submitted in the form of "Further Information" by the end of January 2021 in view of supporting the planning application.

Figure



Top Bright Consultants Ltd.

Drawing No. :TB/20/653/05B

Layout Plan

Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, N.T.

FIGURE 5B

FOR IDENTIFICATION PURPOSE
Date: 3.12.2020
Scale: 1 : 1 000

才鴻顧問有限公司
TOP BRIGHT CONSULTANTS LIMITED

Your Ref.: TPB/ A/YL-PH/857
Our Ref.: 20/653/L05

By Post & Email

February 4, 2021

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

Dear Sir/Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years in "Agriculture" ("AGR") Zone at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories

(Application No. A/YL-PH/857)

In response to the comments from the Transport Department dated on 30.10.2020, we submit herewith the Further Information for your consideration.

Should you have any queries or require further information, please feel free to contact the undersigned at

Yours faithfully,
For and on behalf of
Top Bright Consultants Ltd.

Lo Ming Kong

Encl.

c.c. DPO/ FSS & YLE - Attn: Mr. Wan Tou Wei, Todd (By Email - ttwwan@pland.gov.hk)
Chief Force Limited (the Applicant)

Comments from Transport Department Dated 30 October 2020	Responses
1. The applicant should demonstrate there is a local demand for 100 car parking spaces with support of relevant site photos.	Noted. Please note that the number of proposed private car parking spaces has been reduced from 100 to 80, and the revised site layout is shown in **Figure 1.1**. The proposed public vehicle park is targeted to serve the villagers and their visitors in Wang Toi Shan San Tsuen. This will help regulate parking in the area and improve the traffic conditions in the vicinity. To demonstrate there is a local demand for 80 private car parking spaces in the village, the following information is provided: **A. Existing Parking Situation** At present, there is no proper private car parking space in Wang Toi Shan San Tsuen. Due to the lack of parking facilities, cars are parked freely along the local track within the village, as shown in the enclosed site photos (see **Appendix A**). As expressed in the supporting letter by Yuen Long District Council Member – Mr. Tang Yung Yiu, Ronnie of Pat Heung North (see **Appendix B**), there has been an increasing local demand for private car parking spaces in Wang Toi Shan along with the recent district development. It was discovered that the shortage of domestic parking supply would result in improper parking and lead to traffic and road safety concerns in the surrounding areas. **B. Existing Public Transport Facilities** At present, Wang Toi Shan San Tsuen is served by 4 franchised bus routes and 1 Green Mini-bus ("GMB") route along Kam Tin Road and Fan Kam Road, as shown in **Figure 1.2** and **Table 1.1**. The village is not in close proximity to any MTR station.

Table 1.1 Existing Public Transport Services in the Vicinity of Wang Toi Shan San Tsuen

Route No.		Origin - Destination	Frequency (min)	Operation Period	Remarks
Bus	54	Yuen Long (West) ↔ Sheung Tsuen	20 – 30	05:25 – 23:25	Circular Route
	77K	Sheung Shui ↔ Yuen Long (Fung Cheung Road)	20 – 30	06:00 – 23:30	-
	251B	Pat Heung Road ↔ Sheung Tsuen	10 – 30	05:30 – 01:20	Circular Route
	251M	Sheung Tsuen ↔ Tsuen Wan Station	-	07:00, 08:00, 09:00	Monday to Friday (Morning peak hour service only, 3 times per day)
GMB	608	Yuen Long (Fung Cheung Road) ↔ Wang Toi Shan	10 - 13	06:30 – 21:00	-

As shown in **Table 1.1**, there are limited public transport options in terms of variety and frequency of public transport services in the vicinity of Wang Toi Shan San Tsuen. As a result, many villagers rely on private cars as their major means of transportation, which account for the enormous demand for private car parking spaces in the village.

C. Existing Private Car Flow Rates in Wang Toi Shan San Tsuen

There are two major village accesses at Wang Toi Shan San Tsuen, namely Leung Shing Road and the unnamed access road leading from Kam Tin Road to Wang Toi Shan San Tsuen, as shown in **Figure 1.3**.

To appraise the existing traffic conditions, classified vehicle count survey were carried out and adjustment factors are proposed to be applied on the survey data for eliminating the impacts of abnormal traffic conditions during the COVID-19 pandemic (the survey methodology and derivation of adjustment factors are detailed in **P.6 - 9** of this R-t-C document).

According to the adjusted traffic count data, the existing private car flow rates at the two accesses during AM and PM peak hours are summarised in **Table 1.2**.

Table 1.2 Existing Private Car Flow Rates at the Village Accesses of Wang Toi Shan San Tsuen

Location of Village Access	Direction	Private Car Flow Rate (veh/hr)	
		AM Peak	PM Peak
Unnamed access road leading Kam Tin Road to Wang Toi Shan San Tsuen	S/B (inward)	59	62
	N/B (outward)	29	114
Leung Shing Road	S/B (inward)	16	23
	N/B (outward)	19	25
Total		123	224

As shown in **Table 1.2**, there are more than 80 private cars visiting and exiting Wang Toi San Tsuen during the identified AM and PM peak hours, which indicate that active usage of private cars is relatively common in the village for commuting.

In view of the above, it is considered that there is at current a local demand for 80 private car parking spaces in Wang Toi Shan San Tsuen.

2. Given that 100 parking spaces would be provided, the applicant should review the reasonableness of the traffic generated in peak hours and provide an assessment to Kam Tin Road and Leung Shing Road to demonstrate the proposed PVP would not cause insurmountable traffic impact. In addition, the applicant should provide the existing traffic figures for both roads for reference.

Noted. The peak-hour traffic generation of the proposed development is estimated with reference to a recently approved planning application No. **A/YL-PH/856** for a temporary public vehicle park in Wang Toi Shan Leung Uk Tsuen.

The referenced public vehicle park contains 15 no. private car parking spaces and 3 no. Light Goods Vehicle ("LGV") parking spaces. it shares similar purposes with the proposed development, which is to serve the nearby villagers and their visitors in Wang Toi Shan. The peak-hour development traffic flows of the public vehicle park (including traffic generation and attraction) according to the application is summarised in **Table 2.1**.

Table 2.1 Peak-hour Development Traffic Flows of the Public Vehicle Park According to Planning Application No. A/YL-PH/856

Type of Vehicles	AM Peak	PM Peak
	Trip in veh/hr	
Private Car	5	5
LGV	3	3

By applying the peak-hour development traffic flows to private car parking provision ratio of the referenced public vehicle park i.e., 5 ÷ 15 = **0.33**, the peak-hour development traffic flows of the proposed development are estimated to be: 80 no. of private car parking spaces x 0.33 = **27 veh/hr**. For assessment purposes, the corresponding peak-hour traffic generation and attraction rates are deduced from the estimated development traffic flows in consideration of the typical commuting patterns in Hong Kong, and the results are summarised in **Table 2.2**.

Table 2.2 Estimated Peak-hour Traffic Generation and Attraction Rates of the Proposed Development

Development	Generation		Attraction	
	AM Peak	PM Peak	AM Peak	PM Peak
	Trip in veh/hr (pcu/hr)			
Proposed No. of Private Car Parking spaces: 80	22 (22)	5 (5)	5 (5)	22 (22)

To summarise, the proposed development is estimated to generate 22(5) pcu and attract 5(22) pcu during the AM(PM) peak hours.

Traffic impact assessment ("TIA") is carried out to appraise the traffic impact of the proposed development on Kam Tin Road and Leung Shing Road. The methodology and results are detailed as follows:

A. Traffic Count Surveys

To appraise the existing traffic conditions, classified vehicle count surveys were conducted at the key road links and junctions within the Area of Influence of the TIA as presented in **Figure 2.1** and **Table 2.3**, on 20 January 2021 (WED) during the periods of 0730 – 1030 and 1600 – 1900 hours.

Table 2.3 Location of the Key Road Links and Junctions

Ref.	Location
	Road Link
L1	Kam Tin Road between Fan Kam Road and Unnamed Access Road leading from Kam Tin Road to Wang Toi Shan San Tsuen
L2	Kam Tin Road between Leung Shing Road and Fan Kam Road
L3	Leung Shing Road between Kam Tin Road and Unnamed Access Road leading from Leung Shing Road to Wang Toi Shan San Tsuen (1)
	Junction
J1	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road
J2	Fan Kam Road / Kam Tin Road
J3	Leung Shing Road / Kam Tin Road
J4	Unnamed Access Road leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road
J5	Unnamed Access Road leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road

	The traffic counts were recorded in a 15-minutes interval; and to be converted into passenger car unit ("pcu") values. The highest consecutive 15-minutes hourly traffic volume is adopted as the peak-hour traffic flow. The AM and PM peak hours of the road network during the survey period were identified as **0845 – 0945** and **1715 – 1815** hours respectively. The observed traffic flows during the peak hours are presented in **Figure 2.2**. **B. Proposed Adjustment on Survey Data During COVID-19 Period** In view of the abnormal traffic conditions under the COVID-19 pandemic, calibration of survey data is carried out with reference to the historical traffic data from Annual Traffic Census ("ATC") 2019, published by Transport Department. To facilitate the calibration process, the weekday AM and PM peak-hour traffic flow data at the concerned sections of Kam Tin Road and Fan Kam Road are extracted from ATC 2019 (see **Appendix C**). The data are then projected to year 2021 with an annual growth rate of +2.4% (the derivation of growth factor is detailed in at **P.13 - 14** of this R-t-C document) to represent the traffic situation in 2021 under normal conditions, as shown in **Table 2.4**

Table 2.4 Raw and Processed Traffic Flow Data with Reference to ATC2019

Station No. / Road Name	Direction	Peak-hour Traffic Flow Data quoted from ATC 2019 (veh/hr)		Year 2021 Projected Traffic Flow Data (veh/hr)	
		AM Peak	PM Peak	AM Peak	PM Peak
6207/ Kam Tin Road *(from Kam Sheung Road western junction to Fan Kam Road)*	E/B	750	730	786	765
	W/B	760	940	797	986
6212/ Fan Kam Road *(from Kam Tin Road to Fanling Highway)*	N/B	370	400	388	419
	S/B	490	470	490	470

The Year 2021 Projected Traffic Flow Data provide the basis of comparison with the collected survey data, and the adjustment factors are formulated by comparing the sum of the common movements of the projected and in-house survey data during peak hours, as demonstrated in **Table 2.5**.

Table 2.5 Comparison between the Year 2021 Projected Traffic Flow Data and Survey Data

Location	Direction	Traffic Flows at AM Peak (veh/hr) Projected Data [A] / Survey Data [B]	Traffic Flows at PM Peak (veh/hr) Projected Data [A] /Survey Data [B]
Kam Tin Road	E/B	786 / 719	765 / 804
	W/B	797 / 695	986 / 928
Fan Kam Road	N/B	388 / 358	419 / 444
	S/B	514 / 453	493 / 450
Total		2,485 / 2,225	2,663 / 2,626
Adjustment Factor: [A] ÷ [B]		**1.12**	**1.02**

As a result, the adjustment factors, i.e. **1.12** and **1.02** are applied on the AM and PM peak-hour traffic flow data collected from the in-house survey respectively to eliminate the impacts of abnormal traffic conditions during the COVID-19 pandemic. The traffic flows during the peak hours after adjustment are presented in **Figure 2.3**.

	C. Existing Capacity Assessment *Link Capacity Assessment* Based on the adjusted traffic flows during the AM and PM peak hours at the key road links, the corresponding performances in terms of volume-to-capacity ("V/C") ratio are assessed in accordance with Transport Planning Design Manual ("TPDM") Volume 2. For assessment purpose, it is assumed that: • the carriageway capacities of road links no. L1 and L2 at Kam Tin Road are equivalent to 6.75m single-two lane district distributors. As advised in TPDM, a reduction factor of -7% is further applied on the carriage capacities of road links at AM Peak for 15 – 20% heavy vehicle content in the traffic, as observed from the survey results. Carriageway capacities of L1 and L2 at **AM Peak** = 1400 (capacity of a 6.75m single-two lane district distributor) x (1 – 7%) = **1302 veh/hr**, for both directions of flows. Carriageway capacities of L1 and L2 at **PM Peak** = **1400 veh/hr**, for both directions of flows. • the carriageway capacity of road link no. L3 at Leung Shing Road is equivalent to a single track access roads with adequate passing places, i.e. **100 veh/hr**, for both directions of flow. A V/C ratio equal or less than 0.85 indicates that adequate capacity is available, and vehicles are not expected to experience significant queues and delays. The assessment results are shown in **Table 2.6**.

Table 2.6 Year 2021 Link Capacity Assessment

Ref.	Key Road Link	Direction	Carriageway Capacity (veh/hr) AM / PM	2021 Observed Flows (veh/hr)		V/C Ratio	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Kam Tin Road	E/B	651 / 700	503	722	0.77	1.03
		W/B	651 / 700	595	555	0.91	0.79
L2	Kam Tin Road	E/B	651 / 700	808	827	1.24	1.18
		W/B	651 / 700	770	940	1.18	1.34
L3	Leung Shing Road	Both Directions	100	36	50	0.36	0.50

As shown in **Table 2.6**, Leung Shing Road is currently operating with spare capacities, while the key road links at Kam Tin Road are overloaded during the AM and PM peak hours.

Junction Capacity Assessment

Junction capacity assessments are carried out at the key junctions in accordance with TPDM Volume 2.

The performance of a priority junction or roundabout is indicated by its design flow / capacity ratio ("DFC"). A DFC value of 0.85 or below is considered within acceptable level without causing undue delay to motorists passing through the concerned junctions. The assessment results are shown in **Table 2.7** and the detailed calculation sheets are enclosed in **Appendix D**.

Table 2.7 Year 2021 Junction Capacity Assessment

Ref.	Junction Location	Type / Capacity Index	AM Peak	PM Peak
J1	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	Priority Junction / DFC	0.14	0.20
J2	Fan Kam Road / Kam Tin Road	Roundabout / DFC	0.66	0.75
J3	Leung Shin Road / Kam Tin Road	Priority Junction / DFC	0.04	0.08
J4	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	Priority Junction / DFC	0.03	0.04
J5	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	Priority Junction / DFC	< 0.01	< 0.01

As shown in **Table 2.7**, all key junctions are currently operating with spare capacities during the AM and PM hours.

D. Design Year of Traffic Forecast

The proposed development is assumed to be approved by the Town Planning Board in 2021, and its operation will be for an initial period of 3 years, i.e. until 2024. Hence, **Year 2024** is used as the design year of the TIA.

E. Annual Traffic Growth

To estimate the traffic flows in the design year 2024, it is proposed to adjust the existing traffic flows with a natural traffic growth factor which is related to the increase in car usage. The growth factor is derived with reference to the projected population data from "Projections of Population Distribution 2019 – 2028", and the historical traffic data from ATC.

Projected Population Data

According to the report "Projections of Population Distribution 2019-2028" published by Planning Department, the population growth from base year 2018 to 2024 in Yuen Long District is shown in **Table 2.8** and an extract of the report is enclosed in **Appendix E**.

Table 2.8 Projected Population in Yuen Long District, 2018 – 2024

Year 2018*	Year 2019	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Growth Rate p.a.
641,000	650,800	650,700	656,600	662,300	664,500	665,000	0.7%

**Base year estimates*

The data indicate an in crease in population at an annual rate of +0.7% in Yuen Long District between 2018 and 2024.

Historical Traffic Data

According to the 2015 – 2019 ATC Reports published by Transport Department, the details of the counting stations in the study area and the corresponding annual average daily traffic ("AADT") data are shown in **Table 2.9**

Table 2.9 Annual Traffic Census Data, 2015 - 2019

Station No. / Road Name	2015	2016	2017	2018	2019	G.P.A
5254/ Kam Tin Road *(from Fan Kam Road to Kam Sheung Road Eastern Junction)*	13,890	14,280 (2.8%)	14,540 (1.8%)	16,210 (11.5%)	18,510 (14.2%)	7.4%
6207/ Kam Tin Road *(from Kam Sheung Road western junction to Fan Kam Road)*	20,450	20,060 (-1.9%)	20,550 (2.4%)	20,390 (-0.8%)	21,300 (4.5%)	1.0%
6212/ Fan Kam Road *(from Kam Tin Road to Fanling Highway)*	12,420	11,900 (-4.2%)	10,780 (-9.4%)	11,570 (7.3%)	11,660 (0.8%)	-1.6%
Average Growth per Annum						**2.4%**

An average annual growth of 2.4% is found between 2015 and 2019 from the historical traffic data.

For conservative purposes, an annual growth rate of **+2.4%** is adopted in the traffic forecast to project the existing traffic flows to the design year 2024.

F. Traffic Generation from Adjacent Development

As stated, it is discovered that a temporary public vehicle park in the vicinity of the Site (under approved planning application no. **A/YL-PH/856**) is under planning/construction within the design year of 2024. Its development traffic flows, as summarised in **Table 2.10**, will be incorporated into the assessment.

Table 2.10 Peak-hour Development Traffic Flows of the Temporary Public Vehicle Park According to Planning Application No. A/YL-PH/856

Type of Vehicles	AM Peak	PM Peak
	Trip in veh/hr (pcu/hr)	
Private Car	5 (5)	5 (5)
LGV	3 (5)	3 (5)
Total	8 (10)	8 (10)

G. Traffic Generation from the Proposed Development

As explained above, the traffic generation of the proposed development is estimated with reference to the nearby public vehicle park under planning application no. A/YL-PH/856, and the results are quoted in **Table 2.11** for easy reference.

Table 2.11 Estimated Peak-hour Traffic Generation and Attraction Rates from the Proposed Development

Development	Generation		Attraction	
	AM Peak	PM Peak	AM Peak	PM Peak
	Trip in veh/hr (pcu/hr)			
Proposed No. of Private Car Parking spaces: 80	22 (22)	5 (5)	5 (5)	22 (22)

Given the proposed development is targeted to serve the villagers and their visitors in Wang Toi Shan San Tsuen exclusively, and an existing local demand for 80 private car parking spaces has been demonstrated in the previous section of the R-t-C document, it is considered that the traffic generation and attraction of the proposed development (i.e. by the existing private car users in the village) has been reflected on the existing traffic along Kam Tin Road and Fan Kam Road. Therefore, no additional traffic is expected to be induced on the district road network from the proposed development in a broad sense.

Nonetheless, it is anticipated that the proposed development will change the driving behaviour of the villagers and alter the surrounding traffic flow pattern owing to its position on the local road network. The anticipated traffic impacts of the proposed development are summarised as follows:

- It is estimated that most drivers from/to Yuen Long will be diverted via Leung Shing Road from the unnamed access road leading from Kam Tin Road to Wang Toi Shan San Tsuen when they are accessing/leaving the Site. For assessment purpose, the peak-hour diverted traffic flows are assumed and summarised in **Table 2.12**.

Table 2.12 Estimated Peak-hour Diverted Traffic Flow Rates After the Development

Traffic Flow from the Site to Yuen Long		Traffic Flow from Yuen Long to the Site	
AM Peak	PM Peak	AM Peak	PM Peak
Trip in veh/hr (pcu/hr)			
10 (10)	2 (2)	2 (2)	10 (10)

As a result, the traffic flows along Leung Shing Road are estimated to be increased, which will reduce the capacities of key road link L3 and key junctions J3, J4 and J5.

On a contrary, the traffic flows along the concerned sections of Kam Tin Road are estimated to be decreased, which will improve the capacities of key link L1, L2 and key junction J1 and J2.

The corresponding net traffic flows of the proposed development are presented in **Figure 2.4**.

	H. Reference and Design Flows The Year 2024 reference and design flows are calculated by the following equations: 2024 Reference Flows = 2021 Observed Flows (After Adjustment) x $(1 + 2.4\%)^3$ + Adjacent Development Traffic Flows 2024 Design Flows = 2024 Reference Flows + Net Development Traffic Flows Based on the observed traffic flows and pattern of the existing road network, the Year 2024 reference flows and design flows at the key junctions during the identified AM and PM peak hours are presented in **Figure 2.5 and 2.6** respectively.

I. Future Capacity Assessment

Link Capacity Assessment

Link capacity assessments are carried out for the key road links under 2024 reference and design scenarios, and the results are shown in **Table 2.13**.

Table 2.13 Year 2024 Link Capacity Assessment

Ref.	Key Road Link	Direction	Carriageway Capacity (veh/hr)	Traffic Flows (veh/hr) [V/C Ratio]			
				2024 Reference Scenario		2024 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Kam Tin Road	E/B	651 / 700	541 **[0.83]**	776 **[1.11]**	539 **[0.83]**	766 **[1.09]**
		W/B	651 / 700	640 **[0.98]**	597 **[0.85]**	630 **[0.97]**	595 **[0.85]**
L2	Kam Tin Road	E/B	651 / 700	872 **[1.34]**	891 **[1.27]**	870 **[1.34]**	881 **[1.26]**
		W/B	651 / 700	830 **[1.27]**	1,013 **[1.45]**	820 **[1.26]**	1,011 **[1.44]**
L3	Leung Shing Road	Both Directions	100	47 **[0.47]**	62 **[0.62]**	59 **[0.59]**	74 **[0.74]**

As indicated in **Table 2.13**, the key road links at Kam Tin Road will be overloaded regardless the presence of the proposed development, but their traffic situations would be slightly improved due to the traffic diversion effect of the proposed development. On the other hand, Leung Shing Road will still be operating with spare capacity with the proposed development.

Junction Capacity Assessment

Junction capacity assessments are carried out for the key junctions under 2024 reference and design scenarios, and the results are shown in **Table 2.14**.

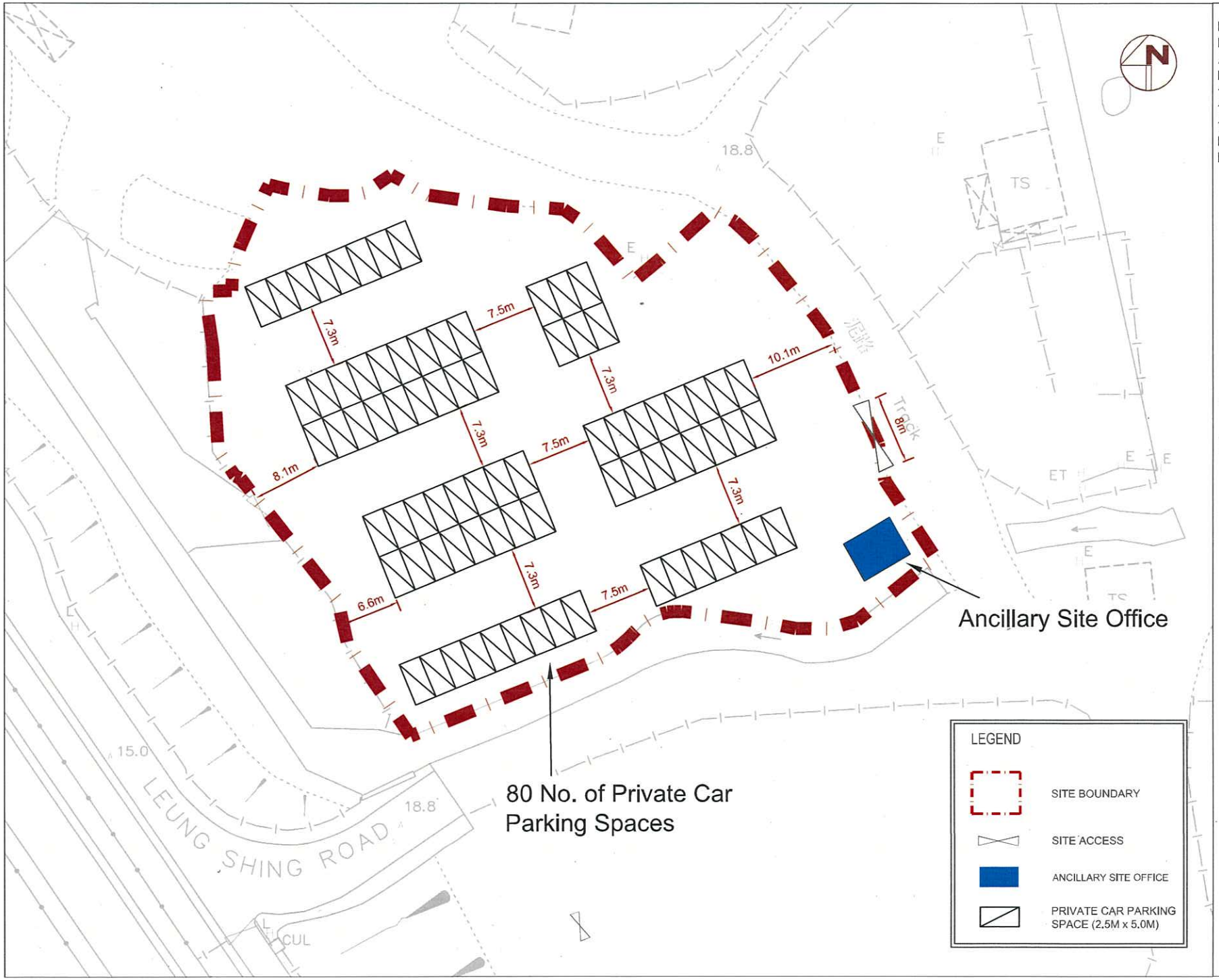
Table 2.14 Year 2024 Junction Capacity Assessment

Ref.	Junction Location	Type / Capacity Index	2024 Reference Scenario		2024 Design Scenario	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	Priority Junction / DFC	0.16	0.24	0.15	0.23
J2	Fan Kam Road / Kam Tin Road	Roundabout / DFC	0.72	0.82	0.71	0.82
J3	Leung Shing Road / Kam Tin Road	Priority Junction / DFC	0.09	0.18	0.08	0.18
J4	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	Priority Junction / DFC	0.04	0.05	0.05	0.05
J5	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen (2) / Kam Tin Road	Priority Junction / DFC	< 0.01	< 0.01	0.01	< 0.01

As shown in **Table 2.14**, all key junctions are expected to operate with spare capacity during the identified AM and PM peak hours under the Year 2024 Reference and Design Scenarios.

	J. Conclusion In view of the above, it can be concluded that the proposed development will not generate adverse traffic impact to Leung Shing Road and Kam Tin Road.

Figure



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

SITE LAYOUT

FIGURE 1.1

Scale : 1:400

Date : FEB 2021

Rev. :

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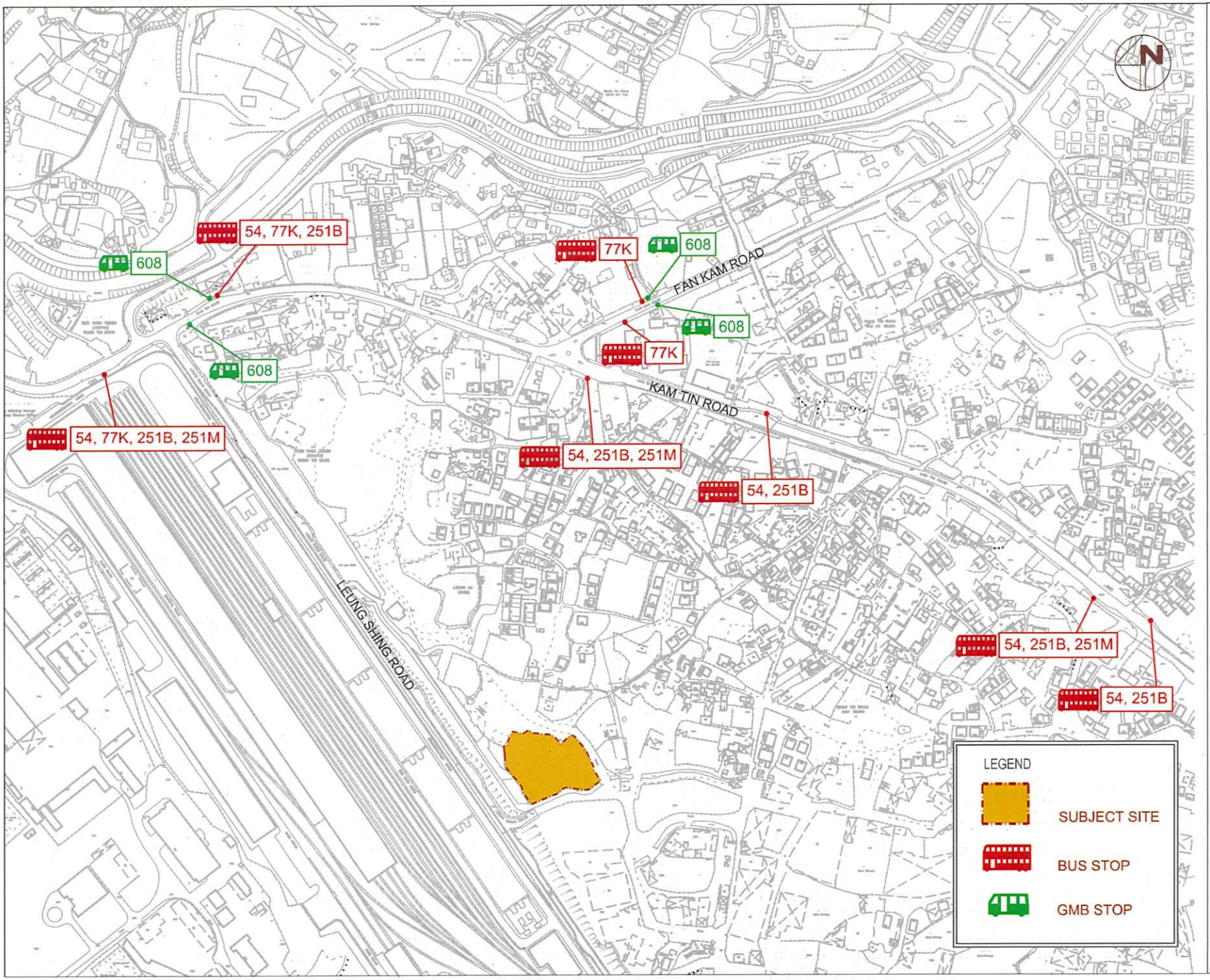
X:\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 1.1.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

PUBLIC TRANSPORT FACILITIES IN THE VICINITY OF WANG TOI SHAN SAN TSUEN

FIGURE 1.2

Scale : 1:3000

Date : FEB 2021

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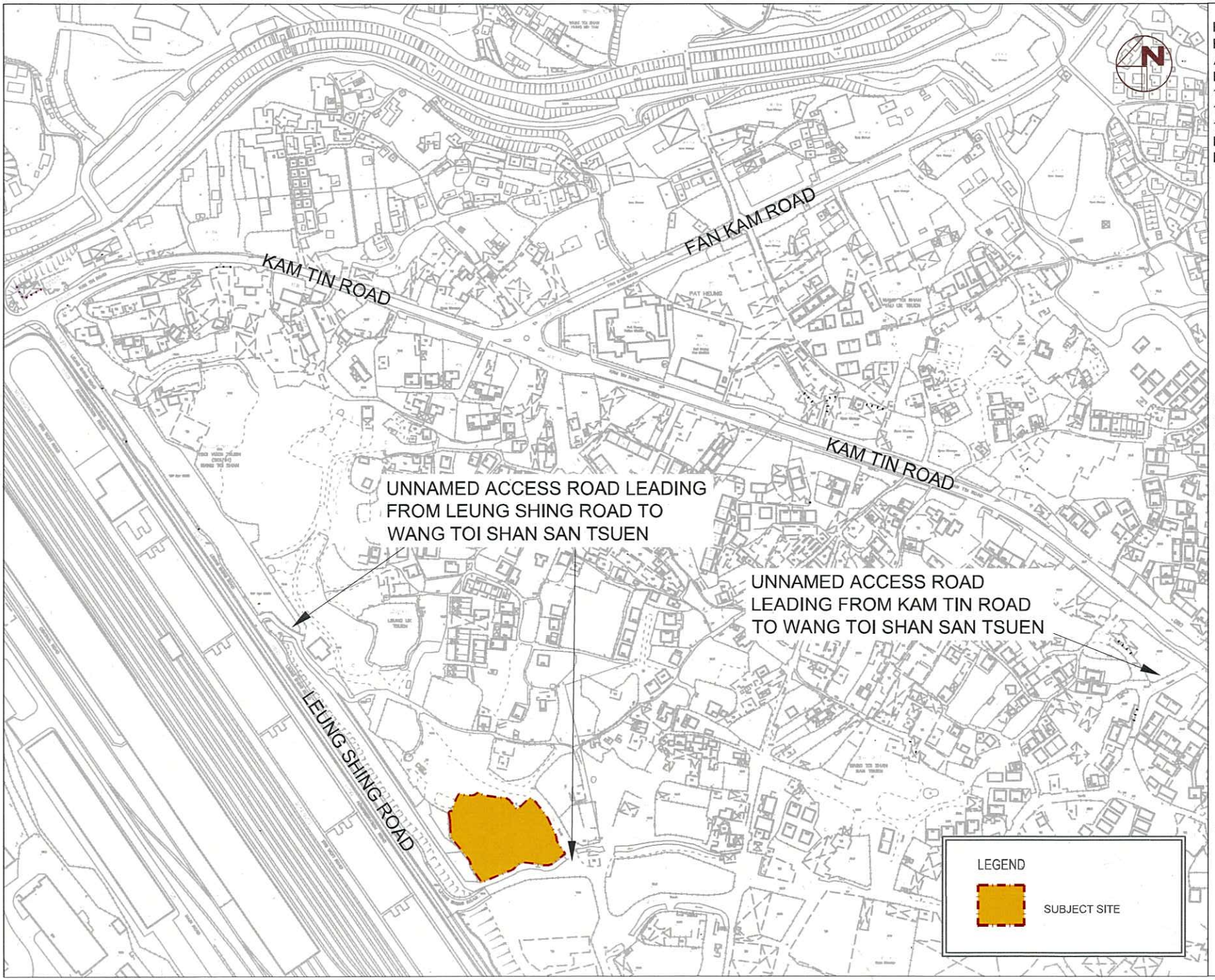
X:\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 1.2.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

SURROUNDING ROAD NETWORK OF THE SITE

FIGURE 1.3

Scale : 1:2500

Date : FEB 2021

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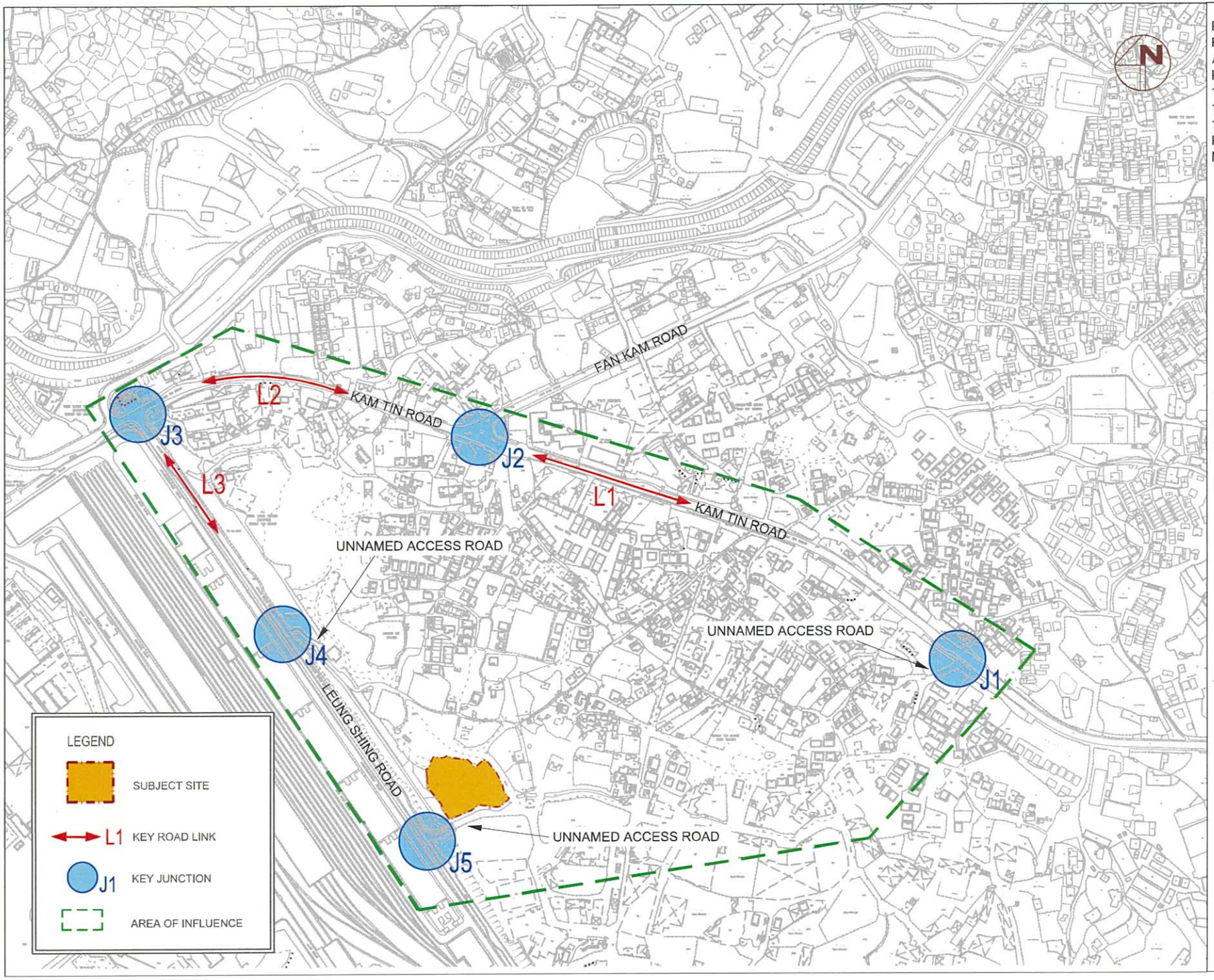
X:\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 1.3.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

LOCATION OF KEY ROAD LINKS AND JUNCTIONS

FIGURE 2.1

Scale : 1:3500

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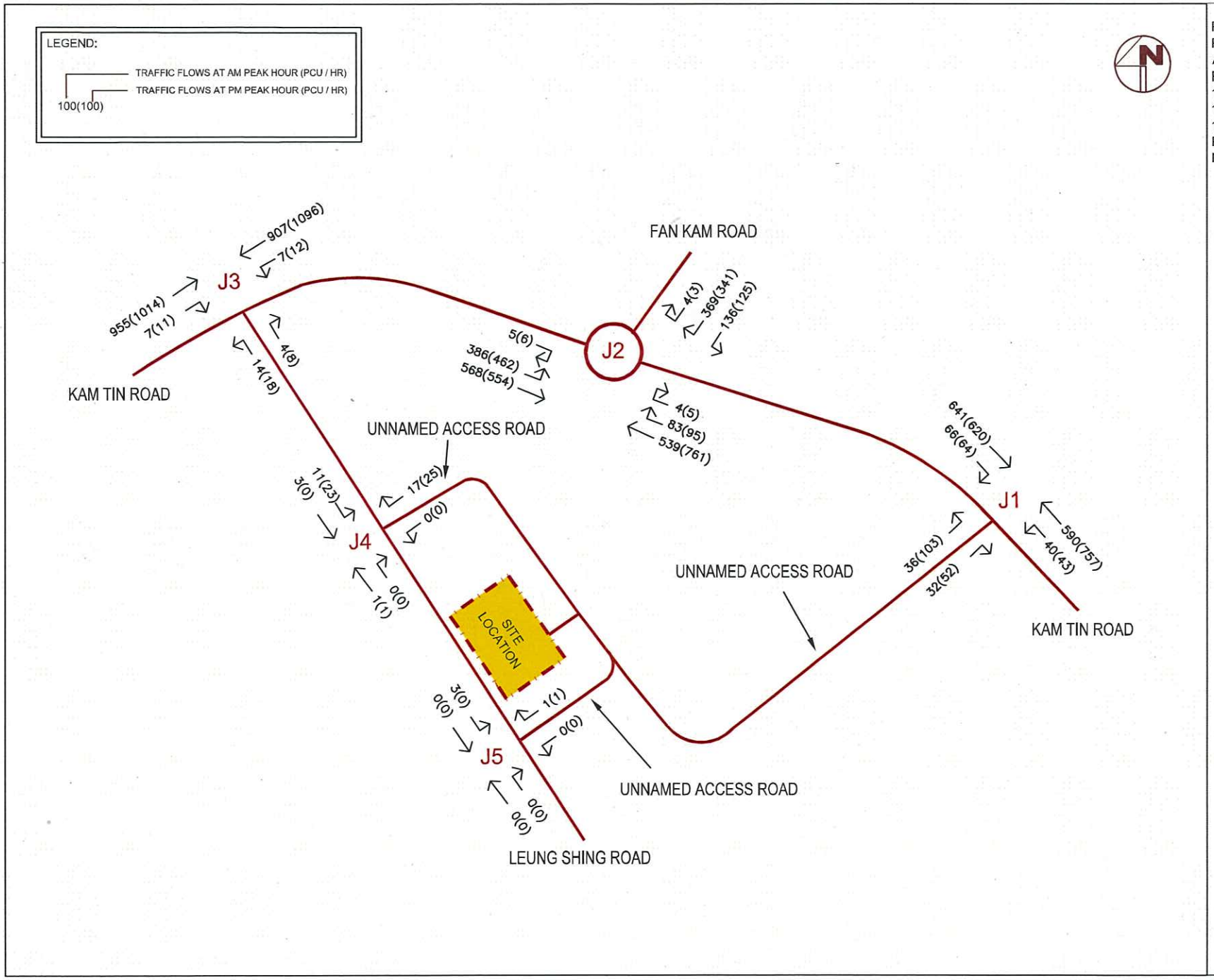
X:\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.1.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2021 OBSERVED TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.2

Scale : N.T.S.

Date : FEB 2021

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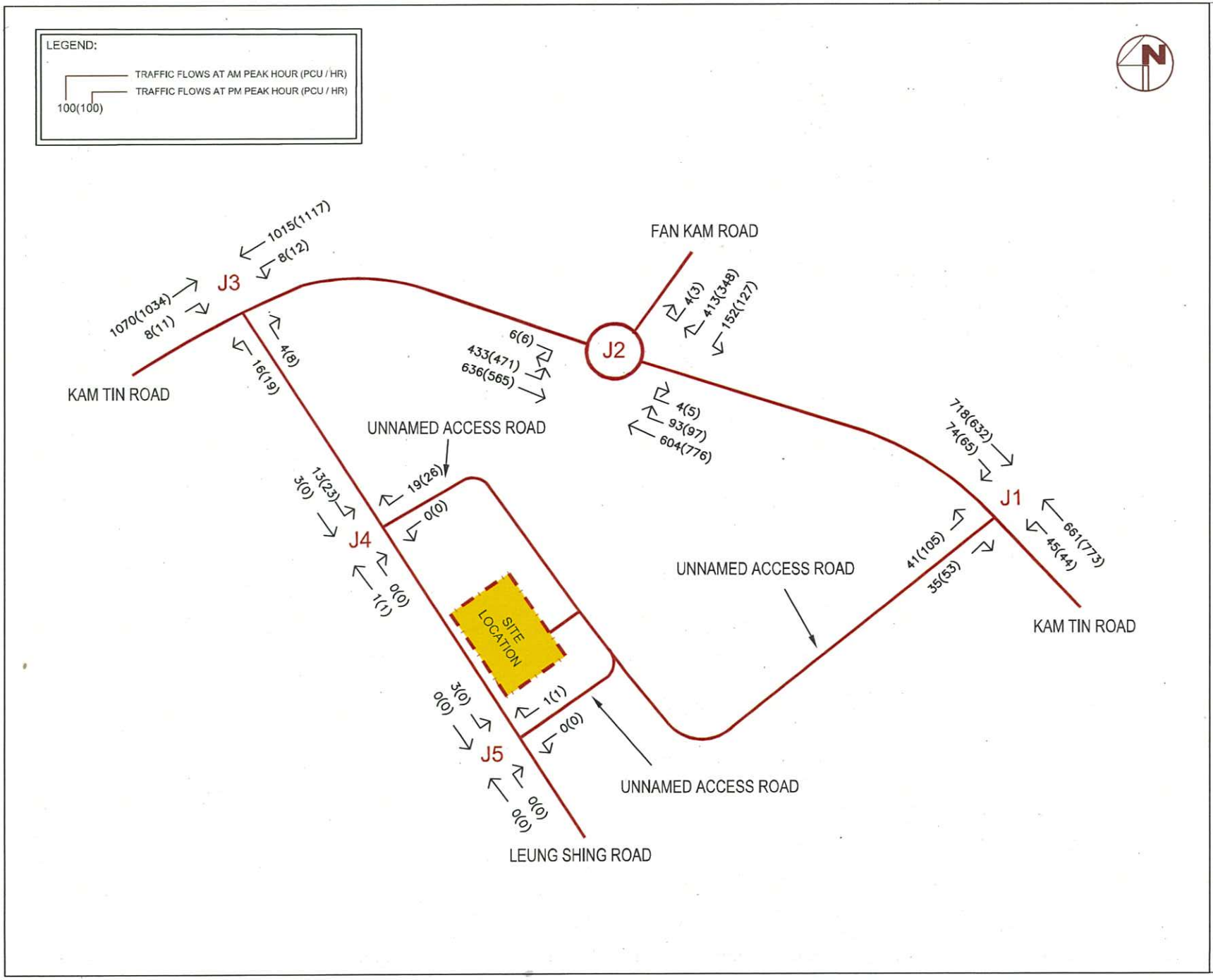

Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2021 OBSERVED TRAFFIC FLOWS DURING AM & PM PEAK HOURS (AFTER ADJUSTMENT)

FIGURE 2.3

Scale : N.T.S.

Date : FEB 2021

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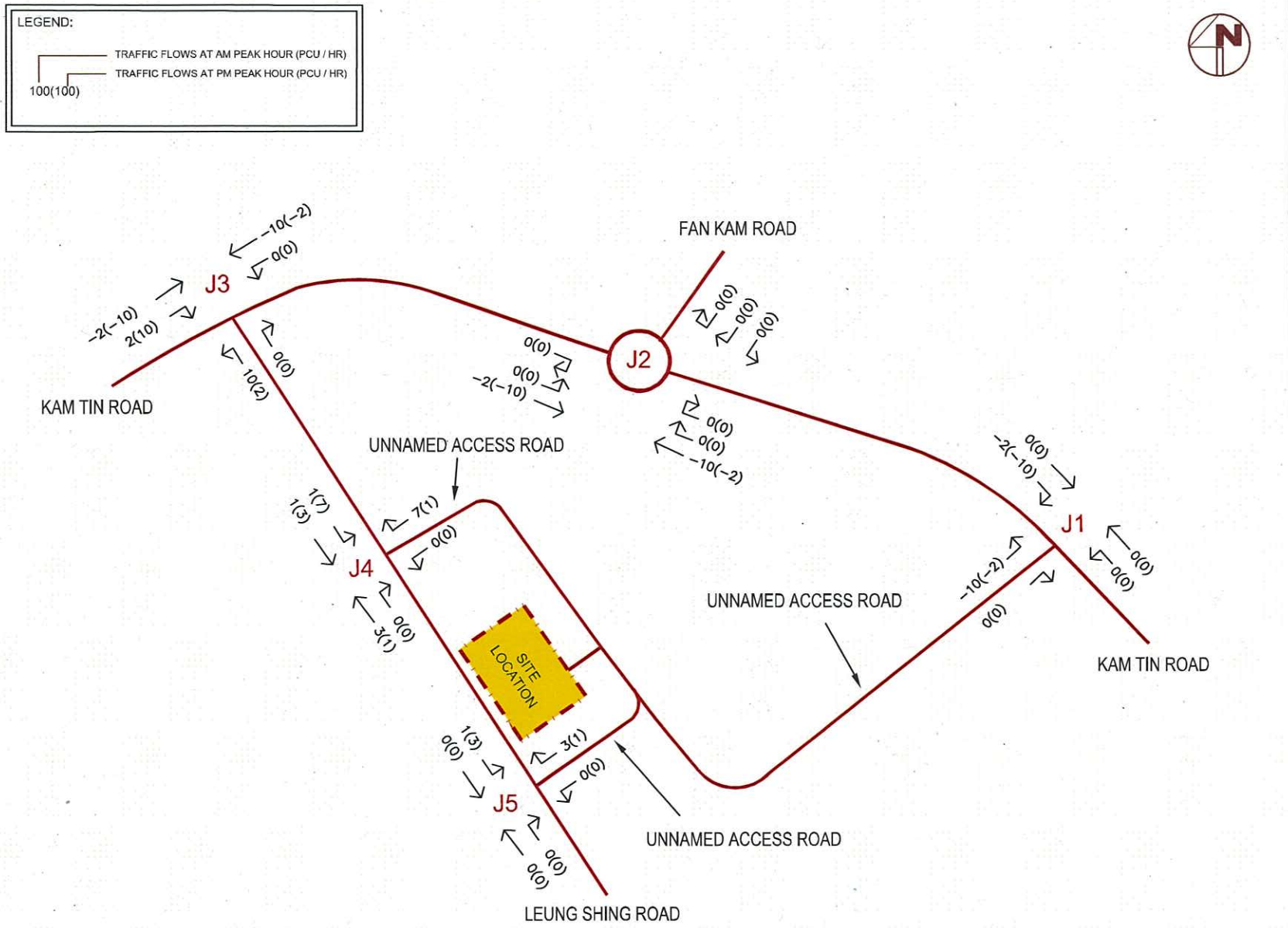
\\NAS\AXON\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.3.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

NET DEVELOPMENT TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.4

Scale : N.T.S.

Date : FEB 2021

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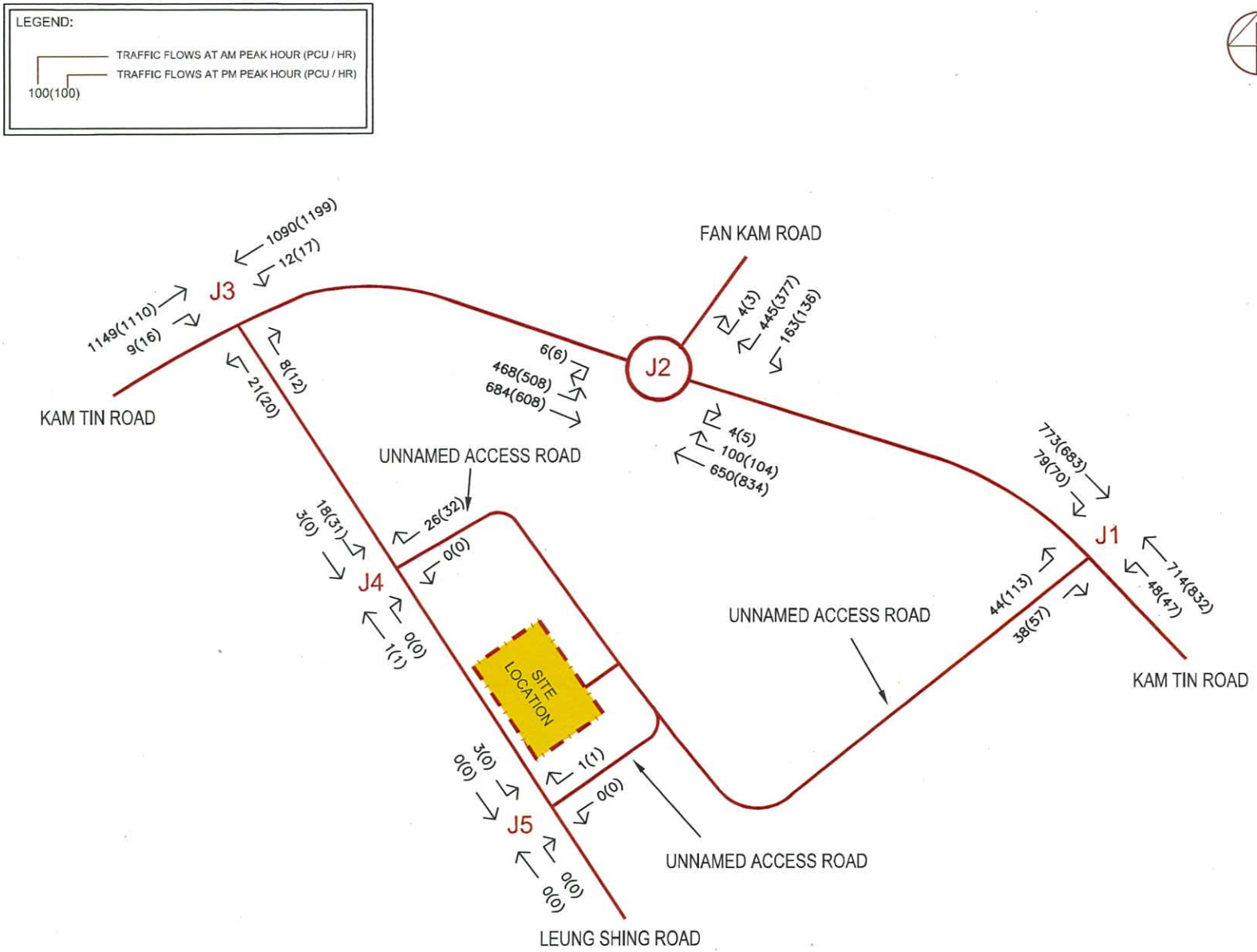
\\NAS\AXON\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.4.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2024 REFERENCE TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.5

Scale : N.T.S.

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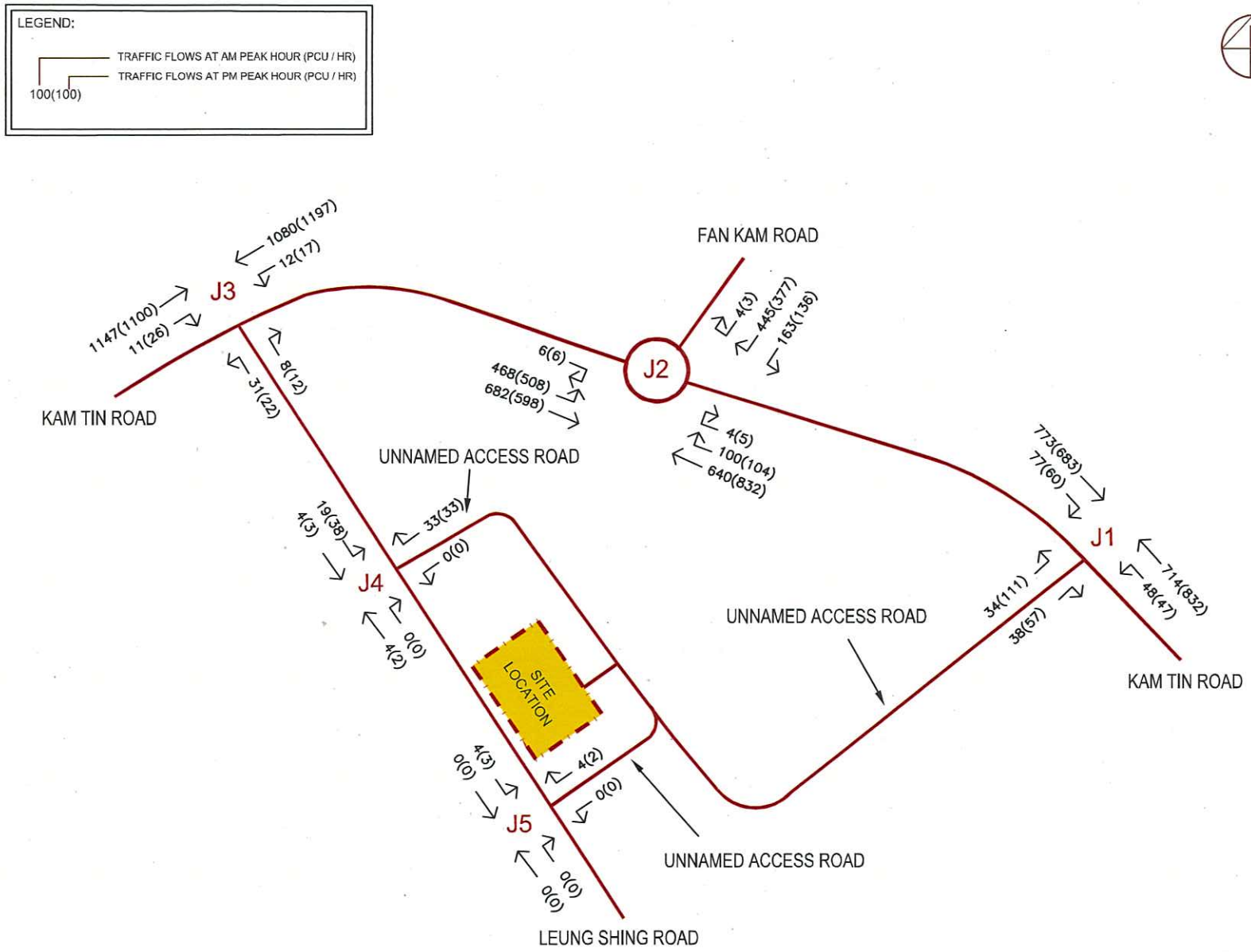
\\NAS\AXON\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.5.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2024 DESIGN TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.6

Scale : N.T.S.

Date : FEB 2021

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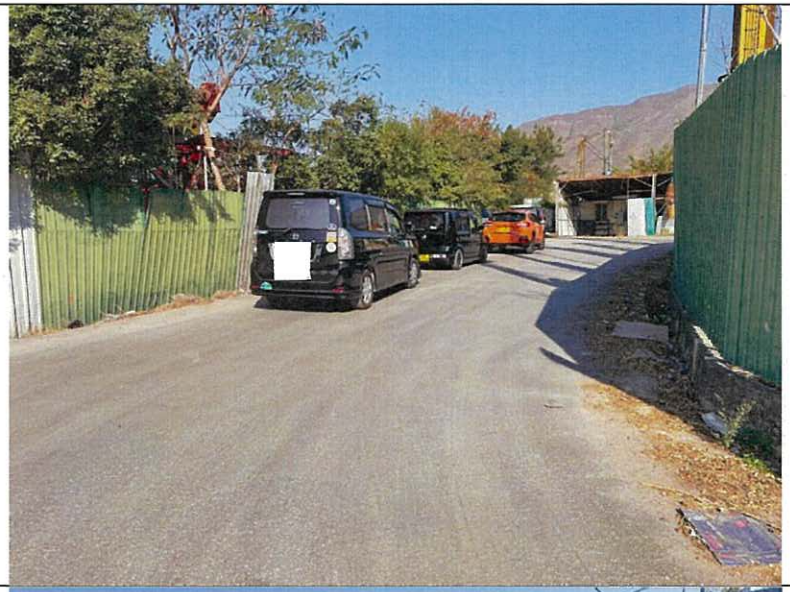
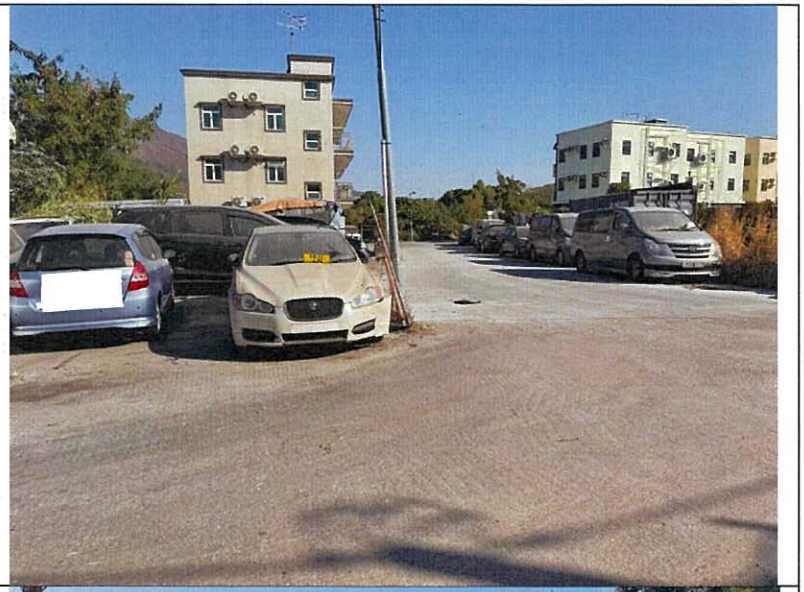
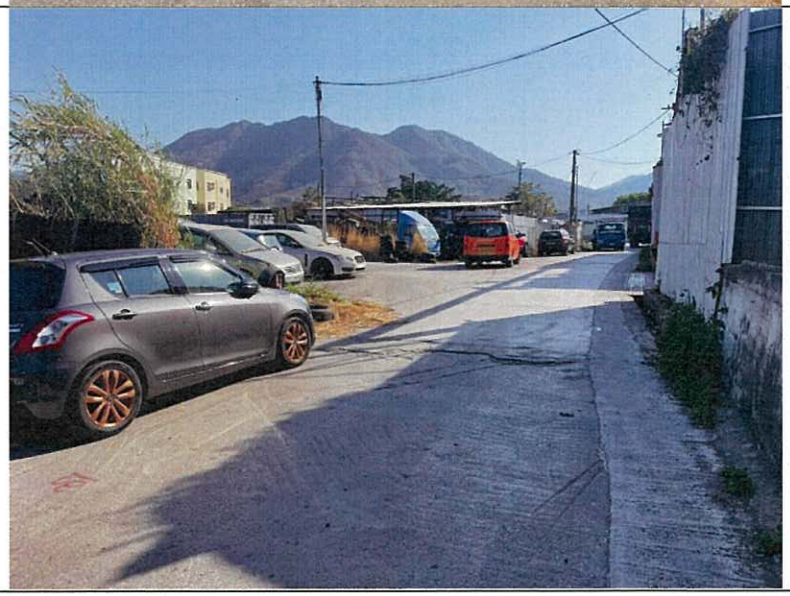
\\NAS\AXON\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.6.DWG

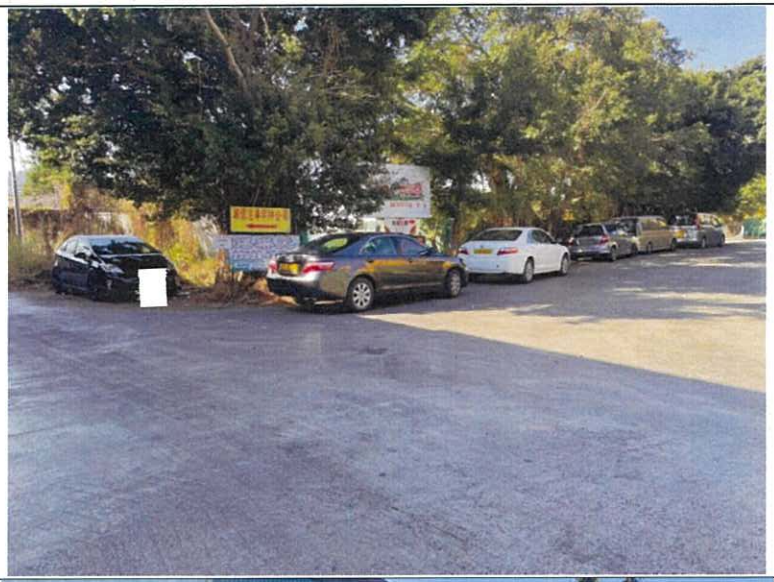
Appendix A

Site photos









Remark: The Site photos were taken on 29 January 2021 at 7:30am within the Wang Toi Shan San Tsuen.

Appendix B

Supporting Letter by Mr. Tang Yung Yiu, Ronnie

Annex 2

鄧鎔耀區議員辦事處

通訊地址：新界元朗八鄉橫台山永寧里 200 號地下
電話：2483 3008　　傳真：2483 3638　　電郵地址：yungyiuoffice@gmail.com

檔案編號：D2020-100009WTSST_ML

新界荃灣青山公路 388 號
中染大廈 22 樓 2202 室
粉嶺、上水及元朗東規劃處
敬啟者：

擬議向城市規劃委員會申請在新界元朗八鄉
丈量約份第 111 約地段第 1869 號(部份), 1870 號(部份) , 1872 號(部份) ,
1873 號(部份) , 1875 號餘段(部份) , 1876 號(部份)及 1877 號
用作臨時公眾停車場連附屬辦公室為期三年的規劃申請　(A/YL-PH/857)

本人為元朗八鄉北區議員。知悉標題地段規劃申請，現特函　貴處，希能向有關政府部門，反映本區交通問題。

有關申請地點座落橫台山新村，該村及毗鄰村落，因歷史問題，土地用途比較廣泛，除村屋外亦包括露天存放、店鋪、老人中心等等。隨著地區發展，近年當地民居日益增加，因而對私家車泊車需求更大。

本人服務本區多年，深知在鄉郊地區私家車是村民/居民其中一項主要交通工具；唯村路偏窄，地權複雜，村民/居民為車輛阻塞及泊停問題，時有爭議。現知悉標題規劃申請公眾停車場，專為此區村民/居民而設，既可為本區提供合法泊車位，又可經由車輛不多的梁盛路出入錦田公路，有助紓緩村內交通問題。

因是項申請不會造成本區負面交通影響，本人表示支持是項申請。

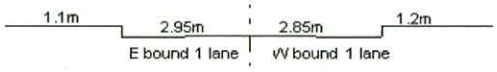
鄧鎔耀

元朗（八鄉北）區議員
鄧鎔耀　謹啟
2020 年 10 月 28 日

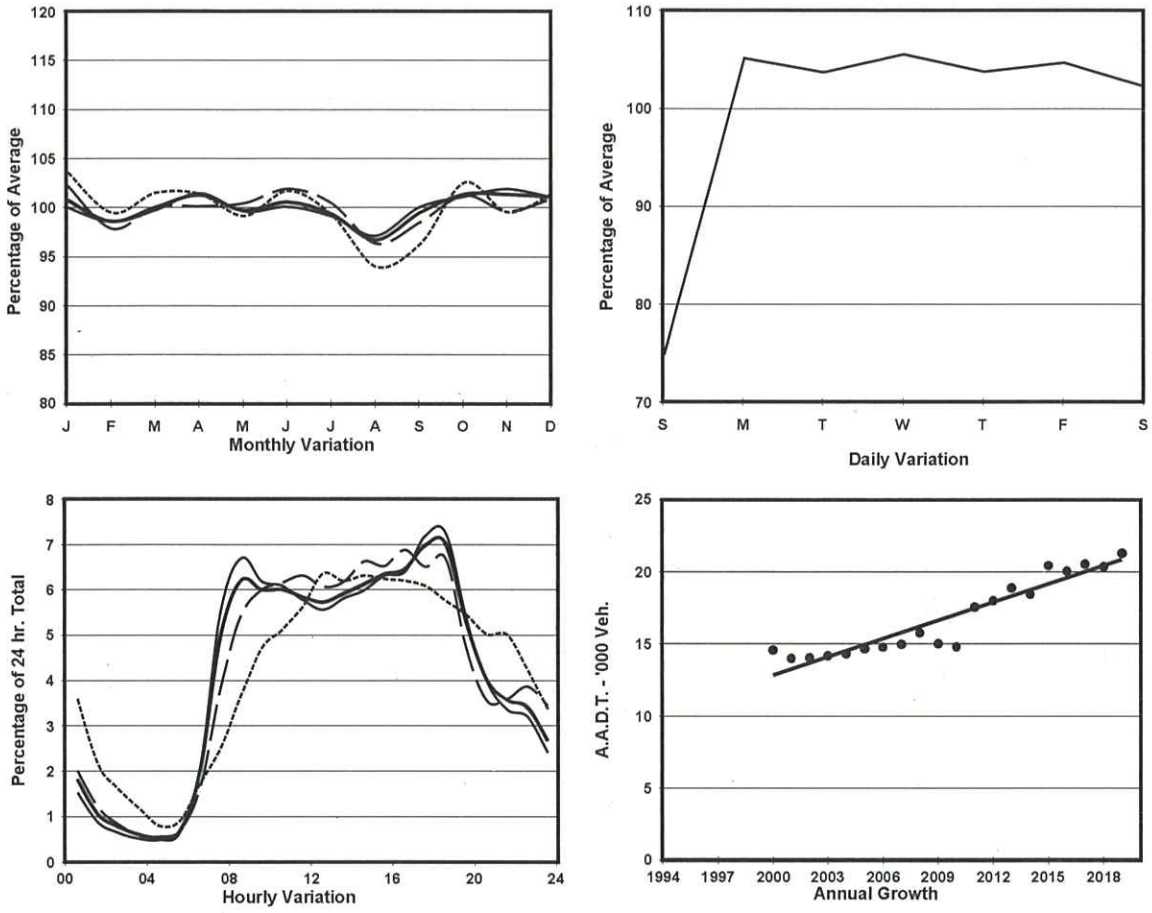
Appendix C

Extract from ATC 2019 for Counting Station No. 6207 & 6212

YEAR	2019	LINK	KAM TIN RD (from KAM SHEUNG RD WESTERN JUNCTION to FAN KAM RD)
COVERAGE (B) STATION	6207		
ROAD NETWORK	MAJOR		
ROAD TYPE	RURAL ROAD		



1. TRAFFIC FLOW VARIATION AND GROWTH

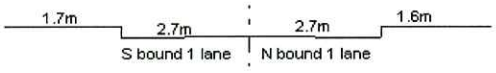


2. TRAFFIC CHARACTERISTICS (BY DIRECTION)

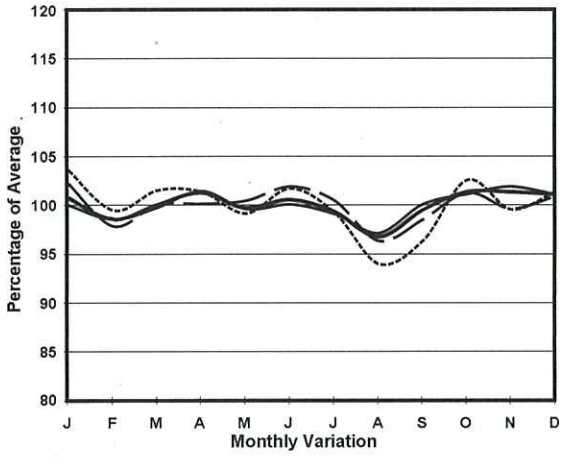
Parameter	All - Day	Mon. - Fri.	Sat.	Sun.
EAST BOUND				
A.A.D.T.	10380	10900	11000	8120
R 12 / 24 - %	71.9	73.4	71.4	62.6
R 16 / 24 - %	89.3	90.4	88.4	83.6
AM Peak Hour	0800-0900	0800-0900	0900-1000	0900-1000
One-way flow at AM peak hour	660	750	660	370
T - % (AM)	-	11	-	-
PM Peak Hour	1700-1800	1700-1800	1600-1700	1700-1800
One-way flow at PM peak hour	680	730	750	490
T - % (PM)	-	5.8	-	-
Prop.of commercial vehicles - 16 hr.	-	8.6	-	-
WEST BOUND				
A.A.D.T.	10920	11680	11090	8070
R 12 / 24 - %	75.1	76.2	75.1	67.2
R 16 / 24 - %	90.4	91.1	89.7	85.7
AM Peak Hour	0800-0900	0800-0900	0900-1000	0900-1000
One-way flow at AM peak hour	670	760	670	400
T - % (AM)	-	12.8	-	-
PM Peak Hour	1800-1900	1800-1900	1800-1900	1600-1700
One-way flow at PM peak hour	850	940	830	530
T - % (PM)	-	3.3	-	-
Prop.of commercial vehicles - 16 hr.	-	9.3	-	-

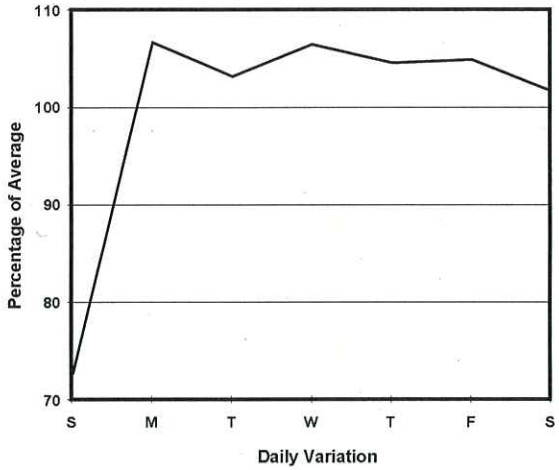
3. OTHER INFORMATION AND COMMENT

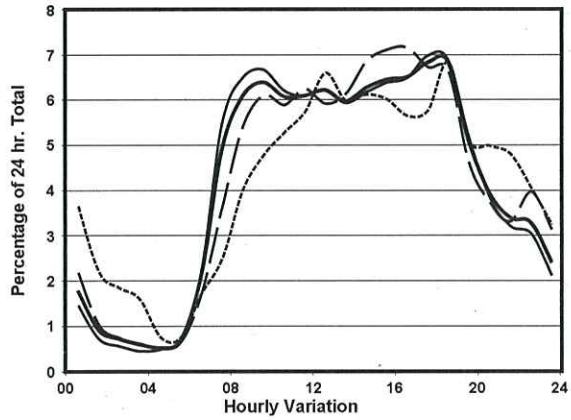
YEAR	2019	LINK	FAN KAM RD (from KAM TIN RD to FANLING HIGHWAY)
COVERAGE (B) STATION	6212		
ROAD NETWORK	MAJOR		
ROAD TYPE	RURAL ROAD		

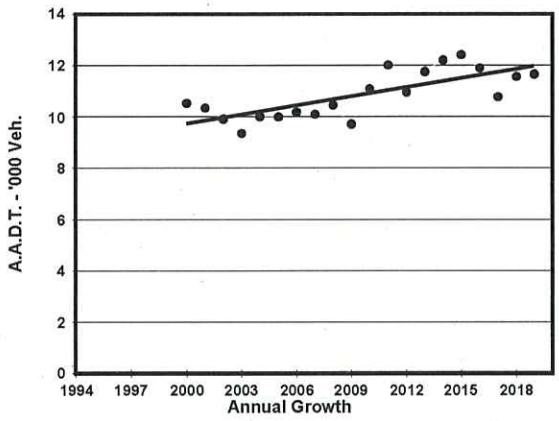


1. TRAFFIC FLOW VARIATION AND GROWTH









All day — Mon.- Fri. — Sat. — Sun.

2. TRAFFIC CHARACTERISTICS (BY DIRECTION)

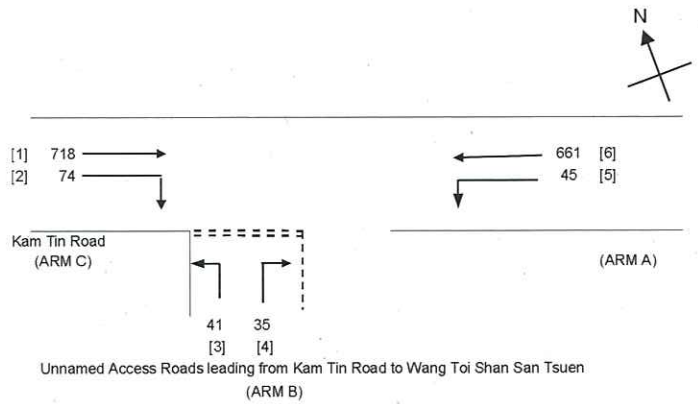
Parameter	All - Day	Mon. - Fri.	Sat.	Sun.
SOUTH BOUND				
A.A.D.T.	6180	6620	6280	4510
R 12 / 24 - %	77.4	78.8	76	69.5
R 16 / 24 - %	91	91.7	90.3	86.8
AM Peak Hour	0800-0900	0700-0800	0900-1000	0900-1000
One-way flow at AM peak hour	420	490	430	240
T - % (AM)	-	7.4	-	-
PM Peak Hour	1800-1900	1800-1900	1800-1900	1800-1900
One-way flow at PM peak hour	440	470	450	340
T - % (PM)	-	3.5	-	-
Prop.of commercial vehicles - 16 hr.	-	7	-	-
NORTH BOUND				
A.A.D.T.	5480	5820	5750	4100
R 12 / 24 - %	71.4	72.8	71.5	60.7
R 16 / 24 - %	89.4	90.8	88.5	81.4
AM Peak Hour	0900-1000	0900-1000	0900-1000	0900-1000
One-way flow at AM peak hour	330	370	310	170
T - % (AM)	-	15.5	-	-
PM Peak Hour	1600-1700	1700-1800	1600-1700	1800-1900
One-way flow at PM peak hour	380	400	460	250
T - % (PM)	-	4.1	-	-
Prop.of commercial vehicles - 16 hr.	-	7.6	-	-

3. OTHER INFORMATION AND COMMENT

Appendix D

Junction Calculation Sheets

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	45	(pcu/hr)
q a-c	=	661	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	718	(pcu/hr)
q c-b	=	74	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	35	(pcu/hr)
q b-c	=	41	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.5394737

THE CAPACITY OF MOVEMENT :

Q b-a	=	275		
Q b-c	=	546	Q b-c (O) =	528.6
Q c-b	=	522		
Q b-ac	=	375.6		

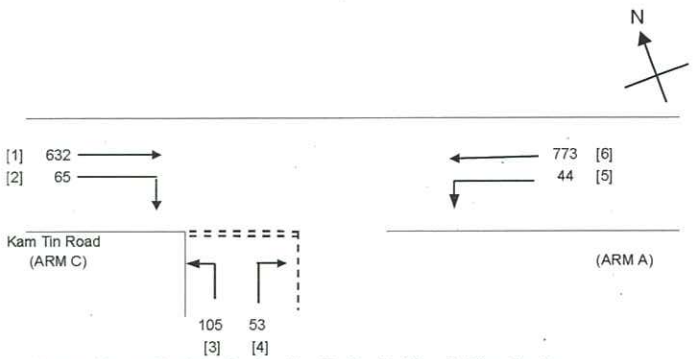
TOTAL FLOW = 1574 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1273
DFC b-c	=	0.0751
DFC c-b	=	0.1418

CRITICAL DFC = 0.14

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	44	(pcu/hr)
q a-c	=	773	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	632	(pcu/hr)
q c-b	=	65	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	53	(pcu/hr)
q b-c	=	105	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.664557

THE CAPACITY OF MOVEMENT :

Q b-a	=	264		
Q b-c	=	517	Q b-c (O) =	491.1
Q c-b	=	494		
Q b-ac	=	391.2		

TOTAL FLOW = 1672 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2008
DFC b-c	=	0.2031
DFC c-b	=	0.1316

CRITICAL DFC = 0.20

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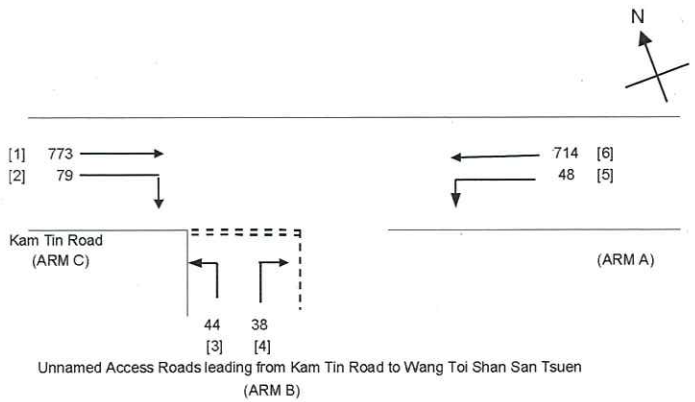
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	48	(pcu/hr)
q a-c	=	714	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	773	(pcu/hr)
q c-b	=	79	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	38	(pcu/hr)
q b-c	=	44	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.5365854

THE CAPACITY OF MOVEMENT :

Q b-a	=	251		
Q b-c	=	532	Q b-c (O) =	511.9
Q c-b	=	508		
Q b-ac	=	350.3		

TOTAL FLOW = 1696 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1514
DFC b-c	=	0.0827
DFC c-b	=	0.1555

CRITICAL DFC = 0.16

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
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J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
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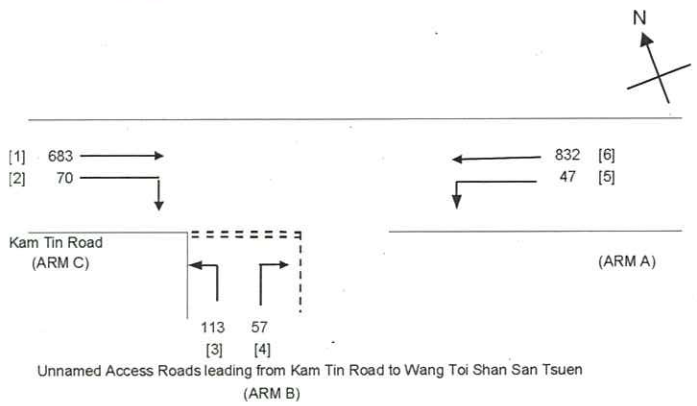

NOTES : (GEOMETRIC INPUT DATA)

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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	47	(pcu/hr)
q a-c	=	832	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	683	(pcu/hr)
q c-b	=	70	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	57	(pcu/hr)
q b-c	=	113	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.6647059

THE CAPACITY OF MOVEMENT :

Q b-a	=	239		
Q b-c	=	502	Q b-c (O) =	472.1
Q c-b	=	478		
Q b-ac	=	366.7		

TOTAL FLOW = 1802 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2385
DFC b-c	=	0.2251
DFC c-b	=	0.1464

CRITICAL DFC = 0.24

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AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
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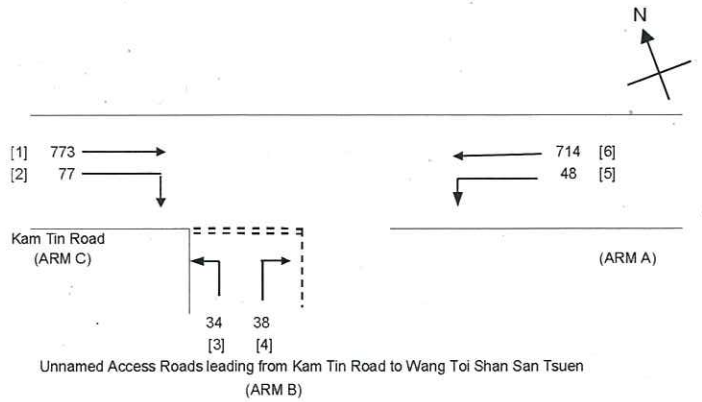

NOTES : (GEOMETRIC INPUT DATA)

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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	48	(pcu/hr)
q a-c	=	714	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	773	(pcu/hr)
q c-b	=	77	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	38	(pcu/hr)
q b-c	=	34	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.4722222

THE CAPACITY OF MOVEMENT :

Q b-a	=	252		
Q b-c	=	532	Q b-c (O) =	511.9
Q c-b	=	508		
Q b-ac	=	335.3		

TOTAL FLOW = 1684 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1508
DFC b-c	=	0.0639
DFC c-b	=	0.1516

CRITICAL DFC = 0.15

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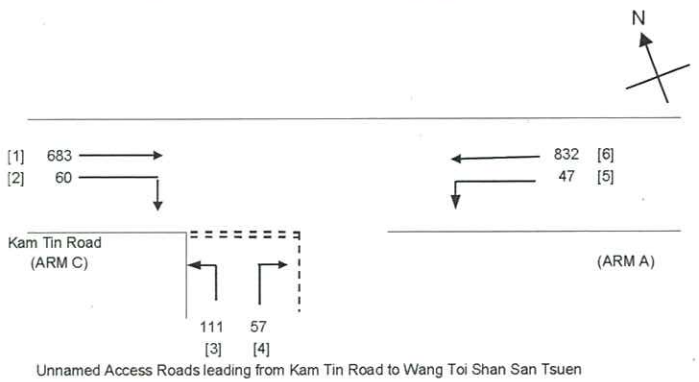
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	47	(pcu/hr)
q a-c	=	832	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	683	(pcu/hr)
q c-b	=	60	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	57	(pcu/hr)
q b-c	=	111	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.6607143

THE CAPACITY OF MOVEMENT :

Q b-a	=	243		
Q b-c	=	502	Q b-c (O) =	472.6
Q c-b	=	478		
Q b-ac	=	368.7		

TOTAL FLOW = 1790 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

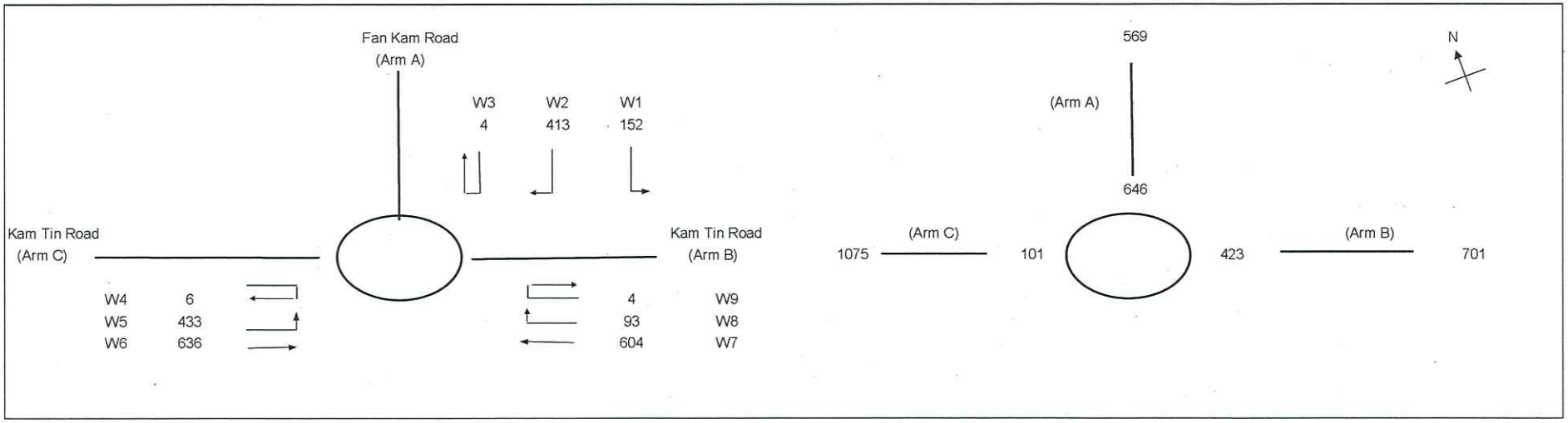
DFC b-a	=	0.2346
DFC b-c	=	0.2211
DFC c-b	=	0.1255

CRITICAL DFC = 0.23

AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	二月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	二月-21
SITUATION:	2021 Observed Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	二月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	569	701	1075
Qc	=	Circulating flow across entry (pcu/h)	646	423	101
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	937	1126	1624
DFC	=	Design flow/Capacity = Q/Qe	0.61	0.62	0.66

Total In Sum = 3515 PCU

DFC of Critical Approach = 0.66

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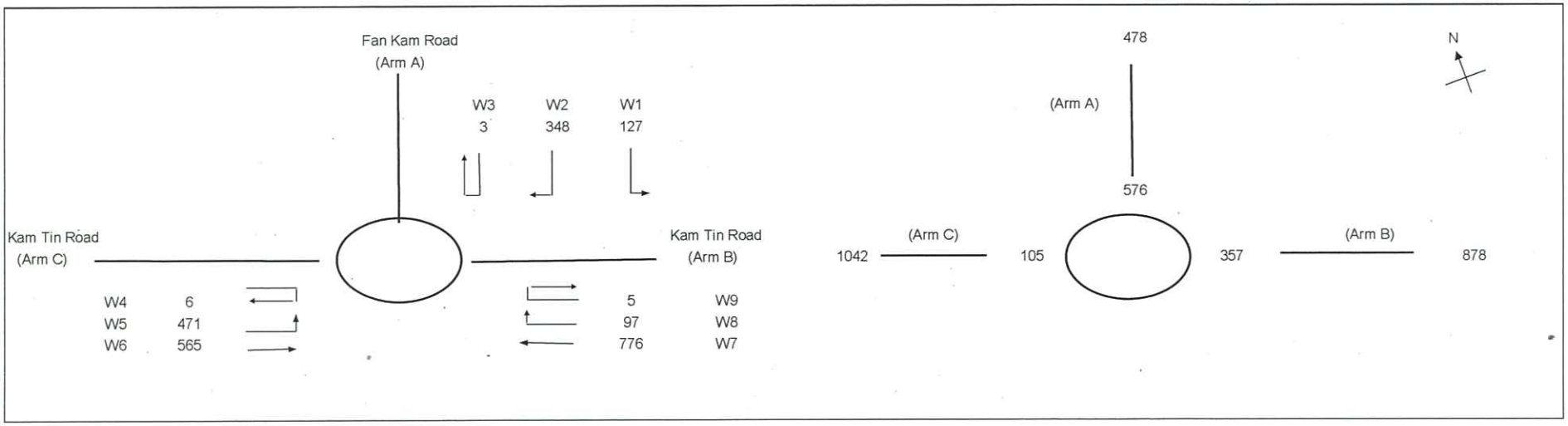
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	二月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	二月-21
SITUATION:	2021 Observed Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	二月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	478	878	1042
Qc	=	Circulating flow across entry (pcu/h)	576	357	105
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	976	1167	1621
DFC	=	Design flow/Capacity = Q/Qe	0.49	0.75	0.64

Total In Sum = 3436 PCU

DFC of Critical Approach = 0.75

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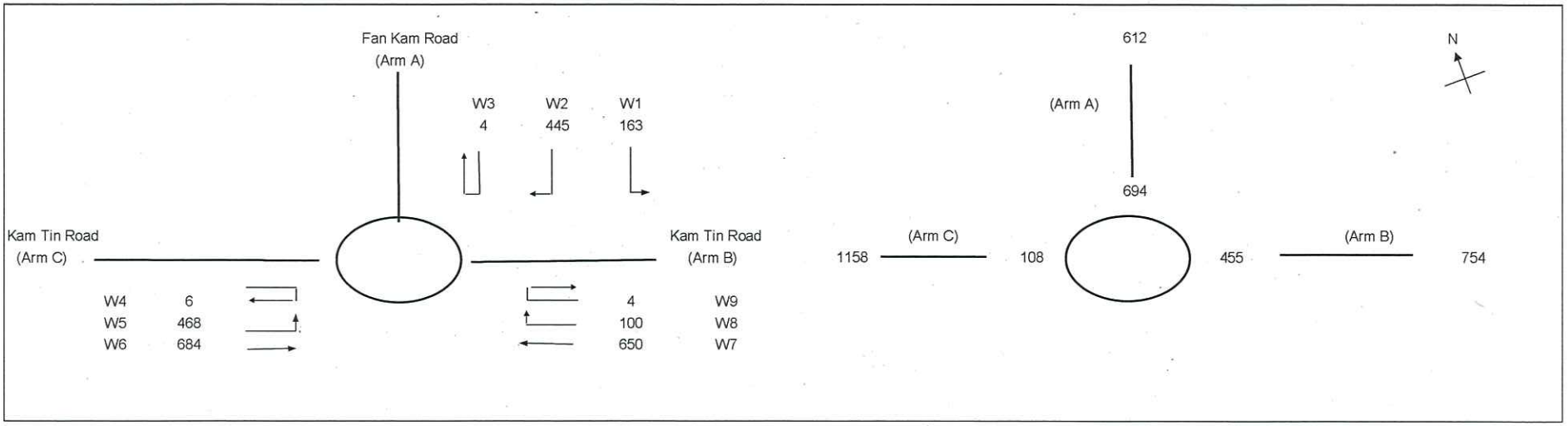
ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	二月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	二月-21
SITUATION:	2024 Reference Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	二月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	612	754	1158
Qc	=	Circulating flow across entry (pcu/h)	694	455	108
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	910	1106	1619
DFC	=	Design flow/Capacity = Q/Qe	0.67	0.68	0.72

Total In Sum = 3781 PCU

DFC of Critical Approach = 0.72

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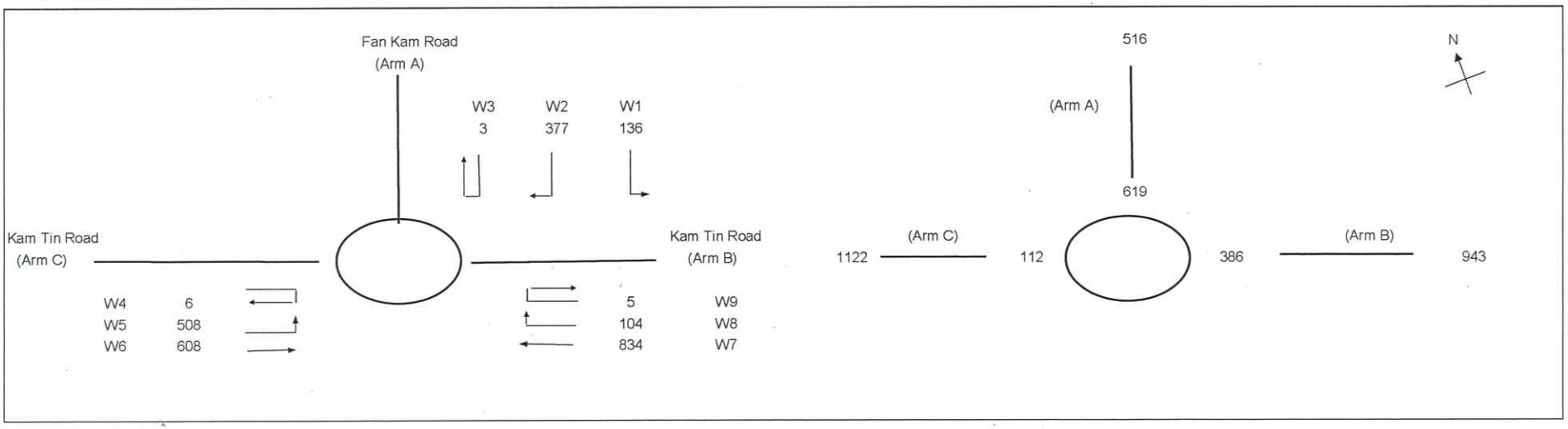
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	二月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	二月-21
SITUATION:	2024 Reference Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	二月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	516	943	1122
Qc	=	Circulating flow across entry (pcu/h)	619	386	112
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	952	1149	1616
DFC	=	Design flow/Capacity = Q/Qe	0.54	0.82	0.69

Total In Sum = 3698 PCU

DFC of Critical Approach = 0.82

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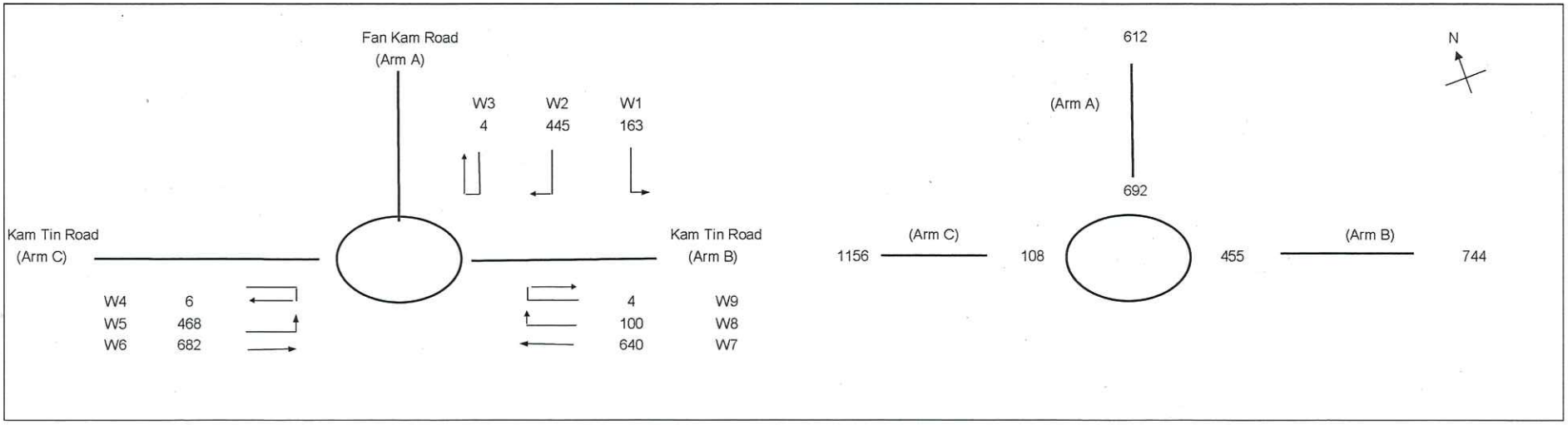
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	二月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	二月-21
SITUATION:	2024 Design Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	二月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	612	744	1156
Qc	=	Circulating flow across entry (pcu/h)	692	455	108
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	911	1106	1619
DFC	=	Design flow/Capacity = Q/Qe	0.67	0.67	0.71

Total In Sum = 3767 PCU

DFC of Critical Approach = 0.71

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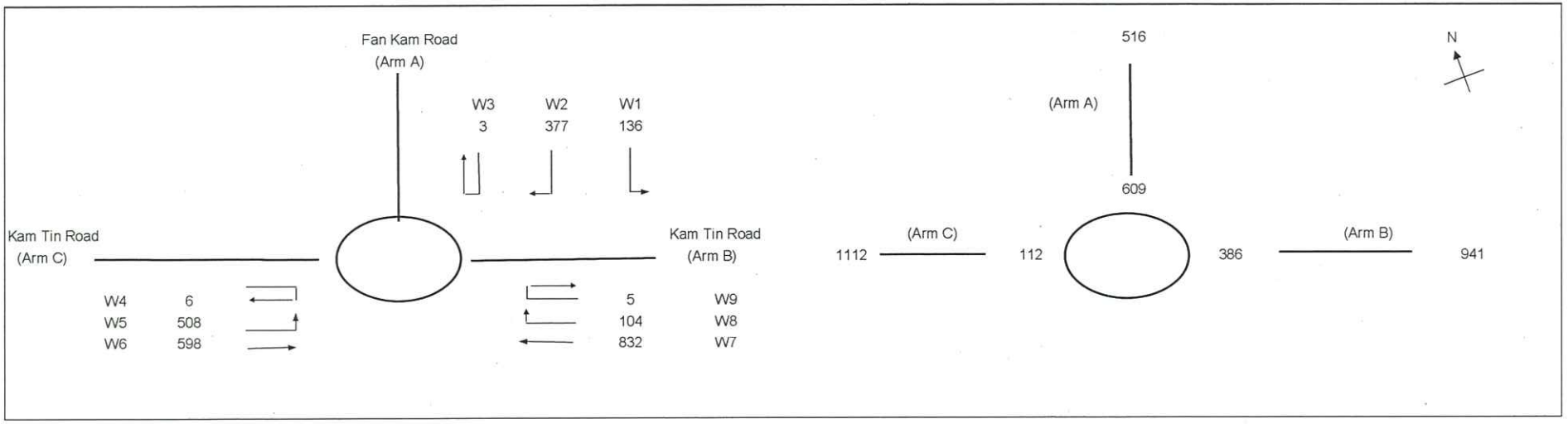
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	二月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	二月-21
SITUATION:	2024 Design Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	二月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	516	941	1112
Qc	=	Circulating flow across entry (pcu/h)	609	386	112
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	958	1149	1616
DFC	=	Design flow/Capacity = Q/Qe	0.54	0.82	0.69

Total In Sum = 3676 PCU

DFC of Critical Approach = 0.82

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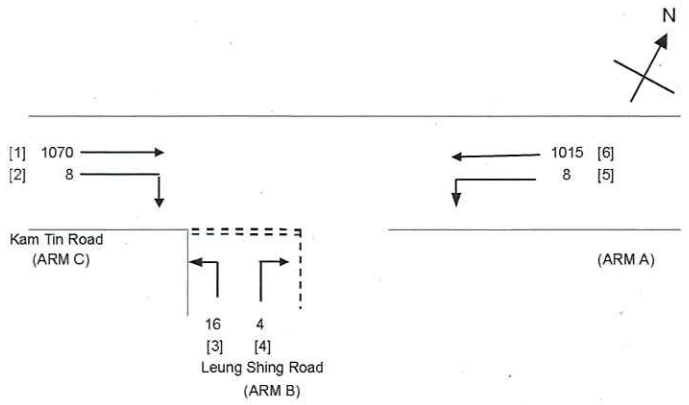
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J3 - Leung Shing Road / Kam Tin Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	8	(pcu/hr)
q a-c	=	1015	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1070	(pcu/hr)
q c-b	=	8	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	16	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.8

THE CAPACITY OF MOVEMENT :

Q b-a	=	128		
Q b-c	=	433	Q b-c (O) =	429.6
Q c-b	=	403		
Q b-ac	=	293.2		

TOTAL FLOW = 2121 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0313
DFC b-c	=	0.0370
DFC c-b	=	0.0199

CRITICAL DFC = 0.04

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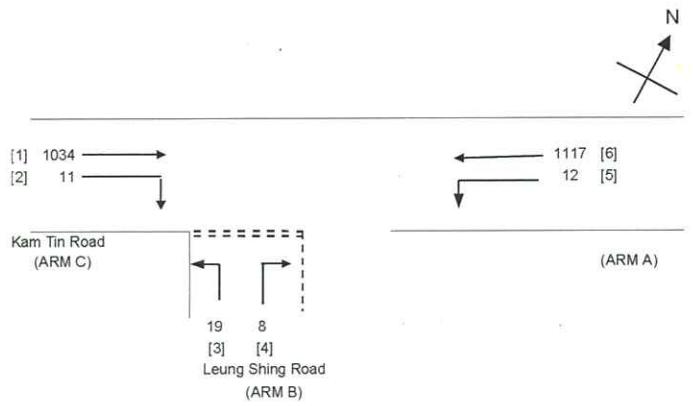
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J3 - Leung Shing Road / Kam Tin Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	12	(pcu/hr)
q a-c	=	1117	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1034	(pcu/hr)
q c-b	=	11	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	8	(pcu/hr)
q b-c	=	19	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7037037

THE CAPACITY OF MOVEMENT :

Q b-a	=	105		
Q b-c	=	404	Q b-c (O) =	396.3
Q c-b	=	376		
Q b-ac	=	219.1		

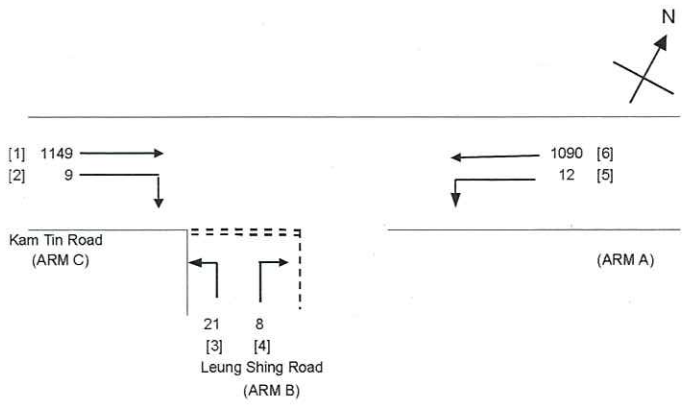
TOTAL FLOW = 2201 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0762
DFC b-c	=	0.0470
DFC c-b	=	0.0293

CRITICAL DFC = 0.08

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	12	(pcu/hr)
q a-c	=	1090	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1149	(pcu/hr)
q c-b	=	9	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	8	(pcu/hr)
q b-c	=	21	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7241379

THE CAPACITY OF MOVEMENT :

Q b-a	=	94		
Q b-c	=	412	Q b-c (O) =	403.2
Q c-b	=	383		
Q b-ac	=	213.1		

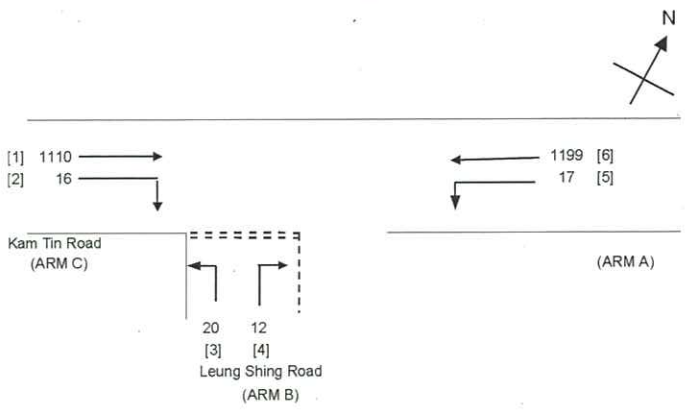
TOTAL FLOW = 2289 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0851
DFC b-c	=	0.0510
DFC c-b	=	0.0235

CRITICAL DFC = 0.09

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	17	(pcu/hr)
q a-c	=	1199	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1110	(pcu/hr)
q c-b	=	16	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	20	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.625

THE CAPACITY OF MOVEMENT :

Q b-a	=	67		
Q b-c	=	381	Q b-c (O) =	363.9
Q c-b	=	353		
Q b-ac	=	138.2		
TOTAL FLOW	=	2374	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1791
DFC b-c	=	0.0525
DFC c-b	=	0.0453

CRITICAL DFC = 0.18

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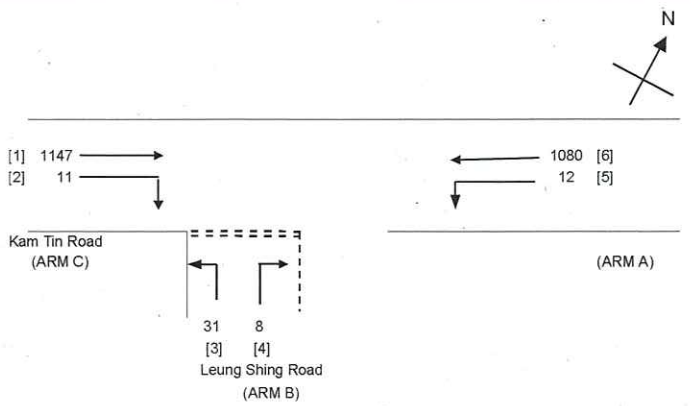
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	12	(pcu/hr)
q a-c	=	1080	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1147	(pcu/hr)
q c-b	=	11	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	8	(pcu/hr)
q b-c	=	31	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7948718

THE CAPACITY OF MOVEMENT :

Q b-a	=	96		
Q b-c	=	414	Q b-c (O) =	405.4
Q c-b	=	385		
Q b-ac	=	246.5		

TOTAL FLOW = 2289 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0833
DFC b-c	=	0.0749
DFC c-b	=	0.0286

CRITICAL DFC = 0.08

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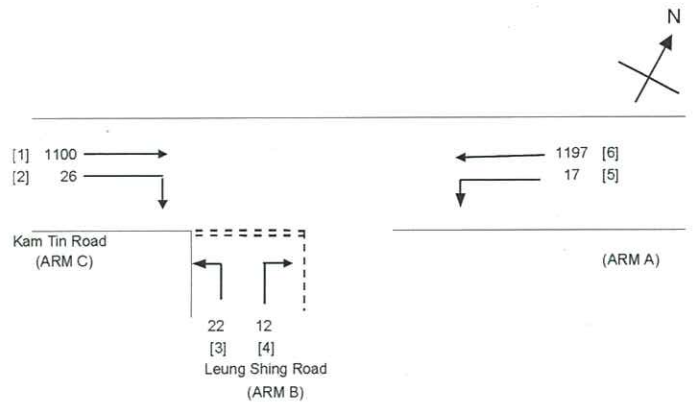
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	17	(pcu/hr)
q a-c	=	1197	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1100	(pcu/hr)
q c-b	=	26	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	22	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.6470588

THE CAPACITY OF MOVEMENT :

Q b-a	=	65		
Q b-c	=	381	Q b-c (O) =	363.4
Q c-b	=	354		
Q b-ac	=	140.3		
TOTAL FLOW	=	2374	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1846
DFC b-c	=	0.0577
DFC c-b	=	0.0734

CRITICAL DFC = 0.18

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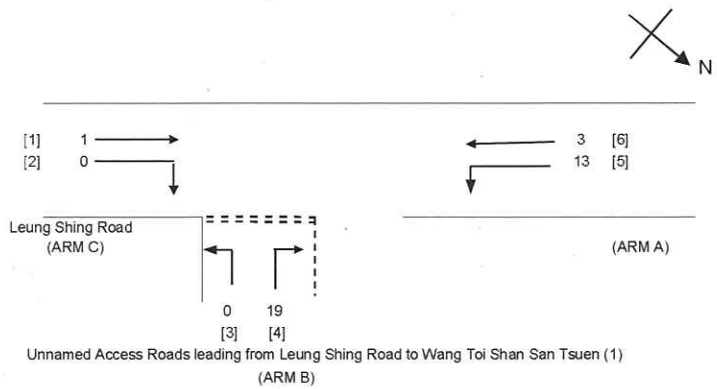
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	13	(pcu/hr)
q a-c	=	3	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	1	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	19	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	628		
Q b-c	=	733	Q b-c (O) =	727.5
Q c-b	=	755		
Q b-ac	=	628		

TOTAL FLOW = 36 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0303
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.03

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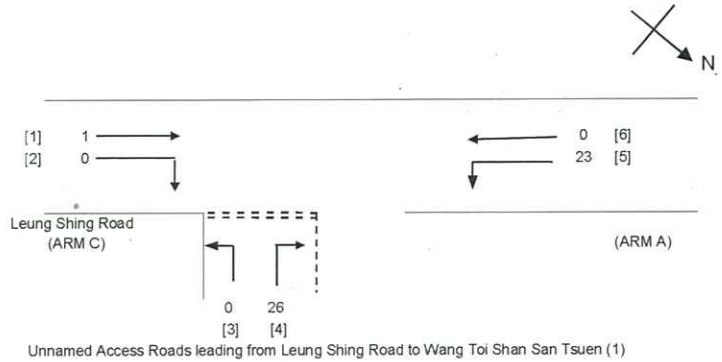
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	23	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	1	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	26	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	627		
Q b-c	=	732	Q b-c (O) =	724.4
Q c-b	=	753		
Q b-ac	=	627		

TOTAL FLOW = 50 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0415
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.04

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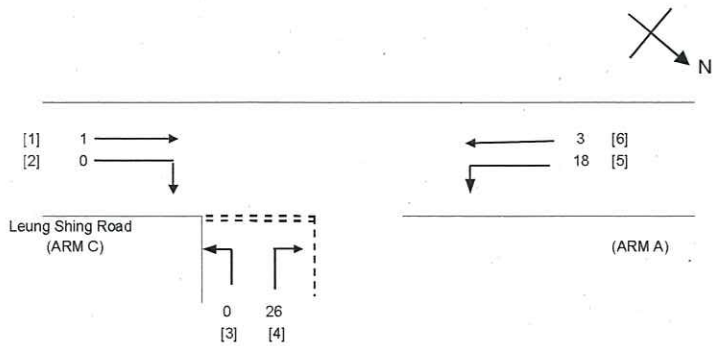
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	18	(pcu/hr)
q a-c	=	3	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	1	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	26	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	627		
Q b-c	=	732	Q b-c (O) =	724.4
Q c-b	=	754		
Q b-ac	=	627		

TOTAL FLOW = 48 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0415
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.04

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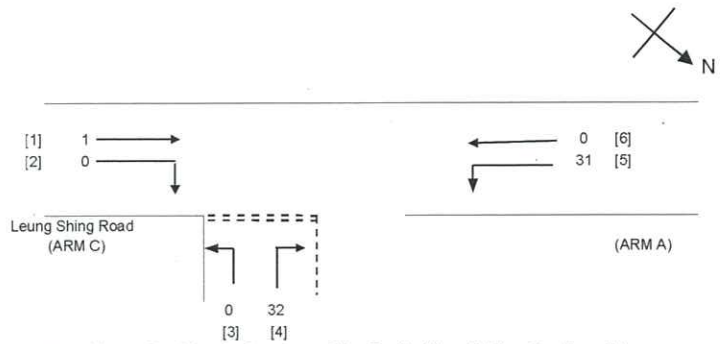
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	31	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	1	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	32	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	626		
Q b-c	=	731	Q b-c (O) =	721.7
Q c-b	=	751		
Q b-ac	=	626		

TOTAL FLOW = 64 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0511
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.05

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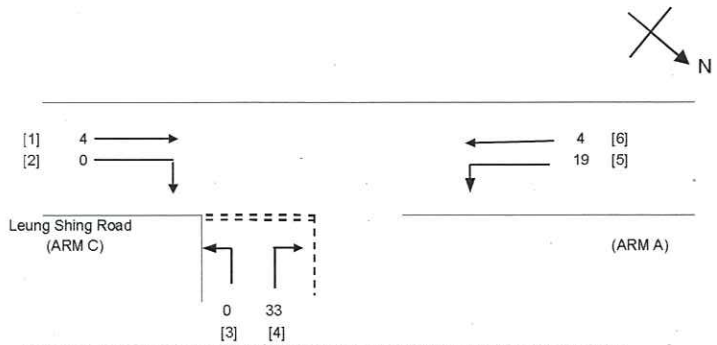
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	19	(pcu/hr)
q a-c	=	4	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	4	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	33	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	626		
Q b-c	=	732	Q b-c (O) =	722.4
Q c-b	=	753		
Q b-ac	=	626		

TOTAL FLOW = 60 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0527
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.05

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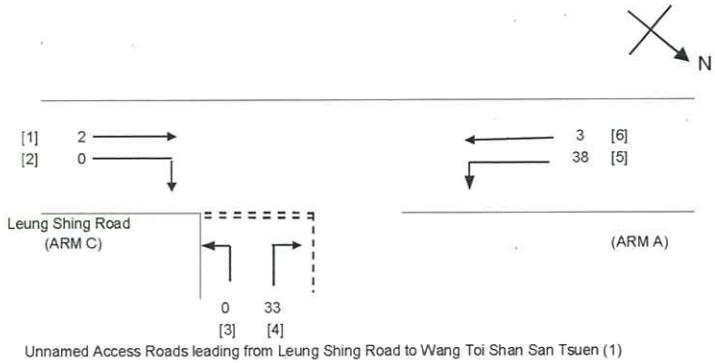
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	38	(pcu/hr)
q a-c	=	3	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	2	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	33	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	624		
Q b-c	=	730	Q b-c (O) =	720.3
Q c-b	=	748		
Q b-ac	=	624		

TOTAL FLOW = 76 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0529
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.05

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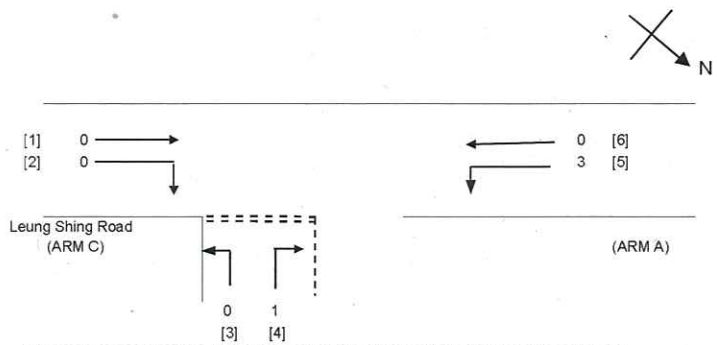
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.7
Q c-b	=	759		
Q b-ac	=	578		

TOTAL FLOW = 4 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0017
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

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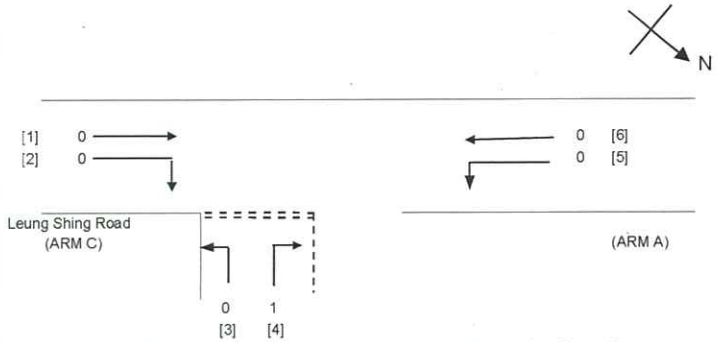
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.7
Q c-b	=	760		
Q b-ac	=	578		

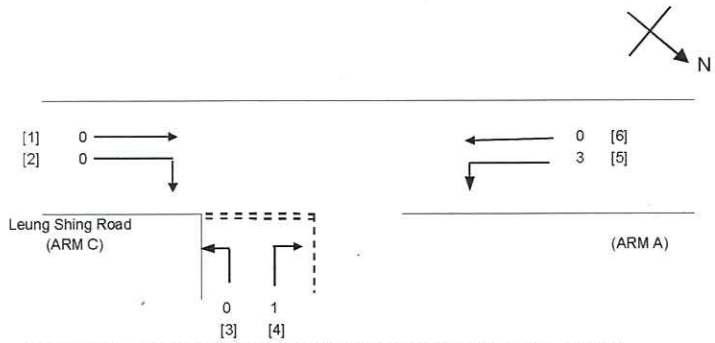
TOTAL FLOW = 1 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0017
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.7
Q c-b	=	759		
Q b-ac	=	578		

TOTAL FLOW = 4 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0017
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

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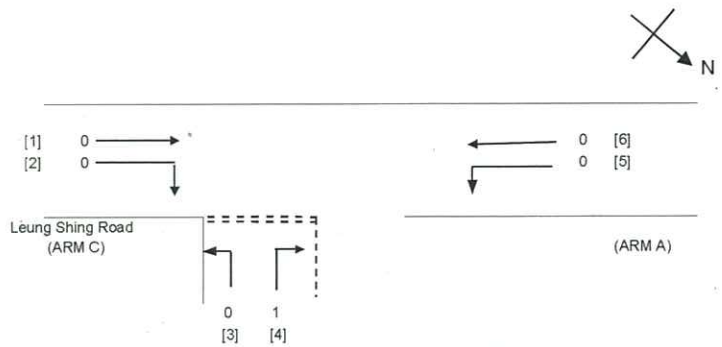
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.7
Q c-b	=	760		
Q b-ac	=	578		

TOTAL FLOW = 1 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0017
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

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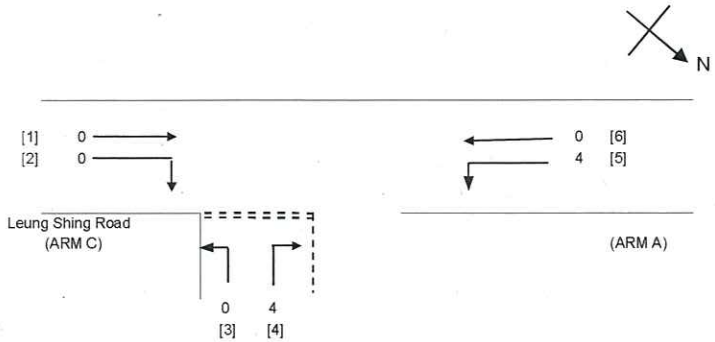
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	4	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	631.9
Q c-b	=	759		
Q b-ac	=	578		
TOTAL FLOW	=	8	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0069
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

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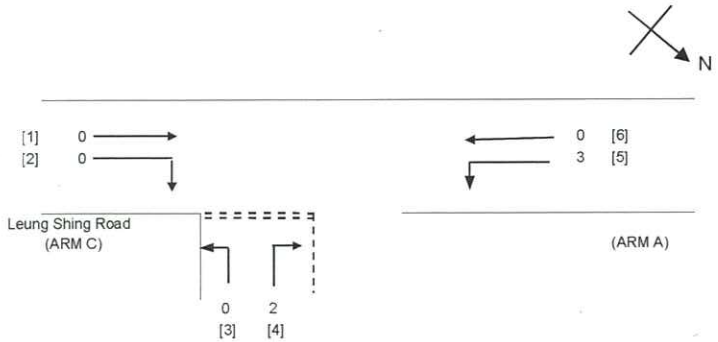
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	二月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	二月-21
		REFERENCE NO.:	REVIEWED BY:	SF	二月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	2	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.5
Q c-b	=	759		
Q b-ac	=	578		

TOTAL FLOW = 5 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0035
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

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Appendix E

Planning Data from Planning Department

表 1：二零一九年至二零二八年按區議會分區劃分的人口推算數字

Table 1 : Projected Population by District Council District, 2019-2028

(以年中計算 as at mid year)

區議會分區/ *主要區域*	District Council District/ *Broad Area*	2018 #	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
中西區	Central and Western	245 600	242 200	239 500	236 000	231 400	228 700	226 100	223 000	219 600	216 500	212 200
灣仔	Wan Chai	182 000	178 600	175 700	173 400	167 800	166 700	164 400	161 500	156 600	153 700	150 600
東區	Eastern	551 300	548 500	547 800	546 000	536 100	532 200	530 600	524 400	517 700	512 500	503 500
南區	Southern	273 100	270 700	269 500	267 800	266 100	266 500	268 300	268 400	271 000	280 500	290 500
深水埗	Sham Shui Po	403 500	428 800	447 800	458 300	460 400	463 100	470 800	469 500	469 300	466 500	462 300
九龍城	Kowloon City	420 300	424 800	429 400	427 800	427 700	431 200	446 000	452 600	452 400	460 900	457 100
黃大仙	Wong Tai Sin	423 100	420 300	425 300	427 100	426 700	427 600	431 800	430 000	429 500	427 500	429 300
觀塘	Kwun Tong	682 800	695 300	695 600	698 200	700 600	703 900	705 300	718 200	722 400	725 300	730 400
油尖旺	Yau Tsim Mong	335 500	329 700	328 100	324 700	318 400	315 300	313 700	309 300	303 900	300 900	295 500
葵青	Kwai Tsing	514 800	510 800	509 900	508 200	506 000	512 900	518 300	516 600	512 100	508 300	506 800
荃灣	Tsuen Wan	314 700	314 700	316 800	315 700	310 800	307 300	305 500	302 500	297 700	296 800	294 700
屯門	Tuen Mun	502 700	504 600	508 600	513 600	535 800	549 700	559 700	571 700	578 300	578 800	581 700
元朗	Yuen Long	641 000	650 800	650 700	656 600	662 300	664 500	665 000	684 300	710 700	716 500	718 000
北區	North	318 400	317 600	325 100	326 000	360 400	364 400	368 200	369 900	372 600	388 200	421 500
大埔	Tai Po	310 500	308 600	312 200	325 500	332 000	349 100	352 900	352 400	355 600	359 700	357 300
沙田	Sha Tin	685 500	692 500	706 000	717 800	716 400	721 000	717 700	718 300	713 500	711 000	704 700
西貢	Sai Kung	471 900	474 100	481 100	495 400	501 500	505 000	508 800	521 000	523 500	526 700	543 100
離島	Islands	173 200	188 600	188 000	189 200	196 300	195 500	194 300	193 900	217 700	228 600	235 100
香港島	*Hong Kong Island*	*1 252 100*	*1 240 100*	*1 232 500*	*1 223 200*	*1 201 400*	*1 194 100*	*1 189 400*	*1 177 400*	*1 165 000*	*1 163 100*	*1 156 700*
九龍	*Kowloon*	*2 265 100*	*2 299 000*	*2 326 100*	*2 336 000*	*2 333 800*	*2 341 000*	*2 367 500*	*2 379 600*	*2 377 500*	*2 381 000*	*2 374 700*
新界	*New Territories*	*3 932 700*	*3 962 400*	*3 998 400*	*4 048 100*	*4 121 400*	*4 169 300*	*4 190 500*	*4 230 700*	*4 281 800*	*4 314 500*	*4 362 900*
新市鎮	*New Towns*	*3 495 600*	*3 511 500*	*3 546 000*	*3 595 000*	*3 639 800*	*3 684 900*	*3 697 400*	*3 709 700*	*3 725 900*	*3 747 600*	*3 763 300*
其他地區†	*Other Areas* †	*437 000*	*450 900*	*452 400*	*453 100*	*481 600*	*484 400*	*493 100*	*521 000*	*555 800*	*566 900*	*599 600*
陸上總計	**Land Total**	**7 449 800**	**7 501 400**	**7 557 000**	**7 607 300**	**7 656 600**	**7 704 400**	**7 747 400**	**7 787 700**	**7 824 200**	**7 858 600**	**7 894 200**
加：水上人口	**Plus : Marine Population**	**1 200**	**1 100**	**1 100**	**1 100**	**1 100**	**1 100**	**1 100**	**1 100**	**1 000**	**1 000**	**1 000**
全港	**Whole Territory**	**7 451 000**	**7 502 600**	**7 558 100**	**7 608 400**	**7 657 700**	**7 705 400**	**7 748 400**	**7 788 700**	**7 825 200**	**7 859 600**	**7 895 200**

基年估計 Base year estimates.

†「其他地區」的數字亦包括新市鎮擴展區及主要新發展區截至有關年份的推算人口。
Figures for "Other Areas" also include the projected population for New Town Extension and major New Development Areas up to relevant years.

才鴻顧問有限公司
TOP BRIGHT CONSULTANTS LIMITED

Your Ref.: TPB/ A/YL-PH/857
Our Ref.: 20/653/L06

By Email

February 8, 2021

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

Dear Sir/Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years in "Agriculture" ("AGR") Zone at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories
(Application No. A/YL-PH/857)

We are writing to provide a clarification for the captioned application:

1) The Application Site will provide 80 parking spaces for Private Cars only.
2) The proposed hours of operation at the Application Site are 24 hours daily (Mondays to Sundays and Public Holidays).

Should you have any queries or require further information, please feel free to contact the undersigned at .

Yours faithfully,
For and on behalf of
Top Bright Consultants Ltd.

Lo Ming Kong

c.c. DPO/ FSS & YLE - Attn: Mr. Wan Tou Wei, Todd (By Email - ttwwan@pland.gov.hk)
Chief Force Limited (the Applicant)

才鴻顧問有限公司
TOP BRIGHT CONSULTANTS LIMITED

Your Ref.: TPB/ A/YL-PH/857
Our Ref.: 20/653/L07

By Post & Email

May 26, 2021

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

Dear Sir/Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years in "Agriculture" ("AGR") Zone at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories

(Application No. A/YL-PH/857)

In response to the comments from the Transport Department dated on 31.3.2021, we submit herewith the Further Information for your consideration.

Should you have any queries or require further information, please feel free to contact the undersigned at

Yours faithfully,
For and on behalf of
Top Bright Consultants Ltd.

Lo Ming Kong

Encl.

c.c.
DPO/ FS & YLE - Attn: Mr. WAN Tou Wei, Todd (By Email - ttwwan@pland.gov.hk)
DPO/FS&YLE - Attn.: Mr. LUNG Ching Ho, Otto (By Email - ochlung@pland.gov.hk)
Chief Force Limited (the Applicant)

Comments from Transport Department **Dated 31 March 2021 (via Planning Department)**	**Responses**
a) The applicant should provide traffic assessment of Leung Shing Road and the local access connecting Kam Tin Road near Lo Uk Tsuen.	Noted. Leung Shing Road (**L3**) and the local access connecting Kam Tin Road near Lo Uk Tsuen (**L4**) are classified as single-track access road. With reference to Transport and Planning Design Manual (TPDM) Volume 2, the carriageway capacity of a single-track access road is **100 vehicle/hour** for both directions. Based on the adjusted traffic survey results, the 2021 PM peak-hour traffic flows at **L4** are 165 vehicle/hour for both directions, which give a V/C ratio of 1.65 when 100 vehicle/hour is adopted as the carriageway capacity of the road link. According to TPDM, a V/C ratio above 1.2 represents forced or breakdown flow conditions with widespread congestion and extensively long traffic queues. These are considered inconsistent with the actual traffic situation of **L4**, as it was observed that the maximum vehicle queues at **L4** were 3 vehicles only and the level of traffic circulation was generally within acceptable level during the survey period. Furthermore, the clear road widths of **L3** and **L4** are approximately 5m, which are wider than the typical road width of single-track access road i.e. 3.5m, and allow private cars (the major vehicle types on the concerned road links according to the survey results) to pass either in opposing directions. In view of the above, <u>an adjustment factor of **2.0** is further applied on the carriageway capacities of **L3** and **L4** to reflect the realistic traffic situation of the road links</u>. The estimated carriageway capacities of **L3** and **L4** are hence: 100 x 2 = **200 vehicle/hour** for both directions. ----------

	Besides, the carriageway capacities of the concerned sections of Kam Tin Road (i.e. **L1** & **L2**, as shown in **Figure 2.1**) are revised as follows: The concerned sections of Kam Rin Road are classified as single-two lane rural roads. For assessment purpose, it is assumed that the carriageway capacities of **L1** and **L2** are equivalent to 6.75m single-two lane district distributors, i.e. 1,400 vehicle/hour for both directions, with reference to TPDM Volume 2. As advised in TPDM, a reduction factor of -10% is further applied on the capacities of the concerned road links for 20-25% heavy vehicle content in the traffic. Hence, the estimated carriageway capacities of **L1** and **L2** are: 1400 x (1-10%) = **1,260 vehicle/hour** for both directions. ---------- The revised link capacity analysis results are enclosed in **Appendix A** for your review.
b) The applicant should further elaborate the net decrease of traffic in the unnamed access road.	Noted. Given the proposed development is targeted to serve the villagers and their visitors in Wang Toi Shan San Tsuen exclusively, and an existing local demand for 75 additional private car parking spaces has been demonstrated by the aerial photos showing the number of private cars which are parked freely on the local track within the village (see more details in **item C** of the R-t-C document), it is considered that the traffic generation and attraction of the proposed development has been reflected on the existing traffic of the appraised road network. Hence, no additional traffic is expected to be induced on Kam Tin Road or other district road networks due to the proposed development. Nonetheless, it is anticipated that the proposed development will alter the driving behaviors of the villagers and their visitors, and affect the surrounding traffic flow patterns in Wang Toi Shan Tsuen owing to its geographic position on the local road network. To estimate the net development flows of the proposed development, considerations are given to the existing traffic distribution patterns in Wang Toi Shan San Tsuen and Wang Toi Shan Leng Uk Tsuen, the estimated traffic generation and attraction, and the trip assignment of the proposed development, which are detailed as follows:

	1. Identifying the Existing Traffic Distribution Patterns at the Two Village Accesses of Wang Toi Shan San Tsuen and Wang Toi Shan Leung Uk Tsuen Wang Toi Shan San Tsuen, and the adjacent Wang Toi Shan Leung Uk Tsuen are served by two major village accesses, namely Leung Shing Road (**L3**) and the local access connecting Kam Tin Road near Lo Uk Tsuen (**L4**). According to the adjusted traffic count survey results, the traffic distribution patterns at the two village accesses during AM and PM peak hours are summarised in **Table 1.1** and **1.2,** respectively.

Table 1.1 2021 Observed Traffic Distribution Pattern at L3 and L4 during AM Peak Period

Direction	L3	L4	Total
	Traffic Flows in veh/hr (proportion of total hourly traffic volume in the villages)		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	2 (1%)	46 (31%)	48 (32%)
From/to Fan Kam Road	8 (5%)	35 (24%)	43 (29%)
From/to Yuen Long or Tsing Long Highway	25 (17%)	30 (22%)	59 (39%)
Total	36 (23%)	115 (77%)	150 (100%)

Table 1.2 2021 Observed Traffic Distribution Pattern at L3 and L4 during PM Peak Period

Direction	L3	L4	Total
	Traffic Flows in veh/hr (proportion of total hourly traffic volume in the villages)		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	1 (1%)	67 (31%)	68 (32%)
From/to Fan Kam Road	18 (8%)	49 (23%)	67 (31%)
From/to Yuen Long or Tsing Long Highway	29 (14%)	49 (23%)	78 (37%)
Total	48 (23%)	165 (77%)	213 (100%)

Note:

1. *The proportion of total hourly traffic volume presented in **Table 1.1 and 1.2** are rounded to the nearest integers (1% at minimum).*

	2. Adopting the Existing Traffic Distribution Patterns on the Hourly Traffic Volume Equivalent to the Peak Hour Development Flows Based on the updated parking provisions of the proposed development, the peak-hour development traffic (including generation and attraction) of the proposed development is estimated to be **25 vehicle/hour** (see more details in **item C** of the R-t-C document). By adopting the traffic distribution patterns as presented in **Table 1.1** and **Table 1.2** on this specific traffic volume, the results are summarised in **Table 1.3** and **1.4**. They represent the traffic distribution patterns of the existing on-street parking vehicles in the village, which will be later contained by the proposed public vehicle park.

Table 1.3 2021 Observed Traffic Distribution Pattern at L3 and L4 during AM Peak Hour on an Hourly Traffic Volume of 25 vehicle/hour

Direction	L3	L4	Total
	Traffic Flows in veh/hr (proportion of total hourly traffic volume in the villages)		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	1 (4%)	8 (32%)	9 (36%)
From/to Fan Kam Road	1 (4%)	6 (24%)	7 (28%)
From/to Yuen Long or Tsing Long Highway	4 (16%)	5 (20%)	9 (36%)
Total	6 (24%)	19 (76%)	**25** (100%)

Table 1.4 2021 Observed Traffic Distribution Pattern at L3 and L4 during PM Peak Hour on an Hourly Traffic Volume of 25 Vehicle/hour

Direction	L3	L4	Total
	Traffic Flows in veh/hr (proportion of total hourly traffic volume in the villages)		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	1 (4%)	8 (32%)	9 (36%)
From/to Fan Kam Road	2 (8%)	6 (24%)	8 (32%)
From/to Yuen Long or Tsing Long Highway	3 (12%)	5 (20%)	8 (32%)
Total	6 (24%)	19 (76%)	**25** (100%)

Note:
1. *The traffic flows presented in **Table 1.3 and 1.4** are rounded to the nearest integers (1 veh/hr at minimum).*
2. *Fine adjustments are made to the proportion of the traffic flows due to the decrease in total traffic volume for distribution.*

	3. Estimating the Trip Assignment and Net Development Flows of the Proposed Development
	
	To estimate the net development flows of the proposed development, the following considerations are made:
	
	• Drivers tend to take routes which are less congested and pass through the least number of road junctions to minimise travel delay.
	
	• As demonstrated in the link capacity assessment results as shown in **Appendix A**, Kam Tin Road is currently overloaded during AM and PM peak hours. Moreover, it is observed that section **L1** of Kam Tin Road in general has a better operational performance than section **L2**, which indicates that it is relatively less congested.
	
	• In view of the above and the geographical location of the proposed development, it is assumed that:
	
	  ○ All of the trips from/to Lam Kam Road, Route Twisk or Kam Sheung Road will be diverted via **L4**.
	
	  ○ All of the trips from/to Yuen Long or Tsing Long Highway will be diverted via **L3**.
	
	  ○ Most of the trips from/to Fan Kam Road will be diverted via **L4**, as suggested from the existing traffic distribution patterns.
	
	Taking account of the traffic distribution patterns presented in **Table 1.3** and **1.4**, as well as the above considerations, the trip assignment of the proposed development at **L3** and **L4** during AM and PM peak hours are estimated and summarised in **Table 1.5** and **1.6**.

Table 1.5 Estimated Trip Assignment of the Proposed Development at L3 and L4 during AM Peak Hour

Direction	L3	L4	Total
	Development Flows (Net Development Flows) in veh/hr		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	0 (-1)	9 (+1)	9
From/to Fan Kam Road	1	6	7
From/to Yuen Long or Tsing Long Highway	9 (+5)	0 (-5)	9
Total	10 (+4)	15 (-4)	**25**

Table 1.6 Estimated Trip Assignment of the Proposed Development at L3 and L4 during PM Peak Hour

Direction	L3	L4	Total
	Development Flows (Net Development Flows) in veh/hr		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	0 (-1)	9 (+1)	9
From/to Fan Kam Road	2	6	8
From/to Yuen Long or Tsing Long Highway	8 (+5)	0 (-5)	8
Total	10 (+4)	15 (-4)	**25**

Note:
1. *Colour Indices: **Green** = net increase in traffic; **Red** = net decrease in traffic.*
2. *It is assumed that after the development, the drivers as users of the public vehicle park who:*
   *use **L3** to travel from/to Lam Kam Road, Road Twisk or Kam Sheung Road originally will use **L4** instead;*
   *use **L4** to travel from/to Yuen Long or Tsing Long Highway originally will use **L3** instead.*

	As shown in **Table 1.5** and **1.6** and **Figure 2.6**, it is anticipated that a net development flow of **+4/+4 vehicle/hour** and **-4/-4 vehicle/hour** will be induced by the proposed development at **L3** and **L4** respectively during AM/PM peak hours. Therefore, a net increase of traffic at **L3**, and a net decrease of traffic at **L4** are expected to be resulted from the proposed development.

c) The applicant should also tabulated the number of trips that are generated by on-street parking and by new traffic due to the development.	Noted. To determine the number of trips that will be generated by on-street parking and by new traffic due to the proposed development, considerations are given to the proposed parking provisions of the development and the unsatisfied parking demand of Wang Toi Shan San Tsuen, which are reflected on the existing on-street parking situation in the village. To observe the existing situation of private cars which are parked freely along the local track in the village, a vehicle count survey was conducted at three identified major on-street parking locations during 1715 – 1745 hour on 28 April 2021, as shown in **Appendix C**. As demonstrated on the aerial photos enclosed in **Appendix C**, it was discovered that a minimum of 90 private cars were parked freely along the local track of Wang Toi Shan San Tsuen, which accounts for an existing parking demand for 90 additional private car parking spaces in the village. Considering 15 private car parking spaces will be provided under the approved planning application no. A/YL-PH/856, the current unsatisfied parking demand of Wang Toi Shan San Tsuen is: 90 – 15 = **75 nos. of private car parking spaces**. In view of the above, the proposed number of private car parking spaces under the proposed development is reduced from 80 to 75, and the revised site layout is shown in **Figure 1.1**. After reduction in parking provisions, the proposed public vehicle park is considered to absorb all the identified on-street parking vehicles in Wang Toi Shan San Tsuen. Therefore, no on-street parking or new traffic is anticipated to be generated from the proposed development.

Based on the update to the parking provision, the peak-hour traffic generation and attraction rates of the proposed development are revised and summarised in **Table 3.1**.

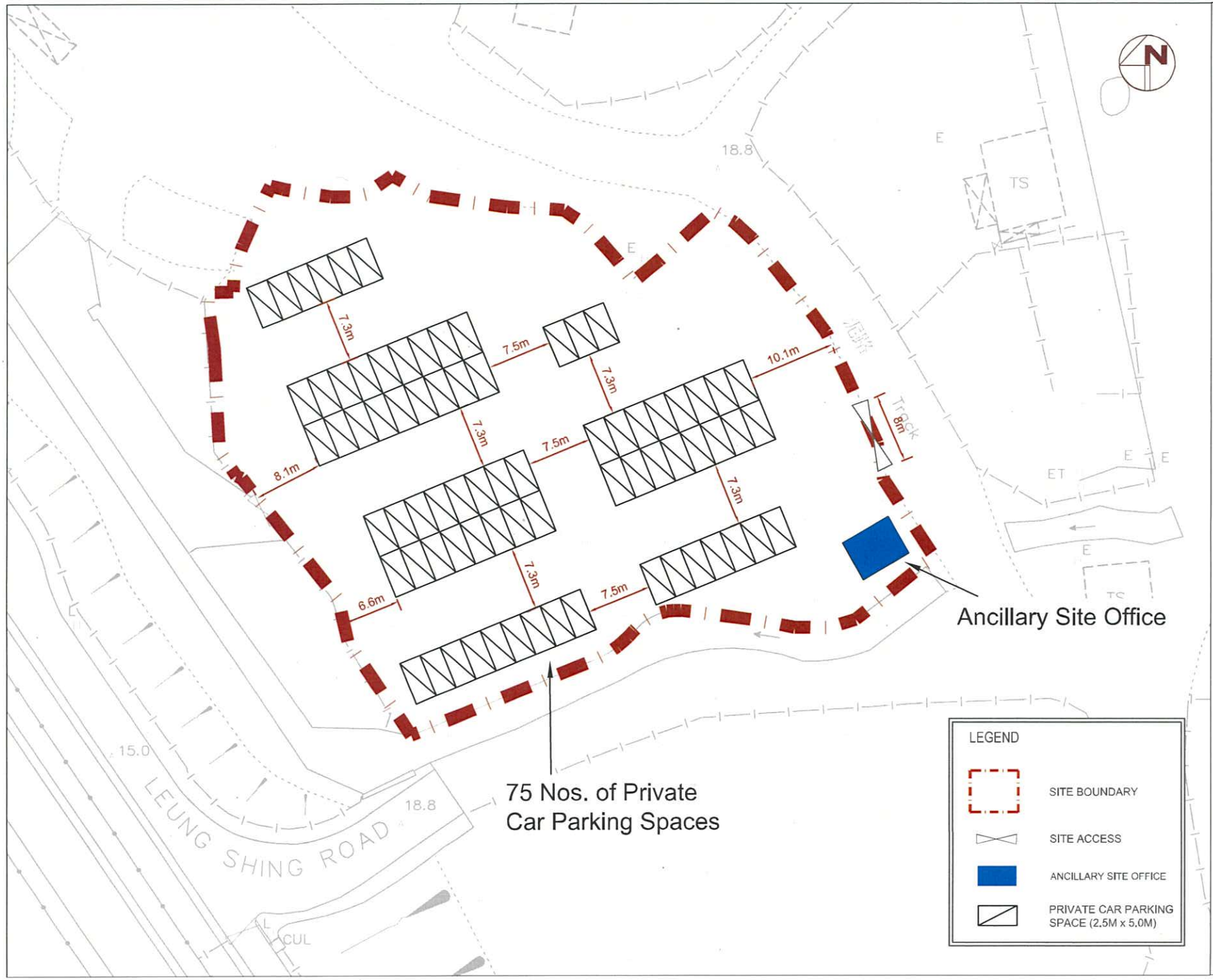
Table 3.1 Estimated Peak-hour Traffic Generation and Attraction Rates of the Proposed Development

Development	Generation		Attraction	
	AM Peak	PM Peak	AM Peak	PM Peak
	Trip in veh/hr (pcu/hr)			
Proposed No. of Private Car Parking Spaces: **75**	20 (20)	5 (5)	5 (5)	20 (20)

Note:

1. *The peak-hour traffic generation and attraction rates of the proposed development are estimated with reference to the peak-hour development flows to private car parking provision ratio of a nearby public vehicle park under approved planning application no. A/YL-PH/856, i.e.* ***0.33****.*

Figures



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

SITE LAYOUT

FIGURE 1.1

Scale : 1:400

Date : MAY 2021

Rev. : A

AXON CONSULTANCY
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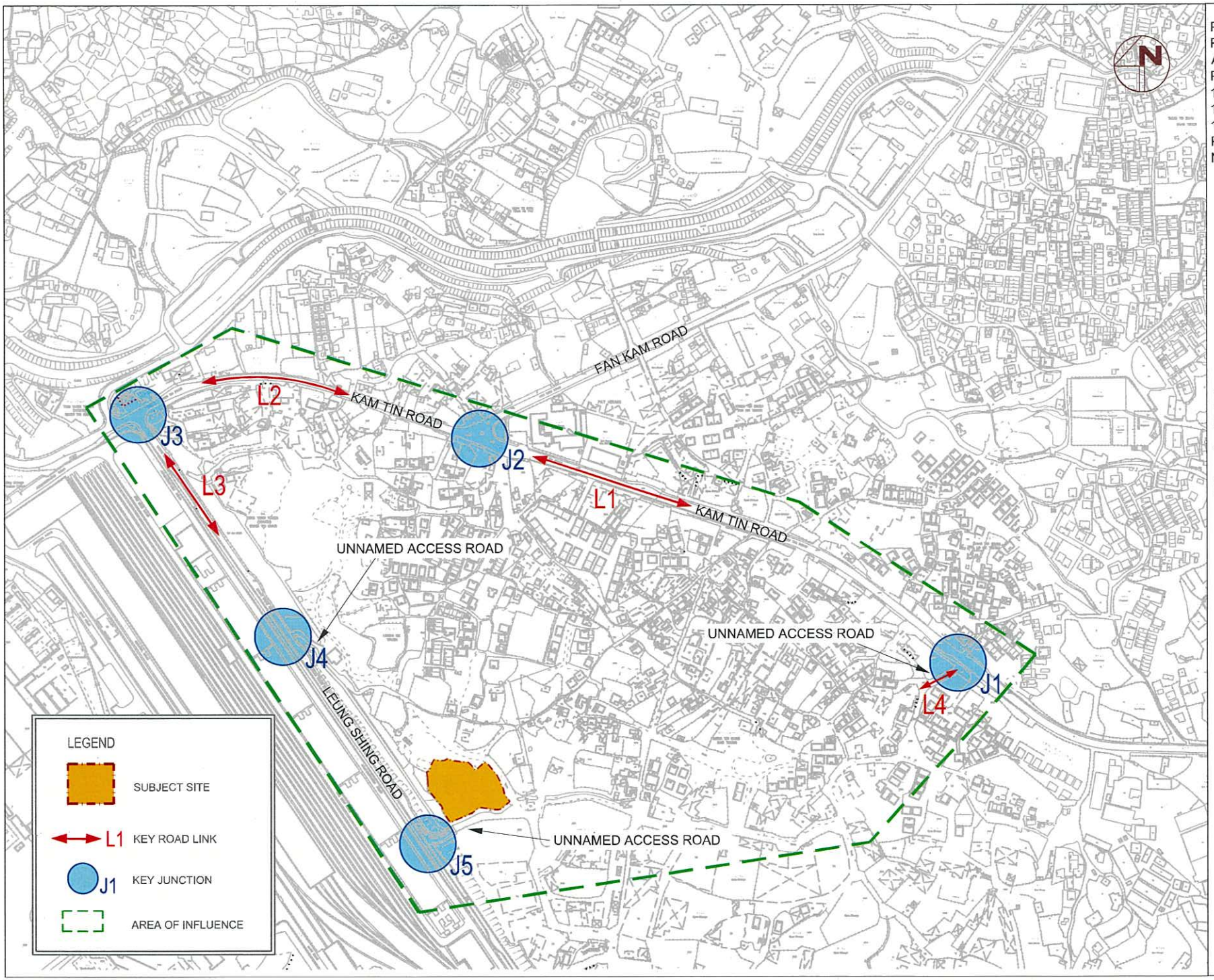
X:\PROJECT\30909 WANG TO SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 1.1.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

LOCATION OF KEY ROAD LINKS AND JUNCTIONS

FIGURE 2.1

Scale : 1:3500

Date : MAR 2021

Rev. : A

AXON CONSULTANCY
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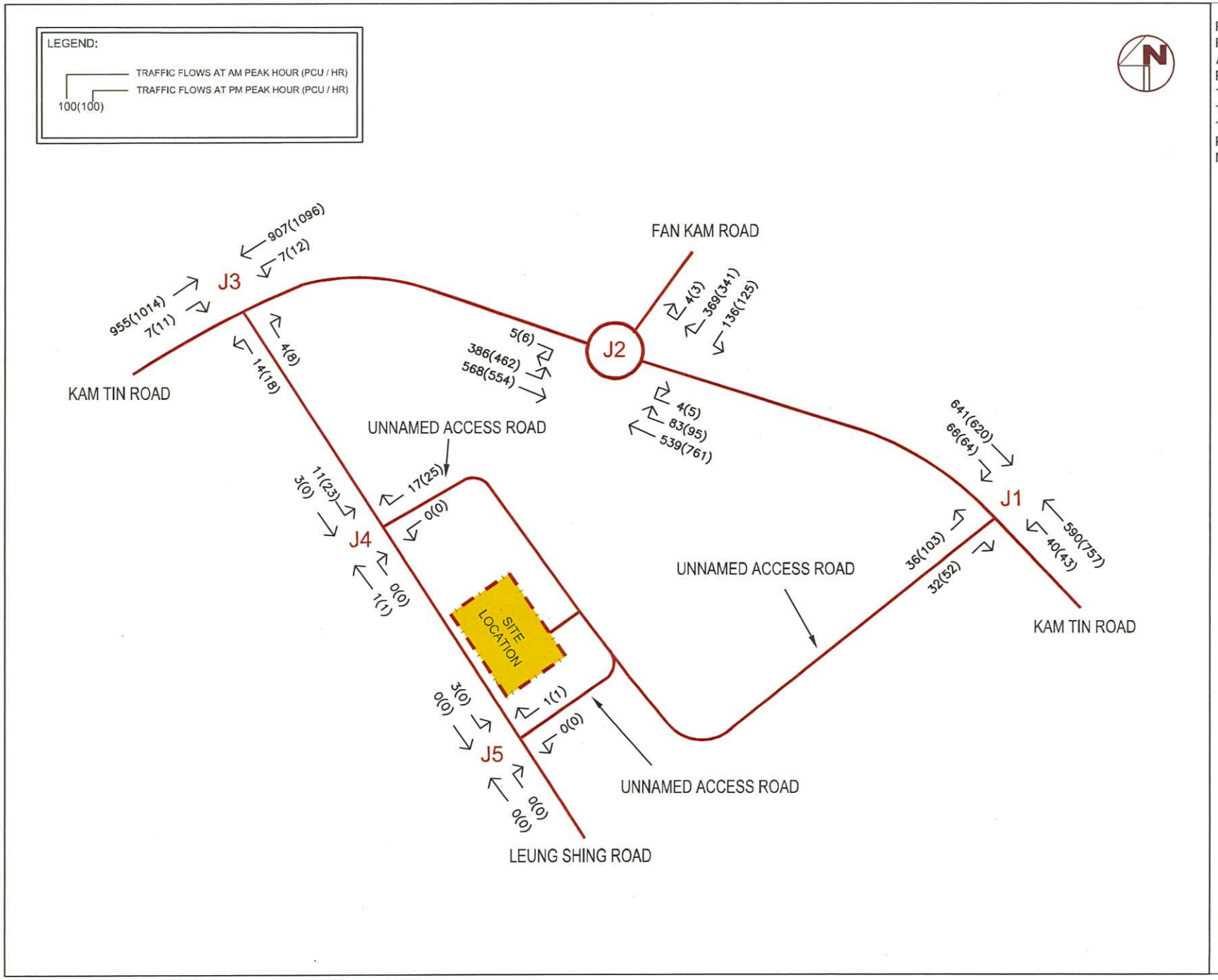
X:\PROJECT\J0909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.1A.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2021 OBSERVED TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.2

Scale : N.T.S.

Date : FEB 2021

Rev. :

AXON CONSULTANCY
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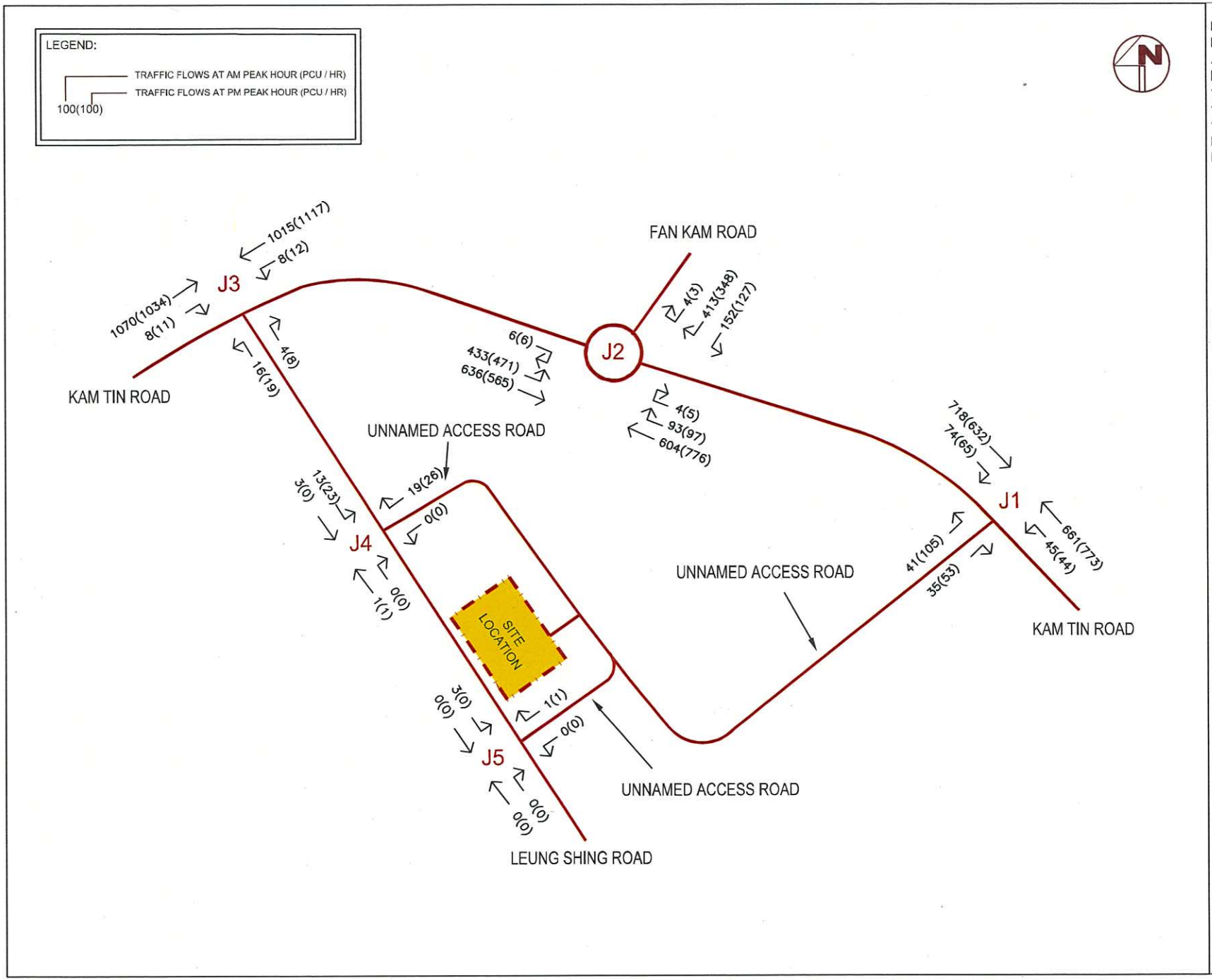
\\NAS\AXON\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\TRAFFIC FLOW INPUT_2004.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2021 OBSERVED TRAFFIC FLOWS DURING AM & PM PEAK HOURS (AFTER ADJUSTMENT)

FIGURE 2.3

Scale : N.T.S.

Date : FEB 2021

Rev. :

AXON CONSULTANCY
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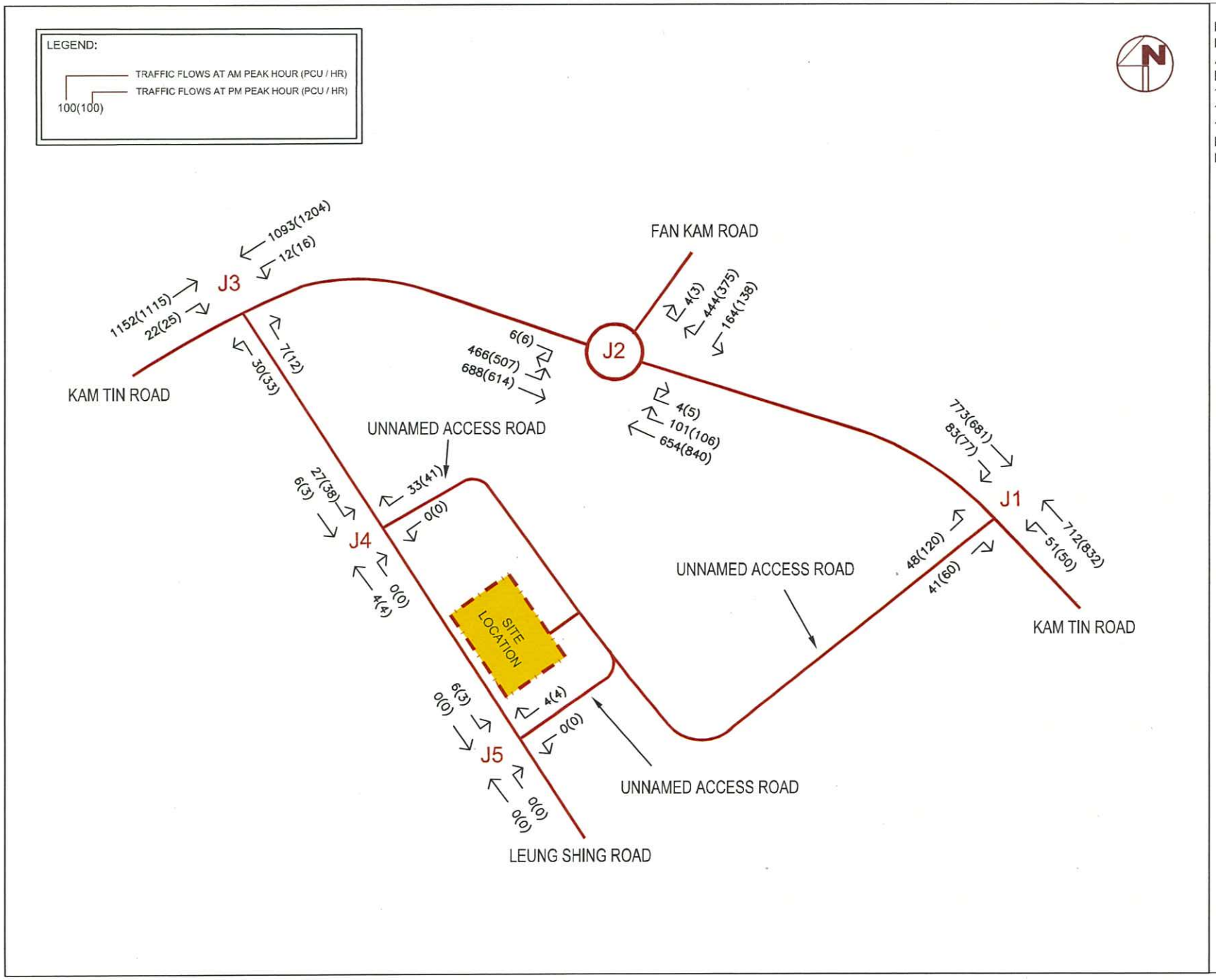
\\NAS\AXON\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.3.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2024 REFERENCE TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.4

Scale : N.T.S.

Date : MAR 2021

Rev. : A

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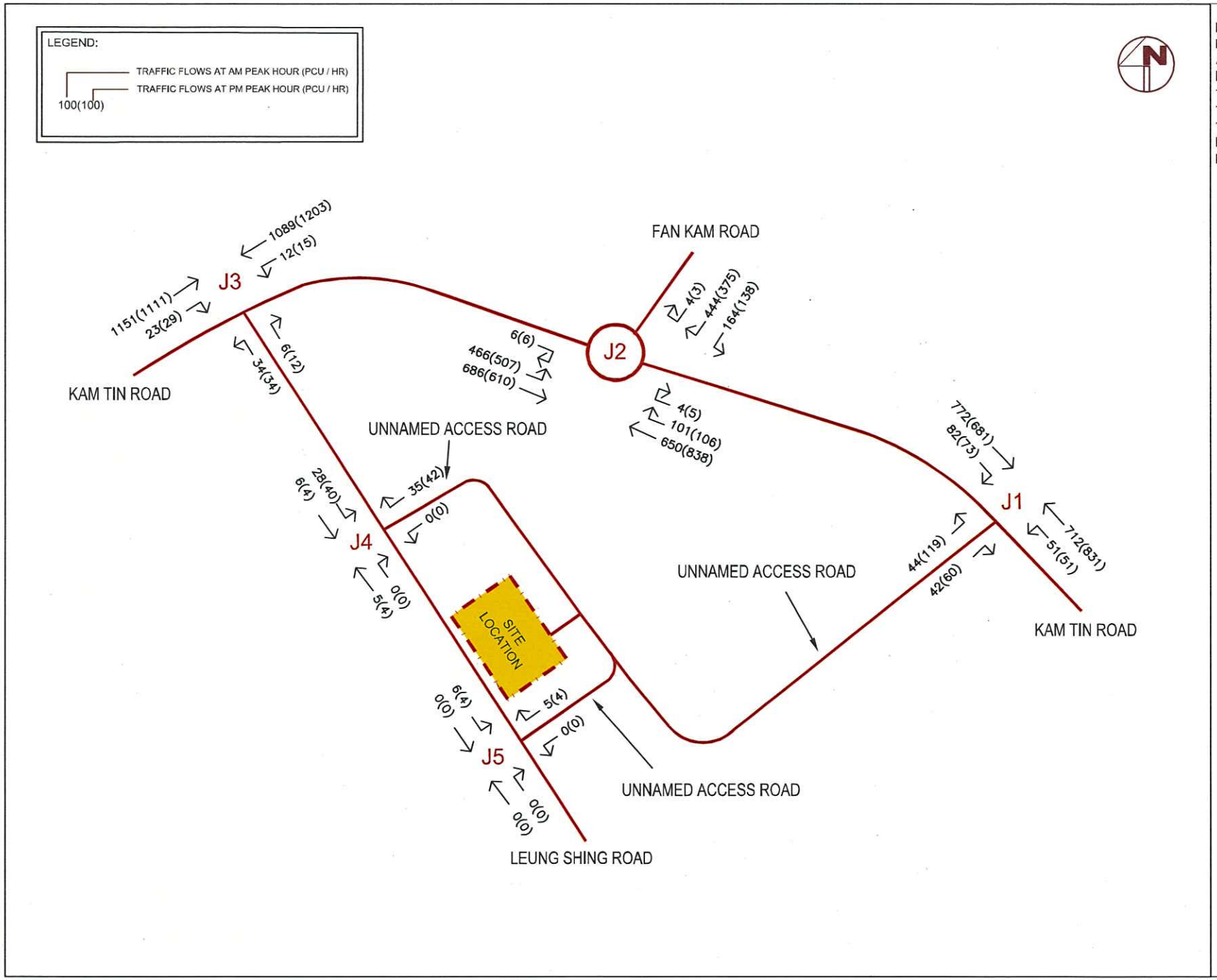

Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2024 DESIGN TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.5

Scale : N.T.S.

Date : MAY 2021

Rev. : B

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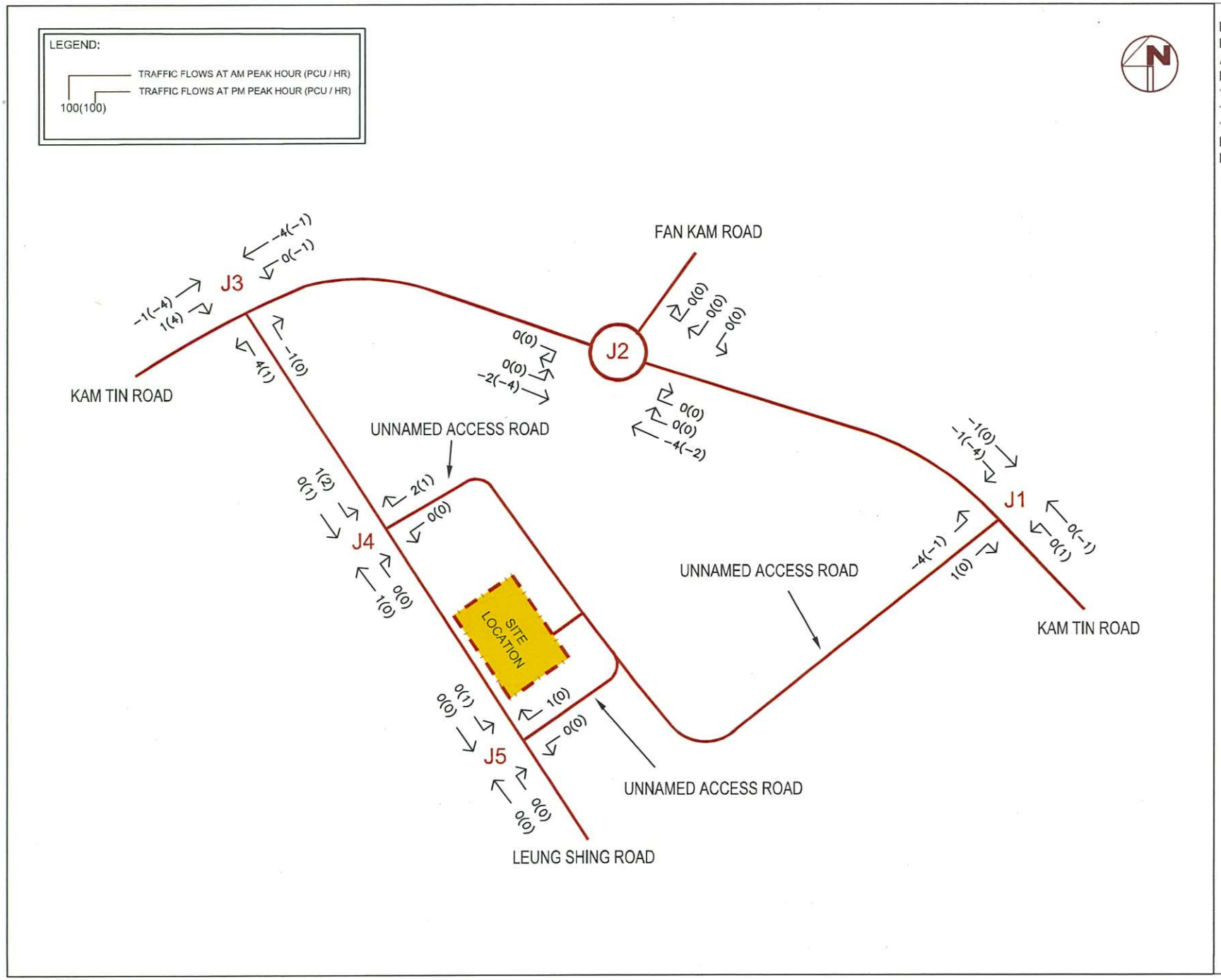
\\NAS\AXON\PROJECT\30999 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\TRAFFIC FLOW INPUT_2004.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

NET DEVELOPMENT TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.6

Scale : N.T.S.

Date : MAY 2021

Rev. : B

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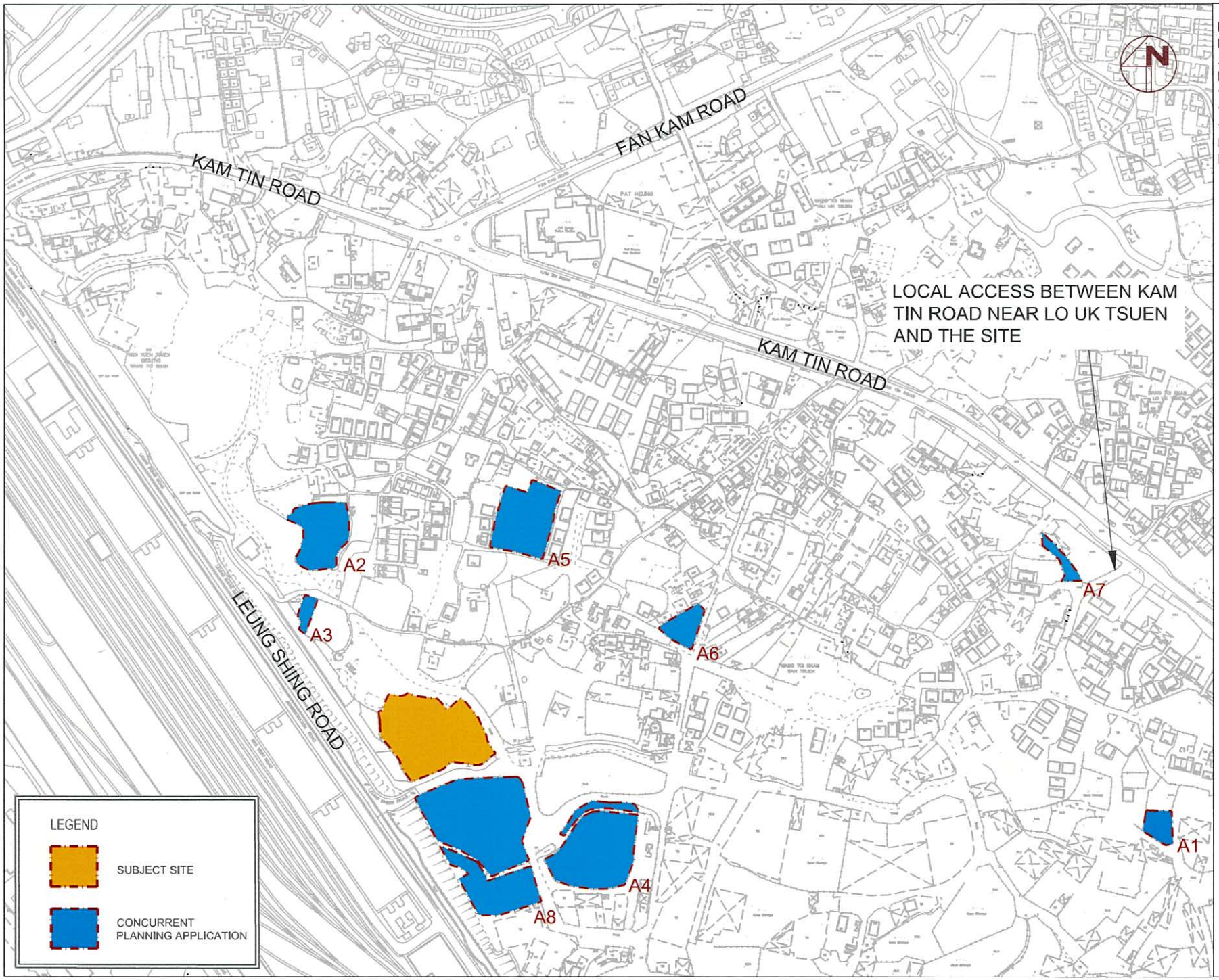
\\NAS\AXON\PROJECT\30999 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\TRAFFIC FLOW INPUT_2004.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

CONCURRENT PLANNING APPLICATIONS ALONG LEUNG SHING ROAD AND THE LOCAL ACCESS BETWEEN KAM TIN ROAD NEAR LO UK TSUEN AND THE SITE

FIGURE 3.1

Scale : 1:2500

Date : MAR 2021

Rev. :

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X:\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 3.1.DWG

Appendix A

Revised Link and Junction Capacity Assessment Results

17 May 2021

Revised Link and Junction Capacity Assessment Results (Rev. A)

Introduction

This paper is prepared in response to the comments from Transport Department (dated 22 March 2021, circulated by Planning Department via email) on the previous FI submission. The methodology of the assessment, including the source of traffic data and traffic forecast method are in accordance to the previous FI submission with the following amendments:

1. The carriageway capacities of the four key road links have been revised and incorporated in the assessment.

2. The net development flows of the proposed development have been revised and incorporated in the assessment.

Details of the amendments are further elaborated on the Response-to-Comment Table.

2021 Existing Link and Junction Capacity Assessment

Table 2.1 Year 2021 Link Capacity Assessment

Ref.	Key Road Link	Direction	Carriageway Capacity (veh/hr)	2021 Observed Flows (veh/hr)		V/C Ratio	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Kam Tin Road	E/B	630	460	613	0.73	0.97
		W/B	630	545	508	0.87	0.81
L2	Kam Tin Road	E/B	630	735	752	1.17	1.19
		W/B	630	701	856	1.11	1.36
L3	Leung Shing Road	Both Directions	200	35	48	0.18	0.24
L4	Local Access between Kam Tin Road near Lo Uk Tsuen and the Site	Both Directions	200	115	165	0.58	0.83

As shown on **Table 2.1**, Leung Shing Road and the local access between Kam Tin Road near Lo Uk Tsuen and the Site are currently operating with spare capacities, while the key road links at Kam Tin Road are overloaded during the AM and PM peak hours.

Table 2.2 Year 2021 Junction Capacity Assessment

Ref.	Junction Location	Type / Capacity Index	AM Peak	PM Peak
J1	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	Priority Junction / DFC	0.14	0.20
J2	Fan Kam Road / Kam Tin Road	Roundabout / DFC	0.66	0.75
J3	Leung Shin Road / Kam Tin Road	Priority Junction / DFC	0.04	0.08
J4	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	Priority Junction / DFC	0.03	0.04
J5	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	Priority Junction / DFC	< 0.01	< 0.01

As shown on **Table 2.2**, all key junctions are currently operating with spare capacities during the AM and PM Peak hours.

2024 Link and Junction Capacity Assessment Under Reference and Design Scenarios

Table 2.3 Year 2024 Link Capacity Assessment

Ref.	Key Road Link	Direction	Carriageway Capacity (veh/hr)	Traffic Flows (veh/hr) [V/C Ratio]			
				2024 Reference Scenario		2024 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Kam Tin Road	E/B	630	498 **[0.79]**	664 **[1.05]**	496 **[0.79]**	660 **[1.05]**
		W/B	630	589 **[0.93]**	551 **[0.87]**	585 **[0.93]**	549 **[0.87]**
L2	Kam Tin Road	E/B	630	793 **[1.26]**	812 **[1.29]**	791 **[1.26]**	808 **[1.28]**
		W/B	630	757 **[1.20]**	924 **[1.47]**	753 **[1.20]**	922 **[1.46]**
L3	Leung Shing Road	Both Directions	200	50 **[0.25]**	64 **[0.32]**	54 **[0.27]**	68 **[0.34]**
L4	Local Access between Kam Tin Road near Lo Uk Tsuen and the Site	Both Directions	200	128 **[0.64]**	184 **[0.92]**	124 **[0.62]**	180 **[0.90]**

As shown on **Table 2.3**, the local access between Kam Tin Road near Lo Uk Tsuen and the Site will be operating close to its capacity, while Kam Tin Road will be overloaded regardless of the presence of the proposed development in the design year of 2024, but their traffic situations will be slightly improved due to the traffic diversion effect of the proposed development. Besides, Leung Shing Road will still be operating with spare capacity with the proposed development.

Table 2.4 Year 2024 Junction Capacity Assessment

Ref.	Junction Location	Type / Capacity Index	2024 Reference Scenario		2024 Design Scenario	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	Priority Junction / DFC	0.16	0.25	0.17	0.25
J2	Fan Kam Road / Kam Tin Road	Roundabout / DFC	0.72	0.83	0.72	0.83
J3	Leung Shing Road / Kam Tin Road	Priority Junction / DFC	0.08	0.20	0.08	0.20
J4	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	Priority Junction / DFC	0.05	0.07	0.06	0.07
J5	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen (2) / Kam Tin Road	Priority Junction / DFC	0.01	0.01	0.01	0.01

As shown on **Table 2.4**, all key junctions are expected to operate with spare capacities during the identified AM and PM peak hours under the Year 2024 Reference and Design Scenarios.

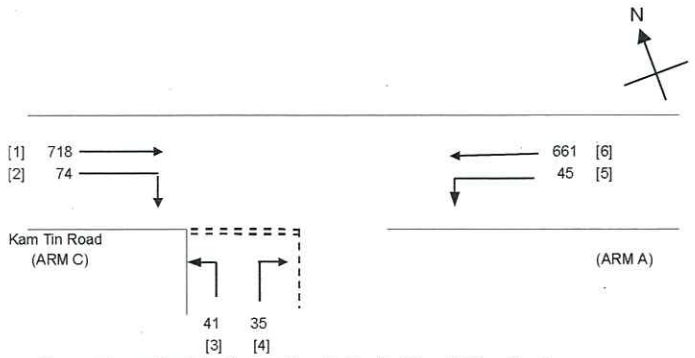
Conclusion

In view of the above, it can be concluded that the proposed development will not have adverse traffic impact on the local road network, and the proposed development is considered acceptable from traffic engineering point of view.

Appendix B

Revised Junction Calculation Sheets

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen
(ARM B)

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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	45	(pcu/hr)
q a-c	=	661	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	718	(pcu/hr)
q c-b	=	74	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	35	(pcu/hr)
q b-c	=	41	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.5394737

THE CAPACITY OF MOVEMENT :

Q b-a	=	275		
Q b-c	=	546	Q b-c (O) =	528.6
Q c-b	=	522		
Q b-ac	=	375.6		

TOTAL FLOW = 1574 (PCU/HR)

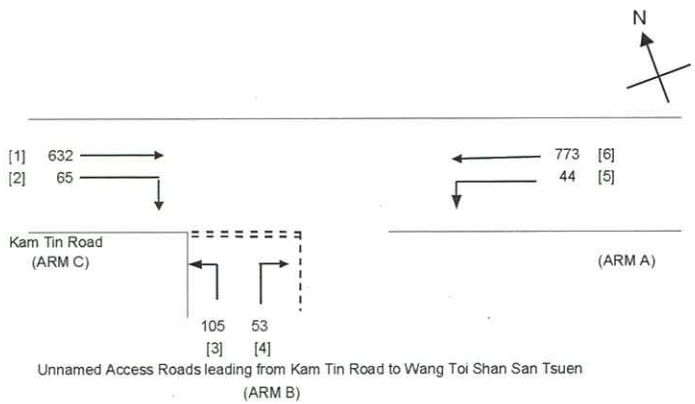
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1273
DFC b-c	=	0.0751
DFC c-b	=	0.1418

CRITICAL DFC = 0.14

X:\Project\30909 Wang Toi Shan San Tsuen - TIA\Data\calculation\[J1_Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen _Kam Tin Road.xlsx]OBS AM

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	44	(pcu/hr)
q a-c	=	773	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	632	(pcu/hr)
q c-b	=	65	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	53	(pcu/hr)
q b-c	=	105	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.664557

THE CAPACITY OF MOVEMENT :

Q b-a	=	264		
Q b-c	=	517	Q b-c (O) =	491.1
Q c-b	=	494		
Q b-ac	=	391.2		

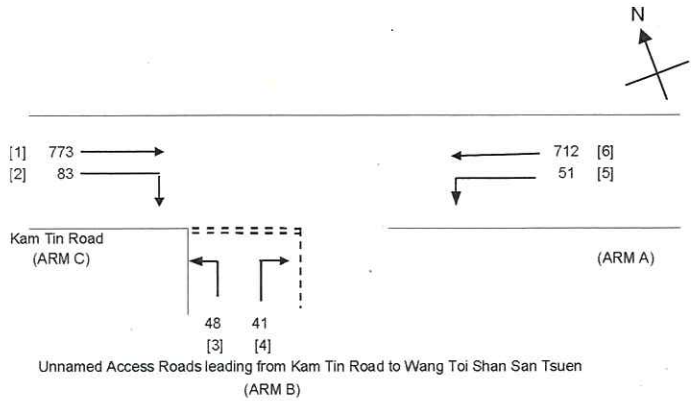
TOTAL FLOW = 1672 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2008
DFC b-c	=	0.2031
DFC c-b	=	0.1316

CRITICAL DFC = 0.20

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	51	(pcu/hr)
q a-c	=	712	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	773	(pcu/hr)
q c-b	=	83	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	41	(pcu/hr)
q b-c	=	48	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.5393258

THE CAPACITY OF MOVEMENT :

Q b-a	=	250		
Q b-c	=	532	Q b-c (O) =	510.2
Q c-b	=	507		
Q b-ac	=	350.1		

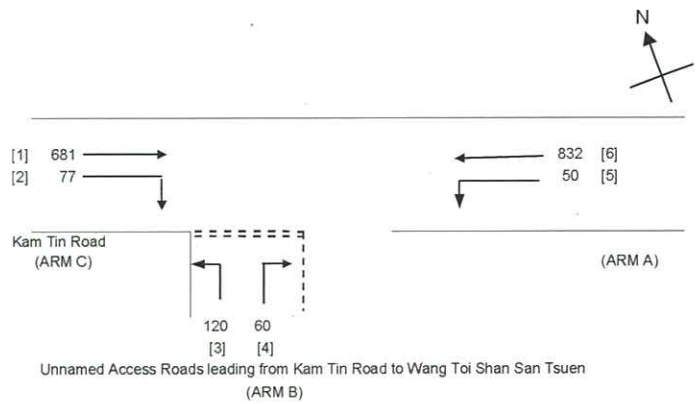
TOTAL FLOW = 1708 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1640
DFC b-c	=	0.0902
DFC c-b	=	0.1637

CRITICAL DFC = 0.16

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	50	(pcu/hr)
q a-c	=	832	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	681	(pcu/hr)
q c-b	=	77	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	60	(pcu/hr)
q b-c	=	120	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.6666667

THE CAPACITY OF MOVEMENT :

Q b-a	=	237		
Q b-c	=	501	Q b-c (O) =	469.3
Q c-b	=	478		
Q b-ac	=	365.3		
TOTAL FLOW	=	1820	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2532
DFC b-c	=	0.2395
DFC c-b	=	0.1611

CRITICAL DFC = 0.25

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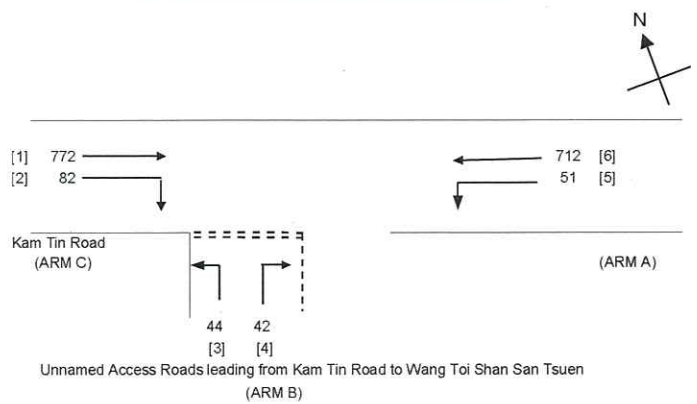
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	51	(pcu/hr)
q a-c	=	712	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	772	(pcu/hr)
q c-b	=	82	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	42	(pcu/hr)
q b-c	=	44	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.5116279

THE CAPACITY OF MOVEMENT :

Q b-a	=	250		
Q b-c	=	532	Q b-c (O) =	509.7
Q c-b	=	507		
Q b-ac	=	343		

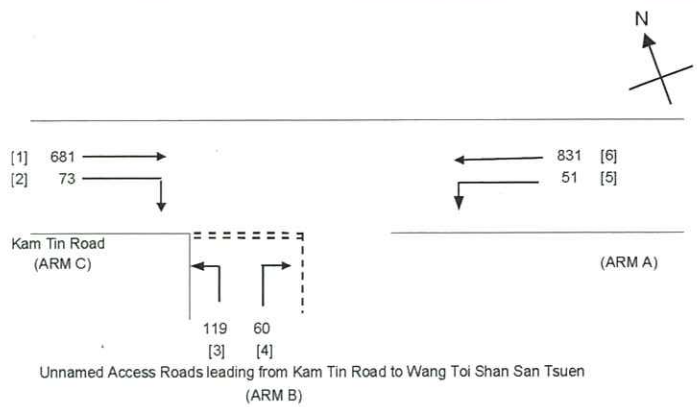
TOTAL FLOW = 1703 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1680
DFC b-c	=	0.0827
DFC c-b	=	0.1617

CRITICAL DFC = 0.17

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	51	(pcu/hr)
q a-c	=	831	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	681	(pcu/hr)
q c-b	=	73	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	60	(pcu/hr)
q b-c	=	119	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.6648045

THE CAPACITY OF MOVEMENT :

Q b-a	=	238		
Q b-c	=	501	Q b-c (O) =	469.4
Q c-b	=	478		
Q b-ac	=	365.6		
TOTAL FLOW	=	1815	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2521
DFC b-c	=	0.2375
DFC c-b	=	0.1527

CRITICAL DFC = 0.25

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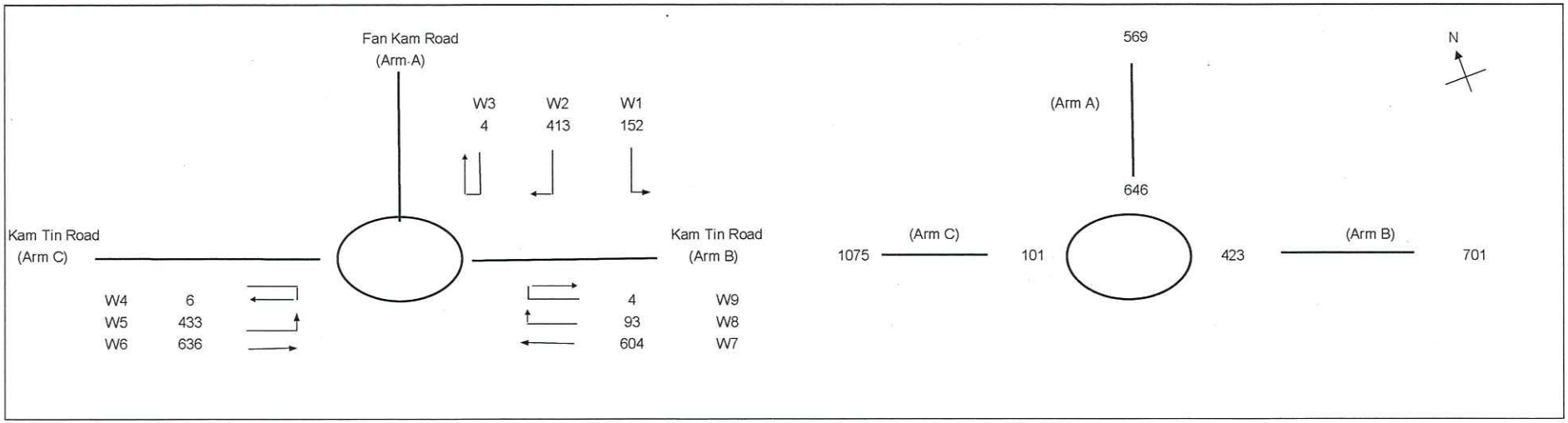
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2021 Observed Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	569	701	1075
Qc	=	Circulating flow across entry (pcu/h)	646	423	101
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	937	1126	1624
DFC	=	Design flow/Capacity = Q/Qe	0.61	0.62	0.66

Total In Sum = 3515 PCU

DFC of Critical Approach = 0.66

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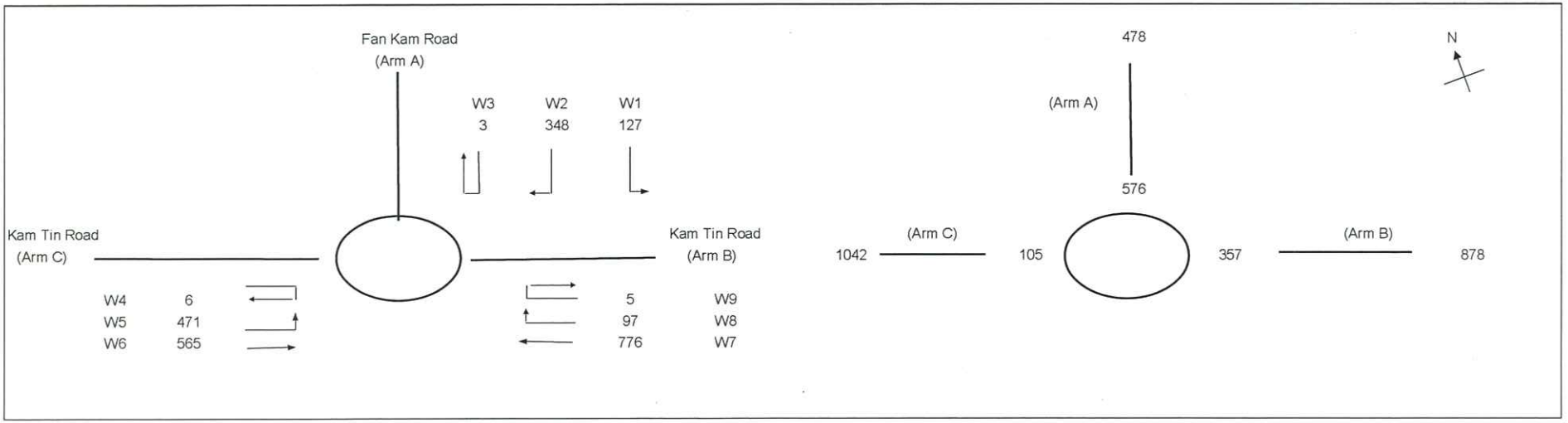
AXON CONSULTANCY LIMITED		ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2021 Observed Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	478	878	1042
Qc	=	Circulating flow across entry (pcu/h)	576	357	105
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	976	1167	1621
DFC	=	Design flow/Capacity = Q/Qe	0.49	0.75	0.64

Total In Sum = 3436 PCU

DFC of Critical Approach = 0.75

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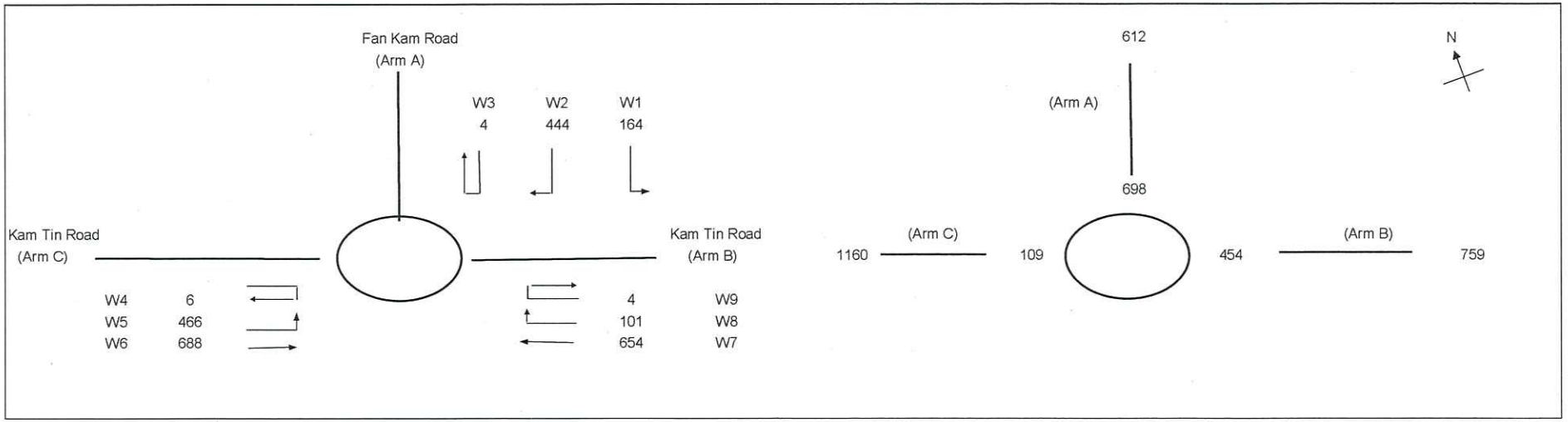
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2024 Reference Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	612	759	1160
Qc	=	Circulating flow across entry (pcu/h)	698	454	109
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	908	1107	1618
DFC	=	Design flow/Capacity = Q/Qe	0.67	0.69	0.72

Total In Sum = 3792 PCU

DFC of Critical Approach = 0.72

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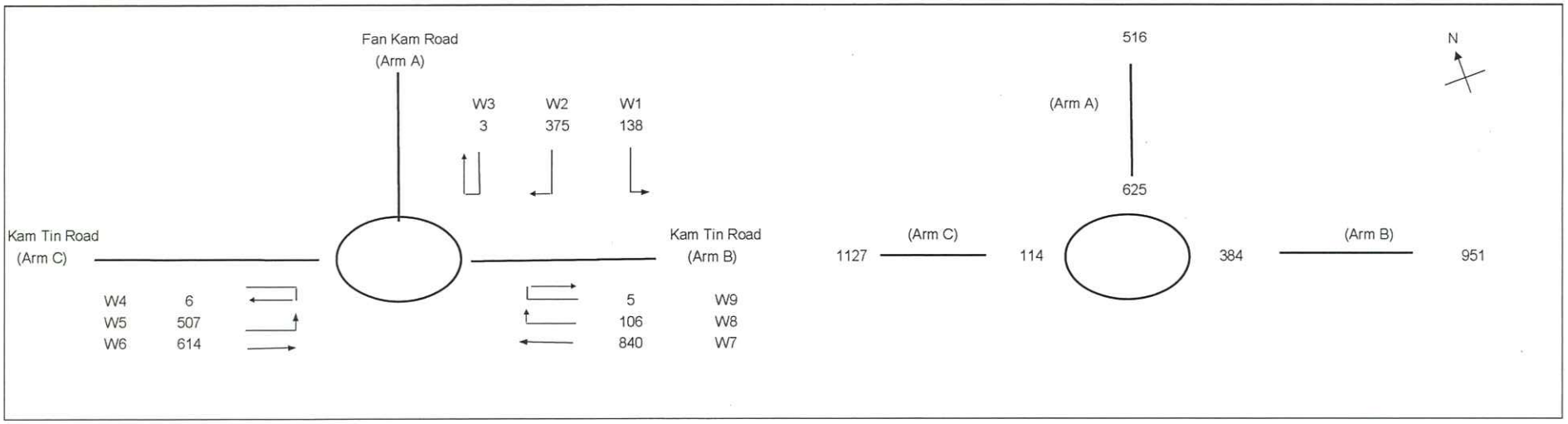
ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2024 Reference Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	516	951	1127
Qc	=	Circulating flow across entry (pcu/h)	625	384	114
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	949	1150	1615
DFC	=	Design flow/Capacity = Q/Qe	0.54	0.83	0.70

Total In Sum = 3717 PCU

DFC of Critical Approach = 0.83

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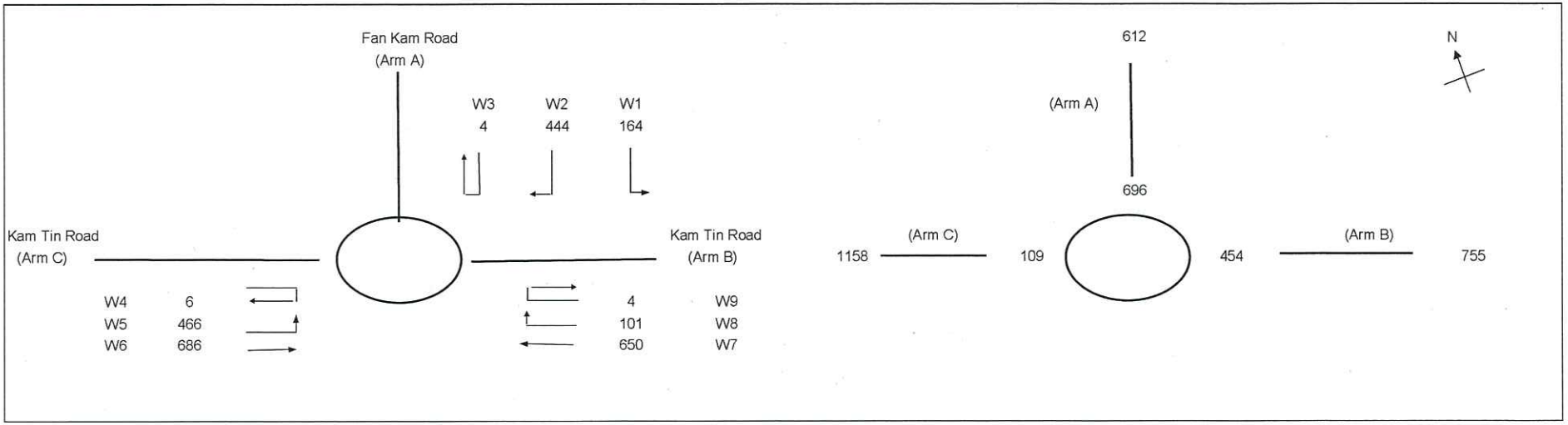
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2024 Design Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	612	755	1158
Qc	=	Circulating flow across entry (pcu/h)	696	454	109
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	909	1107	1618
DFC	=	Design flow/Capacity = Q/Qe	0.67	0.68	0.72

Total In Sum = 3784 PCU

DFC of Critical Approach = 0.72

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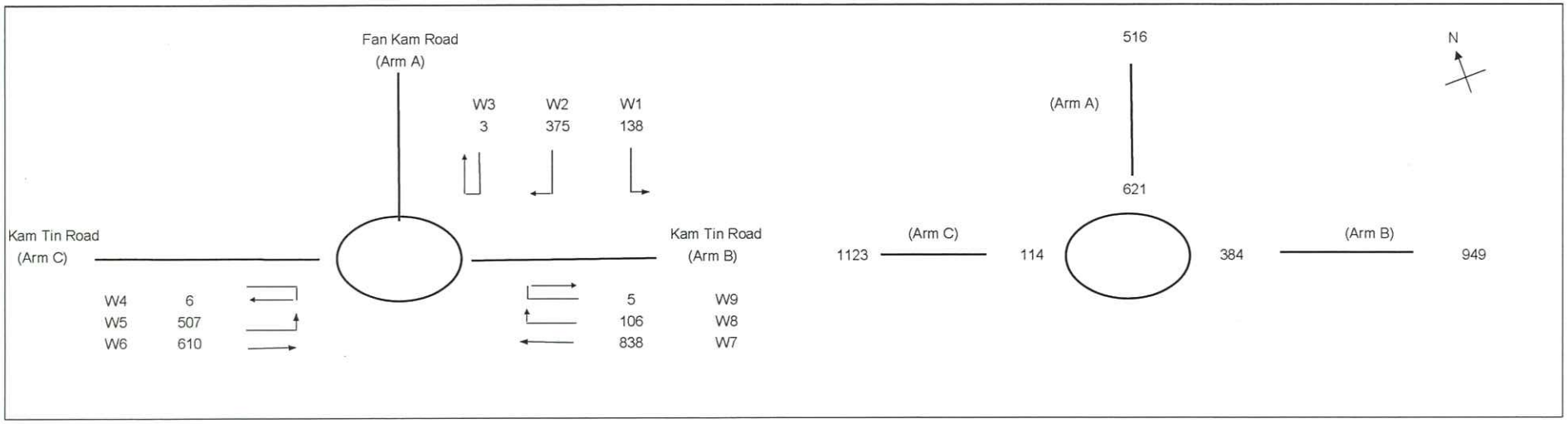
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2024 Design Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	516	949	1123
Qc	=	Circulating flow across entry (pcu/h)	621	384	114
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	951	1150	1615
DFC	=	Design flow/Capacity = Q/Qe	0.54	0.83	0.70

Total In Sum = 3707 PCU

DFC of Critical Approach = 0.83

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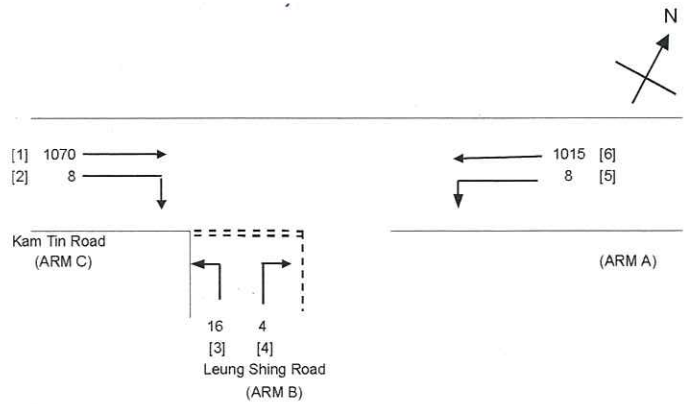
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	8	(pcu/hr)
q a-c	=	1015	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1070	(pcu/hr)
q c-b	=	8	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	16	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.8

THE CAPACITY OF MOVEMENT :

Q b-a	=	128		
Q b-c	=	433	Q b-c (O) =	429.6
Q c-b	=	403		
Q b-ac	=	293.2		

TOTAL FLOW = 2121 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0313
DFC b-c	=	0.0370
DFC c-b	=	0.0199

CRITICAL DFC = 0.04

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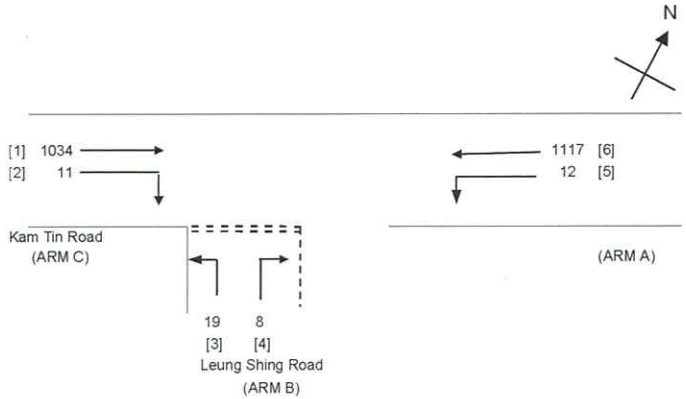
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	12	(pcu/hr)
q a-c	=	1117	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1034	(pcu/hr)
q c-b	=	11	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	8	(pcu/hr)
q b-c	=	19	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7037037

THE CAPACITY OF MOVEMENT :

Q b-a	=	105		
Q b-c	=	404	Q b-c (O) =	396.3
Q c-b	=	376		
Q b-ac	=	219.1		

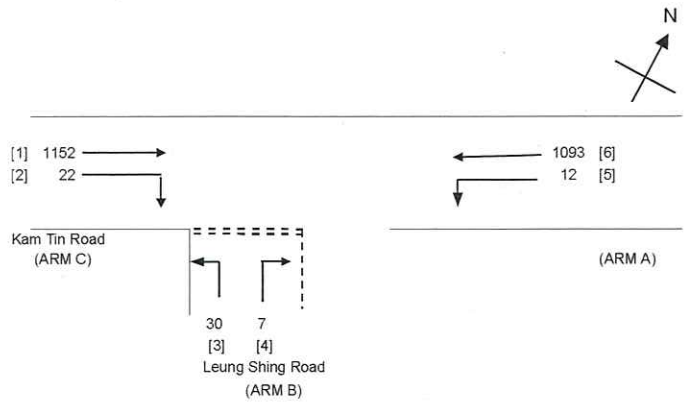
TOTAL FLOW = 2201 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0762
DFC b-c	=	0.0470
DFC c-b	=	0.0293

CRITICAL DFC = 0.08

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	12	(pcu/hr)
q a-c	=	1093	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1152	(pcu/hr)
q c-b	=	22	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	7	(pcu/hr)
q b-c	=	30	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.8108108

THE CAPACITY OF MOVEMENT :

Q b-a	=	87		
Q b-c	=	411	Q b-c (O) =	402.7
Q c-b	=	382		
Q b-ac	=	241.1		

TOTAL FLOW = 2316 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0805
DFC b-c	=	0.0730
DFC c-b	=	0.0576

CRITICAL DFC = 0.08

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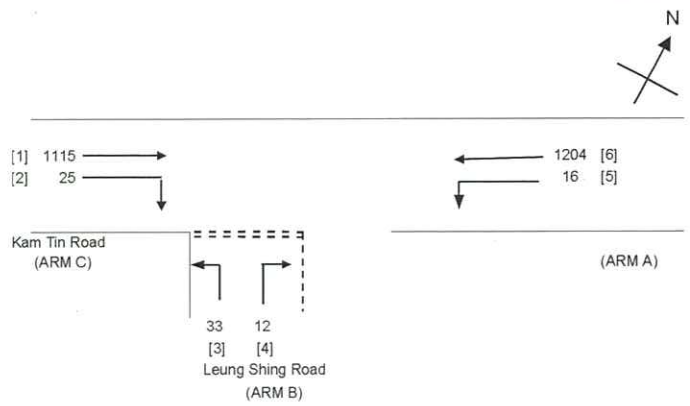
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	16	(pcu/hr)
q a-c	=	1204	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1115	(pcu/hr)
q c-b	=	25	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	33	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7333333

THE CAPACITY OF MOVEMENT :

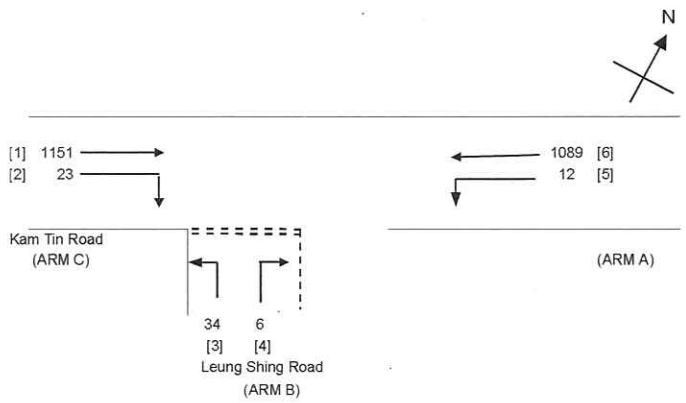
Q b-a	=	61		
Q b-c	=	380	Q b-c (O) =	361.3
Q c-b	=	352		
Q b-ac	=	158.7		
TOTAL FLOW	=	2405	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1967
DFC b-c	=	0.0868
DFC c-b	=	0.0710

CRITICAL DFC = 0.20

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	12	(pcu/hr)
q a-c	=	1089	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1151	(pcu/hr)
q c-b	=	23	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	6	(pcu/hr)
q b-c	=	34	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.85

THE CAPACITY OF MOVEMENT :

Q b-a	=	88		
Q b-c	=	412	Q b-c (O) =	405
Q c-b	=	383		
Q b-ac	=	265.4		

TOTAL FLOW = 2315 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0682
DFC b-c	=	0.0825
DFC c-b	=	0.0601

CRITICAL DFC = 0.08

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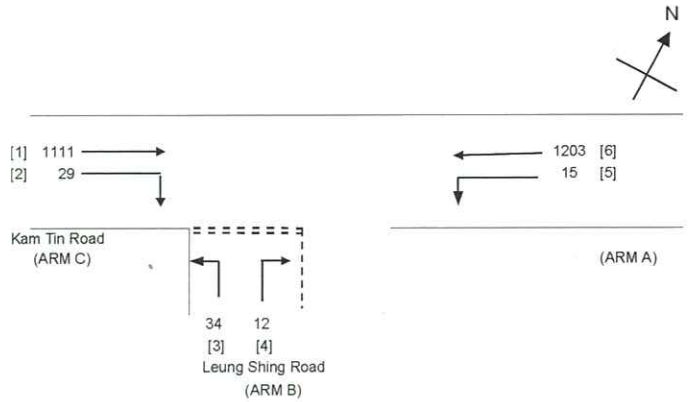
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	15	(pcu/hr)
q a-c	=	1203	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1111	(pcu/hr)
q c-b	=	29	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	34	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7391304

THE CAPACITY OF MOVEMENT :

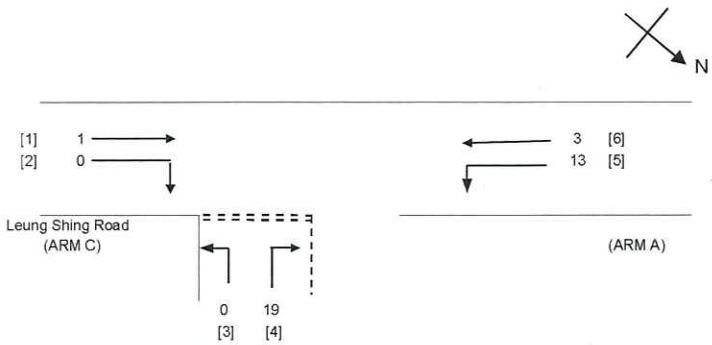
Q b-a	=	61		
Q b-c	=	380	Q b-c (O) =	361.3
Q c-b	=	353		
Q b-ac	=	160.7		
TOTAL FLOW	=	2404	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1967
DFC b-c	=	0.0895
DFC c-b	=	0.0822

CRITICAL DFC = 0.20

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	13	(pcu/hr)
q a-c	=	3	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	1	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	19	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

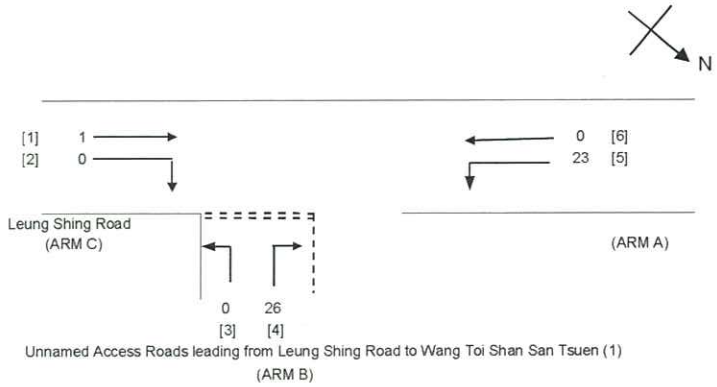
Q b-a	=	628		
Q b-c	=	733	Q b-c (O) =	727.5
Q c-b	=	755		
Q b-ac	=	628		
TOTAL FLOW	=	36	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0303
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.03

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	23	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	1	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	26	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	627		
Q b-c	=	732	Q b-c (O) =	724.4
Q c-b	=	753		
Q b-ac	=	627		
TOTAL FLOW	=	50	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0415
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.04

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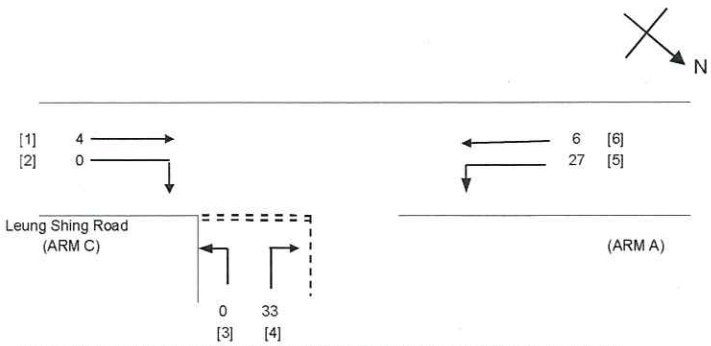
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	27	(pcu/hr)
q a-c	=	6	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	4	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	33	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	624		
Q b-c	=	730	Q b-c (O) =	720.3
Q c-b	=	750		
Q b-ac	=	624		

TOTAL FLOW = 70 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0529
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.05

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AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
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J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
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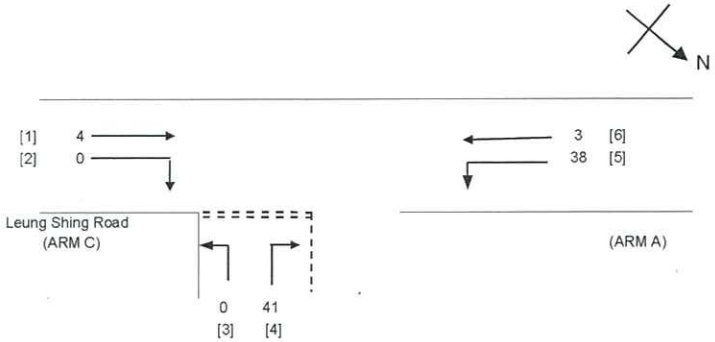

NOTES : (GEOMETRIC INPUT DATA)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	38	(pcu/hr)
q a-c	=	3	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	4	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	41	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	624		
Q b-c	=	730	Q b-c (O) =	718
Q c-b	=	748		
Q b-ac	=	624		

TOTAL FLOW = 86 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0657
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.07

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J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
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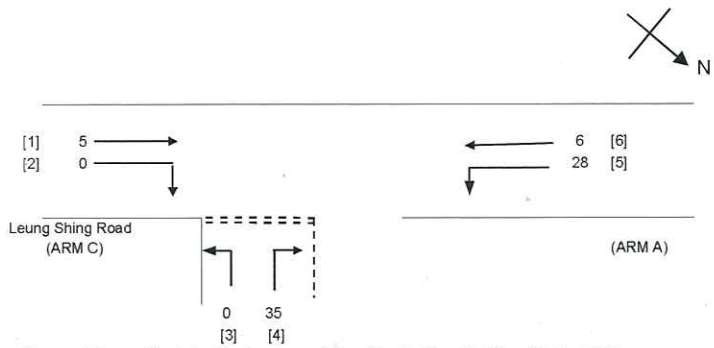

Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	6	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	5	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	35	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	624		
Q b-c	=	730	Q b-c (O) =	719.8
Q c-b	=	750		
Q b-ac	=	624		

TOTAL FLOW = 74 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0561
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.06

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
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J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
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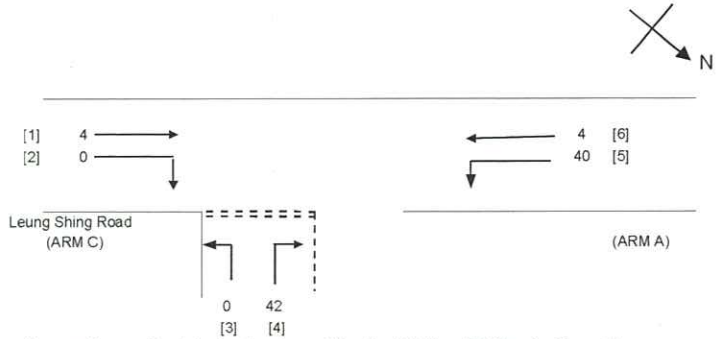

NOTES : (GEOMETRIC INPUT DATA)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	40	(pcu/hr)
q a-c	=	4	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	4	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	42	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	623		
Q b-c	=	729	Q b-c (O) =	716.7
Q c-b	=	747		
Q b-ac	=	623		

TOTAL FLOW = 90 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0674
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.07

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AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
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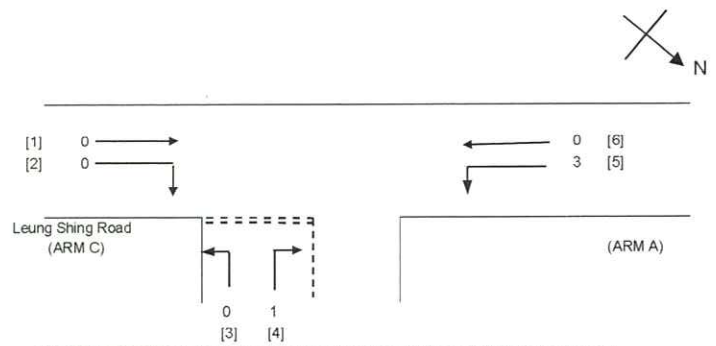
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.7
Q c-b	=	759		
Q b-ac	=	578		

TOTAL FLOW = 4 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0017
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

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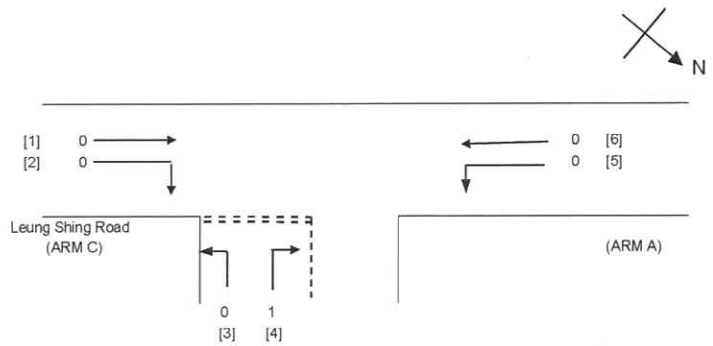
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.7
Q c-b	=	760		
Q b-ac	=	578		

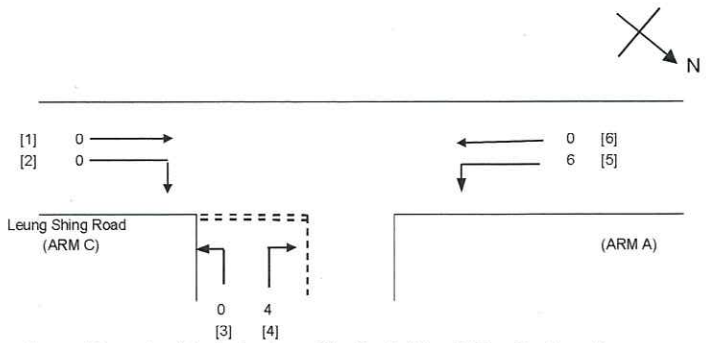
TOTAL FLOW = 1 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0017
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	6	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	577		
Q b-c	=	633	Q b-c (O) =	631.9
Q c-b	=	758		
Q b-ac	=	577		

TOTAL FLOW = 10 (PCU/HR)

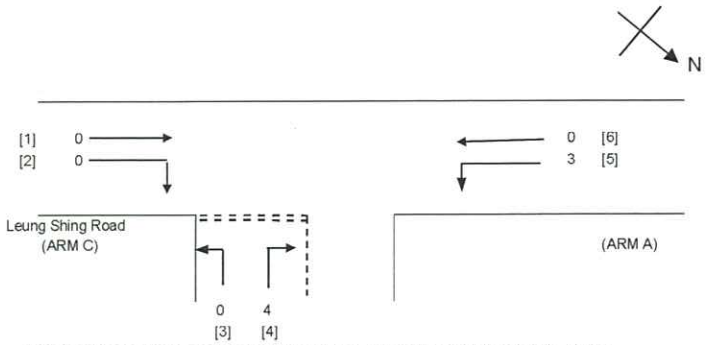
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0069
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

X:\Project\30909 Wang Toi Shan San Tsuen - TIA\Data\calculation\[J5_Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)_Leung Shing Road.xlsx]REF AM

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	631.9
Q c-b	=	759		
Q b-ac	=	578		

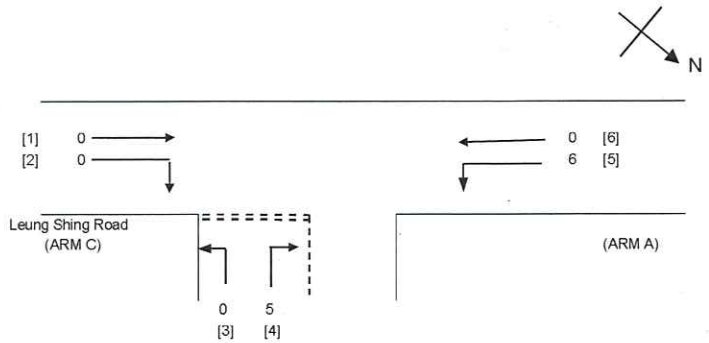
TOTAL FLOW = 7 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0069
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	6	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	5	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

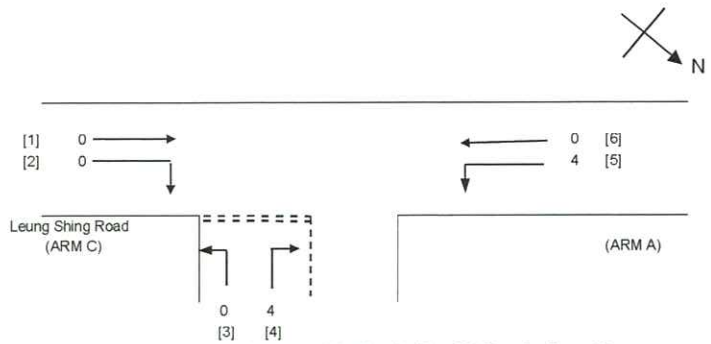
Q b-a	=	577		
Q b-c	=	633	Q b-c (O) =	631.6
Q c-b	=	758		
Q b-ac	=	577		
TOTAL FLOW	=	11	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0087
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	4	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	631.9
Q c-b	=	759		
Q b-ac	=	578		
TOTAL FLOW	=	8	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

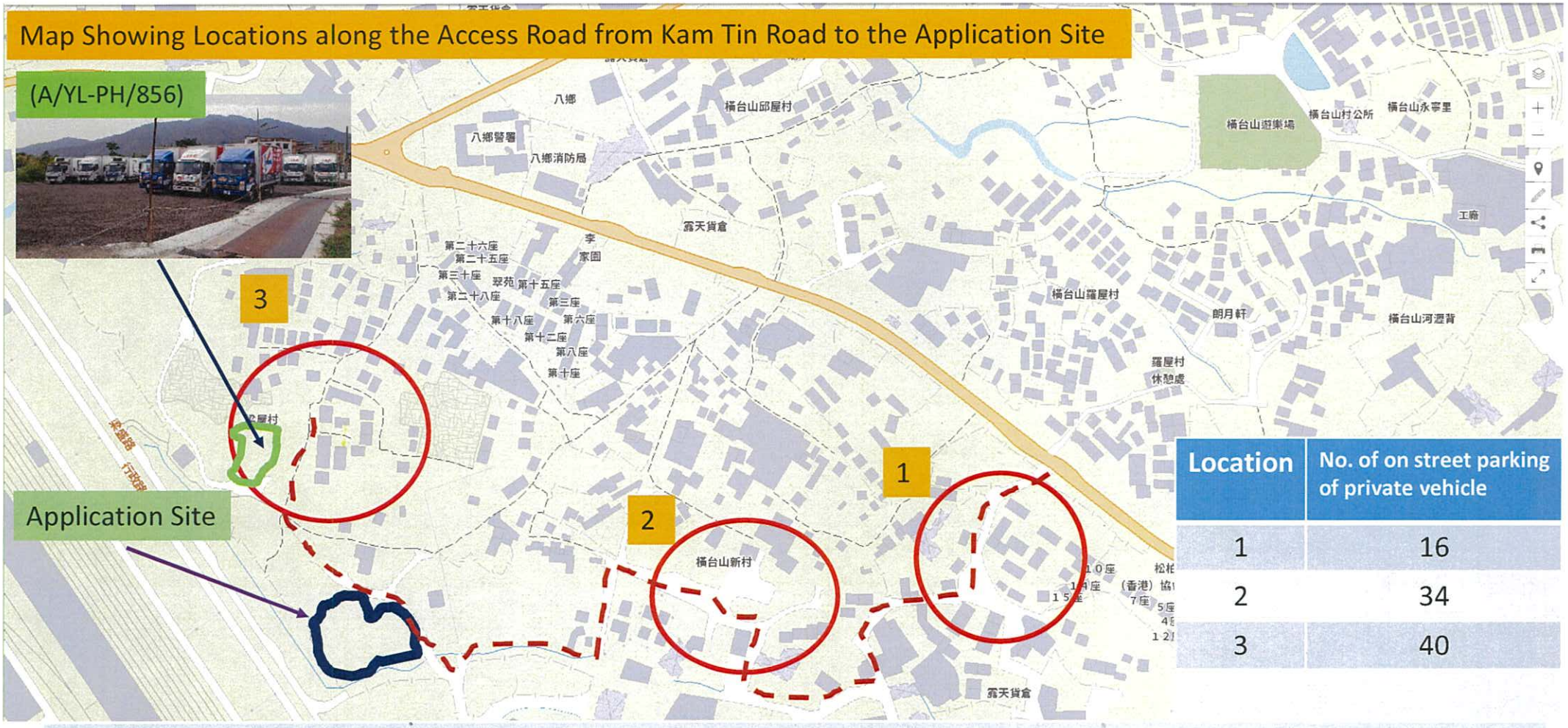
DFC b-a	=	0.0069
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

Appendix C

Aerial Photos Showing the Existing Parking Situation in Wang Toi Shan San Tsuen

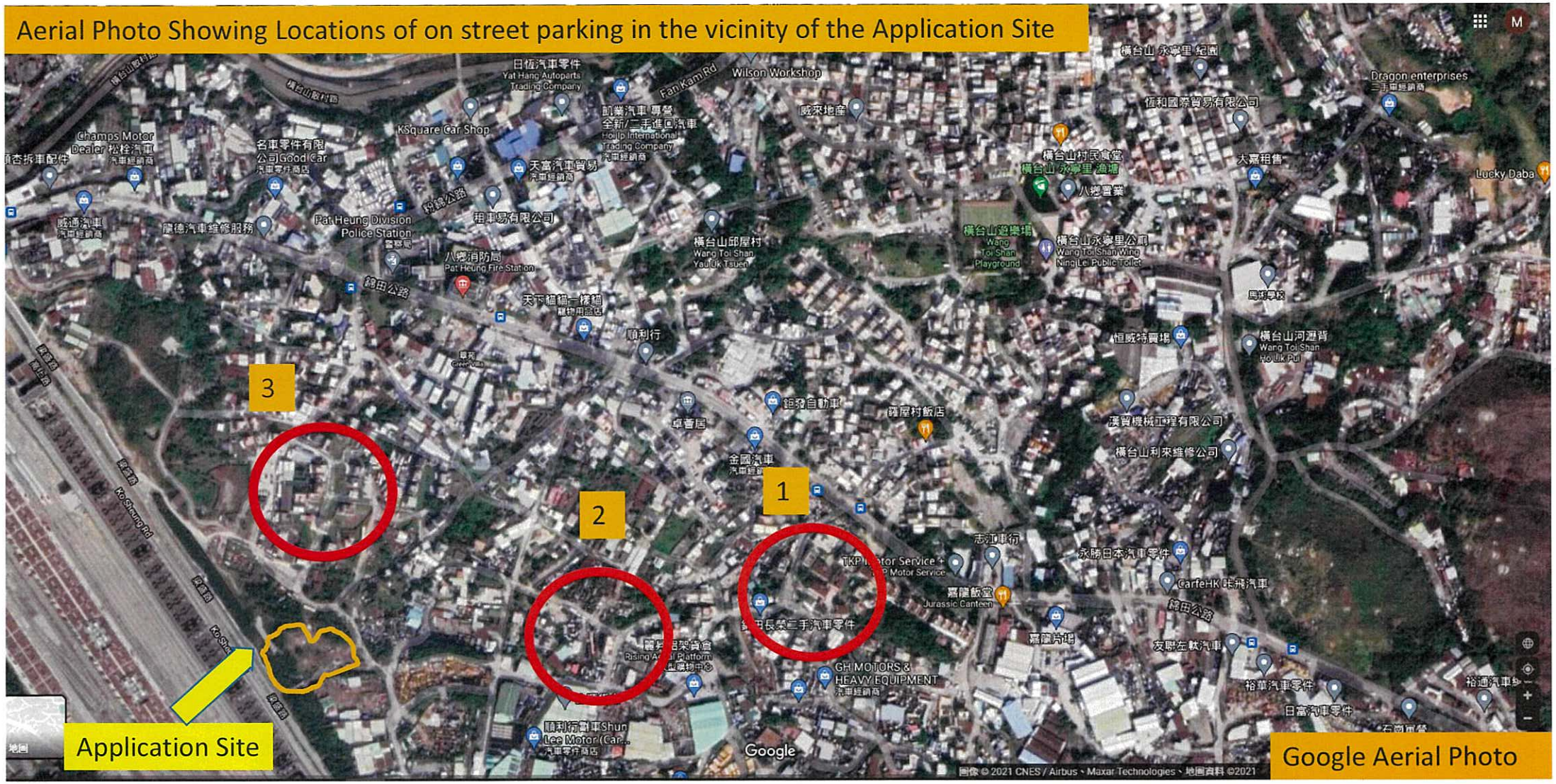
Map Showing Locations along the Access Road from Kam Tin Road to the Application Site



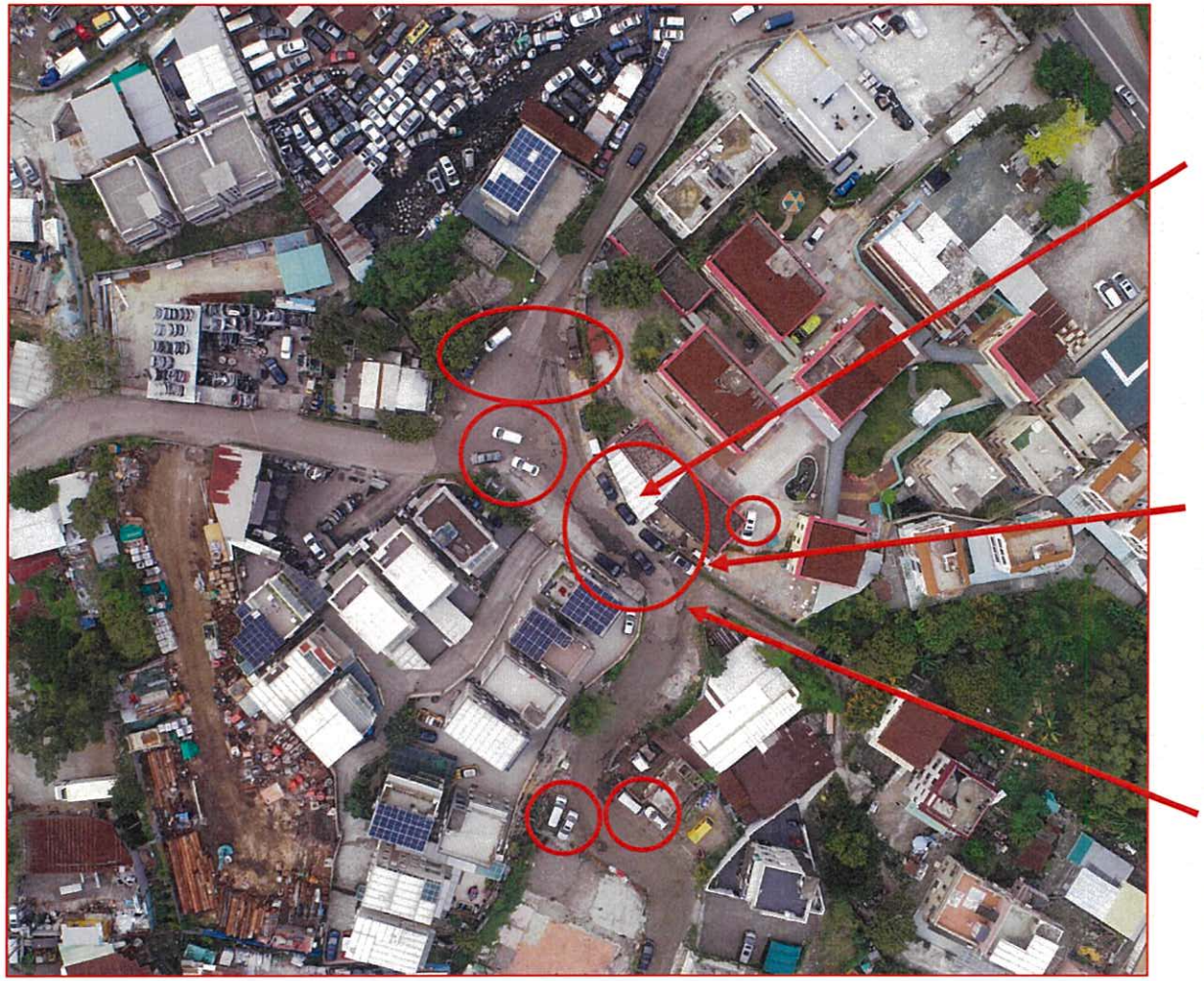
Location	No. of on street parking of private vehicle
1	16
2	34
3	40

Notes: (1) Parking of vehicles in "V" zone without planning approval is an offence under the Town Planning Ordinance;
(2) A "Public Vehicle Park" approved by the Town Planning Board on 6 Nov., 2020. The Public Vehicle Park has 15 nos. of parking spaces for private cars and nos. of parking spaces for Light Goods Vehicles.

Aerial Photo Showing Locations of on street parking in the vicinity of the Application Site



On street parking Location 1:



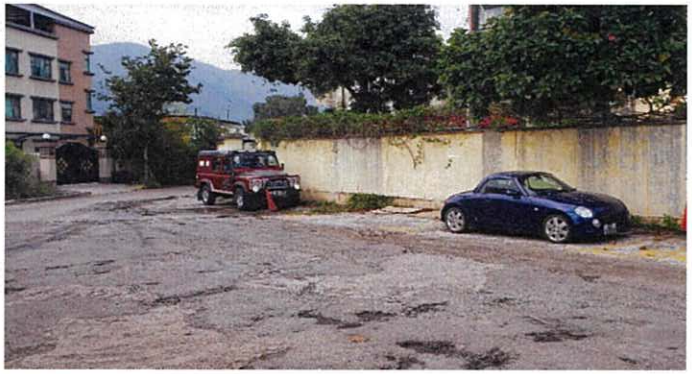


Photo taken at 5:15 pm dated 28.4.2021 by the Applicant

On street parking Location 2:

On street parking Location 2:

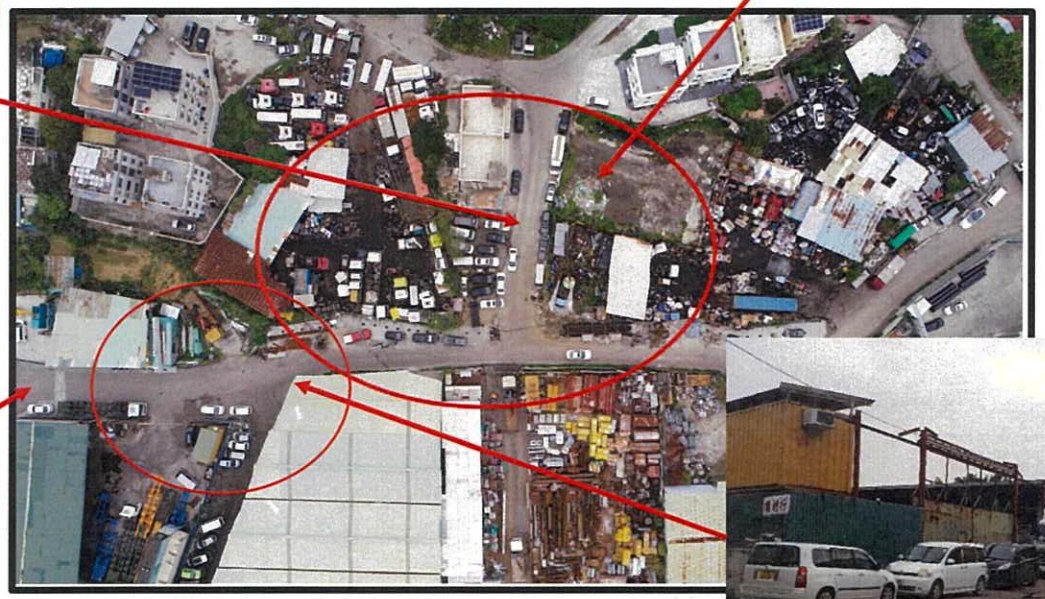


Photo taken at 5:30 pm dated 28.4.2021 by the Applicant

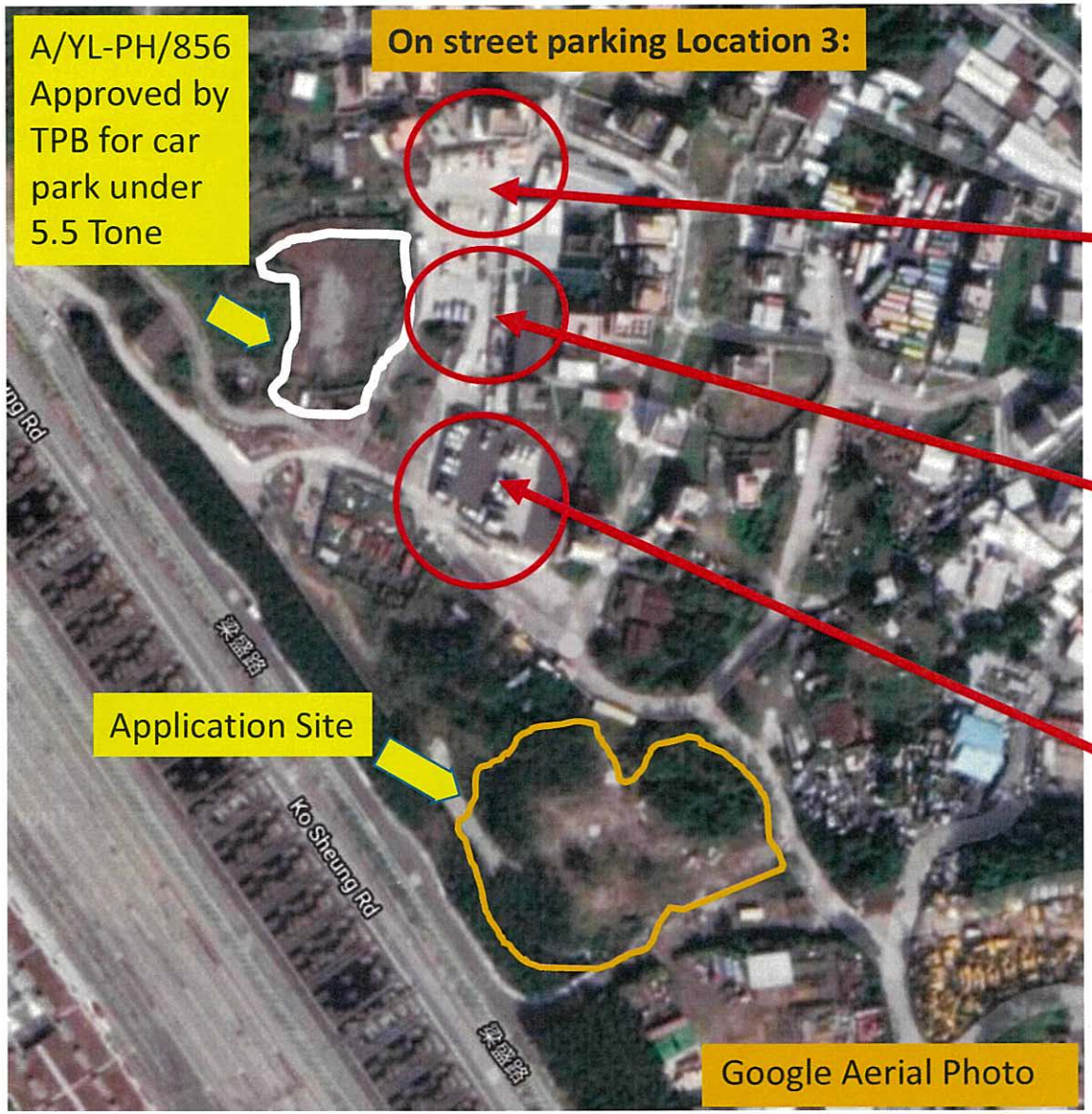


Photo taken at 5:45 pm dated 28.4.2021 by the Applicant

*The on-site aerial photo is unavailable since Location 3 is within the restricted zone for the use of unmanned aircraft system

才鴻顧問有限公司
TOP BRIGHT CONSULTANTS LIMITED

Your Ref.: TPB/ A/YL-PH/857
Our Ref.: 20/653/L08

By Post & Email

July 16, 2021

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

Dear Sir/Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years in "Agriculture" ("AGR") Zone at Lots 1869(Part), 1870(Part), 1872(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in DD111, Pat Heung, Yuen Long, New Territories
(Application No. A/YL-PH/857)

In response to the comments from the Transport Department dated on 31.3.2021, we submit herewith the Further Information dated 16.6.2021 for your consideration.

Should you have any queries or require further information, please feel free to contact the undersigned at .

Yours faithfully,
For and on behalf of
Top Bright Consultants Ltd.

Lo Ming Kong

Encl.

c.c.
DPO/ FS & YLE - Attn: Mr. WAN Tou Wei, Todd (By Email - ttwwan@pland.gov.hk)
DPO/FS&YLE - Attn.: Mr. LUNG Ching Ho, Otto (By Email - ochlung@pland.gov.hk)
Chief Force Limited (the Applicant)

Comments from Transport Department **Dated 31 March 2021 (via Planning Department)**	**Responses**
a) The applicant should provide traffic assessment of Leung Shing Road and the local access connecting Kam Tin Road near Lo Uk Tsuen.	Noted. Leung Shing Road (**L3**) and the local access connecting Kam Tin Road near Lo Uk Tsuen (**L4**) are classified as single-track access road. With reference to Transport and Planning Design Manual (TPDM) Volume 2, the carriageway capacity of a single-track access road is **100 vehicle/hour** for both directions. Based on the adjusted traffic survey results, the 2021 PM peak-hour traffic flows at **L4** are 165 vehicle/hour for both directions, which give a V/C ratio of 1.65 when 100 vehicle/hour is adopted as the carriageway capacity of the road link. According to TPDM, a V/C ratio above 1.2 represents forced or breakdown flow conditions with widespread congestion and extensively long traffic queues. These are considered inconsistent with the actual traffic situation of **L4**, as it was observed that the maximum vehicle queues at **L4** were 3 vehicles only and the level of traffic circulation was generally within acceptable level during the survey period. Furthermore, the clear road widths of **L3** and **L4** are approximately 5m, which are wider than the typical road width of single-track access road i.e. 3.5m, and allow private cars (the major vehicle types on the concerned road links according to the survey results) to pass either in opposing directions. In view of the above, <u>an adjustment factor of **2.0** is further applied on the carriageway capacities of **L3** and **L4** to reflect the realistic traffic situation of the road links</u>. The estimated carriageway capacities of **L3** and **L4** are hence: 100 x 2 = **200 vehicle/hour** for both directions. ----------

	Besides, the carriageway capacities of the concerned sections of Kam Tin Road (i.e. **L1** & **L2**, as shown in **Figure 2.1**) are revised as follows: The concerned sections of Kam Rin Road are classified as single-two lane rural roads. For assessment purpose, it is assumed that the carriageway capacities of **L1** and **L2** are equivalent to 6.75m single-two lane district distributors, i.e. 1,400 vehicle/hour for both directions, with reference to TPDM Volume 2. As advised in TPDM, a reduction factor of -10% is further applied on the capacities of the concerned road links for 20-25% heavy vehicle content in the traffic. Hence, the estimated carriageway capacities of **L1** and **L2** are: 1400 x (1-10%) = **1,260 vehicle/hour** for both directions. ---------- According to the discussion paper no. 2019/56 for the Traffic and Transport Committee of Yuen Long District Council (see **Appendix A**), the remaining unimproved sections of Kam Tin Road and Lam Kam Road, i.e. Kam Tin Road section between Tung Wui Road and Lam Kam Road; and Lam Kam Road section between Kam Tin Road and Kadoorie Farm, will be upgraded to a standard width single two-lane carriageway. Details for part of the proposed road widening scheme are listed as follows: • Upgrading of the remaining unimproved sections of Kam Tin Road (between Fan Kam Road and Lam Kam Road) and Lam Kam Road from a substandard single-two lane carriageway to a standard of at least **7.3m wide carriageway**, which cover **L1**. • Upgrading of the remaining unimproved sections of Kam Tin Road (between Tung Wui Road and Fan Kam Road) to **10.3m wide carriageway**, which cover **L2**. The subject road improvement works will increase the carriageway capacities of **L1** and **L2**, and they are calculated based on the guidelines from TPDM Volume 2 as shown below:

	The estimated carriageway capacity of **L1** (After road improvement works): 1700 (carriageway capacity of a 7.3m district distributor) x 0.9 (reduction factor for 20-25% heavy vehicle content in the traffic) = **1,530 vehicle/hour** for both directions. The estimated carriageway capacity of **L2** (After road improvement works): 2000 (carriageway capacity of a 10.0m district distributor) x 0.9 (reduction factor for 20-25% heavy vehicle content in the traffic) = **1,800 vehicle/hour** for both directions. For the sake of comprehensiveness, link capacity assessment has been carried out under the scenarios with and without the completion of road improvement works in the design year of 2024. ---------- The revised link capacity analysis results are enclosed in **Appendix B** for your review.
b) The applicant should further elaborate the net decrease of traffic in the unnamed access road.	Noted. Given the proposed development is targeted to serve the villagers and their visitors in Wang Toi Shan San Tsuen exclusively, and an existing local demand for 75 additional private car parking spaces has been demonstrated by the aerial photos showing the number of private cars which are parked freely on the local track within the village (see more details in **item C** of the R-t-C document), it is considered that the traffic generation and attraction of the proposed development has been reflected on the existing traffic of the appraised road network. Hence, <u>no additional traffic is expected to be induced on Kam Tin Road or other district road networks due to the proposed development</u>. Nonetheless, it is anticipated that the proposed development will alter the driving behaviors of the villagers and their visitors and affect the surrounding traffic flow patterns in Wang Toi Shan Tsuen owing to its geographic position on the local road network. To estimate the net development flows of the proposed development, considerations are given to the existing traffic distribution patterns in Wang Toi Shan San Tsuen and Wang Toi Shan Leung Uk Tsuen, the estimated traffic generation and attraction, and the trip assignment of the proposed development, which are detailed as follows:

	1. Identifying the Existing Traffic Distribution Patterns at the Two Village Accesses of Wang Toi Shan San Tsuen and Wang Toi Shan Leung Uk Tsuen Wang Toi Shan San Tsuen, and the adjacent Wang Toi Shan Leung Uk Tsuen are served by two major village accesses, namely Leung Shing Road (**L3**) and the local access connecting Kam Tin Road near Lo Uk Tsuen (**L4**). According to the adjusted traffic count survey results, the traffic distribution patterns at the two village accesses during AM and PM peak hours are summarised in **Table 1.1** and **1.2,** respectively.

Table 1.1 2021 Observed Traffic Distribution Pattern at L3 and L4 during AM Peak Period

Direction	L3	L4	Total
	Traffic Flows in veh/hr (proportion of total hourly traffic volume in the villages)		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	2 (1%)	46 (31%)	48 (32%)
From/to Fan Kam Road	8 (5%)	35 (24%)	43 (29%)
From/to Yuen Long or Tsing Long Highway	25 (17%)	30 (22%)	59 (39%)
Total	36 (23%)	115 (77%)	150 (100%)

Table 1.2 2021 Observed Traffic Distribution Pattern at L3 and L4 during PM Peak Period

Direction	L3	L4	Total
	Traffic Flows in veh/hr (proportion of total hourly traffic volume in the villages)		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	1 (1%)	67 (31%)	68 (32%)
From/to Fan Kam Road	18 (8%)	49 (23%)	67 (31%)
From/to Yuen Long or Tsing Long Highway	29 (14%)	49 (23%)	78 (37%)
Total	48 (23%)	165 (77%)	213 (100%)

Note:

*1. The proportion of total hourly traffic volume presented in **Table 1.1 and 1.2** are rounded to the nearest integers (1% at minimum).*

	2. Adopting the Existing Traffic Distribution Patterns on the Hourly Traffic Volume Equivalent to the Peak Hour Development Flows Based on the updated parking provisions of the proposed development, the peak-hour development traffic (including generation and attraction) of the proposed development is estimated to be **25 vehicle/hour** (see more details in **item C** of the R-t-C document). By adopting the traffic distribution patterns as presented in **Table 1.1** and **Table 1.2** on this specific traffic volume, the results are summarised in **Table 1.3** and **1.4**. They represent the traffic distribution patterns of the existing on-street parking vehicles in the village, which will be later contained by the proposed public vehicle park.

Table 1.3 2021 Observed Traffic Distribution Pattern at L3 and L4 during AM Peak Hour on an Hourly Traffic Volume of 25 vehicle/hour

Direction	L3	L4	Total
	Traffic Flows in veh/hr (proportion of total hourly traffic volume in the villages)		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	1 (4%)	8 (32%)	9 (36%)
From/to Fan Kam Road	1 (4%)	6 (24%)	7 (28%)
From/to Yuen Long or Tsing Long Highway	4 (16%)	5 (20%)	9 (36%)
Total	6 (24%)	19 (76%)	**25** (100%)

Table 1.4 2021 Observed Traffic Distribution Pattern at L3 and L4 during PM Peak Hour on an Hourly Traffic Volume of 25 Vehicle/hour

Direction	L3	L4	Total
	Traffic Flows in veh/hr (proportion of total hourly traffic volume in the villages)		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	1 (4%)	8 (32%)	9 (36%)
From/to Fan Kam Road	2 (8%)	6 (24%)	8 (32%)
From/to Yuen Long or Tsing Long Highway	3 (12%)	5 (20%)	8 (32%)
Total	6 (24%)	19 (76%)	**25** (100%)

Note:
1. *The traffic flows presented in **Table 1.3 and 1.4** are rounded to the nearest integers (1 veh/hr at minimum).*
2. *Fine adjustments are made to the proportion of the traffic flows due to the decrease in total traffic volume for distribution.*

	3. Estimating the Trip Assignment and Net Development Flows of the Proposed Development
	
	To estimate the net development flows of the proposed development, the following considerations are made:
	
	• Drivers tend to take routes which are less congested and pass through the least number of road junctions to minimise travel delay.
	
	• As demonstrated in the link capacity assessment results as shown in **Appendix B**, Kam Tin Road is currently overloaded during AM and PM peak hours. Moreover, it is observed that section **L1** of Kam Tin Road in general has a better operational performance than section **L2**, which indicates that it is relatively less congested.
	
	• In view of the above and the geographical location of the proposed development, it is assumed that:
	
	  o All of the trips from/to Lam Kam Road, Route Twisk or Kam Sheung Road will be diverted via **L4**.
	
	  o All of the trips from/to Yuen Long or Tsing Long Highway will be diverted via **L3**.
	
	  o Most of the trips from/to Fan Kam Road will be diverted via **L4**, as suggested from the existing traffic distribution patterns.
	
	Taking account of the traffic distribution patterns presented in **Table 1.3** and **1.4**, as well as the above considerations, the trip assignment of the proposed development at **L3** and **L4** during AM and PM peak hours are estimated and summarised in **Table 1.5** and **1.6**.

Table 1.5 Estimated Trip Assignment of the Proposed Development at L3 and L4 during AM Peak Hour

Direction	L3	L4	Total
	Development Flows (Net Development Flows) in veh/hr		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	0 (-1)	9 (+1)	9
From/to Fan Kam Road	1	6	7
From/to Yuen Long or Tsing Long Highway	9 (+5)	0 (-5)	9
Total	10 (+4)	15 (-4)	**25**

Table 1.6 Estimated Trip Assignment of the Proposed Development at L3 and L4 during PM Peak Hour

Direction	L3	L4	Total
	Development Flows (Net Development Flows) in veh/hr		
From/to Lam Kam Road, Route Twisk or Kam Sheung Road	0 (-1)	9 (+1)	9
From/to Fan Kam Road	2	6	8
From/to Yuen Long or Tsing Long Highway	8 (+5)	0 (-5)	8
Total	10 (+4)	15 (-4)	**25**

Note:
*1. Colour Indices: **Green** = net increase in traffic; **Red** = net decrease in traffic.*
2. It is assumed that after the development, the drivers as users of the public vehicle park who:
*use **L3** to travel from/to Lam Kam Road, Road Twisk or Kam Sheung Road originally will use **L4** instead;*
*use **L4** to travel from/to Yuen Long or Tsing Long Highway originally will use **L3** instead.*

	As shown in **Table 1.5** and **1.6** and **Figure 2.6**, it is anticipated that a net development flow of **+4/+4 vehicle/hour** and **-4/-4 vehicle/hour** will be induced by the proposed development at **L3** and **L4** respectively during AM/PM peak hours. Therefore, a net increase of traffic at **L3**, and a net decrease of traffic at **L4** are expected to be resulted from the proposed development.

c) The applicant should also tabulated the number of trips that are generated by on-street parking and by new traffic due to the development.	Noted. To determine the number of trips that will be generated by on-street parking and by new traffic due to the proposed development, considerations are given to the proposed parking provisions of the development and the unsatisfied parking demand of Wang Toi Shan San Tsuen, which are reflected on the existing on-street parking situation in the village. To observe the existing situation of private cars which are parked freely along the local track in the village, a vehicle count survey was conducted at three identified major on-street parking locations during 1715 – 1745 hour on 28 April 2021, as shown in **Appendix D**. As demonstrated on the aerial photos enclosed in **Appendix D**, it was discovered that a minimum of 90 private cars were parked freely along the local track of Wang Toi Shan San Tsuen, which accounts for an existing parking demand for 90 additional private car parking spaces in the village. Considering 15 private car parking spaces will be provided under the approved planning application no. A/YL-PH/856, the current unsatisfied parking demand of Wang Toi Shan San Tsuen is: 90 – 15 = **75 nos. of private car parking spaces**. In view of the above, the proposed number of private car parking spaces under the proposed development is reduced from 80 to 75, and the revised site layout is shown in **Figure 1.1**. After reduction in parking provisions, the proposed public vehicle park is considered to absorb all the identified on-street parking vehicles in Wang Toi Shan San Tsuen. Therefore, no on-street parking or new traffic is anticipated to be generated from the proposed development.

Based on the update to the parking provision, the peak-hour traffic generation and attraction rates of the proposed development are revised and summarised in **Table 3.1**.

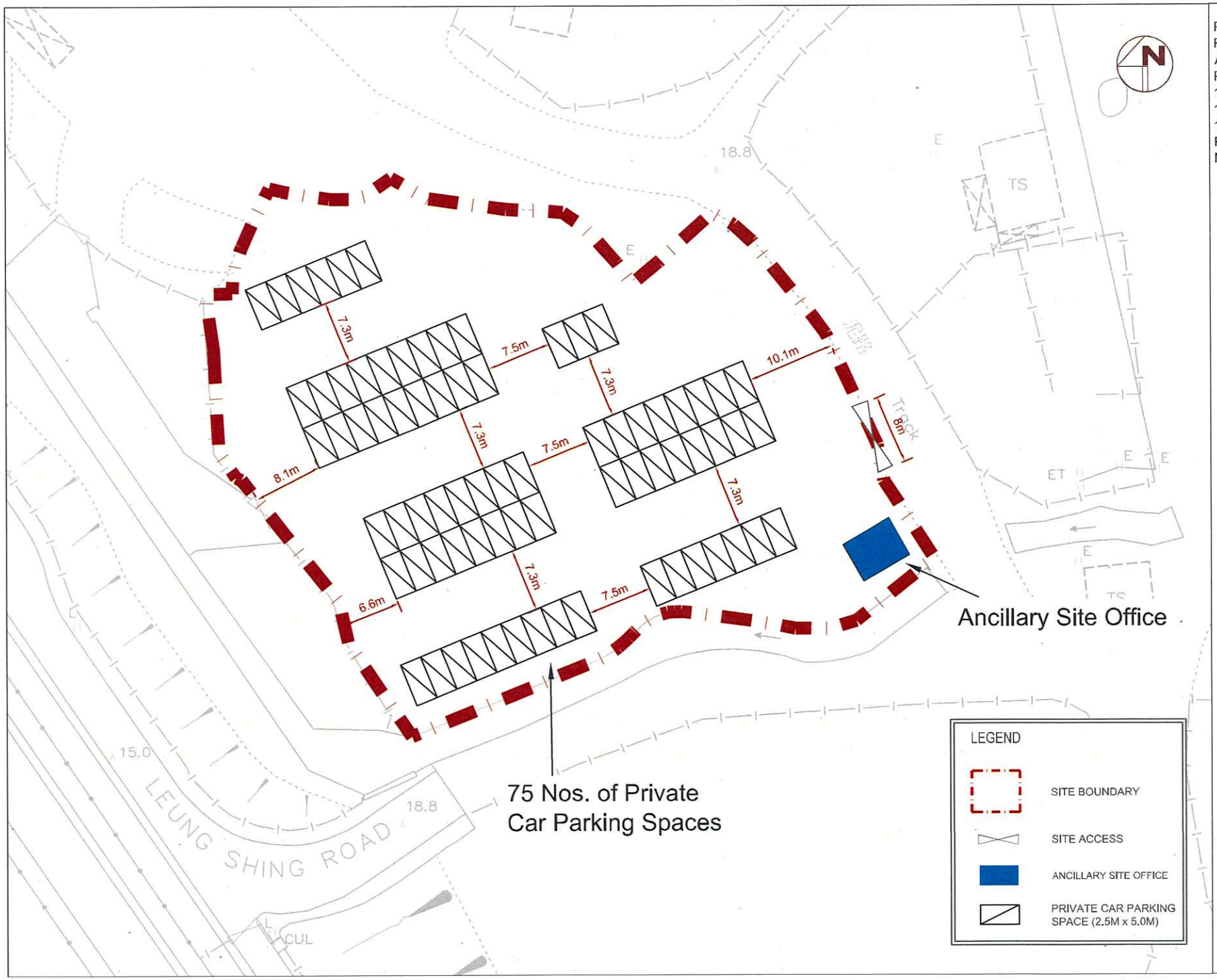
Table 3.1 Estimated Peak-hour Traffic Generation and Attraction Rates of the Proposed Development

Development	Generation		Attraction	
	AM Peak	PM Peak	AM Peak	PM Peak
	Trip in veh/hr (pcu/hr)			
Proposed No. of Private Car Parking Spaces: **75**	20 (20)	5 (5)	5 (5)	20 (20)

Note:

1. *The peak-hour traffic generation and attraction rates of the proposed development are estimated with reference to the peak-hour development flows to private car parking provision ratio of a nearby public vehicle park under approved planning application no. A/YL-PH/856, i.e.* ***0.33****.*

Figures



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

SITE LAYOUT

FIGURE 1.1

Scale : 1:400

Date : MAY 2021

Rev. : A

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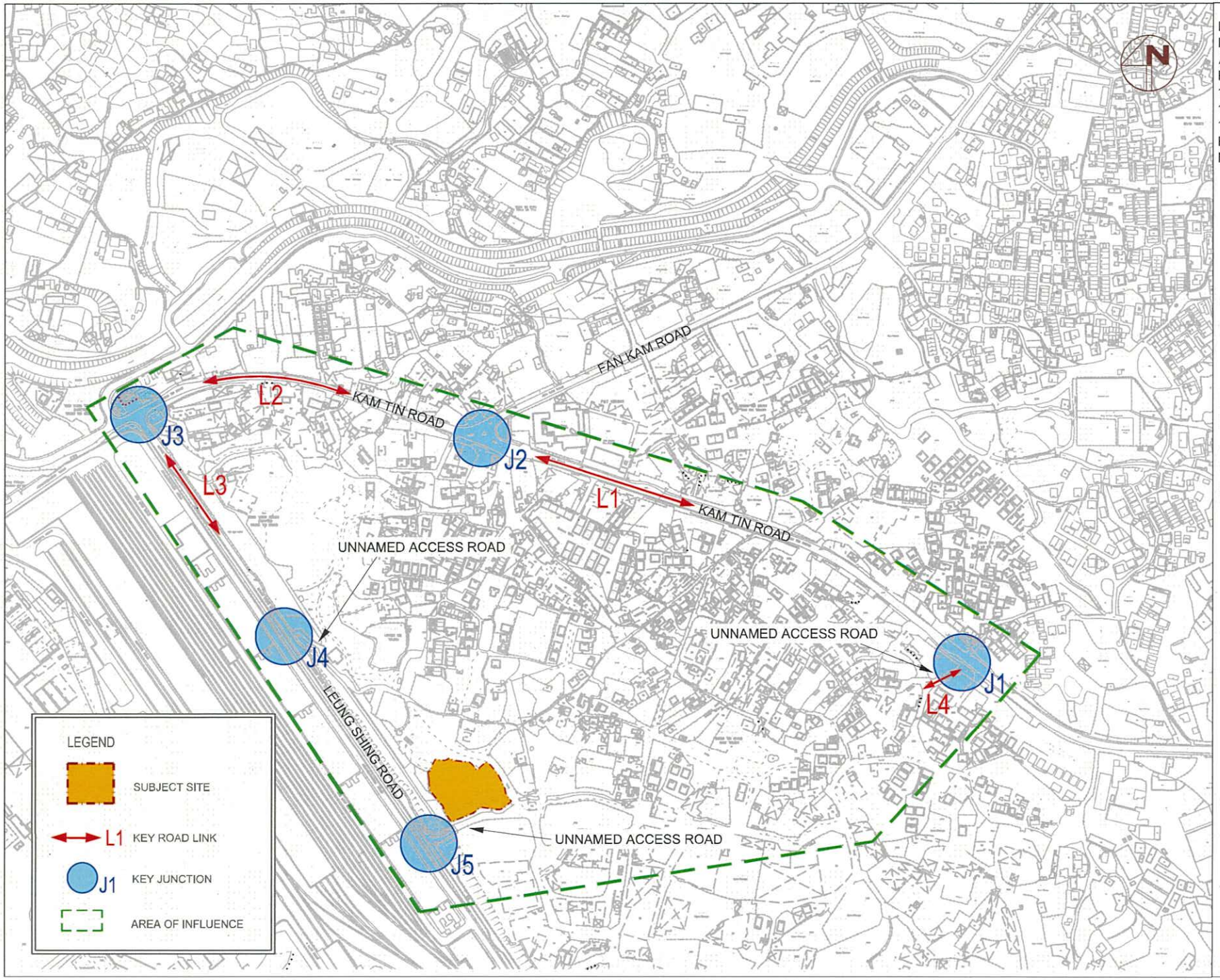
X:\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 1.1.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

LOCATION OF KEY ROAD LINKS AND JUNCTIONS

FIGURE 2.1

Scale : 1:3500

Date : MAR 2021

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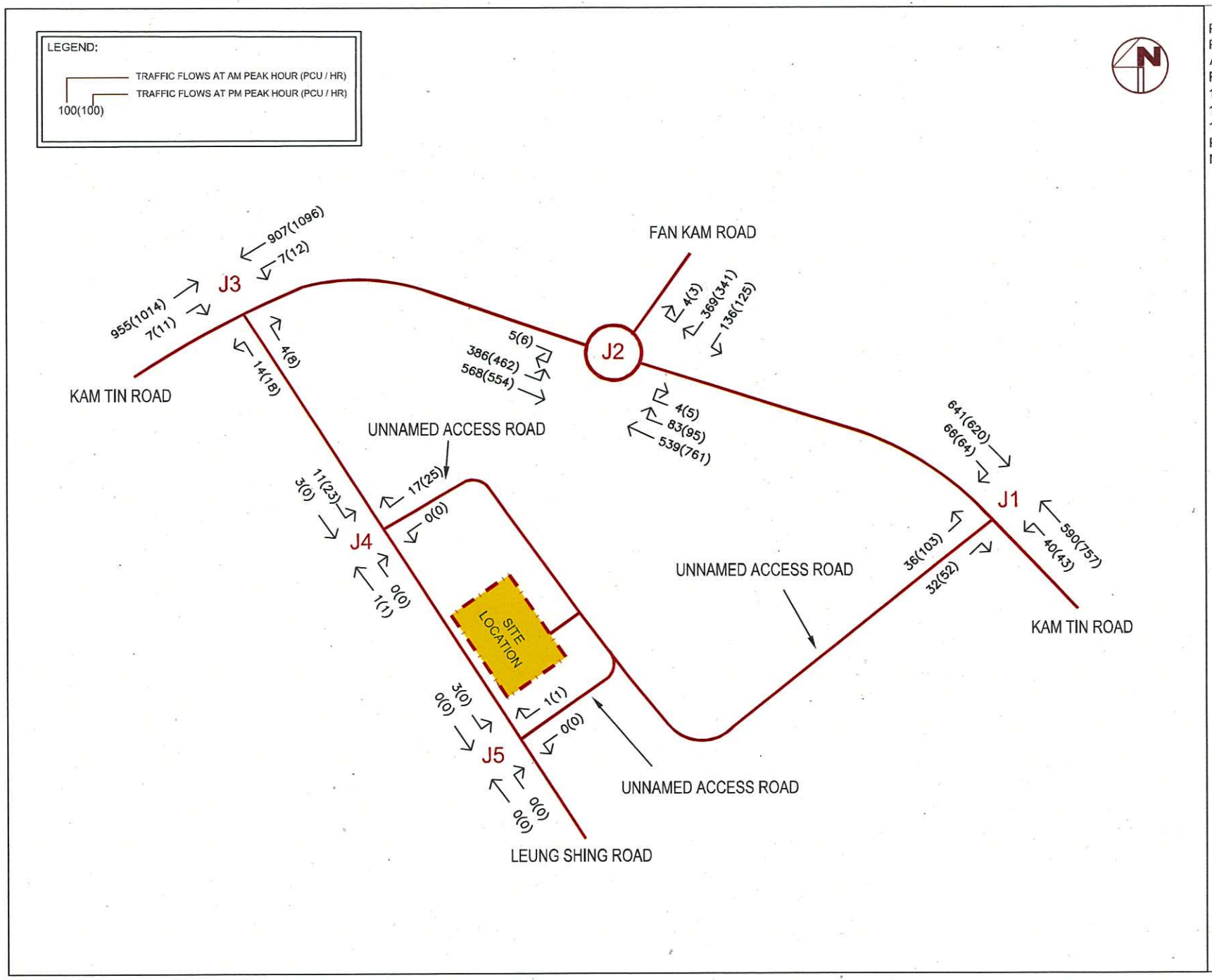
X:\PROJECT\J0909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.1A.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2021 OBSERVED TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.2

Scale : N.T.S.

Date : FEB 2021

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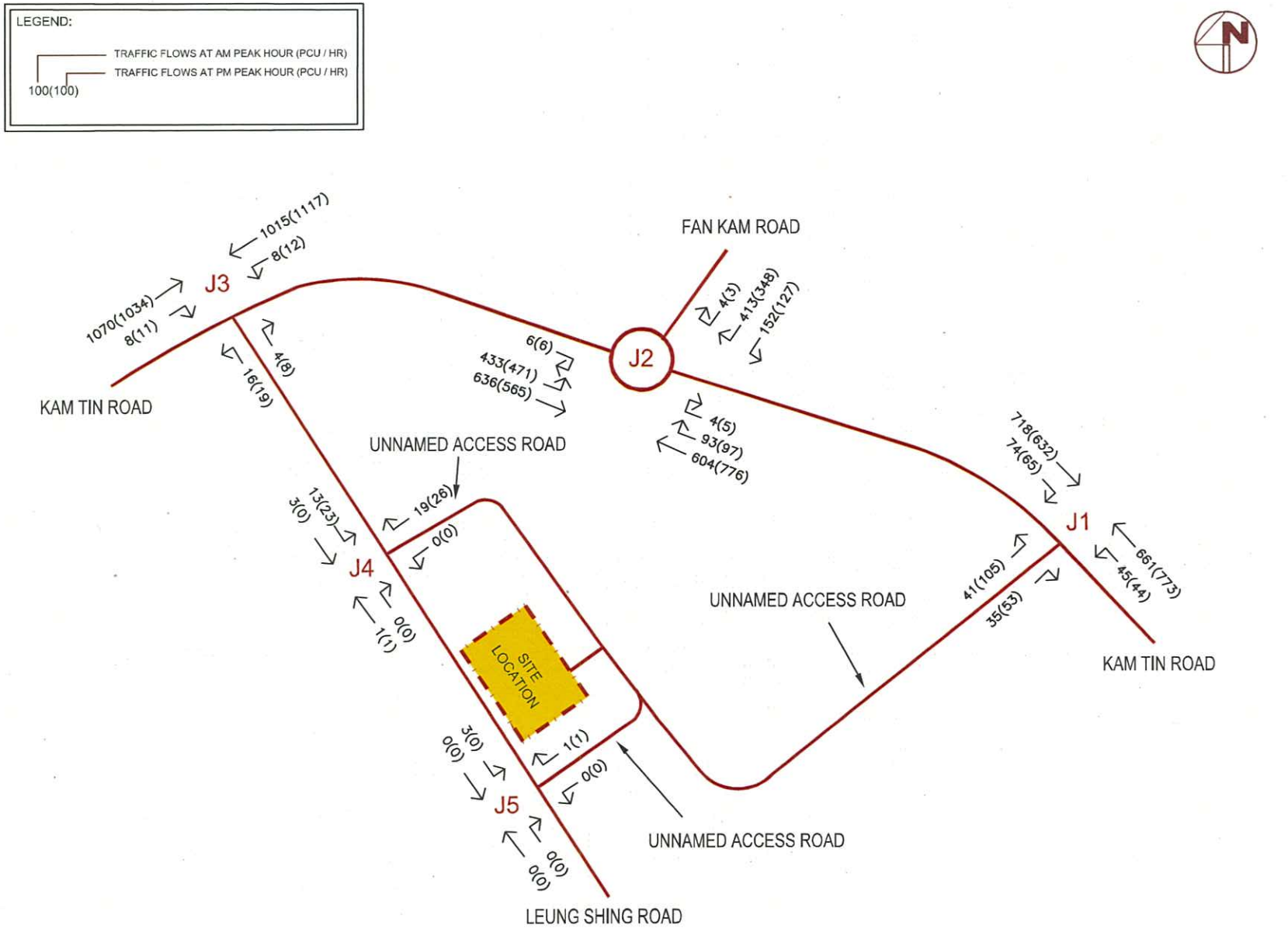
\\NAS\AXON\PROJECT\30999 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\TRAFFIC FLOW INPUT 2004.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2021 OBSERVED TRAFFIC FLOWS DURING AM & PM PEAK HOURS (AFTER ADJUSTMENT)

FIGURE 2.3

Scale : N.T.S.

Date : FEB 2021

Rev. :

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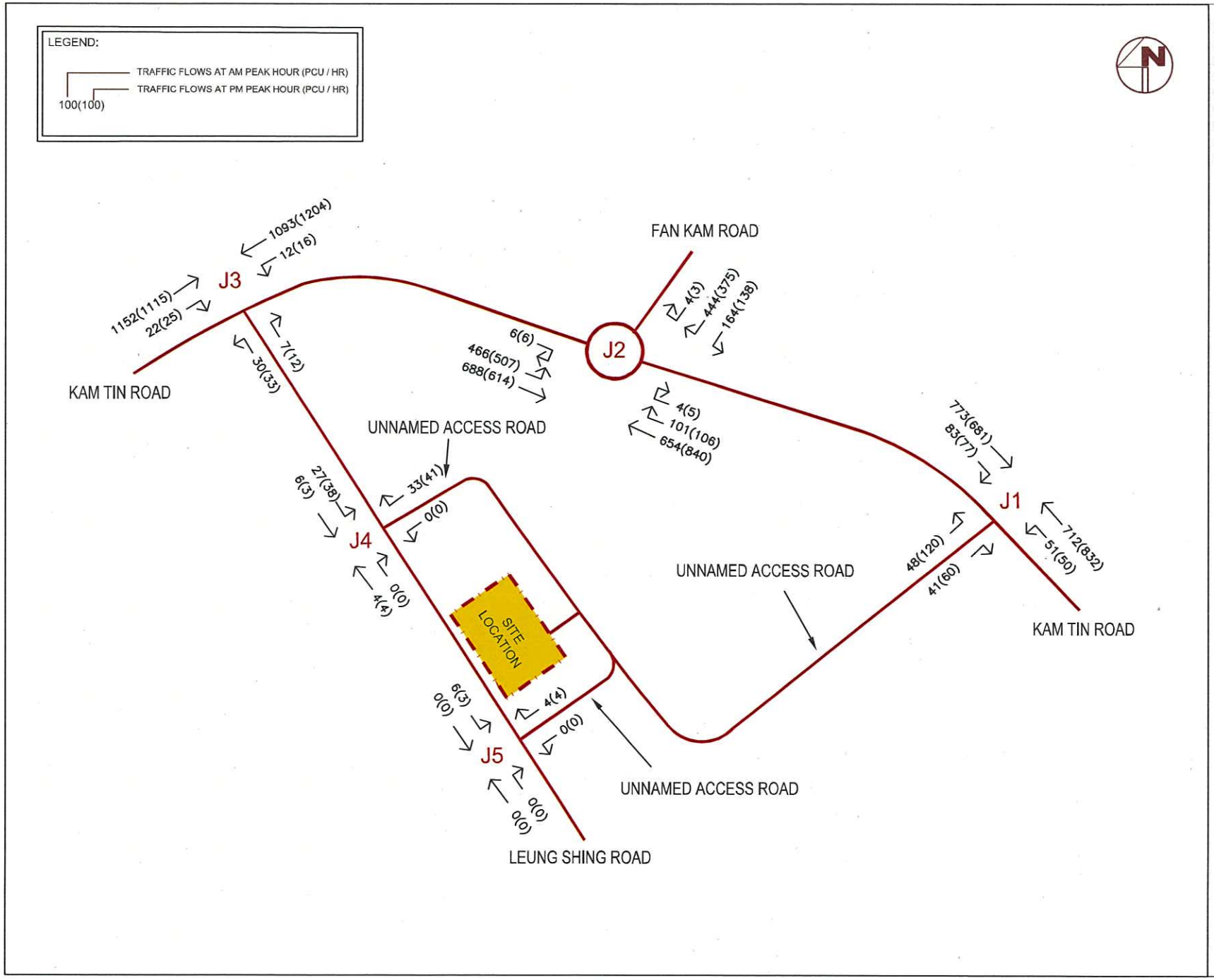
\\NAS\AXON\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 2.3.DWG



Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2024 REFERENCE TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.4

Scale : N.T.S.

Date : MAR 2021

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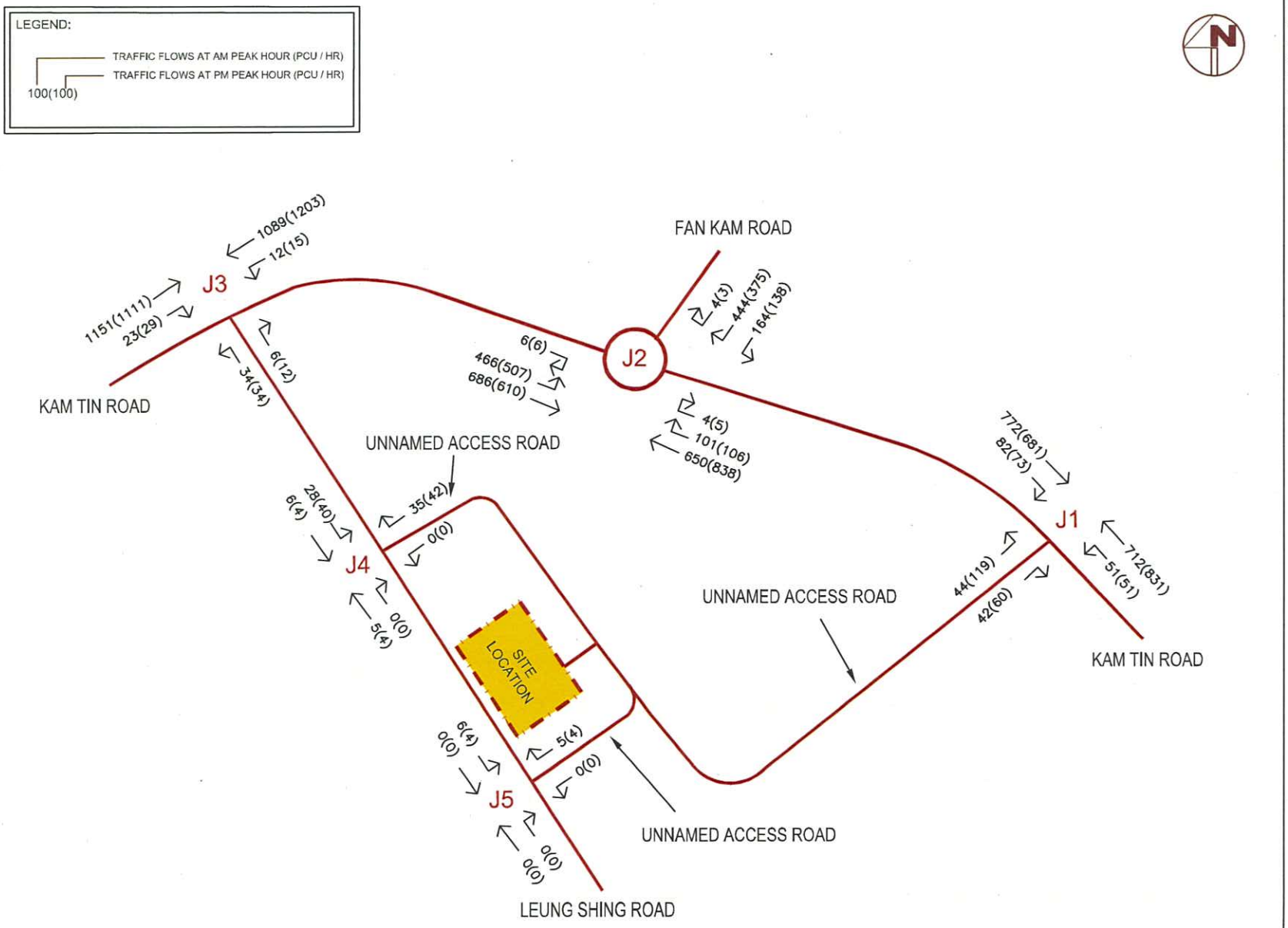

Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

2024 DESIGN TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.5

Scale : N.T.S.

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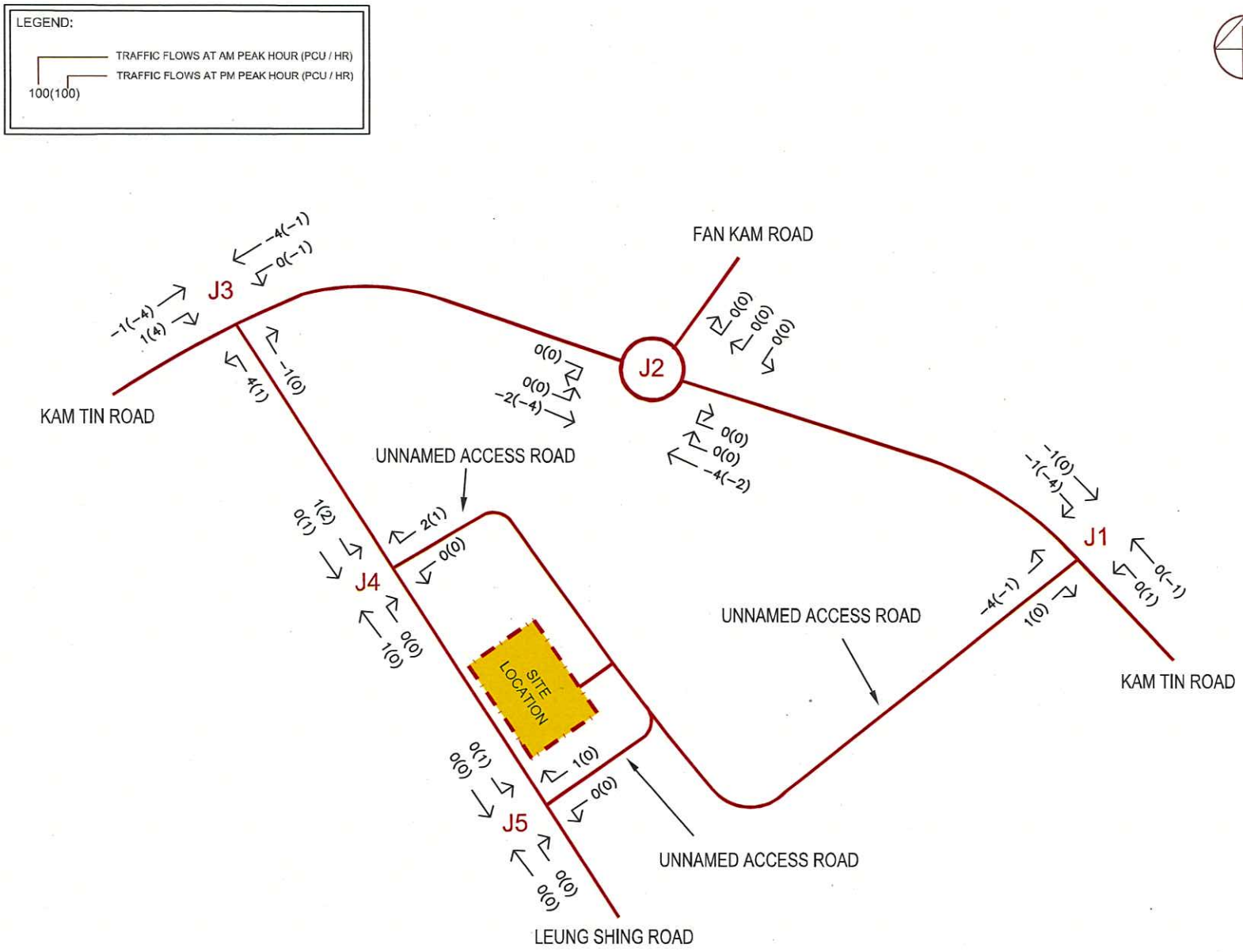

Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

NET DEVELOPMENT TRAFFIC FLOWS DURING AM & PM PEAK HOURS

FIGURE 2.6

Scale : N.T.S.

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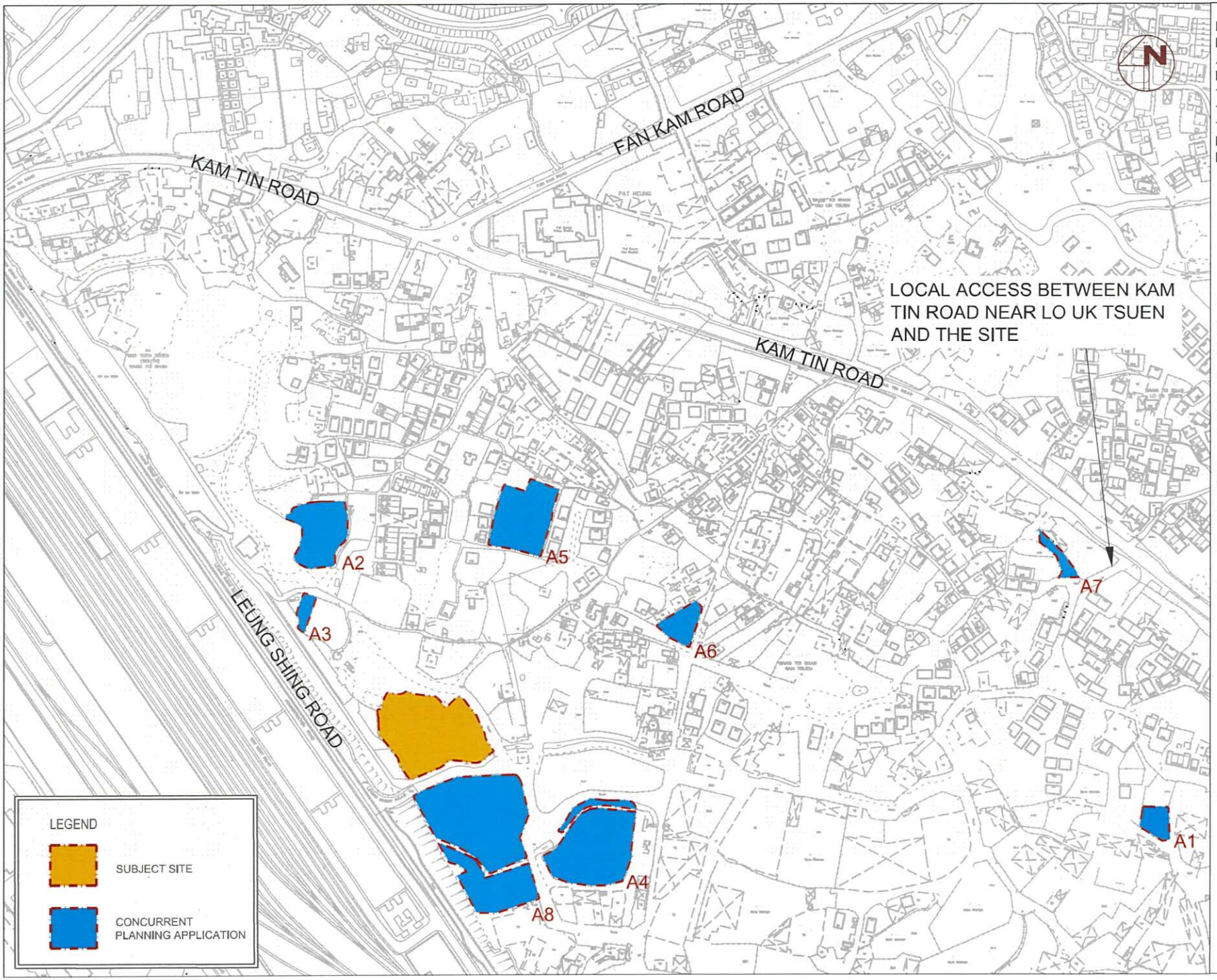

Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Lots 1869(Part) ,1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long, New Territories

CONCURRENT PLANNING APPLICATIONS ALONG LEUNG SHING ROAD AND THE LOCAL ACCESS BETWEEN KAM TIN ROAD NEAR LO UK TSUEN AND THE SITE

FIGURE 3.1

Scale : 1:2500

Date : MAR 2021

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X:\PROJECT\30909 WANG TOI SHAN SAN TSUEN - TIA\DATA\DRAWING\FIGURE 3.1.DWG

Appendix A

Excerpt of the DC discussion Paper no. 2019/56

交委會文件 2019/第 56 號
(於 11.7.2019 會議討論)

元朗區議會交通及運輸委員會
二零一九年度第四次會議

錦田公路及林錦公路餘段改善工程

目的

1. 本文件旨在就錦田公路及林錦公路餘段改善工程項目(下稱「本工程項目」)的擬議方案徵詢元朗區議會轄下的交通及運輸委員會(下稱「委員會」)的意見。

背景

2. 錦田公路及林錦公路是連接元朗東和大埔南區的重要通道。本署在 1986 至 2002 年間分階段進行了林錦公路和錦田公路部分路段的改善工程，包括嘉道理農場至林錦公路交匯處一段的林錦公路和凹頭迴旋處至高埔村一段的錦田公路，並於 2004 年完成興建錦田繞道，以疏導高埔村至橋頭村一段錦田公路的交通。

3. 本工程項目涵蓋介乎錦田繞道和林錦公路之間的一段錦田公路和介乎錦田公路和嘉道理農場之間的一段林錦公路。兩個路段全長共約 5.3 公里，是一條東西行雙向的行車道，闊度一般低於現時運輸署雙線雙程不分隔車道設訂的標準，而兩旁的行人路既狹窄又不連貫。

4. 本署在 2018 年聘請顧問公司就錦田公路及林錦公路餘段改善工程進行研究，制定出以下的初步方案。

方案規劃

5. 初步方案可以改善現有行車道、行人路及相關設施，以應付區內交通的需求及改善道路安全情況。另外，方案亦包括了相關的排水設施，以緩解於雨季偶有出現的水浸問題。我們在研究中會制定合適的方案，盡量減少對環境的影響、保留現有的樹木及減少徵收土地。

擬議方案

6. 本工程項目的改善方案範圍包括:

(一)改善約 5.3 公里長的錦田公路及林錦公路餘段，以達到合符現有雙線不分隔行車道的闊度標準。其中介乎東匯路和粉錦公路間的一段錦田公路行車道，將會擴闊至 10.3 米，而其餘路段的行車道則擴闊至 7.3 米；

(二)在情況許可下，沿改善後的行車道兩旁修建 2 米闊的標準行人路；

(三)在適當的地點設置停車處和過路設施；以及

(四)改善相關斜坡、排水、輔助交通設施、街道照明設備及進行環境美化工程。

7. 初步方案的總平面圖載於附件一。

環境影響評估

8. 顧問公司正就初步方案進行環境影響評估。本署預計有關報告會於 2019 年下旬完成。

9. 環境影響評估報告將會詳述本工程項目對鄰近敏感受體就空氣質素、噪音、水質、廢物管理、土地污染、生態、景觀及視覺影響作出評估，並提出合適的緩解措施。

施工期間交通影響評估

10. 顧問公司正就初步方案進行施工期間的交通影響評估。有關報告會建議臨時交通安排方案，把影響減至最低。

徵收土地

11. 工程範圍涉及部份私人及政府土地。本工程項目會盡量避免和減少徵用私人土地，亦會盡量避免影響現有永久及臨時樓宇和結構物。

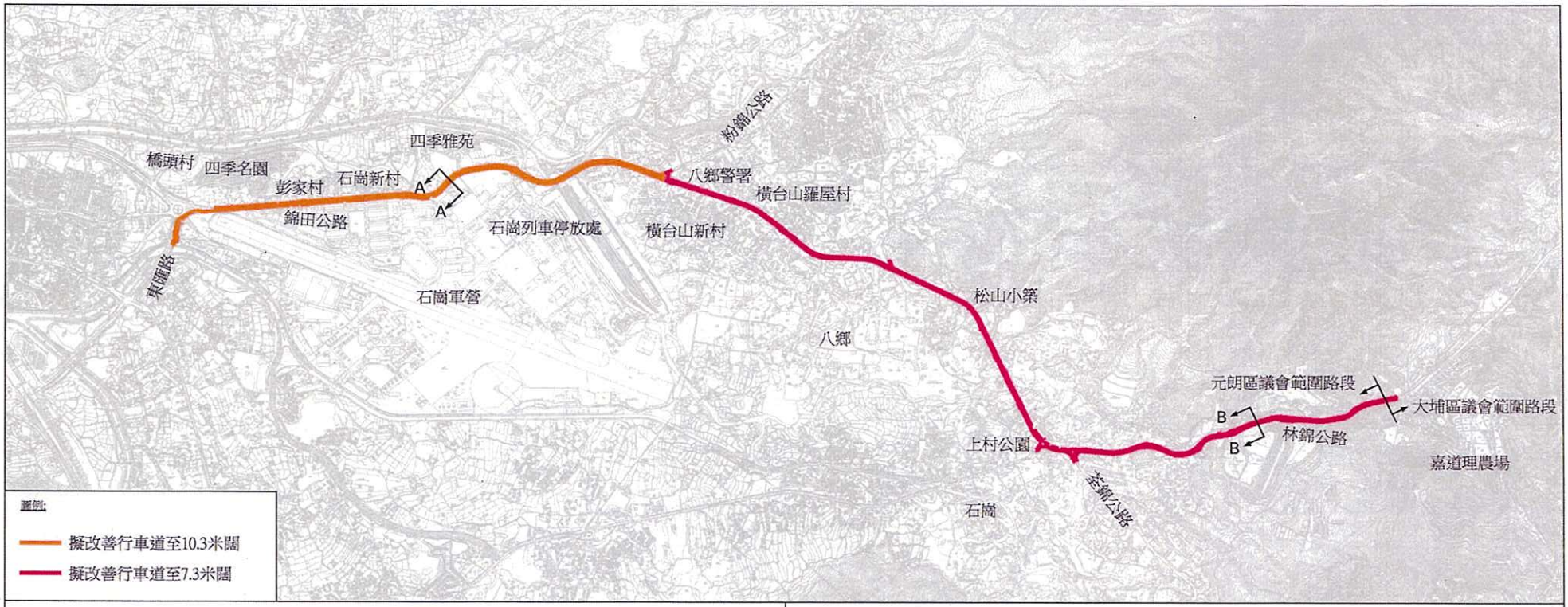
時間表

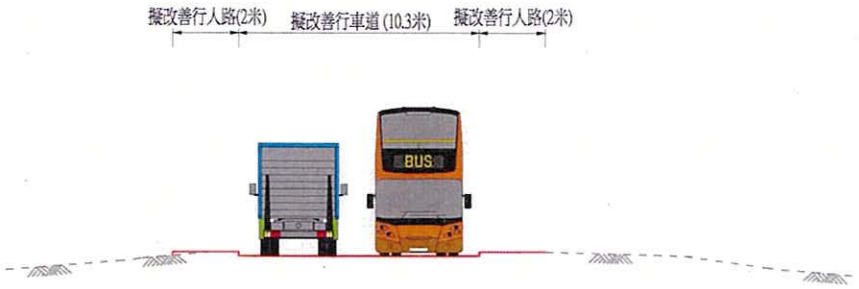
12. 本署在 2019 年 4 月和 5 月已諮詢錦田及八鄉鄉事委員會並取得支持。如果得到委員會支持，本署會於 2019 年底或 2020 年初依據《道路(工程、使用及補償)條例》(第 370 章)就本工程項目刊憲，並進行詳細設計。本署會適時諮詢相關持份者，及後展開工程。

徵詢意見

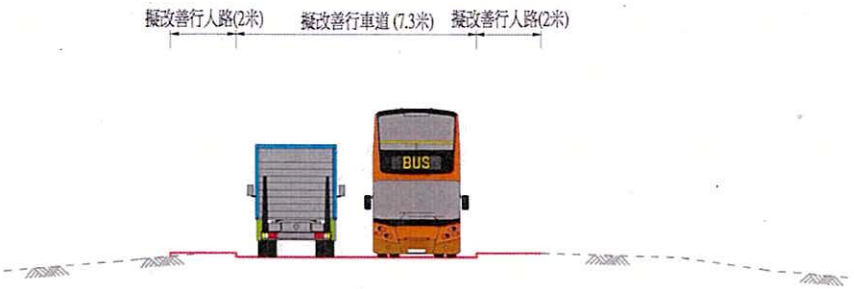
13. 請各委員備悉文件內容，並提出意見。

路政署工程部
2019 年 7 月





A-A剖面
雙線不分隔車行車道剖面
比例: 不按比例



B-B剖面
雙線不分隔車行車道剖面
比例: 不按比例

圖紙標題

錦田公路及林錦公路餘段改善工程 - 總平面圖

圖紙編號
P1062/DC/001

比例
1:16000@A3

版本

K:\P1062 - CE76/2017(HY) Kam Tin & Lam Kam - Investigation\Station\DC Paper\DC Paper.dgn

Appendix B

Revised Link and Junction Capacity Assessment Results

16 June 2021

Revised Link and Junction Capacity Assessment Results (Rev. B)

Introduction

This paper is prepared in response to the comments from Transport Department (dated 22 March 2021, circulated by Planning Department via email) on the previous FI submission. The methodology of the assessment, including the source of traffic data and traffic forecast method are in accordance to the previous FI submission with the following amendments:

1. The carriageway capacities of the four key road links have been revised, and the scenarios with and without the road improvement works at Kam Tin Road have been incorporated in the link capacity assessment.

2. The net development flows of the proposed development have been revised and incorporated in the link and junction capacity assessment.

Details of the amendments are further elaborated on the Response-to-Comment Table.

2021 Existing Link and Junction Capacity Assessment

Table 2.1 Year 2021 Link Capacity Assessment

Ref.	Key Road Link	Direction	Carriageway Capacity (veh/hr)	2021 Observed Flows (veh/hr)		V/C Ratio	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Kam Tin Road	E/B	630	460	613	0.73	0.97
		W/B	630	545	508	0.87	0.81
L2	Kam Tin Road	E/B	630	735	752	1.17	1.19
		W/B	630	701	785	1.11	1.25
L3	Leung Shing Road	Both Directions	200	35	48	0.18	0.24
L4	Local Access between Kam Tin Road near Lo Uk Tsuen and the Site	Both Directions	200	115	165	0.58	0.83

As shown on **Table 2.1**, Leung Shing Road and the local access between Kam Tin Road near Lo Uk Tsuen and the Site are currently operating with spare capacities, while the key road links at Kam Tin Road are overloaded during the AM and PM peak hours.

Table 2.2 Year 2021 Junction Capacity Assessment

Ref.	Junction Location	Type / Capacity Index	AM Peak	PM Peak
J1	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	Priority Junction / DFC	0.14	0.20
J2	Fan Kam Road / Kam Tin Road	Roundabout / DFC	0.66	0.75
J3	Leung Shin Road / Kam Tin Road	Priority Junction / DFC	0.04	0.08
J4	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	Priority Junction / DFC	0.03	0.04
J5	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	Priority Junction / DFC	< 0.01	< 0.01

As shown on **Table 2.2**, all key junctions are currently operating with spare capacities during the AM and PM Peak hours.

2024 Link and Junction Capacity Assessment Under Reference and Design Scenarios

Table 2.3 Year 2024 Link Capacity Assessment (Without Road Improvement Works)

Ref.	Key Road Link	Direction	Carriageway Capacity (veh/hr)	Traffic Flows (veh/hr) [V/C Ratio]			
				2024 Reference Scenario		2024 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Kam Tin Road	E/B	630	498 **[0.79]**	664 **[1.05]**	496 **[0.79]**	660 **[1.05]**
		W/B	630	589 **[0.93]**	551 **[0.87]**	585 **[0.93]**	549 **[0.87]**
L2	Kam Tin Road	E/B	630	793 **[1.26]**	812 **[1.29]**	791 **[1.26]**	808 **[1.28]**
		W/B	630	757 **[1.20]**	848 **[1.35]**	753 **[1.20]**	846 **[1.34]**
L3	Leung Shing Road	Both Directions	200	50 **[0.25]**	64 **[0.32]**	54 **[0.27]**	68 **[0.34]**
L4	Local Access between Kam Tin Road near Lo Uk Tsuen and the Site	Both Directions	200	128 **[0.64]**	184 **[0.92]**	124 **[0.62]**	180 **[0.90]**

Table 2.4 Year 2024 Link Capacity Assessment (With Road Improvement Works)

	Key Road Link	Direction	Carriageway Capacity (veh/hr)	Traffic Flows (veh/hr) [V/C Ratio]			
				2024 Reference Scenario		2024 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Kam Tin Road	E/B	765	498 **[0.65]**	664 **[0.87]**	496 **[0.65]**	660 **[0.86]**
		W/B	765	589 **[0.77]**	551 **[0.72]**	585 **[0.76]**	549 **[0.72]**
L2	Kam Tin Road	E/B	900	793 **[0.88]**	812 **[0.90]**	791 **[0.88]**	808 **[0.90]**
		W/B	900	757 **[0.84]**	848 **[0.94]**	753 **[0.84]**	846 **[0.94]**
L3	Leung Shing Road	Both Directions	200	50 **[0.25]**	64 **[0.32]**	54 **[0.27]**	68 **[0.34]**
L4	Local Access between Kam Tin Road near Lo Uk Tsuen and the Site	Both Directions	200	128 **[0.64]**	184 **[0.92]**	124 **[0.62]**	180 **[0.90]**

As shown on **Table 2.3** and **Table 2.4**, it is noted that:

- **Without** the road improvement works at Kam Tin Road, Kam Tin Road will be overloaded during the identified AM and PM peak hours under the Year 2024 Reference and Design Scenarios.

- **With** the road improvement works at Kam Tin Road, Kam Tin Road will be operating close to its capacity in the design year of 2024 during the identified AM and PM peak hours under the Year 2024 Reference and Design Scenarios

Regardless the completion of the road improvement works, the local access between Kam Tin Road near Lo Uk Tsuen will be operating close to its capacity, while Leung Shing Road will be operating with spare capacity. In general, the local traffic situation will be slightly improved due to the traffic diversion effect of the proposed development.

Table 2.5 Year 2024 Junction Capacity Assessment

Ref.	Junction Location	Type / Capacity Index	2024 Reference Scenario		2024 Design Scenario	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	Priority Junction / DFC	0.16	0.25	0.17	0.25
J2	Fan Kam Road / Kam Tin Road	Roundabout / DFC	0.72	0.83	0.72	0.83
J3	Leung Shing Road / Kam Tin Road	Priority Junction / DFC	0.08	0.20	0.08	0.20
J4	Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	Priority Junction / DFC	0.05	0.07	0.06	0.07
J5	Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen (2) / Kam Tin Road	Priority Junction / DFC	0.01	0.01	0.01	0.01

As shown on **Table 2.5**, all key junctions are expected to operate with spare capacities during the identified AM and PM peak hours under the Year 2024 Reference and Design Scenarios.

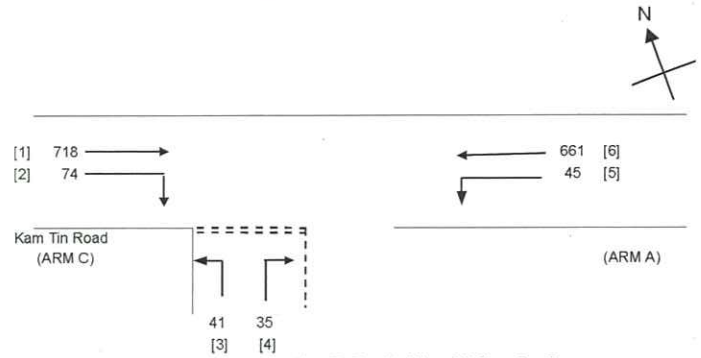
Conclusion

In view of the above, it can be concluded that the proposed development will not have adverse traffic impact on the local road network, and the proposed development is considered acceptable from traffic engineering point of view.

Appendix C

Revised Junction Calculation Sheets

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	45	(pcu/hr)
q a-c	=	661	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	718	(pcu/hr)
q c-b	=	74	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	35	(pcu/hr)
q b-c	=	41	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.5394737

THE CAPACITY OF MOVEMENT :

Q b-a	=	275		
Q b-c	=	546	Q b-c (O) =	528.6
Q c-b	=	522		
Q b-ac	=	375.6		

TOTAL FLOW = 1574 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1273
DFC b-c	=	0.0751
DFC c-b	=	0.1418

CRITICAL DFC = 0.14

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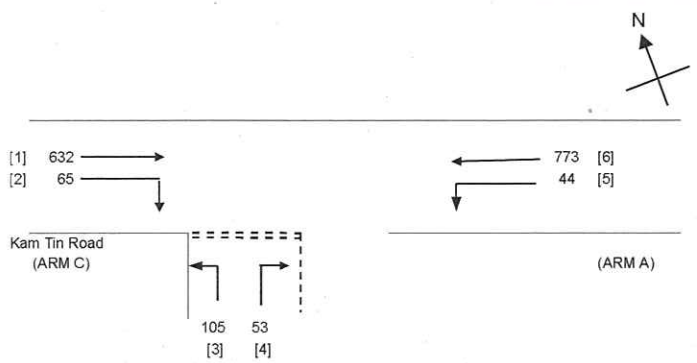
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	44	(pcu/hr)
q a-c	=	773	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	632	(pcu/hr)
q c-b	=	65	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	53	(pcu/hr)
q b-c	=	105	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.664557

THE CAPACITY OF MOVEMENT :

Q b-a	=	264		
Q b-c	=	517	Q b-c (O) =	491.1
Q c-b	=	494		
Q b-ac	=	391.2		

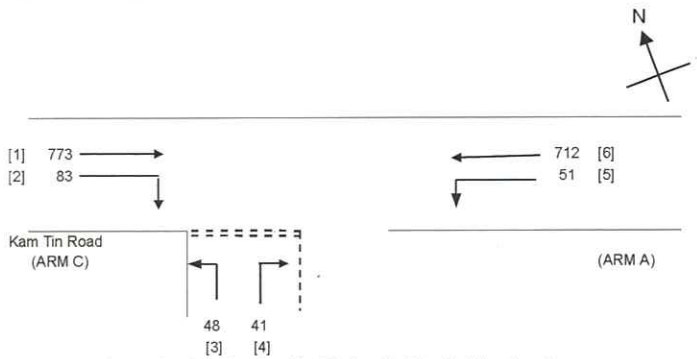
TOTAL FLOW = 1672 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2008
DFC b-c	=	0.2031
DFC c-b	=	0.1316

CRITICAL DFC = 0.20

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen
(ARM B)

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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	51	(pcu/hr)
q a-c	=	712	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	773	(pcu/hr)
q c-b	=	83	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	41	(pcu/hr)
q b-c	=	48	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.5393258

THE CAPACITY OF MOVEMENT :

Q b-a	=	250		
Q b-c	=	532	Q b-c (O) =	510.2
Q c-b	=	507		
Q b-ac	=	350.1		
TOTAL FLOW	=	1708	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1640
DFC b-c	=	0.0902
DFC c-b	=	0.1637

CRITICAL DFC = 0.16

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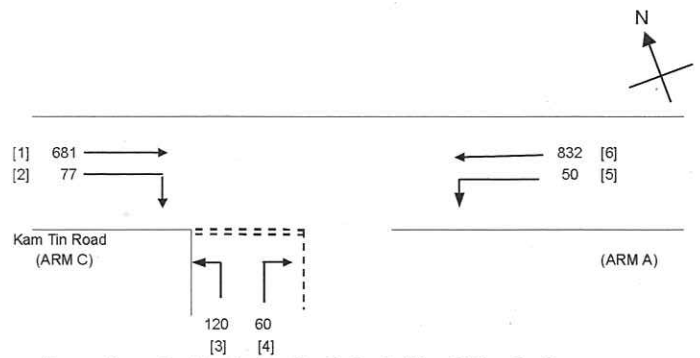
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	50	(pcu/hr)
q a-c	=	832	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	681	(pcu/hr)
q c-b	=	77	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	60	(pcu/hr)
q b-c	=	120	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.6666667

THE CAPACITY OF MOVEMENT :

Q b-a	=	237		
Q b-c	=	501	Q b-c (O) =	469.3
Q c-b	=	478		
Q b-ac	=	365.3		

TOTAL FLOW = 1820 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2532
DFC b-c	=	0.2395
DFC c-b	=	0.1611

CRITICAL DFC = 0.25

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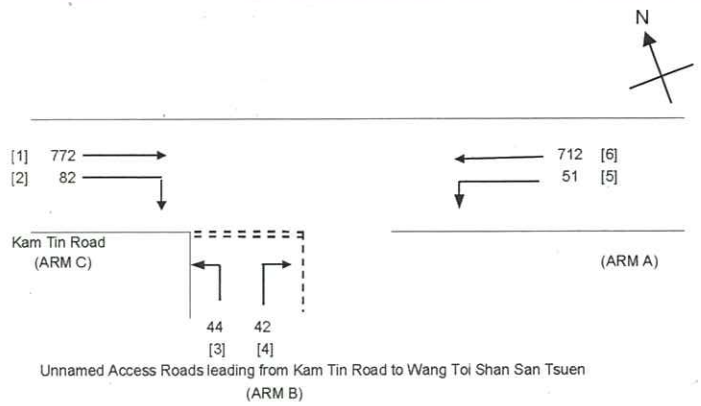
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	51	(pcu/hr)
q a-c	=	712	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	772	(pcu/hr)
q c-b	=	82	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	42	(pcu/hr)
q b-c	=	44	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.5116279

THE CAPACITY OF MOVEMENT :

Q b-a	=	250		
Q b-c	=	532	Q b-c (O) =	509.7
Q c-b	=	507		
Q b-ac	=	343		

TOTAL FLOW = 1703 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1680
DFC b-c	=	0.0827
DFC c-b	=	0.1617

CRITICAL DFC = 0.17

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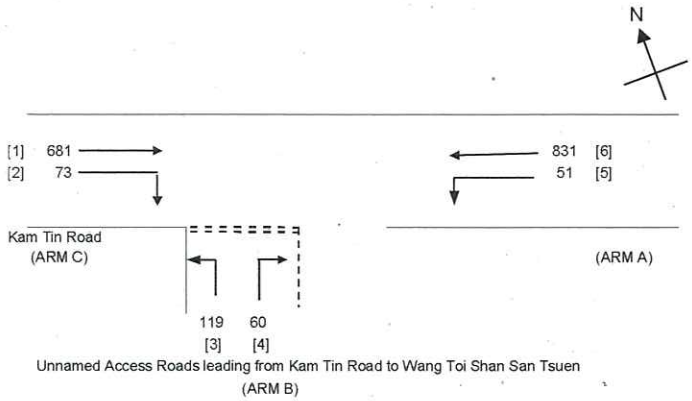
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J1 - Unnamed Access Roads leading from Kam Tin Road to Wang Toi Shan San Tsuen / Kam Tin Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	7.80	(metres)
W cr	=	0	(metres)
q a-b	=	51	(pcu/hr)
q a-c	=	831	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	25	(metres)
q c-a	=	681	(pcu/hr)
q c-b	=	73	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.30	(metres)
W b-c	=	3.30	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	120	(metres)
q b-a	=	60	(pcu/hr)
q b-c	=	119	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9212014
E	=	0.9671
F	=	0.9359908
Y	=	0.7309
F for (Qb-ac)	=	0.6648045

THE CAPACITY OF MOVEMENT :

Q b-a	=	238		
Q b-c	=	501	Q b-c (O) =	469.4
Q c-b	=	478		
Q b-ac	=	365.6		
TOTAL FLOW	=	1815	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2521
DFC b-c	=	0.2375
DFC c-b	=	0.1527

CRITICAL DFC = 0.25

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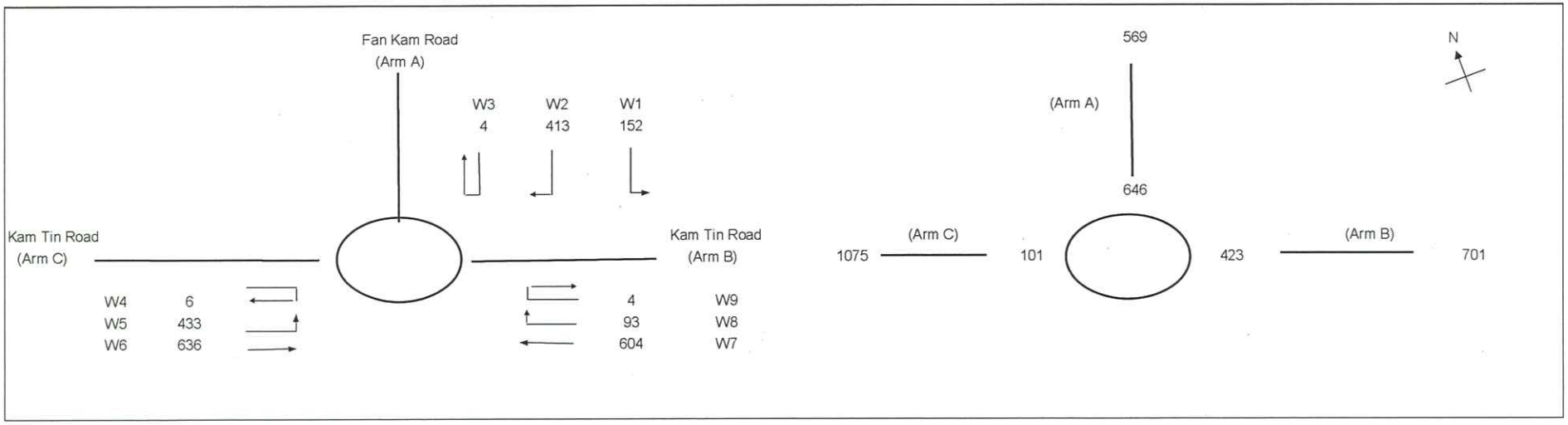
ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2021 Observed Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	569	701	1075
Qc	=	Circulating flow across entry (pcu/h)	646	423	101
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	937	1126	1624
DFC	=	Design flow/Capacity = Q/Qe	0.61	0.62	0.66

Total In Sum = 3515 PCU

DFC of Critical Approach = 0.66

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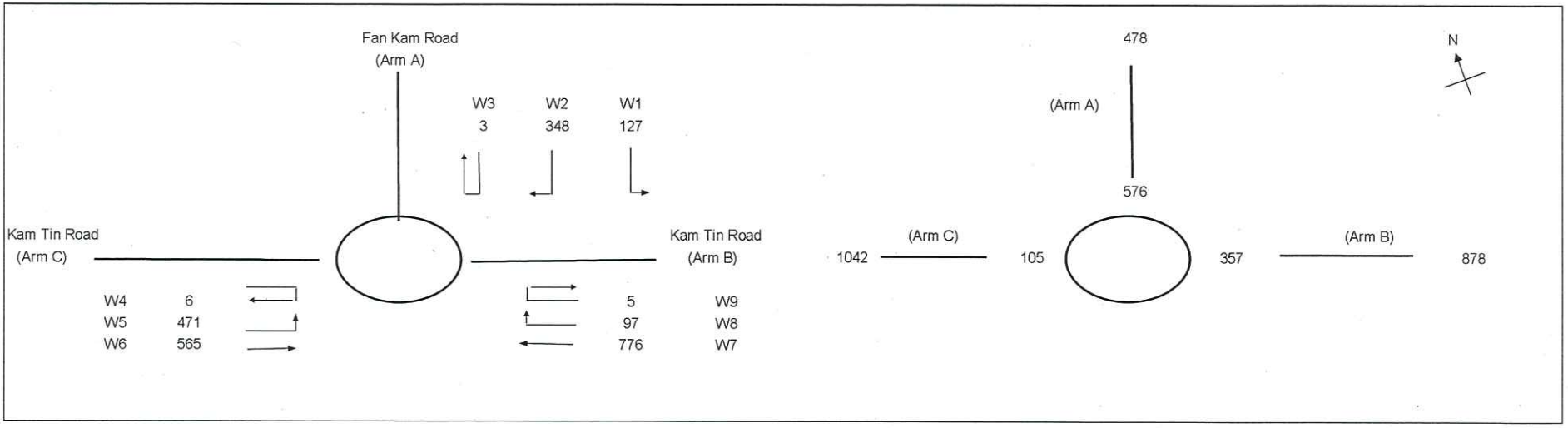
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2021 Observed Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	478	878	1042
Qc	=	Circulating flow across entry (pcu/h)	576	357	105
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	976	1167	1621
DFC	=	Design flow/Capacity = Q/Qe	0.49	0.75	0.64

Total In Sum = 3436 PCU

DFC of Critical Approach = 0.75

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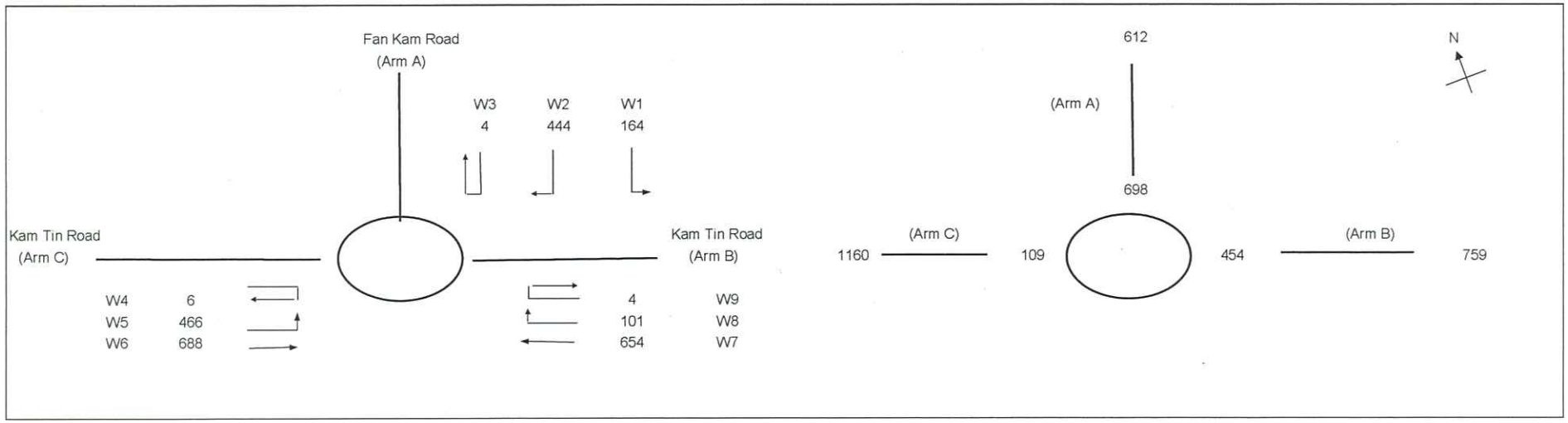
ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2024 Reference Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	612	759	1160
Qc	=	Circulating flow across entry (pcu/h)	698	454	109
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	908	1107	1618
DFC	=	Design flow/Capacity = Q/Qe	0.67	0.69	0.72

Total In Sum = 3792 PCU

DFC of Critical Approach = 0.72

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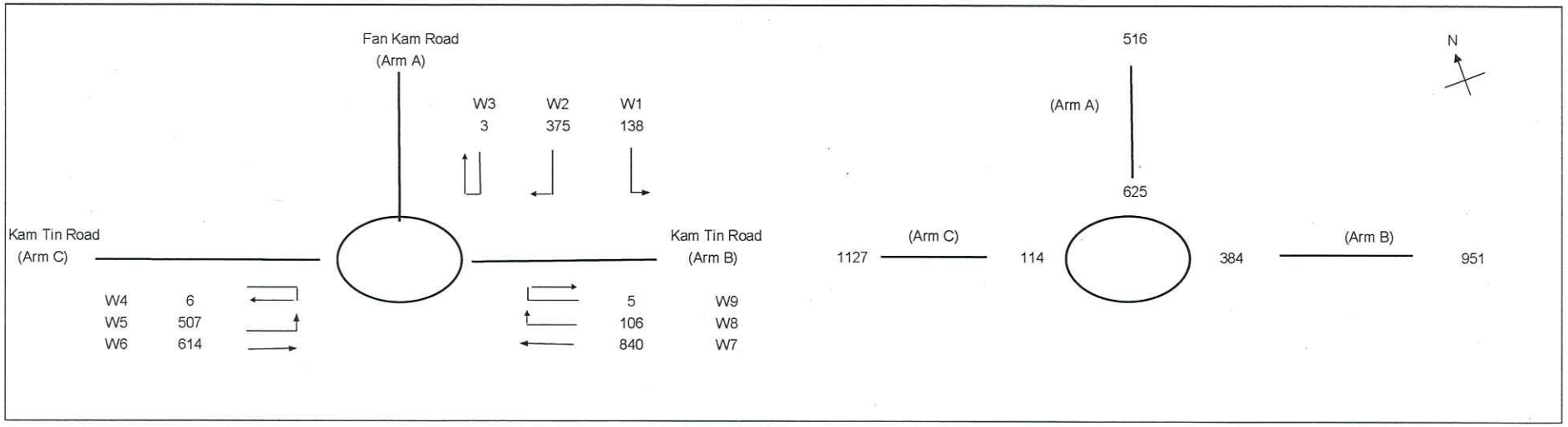
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2024 Reference Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	516	951	1127
Qc	=	Circulating flow across entry (pcu/h)	625	384	114
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	949	1150	1615
DFC	=	Design flow/Capacity = Q/Qe	0.54	0.83	0.70

Total In Sum = 3717 PCU

DFC of Critical Approach = 0.83

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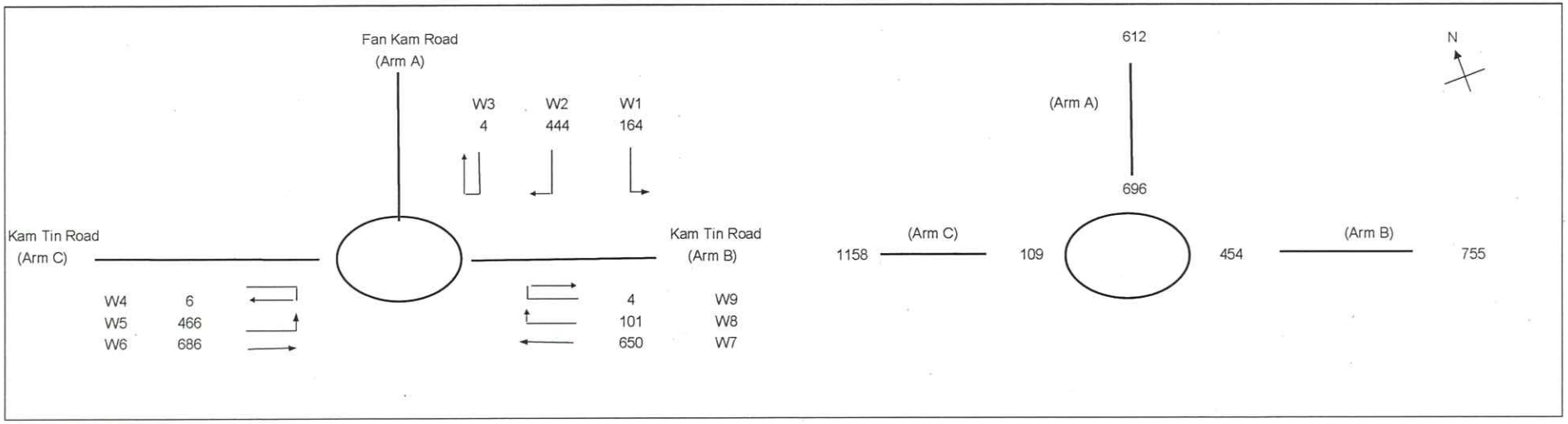
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2024 Design Flows AM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	612	755	1158
Qc	=	Circulating flow across entry (pcu/h)	696	454	109
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	909	1107	1618
DFC	=	Design flow/Capacity = Q/Qe	0.67	0.68	0.72

Total In Sum = 3784 PCU

DFC of Critical Approach = 0.72

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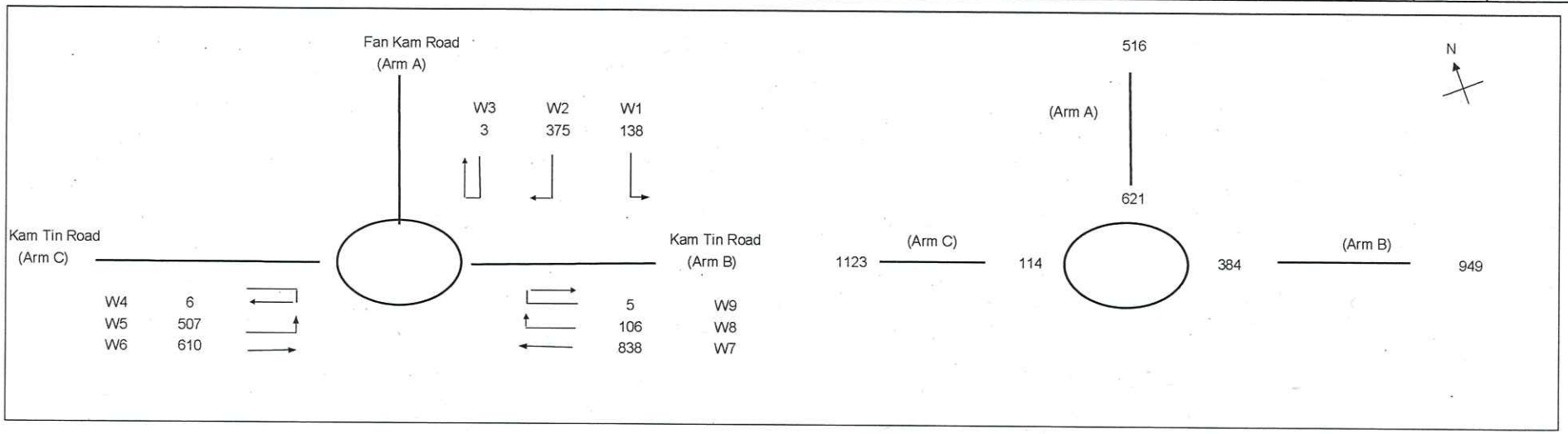
AXON CONSULTANCY LIMITED

ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
JOB TITLE:	Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long	PROJECT NO.:	30909	PREPARED BY:	JL	五月-21
JUNCTION NAME:	J2 - Fan Kam Road / Kam Tin Road	FILENAME :		CHECKED BY:	JP	五月-21
SITUATION:	2024 Design Flows PM	REFERENCE NO.:		REVIEWED BY:	SF	五月-21



ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.00	3.40	3.20
E	=	Entry width (m)	6.90	7.40	7.10
L	=	Effective length of flare (m)	9.00	3.60	14.80
R	=	Entry radius (m)	8.00	40.00	33.00
D	=	Inscribed circle diameter (m)	22.50	22.50	22.50
A	=	Entry angle (degree)	31.00	16.50	21.00
Q	=	Entry flow (pcu/h)	516	949	1123
Qc	=	Circulating flow across entry (pcu/h)	621	384	114
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.69	1.78	0.42
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.92	1.07	1.05
X2	=	V + ((E-V)/(1+2S))	4.63	4.28	5.32
M	=	EXP((D-60)/10)	0.02	0.02	0.02
F	=	303*X2	1404	1296	1611
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.60	0.58	0.64
Qe	=	K(F-Fc*Qc)	951	1150	1615
DFC	=	Design flow/Capacity = Q/Qe	0.54	0.83	0.70

Total In Sum = 3707 PCU

DFC of Critical Approach = 0.83

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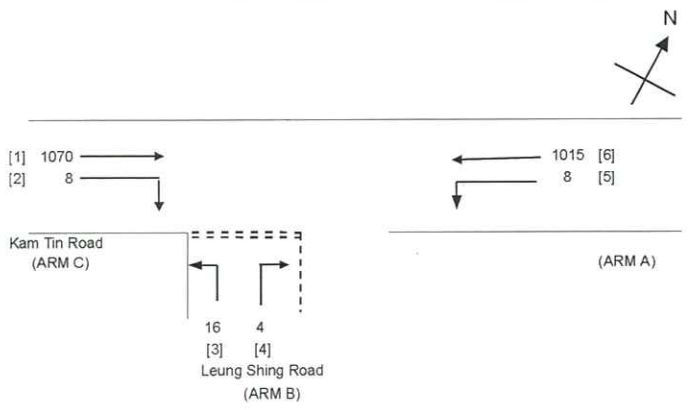
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	8	(pcu/hr)
q a-c	=	1015	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1070	(pcu/hr)
q c-b	=	8	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	16	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.8

THE CAPACITY OF MOVEMENT :

Q b-a	=	128		
Q b-c	=	433	Q b-c (O) =	429.6
Q c-b	=	403		
Q b-ac	=	293.2		

TOTAL FLOW = 2121 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0313
DFC b-c	=	0.0370
DFC c-b	=	0.0199

CRITICAL DFC = 0.04

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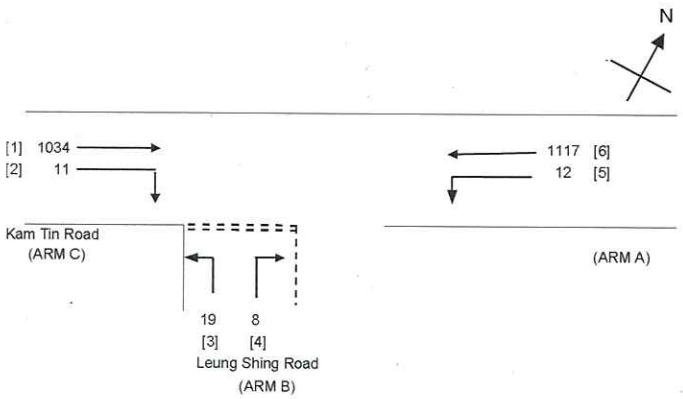
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	12	(pcu/hr)
q a-c	=	1117	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1034	(pcu/hr)
q c-b	=	11	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	8	(pcu/hr)
q b-c	=	19	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7037037

THE CAPACITY OF MOVEMENT :

Q b-a	=	105		
Q b-c	=	404	Q b-c (O) =	396.3
Q c-b	=	376		
Q b-ac	=	219.1		

TOTAL FLOW = 2201 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0762
DFC b-c	=	0.0470
DFC c-b	=	0.0293

CRITICAL DFC = 0.08

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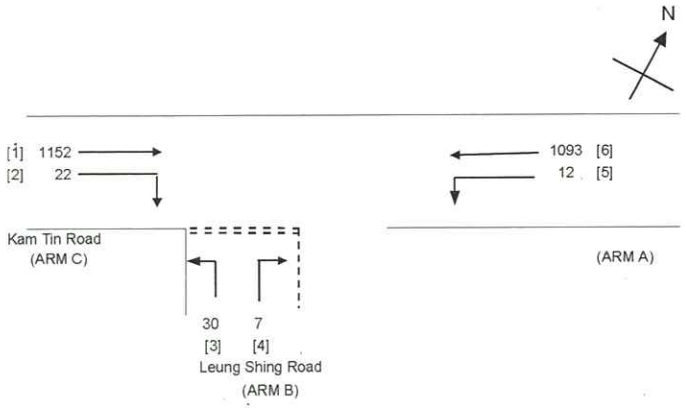
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	12	(pcu/hr)
q a-c	=	1093	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1152	(pcu/hr)
q c-b	=	22	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	7	(pcu/hr)
q b-c	=	30	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.8108108

0

THE CAPACITY OF MOVEMENT :

Q b-a	=	87		
Q b-c	=	411	Q b-c (O) =	402.7
Q c-b	=	382		
Q b-ac	=	241.1		

TOTAL FLOW = 2316 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0805
DFC b-c	=	0.0730
DFC c-b	=	0.0576

CRITICAL DFC = 0.08

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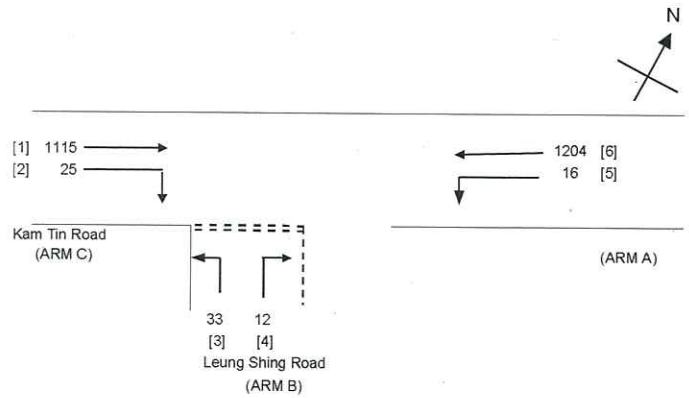
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	16	(pcu/hr)
q a-c	=	1204	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1115	(pcu/hr)
q c-b	=	25	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	33	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7333333

THE CAPACITY OF MOVEMENT :

Q b-a	=	61		
Q b-c	=	380	Q b-c (O) =	361.3
Q c-b	=	352		
Q b-ac	=	158.7		

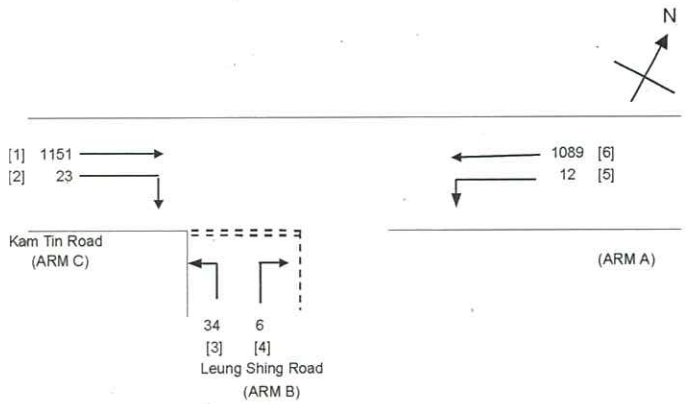
TOTAL FLOW = 2405 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1967
DFC b-c	=	0.0868
DFC c-b	=	0.0710

CRITICAL DFC = 0.20

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	12	(pcu/hr)
q a-c	=	1089	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1151	(pcu/hr)
q c-b	=	23	(pcu/hr)

8

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	6	(pcu/hr)
q b-c	=	34	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.85

THE CAPACITY OF MOVEMENT :

Q b-a	=	88		
Q b-c	=	412	Q b-c (O) =	405
Q c-b	=	383		
Q b-ac	=	265.4		
TOTAL FLOW	=	2315	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0682
DFC b-c	=	0.0825
DFC c-b	=	0.0601

CRITICAL DFC = 0.08

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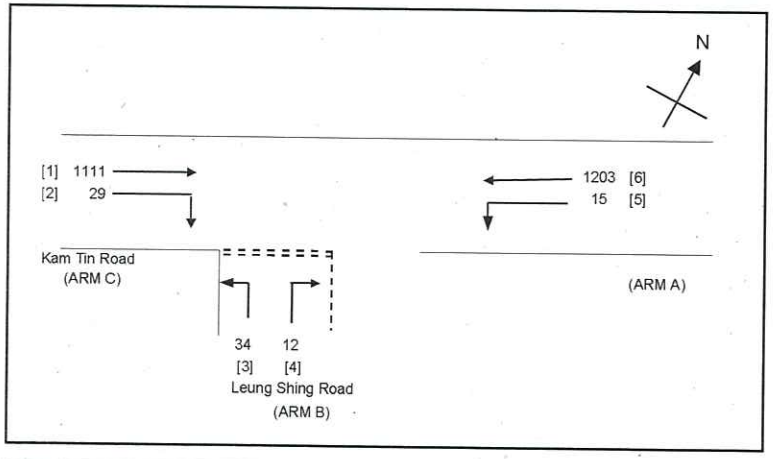
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J3 - Leung Shing Road / Kam Tin Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	15	(pcu/hr)
q a-c	=	1203	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.00	(metres)
Vr c-b	=	70	(metres)
q c-a	=	1111	(pcu/hr)
q c-b	=	29	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	80	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	34	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9480631
E	=	0.9594692
F	=	0.8966495
Y	=	0.793
F for (Qb-ac)	=	0.7391304

THE CAPACITY OF MOVEMENT :

Q b-a	=	61		
Q b-c	=	380	Q b-c (O) =	361.3
Q c-b	=	353		
Q b-ac	=	160.7		

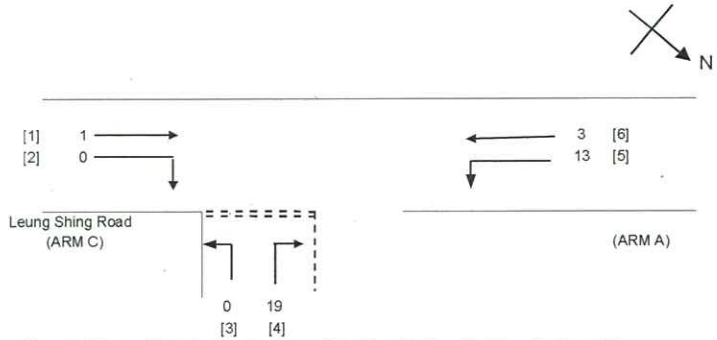
TOTAL FLOW = 2404 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1967
DFC b-c	=	0.0895
DFC c-b	=	0.0822

CRITICAL DFC = 0.20

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	13	(pcu/hr)
q a-c	=	3	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	1	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	19	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	628		
Q b-c	=	733	Q b-c (O) =	727.5
Q c-b	=	755		
Q b-ac	=	628		

TOTAL FLOW = 36 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0303
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.03

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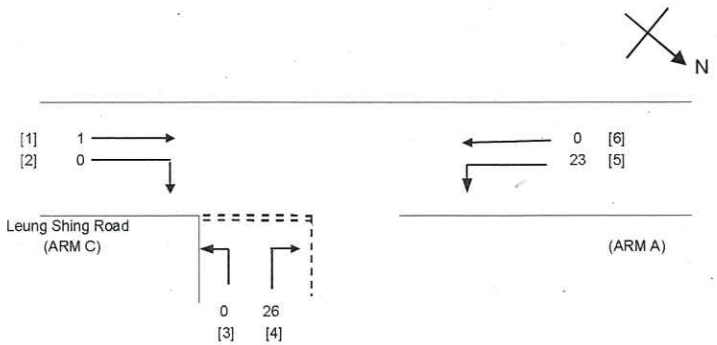
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	23	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	1	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	26	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	627		
Q b-c	=	732	Q b-c (O) =	724.4
Q c-b	=	753		
Q b-ac	=	627		

TOTAL FLOW = 50 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0415
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.04

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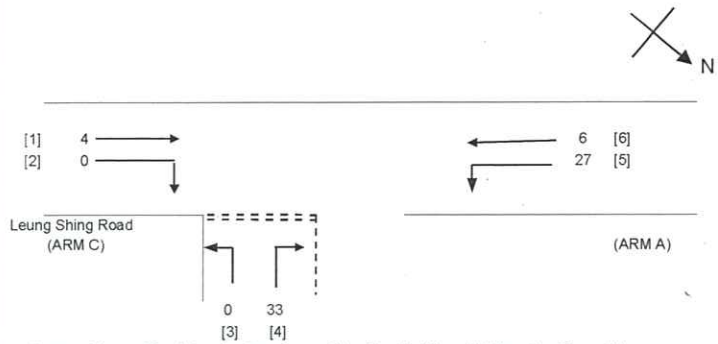
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	27	(pcu/hr)
q a-c	=	6	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	4	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	33	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	624		
Q b-c	=	730	Q b-c (O) =	720.3
Q c-b	=	750		
Q b-ac	=	624		

TOTAL FLOW = 70 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0529
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.05

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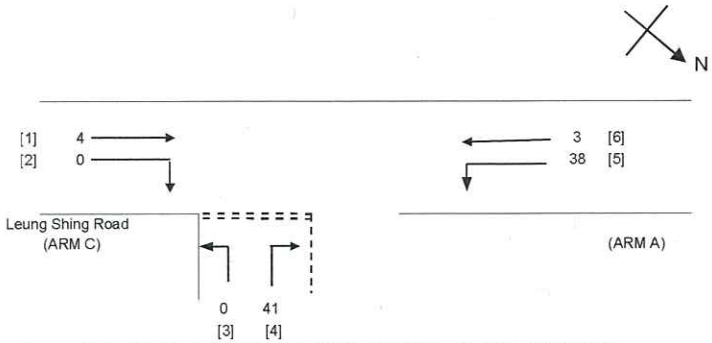
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	38	(pcu/hr)
q a-c	=	3	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	4	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	41	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	624	
Q b-c	=	730	Q b-c (O) = 718
Q c-b	=	748	
Q b-ac	=	624	
TOTAL FLOW	=	86	(PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0657
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.07

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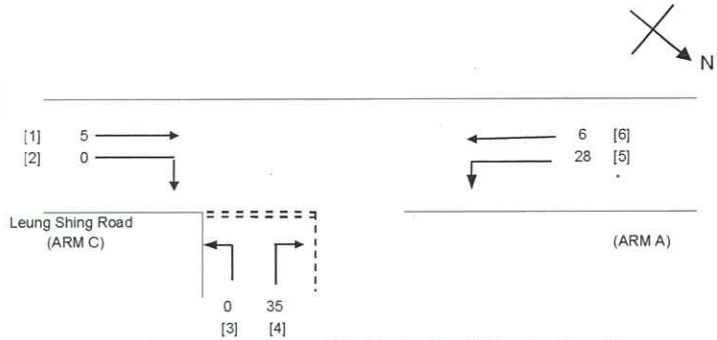
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Design Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	6	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	5	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	35	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	624		
Q b-c	=	730	Q b-c (O) =	719.8
Q c-b	=	750		
Q b-ac	=	624		

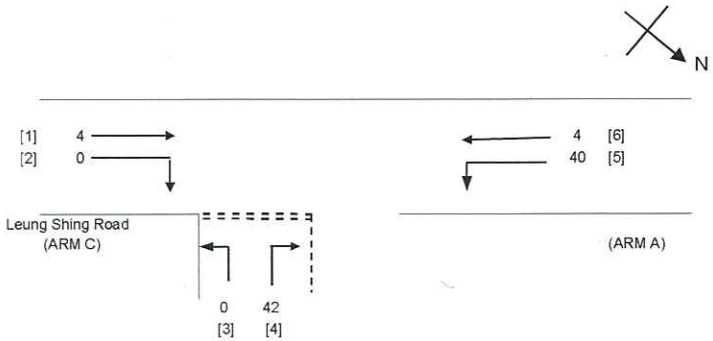
TOTAL FLOW = 74 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0561
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.06

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J4 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1) / Leung Shing Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (1)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	40	(pcu/hr)
q a-c	=	4	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	4	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.90	(metres)
W b-c	=	3.90	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	80	(metres)
q b-a	=	42	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.005077
E	=	0.986654
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

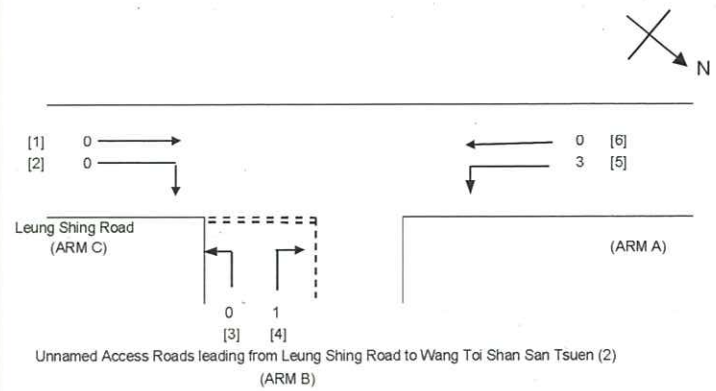
Q b-a	=	623		
Q b-c	=	729	Q b-c (O) =	716.7
Q c-b	=	747		
Q b-ac	=	623		
TOTAL FLOW	=	90	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0674
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.07

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2021 Observed Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

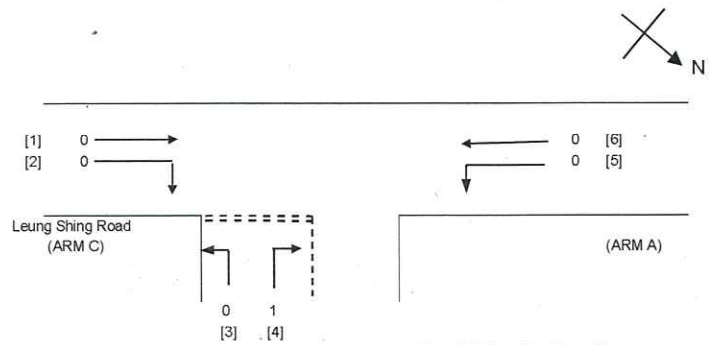
Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.7
Q c-b	=	759		
Q b-ac	=	578		
TOTAL FLOW	=	4	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0017
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2021 Observed Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	1	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	632.7
Q c-b	=	760		
Q b-ac	=	578		

TOTAL FLOW = 1 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0017
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.00

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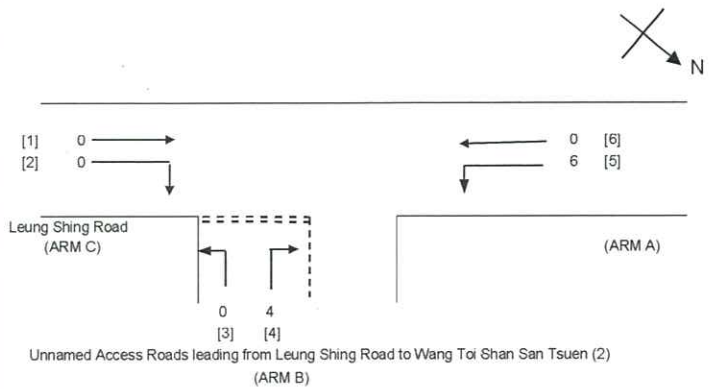
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Reference Flows AM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	6	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	577		
Q b-c	=	633	Q b-c (O) =	631.9
Q c-b	=	758		
Q b-ac	=	577		
TOTAL FLOW	=	10	(PCU/HR)	

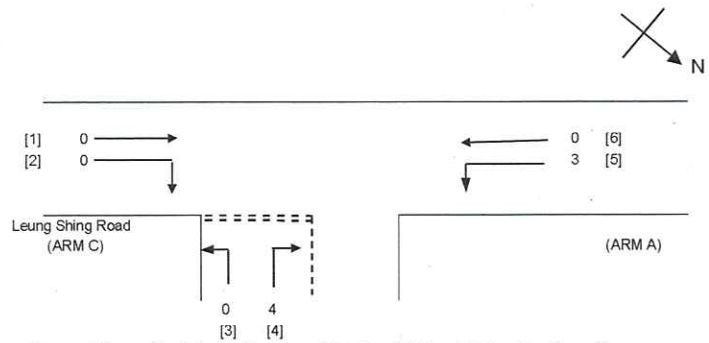
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0069
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

X:\Project\30909 Wang Toi Shan San Tsuen - TIA\Data\calculation\[J5_Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)_Leung Shing Road.xlsx]REF AM

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Reference Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	3	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	631.9
Q c-b	=	759		
Q b-ac	=	578		

TOTAL FLOW = 7 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0069
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
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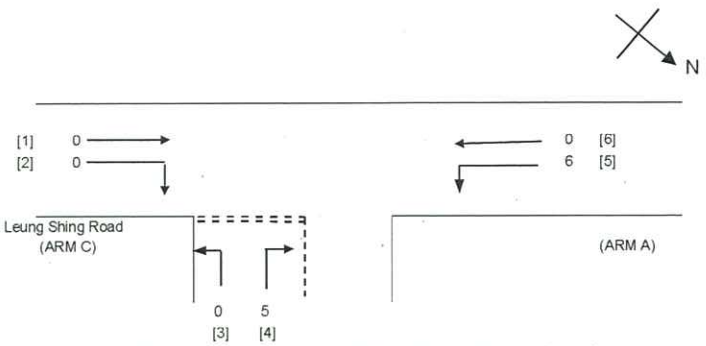


NOTES : (GEOMETRIC INPUT DATA)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	6	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	5	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	577		
Q b-c	=	633	Q b-c (O) =	631.6
Q c-b	=	758		
Q b-ac	=	577		

TOTAL FLOW = 11 (PCU/HR)

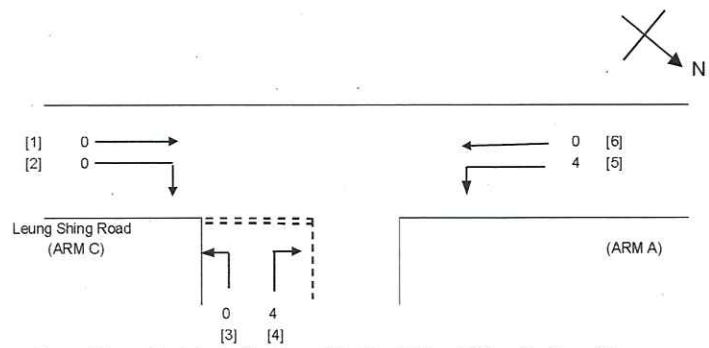
COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0087
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

X:\Project\30909 Wang Toi Shan San Tsuen - TIA\Data\calculation\[J5_Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)_Leung Shing Road.xlsx]DES AM

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Lots 1869(Part), 1870(Part), 1873(Part), 1875RP(Part), 1876 and 1877 in D.D. 111, Pat Heung, Yuen Long		PROJECT NO.: 30909	PREPARED BY:	JL	五月-21
J5 - Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2) / Leung Shing Road	2024 Design Flows PM	FILENAME :	CHECKED BY:	JP	五月-21
		REFERENCE NO.:	REVIEWED BY:	SF	五月-21



Unnamed Access Roads leading from Leung Shing Road to Wang Toi Shan San Tsuen (2)
(ARM B)

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	=	5.00	(metres)
W cr	=	0	(metres)
q a-b	=	4	(pcu/hr)
q a-c	=	0	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.00	(metres)
Vr c-b	=	15	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	120	(metres)
Vr b-a	=	120	(metres)
Vr b-c	=	15	(metres)
q b-a	=	4	(pcu/hr)
q b-c	=	0	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9219998
E	=	0.850174
F	=	1.020408
Y	=	0.8275
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

Q b-a	=	578		
Q b-c	=	633	Q b-c (O) =	631.9
Q c-b	=	759		
Q b-ac	=	578		

TOTAL FLOW = 8 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

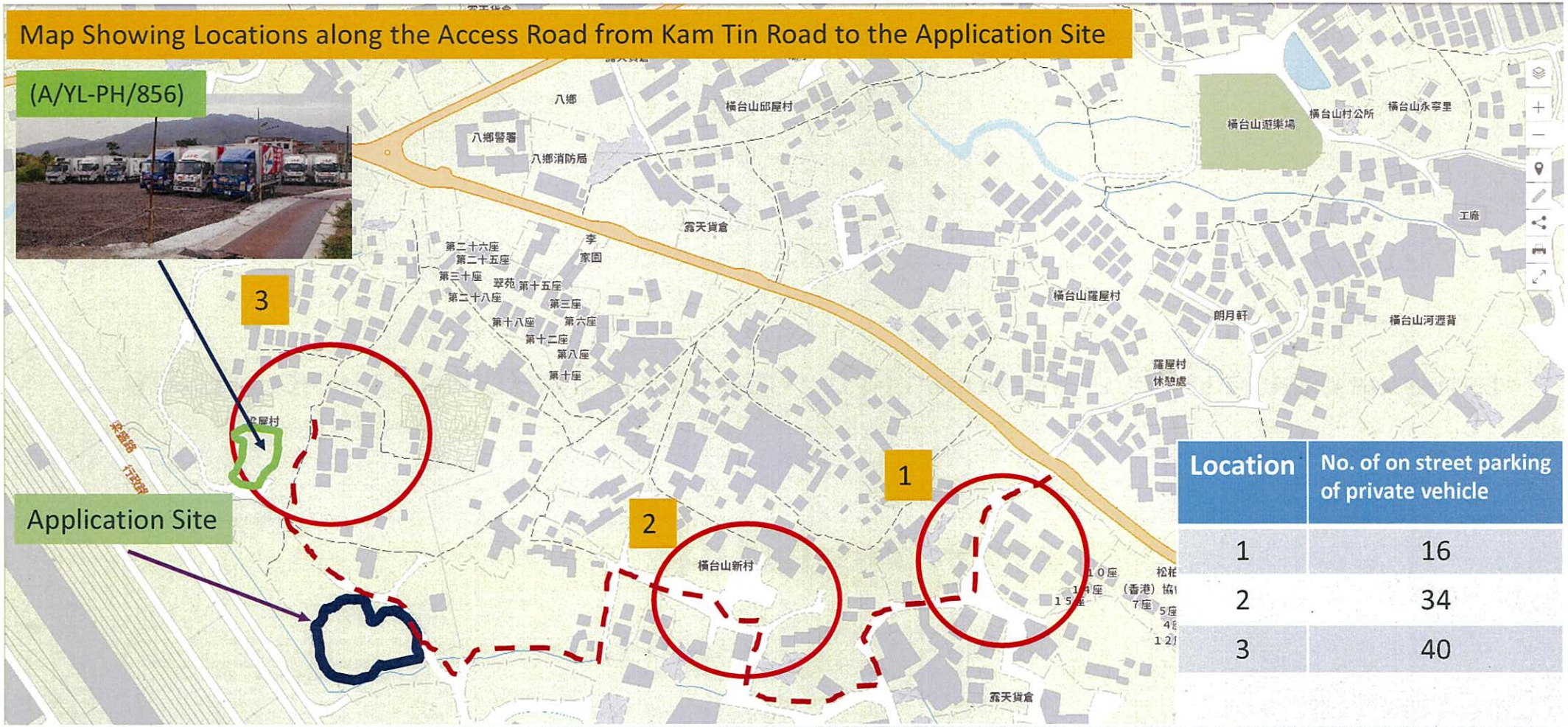
DFC b-a	=	0.0069
DFC b-c	=	0.0000
DFC c-b	=	0.0000

CRITICAL DFC = 0.01

Appendix D

Aerial Photos Showing the Existing Parking Situation in Wang Toi Shan San Tsuen

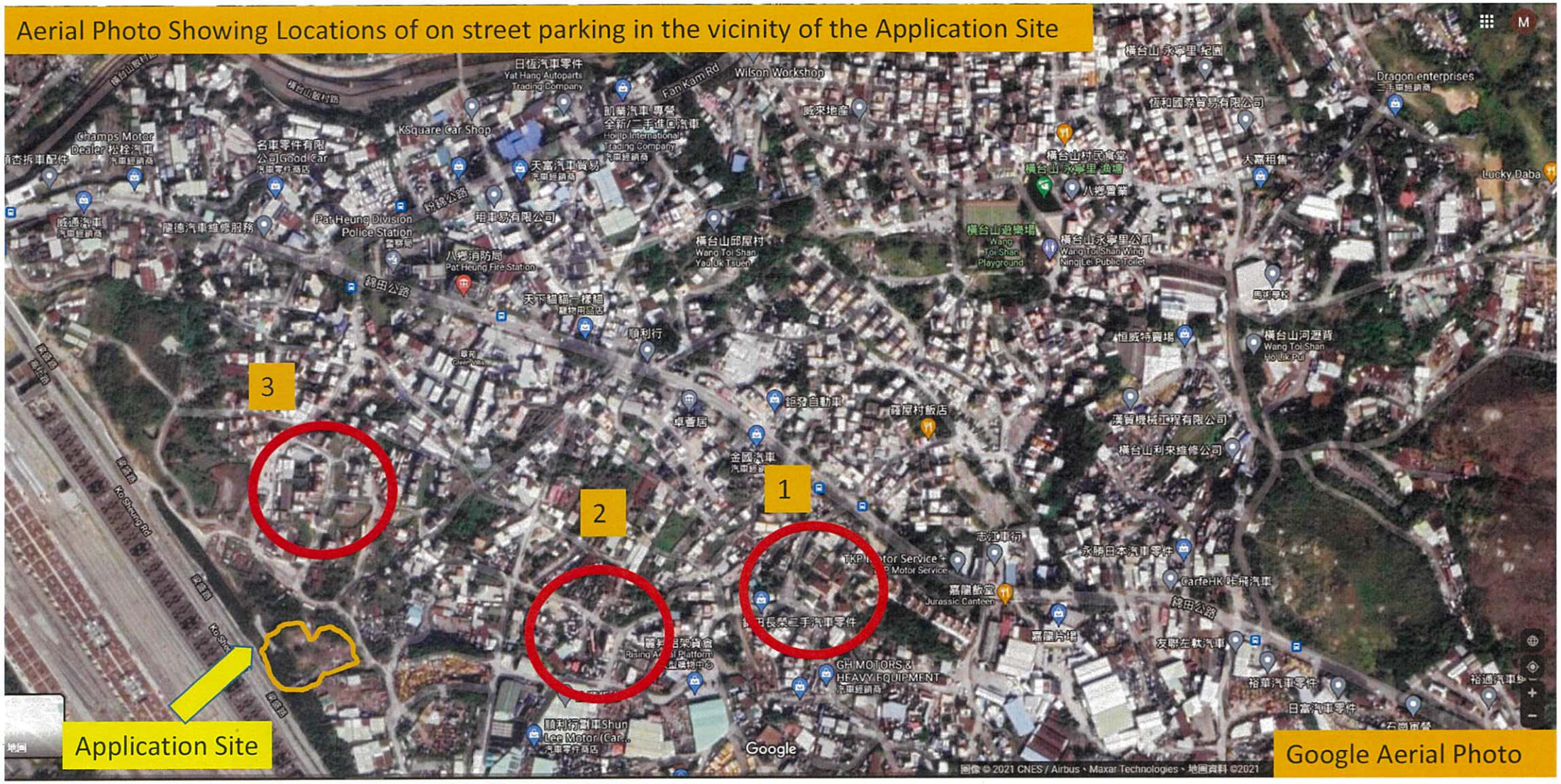
Map Showing Locations along the Access Road from Kam Tin Road to the Application Site



Location	No. of on street parking of private vehicle
1	16
2	34
3	40

Notes: (1) Parking of vehicles in "V" zone without planning approval is an offence under the Town Planning Ordinance;
(2) A "Public Vehicle Park" approved by the Town Planning Board on 6 Nov., 2020. The Public Vehicle Park has 15 nos. of parking spaces for private cars and nos. of parking spaces for Light Goods Vehicles.

Aerial Photo Showing Locations of on street parking in the vicinity of the Application Site



On street parking Location 1:

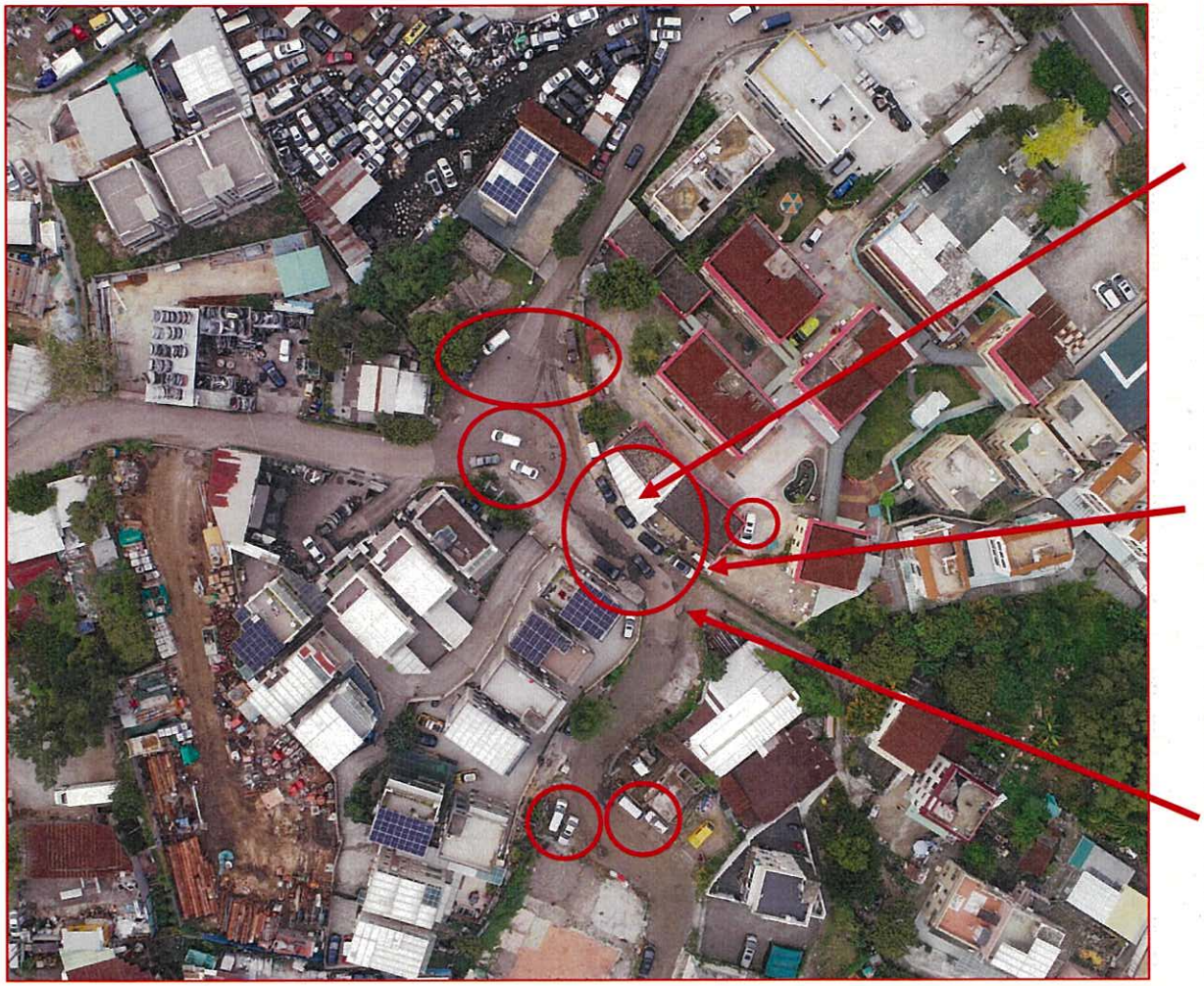
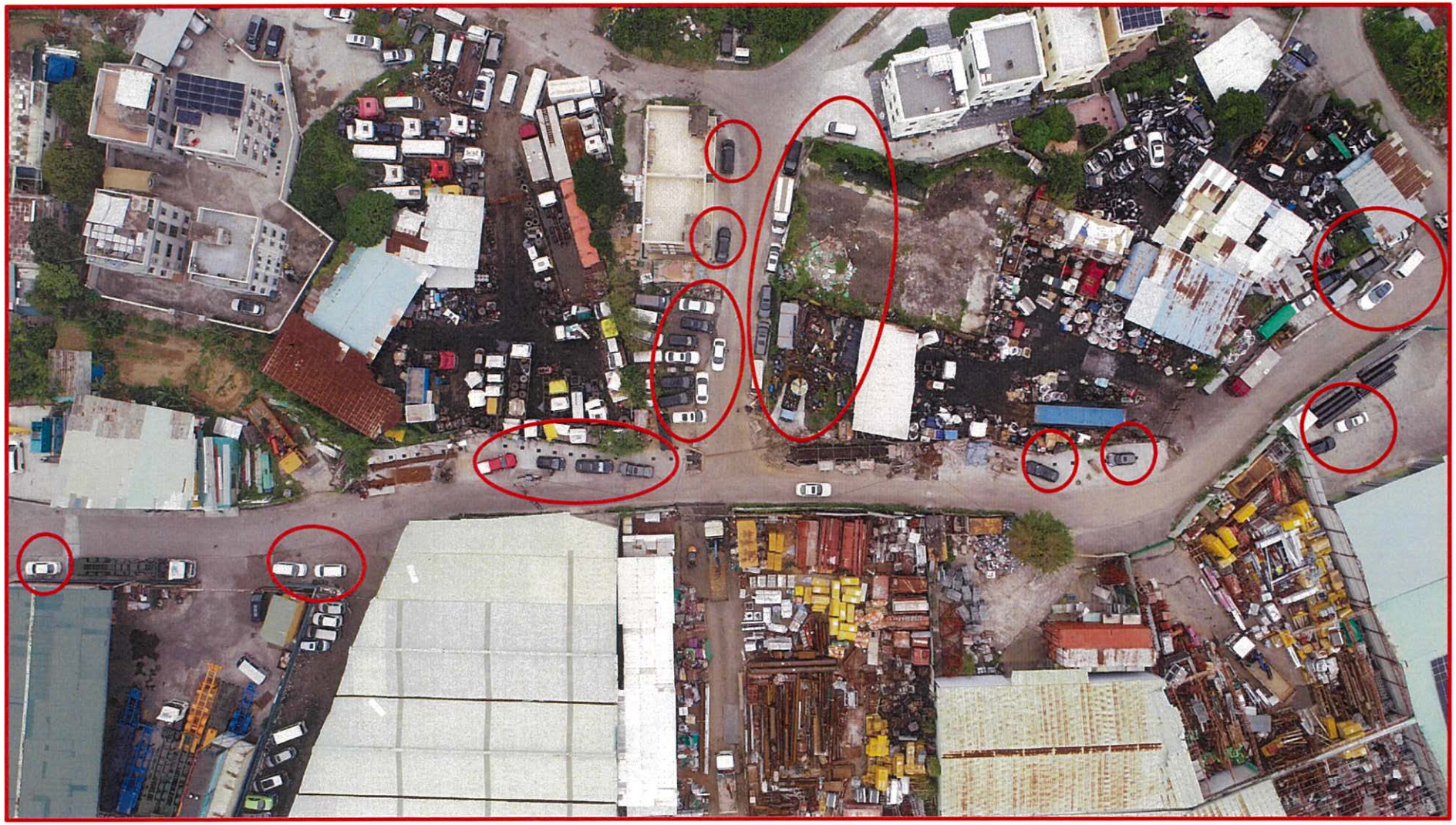


Photo taken at 5:15 pm dated 28.4.2021 by the Applicant

On street parking Location 2:



On street parking Location 2:

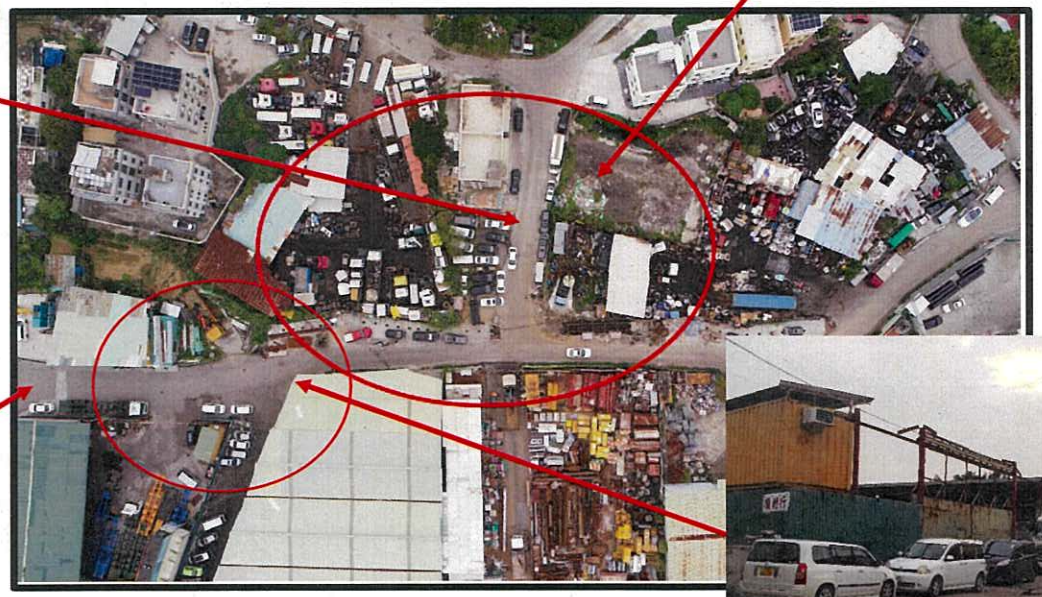


Photo taken at 5:30 pm dated 28.4.2021 by the Applicant

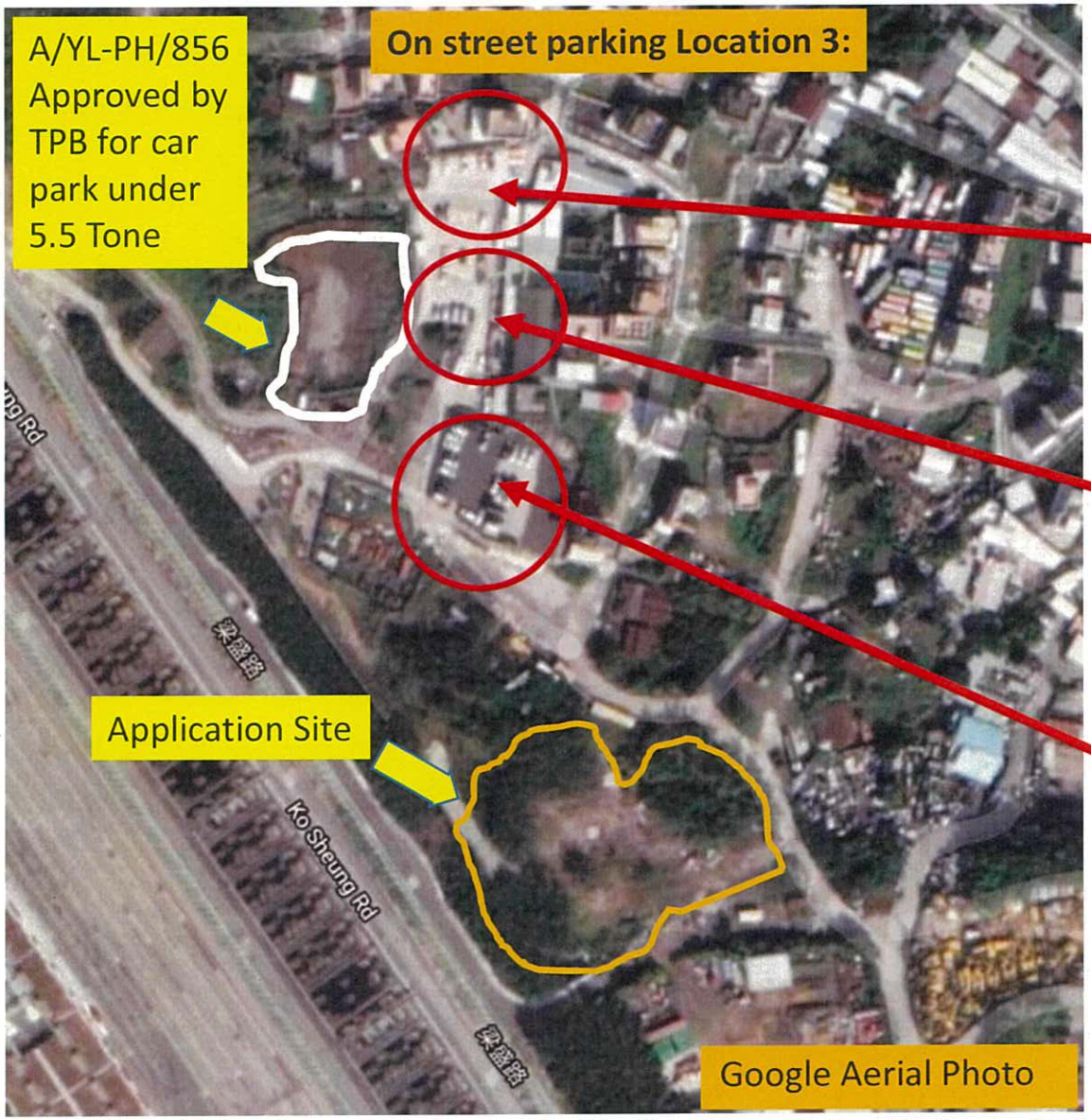


Photo taken at 5:45 pm dated 28.4.2021 by the Applicant

*The on-site aerial photo is unavailable since Location 3 is within the restricted zone for the use of unmanned aircraft system

Previous s.16 Applications covering the Application Site

Rejected Applications

	Application No.	Proposed Uses	Date of Consideration (RNTPC/TPB)	Rejection Reasons
1	A/YL-PH/235	Nine temporary open storage yards of construction materials for a period of 12 months	30.10.1998	(1), (2), (3), (4), (5), (6)
2	A/YL-PH/566	Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years	1.8.2008	(1), (3), (5), (6)

Rejection Reasons

(1) The proposed development is not in line with the planning intention of the "Agriculture" ("AGR") zone, which was to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It was also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. There was no strong justification in the submission for a departure from the planning intention, even on a temporary basis

(2) The proposed development is not in line with the planning intention of the "Village Type Development" ("V") zone which is to designate both existing recognized villages and areas of land considered suitable for village expansion. No strong justification has been given in the submission for a departure from such planning intention even on a temporary basis

(3) The proposed development does not comply with the then Town Planning Guidelines for "Application for Open Storage and Port Back-up Uses under Section 16 of the Town Planning Ordinance" in that there was no previous planning approval at the site / there were adverse departmental comments / it is incompatible with the surrounding area

(4) The proposed vehicular access leading to the site from Kam Tin Road would be via a sub-standard track passing through the existing village settlements in Wang Toi Shan San Tsuen. The frequent transportation of construction materials to and from the site in large quantities would generate adverse noise and traffic impacts on the nearby village settlements

(5) There is insufficient information in the submission to demonstrate that the development would not have adverse drainage / environmental / landscape impact on the surrounding areas

(6) Approval of the application would set an undesirable precedent for similar uses to proliferate into the "AGR" / "V" zone. The cumulative effect of approving such similar applications would result in a general degradation of the environment of the area

Appendix III of RNTPC
Paper No. A/YL-PH/857B

Similar Applications within the same "AGR" zone on the Pat Heung OZP

Rejected Applications

No.	Application No.	Proposed Use(s)/Development(s)	Date of Consideration by RNTPC/TPB	Rejection Reasons
1	A/YL-PH/758	Temporary Public Vehicle Park (Private Cars, Lorries and Coaches) for a Period of 3 Years	24.11.2017 9.3.2018 (on review)	(1), (2), (3)
2	A/YL-PH/799	Temporary Public Vehicle Park (excluding container vehicle) for a Period of 3 Years	18.1.2019	(1), (3)

Rejection Reasons

(1) The development is not in line with the planning intention of the "Agriculture" ("AGR") zone which is to retain and safeguard good quality agricultural land/ farm/fish ponds for agricultural purposes. This zone is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. No strong planning justification has been given in the submission for a departure from the planning intention, even on a temporary basis

(2) The applicant fails to demonstrate that the development would not generate adverse environmental impacts on the surrounding areas

(3) The approval of the application, even on a temporary basis, would set an undesirable precedent for other similar applications to proliferate into this part of the "AGR" zone. The cumulative effect of approving such application would result in a general degradation of the rural environment of the area

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

參考編號 **Reference Number:**	201013-095259-84772
提交限期 **Deadline for submission:**	13/10/2020
提交日期及時間 **Date and time of submission:**	13/10/2020 09:52:59
有關的規劃申請編號 **The application no. to which the comment relates:**	A/YL-PH/857
「提意見人」姓名/名稱 **Name of person making this comment:**	先生 Mr. Harry

意見詳情
Details of the Comment :

申請人在申請改劃前，理應清楚明白該處早已被劃為農業用地。作為土地擁有人，理應保護土地資產，而非對土地作先破壞、再申請改劃。再者，錦田南在附近公屋工程開展後。可耕農地已經愈來愈少，農業亦就來在該區消失。城規會理應禁止錦田南所有農地改劃，並加以保護。如有破壞農地者，亦應考慮轉介地政等部門根進，要求土地擁有人修復土地面貌，令農業不會在錦田南永久消失！

嘉道理農場暨植物園公司
Kadoorie Farm & Botanic Garden Corporation

The Secretary,
Town Planning Board,
15/F, North Point Government Offices,
333, Java Road, North Point,
Hong Kong.
(Email: tpbpd@pland.gov.hk)

RECEIVED
- 6 OCT 2020
Town Planning Board

6th October, 2020.

By email only

Dear Sir/ Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years (A/YL-PH/857)

1. We refer to the captioned.

2. There is a rejected application for 'Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years' (A/YL-PH/566) covering the current application site; the reasons for rejection are reproduced below:

(a) *the proposed development was not in line with the planning intention of the "Agriculture" ("AGR") zone, which was to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It was also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. The site was located amid a large "AGR" zone surrounded by fallow agricultural/vacant lands with scattered residential settlements. The proposed development was incompatible with the surroundings which were generally rural in character. There was no strong justification in the submission for a departure from the planning intention, even on a temporary basis;*

(b) *the proposed development was also not in line with the Town Planning Board Guidelines for "Application for Open Storage and Port Back-up Uses" (TPB PG-No.13D) in that there was no previous planning approval covering the site and there were adverse departmental comments on the impacts brought about by the proposed development;*

香港新界大埔林錦公路
Lam Kam Road, Tai Po, New Territories, Hong Kong
Email: eap@kfbg.org

(c) *there was no information in the submission to demonstrate that the proposed development would not cause adverse environmental, drainage and landscape impacts on the surrounding areas; and*

(d) *approval of the application would set an undesirable precedent for similar uses to proliferate into the zone. The cumulative effect of approving such applications would result in a general degradation of the environment of the area.*

3. We consider the captioned proposal is unlikely to be in line with the planning intention of Agriculture (AGR) zone. We are also concerned that the approval of this application would set a precedent for other similar applications in the AGR zone of concern; the Board should seriously consider the potential cumulative impact on this AGR zone of approving this application.

4. The application site is within AGR zone. We urge the Board to reject this application as the proposed use is not in line with the planning intention of AGR zone.

5. Thank you for your attention.

Ecological Advisory Programme
Kadoorie Farm and Botanic Garden

香港新界大埔林錦公路
Lam Kam Road, Tai Po, New Territories, Hong Kong
Email: eap@kfbg.org

世界自然基金會
香港分會

WWF-Hong Kong

香港新界葵涌葵昌路 8 號
萬泰中心 15 樓
15/F, Manhattan Centre
8 Kwai Cheong Road
Kwai Chung, N.T., Hong Kong

電話 Tel: +852 2526 1011
傳真 Fax:+852 2845 2764
wwf@wwf.org.hk
wwf.org.hk

8 Oct 2020

Chairman and members
Town Planning Board
15/F North Point Government Offices,
333 Java Road, North Point,
Hong Kong
(E-mail: tpbpd@pland.gov.hk)

RECEIVED
- 8 OCT 2020
Town Planning Board

By E-mail ONLY

Dear Sir/Madam,

RE: Proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years in "Agriculture" zone in Pat Heung (A/YL-PH/857)

WWF would like to lodge objection to the captioned.

Not in line with the planning intention of the "Agriculture" zone

The development, even on a temporary basis, is considered not in line with the planning intention of both the "Agriculture" zone which aims to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. Approval of the application will frustrate the planning intention of the zone. Even the site has been paved, it still has the potential to restore for any agricultural activities.

"Destroy first, develop later" approach may have adopted

Comparing to the Google Earth' aerial images in Fig 1, the application site has been changed its use as an open storage since 2013 or earlier. While we now don't have any update information to prove the site is associated with unauthorized development, we would like to ask the Town Planning Board to request relevant government authorities for investigation. If that were the case, we would like to remind the Town Planning Board to proactively deter "Destroy first, develop later" planning applications so as to be consistent with the Government press release on 4 July 2011 which stated that "*the Board is determined to conserve the rural and natural environment and will not tolerate any deliberate action to destroy the rural and natural environment in the hope that the*

together possible™

贊助人： 香港特別行政區行政長官 梁振英先生, GBM, GBS, JP
主 席： 何鼎達先生
行政總裁： 江偉智先生
義務核數師：香港立信德豪會計師事務所有限公司
義務公司秘書：嘉信秘書服務有限公司
義務律師：孖士打律師行
義務司庫：匯豐銀行
註冊慈善機構

Patron: The Honourable CY Leung, GBM, GBS, JP Chief Executive of the HKSAR
Chairman: Mr Edward M. Ho
CEO: Mr Peter Cornthwaite

Honorary Auditors: BDO Limited
Honorary Company Secretary: McCabe Secretarial Services Limited
Honorary Solicitors: Mayer Brown JSM
Honorary Treasurer: HSBC
Registered Charity
(Incorporated With Limited Liability)

註冊名稱 Registered Name: 世界自然(香港)基金會 World Wide Fund For Nature Hong Kong
(於香港註冊成立的擔保有限公司 Incorporated in Hong Kong with limited liability by guarantee)

Board would give sympathetic consideration to subsequent development on the site concerned"[1].

We would be grateful if our comments could be considered by the Town Planning Board.

Sincerely yours,
Tobi Lau (Mr.)
Manager, Conservation Policy

Fig 1 Changes of the landscape of the application site

Image source: Google Earth. Accessed on 8 Oct 2020.

[1] http://www.info.gov.hk/gia/general/201107/04/P201107040255.htm.

HKBWS 香港觀鳥會

人鳥和諧 自然長存

Secretary, Town Planning Board
15/F, North Point Government Offices
333 Java Road, North Point, Hong Kong
(E-mail: tpbpd@pland.gov.hk)

RECEIVED
- 8 OCT 2020
Town Planning Board

By email only

8 October 2020

Dear Sir/Madam,

Comments on the planning application for the proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Pat Heung, Yuen Long (A/YL-PH/857)

The Hong Kong Bird Watching Society (HKBWS) objects to the planning application based on the following reasons.

1 **Not in line with the planning intention of the "Agriculture" (AGR) zoning**

The application site is located within the AGR zone, where the planning intention is *"to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes"*. From Google Earth aerial photograph in 2017, there are active farmlands near the application site (Figure 1). We consider that the site has potential for agricultural uses. However, the proposed vehicle park development is not in line with the intention to retain land for agricultural purposes, and therefore we urge the Town Planning Board (Board) to reject this application.

2 **The Town Planning Board should not encourage "destroy first, build later"**

2.1 Two Enforcement Notices (Case no. E/YL-PH/399 and E/YL-PH/484) for the unauthorized development of open storage and workshop were issued at the application site.

香港觀鳥會 Hong Kong Bird Watching Society
電話 Tel No +852 2377 4387 電郵 E-mail info@hkbws.org.hk 地址 香港九龍荔枝角青山道532號偉基大廈7C
傳真 Fax No +852 2314 3687 網頁 Web site www.hkbws.org.hk Address 7C, V Ga Building, 532 Castle Peak Road, Lai Chi Kok, Kowloon, Hong Kong

BirdLife INTERNATIONAL PARTNER

2.2 From the Google Earth aerial photographs, landscape changes including vegetation clearance, site formation and storage uses were seen at the application site between 2012 and 2017 (Figure 1).

2.3 We consider that this is "destroy first, build later". We are concerned the approval of the current application would further legitimize the current misuse of the AGR zone, leading to the promotion of "destroy first, develop later" attitudes among landowners in the locality. As the Board has suggested that *"the Board will not tolerate any deliberate action to destroy the rural and natural environment in the hope that the Board would give sympathetic consideration to subsequent development on the site concerned."* [1] We urge the Board to reject this application.

3 Set an undesirable precedent to the future development

As there are active agricultural land nearby, the approval of this application will set an undesirable precedent to the future similar applications associated with "destroy first, build later" within the AGR zone, and thus nullifying the statutory planning control mechanism. We urge the Board to reject this application in order to protect AGR zone and the existing agricultural cluster from any development threats.

4 Justifications for the decision and comments made by Government departments and the Board

According to the Hong Kong Planning Standards and Guidelines (HKPSG), Chapter 10, Section 2.1 (iii), the Board has the responsibility to *"control adjoining uses to minimise adverse impacts on conservation zones and optimise their conservation value"*. We note that all other Government bureaux/departments are also bound to the HKPSG, the Agriculture, Fisheries and Conservation Department (AFCD) and the Planning Department (PlanD) has the responsibility to advise the Board on the ecological and planning aspects in particular[2]. Given AFCD's mission to conserve

[1] TPB Press Release. Available at: http://www.info.gov.hk/gia/general/201107/04/P201107040255.htm

[2] AFCD Role of Department. Available at: http://www.afcd.gov.hk/english/aboutus/abt_role/abt_role.html

natural environment and safeguard the ecological integrity[3] and the proposed development is not in line with the planning intention of the statutory zoning, HKBWS would also expect AFCD and PlanD to object this application. Should AFCD, PlanD or the Board feels otherwise, we urge that the appropriate justifications are provided.

The HKBWS respectfully requests the Board to take our comments into consideration and **reject** the current application. Thank you for your kind attention.

Yours faithfully,

Suet Mei

Wong Suet Mei
Assistant Conservation Officer
The Hong Kong Bird Watching Society

cc.
The Conservancy Association
Designing Hong Kong
Kadoorie Farm and Botanic Garden
WWF – Hong Kong
TrailWatch

[3] AFCD Vision and Mission. Available at: http://www.afcd.gov.hk/english/aboutus/vision_mission/abt_vision_mission.html

Figure 1. The Google Earth aerial photograph in in 2017 shows that there are active farmlands near the application site (marked with red line). The proposed vehicle park development is not in line with the intention to retain land for agricultural purposes. Moreover, landscape changes including vegetation clearance, site formation and storage uses were seen at the application site between 2012 and 2017. We consider that this is "destroy first, build later". We therefore urge the Board to reject this application.

5-5

tpbpd@pland.gov.hk

寄件者: [redacted]
寄件日期: 2020年10月12日星期一 3:41
收件者: tpbpd
主旨: A/YL-PH/857 DD 111 Leung Uk Tsuen, Pat Heung
附件: Leung Uk Tsuen - Google Maps.pdf

A/YL-PH/857
Lots 1869 (Part), 1870 (Part), 1872 (Part), 1873 (Part), 1875 RP (Part), 1876 and 1877 in D.D. 111 Leung Uk Tsuen, Pat Heung
Site area : About 3,526sq.m
Zoning : "Agriculture"
Applied use : 100 Vehicle Parking

Dear TPB Members,

The application is clearly to legitimize a long standing Open Storage operation.

Private Vehicle parking? But there is no sizeable residential cluster close by. Unlike a similar application 803 for Open Storage on adjacent lots, PlanD cannot use the usual line that it is a roll over of previously approved use.

Members are obliged to raise questions as to what is the true intention of this application.

Mary Mulvihill

Google Maps Leung Uk Tsuen

Imagery ©2020 CNES / Airbus, Maxar Technologies, Map data ©2020 20 m

seq 3. 5-6

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

參考編號 **Reference Number:**	210224-162811-04881
提交限期 **Deadline for submission:**	12/03/2021
提交日期及時間 **Date and time of submission:**	24/02/2021 16:28:11
有關的規劃申請編號 **The application no. to which the comment relates:**	A/YL-PH/857
「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，鄉郊設臨時公眾停車場連附屬辦公室將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。

嘉道理農場暨植物園公司
Kadoorie Farm & Botanic Garden Corporation

The Secretary,
Town Planning Board,
15/F, North Point Government Offices,
333, Java Road, North Point,
Hong Kong.
(Email: tpbpd@pland.gov.hk)

RECEIVED
16 MAR 2021
Town Planning Board

10th March, 2021.

By email only

Dear Sir/ Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years (A/YL-PH/857)

1. We refer to the captioned.

2. According to the gist, there are two rejected planning applications covering the current application site; the reasons to reject one of these applications (i.e., A/YL-PH/566; Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years) are reproduced below:

(a) the proposed development was not in line with the planning intention of the "Agriculture" ("AGR") zone, which was to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It was also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. The site was located amid a large "AGR" zone surrounded by fallow agricultural/vacant lands with scattered residential settlements. The proposed development was incompatible with the surroundings which were generally rural in character. There was no strong justification in the submission for a departure from the planning intention, even on a temporary basis;

(b) the proposed development was also not in line with the Town Planning Board Guidelines for "Application for Open Storage and Port Back-up Uses" (TPB PG-No.13D) in that there was no previous planning approval covering the site and there were adverse departmental comments on the impacts brought about by the proposed

香港新界大埔林錦公路
Lam Kam Road, Tai Po, New Territories, Hong Kong
Email: eap@kfbg.org

development;

(c) there was no information in the submission to demonstrate that the proposed development would not cause adverse environmental, drainage and landscape impacts on the surrounding areas; and

(d) approval of the application would set an undesirable precedent for similar uses to proliferate into the zone. The cumulative effect of approving such applications would result in a general degradation of the environment of the area.

3. We urge the Board to reject this application as the proposed use is not in line with the planning intention of Agriculture zone.

4. Thank you for your attention.

Ecological Advisory Programme
Kadoorie Farm and Botanic Garden

HKBWS 香港觀鳥會

人鳥和諧 自然長存

Secretary, Town Planning Board
15/F, North Point Government Offices
333 Java Road, North Point, Hong Kong
(E-mail: tpbpd@pland.gov.hk)

RECEIVED
12 MAR 2021
Town Planning Board

By email only

12 March 2021

Dear Sir/Madam,

Comments on the planning application for the proposed Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years at Pat Heung, Yuen Long (A/YL-PH/857)

The Hong Kong Bird Watching Society (HKBWS) objects to the planning application based on the following reasons.

1 **Not in line with the planning intention of the "Agriculture" (AGR) zoning**

The application site is located within the AGR zone, where the planning intention is *"to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes"*. From Google Earth aerial photograph in 2017, there are active farmlands near the application site (Figure 1). We consider that the site has potential for agricultural uses. However, the proposed vehicle park development is not in line with the intention to retain land for agricultural purposes, and therefore we urge the Town Planning Board (Board) to reject this application.

2 **The Town Planning Board should not encourage "destroy first, build later"**

2.1 Two Enforcement Notices (Case no. E/YL-PH/399 and E/YL-PH/484) for the unauthorized development of open storage and workshop were issued at the application site.

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+852 2314 3687 www.hkbws.org.hk 7C, V Ga Building, 532 Castle Peak Road, Lai Chi Kok, Kowloon, Hong Kong

BirdLife PARTNER

2.2 From the Google Earth aerial photographs, landscape changes including vegetation clearance, site formation and storage uses were seen at the application site between 2012 and 2017 (Figure 1).

2.3 We consider that this is "destroy first, build later". We are concerned the approval of the current application would further legitimize the current misuse of the AGR zone, leading to the promotion of "destroy first, develop later" attitudes among landowners in the locality. As the Board has suggested that *"the Board will not tolerate any deliberate action to destroy the rural and natural environment in the hope that the Board would give sympathetic consideration to subsequent development on the site concerned."* [1] We urge the Board to reject this application.

3 Set an undesirable precedent to the future development

As there are active agricultural land nearby, the approval of this application will set an undesirable precedent to the future similar applications associated with "destroy first, build later" within the AGR zone, and thus nullifying the statutory planning control mechanism. We urge the Board to reject this application in order to protect AGR zone and the existing agricultural cluster from any development threats.

4 Justifications for the decision and comments made by Government departments and the Board

According to the Hong Kong Planning Standards and Guidelines (HKPSG), Chapter 10, Section 2.1 (iii), the Board has the responsibility to *"control adjoining uses to minimise adverse impacts on conservation zones and optimise their conservation value"*. We note that all other Government bureaux/departments are also bound to the HKPSG, the Agriculture, Fisheries and Conservation Department (AFCD) and the Planning Department (PlanD) has the responsibility to advise the Board on the ecological and planning aspects in particular[2]. Given AFCD's mission to conserve

[1] TPB Press Release. Available at: http://www.info.gov.hk/gia/general/201107/04/P201107040255.htm

[2] AFCD Role of Department. Available at: http://www.afcd.gov.hk/english/aboutus/abt_role/abt_role.html

natural environment and safeguard the ecological integrity[3] and the proposed development is not in line with the planning intention of the statutory zoning, HKBWS would also expect AFCD and PlanD to object this application. Should AFCD, PlanD or the Board feels otherwise, we urge that the appropriate justifications are provided.

The HKBWS respectfully requests the Board to take our comments into consideration and **reject** the current application. Thank you for your kind attention.

Yours faithfully,

Suetmei

Wong Suet Mei
Conservation Officer
The Hong Kong Bird Watching Society

cc.
The Conservancy Association
Designing Hong Kong
Kadoorie Farm and Botanic Garden
WWF – Hong Kong
TrailWatch

[3] AFCD Vision and Mission. Available at: http://www.afcd.gov.hk/english/aboutus/vision_mission/abt_vision_mission.html

Figure 1. The Google Earth aerial photograph in in 2017 shows that there are active farmlands near the application site (marked with red line). The proposed vehicle park development is not in line with the intention to retain land for agricultural purposes. Moreover, landscape changes including vegetation clearance, site formation and storage uses were seen at the application site between 2012 and 2017. We consider that this is "destroy first, build later". We therefore urge the Board to reject this application.

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

參考編號 **Reference Number:**	210608-150552-90821
提交限期 **Deadline for submission:**	29/06/2021
提交日期及時間 **Date and time of submission:**	08/06/2021 15:05:52
有關的規劃申請編號 **The application no. to which the comment relates:**	A/YL-PH/857
「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，鄉郊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。

5-9附加

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

參考編號 **Reference Number:**	210621-163223-57014
提交限期 **Deadline for submission:**	29/06/2021
提交日期及時間 **Date and time of submission:**	21/06/2021 16:32:23
有關的規劃申請編號 **The application no. to which the comment relates:**	A/YL-PH/857
「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，鄉郊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。

K F B G
Kadoorie Farm & Botanic Garden
嘉道理農場暨植物園

嘉道理農場暨植物園公司
Kadoorie Farm & Botanic Garden Corporation

The Secretary,
Town Planning Board,
15/F, North Point Government Offices,
333, Java Road, North Point,
Hong Kong.
(Email: tpbpd@pland.gov.hk)

RECEIVED
28 JUN 2021
Town Planning Board

28th June, 2021.

By email only

Dear Sir/ Madam,

Temporary Public Vehicle Park with Ancillary Site Office for a Period of 3 Years (A/YL-PH/857)

1. We refer to the captioned.

2. We urge the Board to reject this application as the proposed use is not in line with the planning intention of Agriculture (AGR) zone.

3. According to the gist, there are two rejected applications covering the application site and their proposed uses are also not in line with the planning intention of AGR zone. The reasons to reject one of these applications (A/YL-PH/566) are reproduced below:

(a) the proposed development was not in line with the planning intention of the "Agriculture" ("AGR") zone, which was to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It was also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. The site was located amid a large "AGR" zone surrounded by fallow agricultural/vacant lands with scattered residential settlements. The proposed development was incompatible with the surroundings which were generally rural in character. There was no strong justification in the submission for a departure from the planning intention, even on a temporary basis;

(b) the proposed development was also not in line with the Town Planning Board Guidelines for "Application for Open Storage and Port Back-up Uses" (TPB

香港新界大埔林錦公路
Lam Kam Road, Tai Po, New Territories, Hong Kong
Email: eap@kfbg.org

PG-No.13D) in that there was no previous planning approval covering the site and there were adverse departmental comments on the impacts brought about by the proposed development;

(c) there was no information in the submission to demonstrate that the proposed development would not cause adverse environmental, drainage and landscape impacts on the surrounding areas; and

(d) approval of the application would set an undesirable precedent for similar uses to proliferate into the zone. The cumulative effect of approving such applications would result in a general degradation of the environment of the area.

4. We also urge the Board to consider the potential cumulative impacts of approving this application on the AGR zone as the approval would set a precedent for other similar applications in this AGR zone.

5. Thank you for your attention.

Ecological Advisory Programme
Kadoorie Farm and Botanic Garden

香港新界大埔林錦公路
Lam Kam Road, Tai Po, New Territories, Hong Kong
Email: eap@kfbg.org

☐ Urgent ☐ Return receipt ☐ Sign ☐ Encrypt ☐ Mark Subject Restricted ☐ Expand personal&public groups

Fwd: A/YL-PH/857 DD 111 Leung Uk Tsuen, Pat Heung
29/06/2021 03:16

From:

To: tpbpd <tpbpd@pland.gov.hk>
FileRef:

1 attachment

Leung Uk Tsuen - Google Maps.pdf

Dear TPB Members,
The gradual reduction in the number of vehicles rather than render the application more favourable, actually reinforces the assumption that this is nothing more than an attempt to perpetuate the Open Storage operation involving long bodied vehicles or containers.
Previous objections upheld.
Mary Mulvihill

From:
To: "tpbpd" <tpbpd@pland.gov.hk>
Sent: Monday, October 12, 2020 3:41:23 AM
Subject: A/YL-PH/857 DD 111 Leung Uk Tsuen, Pat Heung
A/YL-PH/857
Lots 1869 (Part), 1870 (Part), 1872 (Part), 1873 (Part), 1875 RP (Part), 1876 and 1877 in D.D. 111 Leung Uk Tsuen, Pat Heung
Site area : About 3,526sq.m
Zoning : "Agriculture"
Applied use : 100 Vehicle Parking - reduced to 80 and then to 75

Dear TPB Members,

The application is clearly to legitimize a long standing Open Storage operation.

Private Vehicle parking? But there is no sizeable residential cluster close by. Unlike a similar application 803 for Open Storage on adjacent lots, PlanD cannot use the usual line that it is a roll over of previously approved use.

Members are obliged to raise questions as to what is the true intention of this application.

Mary Mulvihill

Google Maps Leung Uk Tsuen

Imagery ©2020 CNES / Airbus, Maxar Technologies, Map data ©2020 20 m

Advisory Clauses

(a) note DLO/YL, LandsD's comments that the Site comprises Old Schedule Agricultural Lots 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. The STW holder(s) will need to apply to his office for modification of the STW conditions where appropriate, and the lot owner(s) of the lot(s) without STW will need to apply to his office to permit the structures to be erected or regularize any irregularities on site, if any. Besides, given the proposed use is temporary in nature, only application for regularization or erection of temporary structure(s) will be considered. Applications for any of the above will be considered by LandsD acting in the capacity of the landlord or lessor at its sole discretion and there is no guarantee that such application will be approved. If such application is approved, it will be subject to such terms and conditions, including among others the payment of premium or fee, as may be imposed by the LandsD;

(b) note C for T's comments 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 the LandsD. Moreover, the management and maintenance responsibilities of the local access road should be clarified with the relevant lands and maintenance authorities accordingly;

(c) note CHE/NTW, HyD's comments that his department shall not be responsible for the maintenance of any access connecting the Site and Kam Tin Road. Adequate drainage measures should be provided to prevent surface water running from the Site to the nearby public roads and drains;

(d) follow the relevant mitigation measures and requirements in the latest "Code of Practice on Handling the Environmental Aspects of Temporary Uses and Open Storage Sites" issued by the DEP to minimise any potential impact;

(e) note CTP/UD&L of PlanD's comments that approval of the planning application under the Town Planning Ordinance does not imply approval of the tree preservation / removal scheme under the lease. The applicant should seek comments and approval from the relevant authority on the proposed tree works and compensatory planting proposal, where appropriate;

(f) note D of FS's comments that in consideration of the design / nature of the proposal, FSIs are anticipated to be required. Therefore, the applicant is advised to submit relevant layout plans incorporated with the proposed FSIs to his department for approval. The layout plans should be drawn to scale and depicted with dimensions and nature of occupancy. The location of where the proposed FSI to be installed

should be clearly marked on the layout plans. The applicant is reminded that if the proposed structure(s) is required to comply with the BO (Cap. 123), detailed fire service requirements will be formulated upon receipt of formal submission of general building plans; and

(g) note CBS/NTW, BD's comments that that if the existing structures (not being a New Territories Exempted House) are erected on leased land without the approval of the BA, they are UBW under the BO and should not be designated for any proposed use under the application. For UBW erected on leased land, enforcement action may be taken by the BD to effect their removal in accordance with the prevailing enforcement policy against UBW as and when necessary. The granting of any planning approval should not be construed as an acceptance of any existing building works or UBW 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 the Site, prior approval and consent of the BA should be obtained, otherwise, they are UBW. An Authorized Person should be appointed as the co-ordinator for the proposed building works in accordance with the BO. 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 the building plan submission stage. Detailed checking under the BO will be carried out at building plan submission stage.