Form No. S16-I
表格第 S16-I 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 proposals not involving or not only involving:
適用於建議不涉及或不祇涉及:

(i) Construction of "New Territories Exempted House(s)";
興建「新界豁免管制屋宇」;

(ii) Temporary use/development of land and/or building not exceeding 3 years in rural areas or Regulated Areas; and
位於鄉郊地區或受規管地區土地上及/或建築物內進行為期不超過三年的臨時用途/發展;及

(iii) Renewal of permission for temporary use or development in rural areas or Regulated Areas
位於鄉郊地區或受規管地區的臨時用途或發展的許可續期

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.tpb.gov.hk/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.tpb.gov.hk/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

2403049 18/12 By hand

Form No. S16-I 表格第 S16-I 號

For Official Use Only 請勿填寫此欄	Application No. 申請編號	A/TP/702
	Date Received 收到日期	20 DEC 2024

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.tpb.gov.hk/. 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.tpb.gov.hk/)，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)

Hong Kong Sheng Kung Hui Welfare Council 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)

Masterplan 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）	Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po
(b) Site area and/or gross floor area involved 涉及的地盤面積及／或總樓面面積	☑Site area 地盤面積 2,191.3 sq.m 平方米 ☑About 約 ☑Gross floor area 總樓面面積 12,521.1 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）	NA sq.m 平方米 ☐About 約

(d) Name and number of the related statutory plan(s) 有關法定圖則的名稱及編號	Approved Tai Po Outline Zoning Plan No. S/TP/30
(e) Land use zone(s) involved 涉及的土地用途地帶	Government, Institution or Community
(f) Current use(s) 現時用途	Vacant (If there are any Government, institution or community facilities, please illustrate on plan and specify the use and gross floor area) (如有任何政府、機構或社區設施，請在圖則上顯示，並註明用途及總樓面面積)

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

The applicant 申請人 –

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

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

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

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

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

(a) According to the record(s) of the Land Registry as at .....27/11/2024..... (DD/MM/YYYY), this application involves a total of .....1..... "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 .....1..... "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)
1	The Remaining Portion of Taxlord Lot No. T77 in D.D. 34	10/12/2024

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

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

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

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

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

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

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

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

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

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

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

Others 其他

☐ others (please specify)
其他（請指明）

_____

_____

_____

_____

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

6. Type(s) of Application 申請類別

☐ Type (i) 第(i)類 Change of use within existing building or part thereof 更改現有建築物或其部分內的用途

☐ Type (ii) 第(ii)類 Diversion of stream / excavation of land / filling of land / filling of pond as required under Notes of Statutory Plan(s) 根據法定圖則《註釋》內所要求的河道改道／挖土／填土／填塘工程

☐ Type (iii) 第(iii)類 Public utility installation / Utility installation for private project 公用事業設施裝置/私人發展計劃的公用設施裝置

☑ Type (iv) 第(iv)類 Minor relaxation of stated development restriction(s) as provided under Notes of Statutory Plan(s) 略為放寬於法定圖則《註釋》內列明的發展限制

☑ Type (v) 第(v)類 Use / development other than (i) to (iii) above 上述的(i)至(iii)項以外的用途／發展

Note 1: May insert more than one「✓」.
註 1： 可在多於一個方格內加上「✓」號
Note 2: For Development involving columbarium use, please complete the table in the Appendix.
註 2： 如發展涉及靈灰安置所用途，請填妥於附件的表格。

(i) For Type (i) application 供第(i)類申請

(a) Total floor area involved 涉及的總樓面面積	sq.m 平方米		
(b) Proposed use(s)/development 擬議用途/發展	(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)		
(c) Number of storeys involved 涉及層數		Number of units involved 涉及單位數目	
(d) Proposed floor area 擬議樓面面積	Domestic part 住用部分 ..... sq.m 平方米 ☐About 約		
	Non-domestic part 非住用部分..... sq.m 平方米 ☐About 約		
	Total 總計 ..... sq.m 平方米 ☐About 約		

(e) Proposed uses of different floors (if applicable) 不同樓層的擬議用途(如適用) (Please use separate sheets if the space provided is insufficient) (如所提供的空間不足，請另頁說明)	Floor(s) 樓層	Current use(s) 現時用途	Proposed use(s) 擬議用途

(ii) For Type (ii) application 供第(ii)類申請	
(a) Operation involved 涉及工程	☐ 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 (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) (請用圖則顯示有關土地／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))
(b) Intended use/development 有意進行的用途／發展	

(iii) For Type (iii) application 供第(iii)類申請	
(a) Nature and scale 性質及規模	☐ Public utility installation 公用事業設施裝置 ☐ Utility installation for private project 私人發展計劃的公用設施裝置 Please specify the type and number of utility to be provided as well as the dimensions of each building/structure, where appropriate 請註明有關裝置的性質及數量，包括每座建築物/構築物(倘有)的長度、高度和闊度

Name/type of installation 裝置名稱／種類	Number of provision 數量	Dimension of each installation /building/structure (m) (LxWxH) 每個裝置／建築物／構築物的尺寸 (米) (長 x 闊 x 高)

(Please illustrate on plan the layout of the installation 請用圖則顯示裝置的布局)

(iv) For Type (iv) application 供第(iv)類申請

(a) Please specify the proposed minor relaxation of stated development restriction(s) and **also fill in the proposed use/development and development particulars in part (v) below** –
請列明擬議略為放寬的發展限制**並填妥於第(v)部分的擬議用途/發展及發展細節** –

☐	Plot ratio restriction 地積比率限制	From 由 ..... to 至 .....
☐	Gross floor area restriction 總樓面面積限制	From 由 .....sq. m 平方米 to 至 .....sq. m 平方米
☐	Site coverage restriction 上蓋面積限制	From 由 .....% to 至 ..... %
☑	Building height restriction 建築物高度限制	From 由 .....m 米 to 至 ..... m 米 From 由 ..... mPD 米 (主水平基準上) to 至 .....mPD 米 (主水平基準上) From 由 8 storeys 層 to 至 10 storeys 層
☐	Non-building area restriction 非建築用地限制	From 由 .....m to 至 ..... m
☐	Others (please specify) 其他（請註明）	.....

(v) For Type (v) application 供第(v)類申請

(a) Proposed use(s)/development 擬議用途/發展	Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility (Please illustrate the details of the proposal on a layout plan 請用平面圖說明建議詳情)

(b) Development Schedule 發展細節表

Proposed gross floor area (GFA) 擬議總樓面面積	12,521.1 sq.m 平方米	☑About 約
Proposed plot ratio 擬議地積比率	5.7	☑About 約
Proposed site coverage 擬議上蓋面積	See below* %	☐About 約
Proposed no. of blocks 擬議座數	1	
Proposed no. of storeys of each block 每座建築物的擬議層數	10 storeys 層	
	☐ include 包括 ____ storeys of basements 層地庫	
	☑ exclude 不包括 2 storeys of basements 層地庫	
Proposed building height of each block 每座建築物的擬議高度	115 mPD 米(主水平基準上)	☑About 約
	..... m 米	☐About 約

*Max. 85% (15m or below)
Max. 42% (above 15m)

Part 6 (Cont'd) 第 6 部分 (續)

☐ Domestic part 住用部分

GFA 總樓面面積 ..... sq. m 平方米 ☐About 約

number of Units 單位數目 .....

average unit size 單位平均面積 .....sq. m 平方米 ☐About 約

estimated number of residents 估計住客數目 .....

☑ Non-domestic part 非住用部分

GFA 總樓面面積

☐ eating place 食肆 ..... sq. m 平方米 ☐About 約

☐ hotel 酒店 ..... sq. m 平方米 ☐About 約

(please specify the number of rooms 請註明房間數目) .....

☐ office 辦公室 ..... sq. m 平方米 ☐About 約

☐ shop and services 商店及服務行業 ..... sq. m 平方米 ☐About 約

☑ Government, institution or community facilities 政府、機構或社區設施*

(please specify the use(s) and concerned land area(s)/GFA(s) 請註明用途及有關的地面面積／總樓面面積)

Staff Training Unit (STU): about 194 sqm

Area for common connection, vehicular circulation, car park and back of house facilities (E&M and sewage treatment plant (STP)): about 5,003.5 sqm

*Special Child Care Centre (SCCC): about 968.4 sqm
Residential Care Home for the Elderly (CoC Home): about 4,769.8 sqm
Small Group Home (SGH): about 941.2 sqm
Foster Care Services and Agency-based Enhancement of Professional Staff Support Services (FSC & ABPSS): about 94.7 sqm
Child Care Centre (CCC): about 549.5 sqm

☐ other(s) 其他

(please specify the use(s) and concerned land area(s)/GFA(s) 請註明用途及有關的地面面積／總樓面面積)

.....

.....

.....

☑ Open space 休憩用地

(please specify land area(s) 請註明地面面積)

☑ private open space 私人休憩用地 325..... sq. m 平方米 ☑ Not less than 不少於

☐ public open space 公眾休憩用地 ..... sq. m 平方米 ☐ Not less than 不少於

(c) Use(s) of different floors (if applicable) 各樓層的用途 (如適用)

[Block number] [座數]	[Floor(s)] [層數]**	[Proposed use(s)] [擬議用途]
.....	7/F	STU, FSC&ABPSS, CoC Home (supporting facilities), landscaped area
.....	3/F – 6/F	CoC Home
.....	2/F	CoC Home, landscaped area
.....	1/F	CoC Home, SCCC, CCC, landscaped area
.....	G/F	CoC Home, SCCC, CCC, parking and lay by, landscaped Area
.....	B1/F – B2/F	Carpark and STP, supporting facilities for CoC Home, SCCC and CCC

(d) Proposed use(s) of uncovered area (if any) 露天地方（倘有）的擬議用途

Landscaped Areas, Circulation Area

.....

.....

.....

.....

.....

**8/F and 9/F - SGH and landscaped area
Roof - E&M

7. Anticipated Completion Time of the Development Proposal 擬議發展計劃的預計完成時間

Anticipated completion time (in month and year) of the development proposal (by phase (if any)) (e.g. June 2023)
擬議發展計劃預期完成的年份及月份 (分期 (倘有)) (例：2023 年 6 月)
(Separate anticipated completion times (in month and year) should be provided for the proposed public open space and Government, institution or community facilities (if any))
(申請人須就擬議的公眾休憩用地及政府、機構或社區設施 (倘有) 提供個別擬議完成的年份及月份)

March 2030

8. Vehicular Access Arrangement of the Development Proposal 擬議發展計劃的行車通道安排

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)) Tai Po Road – Tai Po Kau section ☐ 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	☐
Any provision of parking space for the proposed use(s)? 是否有為擬議用途提供停車位？	Yes 是	☑ (Please specify type(s) and number(s) and illustrate on plan) 請註明種類及數目並於圖則上顯示) Private Car Parking Spaces 私家車車位: 7 Motorcycle Parking Spaces 電單車車位: 2 Light Goods Vehicle Parking Spaces 輕型貨車泊車位: 1 Medium Goods Vehicle Parking Spaces 中型貨車泊車位: Heavy Goods Vehicle Parking Spaces 重型貨車泊車位: Others (Please Specify) 其他 (請列明) Light Bus: 2 Coach: 2
	No 否	☐
Any provision of loading/unloading space for the proposed use(s)? 是否有為擬議用途提供上落客貨車位？	Yes 是	☑ (Please specify type(s) and number(s) and illustrate on plan) 請註明種類及數目並於圖則上顯示) Taxi Spaces 的士車位: Coach Spaces 旅遊巴車位: Light Goods Vehicle Spaces 輕型貨車車位: Medium Goods Vehicle Spaces 中型貨車車位: Heavy Goods Vehicle Spaces 重型貨車車位: 1 Others (Please Specify) 其他 (請列明) Private car layby: 1 Ambulance Bay: 1
	No 否	☐

9. Impacts of Development Proposal 擬議發展計劃的影響

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

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	☑
Does the development proposal involve the operation on the right? 擬議發展是否涉及右列的工程? (Note: where Type (ii) application is the subject of application, please skip this section. 註：如申請涉及第(ii)類申請，請跳至下一條問題。)	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 2,191.3 sq.m 平方米 ☑About 約 Depth of excavation 挖土深度 9.3 m 米 ☑About 約
	No 否	☐
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) Please refer to the planning statement.	

10. Justifications 理由

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

Please refer to the planning statement.

11. Declaration 聲明

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

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

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

IAN BROWNLEE ..... Managing 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
☑ RPP 註冊專業規劃師 No. 92
Others 其他 .....

on behalf of 代表 Masterplan Limited .....

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

Date 日期 18/12/2024 ..... (DD/MM/YYYY 日/月/年)

Remark 備註

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

Warning 警告

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

Statement on Personal Data 個人資料的聲明

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

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

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

For Developments involving Columbarium Use, please also complete the following:
如發展涉及靈灰安置所用途，請另外填妥以下資料:

Ash interment capacity 骨灰安放容量@

Maximum number of sets of ashes that may be interred in the niches
在龕位內最多可安放骨灰的數量 _____

Maximum number of sets of ashes that may be interred other than in niches
在非龕位的範圍內最多可安放骨灰的數量 _____

Total number of niches 龕位總數 _____

Total number of single niches
單人龕位總數 _____

Number of single niches (sold and occupied)
單人龕位數目 (已售並佔用) _____

Number of single niches (sold but unoccupied)
單人龕位數目 (已售但未佔用) _____

Number of single niches (residual for sale)
單人龕位數目 (待售) _____

Total number of double niches
雙人龕位總數 _____

Number of double niches (sold and fully occupied)
雙人龕位數目 (已售並全部佔用) _____

Number of double niches (sold and partially occupied)
雙人龕位數目 (已售並部分佔用) _____

Number of double niches (sold but unoccupied)
雙人龕位數目 (已售但未佔用) _____

Number of double niches (residual for sale)
雙人龕位數目 (待售) _____

Total no. of niches other than single or double niches (please specify type)
除單人及雙人龕位外的其他龕位總數 (請列明類別)

_____

Number. of niches (sold and fully occupied)
龕位數目 (已售並全部佔用) _____

Number of niches (sold and partially occupied)
龕位數目 (已售並部分佔用) _____

Number of niches (sold but unoccupied)
龕位數目 (已售但未佔用) _____

Number of niches (residual for sale)
龕位數目 (待售) _____

Proposed operating hours 擬議營運時間 _____

_____

@ Ash interment capacity in relation to a columbarium means –
就靈灰安置所而言，骨灰安放容量指：
- the maximum number of containers of ashes that may be interred in each niche in the columbarium;
每個龕位內可安放的骨灰容器的最高數目;
- the maximum number of sets of ashes that may be interred other than in niches in any area in the columbarium; and
在該靈灰安置所並非龕位的範圍內，總共最多可安放多少份骨灰；以及
- the total number of sets of ashes that may be interred in the columbarium.
在該骨灰安置所內，總共最多可安放多少份骨灰。

Gist of Application 申請摘要

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

Application No. 申請編號	(For Official Use Only) (請勿填寫此欄)
Location/address 位置／地址	Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po
Site area 地盤面積	2,191.3 sq. m 平方米 ☑ About 約 (includes Government land of 包括政府土地 sq. m 平方米 ☐ About 約)
Plan 圖則	Approved Tai Po Outline Zoning Plan No. S/TP/30
Zoning 地帶	Government, Institution or Community
Applied use/ development 申請用途/發展	Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility

(i) Gross floor area and/or plot ratio 總樓面面積及／或地積比率		sq.m 平方米		Plot Ratio 地積比率	
	Domestic 住用		☐ About 約 ☐ Not more than 不多於		☐About 約 ☐Not more than 不多於
	Non-domestic 非住用	12,521.1	☑ About 約 ☐ Not more than 不多於	5.7	☑About 約 ☐Not more than 不多於
(ii) No. of blocks 幢數	Domestic 住用				
	Non-domestic 非住用	1			
	Composite 綜合用途				

(iii)	Building height/No. of storeys 建築物高度／層數	Domestic 住用	m 米 ☐ (Not more than 不多於)
			mPD 米(主水平基準上) ☐ (Not more than 不多於)
			Storeys(s) 層 ☐ (Not more than 不多於) *(☐Include 包括/☐ Exclude 不包括* ☐ *Carport 停車間* ☐ *Basement 地庫* ☐ *Refuge Floor 防火層* ☐ *Podium 平台)*
		Non-domestic 非住用	m 米 ☐ (Not more than 不多於)
			mPD 米(主水平基準上) ☐ (Not more than 不多於)
			Storeys(s) 層 ☐ (Not more than 不多於) *(☐Include 包括/☐ Exclude 不包括* ☐ *Carport 停車間* ☐ *Basement 地庫* ☐ *Refuge Floor 防火層* ☐ *Podium 平台)*
		Composite 綜合用途	m 米 ☐ (Not more than 不多於)
			115 mPD 米(主水平基準上) ☑ (Not more than 不多於)
			10 Storeys(s) 層 ☐ (Not more than 不多於) *(☐Include 包括/☑ Exclude 不包括* ☐ *Carport 停車間* (2 levels of basement for use of car park and STP) ☑ *Basement 地庫* ☐ *Refuge Floor 防火層* ☐ *Podium 平台)*
(iv)	Site coverage 上蓋面積	not exceeding 42% (above 15m) not exceeding 85% (15m or below)	%　☐ About 約
(v)	No. of units 單位數目		
(vi)	Open space 休憩用地	Private 私人	325　sq.m 平方米 ☑ Not less than 不少於
		Public 公眾	sq.m 平方米 ☐ Not less than 不少於

(vii) 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	14
	Private Car Parking Spaces 私家車車位	7
	Motorcycle Parking Spaces 電單車車位	2
	Light Goods Vehicle Parking Spaces 輕型貨車泊車位	1
	Medium Goods Vehicle Parking Spaces 中型貨車泊車位	
	Heavy Goods Vehicle Parking Spaces 重型貨車泊車位	
	Others (Please Specify) 其他 (請列明)	
	Light Bus	2
	Coach Space	2
	Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數	3
	Taxi Spaces 的士車位	
	Coach Spaces 旅遊巴車位	
	Light Goods Vehicle Spaces 輕型貨車車位	
	Medium Goods Vehicle Spaces 中型貨車位	
	Heavy Goods Vehicle Spaces 重型貨車車位	1
	Others (Please Specify) 其他 (請列明)	
	Ambulance Bay	1
	Private Car Layby	1

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）	☐	☑
Landscape Proposal, Setback Diagram		
Reports 報告書		
Planning Statement/Justifications 規劃綱領/理據	☐	☑
Environmental assessment (noise, air and/or water pollutions) 環境評估（噪音、空氣及／或水的污染）	☐	☑
Traffic impact assessment (on vehicles) 就車輛的交通影響評估	☐	☑
Traffic impact assessment (on pedestrians) 就行人的交通影響評估	☐	☐
Visual impact assessment 視覺影響評估	☐	☑
Landscape impact assessment 景觀影響評估	☐	☐
Tree Survey 樹木調查	☐	☐
Geotechnical impact assessment 土力影響評估	☐	☑
Drainage impact assessment 排水影響評估	☐	☐
Sewerage impact assessment 排污影響評估	☐	☑
Risk Assessment 風險評估	☐	☐
Others (please specify) 其他（請註明）	☐	☐

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

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

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

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MASTERPLAN LIMITED
Planning and Development Advisors
領賢規劃顧問有限公司

Your Reference No.: A/TP/702

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

2 April 2025

By Email and Hand

Dear Sir/ Madam,

Section 16 Planning Application No. A/TP/702

Proposed Development of
Hong Kong Sheng Kung Hui St. Christopher's Complex
at Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po -
Proposed Minor Relaxation of Building Height Restriction
for Permitted Social Welfare Facility

Consolidated Submission

On behalf of the Applicant, we submit herewith a consolidated planning statement, which contains the latest version of the development scheme and technical assessments previously submitted to the Town Planning Board (the Board). Our previous responses to departmental comments are incorporated in this submission. This consolidated version is to supersede the previous further information submissions dated 27.1.2025, 5.2.2025, 20.2.2025, 6.3.2025, 11.3.2025 and 21.3.2025, and to facilitate consideration of the application by the Board.

The submission has been prepared in accordance with the Town Planning Board Guideline No. 32B on submission of further information in relation to applications for amendment of Plans under the Town Planning Ordinance. It contains no new information other than that already accepted by the Board. As such, it should be exempted from the publication and recounting requirements. 4 copies are submitted with this letter.

Thank you.

Yours faithfully,

Ian Brownlee
For and On Behalf of
Masterplan Limited

Encl.
cc. Mr. LAU Ka Chun, Benson (Town Plnr/TP3, PlanD) (By Email)
Client and Consultants (By Email)

Section 16 Planning Application

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po

Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility

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Planning Statement

April 2025

MASTERPLAN
Planning and Development Advisors
領賢規劃顧問有限公司

本文件為一份經整合的規劃綱領，其中包含最新的發展方案和先前提交的技術評估。本文件是根據《規劃指引編號 32B》就修訂圖則申請、規劃許可申請及覆核申請提交進一步資料而擬備。本文件並不包含除城市規劃委員會已接納的進一步資料以外的其他新資料。本文件會取代之前於 27.1.2025、5.2.2025、20.2.2025、6.3.2025、11.3.2025 及 21.3.2025 提交的進一步資料以便城市規劃委員會審議是次申請。

This is a consolidated Planning Statement, which contains the latest version of the development scheme and technical assessments previously submitted to the Town Planning Board (the Board). The submission is prepared in accordance with the Town Planning Board Guideline No. 32B on submission of further information. It contains no new information other than that already accepted by the Board. This consolidated version is to supersede the previous further information submissions dated 27.1.2025, 5.2.2025, 20.2.2025, 6.3.2025, 11.3.2025 and 21.3.2025 to facilitate consideration of the application by the Board.

EXECUTIVE SUMMARY

S1. This Section 16 (s.16) planning application seeks planning permission from the Town Planning Board (TPB) for proposed minor relaxation of building height restriction (BHR) for permitted social welfare facilities at Tai Po Road – Tai Po Kau section (the Site). The Site falls within an area zoned "Government, Institution or Community" on the Approved Tai Po Outline Zoning Plan No. S/TP/30 (the OZP), where 'Social Welfare Facility' is a Column 1 use and is always permitted. The Site is subject to a building height restriction of 8-storey under the OZP. This application seeks permission for minor relaxation of the BHR to 10-storey so that the development can maximize its use of land in providing a range of permitted social welfare facilities.

S2. The proposed development aligns with various Government policies, such as the "Special Scheme on Privately Owned Sites for Welfare Uses" and "Single Site, Multiple Uses" policies, in addressing the pressing demand for social welfare facilities, especially the caring facilities for the elderly and the supporting facilities for children in need.

S3. The Applicant intends to develop a social welfare complex that accommodates a wide range of facilities. The proposed development is considered compatible to the surrounding environment and is technically feasible. It will provide significant benefits to the community, and help address the demand for social welfare facilities, especially Residential Care Home for the Elderly and Small Group Homes.

S4. The proposed development is an outcome of careful consideration and assessments, and is a balanced design having addressed various site constraints and operational requirements. In view of the above, the TPB is invited to give favorable consideration on the proposed minor relaxation of maximum BHR at the Site.

行政摘要

(聲明：此中文譯本僅供參考，如中文譯本和英文原文有差異時，應以英文原文為準。)

S1. 本第 16 條規劃申請是向城市規劃委員會 (下稱「城規會」) 申請略為放寬位於大埔道大埔滘段的建築物高度限制，以作准許的社會福利設施用途。申請地點位於《大埔分區計劃大綱核准圖編號 S/TP/30》上的「政府、機構或社區」地帶，當中「社會福利設施」屬於第一欄經常准許的用途。該地帶的建築物高度限制為八層。本申請希望可以將建築物高度限制略為放寬至十層，以善用申請地點提供多元化的准許社會福利設施。

S2. 擬議的發展配合政府的政策，包括「私人土地作福利用途特別計劃」及「一地多用」的兩項政策，以助解決公眾對社福設施 (特別是給有需要的長者及幼兒的照顧服務) 的迫切需求。

S3. 申請人有意發展一幢綜合社區服務大樓，提供多項社會福利設施。大樓設計與毗鄰環境相融，並在技術上可行。大樓的落成可為社區帶來裨益，並有助緩解社區對護理安老院及兒童之家的需求。

S4. 擬議方案經仔細考量及評估，平衡了各項考慮因素，當中包括場地限制和運營要求。基於以上各點，懇請城規會從優考慮略為放寬申請地盤的最高建築物高度限制。

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Consultants

Ho Wang SPB Limited	-	*Traffic Engineer*
JMK Consulting Engineers Limited	-	*Structural, Civil and Geotechnical Engineer*
LWK & Partners (HK) Limited	-	*Lead Consultant & Architect*
Masterplan Limited	-	*Planning Consultant*
Otherland Limited	-	*Landscape Architect*
Urban Green Consultants Limited	-	*Environmental Consultant*
WSP Hong Kong Limited	-	Building Services Engineer

1. Introduction

1.1. This Section 16 (s.16) planning application is submitted on behalf of Hong Kong Sheng Kung Hui Welfare Council Limited (HKSKHWCL) (the Applicant) to seek planning permission from the Town Planning Board (TPB) for minor relaxation of building height restriction (BHR) for permitted social welfare facilities at the Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po (the Site).

1.2. The Site falls within an area zoned "Government, Institution or Community" ("G/IC") on the Approved Tai Po Outline Zoning Plan No. S/TP/30 (the OZP), where 'Social Welfare Facility' is a Column 1 use and is always permitted. The Site is subject to a maximum building height restriction (BHR) of 8-storey under the OZP. Minor relaxation of BHR may be considered by the TPB on application under s.16 of the Town Planning Ordinance based on the individual merits of the development proposal.

1.3. The Applicant intends to develop a 10-storey social welfare complex, accommodating a range of facilities at the Site, the scope of which is agreed by the Social Welfare Department (SWD). The proposed development is to be named as Hong Kong Sheng Kung Hui St. Christopher's Complex (the SC Complex). This application requests for minor relaxation of BHR from 8 to 10-storeys so that the development can maximize its use in accommodating the permitted social welfare facilities.

2. Background

2.1. The Site

2.1.1. The Site is situated on a hillside of a long sloping terrain which stretches from the Tolo Highway to +400mPD uphill. The Site is located at Tai Po Road - Tai Po Kau Section. A rural road is located to the southeast across a piece of vacant government land connecting a low-density residential development at Deerhill Bay to Tai Po Road - Tai Po Kau Section. **Figures 1 and 2** below and **Appendix 1** show the location of the Site.

2.1.2. The Site is currently a hummock covered with vegetation with no building structures (**Figure 4**). It is generally rectangular in shape with an area of about 2,191.3m^2 and is at an elevation of about +78mPD to about +86mPD.

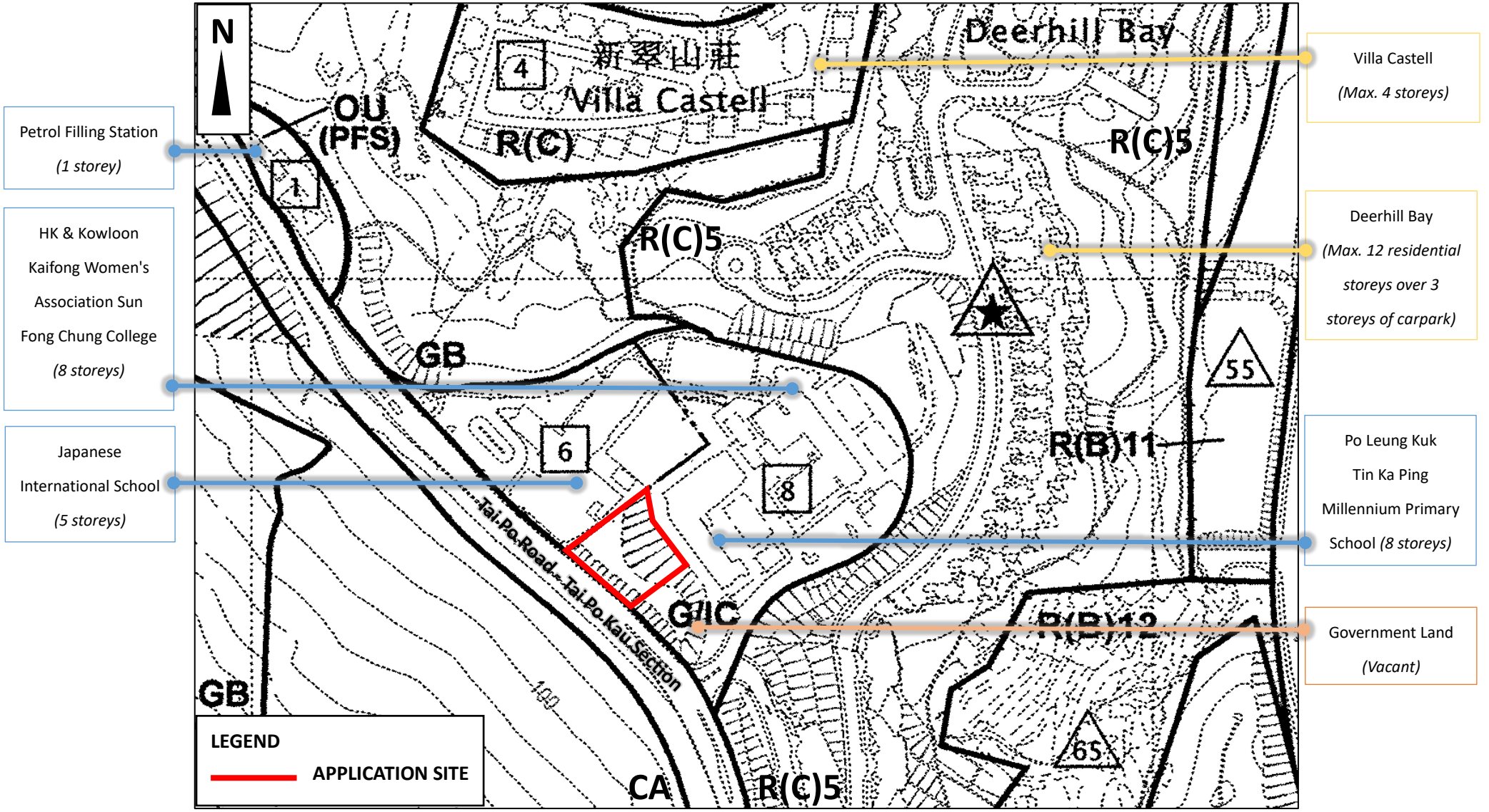

Figure 1: The Site and its neighbourhood shown on the Approved Tai Po Outline Zoning Plan No. S/TP/30 and surrounding building height profile

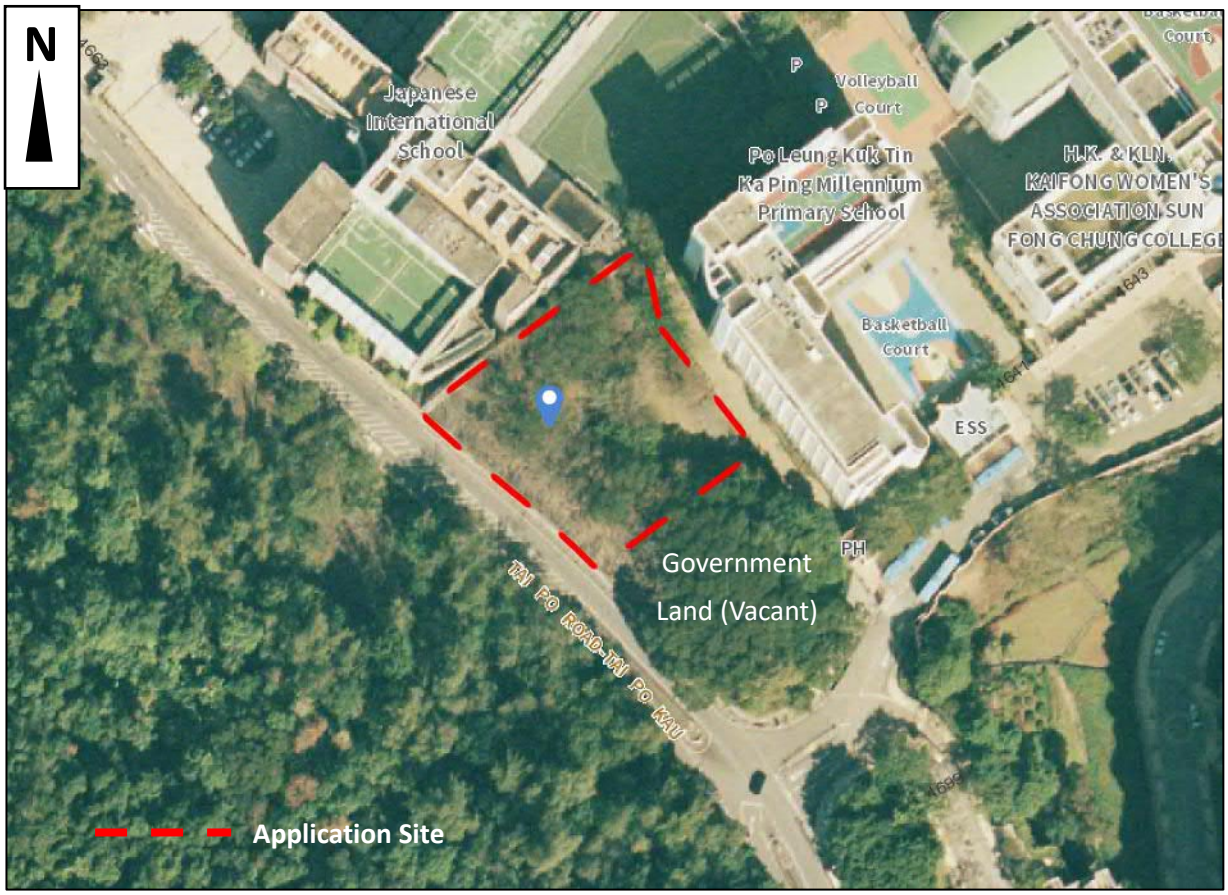

Figure 2: Satellite image of the Application Site and its surroundings (image from GEOINFO MAP, The Government of Hong Kong SAR)

2.2. The Neighbourhood

2.2.1. The surrounding of the Site is characterised by various land uses (**Figure 1**), mainly with "G/IC" in the immediate vicinity. To its north and northeast of the Site are three schools within the "G/IC" zone, namely Japanese International School (JIS) with a BHR of 6-storey; Po Leung Kuk Tin Ka Ping Millennium Primary School (TPKM Primary School) with BHR of 8-storey and Hong Kong & Kowloon Kaifong Women's Association Sun Fong Chung College (SFCC) with BHR of 8-storey under the OZP. To the southeast across a piece of vacant government land is the Deerhill Bay development within an area zoned "Residential (Group C)5" ("R(C)5") zone with BHR of 12 residential storeys over 3 storeys of car park under the OZP. The existing conditions of the key developments in the vicinity are in **Figure 3** below.

2.2.2. The immediate surroundings of the Site have low building height profile of not more than 12 storeys, which are dominated by low-rise residential development and schools (**Figures 1, 3** and **4** refer). Relaxation of BHR for a development to 10 storeys is not out of context in terms of building height profile of the surrounding area.

	
Po Leung Kuk Tin Ka Ping Millennium Primary School (TPKM Primary School): About +106.3mPD (8-storey)	**DeerHill Bay:** About +106.5 to +112.8mPD (12-storey over 3-storey of carpark)
	
Japanese International School (JIS): About +99.2mPD (5-storey)	**Petrol filling station adjacent to JIS** (1-storey)

Figure 3: Key developments in the vicinity of the Site and their characteristics

Figure 4: Adjacent Government Land and the Site together is a hummock covered with trees

2.3. Site Constraints

2.3.1. The design of the proposed development has considered a number of site constraints. They include the existing uneven terrain within the site, traffic noise and emission from Tai Po Road - Tai Po Kau Section, as well as the relationship of the proposed SC Complex with the adjacent school blocks that are built closely to the Site's boundary (**Figure 5**). The design would also have to strike a balance between providing enough floor space to accommodate the necessary functions while keeping outdoor area as much as possible for enjoyment of the residents, as well as fulfill various government regulation and requirements, and to address the site constraints mentioned. The relevant design considerations are detailed in **section 7 and paragraph 8.6.2** below.

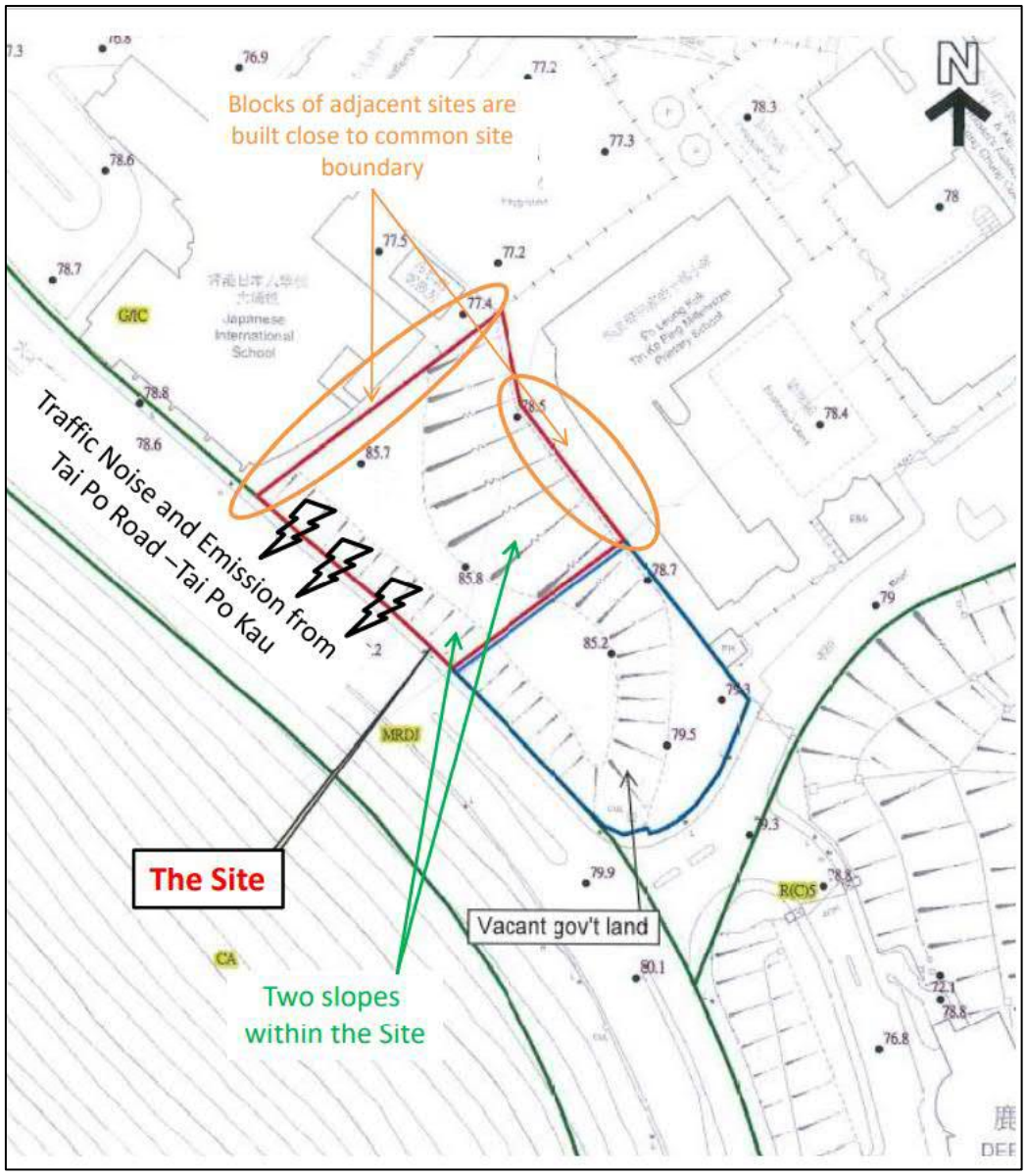

Figure 5: Key site constraints faced by the proposed development.

3. Background

3.1. Policy of "Special Scheme on Privately Owned Sites for Welfare Uses" ("Special Sites Scheme")

3.1.1. In response to the 2013 Policy Address, the "Special Sites Scheme" is launched by the Labour and Welfare Bureau/SWD. The scheme encourages non-governmental organisations (NGOs) to make better use of their sites through expansion, redevelopment or new development to provide diversified sub-vented and self-financing welfare services. The applicant organization may apply for grants under the Lotteries Fund (LF) to conduct a technical feasibility study (TFS) for their project proposals, and upon completion of the TFS, seek further funding support under the Special Sites Scheme to meet the capital cost of their projects according to the prevailing

mechanism.

3.1.2. The proposed SC Complex is one of the project proposals under Special Sites Scheme. HKSKHWCL had reached an agreement with SWD on the service scope and floor area requirements of the project and had received funding support from the Lotteries Fund. The funding received had helped the Applicant formulate and submit a TFS to SWD.

3.2. **Shortage of Residential Child Care Services (RCCS) and Small Group Homes (SGHs)**

3.2.1. It is evident that there is a clear demand of more RCCS especially SGHs. In 2022-2023, the average occupancy rate for ordinary service of SGH is 93%[1]. 388 number of children are recorded at waitlist on average each month, the highest amongst RCCS and related services. In the Committee on Review of Residential Child Care and Related Services chaired by the Director of Social Welfare (2022), SWD is recommended to identify suitable sites for setting up new RCCs or SGHs through various channels such as development and re-development projects, so as to provide children under the age of 6 with family-based care and a secure environment for growing up and meeting the service demand[2].

3.3. **Shortage of Residential Care Services for the Elderly**

3.3.1. Given Hong Kong's ageing population and the longer average life expectancy, the residential care service ("RCS") places for the elderly have been in acute demand. As at 31 March 2023, there are about 16 800 elderly persons waitlisted for subsidized RCS[3]. In light of the pressing demand, the Government is taking a multi-pronged approach to increase residential care places for the elderly. This includes the "Special Sites Scheme" which the proposed development is a part of. In the proposed development, the places of the Residential Care Home for the Elderly will be available for eligible people on the SWD waiting list or through application to the operator.

3.4. **Policy of "Single Site, Multiple Uses" (SSMU)**

3.4.1. Inadequate land within the territory for development has been a challenge of the Government for decades. The Chief Executive's (2018) Policy Address states that shortage of land supply not only leads to a shortage of housing supply, but also affects people's quality of life. The impact covers "*from child care centres to elderly care facilities; from basic education and healthcare services to leisure open space…*". The Policy Address proposes SSMU policy to better utilise valuable land resource and increase the yield of development land. This proposal is in line with

[1] https://www.legco.gov.hk/yr2024/english/panels/ws/ws_mcpa/papers/ws_mcpa20230122cb2-25-4-e.pdf
[2] https://www.legco.gov.hk/yr2024/english/panels/ws/ws_mcpa/papers/ws_mcpa20230122cb2-25-4-e.pdf
[3] https://www.legco.gov.hk/yr2023/english/panels/ws/papers/ws20230612cb2-535-5-e.pdf

the Government policy of increasing social welfare facilities and better utilization of land resources, where technical feasibility permits.

4. Planning Context

4.1. Statutory Planning Context

4.1.1. The Site falls within an area zoned "G/IC" on the OZP. The proposed development is for 'Social Welfare Facility' use, which is listed as a Column 1 use under the OZP and is always permitted (details of the proposed facilities is in **Section 6** below). The proposed development is in line with the planning intention of "G/IC" zone, which is primarily for the provision of government, institution or community facilities serving the needs of the local residents and/or a wider area.

4.1.2. Under the OZP, the Site has a BHR of 8-storey and any basement floor(s) may be disregarded in determining the maximum number of storeys for BHR. There is neither GFA nor plot ratio restrictions imposed on the Site. According to the Notes of the OZP, minor relaxation of BHR may be considered by the TPB on application under s.16 of the Town Planning Ordinance based on the individual merits of the development proposal. As such, a s.16 planning application is required to apply for minor relaxation of the BHR for the proposed 10-storey development.

4.1.3. According to the Explanatory Statement of the OZP, to provide incentive for developments/redevelopments with design merits/planning gains, each application for minor relaxation of BHR under section 16 of the Ordinance will be considered on its own merits and the relevant criteria for consideration of such relaxation are as follows:

a) amalgamating smaller sites for achieving better urban design and local area improvement;
b) accommodating the bonus plot ratio granted under the Buildings Ordinance in relation to surrender/dedication of land/area for use as a public passage/street widening;
c) providing better streetscape/good quality street level public urban space;
d) providing separation between buildings to enhance air and visual permeability;
e) accommodating building design to address specific site constraints in achieving the permissible plot ratio under the OZP; and
f) other factors such as need for tree preservation, innovative building design and planning merits that would bring about improvements to townscape and amenity of the locality and would not cause adverse landscape and visual impacts.

4.1.4. The proposed development is in line with consideration of relaxation of BHR under Explanatory

Statement of the OZP, in particular it fulfills criteria (c) where the landscape treatment is proposed on G/F (at a level meeting the adjoining Tai Po Road (details in **paragraphs 6.2.2 and 8.5.3** below)) to create visual interest and an improved walking environment along Tai Po Road, and criteria (e) where the proposed SC Complex has been designed to address various site constraints mentioned in **paragraph 2.3** above, while achieving its maximum development potential.

4.2. Previous Application

4.2.1. There are no previous planning applications submitted at the Site.

5. Land Matters

5.1 The Site is an agricultural lot which falls within the Remaining Portion of Taxlord Lot No. T77 in D.D.34 (RP T77 DD 34), which is held under Block Government Lease. The lease term is to be expired on 30.6.2047. The registered owner is "The Bishop of Victoria Hong Kong" ("The Hong Kong Sheng Kung Hui Foundation" is formerly known as "The Bishop of Victoria Hong Kong").

5.2 The lot is an agricultural lot and no building can be erected without the prior approval from Lands Department (LandsD). Based on the proposed development, a lease modification application will need to be submitted to LandsD.

6. Development Proposal

6.1. Proposed Facilities at the Site

6.1.1. The proposed building will accommodate the following services: -

a) Special Child Care Centre (SCCC, 100 subvented places)
b) Care and Attention Home providing Continuum of Care (CoC Home, 240 subvented places and 49 self-financing places)
c) Small Group Home (SGH, 30 subvented places, 4 flats)
d) Foster Care Services and Agency-based Enhancement of Professional Staff Support Services (FCS & ABPSS, subvented)
e) Child Care Centre (CCC, 65 aided places)
f) Staff Training Unit (STU, self-financed)

6.1.2. The proposed development comprises of one 10-storey block including 2 storeys of podium, over

two levels of basement. The development accommodates mainly training rooms, activity rooms and residential homes for children and elderly persons. A vehicular access is proposed at Tai Po Road-Tai Po. The target completion year of the proposed development is March 2030. The development would be carried out in one phase. The development parameters and accommodation of floors of the proposed SC Complex are in **Tables 1 and 2** below respectively.

Table 1: Development Parameters of the Proposed St Christopher's Complex

Development Parameters	Details
Site Area	2,191.3 m^2 (about)
Mean Site Formation level	+79.2mPD (about)
Building Height • No. of Storeys • Meters from mean site formation level • mPD	 10 (excluding two levels of basement) 36m (about) +115 mPD (about) (main roof level)
Site Coverage	not exceeding 42% (above 15m) not exceeding 85% (15m or below)
Total GFA • SCC • CoC • SGH • FCS & ABPSS • CCC • STU • Area for common connection, vehicular circulation, car park and back of house facilities (E&M and sewage treatment plant)	12,521.1 m^2 (about) 968.4 m^2 (about) 4,769.8 m^2 (about) 941.2 m^2 (about) 94.7 m^2 (about) 549.5 m^2 (about) 194 m^2 (about) 5,003.5 m^2 (about)
Plot Ratio	5.7 (about)
No. of parking spaces • Private Car • Light Bus • Light Goods Vehicle (LGV) • Coach Space • Motorcycle	 7* 2 1 2 2
No. of Bay / Layby • Ambulance Bay • Private Car Layby	 1 1

Development Parameters	Details
• Heavy Goods Vehicle (HGV) L/UL Bay	1
Open Space	Not less than 325 m^2**

*Include. 1 accessible parking space

** Base on the calculation of 1m^2/person for an intended population of 325 at the proposed development.

Table 2: Accommodation of Floors of the proposed St Christopher's Complex

Floors	Uses*
Roof	E&M
8/F and 9/F	SGH and Landscaped Area
7/F	• STU and FCS & ABPSS • Supporting facilities of CoC Home (including staff office, staff toilet/bathroom, general store) • Landscaped Area
3/F – 6/F**	CoC Home
2/F	• CoC Home • Landscaped Area
1/F	• CoC Home, SCCC and CCC • Landscaped Area
G/F	• CoC Home, SCCC and CCC • Ambulance bay, HGV L/UL space, coach parking space, and private car layby • Landscaped Area
Basement (B1/F – B2/F)***	• Carpark and Sewage Treatment Plant (STP) • Supporting facilities of CoC Home, SCCC and CCC

*Ancillary back of house services (including plantrooms and E&M) are not shown in the table from basement level to 9/F.

**Floor level of 6/F is at about 23.1m above ground (i.e. less than 24m above ground), fulfilling requirements in paragraph 7.2 below.

*** B2/F is a partial floor accommodating sewage treatment plant only.

6.1.3. Master Layout Plan, Layout Plans of CoC Home on 1/F and SGH on 8/F, and a Section are shown in **Figures 6 to 9** below. The full set of architectural drawings is in **Appendix 1.**

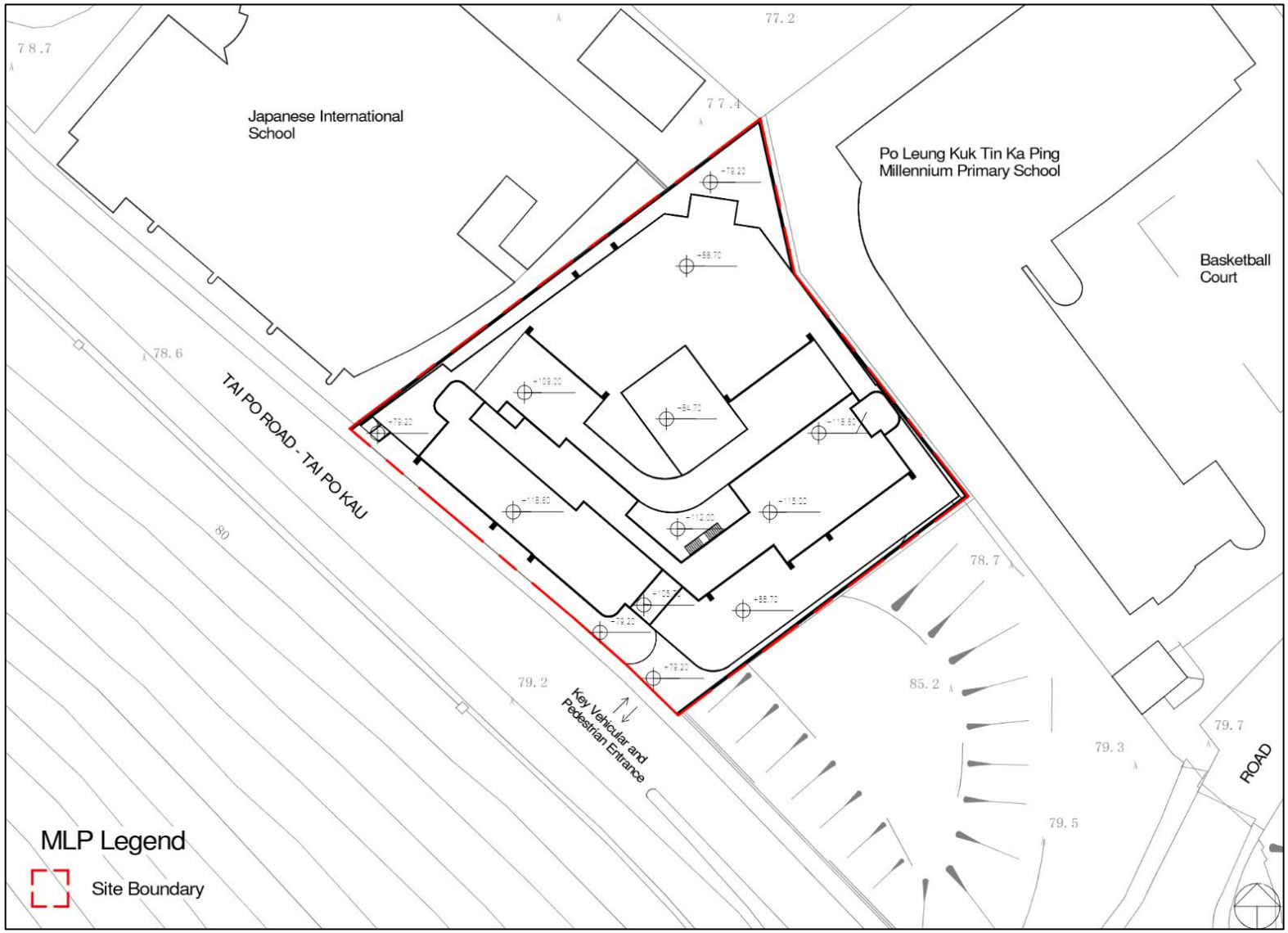

Figure 6: Master Layout Plan for St. Christopher's Complex

Figure 7: 1/F Plan

Figure 8: 8/F - Layout Plan of Small Group Home

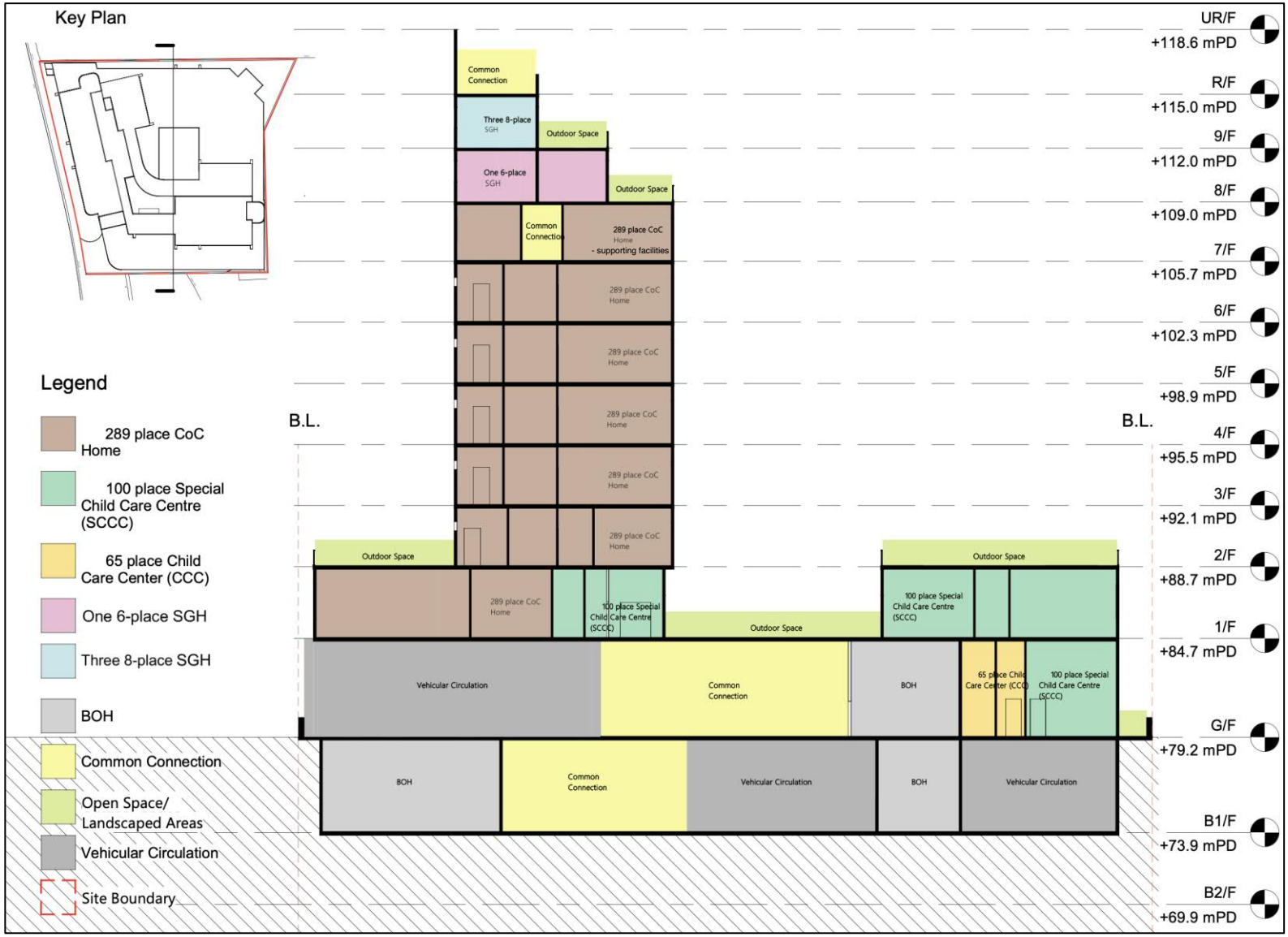

Figure 9: Section of the proposed development

6.2. Landscaping, Recreational and Leisure Spaces

6.2.1. Various resting and landscaped spaces are incorporated into the design of the proposed development. A brief description of the location and the uses are shown in **Table 3**:

Table 3: Landscaping, Recreational and Leisure Spaces

Floor	Landscaping Spaces	Remarks
Roof	Lawn	Green feature not intended for regular users
8/F	Landscape garden with minigolf facilities, herb garden and seatings	for residents/visitors *
7/F and 9/F	Landscape garden with herb garden and seatings	for staff
2/F	Landscape garden with farming area, herb garden, sensory garden, water features, pebble walk and seatings	for residents/visitors*
1/F	Deck with seatings	for residents/visitors*
G/F	Landscape area	for residents/visitors*

*"Visitors" refer to visitors of the residents from SC Complex and not the general public.

6.2.2. The landscape and recreational spaces are proposed to provide a pleasant and comfortable environment for residents, visitors, and staff of the proposed social welfare complex. For example, the landscaping on the G/F act as a buffer between the proposed SC Complex and surrounding traffic and adjacent developments of TPKM Primary School and JIS, as well as to create visual interest and an improved walking environment along Tai Po Road (**Figure 10**). For those located on the upper floors, landscape venues are suitable for resting and recreational uses. Green spaces and sensory areas have benefits for the mental and physical well-being of the users of social welfare facility in the proposed complex. **Figure 11** shows the landscape layout plan for 2/F of the proposed development. An open space area of not less than 325m^2 is incorporated in the proposed development. Details of the landscape proposal could be found in **Appendix 2**.

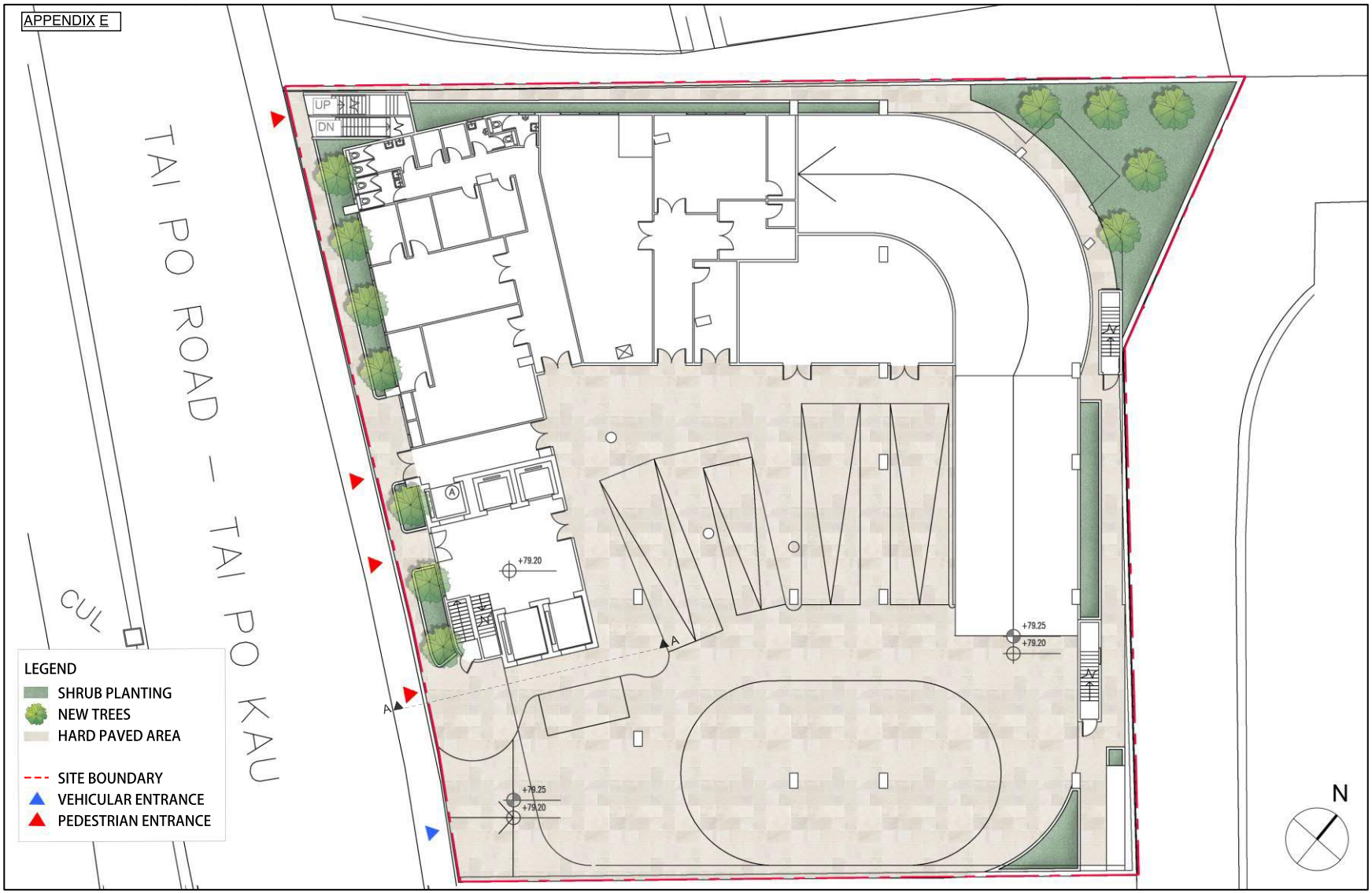

Figure 10: G/F Landscape layout plan of the proposed SC Complex

Figure 11: 2/F Landscape layout plan of the proposed SC Complex

6.3. Internal Transport Provision

6.3.1. The Internal Transport Provision of the Proposed SC Complex is shown in **Table 1** above. There is no specific car parking and loading/unloading requirements for social welfare facilities development based on the latest Hong Kong Planning Standards and Guidelines (HKPSG). With regards to Item 1(b) in Statement of Intent of Table 11 – "Parking Standard" of HKPSG Chapter 8, "*The provision of parking for community facilities should generally be limited to operation requirements. Users of community facilities will generally be expected to use public transport or public car parks*."

6.3.2. The car parking and loading/unloading provisions advised by SWD have been confirmed by HKSKHWCL to fulfil their operational need. Details of internal transport provision for the proposed development are in **Appendix 3**.

7. Design Considerations

7.1. Design Theme and Placemaking

7.1.1. The Site is located in the tranquil rural area, and enjoys scenic views towards the mountain and Tolo Harbour. The design approach is to create a lively and comfortable environment for the elderly and children to live and reside, with proper building orientation and carefully created open spaces.

7.1.2. There are 2 schools adjacent to the site, JIS to the northwest and TPKM Primary School to the northeast (**paragraph 2.3 refers**). In order to avoid the overlooking of the dormitory and comply with the lighting and ventilation requirement of B(P)R 29-30, the complex is designed with an L-shape tower sitting on a small rectangular podium. There are several benefits: The building core is placed at the "kink" of the "L" for efficient circulation and effective building management. The two wings of the "L" point to the two adjoining schools, with windows opening sideways, so that overlooking and distraction to classrooms are minimised. The L-shape tower shaped the space on podium garden, which would be enjoyed by the users in the complex and served as a visual buffer to neighbours. It also shields the inside against traffic noises from Tai Po Road. The landscaping and greening at the site also soften the building edge to minimize its potential visual impact to surrounding environment. The adoption of building design with use of compatible finishing materials/colour/facade treatment will also be considered at the detail design stage to alleviate the potential visual impacts. The "L" shape proposed also avoided fully build up the whole site to achieve maximum floor area. The site coverage is thus limited to within 42% above 15m.

7.2. **Relevant Ordinances, Regulations and Guidelines**

7.2.1. The design of the proposed SC Complex respects and complies with a number of relevant ordinances, regulations and guidelines as follow:

i. Height restrictions for welfare facilities:

- According to the Child Care Services Regulation Cap. 243A (CSSR), CCC is subject to a maximum height rule of 12m for age under 2 and 24m for other age range. The CCC and SCCC are located at G/F and 1/F which are within 12m from ground level.

- As regards CoC, it is subject to the height restriction of 24m above ground according to the Residential Care Homes (Elderly Persons) Ordinance (Cap. 459A) (RCHEO). Considering this, CoC Home is proposed at 2/F-6/F, which is under 24m.

ii. Regulation 21(4) CSSR requires the ceiling of every room of the SCCC to be not less than 3m above the floor level of the room. The proposed development follows this requirement (see **Figure 9** above).

7.3. **Building Setback (Appendix 8)**

7.3.1. As Tai Po Road - Tai Po Kau Section is considered a rural road, no setback from the road is required according to HKPSG. Besides, a 7.5m building setback from the centreline of the road is fulfilled as per SBDG PNAP APP 152. The separation distance for prescribed window as required by the Building (Planning) Regulation is also complied with. The proposed development has purposefully been designed to optimise setbacks to JIS and TKPM Primary School, ensuring adequate air and visual permeability of the proposed development to adjacent schools, and that overlooking and distraction to classrooms are minimised. About 3m-4m and 8m podium setback (from G/F to 2/F) from JIS and TPKM Primary School respectively, and about 4m-29m and 7m - 34 m tower setback (from 3/F and above) from JIS and TPKM Primary School respectively will be provided.

7.4. **Greenery and Open View**

7.4.1 The building design also incorporates sufficient greenery by introducing multi-level garden spaces and balconies, corresponding to the use of each floor. The majority of the greenery is proposed at G/F, 2/F, and 8/F landscape gardens. The landscape gardens incorporate facilities for both children and the elderly to fit the purpose of each floor. It encourages children, elderly and

staff to be physically active and promotes a healthier lifestyle. It also allows cross-generation activities to be held on special occasions. Balconies and gardens enhance natural ventilation, lighting and improve indoor air and living quality.

7.4.2 The greenery features and the compensatory trees on G/F and 2/F landscape garden will provide visual amenity and comfort. The open view towards Tolo Harbour is available at the north of the site, between JIS and TKPM Primary School, to which the building layout oriented. The provision of the greenery will fulfill the relevant guideline. Details of Landscape Proposal is in **Appendix 2**.

7.5. **Sustainable Environmentally Friendly Elements**

7.5.1 The Applicant proposes to create a sustainable development at the SC Complex, and aims to obtain the sustainable building performance of "Gold Rating" for the "BEAM Plus New Buildings V2.0" assessment. The measures for achieving this will be further explored in detail design stage.

7.6. **Area and Headroom Requirements of Welfare Facilities**

7.6.1 The design of the proposed SC Complex has taken account of the following:

i. The Net Operating Floor Areas (NOFAs) of the proposed welfare facilities which have been agreed with SWD.
ii. For typical floors (i.e. 3/F-6/F), a general clear height of not less than 2.5m measured vertically from the finished floor.

7.7. **Basement and Extent of Excavation Works**

7.7.1 Considering the requirements to locate various social welfare facilities below 24m (**paragraph 7.2** above refers), there is a need for a basement to accommodate the supporting facilities for the operation of the social welfare complex. They include a carpark, plant rooms and other back of house uses required to support the operation of the complex.

7.7.2 In particular, the basement will accommodate facilities which are often associated with unwelcoming impressions, including the on-site STP. The periodic collection of dewatered sludge generated from the STP would be done in the basement to minimise the nuisance to the users of the SC Complex.

7.7.3 The amount of excavation work is minimised as far as practicable, the proposed area for the underground is all from necessity. Floor space has been fully utilised in the most efficient manner.

8. Technical Considerations

8.1. Landscape Proposal

8.1.1. The Landscape Proposal in **Appendix 2** comprises an assessment of the impacts on existing trees and presents a proposed landscape layout. It provides a strategy to enhance the proposed development and its integration with its environment. Tree survey has been conducted in accordance with LAO PN No.2/2020 –Tree Preservation and Removal Proposal for Building Development in Private Projects Compliance of Tree Preservation Clause under Lease. A total of 77 trees are surveyed within the Site, among which most are common species. All the trees are proposed to be felled and 46 trees would be compensated within the site**.** The ratio is optimised given the site constraints such as the building layout, run-in-out, and that new trees has been proposed with minimum 4m spacing to ensure sufficient space for growth.

8.1.2. Amenity planting and landscape treatments including shrubs, groundcover and trees, promotes visual interest and alleviate the potential visual impacts. The total greenery coverage within the Site is not less than 438.26 m^2 and not less than 212.13 m^2 in the primary zone (i.e. meeting the required 20% overall greenery coverage and 10% greenery coverage at primary zone in SBDG PNAP APP 152).

8.1.3. Landscape garden at various floors with seating, farming areas, mini golf as well as soft landscaping mentioned, serve as open recreational space for creating a visually pleasing and enjoyable environment for the proposed development and surroundings.

8.2. Traffic Impact Assessment and Transport Considerations

8.3. The traffic impact assessment (TIA) in **Appendix 3** concluded that the proposed development will not generate adverse traffic impacts. The traffic impact assessment demonstrated that all 5 concerned junctions and 4 concerned road links will operate with adequate capacity in the AM and PM Peak periods in year 2033. The assessment also shows that the franchised buses service is adequate to accommodate the additional passenger demand generated by the proposed development. However, one additional GMB services (to Shatin direction) is required to accommodate the future passenger demands generated by the proposed development in AM and PM peak period respectively. The performance of concerned footpath sections and bus layby will operate with no capacity problem during the peak periods in design year 2033. The proposed social services development is therefore supported from the traffic engineering point of view.

8.4. **Visual Impact Assessment**

8.4.1. The VIA (**Appendix 4**) was carried out to assess the potential visual impact of the proposed development to the surrounding environment. The Town Planning Board Guidelines on Submission of Visual Impact Assessment for Planning Applications to the Town Planning Board (TPB PG-No. 41) was taken into consideration.

8.4.2. The Visual Envelope (VE) was formed by the surrounding area of Nature Reserve, Institutional and Residential building such as Tai Po Kau Nature Reserve, JIS, TKPM Primary School and Deerhill Tower Deerhill Bay. Within the VE, the visual impacts of 6 View Points (VPs) are assessed. The visual impacts of VPs range from "negligible" to " slightly adverse". It is concluded that the proposed development does not amount to pronounced increase in development scale and intensity and visual changes from key public VPs. It would not adversely impact on the existing visually sensitive areas, visual amenities and visual resources enjoyed by the public.

8.5. **Geotechnical Considerations**

8.5.1. A Geotechnical Planning Review Report (GPRR) for the proposed development is in **Appendix 5**.

8.5.2. The geological map indicates the regional area around the Site is underlain Lapilli Lithic-Bearing Coarse Ash Crystal Tuff and Tuffite of Yim Tin Tsai Formation. There are 3 nos. of registered geotechnical features lying within or in the vicinity of the Site, including Feature Nos. 7NE-C/C392, 7NE-C/C440 and 7NE-C/C403.

8.5.3. For the proposed development at the Site, it is proposed to form a flat platform to meet the level of adjoining Tai Po Road. It is required to carry out temporary excavation and lateral support works for the construction of basement structure and foundation works at the Site.

8.5.4. For the site formation works on the side adjoining the boundary of Japanese International School (JIS), two schemes are considered:

- Scheme 1: Removal of Feature no. 7NE-C/C403 along the boundary of JIS

  After this development, Feature no. 7NE-C/C403 becomes obsolete and removal of this feature reduces the associated geotechnical risk and enables a more efficient use of available space. For ELS works, it would be carried out after the site formation works is down to the proposed ground level +79.2mPD. The pipe pile wall with lagging plates and 3 layers of waling and corner struts are proposed for basement and footing construction. Prior agreement will be obtained before the site formation work related

to feature no. 7NE-C/C403 along the boundary of JIS is carried out.

- Scheme 2: Retain of Feature no. 7NE-C/C403 along the boundary of JIS

  In case the lot owner of Feature no. 7NE-C/C403 does not agree the removal of this feature, strengthening works for this slope is required. Furthermore, to allow the minimum spacing for the slope for maintenance, the building in the Site is required to set back from the retained slope.

8.5.5. For the site formation works on the side adjoining the government land, since LandsD does not agree to permanently cut back the topographical feature, a new soldier pile wall within the Site would be created to retain the topographical feature on the adjoining vacant government land.

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

8.6. **Environmental Assessment Report**

8.6.1. An Environmental Assessment (EA) is prepared to identify potential environmental impacts and relevant environmental requirements related to the proposed development (**Appendix 6**). No significant adverse impact on air quality, noise, water quality, waste management, and water contamination is anticipated from the proposed development.

8.6.2. It is highlighted that the traffic noise impact was assessed based on the projected peak hour flows for the worst year within 15-years from the date of occupancy. The predicted traffic noise levels at all noise sensitive uses can comply with the HKPSG standard of 70 dB(A) with the installation of the proposed acoustic windows. No adverse traffic noise impact is anticipated.

8.7. **Sewerage Impact Assessment**

8.7.1. A Sewerage Impact Assessment (SIA) has been conducted to evaluate the potential impacts due to the sewerage generation from the proposed development (**Appendix 7**).

8.7.2. The proposed development will serve approximately 904 people and the estimated sewerage generation from the proposed development will be approximately 168.41m^3/day. As there is no existing public sewerage in the vicinity of the Site and, to fulfil the required discharge standards, an underground STP is proposed and provided by the applicant. It will be designed, constructed,

operated and maintained in accordance with the "Guidelines for the Design of Small Sewerage Treatment Plants" published by the EPD to ensure the sewerage generated from the proposed development will be treated to acceptable standards before discharge to the receiving water. Effluent discharge location from the proposed underground STP will be discharged into the existing drainage system to the west of the Site. No adverse water quality impact due to sewerage generation from the proposed development is anticipated.

8.7.3. The flow of the sewerage generated and stormwater runoff from the Site will, however, exceed the capacity of the existing drainage system. Upgrading works of the drainage pipes will be required to cater the treated sewerage and drainage discharge. With the proposed upgrading works, it is concluded that there shall be no sewerage impact arising from the proposed development.

9. Planning Merits and Justification

9.1. Addressing Urgent Need for Social Welfare Facilities

9.1.1. The proposed development is in line with the Government's policy objectives of enhancing the provision of social welfare facility for elders and the purpose of the Special Sites Scheme. The proposed SC Complex will provide a total of 289 CoC Home places which will help alleviate the pressing demand for RCHE facilities. Furthermore, the proposal will be able to provide various "Family and Child Welfare" services for the community, including SCCC, FCS & ABPSS. There will be 30 SGH places provided which will increase the capacity of the currently highly enrolled SGH services.

9.2. Aligning with Government Policies of Developing Multi-purpose Facility Buildings

9.2.1. The SSMU policy was first put forward in the 2018 Policy Address to accommodate multiple uses in a single site, to optimise the development potential of the Site, which in turn helps address the limited land supply. The SC Complex will accommodate a range of social welfare facilities with various landscape features. Its development aligns with the SSMU policy promulgated by the Government which is for better utilisation of the scarce land resource.

9.3. Need for Minor Relaxation of the BHR due to Site Constraint

9.3.1. The Site is stipulated with a BHR of 8-storey under the OZP. However, with various site constraints being located directly adjacent to other school developments and the need to accommodate social welfare facilities of high demand (**paragraph 2.3** refers), good design solution for the proposed development is limited. The proposed SC Complex has purposefully been designed to

optimise setbacks to JIS and TKPM Primary School, ensuring adequate air and visual permeability of the proposed development to adjacent schools, and that overlooking and distraction to classrooms are minimized (**paragraph 7.3** refers).

9.3.2. Furthermore, the magnitude of the requested relaxation of building height from 8-storey to 10-storey is also minor in relation to the large amount of GFA to be accommodated in the SC Complex. Also, under the Notes of the OZP, any basement floor(s) may be disregarded in determining the maximum number of storeys for BHR. Therefore, the need to request for a minor relaxation of the BHR is justified.

9.4. **Support from Social Welfare Department**

9.4.1. During the s.16 planning application pre-submission stage in March 2022, SWD stated that the proposed SC Complex is in line with the Special Sites Scheme, and its application for minor relaxation of the BHR as necessitated by the development is thus supported by SWD from social welfare perspective.

9.5. **Meeting the Planning Intention for the "G/IC" zone of the Outline Zoning Plan**

9.5.1. The proposed SC Complex meets the planning intention of the "G/IC" zone under the OZP, providing social welfare facilities primarily serving the needs of local residents and/or wider district, region or the territory. The Applicant is a well-known and long-established NGO which has provided a generous amount of social welfare services for the community in Hong Kong.

9.6. **Proposed SC Complex Fulfills the Criteria for Minor Relaxation of BHR**

9.6.1. The proposed development of the SC Complex has positively responded to some of the criteria for minor relaxation of BHR (**paragraph 4.1.4** refers).

9.7. Proposed Development is Compatible with Surrounding

9.7.1. The proposed SC Complex fits in well with the existing gently sloping profile (**Figure 12**). It reflects the taller mountain backdrop, whilst the other surrounding developments act as a transition to lower building height, and gradually descending towards the sea following a stepped building height profile. The proposed development as well as its landscape proposal have given due respect to the existing natural elements at the site.

Figure 12: Stepped building height concept still maintained with the proposed SC Complex

9.7.2. The minor increase in building height will not create an unacceptable building bulk and visual impact that would adversely affect the neighbourhood. A VIA can be viewed in **Appendix 4**.

9.8. Need for Underground Carpark

9.8.1. The proposed SC Complex accommodates various social welfare facility (with a height restriction of 24m space above G/F), and requires vehicular and carparking spaces for its daily operation and emergency services. Excavation works for basement have been minimized as far as practicable, the proposed area for the underground is all from necessity. Floor space has been fully utilised in the most efficient manner.

9.8.2. There are several advantages of prioritising essential services on the G/F and lower floors of the SC Complex, and having the remaining operational and car parking facilities in the LG1/F:

i. Optimum efficiency for emergency and essential services whilst maximises safe mobility and security for elders, children, disabled or other vulnerable users or visitors to access the building;
ii. Eliminates the need for a taller building and minimises the building bulk;
iii. Reduces the need for queuing of vehicles on the street level, which may cause traffic jam at Tai Po Road;

iv. Opens up opportunities for incorporating more landscaping and improving the pedestrian streetscape;
v. Better hygiene and environment to have traffic and E&M facilities separate from major human activities; and
vi. Unattractive E&M facilities are hidden from the streetscape and public.

9.9. **No Adverse Technical Impact**

9.9.1. Various technical assessments attached in this planning application has demonstrated that there are no adverse technical impacts from the proposed SC Complex.

9.10. **Design Respects the Relevant Requirements, Regulations and Guidelines**

9.10.1. The design of the proposed development has taken account of the licensing requirements and regulations of the social welfare facilities as well as the regulation and safety requirements. It satisfies with the CSSR and RCHEO (**paragraph 7.2** refers).

9.11. **Commitment Towards a Sustainable Development**

9.11.1. The Applicant proposes to create a sustainable development at the SC Complex, and aims to obtain the sustainable building performance of "Gold Rating" for the "BEAM Plus New Buildings V2.0" assessment. The measures for achieving this will be further explored in detail design stage.

10. Conclusion

10.1 This s.16 planning application relates to the development of the SC Complex. All proposed uses included in the scheme are Column 1 uses and are permitted as of right in the "G/IC" zone under the OZP. A s.16 planning application for minor relaxation of BHR is required because the proposed development of 10-storey exceeds the BHR of 8-storey imposed on the Site.

10.2 The proposed 10-storey design is needed to accommodate the facilities which serve the community and the wider region. The 10-storey design also respects the neighbouring school development to provide visual relief and better air and light penetration to the proposed development as well as to the adjacent schools.

10.3 The SC Complex is considered technically feasible and will provide significant benefits to the

community, and helps to alleviate the high-demand for social welfare facilities especially CoC and SGHs. Furthermore, it meets various Government policy objectives, such as the Special Sites Scheme and the SSMU policy. This will address the urgent community needs and enable better utilisation of the valuable land resources in the territory.

10.4 The proposed development is an outcome of careful consideration, as a balanced design having addressed various site constraints and operational requirements. The TPB is invited to give favourable consideration to this s.16 planning application so that the SC Complex could be implemented to serve the community.

Appendix 1

Location Plan and Architectural Drawings

ANNEX 1

LEGEND:

Site Boundary

大埔公路 — 大埔滘段

TAI PO ROAD — TAI PO KAU

香港日本人學校
大埔校

Japanese
International
School

污水處
理機房

保良局田家炳千禧小學

Po Leung Kuk
Tin Ka Ping Millennium
Primary School

籃球場
Basketball Court

ESS

道路

Road

PH

77.5 77.2 77.4 78.7 78.4 85.7 85.8 78.7 79.0 79.2 85.2 79.7 79.3 79.5 79.3 79.9

4641 4699

80 100

CUL

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SITE LOCATION PLAN

LWK +PARTNERS

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 25 MAR 2022
SCALE: 1:500 (A3)

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
GF Plan

SCALE 1 : 200 @A3

DRAWING NO. P001

ISSUE DATE 05/09/24

LEAD CONSULTANT & ARCHITECT
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STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited

Legend

- 289 place CoC Home
- 100 place Special Child Care Centre (SCCC)
- 65 place Child Care Center (CCC)
- Common Connection
- Open Space/ Landscaped Areas
- Back of House (BOH)
- Site Boundary

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

1F Plan

SCALE 1 : 200 @A3

DRAWING NO. P002

ISSUE DATE 05/09/24

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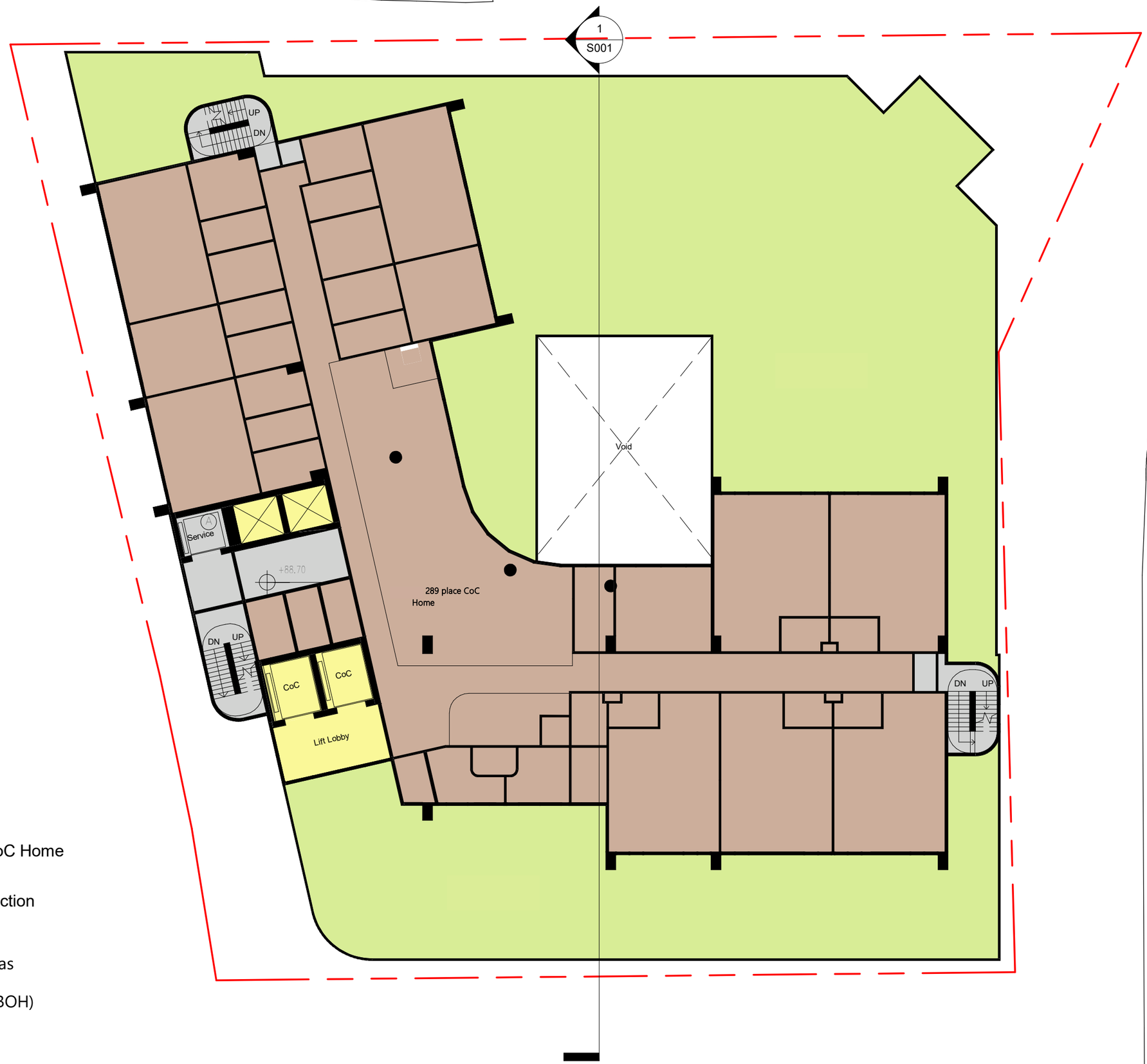

Legend

- 289 place CoC Home
- Common Connection
- Open Space/ Landscaped Areas
- Back of House (BOH)
- Site Boundary

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

2F Plan

SCALE 1 : 200 @A3

DRAWING NO. P003

ISSUE DATE 05/09/24

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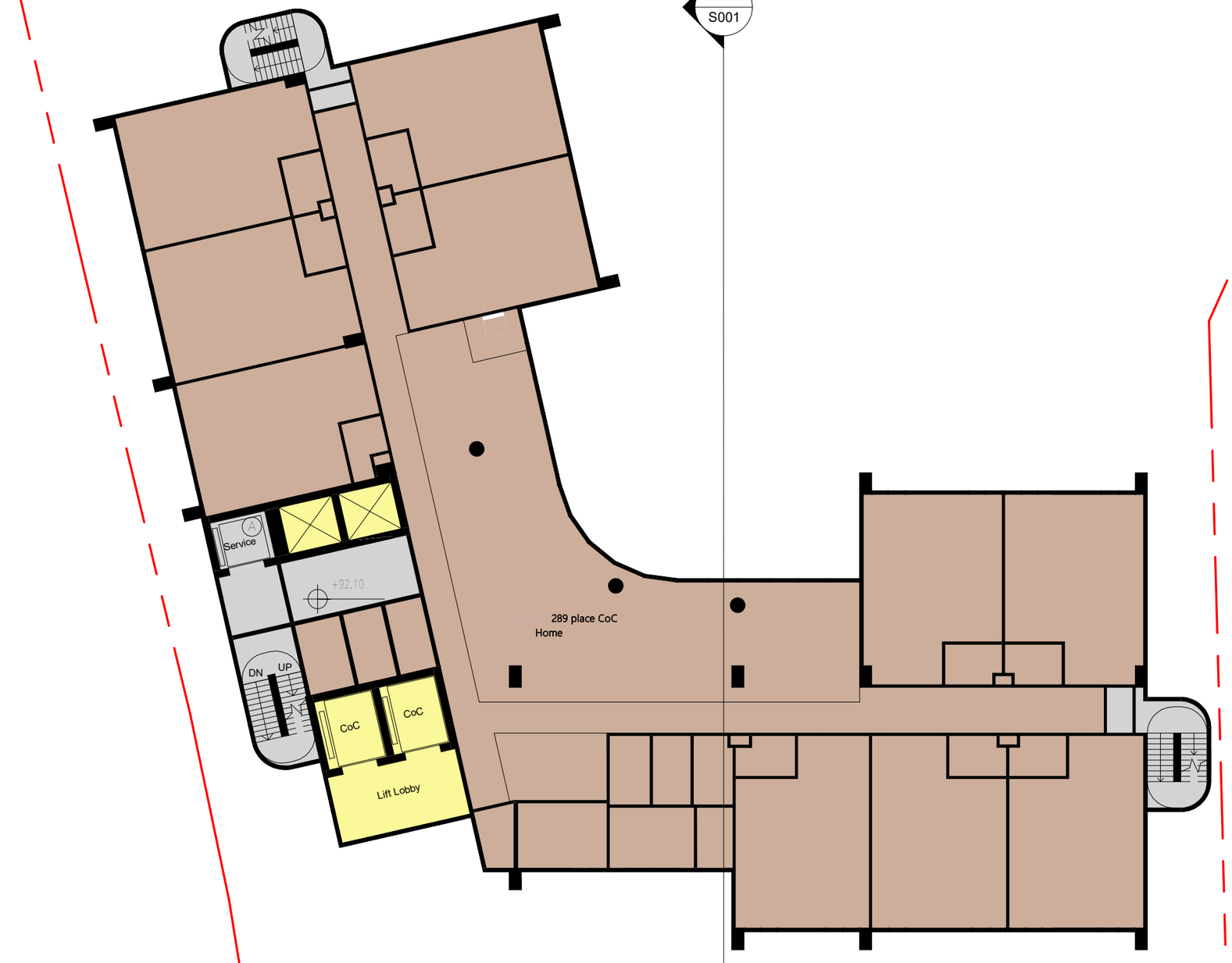

Legend

- 289 place CoC Home
- Common Connection
- Back of House (BOH)
- Site Boundary

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
3F - 6F Plan

SCALE 1 : 200 @A3

DRAWING NO. P004

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QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited

Legend

- 289 place CoC Home
- Foster Care Services and Agency based Enhancement of Professional Staff Support Services (FSC & APBSS)
- Staff Training Unit (STU)
- Common Connection
- Open Space/ Landscaped Areas
- Back of House (BOH)
- Site Boundary

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

7F Plan

SCALE 1 : 200 @A3

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QUANTITY SURVEYOR
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LANDSCAPE ARCHITECT
Otherland Limited

Legend

- Three 8-place SGH
- One 6-place SGH
- Back of House (BOH)
- Common Connection
- Open Space/ Landscaped Areas
- Site Boundary

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

8F Plan

SCALE 1 : 200 @A3

DRAWING NO. P006

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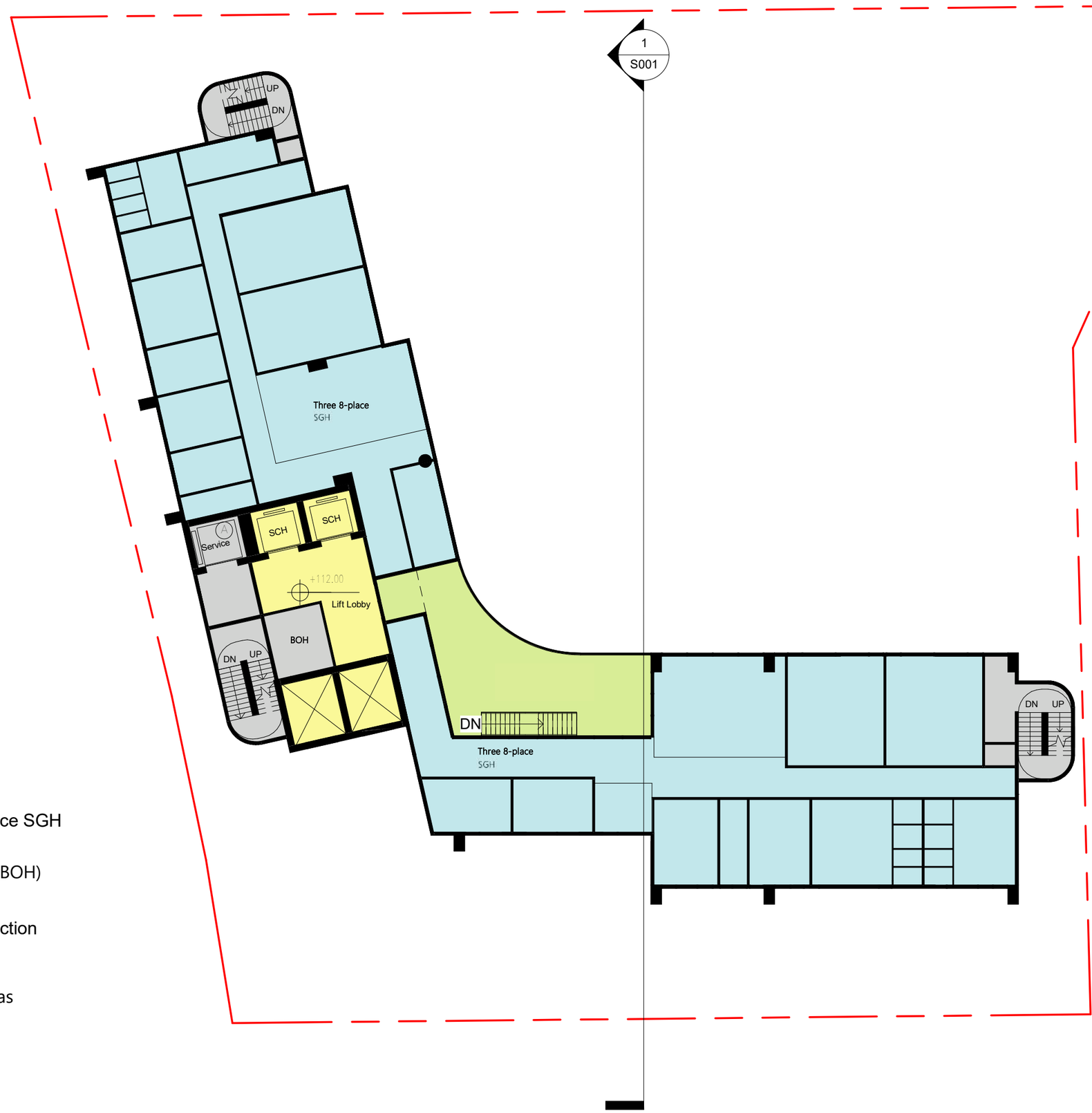

Legend

- Three 8-place SGH
- Back of House (BOH)
- Common Connection
- Open Space/ Landscaped Areas
- Site Boundary

BD REF -

BIM REF -

FSD REF -

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PROJECT NO.: HKA-P-01757

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Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

9F Plan

SCALE 1 : 200 @A3

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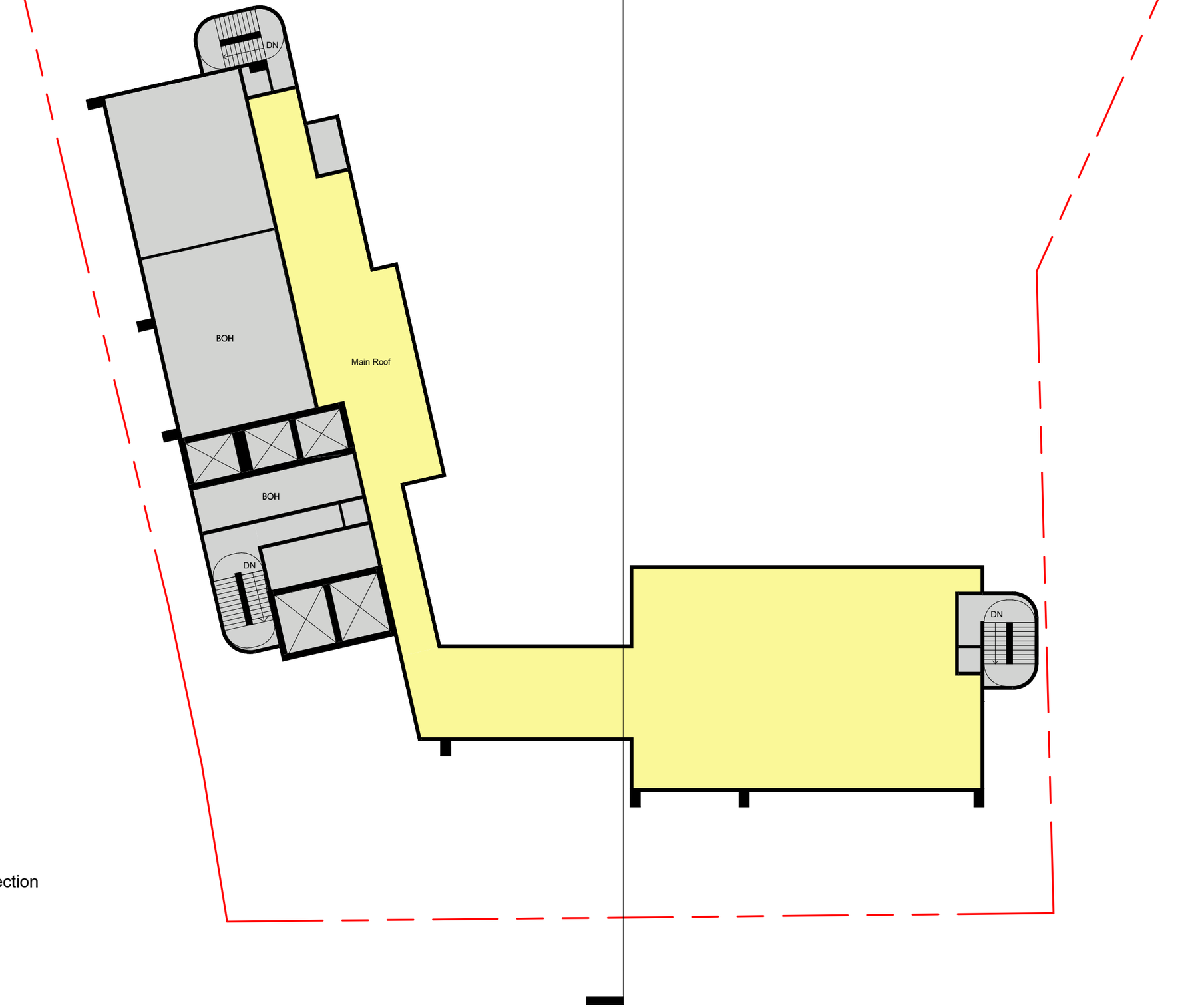

Legend

- BOH
- Common Connection
- Site Boundary

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Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

RF Plan

SCALE 1 : 200 @A3

DRAWING NO. P008

ISSUE DATE 05/09/24

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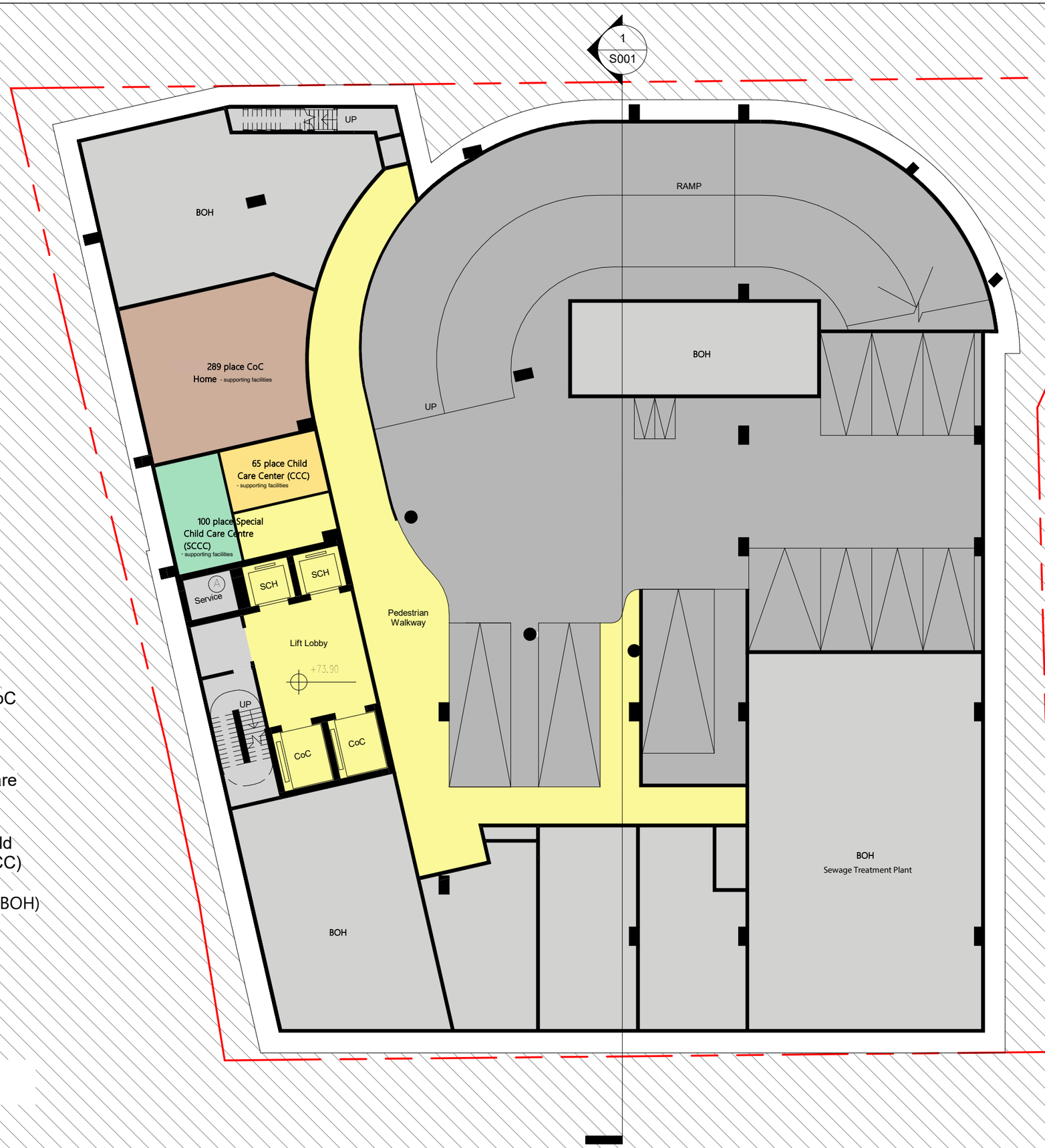

Legend

- 289 place CoC Home
- 100 place Special Child Care Centre (SCCC)
- 65 place Child Care Center (CCC)
- Back of House (BOH)
- Common Connection
- Vehicular Circulation
- Site Boundary

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

B1F Plan

SCALE 1 : 200 @A3

DRAWING NO. P009

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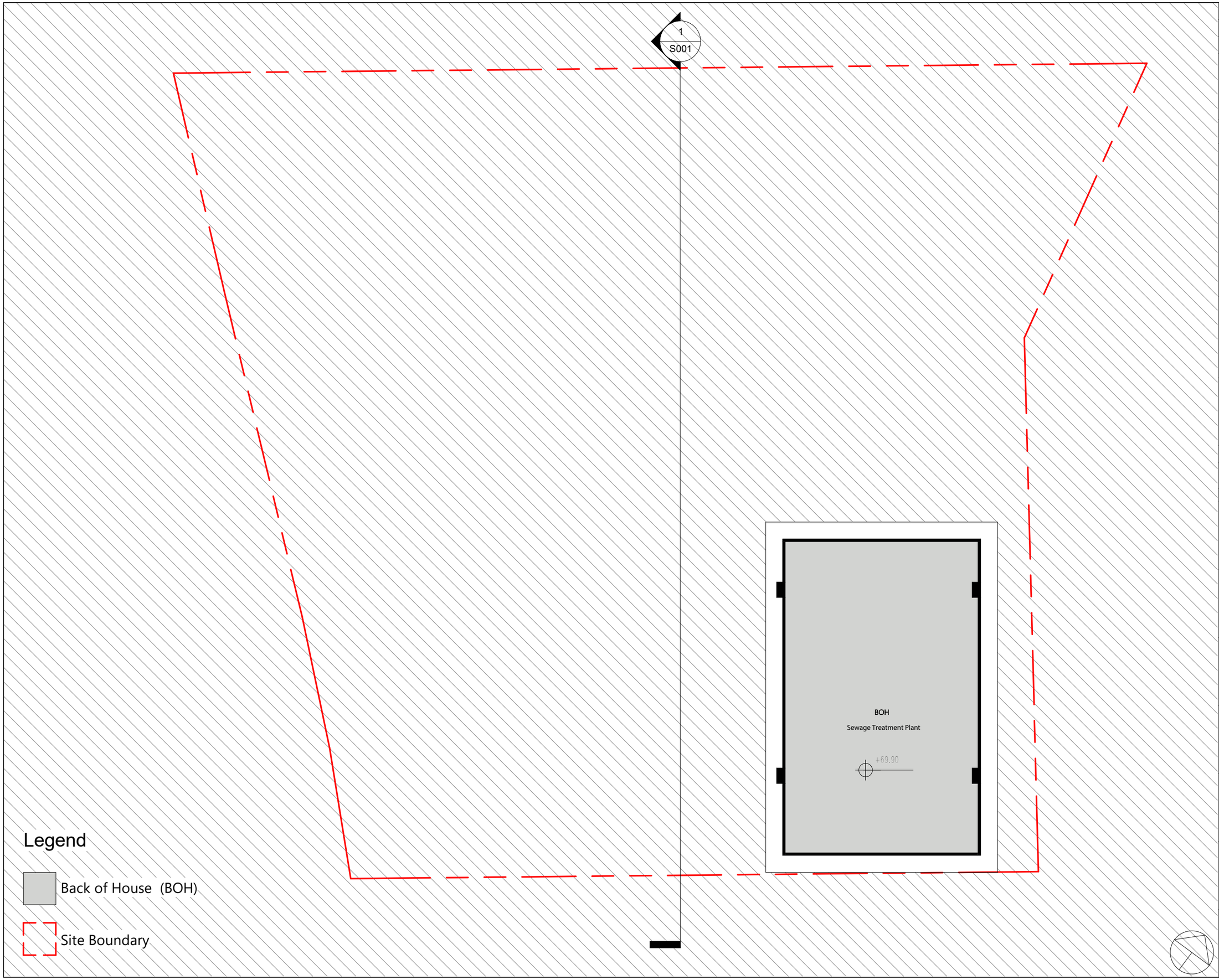

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Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

B2F Plan

SCALE 1 : 200 @A3

DRAWING NO. P010

ISSUE DATE 05/09/24

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Urban Green Consultants Limited

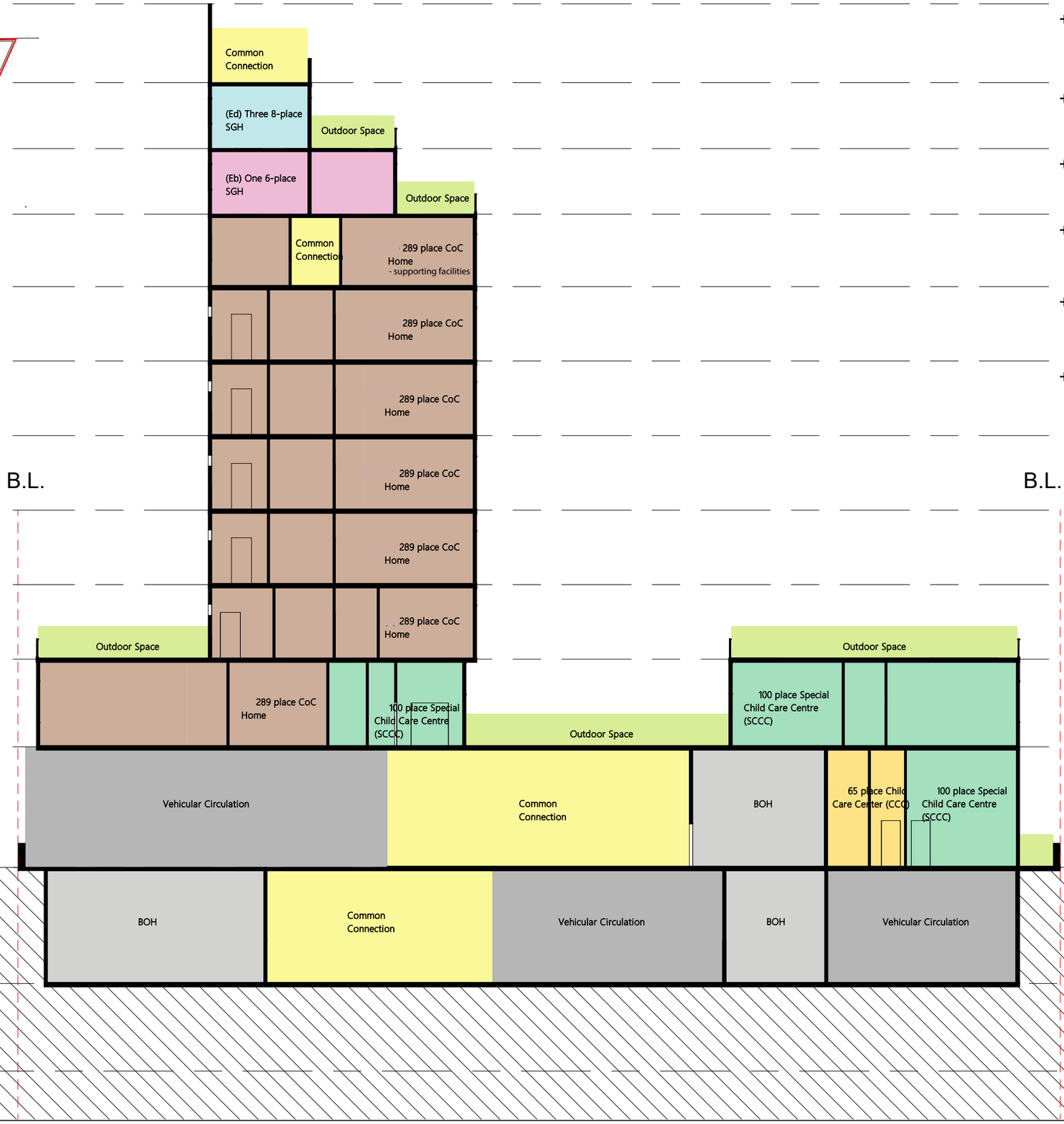
QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited

Key Plan

Legend

- 289 place CoC Home
- 100 place Special Child Care Centre (SCCC)
- 65 place Child Care Center (CCC)
- One 6-place SGH
- Three 8-place SGH
- Back of House (BOH)
- Common Connection
- Open Space/ Landscaped Areas
- Vehicular Circulation
- Site Boundary



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Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
Diagrammatic Section

SCALE 1:200 @A3

DRAWING NO. SE001 | ISSUE DATE 05/09/24

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Urban Green Consultants Limited

QUANTITY SURVEYOR
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Appendix 2

Landscape Proposal

Section 16 Planning Application
The Town Planning Ordinance (CAP. 131)

**PROPOSED HONG KONG SHENG KUNG HUI (SKH) ST CHRISTOPHER'S COMPLEX
AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN DD 34, TAI PO**

LANDSCAPE PROPOSAL

LANDSCAPE PROPOSAL

OCT, 2024

PREPARED BY:

OTHERLAND LIMITED

TABLE OF CONTENTS

SECTION 1
INTRODUCTION & PROJECT BACKGROUND REVIEW

1.1 Introduction

This Section 16 (S16) planning application relates to a site on Tai Po Road - Tai Po Kau Section, New Territories. The site is Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po.

Sheng Kung Hui (SKH) intends to develop the Site for a 10-storey building, namely Hong Kong Sheng Kung Hui St Christopher's Complex (hereinafter SCC), to accommodate a range of social welfare facilities. The Site is zoned Government, Institution or Community ["G/IC"] on the Approved Tai Po Outline Zoning Plan (OZP) No. S/TP/30. Under the zoning, 'Social Welfare Facility' is a Column 1 use and is permitted as of right. However, the Site is imposed with a Building Height Restriction (BHR) of 8 storeys. A S16 planning application is required to apply for minor relaxation of the BHR for the intended 10-storey development.

This S16 application is submitted by Hong Kong Sheng Kung Hui Welfare Council Limited (HKSKHWCL), and the owner of the Site is The Bishop of Victoria Hong Kong.

1.2 Project Description

The site is located at Tai Po Road, Tai Po, New Territories, Lot No. T77 in D.D. 34, covering and area of about 2191.3 sq.m. which is a vacant site under existing condition. The Project mainly is to construct a new Social Welfare Complex to accommodate the following services:

- Care and Attention Home for the Elderly Providing Continuum of Care;
- Special Child Care Centre;
- Child Care Centre;
- Small Group Homes;
- Foster Care Services and Agency-based Enhancement of Professional Staff support Services; and
- Staff Training Unit

SECTION 2
SITE APPRAISAL

The Application Site (the site) and its neighbourhood are situated on a hillside of a long sloping terrain which stretches from the Tolo Harbor Road to a few hundred mPD uphill. The Site is located at Tai Po Road - Tai Po Kau Section which is a rural road. The Site is situated in the part of the rural road near the Deerhill Bay development which is a low-density residential development. In the immediate vicinity of the Site are three schools, namely Japanese International School (JIS), Po Leung Kuk Tin Ka Ping Millennium Primary School (TKPM Primary School) and Hong Kong & Kowloon Kaifong Women's Association Sun Fong Chung College (SFCC). **Figure 1** shows the location of the Site and its neighbourhood.

Application Site

Figure 1

Within the application site, there are 1 type of Landscape Resources recorded and described in below table:

Landscape Resources Description	Sensitivity
Plantation The area consists of 77 nos. of natural trees and most of them are common species, including 46 nos. *Leucaena leucocephala*, which is an undesirable species that could be excluded from tree compensation according to LAO PN No. 6/2023 issued by LandsD and 5 nos. of Dead Tree. Considering this tree group height ranging from 5m to 13m, crown spread ranging from 1m to 10m, the sensitivity of this tree group is considered as medium.	Medium

Tree Survey was conducted by Mr. Pak Hin Leung (The Arboricultural Association Accredited Arborist: MArborA: PRO5833) on 27th Jan, 2022. There are total 77 nos. of trees surveyed within the application site, and among these trees , 10 species were identified within the application site. Please refer to the table below:

Scientific Name	Chinese Name	Quantity (nos.)
Acacia confusa	台灣相思	9
Bombax ceiba	木棉	2
Bridelia tomentosa	土蜜樹	1
Celtis sinensis	朴樹	1
Adenanthera microsperma	海紅豆	4
Dead tree	死樹	5
Ficus microcarpa	細葉榕	6
Leucaena leucocephala	銀合歡	46
Litsea glutinosa	潺槁樹	1
Macaranga tanarius var. tomentosa	血桐	1
Trema tomentosa	山黃麻	1
	Total	77

For tree survey details, please refer to **Appendix A** and **Appendix B.**

SECTION 3
ASSESSMENT OF THE POTENTIAL IMPACT TO EXISTING TREES ON SITE

Among 77 trees surveyed, since the proposed development consists of site formation to make the ground floor of the building at level 79.2mPD. All trees within the application site will be affected. 77 trees are proposed to be felled.

Most of the felled trees are not recommended to be transplanted due to several reasons, including poor health, poor structural condition, on steep slope which the root ball cannot be formed, undesirable species or large size which is not feasible to be transplanted and with low survival rate after transplanting. For details, please refer to Appendix B and the table below.

Summary of Trees to be felled

Scientific Name	Chinese Name	Quantity (nos.)
Acacia confusa	台灣相思	9
Bombax ceiba	木棉	2
Bridelia tomentosa	土蜜樹	1
Celtis sinensis	朴樹	1
Adenanthera microsperma	海紅豆	4
Dead tree	死樹	5
Ficus microcarpa	細葉榕	6
Leucaena leucocephala	銀合歡	46
Litsea glutinosa	潺槁樹	1
Macaranga tanarius var. tomentosa	血桐	1
Trema tomentosa	山黃麻	1
	Total	77

46 nos. of new trees will be provided within the site[1]. Sufficient space, i.e. 4m spacing will be provided for tree growth. Proposed tree species, sizes, quantity, and location will be further developed. They are 12 nos. located at G/F and 34 nos. on 2/F, for details, please refer to **Appendix E**.

Proposed new tree planting schedule:

Abbreviation	Botanical name	Chinese name	Height (mm)	Spread (mm)	DBH (mm)	Spacing (mm)	Origin	Quantity
LIQ.FOR.	*Liquidambar formosana*	楓香	3500	2000	95	4000	Native	7
LLE.ROT.	*Ilex rotunda*	小果鐵冬青	3500	2000	80	4000	Native	3
TER.MAN.	*Terminalia mantaly*	小葉欖仁	3500	2000	95	4000	Exotic	25
PLU.RUB.	*Plumeria rubra*	紅雞蛋花	3500	2000	80	4000	Exotic	7
TAB. CHR.	*Tabebuia chrysantha*	黃鐘木（風鈴木）	3500	2000	80	4000	Exotic	4

SECTION 4
DESIGN CONCEPT AND OBJECTIVES

The proposed development consists of a main landscape area at 2/F and some other landscape area at different levels, including G/F, 7/F, 8/F and R/F. Considering the affected existing Landscape resources mentioned in Section 3, the proposed landscape treatment has been critically reviewed and opportunities for new landscape planting has been maximized, including trees; shrub; groundcover; sensory garden for dementia therapy & aromatic herbs garden. For details, please refer to **Appendix E**.

4.1 Soft Landscape Design

(i) Ground Floor

Since most of the space within the application site has been reserved for the building footprint, the landscape area is aimed to eliminate visual impact viewing from the adjacent school and outside , enhance the effect by choosing fluffy shrubs and trees will be proposed at the planter along to the Tai Po Road entrance to create pleasant environment and mitigate the visual impact of the Proposed Development.

(ii) 2/F

This portion of the site receives the most sunlight throughout the day and it will be beneficial for vegetation planting. Two set of fitness equipment is proposed for user to exercise under the sunshine. A large number of trees with seasonal changes will be placed to this sensory garden to create an area with lush vegetation to offer a forest like environment for users wandering around under shades with different sensory experience. Visual stimulation as creating mood of color by combine variety height of plantings to attract bees, birds and butterflies; Scents and smell stimulation as natural and placing aromatic plants to evoke intense feelings and trigger emotions; Hearing stimulation as soothing sound from pond of water for relaxing; Tactile Stimulation as pebble walk. Quite a number of vegetables and fruits can be farmed in the garden by easy maintenance and benefits to dementia therapy.

(iii) 7/F & 9/F

The landscape area in this floor is mainly designed for staff supporting, landscape furniture will be placed with aromatic plants as herbs and shrubs in a variety of form and texture to create a relaxing environment for staff to relax.

(iv) 8/F

The Landscape area in this floor is mainly designed for Small Group Homes. Mini-golf and seating areas will be provided with lush vegetation planting at the edge of the building. Mosquito repellent plants as herbs, shrubs and ground cover species in a variety of form and texture to create a relaxing environment for children to explore and hang out.

(v) R/F

The Landscape area in this floor is mainly proposed to increase green coverage and for visual interests.

Note 1: Overall compensatory ratio in terms of number within application site is 1: 0.59. Overall compensatory ratio in terms of aggregated DBH within application site is 1:0.36.

4.2 Hard Landscape Design

(i) All hard landscape areas and associated features will be in full compliance with relevant safety standards and guidelines. The choices of materials for different kinds of finishes will be compatible with the architectural style of proposed development.

(ii) Site furniture will be located at appropriate areas i.e. edges of the planters, in order to serve its functions fully.

(iii) The floor tiles to be used on pedestrian accesses/floor finishes will be able to achieve certain slip-resistant effect.

4.3 Greenery Coverage

The Site area of the application site is 2191.3 sq.m. According to Sustainable Building Design Guidelines PNAP APP 152, the total greenery coverage within the application site is not less than 438.26 sq,m. and not less than 219.13 sq,m in primary zone, which achieved not less than 10% at primary zone and not less than 20% in overall greenery coverage. The demarcation of greenery coverage is illustrated in **Appendix F**.

4.4 Open Space Provision

The proposed open space area is not less than 325m² for the intended population of 325, which meets 1m² per person in accordance to the recommendation from Hong Kong Planning Standards and Guidelines (HKPSG). A diagram showing the location of the open space is illustrated in **Appendix G**.

4.5 Others

(i) Soil Depth

The proposed landscaped area of this application site will be designed with adequate soil depth and width for healthy plant growth. Sufficient soil depth and volume will be provided for all landscape planting at ground, intermediate and roof levels. Excluding drainage layer, minimum soil depths of 1200mm, 600mm and 300mm will be provided for tree, shrubs, grass/ground covers respectively.

(ii) Drainage

Adequate drainage in forms of soak away system, subsoil drains by pipes or miradrains will be provided for all planting areas to protect plants from waterlogging problems.

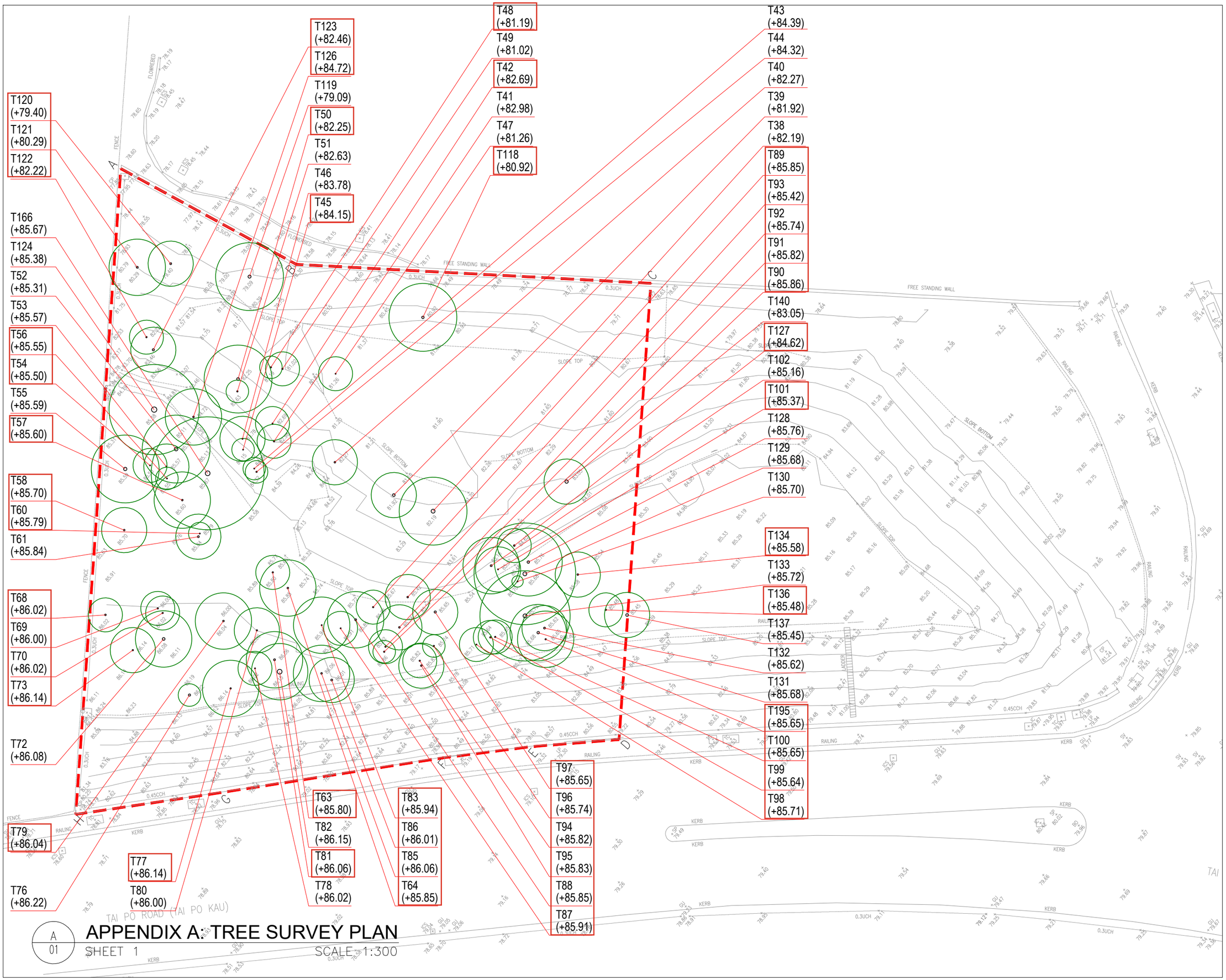
(iii) Irrigation

Adequate water points will be provided for general maintenance and watering of vegetation. To facilitate maintenance of soft landscape works, provision of water points located at a distance of maximum 40m centre to centre, which allows for 20m hose connection, for manual watering will be provided for irrigating all planting areas.

(iv) Maintenance and Accessibility

All landscaped areas will be provided with sufficient maintenance accesses.

-End-



A 01

APPENDIX A: TREE SURVEY PLAN

SHEET 1 SCALE 1:300

LEGEND:

SITE BOUNDARY

T## (+10.00) TREE NO. AND EXISTING LEVEL

SURVEYED TREES (TOTAL 77 nos.)

REV	DATE	DESCRIPTION
0	09 FEB 2022	TPRP

otherland

ROOM 2302, 23/F, NEW TECH PLAZA
34 TAI YAU STREET
SAN PO KONG KOWLOON, HONG KONG,

Tel: (852) 2893 0270 / 6286 2720
Fax: (852) 2893 3139
WWW.OTHERLAND.COM.HK

CLIENT:

HONG KONG SHENG KUNG HUI WELFARE COUNTIL LIMITED

PROJECT:

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex, Tai Po

TITLE:

TREE SURVEY PLAN (Sheet 1)

SCALE: 1:300	A3
DRAWN BY: L.W. CHAN	
CHECKED BY: YANMI LEUNG	
APPROVED BY: PAUL Y.K. CHAN	
DRAWING DATE: 09 Feb 2022	
PROJECT No: LWK03_21	
SHEET No: LWK03_LP_TSP_01	REV: 0

APPENDIX B: TREE ASSESSMENT SCHEDULE

Address: Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po

Lot: T77 in D.D. 34, Tai Po

Prepared by LEUNG Pak Hin on 27th JAN 2022

Field Survey was conducted/updated on 27th JAN 2022

To be read in conjuction with drawing nos. LWK03_LP_TSP_01 rev. 0 and LWK03_LP_TTP_01_rev. 0

Tree No.	Tree Species		Original Location (Lot/GA/YA/GHBA, etc.)	Tree Size			Form	Health condition	Structural condition	Anticipated Survival Rate after Transplanting (High / Medium / Low)	Top of Soil Level above Root Collar	Proposed Treatment		Additonal Remarks
	Scientific name	Chinese name		Overall height (m)	DBH (mm)	Average crown spread (m)	(Good (G) / Fair (F) / Poor (P))					In initial application	in this revision, if applicable	
												(Retain / Transplant / Fell)		
T038	*Adenanthera microsperma*	海紅豆	DD34TLL T77 RP	13	345	6	F	F	F	L	82.19	Fell	-	-
T039	*Adenanthera microsperma*	海紅豆	DD34TLL T77 RP	9	230	4	F	F	F	L	81.92	Fell	-	-
T040	*Trema tomentosa*	山黃麻	DD34TLL T77 RP	7	140	4	F	F	F	L	82.27	Fell	-	Climber
T041	*Adenanthera microsperma*	海紅豆	DD34TLL T77 RP	6	110	3	F	F	P	M	82.98	Fell	-	Wound on trunk
T042	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	100	3	F	F	F	L	82.69	Fell	-	-
T043	*Dead tree*	死樹	DD34TLL T77 RP	6	95	2	P	P	P	L	84.39	Fell	-	-
T044	*Dead tree*	死樹	DD34TLL T77 RP	5	105	2	P	P	P	L	84.32	Fell	-	-
T045	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	9	100	2	F	F	F	L	84.15	Fell	-	-
T046	*Ficus microcarpa*	細葉榕	DD34TLL T77 RP	7	101	4	F	F	F	L	83.78	Fell	-	-
T047	*Ficus microcarpa*	細葉榕	DD34TLL T77 RP	5	100	3	F	F	F	L	81.26	Fell	-	-
T048	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	120	2	F	F	F	L	81.19	Fell	-	Leaning 35°
T049	*Ficus microcarpa*	細葉榕	DD34TLL T77 RP	6	110	3	F	F	F	L	81.02	Fell	-	Climber
T050	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	9	230	6	F	F	F	L	82.25	Fell	-	Crack on branch
T051	*Ficus microcarpa*	細葉榕	DD34TLL T77 RP	5	110	2	F	F	F	L	82.63	Fell	-	-
T052	*Dead tree*	死樹	DD34TLL T77 RP	8	330	6	P	P	P	L	85.31	Fell	-	-
T053	*Bridelia tomentosa*	土蜜樹	DD34TLL T77 RP	6	100	4	F	F	F	M	85.57	Fell	-	-
T054	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	100	3	F	F	F	L	85.50	Fell	-	-
T055	*Acacia confusa*	台灣相思	DD34TLL T77 RP	11	290	6	F	F	F	L	85.59	Fell	-	Split branch, dead branch, codominant trunk
T056	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	100	2	F	P	F	L	85.55	Fell	-	Dieback twigs
T057	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	130	5	F	P	F	L	85.60	Fell	-	Dieback twigs
T058	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	140	4	F	P	F	L	85.70	Fell	-	Dieback twigs
T060	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	9	100	2	F	P	F	L	85.79	Fell	-	Dieback twigs
T061	*Ficus microcarpa*	細葉榕	DD34TLL T77 RP	7	165	4	F	P	F	L	85.84	Fell	-	Dieback twigs
T063	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	110	3	F	F	F	L	85.80	Fell	-	Cross branch with adjacent trunk
T064	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	130	5	F	P	F	L	85.85	Fell	-	Dieback twigs
T068	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	134	3	F	P	F	L	86.02	Fell	-	Dieback twigs
T069	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	120	3	F	P	F	L	86.00	Fell	-	Dieback twigs

Address: Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po

Lot: T77 in D.D. 34, Tai Po

Prepared by LEUNG Pak Hin on 27th JAN 2022

Field Survey was conducted/updated on 27th JAN 2022

To be read in conjuction with drawing nos. LWK03_LP_TSP_01 rev. 0 and LWK03_LP_TTP_01_rev. 0

Tree No.	Tree Species		Original Location (Lot/GA/YA/GHBA, etc.)	Tree Size			Form	Health condition	Structural condition	Anticipated Survival Rate after Transplanting (High / Medium / Low)	Top of Soil Level above Root Collar	Proposed Treatment		Additonal Remarks
	Scientific name	Chinese name		Overall height (m)	DBH (mm)	Average crown spread (m)	(Good (G) / Fair (F) / Poor (P))					In initial application	in this revision, if applicable	
												(Retain / Transplant / Fell)		
T070	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	110	3	F	P	F	L	86.02	Fell	-	Dieback twigs
T072	*Ficus microcarpa*	細葉榕	DD34TLL T77 RP	9	251	5	F	F	F	L	86.08	Fell	-	-
T073	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	110	4	F	F	F	L	86.14	Fell	-	-
T076	*Bombax ceiba*	木棉	DD34TLL T77 RP	8	180	2	F	F	F	L	86.22	Fell	-	Restrict root
T077	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	110	5	F	F	P	M	86.14	Fell	-	Leaning 45°
T078	*Adenanthera microsperma*	海紅豆	DD34TLL T77 RP	6	100	3	F	F	F	M	86.02	Fell	-	-
T079	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	9	141	5	F	F	F	L	86.04	Fell	-	Broken branch
T080	*Litsea glutinosa*	潺槁樹	DD34TLL T77 RP	7	120	4	F	P	F	M	86.00	Fell	-	Dead branch, severe dieback
T081	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	162	5	F	F	F	L	86.06	Fell	-	Leaning 45°, codominant trunk with included bark, hanger
T082	*Acacia confusa*	台灣相思	DD34TLL T77 RP	8	426	5	F	F	F	L	86.15	Fell	-	Multi trunk, included bark, dead branch
T083	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	95	5	F	F	F	L	85.94	Fell	-	-
T085	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	140	5	P	F	P	M	86.06	Fell	-	Uproot, leaning 45°
T086	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	9	160	4	F	P	F	L	86.01	Fell	-	Dieback twigs, leaning 15°, trunk merged with metal fencing
T087	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	95	3	F	F	F	L	85.91	Fell	-	Leaning 10°
T088	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	169	5	F	F	F	L	85.85	Fell	-	Included bark, leaning 10°
T089	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	110	3	F	F	P	M	85.85	Fell	-	Collapsed tree with self-corrected
T090	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	105	2	F	F	F	L	85.86	Fell	-	Leaning 15°, asymmetric crown
T091	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	110	3	P	F	P	M	85.82	Fell	-	Exposed root, leaning 20°, asymmetric crown
T092	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	151	4	P	F	F	M	85.74	Fell	-	Multi trunk, crack trunk, leaning 20°
T093	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	131	4	F	F	P	M	85.42	Fell	-	Uproot, codominant trunk
T094	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	120	3	P	F	P	M	85.82	Fell	-	Exposed root, leaning 10°
T095	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	145	4	P	F	P	M	85.83	Fell	-	Leaning 25°, asymmetric crown, trunk merged with metal fencing
T096	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	110	2	F	F	F	L	85.74	Fell	-	Exposed root
T097	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	181	4	P	F	F	M	85.65	Fell	-	Multi trunk, codominant trunk with included bark, hanger
T098	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	5	100	3	P	F	P	M	85.71	Fell	-	Leaning 45°, uproot, asymmetric crown
T099	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	118	3	P	F	F	M	85.64	Fell	-	Multi trunk
T100	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	110	3	P	F	F	M	85.65	Fell	-	Leaning 10°, asymmetric crown

Address: Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po

Lot: T77 in D.D. 34, Tai Po

Prepared by LEUNG Pak Hin on 27th JAN 2022

Field Survey was conducted/updated on 27th JAN 2022

To be read in conjuction with drawing nos. LWK03_LP_TSP_01 rev. 0 and LWK03_LP_TTP_01_rev. 0

Tree No.	Tree Species		Original Location (Lot/GA/YA/GHBA, etc.)	Tree Size			Form	Health condition	Structural condition	Anticipated Survival Rate after Transplanting (High / Medium / Low)	Top of Soil Level above Root Collar	Proposed Treatment		Additonal Remarks
	Scientific name	Chinese name		Overall height (m)	DBH (mm)	Average crown spread (m)	(Good (G) / Fair (F) / Poor (P))					In initial application	in this revision, if applicable	
												(Retain / Transplant / Fell)		
T101	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	95	4	F	F	F	L	85.37	Fell	-	-
T102	*Acacia confusa*	台灣相思	DD34TLL T77 RP	8	170	5	F	F	F	L	85.16	Fell	-	Dead fronds
T118	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	210	6	F	F	F	L	80.92	Fell	-	-
T119	*Macaranga tanarius var. tomentosa*	血桐	DD34TLL T77 RP	6	260	6	F	F	F	L	79.09	Fell	-	-
T120	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	8	170	4	F	F	F	L	79.40	Fell	-	-
T121	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	160	5	P	F	P	M	80.29	Fell	-	Abnormal crook trunk, exposed root, restrict root by planter
T122	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	5	120	3	P	F	F	M	82.22	Fell	-	Leaning 30°, cross branch with adjacent trunk, asymmetric crown
T123	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	5	187	4	P	F	P	M	82.46	Fell	-	Root-plate movement, leaning 90°, codominant
T124	*Acacia confusa*	台灣相思	DD34TLL T77 RP	11	479	8	F	F	F	L	85.38	Fell	-	Cross branch with adjacent trunk, multi trunk, cavity, girlding root, abnormal bark crack
T126	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	150	5	P	F	F	M	84.72	Fell	-	Asymmetric crown, leaning 15°
T127	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	6	146	3	F	F	P	M	84.62	Fell	-	Codominant trunk, exposed root, leaning 10°
T128	*Acacia confusa*	台灣相思	DD34TLL T77 RP	11	215	6	F	F	F	L	85.76	Fell	-	Exposed root,
T129	*Acacia confusa*	台灣相思	DD34TLL T77 RP	10	342	9	P	F	P	M	85.68	Fell	-	Cavity on dead branch, multi trunk, dead branch, cavity on basal trunk
T130	*Dead tree*	死樹	DD34TLL T77 RP	7	95	1	P	P	P	L	85.70	Fell	-	-
T131	*Acacia confusa*	台灣相思	DD34TLL T77 RP	8	210	5	P	F	F	M	85.68	Fell	-	Asymmetric crown
T132	*Acacia confusa*	台灣相思	DD34TLL T77 RP	9	160	4	P	F	F	M	85.62	Fell	-	Leaning 15°, exposed root, asymmetric crown
T133	*Acacia confusa*	台灣相思	DD34TLL T77 RP	10	340	8	P	F	F	M	85.72	Fell	-	Codominant, asymmetric crown
T134	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	130	4	P	F	P	M	85.58	Fell	-	Uproot, leaning 25°, wound on branch, asymmetric crown
T136	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	7	120	3	F	F	F	L	85.48	Fell	-	-
T137	*Celtis sinensis*	朴樹	DD34TLL T77 RP	7	252	4	P	F	P	M	85.45	Fell	-	Exposed root, bark crack, multi trunk, asymmetric crown, epiphytic plant, included bark, cross branch
T140	*Bombax ceiba*	木棉	DD34TLL T77 RP	9	300	4	P	F	F	M	83.05	Fell	-	Abnormal crook trunk
T166	*Dead tree*	死樹	DD34TLL T77 RP	10	427	10	P	P	P	L	85.67	Fell	-	Codominant
T195	*Leucaena leucocephala*	銀合歡	DD34TLL T77 RP	5	120	5	P	F	P	M	85.65	Fell	-	Leaning 55°, uproot

APPENDIX B: TREE ASSESSMENT SCHEDULE

Address: Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po

Lot: T77 in D.D. 34, Tai Po

Prepared by LEUNG Pak Hin on 27th JAN 2022

Field Survey was conducted/updated on 27th JAN 2022

To be read in conjuction with drawing nos. LWK03_LP_TSP_01 rev. 0 and LWK03_LP_TTP_01_rev. 0

Tree No.	Tree Species		Original Location (Lot/GA/YA/GHBA, etc.)	Tree Size			Form	Health condition	Structural condition	Anticipated Survival Rate after Transplanting (High / Medium / Low)	Top of Soil Level above Root Collar	Proposed Treatment		Additonal Remarks
	Scientific name	Chinese name		Overall height (m)	DBH (mm)	Average crown spread (m)	(Good (G) / Fair (F) / Poor (P))					In initial application	in this revision, if applicable	
												(Retain / Transplant / Fell)		

LEGEND

	Tree Proposed to be Retained
	Tree Proposed to be Felled
	Tree Proposed to be Transplanted

Total No. of Trees Surveyed:	77
Total No. of Retained Trees:	0
Total No. of Felled Trees:	77
Total No. of Transplanted Trees:	0
Total DBH of Felled Trees (mm):	12663

Remarks

Trees with the following features should not be considered suitable for transplanting:

a) Poor amenity value

b) Irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);

c) Species with low survival rate after transplanting;

d) Very large size (unless the feasibility to transplant has beem considered financially reasonable and technically feasible during the feasibility stage);

e) With evidence of over-maturity and onset of senescence;

f) With poor health, structure or form (e.g. imbalanced form, leaning, with major/cavity/cracks/splits); or

g) Undesirable species (e.g. Leuceana leucocephala which is an invasive exotic tree).

h) Low cost-effectiveness for transplant operation

i) Located on Slope

Justification

i) Affected by proposed work, impossible to retain in-situ

ii) Poor form (e.g. canopy lopsided & unbalanced, tree trunk leaning dangerously, tree trunk crooked, with hazard-beam bending)

iii) Poor health (e.g. tree severely stressed, diseased, insect-pest infected, thin foliage density cover, dieback of canopy)

iv) Poor structure (e.g. tree trunk decayed, with decayed hollow cavity, dangerous biburcation codominant stems with included-bark likely to split apart)

v) Root ball not extractable for transplant (e.g. trees grown on slope/masonry wall; trees with roots are tangled together with adjacent tree)

vi) Ubiquitous species - easily replaceable by new compensatory planting of better quality in term of ecological value

vii) Undesirable Species : According to Para. 8 of DEVB TCW No. 4/2020

viii) Oversized tree not feasible for transportable/ transplantable

APPENDIX B: TREE ASSESSMENT SCHEDULE

Address: Remaining Portion of Taxlord Lot No. T77 in DD 34, Tai Po

Lot: T77 in D.D. 34, Tai Po

Prepared by LEUNG Pak Hin on 27th JAN 2022

Field Survey was conducted/updated on 27th JAN 2022

To be read in conjuction with drawing nos. LWK03_LP_TSP_01 rev. 0 and LWK03_LP_TTP_01_rev. 0

Tree No.	Tree Species		Original Location (Lot/GA/YA/GHBA, etc.)	Tree Size			Form	Health condition	Structural condition	Anticipated Survival Rate after Transplanting (High / Medium / Low)	Top of Soil Level above Root Collar	Proposed Treatment		Additonal Remarks
	Scientific name	Chinese name		Overall height (m)	DBH (mm)	Average crown spread (m)	(Good (G) / Fair (F) / Poor (P))					in initial / approved application	in this revision, if applicable	
												(Retain / Transplant / Fell)		

LEGEND

	Tree Proposed to be Retained
	Tree Proposed to be Felled
	Tree Proposed to be Transplanted

Total No. of Trees Surveyed:	77
Total No. of Retained Trees:	0
Total No. of Felled Trees:	77
Total No. of Transplanted Trees:	0
Total DBH of Felled Trees (mm):	12663

Remarks

Trees with the following features should not be considered suitable for transplanting:

a) Poor amenity value

b) Irrecoverable form after transplanting (e.g. if substantial crown and root pruning are necessary to facilitate the transplanting);

c) Species with low survival rate after transplanting;

d) Very large size (unless the feasibility to transplant has beem considered financially reasonable and technically feasible during the feasibility stage);

e) With evidence of over-maturity and onset of senescence;

f) With poor health, structure or form (e.g. imbalanced form, leaning, with major/cavity/cracks/splits); or

g) Undesirable species (e.g. Leuceana leucocephala which is an invasive exotic tree).

h) Low cost-effectiveness for transplant operation

i) Located on Slope

Justification

i) Affected by proposed work, impossible to retain in-situ

ii) Poor form (e.g. canopy lopsided & unbalanced, tree trunk leaning dangerously, tree trunk crooked, with hazard-beam bending)

iii) Poor health (e.g. tree severely stressed, diseased, insect-pest infected, thin foliage density cover, dieback of canopy)

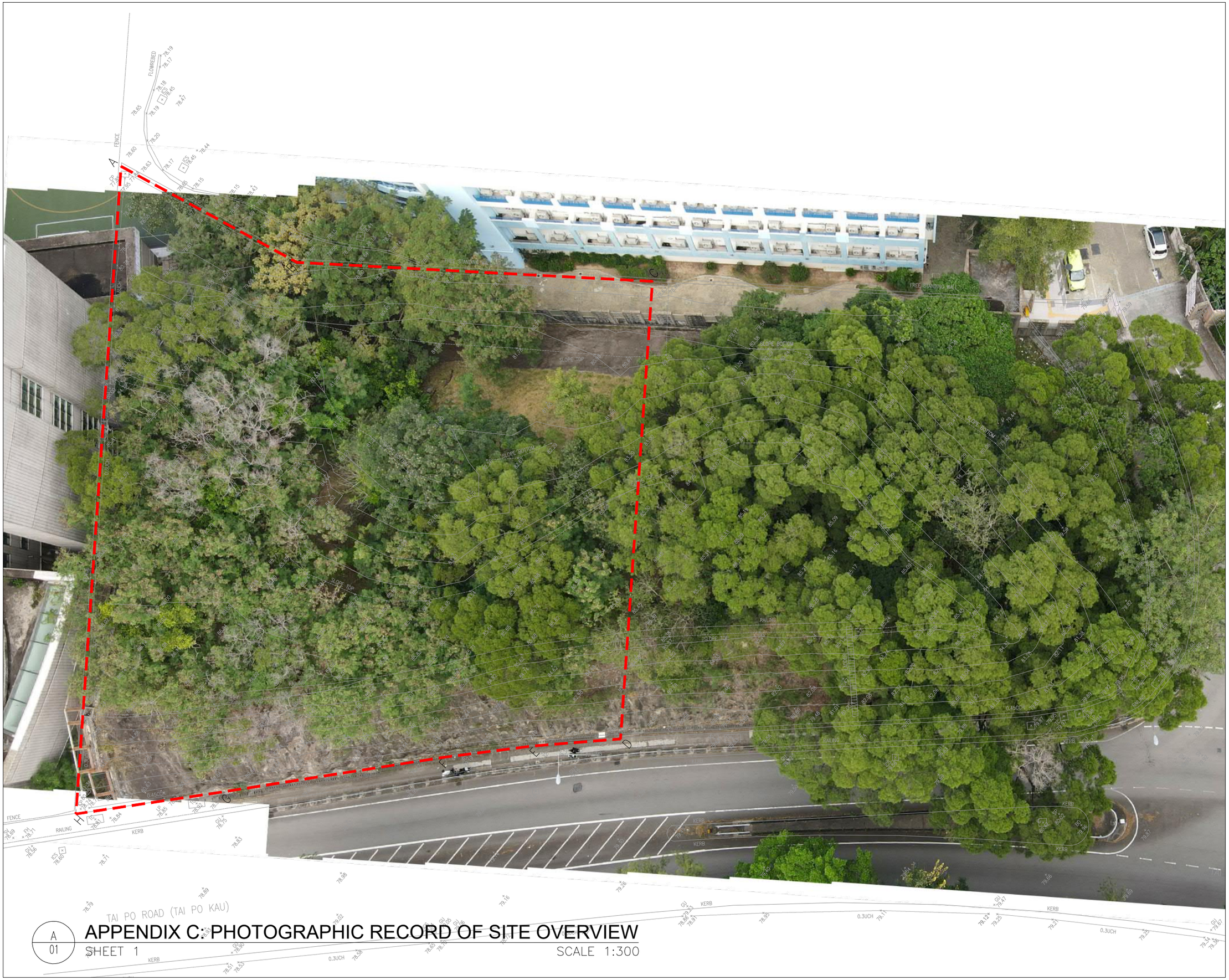
iv) Poor structure (e.g. tree trunk decayed, with decayed hollow cavity, dangerous biburcation codominant stems with included-bark likely to split apart)

v) Root ball not extractable for transplant (e.g. trees grown on slope/masonry wall; trees with roots are tangled together with adjacent tree)

vi) Ubiquitous species - easily replaceable by new compensatory planting of better quality in term of ecological value

vii) Undesirable Species : According to Para. 8 of DEVB TCW No. 4/2020

viii) Oversized tree not feasible for transportable/ transplantable



A 01

APPENDIX C: PHOTOGRAPHIC RECORD OF SITE OVERVIEW

SHEET 1 SCALE 1:300

LEGEND:

SITE BOUNDARY

REV	DATE	DESCRIPTION
0	09 FEB 2022	TPRP

otherland
ROOM 2302, 23/F, NEW TECH PLAZA
34 TAI YAU STREET
SAN PO KONG KOWLOON, HONG KONG,

Tel: (852) 2893 0270 / 6286 2720
Fax: (852) 2893 3139
WWW.OTHERLAND.COM.HK

CLIENT:

HONG KONG SHENG KUNG HUI WELFARE COUNTIL LIMITED

PROJECT:

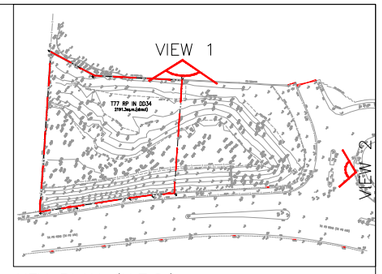
Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex, Tai Po

TITLE:

PHOTOGRAPHIC RECORD OF SITE OVERVIEW (Sheet 1)

SCALE: 1:300	A3
DRAWN BY: L.W. CHAN	
CHECKED BY: YANMI LEUNG	
APPROVED BY: PAUL Y.K. CHAN	
DRAWING DATE: 09 Feb 2022	
PROJECT No: LWK03_21	
SHEET No: LWK03_LP_PR_01	REV: 0

VIEW 1



KEY PLAN (N.T.S.)

VIEW 2

A 01 APPENDIX C: PHOTOGRAPHIC RECORD OF SITE OVERVIEW

SHEET 2 N.T.S.

LEGEND:

SITE BOUNDARY

REV	DATE	DESCRIPTION
0	09 FEB 2022	TPRP

otherland
ROOM 2302, 23/F, NEW TECH PLAZA
34 TAI YAU STREET
SAN PO KONG KOWLOON, HONG KONG,

Tel: (852) 2893 0270 / 6286 2720
Fax: (852) 2893 3139
WWW.OTHERLAND.COM.HK

CLIENT:

HONG KONG SHENG KUNG HUI WELFARE COUNTIL LIMITED

PROJECT:

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex, Tai Po

TITLE:

PHOTOGRAPHIC RECORD OF SITE OVERVIEW (Sheet 2)

SCALE: N.T.S.	A3
DRAWN BY: L.W. CHAN	
CHECKED BY: YANMI LEUNG	
APPROVED BY: PAUL Y.K. CHAN	
DRAWING DATE: 09 Feb 2022	
PROJECT No: LWK03_21	
SHEET No: LWK03_LP_PR_02	REV: 0

T120 (+79.40)
T121 (+80.29)
T122 (+82.22)
T123 (+82.46)
T126 (+84.72)
T119 (+79.09)
T50 (+82.25)
T51 (+82.63)
T46 (+83.78)
T45 (+84.15)
T48 (+81.19)
T49 (+81.02)
T42 (+82.69)
T41 (+82.98)
T47 (+81.26)
T118 (+80.92)
T43 (+84.39)
T44 (+84.32)
T40 (+82.27)
T39 (+81.92)
T38 (+82.19)
T89 (+85.85)
T93 (+85.42)
T92 (+85.74)
T91 (+85.82)
T90 (+85.86)
T140 (+83.05)
T127 (+84.62)
T102 (+85.16)
T101 (+85.37)
T128 (+85.76)
T129 (+85.68)
T130 (+85.70)
T166 (+85.67)
T124 (+85.38)
T52 (+85.31)
T53 (+85.57)
T56 (+85.55)
T54 (+85.50)
T55 (+85.59)
T57 (+85.60)
T58 (+85.70)
T60 (+85.79)
T61 (+85.84)
T134 (+85.58)
T133 (+85.72)
T136 (+85.48)
T137 (+85.45)
T132 (+85.62)
T131 (+85.68)
T195 (+85.65)
T100 (+85.65)
T99 (+85.64)
T98 (+85.71)
T68 (+86.02)
T69 (+86.00)
T70 (+86.02)
T73 (+86.14)
T72 (+86.08)
T79 (+86.04)
T77 (+86.14)
T80 (+86.00)
T76 (+86.22)
T63 (+85.80)
T82 (+86.15)
T81 (+86.06)
T78 (+86.02)
T83 (+85.94)
T86 (+86.01)
T85 (+86.06)
T64 (+85.85)
T97 (+85.65)
T96 (+85.74)
T94 (+85.82)
T95 (+85.83)
T88 (+85.85)
T87 (+85.91)

TAI PO ROAD (TAI PO KAU)

A 01 APPENDIX D: TREE TREATMENT PLAN
SHEET 1 SCALE 1:300

LEGEND:

- SITE BOUNDARY
- PROPOSED DEVELOPMENT
- T## (+10.00) TREE NO. AND EXISTING LEVEL
- TREE PORPOSED TO BE RETAINED (TOTAL 0 nos.)
- TREE PORPOSED TO BE FELLED (TOTAL 77 nos.)
- TREE PORPOSED TO BE TRANSPLANTED (TOTAL 0 nos.)

REV	DATE	DESCRIPTION
0	26 JUN 2024	TPRP

otherland
23/F, ON TIN CENTRE
1 SHEUNG HEI STREET
SAN PO KONG KOWLOON, HONG KONG,
Tel: (852) 2893 0270 / 6286 2720
Fax: (852) 2893 3139
WWW.OTHERLAND.COM.HK

CLIENT:
HONG KONG SHENG KUNG HUI WELFARE COUNTIL LIMITED

PROJECT:
Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex, Tai Po

TITLE:
TREE TREATMENT PLAN (Sheet 1)

SCALE: 1:300	A3
DRAWN BY: L.W. CHAN	
CHECKED BY: BRENDAN CHAN	
APPROVED BY: PAUL Y.K. CHAN	
DRAWING DATE: 16 FEB 2024	
PROJECT No: LWK03_21	
SHEET No: LWK03_LP_TTP_01	REV: 0

APPENDIX E

TAI PO ROAD – TAI PO KAU

UP

DN

A

+79.20

+79.25

+79.20

+79.25

+79.20

A

A

LEGEND

- SHRUB PLANTING
- NEW TREES
- PEDESTRIAN PAVEMENT
- VEHICULAR ROAD
- BENCHES
- SITE BOUNDARY
- VEHICULAR ENTRANCE
- PEDESTRIAN ENTRANCE

N

LWK +PARTNERS

LANDSCAPE LAYOUT PLAN AT G/F

0 5 10m

(SCALE 1:200 in A3)

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 28 OCT 2024

SCALE: 1:200 (A3)

APPENDIX E

TAI PO ROAD – TAI PO KAU

CUL

DN

A

+84.75
+84.70

LEGEND

- DECK
- BENCH / RACK
- SITE BOUNDARY

N

LWK +PARTNERS

LANDSCAPE LAYOUT PLAN AT 1/F

0 5 10m

(SCALE 1:200 in A3)

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 28 OCT 2024
SCALE:1:200 (A3)

APPENDIX E

TAI PO ROAD — TAI PO CUL

89.3
88.7
UP
DN
89.3
88.7
89.3
89.3
89.3
88.7
89.3
88.7
89.3
B
88.7
B
89.3
89.3
A
Service
+88.75
+88.70
DN
UP
CoC
CoC
SKH Lobby
DN
UP
W1
89.3

LEGEND

- SHRUBS PLANTING
- NEW TREE
- HARD PAVED AREA
- SITE BOUNDARY
- DECK
- PAVILION
- PEBBLE WALK
- FARMING BOX
- BENCH
- FISHPOND
- SAFETY MAT
- FITNESS EQUIPMENT

N

LWK +PARTNERS

LANDSCAPE LAYOUT PLAN AT 2/F

0 5 10m

(SCALE 1:200 in A3)

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 28 OCT 2024
SCALE: 1:200 (A3)

APPENDIX E

TAI PO ROAD – TAI PO KAU

CUL

Aromatic Herb Garden

+105.75

+105.70

LEGEND

- SHRUBS PLANTING
- HARD PAVED AREA
- LONG BENCH
- TABLE WITH CHAIRS
- SITE BOUNDARY

N

LWK +PARTNERS

LANDSCAPE LAYOUT PLAN AT 7/F

0 5 10m

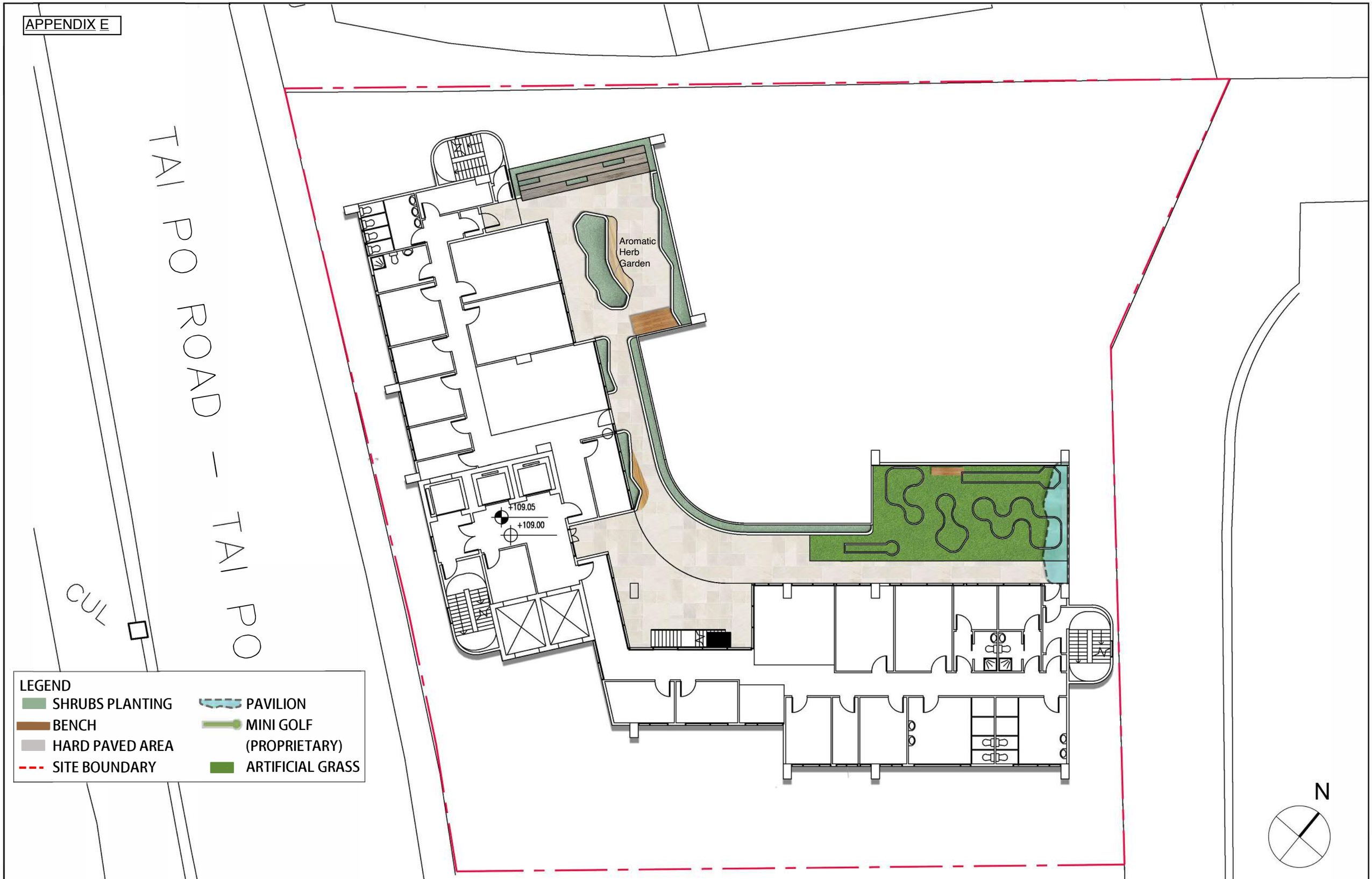
(SCALE 1:200 in A3)

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 28 OCT 2024

SCALE: 1:200 (A3)

APPENDIX E



LWK +PARTNERS

LANDSCAPE LAYOUT PLAN AT 8/F

0 5 10m

(SCALE 1:200 in A3)

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 28 OCT 2024
SCALE: 1:200 (A3)

APPENDIX E

LWK +PARTNERS

LANDSCAPE LAYOUT PLAN AT 9/F

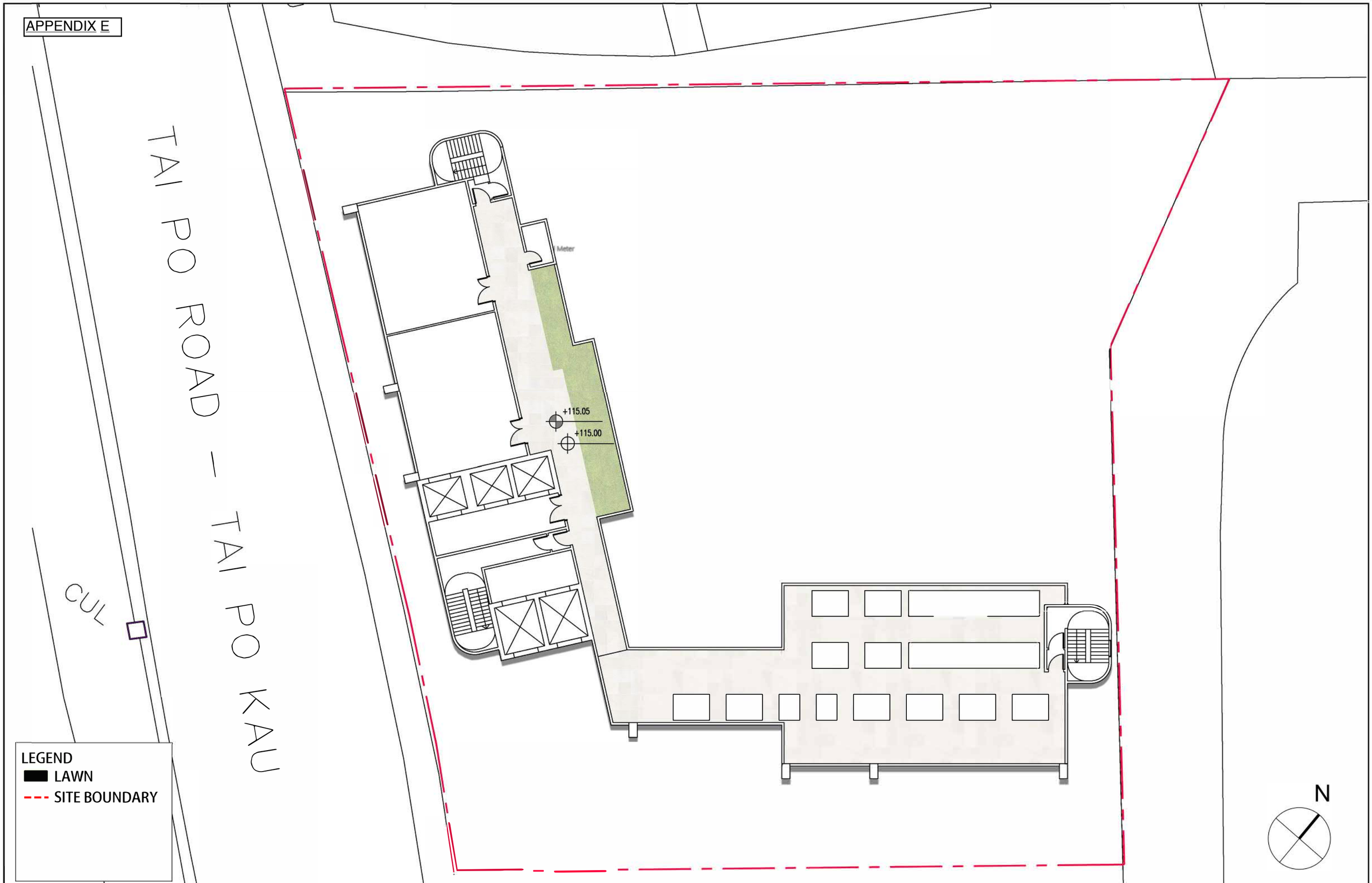
0 5 10m

(SCALE 1:200 in A3)

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 28 OCT 2024
SCALE: 1:200 (A3)

APPENDIX E



LWK +PARTNERS

R/F (M/E)

0 5 10m

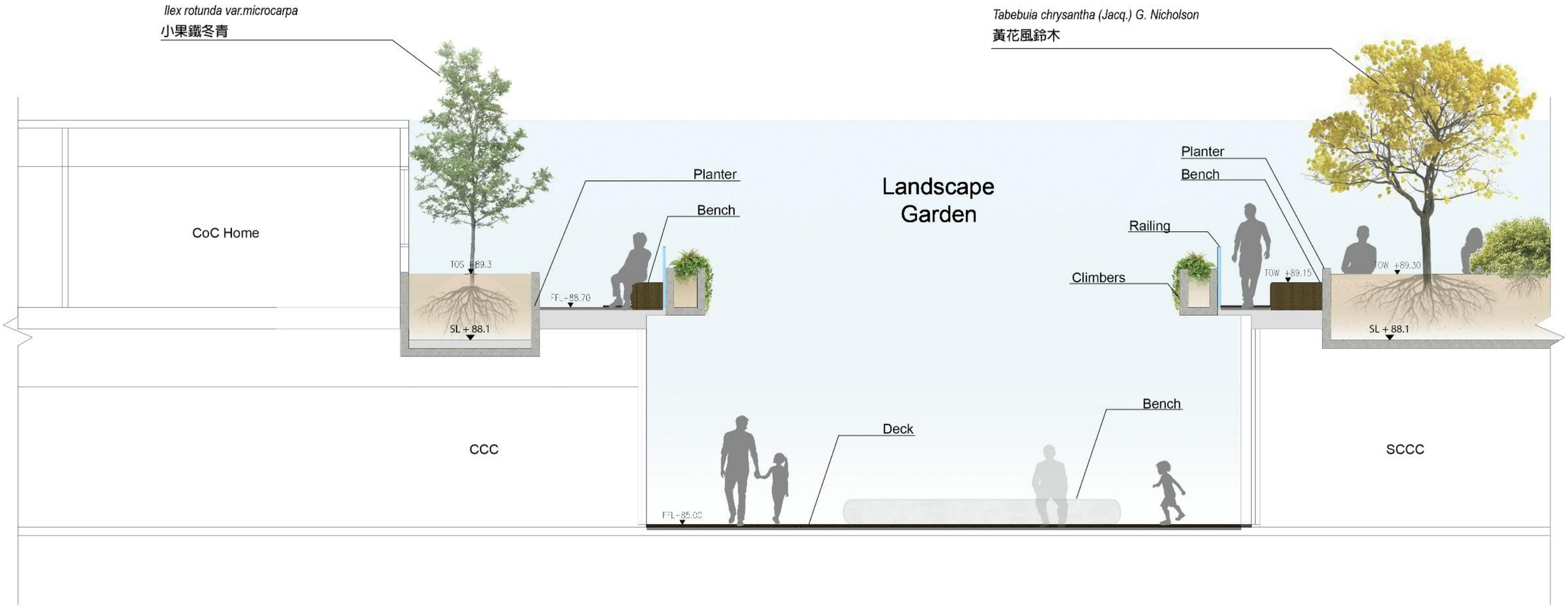
(SCALE 1:200 in A3)

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 28 OCT 2024
SCALE: 1:200 (A3)

APPENDIX E

KEY PLAN



SECTION B-B

LWK +PARTNERS

1/F & 2/F Landscape Garden

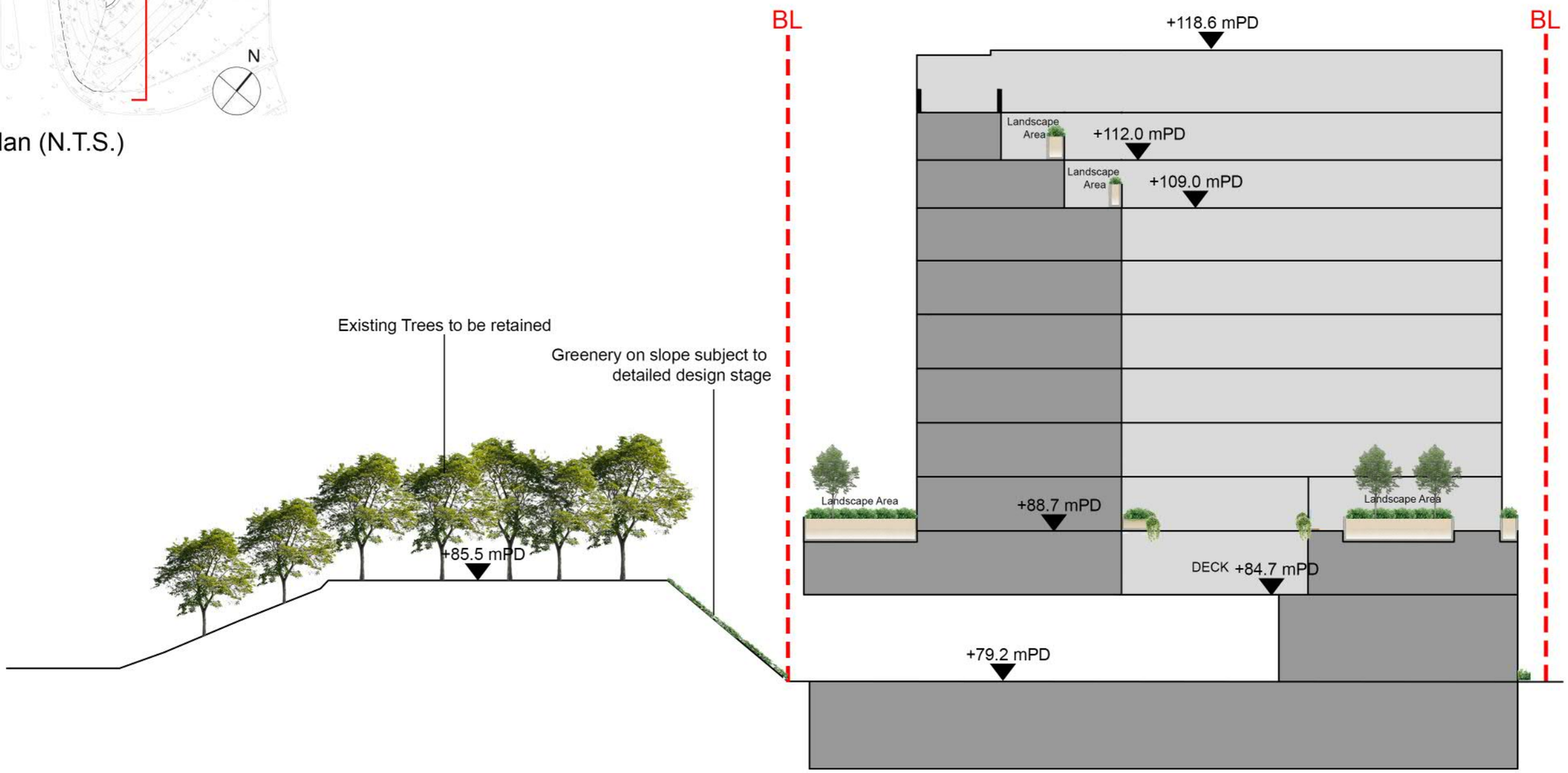
0 1 2 3m
(SCALE 1:70 in A3)

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

DATE: 28 NOV 2022
SCALE: 1:70 (A3)

APPENDIX E

Key Plan (N.T.S.)



LWK +PARTNERS

Landscape Section
1:300@A3

Feasibility Study on the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher Complex on the Vacant Site in Tai Po

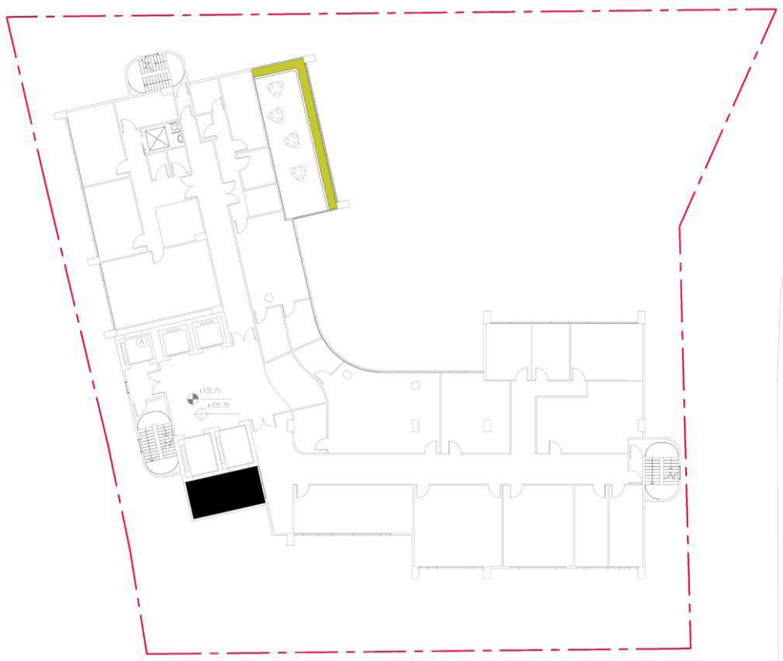
APPENDIX F: GREENERY COVERAGE

PRIMARY ZONE (Non-Covered Greenery) (Covered Greenery) (Water Feature) **NON-PRIMARY ZONE** (Non-Covered Greenery)

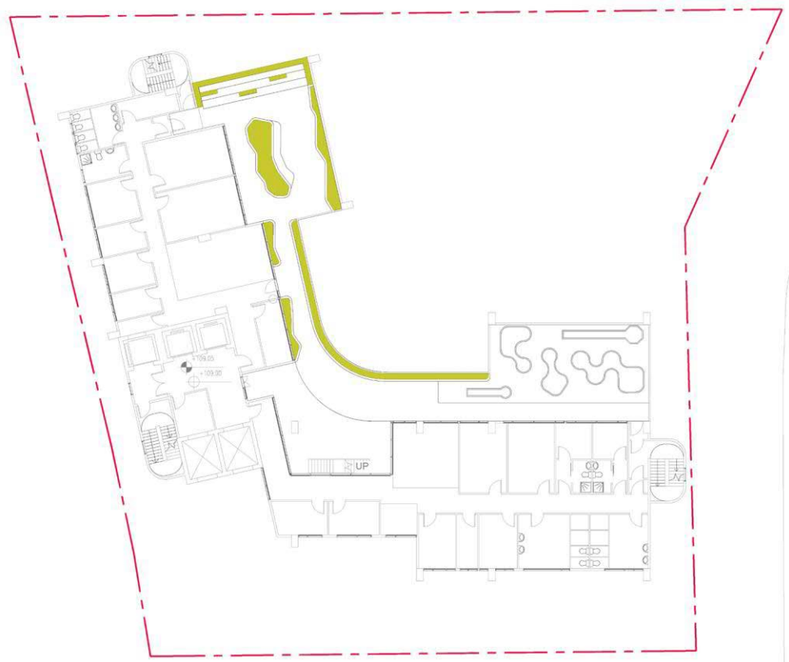
G/F

2/F

7/F



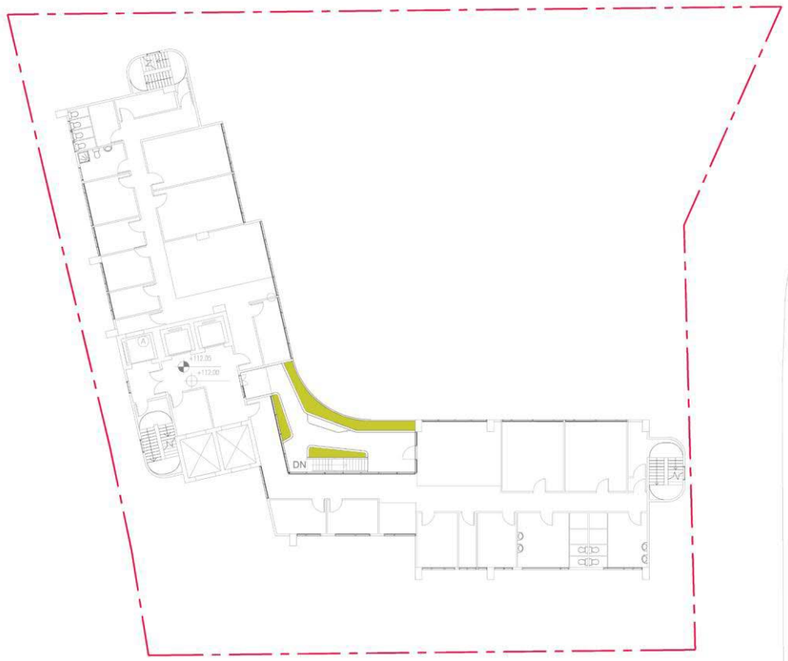
8/F



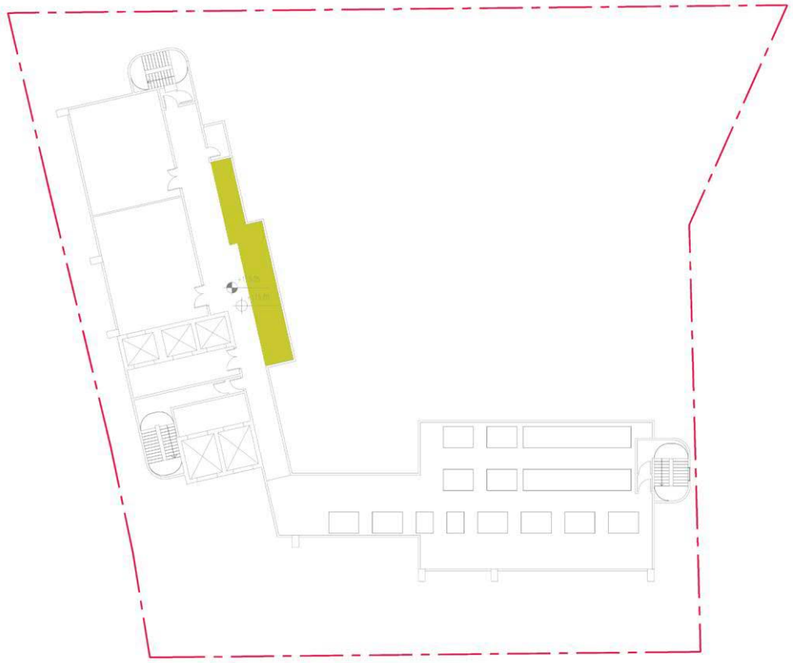
APPENDIX F: GREENERY COVERAGE

PRIMARY ZONE (Non-Covered Greenery) (Covered Greenery) (Water Feature) **NON-PRIMARY ZONE** (Non-Covered Greenery)

9/F



R/F



APPENDIX G: OPEN SPACE AREA

(Open Space Area)

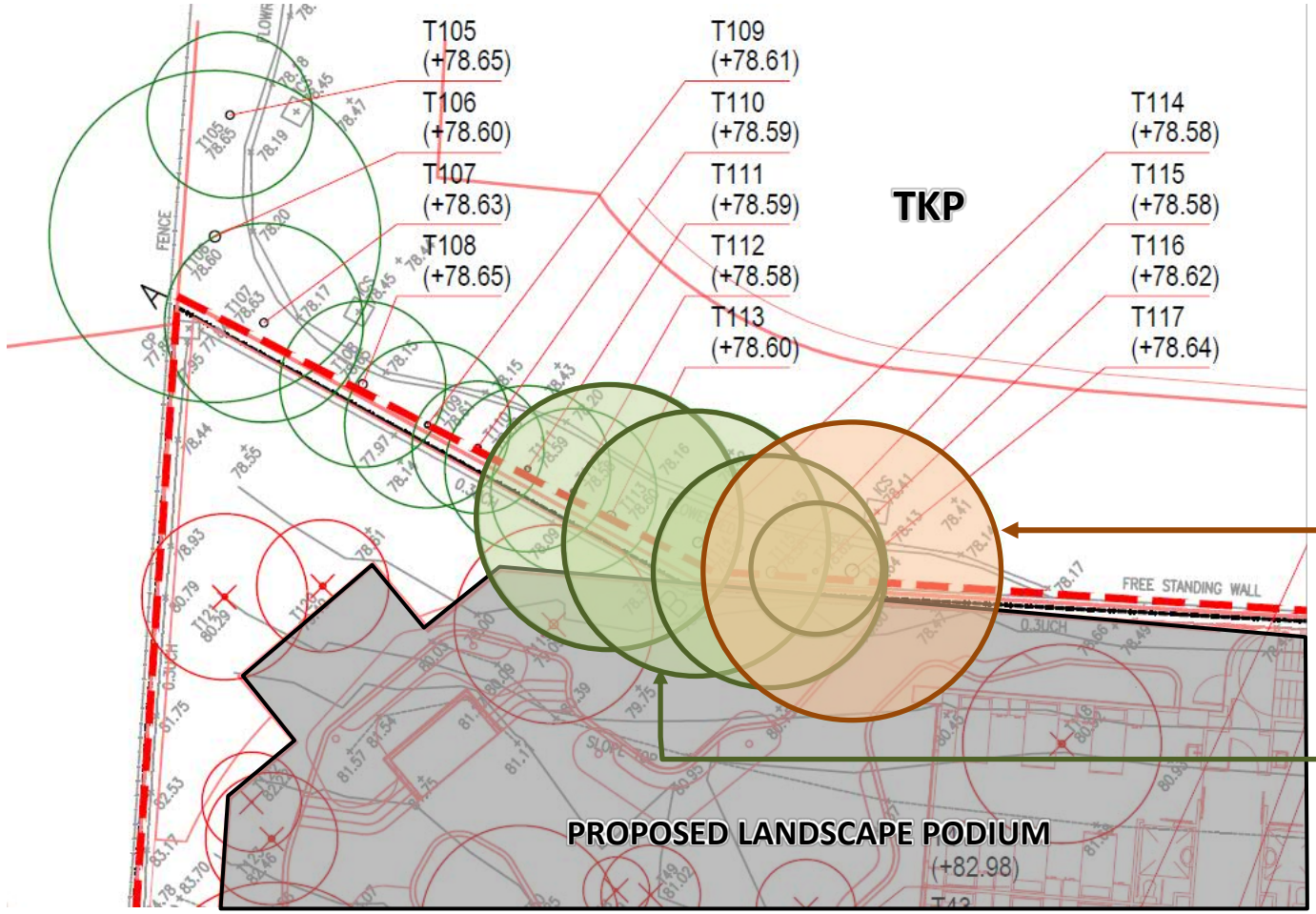
2/F

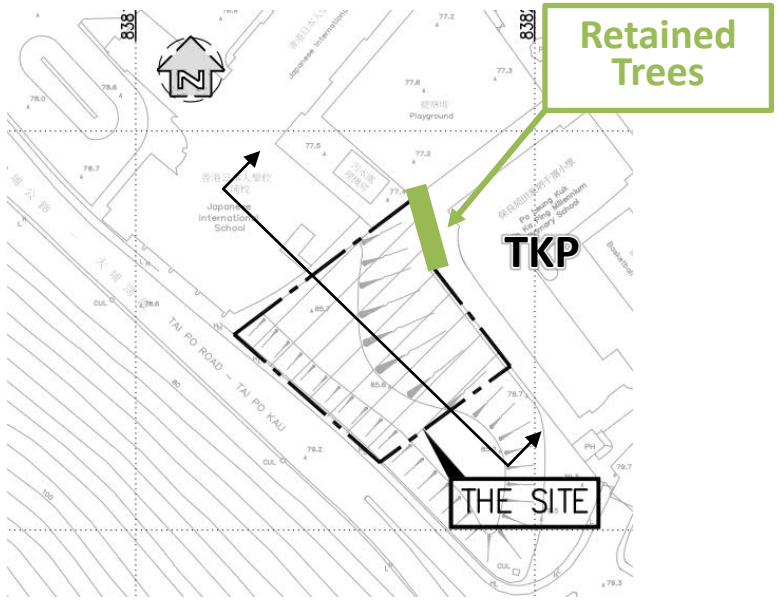
Appendix H

Proposed Interfacing Works with TKP

- **All trees in TKP site to be retained**
  i.e. T105 to T117 along shared boundary between TKP and project site

- **T117 to be pruned** to avoid its lower branches clashing with the podium structure in project site





Location Plan

Appendix H

Major Trees between TKP and Project Site

Branches leaning towards TKP site

T113

Branches leaning towards TKP site

T114

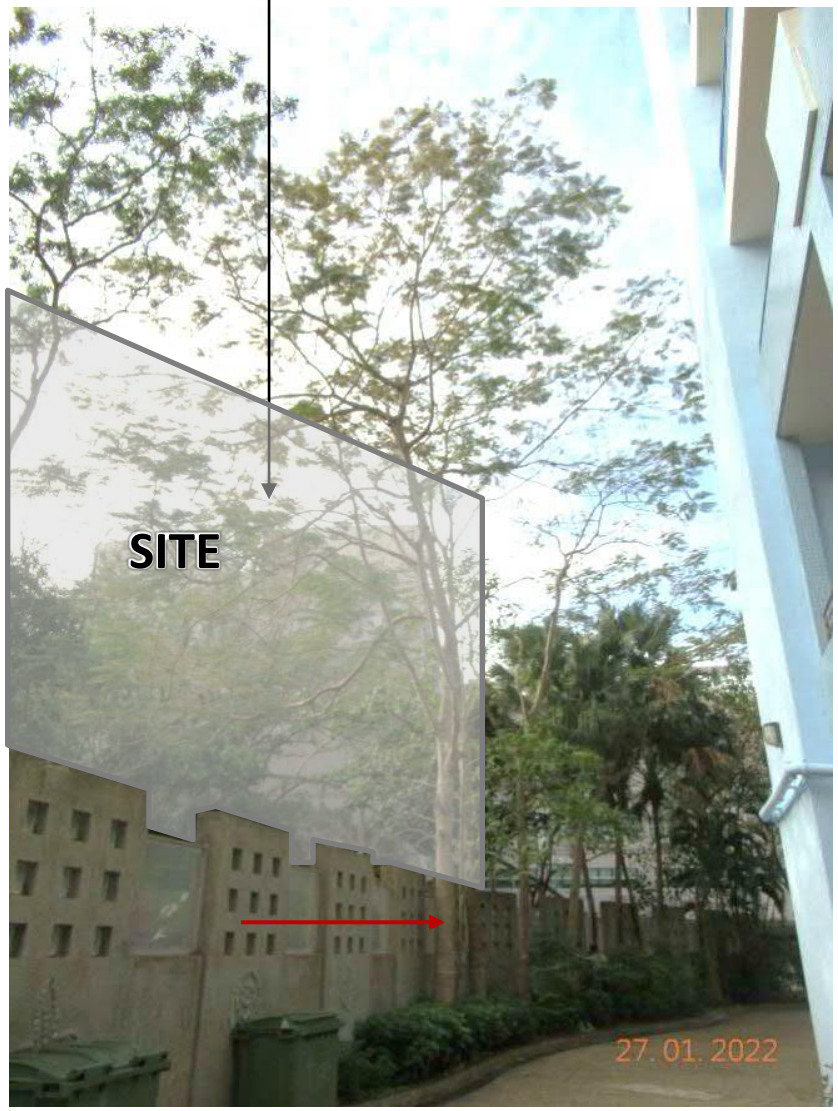
Branches leaning towards TKP site

T115

Canopy does not conflict

T116

Perform crown lifting, remove lower branches, does not involve any construction work



T117

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T38
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T38_Tree Tag

Tree No.: T38
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T38_Fruits and leaf (Close up) – Deciduous tree

Tree No.: T38
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T38_Bark - Tanning

Tree No.: T39
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

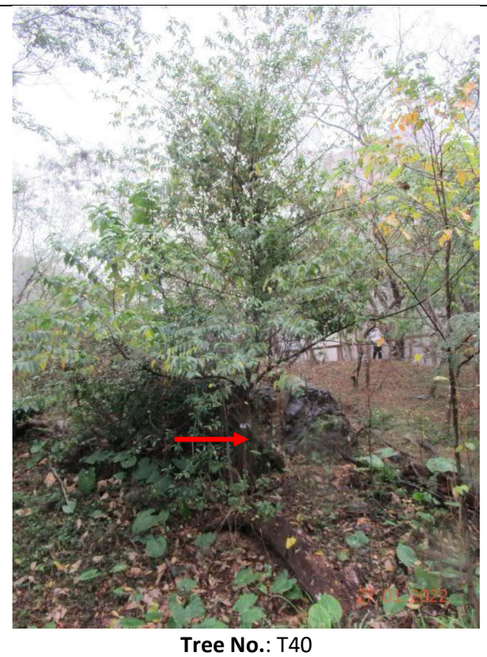
T39_Tree Tag

Tree No.: T39
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T39_Fruits and leaf (Close up) – Deciduous tree

Tree No.: T39
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T39_ Bark - Tanning



Tree No.: T40
Scientific Name: *Trema tomentosa*
Proposed Tree Treatment: Fell

T40_Tree Tag

Tree No.: T41
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T41_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T41
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T41_Leaf (Close up) – Deciduous tree

Tree No.: T41
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T41_ Bark - Tanning

Tree No.: T42
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T42_Tree Tag

Tree No.: T43
Scientific Name: *Dead tree*
Proposed Tree Treatment: Fell

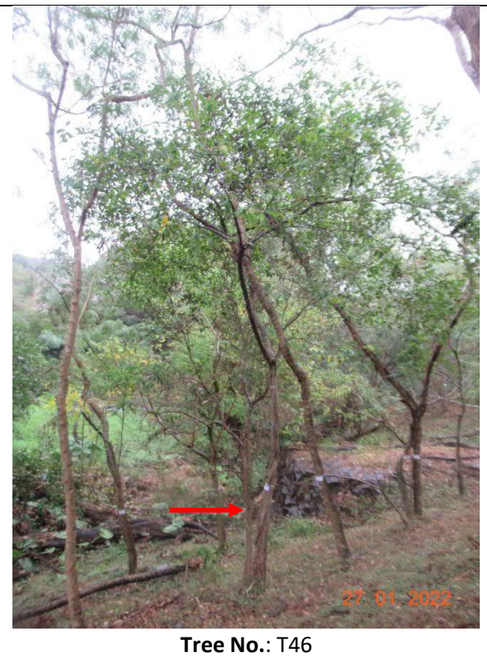
T43_Tree Tag

Tree No.: T44
Scientific Name: *Dead tree*
Proposed Tree Treatment: Fell

T44_Tree Tag

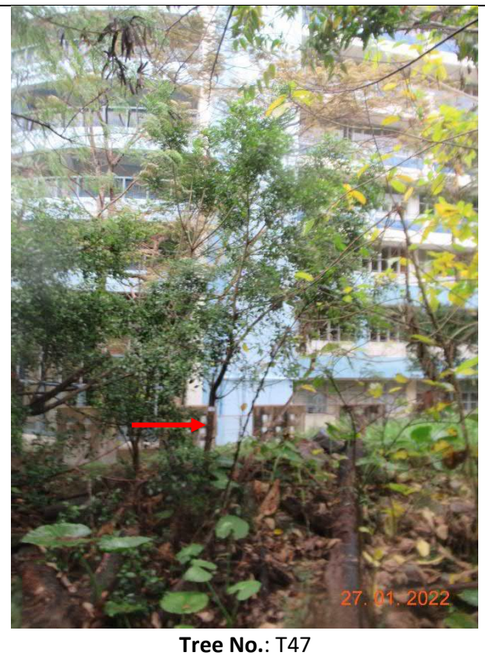
Tree No.: T45
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T45_Tree Tag



Tree No.: T46
Scientific Name: *Ficus microcarpa*
Proposed Tree Treatment: Fell

T46_Tree Tag



Tree No.: T47
Scientific Name: *Ficus microcarpa*
Proposed Tree Treatment: Fell

T47_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T48
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T48_Tree Tag

Tree No.: T49
Scientific Name: *Ficus microcarpa*
Proposed Tree Treatment: Fell

T49_Tree Tag

Tree No.: T50
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

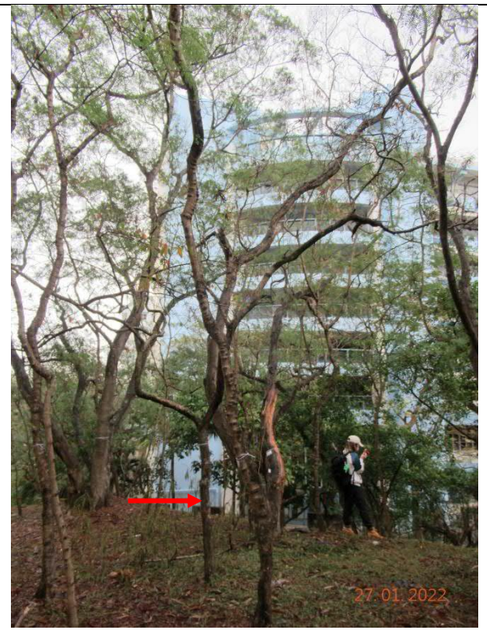
T50_Tree Tag

Tree No.: T51
Scientific Name: *Ficus microcarpa*
Proposed Tree Treatment: Fell

T51_Tree Tag

Tree No.: T52
Scientific Name: *Dead tree*
Proposed Tree Treatment: Fell

T52_Tree Tag



Tree No.: T53
Scientific Name: *Bridelia tomentosa*
Proposed Tree Treatment: Fell

T53_Tree Tag

Tree No.: T54
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T54_Tree Tag

Tree No.: T55
Scientific Name: *Acacia confusa*
Proposed Tree Treatment: Fell

T55_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T56
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T56_Tree Tag

Tree No.: T57
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T57_Tree Tag

Tree No.: T58
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T58_Tree Tag

Tree No.: T60
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T60_Tree Tag

Tree No.: T61
Scientific Name: *Ficus microcarpa*
Proposed Tree Treatment: Fell

T61_Tree Tag

Tree No.: T63
Scientific Name: *Bridelia tomentosa*
Proposed Tree Treatment: Fell

T63_Tree Tag

Tree No.: T64
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T64_Tree Tag

Tree No.: T68
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T68_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T69
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T69_Tree Tag

Tree No.: T70
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T70_Tree Tag

Tree No.: T72
Scientific Name: *Ficus microcarpa*
Proposed Tree Treatment: Fell

T72_Tree Tag

Tree No.: T73
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T73_Tree Tag

Tree No.: T76
Scientific Name: *Bombax ceiba*
Proposed Tree Treatment: Fell

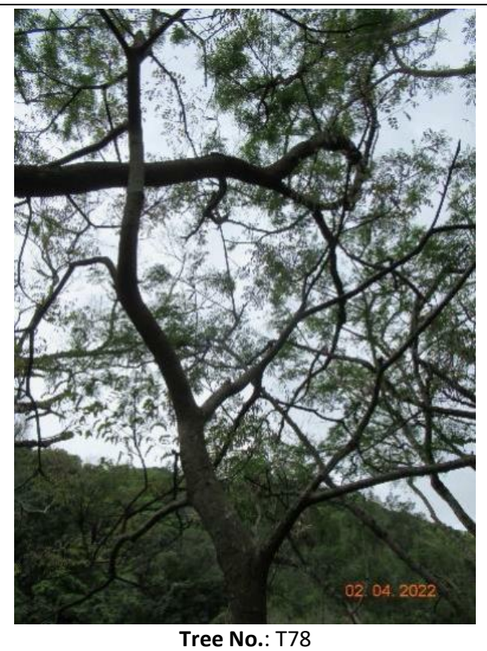
T76_Tree Tag

Tree No.: T77
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T77_Tree Tag

Tree No.: T78
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T78_Tree Tag



Tree No.: T78
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T78_Fruits (Close up) – Deciduous tree

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T78
Scientific Name: *Adenamthera microsperma*
Proposed Tree Treatment: Fell

T78_Bark - Tanning

Tree No.: T79
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

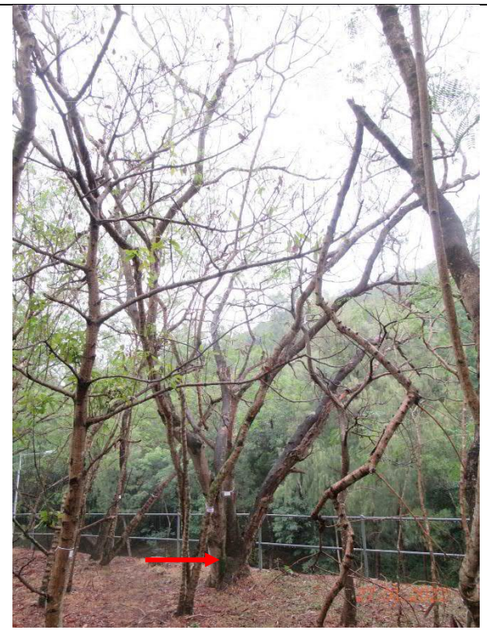
T79_Tree Tag

Tree No.: T80
Scientific Name: *Litsea glutinosa*
Proposed Tree Treatment: Fell

T80_Tree Tag

Tree No.: T81
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T81_Tree Tag



Tree No.: T82
Scientific Name: *Acacia confusa*
Proposed Tree Treatment: Fell

T82_Tree Tag

Tree No.: T83
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T83_Tree Tag

Tree No.: T85
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T85_Tree Tag

Tree No.: T86
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T86_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T87
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T87_Tree Tag

Tree No.: T88
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T88_Tree Tag

Tree No.: T89
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T89_Tree Tag

Tree No.: T90
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T90_Tree Tag

Tree No.: T91
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T91_Tree Tag

Tree No.: T92
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T92_Tree Tag

Tree No.: T93
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T93_Tree Tag

Tree No.: T94
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T94_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T95
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T95_Tree Tag

Tree No.: T96
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T96_Tree Tag

Tree No.: T97
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

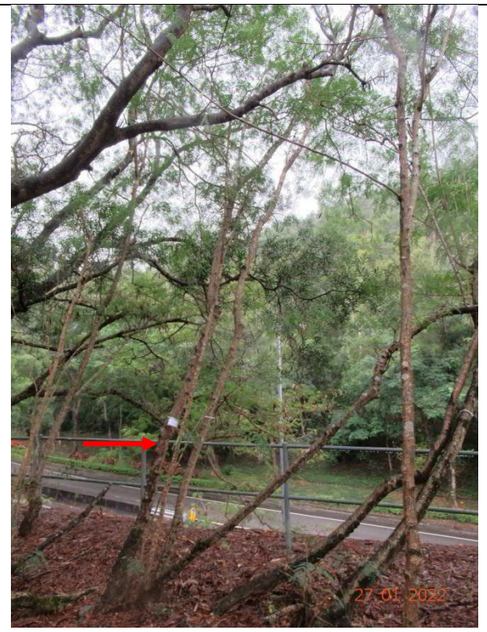
T97_Tree Tag

Tree No.: T98
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T98_Tree Tag

Tree No.: T99
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T99_Tree Tag



Tree No.: T100
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T100_Tree Tag

Tree No.: T101
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T101_Tree Tag

Tree No.: T102
Scientific Name: *Acacia confusa*
Proposed Tree Treatment: Fell

T102_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T118
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T118_Tree Tag

Tree No.: T119
Scientific Name: *Macaranga tanarius var. tomentosa*
Proposed Tree Treatment: Fell

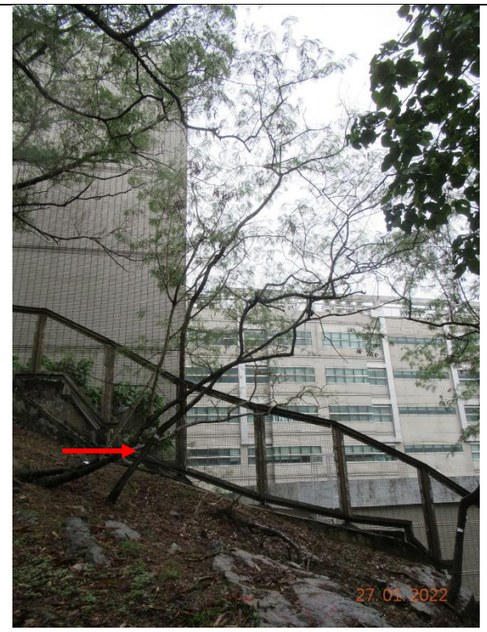
T119_Tree Tag

Tree No.: T120
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T120_Tree Tag

Tree No.: T121
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T121_Tree Tag



Tree No.: T122
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T122_Tree Tag

Tree No.: T123
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T123_Tree Tag

Tree No.: T124
Scientific Name: *Ficus microcarpa*
Proposed Tree Treatment: Fell

T124_Tree Tag

Tree No.: T126
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T126_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T127
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T127_Tree Tag

Tree No.: T128
Scientific Name: *Acacia confusa*
Proposed Tree Treatment: Fell

T128_Tree Tag

Tree No.: T129
Scientific Name: *Acacia confusa*
Proposed Tree Treatment: Fell

T129_Tree Tag

Tree No.: T130
Scientific Name: *Dead tree*
Proposed Tree Treatment: Fell

T130_Tree Tag

Tree No.: T131
Scientific Name: *Acacia confusa*
Proposed Tree Treatment: Fell

T131_Tree Tag

Tree No.: T132
Scientific Name: *Acacia confusa*
Proposed Tree Treatment: Fell

T132_Tree Tag

Tree No.: T133
Scientific Name: *Acacia confusa*
Proposed Tree Treatment: Fell

T133_Tree Tag

Tree No.: T134
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T134_Tree Tag

APPENDIX I: PHOTOGRAPHIC RECORD OF TREES

Tree No.: T136
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T136_Tree Tag

Tree No.: T137
Scientific Name: *Celtis sinensis*
Proposed Tree Treatment: Fell

T137_Tree Tag

Tree No.: T195
Scientific Name: *Leucaena leucocephala*
Proposed Tree Treatment: Fell

T195_Tree Tag

Tree No.: T140
Scientific Name: *Bombax ceiba*
Proposed Tree Treatment: Fell

T140_Tree Tag

Tree No.: T166
Scientific Name: *Dead tree*
Proposed Tree Treatment: Fell

T166_Tree Tag

Appendix 3

Traffic Impact Assessment

Technical Feasibility Study for the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord No. T77 in D.D.34. Tai Po

Traffic Impact Assessment Study

March 2024

HWSPB 何黃
Traffic & Transportation Consultants

Technical Feasibility Study for the Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord No. T77 in D.D.34. Tai Po

Traffic Impact Assessment Study

March 2024

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1. INTRODUCTION

1.1 Background

1.1.1 Hong Kong Sheng Kung Hui Welfare Council Limited (HKSKHWCL) plans to develop a new Social Service complex building at the Remaining Portion of Taxlord Lot No. T77 in D.D.34. Tai Po.

1.1.2 Ho Wang SPB Limited (HWSPB) is commissioned as the traffic consultant to undertake a Traffic Impact Assessment (TIA) study for this development study for the Planning Application.

1.1.3 The TIA report has been submitted to TD in March 2023 and comments were received from TD in August 2023. This revised TIA report has incorporated with TD's comments and the Response to Comment are enclosed in **Annex A**.

1.2 Objectives of the Report

1.2.1 The objectives of this traffic study are listed as follows:

(a) Conduct vehicle traffic and pedestrian count surveys and bus layby utilization survey to record existing traffic conditions during the critical AM and PM peak periods within the study area;

(b) Review and recommend on the car park and loading/ unloading provisions for this Social Services Complex based on HKPSG's requirement/end-user operational need;

(c) Review the existing traffic and transport facilities in the vicinity of the development site;

(d) Estimated the development traffic generations and attractions;

(e) Prepare the traffic forecast for the reference and design years (i.e. 3 years after the operation of the development);

(f) Assess the traffic impacts of the proposed development traffic on the adjacent road network in the design year;

(g) Recommend improvement measures, if necessary, to mitigate the traffic impact on the local road junction/network.

1.3 Report Structure

1.3.1 After this introductory chapter describes the background and study objective, this Traffic Review Report focus on the presentation and elaboration of the following key areas:

Chapter 2 – describes the proposed site location, proposed development schedule, vehicular and pedestrian access arrangements; and the proposed internal transport facilities provisions;

Chapter 3 – describes the baseline traffic surveys and the existing traffic conditions based on the latest traffic surveys;

Chapter 4 – presents the traffic forecast methodology and future traffic conditions;

Chapter 5 – estimates the development traffic generations and evaluates the traffic impacts within the study area in the Reference and Design scenarios;

Chapter 6 - estimates and review the number of construction traffic generations and the traffic impacts within the study area in design year 2033; and

Chapter 7 - summarizes and concludes the study findings of this TIA study.

2. THE PROPOSED DEVELOPMENT

2.1 Site Location

2.1.1 The existing site is a vacant site in at Tai Po Kau which is bounded by Po Leung Kuk Tin Ka Ping Millennium Primary School to the north, Japanese International School to the west, Tai Po Road-Tai Po Kau to the south and a vacant site to the east.

2.1.2 The subject site location is shown in **Figure 2.1**.

2.2 Proposed Development Schedule

2.2.1 According to latest Schedule of Accommodation (SoA), this complex (with **12,534**m^2 GFA approx.) will comprise of a variety of social services and facilities as summarized in **Table 2.1**.

Table 2.1 Proposed Development Schedule

Facilities	Places/ GFA
Special Child Care Centre (SCCC)	100 Places
Care and Attention Home providing Continuum of Care (CoC Home)	289 Places
Foster Care Services (FCS) and Agency-based Enhancement of Professional Staff Support Service (ABPSS)	95.4m^2 GFA
Staff Training Unit (STU)	85 Places
Child Care Centre (CCC)	65 Places
Small Group Home (SGH)	30 Places

2.3 Permanent Vehicular Access

2.3.1 A 7.3m wide vehicular access is proposed at Tai Po Road-Tai Po Kau as shown in **Figure 2.2**.

2.3.2 The section of the central divider close to the proposed vehicular access will be demolished for the provision of a designated northbound right-turn lane for the ingress development traffic.

2.3.3 All development ingress/egress vehicles can operate in all traffic movements.

2.3.4 Currently there is a lamp post (ID: EB4724) outside the proposed run-in/out. This lamp post will need to be relocated to a suitable location by Works Agent. The Works Agent for undertaking the works will need to be agreed with relevant Government Departments at later stage.

2.4 Temporary Vehicular Access during Construction Stage

2.4.1 The temporary construction vehicular access is proposed at Tai Po Road-Tai Po Kau. (i.e. similar to permanent vehicular access). All construction vehicles will be operated via a left-in and left-out traffic arrangement.

2.5 Internal Transport Facilities

2.5.1 There are no specific car parking and loading/unloading requirements for this type of development based on the latest Hong Kong Planning Standards and Guidelines (HKPSG). With regards to Item 1(b) in Statement of Intent of Table 11 – "Parking Standard" of HKPSG Chapter 8, "*The provision of parking for community facilities should generally be limited to operation requirements. Users of community facilities will generally be expected to use public transport or public car parks.*"

2.5.2 The car parking and loading/unloading provisions advised by Social Welfare Department have been confirmed by End-users to fulfil their operational need.

2.5.3 The parking and loading/unloading provisions are summarized in **Table 2.2**.

Table 2.2 Car Parking and Loading/ Unloading Provisions of the Subject Site

Type	Vehicle Type	Floor	Dimension	Number
SCCC	Coach (48-seater)	G/F	12m x 3.5m	2
CoC	Light Bus	B1/F	8m x 3m	2
	Private Car	B1/F	5m x 2.5m	6(1)
Share-used	Private Car (Accessible)	B1/F	5m x 3.5m	1
	Motorcycle	B1/F	2.4m x 1m	2
	LGV	B1/F	7m x 3.5m	1
	HGV L/UL bay	G/F	12m x 3.5m	1
	Ambulance Bay	G/F	9m x 3m	1
	Private car/ Taxi Drop-off/ pick-up bay	G/F	5m x 2.5m	1

Note: (1) As advised by SWD, ratio of 1 parking spaces for every 50 residential service places is adopted. (i.e. 289 CoC places / 50 = 6 parking spaces)

2.5.4 Based on the existing SKH reference sites, the parking demand for visitors/ users is minimal. 1 accessible parking space will be provided for visitor parking and share-used among the whole development in accordance with BFA codes.

2.5.5 All visitors are advised to commute by public transport and the users will be travelled by the NEATS (Non-Emergency Ambulance Transfer Service) provided by operator.

2.5.6 The proposed parking and loading/ unloading provisions can satisfy the operation need for the subject site.

2.5.7 The parking layouts for G/F and B1/F are presented in **Figure 2.3** and **Figure 2.4** respectively.

2.6 Swept Path Analysis

2.6.1 Computerized swept path simulation analysis demonstrated there is adequate manoeuvring space for the design vehicle (i.e. 12m coach) and is shown in **Appendix A**.

2.7 Sightline assessment

2.7.1 The sightline assessment (presented in **Figure 2.5**) shows that a minimum 60m clear sightline can be provided without obstruction (over 1.05m height) placed within visibility splay.

3. EXISTING TRAFFIC CONDITIONS

3.1 Existing Road Network

3.1.1 Tai Po Road - Tai Po Kau is a rural road running in a north-south direction connecting Shatin and Tai Po districts. This road also connects with between Tai Po Road – Ma Liu Shui and Tai Po Road – Yuen Chai Tsai.

3.1.2 The details of the road network are also shown in **Figure 2.1**.

3.2 Public Transport Facilities

3.2.1 There are numerous franchised buses and green minibus services along Tai Po Road. The details of the nearby public transport services are summarised in **Table 3.1**.

Table 3.1 Public Transport Services along Tai Po Road – Tai Po Kau

Public Transport Services	Tai Po Road – Tai Po Kau
Franchised Buses	72, 72A, 73A, 74A
GMB	28K, 28S

3.2.2 The locations of the nearby public transport facilities are shown in **Figure 3.1**.

3.3 Baseline Traffic Surveys

3.3.1 In order to review the existing traffic conditions, vehicular traffic count survey and public transport utilization survey were carried out on a typical school weekday (under normal school traffic condition without zoom classes and without work from home arrangement) on 22 November 2021 and 20 February 2024 during the AM (07:30-09:30) and PM (17:00-19:00) peak periods.

3.3.2 The locations of the concerned road junctions are shown in **Figure 3.2**.

3.3.3 The weekday AM and PM Peak hours of the existing local road network are identified as 08:15-09:15 and 17:45-18:45 hours respectively.

3.3.4 The 2021 observed traffic flows for these concerned junctions and road links are presented in **Figure 3.3**.

3.3.5 It is observed that the peak hour traffic flows at the junction of Tai Po Road – Tai Po Kau and Access Road to Deerhill Bay (J1) is different from local road network due to traffic generated by nearby schools.

3.3.6 Surge factors are adopted for J1 to reflect traffic survey during school peak periods (AM and PM peak). The adopted surge factors are presented in **Table 3.2** and its derivation is enclosed in **Appendix B**.

Table 3.2 Adopted Traffic Surge Factor for J1

Period	Traffic Surge Factor
AM	1.14
PM	1.19

3.4 Junction Capacity Performance in Year 2021 and 2024

3.4.1 Based on the 2021 and 2024 surveyed traffic flows, the junction capacity analysis for the 4 concerned junctions during the worst AM and PM peak periods have been assessed and the results of the junction capacity analysis are summarised in **Table 3.3**.

Table 3.3 Base Year Junction Operational Performance

No.	Junction	Junction Type(1)	Weekday	
			AM Peak	PM Peak
J1(2)	Tai Po Road – Tai Po Kau / Access Road to Deerhill Bay	Priority (DFC)	0.26	0.08
J2	Tai Po Road – Ma Liu Shui / Kau To Shan Road	Roundabout (DFC)	0.53	0.56
J3	Tai Po Road – Sha Tin / Tsun King Road	Roundabout (DFC)	0.47	0.52
J4	Tai Po Road – Tai Po Kau / Lookout Link	Priority (DFC)	0.24	0.12
J5(3)	Tai Po Road – Ma Liu Shui/ Lai Ping Road	Roundabout (DFC)	0.55	0.51

Note: (1) DFC – Design flow/ Capacity ratio for priority junction and roundabout.
(2) Surge factor (i.e. 1.14 and 1.19 for AM and PM peak) is adopted for J1.
(3) Junction surveyed in 2024.

3.4.2 The results of the junction performance enclosed in **Appendix C** show that all 5 concerned junctions are currently operating with ample junction capacity.

3.5 Base Year Road Link Performance

3.5.1 The road link performance for the 4 concerned road links during the AM and PM peak periods have been assessed and the results of the road link analysis are presented in **Table 3.4**.

Table 3.4 Base Year Road Link Capacity Performance

No.	Road Link	Direction	Capacity(1) (veh/hr)	AM Peak		PM Peak	
				Flows (veh/ hr)	V/C	Flows (veh/ hr)	V/C
L1	Tai Po Road – Ma Liu Shui (near University Avenue)	SB	2600	806	0.31	237	0.09
		NB	2600	269	0.10	437	0.17
L2	Tai Po Road – Sha Tin (Slip Road from Tai Po Road – Ma Liu Shui Southbound to Shatin Racecourse)	SB	1300	496	0.38	499	0.38
L3	Tai Po Road – Sha Tin (Slip Road from Tai Po Road – Sha Tin Northbound to Tsun King Road Roundabout)	NB	2600	316	0.12	299	0.12
L4	Tai Po Road – Ma Liu Shui (near Lai Ping Road)(2)	SB	1400	685	0.49	466	0.33
		NB	1400	446	0.32	390	0.28

Note (1): Design flow is reference to Table 2.4.11, Chapter 2.4, Volume 2, TPDM.
(2): Road Link surveyed in 2024.

3.5.2 The road link assessment presented in **Table 3.3** shows that all 4 concerned road links can operate with adequate capacity during the AM and PM peak hours.

3.6 Existing Public Transport Utilization

3.6.1 The public transport utilization assessment at Tai Po Road – Tai Po Kau bus layby is also conducted and the results are presented in **Table 3.5**.

Table 3.5 Existing Public Transport Service Utilization

Public Transport	AM Peak			PM Peak		
	Total Passenger Capacity (pax/hr)	Total Passenger Demand (pax/hr)	Occupancy (Demand /Capacity)	Total Passenger Capacity (pax/hr)	Total Passenger Demand (pax/hr)	Occupancy (Demand /Capacity)
Franchised Buses (72, 72A, 73A, 74A) (To Shatin Direction)	1237	209	0.17	1008	503	0.50
Franchised Buses (72, 72A, 73A, 74A) (To Tai Po Direction)	870	128	0.15	886	284	0.32
GMB (28K, 28S) (To Shatin Direction)	182	147	0.81	150	133	0.89
GMB (28K, 28S) (To Tai Po Direction)	163	117	0.72	150	85	0.57

3.6.2 The results shows that there is adequate public transport capacity.

3.7 Bus Layby Assessment

3.7.1 In order to assess the adequacy existing bus layby (Deerhill Bay Bus Stop) at Tai Po Road – Tai Po Kau near subject site, multi-servers queuing (M/M/N) model was applied as follows:

$$\rho = \frac{\text{Average Arrival Rate Per Hour } (\lambda)}{\text{Average Service Rate } (\mu)}$$

with the probability of having no vehicles in the system is:

$$P_0 = \frac{1}{\sum_{i=0}^{N-1} \frac{\rho^i}{i!} + \frac{\rho^N}{N!\left(1-\frac{\rho}{N}\right)}}$$

and the probability of having n vehicles in the system is:

$$P_n = \frac{\rho^n p_0}{n!} \qquad P_n = \frac{\rho^n p_0}{n!} \text{ (for } n \le N)$$

$$P_n = \frac{\rho^n p_0}{N^{n-N} N!} \qquad P_n = \frac{\rho^n p_0}{N^{n-N} N!} \text{ (for} > N)$$

3.7.2 The average arrival rate and average servicing time for the existing bus layby (Deerhill Bay Bus Stop) are summarized in **Table 3.6**.

Table 3.6 Average Arrival Rate and Servicing Time on Deerhill Bay Bus Layby

Location	Arrival Rate(veh/hr)		Average Servicing Time (min/veh)[1]	
	AM Peak	PM Peak	AM Peak	PM Peak
Deerhill Bay Bus Stop (NB)	16	14	0.32	0.36
Deerhill Bay Bus Stop (SB)	11	11	0.41	0.34

Note (1): Estimated based on boarding time of 4 second/passenger, alighting time of 3 second/passenger and 10 second/vehicle for manoeuvring of buses/GMBs.

3.7.3 Bus layby assessment is summarized in **Table 3.7**.

Table 3.7 Existing Bus Layby Assessment

Location		AM Peak		PM Peak	
		P_n	P(0)+P(1)	P_n	P(0)+P(1)
Deerhill Bay Bus Stop (NB)	n=0 (no vehicle at layby)	0.9144	0.9926	0.9169	0.9931
	n=1 (1 vehicle at layby)	0.0782		0.0762	
Deerhill Bay Bus Stop (SB)	n=0 (no vehicle at layby)	0.9256	0.9945	0.9375	0.9961
	n=1 (1 vehicle at layby)	0.0689		0.0586	

3.7.4 The assessment in above table concluded that the chances for more than 2 vehicles simultaneously using the bus layby is less than 1% and there is no capacity problem at the existing bus layby.

3.8 Existing Footpath Performance

3.8.1 Pedestrian count survey was carried out at the concerned footpath on a typical school weekday (under normal school traffic condition without zoom classes and without work from home arrangement) on 11 May 2022 during the AM (07:30-09:30), and PM (17:00-19:00) peak periods.

3.8.2 The footpath assessment (Level of Service (LOS)) is based on the guidelines stipulated in Chapter 10.5.2, Volume 6, TPDM. The definitions of Level of Service (LOS) for pedestrian footpath are enclosed in **Appendix D**.

3.8.3 Based on the 2022 surveyed pedestrian flows, the performance for the critical footpath sections leading to the subject site and bus stop is tabulated in **Table 3.8**.

Table 3.8 Base Year Footpath (LOS) Performance

No.	Location	Actual Width (m)	Effective Width (m)	Peak	Pedestrian Flows (ped/15 mins)	Flow Rate (Ped/min/ m)	Level of Service (LOS)
P1	Tai Po Road – Tai Po Kau (outside Subject Site)	1.9	0.9	AM	26	1.93	A
				PM	14	1.04	A
P2	Tai Po Road – Tai Po Kau (outside Japanese International School)	1.9	0.9	AM	48	3.56	A
				PM	24	1.78	A
P3	Pedestrian Crossing across Tai Po Road – Tai Po Kau	4.5	3.5	AM	12	0.23	A
				PM	13	0.25	A
P4	Tai Po Road – Tai Po Kau (near Tai Po Kau Gas Station northbound bus stop)	2	1	AM	12	0.8	A
				PM	13	0.87	A

Note (1): Effective Width = Actual width – 1m.

3.8.4 The results of the above assessment demonstrated that the concerned footpaths can operate with Level of Service "A" and with adequate capacity.

3.8.5 The 2022 observed pedestrian flows for concerned footpath are presented in **Figure 3.4**.

3.9 Existing Queue Length Survey

3.9.1 Queue length survey was carried out at the junction of Tai Po Road- Tai Po Kau and access road to Deerhill Bay on a typical school weekday (under normal school traffic condition without zoom classes and without work from home arrangement) on 22 November 2021 during the AM (07:30-09:30) and PM (17:00-19:00) peak periods.

3.9.2 During the survey period, no traffic queue was observed as shown in the photo records enclosed in **Appendix E**.

4. FUTURE TRAFFIC CONDITION

4.1 Design Year

4.1.1 Based on the latest programme, the proposed development is scheduled to be completed and in operation by 2030. Hence a design year 2033 [i.e. 3 years after the operation year] is adopted for the traffic assessment purpose.

4.2 Traffic Forecast Approach

4.2.1 Since there are no major changes in the local road network, traffic forecast by growth factor method is adopted to estimate the future traffic flows (i.e. from base year 2021 to design year 2033) based on the following data:

- Historical trend data from the Annual Traffic Census (ATC) by Transport Department
- 2019-based Territorial Population and Employment Data Matrix (TPEDM) planning data by Planning Department's website
- Hong Kong Population Distribution 2020-2069 by Census and Statistics Department
- Projections of Population Distribution 2019-2029 by Planning Department

4.2.2 The historical traffic data of the surrounding road links based on the Annual Average Daily Traffic (AADT) are extracted from the "Annual Traffic Census" report issued by Transport Department. The relevant AADT data from 2016 to 2020 are summarized in **Table 4.1.**

Table 4.1 AADT at Counting Stations Extracted from Annual Traffic Census – 2017 to 2021

Stn No.	Road	From	To	2017	2018	2019	2020	2021
6652	Yau King Lane	Lookout Link	End	1,320	1,160	1,350	1,330	1,430
6210	Tai Po Road - Ma Liu Shui	Entrance to Chung Chi College, CUHK	Yuen Chau Tsai	7,650	7,640	7,970	8,260	7,650
5820	Tai Po Road - Shatin	Tolo Highway	Entrance to Chung Chi College, CUHK	13,840	13,830	13,040	14,450	15,230
All Stations Total				22,810	22,630	22,360	24,040	24,310
Average Growth Rate (% p. a.)					-0.79%	-1.19%	7.51%	1.12%
Overall Growth Rate (% p. a.) from 2016 to 2020				+1.66%				

4.2.3 The population and employment data of the Planning Data District are extracted from the 2019-based TPEDM issued by Planning Department's website. The estimated growth rate from 2021 to 2026 in Tai Po District is summarized in **Table 4.2.**

Table 4.2 2019-Based TPEDM Tai Po District

Annual Growth from 2021 to 2026 (%)	**Tai Po**		
	2019	**2021**	**2026**
Total Population	250,050	285,850	263 800
Total Employment	86,750	83,700	78 550
Total Population & Employment	336,800	369,550	342 350
Average Annual Growth Rate of Total Population & Employment		**2019-2021**	**2021-2026**
		4.75%	**-1.52%**

4.2.4 The relevant growth rates from year 2022 to 2046 are extracted from the Hong Kong Population Projection by Census and Statistics Department and are presented in **Table 4.3**.

Table 4.3 Hong Kong Population Projection Forecast

Hong Kong Population Projections 2022-2046 by Census and Statistics Department	**Year**			
	2021	**2026**	**2031**	**2036**
Population (Thousands)	7413.1	7596.8	7820.2	8022.4
Average Annual Growth Rate of Total Population	2021-2026	2026-2031	2031-2036	
	0.5%	0.6%	0.5%	

4.2.5 The Projections of Population Distribution 2019-2029 by Planning Department and the relevant growth rate are summarised in **Table 4.4**.

Table 4.4 Projections of Population Distribution 2019-2029

Projections of Population Distribution 2019-2029 by Planning Department (Tai Po District)			
Year	2021	2026	2029
Projections of Population	323,200	353,800	348,000
Average Annual Population Growth (%)		**2021-2026**	**2026-2029**
		+1.83%	**-0.55%**

4.2.6 The annual growth rates obtained from various sources from 2016 to 2033 are summarised in **Table 4.5**.

Table 4.5 Summary of Annual Growth Rates Obtained from Various Sources from 2018 to 2036

Information	Planning Horizon	District	Annual Growth Rates			
			2018-2022	2021-2026	2026-2031	2031-2036
Annual Traffic Census	--	Tai Po	+1.66 %	--	--	--
2019-based Territorial Population and Employment Data Matrix by Planning Department	2026	Tai Po	--	-1.52%	--	--
Projections of Population Distribution 2019-2029 by Planning Department	2029	Tai Po	--	+1.83%	-0.55%(1)	--
Hong Kong Population Projections 2022-2046 by Census and Statistics Department	2046	Territorial-wide	--	+0.5%	+0.6%	+0.5%

Note: (1) Annual growth rates from 2026 to 2029.

4.2.7 For conservative analysis, the background traffic from 2021 to 2026, 2026 to 2031, and 2031 to 2033 will adopt various growth rates of +1.83%, +0.6% and +0.5% p.a. respectively for the traffic forecast.

4.3 Planned and Committed Developments in the Vicinity

4.3.1 The development traffic generated by the adjacent planned developments in the vicinity have also been taken into consideration in the reference case scenario for this TIA study.

4.3.2 The planned/committed developments approved by the Town Planning Board in the Vicinity are summarised in **Table 4.6**.

Table 4.6 Summary of Planned / Committed Developments in the Vicinity

Application No.	Planned Development	Completion Year	Development Scale	Traffic Generations (pcu/hr)			
				AM Peak		PM Peak	
				Gen.	Att.	Gen.	Att.
Y/TP/28(1)	Proposed Housing Development [at Tsiu Hang]	Unknown	2,198 Flats	158	94	63	82
A/TP/656(1) (TPTL 244)	Proposed Housing Development with Proposed Social Welfare Facility (Residential Care Home for the Elderly) [at Yau King Lane]	Phase 1: 2023 Phase 2A: 2024 Phase 2B: 2024	Phase 1: 576 Phase 2A: 607 Phase 2B: 688	136	81	55	71
NA	Public Housing Development at To Yuen Tung (1)(3)	2032-2033	2,400 Flats(3)	150	102	71	96
Tai Po Town Lot 230(2)	Proposed Residential Development at Tai Po Town Lot No.230, Tai Po Kau, Tai Po	N.A.	GFA: 24,128m^2 (approx.135 house)(3)	34	27	29	42
Tai Po Town Lot 231	Proposed Residential Development at Tai Po Town Lot No.231, Tai Po Kau, Tai Po	N.A.	GFA: 5,450m^2 23 House	8	7	7	10
Tai Po Town Lot 234(2)	Proposed Residential Development at Tai Po Town Lot No. 234	N.A.	GFA: 21,003m^2 (approx.163 house) (3)	29	24	26	37
Tai Po Town Lot 241(2)	Proposed Residential Development	N.A.	GFA: 9357m^2 (approx.116 house) (3)	14	11	12	17
Total				**529**	**346**	**263**	**355**

Note: (1) Traffic Generations are estimated based on trip rate of Private Housing: High Density (Average Flat Size 60m^2) in TPDM Vol 1 Chap 3 Appendix, the trip rate is presented as below

Development	Average Flat Size	AM Peak		PM Peak	
		Gen.	Att.	Gen.	Att.
Private Housing	60m^2	0.0718	0.0425	0.0256	0.0370

(2) Traffic Generations are estimated based on trip rate of Private Housing: Low-Density (Average Flat Size 300m^2) in TDPM Vol 1 Chap 3 Appendix, the flat number are based on GFA/house ratio in TPTL Lot 231. The trip rate is presented as below

Development	Average Flat Size	AM Peak		PM Peak	
		Gen.	Att.	Gen.	Att.
Private Housing	300m^2	0.3252	0.2609	0.2835	0.4074

(3) Since the nos. of house are not available at the time of preparation of the TIA report, the traffic generation of the development sites are based on estimated flat size with total GFA. The latest development scale are updated accordingly to the best available public information.

4.3.3 The distribution of the adjacent planned/ committed developments traffic is presented in **Figure 4.1**.

4.4 Reference Year Traffic Forecasts

4.4.1 The 2033 Reference traffic flows are derived as follows:

= 2021 Observed Traffic Flows x $(1+1.83\%)^{(2026-2021)}$ x $(1+0.4\%)^{(2029-2026)}$ x $(1+0.3\%)^{(2033-2029)}$
+ Adjacent Planned/Committed Developments Traffic

4.4.2 The 2033 reference traffic flows (i.e. without proposed development traffic) are shown in **Figure 4.2**.

5. TRAFFIC IMPACT ASSESSMENT

5.1 Proposed Development Traffic Generations

5.1.1 The trip generations of this proposed development are estimated based different types of services.

5.1.2 For Continuum of Care Home, in-house trip rates from similar sites are adopted.

5.1.3 As there are no suitable reference sites for the other services (SCCC, CCC, SGH, FCS, ABPSS and STU) with similar site characteristics, the trip generations are estimated based on information provided by HKSKH (e.g. users, visitors and future staff number) and are summarised in **Table 5.1**.

Table 5.1 Estimated Trip Generations of the Proposed Development based on HKSKH information

Proposed GIC Facilities	CoC Home	SCCC(1)	CCC(1)	STU	SGH	FCS and ABPSS
Places	289	100	65	85 places	30 places	--
Estimated Pedestrian Trip Generations for User/ Visitor	In-house Trip Rate	AM: 46 (IN); 26 (OUT) PM: 26 (IN); 46 (OUT)	AM: 150 (IN); 85 (OUT) PM: 85 (IN); 150 (OUT)	AM: 85 (IN); 0 (OUT) PM: 0 (IN); 85 (OUT)	--	--
Future Staff Number & Shifting Hour	80 (07:00-15:00) 80 (13:30-21:30) 40 (21:30-07:00)	25	16	--	20 (10:00-20:00)	10

Note: (1) the number of pedestrian trip generations for user/visitor is advised by HKSKH.

Adopted Modal Split

5.1.4 The modal split provided by Sheng Kung Hui from similar reference sites (i.e. SKH Nursing Home and HKSKH Li Ka Shing Care & Attention Home for the Elderly) are adopted for the assessment for the vehicular trip generations and are presented in **Table 5.9**.

Table 5.2 Adopted Modal Split

Transport Mode	Modal Split (%)	
	User/Visitors(1)	Staff
Private Car	4%	0%
Taxi	5%	8%
Bus	82%	64%
GMB	9%	28%
Total	**100%**	**100%**

Note: (1) Percentage excluding users commuting by NEATS.

Pedestrian Trip Generations of CoC Home

5.1.5 The in-house trip rate survey at similar site (Po Leung Kuk Wong Chuk Hang Elderly Home) are adopted for this Continuum of Care Home.

5.1.6 The pedestrian count survey result and the pedestrian trip rates of this reference site are presented in **Table 5.3**.

Table 5.3 Pedestrian Trip Generations of Po Leung Kuk Wong Chuk Hang Elderly Home

Po Leung Kuk Wong Chuk Hang Elderly Home (Total: 165 places)	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Pedestrian Trips (ped/hr)	4	13	39	3
Pedestrian Trip Rate (ped/hr/place)	0.0242	0.0788	0.2364	0.0182

5.1.7 By applying the trip rates shown in Table 5.4, the estimated pedestrian trip generations for proposed development (CoC Home) are presented in **Table 5.4**.

Table 5.4 Pedestrian Trip Generations of Proposed Development (CoC Home)

Proposed Development – CoC Home (289 places)	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Estimated Pedestrian Trips (ped/hr)	8	23	69	6

Vehicular Trip Generations of Continuum of Care Home (CoC Home)

5.1.8 Vehicular count survey was also conducted at the reference site and the result and the vehicular trip rates are summarized in **Table 5.5**.

Table 5.5 Vehicular Traffic Generations of Po Leung Kuk Wong Chuk Hang Elderly Home

Po Leung Kuk Wong Chuk Hang Elderly Home (Total: 165 places)	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Vehicular Trips (pcu/hr)	9	7	3	5
Vehicle Trip Rate (pcu/hr/place)	0.0545	0.0424	0.0182	0.0303

5.1.9 By adopting the trip rate in Table 5.5, the estimated vehicular traffic generations for proposed development (CoC Home) are presented in **Table 5.6**.

Table 5.6 Vehicular Traffic Generations of Proposed Development (CoC Home)

Proposed Development - CoC Home (289 places)	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Estimated Vehicular Trips (pcu/hr)	16	13	6	9

Pedestrian Trip Generations of Special Child Care Centre (SCCC)

5.1.10 The pedestrian trip generations of SCCC are estimated based on information provided by the users and SWD operation requirement (i.e. minimum 80% of users is required to commute by NEATS).

5.1.11 The pedestrian trip generations are summarised in **Table 5.7** and trip generations breakdown by different transport modes are summarised in **Table 5.8**.

Table 5.7 Pedestrian Trip Generations of Proposed Development (SCCC)

Proposed Development - SCCC (100 places)	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Estimated Pedestrian Trips (ped/hr)(1)	26	46	46	26

Note: (1) Pedestrian trip generations are advised by users.
(2) 80 users will travel by NEATS.

Table 5.8 Pedestrian Trip Generations breakdown of Proposed Development (SCCC)

Proposed Development - SCCC (100 places)	Modal Split	AM Peak (ped/hr)		PM Peak(ped/hr)	
		Generation	Attraction	Generation	Attraction
Private Car	4%	1	2	2	1
Taxi	5%	1	2	2	1
Bus	82%	21	37	37	21
GMB	9%	3	5	5	3
Sub-Total(1)	**100%**	**26**	**46**	**46**	**26**

Note: (1) Number of users not commuting by NEATS.

5.1.12 The proposed development of SCCC service will generate and attract a total of 72 pedestrian trips (26+46) in AM peak hour and 72 pedestrian trips (46+26) in PM peak hour.

Vehicular Trip Generations of Special Child Care Centre (SCCC)

5.1.13 Based on the pedestrian trip generations by different transport modes, the vehicular generations are summarised in **Table 5.9**.

Table 5.9 Vehicular Trip Generations of Proposed Development (SCCC)

Proposed Development SCCC (100 places)(1)	Occupancy Rate (ped/veh)	PCU factor	AM Peak (pcu/hr)(3)		PM Peak (pcu/hr) (3)	
			Gen.	Att.	Gen.	Att.
Private Car	1	1	2(2)	2	2	2(2)
Taxi	1	1	2(2)	2	2	2(2)
NEATS	48	2	0	4	4	0
Total	--	--	**4**	**8**	**8**	**4**

Note: (1) The vehicular trip generations for Bus and GMB will be discussed in section 5.5.
(2) Maximum of vehicle trips (gen./att.) [Table 5.8] for private car and taxi is taken for conservative.
(3) Vehicular trip generation/Attraction = pedestrian trip generation/attraction [Table 5.8] / occupancy rate x PCU factor.

5.1.14 The proposed development of SCCC service will generate and attract a total of 12 pcu (4+8) in AM peak hour and 12 pcu (8+4) in PM peak hour.

Pedestrian Trip Generations of Child Care Centre (CCC)

5.1.15 The future pedestrian trip generations of CCC (65 places) advised by user are summarised in **Table 5.10**.

Table 5.10 Pedestrian Trip Generations of Proposed Development (CCC)

Proposed Development - CCC (65 places)	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Estimated Pedestrian Trips (ped/hr)	85	150	150	85

5.1.16 By adopting the modal split in Table 5.2, the pedestrian trip generations breakdown by different transport modes are tabulated in **Table 5.11**.

Table 5.11 Pedestrian Trip Generations breakdown of Proposed Development (CCC)

Proposed Development - CCC (65 places)	Modal Split	AM Peak (ped/hr)		PM Peak (ped/hr)	
		Generation	Attraction	Generation	Attraction
Private Car	4%	3	6	6	3
Taxi	5%	4	7	7	4
Bus	82%	70	123	123	70
GMB	9%	8	14	14	8
Total	100%	**85**	**150**	**150**	**85**

Vehicular Trip Generations of Child Care Centre (CCC)

5.1.17 Based on the pedestrian trip generations presented in Table 5.11, the vehicular generations of CCC are summarised in **Table 5.12**.

Table 5.12 Vehicular Trip Generations of Proposed Development (CCC)

Proposed Development - CCC (65 places)(1)	Occupancy Rate (ped/veh)	PCU factor	AM Peak (pcu/hr)(3)		PM Peak (pcu/hr) (3)	
			Generation	Attraction	Generation	Attraction
Private Car	1	1	6(2)	6	6	6(2)
Taxi	1	1	7(2)	7	7	7(2)
Total	**--**	**--**	**13**	**13**	**13**	**13**

Note: (1) The vehicular trip generations for Bus and GMB will be discussed in section 5.5.
(2) Maximum of vehicle trips (gen./att.) for private car and taxi is taken for conservative.
(3) Vehicular trip generation/Attraction = pedestrian trip generation/attraction [Table 5.11] / occupancy rate x PCU factor.

5.1.18 The proposed development of CCC service will generate and attract a total of 26 pcu (13+13) in AM peak hour and 26 pcu (13+13) in PM peak hour.

Pedestrian Trip Generations of Staff Training Units (STU) and Small Group Home (SGH)

5.1.19 As advised by user, the users/staff of Staff Training Units (STU) and Small Group Home (SGH) will not commute during concern AM and PM peak hours.

5.1.20 Hence, there is no vehicular and pedestrian trip generations during AM and PM peak hours for STU and SGH services.

Pedestrian Trip Generations of Staff (all services)

5.1.21 The staff trip generations for all services are based on the information advised by users (Table 5.1) and summarised in **Table 5.13**.

Table 5.13 Pedestrian Trip Generations of Proposed Development (Staff)

Services	Pedestrian Trip Generations (ped/hr)			
	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
CoC Home	40	80	0	0
SCCC	0	25	25	0
CCC	0	16	16	0
STU	0	0	0	0
SGH	0	0	0	0
FCS & ABPSS	0	10	10	0
Total	**40**	**131**	**51**	**0**

5.1.22 The proposed development will generate and attract a total of 171 pedestrian trips (40+131) in the AM peak hour and 51 pedestrian trips (51+0) in the PM peak hour.

Vehicular Trip Generations of Staff (all services)

5.1.23 By adopting the modal split presented in Table 5.2, the pedestrian trip generations by different transport modes is presented in **Table 5.14**.

Table 5.14 Pedestrian Trip Generations breakdown of Proposed Development (Staff)

Proposed Development - Staff	Modal Split	Pedestrian Trip Generations (ped/hr)			
		AM Peak		PM Peak	
		Generation	Attraction	Generation	Attraction
Private Car	0%	0	0	0	0
Taxi	8%	3	10	4	0
Bus	64%	26	84	33	0
GMB	28%	11	37	14	0
Total	**--**	**40**	**131**	**51**	**0**

5.1.24 Based on the pedestrian generations shown Table 5.14, the vehicular trip generations by different transport modes are tabulated in **Table 5.15**.

Table 5.15 Vehicular Trip Generations of Proposed Development (Staff)

Proposed Development - Staff[(1)]	Occupancy Rate (ped/veh)	PCU factor	AM Peak (pcu/hr)[(3)]		PM Peak (pcu/hr) [(3)]	
			Generation	Attraction	Generation	Attraction
Private Car	1	1	0	0	0	0
Taxi	1	1	10[(2)]	10	4	4[(2)]
Total	**--**	**--**	**10**	**10**	4	4

Note: (1) The vehicular trip generations for Bus and GMB will be discussed in section 5.5
(2) Maximum of vehicle trips (in/out) for private car and taxi is taken for conservative.
(3) Vehicular trip generation/Attraction = pedestrian trip generation/attraction [Table 5.14] / occupancy rate x PCU factor.

5.1.25 The proposed development (staff) will generate and attract a total of 20 pcu (10+10) in the AM peak hour and 8 pcu (4+4) in the PM peak hour.

Trip Generations Summary

5.1.26 The summary of pedestrian and vehicular trip generations of the development site are tabulated in **Table 5.16**.

Table 5.16 Vehicular Trip Generations Summary

Development		AM Peak (pcu/hr)		PM Peak (pcu/hr)	
		Generation	Attraction	Generation	Attraction
CoC Home (289 places)	Table 5.6	16	13	6	9
SCCC (100 places)	Table 5.9	4	8	8	4
CCC (65 places)	Table 5.12	13	13	13	13
STU (85 places)	--	0	0	0	0
SGH (30 places)	--	0	0	0	0
Staff (All Service)	Table 5.15	10	10	4	4
Total		**43**	**44**	**31**	**30**

5.1.27 The proposed development will generate and attract a total of 87 pcu (43+44) in the AM peak hour and 61 pcu (31+30) in the PM peak hour.

5.1.28 The distribution of the development traffic based on survey pattern is presented in **Figure 5.1**.

5.2 2033 Design Traffic Flows

5.2.1 The 2033 Design traffic flows are calculated as follows:

2033 Design Flows = 2033 Reference Flows + Development Traffic Flows

5.2.2 The 2033 design traffic flows (i.e. with proposed development traffic) are shown in **Figures 5.2**.

5.3 Junction Capacity Performance for 2033 Reference and Design Year

5.3.1 The junction capacity for the 6 concerned junctions in the vicinity of the site has been assessed for both reference and design scenarios in year 2033 and the results of the junction performance are shown in **Table 5.17**.

Table 5.17 2033 Junction Performance (Reference and Design Scenarios)

No.	Junction	Junction Type	2033 Reference (Without Proposed Development)		2033 Design (With Proposed Development)	
			AM Peak	PM Peak	AM Peak	PM Peak
J1[(1)]	Tai Po Road – Tai Po Kau / Access Road to Deerhill Bay	Priority (DFC)	0.34	0.10	0.34	0.10
J2	Tai Po Road – Ma Liu Shui/ Kau To Shan Road	Roundabout (DFC)	0.66	0.67	0.67	0.68
J3	Tai Po Road – Sha Tin / Tsun King Road	Roundabout (DFC)	0.57	0.63	0.57	0.63
J4	Tai Po Road – Tai Po Kau / Lookout Link	Priority (DFC)	0.45	0.19	0.46	0.19
J5	Tai Po Road – Ma Liu Shui/ Lai Ping Road	Roundabout (DFC)	0.69	0.64	0.70	0.65
J6	Tai Po Road – Tai Po Kau / Access Road to Development Site	Priority (DFC)	--	--	0.14	0.07

Note: DFC – Design flow/ Capacity ratio for priority junction and roundabout.
(1)Surge factor adopted for J1 for AM and PM period, details please refer to Appendix B.

5.3.2 The junction capacity analysis enclosed in **Appendix C** show that all the 6 concerned junctions will operate with adequate junction capacity under 2033 reference and design scenarios.

5.4 Road Link Performance for 2033 Reference and Design Year

5.4.1 The road link performance for the 4 concerned road links during the AM and PM peak periods in 2033 Reference and Design scenario have been assessed and the results are presented in **Table 5.18**.

Table 5.18 2033 Reference and Design Road Link Capacity Performance

No.	Road Link	Direction	2033 Reference				2033 Design			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Flows (veh/ hr)	V/C	Flows (veh/ hr)	V/C	Flows (veh/ hr)	V/C	Flows (veh/ hr)	V/C
L1	Tai Po Road – Ma Liu Shui (near University Avenue)	SB	981	0.38	322	0.12	999	0.38	335	0.13
		NB	359	0.14	553	0.21	376	0.14	564	0.22
L2	Tai Po Road – Sha Tin (Slip Road from Tai Po Road – Ma Liu Shui Southbound to Shatin Racecourse)	SB	633	0.49	613	0.47	650	0.50	626	0.48
L3	Tai Po Road – Sha Tin (Slip Road from Tai Po Road – Sha Tin Northbound to Tsun King Road Roundabout)	NB	360	0.14	340	0.13	365	0.14	344	0.13
L4	Tai Po Road – Ma Liu Shui (near Lai Ping Road)	SB	849	0.61	570	0.41	866	0.62	583	0.42
		NB	557	0.40	496	0.35	574	0.41	507	0.36

Note (1): Design flow is reference to Table 2.4.11, Chapter 2.4, Volume 2, TPDM.

5.4.2 The results of the road link assessment shows that all 4 concern road links will operate with adequate capacity during the AM and PM peak hours in both 2033 Reference and Design Year scenarios.

5.5 Public Transport Utilization Assessment

5.5.1 The public transport demand generated (Bus and GMB) by the proposed development are summarized in **Table 5.19** and **Table 5.20** respectively.

Table 5.19 Pedestrian Trip Generations by Public Transport (Bus)

Development		AM Peak (ped/hr)		PM Peak (ped/hr)	
		Generation	Attraction	Generation	Attraction
CoC Home	--	7	21	62	5
SCCC	Table 5.8	21	37	37	21
CCC	Table 5.11	70	123	123	70
STU	--	0	0	0	0
SGH	--	0	0	0	0
Staff	Table 5.14	26	84	33	0
Total		124	265	255	96

Table 5.20 Pedestrian Trip Generations by Public Transport (GMB)

Development		AM Peak (ped/hr)		PM Peak (ped/hr)	
		Generation	Attraction	Generation	Attraction
CoC Home	--	1	2	7	1
SCCC	Table 5.8	3	5	5	3
CCC	Table 5.11	8	14	14	8
STU	--	0	0	0	0
SGH	--	0	0	0	0
Staff	Table 5.14	11	37	14	0
Total		23	58	40	12

5.5.2 The public transport utilization for 2033 Design scenarios is presented in **Table 5.21**.

Table 5.21 2033 Design Public Transport Utilization

Public Transport	AM Peak			PM Peak		
	Total Passenger Capacity (pax/hr)	Total Passenger Demand (pax/hr)(1)	Occupancy (Demand /Capacity)	Total Passenger Capacity (pax/hr)	Total Passenger Demand (pax/hr)(1)	Occupancy (Demand /Capacity)
Franchised Buses (72, 72A, 73A, 74A) (To Shatin Direction)	1237	393	0.32	1008	666	0.66
Franchised Buses (72, 72A, 73A, 74A) (To Tai Po Direction)	870	250	0.29	870	471	0.54
GMB (28K, 28S) (To Shatin Direction)	182	200	1.10	150	165	1.10
GMB (28K, 28S) (To Tai Po Direction)	163	154	0.95	163	119	0.73

Note: (1) 2033 Design Public Transport Demand = 2021 Demand x Growth Factor + Development demand.

5.5.3 The assessment shows that there is ample capacity for the franchised buses service to accommodate the additional passenger demands generated by proposed development site except GMB service (Shatin bound) during AM and PM Peak period.

5.5.4 Additional GMB services (Shatin bound) are recommended to accommodate the additional passenger demands generated by the proposed development. The required additional GMB services are presented in **Table 5.22**.

Table 5.22 Additional GMB Services Required

Additional GMB Services Required	AM Peak				PM Peak			
	Total Passenger Capacity (pax/hr)	Total Passenger Demand (pax/hr)	Deficiency (pax/hr)	Additional GMB required^	Total Passenger Capacity (pax/hr)	Total Passenger Demand (pax/hr)	Deficiency (pax/hr)	Additional GMB required^
	[A]	[B]	[C] =[B]-[A]	[D] =[C]/19	[A]	[B]	[C]= [B]-[A]	[D]= [C]/19
GMB (28K, 28S) (To Shatin Direction)	182	200	18	1	150	165	15	1

Note: ^It is assumed that the GMB capacity is 19 passengers.

5.5.5 An additional 1 GMB service (to Shatin direction) [i.e. 1.5 pcu] is required for AM and PM Peak period respectively according to the above analysis results.

5.6 2033 Design Bus Layby Assessment

5.6.1 The arrival rate for the bus layby (Deerhill Bay Bus Stop) incorporated the public transport utilization assessment result (Table 5.21 and Table 5.22) is estimated and presented in **Table 5.23**.

Table 5.23 Arrival Rate and Servicing Time on Deerhill Bay Bus Layby in Year 2033

Location	Arrival Rate(veh/hr)		Average Servicing Time (min/veh)	
	AM Peak	PM Peak	AM Peak	PM Peak
Deerhill Bay Bus Stop (NB)	16	14	0.78	1.22
Deerhill Bay Bus Stop (SB)(1)	12	12	1.23	1.00

Noted: (1) Arrival rate for SB bus stop: 11 veh/hr (table 3.6) + 1 veh (table 5.22) = 12 veh/hr

5.6.2 The 2033 bus layby assessment is reviewed and the results are summarized in **Table 5.24**.

Table 5.24 2033 Design Bus Layby Assessment

Location		2033 Design AM Peak		2033 Design PM Peak	
		P_n	Sum of P(n)	P_n	Sum of P(n)
Deerhill Bay Bus Stop (NB)	n=0 (no vehicle at layby)	0.7920	0.9910	0.7153	0.9769
	n=1 (1 vehicle at layby)	0.1647		0.2036	
	n=2 (2 vehicles at layby)	0.0343		0.0580	
Deerhill Bay Bus Stop (SB)	n=0 (no vehicle at layby)	0.7540	0.9851	0.8000	0.9920
	n=1 (1 vehicle at layby)	0.1855		0.1600	
	n=2 (2 vehicles at layby)	0.0456		0.0320	

5.6.3 The assessment shown in above table concluded that the chances for more than 2 vehicles simultaneously using the bus layby is less than 3%. The result showed that there will be no capacity problem at the bus layby under 2033 design scenario.

5.7 2033 Reference and Design Year Footpath Performance Assessment

5.7.1 Based on the additional pedestrian flows the performance for the critical footpath sections under 2033 reference and design scenarios are reviewed and the results are tabulated in **Table 5.25**.

Table 5.25 2033 Critical Footpath Sections Performance

No.	Location	Peak	2033 Reference			2033 Design		
			Pedestrian Flows (Ped/ 15 mins)	Flow Rate (Ped/min/ m)	Level of Service (LOS)	Pedestrian Flows (Ped/ 15 mins)	Flow Rate (Ped/min/ m)	Level of Service (LOS)
P1	Tai Po Road – Tai Po Kau (outside Subject Site)	AM	29	2.15	A	147	10.89	A
		PM	16	1.19	A	117	8.67	A
P2	Tai Po Road – Tai Po Kau (outside Japanese International School)	AM	53	3.93	A	171	12.67	A
		PM	27	2.00	A	128	9.48	A
P3	Pedestrian Crossing across Tai Po Road – Tai Po Kau	AM	14	0.27	A	132	2.51	A
		PM	15	0.29	A	116	2.21	A
P4	Tai Po Road – Tai Po Kau (near Tai Po Kau Gas Station northbound bus stop)	AM	14	0.93	A	132	8.80	A
		PM	15	1.00	A	116	7.73	A

5.7.2 The results of the above assessment demonstrated that the concerned footpaths will operate with adequate capacity under 2033 reference and design scenarios.

5.7.3 The 2033 reference and design pedestrian flows are presented in **Figures 5.3.**

6. CONSTRUCTION TRAFFIC IMPACT ASSESSMENT

6.1 Traffic Review for Construction Vehicles

6.1.1 According to the preliminary information provided by AP, it is estimated that there will be approximately 5 heavy good vehicles enter and leave the subject site hourly (equivalent to 12.5 pcu/hr) on each working day.

6.1.2 As the demand of the construction vehicles is relatively low, the traffic impact generated is considered negligible to the local road network.

6.1.3 The following traffic management measures are recommended to minimize the construction vehicles traffic impact to the general public:

(1) A maximum of 5 construction vehicles are limited within one hour period;

(2) The construction vehicles are restricted during local peak period and school peak period to avoid construction vehicle impact to the local road network and the school activities in the vicinity.

(3) Traffic wardens will be deployed at Access Road to Deerhill Bay to closely monitor the traffic situation and manage the ingress/egress of delivery vehicles. The traffic warden will also ensure smooth operation of the delivery vehicles and pedestrian safety.

7. SUMMARY AND CONCLUSION

7.1 Summary

Background

7.1.1 The subject site is located at Tai Po Kau area which is bounded by Po Leung Kuk Tin Ka Ping Millennium Primary School to the north, Japanese International School to the west, Tai Po Road-Tai Po Kau to the south and a vacant site to the east.

7.1.2 The development site will provide 1 block of Social Services Complex and is anticipated to be completed by 2030 for Special Child Care Centre (SCCC), Care and Attention Home providing Continuum of Care (CoC Home), Small Group Home (SGH), Foster Care Services (FCS) and Agency-based Enhancement of Professional Staff Support Service (ABPSS), Staff Training Unit (STU) and Child Care Centre (CCC) facilities.

Proposed Parking Provisions and Vehicular Access Points

7.1.3 A total of 7 private car parking spaces, 2 Light Bus parking spaces, 1 LGV parking spaces and 2 coach spaces and 1 private car bay, 1 ambulance bays, 1 HGV L/UL bay are provided to meet the end-users' operational need.

7.1.4 The permanent vehicular access is located at Tai Po Road – Tai Po Kau.

Existing Traffic Conditions

7.1.5 In order to review the existing traffic conditions, vehicular count surveys and pedestrian count surveys were carried out on a typical school weekday in November 2021, May 2022 and February 2024 during the AM (07:30 to 09:30) and PM (17:00 to 19:00) peak periods respectively.

7.1.6 The junction capacity and road link assessment show that the 5 concerned junctions and 4 concerned road links can operate with adequate capacity during the AM and PM peak hours under existing traffic condition.

7.1.7 The concerned footpath sections along the subject site and bus layby in the vicinity can operate with no capacity problem during the AM and PM peak periods.

Future Traffic Conditions

7.1.8 The proposed development is scheduled to be operated by 2030. Hence a design year 2033 (i.e. 3 years after the completion) is adopted for the TIA study for the traffic impact assessment purpose.

7.1.9 A growth factor method is applied to forecast the traffic flows in design year 2033. For conservative analysis, the background traffic annual growth rate from 2021 to 2026, 2026 to 2031 and 2031 to 2033 has adopted a growth rate of +1.83%, +0.6% and +0.5% p.a. respectively.

Traffic Impact Assessment

7.1.10 Upon the completion of the development building, this Social Services Complex will generate and attract 87 (two-way) pcu/hr in the AM peak hour and 61 (two-way) pcu/hr in the PM peak hour.

7.1.11 The traffic impact assessment demonstrated that all 5 concerned junctions and 4 concerned road links will operate with adequate capacity in the AM and PM Peak periods in year 2033.

7.1.12 The assessment shows that the franchised buses service is adequate to accommodate the additional passenger demand generated by proposed development site. However, additional 1 GMB services (To Shatin direction) is required to accommodate the future passenger demands generated by the proposed development in AM and PM peak period respectively.

7.1.13 The performance of concerned footpath sections and bus layby will operate with no capacity problem during the peak periods in design year 2033.

Traffic Review for the Construction Vehicles

7.1.14 According to the AP's preliminary programme, a maximum of 5 construction vehicles will access to the subject site per hour during non-peak in year 2030 (i.e. max 12.5 pcu/hr).

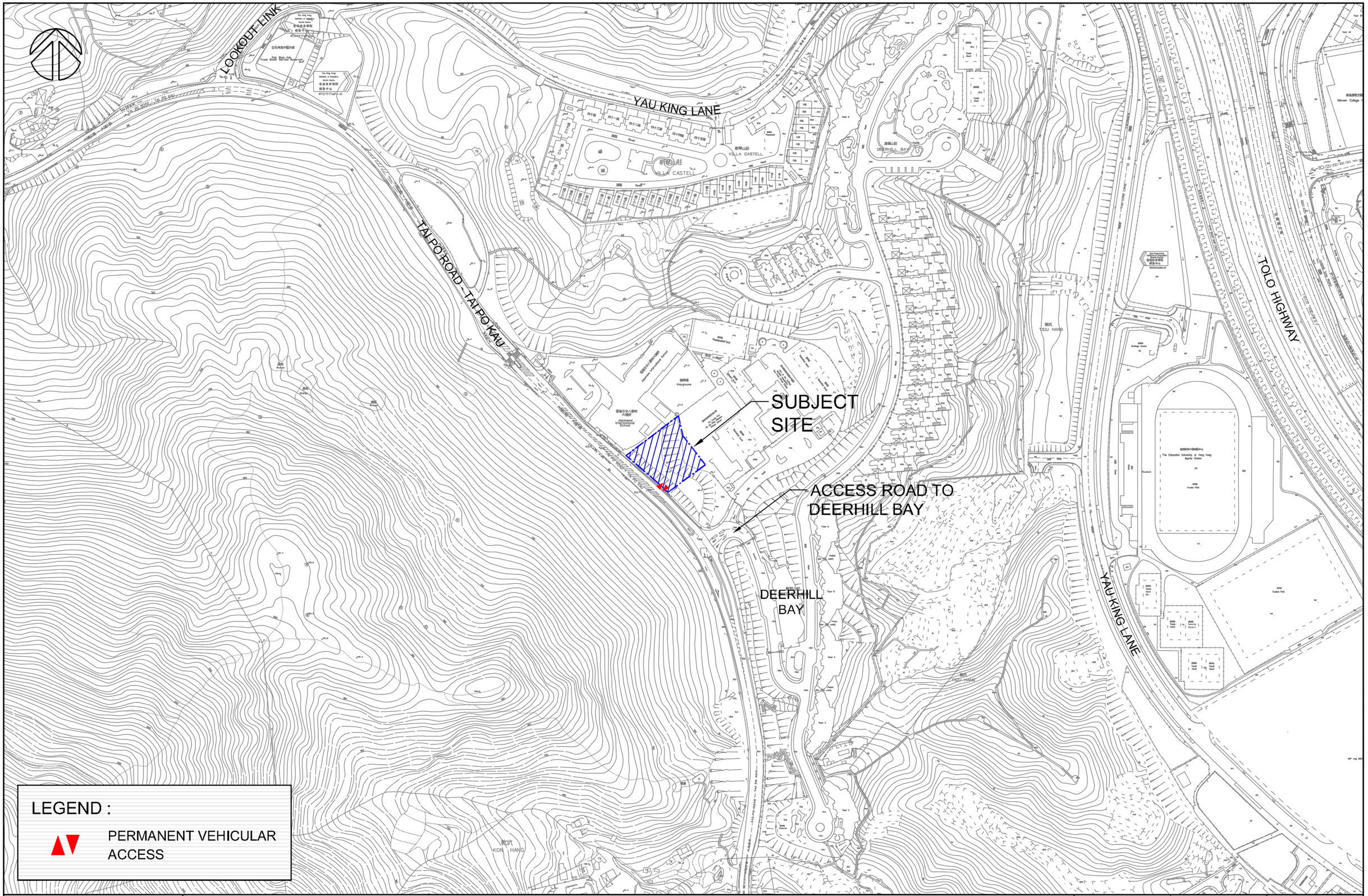
7.1.15 These construction traffic are considered negligible and will not affect the local road network.

7.2 Conclusion

7.2.1 The findings of this TIA concluded that the proposed Social Services Complex development will not generate with adverse traffic impacts in Design year 2033.

7.2.2 The proposed Social Services Complex Development is therefore supported from the traffic engineering point of view.

FIGURES



HWSPB 何黃 Traffic & Transportation Consultants Ho Wang SPB Limited	Project Title: TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO	Scale: 1 : 5000	Date: FEB 2022	Figure No.: 2.1
	Figure Title: SITE LOCATION	Project No.: J1652	CAD Ref.: J1652/TIA1/F21/2023-03-29	Rev.: –

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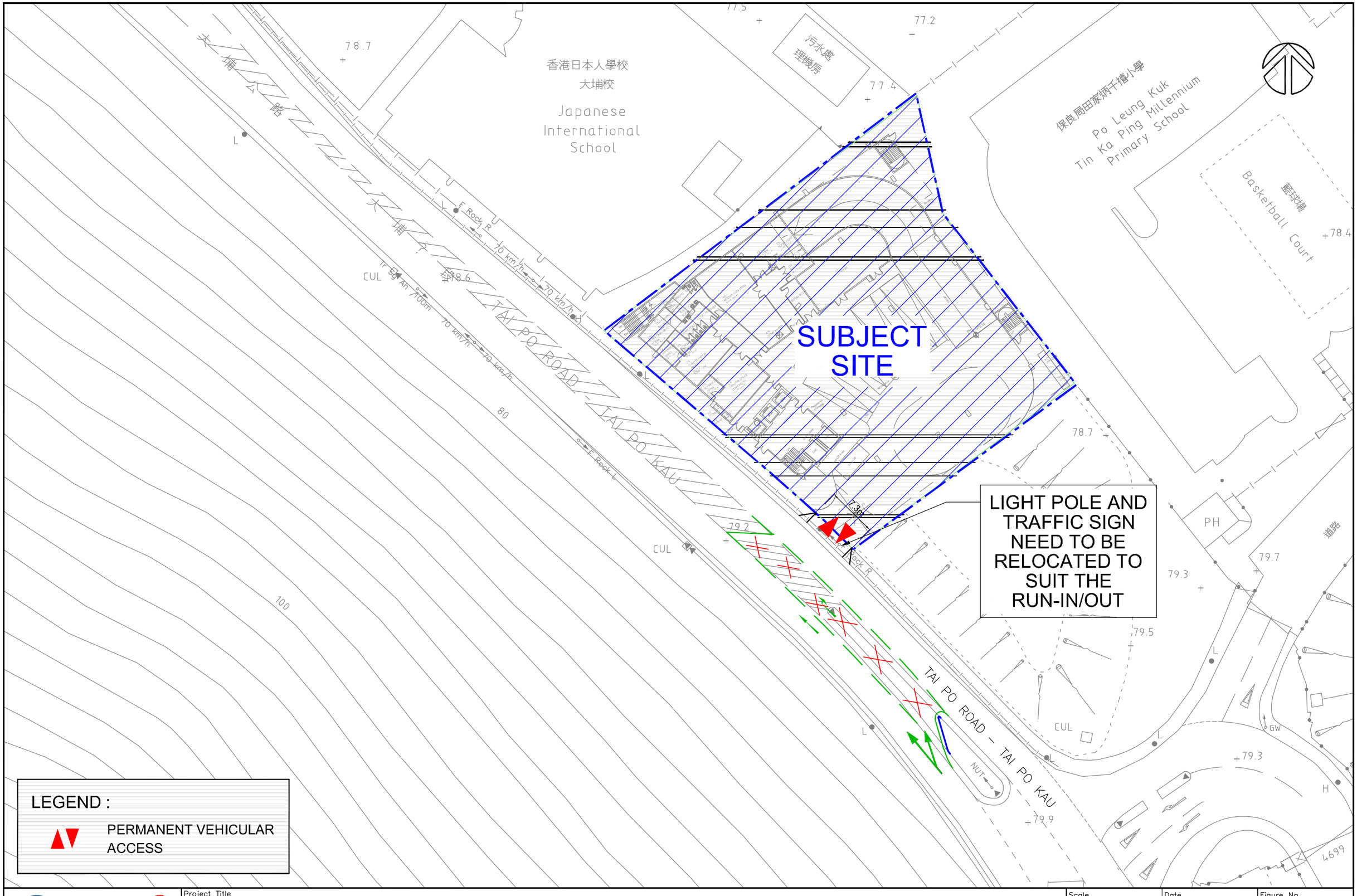

LEGEND :

PERMANENT VEHICULAR ACCESS

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	Figure Title: PROPOSED PERMANENT VEHICULAR ACCESS AT TAI PO ROAD – TAI PO KAU	Project No.: J1652	CAD Ref.: J1652/TIA1/F22B/2024-02-28 / Rev.: B

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ROAD - TAI PO KAU

UP
DN
D13 STAFF CHANGING ROOM
S21 STAFF TOILET
D13 STAFF CHANGING ROOM 4.6 m² /6.3 m²
C16 STAFF CHANGING ROOM 13.8 m² /16.7 m²
C16 STAFF CHANGING ROOM 13.8 m² /16.7 m²
D21 STAFF TOILET
C15 TOILET FOR STAFF
D1 SUPERVISOR'S OFFICE 7.5 m² /7.4 m²
D2 ASSISTANT OPERATION INTENDENT OFFICE 5.6 m² /8.6 m²
D3 OPEN PLAN FOR OFFICE/ STAFF ROOM 33.8 m² /32.3 m²
C17 SUPERVISOR'S OFFICE 7.3 m² /7.1 m²
C18 GENERAL OFFICE/ STAFF ROOM 47.4 m² /48.8 m²
X11 FS INLET
X12 SPRINKLER INLET
A15 KITCHEN CUM STORE 83.2 m² /82.6 m²
C4 KITCHEN 36.9 m² /33.2 m²
C5 FOOD STORE 8.4 m² /8.3 m²
DUMB WAITER
D12 FOOD STORE 2.6 m² /2.6 m²
D11 KITCHEN 13.4 m² /13.0 m²
REFUSE ROOM
A16 DUMB WAITER
X9 TX ROOM
UP
Building Above
Service
SCH
SCH
SCH Lobby
Pedestrian Walkway
UP
SKH Lobby
CoC
CoC
DN
L/UL
Ambulance
SCCC Coach-1
SCCC Coach-2
RAMP
DN
+79.20
UP
Drop Off Area
Drop Off
+79.20
7.3m
X13 WATER METER
X14 CHEC METER

PEDESTRIAN ACCESS

VEHICULAR ACCESS RUN-IN/OUT

LEGEND:

- HGV L/UL BAY [11m(L) x 3.5m(W)]
- COACH PARKING SPACE [12m(L) x 3.5m(W)]
- AMBULANCE BAY [9m(L) x 3m(W)]
- PRIVATE CAR PICK-UP / DROP-OFF BAY [5m(L) x 2.5m(W)]
- VEHICULAR ACCESS
- PEDESTRIAN ACCESS

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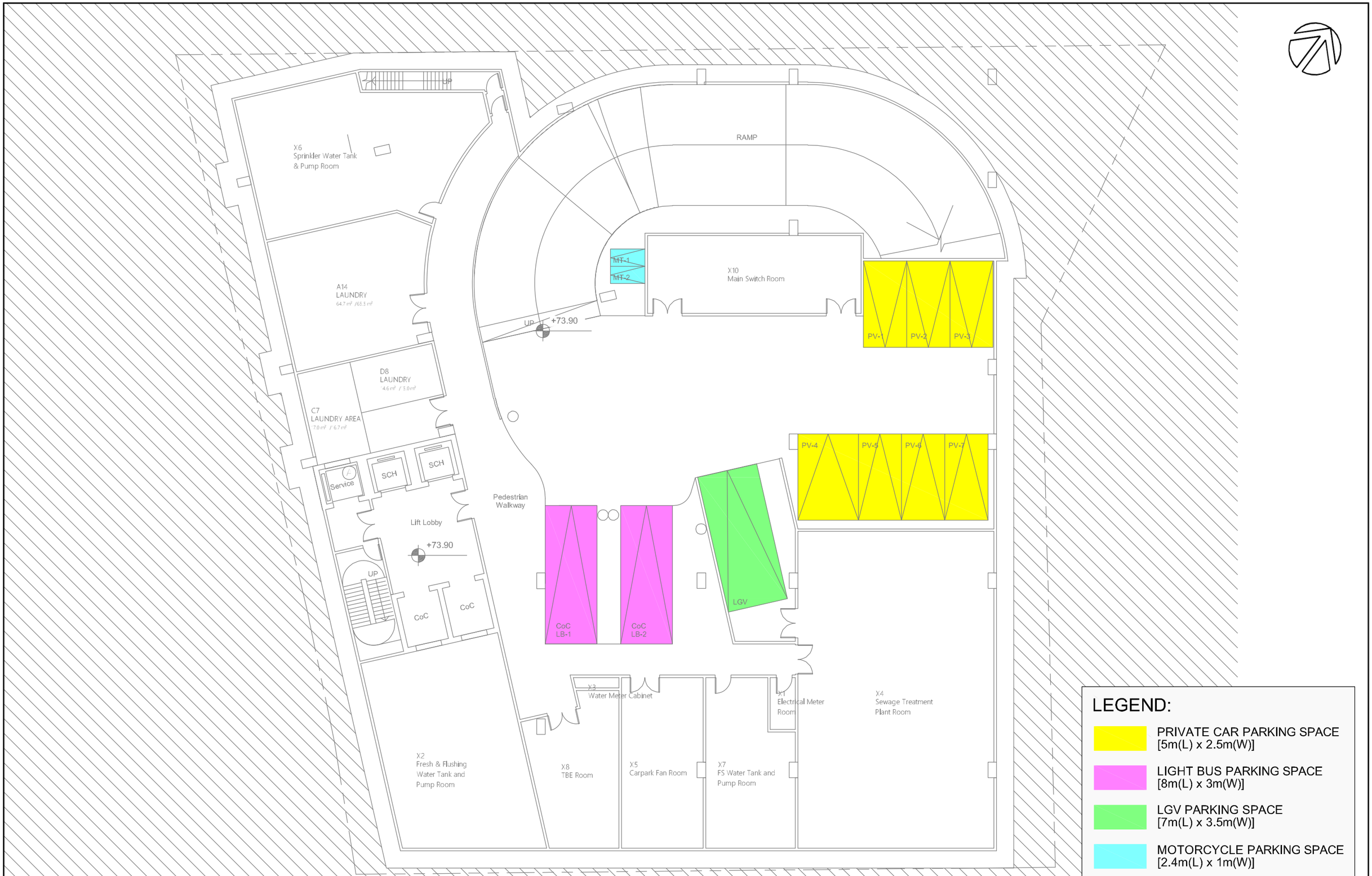
Figure Title
G/F LAYOUT PLAN

Scale	Date	Figure No.
1 : 200	FEB 2024	2.3

Project No.	CAD Ref.	Rev.
J1652	J1652/TIA1/F23/2024-02-28	–



LEGEND:

- PRIVATE CAR PARKING SPACE [5m(L) x 2.5m(W)]
- LIGHT BUS PARKING SPACE [8m(L) x 3m(W)]
- LGV PARKING SPACE [7m(L) x 3.5m(W)]
- MOTORCYCLE PARKING SPACE [2.4m(L) x 1m(W)]

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Figure Title
LG1/F LAYOUT PLAN

Scale	Date	Figure No.
1 : 200	JUL 2024	2.4

Project No.	CAD Ref.	Rev.
J1652	J1652/TIA1/F24A/2024-07-26	A

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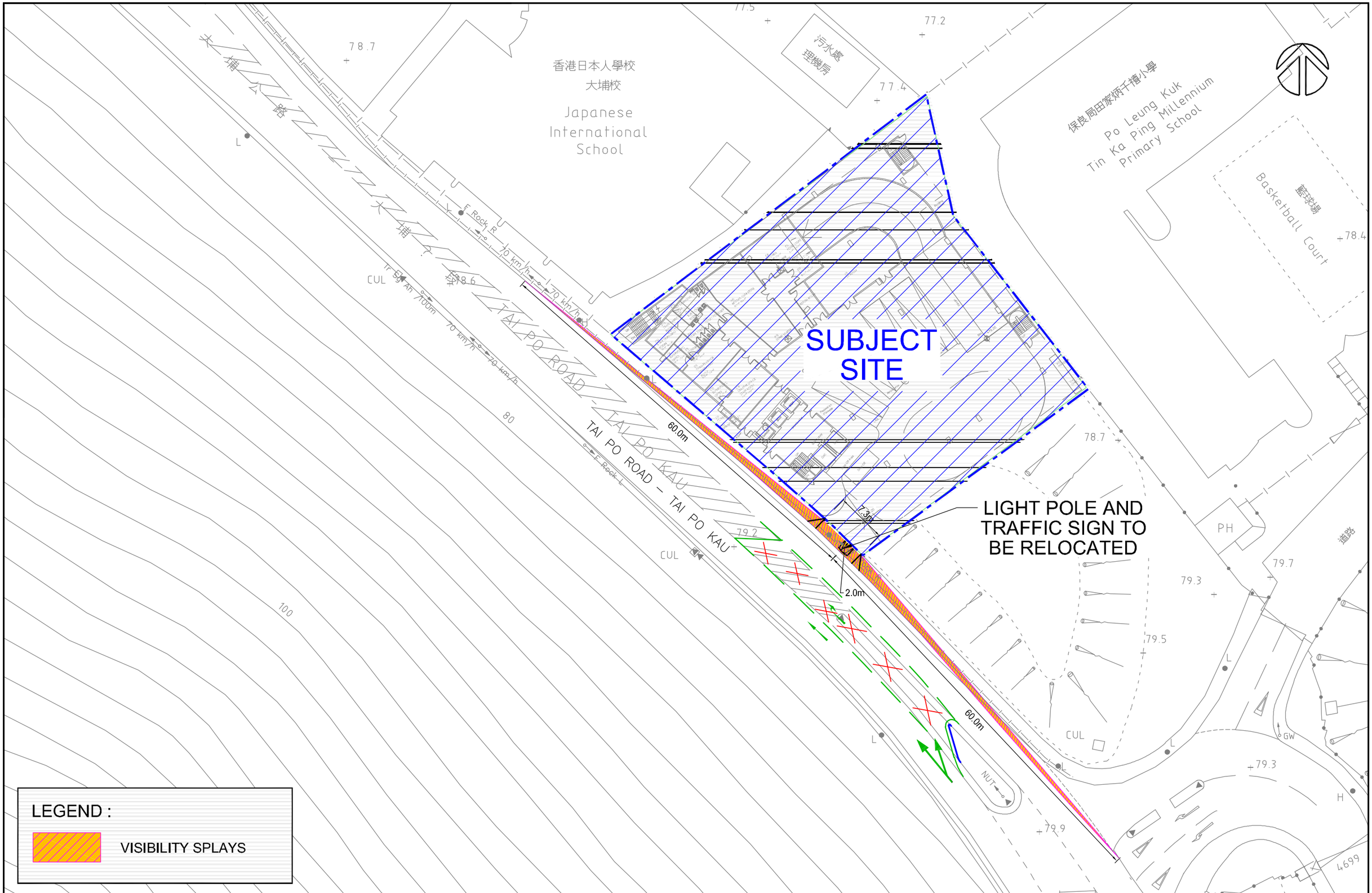

LEGEND :

VISIBILITY SPLAYS

HWSPB 何黃 Traffic & Transportation Consultants Ho Wang SPB Limited	Project Title: TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO	Scale: 1 : 500	Date: FEB 2024 / Figure No.: 2.5
	Figure Title: SIGHTLINE ASSESSMENT	Project No.: J1652	CAD Ref.: J1652/TIA1/F25/2024-02-28 / Rev.: –

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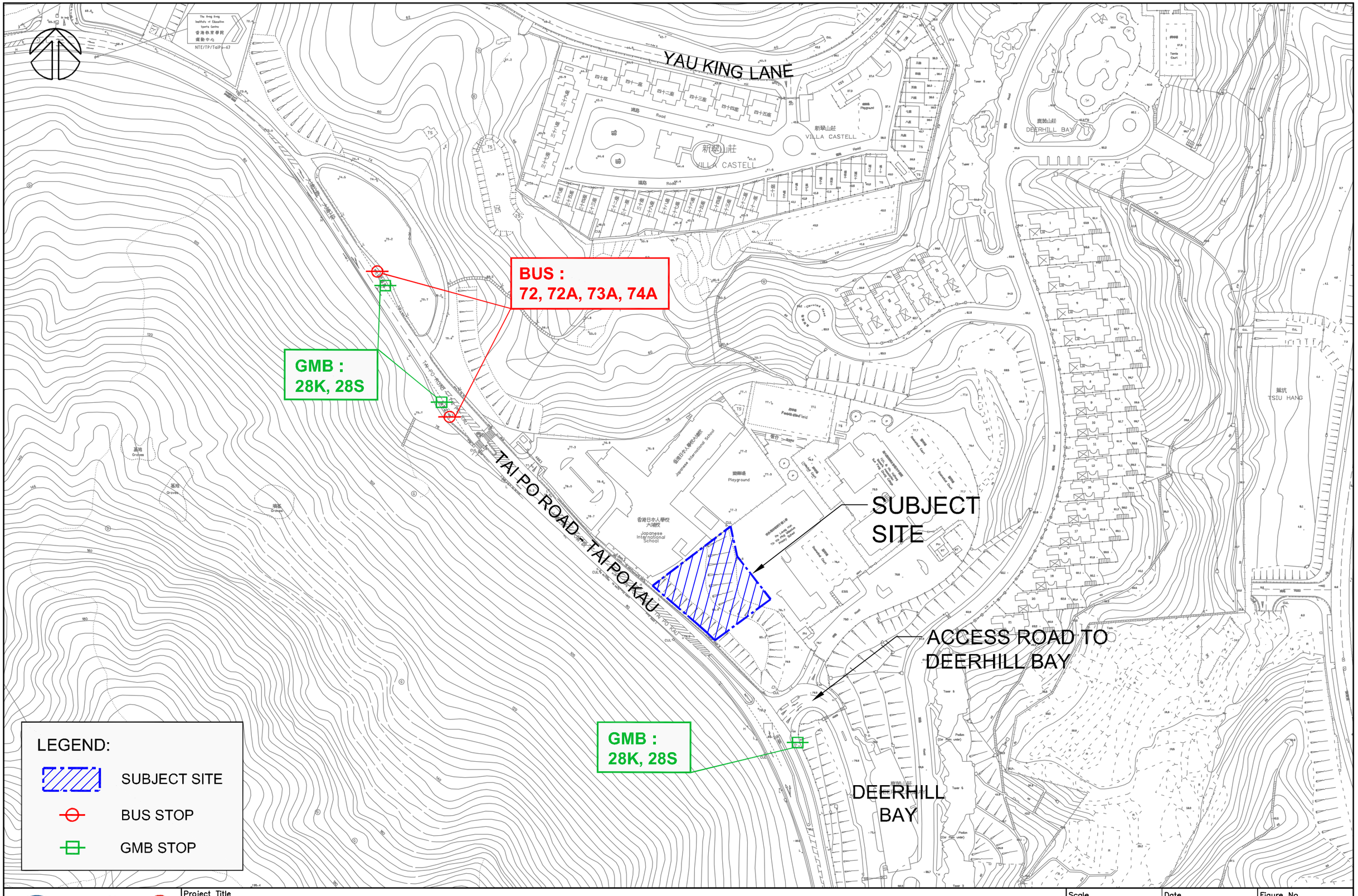

HWSPB 何黃 Traffic & Transportation Consultants Ho Wang SPB Limited	Project Title: TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO	Scale: 1 : 2000	Date: FEB 2022	Figure No.: 3.1
	Figure Title: LOCATION OF EXISTING PUBLIC TRANSPORT FACILITIES	Project No.: J1652	CAD Ref.: J1652/TIA1/F31/2023-03-29	Rev.: –

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TOLO HIGHWAY

TOLO HIGHWAY

沙田海
SHA TIN HOI

YAU KING LANE

LOOKOUT LINK

J4

J1

TAI PO ROAD - TAI PO KAU

SUBJECT SITE

L1

TAI PO ROAD - MA LIU SHUI

L4

J5

TOLO HIGHWAY

KAU TO SHAN ROAD

J2

L2

L3

J3

TSUN WING ROAD

TAI PO ROAD - SHA TIN

LEGEND :

AREA OF INFLUENCE (AOI)

J1 SURVEYED JUNCTION

L1 SURVEYED ROAD LINK

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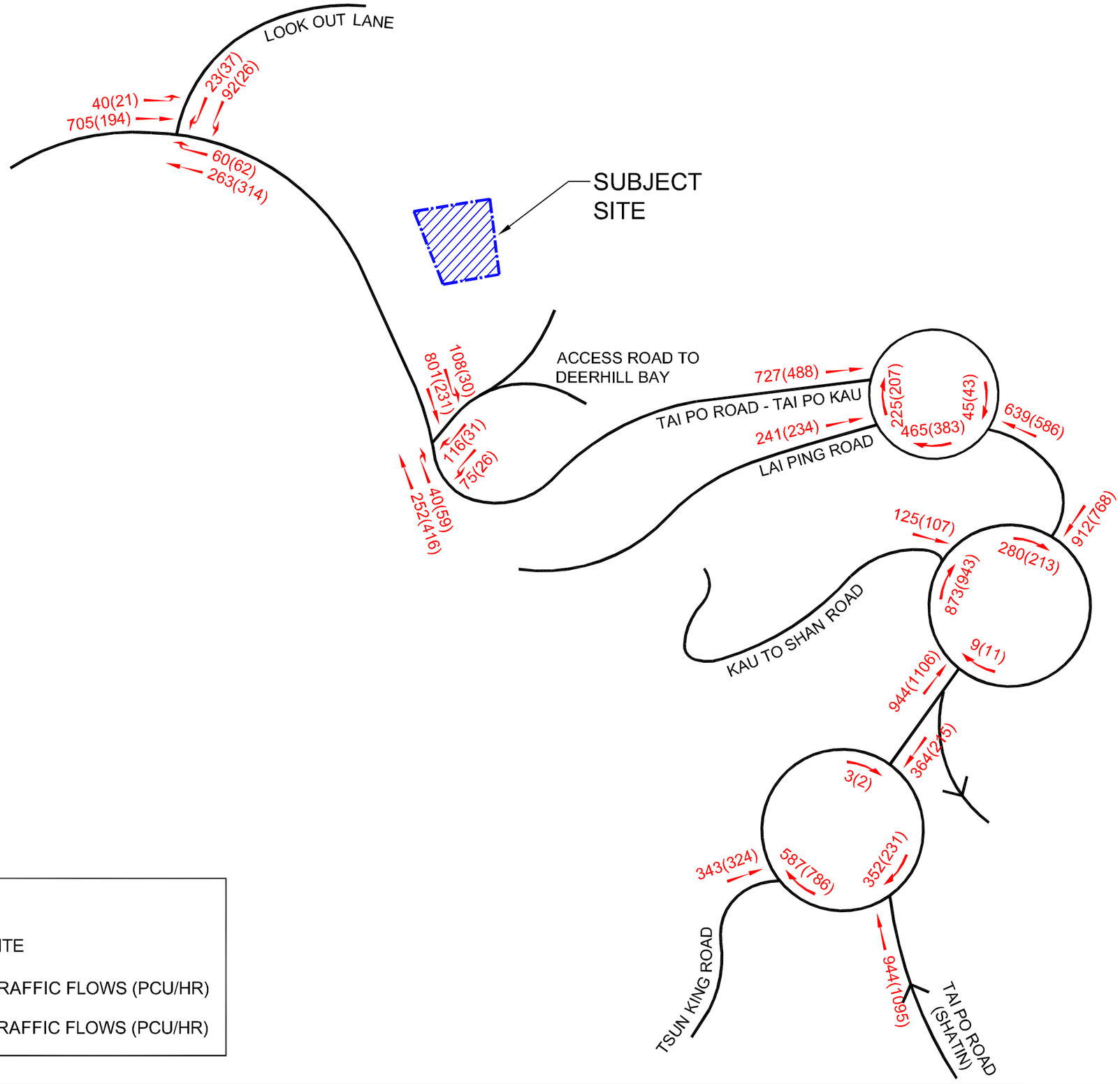
Figure Title: LOCATION OF SURVEYED JUNCTIONS AND ROAD LINKS	Project No.: J1652	CAD Ref.: J1652/TIA1/F32A/2024-02-15	Rev.: A



LEGEND:

	SUBJECT SITE
123	AM PEAK TRAFFIC FLOWS (PCU/HR)
(456)	PM PEAK TRAFFIC FLOWS (PCU/HR)

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Figure Title: 2021 OBSERVED TRAFFOC FLOWS	Project No.: J1652	CAD Ref.: J1652/TIA1/F33B/2024-02-27	Rev.: B

No.	Peak	Pedestrian Flows (Ped/15min)	Flow Rate (Ped/min/m)	Level of Service (LOS)
P1	AM	26	1.93	A
	PM	14	1.04	A
P2	AM	48	3.56	A
	PM	24	1.78	A
P3	AM	12	0.23	A
	PM	13	0.25	A
P4	AM	12	0.8	A
	PM	13	0.87	A

BUS/GMB STOP
(TO SHATIN DIRECTION)

BUS/GMB STOP
(TO TAI PO DIRECTION)

P1

P2

P3

P4

SUBJECT SITE

TAI PO ROAD - TAI PO KAU

LEGEND:

SUBJECT SITE

PEDESTRIAN ROUTE

P1 SURVEYED LOCATION

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Figure Title
2022 OBSERVED PEDESTRIAN FLOWS

Scale	Date	Figure No.
1 : 1500	MAY 2022	3.4

Project No.	CAD Ref.	Rev.
J1652	J1652/TIA1/F34/2023-03-29	–

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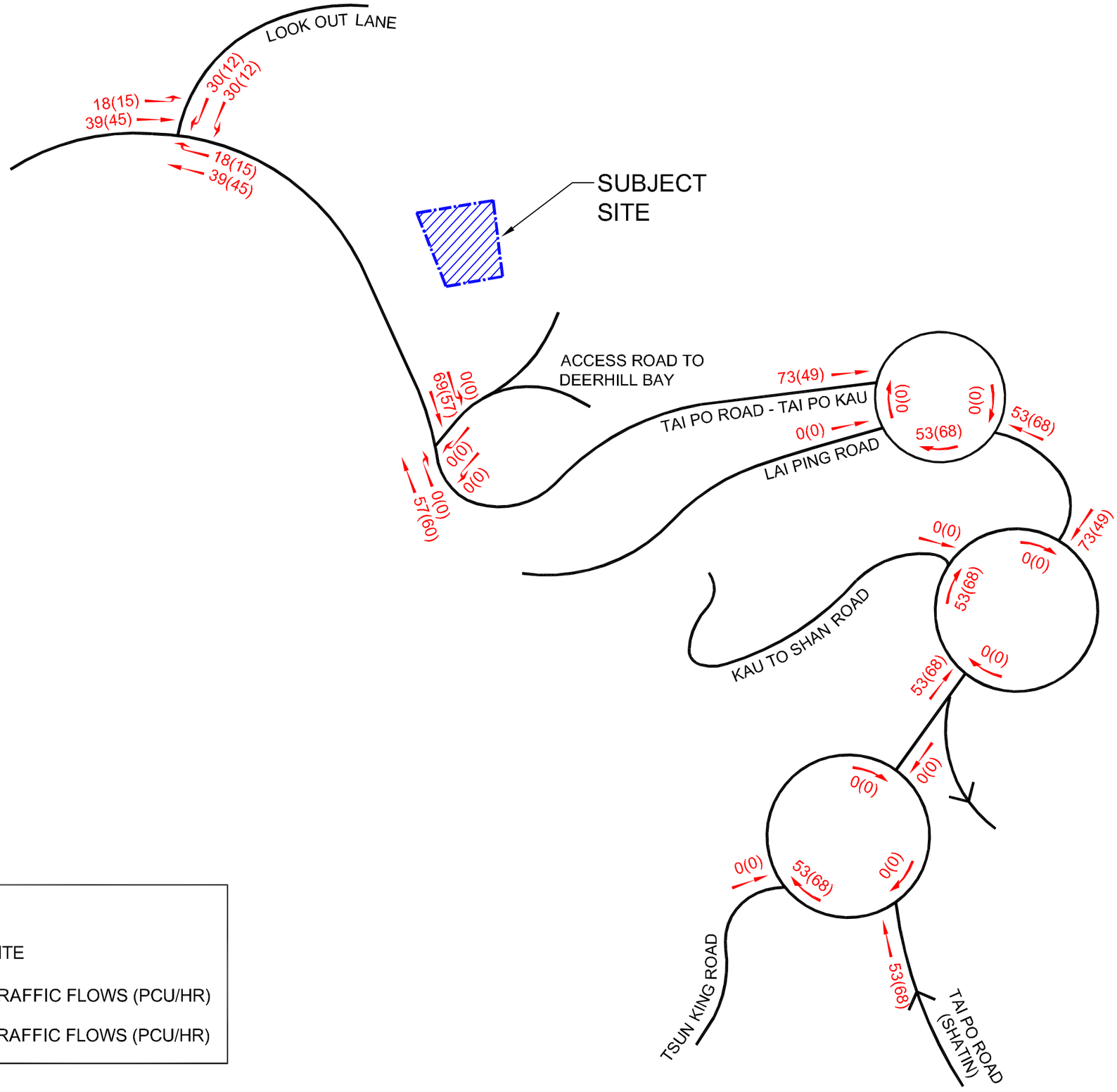

LEGEND:

	SUBJECT SITE
123	AM PEAK TRAFFIC FLOWS (PCU/HR)
(456)	PM PEAK TRAFFIC FLOWS (PCU/HR)

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Figure Title: DISTRIBUTION OF ADJACENT PLANNED/COMMITTED DEVELOPMENT TRAFFIC FLOWS

Scale	Date	Figure No.
N. T. S.	FEB 2024	4.1

Project No.	CAD Ref.	Rev.
J1652	J1652/TIA1/F41B/2024-02-27	B

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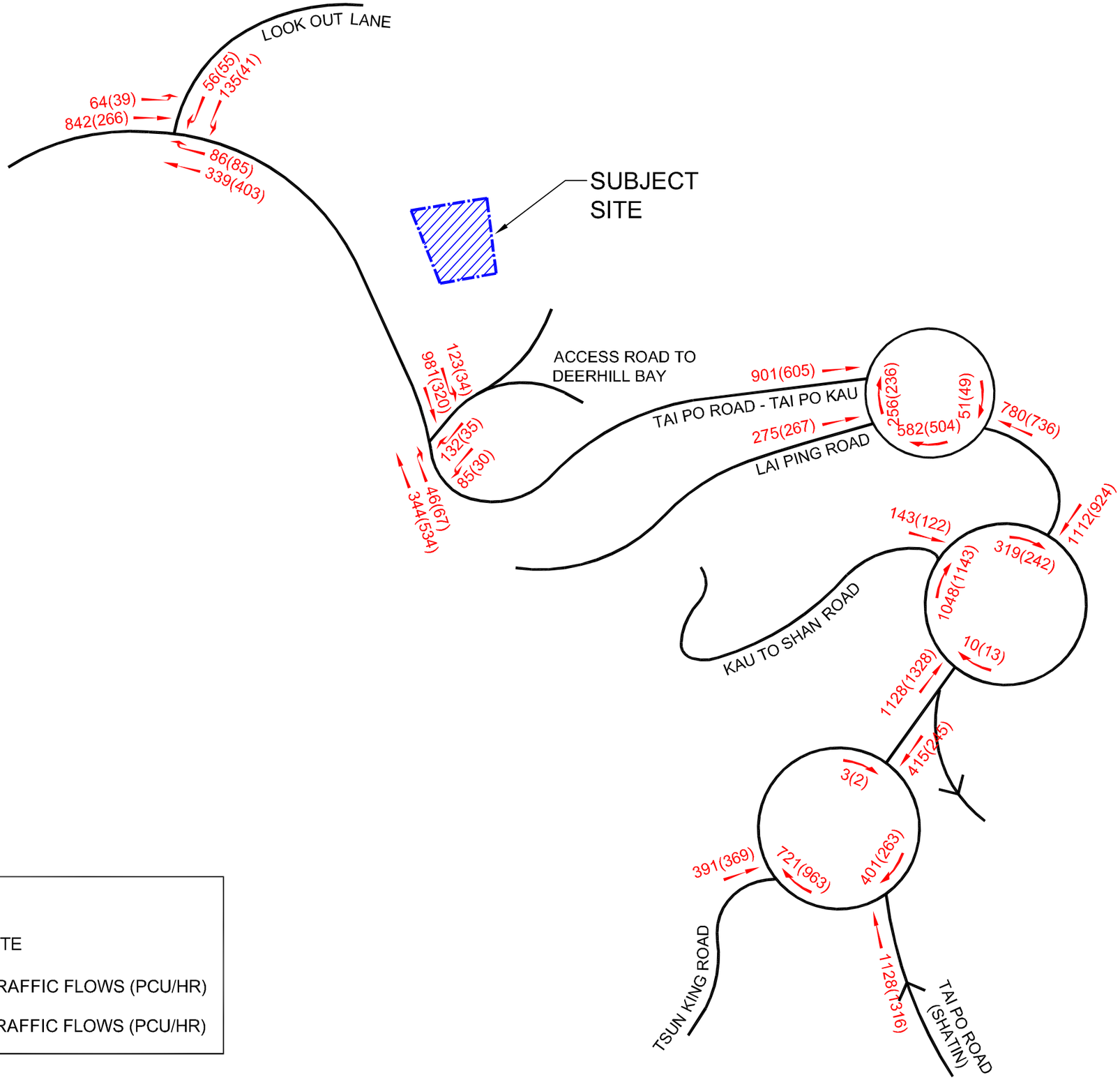

LEGEND:

	SUBJECT SITE
123	AM PEAK TRAFFIC FLOWS (PCU/HR)
(456)	PM PEAK TRAFFIC FLOWS (PCU/HR)

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Figure Title: 2033 REFERENCE TRAFFIC FLOWS

Scale	Date	Figure No.
N. T. S.	FEB 2024	4.2

Project No.	CAD Ref.	Rev.
J1652	J1652/TIA1/F42B/2024-02-27	B

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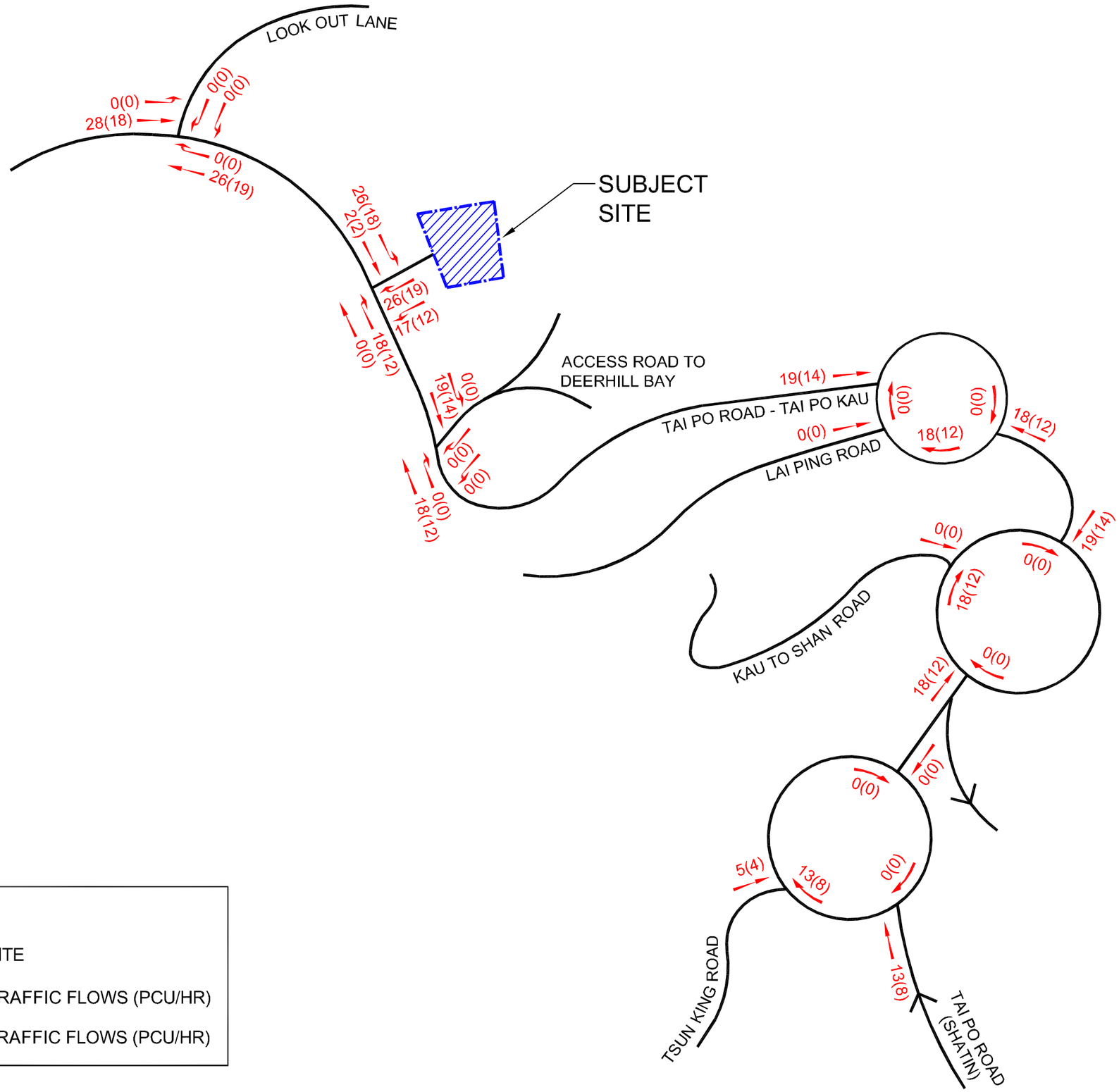

LEGEND:

	SUBJECT SITE
123	AM PEAK TRAFFIC FLOWS (PCU/HR)
(456)	PM PEAK TRAFFIC FLOWS (PCU/HR)

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Traffic & Transportation Consultants
Ho Wang SPB Limited

Project Title
TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO

Figure Title
DISTRIBUTION OF DEVELOPMENT TRAFFIC FLOWS

Scale	Date	Figure No.
N. T. S.	FEB 2024	5.1

Project No.	CAD Ref.	Rev.
J1652	J1652/TIA1/F51B/2024-02-27	B

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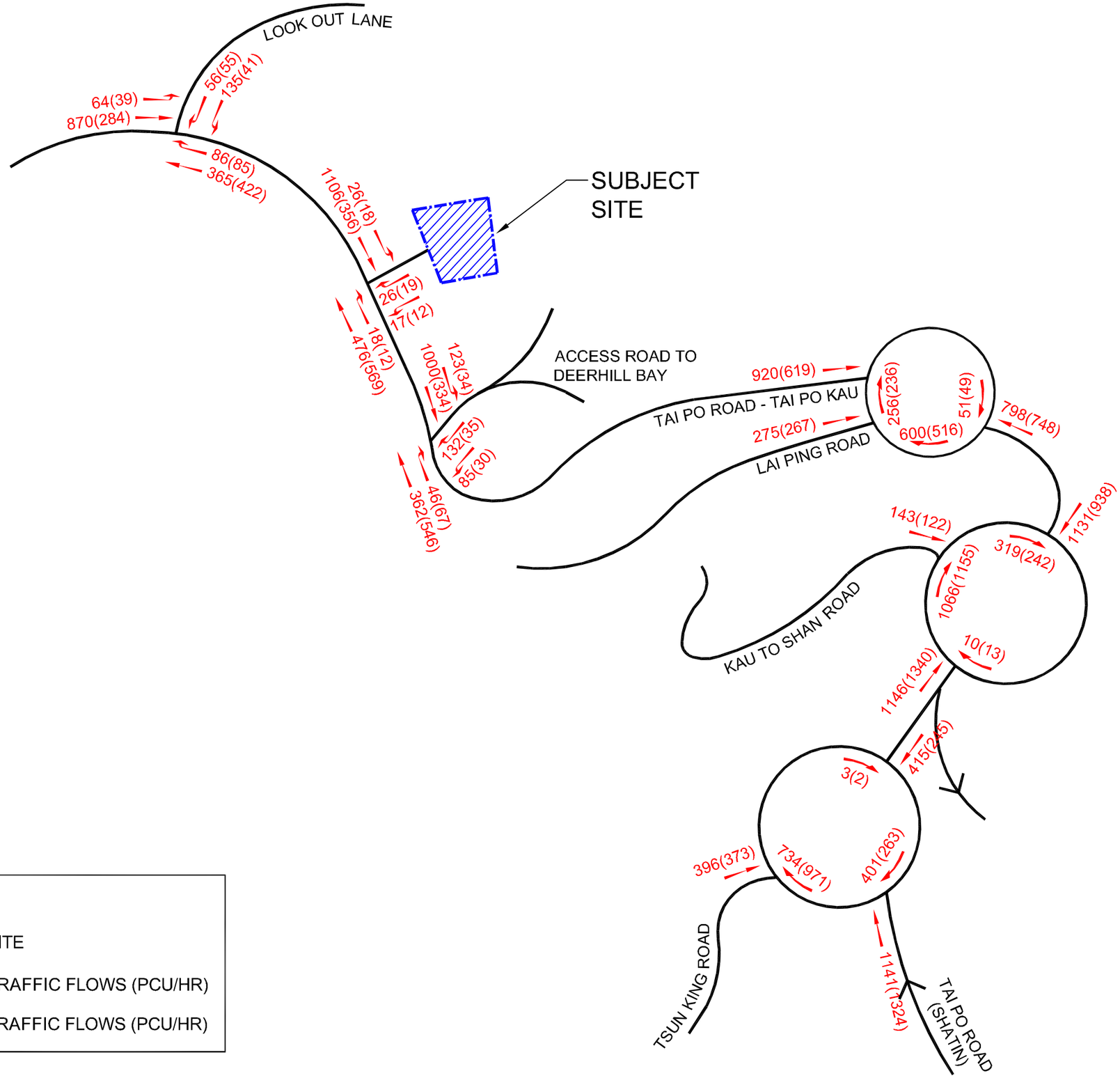

LEGEND:

	SUBJECT SITE
123	AM PEAK TRAFFIC FLOWS (PCU/HR)
(456)	PM PEAK TRAFFIC FLOWS (PCU/HR)

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Figure Title: 2033 DESIGN TRAFFIC FLOWS

Scale	Date	Figure No.
N. T. S.	FEB 2024	5.2

Project No.	CAD Ref.	Rev.
J1652	J1652/TIA1/F52B/2024-02-27	B

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No.	Peak	2033 Reference Flows (Ped/15min)	Flow Rate (Ped/min/m)	Level of Service (LOS)	2033 Design Flows (Ped/15min)	Flow Rate (Ped/min/m)	Level of Service (LOS)
P1	AM	29	2.15	A	147	10.89	A
	PM	16	1.19	A	117	8.67	A
P2	AM	53	3.93	A	171	12.67	A
	PM	27	2.00	A	128	9.48	A
P3	AM	14	0.27	A	132	2.51	A
	PM	15	0.29	A	116	2.21	A
P4	AM	14	0.93	A	132	8.80	A
	PM	15	1.00	A	116	7.73	A

BUS/GMB STOP
(TO SHATIN DIRECTION)

BUS/GMB STOP
(TO TAI PO DIRECTION)

P1

P2

P3

P4

TAI PO ROAD - TAI PO KAU

SUBJECT SITE

LEGEND:

- SUBJECT SITE
- PEDESTRIAN ROUTE
- P1 SURVEYED LOCATION

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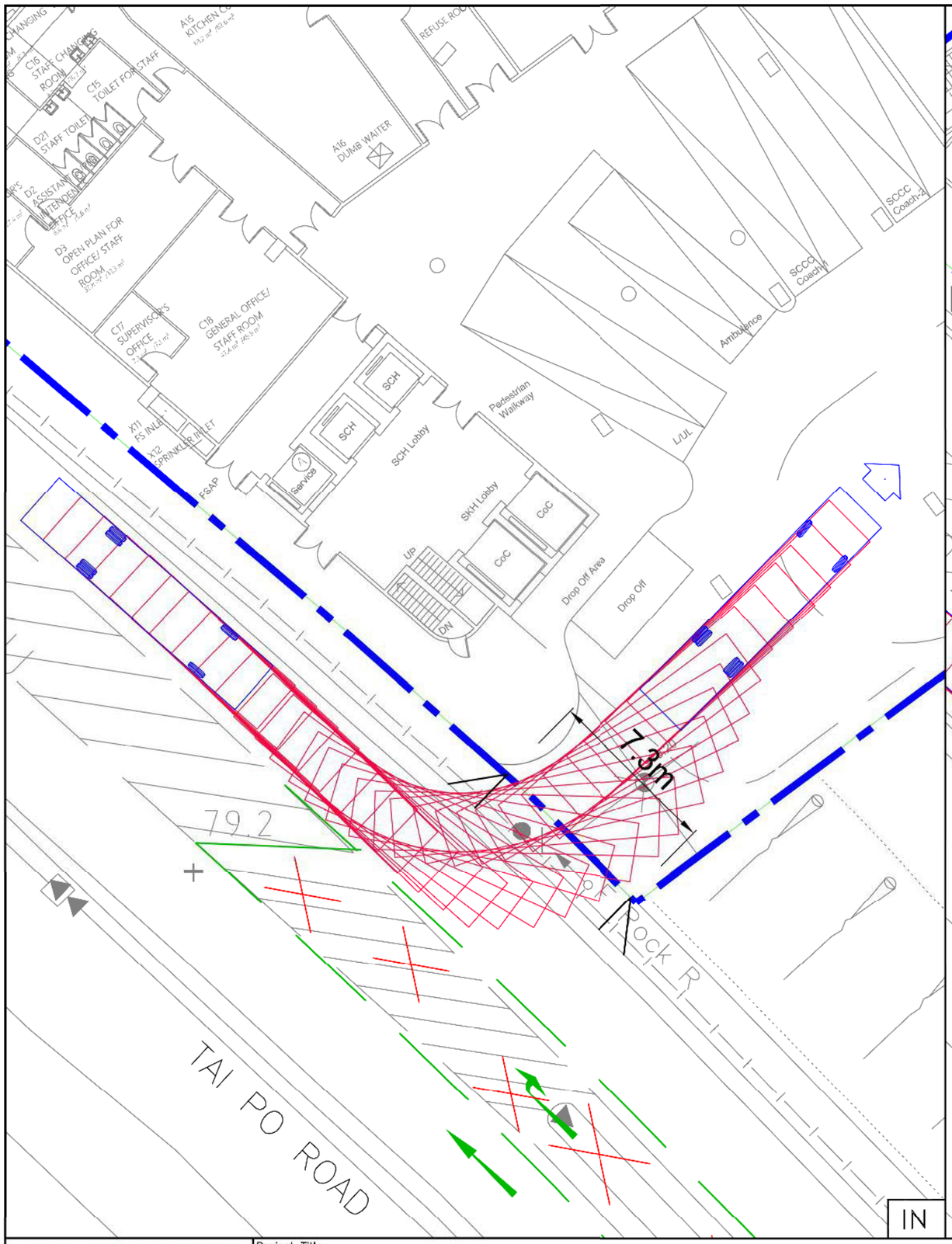
Project Title: TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO	Scale: 1 : 1500	Date: MAY 2022	Figure No.: 5.3
Figure Title: 2031 REFERENCE AND DESIGN PEDESTRIAN FLOWS	Project No.: J1652	CAD Ref.: J1652/TIA1/F53B/2024-02-15	Rev.: B

T:\04(Thu)2024-02-15\J1652-ca4\TIA1 2022-01-27\J1652-TIA1-F53B.dwg, 1:1

APPENDIX A

Swept Path Analysis



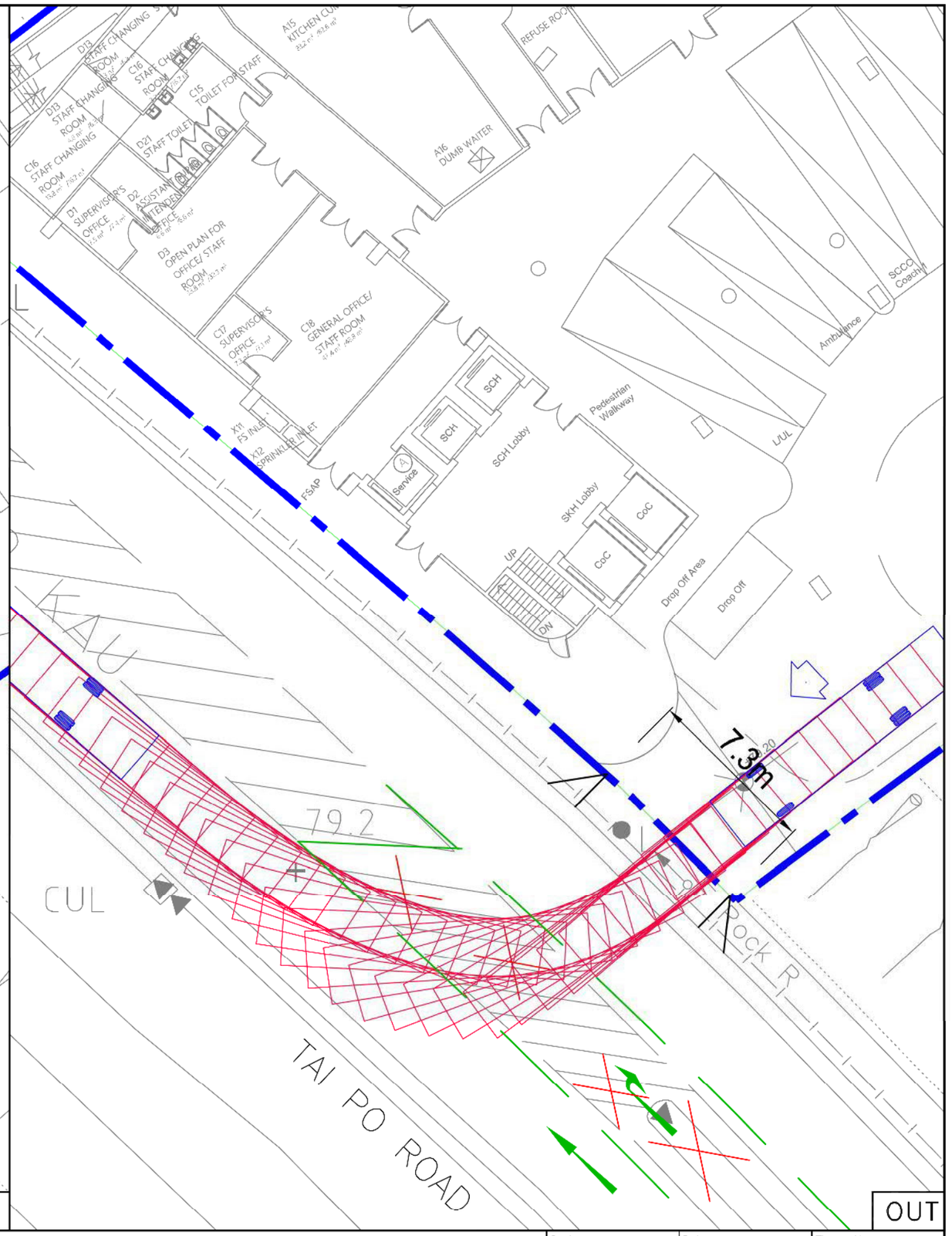


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Figure Title: SWEPT PATH ANALYSIS OF A 12m COACH TURNING INTO / OUT OF THE SUBJECT SITE	Project No.: J1652	CAD Ref.: J1652/TIA1/SP1/2024-02-28	Rev.: -

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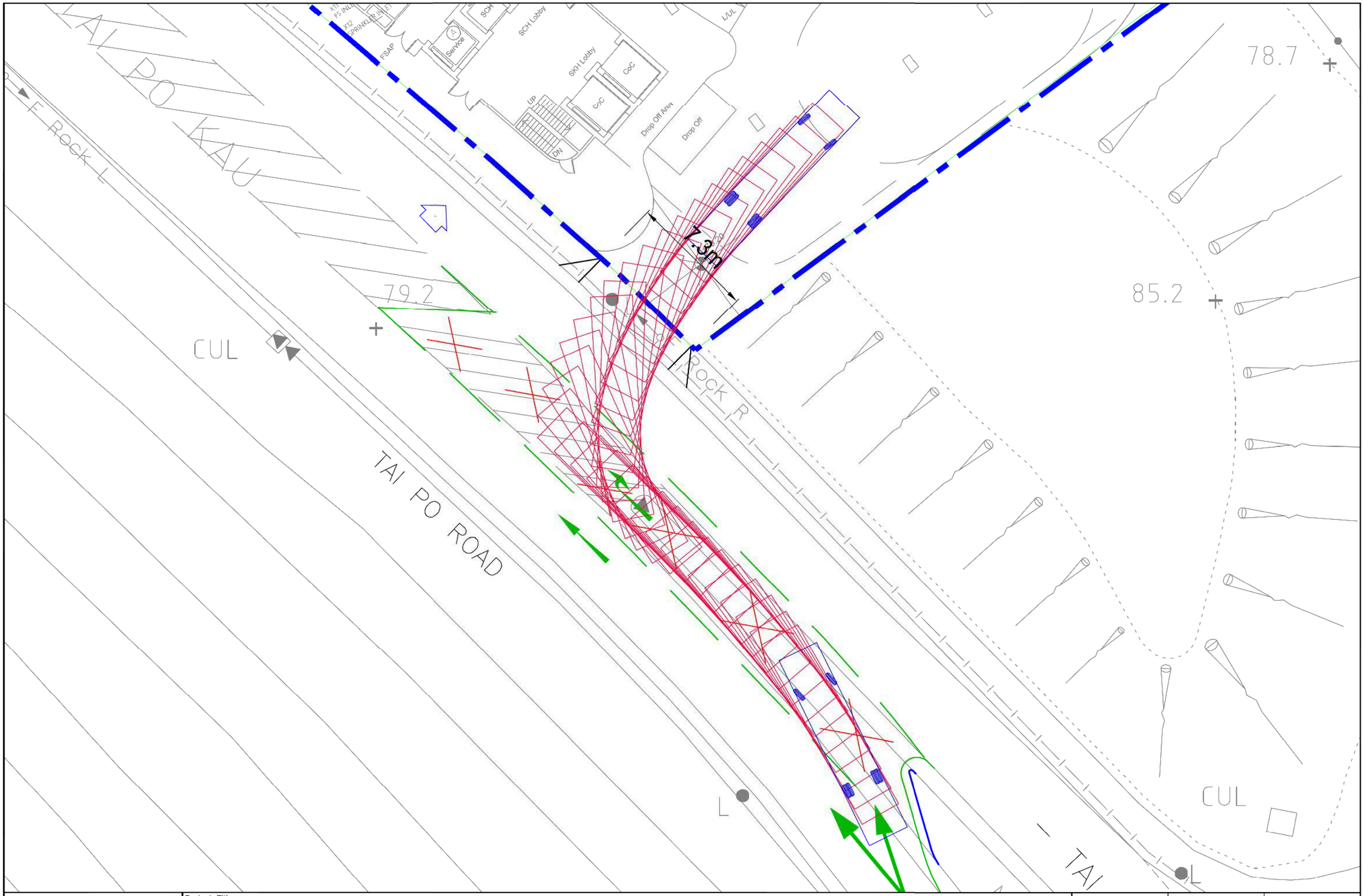
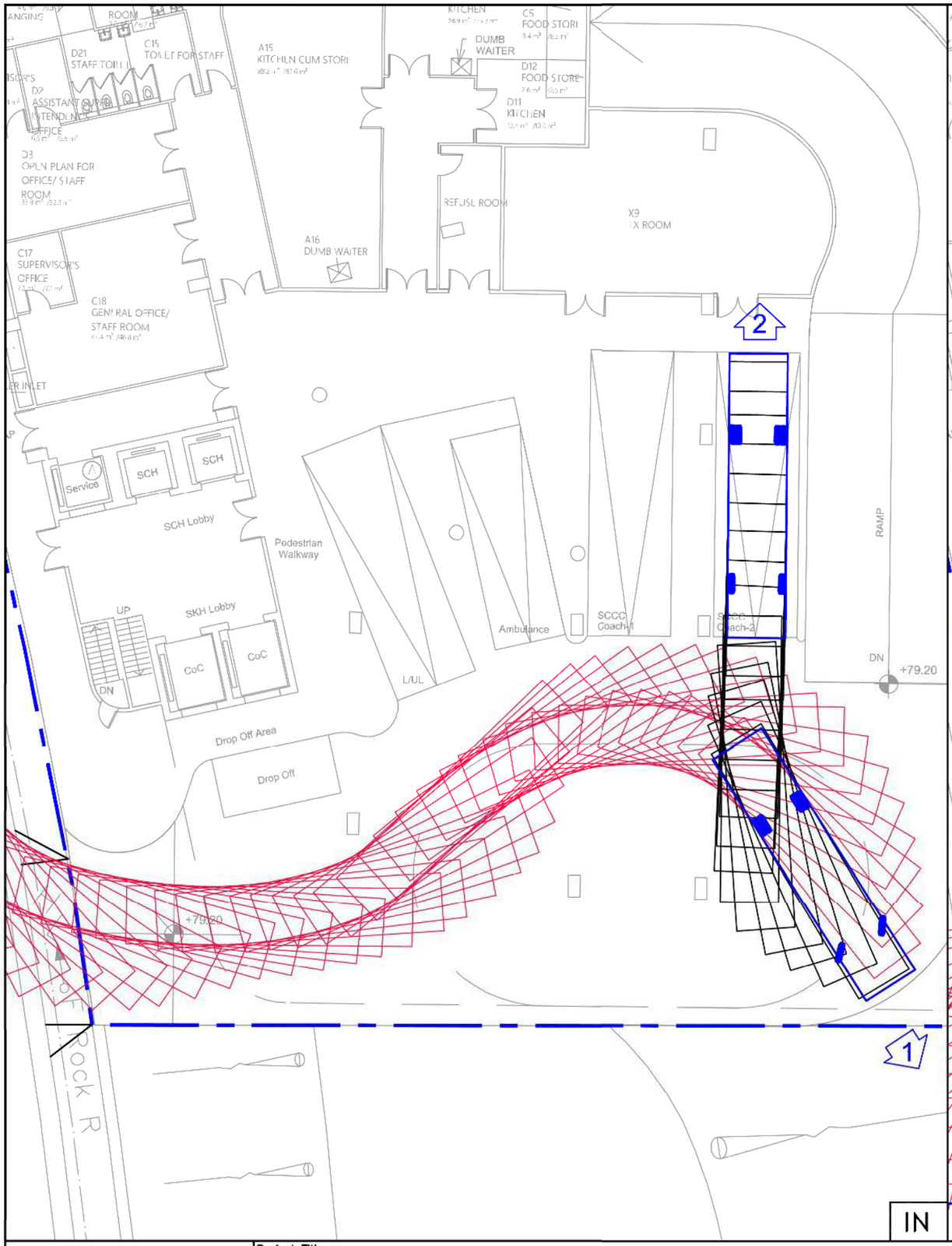
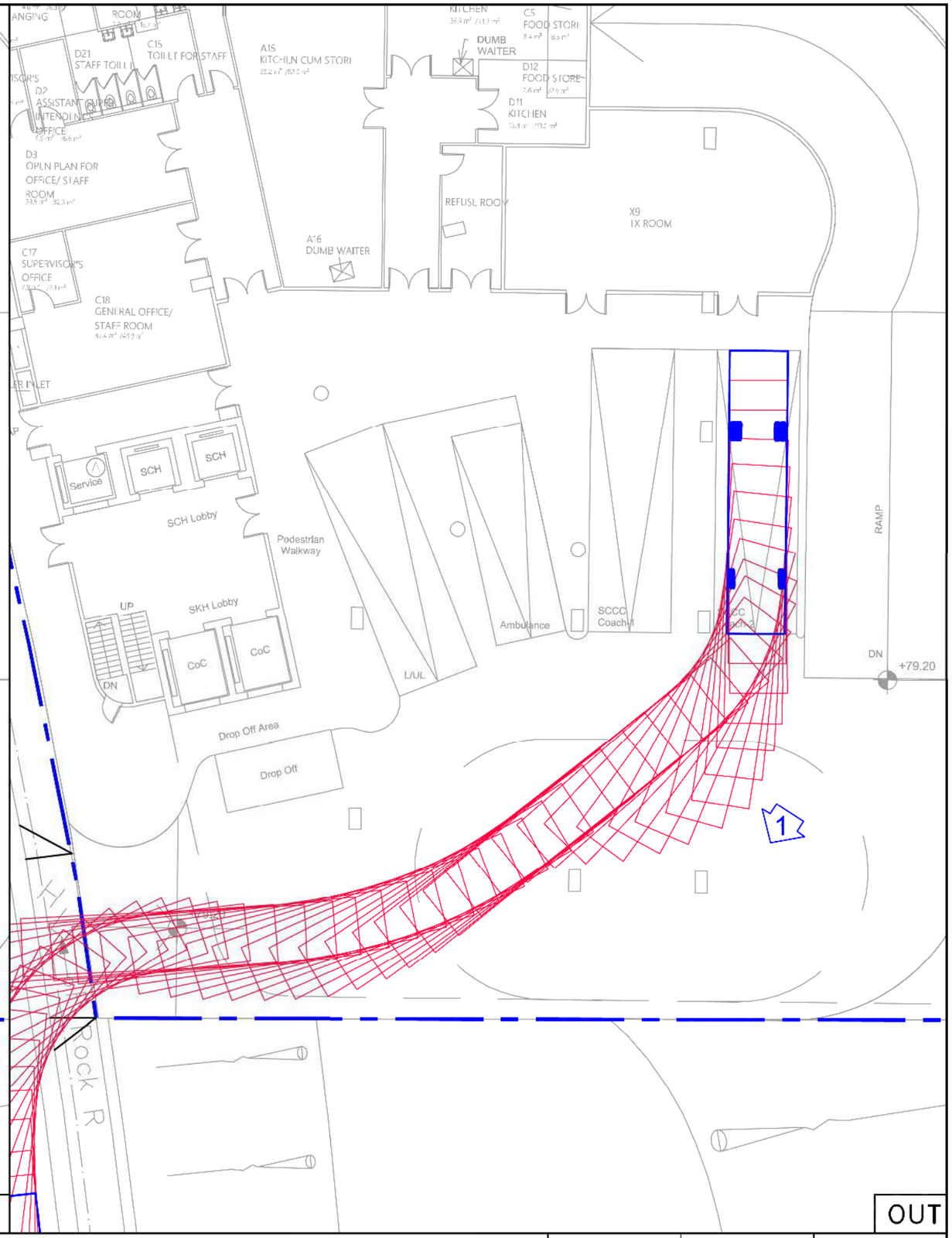


HWSPB 何黃
Traffic & Transportation Consultants
Ho Wang SPB Limited

Project Title: TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO	Scale: 1 : 200	Date: JUL 2024	Figure No.: SP2
Figure Title: SWEPT PATH ANALYSIS OF A 12m COACH TURNING INTO THE SUBJECT SITE	Project No.: J1652	CAD Ref.: J1652/TIA1/SP2/2024-07-30	Rev.: -

T:\02(Tue)\2024-07-30\J1652-cad\TIA1 2022-01-27\J1652-TIA1-SP2.dwg, 1:1





HWSPB 何黃
Traffic & Transportation Consultants
Ho Wang SPB Limited

Project Title: TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO	Scale: 1 : 200	Date: AUG 2024	Figure No.: SP3
Figure Title: SWEPT PATH ANALYSIS OF A 12m COACH TURNING INTO / OUT OF THE SUBJECT SITE	Project No.: J1652	CAD Ref.: J1652/TIA1/SP3toSP5/2024-08-14	Rev.: -

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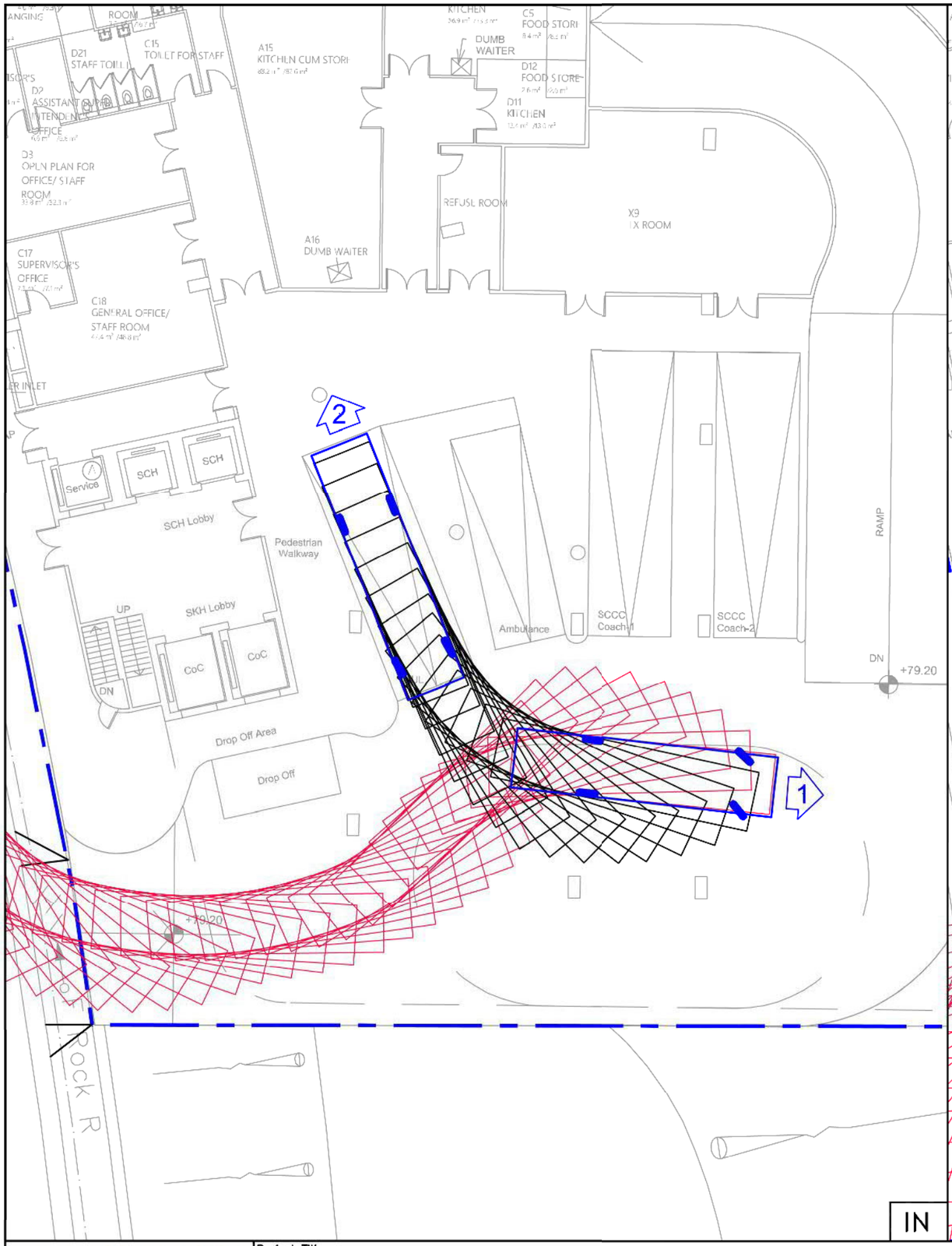

HWSPB 何黃 Traffic & Transportation Consultants Ho Wang SPB Limited	Project Title: TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO	Scale: 1 : 200	Date: AUG 2024	Figure No.: SP4
	Figure Title: SWEPT PATH ANALYSIS OF A 11m HGV TURNING INTO / OUT OF THE SUBJECT SITE	Project No.: J1652	CAD Ref.: J1652/TIA1/SP3toSP5/2024-08-14	Rev.: -

T:\03\Wed\2024-08-14\J1652-cad\TIA1 2022-0'-27\J1652-TIA1 -SP3toSP5.dwg, User, Adobe PDF - A3.pc3

RAMP

MT-1
MT-2

X10
Main Switch Room

PV-1
PV-2
PV-3
PV-4
PV-5
PV-6
PV-7

D8
LAUNDRY

SCH
SCH

Pedestrian
Walkway

Lift Lobby

+73.90

UP

CoC
CoC

CoC
LB-1

CoC
LB-2

LGV

X3
Water Meter Cabinet

X1
Electrical Meter
Room

X4
Sewage Treatment
Plant Room

X2
Fresh & Flushing
Water Tank and
Pump Room

X8
TBE Room

X5
Carpark Fan Room

X7
FS Water Tank and
Pump Room

1

2

IN

OUT

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HWSPB 何黃
Traffic & Transportation Consultants
Ho Wang SPB Limited

Project Title
TECHNICAL FEASIBILITY STUDY (TFS) FOR THE PROPOSED DEVELOPMENT OF HONG KONG SHENG KUNG HUI ST. CHRISTOPHER'S COMPLEX AT THE REMAINING PORTION OF TAXLORD LOT NO. T77 IN D.D.34. TAI PO

Figure Title
SWEPT PATH ANALYSIS OF A 7.8m LIGHT BUS TURNING INTO / OUT OF THE PARKING SPACE

Scale	Date	Figure No.
1 : 200	AUG 2024	SP5

Project No.	CAD Ref.	Rev.
J1652	J1652/TIA1/SP5/2024-08-14	-

APPENDIX B

Traffic Assessment for The Junction of Tai Po Road – Tai Po Kau And Access Road to Deerhill Bay (J1) During 2022 Observed School Peak Period

1. APPENDIX B

1.1 Background

1.1.1 It is observed that the peak hour traffic flow of the junction of Tai Po Road – Tai Po Kau and Access Road to Deerhill Bay (J1) is different from local road network due to traffic generated by nearby schools. An additional traffic review for J1 during school time peak period (AM) is conducted

1.2 Additional Traffic Survey

1.2.1 In order to review the existing traffic conditions, an additional vehicular traffic count survey was carried out on typical school weekday (under normal school traffic condition without zoom classes and without work from home arrangement) in 14 September 2022 (Wed) during the AM (07:30-09:30) and PM (17:00-19:00) peak periods.

1.2.2 The observed peak periods and traffic flows are presented in **Table 1.1** and **Table 1.2** respectively.

Table 1.1 2022 Observed Peak Hour at J1

Period	Local Peak Peak Hour	J1 Peak Hour
AM	08:15 – 09:15	07:45 – 08:45
PM	17:45 – 18:45	17:30 – 18:30

Table 1.2 2022 Observed Vehicular Flow at J1

Period (15 minutes)	Observed Vehicular Flow
0730-0745	262
0745-0800	279
0800-0815	377
0815-0830	364
0830-0845	300
0845-0900	191
0900-0915	202
0915-0930	140
1700-1715	146
1715-1730	155
1730-1745	212
1745-1800	128
1800-1815	184
1815-1830	187
1830-1845	163
1845-1900	139

1.2.3 The survey result shows that the AM peak period at the junction of Tai Po Road – Tai Po Kau and Access Road to Deerhill Bay (J1) is different from the local AM peak period (08:15 – 09:15). It is noted that there is a local traffic surge occurred at around 08:00 – 08:15 and 17:30 – 17:45 hours. A traffic surge factor is derived for conservative assessment as summarized in **Table 1.3**.

Table 1.3 Traffic Surge Factor

Period	Observed Peak Hour Flow at J1 [A]	Observed Peak 15-minutes Flow at J1 during J1 Traffic Surge [B]	Surge Factor = ([B]x4)/[A]
AM	1320 (07:45–08:45)	377 (08:00-08:15)	1.14
PM	711 (17:30-18:30)	212 (17:30-18:30)	1.19

1.2.4 Based on the survey result, a surge factor of 1.14 and 1.19 for AM and PM peak is adopted for conversative analysis.

1.3 Junction Capacity Performance at AM School Peak Hour

1.3.1 Based on the 2022 adjusted peak hour traffic flows, the junction capacity analysis for J1 during the observed school peak period is assessed and the results is presented in **Table 1.3**.

Table 1.4 2022 Junction Operational Performance

No.	Junction	Junction Type	2022 Weekday	
			AM Peak	PM Peak
J1	Tai Po Road – Tai Po Kau / Access Road to Deerhill Bay	Priority (DFC)	0.399	0.093

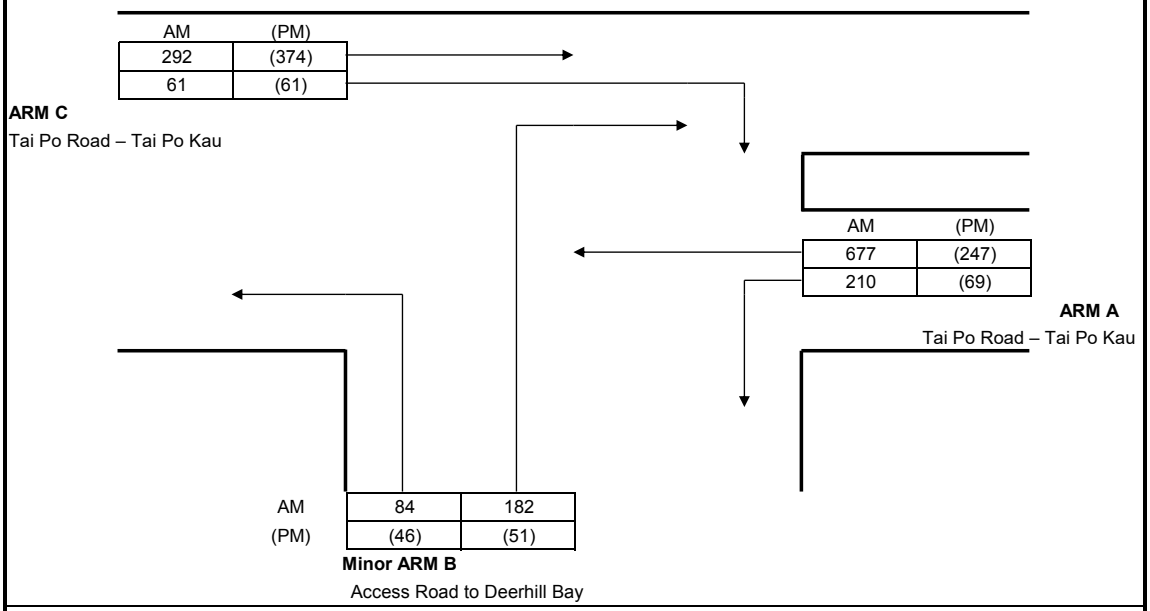
Note: DFC – Design flow/ Capacity ratio for priority junction and roundabout.

1.3.2 The results of the junction performance enclosed show that junction of Tai Po Road – Tai Po Kau/ Access Road to Deerhill Bay (J1) are currently operating with ample junction capacity during school peak period with traffic surge.

Simplified Priority Junction Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po				
Junction:	Tai Po Road – Tai Po Kau / Access Road to Deerhill Bay			Ref. No.:	J1
Scheme:	2022 Observed School Peak			Ref. No.:	
Year:	2022	Job No.:	J1652	Rev.:	-
ARM A:	Tai Po Road – Tai Po Kau				
ARM B:	Access Road to Deerhill Bay				
ARM C:	Tai Po Road – Tai Po Kau				



GEOMETRY

Major road width	W	11.00	Lane widths	w(b-a)	4.00
Central Reserve width	Wcr	5.00		w(b-c)	3.30
2 Lane Minor Arm (Y/N)		Y		w(c-b)	5.00
Visibilities	Vr(b-a)	100	Calculated	D	0.98
	Vl(b-a)	100		E	0.93
	Vr(b-c)	80		F	1.06
	Vr(c-b)	50		Y	0.62

ANALYSIS

			AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		292	374
	q(c-b)		61	61
	q(a-b)		210	69
	q(a-c)		677	247
	q(b-a)		182	51
	q(b-c)		84	46
	f		0.32	0.47
		Factor		
CAPACITIES	Q(b-a)	1	457	553
	Q(b-c)	1	534	637
	Q(c-b)	1	575	711
	Q(b-ac)	1	479	589
RFC's	b-a		0.399	0.093
	b-c		0.158	0.072
	c-b		0.105	0.086
	b-ac		0.000	0.000
Worst RFC			**0.399**	**0.093**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	JL	Date:	Dec-22	Checked by:	TA

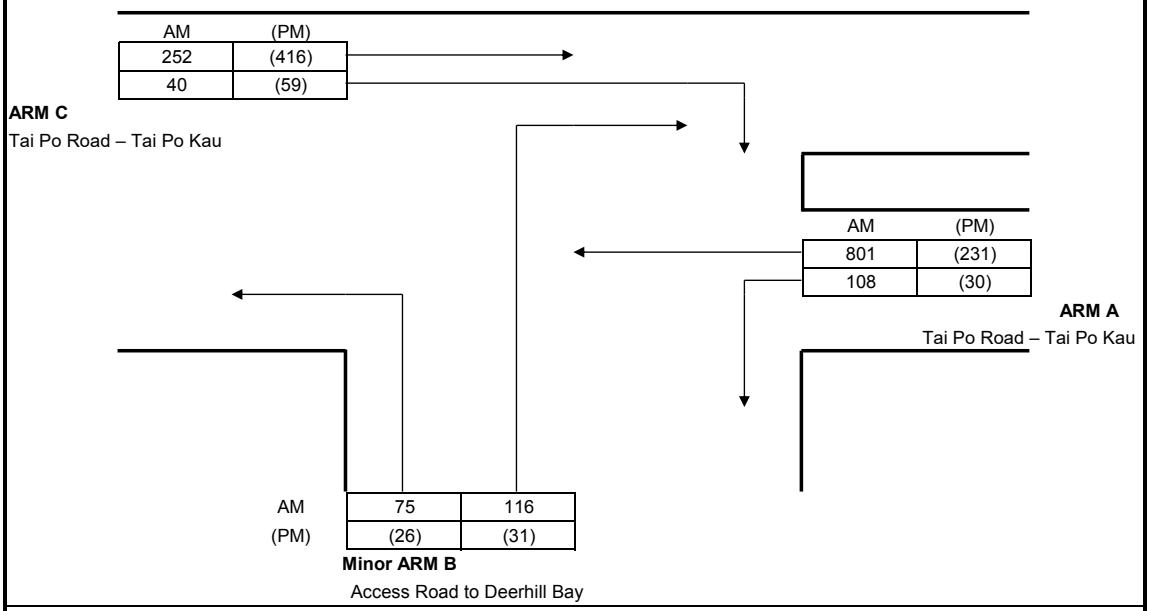
APPENDIX C

JUNCTION PERFORMANCE CALCULATION SHEETS

Simplified Priority Junction Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po				
Junction:	Tai Po Road – Tai Po Kau / Access Road to Deerhill Bay			Ref. No.:	J1
Scheme:	2021 Observed			Ref. No.:	
Year:	2021	Job No.:	J1652	Rev.:	I3
ARM A:	Tai Po Road – Tai Po Kau				
ARM B:	Access Road to Deerhill Bay				
ARM C:	Tai Po Road – Tai Po Kau				



GEOMETRY

Major road width	W	11.00	Lane widths	w(b-a)	4.00
Central Reserve width	Wcr	5.00		w(b-c)	3.30
2 Lane Minor Arm (Y/N)		Y		w(c-b)	5.00
Visibilities	Vr(b-a)	100	Calculated	D	0.98
	Vl(b-a)	100		E	0.93
	Vr(b-c)	80		F	1.06
	Vr(c-b)	50		Y	0.62

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		252	416
	q(c-b)		40	59
	q(a-b)		108	30
	q(a-c)		801	231
	q(b-a)		116	31
	q(b-c)		75	26
	f		0.39	0.46
CAPACITIES	Q(b-a)	1	450	555
	Q(b-c)	1	517	643
	Q(c-b)	1	570	724
	Q(b-ac)	1	474	592
RFC's	b-a		0.258	0.056
	b-c		0.145	0.040
	c-b		0.070	0.081
	b-ac		0.000	0.000
Worst RFC			**0.258**	**0.081**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

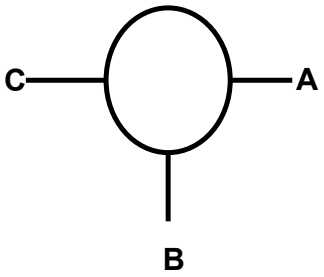
Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title: TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po			
Junction: Tai Po Road – Tai Po Kau / Kau To Shan Road		Ref. No.:	J2
Scheme: 2021 Observed		Ref. No.:	
Year: 2021	Job No.: J1652	Rev.:	-

AM PM

ARM A: Tai Po Road – Tai Po Kau
ARM B: Kau To Shan Road
ARM C: Tai Po Road – Tai Po Kau



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	6.50	7.80	16	9	36	50	0.13
B	4.80	8.20	18	75	36	46	0.30
C	5.20	8.00	8	53	36	50	0.56

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	9	944
B	0	0	0	873	125
C	0	0	0	280	912

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	11	1106
B	0	0	0	943	107
C	0	0	0	213	768

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.87	7.53	0.09	2282	1.46	0.77	1981	1980	0.48	0.56
B	0.98	6.92	0.09	2096	1.46	0.73	1430	1380	0.09	0.08
C	0.96	6.52	0.09	1976	1.46	0.71	1709	1755	0.53	0.44

Critical Arm: **C** **A**
RFC: **0.53** **0.56**
AM **PM**

- In accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

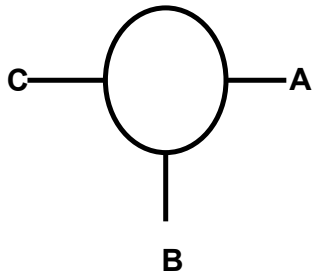
Job Title: TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po			
Junction: Tai Po Road – Sha Tin / Tsun King Road		Ref. No.:	J3
Scheme: 2021 Observed		Ref. No.:	
Year: 2021	Job No.: J1652	Rev.:	-

AM PM

ARM A: Tai Po Road – Sha Tin

ARM B: Tai Po Road – Sha Tin

ARM C: Tsun King Road



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	3.30	7.60	13.5	40	38	40	0.51
B	7.60	9.40	9.6	12	38	60	0.30
C	7.80	8.20	1	100	38	30	0.64

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	3	364
B	0	0	0	352	944
C	0	0	0	587	343

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	2	215
B	0	0	0	231	1095
C	0	0	0	786	324

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.99	5.43	0.11	1645	1.45	0.64	1626	1627	0.22	0.13
B	0.86	8.73	0.11	2644	1.45	0.84	2028	2116	0.47	0.52
C	1.04	7.98	0.11	2417	1.45	0.79	2029	1866	0.17	0.17

Critical Arm: **B** **B**

RFC: **0.47** **0.52**

- In accordance with TPDM V2.4

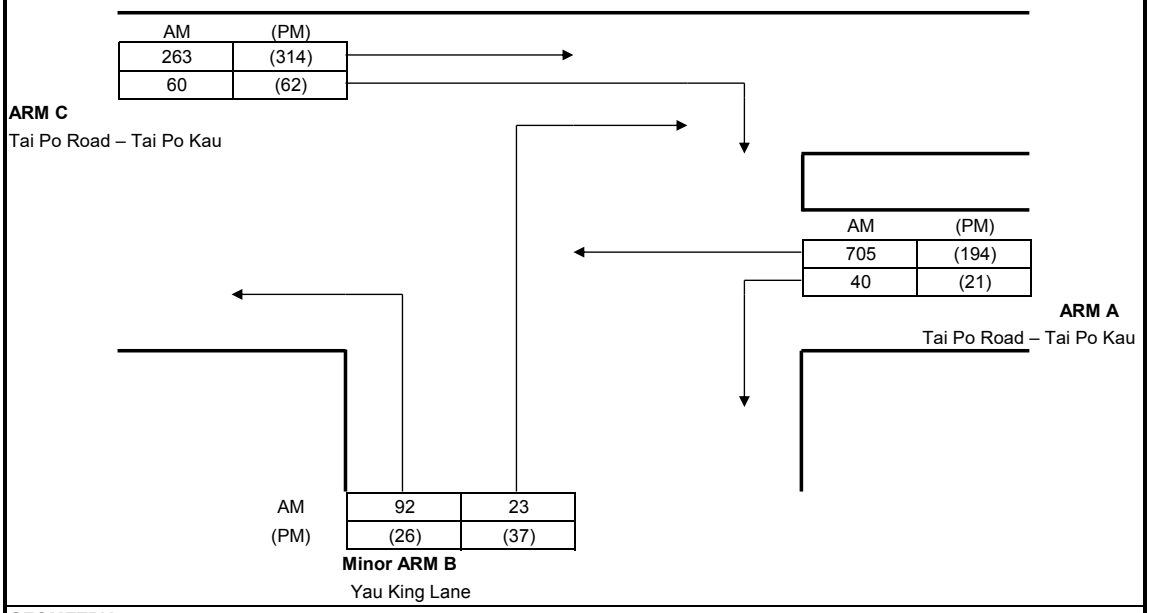
AM **PM**

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

Simplified Priority Junction Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po				
Junction:	Tai Po Road – Tai Po Kau / Yau King Lane			Ref. No.:	J4
Scheme:	2021 Observed			Ref. No.:	
Year:	2021	Job No.:	J1652	Rev.:	I3
ARM A:	Tai Po Road – Tai Po Kau				
ARM B:	Yau King Lane				
ARM C:	Tai Po Road – Tai Po Kau				



GEOMETRY

Major road width	W	9.00	Lane widths	w(b-a)	3.60
Central Reserve width	Wcr	1.00		w(b-c)	3.60
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.60
Visibilities	Vr(b-a)	70	Calculated	D	0.90
	Vl(b-a)	70		E	0.95
	Vr(b-c)	70		F	0.92
	Vr(c-b)	40		Y	0.69

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		263	314
	q(c-b)		60	62
	q(a-b)		40	21
	q(a-c)		705	194
	q(b-a)		23	37
	q(b-c)		92	26
	f		0.80	0.41
CAPACITIES	Q(b-a)	1	359	469
	Q(b-c)	1	536	660
	Q(c-b)	1	515	638
	Q(b-ac)	1	488	531
RFC's	b-a		0.064	0.080
	b-c		0.172	0.039
	c-b		0.116	0.097
	b-ac		0.236	0.119
Worst RFC			**0.236**	**0.119**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

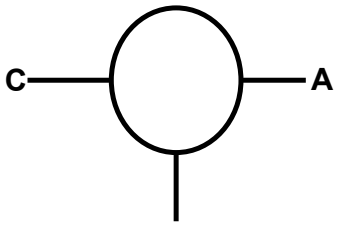
Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	Consultancy Services for New Teaching Research Complex in Tai Po Area 39 - The Chinese University of Hong Kong		
Junction:	Tai Po Road - Ma Liu Shui / Lai Ping Road	Ref. No.:	J5
Scheme:	2024 Observed	Ref. No.:	
Year:	2024	Job No.: J1652	Rev.: I3

AM PM

ARM A: Tai Po Road - Ma Liu Shui
ARM B: Lai Ping Road
ARM C: Tai Po Road - Ma Liu Shui



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	3.30	4.20	8	30	30	40	0.18
B	4.00	4.20	2	20	30	40	0.16
C	4.50	4.60	2	100	30	25	0.08

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	2	182	455	45	639
B	223	0	18	465	241
C	682	37	8	225	727

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	6	226	354	43	586
B	201	0	33	383	234
C	445	20	23	207	488

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.98	3.96	0.05	1200	1.48	0.56	1154	1155	0.55	0.51
B	0.97	4.15	0.05	1258	1.48	0.57	960	1004	0.25	0.23
C	1.06	4.59	0.05	1390	1.48	0.59	1327	1338	0.55	0.36

Critical Arm: **A** **A**
RFC: **0.55** **0.51**
AM **PM**

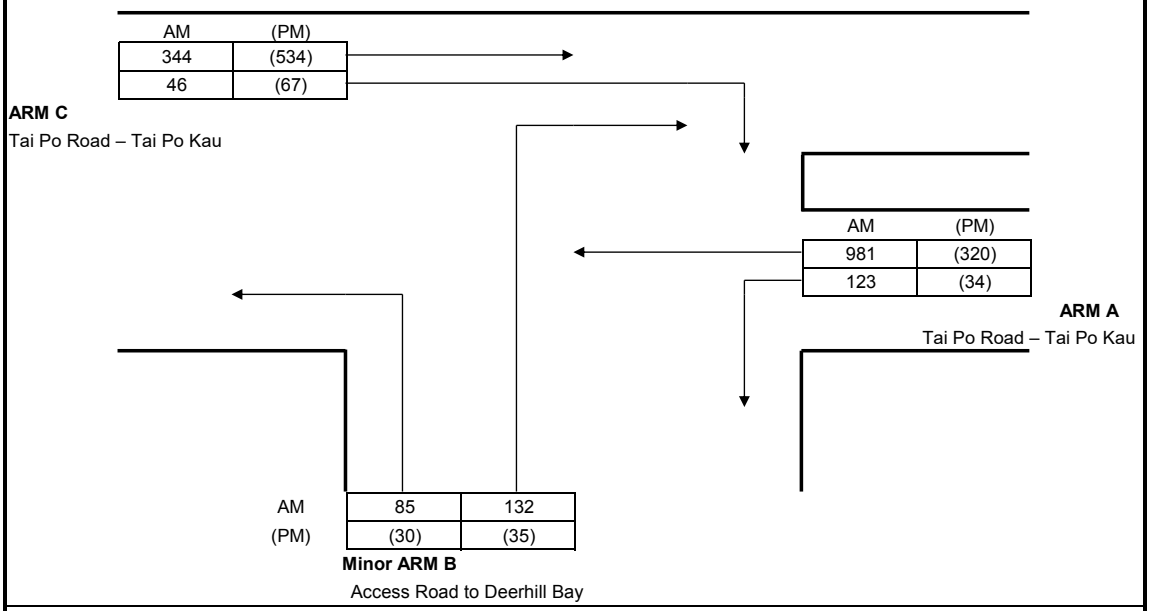
- In accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

Simplified Priority Junction Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po				
Junction:	Tai Po Road – Tai Po Kau / Access Road to Deerhill Bay			Ref. No.:	J1R
Scheme:	2033 Reference			Ref. No.:	
Year:	2033	Job No.:	J1652	Rev.:	I3
ARM A:	Tai Po Road – Tai Po Kau				
ARM B:	Access Road to Deerhill Bay				
ARM C:	Tai Po Road – Tai Po Kau				



GEOMETRY

Major road width	W	11.00	Lane widths	w(b-a)	4.00
Central Reserve width	Wcr	5.00		w(b-c)	3.30
2 Lane Minor Arm (Y/N)		Y		w(c-b)	5.00
Visibilities	Vr(b-a)	100	Calculated	D	0.98
	Vl(b-a)	100		E	0.93
	Vr(b-c)	80		F	1.06
	Vr(c-b)	50		Y	0.62

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		344	534
	q(c-b)		46	67
	q(a-b)		123	34
	q(a-c)		981	320
	q(b-a)		132	35
	q(b-c)		85	30
	f		0.39	0.46
CAPACITIES	Q(b-a)	1	394	516
	Q(b-c)	1	478	624
	Q(c-b)	1	523	702
	Q(b-ac)	1	423	561
RFC's	b-a		0.335	0.068
	b-c		0.178	0.048
	c-b		0.088	0.095
	b-ac		0.000	0.000
Worst RFC			**0.335**	**0.095**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

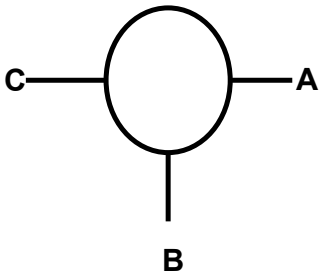
Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title: TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po			
Junction: Tai Po Road – Tai Po Kau / Kau To Shan Road		Ref. No.:	J2R
Scheme: 2033 Reference		Ref. No.:	
Year: 2033	Job No.: J1652	Rev.:	-

AM PM

ARM A: Tai Po Road – Tai Po Kau
ARM B: Kau To Shan Road
ARM C: Tai Po Road – Tai Po Kau



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	6.50	7.80	16	9	36	50	0.13
B	4.80	8.20	18	75	36	46	0.30
C	5.20	8.00	8	53	36	50	0.56

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	10	1128
B	0	0	0	1048	143
C	0	0	0	319	1112

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	13	1328
B	0	0	0	1143	122
C	0	0	0	242	924

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.87	7.53	0.09	2282	1.46	0.77	1981	1979	0.57	0.67
B	0.98	6.92	0.09	2096	1.46	0.73	1305	1237	0.11	0.10
C	0.96	6.52	0.09	1976	1.46	0.71	1682	1735	0.66	0.53

Critical Arm:	**C**	**A**
RFC:	**0.66**	**0.67**
	AM	**PM**

- In accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

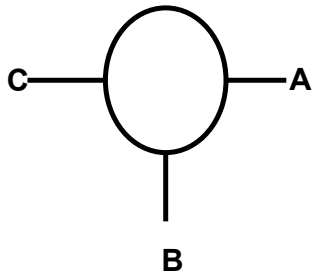
Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title: TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po			
Junction: Tai Po Road – Sha Tin / Tsun King Road		Ref. No.:	J3R
Scheme: 2033 Reference		Ref. No.:	
Year: 2033	Job No.: J1652	Rev.:	-

AM PM

ARM A: Tai Po Road – Sha Tin
ARM B: Tai Po Road – Sha Tin
ARM C: Tsun King Road



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	3.30	7.60	13.5	40	38	40	0.51
B	7.60	9.40	9.6	12	38	60	0.30
C	7.80	8.20	1	100	38	30	0.64

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	3	415
B	0	0	0	401	1128
C	0	0	0	721	391

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	2	245
B	0	0	0	263	1316
C	0	0	0	963	369

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.99	5.43	0.11	1645	1.45	0.64	1626	1627	0.26	0.15
B	0.86	8.73	0.11	2644	1.45	0.84	1993	2092	0.57	0.63
C	1.04	7.98	0.11	2417	1.45	0.79	1919	1720	0.20	0.21

Critical Arm: **B** **B**
RFC: **0.57** **0.63**
AM **PM**

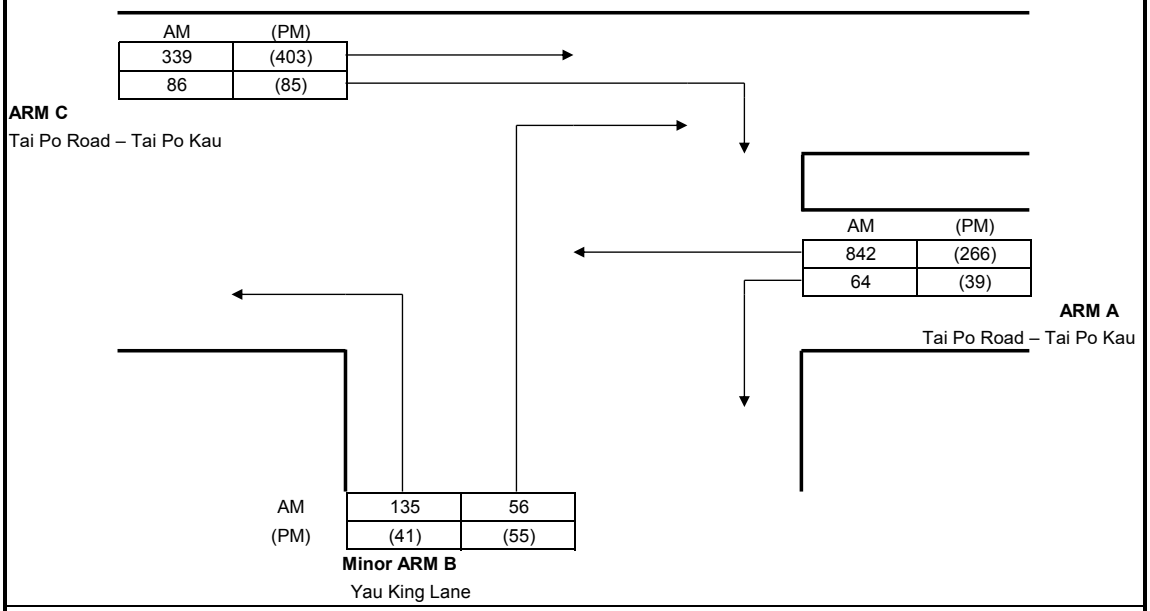
- In accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

Simplified Priority Junction Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po				
Junction:	Tai Po Road – Tai Po Kau / Yau King Lane			Ref. No.:	J4R
Scheme:	2033 Reference			Ref. No.:	
Year:	2033	Job No.:	J1652	Rev.:	I3
ARM A:	Tai Po Road – Tai Po Kau				
ARM B:	Yau King Lane				
ARM C:	Tai Po Road – Tai Po Kau				



GEOMETRY

Major road width	W	9.00	Lane widths	w(b-a)	3.60
Central Reserve width	Wcr	1.00		w(b-c)	3.60
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.60
Visibilities	Vr(b-a)	70	Calculated	D	0.90
	Vl(b-a)	70		E	0.95
	Vr(b-c)	70		F	0.92
	Vr(c-b)	40		Y	0.69

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		339	403
	q(c-b)		86	85
	q(a-b)		64	39
	q(a-c)		842	266
	q(b-a)		56	55
	q(b-c)		135	41
	f		0.71	0.43
CAPACITIES	Q(b-a)	1	307	431
	Q(b-c)	1	501	641
	Q(c-b)	1	478	617
	Q(b-ac)	1	423	501
RFC's	b-a		0.182	0.128
	b-c		0.269	0.064
	c-b		0.180	0.138
	b-ac		0.452	0.192
Worst RFC			**0.452**	**0.192**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

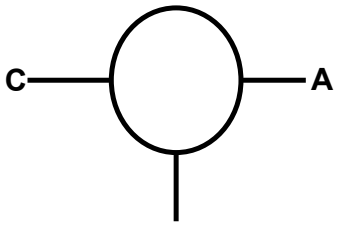
Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	Consultancy Services for New Teaching Research Complex in Tai Po Area 39 - The Chinese University of Hong Kong		
Junction:	Tai Po Road - Ma Liu Shui / Lai Ping Road	Ref. No.:	J5R
Scheme:	2033 Reference	Ref. No.:	
Year:	2033	Job No.: J1652	Rev.: I3

AM PM

ARM A: Tai Po Road - Ma Liu Shui
ARM B: Lai Ping Road
ARM C: Tai Po Road - Ma Liu Shui



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	3.30	4.20	8	30	30	40	0.18
B	4.00	4.20	2	20	30	40	0.16
C	4.50	4.60	2	100	30	25	0.08

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	2	207	571	51	780
B	254	0	21	582	275
C	850	42	9	256	901

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	7	258	471	49	736
B	229	0	38	504	267
C	556	23	26	236	605

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.98	3.96	0.05	1200	1.48	0.56	1151	1152	0.68	0.64
B	0.97	4.15	0.05	1258	1.48	0.57	895	938	0.31	0.28
C	1.06	4.59	0.05	1390	1.48	0.59	1307	1320	0.69	0.46

Critical Arm:	**C**	**A**
RFC:	**0.69**	**0.64**
	AM	**PM**

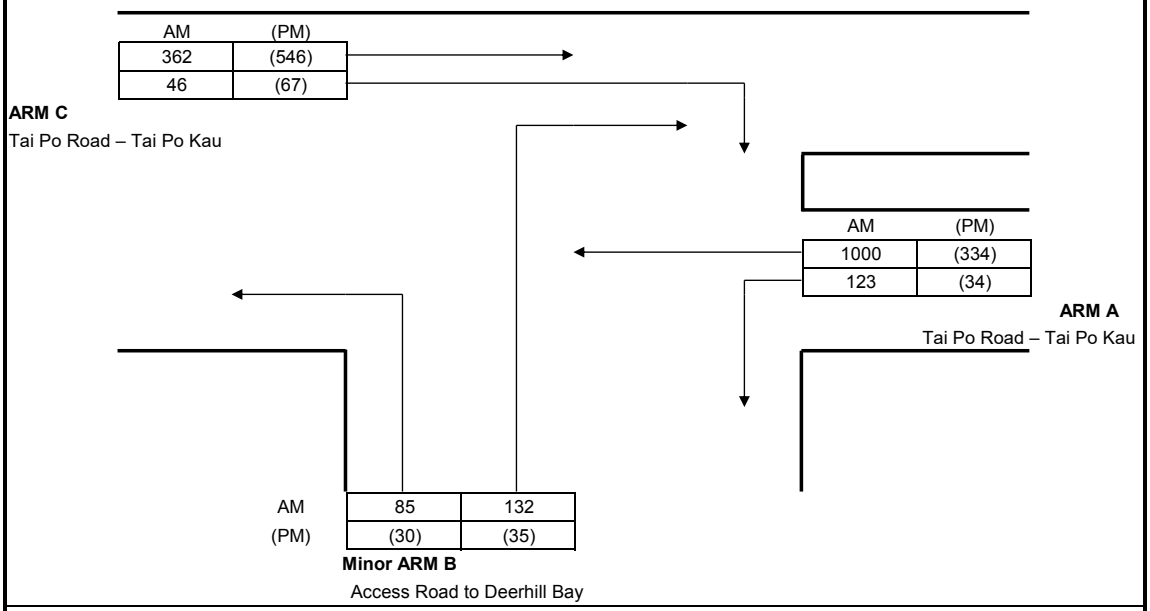
- In accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

Simplified Priority Junction Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po				
Junction:	Tai Po Road – Tai Po Kau / Access Road to Deerhill Bay			Ref. No.:	J1D
Scheme:	2033 Design			Ref. No.:	
Year:	2033	Job No.:	J1652	Rev.:	I3
ARM A:	Tai Po Road – Tai Po Kau				
ARM B:	Access Road to Deerhill Bay				
ARM C:	Tai Po Road – Tai Po Kau				



GEOMETRY

Major road width	W	11.00	Lane widths	w(b-a)	4.00
Central Reserve width	Wcr	5.00		w(b-c)	3.30
2 Lane Minor Arm (Y/N)		Y		w(c-b)	5.00
Visibilities	Vr(b-a)	100	Calculated	D	0.98
	Vl(b-a)	100		E	0.93
	Vr(b-c)	80		F	1.06
	Vr(c-b)	50		Y	0.62

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		362	546
	q(c-b)		46	67
	q(a-b)		123	34
	q(a-c)		1000	334
	q(b-a)		132	35
	q(b-c)		85	30
	f		0.39	0.46
CAPACITIES	Q(b-a)	1	388	511
	Q(b-c)	1	474	621
	Q(c-b)	1	519	699
	Q(b-ac)	1	418	557
RFC's	b-a		0.340	0.068
	b-c		0.179	0.048
	c-b		0.089	0.096
	b-ac		0.000	0.000
Worst RFC			**0.340**	**0.096**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

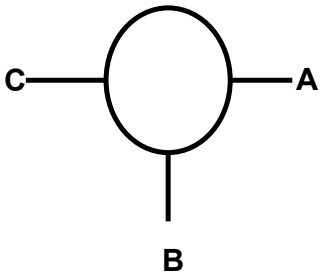
Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title: TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po			
Junction: Tai Po Road – Tai Po Kau / Kau To Shan Road		Ref. No.:	J2D
Scheme: 2033 Design		Ref. No.:	
Year: 2033	Job No.: J1652	Rev.:	-

AM PM

ARM A: Tai Po Road – Tai Po Kau
ARM B: Kau To Shan Road
ARM C: Tai Po Road – Tai Po Kau



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	6.50	7.80	16	9	36	50	0.13
B	4.80	8.20	18	75	36	46	0.30
C	5.20	8.00	8	53	36	50	0.56

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	10	1146
B	0	0	0	1066	143
C	0	0	0	319	1131

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	13	1340
B	0	0	0	1155	122
C	0	0	0	242	938

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.87	7.53	0.09	2282	1.46	0.77	1981	1979	0.58	0.68
B	0.98	6.92	0.09	2096	1.46	0.73	1292	1229	0.11	0.10
C	0.96	6.52	0.09	1976	1.46	0.71	1682	1735	0.67	0.54

Critical Arm: **C** **A**
RFC: **0.67** **0.68**
AM **PM**

- In accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

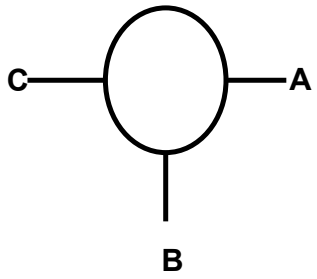
Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title: TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po			
Junction: Tai Po Road – Sha Tin / Tsun King Road		Ref. No.:	J3D
Scheme: 2033 Design		Ref. No.:	
Year: 2033	Job No.: J1652	Rev.:	-

AM PM

ARM A: Tai Po Road – Sha Tin
ARM B: Tai Po Road – Sha Tin
ARM C: Tsun King Road



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	3.30	7.60	13.5	40	38	40	0.51
B	7.60	9.40	9.6	12	38	60	0.30
C	7.80	8.20	1	100	38	30	0.64

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	3	415
B	0	0	0	401	1141
C	0	0	0	734	396

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	0	0	2	245
B	0	0	0	263	1324
C	0	0	0	971	373

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.99	5.43	0.11	1645	1.45	0.64	1626	1627	0.26	0.15
B	0.86	8.73	0.11	2644	1.45	0.84	1993	2092	0.57	0.63
C	1.04	7.98	0.11	2417	1.45	0.79	1908	1714	0.21	0.22

Critical Arm: **B** **B**
RFC: **0.57** **0.63**
AM **PM**

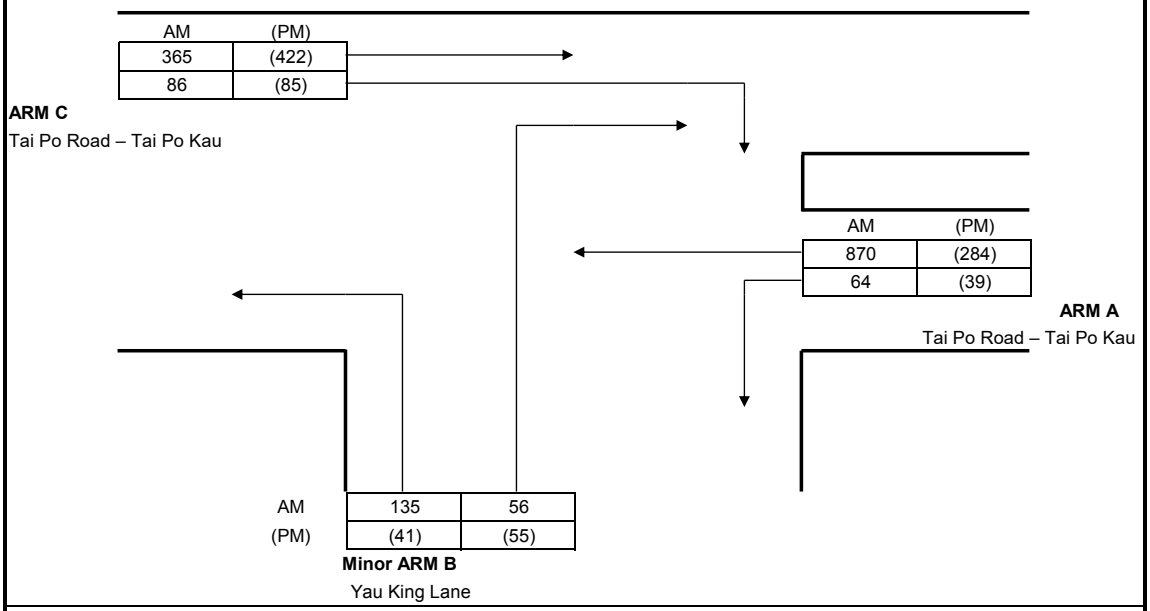
- In accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

Simplified Priority Junction Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po				
Junction:	Tai Po Road – Tai Po Kau / Yau King Lane			Ref. No.:	J4D
Scheme:	2033 Design			Ref. No.:	
Year:	2033	Job No.:	J1652	Rev.:	I3
ARM A:	Tai Po Road – Tai Po Kau				
ARM B:	Yau King Lane				
ARM C:	Tai Po Road – Tai Po Kau				



GEOMETRY

Major road width	W	9.00	Lane widths	w(b-a)	3.60
Central Reserve width	Wcr	1.00		w(b-c)	3.60
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.60
Visibilities	Vr(b-a)	70	Calculated	D	0.90
	Vl(b-a)	70		E	0.95
	Vr(b-c)	70		F	0.92
	Vr(c-b)	40		Y	0.69

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		365	422
	q(c-b)		86	85
	q(a-b)		64	39
	q(a-c)		870	284
	q(b-a)		56	55
	q(b-c)		135	41
	f		0.71	0.43
CAPACITIES	Q(b-a)	1	297	424
	Q(b-c)	1	495	637
	Q(c-b)	1	472	613
	Q(b-ac)	1	414	494
RFC's	b-a		0.189	0.130
	b-c		0.273	0.064
	c-b		0.182	0.139
	b-ac		0.461	0.194
Worst RFC			**0.461**	**0.194**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

Capacity of combined streams
- in accordance with TPDM V2.4

T.P.D.M.V.2.4
Appendix 1

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

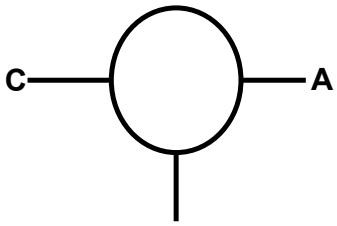
Simplified Roundabout Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	Consultancy Services for New Teaching Research Complex in Tai Po Area 39 - The Chinese University of Hong Kong		
Junction:	Tai Po Road - Ma Liu Shui / Lai Ping Road	Ref. No.:	J5D
Scheme:	2033 Design	Ref. No.:	
Year:	2033	Job No.: J1652	Rev.: I3

AM PM

ARM A: Tai Po Road - Ma Liu Shui
ARM B: Lai Ping Road
ARM C: Tai Po Road - Ma Liu Shui



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	3.30	4.20	8	30	30	40	0.18
B	4.00	4.20	2	20	30	40	0.16
C	4.50	4.60	2	100	30	25	0.08

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	2	207	589	51	798
B	254	0	21	600	275
C	868.5	42	9	256	919.5

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	7	258	483	49	748
B	229	0	38	516	267
C	569.9	23	26	236	618.9

CALCULATIONS

ARM	K	X_2	M	F	t_D	f_c	Q_E AM	Q_E PM	RFC AM	RFC PM
A	0.98	3.96	0.05	1200	1.48	0.56	1151	1152	0.69	0.65
B	0.97	4.15	0.05	1258	1.48	0.57	886	932	0.31	0.29
C	1.06	4.59	0.05	1390	1.48	0.59	1307	1320	0.70	0.47

Critical Arm:	**C**	**A**
RFC:	**0.70**	**0.65**
	AM	**PM**

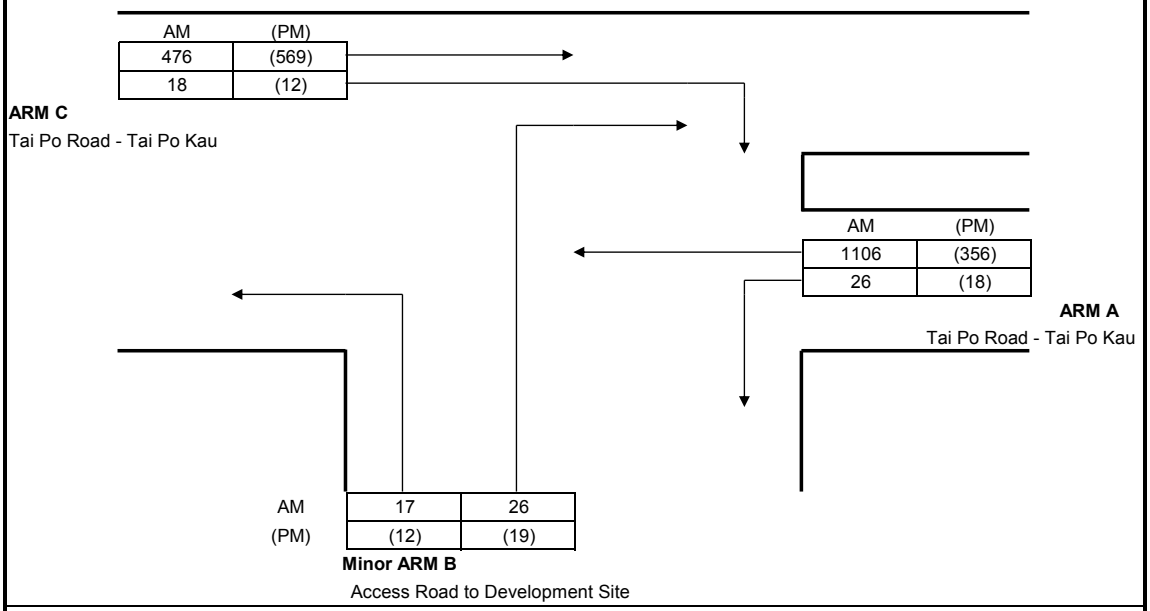
- In accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

Simplified Priority Junction Capacity Calculation

Ho Wang SPB Limited
Traffic & Transportation Consultants

Job Title:	TFS for the Proposed Development of Hong Kong Sheung Kung Hui St. Christoper's in Tai Po				
Junction:	Tai Po Road - Tai Po Kau / Access Road to Development Site			Ref. No.:	J6D
Scheme:	2033 Design			Ref. No.:	
Year:	2033	Job No.:	J1652	Rev.:	I3
ARM A:	Tai Po Road - Tai Po Kau				
ARM B:	Access Road to Development Site				
ARM C:	Tai Po Road - Tai Po Kau				



GEOMETRY

Major road width	W	9.65	Lane widths	w(b-a)	3.00
Central Reserve width	Wcr	1.00		w(b-c)	3.00
2 Lane Minor Arm (Y/N)		N		w(c-b)	3.50
Visibilities	Vr(b-a)	100	Calculated	D	0.89
	Vl(b-a)	100		E	0.92
	Vr(b-c)	100		F	0.92
	Vr(c-b)	50		Y	0.67

ANALYSIS

		Factor	AM PEAK	(PM) PEAK
TRAFFIC FLOWS	q(c-a)		476	569
	q(c-b)		18	12
	q(a-b)		26	18
	q(a-c)		1106	356
	q(b-a)		26	19
	q(b-c)		17	12
	f		0.40	0.40
CAPACITIES	Q(b-a)	1	260	413
	Q(b-c)	1	437	606
	Q(c-b)	1	434	604
	Q(b-ac)	1	310	473
RFC's	b-a		0.100	0.045
	b-c		0.039	0.020
	c-b		0.041	0.020
	b-ac		0.139	0.066
Worst RFC			**0.139**	**0.066**

Where Vl and Vr are visibility distances to the left or right of the respective streams

D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(Vl(b-a)-150))

E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))

F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))

Y = 1-0.0345W

f = proportion of minor traffic turning left

Q (b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)

T.P.D.M.V.2.4
Appendix 1

Capacity of combined streams
- in accordance with TPDM V2.4

Calculated by:	JL	Date:	Feb-24	Checked by:	TA

APPENDIX D

DEFINITIONS OF LEVEL OF SERVICE

Description of Level-of-Service (LOS)
(Reference:HCM 2000)

LOS	Flow Rate (ped/min/m)	Description
A	≤ 16	Pedestrians basically move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected, and conflicts between pedestrians are unlikely.
B	16 - 23	Sufficient space is provided for pedestrians to freely select their walking speeds, to bypass other pedestrians and to avoid crossing conflicts with others. At this level, pedestrians begin to be aware of other pedestrians and to respond to their presence in the selection of walking paths.
C	23 - 33	Sufficient space is available to select normal walking speeds and to bypass other pedestrians primarily in unidirectional stream. Where reverse direction or crossing movement exist, minor conflicts will occur, and speed and volume will be somewhat lower.
D	33 - 49	Freedom to select individual walking speeds and bypass other pedestrians is restricted. Where crossing or reverse-flow movements exist, the probability of conflicts is high and its avoidance requires changes of speeds and position. The LOS provides reasonable fluid flow; however considerable friction and interactions between pedestrians are likely to occur.
E	49 - 75	Virtually, all pedestrians would have their normal walking speeds restricted. At the lower range of this LOS, forward movement is possible only by shuffling. Space is insufficient to pass over slower pedestrians. Cross- and reverse-movement are possible only with extreme difficulties. Design volumes approach the limit of walking capacity with resulting stoppages and interruptions to flow.
F	> 75	Walking speeds are severely restricted. Forward progress is made only by shuffling. There are frequent and unavoidable conflicts with other pedestrians. Cross- and reverse-movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristics of queued pedestrians than of moving pedestrian streams.

APPENDIX E

SITE SURVEY PHOTO RECORDS

2021.11.22 SURVEY PERIOD – AM

07:30

07:45

08:00

08:15

2021.11.22 SURVEY PERIOD – AM

08:30

08:45

09:00

09:15

2021.11.22 SURVEY PERIOD – AM

09:30

2021.11.22 SURVEY PERIOD – PM

17:00

17:15

17:30

17:45

2021.11.22 SURVEY PERIOD – PM

18:00

18:15

18:30

18:45

2021.11.22 SURVEY PERIOD – PM

19:00

ANNEX A

RESPONSE TO TRANSPORT DEPARTMENT'S COMMENT

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot no. T77 in D.D. 34, Tai Po

Technical Feasibility Study and TIA - Response to Comments

Transport Department's Comment via email dated 19/7/2024	Responses to Comments
Please find our comments to the TIA below:	
R-to-C	
1. R-to-C 25: The swept path for vehicles turning from Tai Po Road – Tai Po Kau right turn into the developments is missing.	Noted. The swept path analysis of a 12m coach right turn into the development from Tai Po Road – Tai Po Kau northbound is presented in **Figure SP2**. The analysis demonstrated that there is no manoeuvring problem for the ingress of large vehicle from Tai Po Road -Tai Po Kau northbound.
2. From fig. 2.3 and 2.4, columns are present in the driveway which may render vehicles unable to maneuver into / out of the parking spaces / layby. The applicant shall ensure their schemes are technically feasible for vehicles to smoothly and safely maneuvering into / out of the parking spaces / layby / driveway. The applicant is also reminded to observe the relevant BD's requirements on the design of driveways and parking facilities.	Noted. Please refer to updated LG1/F layout plan (**Figure 2.4 rev. A**) and **Figure SP3, SP4** and **SP5** showing that all design vehicles (i.e. 11m HGV, 12m coach and 7.8m light bus) can turn into/out of the parking spaces and loading/unloading bays without any manoeuvring problem.
Other Comments	
3. Table 5.22: Please advise the GMB services assessment for Tai Po bound.	Noted. Based on the public transport utilization result presented in **Table 5.21**, there is ample capacity for GMB services for Tai Po bound to accommodate the additional passenger demands generated by proposed development site during AM and PM peak period. Thus, no additional GMB service is required.
4. Please also seek comments from our TONT division.	Noted.

By Fax and by Post
2866 4332

運輸署
Transport Department

本署檔案 Our Ref. : (NRQT0) in TD NR146/194-T20
來函檔號 Your Ref. : J1652/10
電 話 Tel. : 2399 2731
圖文傳真 Fax : 2381 3799
電 郵 Email : hiufungpang@td.gov.hk

19 October 2024

Ho Wang SPB Limited
5/F, So Hong Commercial Building
41-47 Jervois Street,
Sheung Wan
Hong Kong
(Attn.: Mr. Tommy LAM, Principal Traffic Engineer)

Dear Mr LAM,

Technical Feasibility Study for the Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at the remaining portion of Taxlord Lot No. T77 in D.D. 34, Tai Po
Traffic Impact Assessment

I refer to your above referenced letter dated 14 August 2024 regarding the subject submission. Please be advised that I have no further comment to the report. Please be reminded to seek comments from our TONT Division.

Yours faithfully,

(PANG Hiu-fung)
for Commissioner for Transport

新界分區辦事處
NT Regional Office
九龍聯運街三十號旺角政府合署七樓
7th Floor, Mong Kok Government Offices, 30 Lucn Wan Street, Kowloon.
圖文傳真 Fax No.: 2381 3799 (新界區) (NTRO)
網址 Web Site: http://www.td.gov.hk

Appendix 4

Visual Impact Assessment

SECTION 1

INTRODUCTION & PROJECT BACKROUND REVIEW

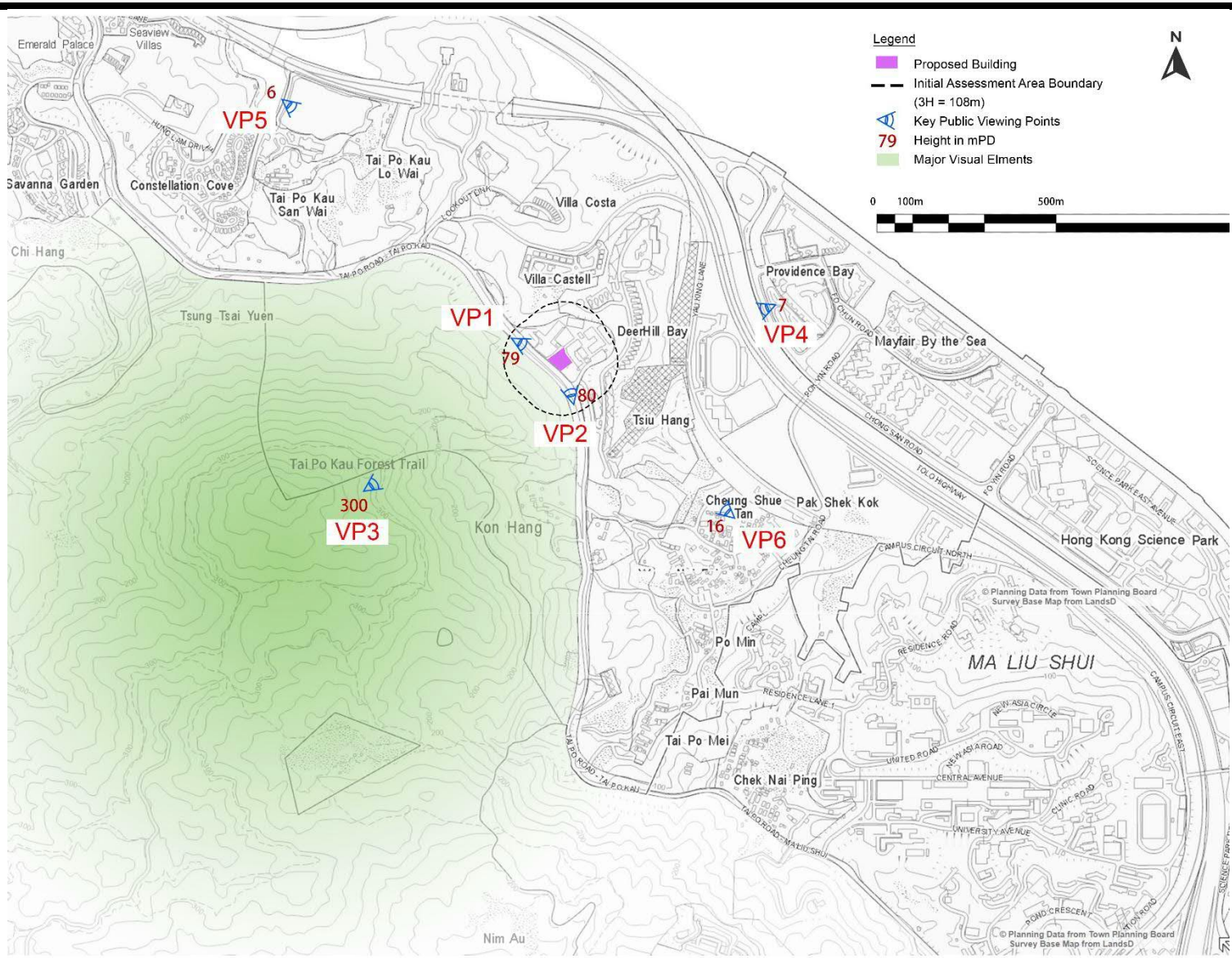
Introduction

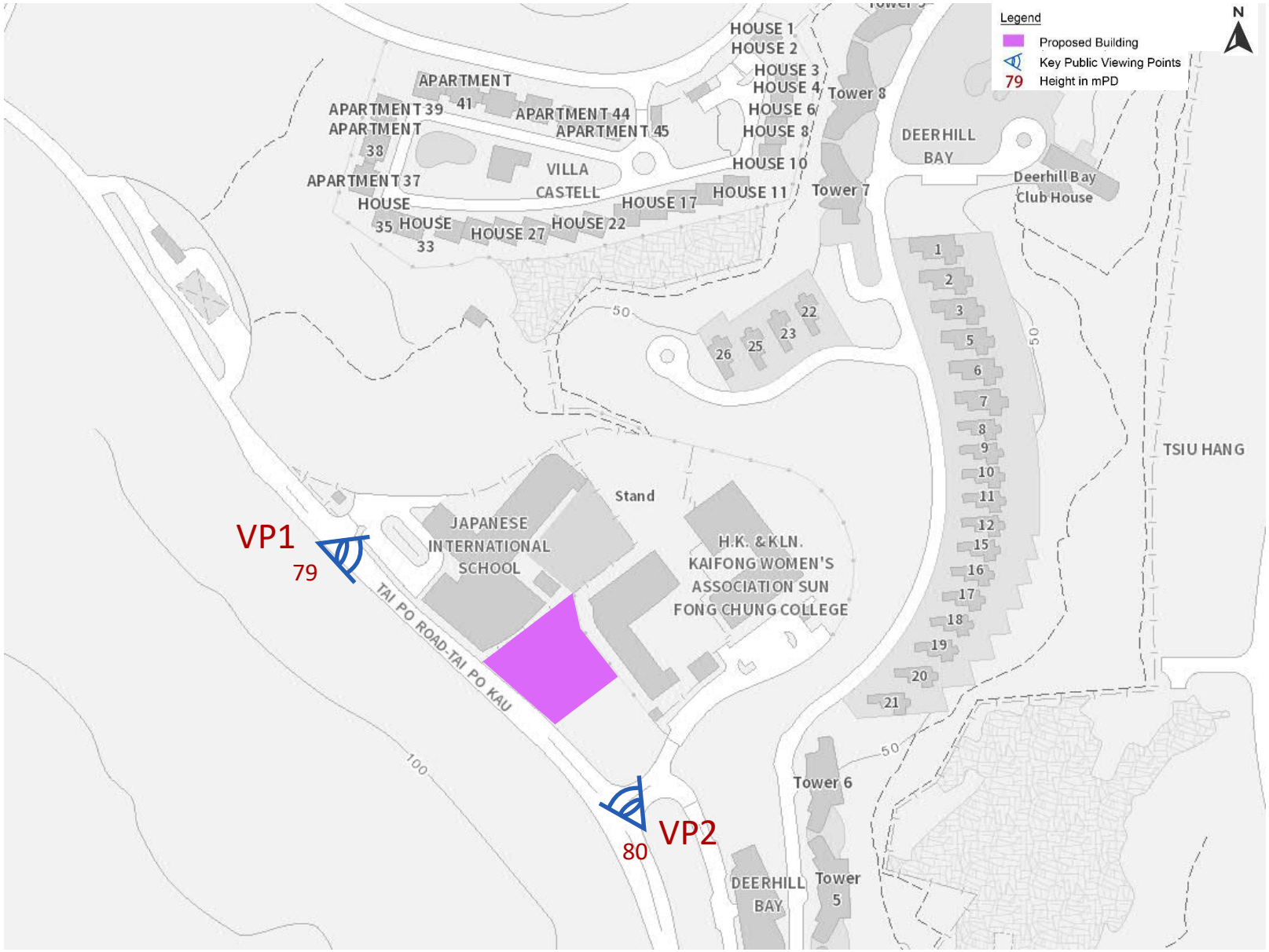
The VIA is to assess the potential impact of a site on Tai Po Road – Tai Po Ka Section, New Territories in accordance with the TPB Guidelines No.41. The site is Remaining Portion of Taxlord Lot No. T77 in DD34, Tai Po.

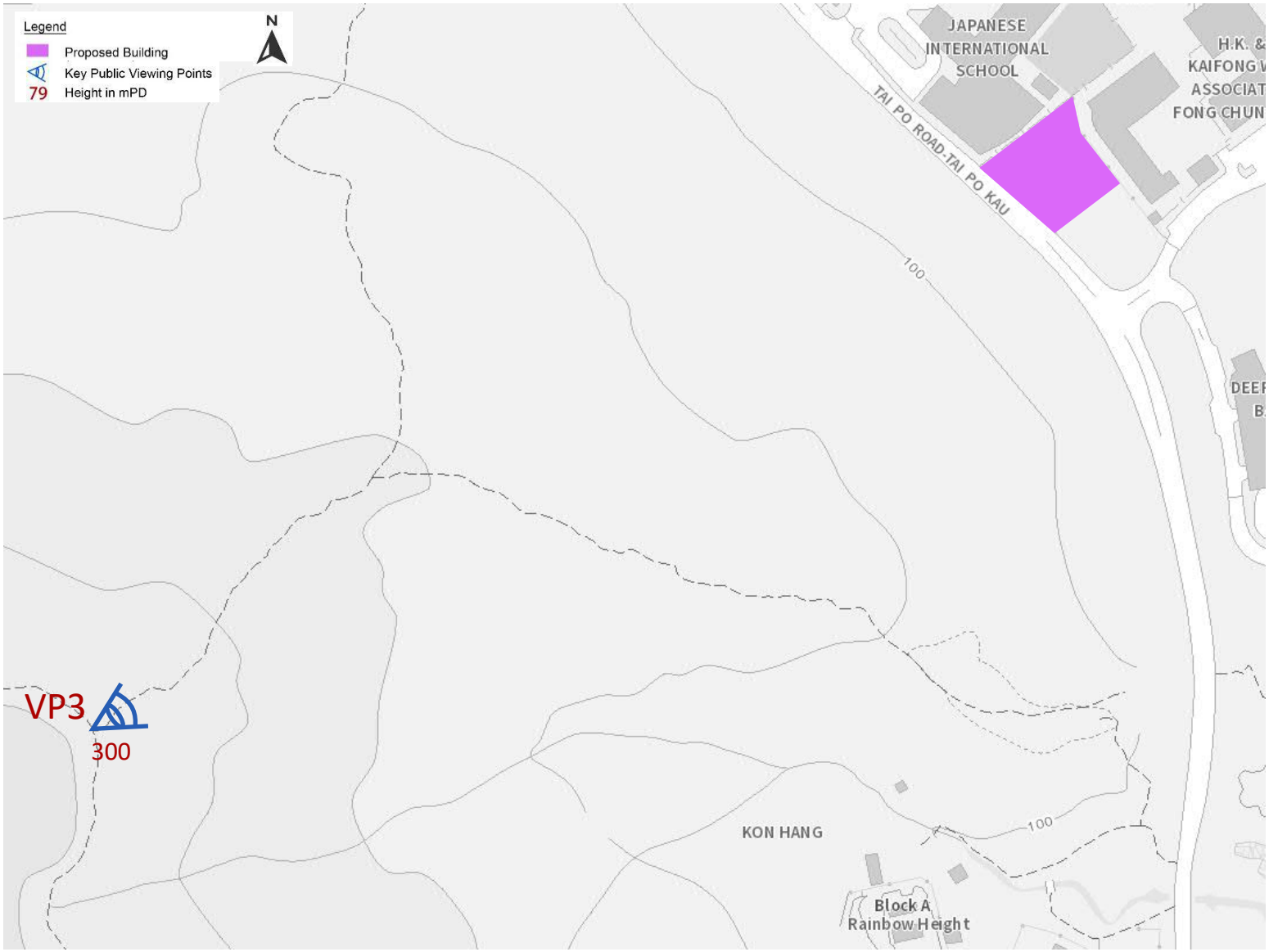
Sheng Kung Hui (SKH) intends to develop the Site for a 10-storey building, namely Hong Kong Sheng Kung Hui St Christopher's Complex (hereinafter SCC), to accommodate a range of social welfare facilities. The Site is zoned Government, Institution or Community ["G/IC"] on the Approved Tai Po Outline Zoning Plan (OZP) No. S/TP/30. Under the zoning, 'Social Welfare Facility' is a Column 1 use and is permitted as of right. However, the site is imposed with a Building Height Restriction (BHR) of 8 storeys. A S16 planning application is required to apply for minor relaxation of the BHR for the intended 10 – storey development.

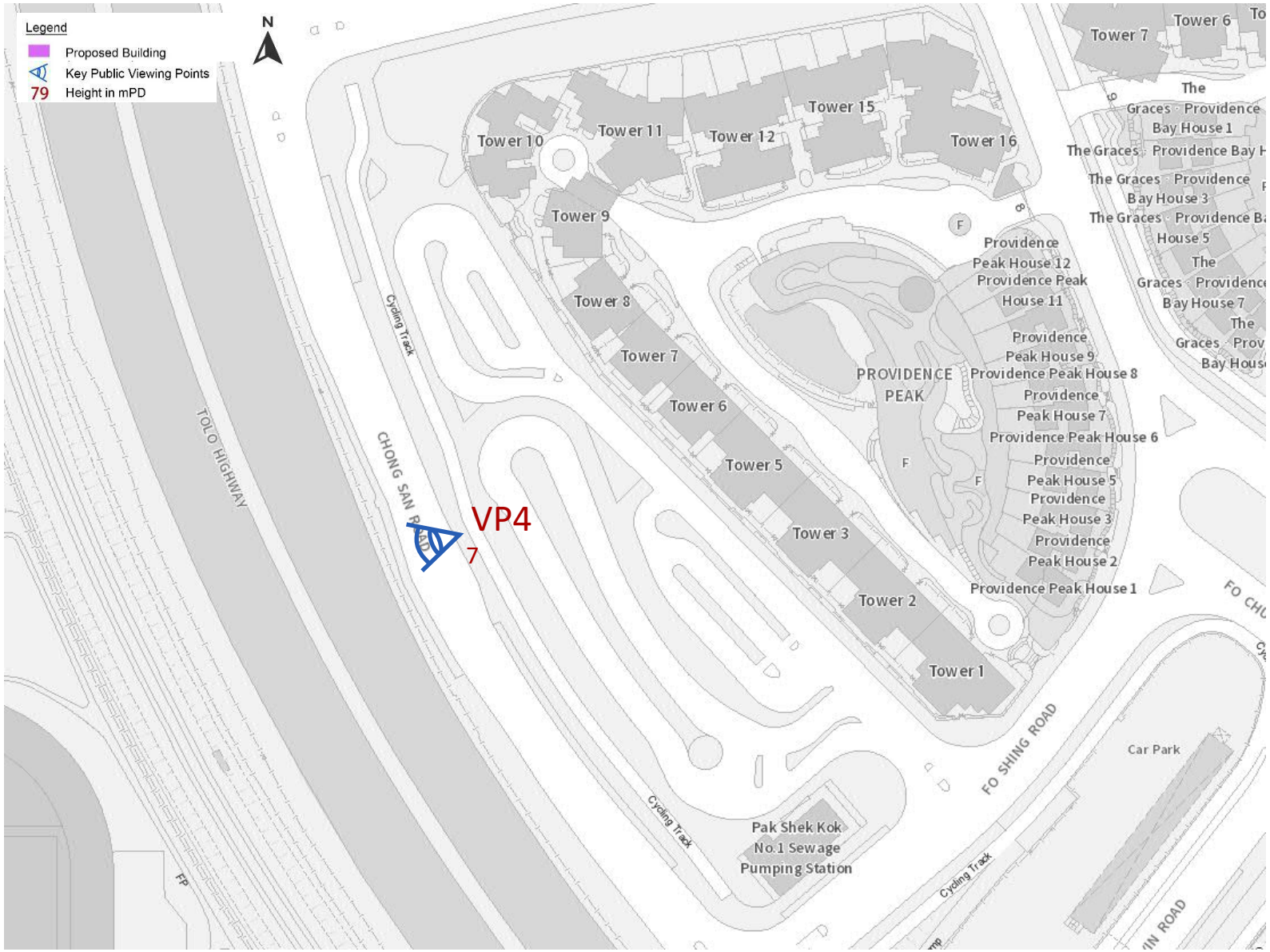
This S16 application is submitted by Hong Kong Sheng Kung Hui Welfare Council Limited (HKSKHWCL), and the owner of the Site is The Bishop of Victoria Hong Kong.

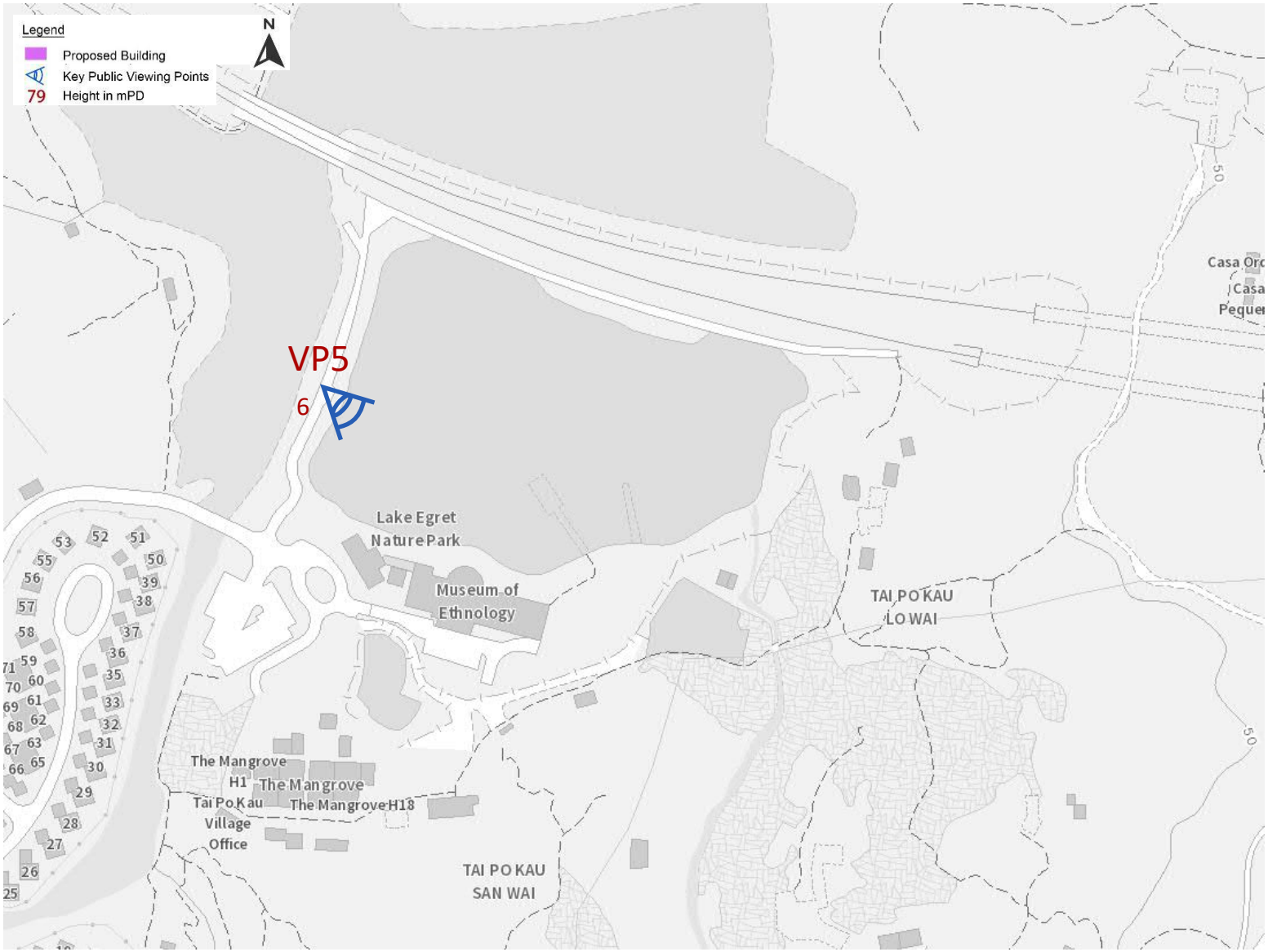
SECTION 2
VISUAL ENVELOPE AND ASSESSMENT




Legend
Proposed Building
Key Public Viewing Points
79 Height in mPD
N
VP1
79
VP2
80
HOUSE 1
HOUSE 2
HOUSE 3
HOUSE 4
HOUSE 6
HOUSE 8
HOUSE 10
HOUSE 11
HOUSE 17
HOUSE 22
HOUSE 27
HOUSE 35
HOUSE 33
APARTMENT 41
APARTMENT 39
APARTMENT 38
APARTMENT 44
APARTMENT 45
APARTMENT 37
VILLA CASTELL
Tower 8
Tower 7
Tower 6
Tower 5
DEERHILL BAY
Deerhill Bay Club House
TSIU HANG
Stand
JAPANESE INTERNATIONAL SCHOOL
H.K. &KLN. KAIFONG WOMEN'S ASSOCIATION SUN FONG CHUNG COLLEGE
TAI PO ROAD-TAI PO KAU
50
100


Legend
Proposed Building
Key Public Viewing Points
79 Height in mPD
N
JAPANESE INTERNATIONAL SCHOOL
TAI PO ROAD-TAI PO KAU
100
VP3
300
KON HANG
100
Block A
Rainbow Height


Legend
Proposed Building
Key Public Viewing Points
79 Height in mPD
N
VP4
7
Tower 10
Tower 11
Tower 12
Tower 15
Tower 16
Tower 9
Tower 8
Tower 7
Tower 6
Tower 5
Tower 3
Tower 2
Tower 1
Tower 7
Tower 6
The Graces Providence Bay House 1
The Graces Providence Bay House 3
House 5
Providence Peak House 12
Providence Peak House 11
Providence Peak House 9
Providence Peak House 8
Providence Peak House 7
Providence Peak House 6
Providence Peak House 5
Providence Peak House 3
Providence Peak House 2
Providence Peak House 1
PROVIDENCE PEAK
TOLO HIGHWAY
CHONG SAN ROAD
Cycling Track
FO SHING ROAD
Car Park
Pak Shek Kok No.1 Sewage Pumping Station
FP


Legend
Proposed Building
Key Public Viewing Points
79 Height in mPD
N
VP5
6
Lake Egret
Nature Park
Museum of
Ethnology
TAI PO KAU
LO WAI
TAI PO KAU
SAN WAI
The Mangrove
H1
The Mangrove
The Mangrove H18
Tai Po Kau
Village
Office
Casa Orc
Casa
Pegue
50
50


Legend
Proposed Building
Key Public Viewing Points
79 Height in mPD
N
VP6
16
Greenwood Tower 5
Silicon Hill
Greenwood Tower 3
Cheung Shue Tan Stormwater Pumping Station
YAU KING LANE
Burial Urns
Ramp
Cheung Shue Tan Village No.2 Public Toilet Tai Po
Cheung Shue Tan Heung Shu Yan Basketball Court
Cheung Shue Tan Children's Playground
Cheung Shue Tan Site 1 Public Toilet
WIP Mar 2024
Kensington Heights
2B
CHEUNG

The Visual Envelope (VE) is formed by surrounding area of Nature Reserve, Institutional and Residential building such as Tai Po Kau Nature Reserve, Japanese International School, PLK Tin Ka Ping Millennium Primary School and Deerhill Tower Deerhill Bay.

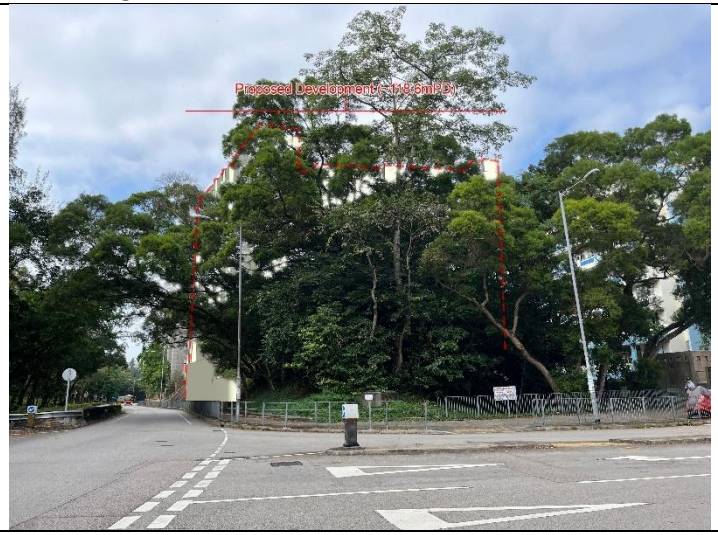
Within the VE, a series of key View Point (VP) may be affected by the proposed development. VPs are identified base to the VE, and as summarised in below table;

VP	Description	Visual Sensitivity (Low,Medium,High)	Approx.Viewing Distance to High Rise Elements (m)	Visual Composition	Visual Obstruction	Types of Public Viewers	Effect on Public Viewers	Effects on Visual Resources	Duration of Impacts	Evaluation of Overall Visual Impact
VP1	View from Tai Po Road (Tai Po Kau) bus stop northwest to the site	Medium	~95m (79mpd)	Existing view includes a low-rise institutional block in front of the proposed building mass, mixed with open views to hillside further right. Proposed building mass is only partly visible therefore quite compatible.	Part of the Views to open sky visible in the background will be blocked, and part of visual openness lost	Commuters, surrounding residents, students, hikers, pedestrians	Slight The direct sightlines are disturbed by the proposed development backdrop. The existing Japanese school is visually more dominating than the proposed development.	Some visual degradation Streetscape character is not strongly degraded due to the existing presence of mature trees along the Tai Po Road. Openness of skyline is obstructed. Vegetation screening can be applied to the building façade.	Permanent	Slightly adverse
VP2	View from Tai Po Road (Tai Po Kau) junction of entering the perforated schools and Deerhill Bay	Medium	~85m (80mpd)	Existing view includes natural woodland at slope in front of the Proposed building mass. Proposed building mass is only partly visible which is highly compatible.	Views to Japanese International School building currently visible in the background will be partly blocked, but this is a small element in the existing view and the overall openness will remain largely, only part	Commuters, surrounding residents, students, hikers, pedestrians	Slight Most of the existing screening matured trees will be retained. The views towards vegetation in front of the proposed building will not be affected.	Some visual degradation Existing tree in the photomontage is on government land outside of the application site. The landscape treatment is subject to	Permanent	Slightly adverse

VP	Description	Visual Sensitivity (Low,Medium,High)	Approx.Viewing Distance to High Rise Elements (m)	Visual Composition	Visual Obstruction	Types of Public Viewers	Effect on Public Viewers	Effects on Visual Resources	Duration of Impacts	Evaluation of Overall Visual Impact
					of visual openness to sky lost.			agreement of relevant government department.		
VP3	View from Tai Po Kau Forest Trail (Yellow Trail Section)	Low	~279m (300mpd)	The proposed Project is hardly visible within the huge vegetation and causes no significant change in the visual composition.	No visual obstruction	Hikers	Negligible The proposed development will be screened by existing woodland, hence no any impact on viewers.	Minimum visual degradation The proposed development visually is insignificant to other visual resources.	Permanent	Negligible
VP4	View from Public Interchange outside of Providence Bay	Low	~637m (7mpd)	Existing view includes a number of medium-rise residential blocks horizontally mixed with institutional buildings and open views to hillside further north. Proposed building mass is only partly visible therefore quite compatible.	Visible Ridgelines remain intact and there is minimal visual obstruction to the open sky.	Commuters, surrounding residents, students, pedestrians	Slight The proposed development does not impact the ridgeline and visibly unidentifiable with the existing buildings group to key viewers.	Minimum visual degradation The surrounding woodland and highway offset visual impact of building mass. The visual resources and amenities are retained.	Permanent	Slightly adverse
VP5	View from Core Aqua Park of the	Medium	~1085m (6mpd)	The proposed Project is not visible within the huge vegetation and causes no change	No visual obstruction	Hikers, Visitor of Egret Park (Mainly	Negligible The proposed development will	Minimum visual degradation of	Permanent	Negligible

VP	Description	Visual Sensitivity (Low,Medium,High)	Approx.Viewing Distance to High Rise Elements (m)	Visual Composition	Visual Obstruction	Types of Public Viewers	Effect on Public Viewers	Effects on Visual Resources	Duration of Impacts	Evaluation of Overall Visual Impact
	Passing Place			in the visual composition.		recreation in nature.)	be screened by existing woodland, hence no impact on viewers.	existing visual resources The proposed development visually is insignificant to other visual resources.		
VP6	View from Cheung Shue Tan Heung Shu Yan Basketball Court	Low	~650m (16mpd)	The proposed Project is not visible within the huge vegetation and causes no change in the visual composition.	No visual obstruction	Surrounding residents, pedestrians	Negligible The proposed development will be screened by existing woodland, hence no impact on viewers.	Minimum visual degradation of existing visual resources The proposed development visually is insignificant to other visual resources.	Permanent	Negligible

SECTION 3
VIEW POINT PHOTOMONTAGE

	
VP 1 Existing View	VP 1 Photomontage
	
VP 2 Existing View	VP 2 Photomontage

	
VP 3 Existing View	VP 3 Photomontage
	
VP 4 Existing View	VP 4 Photomontage

	
VP 5 Existing View	VP 5 Photomontage
	
VP 6 Existing View	VP 6 Photomontage

SECTION 4
SUMMARY AND EVALUATION OF OVERALL VISUAL IMPACT

4.1. VP1- View from Tai Po Road (Tai Po Kau) bus stop northwest to the site

4.2. The overall visual impact is considered **slightly adverse** prior to mitigation. The VP shows the permanent obstruction of the open sky views, the prominent low-rise institutional block and tree planting along the Tai Po Road are more dominating to the visual composition perceived by the key viewers of low sensitivity, i.e., commuters. For the effect on Public Viewers, Tai Po Road (Tai Po Kau) is frequently used, primarily by the user of nearby colleges and schools. The proposed development will be readily noticeable from this VP. The proposed development will reduce the sense of visual openness due to the blockage of some sky view. For the effect on Visual Resources / Amenities, the visual impact arising from the proposed development will be slightly adverse, due to the blockage of some open sky view. The proposed development will not impact the existing urban fringe character of the surrounding area and the extent of impact is low.

Description of Visual Sensitivity of VP1 as below:

Type of Sensitive Receiver Represented: Pedestrians and drivers along Tai Po Road (Tai Po Kau), Users of nearby college and school.

Approximate Viewing Distance to Site: ~95m

Description of Existing View: The view point is located at the bus stop of Tai Po Road (Tai Po Kau) looking towards the site at a distance of approximately 95m, pedestrians, drivers and passengers have a clear view to the site. Tai Po Road (Tai Po Kau) is frequently used, primarily by the user of nearby colleges and schools. Public transportation will stop at this location and the drivers are usually focused on the road and immediate surrounds and their views are transient and brief, the public viewers at this VP are considered to have **Medium** sensitivity to visual change.

Estimated number of Viewers: Some

Duration of view: Moderate to Long

Degree of Visibility: Full

Perception of Value to View: Medium

4.3. VP2- View from Tai Po Road (Tai Po Kau) junction of entering the schools and Deerhill Bay

4.4. The overall visual impact is considered **slightly adverse** prior to mitigation. The VP2 shows that with the proposed development backdrop, part of the views to the Japanese International School will be blocked and the overall openness will remain largely, only part of visual openness to sky lost. For the effect on Public Viewers, Tai Po Road (Tai Po Kau) junction is frequently used, mostly by the users of the nearby colleges and schools. A slight portion of the open sky view behind the vegetation will be blocked due to the proposed development. Existing tree in the photomontage is on Government land outside of the application site. The landscape treatment is subject to agreement of relevant government department. For the effect on Visual Resources/ Amenities, the visual impact arising from the proposed development will be slightly adverse, due to the blockage of a slight portion of the open sky view behind the vegetation. No other noticeable effect on other visual resources/ amenities from this VP is observed.

Description of Visual Sensitivity of VP2 as below:

Type of Sensitive Receiver Represented: Commuters, surrounding residents, students, hikers pedestrians.

Approximate Viewing Distance to Site: ~85m

Description of Existing View: The view point is located at Tai Po Road (Tai Po Kau) junction of entering the perforated schools and Deerhill Bay looking towards the site at a distance of approximately 85m, a large number of commuters including public transit users and commuters in private vehicles will travel from this junction to the site. The view is mainly vegetation blocking the view towards the site and the proposed development in the background.

Estimated number of Viewers: Some

Duration of view: Moderate to Long

Degree of Visibility: Full

Perception of Value to View: Medium

4.5. VP3-View from Tai Po Kau Forest Trail (Yellow Trail Section)

4.6. The overall visual impact is considered **negligible**. VP3 shows the proposed development would not be visible at this proximity and screened by natural woodland. No observable visual obstruction and degradation of the existing country park character of the surrounding area. For the effect on public viewers, the main commuters of this VP are Hikers using the hiking trail. The proposed development will be screened by existing woodland, therefore no any impact on viewers, e.g. hikers. For the effect on Visual Resources / Amenities, some of the exiting vegetation at site will be removed, causing a minimum visual degradation to the view point. The proposed development visually is insignificant to other visual resources.

Description of Visual Sensitivity of VP3 as below:

Type of Sensitive Receiver Represented: Hikers

Approximate Viewing Distance to Site: ~279m

Description of Existing View: The view point is located Tai Po Kau Forest Trail looking towards to site at a distance of approximately 279m, the main commuter will be the hikers at the hiking trails. However, the proposed project is hardly visible within the huge vegetation and causes no significant change in the visual composition.

Estimated number of Viewers: Some

Duration of view: Moderate to Long

Degree of Visibility: Partial

Perception of Value to View: Medium

4.7. VP4- View from Public Interchange outside of Providence Bay

The overall visual impact is considered **slightly adverse** prior to mitigation. The building mass of proposed development is visual compatible with the medium-rise residential blocks and do not obstruct the existing dominant ridgelines and skylines. The extension of built structures will slightly degrade the visual amenities of woodland but the intrusive visual elements i.e., Tai Po Road, will distract the visibility of the new development. Current Perception remains to the proposed development for high sensitivity viewers, i.e., Providence Bay residents who are currently enjoying the ridgeline views and low sensitivity viewers i.e., commuters. For the effect on Public Viewers, the main commuters are surrounding residents, students, and pedestrians. The proposed development does not impact the ridgeline and visibly unidentifiable with the existing buildings group to key viewers. For the effect on Visual Resources / Amenities, there is a minimum visual degradation, as the surrounding woodland and highway offset visual impact of building mass. The visual resources and amenities are retained.

Description of Visual Sensitivity of VP4 as below:

Type of Sensitive Receiver Represented: Commuters, surrounding residents, students, pedestrians.

Approximate Viewing Distance to Site: ~637m

Description of Existing View: The view point is located at the public interchange outside of Providence Bay looking towards the site with a distance of approximately 637m. The existing view includes a number of medium-rise residential blocks mixed with institutional building and open views to the hillside in background. The proposed building mass is only a minor part visible to the viewer.

Estimated number of Viewers: Some

Duration of view: Moderate to Long

Degree of Visibility: Full

Perception of Value to View: Medium

4.8. VP5- View from Core Aqua Park of the Passing Place

The overall visual impact is considered **negligible**. VP5 shows the proposed development would not be visible at this proximity and screened by natural woodland. No observable visual obstruction and degradation of the existing nature character of the surrounding area. For the effect on Public Viewers, the proposed development will be screened by existing woodland, therefore no crucial impact on the viewers. For the effect on Visual Resources / Amenities, there is a minimum visual degradation of existing visual resources. The proposed development visually is insignificant to other visual resources.

Description of Visual Sensitivity of VP5 as below:

Type of Sensitive Receiver Represented: Hikers, Visitor of Egret Park (Mainly recreation in nature)

Approximate Viewing Distance to Site: ~1085m

Description of Existing View: The view point is located at the Core Aqua Park of the Passing Place looking forwards to the site at a distance of approximately 1085m. The existing view included a open sky view and a series of hillside landscape. The proposed project site is not visible within the huge vegetation and causes no change in the visual composition.

Estimated number of Viewers: Some

Duration of view: Moderate to Long

Degree of Visibility: Full

Perception of Value to View: Medium

4.9. VP6- View from Cheung Shue Tan Heung Shu Yan Basketball Court

The overall visual impact is considered **negligible**. VP6 shows the proposed development would not be visible at this proximity and screened by natural woodland. No observable visual obstruction and degradation of the existing nature character of the surrounding area. For the Effect on Public Viewers, the main visual receivers are surrounding residents and pedestrians. The proposed development will be screened by existing woodland, hence no impact on the visual receivers. For the effect on Visual Resources/ Amenities, there is a minimum visual degradation of existing visual resources. The proposed development visually is insignificant to other visual resources.

Description of Visual Sensitivity of VP6 as below:

Type of Sensitive Receiver Represented: surrounding residents, pedestrians

Approximate Viewing Distance to Site: ~650m

Description of Existing View: The view point is located at Cheung Shue Tan Heung Shu Yan Basketball Court looking towards to the site from a distance of approximately 650m. The existing view contains a low-rise residential building in the front and mid-rise residential building in the background. The proposed development is screened by the existing woodland and not visible from this view point.

Estimated number of Viewers: Some

Duration of view: Moderate to Long

Degree of Visibility: Full

Perception of Value to View: Medium

4.10. Evaluation of overall visual impact

According to TPB PG-No. 41, the overall visual impact can be concluded and classified within a range to threshold, i.e. ''**Negligible**'' to " **slightly adverse**". The visual impact of VP1, VP2 and VP4 is "**Slightly Adverse**", and VP3, VP5 & VP6 is "**Negligible**".

Appendix 5

Geotechnical Planning Review Report

Proposed Development of SKH St Christopher's Complex at TLL T77 RP in D.D.34 Tai Po, New Territories

GEOTECHNICAL PLANNING REVIEW REPORT

REVISION 2

CONTENTS

FIGURES

APPENDIX

1. INTRODUCTION

It is the Geotechnical Planning Review Report (GPRR) for the premises at Lot No. TLL T77 RP in D.D.34 at Tai Po, New Territories.

This GPPR is made based on desk study and review of available documentary information and proposed development plan. The geology and site conditions are described. Potential geotechnical constraints are identified in the assessment.

2. THE SITE AND THE FEATURES

The site is at a hill terrain land at Tai Po, New Territories. Site photos of features are presented in Appendix A. The site location plan and the aerial view of the proposed development site are presented in Figures 1 and 2, respectively.

According to the available SIMAR records obtained from Lands Department and SIS records obtained from Geotechnical Engineering Office (GEO), there are 3 nos. of registered geotechnical features lies within or in the vicinity of the site (see Figure 3). The features and the responsible lot/ party are tabulated below:

Feature No.	Sub-division No.	Responsible Lot/ Party
7NE-C/C392	1	Highways Department
	2	DD34 TLL T77 RP (Subject Lot)
7NE-C/C440	1	DD34 TLL T77 RP (Subject Lot)
	2	Lands Department
7NE-C/C403	-	TPTL 156

A copy of the SIMAR report and slope records are enclosed in Appendix B and C, respectively. The location of the said feature is also presented in Figure 3.

3. DESK STUDY

Desk study has been carried out to search and review the existing building records, previous ground investigation data and geotechnical study reports kept by the Geotechnical Information Unit (GIU) of Geotechnical Engineering Office (GEO) and the Buildings Department (BD).

Ground investigation was carried out at distance about 15m from the northeastern boundary of the site under the ASD school project, namely "Primary School in Area 12, Tai Po, New Territories", prepared by I-P Foundation Ltd. in June 1999. The borehole and trial pit records indicated that a layer of slightly to moderately decomposed tuff (SDT/ MDT) was encountered at a depth of 1.8m below the existing ground level. (see Appendix D).

3.1 Geological Maps

The geology of the Study Area is shown on the Hong Kong Geological Survey (HKGS) Map Sheet 7 (Sha Tin), 1:20,000-scale HGM20 series. The local geology of the Study Area is presented in Figure 4 and described below.

3.1.1 Solid Geology

The 1:20,000 scale geological maps indicated that regional area around the Site is underlain Lapilli Lithic-Bearing Coarse Ash Crystall Tuff (Jmt_cat) and Tuffite (Jty_tt) of the Yim Tin Tsai Formation.

3.1.2 Superficial Geology

Entire Site are surrounded by lapilli of sedimentary rocks.

3.1.3 Structural Geology

No fault or photolineament has been recorded within or in the vicinity of the Site.

3.2 Enhanced Natural Terrain Landslide Inventory

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

In accordance with GEO Report No. 138 (GEO, 2016), landslides are classed as either "Relict" or "Recent", depending on their appearance in aerial photographs. "Relict" landslides are defined as those where the main scarp is well-defined but vegetation has re-established on the scar on the earliest set of

available aerial photographs. "Recent" landslides are defined as having occurred within the timespan of the aerial photograph coverage. These are typically identified as having a light tone on the aerial photographs and are bare of vegetation.

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

3.3 Historical Landslide Catchment (HLC) Inventory

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

3.4 Large Landslide Study

The Large Landslide database was prepared by Scott Wilson (1999) for the GEO. Interpretation of landslide details with Map Sheet Ref No. 7-NE-C was conducted using the low altitude (3,900 ft.) 1963 aerial photographs to identify features thought to be landslides with source area greater than 20 m wide. The database has no record of large landslides within or close to the Site.

3.5 Reported Landslide Incidents

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

4. IMPACTS OF PROPOSED WORKS ON EXISTING SLOPES

4.1 Existing Features within or in the vicinity of the Site

Feature No. 7NE-C/C392
Feature No. 7NE-C/C392 is located at the southwestern boundary of the Site. Based on the SIMAR record, only sub-division no. 2 of the feature is located within the site. According to the SIS record, the feature is about 90m long and 6m high with average slope gradient of 40° to the horizontal.

Feature No. 7NE-C/C440
Feature No. 7NE-C/C440 is located within the site and running from the northern to southeastern boundary of the Site. Based on the SIMAR record, only sub-division no. 1 of the feature is located within the site. According to the SIS record, the feature is about 110m long and 6.5m high with average slope gradient of 30° to the horizontal.

Feature No. 7NE-C/C403
Feature No. 7NE-C/C403 is located abutting to the northwestern boundary of the Site. Based on the SIMAR record, the feature is located outside of the site and belong to Lot No. TPTL 156. According to the SIS record, the feature is about 70m long and 7m high with average slope gradient of 85° to the horizontal.

4.2 Impacts from the Proposed Works to the Registered Slope Features

For the new development at the Site, it is proposed to form a flat ground land which meet with the level of adjoining public road of Tai Po Road, and carry out temporary excavation and lateral support works for construction of basement structure and foundation works at the Site. There is the proposed scheme of site formation works presented in Appendix E.

For the site formation works on the side adjoining the boundary of Japanese International School (JIS), two schemes are considered:

Scheme 1: Removal of Feature no. 7NE-C/C403 along the boundary of Japanese International School (JIS).

After this development, Feature no. 7NE-C/C403 becomes obsolete and removal of this feature reduces the associated geotechnical risk and enables a more efficient use of available space.

For ELS works, it would be carried out after the site formation works is down to the proposed ground level +79.2mPD. The pipe pile wall with lagging plates and 3 layers of waling and corner struts are proposed for basement and footing construction.

Scheme 2: Retain of Feature no. 7NE-C/C403 along the boundary of Japanese International School (JIS).

In case the lot owner of Feature no. 7NE-C/C403 does not agree the removal of this feature, strengthening works for this slope is required. Furthermore, to allow the minimum spacing for the slope for maintenance, the building in the Site is required to set back from the retained slope.

For the site formation works on the side adjoining the government land, since LandsD does not agree to permanently cut back the topographical feature, a new soldier pile wall within the subject site would be created to retain the topographical feature on the adjoining vacant government land.

As the features have stood from some time without evidence of major distress or instability, it is expected that the remaining features will continue under the present condition. However, the stability has to be checked with respect to the proposed development and based on the subsurface conditions and shear strength parameters of soil/rock obtained from site specific ground investigation. If found necessary, appropriate improvement/upgrading works, including slope re-profiling, installation of soil nails, and provision of raking drains will be carried out to bring up the sub-standard portion of the feature to meet the current geotechnical standard.

5. CONCLUSION

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

It is essential to search and review the background information of existing building, geotechnical feature and underground services within and in the vicinity of the site. Site investigation is proposed to reveal/confirm the subsoils and the ground regime within and in the vicinity of the site as well as to determine the engineering properties of subsoils and rock. The ground investigation field works should be preceded under supervision of suitably qualified engineers and technically competent persons conforming the requirements specified in the "Code of Practice for Site Supervision 2009" published by the BD.

For safety and cost effective, the foundation design and retaining wall stability assessment and excavation planning as well as the design of geotechnical structure should be based on geological horizons inferred from the ground investigation results, groundwater table interpreted from the piezometer/standpipe monitoring records and geotechnical parameters determined and adopted by field and laboratory testing.

A comprehensive precautionary monitoring program including settlement markers, tiling, vibration check points as well as groundwater observation wells shall be implemented to ensure demolition of foundation of existing buildings and substructure construction being carried out safety and soundly.

FIGURES

Figure 1

Site Location Plan

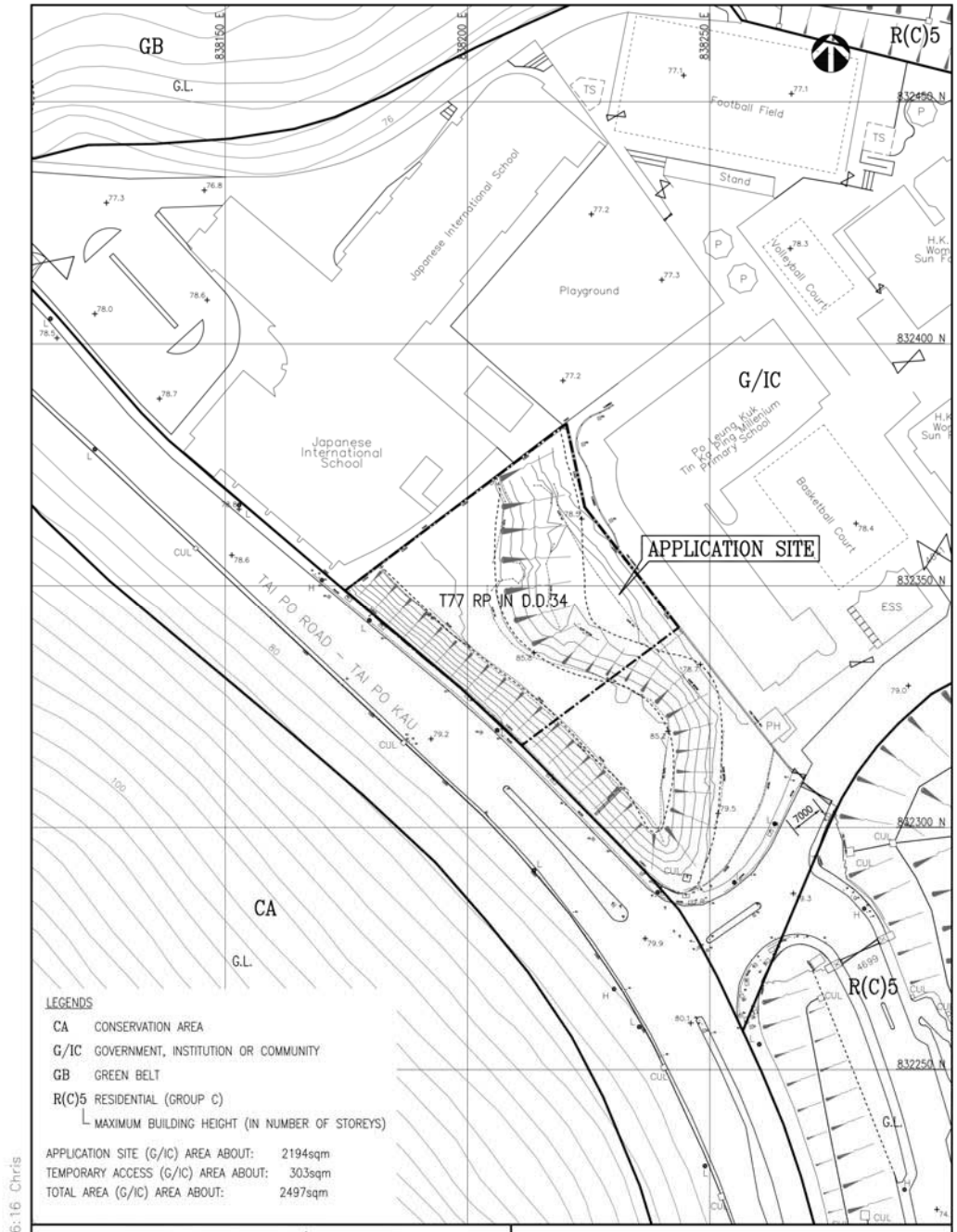
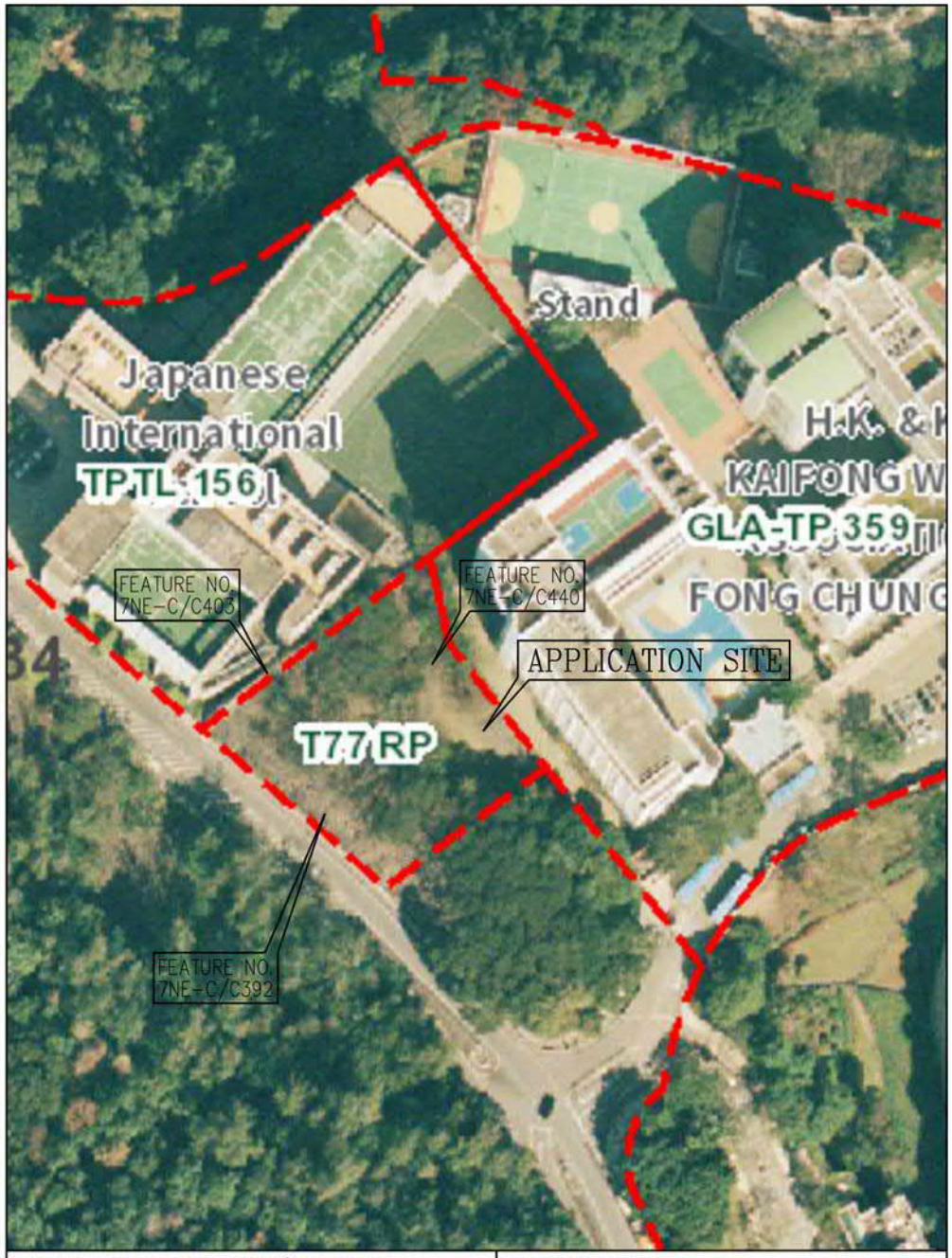


Figure 2

Aerial View of the Proposed Development Site



PROJECT : SHK ST CHRISTOPHER'S COMPLEX AT T77 RP IN D.D.34, TAI PO.			GEOTECHNICAL CONSULTANT : JMK CONSULTING ENGINEERS LTD.
DWG. TITLE : AERIAL VIEW OF THE PROPOSED DEVELOPMENT SITE			
DATE : 14/02/2022	SCALE : N.T.S.	DRG. NO. : FIGURE 2	

2024-08-11 16:16 Chris

\\psa2013\public\User\Chris\6200.dwg

Figure 3

Lot Index Plan and Feature Location

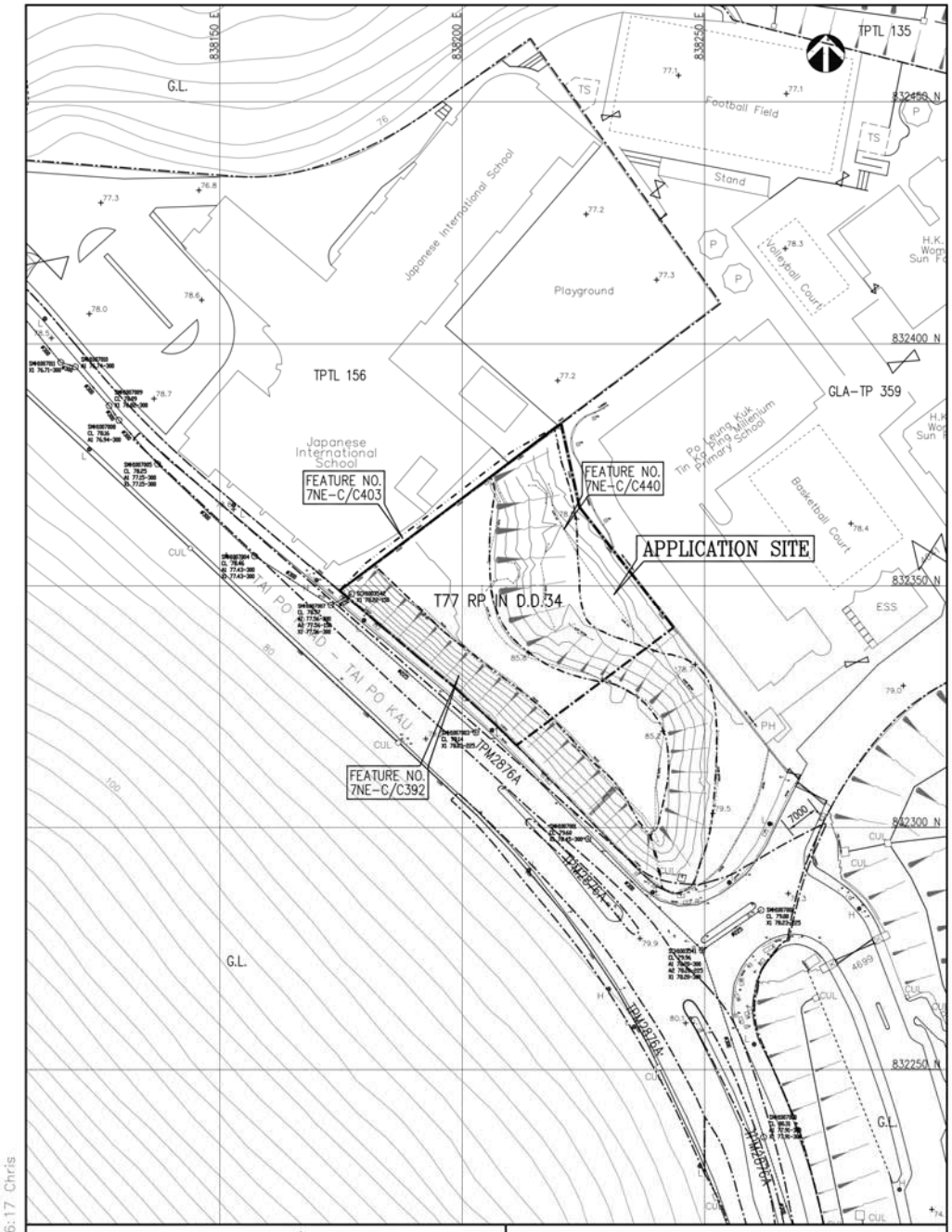
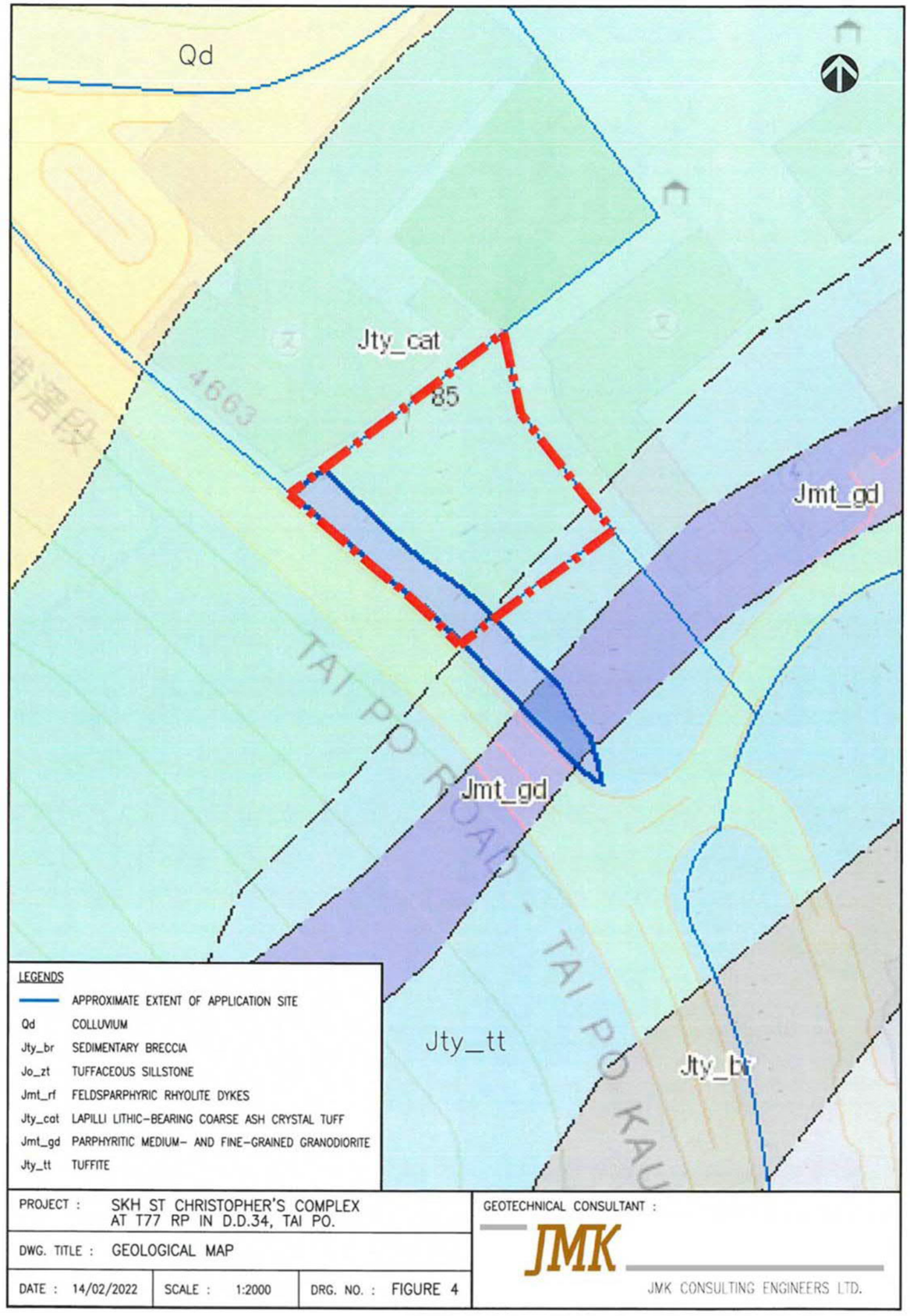


Figure 4

Geological Map



APPENDIX

Appendix A

Photographs

GENERAL VIEW OF FEATURE NO. 7NE-C/C440

GENERAL VIEW OF NORTHERN PORTION OF FEATURE NO. 7NE-C/C392

GENERAL VIEW OF SOUTHERN PORTION OF FEATURE NO. 7NE-C/C392

PROJECT : SKH ST CHRISTOPHER'S COMPLEX AT T77 RP IN D.D.34, TAI PO.		GEOTECHNICAL CONSULTANT : JMK CONSULTING ENGINEERS LTD.
DWG. TITLE : PHOTOS		
DATE : 14/02/2022	SCALE : N.T.S.	DRG. NO. : APPENDIX A

Appendix B

SIMAR Record

Slope Maintenance Responsibility Report

(7NE-C/C392)

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NE-C/C392**		**Sub-Division**	1
	Location	WITHIN DD34 TLL T77 RP & GOVERNMENT LAND ADJOINING TAI PO ROAD		
	Responsible Lot/Party	Highways Department	**Maintenance Agent**	Highways Department
	Remarks	For enquiries about the maintenance of this slope / sub-division of the slope, please contact the Maintenance Agent directly.		

- End of Report -

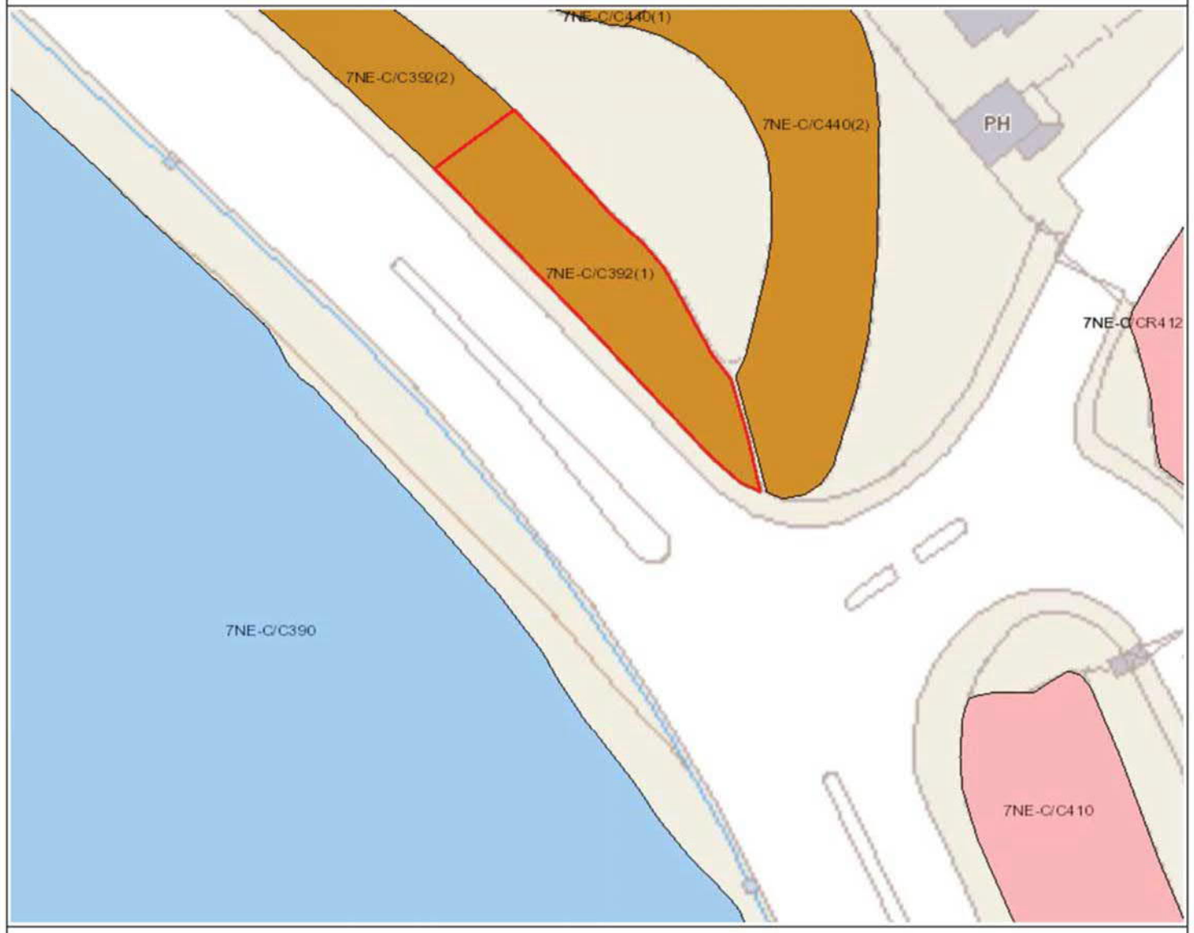
Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

Annex

Location Plan



Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

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Slope Maintenance Responsibility Report

(7NE-C/C392)

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NE-C/C392**		**Sub-Division**	2
	Location	WITHIN DD34 TLL T77 RP & GOVERNMENT LAND ADJOINING TAI PO ROAD		
	Responsible Lot/Party	DD34 TLL T77 RP	**Maintenance Agent**	Not Applicable
	Remarks	Not Applicable		

- End of Report -

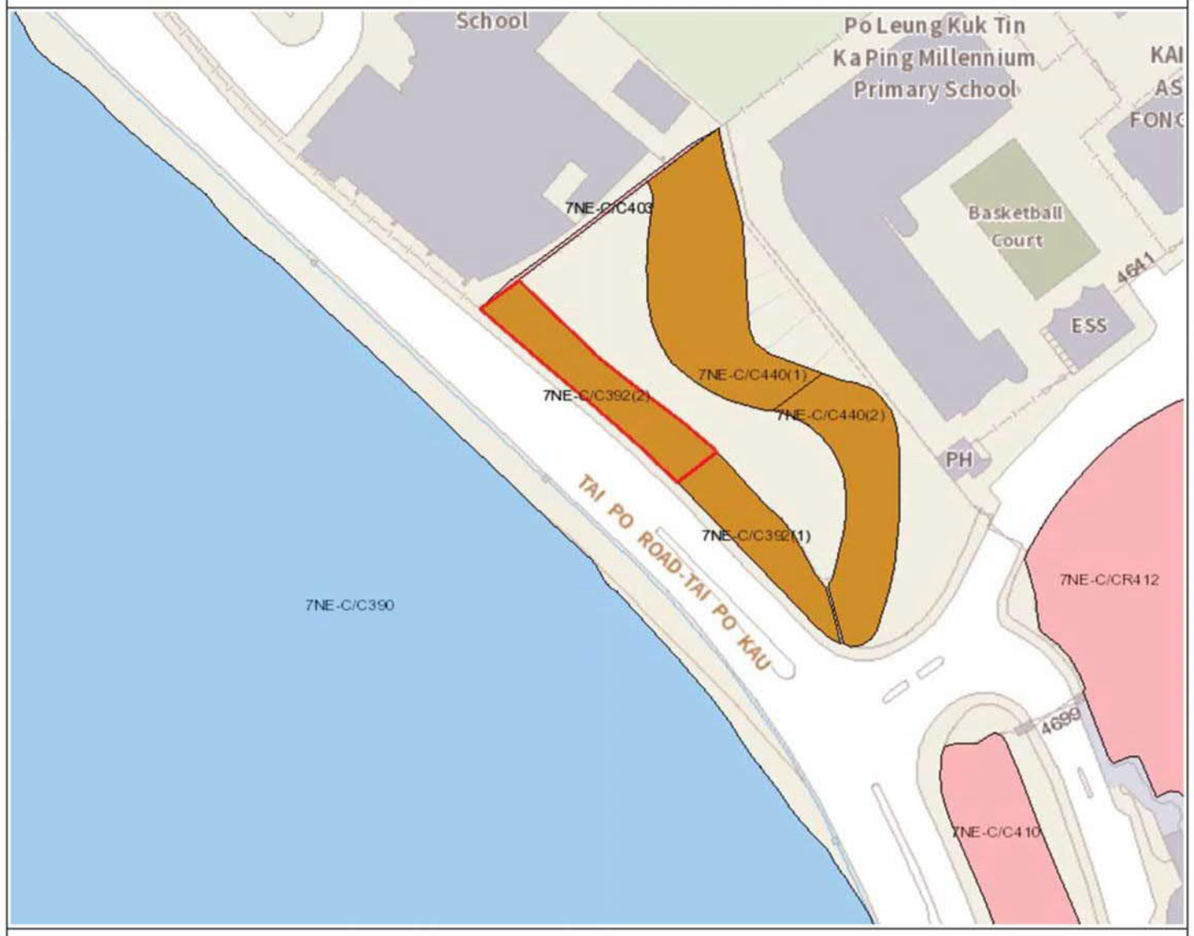
Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

Annex

Location Plan



Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

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Slope Maintenance Responsibility Report

(7NE-C/C440)

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NE-C/C440**		**Sub-Division**	1
	Location	WITHIN DD34 LOT T77RP & ADJOINING GOVERNMENT LAND		
	Responsible Lot/Party	DD34 LOT T77RP	**Maintenance Agent**	Not Applicable
	Remarks	Not Applicable		

- End of Report -

Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

Annex

Location Plan

Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

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Slope Maintenance Responsibility Report

(7NE-C/C440)

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NE-C/C440**		**Sub-Division**	2
	Location	WITHIN DD34 LOT T77RP & ADJOINING GOVERNMENT LAND		
	Responsible Lot/Party	Lands Department	**Maintenance Agent**	Lands Department
	Remarks	For enquiries about the maintenance of this slope / sub-division of the slope, please contact the Maintenance Agent directly.		

- End of Report -

Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

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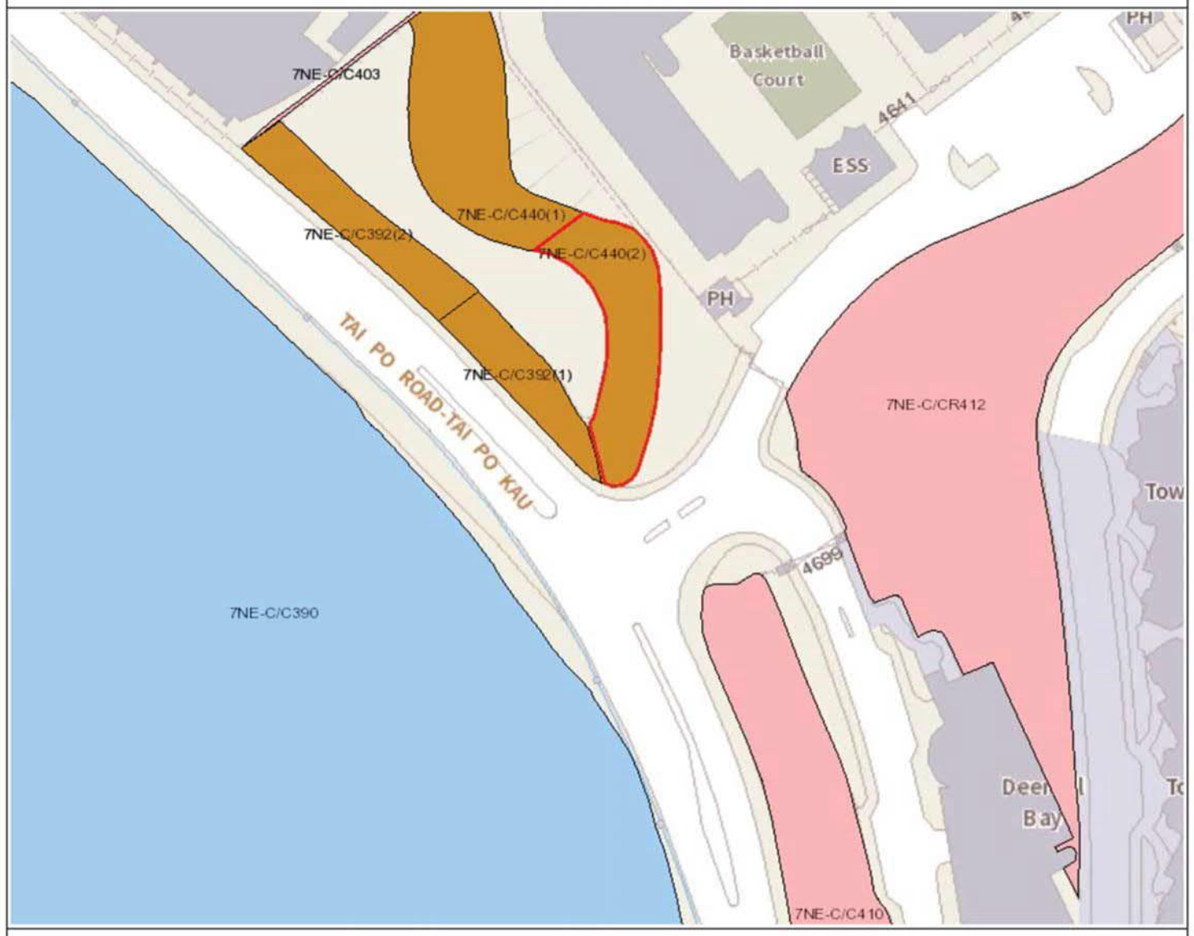
Location Plan



Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

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LANDS DEPARTMENT

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Slope Maintenance Responsibility Report

(7NE-C/C403)

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NE-C/C403**		**Sub-Division**	Not Applicable
	Location	Within TPTL 156, Japanese International School		
	Responsible Lot/Party	TPTL 156	**Maintenance Agent**	Not Applicable
	Remarks	Not Applicable		

- End of Report -

Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

Annex

Location Plan

Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

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Appendix C

Slope Records Retrieved from CEDD

BASIC INFORMATION

Location: Tai Po Road - Tai Po Kau, TP

Date of Formation: post-1977

Date of Construction/ Modification:

Approximate Coordinates: Easting : 838202 Northing : 832330

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest: District open space

Distance of Facility from Crest (m): 0

Facility at Toe: Road/footpath with moderate traffic density

Distance of Facility from Toe (m): 0

Consequence-to-life Category: 2

Remarks: N/A

SLOPE PART

(1) Max. Height (m): 6 Length (m): 90 Average Angle (deg): 40

WALL PART

N/A

SLOPE INFORMATION SYSTEM
GEOTECHNICAL ENGINEERING OFFICE
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
Feature No. 7NE-C/C 392

MAINTENANCE RESPONSIBILITY

Mixed Feature Party: HyD Agent: HyD
Mixed Feature Party: DD34 TLL T77 RP Agent: N/A

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection: 22-01-2009

Data Source: EI(HyD)

Slope Part Drainage: (1) Position: Toe Size(mm): 450

Wall Part Drainage: N/A

SLOPE PART

Slope Part (1)
Surface Protection (%): Bare: 0 Vegetated: 20 Chunam: 0 Shotcrete: 80 Other Cover: 0
Material Description: Material type: Soil Geology: N/A
Berm: No. of Berms: N/A Min. Berm Width (m): N/A
Weepholes: Size (mm): 60 Spacing (m): 1.4

WALL PART

N/A

SERVICES

N/A

STAGE 1 STUDY REPORT

Inspected On:
Weather:
District: ME

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

Distance from Toe(m): 0
Type of Crest Facility: District open space

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

Section No: 2-2
Type of Toe Facility:

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

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

Sign of Seepage:

Criterion A satisfied:
Sign of Distress:

Criterion D satisfied:
Non-routine maintenance required:
Note:

Masonry wall/Masonry facing:
Note:

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

ACTION TO INITIATE PREVENTIVE WORKS

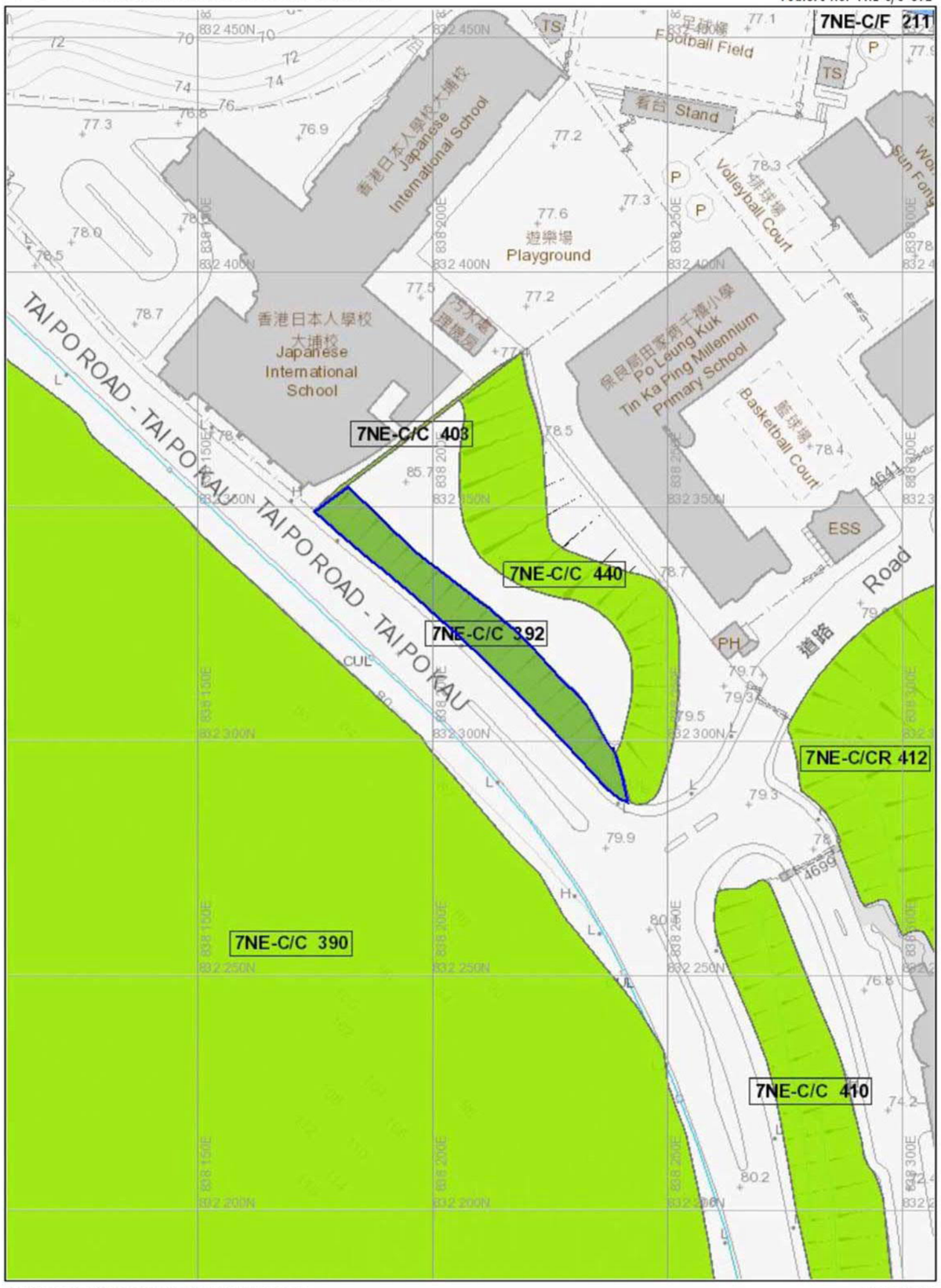
Criterion A/Criterion D: N/A
Action By: N/A
Further Study:
Action By: N/A

OTHER EXTERNAL ACTION

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

SLOPE INFORMATION SYSTEM
GEOTECHNICAL ENGINEERING OFFICE
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
Feature No. 7NE-C/C 392

PHOTO



BASIC INFORMATION

Location: Southeast of Japanses International School

Date of Formation: post-1977

Date of Construction/ Modification:

Approximate Coordinates: Easting : 838229 Northing : 832334

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest: District open space

Distance of Facility from Crest (m): 0

Facility at Toe: School

Distance of Facility from Toe (m): 5

Consequence-to-life Category: 1

Remarks: N/A

SLOPE PART

(1) Max. Height (m): 6.5 Length (m): 110 Average Angle (deg): 30

WALL PART

N/A

MAINTENANCE RESPONSIBILITY

Mixed Feature Party: DD34 LOT T77RP Agent: N/A
Mixed Feature Party: Lands D Agent: Lands D

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection: 22-01-2003
Data Source: Agreement CE 59/2002 (GE)
Slope Part Drainage: N/A

Wall Part Drainage: N/A

SLOPE PART

Slope Part (1)
Surface Protection (%): Bare: 20 Vegetated: 80 Chunam: 0 Shotcrete: 0 Other Cover: 0
Material Description: Material type: Soil Geology: Decomposed volcanic
Berm: No. of Berms: N/A Min. Berm Width (m): N/A
Weepholes: Size (mm): N/A Spacing (m): N/A

SLOPE INFORMATION SYSTEM
GEOTECHNICAL ENGINEERING OFFICE
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
Feature No. 7NE-C/C 440

WALL PART

N/A

SERVICES

N/A

STAGE 1 STUDY REPORT

Inspected On:
Weather:
District: ME

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

Distance from Toe(m): 5
Type of Crest Facility: District open space

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

Section No: 2-2
Type of Toe Facility:

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

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

Sign of Seepage:

Criterion A satisfied:
Sign of Distress:

Criterion D satisfied:
Non-routine maintenance required:
Note:

Masonry wall/Masonry facing:
Note:

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

ACTION TO INITIATE PREVENTIVE WORKS

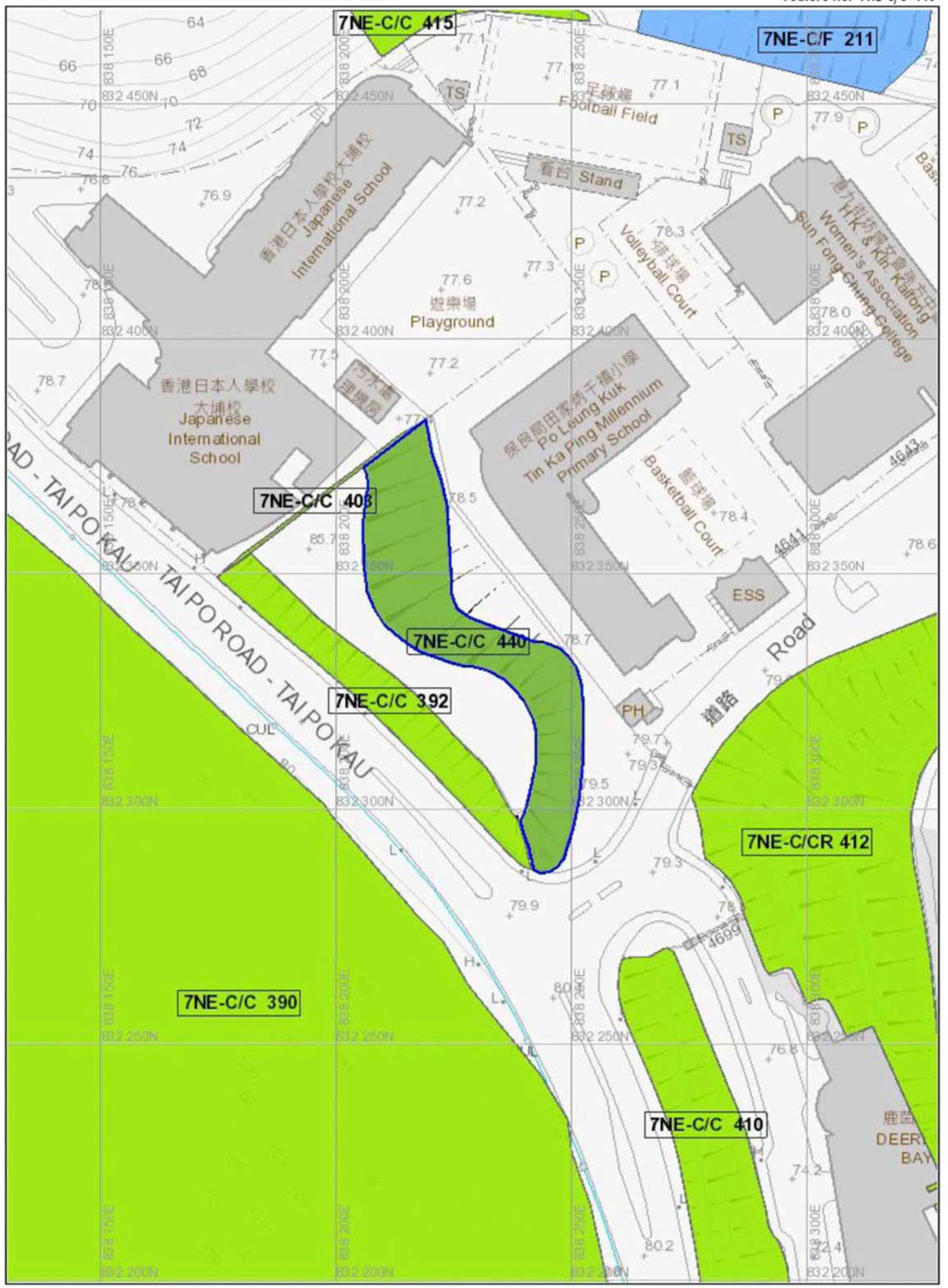
Criterion A/Criterion D: N/A
Action By: N/A
Further Study:
Action By: N/A

OTHER EXTERNAL ACTION

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

PHOTO

SLOPE INFORMATION SYSTEM
GEOTECHNICAL ENGINEERING OFFICE
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
Feature No. 7NE-C/C 440



BASIC INFORMATION

Location: JAPANESE INTERNATIONAL SCHOOL, TAI PO ROAD - TAI PO KAU, TAI PO

Date of Formation: post-1977

Date of Construction/ Modification:

Approximate Coordinates: Easting : 838196 Northing : 832366

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest: District open space

Distance of Facility from Crest (m): 0

Facility at Toe: School

Distance of Facility from Toe (m): 1

Consequence-to-life Category: 1

Remarks: N/A

SLOPE PART

(1) Max. Height (m): 7 Length (m): 70 Average Angle (deg): 85

WALL PART

N/A

SLOPE INFORMATION SYSTEM
GEOTECHNICAL ENGINEERING OFFICE
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
Feature No. 7NE-C/C 403

MAINTENANCE RESPONSIBILITY

Private Feature Party: TPTL 156 Agent: N/A

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection: 14-07-2016

Data Source: Districts

Slope Part Drainage: (1) Position: Stepped Size(mm): 201

Wall Part Drainage: N/A

SLOPE PART

Slope Part (1)

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

Material Description: Material type: Soil & Rock Geology: Decomposed volcanic

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

Weepholes: Size (mm): 65 Spacing (m): 1.2

WALL PART

N/A

SERVICES

N/A

STAGE 1 STUDY REPORT

Inspected On:
Weather:
District: ME

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

Distance from Toe(m): 1
Type of Crest Facility: District open space

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

Section No: 2-2
Type of Toe Facility:

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

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

Sign of Seepage:

Criterion A satisfied:
Sign of Distress:

Criterion D satisfied:
Non-routine maintenance required:
Note:

Masonry wall/Masonry facing:
Note:

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

ACTION TO INITIATE PREVENTIVE WORKS

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

OTHER EXTERNAL ACTION

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

PHOTO

Feature No. 7NE-C/C 403

Appendix D

Extraction of Previous GI Records

I-P FOUNDATIONS

CONTRACT NO. TC G334
TERM CONTRACT FOR GROUND INVESTIGATION AND LABORATORY TESTING FOR WHICH THE ASD IS RESPONSIBLE IN HONG KONG FOR HONG KONG GOVERNMENT

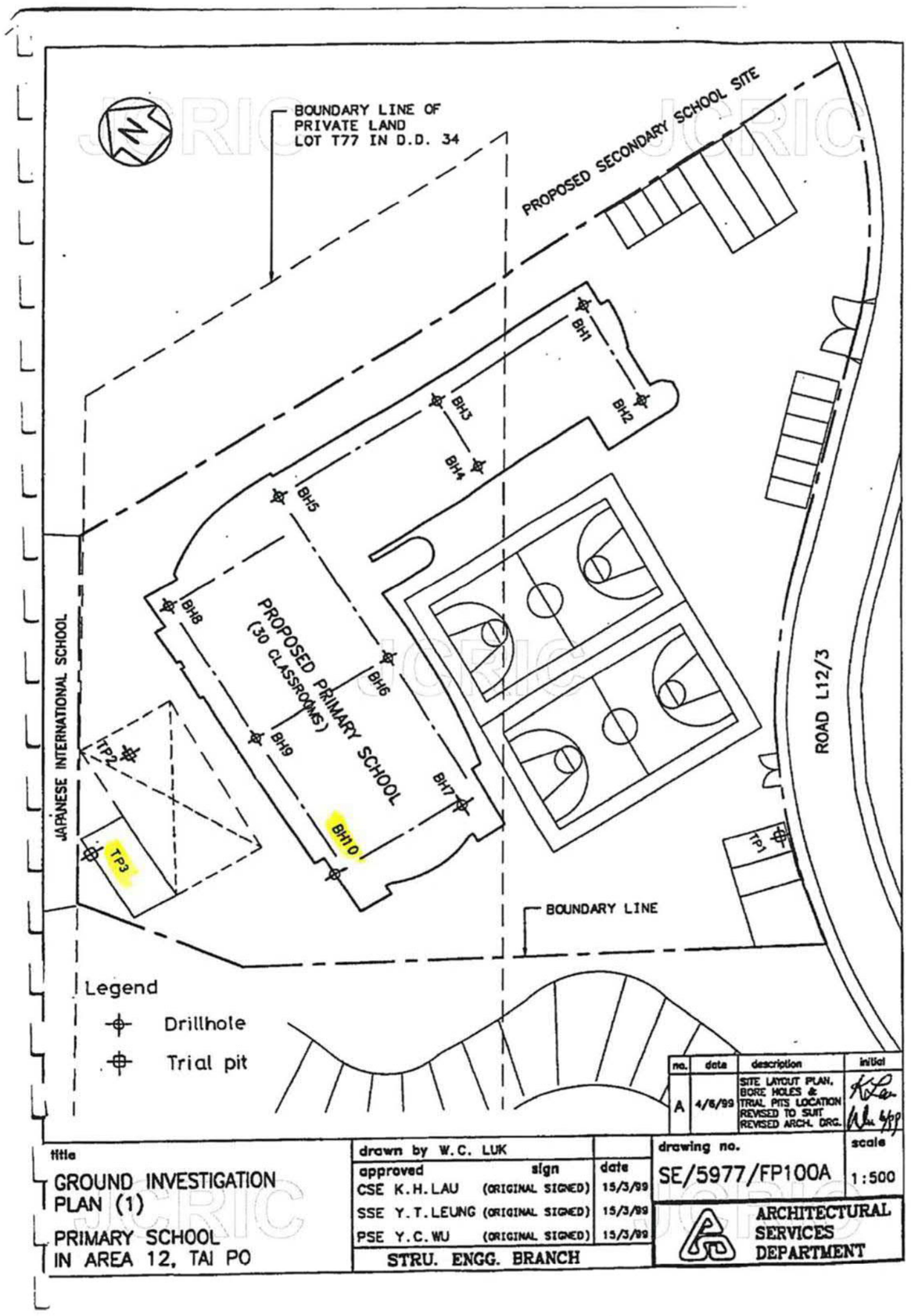
WORKS ORDER NO. ASD 005492
PRIMARY SCHOOL IN AREA 12, TAI PO, NEW TERRITORIES

FIELDWORK REPORT

CONTRACTOR
I-P Foundations Ltd.
6/F, Tai Yau Building,
181 Johnston Road,
Wanchai,
Hong Kong

CLIENT
Architectural Service Department
Queensway Government Offices,
66 Queensway,
Hong Kong

July, 1999



I-P FOUNDATIONS LTD.
Ground Investigation Department.
6/F Tai Yau Building, 181 Johnston Rd., Wan Chai, H.K. Tel. : 2838 3112

DRILLHOLE RECORD
Architectural Services Department
CONTRACT NO. TC G334

HOLE NO.: BH10
SHEET 1 of 1

PROJECT : Primary School in Area 12, Tai Po, N.T.

METHOD : ROTARY	CO-ORDINATES E 838242.46 N 832362.30	W.O.NO. : ASD5492
MACHINE & NO. : LY38 1246		DATE from 17/06/99 to 19/06/99
FLUSHING MEDIUM : WATER	ORIENTATION Vertical	GROUND LEVEL 79.02 mPD

Drilling Progress	Casing depth/size	Water Depth (m)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Description
17/06/99	HW		70						0.00	79.02	0.00			Loose, brown, sandy SILT with some gravel (FILL)
									A 0.60 (Inspection Pit)					
									B 1.00	78.02	1.00		V	Extremely weak, light yellowish brown, completely decomposed fine ash TUFF (Loose, light yellowish brown, sandy SILT with some gravel)
	1.42								C 1.42	77.60	1.42		IV/III	
				85	0	0	NI		T101 1.78	77.26	1.76		III/II	Moderately strong to weak, light grey, highly to moderately decomposed fine ash TUFF - Fractured core.
				100	78	78	9.5		T201 2.13					
				98	98	85			T101 2.84					Strong to moderately strong, light grey, moderately to slightly decomposed fine ash TUFF. Joints are closely to very closely spaced, rough stepped, extremely narrow with limonite and iron stained, dipping 10°-20°, 20°-30° and 60°-70°.
				100	100	83			T201 4.24					
				100	100	86	3.7		T101 5.63	74.11	4.91		III/II	Strong to moderately strong, light grey, moderately to slightly decomposed fine ash TUFF. Joints are medium to closely spaced, rough planar to smooth planar, extremely narrow with limonite and iron stained, dipping 5°-10°, 20°-30° and 50°-60°.
				99	99	75			T201 6.81					
17/06/99		1.90		96	96	96			T101 7.40					
19/06/99		3.05												
				100	100	91			T201 8.91					
				99	99	95			T101 10.00	69.02	10.00			END OF HOLE AT 10.00m.
19/06/99			70											

Small disturbed sample
Large disturbed sample
SPT liner sample
U76 undisturbed sample
U100 undisturbed sample
Mazier sample
Piston sample
Water sample
Piezometer tip
Standpipe
Standard Penetration test
Permeability test
In-situ vane shear test

LOGGED Y.M.WONG
DATE 22/06/99
CHECKED W.H.AU
DATE 23/06/99

REMARKS
An inspection pit was excavated to 1.42m.

Contract No. : TC G334

I-P FOUNDATIONS LTD.

TRIAL PIT LOG

Works Order No. : ASD5492
Site : Primary School in Area 12, Tai Po, New Territories
Trial Pit Centre
Ground Level +78.09 mPD.
Co-ordinates E 838227.26 N 832385.55
Depth of Groundwater Level 1.10m
Trial Pit No. : TP3
Excavation Method HAND TOOLS
Highest/Lowest Gr. Level : +78.09 mPD.
Backfilling Method VIBRATING HAMMER

Sheet 1 of 1
Date Started 24-Jun-99
Completed 26-Jun-99
Pit Backfilled 29-Jun-99
Operator NG FUI
Weather FINE

	Description	Grade
Fill	Very dense, moist, light brownish yellow, silty fine to coarse SAND with much fine to coarse gravel and occasionally abandoned cable (FILL)	
Fill	Dense, moist to wet, alternate brown and orange strips, fine to coarse sandy clayey SILT with some angular fine to coarse gravel and occasionally cobbles (FILL)	
Asphalt pavement	Strong, moist, light grey, slightly decomposed fine ash TUFF at base of pit.	

A - C : Section
A — — — C
1.20

Abandoned cable
Bottom of pit at 1.20m

Face A : 1.20m
Face B : 1.20m
Face C : 1.20m
Face D : 1.20m

Depth (m): 0.00, 0.05, 0.40, 1.20

Sampling/ Testing

Sampling
- Small dist.
- Large dist.
- U76 (Horiz.)
- U76 (Vert.)
- U100 (Horiz.)
- U100 (Vert.)
- Block
- Water

Testing/Installation
- In-situ density
- Plate bearing
- Percolation
- Moisture content
- Photograph
- Seepage
- H-Schmidt hammer

Decomposing grade
- VI Residual soil
- V Completely decomposed
- IV Highly decomposed
- III Moderately decomposed
- II Slightly decomposed
- I Undecomposed

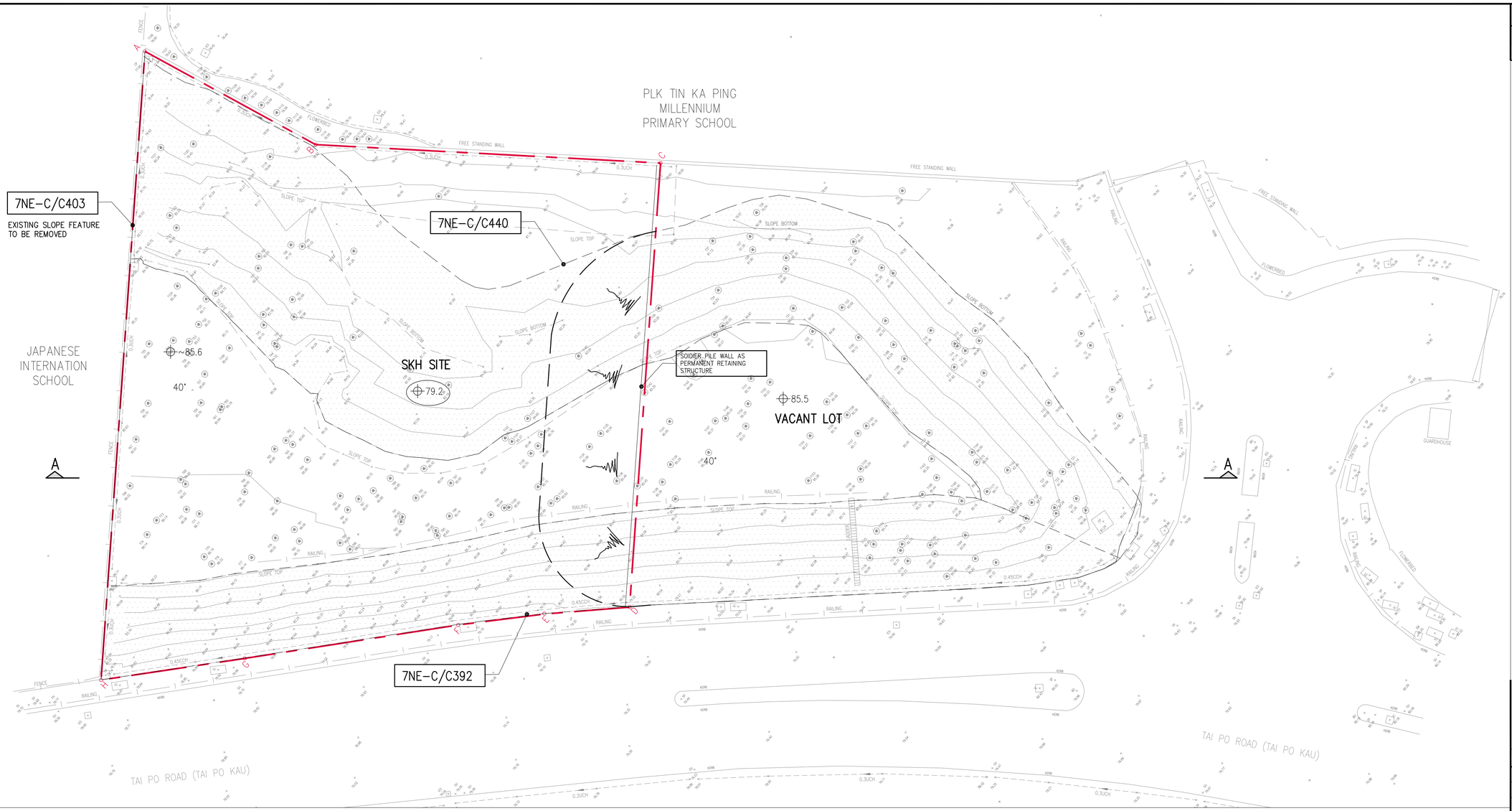
Plan
N
50°
A B C D
Slightly decomposed TUFF at base

Logged Y.M. WONG
Date 26-Jun-99
Checked Y.M. WONG
Date 26-Jun-99
Remarks :
No shoring.

Appendix E

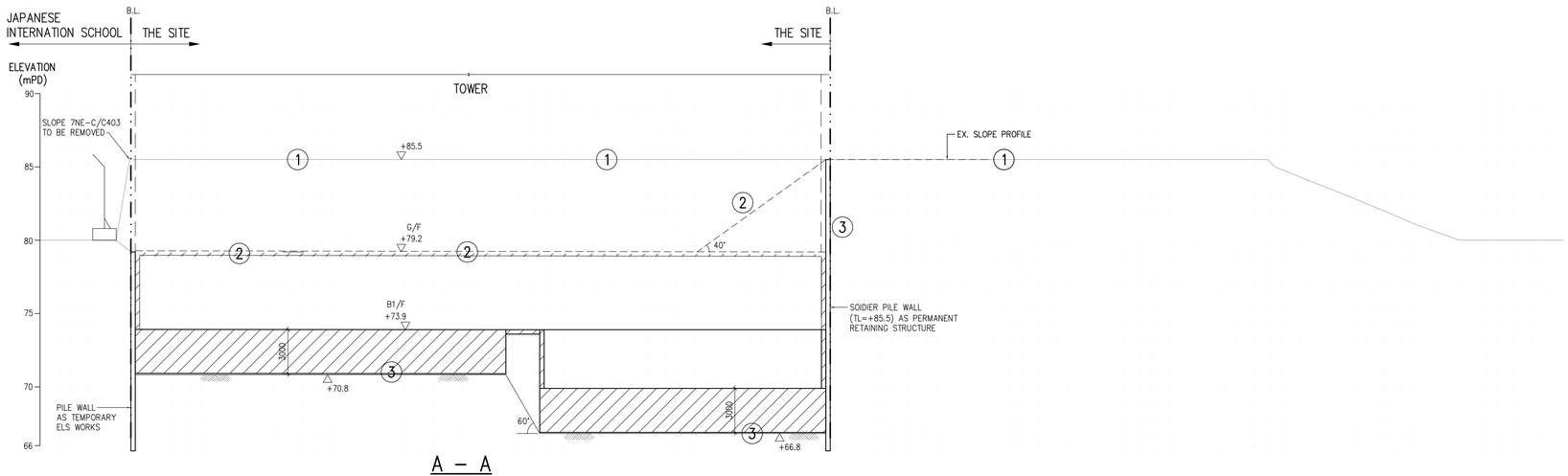
Schematic Plans for Site Formation Works

Schematic Plans for Site Formation Works



SCHEME 2 (DRAFT SITE FORMATION PLAN)

1 : 200



A – A

1: 200

SCHEME 3 (WITH JIS CONSENT & W/O GOV. CONSENT)

1. EX. SLOPE PROFILE
2. SITE FORMATION WORK TO BE CARRIED OUT WITH CUT-SLOPE WITH-IN SITE BOUNDARY
3. CARRY OUT TEMPORARY ELS SYSTEM AND EXCAVATE DOWN TO FOUNDING LEVEL. ELS SYSTEM TO FORM AS PERMANENT RETAINING STRUCTURE ALONG GOV. SITE
4. FORM BASEMENT STRUCTURE & TOWER

B.D. REF.

Notes :

Revision	Date	Description	By	Checked

	Name	Initial
In Charge	H.KWAN	
Design Checked	N.LAM	
Designed	N.LAM	
Draw Checked	N.LAM	
Drawn	W.K.LEE	

Date	Scale	CAD. Ref.
FEB 2022	1 :100	2132-DSF-03

Client

Architect

LWK & PARTNERS (HK) LTD

Project

SHK ST CHRISTOPHER'S COMPLEX
AT T77 RP IN DD34
TAI PO

Title

PRELIMINARY
SITE FORMATION PLAN
(SCHEME 3)

Drg. No.	Rev.
2132/DSF/03	-

JMK CONSULTING ENGINEERS LTD.

PLOT SCALE :

A1 841x594

Appendix 6

Environmental Assessment Report

URBAN GREEN

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po

Environmental Assessment Report

Reference: P060/02 Issue 6
Date: March 2025
Confidential

URBAN GREEN

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34 Tai Po

Environmental Assessment Report

Reference: P60/02 Issue 6

Date: March 2025

Issue	Status	Prepared By	Date	Checked by	Date	Approved By	Date
1	Final	AIC	26/05/22	EMT	26/05/22	JOC	26/05/22
2	Draft	AIC	16/12/22	EMT	16/12/22	JOC	16/12/22
3	Draft	Various	27/02/24	EMT	27/02/24	JOC	27/02/24
4	Final	Various	19/12/24	EMT	19/12/24	JOC	19/12/24
5	Final	Various	13/02/25	EMT	13/02/25	JOC	13/02/25
6	Final	Various	10/03/25	EMT	10/03/25	JOC	10/03/25

23/F, Wu Tat Centre, 55 Connaught Road West, Sheung Wan, Hong Kong
Tel: (852) 3114 1144

Contents

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1 Introduction

1.1 Background

1.1.1.1 The Applicant intends to develop a community service complex (hereafter as "the Proposed Development") for providing childcare and elderly care services at the remaining portion of Taxlord Lot No. T77 in D.D.34, Tai Po (hereafter as "the Site").

1.1.1.2 According to the Approved Tai Po Outline Zoning Plan (OZP) (OZP No.: S/TP/30) gazetted in July 2022, the Site is in the "Government, Institution or Community" Zone.

1.1.1.3 Urban Green Consultants Limited (UGC) has been commissioned to conduct an Environmental Assessment (EA) to access the potential environmental impact on the Proposed Development.

1.2 Objectives of the EA

1.2.1.1 This EA has identified and addressed the following major environmental issues:

- Identify the sensitive uses that will likely be affected by the construction and the operation of the Site;
- Assess and evaluate the potential noise impacts due to site operation and construction phases upon the sensitive uses;
- Assess and evaluate the potential air quality impacts upon the sensitive users;
- Identify and addressed the potential water quality from the construction and operation of the Project on the relevant water system(s);
- Identify and addressed the waste arising as a result of the construction and operation activities of the Project;
- Identify the potential hazardous risks or detrimental effects due to land contamination as a result of industrial or commercial operations carried out on and around the Project Site over a number of years and currently; and
- Propose mitigation measures, where necessary, to reduce the environmental impacts to an acceptable level.

1.3 Report Structure

1.3.1.1 The remaining chapters of this report are shown below:

Chapter 2: Site Context

Chapter 3: Air Quality

Chapter 4: Noise – Road Traffic Noise

Chapter 5: Noise – Fixed Source Noise

Chapter 6: Noise – Construction Noise

Chapter 7: Water Quality

Chapter 8: Waste Management

Chapter 9: Land Contamination

Chapter 10: Conclusion

2 Site Context

2.1 Site Location and Its Environs

2.1.1.1 The Site is bounded by Tai Po Road – Tai Po Kau to its South. The Japanese International School is located at the West of the Site, while Po Leung Kuk Tin Ka Ping Millennium Primary School is at the Northeast of the Site. The site area is approximately 2,210.2m^2.

2.1.1.2 Figure 2.1 shown the Site Location and its environs.

2.2 Proposed Development

2.2.1.1 The Proposed Development is a 10-storey building which consists of seven department units, i.e. Special Child Care Centre (SCCC), Care and Attention Home Providing Continuum of Care (CoC Home), Small Group Home (SGH), Foster Care Service and Agency-based Enhancement of Professional Staff Support Services (FCS), Staff Training Unit (STU), and Child Care Centre (CCC). There will also be residential places for the elderly, a basement carpark, and a localized sewage treatment plant (STP) on B2/F. The installed capacity of the STP is 168.4m^3/day which is not classified as a Designated Project (DP) under EIAO as it has an installed capacity of not more than 5,000m^3 /day and no reclaimed water will be generated for public use. The anticipated commissioning year of the Proposed Development is 2030.

2.2.1.2 The Proposed Development will involve earthworks and building works, with no dredging operations. No upgrading of drainage channels or river training and diversion work is required for the Proposed Development. The project site is not located within the existing or gazetted country park or special area, conservation area, existing or gazetted marine park or marine reserve, site of cultural heritage, and site of special scientific interest, and no earthworks and building work will be conducted in the above natural reserve area. Therefore, the Proposed Development is not classified as a designated project under EIAO as well as no environmental permit is required.

2.2.1.3 As the noise sensitive rooms within the Proposed Development are potentially subject to adverse noise impacts, noise mitigating designs could be incorporated in Proposed Development, if and when necessary, to alleviate the potential noise impacts.

2.2.1.4 The master layout plan with the floor plans and section drawings are presented in Appendix A.

3 Air Quality

3.1 Introduction

3.1.1.1 This section aims to assess the potential air quality impacts arising from the Proposed Development during construction and operation phases.

3.2 Criteria and Guidelines

3.2.1.1 The air quality impact assessment criteria are made reference to the *Air Pollution Control Ordinance* (APCO) (Cap. 311) and the *Hong Kong Planning Standards and Guidelines* (HKPSG).

3.2.1.2 The APCO provides a statutory framework for establishing the Air Quality Objectives (AQO) and stipulating the anti-pollution requirements for air pollution sources. The AQOs have been identified for seven pollutants and are presented in Table 3.1.

Table 3.1 Hong Kong Air Quality Objectives

Pollutant	Averaging time	Concentration limit ($\mu g/m^3$)	Number of exceedances allowed
Sulphur dioxide (SO_2)	10-minute	500	3
	24-hour	50	3
Respirable suspended particulates (PM10)	24-hour	100	9
	Annual	50	Not applicable
Fine suspended particulates (PM2.5)	24-hour	50	35
	Annual	25	Not applicable
Nitrogen dioxide (NO_2)	1-hour	200	18
	Annual	40	Not applicable
Ozone (O_3)	8-hour	160	9
Carbon monoxide (CO)	1-hour	30,000	0
	8-hour	10,000	0
Lead (Pb)	Annual	0.5	Not applicable

3.2.1.3 The minimum buffer distance required between roads and air sensitive uses is stipulated in Table 3.1 in Chapter 9 of the HKPSG. The relevant minimum buffer distance is summarised in Table 3.2. As confirmed by the Transport Department, Tai Po Road – Tai Po Kau Is classified as a rural road with limited traffic flow. According to the HKPSG Chapter 9, there is no minimum buffer distance required for developments adjacent to rural road. However, to address air quality concerns and enhance the overall living environment for future residents, a 5m buffer distance has been incorporated between the Proposed Development and Tai Po Road – Tai Po Kau. The detail of the buffer distance is shown in Figure 3.2.

Table 3.2 Required Buffer Distance between the Surrounding Road and the Air Sensitive Receivers of the Proposed Development

Road	Type	Required Buffer Distance	Buffer Distance Provided
Tai Po Road – Tai Po Kau	Rural Road	Not required according to the HKPSG Ch9	>5m

Remark: The identified road type is based on Transport Department's confirmation, please refer to Appendix B.

Table 3.3 Required Buffer Distance between the Pollution Sources and the Air Sensitive Receiver

Pollution Source	Difference in Height between Chimney Exit and the Site	Required Buffer Distance
Industrial Area	<20m	> 200m (Active and passive recreational uses)
	20 – 30m	5 - 200m (Passive recreational uses)
		> 100m (Active and passive recreational uses)
	30 – 40m	5 - 100m (Passive recreational uses)
		> 50m (Active and passive recreational uses)
	40m	5 - 50m (Passive recreational uses)
		> 10m (Active and passive recreational uses)
Odour Source	NA	200m
Dusty Uses		100m

3.2.1.4 The relevant regulations specified by APCO also include the followings:

- Air Pollution Control Ordinance (Cap. 311);
- Air Pollution Control (Construction Dust) Regulation (Cap. 311R);
- Air Pollution Control (Smoke) Regulation (Cap. 311C);
- Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (Cap. 311Z);

- Air Pollution Control (Fuel Restriction) Regulations (i.e. using liquid fuel with a sulphur content of less than 0.005% by weight); and
- Recommended Pollution Control Clauses for Construction Contracts

3.3 Representative Air Sensitive Receivers

3.3.1.1 Representative existing ASRs located within the 500m study area from the Project Site are identified. Details of the ASRs are provided in Table 3.4 below and their locations are shown in Figure 3.1.

Table 3.4 Representative Air Sensitive Receivers

ASR ID	Location	Uses	Horizontal distance from near site boundary (m)	Building height above ground (approx.) (m)
ASR 1	Villa Costa	Residential	369	8
ASR 2	Villa Castell	Residential	190	8
ASR 3	Deerhill Bay	Residential	78	36
ASR 4	Japanese International School	Educational	7	21
ASR 5	PLK Tin Ka Ping Millennium Primary School	Educational	7	21
ASR 6	Sun Fong Chung College	Educational	63	21
ASR 7	Banyan Villa	Residential	445	9
ASR 8	Proposed Development (NSR 2 in 2/F)	Residential	NA	90

3.4 Existing and Future Background Air Quality Data

3.4.1.1 The nearest EPD fixed air quality monitoring station is located at Tai Po. The annual average monitoring data recorded at EPD's air quality monitoring station have shown general declining trend of pollutant concentrations in the past five years. The recent five years (2019 - 2023) observed concentrations of the key air pollutants relevant to the assessment area are presented in Table 3.5.

Table 3.5 Concentrations of Pollutants in the Recent Five Years (Year 2019 – 2023) at Tai Po EPD Air Quality Monitoring Station

Pollutant	Averaging Time	Observed Concentration (μg/m³)					5-year Average (μg/m³)
		2019	2020	2021	2022	2023	
Sulphur dioxide (SO_2)	4th Highest 24-hour	10	7	8	5	4	7
	4th Highest 10-minutes	20	19	15	12	27	19
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	142	106	115	93	95	110
	Annual	36	30	32	27	27	30
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	65	58	60	48	53	57
	Annual	31	24	26	21	25	25
Fine Suspended Particulates (FSP)	36th Highest 24-hour	35	28	27	25	26	28
	Annual	20	15	16	14	15	16
Ozone (O_3)	10th Highest 8-hour	197	165	168	188	163	176
CO	1st Highest 8-hour	-	-	-	-	-	-
	Annual	-	-	-	-	-	-

Notes:
1) CO concentration is not available at Tai Po Station
2) The number highlighted in red indicates the exceedance against the AQO
3) Source: https://cd.epic.epd.gov.hk/EPICDI/air/station/?lang=en

3.4.1.2 Based on the background air quality data, it appears that the concentrations of all pollutants have decreased over the years from 2019 to 2023 in general. This could indicate improvements in air quality over the year. By comparing with the Air Quality Objectives in Table 3.1, the concentration of all air pollutants falls within the standard except ozone.

3.4.1.3 Future background air quality has been predicted based on hourly concentration data extracted from the "Pollutants in the Atmosphere and their Transport over Hong Kong" (PATH v3.0) model. The Project commissioning year is Year 2030. The best available data from PATH v3.0 will be the projected background scenario in Year 2030. Pollutant concentration in PATH Grid (42,45) in Year 2030 was extracted and summarized in Table 3.6:

Table 3.6 Background Air Pollutant in Year 2030 Extracted from the PATH v3.0 Model

Pollutant	Averaging Time	PATH Grid (42, 45) Concentration (μg/m^3)
Sulphur Dioxide (SO_2)	10-minute (4th Highest)	24.34
	24-hour (4th Highest)	6.99
Nitrogen Dioxide (NO_2)	1-hour (19th Highest)	43.23
	Annual	11.02
Respirable Suspended Particulates (RSP)	24-hour (10th Highest)	48.72
	Annual	19.1
Fine Suspended Particulates (FSP)	24-hour (36th Highest)	25.4
	Annual	11.64
Ozone (O3)	8-hour (10th Highest)	169.09
CO	1-hour (1st Highest)	527.27
	8-hour (1st Highest)	490.27

Notes:
1. *Source: PATH v3.0 data for grid cell (42,45) at levels L1 from https://aqia.epd.gov.hk/*
2. *The number highlighted in red indicates the exceedance against the AQO*

3.5 Potential Impact during Construction Phase

3.5.1.1 The relevant statutory requirements during construction phase of the Project include the *APCO and Air Pollution Control (Construction Dust) Regulation*. Referring to the *Air Pollution Control (Construction Dust) Regulation*, the proposed project works are considered to be "construction work" as defined in the regulation.

3.5.1.2 The potential sources of air quality impact associated with the proposed construction activities include foundation works and construction works, which will be expected to generate construction dust and smoke emission.

3.5.1.3 According to the information provided by the project team. The excavation area will be around 2,210m^2 with a maximum depth 19m while that of filling of land will be approximately 1902m^2 and the maximum depth of filling is 7m. Given a dump truck capacity of 28m^3, approximately 1024 dump trucks would be required throughout the construction period. The whole excavation process will be lasted for 12 months with

total 296 working days (including Saturday). 4 trips per day is therefore anticipated. And 2 dump trucks will travel approximately twice per day for excavated material transportation. The use of bulldozer, dump truck, auger, crane, air compressor, and concrete lorry mixer will be essential for the construction. Table 3.7 below summarizes the number of dump trucks and mechanical equipment to be used per time over the work site during construction.

Table 3.7 Number of Dump Trucks and Mechanical Equipment

Equipment	Quantity
Stage 1 – Hoarding	
Concrete crusher mini-robot mounted	1
Bulldozer, tracked	1
Dump truck (≤38 tonnes)	2
Stage 2 – Piling	
Rotary bored piling – cast in situ (Crane mounted auger)	2
Wheeled mobile crane	2
Air compressor (≤10 m^3/min)	4
Stage 3 – Excavation & Pile Cap	
Wheeled mobile crane	1
Excavator, wheeled/tracked	1
Bar bender and cutter (electric)	1
Compactor, vibratory	2
Large lorry concrete mixer	1
Dump truck (≤38 tonnes)	2
Stage 4 – Superstructure	
Wheeled mobile crane	1
Bar bender and cutter (electric)	1
Compactor, vibratory	2
Large lorry concrete mixer	1
Dump truck (≤38 tonnes)	1
Lorry (≤38 tonnes)	1

Equipment	Quantity

Note:

[1] The listed equipment is quiet PME suggested in the Technical Memorandum on Noise from Construction Work Other Than Percussive Training.

3.5.1.4 During construction, dust generating construction activities will include vehicle movement, site clearance, drilling, ground excavation, and material handling. Vehicle washing facilities will be provided at the entrances and exits of the work site to minimize dust nuisance created to nearby ASRs. The main dust impacts will arise from truck moments along the unpaved haul roads. Secondary impacts will arise through the stockpiling and removal of spoil during hoarding, piling, and excavation works period.

3.5.1.5 Construction dust shall be controlled in accordance with the requirements as listed in the Schedule of the Air Pollution Control (Construction Dust) Regulation of APCO. Also, notice of notifiable works as defined under the Regulation shall be completed by the Contractor and sent to the Environmental Protection Department (EPD). The road improvement work will as well follow relevant guidelines stipulated by EPD to ensure no adverse air quality impact will be induced to nearby ASRs. In addition, there is no concurrent project in the vicinity of the Project Site, thus no cumulative air quality impact is anticipated.

3.5.1.6 Non-road mobile machinery (NRMM) used on construction sites, such as excavators, bulldozers, and cranes, are significant sources of air pollution, emitting pollutants like nitrogen oxides (NOx), carbon dioxide (CO2), and particulate matter (PM). To mitigate these emissions, several measures can be implemented, including adherence to prescribed emission standards.

3.5.1.7 All the non-road vehicles should follow the emissions standards of the following types of newly approved non-road vehicles. For Regulated machines, which include any mobile machines or transportable industrial equipment, must comply with specific emission standards based on their engine type and power output. For compression-ignition engines, the standards are as follows:

Table 3.8 Prescribed Emissions Standards for Regulated Machine

Rated Engine Power Output (P) in kW	Emission Standards Adopted
Compression-ignition Engines	
37 ≤ P ≤ 560	EU Stage IIIA, US Tier 3 or Japan MoE standards
19< P < 37	EU Stage IIIA, US Tier 2 or Japan MoE standards
Positive-ignition Engines	
19< P ≤ 560	US Tier 2 or Japan MoE standards

3.5.1.8 Mitigation measures for NRMM emissions during the construction including:

1. Advanced Engine Technologies: Utilizing machinery equipped with technologies such as selective catalytic reduction (SCR) and diesel particulate filters (DPF) to reduce NOx and PM emissions;

2. Regular Maintenance: Ensuring regular maintenance and timely repairs to prevent increased emissions due to engine wear and malfunctioning emission control systems;

3. Fuel Quality: Using cleaner fuels with lower sulfur content to reduce the formation of harmful pollutants. Biodiesel and other alternative fuels can also be considered to lower emissions;

4. Retrofitting Older Equipment: Upgrading older NRMM with modern emission control technologies to meet current standards; and

5. Operational Practices: Implementing best practices such as minimizing idling time, optimizing engine load, and using energy-efficient machinery. For example, shutting down engines when not in use and scheduling construction activities to avoid peak pollution periods can be effective.

3.6 Mitigation Measures during Construction Phase

3.6.1.1 During construction phase, it will be ensured that the Contractor or relevant parties implement dust control measures in accordance with the requirements of the *Air Pollution Control (Construction Dust) Regulation* and all dust control measures recommended in regulation, where applicable, will also be implemented. All dusty processing will be avoided or rearranged in non-school hours and keep school management informed of any possible impact. Typical dust control measures include:

- The work area shall be sprayed with water before, during and after the construction works so as to maintain the entire surface wet;
- Restricting heights from which materials are to be dropped, as far as practicable to minimize the fugitive dust arising from unloading/ loading;
- Immediately before leaving a construction site, all vehicles shall be washed to remove any dusty materials from its body and wheels;
- All spraying of materials and surfaces should avoid excessive water usage;
- Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle;
- Travelling speeds should be controlled to reduce traffic induced dust dispersion and re-suspension within the site from the operating haul trucks;
- Erection of hoarding of not less than 2.4 m high from ground level along the site boundary;
- Any stockpile of dusty materials shall be covered entirely by impervious sheeting; and/or placed in an area sheltered on the top and 4 sides; and
- All dusty materials shall be sprayed with water immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet;

- Electric power supply should be provided for on-site machinery as far as practicable;
- Avoid the use of diesel generators and machinery to minimize gaseous and articulate emissions;

Enhanced dust mitigation measures will be adopted for the ASRs in proximity to the Proposed Development:

- Adopt site hoarding at sufficient height close to those concerned ASRs;
- Locate the haul road away from those concerned ASRs;
- Avoid dusty works or placing stockpiles near to those concerned ASRs;
- Minimization of unpaved, exposed earth by immediate covering/ permanent paving as soon as the works have been completed.

3.6.1.2 With the implementation of the mitigation measures, no adverse construction dust impact is anticipated.

3.7 Potential Impact during Operation Phase

3.7.1.1 The Proposed Development is mainly for community service and residential uses. No chimney will be provided in the Proposed Development. As a result, there is no expected air pollutants emissions during operation phase and no air sensitive receivers (ASRs) are assigned for the assessment. Moreover, the design and operation of the proposed carparks for the Project will follow *ProPECC PN 2/96 on Control of Air Pollution in Car Parks*. The exhaust outlets of the proposed carpark will be located at the roof floor which faced away from nearby ASRs as far as applicable.

3.7.1.2 According to the Sewerage Impact Assessment (SIA), an underground Sewage Treatment plant (STP) will be provided at the basement under the Proposed Development. The propose STP would treat sewage generated from the Proposed Development only. The Installed capacity of the proposed STP is 168.41 m^3/day. It is not classified as a Designated Project (DP) under EIAO as it will has an installed capacity of not more than 5,000m^3 /day and no reclaimed water will be generated for public use.

3.7.1.3 The proposed STP will be enclosed underground and the potential odour emission impact from the STP would be minimized. General mitigation measures, including enclosure of odorous facilities, maintaining negative pressure to prevent foul air from flowing out, and provision of deodorisation (DO) unit of at least 99.5% removal efficiency (i.e. H2S), will be implemented to control potential odour impacts. And all odorous emission points, including the vent exhaust of the deodorisation unit, will be located at the roof floor which faced away from nearby ASRs as far as applicable. Good housekeeping practices should also be implemented, including regular inspection of treatment components where odour could be produced, regular cleaning and flushing of screens and other sewage handling equipment, and disposal of collected grit and sludge. After the implementation of the above measures, the potential odour impact due to the operation of the on-site STP would be minimal or negligible

3.7.1.4 According to the desktop survey and the site survey on 10 Jun 2024, no chimney was found within 200m nearby the Site. Thus, no adverse air quality impact will be brought to the Proposed Development by surrounding chimney.

3.7.1.5 A desktop study has been conducted to compare the value of Annual Average Daily Traffic (AADT) of the Tai Po Road against other local distributors with similar or grater traffic flow and located in Tai Po district. Shan Tong Road, Ting Lai Road, On Cheung Road and Ting Kok Road have been selected for the comparison. Table 3.9 shows the summary of the comparison.

Table 3.9 Summary of Traffic Flow Comparison

Road Segment	Road Type	ID	AADT				
			2019	2020	2021	2022	2023
Shan Tong Road (Nan Wan Road to Shan Tong Road	LD	6662	NA	NA	NA	7,520	7,080
Ting Lai Toad (Ting Tai Road to Chung Nga Road)	LD	6070	6,740	6,460	6,720	7,250	6,990
On Cheung Road (Tai Po Tai Wo Road to On Chee Road)	LD	6620	13,560	13,050	13,680	13,160	13,600
Ting Kok Road (Tai Po Tai Wo Road to Kwong Fuk Road)	LD	6621	14,790	14,810	15,210	12,960	12,550
Tai Po Road – Ma Liu Shui (Chung Chi College to Yuen Chau Tsai Interchange) * Road segment include Tai Po Road – Tai Po Kau	RR	6210	7,640	7,970	8,260	7,650	7,340

Note: The values of AADT are extracted from the Annual Traffic Census 2023 published by the Traffic Department.

3.7.1.6 As demonstrated in the analysis above, all four roads exhibit traffic flow volumes that are comparable to or greater than Tai Po Road. According to Table 3.1 in Chapter 9 of the HKPSG, a minimum buffer distance of 5m is required between roads and air sensitive uses for these roads. Given that Tai Po Road shares similar traffic characteristics, the same 5m buffer distance requirement is deemed applicable to it.

3.8 Mitigation Measures during Operation Phase

3.8.1.1 The mentioned mitigation measures shall follow the "*Guidelines for the Design of Small Sewage Treatment Plants"* published by EPD. Given the proper handling of the STP, no potential air quality impact is expected due to the Proposed Development.

4 Noise – Road Traffic Noise

4.1 Introduction

4.1.1.1 This section aims to assess the road traffic noise impact from the nearby road upon the Proposed Development during occupancy.

4.2 Assessment Criteria

4.2.1.1 Noise standards are stipulated in Chapter 9 of the *Hong Kong Planning Standards and Guidelines (HKPSG)* for planning against possible noise impact from road traffic. According to the HKPSG, the road traffic noise standard of L10(1-hour) 70 dB(A) for the use of "All domestic premises including temporary housing accommodation" should be followed.

4.3 Assessment Locations

4.3.1.1 Noise sensitive receivers (i.e. dormitory only) were assigned with assessment points. In general, assessment points were assumed at a height of 1.2m above each residential floor and 1m away from the opened window for ventilation of the noise sensitive receivers. Confirmed by the Project Proponent, only dormitories are relied on opened window for ventilation, where the openable window is well-gasketted with at least 6mm thick window pane. Other sensitive uses for example office, conference room, sick / isolation /quiet room, end-of-life room, training room, etc. will all rely on central AC system for ventilation. Therefore, only dormitories are assigned with assessment points. Assessment point of the noise sensitive receivers for the road traffic noise impact assessment are shown in Figures 4.1a-d.

4.4 Assessment Assumption and Methodology

4.4.1.1 As advised by the Project Traffic Consultant, there is no major road infrastructure development in the vicinity of the Site. It is anticipated that the traffic will grow continuously within 15 years from occupation of the Proposed Development (i.e. Year 2045 = Year of occupancy (Year 2030) + 15 years). Therefore, the road traffic noise levels were predicted based on the projected peak hour traffic flows for the worst year within 15-year from the year of occupancy. The traffic forecast in Year 2045 was provided by the traffic consultant under the same application. The traffic consultant has confirmed that traffic data is prepared based on the methodology which approved by TD. The traffic data from peak hour was taken into consideration in the assessment. All major roads within 300m from the Site were included in the assessment. The traffic forecast data with the TD's endorsement is presented in Appendix B.

4.4.1.2 The road traffic noise impact at the assessment points were predicted using the computer model "NoiseMap Enterprise - RoadNoise" which implements the calculation method as prescribed in the Calculation of Road Traffic Noise (CRTN) developed by UK Department of Transport, Welsh Office in 1988. The predicted noise levels were then compared against the HKPSG noise criterion for evaluating the impact.

4.5 Assessment Results

4.5.1.1 Based on the road traffic noise assessment results, the predicted traffic noise levels range from 36 to 78 dB(A). Further eliminate the road traffic noise is essential in use of practicable noise mitigation measures.

4.5.1.2 The predicted traffic noise levels at the identified NSRs without the application of mitigation measures are given in Appendix C1.

4.6 Noise Mitigation Measures

4.6.1.1 According to the result of the predicted noised levels under the base case, a low noise road surface is proposed as an initial mitigation measure to reduce road traffic noise. Low Noise Road Surface (LNRS) effectively reduces traffic noise by absorbing the noise generated from tyre-road interactions and minimizing tyre tread impact and shock noise. According to the EPD website "Innovation Noise Mitigation Design and Measures", approximately 2.5dB(A) of noise reduction level in average can be achieved. The predicted traffic noise levels at the identified NSRs with the application of low noise road surface are given in Appendix C2. The confirmation of the implementation of LNRS from Highways Department is shown in Appendix K.

4.6.1.2 As indicated by the result of the road traffic noise analysis with proposed LNRS, the predicted traffic noise levels in the simulation range from 36 to 75 dB(A). To comply with the HKPSG's road traffic noise standards (i.e. L10(1-hour) 70 dB(A)), acoustic window application is further proposed.

4.6.1.3 The acoustic window (baffle type) comprises two layers of glass panes. The outer layer has openings for ventilation while the inner layer is a sliding panel aimed at shielding noise. Additional sound absorptive materials can also be applied on the top and both sides of the window frame for further noise reduction.

4.6.1.4 The inner sliding glass panel is introduced to a conventional side-hung window in a staggering position. By properly positioning the openings, noise entering indoor can be reduced while allowing air flow into the room through the air gap between the two layers of glass panel. This design leverages the principle of sound wave interference and absorption. The staggered positioning of the glass panels creates a labyrinthine path for sound waves, which helps in dissipating their energy. The air gap acts as an additional buffer, reducing the transmission of sound. Furthermore, the sound absorptive materials on the window frame enhance the overall noise reduction by absorbing residual sound waves that might penetrate through the glass layers.

4.6.1.5 The Practice Note on Lighting and Ventilation requirements (APP-130) issued by the Building Department (BD) states that the air gap (i.e. the overlapping between the inner and outer window layers) should have an overlapping length of not less than 100mm and a width between 100mm to 175mm, for optimal performance in a closed position.

4.6.1.6 In accordance with the recommended *ProPECC PN 5/23 Application of Innovative Noise Mitigation Designs in Planning Private Residential Developments against Road Traffic Noise*. the baffle type acoustic window configuration was considered for noise attenuation purposes. The acoustic window in two different types is proposed and the typical configurations are presented in Figure 4.3a-b. The reference of acoustic window proposed are presented in Appendix E and the summarised of key configuration table are shown in Table 4.1.

4.6.1.7 There are two different types of acoustic windows proposed. The Type A acoustic window comprises two windows of different sizes and is suitable for larger rooms ranging from 16.9 to 43.1 m² in the Proposed Building. For the larger window, the inner and outer window openings measure 1,040 (W) x 1,383 (H) mm² and 1,060 (W) x 1,383 (H) mm² respectively, with an overlapping length of 200 mm and a gap width of 100 mm. For the smaller window, the height is 1,383 mm, with an inner opening width of 575 mm and an outer opening width of 550 mm. Compared to the reference acoustic window recommended in the reference case "Proposed Public Housing Development at Tung Chung Area 46" for the Type C-7 flat, both the inner and outer window openings of the Type A acoustic window share the same dimensions. While the room size is larger than the reference case, the Type A acoustic window will perform better, ensuring that the noise reduction achieved in the reference case can be met. Additionally, this type includes Sound Absorption Material (SAM) and offers a noise reduction level of 6.9 dB(A).

4.6.1.8 On the other hand, Acoustic Window Type B consists of a single window, designed for smaller rooms between 16.9 and 6.6 m². For Type B acoustic window, both the inner and outer window are 750 (W) x 1,500 (H)mm^2. However, its adjusted noise reduction level ranges from 8.2 dB(A) to 4.1 dB(A) due to the different room sizes. Compared to the reference acoustic window recommended in *ProPECC PN 5/23*, both the inner and outer window opening of the type B acoustic window share the same dimension, with a gap width of 100 mm. However, the overlapping length of the Type B acoustic window is twice as large as the reference. This indicates that the Type B acoustic window will perform better, ensuring that the noise reduction standards proposed in *ProPECC PN 5/23* can be achieved.

4.6.1.9 After the implemented of the acoustic window, all the NSR complied with the noise criteria stated at Section 4.2.1.1 The configuration of noise reduction of acoustic window (baffle type) and noise reduction after adjustment for improvement measures, room size, etc are shown in Appendix D. The predicted noise level with mitigation measures is shown in Appendix C2.

Table 4.1 Key Configuration of Proposed Acoustic Window

Key Configuration	Acoustic Window (Type A) (Larger)	Acoustic Window (Type A) (Smaller)	Acoustic Window (Type B)
Number of Windows	1	1	1
Room Size (m^2)	43.1 – 27.1		16.9 - 6.6
Inner Window Opening (mm^2)	1,040 (W) x 1,383 (H)	575 (W) x 1,383 (H)	750 (W) x 1,500 (H)
Outer Window Opening (mm^2)	1,060 (W) x 1,383 (H)	550 (W) x 1,383 (H)	750 (W) x 1,500 (H)
Overlapping (mm)	200	200	200
Gap width (mm)	100	100	100
SAM	Yes		Yes

4.6.1.10 The locations of the proposed noise mitigation measures are listed in Table 4.2 below:

Table 4.2 Locations of Proposed Acoustic Windows

NSR ID	Recommended Mitigation Measure(s)	Implemented Floor(s)
NSR 1	Acoustic Window (Type A)	3/F-6/F
NSR 2		2/F
NSR 4		3/F-6/F
NSR 8		2/F-6/F
NSR 5	Acoustic Window (Type B)	2/F
NSR 3		8/F-9/F
NSR 6		8/F-9/F
NSR 7		8/F-9/F

4.6.1.11 With the further application of the proposed mitigation measure on the above NSRs, the traffic noise level will comply with the 70 dB(A) standard. Thus, no adverse traffic noise impacts are anticipated within the Proposed Development. The location of the acoustic window is shown in Figure 4.2a-d.

4.6.1.12 The predicted traffic noise levels at the NSRs with the application of mitigation measures including LNRS and acoustic window it is expected that the noise impact in each specific room will be effectively mitigated, and road noise impact will not be anticipated.

5 Noise – Fixed Source Noise

5.1 Introduction

5.1.1.1 This section aims to assess potential noise impacts upon the Proposed Development during occupancy and the noise impacts from the Proposed Development on the adjacent sensitive uses.

5.2 Criteria and Guidelines

5.2.1 Existing Fixed Source Noise

5.2.1.1 Under the Noise Control Ordinance (NCO), noise criteria for existing fixed noise sources are stipulated in the "*Technical Memorandum for the Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites*" (IND-TM).

5.2.1.2 The Site is situated in a residential area and is located to the southwest of Tolo Highway. Tolo Highway is considered to be an Influencing Factor (IF) since the annual average daily traffic flow was in excess of 30,000, according to "*The Annual Traffic Census 2023*" issued by Transport Department (TD). However, it should not cause noise effects on the Proposed Development, provided that the highway is 530m away from the Site and there are residential buildings in between.

5.2.1.3 Given the type of area for the Site is classified as Type (ii) "Low density residential area consisting of low-rise or isolated high-rise developments" and will not be affected by the IF, the Area Sensitivity Rating (ASR) of the subject site area is defined as "A". Noise standards for this fixed noise impact assessment are tabulated in Table 5.1 and shall be adopted for all time periods in the assessment.

Table 5.1 Noise Standards for Existing Fixed Noise Source

Time Period	Acceptable Noise Level (ANL) in IND-TM, dB(A)
Day (0700 to 1900 hours)	60
Evening (1900 to 2300 hours)	60
Night (2300 to 0700 hours)	50

5.2.2 Planned Fixed Source Noise

5.2.2.1 According to the HKPSG, the noise standards (in $L_{eq(30min)}$) from the planned fixed noise sources should be 5 dB(A) below the Acceptable Noise Level (ANL) as specified in the IND-TM or as the prevailing background noise level at the façade of the noise sensitive receivers (NSRs). The Acceptable Noise Levels (ANLs) and the HKPSG for the planned fixed noise source as tabulated in Table 5.2 should be followed.

Table 5.2 Noise Standards for Planned Fixed Noise Sources

Time Period	ANL in IND-TM (Area Sensitivity Rating "A")	Noise Standard for Planned Fixed Noise Source [ANL - 5 dB(A)], dB(A)
Day (0700 to 1900 hours)	60	55
Evening (1900 to 2300 hours)	60	55
Night (2300 to 0700 hours)	50	45

5.3 Noise Sensitive Receiver

5.3.1.1 Three representative NSRs were assigned near the Proposed Development. The first representative NSR is Japanese International School (NSR N1), located at approximately 34m to the northwest of the Site. PLK Tin Ka Ping Millennium Primary School (NSR N2) is the second NSR and is located at approximately 63m to the east of the Site. The third NSR is Deerhill Bay (NSR N3) which is approximately 67m away from the Site in the southeast direction. The details are provided in Table 5.3, and the NSR locations are presented in Figure 5.1.

Table 5.3 Representative Noise Sensitive Receiver

NSR ID	NSR Name	Uses	Area Sensitivity Rating
N1	Japanese International School	Educational institutions	A(1)
N2	PLK Tin Ka Ping Millennium Primary School	Educational institutions	A(1)
N3	Deerhill Bay	All domestic premises	A(1)

Note: (1) N1, N2 and N3 are considered to be located in the "Low-density residential area consisting of low-rise or isolated high-rise developments" area and are not affected by an IF, therefore an ASR of "A" has been assigned.

5.4 Background Noise Conditions

5.4.1.1 Noise surveys were conducted on 09 February 2022 and 07 September 2022 to obtain the prevailing background noise levels during daytime, evening time, and night time for determining the ANLs of NSRs N1, N2, and N3. The measurement points were taken at 1.2 m above the ground level. 1-hour L_{90} measurements were conducted for the daytime, evening time and night time, at the monitoring locations presented in Figure 5.1. The measured prevailing noise levels and established noise standard to be complied with according to IND-TM for fixed plant sources are summarized in Table 5.4. As the measurement points are open-field, 3 dB(A) are added to the measured noise levels.

Table 5.4 Measurement of Background Noise Levels

Measurement Period	NSR ID	Monitoring Location	Adjusted Measured Background Noise Level, dB(A)	IND-TM Noise Standard for Planned Fixed Noise Source, [ANL-5dB(A)], dB(A)
09 February 2022 15:55-16:55 (Daytime)	N1	Japanese International School	73.3	55
09 February 2022 21:55-22:55 (Evening Time)			66.1	55
07 September 2022 0:00-01:00 (Night Time)			53.0	45
09 February 2022 16:58-17:58 (Daytime)	N2	Entrance of PLK Tin Ka Ping Millennium Primary School	59.8	55
09 February 2022, 20:45-21:45 (Evening Time)			57.6	55
07 September 2022 1:06-2:06 (Night Time)			47.9	45
09 February 2022 17:59-18:59 (Daytime)	N3	Gate at Deerhill Bay	62.2	55
09 February 2022 19:43-20:43 (Evening Time)			60.4	55
07 September 2022 02:07-3:07 (Night Time)			61.4	45

5.4.1.2 Based on the results, the measured prevailing background noise at all locations are higher than the noise standards. The standards stated in the HKPSG and IND-TM (refer to Table 5.1 and Table 5.2) should therefore be followed.

5.5 Potential Impact during Operation Phase

5.5.1 Noise Impacts from the Proposed Development on the Existing NSRs

5.5.1.1 Potential fixed plant noise associated with the Proposed Development will include noise from the operation of mechanical ventilation and air-conditioning (MVAC), building services equipment and mechanical ventilation provisions for the plant rooms, etc.

5.5.1.2 The actual noise impact from the fixed noise source(s) to the existing NSRs shall be assessed during the detailed design stage of M&E equipment. E&M consultant or

contractor should ensure that the proposed E&M equipment shall be selected and installed to comply with the HKPSG's noise criteria stated in Table 5.2 (i.e. 55 dB(A) for day time and evening time; and 45 dB(A) for night time). As such, no adverse noise impact from fixed sources on existing NSRs is anticipated during operation.

5.5.2 Noise Impact from Potential Noise Sources within the Development

5.5.2.1 In general, building services equipment within the Proposed Development, such as pump unit, transformers, and emergency generator shall be placed at enclosed plant rooms with concrete building envelop. Typical acoustic treatment such as acoustic louvers and silencers shall be provided at the air intake and exhaust louvres of the plant rooms as required. Noise emission shall also be controlled by appropriate selection of equipment and noise control treatments such as acoustic silencers and noise enclosures, whenever necessary.

5.5.2.2 Fixed plant noise control measures, such as above-mentioned enclosed plant room, equipment selection and acoustic treatments, shall be adopted for potential noise sources of Proposed Development as necessary for the compliance with the fixed noise standards of recommended in HKPSG.

5.5.3 Noise Impact from Existing Noise Sources to the Development

5.5.3.1 A site survey conducted on 14 September 2024 identified four sets of chillers, each consisting of two units, located on the roof of the Japanese International School (JIS). Additionally, several outdoor air-conditioning units were observed on the roof and façade of a typical floor at PLK Tin Ka Ping Millennium Primary School. These units may contribute to potential noise impacts on the Proposed Development. The sound power levels of the AC units at PLK Tin Ka Ping Millennium Primary School were determined based on the identified equipment models. However, the noise data of some outdoor AC units (ST1 (2/F), TY-3, and TY-4) are not available. To address this issue, reference outdoor AC units with similar coefficients of performance (COP), dimensions, and cooling capacities were selected for the calculations. At JIS, on-site noise measurements were not permitted, and no chiller specifications were provided. A far-field measurement approach was deemed unsuitable due to potential interference from traffic and other fixed noise sources. Consequently, reference chillers were used to estimate the sound power levels. Site observations confirmed that each of chiller set at JIS consists of two individual chillers, each equipped with six fan motors. To accurately represent the chiller system, two reference chillers (each with six fan motors) were combined and evaluated as a single chiller set (12 fan motors in total) for the fixed noise calculations. The inventory of existing fixed noise sources is summarized in Table 5.5. Additionally, the relevant catalogue of fixed noise sources, along with photographs of the chillers on the roof of JIS and the catalogue reference chiller and AC units are provided in Appendix G.

Table 5.5 Inventory of Existing Fixed Noise Sources

ID	Location	Usage	Major Noise Source
ST1 to ST9	PLK Tin Ka Ping Primary School 1-2/F AC Platform	Educational	Split Type AC

ID	Location	Usage	Major Noise Source
ST1 to ST18	PLK Tin Ka Ping Primary School 3-7/F AC Platform	Educational	Split Type AC
TY3 (1 to 6)	PLK Tin Ka Ping Primary School R/F	Educational	VRV Outdoor Unit
TY4 (1 to 2)	PLK Tin Ka Ping Primary School R/F	Educational	VRV Outdoor Unit
TY5 (1 to 4)	PLK Tin Ka Ping Primary School R/F	Educational	VRV Outdoor Unit
TY6 (1 to 5)	PLK Tin Ka Ping Primary School R/F	Educational	VRV Outdoor Unit
JS1 to JS4	Japanese International School	Educational	Chiller

5.5.3.2 Noise data from equipment share the similar dimension have been applied for the calculation. Sound power level of the chiller in JIS have been estimated for calculation of the overall impacts and the catalogue are shown in Appendix G:

$$SWL = SPL + \left|10 \times \log_{10}\left(\frac{Q}{4\pi r^2}\right)\right|$$

where,

SWL	Sound power level, dB(A)
SPL	Sound pressure level, dB(A)
Q	Directivity Factors
r	Distance to sound source

5.5.3.3 Impact due to individual noise source have been calculated and logarithmically summed at the individual NSRs for calculation of the overall impacts:

$$PNL = \sum [SWL_i + C_{dist} + C_{impulse} + C_{tonality} + C_{barrier} + C_{facade} + C_{Intermittency}]$$

Where applicable

PNL = Overall sound pressure level arising from individual noise source after correction

SWL_i = Sound power level of individual noise source

C_{dist} = Correction for distance attenuation

$C_{impulse}$= Correction (+3dB(A)) for impulsive noise in IND-TM, if applicable

$C_{tonality}$ = Correction (+3dB(A)) for tonality as in IND-TM if applicable

$C_{barrier}$ = Correction (-5dB(A)) for barrier effects due to various architectural features/ obstacles/purpose-built noise barrier/ parapet wall, if any

C_{facade} = Correction (+3dB(A)) for façade reflection at receiver

$C_{Intermittency}$ = Correction (+3dB(A)) for sound pressure level repaid change in nighttime period

The distance attenuation is calculated by adopting the equation as shown below:

$$C_{dist} = 10 \times \log_{10}(\frac{Q}{4\pi r^2})$$

where,

Q=Directivity Factors
r=Distance to sound source, m

5.5.3.4 Fixed noise assessment is conducted to predict the noise level at the NSR of Proposed Development due to the existing fixed noise sources from the surrounding. The results showed that the predicted noise level at the NSRs is between 45dB(A) to 60dB(A) during daytime, which comply with the noise criteria as stipulated in IND-TM (i.e. 60dB(A) during daytime). In addition, as confirmed by the operator of JIS and PLK, the MVAC equipment will not operate at evening and night. Hence, only daytime noise levels are assessed. Therefore, no existing fixed noise impact is anticipated. In the calculation, no tonality correction is applied as no tonal quality is observed during site survey on 14 September 2024. For the intermittency correction, according to the Technical Memorandum issued by EPD, correction of intermittency is only applicable in nighttime period which is not apply for this case. Regarding the correction for impulsiveness, the assessed fixed noise sources, mainly chiller outdoor units and VRV outdoor units, do not exhibit any impulsive characteristics. Therefore, no Correction for Impulsiveness is applied. The Figure 5.3 and Figure 5.4 depict the cross-section diagram between the Proposed Development and the Japanese International School and PLK Tin Ka Ping Millennium Primary School respectively and the detail calculation are presented in Appendix G.

5.5.3.5 Furthermore, three chillers were located on the premises of the Hong Kong & Kowloon Kaifong Women's Association Sun Fong Chung College. Considering the height difference between the observed fixed noise sources and the noise receivers, no direct line of sight is observed, and the noise sources are totally screened by the PLK Tin Ka Ping Primary School. Therefore, these chillers are not considered into the assessment.

6 Noise – Construction Noise

6.1 Introduction

6.1.1.1 This section addresses the potential noise impacts associated with the construction phase of the Project. The potential noise impacts associated with the proposed construction works of the development are identified and evaluated.

6.2 Relevant Legislation, Standards and Guidelines

6.2.1.1 The Noise Control Ordinance (NCO) provides the statutory framework for noise control. Assessment procedures and standards relevant to the Project are set out in the Technical Memoranda (TM) and guidelines listed below:

- Chapter 9, Environment - Hong Kong Planning Standards and Guidelines (HKPSG);
- Practice Note for Professional Persons No. ProPECC PN No. 1/24 "Minimizing Noise from Construction Activities";
- Noise Control Ordinance (NCO) (Cap. 400);
- Technical Memorandum on Noise from Construction Work other than Percussive Piling (GW-TM);
- Technical Memorandum on Noise from Percussive Piling (PP-TM); and

6.3 Potential Impact during Construction Phase

6.3.1.1 There is no statutory control of daytime (07:00-19:00 hours) construction noise and general construction work (excluding percussive piling) may be carried out in this time period on normal weekdays. Any maintenance work in connection with the proposed construction work is also considered as construction work under the NCO and should also be conducted within this time period, if necessary.

6.3.1.2 Noise impact arising from general construction activities conducted during the restricted hours (19:00-07:00 hours on any day and any time on Sunday or general holiday) are governed by the NCO. Currently, it is not expected that construction works will be carried out during the restricted hours but in the event that it is required, a Construction Noise Permit (CNP) will be applied for and obtained prior to commencement of works during restricted hours. Any specific requirements in the CNP will be strictly adhered to.

6.3.1.3 The proposed works will be conducted within the Site with temporary noise barriers erected for screening noise sources from construction plants. To further eliminate the construction noise, the following mitigation measures should be implemented where applicable:

- Selecting quieter powered mechanical equipment (PME) to reduce noise generated from construction activities
- Placing PME as far from NSRs as possible and direct away from NSRs
- Maintaining good site practices, including the avoidance of parallel use of multiple PME

6.3.1.4 The feasibility of adopting other quieter construction methods such as, non-explosive chemical expansion agent, quieter type wire saw or diamond wire saw, listed in the EPD website will also be considered. As such, adverse construction noise impact on the nearby NSRs during construction phase is not anticipated.

7 Water Quality

7.1 Introduction

7.1.1.1 This section addresses the potential sources of water quality impact associated with the construction and operation phases of the project. The relevant statutory requirements and mitigation measures recommended in order to minimize impacts are presented in this section.

7.2 Relevant Legislation, Standards and Guidelines

7.2.1.1 The relevant legislations, standards and guidelines for the review of water quality impact includes the following:

- Water Pollution Control Ordinance (WPCO) (Cap. 358);
- Technical Memorandum for Effluents Discharged into Drainage and Sewerage System Inland and Coastal Waters (TM-DSS);
- Professional Persons Environmental Consultative Committee Practice Note (ProPECC) PN 2/24 "Construction Site Drainage";
- Professional Persons Environmental Consultative Committee Practice Note ProPECC PN 1/23 on Drainage Plans Subject to Comment by the EPD
- EPD's Guidelines for the Design of Small Sewage Treatment Plants; and
- ETWB Technical Circular (Works) No. 5/2005 Protection of Natural Streams/Rivers from Adverse Impacts Arising from Construction Works.

7.2.1.2 According to "Marine Water Quality of Hong Kong 2023" published by EPD, the Proposed Development is located in the inland area of the Tolo Harbour Water Control Zone (WCZ). The water quality objectives for Tolo Harbour WCZ and the water quality objective for watercourses are summarised in Table 7.1 and Table 7.2 respectively.

Table 7.1 Summary of Water Quality Objectives for Tolo Harbour and Channel WCZ

Parameters	Water Quality Objectives	Part or Parts of Zone
Aesthetic Appearance	a) Waste discharges shall cause no noxious or offensive odour or offensive taint or colour in either waters or edible aquatic organisms in the subzone to be present in concentrations detectable by bioassay or organoleptic tests.	Whole Zone
	b) Waste discharges shall cause no visible foam, oil, grease, scum, litter or other objectionable matter in waters of the subzone.	Whole Zone

Parameters	Water Quality Objectives	Part or Parts of Zone
Bacteria	The level of Escherichia coli should not exceed 610 per 100 mL, calculated as the geometric mean of all samples collected in one calendar year.	Inland Waters
Colour	Waste discharges shall not cause the colour of water to exceed 50 Hazen units.	Inland waters
Chlorophyll-A	a) Waste discharges shall not cause the level of chlorophyll-a in waters of the subzone to exceed 20 milligrams per cubic metre, calculated as a running arithmetic mean of 5 daily measurements for any single location and depth	Harbour subzone
	b) Waste discharges shall not cause the level of chlorophyll-a in waters of the subzone to exceed 10 milligrams per cubic metre, calculated as a running arithmetic mean of 5 daily measurements for any single location and depth.	Buffer subzone
	c) Waste discharges shall not cause the level of chlorophyll-a in waters of the subzone to exceed 6 milligrams per cubic metre, calculated as a running arithmetic mean of 5 daily measurements for any single	Channel subzone
Dissolved Oxygen	a) Waste discharges shall not cause the level of dissolved oxygen in waters of the subzone to be less than 2 milligrams per litre within 2 metres of the bottom, or to be less than 4 milligrams per litre in the remainder of the water column.	Harbour subzone
	b) Waste discharges shall not cause the level of dissolved oxygen in waters of the subzone to be less than 3 milligrams per litre within 2 metres of the bottom, or to be less than 4 milligrams per litre in the remainder of the water column.	Buffer subzone
	c) Waste discharges shall not cause the level of dissolved oxygen in waters of the subzone to be less than 4 milligrams per litre at any point in the water column.	Channel subzone
Light Penetration	a) No changes in turbidity, suspended material, colour or other parameters arising from waste discharges shall reduce light transmission by more than 20 per cent of the normal level in the subzone at any location or any time.	Harbour subzone
	b) No changes in turbidity, suspended material, colour or other parameters arising from waste	Buffer subzone

Parameters	Water Quality Objectives	Part or Parts of Zone
	discharges shall reduce light transmission by more than 15 per cent of the normal level in the subzone at any location or any time.	
	c) No changes in turbidity, suspended material, colour or other parameters arising from waste discharges shall reduce light transmission by more than 10 per cent of the normal level in the subzone at any location or any time.	Channel subzone
pH	a) Waste discharges shall not cause the normal pH range of any waters of the subzone to be extended by greater than ± 0.5 pH units at any time.	Harbour subzone
	b) Waste discharges shall not cause the normal pH range of any waters of the subzone to be extended by greater than ± 0.3 pH units at any time.	Buffer subzone
	c) Waste discharges shall not cause the normal pH range of any waters of the subzone to be extended by greater than ± 0.1 pH units at any time.	Channel subzone
Salinity	Waste discharges shall not cause the normal salinity range of any waters of the subzone to be extended by greater than ± 3 parts per thousand at any time.	Whole Zone
Settleable Material	Waste discharges shall give rise to no bottom deposits or submerged objects which adversely influence bottom-living communities, alter the basic Harbour geometry or shipping channels, present any hazard to shipping or diving activities, or affect any other beneficial use of the waters of the subzone.	Whole Zone
Temperature	Waste discharges shall not cause the natural daily temperature range in waters of the subzone to be extended by greater than ± 1.0 degree Celsius at any location or time. The rate of temperature change shall not exceed 0.5 degrees Celsius per hour at any location, unless due to natural phenomena.	Whole Zone
Toxicants	Waste discharges shall not cause the toxicants in waters of the subzone to attain such a level as to produce significant toxic effects in humans, fish or any other aquatic organism, with due regard to biologically cumulative effects in food chains and to toxicant inter-actions with each other.	Whole Zone

Table 7.2 Summary of Water Quality Objectives for Watercourses in Tolo Harbour and Channel WCZ

Parameters	Water Quality Objectives	Part or Parts of Zone
AESTHETIC APPEARANCE	Waste discharges shall not cause waters of the subzone to contain substances that (a)settle to form objectionable deposits. (b)float as debris, scum, oil or other matter to form nuisances. (c)produce objectionable colour, odour, taste or turbidity. (d)injure or are toxic or produce adverse physiological responses in humans, animals or plants; or (e)are conducive to undesirable aquatic life or a nuisance to aquatic life.	All watercourses
BACTERIA	Waste discharges shall not cause the level of Escherichia coli to exceed 1 000 per 100 mL in waters of the subzone, levels to be calculated as a running median of the most recent 5 consecutive samples taken at intervals of between 7 and 21 days (or 14 and 42 days).	(a) SM(A) (b) SM(C) (c) SM(D) (d) SM(E) (e) SM(H) (f) SM(I) (g) TP(B) (h) TP(C) (i) other watercourse
	Waste discharges shall not cause the level of Escherichia coli to exceed 0 per 100 mL in waters of the subzone, levels to be calculated as a running median of the most recent 5 consecutive samples taken at intervals of between 7 and 21 days (or 14 and 42 days).	(a) SM(B) (b) SM(F) (c) SM(G) (d) LT(C)

Parameters	Water Quality Objectives	Part or Parts of Zone
		(e) LT(D) (f) TP(A)
COLOUR	Waste discharges shall not cause the colour of waters of the subzone to exceed 50 Hazen units at any time.	(a) SM(A) (b) SM(C) (c) SM(D) (d) SM(E) (e) SM(H) (f) SM(I) (g) TP(B) (h) TP(C) (i) other watercourses
	Waste discharges shall not cause the colour of waters of the subzone to exceed 30 Hazen units at any time.	(a) SM(B) (b) SM(F) (c) SM(G) (d) LT(C) (e) LT(D) (f) TP(A)
pH	Waste discharges shall not cause the pH of waters of the subzone to exceed the range of 6.0 to 9.0 at any time.	(a) SM(D) (b) SM(E) (c) SM(I) (d) other watercourses

Parameters	Water Quality Objectives	Part or Parts of Zone
pH	Waste discharges shall not cause the pH of waters of the subzone to exceed the range of 6.5 to 8.5 at any time.	(a) SM(A) (b) SM(B) (c) SM(C) (d) SM(F) (e) SM(G) (f) SM(H) (g) LT(C) (h) LT(D) (i) TP(A) (j) TP(B) (k) TP(C)
TEMPERATURE	Waste discharges shall not cause the natural daily temperature range in waters of the subzone to be extended by greater than ± 2.0 degrees Celsius at any location or time.	All watercourses
SUSPENDED SOLIDS	Waste discharges shall not cause the annual median of suspended solids in waters of the subzone to exceed 25 milligrams per litre.	(a) SM(D) (b) SM(E) (c) SM(I) (d) other watercourses
	Waste discharges shall not cause the annual median of suspended solids in waters of the subzone to exceed 20 milligrams per litre.	(a) SM(A) (b) SM(B) (c) SM(C) (d) SM(F) (e) SM(G)

Parameters	Water Quality Objectives	Part or Parts of Zone
		(f)SM(H) (g)LT(C) (h)LT(D) (i)TP(A) (j)TP(B) (k)TP(C)
DISSOLVED OXYGEN	Waste discharges shall not cause the level of dissolved oxygen in waters of the subzone to be less than 4 milligrams per litre or 40% saturation (at 15 degrees Celsius) at any time.	All watercourses
5 DAYS BIOCHEMICAL OXYGEN DEMAND	Waste discharges shall not cause the 5 days biochemical oxygen demand in waters of the subzone to exceed 5 milligrams per litre at any time.	(a) SM(A) (b) SM(C) (c) SM(D) (d) SM(E) (e) SM(H) (f) SM(I) (g) TP(B) (h) TP(C) (i) other watercourses
	Waste discharges shall not cause the 5 days biochemical oxygen demand in waters of the subzone to exceed 3 milligrams per litre at any time.	(a) SM(B) (b) SM(F) (c) SM(G) (d) LT(C) (e) LT(D)

Parameters	Water Quality Objectives	Part or Parts of Zone
		(f) TP(A)
CHEMICAL OXYGEN DEMAND	Waste discharges shall not cause the chemical oxygen demand in waters of the subzone to exceed 30 milligrams per litre at any time.	(a) SM(A) (b) SM(C) (c) SM(D) (d) SM(E) (e) SM(H) (f) SM(I) (g) TP(B) (h) TP(C) (i) other watercourses
	Waste discharges shall not cause the chemical oxygen demand in waters of the subzone to exceed 15 milligrams per litre at any time.	(a) SM(B) (b) SM(F) (c) SM(G) (d) LT(C) (e) LT(D) (f) TP(A)
AMMONIACAL NITROGEN	Waste discharges shall not cause the ammoniacal nitrogen in waters of the subzone to exceed 0.5 milligrams per litre at any time.	All watercourses
TOXICANTS	Waste discharges shall not cause the toxicants in waters of the subzone to attain such a level as to produce significant toxic effects in humans, fish or any other aquatic organism, with due regard to biologically cumulative effects in food chains and to toxicant inter-actions with each other.	All watercourses

7.3 Water Sensitive Receivers and Baseline Conditions

7.3.1.1 Within the 500m water quality study area, eighteen potential water quality sensitive receivers (WSR) are identified. The locations of the WSRs are shown in Figure 7.1.

Table 7.3 Representative Water Sensitive Receivers

WSR	Description	Distance from Site Boundary, (m)
WSR1	Natural Stream	277
WSR2	Natural Stream	331
WSR3	Natural Stream	374
WSR4	Channelized Drainage	441
WSR5	Natural Stream	298
WSR6	Tai Po Kau Natural Reserve	363
WSR7	Conservation Area 1	415
WSR8	Conservation Area 2	29
WSR9	Channelised Drainage	260
WSR10	Natural Stream	251
WSR11	Channelised Drainage	81
WSR12	Channelised Drainage	15
WSR13	Channelised Drainage	227
WSR14	Channelised Drainage	79
WSR15	Channelized Drainage	136
WSR16	Natural and Channelised Stream	150
WSR17	Channelized Drainage	164
WSR18	Natural and Channelised Stream	494

7.3.1.2 With reference to "River Water Quality in Hong Kong in 2023" published by the EPD, the nearest water quality monitoring station of the proposed project site is Tai Po Kau Stream Monitoring Station (TR14). The water quality of Tai Po Kau Stream had a

WQO compliance rate of 100% over the past decade. Table 7.4 shows the summary of water quality monitoring data for Tai Po Kau Stream in 2023:

Table 7.4 River Water Quality Monitoring Data for Tai Po Kau Stream (TR14) in 2023

Parameter	Unit	Water Quality Monitoring Station TR14
Dissolved Oxygen	mg/L	7.7 (5.4 -- 9.3)
pH	-	6.9 (6.7 – 7.2)
Suspended Solids	mg/L	2.4 (0.8 – 84.0)
5-Day Biochemical Oxygen Demand	mg/L	0.3 (<0.1 – 0.8)
Chemical Oxygen Demand	mg/L	9 (6--21)
Oil & Grease	mg/L	<0.5 (<0.5 - <0.5)
E. coli	counts/ 100mL	1,768 (820 – 22,000)
Faecal Coliforms	counts/ 100mL	4448 (1,000 – 35,000)
Ammonia-Nitrogen	mg/L	0.103 (0.053 – 0.270)
Nitrate-Nitrogen	mg/L	0.275 (0.150 – 0.540)
Total Kjeldahl Nitrogen	mg/L	0. 26 (0.14 – 0.36)
Orthophosphate Phosphorus	mg/L	0.014 (<0.002 – 0.034)
Total Phosphorus	mg/L	0.04 (<0.03 – 0.07)
Sulphide	mg/L	<0.02 (<0.02 - <0. 02)
Aluminium	µg/L	<50 (<50 – <50)
Cadmium	µg/L	<0.1 (<0.1 – <0.1)
Chromium	µg/L	<1 (<1 – 1)
Copper	µg/L	<1 (<1 – 3)
Lead	µg/L	<1 (<1 - <1)
Zinc	µg/L	<10 (<10 – 10)
Flow	m^3/s	0.064 (0.008 – 0.720)

Parameter	Unit	Water Quality Monitoring Station TR14

Note:
Data presented are in annual medians of monthly samples; except those for faecal coliforms and E. coli are in annual geometric means. Figures in brackets are annual ranges.

7.4 Potential Impact during Construction Phase

7.4.1 Construction Site and Drainage

7.4.1.1 Prior to the commencement of the project construction works, a discharge license according to the WPCO requirements will be applied for and obtained before any discharge of wastewater from the site to any drainage or sewerage systems, or inland or coastal waters within a WCZ. All site discharges will be pre-treated as necessary, in strict accordance with the WPCO, the conditions of the WPCO discharge license issued, and the relevant standards for the various parameters listed in the TM-DSS prior to discharge.

7.4.1.2 Only land-based construction activities will be involved in this project, including demolition works, excavation works for cable trenches, pits, basement carpark and underground STP, as well as underground drainage and building interior renovation works. Water quality impacts arising from accidental spillage of chemicals, construction works in close proximity of inland watercourses, and wastewater from general construction activities will be assessed. The key water quality issues associated with the construction activities include uncontrolled surface runoff generated from general cleaning, water spraying for dust suppression, wheel washing, and utility installation. These types of wastewater would contain high concentrations of suspended solids (SS).

7.4.1.3 The aforementioned guidelines and good site practices for handling and disposal of construction discharges as part of the construction site management practices would be adopted. Site drainage would also be well maintained, thus no adverse water quality impact from the construction activities is expected.

7.4.1.4 The following water pollution control measures will be considered to be implemented during construction phase in order to further minimize the impacts:

- High loading of suspended solids (SS) in construction site runoff shall be prevented through proper site management by the contractor;
- Construction works should be programmed to minimize soil excavation works where practicable during rainy conditions. Exposed soil surfaces should be protected from rainfall through covering temporarily exposed slope surfaces or stockpiles with tarpaulin or the like;
- Temporary ditches, earth bunds will be created/ provided where necessary to facilitate directed and controlled discharge of runoff into storm drains via sand/ silt removal facilities such as sand traps, silt traps and sediment retention basin;

- Sand and silt removal facilities, channels and manholes will be regularly maintained and the deposited silt and grit should be removed by the contractor, and at the onset of and after each rainstorm to ensure that these facilities area functioning properly;
- Manholes (including newly constructed ones) should be adequately covered or temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system;
- Vehicle wheel washing facilities should be provided at the site exit such that mud, debris, etc. deposited onto the vehicle wheels or body can be washed off before the vehicles are leaving the site area;
- Section of the road between the wheel washing bay and the public road should be paved to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains; and
- Surface run-off from construction sites should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins.
- Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.
- Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.
- Open stockpiles of construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.

7.4.2 Sewage from Construction Workforce

7.4.2.1 In the event that the existing toilets at the Site are not available for use by the workers, chemical toilet(s) will be provided for workers during construction phase. All chemical toilets will be regularly cleaned and the night-soil will be collected and transported by a licensed Contractor to a Government Sewage Treatment Works facility for disposal. With this arrangement in place, adverse water quality impact is not expected.

7.4.3 Chemical Spillage

7.4.3.1 There would be chemicals to be used for carrying out construction activities. These may include surplus adhesives, spent paints, petroleum products, spent lubrication

oil, grease and mineral oil, spent acid and alkaline solutions/solvent and other chemicals. Accidental spillage of chemicals in the works areas can contaminate the surface soils. The contaminated soil particles may be washed away by construction site runoff or storm runoff causing water pollution.

7.4.3.2 In order to prevent accident spillage. It is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes. Any service shop and minor maintenance facilities should be located outside the water gathering ground and should be on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken with the areas appropriately equipped to control these discharges.

7.4.3.3 Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. Emergency plans and clean up procedures should be provided before the commencement of the construction work to deal with accidental spillage of chemicals. Leakage and spillage of chemicals should be contained and cleaned up immediately so as to minimise the impact to the water quality. With proper arrangement and the emergency plans for accidental spillage of chemicals, no adverse water quality impact is anticipated

7.5 Potential Impact during Operation Phase

7.5.1 Domestic Sewage

7.5.1.1 During the operation phase, domestic sewage, including toilet flushing, will be the major wastewater discharge arising from the Proposed Development. Since the Site is not served by any public sewer, sewage generated will be treated in the underground STP with an Average Dry Weather Flow (ADWF) of 168.41 m^3/day and a treatment level of tertiary treatment, to acceptable standards before being discharged into the existing drainage system near the Site.

7.5.1.2 A Sewerage Impact Assessment (SIA) has been conducted for the Proposed Development. The SIA report discussed the discharge standards to be fulfilled and proposed measures to alleviate the impact of the discharge amount on the existing drainage system. Environmental considerations and emergency measures were addressed as well to ensure there will be no adverse water quality impact arising from the STP operation. Furthermore, all stormwater/rainwater from the Site will be conveyed to the stormwater drain. With a properly designed and maintained of the proposed STP and drainage system, no insurmountable water quality impacts would be expected from operation of the Project.

7.5.2 Surface Runoff

7.5.2.1 Pesticides or fertilizers may be used for the maintenance of the landscape area on ground floor subject to the future operational need. This may cause contamination of the runoff by agrochemicals.

7.5.2.2 It is understood that under normal circumstances, any application of pesticides and fertilizers would only be on a need basis based on the health condition of the vegetation and usually at a localized scale. Only registered agrochemicals under the Pesticides Ordinance (Cap.133) shall be used and pesticides with shorter half-life is recommended. Common good practices of agrochemical application should also be followed, such as avoiding the use of agrochemicals before heavy rainstorms and following manufacturer's instructions on the application amount and frequency of the agrochemicals.

7.5.2.3 Potential water quality impact would be the surface runoff from the road surfaces or the open spaces, etc during rainfall events which is known as non-point source pollutions during operational phase. Substances such as dust and lubricant oil deposited and accumulated on the road surfaces will be washed into the drainage system, fish ponds or streams during rainfall. A particular concern with surface run-off will be the 'first flush' of the system during the early phase of storm. The largest quantities of contaminants will be contained within the 'first flush' and the high degree of turbulence in the drains may erode material deposited within the drains. Floating debris and rubbish may also be carried by the surface runoff and may enter and block the stormwater drains. Improper control of the surface runoff may also increase the risk of flooding. To address these issues, Best Management Practices (BMPs) for stormwater discharge will be implemented to minimize pollution. The performance of the permanent drainage system will be designed to comply with the relevant regulations and guidelines (e.g. ProPECC PN 1/23). Thus, the potential flood risk is considered as minimal.

7.5.2.4 With the above-mentioned mitigation measures implemented, no adverse water quality impact is anticipated during both construction and operation phase.

8 Waste Management

8.1 Introduction

8.1.1.1 This section identifies the types of wastes that are likely to be generated during the construction and operation phases of the Project and evaluates the associated waste management implications that may result from these waste types.

8.2 Relevant Legislations, Standards and Guidelines

8.2.1.1 The relevant legislation and associated guidelines applicable to this environmental assessment for waste management implications include:

- Waste Disposal Ordinance (WDO) (Cap. 354);
- Waste Disposal (Chemical Waste) (General) Regulation;
- Waste Disposal (Charges for Disposal of Construction Waste) Regulation; and
- Public Health and Municipal Services Ordinance (Cap. 132) – Public Cleansing and Prevention of Nuisances Regulation.

8.2.1.2 Other relevant documents and guidelines that are applicable to waste management and disposal in Hong Kong include:

- DEVB TCW No. 6/2010 Trip-ticket System for Disposal of Construction and Demolition Materials;
- Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes (Cap. 354 Section 35);
- Code of Practice on Asbestos Control; • Code of Practice Safety and Health at Work with Asbestos;
- Practice Note for Authorized Persons and Registered Structural Engineers – Construction and Demolition Waste (ADV-19); and
- ETWB TCW No. 19/2005 Environmental Management on Construction Sites.

8.3 Waste Disposal Implications during Construction Phase

8.3.1.1 Construction wastes are likely to be generated from the demolition, excavation and construction of structure works. Waste disposal during the construction stage will follow the trip ticket system and comply with legislation requirements including:

- Application for a billing account in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation under WDO; and

- Registration as a Chemical Waste Producer and storage/disposal of chemical wastes in accordance with the Waste Disposal (Chemical Waste) (General) Regulation under WDO.

8.3.1.2 The following types of wastes are anticipated during the construction of the Proposed Development:

- Construction and Demolition (C&D) materials;
- Chemical waste; and
- General refuse.

8.3.2 Construction and Demolition Materials

8.3.2.1 C&D materials would be generated from demolition, excavation and construction activities during the course of the works. Waste-generating activities include excavation activities, concrete works and internal / external finishing works. Concrete debris and packaging material would also be produced.

8.3.2.2 All C&D materials generated shall be sorted into inert and non-inert portion of C&D materials. Where practicable, on-site SPS of inert portion of C&D materials shall be encouraged to minimise material volumes requiring off-site transport/ disposal. Disposal outlets such as public fill reception facilities shall be identified for inert C&D materials if no on-site reuse opportunities exist. Non-inert C&D materials should be re-used or recycled as far as possible. Landfill disposal should be considered as the last resort for non-inert C&D materials handling.

8.3.2.3 The Land (Miscellaneous Provisions) Ordinance requires that individuals or companies, who deliver inert C&D materials to the public fill reception facilities, must obtain Dumping Licences. The licences are issued by CEDD under delegated authority from the Director of Lands.

8.3.2.4 Disposal of C&D materials from the site to the public fill reception facilities and designated landfill shall be controlled under the trip-ticket system under the Development Bureau Technical Circular (Works) No. 6/2010 in order to minimise the incidence of illegal dumping.

8.3.3 Chemical Waste

8.3.3.1 The maintenance and servicing of construction plant and equipment may generate a small amount of chemical waste during construction works, such as cleaning fluids, solvents, lubrication oil and fuel.

8.3.3.2 Chemical wastes arising during the construction stage may pose environmental, health and safety hazards if not stored and disposed of in an appropriate manner as stipulated in the Waste Disposal (Chemical Waste) (General) Regulations. The potential hazards include:

- Toxic effects to workers;
- Adverse impacts on water quality from spills; and
- Fire hazards.

8.3.3.3 Materials classified as chemical wastes will require special handling and storage arrangements before removal for appropriate treatment at the Chemical Waste Treatment Centre (CWTC) or other licensed facilities. Wherever possible opportunities should be taken to reuse and recycle materials.

8.3.3.4 Storage, handling, transport and disposal of chemical waste should be arranged in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Waste published by the EPD. A trip-ticket system should be operated in accordance with the Waste Disposal (Chemical Waste) (General) Regulation to monitor all movements of chemical wastes which would be collected by licensed chemical waste collectors to a licensed facility for final treatment and disposal.

8.3.3.5 Provided that this occurs, and the chemical waste is disposed at a licensed chemical waste treatment and disposal facility, the potential environmental impacts arising from the storage, handling and disposal of a small amount of chemical waste generated from the construction activities will be negligible.

8.3.4 General Refuse

8.3.4.1 General Refuse, such as waste papers, food scraps and containers, will be generated during the construction of the Proposed Development. As a result, waste recycling for the generated refuse will be conducted during the construction phase. The general refuse will be collected on-site, separately from C&D materials by an appropriate waste collector employed by the contractor or relevant party to the landfills.

8.3.4.2 A covered storage area will be provided for the general refuse. This storage area will be cleaned regularly in order to avoid attracting vermin and pests. With proper onsite handling of these wastes, no adverse waste management implications associated with this waste type is expected.

8.4 Waste Disposal Implications during Operation Phase

8.4.1 Chemical Waste

8.4.1.1 Chemical wastes may be generated from the operation of the Project. The Proposed Development will be registered as Chemical Waste Producer when it produces chemical waste which falls under Schedule I of the Waste Disposal (Chemical Waste) (General) Regulation and will inform EPD in writing of any changes to the particulars of the registration including change of waste types, contact telephone number/ person, etc. As per the advice from SWD, the type of chemical waste includes dangerous drugs (unserviceable/expired and poison/non-poisonous) that mostly are the prescribed drugs for the service users and disinfectants and solvents that are used for cleaning.

8.4.1.2 The Proposed Development having in his possession chemical waste of a class, quantity or other description as prescribed in Part A of Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation shall give notice to the Director of Environmental Protection regarding such waste (using form EPD 132) at least 10

working days before disposal of Chemical Wastes prescribed in Part A of Schedule I of the Waste Disposal (Chemical Waste) (General) Regulation before any intended waste disposal operation.

8.4.1.3 The requirements given in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes should be followed, where applicable, in handling of these chemical wastes. A trip-ticket system should be operated in accordance with the Waste Disposal (Chemical Waste) (General) Regulation to monitor all movements of chemical wastes which would be collected by a licensed collector to a licensed facility for treatment and disposal.

8.4.2 Clinical Waste

8.4.2.1 Clinical wastes would be generated from the Proposed Development, such as sharps, dressing and other wastes dribbling and cakes with blood, etc. It is potentially infectious and bio-hazardous and shall be segregated from ordinary refuse and collected separately for proper disposal.

8.4.2.2 Storage, handling transport and disposal of clinical waste should be arranged in accordance with the Code of Practice for Small Clinical Waste Producers published by the EPD. The clinical wastes shall be collected by the Chemical Waste Treatment Centre (CWTC) or other licenced collectors.

8.4.2.3 According to the Waste Disposal (Clinical Waste) (General) Regulation, materials classified as clinical waste will require special handling and storage arrangement before transport for appropriate treatment at the Chemical Waste Treatment Facility (CWTF) for incineration. Therefore, the potential environmental impacts arising from the storage, handling and disposal of a small amount of clinical waste generated from the operation phase are expected to be minimal.

8.4.3 General Refuse

8.4.3.1 Municipal Solid Waste (MSW) are expected to be generated from the daily activities of staff, residents and visitors. The wastes from all floors will be collected and stored at the refuse collection point provided within the Site for further handling. A cleansing contractor will be employed to dispose the refuse to the nearest FEHD's refuse collection point. The waste management practice will comply with the statutory requirements.

8.4.3.2 With the implementation of good waste management practices at the site, the environmental impacts caused by storage, handling, transport and disposal of general refuse are expected to be minimal. As a result, there will be no adverse impacts brought by MSW.

8.5 Summary of Waste Materials

8.5.1.1 Based on the above, Table 8.1 summarized the waste generation during the construction and operation phases. In general, the inert portion of C&D materials

would be reused as backfilling as much as possible, and the remaining inert C&D materials should be disposed to public fill banks or other public filling areas while the non-inert portion should be sent to landfill for disposal. All waste disposals to landfill are always considered as a last resort. Any potential for reuse of materials on-site should be explored prior to disposal.

Table 8.1 Summary of Waste Generation

Material Type	Source(s)	Handling	Disposal/ Treatment	Estimated Quantity
Construction phase				
C&D materials	Demolition and building works	Sort on-site into inert C&D material (public fill) and non-inert C&D waste	Inert C&D material reused as backfilling materials on-site or to be disposed to public fill reception facilities or other beneficial uses	7,700 m^3
			Non-inert C&D waste (Comprising timber, paper, plastics, etc.) to be disposed of at landfill	1,500 m^3
Chemical waste	Cleansing fluids, solvents, lubricating oil and fuel from construction plant and equipment	Recycle on-site or by licensed companies and stored on-site in the designated containers	To Chemical Waste Treatment Facility or other licensed facility for treatment	13 L
General refuse	Waste paper, discarded containers, etc. generated from workforce	Provide on-site refuse collection points	Disposal to landfill	30 m^3
Operation phase				
Chemical Waste	Dangerous drugs, disinfectants and solvents	Stored in the designated area and collected by licensed companies	To Chemical Waste Treatment Facility or other licensed facility	A few litres per month
Clinical Waste	Sharps, dressing and other wastes dribbling and caked with blood	Collected regularly and safely stored at a dedicated location and collected by a licensed clinical waste collector	To Chemical Waste Treatment Facility	0.6 to 2 kg per month
General refuse	Food waste, paper waste and office waste, etc. generated from workforce, patients and visitors	Provide on-site refuse collection points and recycling bins	General Wastes: Disposal to landfill	0.3 to 0.6 m^3 per day
			Recyclable Wastes: To licensed waste collectors	

8.6 Recommended Waste Management Mitigation Measures

8.6.1.1 While potentially significant waste management impacts are not envisaged, given the potential for secondary impacts (e.g., dust, noise, water quality and visual impacts) mitigation measures are required to ensure proper waste handling, storage, transportation and disposal during the operation stage.

8.6.1.2 In line with Government's position on waste minimisation, the practice of avoiding and minimising waste generation and waste recycling should be adopted as far as practicable. Recommended mitigation measures to be implemented:

Construction Stage

- Soil generated from the excavation will need to be properly handled to minimise contamination to surface waters and any exposed ground areas due to leakage or improper storage (i.e. onto bare ground instead of into tanks);
- The reuse/ recycling of all materials on-site shall be investigated prior to treatment/ disposal off-site;
- Good site practices shall be adopted from the commencement of works to avoid the generation of waste, reduce cross contamination of waste and to promote waste minimisation;
- All waste materials shall be sorted on-site into inert and non-inert C&D materials, and where the materials can be recycled or reused, they shall be further segregated. Inert material, or public fill will comprise stone, rock, masonry, brick, concrete and soil which is suitable for land reclamation and site formation whilst non-inert materials include all other wastes generated from the construction process such as plastic packaging and vegetation (from site clearance);
- The Contractor shall be responsible for identifying what materials can be recycled/ reused, whether on-site or off-site. In the event of the latter, the Contractor shall make arrangements for the collection of the recyclable materials. Any remaining non-inert waste shall be collected and disposed of at landfill whilst any inert C&D materials shall be reused on-site as far as possible. Alternatively, if no use of the inert material can be found on-site, the materials can be delivered to a Public Fill Area or Public Fill Bank after obtaining the appropriate license. The storage, handling, transportation and disposal of C&D materials shall be conducted in accordance with the ETWB TCW No. 19/2005, Environmental Management on Construction Sites;
- Under the Waste Disposal (Chemical Waste) (General) Regulation, the Contractor shall register as a Chemical Waste Producer if chemical wastes such as spent lubricants and paints are generated on-site. Only licensed chemical waste collectors shall be employed to collect any chemical waste generated at site. The handling, storage, transportation and disposal of chemical wastes shall be conducted in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and a Guide to the Chemical Waste Control Scheme both published by EPD;
- A sufficient number of covered bins shall be provided on-site for the containment of general refuse to prevent visual impacts and nuisance to the sensitive surroundings. These bins shall be cleared daily and the collected waste disposed of to the refuse transfer station. Further to the issue of ETWB TCW No. 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness,

the Contractor is required to maintain a clean and hygienic site throughout the project works;

- Tool-box talks should be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling; and
- The Contractor shall comply with all relevant statutory requirements and guidelines and their updated versions that may be issued during the course of construction.

Operation Stage

- Waste reduction and management including the provision of recycling bins and adequate space to facilitate separation, collection and storage of recyclable materials for recycling in the Refuse Storage and Material Recovery Chamber will be implemented.
- Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.
- The packaging of the containers of clinical wastes will be effectively sealed on-site and checked to ensure their integrity after movement. Plastic bags will be properly labelled and handled by swan-neck sealing method and body contact with clinical waste should be avoided. All personnel involved in handling of clinical waste and all clean-up operation will be properly trained and be fully aware of the safety requirements and hence to protect the public from potential exposure to the wastes. The clinical waste storage should implement the following measures:
    - Exhibits a warning sign to alert all personnel;
    - Maintains waste in a non-putrescent state;
    - Affords protection from rain, heat and flooding;
    - Maintains clean, well-lit and ventilated;
    - Exhibits a warning sign to alert all personnel;
    - Maintains waste in a non-putrescent state;
    - Affords protection from rain, heat and flooding;
    - Maintains clean, well-lit and ventilated;
    - Keep secure from unauthorized persons, birds, rodents, insects and other animals; and
    - Conveniently accessible to collection vehicles.
- Waste reduction and management including the provision of recycling bins and adequate space to facilitate separation, collection and storage of recyclable materials for recycling in the Refuse Storage and Material Recovery Chamber will be implemented.

9 Land Contamination

9.1 Introduction

9.1.1.1 This section discusses the potential hazardous risks or detrimental effects due to land contamination as a result of industrial or commercial operations carried out on and around the Project Site over a number of years and currently.

9.2 Relevant Guidelines

9.2.1.1 The guidelines related to land contamination studies published by the EPD are as follows:

- Guidance Note for Contaminated Land Assessment and Remediation
- Practice Guide for Investigation and Remediation of Contaminated Land
- Guidance Manual for Use of Risk-Based Remediation Goals for Contaminated Land Management

9.3 Site Conditions

9.3.1.1 A site survey is conducted on 10 June 2024 to identify the source of potential land contamination. The site walkover checklist and inspection photos are provided in Appendix J. Also, from the review of aerial photos provided by the Survey and Mapping Office, Lands Department, it is observed that there are no previous land uses within the Site. Hence, there should be no land contamination issues arising from past land uses and further assessment is not required. The reviewed aerial photos are listed in Table 9.1 and provided in Appendix H.

Table 9.1 Summary of Aerial Photograph Review

Year	Reference No.	Description
1964	1964-3185	The Site was vacated.
1981	36653	The land use remains unchanged
2003	CW52549	The land use remains unchanged
2013	CW103750	The land use remains unchanged
2022	E154990C	The land use remains unchanged
2023	E189302C	The land use remains unchanged

9.3.1.2 Upon reviewing historical aerial photographs and conducting a site survey, it was observed that the site is vacant and devoid of any land use activities. Consequently, land contamination issues are not anticipated at the project site.

10 Conclusion

10.1.1.1 The Environmental Assessment (EA) is prepared to identify all potential environmental impacts and relevant environmental requirements due to the operation of the Proposed Development.

10.1.1.2 As there will be no burners/furnace provided in the Proposed Development, no adverse air quality impact to the surrounding air sensitive uses is anticipated. There is no chimney emission found within the 500m study area, no unacceptable air quality impact arising from industrial emissions on the Proposed Development is anticipated.

10.1.1.3 The traffic noise impacts were assessed based on the projected peak hour flows for the worst year within 15-year from the day of occupancy. The predicted traffic noise levels at all noise sensitive uses can comply with the HKPSG standard of 70 dB(A) with the installation of the proposed acoustic windows. Therefore, no adverse traffic noise impact is anticipated.

10.1.1.4 Fixed source noise impacts from the surrounding fixed noise sources were assessed. Based on the development layout, the fixed noise sources adjacent to the Proposed Development should not pose unacceptable impacts on the identified noise sensitive receivers. Mitigation measures will be implemented on the potential fixed plant noises within the Proposed Development during operation phase, as well, to minimize noise impacts on the existing noise sensitive receivers.

10.1.1.5 Construction works of the project will also be conducted within regulated period. Mitigation measures have been proposed to further reduce the construction noise. Therefore, there shall be no adverse construction noise impact upon the surrounding NSRs.

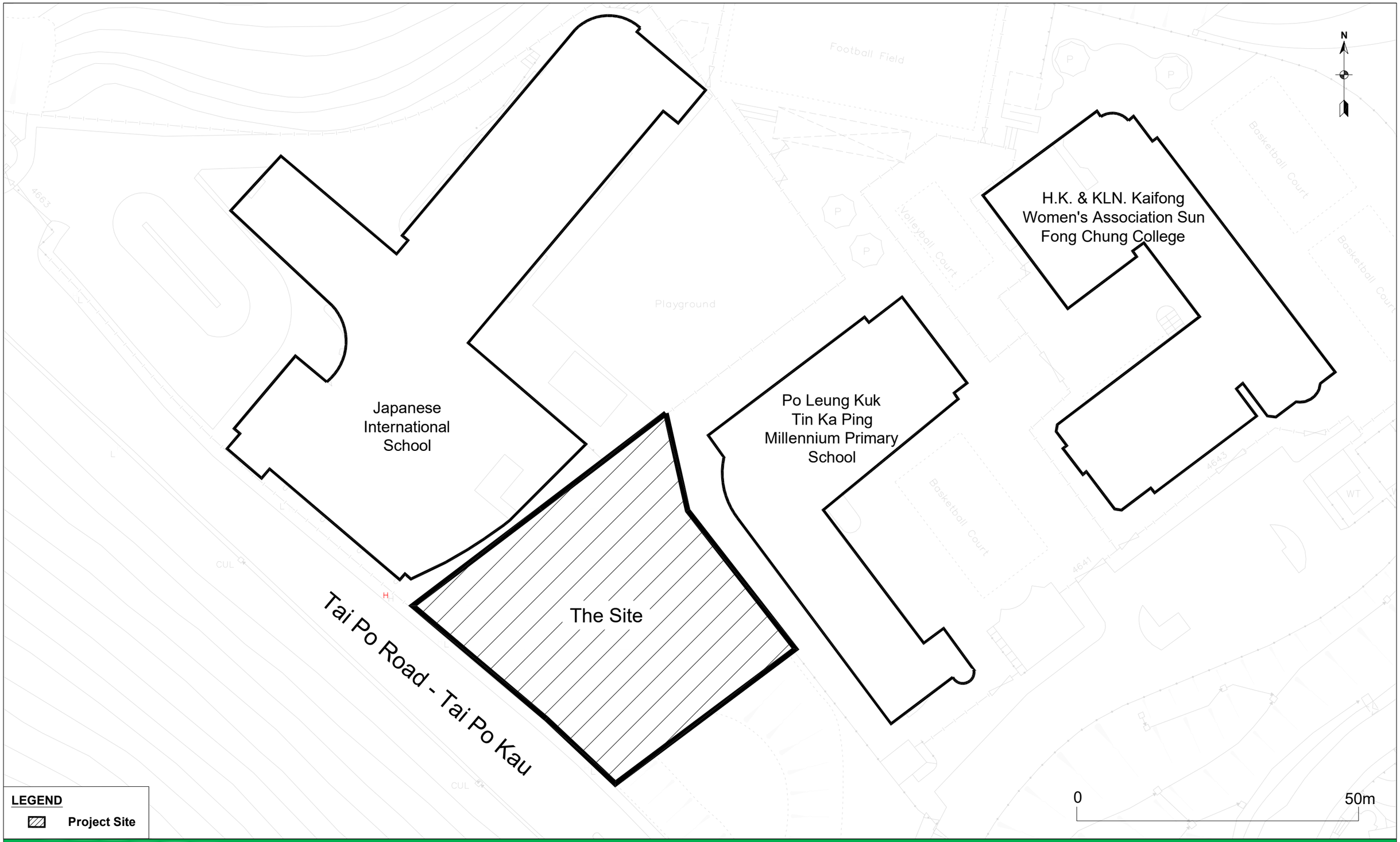
10.1.1.6 Regarding the water quality during construction stage, good site practices, effluent discharge guidelines, and water pollution control measures will be followed and carried out. For operation stage, the sewage generated from the Proposed Development will be treated in the proposed sewage treatment plant and then discharged into the public box culvert on the northwest of the Site along Tai Po Road – Tai Po Kau. Hence, no adverse water quality impact is anticipated.

10.1.1.7 The potential impacts of waste arising from construction and operation phases of the Proposed Development have been assessed. With the implementation of waste management measures, waste generated/disposed of the Proposed Development should not lead to any adverse impact.

10.1.1.8 Based on the review of aerial photos, it is confirmed that there were no previous industrial or commercial operations at the Site. Thus, no potential risks due to land contamination are anticipated.

10.1.1.9 In conclusion, there should be no unacceptable environmental impacts on the Proposed Development. Therefore, it is concluded that the Proposed Development is considered to be environmentally acceptable from the environmental planning point of view.

Figures



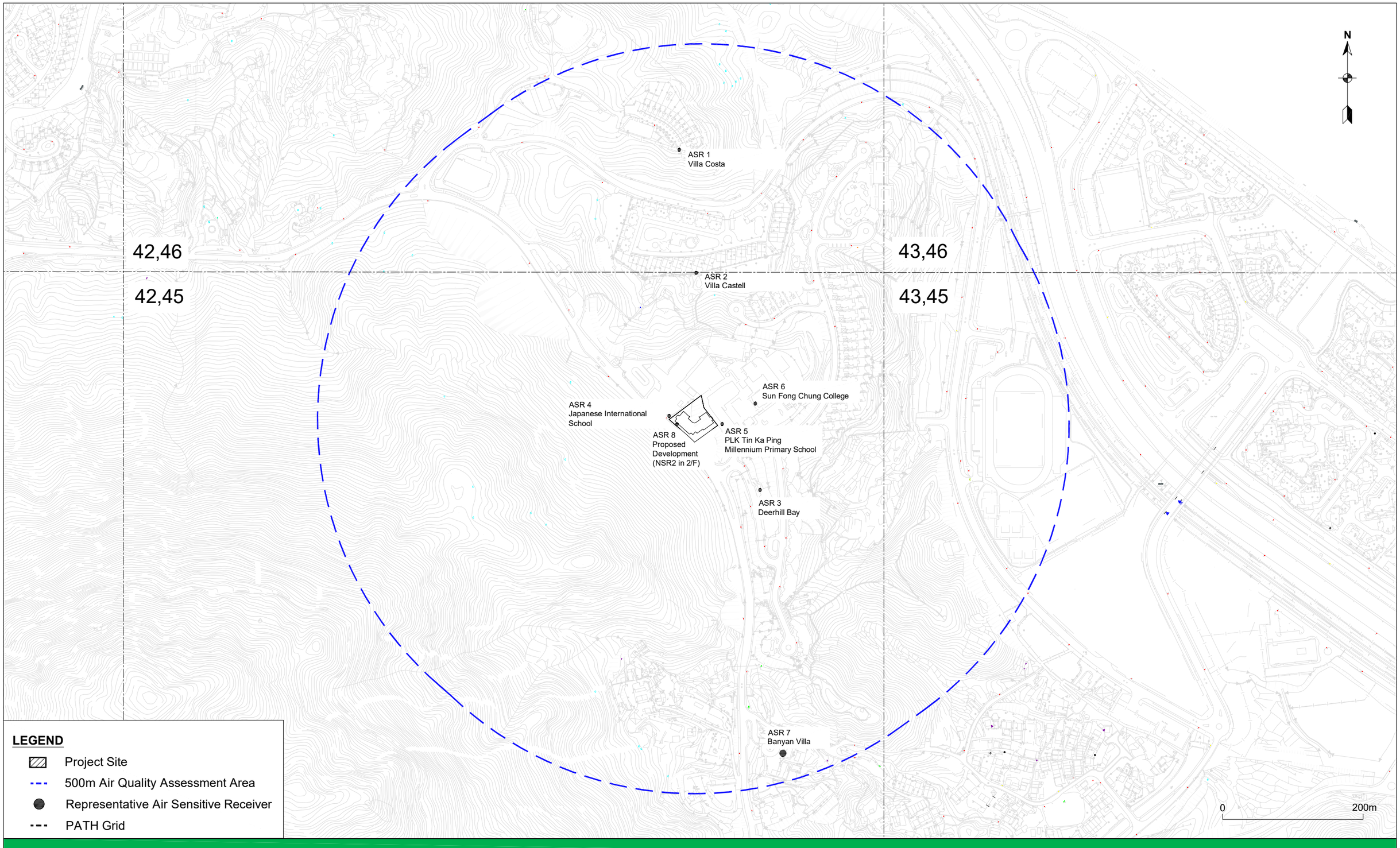
Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po

Site Location and Its Environs

Figure 2.1

Rev. 0

URBAN GREEN



URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Location of Air Sensitive Receiver

Figure 3.1

Rev. 1

N

5m Buffer Distance

LEGEND

- Project Site
- Buffer distance of road
- ASR 8 (Openable Window)

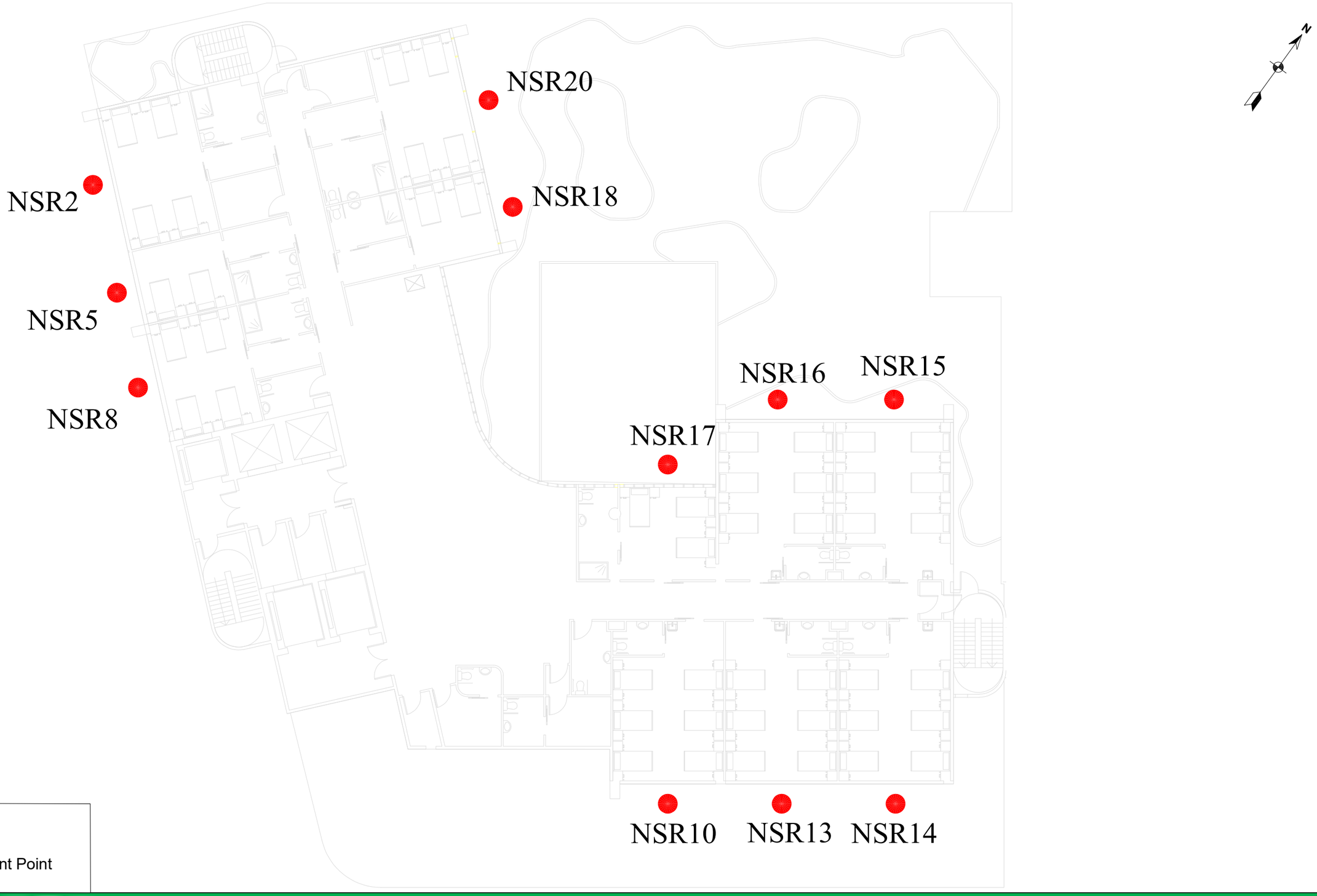
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Buffer Distance of Surrounding Roads

Figure 3.2

Rev. 0



Legend

Assessment Point

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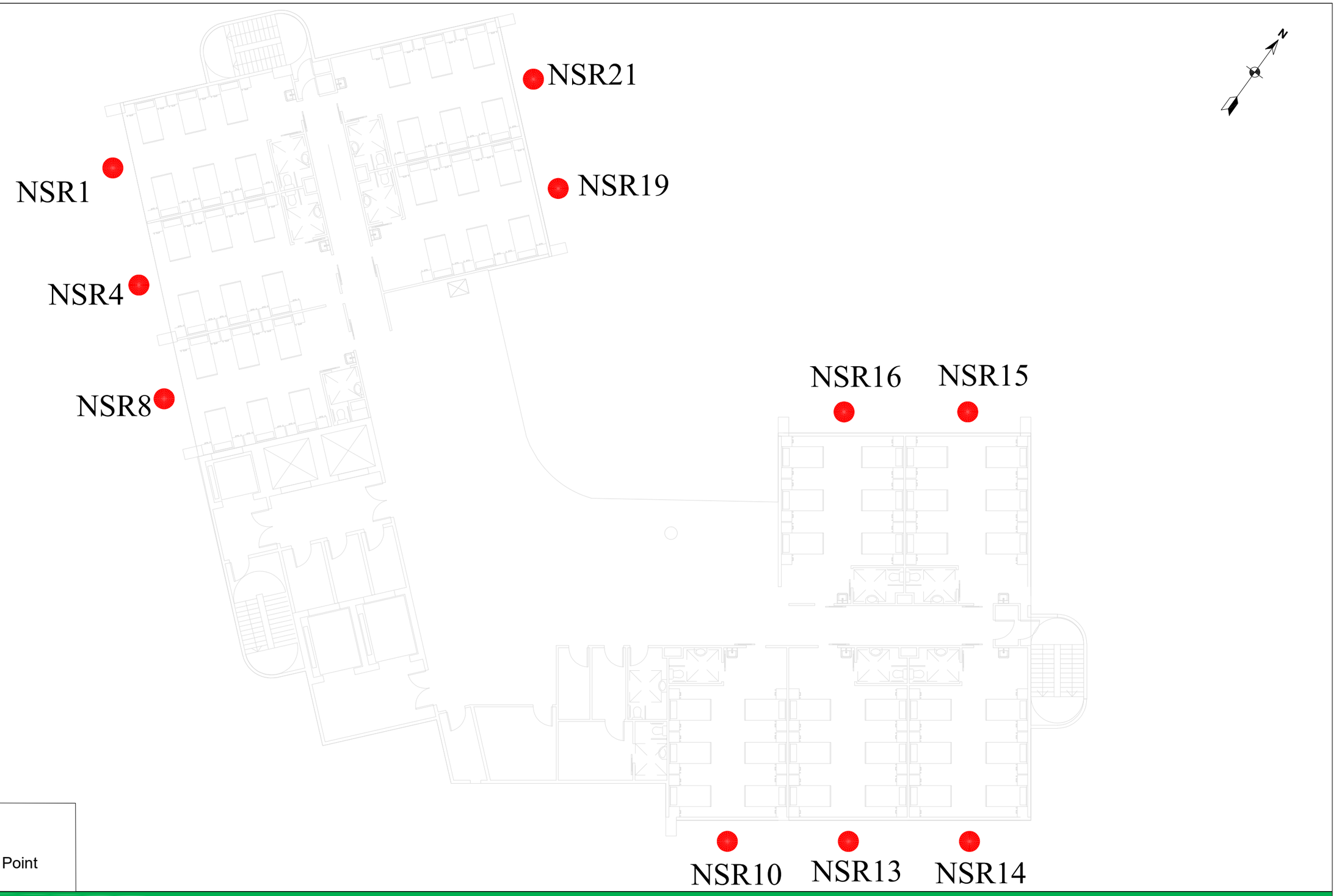
Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord lot No. T77 in D.D. 34 Tai Po

Location of Noise Sensitive Receiver (2/F)

Figure 4.1a

Rev. 0



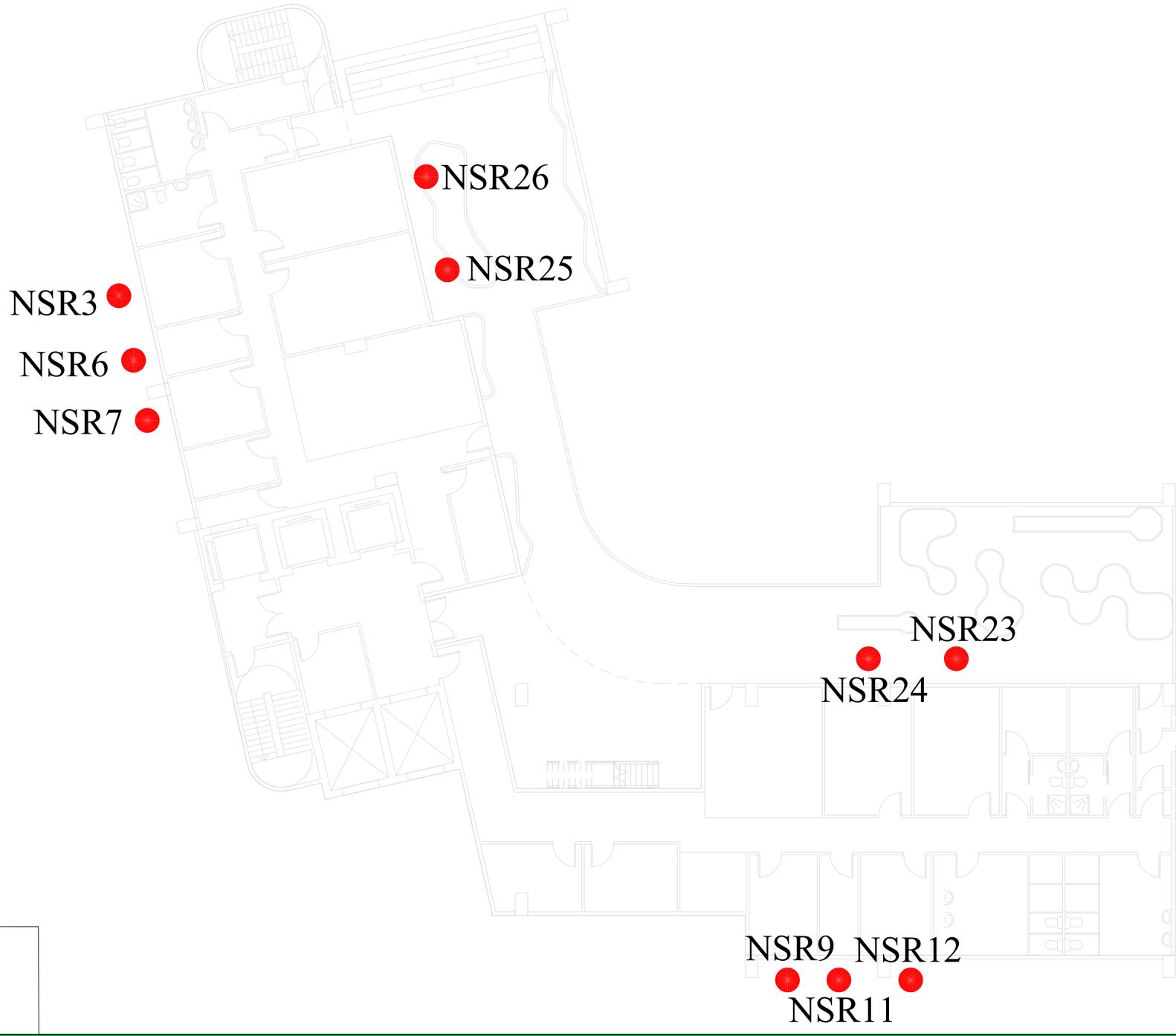
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord lot No. T77 in D.D. 34 Tai Po

Location of Noise Sensitive Receiver (3/F-6/F)

Figure 4.1b

Rev. 0



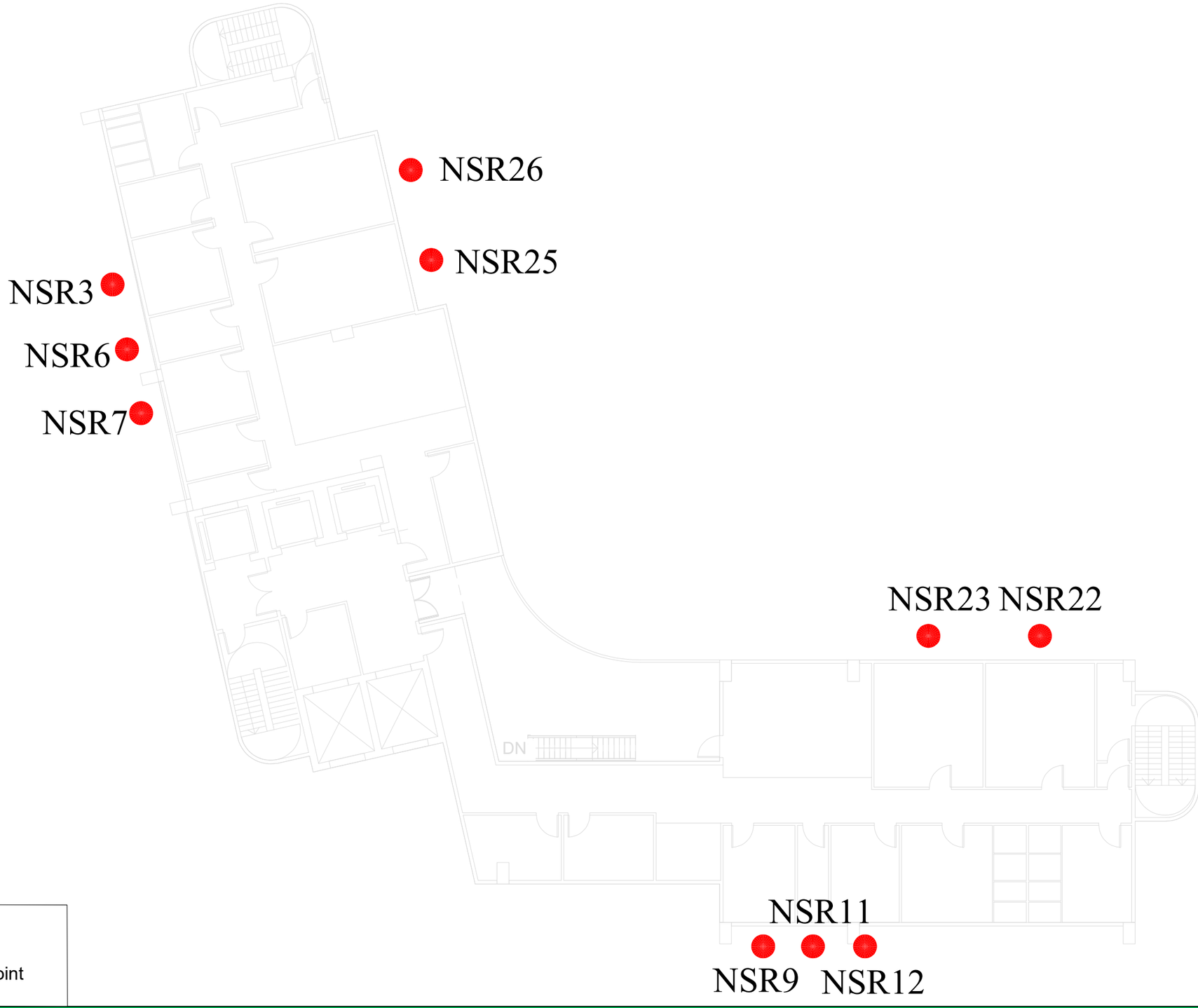
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord lot No. T77 in D.D. 34 Tai Po

Location of Noise Sensitive Receiver (8/F)

Figure 4.1c

Rev. 0



Legend

Assessment Point

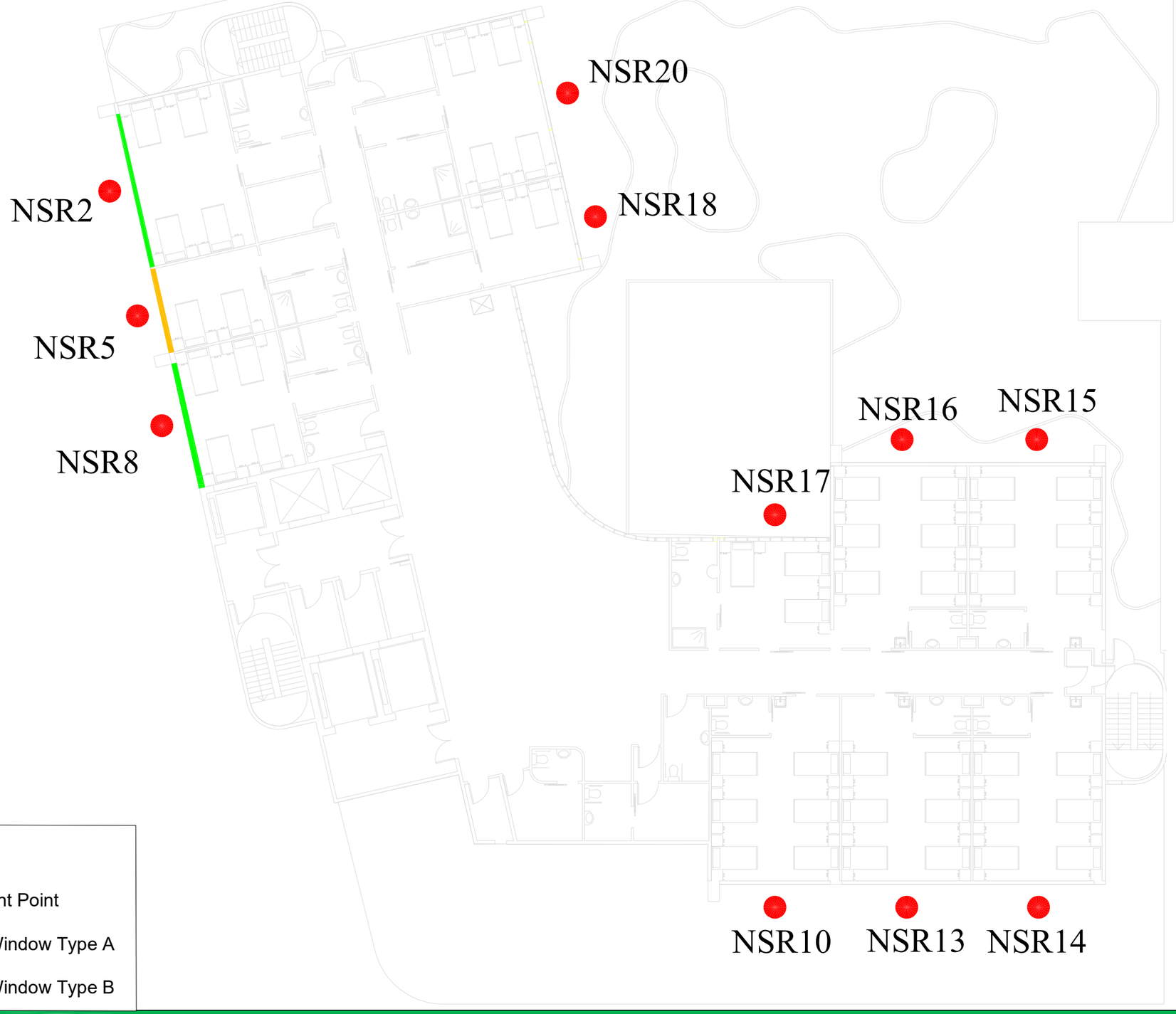
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord lot No. T77 in D.D. 34 Tai Po

Location of Noise Sensitive Receiver (9/F)

Figure 4.1d

Rev. 0



Legend

- Assessment Point
- Acoustic Window Type A
- Acoustic Window Type B

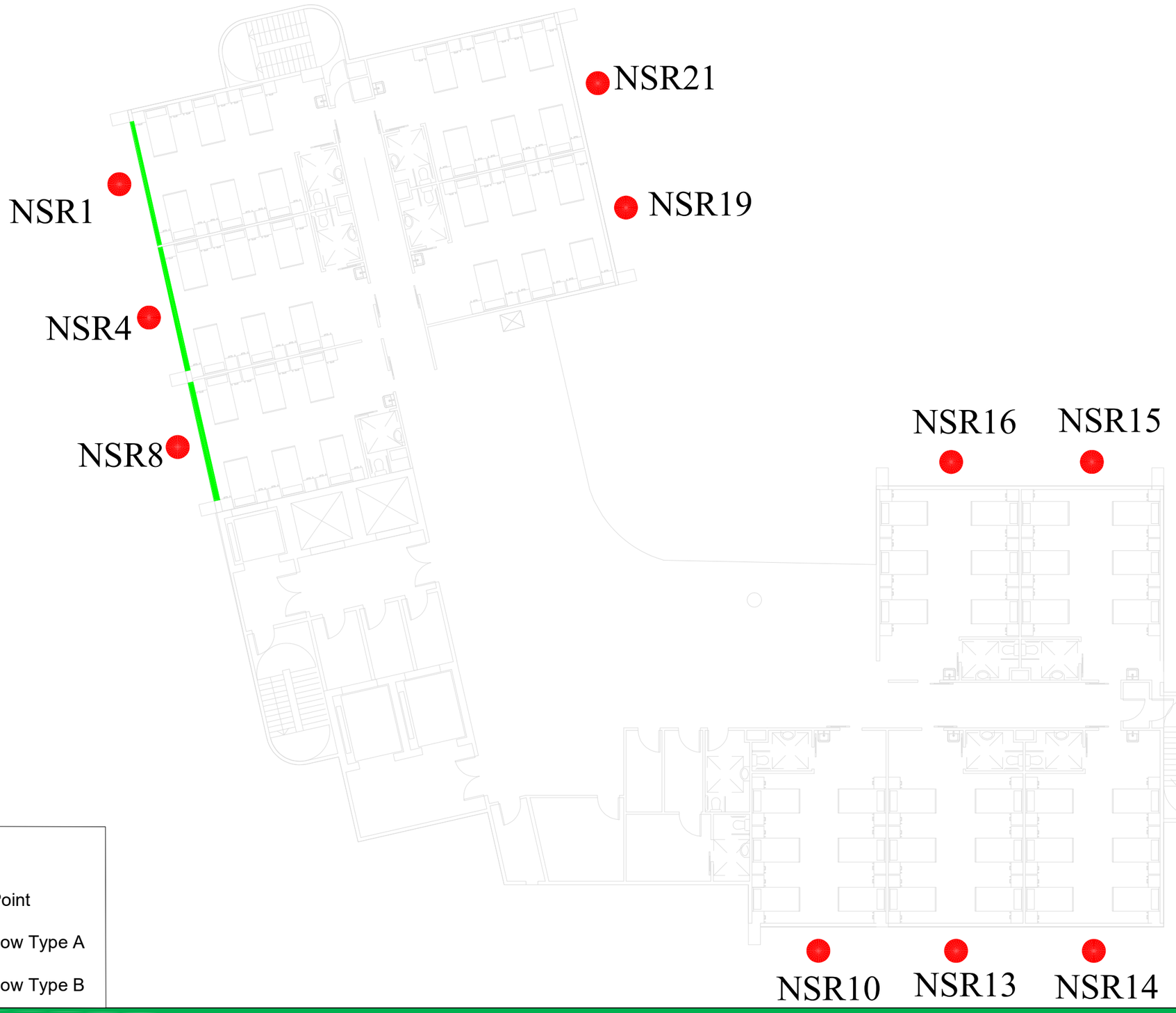
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord lot No. T77 in D.D. 34 Tai Po

Location of Noise Mitigation Measures (2/F)

Figure 4.2a

Rev. 0



Legend

- Assessment Point
- Acoustic Window Type A
- Acoustic Window Type B

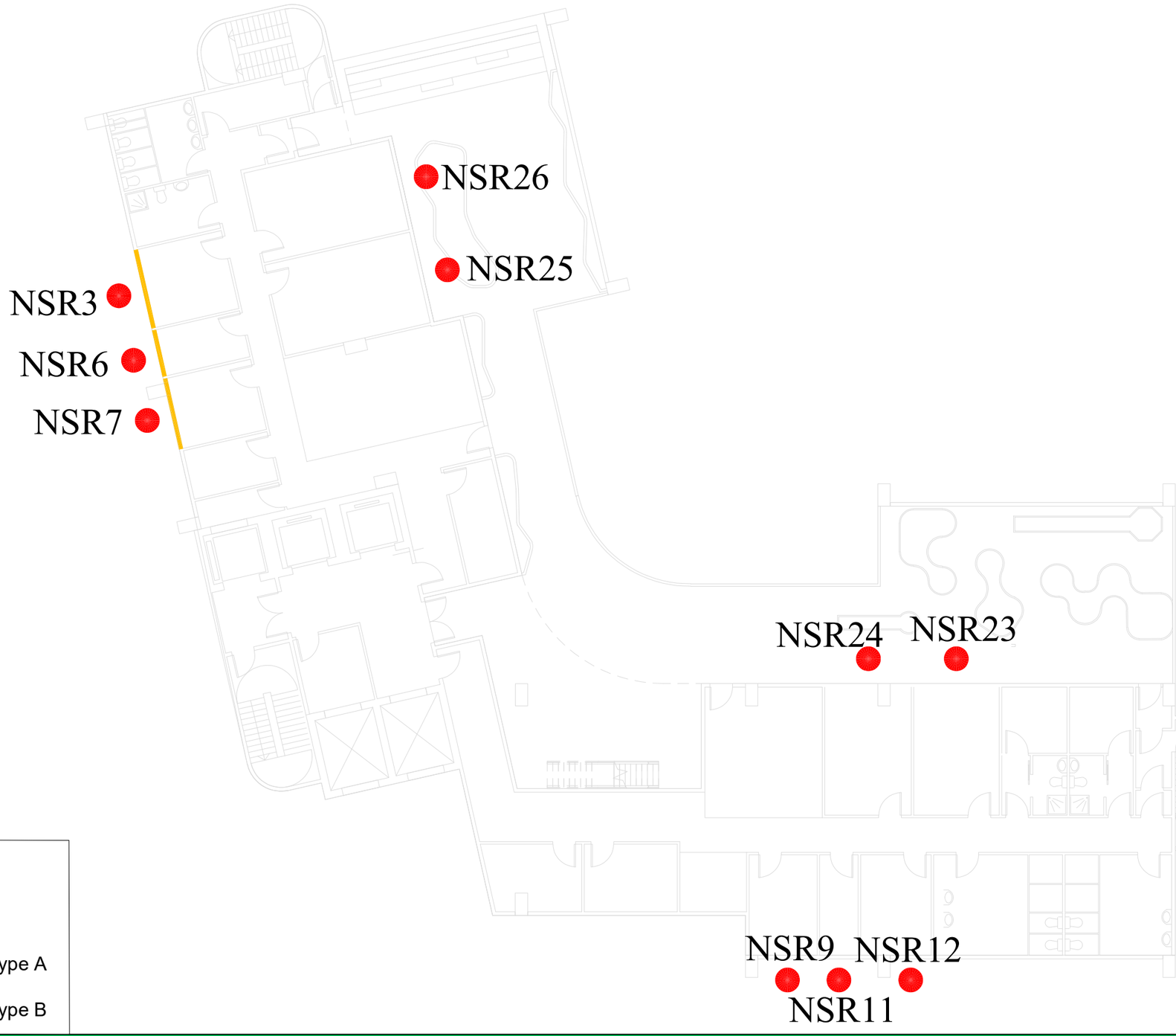
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord lot No. T77 in D.D. 34 Tai Po

Location of Noise Mitigation Measures (3/F-6/F)

Figure 4.2b

Rev. 0



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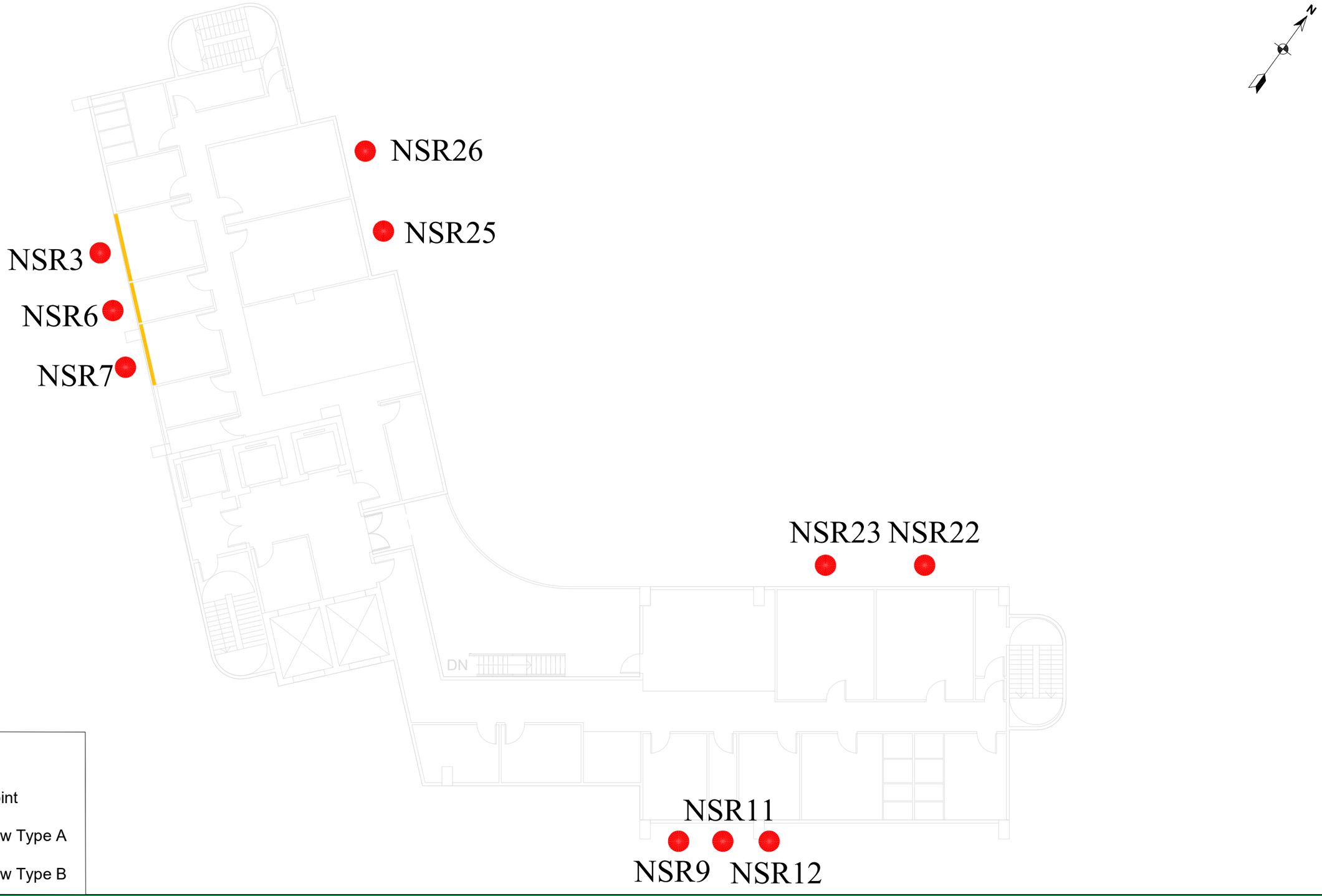
Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord lot No. T77 in D.D. 34 Tai Po

Location of Noise Mitigation Measures (8/F)

Figure 4.2c

Rev. 0



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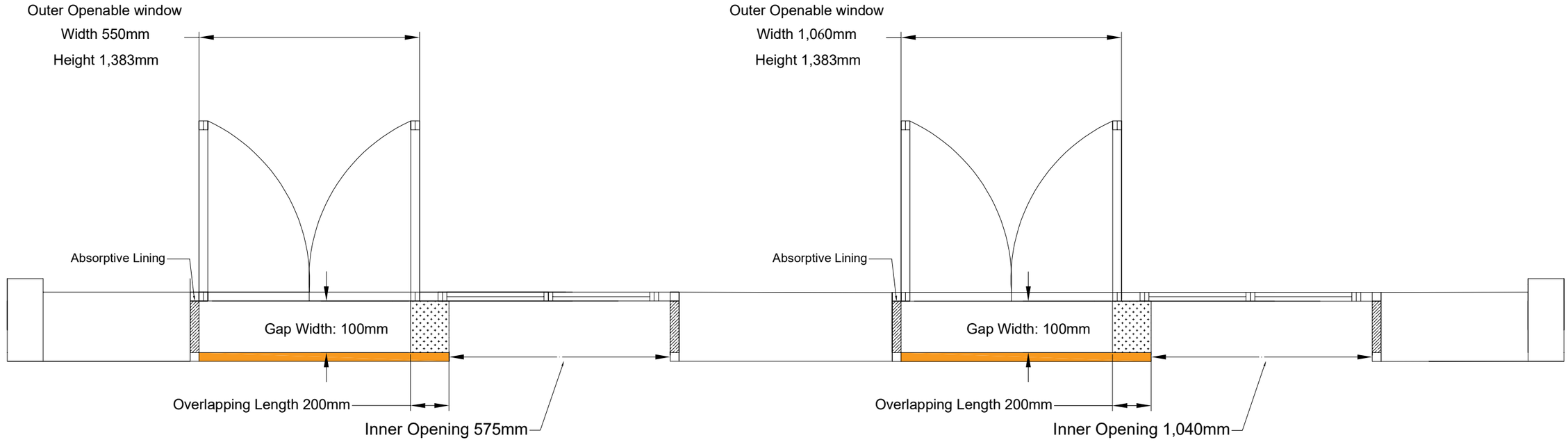
Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord lot No. T77 in D.D. 34 Tai Po

Location of Noise Mitigation Measures (9/F)

Figure 4.2d

Rev. 0



Legend

Sliding Window

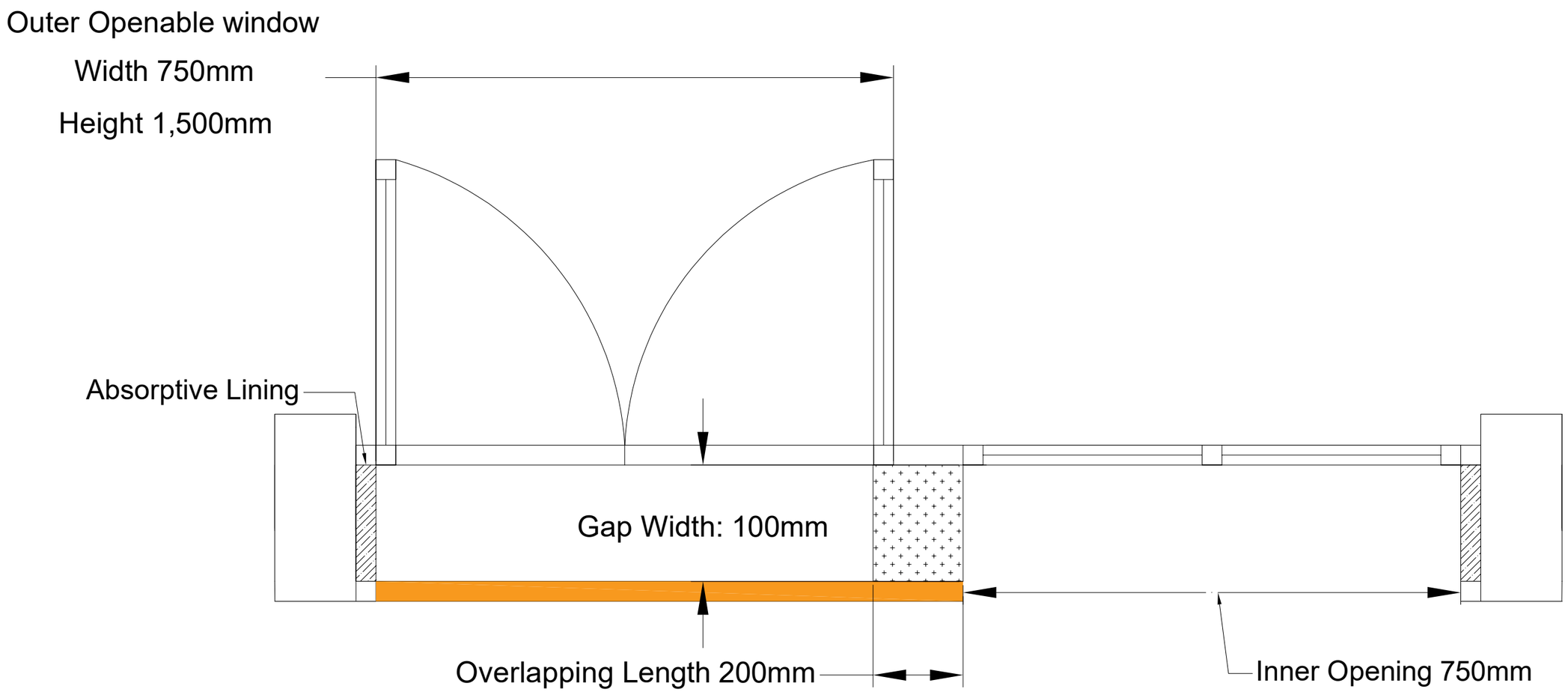
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Configuration of **Type A** Acoustic Window (Baffle Type)

Figure 4.3a

Rev. 0



Legend

Sliding Window

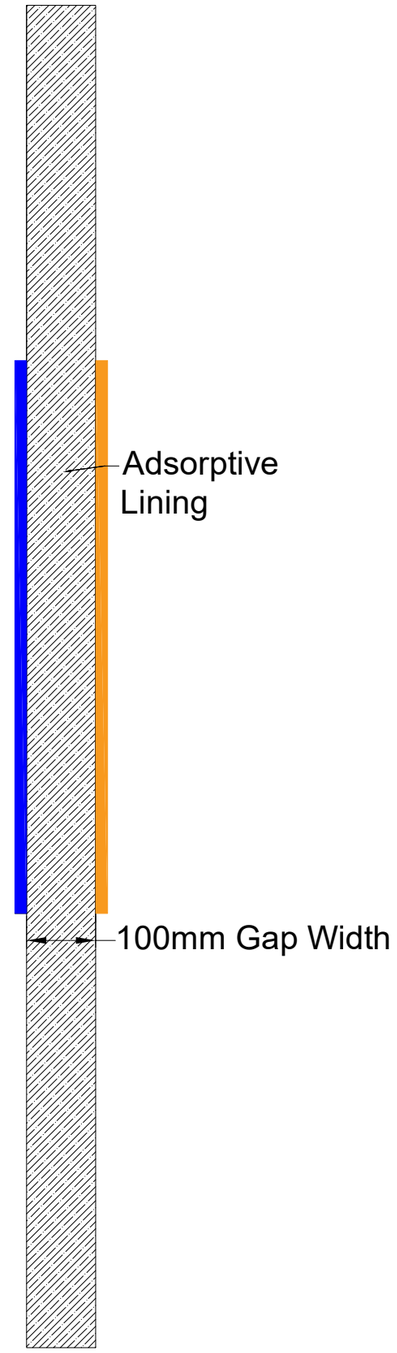
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Configuration of **Type B** Acoustic Window (Baffle Type)

Figure 4.3b
Rev. 0

Side View



Legend

- Openable Window
- Sliding Window

URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Acoustic Window (Side View)

Figure 4.3c

Rev. 0

LEGEND

- Project Site
- Proposed Low Noise Surface Road

URBAN GREEN

Proposed Development of Hong Kong Sheung Kung St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Location of Proposed Low Noise Surface Road

Figure 4.4

Rev. 0

N

N1
Japanese International School

N2
PLK Tin Ka Ping Millennium
Primary School

N3
Deerhill Bay

LEGEND

- Project Site
- Representative Noise Sensitive Receiver
- N1 Noise Measurement Point
- 300m Noise Study Area

0 200m

URBAN GREEN

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po

Location of Representative Noise Sensitive Receiver and Noise Measurement Point

Figure 5.1

Rev. 0

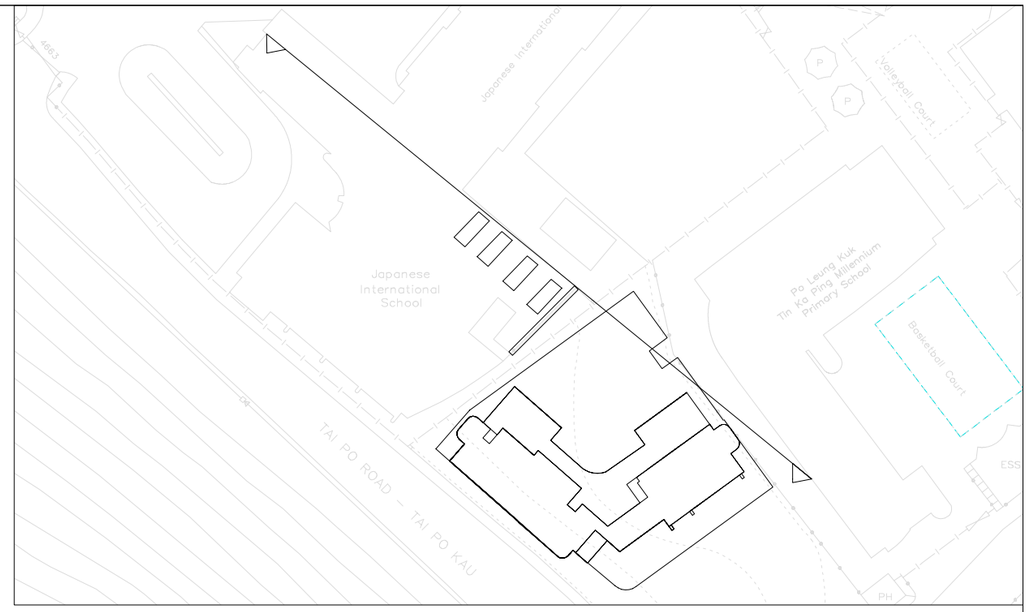
URBAN GREEN

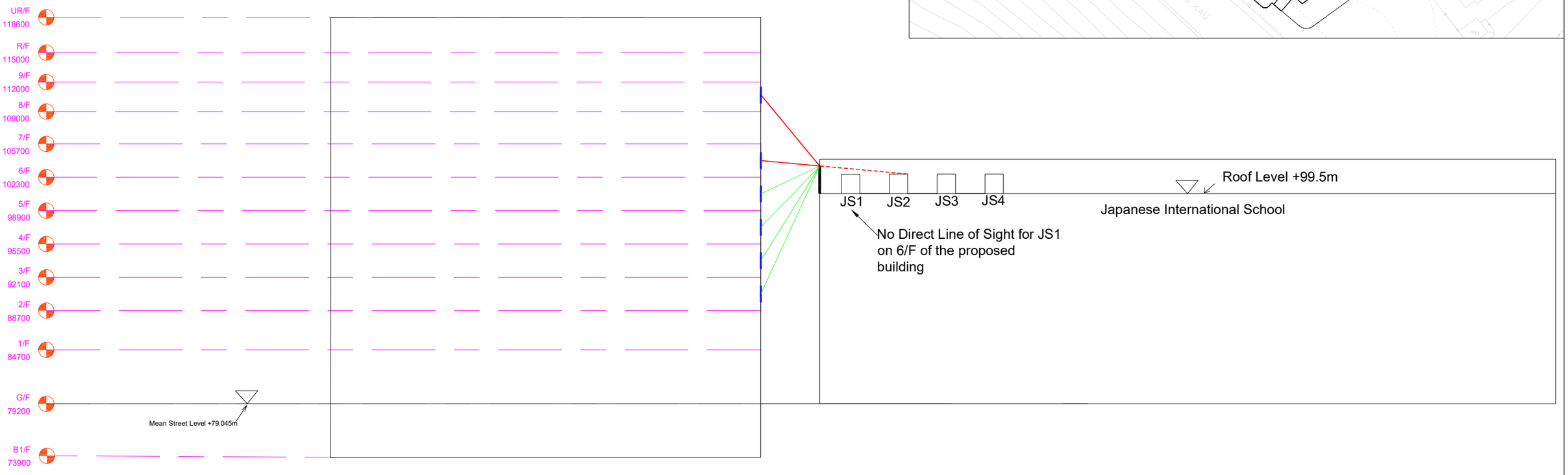
Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlor Lot No. T77 in D.D.34 Tai Po

Location of Fixed Plant Sources

Figure 5.2

Rev. 0





Legend

- Line of Sight (Direct)
- Line of Sight (In Direct)
- Barrier

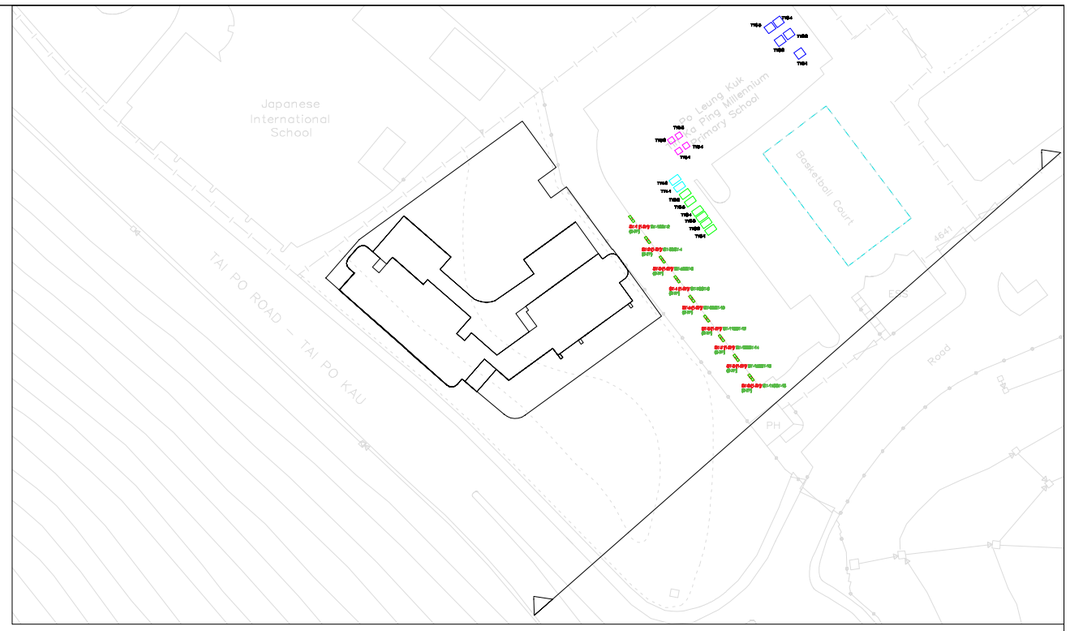
URBAN GREEN

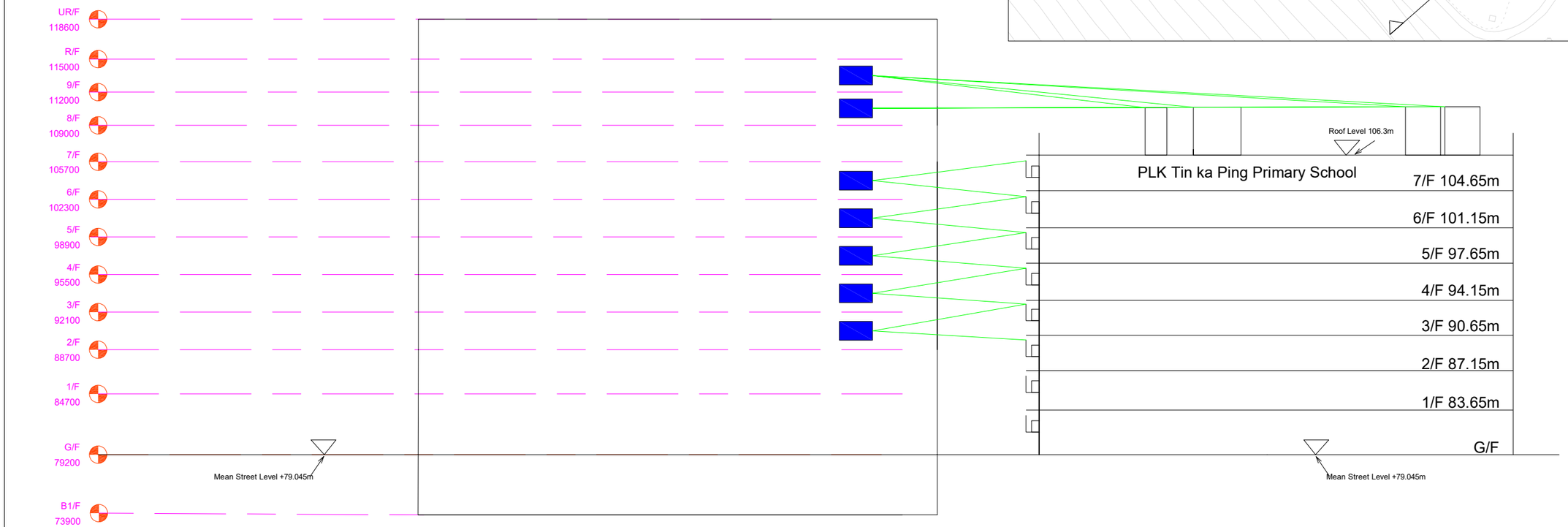
Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Cross-Section Diagram (Japanese International School)

Figure 5.3

Rev. 0





Legend

Line of Sight (Direct)

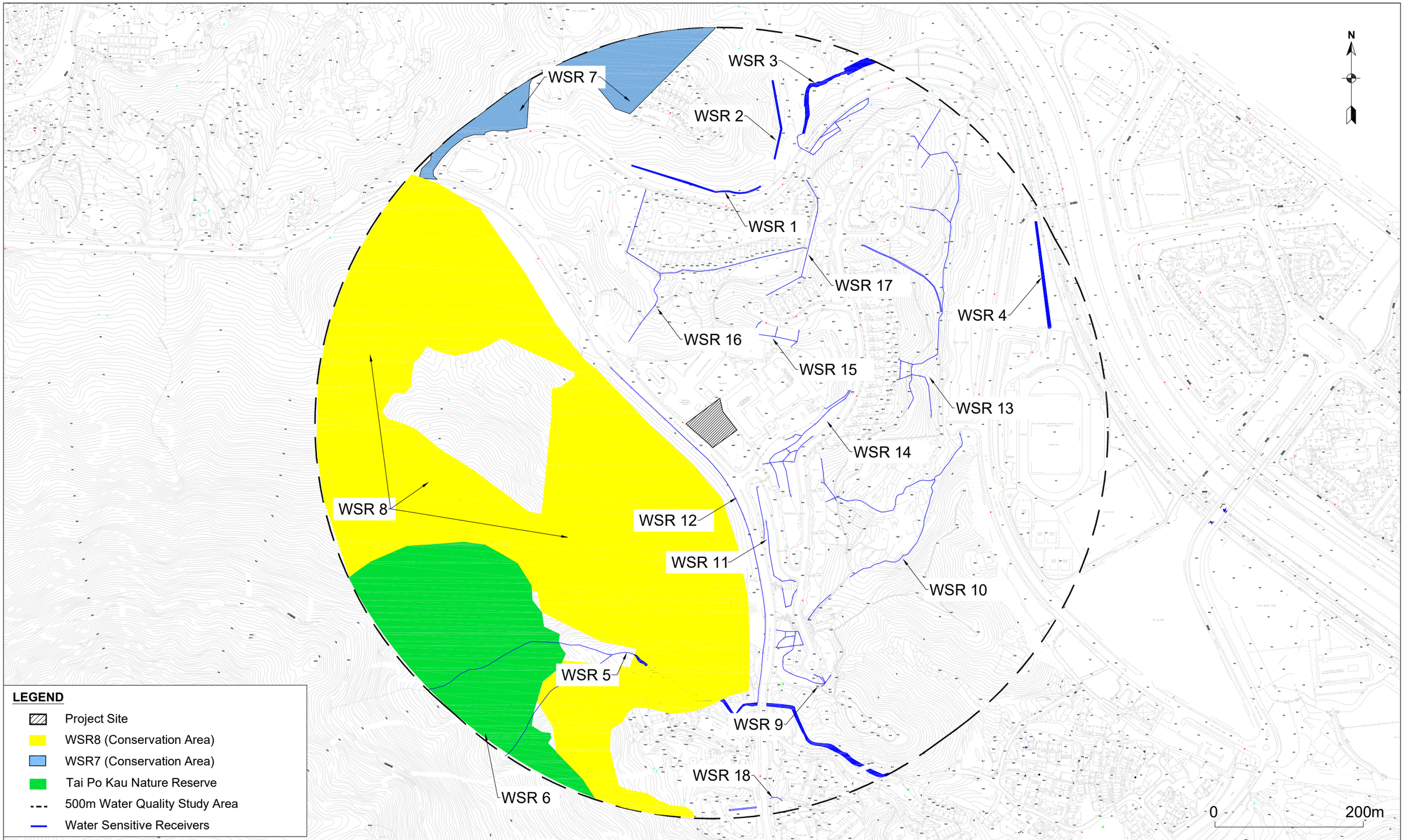
URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Cross-Section Diagram (PLK Tin Ka Ping Millennium Primary School)

Figure 5.4

Rev. 0



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Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

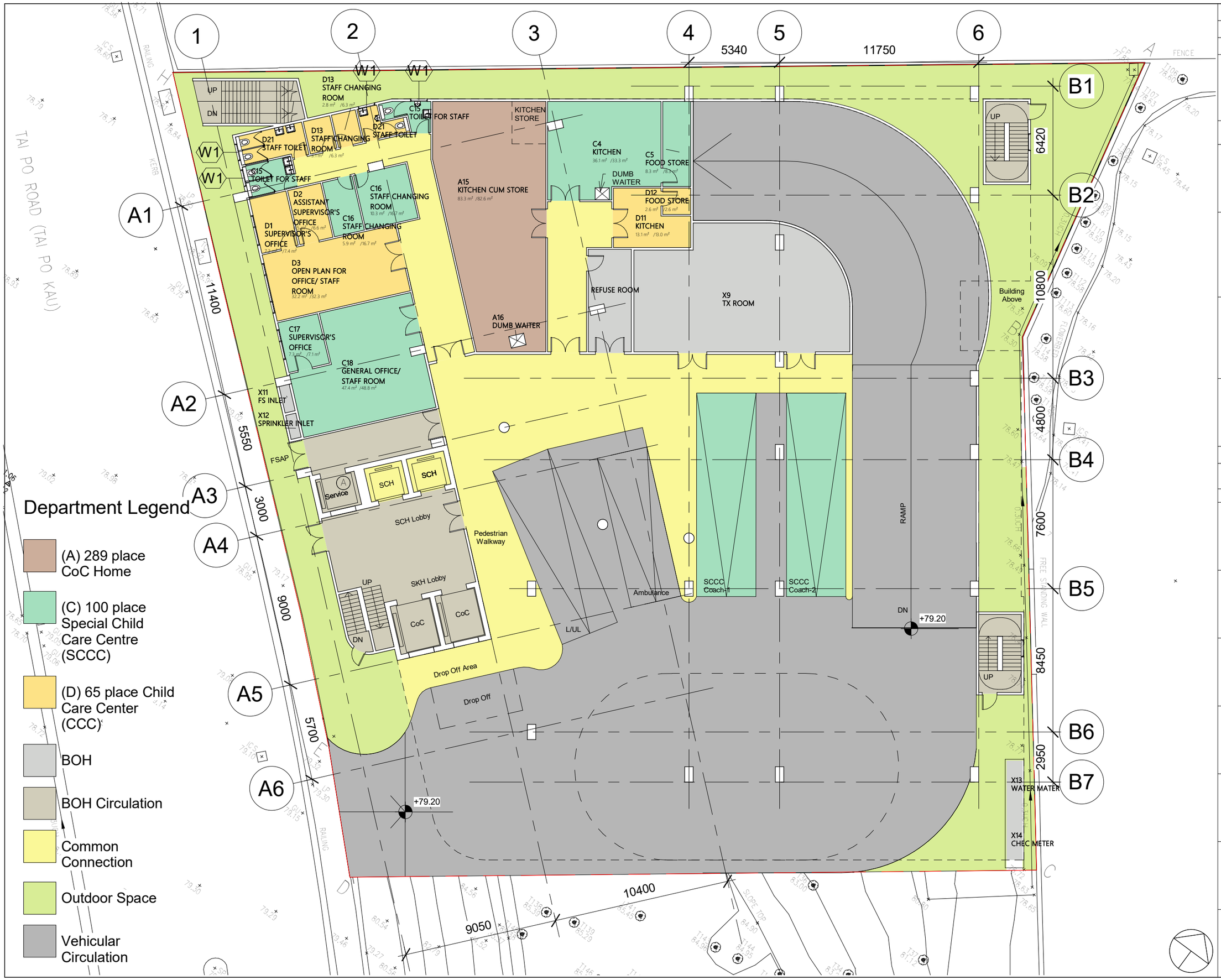
Location of Water Sensitive Receiver

Figure 7.1

Rev. 1

Appendix A

Proposed Layout Plan



Department Legend

- (A) 289 place CoC Home
- (C) 100 place Special Child Care Centre (SCCC)
- (D) 65 place Child Care Center (CCC)
- BOH
- BOH Circulation
- Common Connection
- Outdoor Space
- Vehicular Circulation

BD REF -	
BIM REF -	
FSD REF -	

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
GF Plan

SCALE 1 : 200 @A3

DRAWING NO. A001

ISSUE DATE 07/03/24

LEAD CONSULTANT & ARCHITECT
LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

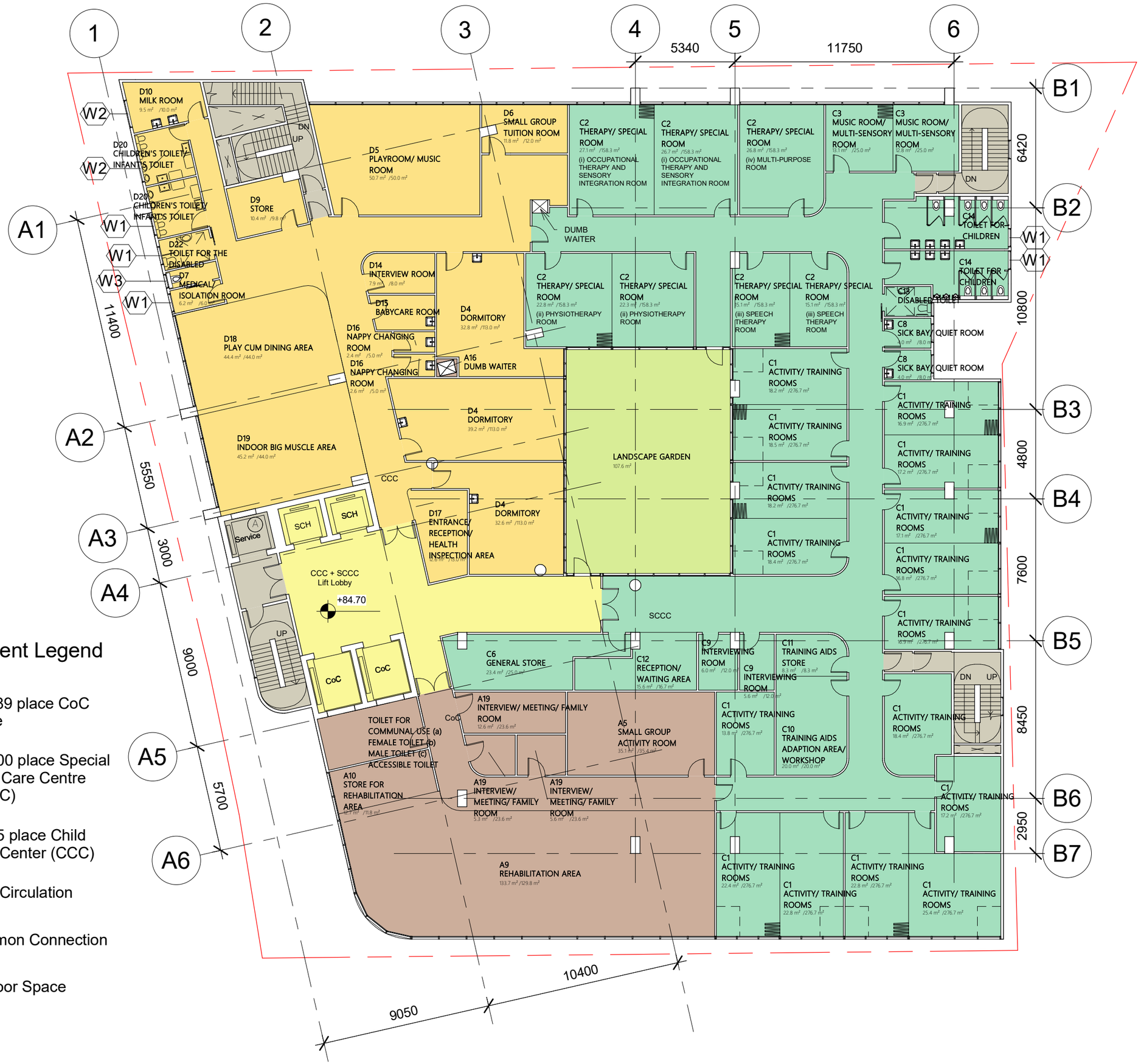
STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited



Department Legend

- (A) 289 place CoC Home
- (C) 100 place Special Child Care Centre (SCCC)
- (D) 65 place Child Care Center (CCC)
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
1F Plan

SCALE 1 : 200 @A3

DRAWING NO. A002

ISSUE DATE 16/02/24

LEAD CONSULTANT & ARCHITECT
LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited

Department Legend

- (A) 289 place CoC Home
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

2F Plan

SCALE 1 : 200 @A3

DRAWING NO. A003

ISSUE DATE 15/01/24

LEAD CONSULTANT & ARCHITECT

LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

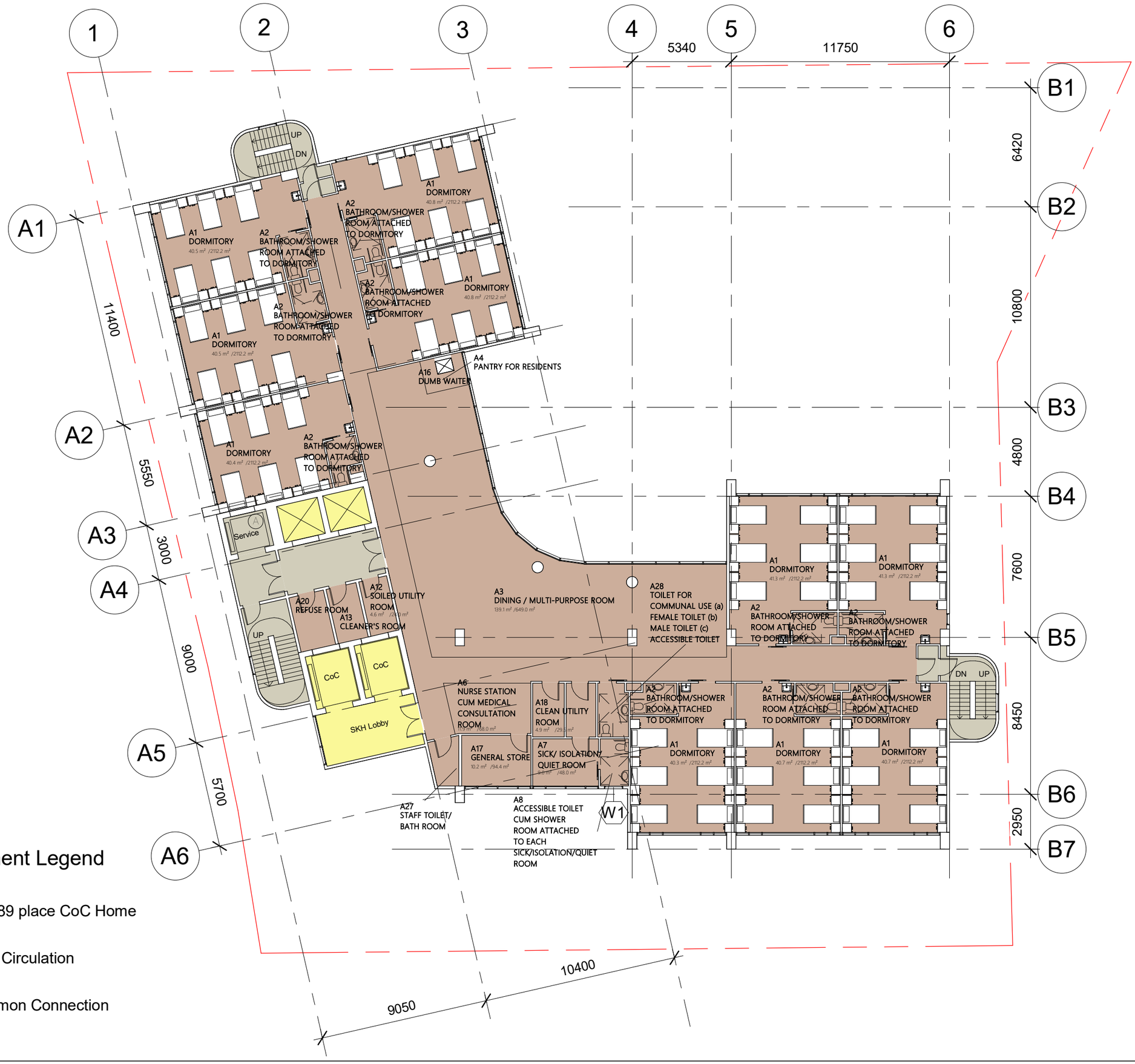
STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited



Department Legend

- (A) 289 place CoC Home
- BOH Circulation
- Common Connection

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

3F-6F Plan

SCALE 1 : 200 @A3

DRAWING NO. A004

ISSUE DATE 28/02/24

LEAD CONSULTANT & ARCHITECT

LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited

Department Legend

- (A) 289 place CoC Home
- (F) Foster Care Services and Agency based Enhancement of Professional Staff Support Services (FSC & APBSS)
- (G) Staff Training Unit (STU)
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

1 E005

DRAWING TITLE
7F Plan

SCALE 1 : 200 @A3

DRAWING NO. A005

ISSUE DATE 15/01/24

LEAD CONSULTANT & ARCHITECT
LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

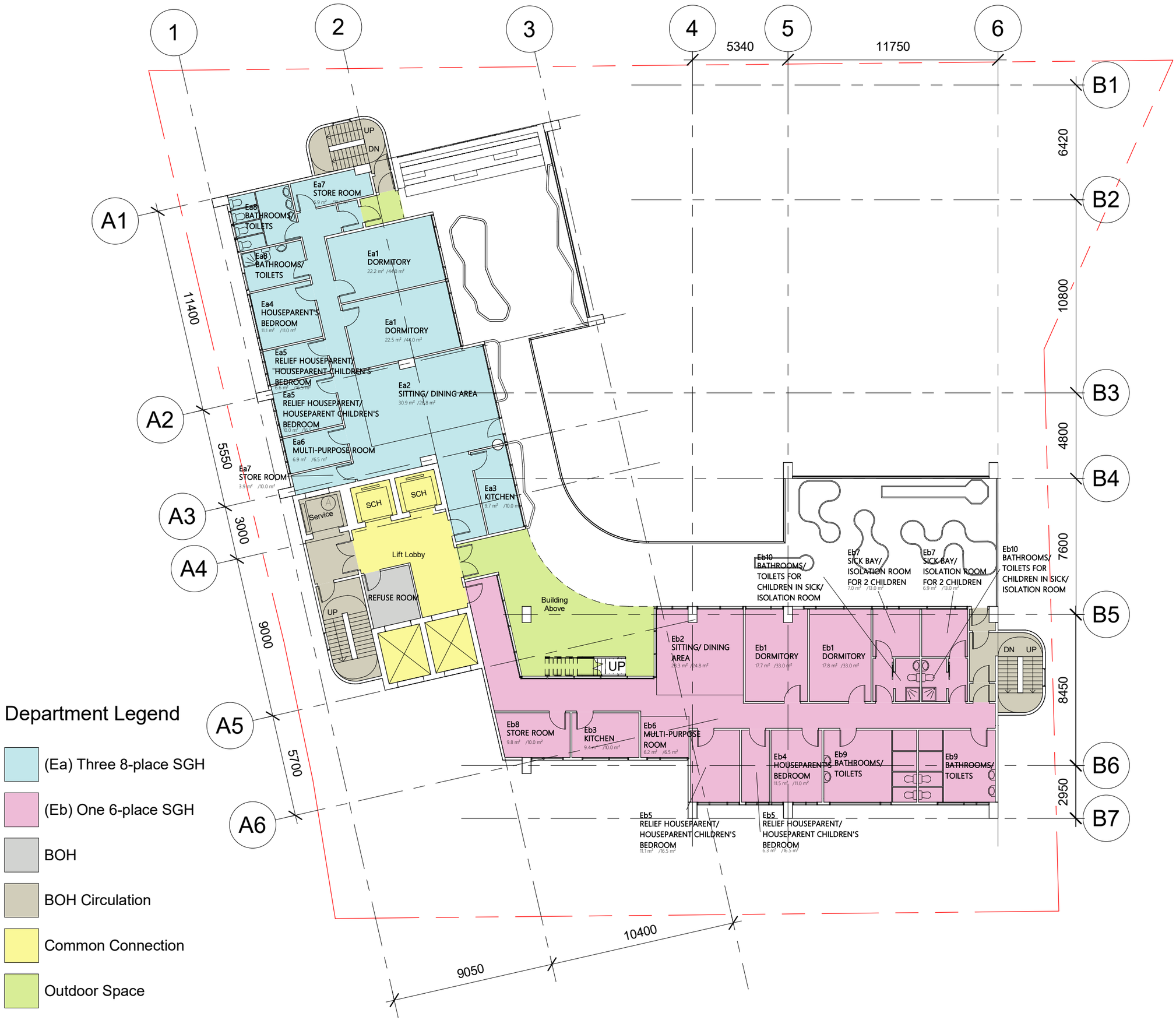
TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited

1 E001



Department Legend

- (Ea) Three 8-place SGH
- (Eb) One 6-place SGH
- BOH
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

8F Plan

SCALE 1 : 200 @A3

DRAWING NO. A006

ISSUE DATE 15/01/24

LEAD CONSULTANT & ARCHITECT

LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited

Department Legend

- (Ec) Three 8-place SGH
- (Ed) Three 8-place SGH
- BOH
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

9F Plan

SCALE 1 : 200 @A3

DRAWING NO. A007

ISSUE DATE 15/01/24

LEAD CONSULTANT & ARCHITECT

LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

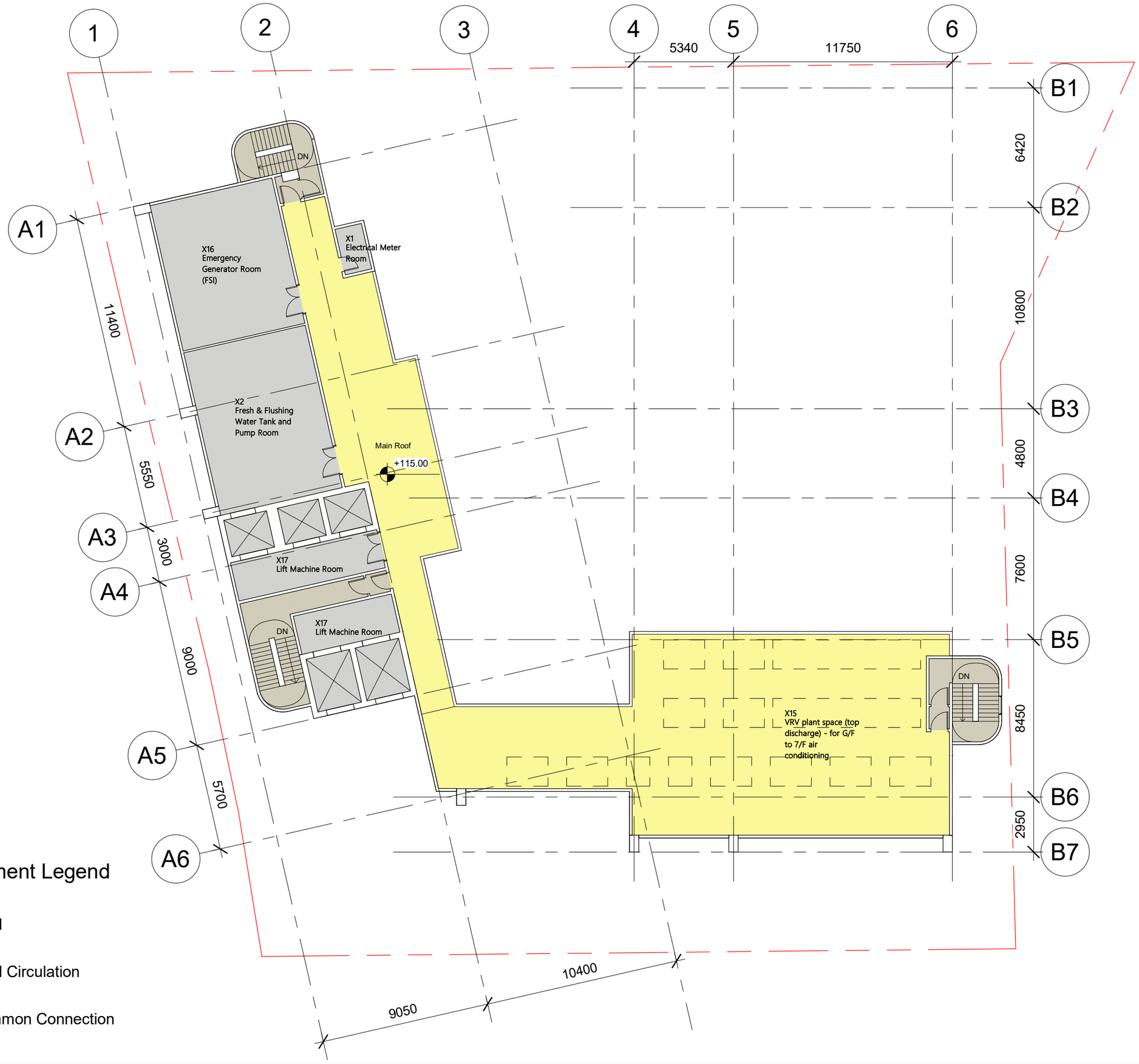
STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited



Department Legend

- BOH
- BOH Circulation
- Common Connection

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
RF Plan

SCALE 1 : 200 @A3

DRAWING NO. A008

ISSUE DATE 15/01/24

LEAD CONSULTANT & ARCHITECT
LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

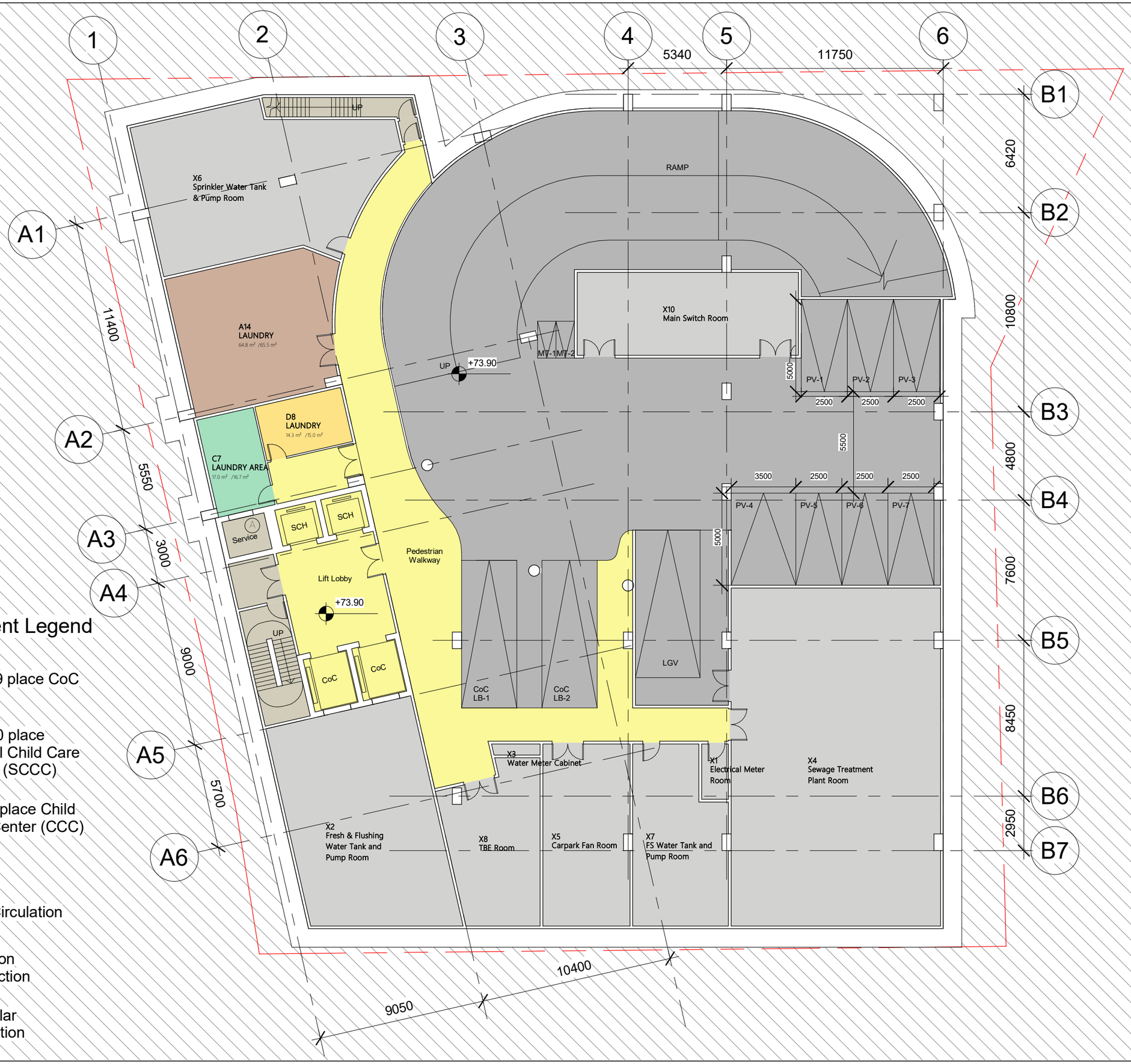
STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited



Department Legend

- (A) 289 place CoC Home
- (C) 100 place Special Child Care Centre (SCCC)
- (D) 65 place Child Care Center (CCC)
- BOH
- BOH Circulation
- Common Connection
- Vehicular Circulation

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

B1F Plan

SCALE 1 : 200 @A3

DRAWING NO. A009

ISSUE DATE 15/01/24

LEAD CONSULTANT & ARCHITECT

LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

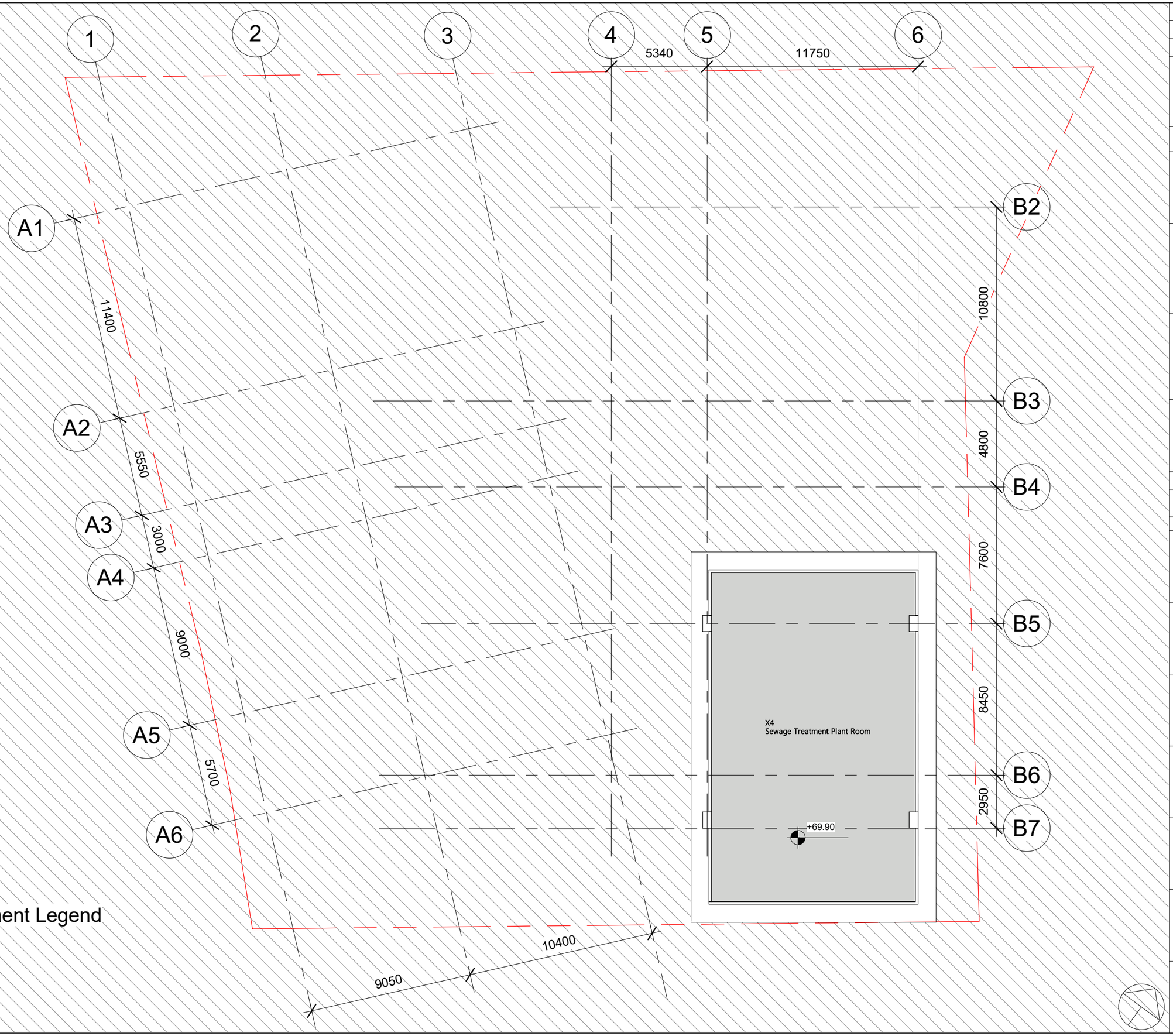
STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited



Department Legend

BOH

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

B2F Plan

SCALE 1 : 200 @A3

DRAWING NO. A010

ISSUE DATE 15/01/24

LEAD CONSULTANT & ARCHITECT

LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

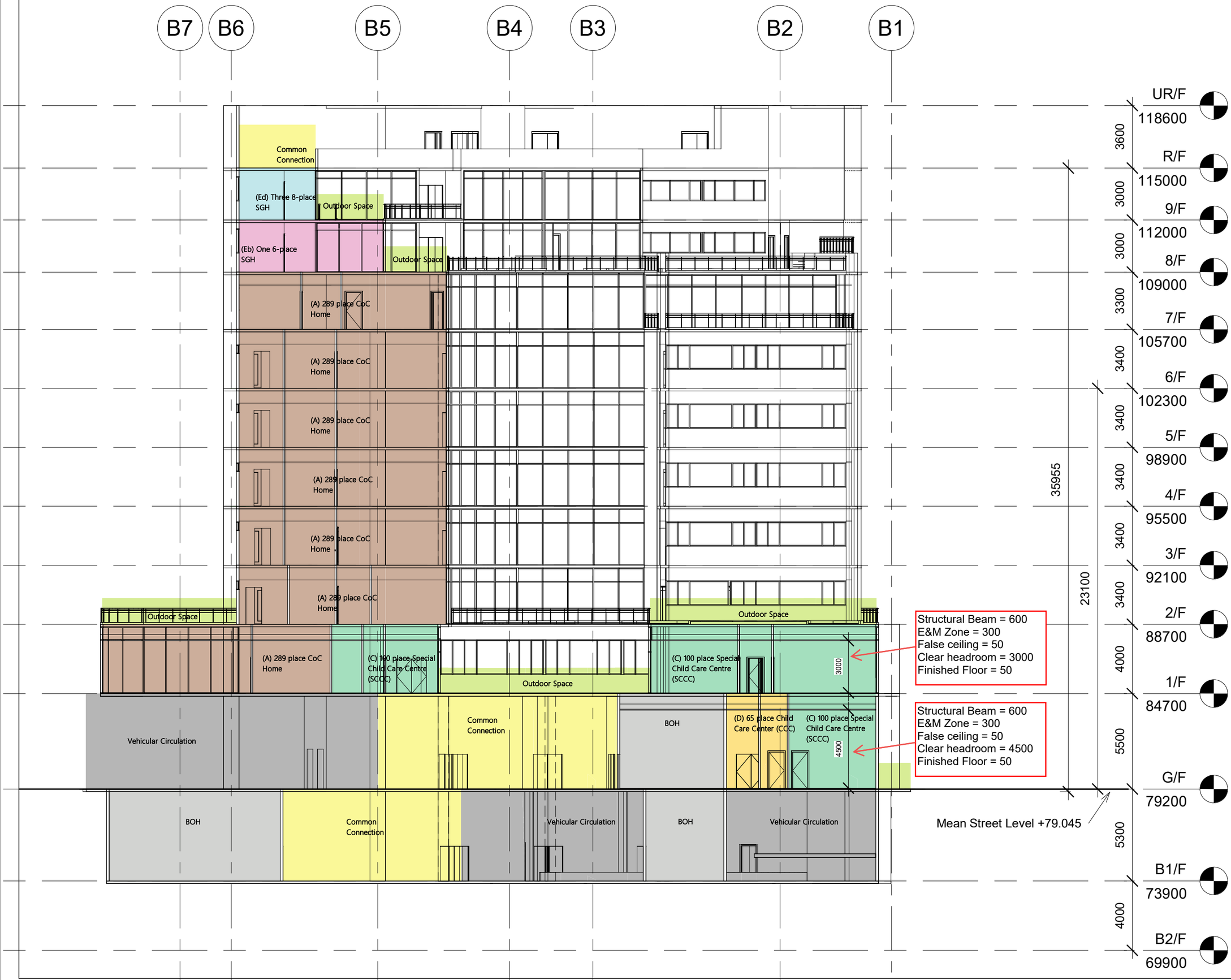
STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited



BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
Section

SCALE 1 : 200 @A3

DRAWING NO. S001

ISSUE DATE 03/07/24

LEAD CONSULTANT & ARCHITECT
LWK +PARTNERS

BUILDING SERVICES ENGINEER
WSP Hong Kong Limited

STRUCTURAL, CIVIL & GEOTECHNICAL ENGINEER
JMK Consulting Engineers Limited

TRAFFIC ENGINEER
Ho Wang SPB Limited

ENVIRONMENTAL CONSULTANT
Urban Green Consultants Limited

QUANTITY SURVEYOR
Rider Levett Bucknall Ltd

LANDSCAPE ARCHITECT
Otherland Limited

Appendix B

Traffic Data and TD endorsement

Re: 回覆: Fw: 回覆: Proposed Development of HKSKH St. Christopher Complex on the Vacant Site in Tai Po under Special Sites Scheme - Road Type Confirmation

Hiu Fung PANG <hiufungpang@td.gov.hk>

週五 2024/7/12 上午 10:18

收件者:Jason Lai <jasonlai@howangspb.com>
副本:Emily Tang <emily.tang@urbangreen.hk>;Hiu Fung PANG <hiufungpang@td.gov.hk>;Hung Hay LEUNG <hunghayleung@td.gov.hk>;Joan Choi <joan.choi@urbangreen.hk>;Norris Ng <norrisng@lwkp.com>;Samantha Wu Sze Man <smwu@skhwc.org.hk>;Tinson Leung <tinsonleung@howangspb.com>;Tommy Lam <tommylam@howangspb.com>

1 個附件 (625 KB)
J1652-EIA1-F01.pdf;

Dear Jason,

I have no further comment on your proposed road type for Tai Po Road - Tai Po Kau as "rural road" please.

Regards,

Jacky Pang
E/TP3, TE/NTE, TD
Tel.: 2399 2731

From: Jason Lai <jasonlai@howangspb.com>
To: Hiu Fung PANG <hiufungpang@td.gov.hk>
Cc: Hung Hay LEUNG <hunghayleung@td.gov.hk>, Tinson Leung <tinsonleung@howangspb.com>, Tommy Lam <tommylam@howangspb.com>, Norris Ng <norrisng@lwkp.com>, Samantha Wu Sze Man <smwu@skhwc.org.hk>, 'Joan Choi' <joan.choi@urbangreen.hk>, Emily Tang <emily.tang@urbangreen.hk>
Date: 2024/07/12 上午 10:15
Subject: 回覆: Fw: 回覆: Proposed Development of HKSKH St. Christopher Complex on the Vacant Site in Tai Po under Special Sites Scheme - Road Type Confirmation

---

Dear Jacky,

We refer to your email on 11/7/2024, the nearest ATC station adjacent to the subject site on Tai Po Road is Station 6210 [Tai Po Road – Ma Liu Shui (between Entrance to Chung Chi College, CUHK and Yuen Chau Tsai INT)] (see below). According to ATC, station 6210 is classified as Rural Road.

As our site is located in the rural area, only a few smaller centre of population and popular recreation areas are connected to the concerned section of Tai Po Road adjacent to our site. Therefore, Tai Po Road – Tai Po Kau (section adjacent to our site) is assumed to be classified as **Rural Road** under the Hierarchy of Roads according to TPDM Vol. 2 Chap. 3.2..

We would be grateful if you could kindly express your confirmation at your earliest convenience.

Jason Lai

寄件者: Hiu Fung PANG <hiufungpang@td.gov.hk>
寄件日期: 2024年11月20日星期三 11:00
收件者: Ho Wang SPB
副本: hiufungpang@td.gov.hk; HKA-P-01757@lwkp.com; Janet Wong; Jason Lai; Norris Ng; smwu@skhwc.org.hk; Tinson Leung; Tommy Lam
主旨: Re: Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot no. T77 in D.D. 34. Tai Po - Technical Note of Traffic Forecast for Noise Impact Assessment
附件: J1652-12L-ALL.pdf

Dear Tommy,

I have no comment on the methodology for traffic forecast pls.

Regards,

Jacky Pang
E/TP3, TE/NTE, TD
Tel.: 2399 2731

From: Ho Wang SPB <info@howangspb.com>
To: "hiufungpang@td.gov.hk" <hiufungpang@td.gov.hk>
Cc: "smwu@skhwc.org.hk" <smwu@skhwc.org.hk>, Norris Ng <norrisng@lwkp.com>, "HKA-P-01757@lwkp.com" <HKA-P-01757@lwkp.com>, Tinson Leung <tinsonleung@howangspb.com>, Tommy Lam <tommylam@howangspb.com>, Jason Lai <jasonlai@howangspb.com>, Janet Wong <janetwong@howangspb.com>
Date: 2024/11/15 [illegible] 11:11
Subject: Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot no. T77 in D.D. 34. Tai Po - Technical Note of Traffic Forecast for Noise Impact Assessment

---

BY POST & EMAIL (hiufungpang@td.gov.hk)

15 November 2024
Our reference: J1652/12

Transport Department

Attention: Mr. PANG Hiu Fung (Engr/Tai Po 1)

Dear Mr. Pang,

Technical Feasibility Study for the Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot no. T77 in D.D. 34. Tai Po
Technical Note of Traffic Forecast for Noise Impact Assessment

We would like to thank you for your no objection to our Traffic impact assessment Report for the captioned project on 19 Oct 2024.

We are pleased to enclose a duplicated copy of the latest Technical Note of Traffic Forecast for Noise Impact Assessment for your consideration/approval as requested by the Environmental Protection Department. The traffic data presented in this Technical Note is only for environmental assessment purpose by the environmental consultant.

We wish to thank you for your kind assistance and should you have any queries, please do not hesitate to contact the undersigned or our Mr. Jason Lai at 2865 0090 / 2169 6763.

Yours sincerely,
for Ho Wang SPB Limited

Tommy Lam
Principal Traffic Engineer

JW/TL/TA/JL/my
Encl.
c.c.: SKH – Ms. Samanth WU (smwu@skhwc.org.hk) – by Email only (w/ encl.)
LWK – Mr. Norris NG (norrisng@lwkp.com) – by Email only (w/encl.)
LWK - Project Email (HKA-P-01757@lwkp.com) – by Email only (w/encl.)

HWSPB 何黃
Traffic & Transportation Consultants

Ho Wang SPB Limited 何黃交通顧問有限公司
香港上環蘇杭街41 - 47號蘇杭商業大廈5樓
5 Floor, So Hong Commercial Building, 41 - 47 Jervois Street, Sheung Wan, Hong Kong
Tel : (852) 2865 0090 Fax : (852) 2866 4332
E-mail : info@howangspb.com Website : www.howangspb.com

BY POST & EMAIL (hiufungpang@td.gov.hk)

15 November 2024
Our reference: J1652/12

Transport Department
NT Regional Office
Traffic Engineering (NTE) Division
Project & Tai Po Section
9/F, Mongkok Government Offices
30 Luen Wan Street
Mongkok, Kowloon

Attention: Mr. PANG Hiu Fung (Engr/Tai Po 1)

Dear Mr. Pang,

Technical Feasibility Study for the Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot no. T77 in D.D. 34. Tai Po
Technical Note of Traffic Forecast for Noise Impact Assessment

We would like to thank you for your no objection to our Traffic impact assessment Report for the captioned project on 19 Oct 2024.

We are pleased to enclose a duplicated copy of the latest Technical Note of Traffic Forecast for Noise Impact Assessment for your consideration/approval as requested by the Environmental Protection Department. The traffic data presented in this Technical Note is only for environmental assessment purpose by the environmental consultant.

We wish to thank you for your kind assistance and should you have any queries, please do not hesitate to contact the undersigned or our Mr. Jason Lai at 2865 0090 / 2169 6763.

Yours sincerely,
for Ho Wang SPB Limited

Tommy Lam
Principal Traffic Engineer

JW/TL/TA/JL/my
Encl.

c.c.: SKH - Ms. Samanth WU (smwu@skhwc.org.hk) - by Email only (w/ encl.)
LWK - Mr. Norris NG (norrisng@lwkp.com) - by Email only (w/encl.)
LWK - Project Email (HKA-P-01757@lwkp.com) - by Email only (w/encl.)

Appendix C1

Road Traffic Noise Result (Unmitigated Scenario)

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai PoSt. Christopher's Complex at Tai Po

Noise Level Exceedance >70 dB(A)

Predicted Traffic Noise Level (Base Condition)

Floor/NSR	NSR1	NSR2	NSR3	NSR4	NSR5	NSR6	NSR7	NSR8	NSR9	NSR10	NSR11	NSR12	NSR13	NSR14	NSR15	NSR16	NSR17	NSR18	NSR19	NSR20	NSR21	NSR22	NSR23	NSR24	NSR25	NSR26
	Predicted Noise Level (dB(A))																									
2		78			78			78		65			65	65	44	43	38	36		36						
3	77			77				77		70			69	69	47	47			39		36					
4	76			76				76		70			69	69	47	48			41		39					
5	76			76				76		70			69	69	48	49			44		42					
6	75			75				75		70			69	69	49	50			48		46					
8			74			74	74		70		70	69											52	54	53	56
9			74			74	74		70		69	69										56	56		58	59

Summary Table	
Total no. of flats	71
Total no. of flats with noise exceedance	21
Compliance rate	70%

Appendix C2

Road Traffic Noise Result (Mitigated Scenario)

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai PoSt. Christopher's Complex at Tai Po

Noise Level Exceedance >70 dB(A)

Predicted Traffic Noise Level (With Proposed Low Noise Road Surface)

Floor/NSR	NSR1	NSR2	NSR3	NSR4	NSR5	NSR6	NSR7	NSR8	NSR9	NSR10	NSR11	NSR12	NSR13	NSR14	NSR15	NSR16	NSR17	NSR18	NSR19	NSR20	NSR21	NSR22	NSR23	NSR24	NSR25	NSR26
	Predicted Noise Level (dB(A))																									
2		75			75			75		64			63	64	43	42	38	36		36						
3	74			75				74		68			67	67	46	47			39		36					
4	74			74				74		68			67	67	47	48			41		39					
5	73			73				73		68			67	67	48	49			44		42					
6	73			73				73		68			67	66	49	50			48		46					
8			72			72	72		68		67	67											52	54	53	56
9			72			72	71		67		67	67										55	56		58	59

Summary Table	
Total no. of flats	71
Total no. of flats with noise exceedance	21
Compliance rate	70%

Predicted Traffic Noise Level (Mitigated)

Floor/NSR	NSR1	NSR2	NSR3	NSR4	NSR5	NSR6	NSR7	NSR8	NSR9	NSR10	NSR11	NSR12	NSR13	NSR14	NSR15	NSR16	NSR17	NSR18	NSR19	NSR20	NSR21	NSR22	NSR23	NSR24	NSR25	NSR26
	Predicted Noise Level (dB(A))																									
2		68			67			68		64			63	64	43	42	38	36		36						
3	68			68				68		68			67	67	46	47			39		36					
4	67			67				67		68			67	67	47	48			41		39					
5	66			66				66		68			67	67	48	49			44		42					
6	66			66				66		68			67	66	49	50			48		46					
8			65			68	66		68		67	67											52	54	53	56
9			65			67	65		67		67	67										55	56		58	59

Summary Table	
Total no. of flats	71
al no. of flats with noise exceedance	0
Compliance rate	100%

*The predicted noise level is not the actual noise level at the external facade after the application of acoustic window. These predicted noise levels are the equivalent noise levels at 1m from the external facade after accounting the reduction in noise levels inside the flat offered by the proposed acoustic window.

Mitigation Measure:

Acoustic Window Type A

Acoustic Window Type B

Appendix D

Noise Reduction Adjustment for Acoustic Windows

Propsoed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Road Traffic Noise Impact Assessment

Summry Table of Major Parameters of AW(BT) as per ProPECC PN5/23 & Reference Case (Proposed Puglic Housing Development at Tung Chung Area 46)

Mitigation Measures	Room Area, m^2	Inner Opening (Width), mm	Inner Opening (Height), mm	Outer Opening (Width), mm	Outer Opening (Height), mm	Gap Width, mm	Overlapping, mm	MPA Applied?	Solid Parapet Applied?	Acoustic Ceiling Applied?	SAM Applied?	Noise Attenuation Applied, dB(A)
Acoustic Window (Baffle Type) MFD (Flat Type C-7 (1B) Living Room)	23.1	1040	1383	1060	1383	100 to 175	≥100	No	-	-	Yes	6.9
Acoustic Window (Baffle Type) MFD (Flat Type C-7 (1B) Bedroom)		575	1383	550	1383	100 to 175	≥100	No	-	-	Yes	
Acoustic Window (Baffle Type) AW(BT) (Type A)	18.0	750	1500	750	1500	100 to 175	≥100	No	-	-	Yes	8.5

Note

MPA: Micro Perforated Absorber

SAM: Sound Absorptive Material

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D. 34 Tai Po

Road Traffic Noise Impact Assessment

Table of Noise Reduction Adjustment

AW(BT) Type A

AW(BT) Type B

			Proposed Development										Reference Case												
Floor	**NSRs**	**Mitigation Measures**	**Inner Opening Area, mm**	**Inner Opening Area (m^2)**	**Outer Opening Area, mm**	**Outer Opening Area (m^2)**	**No. of Window Opening**	**Gap Width, mm**	**Overlapping Length, mm**	**MPA Applied?**	**SAM applied?**	**Room Area (RA), m^2**	**Inner Opening Area, mm**	**Inner Opening Area (m^2)**	**Outer Opening Area, mm**	**Outer Opening Area (m^2)**	**No. of Window Opening**	**Gap Width, mm**	**Overlapping Length, mm**	**MPA Applied?**	**SAM applied?**	**Room Area (RAref), m^2**	**Ref. Sound Attenuation, dB(A)**	**Room Size Adjustment 10xlog(RA/RAref)(adjust downward only),dB(a)**	**Noise Reduction after Adjustment, dB(A)**	**Noise Reduction adopted, dB(A)**
2	NSR2	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	32.7	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
2	NSR8	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	27.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
3	NSR1	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	42.5	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
3	NSR4	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	43.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
3	NSR8	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	41.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
4	NSR1	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	42.5	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
4	NSR4	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	43.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
4	NSR8	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	41.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
5	NSR1	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	42.5	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
5	NSR4	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	43.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
5	NSR8	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	41.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
6	NSR1	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	42.5	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
6	NSR4	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	43.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
6	NSR8	(Flat Type C-7 (1B) Living Room)	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100	200	No	Yes	41.1	1040(W) x 1383 (H)	1.4	1040(W) x 1383 (H)	1.4	1	100 to 175	≥ 100	No	Yes	23.1	6.9	-	6.9	**6.9**
		(Flat Type C-7 (1B) Bedroom)	575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100	200	No	Yes		575(W) x 1383 (H)	0.8	550(W) x 1383 (H)	0.8	1	100 to 175	≥ 100	No	Yes					
2	NSR5	AW(BT) Type B	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100	200	No	Yes	16.9	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100 to 175	≥ 100	No	Yes	18.0	8.5	-0.3	8.2	**8.2**
8	NSR3	AW(BT) Type B	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100	200	No	Yes	11.1	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100 to 175	≥ 100	No	Yes	18.0	8.5	-2.1	6.4	**6.4**
8	NSR6	AW(BT) Type B	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100	200	No	Yes	6.6	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100 to 175	≥ 100	No	Yes	18.0	8.5	-4.4	4.1	**4.1**
8	NSR7	AW(BT) Type B	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100	200	No	Yes	10.0	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100 to 175	≥ 100	No	Yes	18.0	8.5	-2.5	6.0	**6.0**
9	NSR3	AW(BT) Type B	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100	200	No	Yes	11.1	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100 to 175	≥ 100	No	Yes	18.0	8.5	-2.1	6.4	**6.4**
9	NSR6	AW(BT) Type B	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100	200	No	Yes	6.6	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100 to 175	≥ 100	No	Yes	18.0	8.5	-4.4	4.1	**4.1**
9	NSR7	AW(BT) Type B	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100	200	No	Yes	10.0	750(W) x 1500 (H)	1.1	750(W) x 1500 (H)	1.1	1	100 to 175	≥ 100	No	Yes	18.0	8.5	-2.5	6.0	**6.0**

Appendix E

Reference of Acoustic Window Noise Reduction

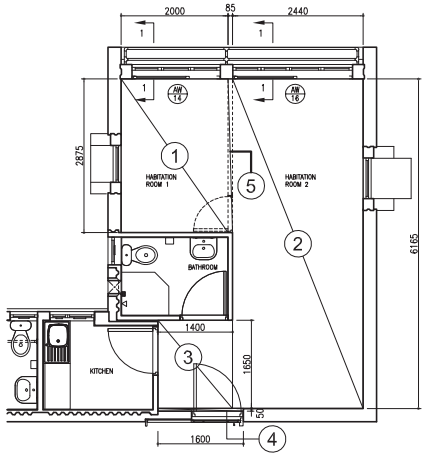
Annex K
Summary of Noise Attenuation Performance for MFD with Acoustic Window

Summary of Noise Attenuation Performance for MFD with Acoustic Window

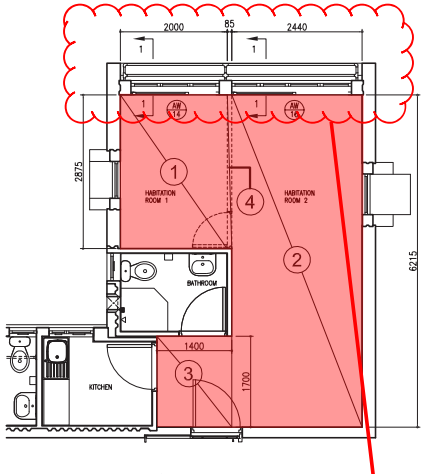
	Acoustic Window Configurations				Noise Attenuation dB(A)	
Flat Type	**Inner Window Opening (mm)**	**Outer Window Opening (mm)**	**Window Overlapping Length (mm)**	**Gap Width between Window Panel (mm)**	**With Sound Absorptive Lining**	**Without Sound Absorptive Lining**
Type A-3 (1/2P)	1383mm (H) x 840mm (W)	1383mm (H) x 870mm (W)	340mm	175mm	**7.0**	**5.8**
Type B-5 (2/3P)	1383mm (H) x 940mm (W)	1383mm (H) x 1010mm (W)	200mm	175mm	**6.6**	**5.5**
Type C-6 (1B) **& Type D-6** (2B)						
Living Room	1383mm (H) x 980mm (W)	1383mm (H) x 1040mm (W)	100mm	175mm	**7.0**	**5.5**
Bedroom 1	1383mm (H) x 675mm (W)	1383mm (H) x 600mm (W)	525mm	175mm		
Type C-7 (1B) **& Type D-7** (2B)						
Living Room	1383mm (H) x 1040mm (W)	1383mm (H) x 1060mm (W)	140mm	175mm	**6.9**	**5.4**
Bedroom 1	1383mm (H) x 575mm (W)	1383mm (H) x 550mm (W)	525mm	175mm		
Type C-8 (1B)						
Living Room	1383mm (H) x 1060mm (W)	1383mm (H) x 1050mm (W)	330mm	175mm	**7.1**	**5.6**
Bedroom 1	1383mm (H) x 675mm (W)	1383mm (H) x 600mm (W)	525mm	175mm		
Type D-6 (2B) **& Type D-7** (2B)						
Bedroom 2	1383mm (H) x 550mm (W)	1383mm (H) x 550mm (W)	500mm	175mm	**3.9**	**2.7**

Acoustic Window A

CALCULATION OF GLAZING AREA



TYPE C-7(b) FLAT (LOW ZONE)
(WITH VPB + VPK)



TYPE C-7(b) FLAT (HIGH ZONE)
(WITH VPB + VPK)

GENERAL NOTES

1. THIS DRAWING SHOWS THE TRAVEL DISTANCE AND DEADEND TO STAIRCASE FOR TYPE C-7(b) FLAT(S), ANY OTHER INFORMATION OF FLOOR LAYOUT PLAN SHOULD REFER TO OTHER RELEVANT ICU APPROVED GENERAL BUILDING PLAN (GBP) FOR THIS PROJECT.
2. THIS DRAWING SHOWS THE GLAZING AR... TYPE C-7(b) FLAT(S), ANY OTHER INFORMA... FOR KITCHEN AND BATHROOM SHALL RE... THIS PROJECT.
3. TYPE C-7(b) FLAT(S) ARE FLAT NO. (pr... information).
4. ACCORDING TO PNAP APP-130, PARA. 6 OF APPENDIX A, THE WIDTH OF AIR GAP IS BETWEEN 100mm TO 175mm, THE LENGTH OF AIR GAP IS NOT LESS THAN 100mm.
5. THE INTENDED CONSTRUCTION OF NOTIONAL PARTITION(S) CONSISTS OF MAXIMUM 85mm THICK SOLID CONCRETE BLOCK WALL(S) / LIGHTWEIGHT PARTITION(S) (DENSITY NOT MORE THAN 2060 kg/m³) WITH 15mm THICK CEMENT SAND PLASTER (DENSITY NOT MORE THAN 2300 kg/m³) ON BOTH FACES (WITH AGGREGATED AVERAGE DENSITY NOT MORE THAN 2125 kg/m³).
6. ALL ELEVATIONS OF WINDOWS ARE VIEWED FROM OUTSIDE.
7. THE FIXED GLAZING IS EQUIPPED WITH SIDE-HUNG OPENABLE WINDOW FOR OPERATION AND MAINTENANCE PURPOSE AND SPECIAL WINDOW OPENING DEVICE (e.g. ALLEN KEY LOCK) WOULD BE PROVIDED. THIS FIXED GLAZING SHALL BE KEPT CLOSE TO ATTAIN THE NOISE PERFORMANCE AS SPECIFIED UNDER ENVIRONMENTAL ASSESSMENT STUDY.
8. THE AIR-CONDITIONERS PLATFORMS SHOULD NOT PROJECT MORE THAN 750mm IN ACCORDANCE WITH PNAP APP-19.

Length & Width of Air Gap

WINDOW / OPENING (AW-14 & AW-16)

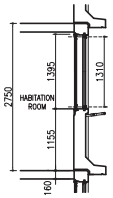
TABLE A (LOW ZONE)

LOCATION	PORTION	AREA (m²)	AREA REQUIRED (m²)			AREA PROVIDED (m²)
HABITATION ROOM 1 (WITH NOTIONAL PARTITION)	1 (AW-14)	(2.000x2.875) = 5.750	GLAZING	1/10	0.575	1.478
			OPENABLE	1/16	0.3	
HABITATION ROOM 2 (WITH NOTIONAL PARTITION)	2, 3 & 4 (AW-16)	(2.440x6.165+ 1.400x1.650+ 1.600x0.050) = 17.433	GLAZING	1/10	1.	
			OPENABLE	1/16	1.090	1.166
HABITATION ROOM 1 & 2 (WITHOUT NOTIONAL PARTITION)	1–5 (AW-14 & AW-16)	(2.000x2.875)+ (2.440x6.165)+ (1.400x1.650)+ (1.600x0.050)+ (0.085x2.875) =23.427	GLAZING	1/10	2.343	(1.478+2.073) =3.551
			OPENABLE	1/16	1.464	(0.609+1.166) =1.775

Room Area

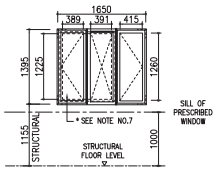
TABLE B (HIGH ZONE)

LOCATION	PORTION	AREA (m²)	AREA REQUIRED (m²)			AREA PROVIDED (m²)
HABITATION ROOM 1 (WITH NOTIONAL PARTITION)	1 (AW-14)	(2.000x2.875) =5.750	GLAZING	1/10	0.575	1.478
			OPENABLE	1/16	0.359	0.609
HABITATION ROOM 2 (WITH NOTIONAL PARTITION)	2 & 3 (AW-16)	(2.440x6.215)+ (1.400x1.700) =17.545	GLAZING	1/10	1.755	2.073
			OPENABLE	1/16	1.097	1.166
HABITATION ROOM 1 & 2 (WITHOUT NOTIONAL PARTITION)	1–4 (AW-14 & AW-16)	(2.000x2.875)+ (2.440x6.215)+ (1.400x1.700)+ (0.085x2.875) =23.539	GLAZING	1/10	2.354	(1.478+2.073) =3.551
			OPENABLE	1/16	1.471	(0.609+1.166) =1.775

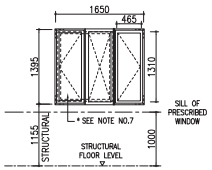


SECTION 1-1

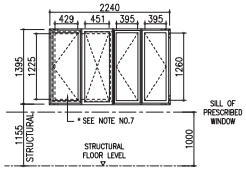
CALCULATION OF GLAZING AREA



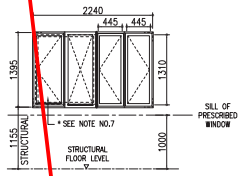
CALCULATION OF OPENABLE AREA



CALCULATION OF GLAZING AREA



CALCULATION OF OPENABLE AREA

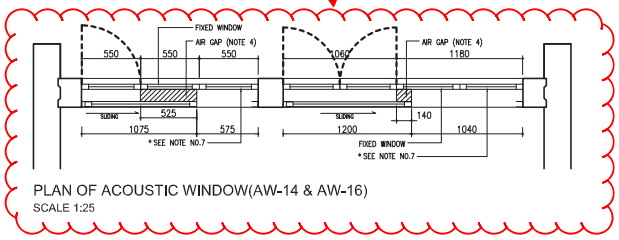


HABITATION ROOM 1

MARK :	AW-14
GLAZING AREA	: 0.415x1.260+0.391x1.225+0.389x1.225 = 1.478m²
OPENABLE AREA (RESULTANT OPENING)	: 0.465x1.310 = 0.609m²

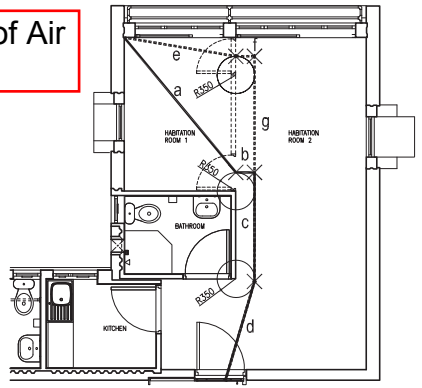
HABITATION ROOM 2

MARK :	AW-16
GLAZING AREA	: 0.429x1.225+0.451x1.225+(0.395x1.260)x2 = 2.073m²
OPENABLE AREA (RESULTANT OPENING)	: (0.445x1.310)x2 = 1.166m²



PLAN OF ACOUSTIC WINDOW(AW-14 & AW-16)
SCALE 1:25

CALCULATION OF DEADEND TRAVEL DISTANCE

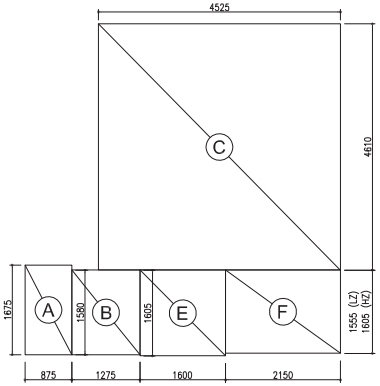


DEADEND TRAVEL DISTANCE (UNDER FS CODE 2011)
FOR TYPE C-7(b) FLAT (HIGH ZONE)
AT A RANGE OF

a + b + c + d =
3.275 + 0.350 + 2.041 + 1.928 = 7.594m
OR
e + f + g + c + d
= 2.114 + 0.350 + 2.175 + 2.041 + 1.928
= 8.608m

} ≤ 24m (UNDER FS CODE 2011 CLAUSE B11.2 (a)(i))

CALCULATION OF IFA



TYPE C-7(b) FLAT		LOW ZONE		HIGH ZONE	
	PORTION	CALCULATION (m)	AREA (m²)	CALCULATION (m)	AREA (m²)
IFA	A	0.875 X 1.675	1.466	0.875 X 1.675	1.466
	B	1.275 X 1.580	2.015	1.275 X 1.580	2.015
	C	4.525 X 4.610	20.860	4.525 X 4.610	20.860
	D	1.600 X 1.605	2.568	1.600 X 1.605	2.568
	E	2.150 X 1.555	3.343	2.150 X 1.605	3.451
		30.252m²		30.360m²	

CALCULATION OF NOTIONAL PARTITION

	IFA (m2) (A)	THE MAXIMUM AGGREGATE LENGTH OF THE ADDITIONAL BLOCK WALL (m) (A)/10 = (B)	TOTAL ADDITIONAL WALL LENGTH (EXCLUDED 1x700mm WIDTH DOOR) (m)
LOW ZONE	30.252	3.025	(2.875 – 0.700) = 2.175 < (B)
HIGH ZONE	30.360	3.036	(2.875 – 0.700) = 2.175 < (B)

* REFER TO NOTES NO.5

NOTES

LEGEND:

LZ - LOW ZONE (XX/F TO XX/F)
HZ - HIGH ZONE (XX/F TO XX/F)

IFA - INTERNAL FLOOR AREA

FS CODE - CODE OF PRACTICE FOR FIRE SAFETY IN BUILDINGS

TYPE C-7(b) Flat

ORIGINAL SIGNED

Chief Architect / Development and Standards
Date : 18 DEC 2018

REVISIONS

NO	DESCRIPTION AND DATE	INITIAL AND DESIGNATION DWN	CKD	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	CA/D&S	ORIGINAL SIGNED	12/2018
CHECKED	SA/27	ORIGINAL SIGNED	12/2018
	A/68	ORIGINAL SIGNED	12/2018
	STO(A)/7	ORIGINAL SIGNED	12/2018
DRAWN	TO(A)/54	ORIGINAL SIGNED	12/2018

PROJECT
MODULAR FLAT DESIGN WITH ACOUSTIC WINDOW (VOLUMETRIC PRECAST BATHROOM AND VOLUMETRIC PRECAST KITCHEN OPTION)

DRAWING TITLE
TYPE C-7(b) FLAT
CALCULATION OF NOTIONAL PARTITION, GLAZING AREA AND DEADEND TRAVEL DISTANCE

SCALE 1:50

DRAWING NO.
MF/AW/VBK/MW/A/ICU809

SOURCE

ICU NO.

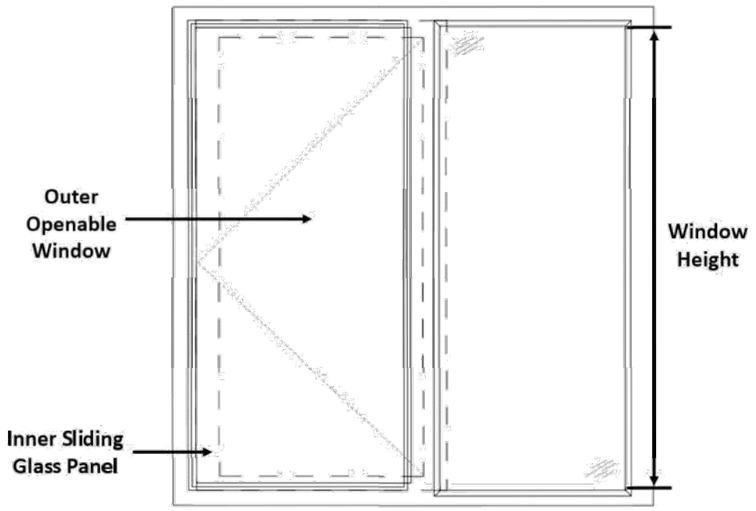
AutoCAD 2000 A1 594 x 841

HOUSING DEPARTMENT

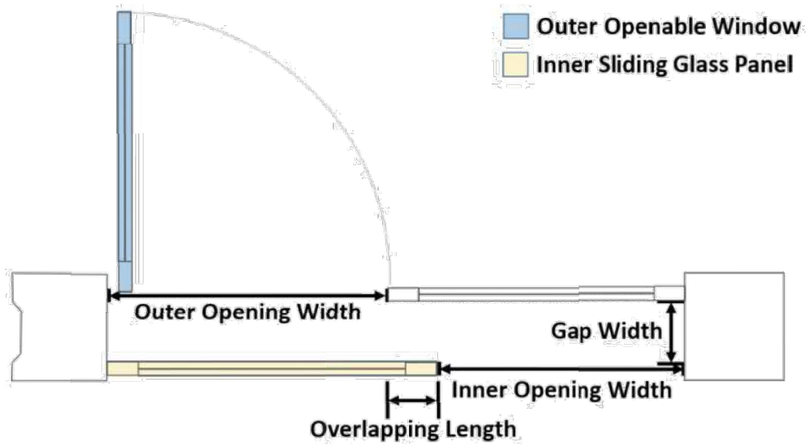
REF : DATE :

☐ C.E.'s COPY ☐ ____'s COPY
☐ COW's COPY ☐ R.E.'s COPY
☐ BSE's COPY ☐ BS's COPY
☐ S.E.'s COPY ☐ Q.S's COPY
☐ CONTRACTOR's COPY ☐ OFFICE's COPY

(I) Possible design of "Acoustic Window (Baffle Type)" for 8m² and 18m² habitable rooms (i.e. dining room, living room or bedroom)



INTERNAL VIEW (NOT TO SCALE)



PLAN (NOT TO SCALE)

Possible Designs of "Acoustic Window (Baffle Type)" for 8m² and 18m² rooms					
Room Size (m^2)	Room Dimensions (mm^3)	Inner Window Opening (mm^2)	Outer Window Opening (mm^2)	Overlapping Length (mm)	Gap Width (mm)
8	3200 (W) x 2500 (D) x 3400 (H)	580 (W) x 870 (H)	600 (W) x 870 (H)	≥ 100	100 to 175
18	5300 (W) x 3390 (D) x 3400 (H)	750 (W) x 1500 (H)	750 (W) x 1500 (H)	≥ 100	100 to 175

Notes:

a. These are feasible designs of AW(BT) for 8m² and 18m² rooms.

b. For optimum performance of noise reduction, the air gap should have a pane-to-pane overlapping length of ≥ 100mm and a gap width between 100mm and 175mm, with the inner sliding glass panel in a closed position. The window pane shall be ≥ 6mm in thickness.

Appendix F

Noise Measurement Records and Calibration Certificate

RECORD OF BACKGROUND NOISE MONITORING								
Project. : Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po St. Christopher's Complex at Tai Po								
Date	9 Feb 2023							
Monitoring Location		N1		N2		N3		
Description of the Location		Japanese International School		Entrance of PLK Tin Ka Ping Millennium Primary		Gate at Deerhill Bay		
Measurement Method		Direct measurement						
Equipment Used (Model and Serial No.)		Noise Meter: XL2 A2A-15415-E0 Calibrator : CEL-120/1 4884880						
Weather Condition	Status	Fine						
	Wind Strength (m/s)	<1						
Time of Monitoring		1 hours L90 Monitoring						
Time of Monitoring	Start	15:55	21:55	16:58	20:45	17:59	19:43	2:07
	Finish	16:55	22:55	17:58	21:45	18:59	20:43	3:07
Measured 1hrs L90(dB(A))		73.3	66.1	59.8	57.6	59.2	57.4	58.4
Free- field Correction (dB(A))		NA	NA	NA	NA	3	3	3
Corrected Noise Level (dB(A))		73.3	66.1	59.8	57.6	62.2	60.4	61.4
Significant Noise Source		Nil						

	Name	Signature	Date
Recorded by	Ailyn Chiu	Ailyn	02-10-2022
Checked by	Emily Tang	Eimly	02-10-2022

Noise Measurement Photo Record

	N1 Japanese International School	N2 PLK Tin Ka Ping Millennium Primary School	N3 Deerhill Bay
Daytime			
Evening time			
Night time			

Noise Meter

聲學測試服務有限公司
Acoustic Testing Services Limited
Unit E, 2/F., Century Industrial Centre, 33-35 Au Pui Wan Street, Fo Tan, Shatin, New Territories, Hong Kong
Tel: (852) 2690 9126 Fax: (852) 2690 9125 E-mail: info@ATSL.com.hk http://www.ATSL.com.hk

Certificate of Calibration

Certificate No. ATS22-010-CC007

Customer:	**Urban Green Consultants Limited** 23/F Wui Tat Centre, 55 Connaught Road West, Sheung Wan, Hong Kong
Unit-under-test (UUT):	
Description:	Sound Analyzer , Microphone & Pre-amplifier Set
Manufacturer:	NTi Audio
Type No.:	XL2 , M2211
Serial No.:	A2A-15415-E0 , 8057
Test Conditions:	
Temperature:	26°C
Relative Humidity:	80%
Test Specifications:	Calibration Check
Date of calibration:	09 June 2022
Test Results:	All calibration points are within manufacturer's specification.

Certified by: _____

Mr. Y. T. LEUNG / Technical Manager
MIOA, MHKIOA, MHKIQEP

Issue Date: 09 June 2022

H&T Instrument Service Company
凱迪儀器服務公司
Tel: +852 2187 1266
Email: hntinstrument@gmail.com

Due Day: 08 June 2023

聲學測試服務有限公司
Acoustic Testing Services Limited
Unit E, 2/F., Century Industrial Centre, 33-35 Au Pui Wan Street, Fo Tan, Shatin, New Territories, Hong Kong
Tel: (852) 2690 9126 Fax: (852) 2690 9125 E-mail: info@ATSL.com.hk http://www.ATSL.com.hk

1. The instrument under test was allowed to stabilize in the laboratory for over 24 hours.

2. Calibration equipment:

Description:	Multifunction Acoustical Calibrator
Manufacturer & Type:	Brüel & Kjær 4226
Serial No.:	2919264
Last Calibration Date:	20 August 2021
Certificate No.:	2HB21001798-0001

The calibration equipment used for calibration is traceable to National Standards via China Ceprei Laboratory Calibration & Testing Centre.

3. The sensitivity of the microphone has been adjusted by the calibration function of the Sound Analyzer (calibrated as 94.0dB at 1000Hz) before the calibration. And the adjusted sensitivity was recorded.

Adjusted Microphone Sensitivity (mV/Pa)	21.1

4. The Sound Analyzer has been calibrated in accordance with the requirements as specified in IEC 61672-1 Class 1, and vendor specific procedures.

5. The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allowance for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. Acoustic Testing Services Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Unit E, 2/F., Century Industrial Centre, 33-35 Au Pui Wan Street, Fo Tan, Shatin, New Territories, Hong Kong
Tel: (852) 2690 9126 Fax: (852) 2690 9125 E-mail: info@ATSL.com.hk http://www.ATSL.com.hk

6. Calibration Results

6.1 Sound Pressure Level

Reference Sound Pressure Level

Setting of unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672-1 Class 1 Tolerance Limits, dB	Conclusion
Range, dB	Parameter	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94.0	1000	94.0	± 0.7	PASS

Linearity

Setting of unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672-1 Class 1 Tolerance Limits, dB	Conclusion
Range, dB	Parameter	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94.0	1000	94.0	± 0.7	PASS
			104.0		104.0	± 0.7	PASS
			114.0		114.0	± 0.7	PASS

Time Weighting

Setting of unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672-1 Class 1 Tolerance Limits, dB	Conclusion
Range, dB	Parameter	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94.0	1000	94.0	± 0.7	PASS
		Slow			94.0	± 0.7	PASS

6.2 Frequency Response

A-weighting:

Setting of unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672-1 Class 1 Tolerance Limits, dB	Conclusion
Range, dB	Parameter	Time Weighting	Level, dB	Frequency, Hz			
30-130	SPL	Fast	54.6	31.5	54.6	± 1.5	PASS
			67.8	63	67.8	± 1.0	PASS
			77.9	125	77.9	± 1.0	PASS
			85.4	250	85.4	± 1.0	PASS
			90.8	500	90.8	± 1.0	PASS
			94.0	1000	94.0	± 0.7	PASS
			95.2	2000	95.2	± 1.0	PASS
			95.0	4000	94.8	± 1.0	PASS
			92.9	8000	93.6	+1.5; -2.5	PASS

C-weighting:

Setting of unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672-1 Class 1 Tolerance Limits, dB	Conclusion
Range, dB	Parameter	Time Weighting	Level, dB	Frequency, Hz			
30-130	SPL	Fast	91.0	31.5	91.1	± 1.5	PASS
			93.2	63	93.2	± 1.0	PASS
			93.8	125	93.8	± 1.0	PASS
			94.0	250	94.0	± 1.0	PASS
			94.0	500	94.0	± 1.0	PASS
			94.0	1000	94.0	± 0.7	PASS
			93.8	2000	93.8	± 1.0	PASS
			93.2	4000	93.8	± 1.0	PASS
			91.0	8000	91.7	+1.5; -2.5	PASS

Linear:

Setting of unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672-1 Class 1 Tolerance Limits, dB	Conclusion
Range, dB	Parameter	Time Weighting	Level, dB	Frequency, Hz			
30-130	SPL	Fast	94.0	31.5	94.0	± 1.5	PASS
				63	94.0	± 1.0	PASS
				125	94.0	± 1.0	PASS
				250	94.0	± 1.0	PASS
				500	94.0	± 1.0	PASS
				1000	94.0	± 0.7	PASS
				2000	93.9	± 1.0	PASS
				4000	94.8	± 1.0	PASS
				8000	94.7	+1.5; -2.5	PASS

All calibration points are within manufacturer's specification.

Calibrator

聲學測試服務有限公司
Acoustic Testing Services Limited
Unit E, 2/F., Century Industrial Centre, 33-35 Au Pui Wan Street, Fo Tan, Shatin, New Territories, Hong Kong
Tel: (852) 2690 9126 Fax: (852) 2690 9125 E-mail: info@ATSL.com.hk http://www.ATSL.com.hk

Certificate of Calibration

Certificate No. ATS22-010-CC008

Customer:	**Urban Green Consultants Limited** 23/F Wui Tat Centre, 55 Connaught Road West, Sheung Wan, Hong Kong
Unit-under-test (UUT):	
Description:	Acoustic Calibrator
Manufacturer:	CASELLA
Type No.:	CEL-120/1
Serial No.:	4884880
Test Conditions:	
Temperature:	26°C
Relative Humidity:	80%
Test Specifications:	Calibration Check
Date of calibration:	09 June 2022
Test Results:	All calibration points are within manufacturer's specification.

Certified by: _____

Mr. Y. T. LEUNG / Technical Manager
MIOA, MHKIOA, MHKIQEP

Issue Date: 09 June 2022

H&T Instrument Service Company
凱迪儀器服務公司
Tel: +852 2187 1266
Email: hntinstrument@gmail.com

Due Day: 08 June 2023

聲學測試服務有限公司
Acoustic Testing Services Limited
Unit E, 2/F., Century Industrial Centre, 33-35 Au Pui Wan Street, Fo Tan, Shatin, New Territories, Hong Kong
Tel: (852) 2690 9126 Fax: (852) 2690 9125 E-mail: info@ATSL.com.hk http://www.ATSL.com.hk

1. The instrument under test was allowed to stabilize in the laboratory for over 24 hours.

2. Calibration equipment:

Description:	Sound Analyzer	Reference Microphone
Manufacturer:	Brüel & Kjær	Brüel & Kjær
Type No.:	2270	4966
Serial No.:	3029788	3145611
Last Calibration Date:	19 April 2022	19 April 2022
Certificate No.:	AV220043	AV220043

The test equipment used for calibration is traceable to National Standards via Standards and Calibration Laboratory, the Government of the HKSAR.

3. The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allowance for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. Acoustic Testing Services Limited shall not be liable for any loss or damage resulting from the use of the equipment.

4. Calibration Results

Nominal value dB	Measured value dB	IEC 60942 Class 1 Tolerance Limits dB	Conclusion	Expanded Measurement Uncertainty of Reference Microphone B&K 4966 at 1000 Hz dB
94.0	94.2	± 0.25	PASS	0.2
114.0	114.2	± 0.25	PASS	0.2

All calibration points are within manufacturer's specification.

Appendix G

Estimation of Fixed Noise Sources Noise Level and Nosie Source Photo

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Power Level Estimation
PLK Tin Ka Ping Primary School

Fixed Noise Source	**Sound Power Level from 38QUS021D8SS3**
	dB(A)
ST-(1-9) (1-2/F)	66.0

Fixed Noise Source	**Sound Power Level of Noise Source**
	dB(A)
ST-(1-18) (3-7/F)	62.0

Fixed Noise Source	**Sound Power Level from RXYMQ9AY1**
	dB(A)
TY3	76

Fixed Noise Source	**Sound Power Level from RXYMQ5AV4A**
	dB(A)
TY4	71.0

Fixed Noise Source	**Sound Power Level of Noise Source**
	dB(A)
TY5	82.0

Fixed Noise Source	**Sound Power Level of**
	dB(A)
TY6	88.0

Japanese Internation School (Reference Chiller)

Sound Pressure Level of AMRTA Chiller (Model number: AW250)	radius [2]	Directivity Factor (Q)	Sound Power Level	Sound Power level of two chiller [1]
dB(A)	m		dB(A)	dB(A)
75	1	1	86.0	89.0

Notes:
(1) According to the site survey, there are four sets of chillers, each comprising two individual chillers with six fan motors. Therefore, two reference chillers will be evaluated as a single set chiller to accurately represent the chiller system at the Japanese International School.
(2) The radius refer to the catalogue of the Reference Chiller (AMRTA Chiller)

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR14
Floor	2/F
Height (mPD)	90.2

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
ST-4 2/F	PLK Ting Ka Ping Millennium Primary School 2/F	Daikin Split Type AC	838245	832349	87.395	2.805	4	66	12.2	26.7	-	-	5.0	3	-	37.3
ST-5 2/F	PLK Ting Ka Ping Millennium Primary School 2/F	Daikin Split Type AC	838248	832345	87.395	2.805	4	66	13.3	27.4	-	-	5.0	3	-	36.6
ST-6 2/F	PLK Ting Ka Ping Millennium Primary School 2/F	Daikin Split Type AC	838250	832341	87.395	2.805	4	66	15.7	28.9	-	-	5.0	3	-	35.1
ST-7 2/F	PLK Ting Ka Ping Millennium Primary School 2/F	Daikin Split Type AC	838253	832337	87.395	2.805	4	66	19.0	30.5	-	-	5.0	3	-	33.5
ST-8 2/F	PLK Ting Ka Ping Millennium Primary School 2/F	Daikin Split Type AC	838256	832334	87.395	2.805	4	66	22.7	32.1	-	-	5.0	3	-	31.9
ST-9 2/F	PLK Ting Ka Ping Millennium Primary School 2/F	Daikin Split Type AC	838259	832330	87.395	2.805	4	66	26.7	33.5	-	-	5.0	3	-	30.5
ST-7 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838245	832349	90.895	0.695	4	62	11.8	26.4	-	-	5.0	3	-	33.6
ST-8 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838245	832348	90.895	0.695	4	62	11.9	26.5	-	-	5.0	3	-	33.5
ST-9 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838248	832345	90.895	0.695	4	62	12.8	27.1	-	-	5.0	3	-	32.9
ST-10 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838248	832344	90.895	0.695	4	62	13.1	27.3	-	-	5.0	3	-	32.7
ST-11 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838250	832341	90.895	0.695	4	62	15.2	28.6	-	-	5.0	3	-	31.4
ST-12 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838251	832340	90.895	0.695	4	62	15.6	28.8	-	-	5.0	3	-	31.2
ST-13 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838253	832337	90.895	0.695	4	62	18.5	30.3	-	-	5.0	4	-	30.7
ST-14 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838254	832337	90.895	0.695	4	62	19.0	30.5	-	-	5.0	5	-	31.5
ST-15 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838256	832334	90.895	0.695	4	62	22.2	31.9	-	-	5.0	6	-	31.1
ST-16 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838257	832333	90.895	0.695	4	62	22.7	32.1	-	-	5.0	7	-	31.9
ST-17 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838259	832330	90.895	0.695	4	62	26.2	33.3	-	-	5.0	8	-	31.7
ST-18 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838259	832329	90.895	0.695	4	62	26.8	33.5	-	-	5.0	9	-	32.5
									Total Predicted Noise Level at NSR 1 (2/F)							**46**
									Criteria, ANL							**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR14
Floor	3/F
Height (mPD)	93.6

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Impulse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
ST-7 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838245	832349	90.895	2.705	4	62	12.1	26.6	-	-	5.0	3	-	33.4
ST-8 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838245	832348	90.895	2.705	4	62	12.2	26.7	-	-	5.0	3	-	33.3
ST-9 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838248	832345	90.895	2.705	4	62	13.1	27.3	-	-	5.0	3	-	32.7
ST-10 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838248	832344	90.895	2.705	4	62	13.3	27.5	-	-	5.0	3	-	32.5
ST-11 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838250	832341	90.895	2.705	4	62	15.4	28.7	-	-	5.0	3	-	31.3
ST-12 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838251	832340	90.895	2.705	4	62	15.8	29.0	-	-	5.0	3	-	31.0
ST-13 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838253	832337	90.895	2.705	4	62	18.6	30.4	-	-	5.0	3	-	29.6
ST-14 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838254	832337	90.895	2.705	4	62	19.1	30.6	-	-	5.0	3	-	29.4
ST-15 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838256	832334	90.895	2.705	4	62	22.3	32.0	-	-	5.0	3	-	28.0
ST-16 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838257	832333	90.895	2.705	4	62	22.9	32.2	-	-	5.0	3	-	27.8
ST-17 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838259	832330	90.895	2.705	4	62	26.3	33.4	-	-	5.0	3	-	26.6
ST-18 3/F	PLK Ting Ka Ping Millennium Primary School 3/F	General Split Type AC	838259	832329	90.895	2.705	4	62	26.9	33.6	-	-	5.0	3	-	26.4
ST-7 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838245	832349	94.395	0.795	4	62	11.8	26.4	-	-	5.0	3	-	33.6
ST-8 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838245	832348	94.395	0.795	4	62	11.9	26.5	-	-	5.0	3	-	33.5
ST-9 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838248	832345	94.395	0.795	4	62	12.8	27.1	-	-	5.0	3	-	32.9
ST-10 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838248	832344	94.395	0.795	4	62	13.1	27.3	-	-	5.0	3	-	32.7
ST-11 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838250	832341	94.395	0.795	4	62	15.2	28.6	-	-	5.0	3	-	31.4
ST-12 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838251	832340	94.395	0.795	4	62	15.6	28.8	-	-	5.0	3	-	31.2
ST-13 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838253	832337	94.395	0.795	4	62	18.5	30.3	-	-	5.0	3	-	29.7
ST-14 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838254	832337	94.395	0.795	4	62	19.0	30.5	-	-	5.0	3	-	29.5
ST-15 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838256	832334	94.395	0.795	4	62	22.2	31.9	-	-	5.0	3	-	28.1
ST-16 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838257	832333	94.395	0.795	4	62	22.7	32.1	-	-	5.0	3	-	27.9
ST-17 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838259	832330	94.395	0.795	4	62	26.2	33.3	-	-	5.0	3	-	26.7
ST-18 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838259	832329	94.395	0.795	4	62	26.8	33.5	-	-	5.0	3	-	26.5
									Total Predicted Noise Level at NSR 1 (3/F)							**45**
									Criteria, ANL							**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR14
Floor	4/F
Height (mPD)	97

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
ST-7 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838245	832349	94.395	2.605	4	62	12.1	26.6	-	-	5.0	3	-	33.4
ST-8 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838245	832348	94.395	2.605	4	62	12.2	26.7	-	-	5.0	3	-	33.3
ST-9 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838248	832345	94.395	2.605	4	62	13.1	27.3	-	-	5.0	3	-	32.7
ST-10 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838248	832344	94.395	2.605	4	62	13.3	27.5	-	-	5.0	3	-	32.5
ST-11 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838250	832341	94.395	2.605	4	62	15.4	28.7	-	-	5.0	3	-	31.3
ST-12 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838251	832340	94.395	2.605	4	62	15.8	29.0	-	-	5.0	3	-	31.0
ST-13 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838253	832337	94.395	2.605	4	62	18.6	30.4	-	-	5.0	3	-	29.6
ST-14 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838254	832337	94.395	2.605	4	62	19.1	30.6	-	-	5.0	3	-	29.4
ST-15 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838256	832334	94.395	2.605	4	62	22.3	32.0	-	-	5.0	3	-	28.0
ST-16 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838257	832333	94.395	2.605	4	62	22.9	32.2	-	-	5.0	3	-	27.8
ST-17 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838259	832330	94.395	2.605	4	62	26.3	33.4	-	-	5.0	3	-	26.6
ST-18 4/F	PLK Ting Ka Ping Millennium Primary School 4/F	General Split Type AC	838259	832329	94.395	2.605	4	62	26.9	33.6	-	-	5.0	3	-	26.4
ST-7 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838245	832349	98.14	1.14	4	62	11.9	26.5	-	-	5.0	3	-	33.5
ST-8 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838245	832348	98.14	1.14	4	62	11.9	26.5	-	-	5.0	3	-	33.5
ST-9 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838248	832345	98.14	1.14	4	62	12.9	27.2	-	-	5.0	3	-	32.8
ST-10 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838248	832344	98.14	1.14	4	62	13.1	27.3	-	-	5.0	3	-	32.7
ST-11 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838250	832341	98.14	1.14	4	62	15.2	28.6	-	-	5.0	3	-	31.4
ST-12 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838251	832340	98.14	1.14	4	62	15.6	28.9	-	-	5.0	3	-	31.1
ST-13 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838253	832337	98.14	1.14	4	62	18.5	30.3	-	-	5.0	3	-	29.7
ST-14 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838254	832337	98.14	1.14	4	62	19.0	30.5	-	-	5.0	3	-	29.5
ST-15 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838256	832334	98.14	1.14	4	62	22.2	31.9	-	-	5.0	3	-	28.1
ST-16 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838257	832333	98.14	1.14	4	62	22.7	32.1	-	-	5.0	3	-	27.9
ST-17 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838259	832330	98.14	1.14	4	62	26.2	33.3	-	-	5.0	3	-	26.7
ST-18 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838259	832329	98.14	1.14	4	62	26.8	33.5	-	-	5.0	3	-	26.5
									Total Predicted Noise Level at NSR 1 (4/F)							45
									Criteria, ANL							**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR14
Floor	5/F
Height (mPD)	100.4

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Impulse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
ST-7 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838245	832349	97.895	2.505	4	62	12.1	26.6	-	-	5.0	3	-	33.4
ST-8 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838245	832348	97.895	2.505	4	62	12.1	26.7	-	-	5.0	3	-	33.3
ST-9 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838248	832345	97.895	2.505	4	62	13.1	27.3	-	-	5.0	3	-	32.7
ST-10 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838248	832344	97.895	2.505	4	62	13.3	27.5	-	-	5.0	3	-	32.5
ST-11 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838250	832341	97.895	2.505	4	62	15.4	28.7	-	-	5.0	3	-	31.3
ST-12 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838251	832340	97.895	2.505	4	62	15.8	28.9	-	-	5.0	3	-	31.1
ST-13 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838253	832337	97.895	2.505	4	62	18.6	30.4	-	-	5.0	3	-	29.6
ST-14 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838254	832337	97.895	2.505	4	62	19.1	30.6	-	-	5.0	3	-	29.4
ST-15 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838256	832334	97.895	2.505	4	62	22.3	31.9	-	-	5.0	3	-	28.1
ST-16 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838257	832333	97.895	2.505	4	62	22.9	32.2	-	-	5.0	3	-	27.8
ST-17 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838259	832330	97.895	2.505	4	62	26.3	33.4	-	-	5.0	3	-	26.6
ST-18 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General Split Type AC	838259	832329	97.895	2.505	4	62	26.9	33.6	-	-	5.0	3	-	26.4
ST-7 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838245	832349	101.395	0.995	4	62	11.8	26.4	-	-	5.0	3	-	33.6
ST-8 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838245	832348	101.395	0.995	4	62	11.9	26.5	-	-	5.0	3	-	33.5
ST-9 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838248	832345	101.395	0.995	4	62	12.8	27.1	-	-	5.0	3	-	32.9
ST-10 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838248	832344	101.395	0.995	4	62	13.1	27.3	-	-	5.0	3	-	32.7
ST-11 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838250	832341	101.395	0.995	4	62	15.2	28.6	-	-	5.0	3	-	31.4
ST-12 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838251	832340	101.395	0.995	4	62	15.6	28.9	-	-	5.0	3	-	31.1
ST-13 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838253	832337	101.395	0.995	4	62	18.5	30.3	-	-	5.0	3	-	29.7
ST-14 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838254	832337	101.395	0.995	4	62	19.0	30.5	-	-	5.0	3	-	29.5
ST-15 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838256	832334	101.395	0.995	4	62	22.2	31.9	-	-	5.0	3	-	28.1
ST-16 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838257	832333	101.395	0.995	4	62	22.7	32.1	-	-	5.0	3	-	27.9
ST-17 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838259	832330	101.395	0.995	4	62	26.2	33.3	-	-	5.0	3	-	26.7
ST-18 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838259	832329	101.395	0.995	4	62	26.8	33.5	-	-	5.0	3	-	26.5
										Total Predicted Noise Level at NSR 1 (5/F)						45
										Criteria, ANL						60

NSR ID	NSR21
Floor	5/F
Height (mPD)	100.4

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Screening Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
JS1	Japan Internation School R/F	Chiller	838201	832380	99.5	0.9	2	89	14.7	31.3	-	-	5.0	3	-	55.7
JS2	Japan Internation School R/F	Chiller	838196	832384	99.5	0.9	2	89	19.2	33.6	-	-	5.0	3	-	53.3
JS3	Japan Internation School R/F	Chiller	838192	832389	99.5	0.9	2	89	24.7	35.8	-	-	5.0	3	-	51.1
JS4	Japan Internation School R/F	Chiller	832187	832392	99.5	0.9	2	89	29.7	37.4	-	-	5.0	3	-	49.6
ST-1 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General AC Outdoor Unit	838236	832360	97.895	2.505	4	62	39.7	36.9	-	-	5.0	3	-	23.1
ST-2 5/F	PLK Ting Ka Ping Millennium Primary School 5/F	General AC Outdoor Unit	838237	832359	97.895	2.505	4	62	40.2	37.1	-	-	5.0	3	-	22.9
ST-1 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General AC Outdoor Unit	838239	832356	101.395	0.995	4	62	39.6	36.9	-	-	5.0	3	-	23.1
ST-2 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General AC Outdoor Unit	838240	832355	101.395	0.995	4	62	40.2	37.0	-	-	5.0	3	-	23.0
										Total Predicted Noise Level at NSR 1 (5/F)						59
										Criteria, ANL						60

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR14
Floor	6/F
Height (mPD)	103.8

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Impulse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
ST-7 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838245	832349	101.395	2.405	4	62	12.0	26.6	-	-	5.0	3	-	33.4
ST-8 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838245	832348	101.395	2.405	4	62	12.1	26.6	-	-	5.0	3	-	33.4
ST-9 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838248	832345	101.395	2.405	4	62	13.0	27.3	-	-	5.0	3	-	32.7
ST-10 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838248	832344	101.395	2.405	4	62	13.3	27.4	-	-	5.0	3	-	32.6
ST-11 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838250	832341	101.395	2.405	4	62	15.4	28.7	-	-	5.0	3	-	31.3
ST-12 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838251	832340	101.395	2.405	4	62	15.8	28.9	-	-	5.0	3	-	31.1
ST-13 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838253	832337	101.395	2.405	4	62	18.6	30.4	-	-	5.0	3	-	29.6
ST-14 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838254	832337	101.395	2.405	4	62	19.1	30.6	-	-	5.0	3	-	29.4
ST-15 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838256	832334	101.395	2.405	4	62	22.3	31.9	-	-	5.0	3	-	28.1
ST-16 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838257	832333	101.395	2.405	4	62	22.8	32.1	-	-	5.0	3	-	27.9
ST-17 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838259	832330	101.395	2.405	4	62	26.3	33.4	-	-	5.0	3	-	26.6
ST-18 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General Split Type AC	838259	832329	101.395	2.405	4	62	26.9	33.6	-	-	5.0	3	-	26.4
ST-7 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838245	832349	104.895	1.095	4	62	11.9	26.5	-	-	5.0	3	-	33.5
ST-8 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838245	832348	104.895	1.095	4	62	11.9	26.5	-	-	5.0	3	-	33.5
ST-9 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838248	832345	104.895	1.095	4	62	12.9	27.2	-	-	5.0	3	-	32.8
ST-10 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838248	832344	104.895	1.095	4	62	13.1	27.3	-	-	5.0	3	-	32.7
ST-11 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838250	832341	104.895	1.095	4	62	15.2	28.6	-	-	5.0	3	-	31.4
ST-12 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838251	832340	104.895	1.095	4	62	15.6	28.9	-	-	5.0	3	-	31.1
ST-13 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838253	832337	104.895	1.095	4	62	18.5	30.3	-	-	5.0	3	-	29.7
ST-14 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838254	832337	104.895	1.095	4	62	19.0	30.5	-	-	5.0	3	-	29.5
ST-15 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838256	832334	104.895	1.095	4	62	22.2	31.9	-	-	5.0	3	-	28.1
ST-16 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838257	832333	104.895	1.095	4	62	22.7	32.1	-	-	5.0	3	-	27.9
ST-17 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838259	832330	104.895	1.095	4	62	26.2	33.3	-	-	5.0	3	-	26.7
ST-18 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General Split Type AC	838259	832329	104.895	1.095	4	62	26.8	33.5	-	-	5.0	3	-	26.5
									Total Predicted Noise Level at NSR 1 (6/F)							**45**
									Criteria, ANL							**60**

NSR ID	NSR21
Floor	6/F
Height (mPD)	103.8

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Impulse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
JS1	Japan Internation School R/F	Chiller	838201	832380	99.5	4.3	2	89	21.9	34.8	-	-	5.0	3	-	52.2
JS2	Japan Internation School R/F	Chiller	838196	832384	99.5	4.3	2	89	25.8	36.2	-	-	-	3	-	55.8
JS3	Japan Internation School R/F	Chiller	838192	832389	99.5	4.3	2	89	30.7	37.7	-	-	-	3	-	54.3
JS4	Japan Internation School R/F	Chiller	832187	832392	99.5	4.3	2	89	35.2	38.9	-	-	-	3	-	53.1
ST-1 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General AC Outdoor Unit	838236	832360	101.395	2.405	4	62	39.7	36.9	-	-	5.0	3	-	23.1
ST-2 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General AC Outdoor Unit	838237	832359	101.395	2.405	4	62	40.2	37.1	-	-	5.0	3	-	22.9
ST-1 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General AC Outdoor Unit	838239	832356	104.895	1.095	4	62	39.6	36.9	-	-	5.0	3	-	23.1
ST-2 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General AC Outdoor Unit	838240	832355	104.895	1.095	4	62	40.2	37.0	-	-	5.0	3	-	23.0
									Total Predicted Noise Level at NSR 1 (6/F)							60
									Criteria, ANL							60

NSR ID	NSR19
Floor	6/F
Height (mPD)	103.8

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Impulse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
JS1	Japan Internation School R/F	Chiller	838201	832380	99.5	4.3	2	89	25.3	36.0	-	-	5.0	3	-	50.9
JS2	Japan Internation School R/F	Chiller	838196	832384	99.5	4.3	2	89	30.0	37.5	-	-	-	3	-	54.5
JS3	Japan Internation School R/F	Chiller	838192	832389	99.5	4.3	2	89	35.4	39.0	-	-	-	3	-	53.0
JS4	Japan Internation School R/F	Chiller	832187	832392	99.5	4.3	2	89	40.2	40.1	-	-	-	3	-	51.9
ST-1 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General AC Outdoor Unit	838236	832360	101.395	2.405	4	62	36.0	36.1	-	-	5.0	3	-	23.9
ST-2 6/F	PLK Ting Ka Ping Millennium Primary School 6/F	General AC Outdoor Unit	838237	832359	101.395	2.405	4	62	36.4	36.2	-	-	5.0	3	-	23.8
ST-1 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General AC Outdoor Unit	838239	832356	104.895	1.095	4	62	38.6	36.7	-	-	5.0	3	-	23.3
ST-2 7/F	PLK Ting Ka Ping Millennium Primary School 7/F	General AC Outdoor Unit	838240	832355	104.895	1.095	4	62	39.1	36.8	-	-	5.0	3	-	23.2
									Total Predicted Noise Level at NSR 1 (6/F)							59
									Criteria, ANL							60

NSR ID	NSR16
Floor	6/F
Height (mPD)	103.8

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Impulse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
JS1	Japan Internation School R/F	Chiller	838201	832380	99.5	4.3	2	89	28.0	36.9	-	-	5.0	3	-	50
JS2	Japan Internation School R/F	Chiller	838196	832384	99.5	4.3	2	89	34.1	38.6	-	-	-	3	-	53
JS3	Japan Internation School R/F	Chiller	838192	832389	99.5	4.3	2	89	40.7	40.2	-	-	-	3	-	52
JS4	Japan Internation School R/F	Chiller	832187	832392	99.5	4.3	2	89	46.3	41.3	-	-	-	3	-	51
									Total Predicted Noise Level at NSR 1 (6/F)							58
									Criteria, ANL							60

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
PLK Tin Ka Ping Millennium Primary School **Sound Pressure level Calculation**

NSR ID	NSR25
Floor	8/F
Height (mPD)	110.5

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
TY3-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838250	832357	108	2.5	2	76	54.1	42.7	-	-	-	3	-	36.3
TY3-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838250	832358	108	2.5	2	76	53.5	42.5	-	-	-	3	-	36.5
TY3-3	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838249	832359	108	2.5	2	76	52.9	42.5	-	-	-	3	-	36.5
TY3-4	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838248	832360	108	2.5	2	76	52.4	42.4	-	-	-	3	-	36.6
TY3-5	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838247	832362	108	2.5	2	76	51.5	42.2	-	-	-	3	-	36.8
TY3-6	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838246	832364	108	2.5	2	76	50.9	42.1	-	-	-	3	-	36.9
TY4-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838245	832365	107	3.4	2	71	50.4	42.0	-	-	-	3	-	32.0
TY4-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838244	832366	107	3.4	2	71	50.3	42.0	-	-	-	3	-	32.0
TY5-1	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832373	108	2.4	2	82	53.4	42.5	-	-	-	3	-	42.5
TY5-2	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838244	832375	108	2.4	2	82	53.0	42.5	-	-	-	3	-	42.5
TY5-3	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832375	108	2.4	2	82	54.6	42.7	-	-	-	3	-	42.3
TY5-4	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838247	832374	108	2.4	2	82	55.0	42.8	-	-	-	3	-	42.2
TY6-1	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838267	832390	108	2.8	2	88	81.6	46.2	-	-	-	3	-	44.8
TY6-2	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832393	108	2.8	2	88	79.7	46.0	-	-	-	3	-	45.0
TY6-3	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838265	832394	108	2.8	2	88	81.8	46.2	-	-	-	3	-	44.8
TY6-4	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832396	108	2.8	2	88	81.4	46.2	-	-	-	3	-	44.8
TY6-5	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838262	832395	108	2.8	2	88	79.4	46.0	-	-	-	3	-	45.0
JS-1	Japanese Internation School R/F	Chiller	838201	832380	101	10.0	2	89	32.6	38.3	-	-	-	3	-	53.7
JS-2	Japanese Internation School R/F	Chiller	838196	832384	101	10.0	2	89	36.6	39.2	-	-	-	3	-	52.8
JS-3	Japanese Internation School R/F	Chiller	838192	832389	101	10.0	2	89	41.3	40.3	-	-	-	3	-	51.7
JS-4	Japanese Internation School R/F	Chiller	832187	832392	101	10.0	2	89	45.5	41.1	-	-	-	3	-	50.8
									Total Predicted Noise Level at NSR 3 (8/F)							**60**
									Criteria, ANL							**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR23
Floor	8/F
Height (mPD)	110.5

Noise Source ID	Location	Activities/Equipment	Location			Height of Floor	Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z				Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
TY3-5	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838247	832362	108	106.3	2.5	2	76	32.2	38.1	-	-	-	3		40.9
TY3-6	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838246	832364	108	106.3	2.5	2	76	32.2	38.1	-	-	-	3		40.9
TY4-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838245	832365	107	106.3	3.4	2	71	31.2	37.9	-	-	-	3		36.1
TY4-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838244	832366	107	106.3	3.4	2	71	31.3	37.9	-	-	-	3		36.1
TY5-1	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832373	108	106.3	2.4	2	82	35.7	39.0	-	-	-	3		46.0
TY5-2	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838244	832375	108	106.3	2.4	2	82	36.2	39.2	-	-	-	3		45.8
TY5-3	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832375	108	106.3	2.4	2	82	37.8	39.5	-	-	-	3		45.5
TY5-4	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838247	832374	108	106.3	2.4	2	82	37.4	39.4	-	-	-	3		45.6
TY6-1	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838267	832390	108	106.3	2.8	2	88	64.4	44.2	-	-	-	3		46.8
TY6-2	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832393	108	106.3	2.8	2	88	63.4	44.0	-	-	-	3		47.0
TY6-3	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838265	832394	108	106.3	2.8	2	88	65.5	44.3	-	-	-	3		46.7
TY6-4	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832396	108	106.3	2.8	2	88	65.8	44.3	-	-	-	3		46.7
TY6-5	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838262	832395	108	106.3	2.8	2	88	63.9	44.1	-	-	-	3		46.9
JS-1	Japanese Internation School R/F	Chiller	838201	832380	101	99.5	10.0	2	89	36.3	39.2	-	-	-	3		52.8
JS-2	Japanese Internation School R/F	Chiller	838196	832384	101	99.5	10.0	2	89	42.3	40.5	-	-	-	3		51.5
JS-3	Japanese Internation School R/F	Chiller	838192	832389	101	99.5	10.0	2	89	48.7	41.7	-	-	-	3		50.3
JS-4	Japanese Internation School R/F	Chiller	832187	832392	101	99.5	10.0	2	89	54.3	42.7	-	-	-	3		49.3
										Total Predicted Noise Level at NSR 3 (8/F)							**60**
										Criteria, ANL							**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR26
Floor	8/F
Height (mPD)	110.5

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
TY3-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838250	832357	108	2.5	2	76	56.7	43.1	-	-	-	3	-	35.9
TY3-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838250	832358	108	2.5	2	76	56.0	42.9	-	-	-	3	-	36.1
TY3-3	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838249	832359	108	2.5	2	76	55.3	42.8	-	-	-	3	-	36.2
TY3-4	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838248	832360	108	2.5	2	76	54.7	42.7	-	-	-	3	-	36.3
TY3-5	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838247	832362	108	2.5	2	76	53.7	42.6	-	-	-	3	-	36.4
TY3-6	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838246	832364	108	2.5	2	76	53.1	42.5	-	-	-	3	-	36.5
TY4-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838245	832365	107	3.4	2	71	52.4	42.4	-	-	-	3	-	31.6
TY4-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838244	832366	107	3.4	2	71	52.0	42.3	-	-	-	3	-	31.7
TY5-1	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832373	108	2.4	2	82	55.1	42.8	-	-	-	3	-	42.2
TY5-2	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838244	832375	108	2.4	2	82	54.5	42.7	-	-	-	3	-	42.3
TY5-3	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832375	108	2.4	2	82	56.2	43.0	-	-	-	3	-	42.0
TY5-4	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838247	832374	108	2.4	2	82	56.7	43.1	-	-	-	3	-	41.9
TY6-1	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838267	832390	108	2.8	2	88	83.0	46.4	-	-	-	3	-	44.6
TY6-2	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832393	108	2.8	2	88	80.9	46.1	-	-	-	3	-	44.9
TY6-3	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838265	832394	108	2.8	2	88	82.9	46.4	-	-	-	3	-	44.6
TY6-4	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832396	108	2.8	2	88	82.4	46.3	-	-	-	3	-	44.7
TY6-5	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838262	832395	108	2.8	2	88	80.5	46.1	-	-	-	3	-	44.9
JS-1	Japanese Internation School R/F	Chiller	838201	832380	101	10.0	2	89	30.8	37.7	-	-	-	3	-	54.2
JS-2	Japanese Internation School R/F	Chiller	838196	832384	101	10.0	2	89	34.2	38.7	-	-	-	3	-	53.3
JS-3	Japanese Internation School R/F	Chiller	838192	832389	101	10.0	2	89	38.6	39.7	-	-	-	3	-	52.3
JS-4	Japanese Internation School R/F	Chiller	832187	832392	101	10.0	2	89	42.6	40.6	-	-	-	3	-	51.4
										Total Predicted Noise Level at NSR 3 (8/F)						**60**
										Criteria, ANL						**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR22
Floor	9/F
Height (mPD)	113.5

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
TY3-4	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838248	832360	108	5.5	2	76	23.9	35.5	-	-	-	3	-	43.5
TY3-5	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838247	832362	108	5.5	2	76	23.4	35.4	-	-	-	3	-	43.6
TY3-6	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838246	832364	108	5.5	2	76	23.4	35.4	-	-	-	3	-	43.6
TY4-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838245	832365	107	6.4	2	71	23.6	35.4	-	-	-	3	-	38.6
TY4-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838244	832366	107	6.4	2	71	23.6	35.4	-	-	-	3	-	38.6
TY5-1	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832373	108	5.4	2	82	27.9	36.9	-	-	-	3	-	48.1
TY5-2	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838244	832375	108	5.4	2	82	28.5	37.1	-	-	-	3	-	47.9
TY5-3	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832375	108	5.4	2	82	30.0	37.5	-	-	-	3	-	47.5
TY5-4	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838247	832374	108	5.4	2	82	29.5	37.4	-	-	-	3	-	47.6
TY6-1	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838267	832390	108	5.8	2	88	56.3	43.0	-	-	-	3	-	48.0
TY6-2	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832393	108	5.8	2	88	55.4	42.8	-	-	-	3	-	48.2
TY6-3	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838265	832394	108	5.8	2	88	57.4	43.2	-	-	-	3	-	47.8
TY6-4	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832396	108	5.8	2	88	57.8	43.2	-	-	-	3	-	47.8
TY6-5	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838262	832395	108	5.8	2	88	55.9	42.9	-	-	-	3	-	48.1
JS-1	Japanese Internation School R/F	Chiller	838201	832380	101	13.0	2	89	40.7	40.2	-	-	-	3	-	51.8
JS-2	Japanese Internation School R/F	Chiller	838196	832384	101	13.0	2	89	46.6	41.4	-	-	-	3	-	50.6
JS-3	Japanese Internation School R/F	Chiller	838192	832389	101	13.0	2	89	53.0	42.5	-	-	-	3	-	49.5
JS-4	Japanese Internation School R/F	Chiller	832187	832392	101	13.0	2	89	58.5	43.3	-	-	-	3	-	48.7
										Total Predicted Noise Level at NSR 4 (9/F)						**60**
										Criteria, ANL						**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR23
Floor	9/F
Height (mPD)	113.5

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
TY3-5	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838247	832362	108	5.5	2	76	32.6	38.2	-	-	-	3	-	40.8
TY3-6	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838246	832364	108	5.5	2	76	32.6	38.2	-	-	-	3	-	40.8
TY4-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838245	832365	107	6.4	2	71	31.7	38.0	-	-	-	3	-	36.0
TY4-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838244	832366	107	6.4	2	71	31.7	38.0	-	-	-	3	-	36.0
TY5-1	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832373	108	5.4	2	82	36.1	39.1	-	-	-	3	-	45.9
TY5-2	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838244	832375	108	5.4	2	82	36.5	39.2	-	-	-	3	-	45.8
TY5-3	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832375	108	5.4	2	82	38.1	39.6	-	-	-	3	-	45.4
TY5-4	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838247	832374	108	5.4	2	82	37.7	39.5	-	-	-	3	-	45.5
TY6-1	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838267	832390	108	5.8	2	88	64.6	44.2	-	-	-	3	-	46.8
TY6-2	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832393	108	5.8	2	88	63.6	44.1	-	-	-	3	-	46.9
TY6-3	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838265	832394	108	5.8	2	88	65.7	44.3	-	-	-	3	-	46.7
TY6-4	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832396	108	5.8	2	88	66.0	44.4	-	-	-	3	-	46.6
TY6-5	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838262	832395	108	5.8	2	88	64.1	44.1	-	-	-	3	-	46.9
JS-1	Japanese Internation School R/F	Chiller	838201	832380	101	13.0	2	89	37.2	39.4	-	-	-	3	-	52.6
JS-2	Japanese Internation School R/F	Chiller	838196	832384	101	13.0	2	89	43.1	40.7	-	-	-	3	-	51.3
JS-3	Japanese Internation School R/F	Chiller	838192	832389	101	13.0	2	89	49.5	41.9	-	-	-	3	-	50.1
JS-4	Japanese Internation School R/F	Chiller	832187	832392	101	13.0	2	89	54.9	42.8	-	-	-	3	-	49.2
										Total Predicted Noise Level at NSR 4 (9/F)						60
										Criteria, ANL						**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR25
Floor	8/F
Height (mPD)	113.5

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
TY3-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838250	832357	108	5.5	2	76	54.4	42.7	-	-	-	3	-	36.3
TY3-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838250	832358	108	5.5	2	76	53.7	42.6	-	-	-	3	-	36.4
TY3-3	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838249	832359	108	5.5	2	76	53.1	42.5	-	-	-	3	-	36.5
TY3-4	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838248	832360	108	5.5	2	76	52.6	42.4	-	-	-	3	-	36.6
TY3-5	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838247	832362	108	5.5	2	76	51.7	42.3	-	-	-	3	-	36.7
TY3-6	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838246	832364	108	5.5	2	76	51.2	42.2	-	-	-	3	-	36.8
TY4-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838245	832365	107	6.4	2	71	50.7	42.1	-	-	-	3	-	31.9
TY4-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838244	832366	107	6.4	2	71	50.6	42.1	-	-	-	3	-	31.9
TY5-1	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832373	108	5.4	2	82	53.6	42.6	-	-	-	3	-	42.4
TY5-2	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838244	832375	108	5.4	2	82	53.2	42.5	-	-	-	3	-	42.5
TY5-3	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832375	108	5.4	2	82	54.9	42.8	-	-	-	3	-	42.2
TY5-4	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838247	832374	108	5.4	2	82	55.3	42.8	-	-	-	3	-	42.2
TY6-1	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838267	832390	108	5.8	2	88	81.8	46.2	-	-	-	3	-	44.8
TY6-2	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832393	108	5.8	2	88	79.8	46.0	-	-	-	3	-	45.0
TY6-3	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838265	832394	108	5.8	2	88	81.9	46.2	-	-	-	3	-	44.8
TY6-4	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832396	108	5.8	2	88	81.5	46.2	-	-	-	3	-	44.8
TY6-5	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838262	832395	108	5.8	2	88	79.6	46.0	-	-	-	3	-	45.0
JS-1	Japanese Internation School R/F	Chiller	838201	832380	101	13.0	2	89	34	39	-	-	-	3	-	53.5
JS-2	Japanese Internation School R/F	Chiller	838196	832384	101	13.0	2	89	37	39	-	-	-	3	-	52.5
JS-3	Japanese Internation School R/F	Chiller	838192	832389	101	13.0	2	89	42	40	-	-	-	3	-	51.5
JS-4	Japanese Internation School R/F	Chiller	832187	832392	101	13.0	2	89	46	41	-	-	-	3	-	50.7
									Total Predicted Noise Level at NSR 3 (8/F)							**60**
									Criteria, ANL							**60**

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sound Pressure level Calculation

NSR ID	NSR26
Floor	8/F
Height (mPD)	113.5

Noise Source ID	Location	Activities/Equipment	Location			Height difference (m)	Directivity Factor (Q)	Estimated SWL dB(A)	Shortest slang Distance from Source to NSRs, m	Correction						Corrected Daytime Noise Level, dB(A)
			X	Y	Z			Daytime & Evening time		Distance	Inpluse Effect	Tonality Effect	Barrier Effect	Façade	Intermittency Effect	
TY3-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838250	832357	108	5.5	2	76	56.9	43.1	-	-	-	3	-	35.9
TY3-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838250	832358	108	5.5	2	76	56.2	43.0	-	-	-	3	-	36.0
TY3-3	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838249	832359	108	5.5	2	76	55.6	42.9	-	-	-	3	-	36.1
TY3-4	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838248	832360	108	5.5	2	76	54.9	42.8	-	-	-	3	-	36.2
TY3-5	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838247	832362	108	5.5	2	76	53.9	42.6	-	-	-	3	-	36.4
TY3-6	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838246	832364	108	5.5	2	76	53.3	42.5	-	-	-	3	-	36.5
TY4-1	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838245	832365	107	6.4	2	71	52.7	42.4	-	-	-	3	-	31.6
TY4-2	PLK Ting Ka Ping Millennium Primary School R/F	York VRF Outdoor Unit	838244	832366	107	6.4	2	71	52.2	42.3	-	-	-	3	-	31.7
TY5-1	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832373	108	5.4	2	82	55.3	42.8	-	-	-	3	-	42.2
TY5-2	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838244	832375	108	5.4	2	82	54.7	42.7	-	-	-	3	-	42.3
TY5-3	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838246	832375	108	5.4	2	82	56.4	43.0	-	-	-	3	-	42.0
TY5-4	PLK Ting Ka Ping Millennium Primary School R/F	Toshiba VRF Outdoor Unit	838247	832374	108	5.4	2	82	56.9	43.1	-	-	-	3	-	41.9
TY6-1	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838267	832390	108	5.8	2	88	83.1	46.4	-	-	-	3	-	44.6
TY6-2	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832393	108	5.8	2	88	81.0	46.2	-	-	-	3	-	44.8
TY6-3	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838265	832394	108	5.8	2	88	83.1	46.4	-	-	-	3	-	44.6
TY6-4	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838263	832396	108	5.8	2	88	82.6	46.3	-	-	-	3	-	44.7
TY6-5	PLK Ting Ka Ping Millennium Primary School R/F	Media VRF Outdoor Unit	838262	832395	108	5.8	2	88	80.6	46.1	-	-	-	3	-	44.9
JS-1	Japanese Internation School R/F	Chiller	838201	832380	101	13.0	2	89	32	38	-	-	-	3	-	53.9
JS-2	Japanese Internation School R/F	Chiller	838196	832384	101	13.0	2	89	35	39	-	-	-	3	-	53.1
JS-3	Japanese Internation School R/F	Chiller	838192	832389	101	13.0	2	89	39	40	-	-	-	3	-	52.1
JS-4	Japanese Internation School R/F	Chiller	832187	832392	101	13.0	2	89	43	41	-	-	-	3	-	51.3
									Total Predicted Noise Level at NSR 3 (8/F)							**60**
									Criteria, ANL							**60**

RZR60MVM

ST 1-9 (1-2/F)

RZR60MVM 50Hz
ST1-9 (1-2/F)

CEILING MOUNTED CASSETTE TYPE (Cooling only)

Model Name				50	60	71	100	125	140
	Indoor unit			FCQ50KAVEA	FCQ60KAVEA	FCQ71KAVEA	FCQ100KAVEA	FCQ125KAVEA	FCQ140KAVEA
	Outdoor unit			RZR50MVM	RZR60MVM	RZR71MVM	RZR100MYM	RZR125MYM	RZR140MYM
Power supply				1 Phase, 220–240 V, 50 Hz			3 Phase, 380–415 V, 50 Hz		
Cooling capacity[1,2] Rated (Min. - Max.)			kW	5.0 (2.3-5.6)	6.0 (2.6-6.3)	7.1 (3.2-8.0)	10.0 (5.0-11.2)	12.5 (5.7-14.0)	14.0 (6.2-15.4)
			Btu/h	17,100 (7,900-19,100)	20,500 (8,900-21,500)	24,200 (10,900-27,300)	34,100 (17,100-38,200)	42,700 (19,500-47,800)	47,800 (21,200-52,600)
Power consumption		Cooling[1]	kW	1.24	1.58	1.99	2.78	4.31	5.62
COP			W/W	4.03	3.80	3.57	3.60	2.90	2.49
CSPF			Wh/Wh	6.47	6.19	5.99	5.13	5.00	4.85
Indoor unit	Colour	Unit		———					
		Decoration panel		Fresh white					
	Airflow rate (H/M/L)		m³/min	21/17.5/13.5			32/26/20	33/28/22.5	
			cfm	741/618/477			1,130/918/706	1,165/988/794	
	Sound pressure level[3] (H/M/L)		dB(A)	35/31.5/28			43/37.5/32	44/39/34	44/40/36
	Dimensions (H×W×D)	Unit	mm	256×840×840			298×840×840		
		Decoration panel	mm	50×950×950					
	Machine weight	Unit	kg	21			24		
		Decoration panel	kg	5.5					
	Certified Operation range		°CWB	14 to 25					
Outdoor unit	Colour			Ivory white					
	Coil	Type		Cross fin coil			Micro channel		
	Compressor	Type		Hermetically sealed swing type					
		Motor output	kW	1.12	1.35	1.76	1.92		
	Refrigerant charge (R-410A)		kg	1.6(Charged for 30 m)			1.9(Charged for 30 m)		
	Sound pressure level[3]	Cooling	dB(A)	48			49	52	54
		Night quiet mode	dB(A)	44			45		
	Dimensions (H×W×D)		mm	595×845×300			990×940×320		
	Machine weight		kg	43			73		
	Certified Operation range		°CDB	21 to 46					
Piping connections	Liquid (Flare)		mm	φ9.5					
	Gas (Flare)		mm	φ15.9					
	Drain	Indoor unit	mm	VP25 (I.Dφ25×O.Dφ32)					
		Outdoor unit	mm	φ26.0 (Hole)					
Max. interunit piping length			m	50 (Equivalent length 70)					
Max. installation level difference			m	30					
Heat insulation				Both liquid and gas piping					

Note :
[1]Rated cooling capacities are based on the following conditions: Indoor temp., 27°CDB, 19.0°CWB; outdoor temp. 35°CDB, 24°CWB. Equiv. refrigeration piping, 7.5 m (horizontal).
[2]Capacities are net, including a deduction for cooling for indoor fan motor heat.
[3]The operation sound is measured in anechoic chamber. If it is measured under the actual installation conditions, it is normally over the set value due to environmental noise and sound reflection.

COMPACT MULTI FLOW CEILING MOUNTED CASSETTE TYPE (Cooling only)

Model Name				25	35	50	60
	Indoor unit			FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B
	Outdoor unit			RKS25EBVMA	RKS35EBVMA	RKS50FVMA	RKS60FVMA
Power supply				1 Phase, 220–240 V, 50 Hz			
Cooling capacity[1] Rated (Min. - Max.)			kW	2.5 (1.2-3.0)	3.4 (1.2-3.7)	4.7 (1.7-5.6)	5.8 (1.7-6.0)
			Btu/h	8,550 (4,100-10,250)	11,600 (4,100-12,600)	16,000 (5,800-19,100)	19,800 (5,800-20,500)
Power consumption		Cooling[1]	kW	0.73	1.10	1.62	2.07
COP			W/W	3.42	3.09	2.90	2.80
Indoor unit	Colour	Unit		———			
		Decoration panel		White			
	Airflow rate (H/L)		m³/min	9/6.5	10/6.5	12/8	15/10
			cfm	317/229	353/229	423/282	529/353
	Sound pressure level (H/L)[2]		dB(A)	29.5/24.5	32/25	36/27	41/32
	Dimensions (H×W×D)	Unit	mm	286×575×575			
		Decoration panel	mm	55×700×700			
	Machine weight	Unit	kg	17.5			
		Decoration panel	kg	2.7			
	Certified operation range		°CWB	14 to 23			
Outdoor unit	Colour			Ivory white			
	Compressor	Type		Hermetically sealed swing type			
		Motor output	kW	0.6		1.1	
	Refrigerant charge (R-410A)		kg	1.0 (Charged for 10 m)		1.5 (Charged for 10 m)	
	Sound pressure level [2]		dB(A)	46	47		49
	Dimensions (H×W×D)		mm	550×765×285		735×825×300	
	Machine weight		kg	34		47	
	Certified operation range		°CDB	10 to 46			
Piping connections	Liquid (Flare)		mm	ø6.4		ø6.4	
	Gas (Flare)		mm	ø9.5		ø12.7	
	Drain	Indoor unit	mm	VP20 (I.Dø20×O.Dø26)			
		Outdoor unit	mm	ø18.0 (Hole)			
Max. interunit piping length			m	20		30	
Max. installation level difference			m	15		20	
Heat insulation				Both liquid and gas piping			

Note :
[1]Rated cooling capacities are based on the following conditions: Indoor temp., 27°CDB, 19.0°CWB; outdoor temp. 35°CDB Equiv. refrigeration piping, 7.5 m (horizontal).
[2]The operation sound is measured in anechoic chamber. If it is measured under the actual installation conditions, it is normally over the set value due to environmental noise and sound reflection.

CEILING SUSPENDED TYPE (Cooling only)

Model Name				35
	Indoor unit			FHQ35BVV1B
	Outdoor unit			RKS35EBVMA
Power supply				1 Phase, 220–240 V, 50 Hz
Cooling capacity[1] Rated (Min. - Max.)			kW	3.4 (1.2-3.7)
			Btu/h	11,600 (4,100-12,600)
Power consumption		Cooling[1]	kW	1.05
COP				3.24
Indoor unit	Colour			White
	Air flow rate (H/L)		m³/min	13/10
			cfm	459/353
	Sound pressure level (H/L)[2]		dB(A)	37/32
	Dimensions (H×W×D)		mm	195×960×680
	Machine weight		kg	24
	Certified operation range		°CWB	14 to 23
Outdoor unit	Colour			Ivory white
	Compressor	Type		Hermetically sealed swing type
		Motor output	kW	0.6
	Refrigerant charge (R-410A)		kg	1.0 (Charged for 10 m)
	Sound pressure level [2]		dB(A)	47
	Dimensions (H×W×D)		mm	550×765×285
	Machine weight		kg	34
	Certified operation range		°CDB	10 to 46
Piping connections	Liquid (Flare)		mm	ø6.4
	Gas (Flare)		mm	ø9.5
	Drain	Indoor unit	mm	VP20 (I.Dø20×O.Dø26)
		Outdoor unit	mm	ø18.0 (Hole)
Max. interunit piping length			m	20
Max. installation level difference			m	15
Heat insulation				Both liquid and gas piping

Note :
[1]Rated cooling capacities are based on the following conditions: Indoor temp., 27°CDB, 19.0°CWB; outdoor temp. 35°CDB Equiv. refrigeration piping, 7.5 m (horizontal).
[2]The operation sound is measured in anechoic chamber. If it is measured under the actual installation conditions, it is normally over the set value due to environmental noise and sound reflection.

CEILING SUSPENDED TYPE (Cooling only)

Model Name				50	60	71	100	125	140
	Indoor unit			FHQ50DAVMA	FHQ60DAVMA	FHQ71DAVMA	FHQ100DAVMA	FHQ125DAVMA	FHQ140DAVMA
	Outdoor unit			RZR50MVM	RZR60MVM	RZR71MVM	RZR100MYM	RZR125MYM	RZR140MYM
Power supply				1 Phase, 220–240 V, 50 Hz			3 Phase, 380–415 V, 50 Hz		
Cooling capacity[1,2] Rated (Min. - Max.)			kW	5.0 (2.3-5.6)	6.0 (2.6-6.3)	7.1 (3.2-8.0)	10.0 (5.0-11.2)	12.5 (5.7-14.0)	14.0 (6.2-15.4)
			Btu/h	17,100 (7,900-19,100)	20,500 (8,900-21,500)	24,200 (10,900-27,300)	34,100 (17,100-38,200)	42,700 (19,500-47,800)	47,800 (21,200-52,600)
Power consumption		Cooling[1]	kW	1.24	1.58	2.37	3.03	4.42	5.55
COP			W/W	4.03	3.80	3.00	3.30	2.83	2.52
CSPF			Wh/Wh	6.18	5.99	5.74	5.01	4.99	4.69
Indoor unit	Colour			white					
	Airflow rate (H/M/L)		m³/min	15/12/10		20.5/17/14	28/24/20	31/27/23	34/29/24
			cfm	530/424/353		724/600/494	988/847/706	1,094/953/812	1,200/1,024/847
	Sound pressure level[3] (H/M/L)		dB(A)	37/35/32		38/36/34	42/38/34	44/41/37	46/42/38
	Dimensions (H×W×D)		mm	235×960×690		235×1,270×690	235×1,590×690		
	Machine weight		kg	25		32	38		
	Certified operation range		°CWB	14 to 25					
Outdoor unit	Colour			Ivory white					
	Coil	Type		Cross fin coil			Micro channel		
	Compressor	Type		Hermetically sealed swing type					
		Motor output	kW	1.12	1.35	1.76	1.92		
	Refrigerant charge (R-410A)		kg	1.6 (Charged for 30 m)			1.9(Charged for 30 m)		
	Sound pressure level[3]	Cooling	dB(A)	48			49	52	54
		Night quiet mode	dB(A)	44			45		
	Dimensions (H×W×D)		mm	595×845×300			990×940×320		
	Machine weight		kg	43			73		
	Certified operation range		°CDB	21 to 46					
Piping connections	Liquid (Flare)		mm	Φ9.5					
	Gas (Flare)		mm	Φ15.9					
	Drain	Indoor unit	mm	VP20 (I.DΦ20×O.DΦ26)					
		Outdoor unit	mm	Φ26.0 (Hole)					
Max. interunit piping length			m	50 (Equivalent length 70)					
Max. installation level difference			m	30					
Heat insulation				Both liquid and gas piping					

Note :
[1]Rated cooling capacities are based on the following conditions: Indoor temp., 27°CDB, 19.0°CWB; outdoor temp. 35°CDB, 24°CWB. Equiv. refrigeration piping, 7.5 m (horizontal).
[2]Capacities are net, including a deduction for cooling for indoor fan motor heat.
[3]The operation sound is measured in anechoic chamber. If it is measured under the actual installation conditions, it is normally over the set value due to environmental noise and sound reflection.

Reference Equipment for ST1-9 (2/F)
used for Fixed Noise Calculation

Carrier

Turn to the experts

Residential and light commercial

SPLIT SYSTEMS CATALOGUE

2022-2023

Carrier
Turn to the experts

For ST1-9 (2/F)

Specifications Multi-Split 38QUS

COOLING HEATING

		2 OUTPUTS		3 OUTPUTS		4 OUTPUTS		5 OUTPUTS
		38QUS014D8S2-1	38QUS018D8S2-2	38QUS021D8S3-1	38QUS027D8S3-2	38QUS028D8S4	38QUS036D8S4-1	38QUS042D8S5-1
MULTI-SPLIT SYSTEM		42QHG007D8S (×2)	42QHG009D8S (×2	42QHG007D8S (×3)	42QHG009D8S (×3)	42QHG007D8S (×4)	42QHG009D8S (×4)	42QHG009D8S (×5)
Power supply	V-HZ-PH	220-240V~, 50HZ, 1PH	220-240V~, 50HZ, 1PH	220-240V~, 50HZ, 1PH	220-24 50HZ, 1PH	50HZ, 1PH	-240V~, 50HZ, 1PH	220-240V~, 50HZ, 1PH
Cooling capacity	kW	4.10 (1.44~4.79)	5.28 (2.26~5.63	6.15 (1.95~6.74)	7.90 (2.20~8.50)	8.20 (2.49~10.26)	10.55 (2.74~11.29)	12.30 (2.64~12.30)
Heating capacity	kW	4.40 (1.50~4.91)	5.57 (2.37~5.68	6.59 (1.45~6.74)	8.20 (1.90~8.50)	8.79 (1.61~10.14)	10.55 (3.60~10.83)	12.30 (3.52~12.30)
Heating capacity at -7, -10, -15°C	kW	3,24 - 3,09 - 2,89	3,82 - 3,85 - 3,42	4,83 - 4,61 - 4,32	5,38 - 5,14 - 4,81	6,50 - 6,20 - 5,81	9,22 - 8,80 - 8,24	8,96 - 8,55 - 8,00
Pdesign capacity cooling	kW	4.10	5.28	6.15	7.90	8.20	10.55	12.30
Pdesign capacity heating (average)	kW	3.90	4.3	5.40	5.70	6.80	9.20	9.50
SEER/ SCOP(average)	W/W	6.8/4.0	6.7/4.0	6.5/4.0	6.1/4.0	7.0/4.0	6.5/4.0	6.5 / 3.8
Energy label		A++/A+	A++/A+	A++/A+	A+	A++/A+	A++/A+	A++/A
Yearly energy consumption	kWh	211/1365	276/1505	331/1890	454	410/2380	568/3220	662/3500
EER/ COP	W/W	3.23/3.71	3.24/3.71	3.23/3.73	3.23/3.73	3.23/3.71	3.23/3.71	3.24/3.73
Standard current (cooling)	A	5,9	7,7	9,0	12,0	10,9	15,0	17,3
Standard input (cooling)	W	1270	1630	1900	2450	2500	3270	3800
Standard current (heating)	A	5,3	6,8	8,5	11,0	10,4	13,5	15,0
Standard input (heating)	W	1185	1500	1770	2200	2400	2845	3300
Rated current	A	11,5	13,0	15,5	17,5	19,0	21,5	22,0
Rated input	W	2650,0	2850	3300	3600,0	4150,0	4600,0	4700,0
Outdoor airflow	m^3/h	2200,0	2200	2700	27		000,0	3850,0
Outdoor sound pressure level	dB(A)	56,0	56	58	60,0	63,0	64,0	63,0
Outdoor sound power level	dB(A)	65,0	65	66	68,0	70,0	72,0	72,0
Throttle type		EXV+Capillary	EXV+Capillary	EXV+Capillary	EXV+Capillary	EXV+Capillary	EXV+Capillary	EXV+Capillary
Dimension (W×D×H)	mm	800×333×554	800×333×554	845×363×702	845×363×702	946×410×810	946×410×810	946×410×810
Packing (W×D×H)	mm	920×390×625	920×390×625	965×395×775	965×395×775	1090×500×885	1090×500×885	1090×500×885
Net / Gross weight	kg	32.0 / 35.0	35.5 / 38.5	47.0 / 51.0	51.0 / 56.0	62.0 / 67.5	69.0 / 75.5	74.1/79.5
GWP		675,0	675	675	675,0	675,0	675,0	675
Refrigerant charge amount (R-32)	kg	1,1	1,25	1,40	1,7	2,1	2,1	2,9
Design pressure	Mpa	4.3 / 1.7	4.3 / 1.7	4.3 / 1.7	4.3 / 1.7	4.3 / 1.7	4.3 / 1.7	4.3 / 1.7
Refrigerant piping (Liquid side/ Gas side)	mm(inch)	2 × [Ø6.35/ Ø9.52 (1/4"/ 3/8")]	2 × [Ø6.35/ Ø9.52 (1/4"/ 3/8")]	3 × [Ø6.35/ Ø9.52 (1/4"/ 3/8")]	3 × [Ø6.35/ Ø9.52 (1/4"/ 3/8")]	3 × [Ø6.35/ Ø9.52 (1/4"/ 3/8")] + 1 × [Ø6.35/ Ø12.7 (1/4"/ 1/2")]	3 × [Ø6.35/ Ø9.52 (1/4"/ 3/8")] + 1 × [Ø6.35/ Ø12.7 (1/4"/ 1/2")]	4 × [Ø6.35/ Ø9.52 (1/4"/ 3/8")] + 1 × [Ø6.35/ Ø12.7 (1/4"/ 1/2")]
Chargeless pipe length	m	7.5*2	7.5*2	7.5*3	7.5*3	7.5*4	7.5*4	7.5*5
Additional charge	g/m	12,0	12	12	12,0	12,0	12,0	12,0
Max. length for all rooms	m	40,0	40	60	60,0	80,0	80,0	80,0
Max. length for one indoor unit	m	25,0	25	25	30,0	30,0	35,0	35,0
Max. height difference between IDU and CDU	m	15,0	15	15	15,0	15,0	15,0	15,0
Max. height difference between indoor units	m	10,0	10	10	10,0	10,0	10,0	10,0
Temperature range cooling	°C	-15 ~ 50	-15 ~ 50	-15 ~ 50	-15 ~ 50	-15 ~ 50	-15 ~ 50	-15 ~ 50
Temperature range heating	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24

Cooling Capacity

COP

Sound Power Level

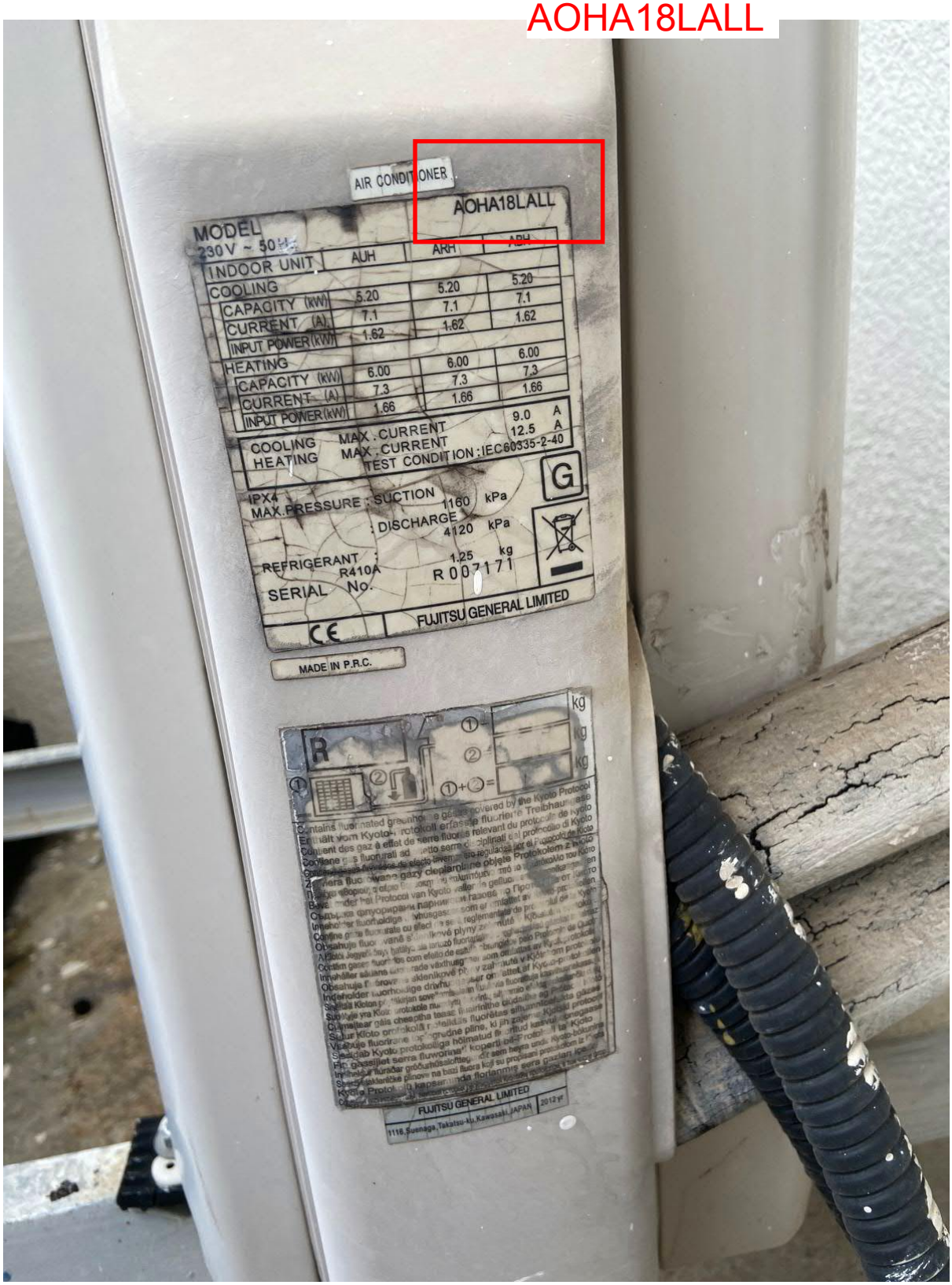
ACCESSORIES	CODE
KJR-120X controller	KJR-120X
Transfer board for KJR-120X (QHG/QHGH sizes 7, 9, 12)	17222000A58716
Transfer board for KJR-120X (QHG sizes 18,22,24)	17222000A58717
Transfer board for KJR-120X (QHE)	17317100A31589
KJR-120X2 controller	KJR-120X2
Transfer board for KJR-120X2 (QHG/QHGH sizes 7, 9, 12)	17222000A58719
Transfer board for KJR-120X2 - (QHG sizes 18,22,24)	17222000A58718
Transfer board for KJR-120X2 - (QHE)	17317100A28268

ACCESSORIES	CODE
Infrared controller	RG67
CCM09 controller	CCM09
Transfer board for CCM09 (QHG sizes 7, 9, 12)	17222000A58719
Transfer board for CCM09 (QHG sizes 18,22,24)	17222000A58718
Transfer board for CCM09 (QHE)	17311500A03582
Transfer board for CCM09 (QHP)	17311500A00145

ST 1-18

General
AOHA18LALL

General
AOHA18LALL



la gamma **a cassetta**

INVERTER alta efficienza

Telecomando a infrarossi
IR a corredo

AUHF12LA
AUHG12LV
INVERTER
› **F** 3.50 kW
› **C** 4.10 kW
› **F** Range: 0,90-4,40 kW
› **C** Range: 0,90-5,70 kW

AUHF14LA
AUHG14LV
INVERTER
› **F** 4.30 kW
› **C** 5.00 kW
› **F** Range: 0,90-5,40 kW
› **C** Range: 0,90-6,50 kW

AUHF18LB
AUHG18LV
INVERTER
› **F** 5.20 kW
› **C** 6.00 kW
› **F** Range: 0,90-5,90 kW
› **C** Range: 0,90-7,50 kW

AUHF24LB
AUHG24LV
INVERTER
› **F** 6.80 kW
› **C** 8.00 kW
› **F** Range: 0,90-8,00 kW
› **C** Range: 0,90-9,10 kW

F capacità di raffreddamento
C capacità di riscaldamento

AOHA/AOHG12/14/18LA

AOHA/AOHG24LA

CARATTERISTICHE

MODELLO	unità interna	AUHF12LA		AUHG12LV						AUHF18LB	
	unità esterna	AOHA12LALL		AOHG12LALL						AOHA18LALL	
		raffreddamento	riscaldamento	raffreddamento	riscaldamento	raffreddamento	riscaldamento	raffreddamento	riscaldamento	raffreddamento	riscaldamento
capacità nominale [kW]		3,50	4,10	3,50	4,10	4,30	5,00	5,20	6,00	5,20	6,00
alimentazione [V/Ø/Hz]		230/1/50		230/1/50						230/1/50	
range min/max [kW]		0,90/4,40	0,90/5,70	0,90/4,40	0,90/5,70	0,90/5,40	0,90/6,50	0,90/5,40	0,90/6,50	0,90/5,90	0,90/7,50
classe di efficienza energetica		A++	A+	A++	A+	A++	A+	A++	A+	A++	A+
portata aria unità interna / esterna [m^3/h]		600/1780	600/1630	600/1780	600/1630	680/1910	800/1740	680/1910	800/1740	680/2000	800/1910
potenza in ingresso [kW]		1,05	1,11	1,05	1,11	1,33	1,34	1,33	1,34	1,33	1,34
corrente nominale [A]		4,60	4,90	4,80	5,10	5,80	5,9	6,10	6,10	7,10	7,30
rendimento energetico [W/W] EER/COP		3,33	3,69	3,33	3,69	3,21	3,71	3,21	3,71	3,21	3,61
P design c Pdesign h (kW)		-	-	3,50	4,20	-	-	4,30	4,50	-	-
indice di efficienza energetica stagionale SEER/ coefficiente di prestazione stagionale SCOP		-	-	6,20	4,10	-	-	6,40	4,40	-	-
consumo energetico annuale (QCE) (QHE) [kWh/a]		-	-	198	1431	-	-	235	1432	-	-
disturbo	unità interna – pressione sonora [dB(A)]	Hi	37	37	37	37	38	43	38	43	38	43
		Mi	34	34	34	34	34	38	34	38	34	38
		Lo	30	31	30	31	30	34	30	34	30	34
						29	27	30	27	30	26	30
	unità interna – livello potenza sonora [dB(A)]					49	50	55	50	55	50	51
	unità esterna – pressione sonora [dB(A)]					48	49	49	49	49	50	50
	unità esterna – livello potenza sonora [dB(A)]	Hi	61	63	61	63	62	64	62	64	62	65
capacità deumidificazione [l/h]		1,20		1,20		1,50		1,50		2,20	
dimensioni: h x l x p [mm]	u. interna / u. esterna / griglia				70 / 578x790x300 x700x700	245x570x570 / 578x790x300 50x700x700		245x570x570 / 578x790x300 50x700x700		245x570x570 / 578x790x300 50x700x700	
peso netto [Kg]	u. interna / u. esterna	15/40		15/40		15/40		15/40		15/40	
Ø tubi di collegamento [mm]		6,35/9,52		6,35/9,52		6,35/12,70		6,35/12,70		6,35/12,70	
max. lunghezza / max. dislivello [m] u. interna / u. esterna		25/15		25/15		25/15		25/15		25/15	
precarica standard [m]		15		15		15		15		15	
R410A (Global Warning Potenzial - 1.975) carica aggiuntiva gas [g/m]]		20		20		20		20		20	
intervallo di funzionamento [C°]		-10~46	-15~24	-10~46	-15~24	-10~46	-15~24	-10~46	-15~24	-10~46	-15~24

General
AOHA18LALL
(ST1-18)

Outdoor Unit

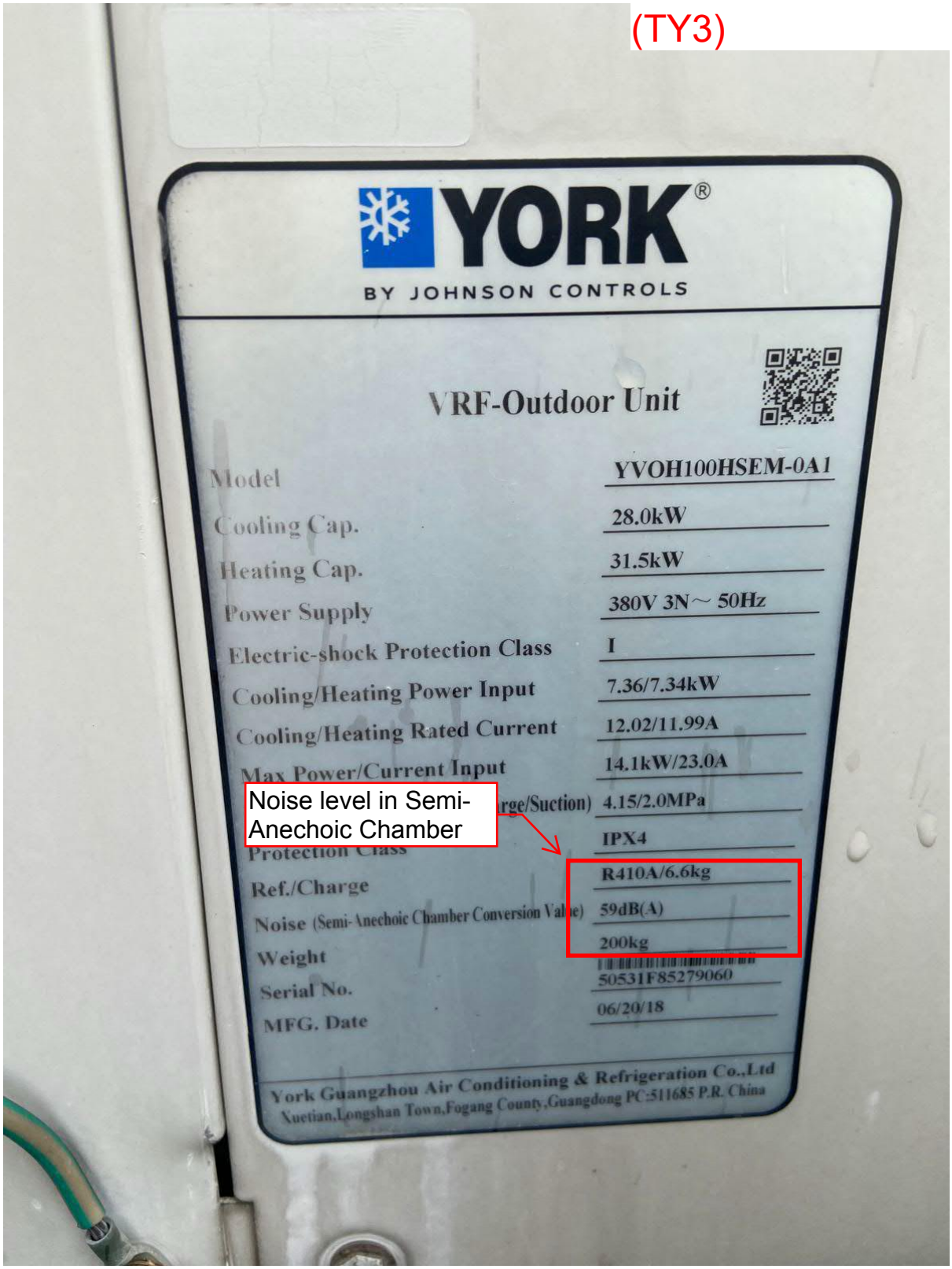
Sound Pressure Level

Sound Power Level

York
YVOH100HSEM-01

TY3

York
YVOH100HSEM-01
(TY3)



Product Specification

York
YVOH100HSEM-01
50Hz (TY3)

YES Slim Outdoor

Outdoor Unit Model		YVOH 080HSEM	YVOH 100HSEM	YVOH 120HSEM
HP		8HP	10HP	12HP
Power Supply (V/Ph/Hz)		380-415/3/50	380-415/3/50	380-415/3/50
Capacity (kW)	Cooling	22.4	28.0	33.5
	Heating	25.0	31.5	35.0
Power (kW)	Cooling	6.19	7.36	9.74
	Heating	5.71	7.34	8.75
Compressor Output (kW)	Nominal	4.80	6.00	7.20
Air Flow (m3/h)	-	9000	9000	10 000
Dimensions (mm)	H×W×D	1600 × 1100 × 400	1600 × 1100 × 400	1600 × 1100 × 400
Weight (kg)	Net Weight	180	200	200
Refrigerant	Type	R410A	R410A	R410A
	Charge (kg)	6.0	6.6	6.6
Noise (dB(A))	Anechoic Sound Level	53	56	58
	Semi-Anechoic Sound Level	56	59	61
Piping (ømm)	Liquid	9.52	9.52	12.70
	Gas	19.05	22.23	25.40
Current (A)	Max Current	20.50	23.00	26.00
	Breaker Current	25.00	32.00	32.00
	Cooling nominal current	10.11	12.02	15.91
	Heating nominal current	9.33	11.99	14.30

Note:

1. Cooling conditions: indoor 27°CDB/ 19°CWB, outdoor 35°CDB, equivalent length 10m, IU/OU height difference 0m.
2. Heating conditions: indoor 20°CDB, outdoor 7°CDB/6°CWB, equivalent length 10m, IU/OU height difference 0m.
3. Noise data is tested in semi-anechoic chamber and converted to equivalent anechoic chamber data. The actual noise data could vary per different installation and working conditions.

DAIKIN

VRV

Reference VRV for TY3 for Fixed Noise Calculation

VRV

Product Catalogue 2023

VRV: Purpose-built to support the decarbonisation of commerical buildings

Climate 360 NET

VRV IV S-series heat pump

Space saving solution without compromising on efficiency

- By choosing this product with LOOP by Daikin you support the reuse of refrigerant
- Space saving trunk design for flexible installation
- Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air cutains
- Wide range of indoor units: either connect VRV or stylish indoor units such as Daikin Emura, Perfera...
- Wide range of units (4 to 12HP) suitable for projects up to 200m² with space limitations
- Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors
- Possibility to limit peak power consumption between 30 and 80%, for example during periods with high power demand
- Contains all standard VRV features

RXYSQ4-6TV9_TY9

LOOP BY DAIKIN

For units made and sold in Europe*

ErP 2021 COMPLIANT

Already fully compliant to LOT 21 - Tier 2

Published data with real-life indoor units

RXYSQ-TV9 / TY9

Outdoor Units			RXYSQ4TV9	RXYSQ5TV9	RXYSQ6TV9	RXYSQ4TY9	RXYSQ5TY9	RXYSQ6TY9
Capacity	Nominal Cooling	kW	12.1	14.0	15.5	12.1	14.0	15.5
	Nominal Heating	kW	12.1	14.0	15.5	12.1	14.0	15.5
ηs,c	Seasonal Efficiency Cooling	%	278.90	270.10	278.00	269.20	260.50	268.30
ηs,h	Seasonal Efficiency Heating	%	171.60	182.90	192.80	154.40	164.50	174.10
Dimensions	Height x Width x Depth	mm	1345 x 900 x 320	1345 x 900 x 320	1345 x 900 x 320	1345 x 900 x 320	1345 x 900 x 320	1345 x 900 x 320
Weight		kg	104	104	104	104	104	104
Air Flow Rate		m³/sec	1.767	1.767	1.767	1.767	1.767	1.767
Electrical Details	Power Supply	Phase / Hz / V	1 / 50 / 230			3 / 50 / 380~415		
	Running Current	amps	14.6	17.9	21.8	5.04	6.15	7.44
	Starting Current	amps	4	4	4	4	4	4
	Fuse Rating	amps	32	32	32	16	16	16
Refrigerant Circuit	Refrigerant Type		R410A					
Sound Pressure (Nom)		dBA	50.0	51.0	51.0	50.0	51.0	51.0
Sound Power (Nom)		dBA	68.0	69.0	70.0	68.0	69.0	70.0
Piping Limits	Maximum Length	m	300	300	300	300	300	300
Piping Connections	Liquid	inch (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	Gas	inch (mm)	5/8 (15.9)	5/8 (15.9)	3/4 (19)	5/8 (15.9)	5/8 (15.9)	3/4 (19)
Capacity Index Limit			50 - 130	62.5 - 162.5	70 -182	50 - 130	62.5 - 162.5	70 -182
Maximum Number of Connected Indoor Units			8	10	12	8	10	12

TY3

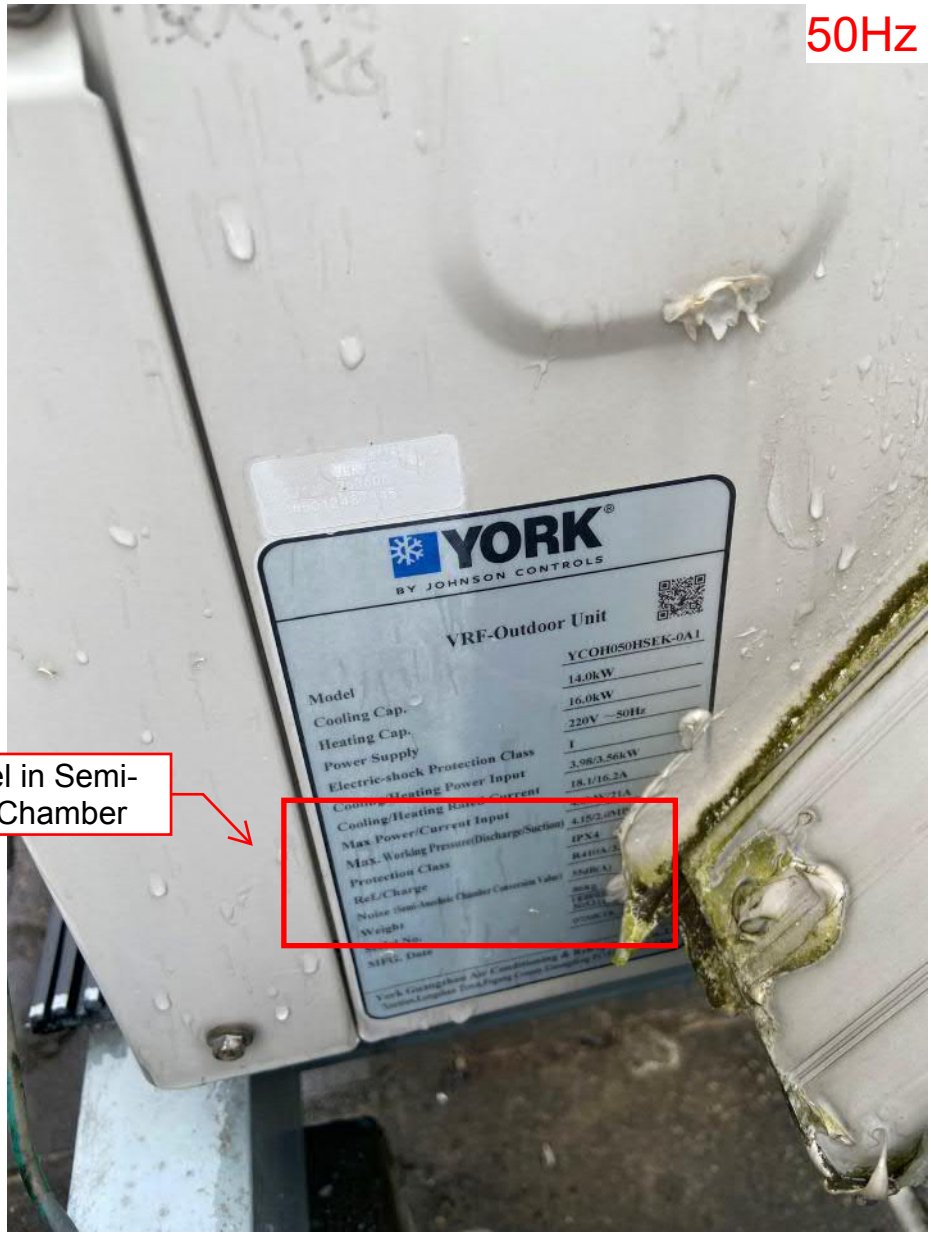
RXYSQ-TY1

Outdoor Units			RXYSQ8TY1	RXYSQ10TY1	RXYSQ12TY1
Capacity	Nominal Cooling	kW	22.4	28.0	33.5
	Nominal Heating	kW	22.4	28.0	33.5
ηs,c	Seasonal Efficiency Cooling	%	247.30	247.40	256.50
ηs,h	Seasonal Efficiency Heating	%	165.80	162.40	169.60
Dimensions	Height x Width x Depth	mm	1430 x 940x320	1615 x 940 x 460	
Weight		kg	144	175	180
Air Flow Rate		m³/sec	2.333	3.033	3.033
Electrical Details	Power Supply	Phase / Hz / V	3 / 50 / 380~415		
	Running Current	amps	11.0	12.1	15.0
	Starting Current	amps	4	4	4
	Fuse Rating	amps	25	25	32
Refrigerant Circuit	Refrigerant Type		R410A		
Sound Pressure (Nom)		dBA	55.0	55.0	57.0
Sound Power (Nom)		dBA	73.0	74.0	76.0
Piping Limits	Maximum Length	m	300	300	300
Piping Connections	Liquid	inch (mm)	3/8 (9.5)	3/8 (9.5)	1/2 (12.7)
	Gas	inch (mm)	3/4 (19)	7/8 (22.2)	1 1/8 (28.6)
Capacity Index Limit			100 - 260	125 - 325	150 - 390
Maximum Number of Connected Indoor Units			17	21	26

York
YCOH050HSEK-0A1

TY 4

York
YCOH050HSEK-0A1
50Hz (TY4)



Noise level in Semi-Anechoic Chamber

APCVAU1605

Reference VRV for TY4 for Fixed Noise Calculation

VRV IV S SERIES



For residential and commercial use

R-410A

Heat Pump 50 Hz

Specifications

Outdoor Units

VRV IV S SERIES — Heat Pump



TY4

MODEL			RXYMQ3AV4A	RXYMQ4AV4A	RXYMQ5AV4A	RXYMQ6AV4A	RXYMQ8AY1	RXYMQ9AY1
Power supply			1-phase, 230–240 V, 50 Hz				3-phase, 380–415 V, 50 Hz	
Cooling capacity		kcal/h	7,740	9,600	12,000	13,800	19,300	20,600
		Btu/h	30,700	38,200	47,800	54,600	76,400	81,900
		kW	9.0	11.2	14.0	16.0	22.4	24.0
Heating capacity		kcal/h	8,600	10,800	12,000	15,500	21,500	22,400
		Btu/h	34,100	42,700	47,800	61,400	85,300	88,700
		kW	10.0	12.5	14.0	18.0	25.0	26.0
Power consumption	Cooling	kW	2.44	2.88	3.93	4.14	5.94	6.88
	Heating		2.28	2.60	3.04	4.07	6.25	6.82
Capacity control		%	24 to 100		16 to 100		20 to 100	
Casing colour			Ivory white (5Y7.5/1)					
Compressor	Type		Hermetically sealed swing type				Hermetically sealed scroll type	
	Motor output	kW	1.92		3.0	3.5	3.8	4.8
Airflow rate		ℓ/s	1,267			1,767	2,333	
		m^3/min	76			106	140	
Dimensions (H×W×D)		mm	990×940×320			1,345×900×320	1,430×940×320	
Machine weight		kg	71		82	104	138	
Sound level (Cooling/Heating)		dB(A)	51/52	52/54	53/54	55/56	57/58	58/59
Sound power		dB(A)	69	70	71	73	75	76
Operation range	Cooling	°CDB	-5 to 46					
	Heating	°CWB	-20 to 15.5					
Refrigerant	Type		R-410A					
	Charge	kg	2.9		3.4	3.6	5.8	
Piping connections	Liquid	mm	ϕ9.5 (Flare)				ϕ9.5 (Brazing)	
	Gas		ϕ15.9 (Flare)			ϕ19.1 (Flare)	ϕ19.1 (Brazing)	ϕ22.2 (Brazing)

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- Refrigerant charge is required.

Outdoor unit combinations

MODEL	kW	Class	Capacity index	Total capacity index of connectable indoor unit				Maximum number of connectable indoor units
				Combination (%)				
				50%*1	80%*2	100%	130%	
RXYMQ3AV4A	9.0	3.5	80	40	64	80	104	5
RXYMQ4AV4A	11.2	4	100	50	80	100	130	6
RXYMQ5AV4A	14.0	5	125	62.5	100	125	162.5	8
RXYMQ6AV4A	16.0	6	150	75	120	150	195	9
RXYMQ8AY1	22.4	8	200	100	160	200	260	13
RXYMQ9AY1	24.0	9	225	112.5	180	225	292.5	14

Note: *1. When only *VRV* indoor units are connected, connection ratio must be 50% to 130%.
*2. When a mixed combination of *VRV* and residential indoor units is connected or when only residential indoor units are connected, connection ratio must be 80% to 130%.

The following current *VRV* III S model is also available

VRV III S SERIES — Heat Pump

MODEL			RXYMQ5PV4A
Power supply			1-phase, 230–240 V, 50 Hz
Cooling capacity		Kcal/h	12,000
		Btu/h	47,800
		kW	14.0
Heating capacity		Kcal/h	13,800
		Btu/h	54,600
		kW	16.0
Power consumption	Cooling	kW	3.97
	Heating		4.09
Capacity control		%	24 to 100
Casing colour			Ivory white (5Y7.5/1)
Compressor	Type		Hermetically sealed scroll type
	Motor output	kW	3.0
Airflow rate		ℓ/s	1,767
		m^3/min	106
Dimensions (H x W x D)		mm	1,345 x 900 x 320
Machine weight		kg	125
Sound level (Cooling/Heating)		dB(A)	51/53
Sound power		dB(A)	69
Operation range	Cooling	°CDB	-5 to 46
	Heating	°CWB	-20 to 15.5
Refrigerant	Type		R-410A
	Charge	kg	4.0
Piping connections	Liquid	mm	ϕ9.5 (Flare)
	Gas		ϕ15.9 (Flare)

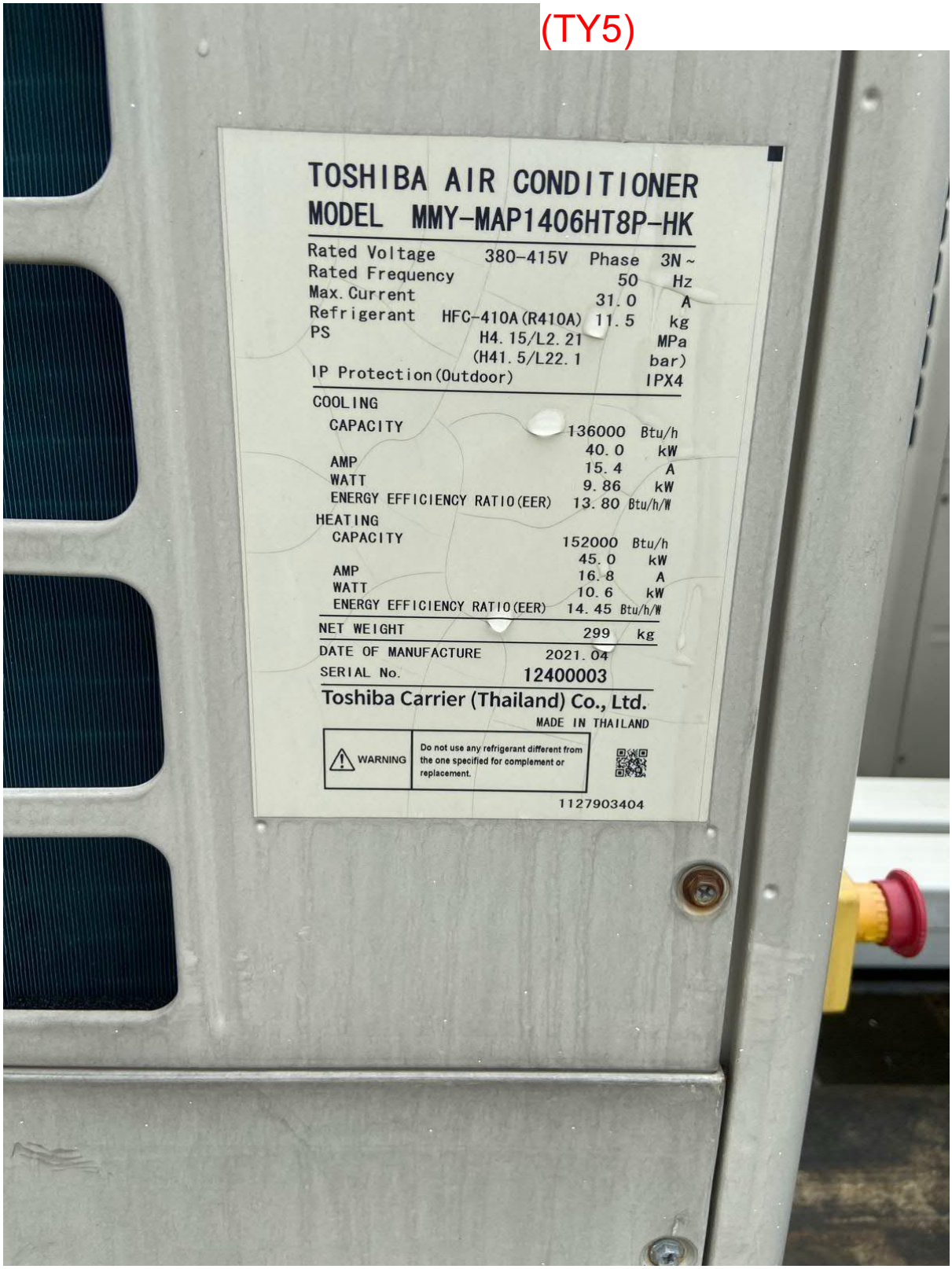
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19.5°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- Refrigerant charge is required.

Please refer to the *VRV* III S series brochure and Engineering Data Book for more information.

TOSHIBA
MMY-MAP1406HT8P-HK

TY 5

TOSHIBA
MMY-MAP1406HT8P-HK
(TY5)



Outdoor unit specifications

Standard model (Single unit)

Technical specifications

Equivalent HP				8HP	10HP	12HP
Model name	Heat Pump	50Hz	(MMY-)	MAP0806HT8P-ME	MAP1006HT8P-ME	MAP1206HT8P-ME
Outdoor unit type				Inverter		
Power supply (*1)				3phase 4wires 50Hz 400V (380-415V)		
Cooling (*)	Capacity 100%		(kW)	22.4	28.0	33.5
	Power consumption		(kW)	4.84	6.28	8.24
	EER (Energy efficiency ratio)			4.63	4.46	4.07
Cooling (**)	Capacity 100%		(kW)	20.3	25.2	26.8
	Power consumption		(kW)	6.54	8.75	8.98
	EER (Energy efficiency ratio)			3.1	2.88	2.98
Heating (*2)	Capacity 100%		(kW)	25.0	31.5	37.5
	Power consumption		(kW)	5.38	7.08	9.24
	COP (Coefficiency of performance)			4.65	4.45	4.06
Starting Current			(A)	Soft Start		
External dimensions (Height / Width / Depth)			(mm)	1,800 / 990 / 780	1,800 / 990 / 780	1,800 / 990 / 780
Total weight	Heat Pump		(kg)	242	242	242
Compressor	Quantity		(nos)	2	2	2
Fan unit	Air volume		(m³/h)	9,700	9,700	12,200
Refrigerant R410A(Charged refrigerant amount)			(kg)	11.5	11.5	11.5
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ19.1	Φ22.2	Φ28.6
		Liquid side	(mm)	Φ12.7	Φ12.7	Φ12.7
		Balance pipe	(mm)	Φ9.5	Φ9.5	Φ9.5
Sound pressure level (Cooling/Heating)			(dB(A))	55 / 56		
Sound power level (Cooling/Heating)			(dB(A))	74 / 74		
Connectable indoor units			(nos)	13		

TOSHIBA
MMY-MAP1406HT8P-HK
(TY5)

Standard model (Single unit)

Technical specifications

Equivalent HP				14HP	16HP	18HP	20HP
Model name	Heat Pump	50Hz	(MMY-)	MAP1406HT8P-ME	MAP1606HT8P-ME	MAP1806HT8P-ME	MAP2006HT8P-ME
Outdoor unit type				Inverter			
Power supply (*1)				3phase 4wires 50Hz 400V (380-415V)			
Cooling (*)	Capacity 100%		(kW)	40.0	45.0	50.4	56.0
	Power consumption		(kW)	9.90	12.1	12.3	15.5
	EER (Energy efficiency ratio)			4.04	3.72	4.1	3.61
Cooling (**)	Capacity 100%		(kW)	32.5	36.0	42.8	44.8
	Power consumption		(kW)	11.6	12.5	14.2	14.9
	EER (Energy efficiency ratio)			2.80	2.88	3.01	3.01
Heating (*2)	Capacity 100%		(kW)	45.0	50.0	56.0	63.0
	Power consumption		(kW)	10.6	12.50	13.6	16.5
	COP (Coefficiency of performance)			4.25	4.00	4.12	3.82
Starting Current			(A)		Soft Start		
External dimensions (Height / Width / Depth)			(mm)	1,800 / 1,210 / 780	1,800 / 1,210 / 780	1,800/1,600/780	1,800/1,600/780
Total weight	Heat Pump		(kg)	299	299	370	370
Compressor	Quantity		(nos)	2	2	2	2
Fan unit	Air volume		(m³/h)	12,200	12,600	17,300	17,900
Refrigerant R410A (Charged refrigerant amount)			(kg)	11.5	11.5	11.5	11.5
Refrigerant piping	Main pipe diameter	Gas side	(mm)	Φ28.6	Φ28.6	Φ28.6	Φ28.6
		Liquid side	(mm)	Φ15.9	Φ15.9	Φ15.9	Φ15.9
		Balance pipe	(mm)	Φ9.5	Φ9.5	Φ9.5	Φ9.5
Sound pressure level (Cooling/Heating)			(dB(A))	60 / 62			61 / 62
Sound power level (Cooling/Heating)			(dB(A))	80 / 82			80 / 82
Connectable indoor units			(nos)	23	27	30	33

Sound Power Level

Protective devices: Discharge temp. sensor / Suction temp. sensor / High-pressure sensor Low-pressure sensor / High-pressure switch / PC board fuse

*1 The source voltage must not fluctuate more than ±10%.

* Indoor temperature: 26.7°C DB/19.4°CWB, outdoor temperature: 35°C DB (AHRI 1230 standard).

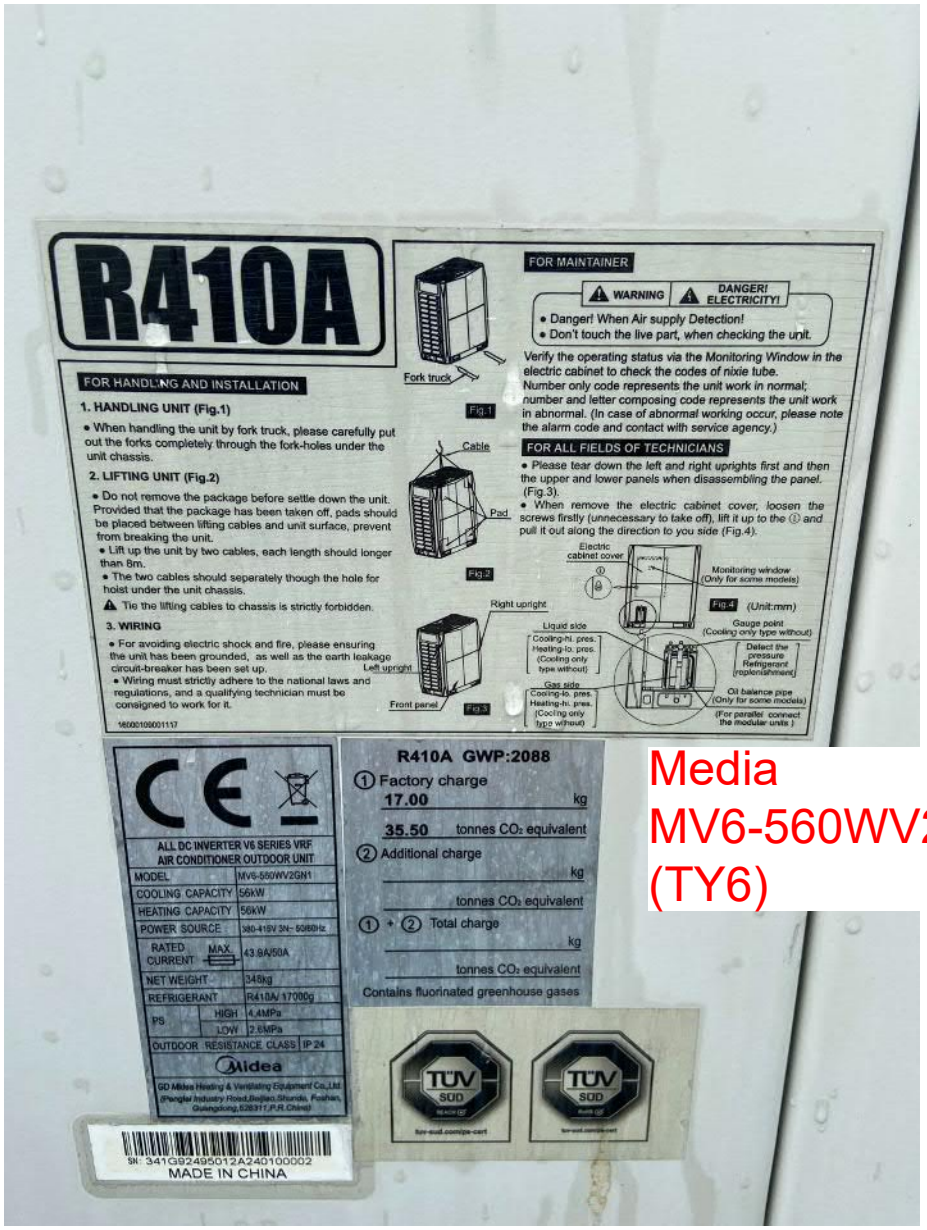
** Indoor temperature: 29°C DB/19°CWB, outdoor temperature: 46°C DB (ISO 15042 standard).

*2 Heating : Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

TY-6

Media
MV6-560WV2GN1

Media
MV6-560WV2GN1
(TY6)



Media
MV6-560WV2GN1
(TY6)

Working Range	Heating	°C	-25 ila 24			
Capacity		HP	16	18	20	22
Model			MV6-450WV2GN1-E	MV6-500WV2GN1-E	MV6-560WV2GN1-E	MV6-615WV2GN1-E
Power source		V / Ph / Hz	380-415/3/50			
Cooling[1]	Capacity	kW	45.0	50.0	56.0	61.5
		kBut/h	153.5	170.6	191.1	209.8
	Power Input	kW	12.0	12.5	15.1	18.4
	HONOUR	kW / kW	3.75	4.00	3.70	3.35
Heating[2]	Capacity	kW	45.0	50.0	56.0	61.5
		kBut/h	153.5	170.6	191.1	209.8
	Power Input	kW	9.8	10.6	12.7	15.0
	COP	kW / kW	4.60	4.70	4.40	4.10
Connectable indoor unit	Total Capacity		50-130% of outdoor unit capacity			
	Max. Capacity		26	29	33	36
compressors	Tip		DC inverter			
	Quantity		1	2		
fan motors	Tip		DC			
	Quantity		1	2		
	Maks. IT	Well	20 Default; 60 Personalization			
Cooler liquid	Tip		R410A			
	Factory Filling	kg	13	17		
Pipe Connections[3]	Liquid Pipe	mm	Φ15.9	Φ19.1		
	Gas Pipe	mm	Φ31.8	Φ31.8		
Airflow Rate		m^3/h	13000	17000		
Sound Pressure Level[4]		dB(A)	65		66	
Sound Power Level		dB(A)	88			
Net Dimensions (WxHxD)		mm	1340×1635×850	1340×1635×825		
Packaged Dimensions (WxHxD)		mm	1405×1805×910			
Net weight		kg	277	348		
Gross weight		kg	304	368		
Ambient temperature Working Range	Cooling	°C	-5 night 48			
	Heating	°C	-25 ila 24			

Capacity		HP	24	26	28
Model			MV6-670WV2GN1-E	MV6-730WV2GN1-E	MV6-785WV2GN1-E
Power source		V / Ph / Hz	380-415/3/50		
Cooling[1]	Capacity	kW	67.0	73.0	78.5
		kBut/h	228.6	249.1	267.8
	Power Input	kW	18.1	20.9	24.2
	HONOUR	kW / kW	3.70	3.49	3.25
Heating[2]	Capacity	kW	67.0	73.0	78.5
		kBut/h	228.6	249.1	267.8
	Power Input	kW	15.33	18.11	21.27
	COP	kW / kW	4.37	4.03	3.69

Sound Power Level

Media
MV6-560WV2GN1
(TY6)

TOP

Reference chiller for Japanese International School (JIS) 1-4 in fixed noise calculation

Air Cooled Screw Chiller and Heat Pump

150kW~1180kW
44.6Ton~334.9Ton

Application areas

- Offices, Hotels, Hospitals
- Industry
- Administration
- Medium and large commercial buildings

Why this choice?

- High efficiency
- Very low noise operation
- Screw compressors
- Advanced control
- Reduced total cost of ownership

Characteristics

The compressor

The unit is equipped with semi-hermetic screw compressor, compared with the piston compressor, semi-hermetic screw compressor has two advantages:

• Less parts(About 1/3 of the piston compressor), simple structure, less wearing parts, high reliability and long life.
• Compressor suction and exhaust uniform, exhaust temperature is low, vibration is small, not sensitive to wet compression, anti-liquid strike ability.

Tube-fin air-cooled condenser

The tube-fin air-cooled condenser adopts the inverted "V" type layout, on the one hand, it improves the space utilization ratio, increases the heat exchange area, on the other hand, it improves the airflow and heat transfer efficiency, so that improve the unit's cooling and heating capacity.

Throttling equipment

For expansion valve, we select the most advanced products, with a compact overall design, rugged stainless steel diaphragm, and in a wide range of operating conditions to provide stable and accurate control.

Tube-shell evaporator

Using shell and tube structure, the outside is proceeded with fire-retardant,waterproof insulation materials, water side of the working pressure is 1.0MPa.

Evaporator with PVC plastic water board, corrosion resistance. Chilled water along the diaphragm up and down circuitous flow, in order to increase the spoiler effect to improve the evaporator heat transfer capacity.

Using the latest DAC corrugated spiral high efficiency heat transfer tubes, strengthen the fluorine side heat transfer capacity, improve the heat transfer coefficient to ensure that the unit good refrigeration and heating performance.

Electronic control

Air-cooled hot and cold water unit uses a microcomputer as the core of the control system, the control system control precision, anti-interference ability to ensure that the unit safe, reliable and economical operation.

Energy regulation automatic control can make the unit always in the best economic mode point efficient operation.

Protection function complete unit with overload, short circuit protection, frost protection, high and low voltage protection, overheating protection and other functions.

Technical Data

Model	Unit	AW150	AW180	AW250	AW320	AW380	AW430	AW500
Cooling capacity *	kW	156	180	250	320	380	428	497.6
	Ton	44.6	51.4	71.4	91.4	108.6	122.3	142.2
Heating capacity *	kW	180	198	276	353	416	474	550
	Ton	51.4	56.6	78.9	100.9	118.9	124.7	157.1
Compressor								
Qty	Nr.	1	1	1	1	1	2	2
Cooling power input *	kW	49.3	54.2	77.4	96.7	114	131.6	154.8
Cooling current *	A	87.8	95.2	134	166	199	229.2	268
Heating power input *	kW	48.4	53.2	76	95	112	129.2	152
Heating current *	A	86.5	93.7	132	164	196	225.7	264
Energy adjustment steps	step	4	4	4	4	4	8	8
Evaporator								
Water flow rate	m^3/h	26.7	31	42.8	54.8	65	74	85.6
Water side pressure drop	kPa	41	41	42	42	42	42	43
Water pipe	DN	100	100	100	125	125	125	125
Axial Fan								
Fan motor number	Nr.	4	4	6	6	8	10	12
Power input	kW	4*2.2	4*2.2	6*2.2	6*2.2	8*2.2	10*2.2	12*2.2
Current input	A	4*5.6	4*5.6	6*5.6	6*5.6	8*5.6	10*5.6	12*5.6
Air flow	m^3/h	68000	96000	144000	144000	196000	240000	288000
Dimensions								
Length	mm	2500	2500	3300	3590	4680	5800	6790
Width	mm	2160	2160	2160	2160	2160	2160	2160
Height	mm	2450	2450	2450	2450	2450	2450	2450
Sound pressure level **	dB(A)	73	73	75	75	78	80	81
Net weight	kg	2050	2350	2750	3150	3650	4800	5250

Technical Data

Model	Unit	AW570	AW640	AW700	AW760	AW870	AW930	AW1000	AW1180
Cooling capacity *	kW	568	637.8	700	758	868	923.8	992.8	1172
	Ton	162.3	182.2	200	216.6	248	263.9	283.7	334.9
Heating capacity *	kW	630	706	772	827	953	1014	1086	1264
	Ton	180	201.7	220.6	236.3	272.3	289.7	310.3	361.1
Compressor									
Qty	Nr.	2	2	2	2	3	3	3	3
Cooling power input *	kW	174.1	193.4	210.7	228	268.8	286.4	309.6	348.2
Cooling current *	A	300	332	365	398	467	497.2	536	600.4
Heating power input *	kW	171	190	207	224	264	281.2	304	342
Heating current *	A	296	328	360	392	460	489.7	528	591.2
Energy adjustment steps	step	8	8	8	8	12	12	12	12
Evaporator									
Water flow rate	m^3/h	97.4	109.7	120	130	149	159	170.8	201.6
Water side pressure drop	kPa	43	44	45	45	45	45	45	45
Water pipe	DN	125	150	150	150	150	150	150	200
Axial fan									
Fan motor number	Nr.	12	12	14	16	18	18	18	20
Power input	kW	12*2.2	12*2.2	14*2.2	16*2.2	18*2.2	18*2.2	18*2.2	20*2.2
Current input	A	12*5.6	12*5.6	14*5.6	16*5.6	18*5.6	18*5.6	18*5.6	20*5.6
Air flow	m^3/h	288000	288000	333600	384000	432000	432000	432000	576000
Dimensions									
Length	mm	6790	7190	8280	9370	10290	10580	10980	11780
Width	mm	2160	2160	2160	2160	2160	2160	2160	2160
Height	mm	2450	2450	2450	2450	2450	2450	2450	2450
Sound pressure level **	dB(A)	81	81	82	83	83	83	83	83
Net weight	kg	5600	6150	6900	7600	8900	9650	10000	11000

* The performance values refer to the following conditions:
Cooling: ambient air temperature 35°C; evaporator water in/out temperature 12/7°C.
Heating: ambient air temperature DB 7°C, WB 6°C; condenser water in/out temperature 40/45°C.
** Sound pressure measured at a distance of 1 m and a height of 1.5 m above the ground in a clear field.

Reference Chiller for Sound Power Level Supporting

LDA

AIR COOLED WATER CHILLERS WITH AXIAL FANS

Cooling capacity from 20 kW to 390 kW

LDA water chillers are efficient, low-noise products designed for medium to large applications.

They are suitable for generating chilled water at temperatures in the region of 7°C, commonly used in applications with fan coils and/or air handling units.

The use of tandem scroll compressors results in high efficiencies (especially at part loads) and low noise levels, making them suitable for use in many applications.

Differing versions and a wide range of accessories, enable the optimal solution to be selected.

VERSIONS

CO	Cooling only.
SA	Standard efficiency, AC fans. Only for the non-EU market
SE	Standard efficiency, EC fans.
HA	High efficiency, AC fans.
HE	High efficiency, EC fans.

Hidros
INNOVATION AS ENERGY

HA/XL/CO		252	302	412	432	492	602	702	802	902	1002	1202	1402
Cooling capacity (EN14511) (1)	kW	20,5	27,0	31,9	42,6	46,1	54,0	61,2	68,1	80,7	91,2	103,2	118,8
Total input power (EN14511) (1)	kW	6,6	8,7	10,2	13,7	14,9	17,4	19,6	22,0	25,4	29,4	33,3	36,9
EER (EN14511) (1)	W/W	3,11	3,10	3,14	3,11	3,10	3,11	3,12	3,10	3,18	3,10	3,10	3,22
SEER (2)	kWh/kWh	4,14	4,11	4,15	4,13	4,11	4,16	4,15	4,15	4,16	4,17	4,16	4,20
ηs,c (2)	%	162	161	163	162	161	163	163	163	163	164	163	165
Sound power (3)	dB (A)	70	70	70	70	72	72	72	73	75	77	78	80
Sound pressure (4)	dB (A)	38	38	38	38	40	40	40	41	43	45	46	48
Water tank volume	l	100	100	100	100	100	300	300	300	300	300	300	500
HE/XL/CO		**252**	**302**	**412**	**432**	**492**	**602**	**702**	**802**	**902**	**1002**	**1202**	**1402**
Cooling capacity (EN14511) (1)	kW	20,5	27,0	31,4	42,6	46,1	54,0	61,2	68,1	80,7	91,2	103,2	118,8
Total input power (EN14511) (1)	kW	6,6	8,7	10,1	13,7	14,8	17,2	19,6	21,9	25,4	29,2	33,2	36,9
EER (EN14511) (1)	W/W	3,12	3,11	3,12	3,11	3,11	3,14	3,13	3,11	3,18	3,12	3,11	3,22
SEER (2)	kWh/kWh	4,35	4,32	4,44	4,25	4,30	4,35	4,30	4,25	4,40	4,43	4,30	4,50
ηs,c (2)	%	171	170	175	167	169	171	169	167	173	174	169	177
Sound power (3)	dB (A)	64	65	68	70	72	72	72	73	75	77	78	80
Sound pressure (4)	dB (A)	32	33	36	38	40	40	40	41	43	45	46	48
Power supply	V/Ph/Hz	400/3+N/50	400/3+N/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Compressors / Circuits	n° / n°	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1
Fans	n°	2	2	2	2	2	2	2	2	2	2	2	3
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge	kg	6,5	6,5	6,5	10,0	8,5	8,5	14,5	14,5	19,0	19,0	20,0	28,0
Global warming potential (GWP)		2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088
Equivalent CO_2 charge	t	13,57	13,57	13,57	20,88	17,74	17,74	30,27	30,27	39,67	39,67	41,76	58,46
Water tank volume	l	100	100	100	100	100	300	300	300	300	300	300	500

HA/XL/CO		1602	1802	2002	2302	2502	2504	3004	3204	3504	4004	4504
Cooling capacity (EN14511) (1)	kW	130,1	150,1	166,8	189,1	211,0	208,5	236,0	264,0	297,8	337,4	383,5
Total input power (EN14511) (1)	kW	42,0	48,1	53,8	60,8	67,8	67,3	75,6	84,9	95,8	108,5	123,7
EER (EN14511) (1)	W/W	3,10	3,12	3,10	3,11	3,11	3,10	3,12	3,11	3,11	3,11	3,10
SEER (2)	kWh/kWh	4,11	4,25	4,12	4,27	4,15	4,14	4,22	4,20	4,30	4,20	4,25
ηs,c (2)	%	161	167	162	168	163	163	166	165	169	165	167
Sound power (3)	dB (A)	81	81	81	83	84	81	83	84	84	84	86
Sound pressure (4)	dB (A)	49	49	49	51	52	49	51	52	52	52	54
Water tank volume	l	500	500	500	500	500	1000	1000	1000	1000	1000	1000
HE/XL/CO		**1602**	**1802**	**2002**	**2302**	**2502**	**2504**	**3004**	**3204**	**3504**	**4004**	**4504**
Cooling capacity (EN14511) (1)	kW	130,1	150,1	166,8	189,1	211,0	208,5	236,0	264,0	297,8	337,4	383,5
Total input power (EN14511) (1)	kW	42,0	48,1	53,6	60,8	67,8	67,3	75,6	84,9	95,4	108,5	122,9
EER (EN14511) (1)	W/W	3,10	3,12	3,11	3,11	3,11	3,10	3,12	3,11	3,12	3,11	3,12
SEER (2)	kWh/kWh	4,40	4,45	4,35	4,35	4,28	4,30	4,40	4,35	4,38	4,30	4,40
ηs,c (2)	%	173	175	171	171	168	169	173	171	172	169	173
Sound power (3)	dB (A)	81	81	81	83	84	81	83	84	84	84	86
Sound pressure (4)	dB (A)	49	49	49	51	52	49	51	52	52	52	54
Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Compressors / Circuits	n° / n°	2 / 1	2 / 1	2 / 1	2 / 1	2 / 1	4 / 2	4 / 2	4 / 2	4 / 2	4 / 2	4 / 2
Fans	n°	3	3	3	3	3	4	6	6	6	6	8
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge	kg	30,0	30,0	30,0	30,0	40,0	40,0	50,0	60,0	50,0	60,0	90,0
Global warming potential (GWP)		2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088
Equivalent CO_2 charge	t	62,64	62,64	62,64	62,64	83,52	83,52	104,40	152,28	104,40	152,28	187,92
Water tank volume	l	500	500	500	500	500	1000	1000	1000	1000	1000	1000

Sound Power Level

Number of fan

Performances are referred to the following conditions:

(1) Cooling: ambient air temperature 35°C, evaporator water temperature in/out 12/7 °C.

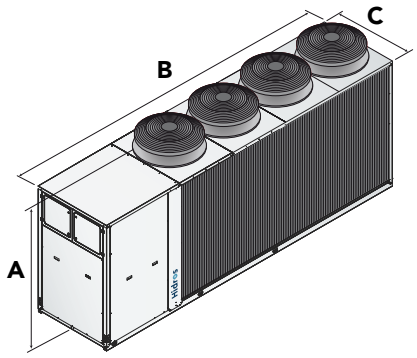
(2) In accordance with (EU) 2016/2281 and relative norms part of this

(3) Sound power level in accordance with ISO 3744.

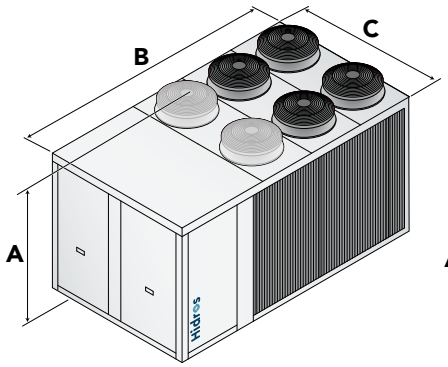
(4) Sound pressure level at 10 mt from the unit in free field conditions in accordance with ISO 3744.

LDA		2502	2504	3004	3204	3504	4004	4504	5004
Flow switch		●	●	●	●	●	●	●	●
"Floating frame" Technology - LS Version		–	–	–	–	–	–	–	–
"Floating frame" Technology - XL Version		●	●	●	●	●	●	●	●
E.C. fans - SA versions	VECE	–	–	–	–	–	–	–	–
E.C. fans - SE versions	VECE	●	●	●	●	●	●	●	●
E.C. fans - HA versions	VECE	–	–	–	–	–	–	–	–
E.C. fans - HE versions	VECE	●	●	●	●	●	●	●	●
Evap/cond. press. control by transducer and fan speed control	DCCF	O	O	O	O	O	O	O	O
Antifreeze kit for 2 pipe units	RAEV2	O	O	O	O	O	O	O	O
Electronic soft starter	DSSE	O	O	O	O	O	O	O	O
Serial interface card RS485	INSE	O	O	O	O	O	O	O	O
Rubber anti-vibration mountings	KAVG	O	O	O	O	O	O	O	O
Remote control panel	PCRL	O	O	O	O	O	O	O	O
Electronic expansion valve	VTEE	O	O	O	O	O	O	O	O
Cascade control system via RS485	SGRS	O	O	O	O	O	O	O	O
Hydraulic kit with one pump with tank	A1ZZU	O	O	O	O	O	O	O	O
Hydraulic kit with two pumps with tank	A2ZZU	O	O	O	O	O	O	O	O
Hydraulic kit with one pump without tank	A1NTU	O	O	O	O	O	O	O	O
Hydraulic kit with two pumps without tank	A2NTU	O	O	O	O	O	O	O	O

● Standard O Optional – Not available



SA/SE-LS/XL 2504 - 3004 - 3204



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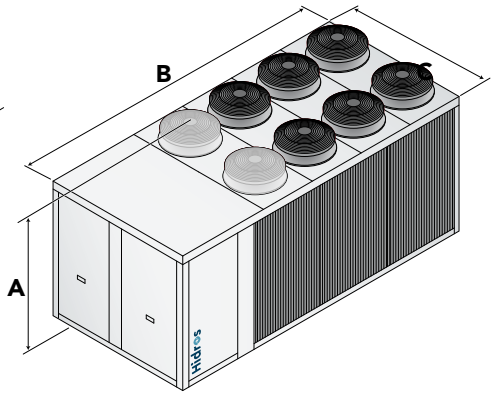
HA/HE-LS/XL 2504 - 3004 - 3204 - 3504



SA/SE-LS/XL 4504 - 5004
HA/HE-LS/XL 4004 - 4504 - 5004

		2502	2504	3004	3204	3504	4004	4504	5004
A	**SA-SE/LS**	2310	2310	2310	2310	2350	2350	2380	2380
B	**SA-SE/LS**	4505	5300	5300	5300	4205	4205	4810	4810
C	**SA-SE/LS**	1150	1150	1150	1150	2210	2210	2210	2210
kg	**SA-SE/LS**	2000	2460	2500	2580	3170	3220	3550	3650
A	**SA-SE/XL**	2310	2310	2310	2310	2350	2350	2380	2380
B	**SA-SE/XL**	4505	5300	5300	5300	4205	4205	4810	4810
C	**SA-SE/XL**	1150	1150	1150	1150	2210	2210	2210	2210
kg	**SA-SE/XL**	2000	2460	2500	2580	3170	3220	3550	3650
A	**HA-HE/LS**	2270	2350	2350	2350	2350	2380	2380	2380
B	**HA-HE/LS**	3905	4205	4205	4205	4205	4805	4810	4810
C	**HA-HE/LS**	1150	2210	2210	2210	2210	2210	2210	2210
kg	**HA-HE/LS**	1780	3120	3170	3220	3270	3610	3670	3720
A	**HA-HE/XL**	2270	2350	2350	2350	2350	2380	2380	2380
B	**HA-HE/XL**	3905	4205	4205	4205	4205	4805	4810	4810
C	**HA-HE/XL**	1150	2210	2210	2210	2210	2210	2210	2210
kg	**HA-HE/XL**	1810	3170	3220	3270	3320	3660	3720	3770

Size of chiller

MITSUBISHI ELECTRIC
HYDRONICS & IT COOLING SYSTEMS

Reference Chiller for Sound Power Level Supporting

Data Book

NX-N-G06 0202P - 0812P_202107_EN R454B
ELCA_Engine ver.4.5.5.5

HEATING
COOLING

NX-N-G06 0202P - 0812P

44,9-211 kW
Reversible unit, air source for outdoor installation

R454B
SCROLL
PLATES

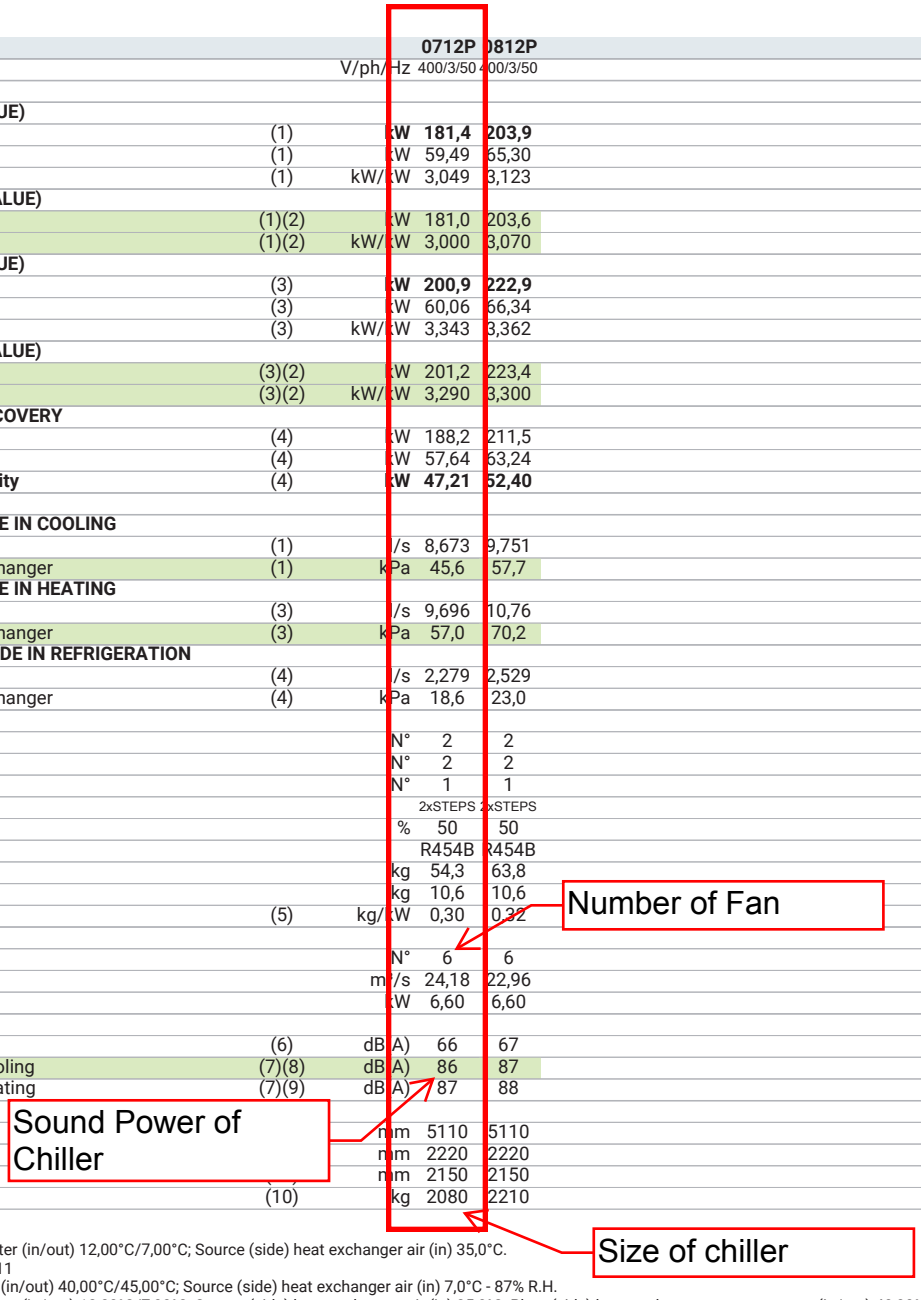
(The photo of the unit is indicative and may vary depending on the model)

- LOW GWP REFRIGERANT
- WIDE OPERATING LIMITS
- ELECTRONIC EXPANSION VALVE
- CLASS A EFFICIENCY
- TWO SOUND EMISSION LEVELS
- INTEGRATED HYDRONIC GROUP

CLIMAVENETA®

[SI System]

NX-N-G06/LN-CA			0712P	0812P
Power supply		V/ph/Hz	400/3/50	400/3/50
PERFORMANCE				
COOLING ONLY (GROSS VALUE)				
Cooling capacity	(1)	kW	**181,4**	**203,9**
Total power input	(1)	kW	59,49	65,30
EER	(1)	kW/kW	3,049	3,123
COOLING ONLY (EN14511 VALUE)				
Cooling capacity	(1)(2)	kW	181,0	203,6
EER	(1)(2)	kW/kW	3,000	3,070
HEATING ONLY (GROSS VALUE)				
Total heating capacity	(3)	kW	**200,9**	**222,9**
Total power input	(3)	kW	60,06	66,34
COP	(3)	kW/kW	3,343	3,362
HEATING ONLY (EN14511 VALUE)				
Total heating capacity	(3)(2)	kW	201,2	223,4
COP	(3)(2)	kW/kW	3,290	3,300
COOLING WITH PARTIAL RECOVERY				
Cooling capacity	(4)	kW	188,2	211,5
Total power input	(4)	kW	57,64	63,24
Desuperheater heating capacity	(4)	kW	**47,21**	**52,40**
EXCHANGERS				
HEAT EXCHANGER USER SIDE IN COOLING				
Water flow	(1)	l/s	8,673	9,751
Pressure drop at the heat exchanger	(1)	kPa	45,6	57,7
HEAT EXCHANGER USER SIDE IN HEATING				
Water flow	(3)	l/s	9,696	10,76
Pressure drop at the heat exchanger	(3)	kPa	57,0	70,2
PARTIAL RECOVERY USER SIDE IN REFRIGERATION				
Water flow	(4)	l/s	2,279	2,529
Pressure drop at the heat exchanger	(4)	kPa	18,6	23,0
REFRIGERANT CIRCUIT				
Compressors nr.		N°	2	2
Number of capacity steps		N°	2	2
No. Circuits		N°	1	1
Regulation			2xSTEPS	2xSTEPS
Min. capacity step		%	50	50
Refrigerant			R454B	R454B
Theoretical refrigerant charge		kg	54,3	63,8
Oil charge		kg	10,6	10,6
Rc (ASHRAE)	(5)	kg/kW	0,30	0,32
FANS				
Quantity		N°	6	6
Air flow		m³/s	24,18	22,96
Total fans power input		kW	6,60	6,60
NOISE LEVEL				
Total sound Pressure	(6)	dB(A)	66	67
Total sound power level in cooling	(7)(8)	dB(A)	86	87
Total sound power level in heating	(7)(9)	dB(A)	87	88
SIZE AND WEIGHT				
A		mm	5110	5110
B		mm	2220	2220
H		mm	2150	2150
Operating weight	(10)	kg	2080	2210



Notes:
1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
2 Values in compliance with EN14511
3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
5 Rated in accordance with AHRI Standard 550/590
6 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Sound power level in heating, outdoors.
10 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

Record in roof level of PLK Tin Ka Ping Millennium Primary School with 106.3mPD

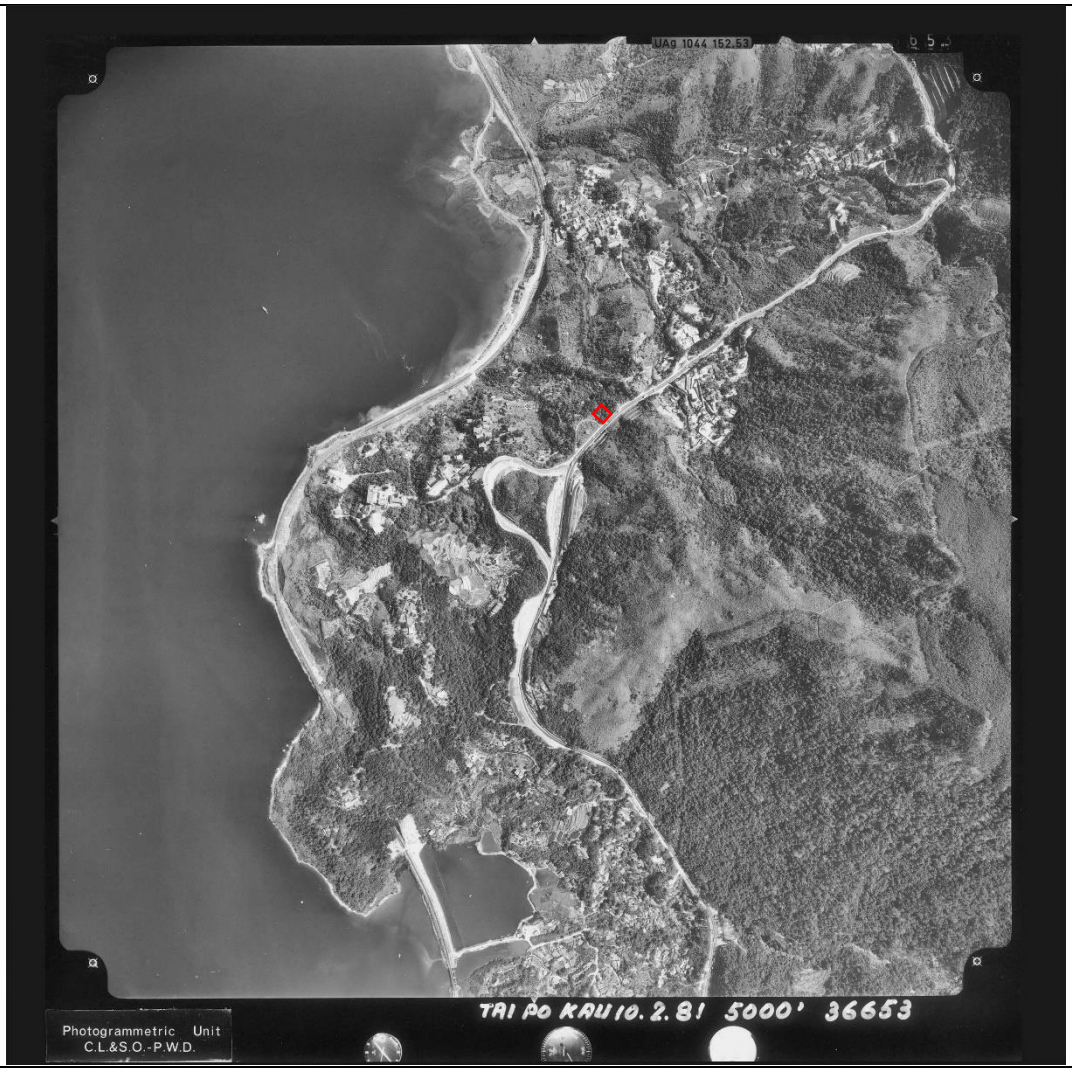
Appendix H

Aerial Photos

Project: Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po St. Christopher's Complex at Tai Po

Aerial Photos

Year 1964


UAg 1044 152.53
TAI PO KAU 10. 2. 81 5000' 36653
Photogrammetric Unit
C.L.&S.O.-P.W.D.

Year 1981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0164
TAI PO KAU 24.11.2003 6,000' CW52549
香港特別行政區政府 地政總署測繪處
Survey & Mapping Office, Lands Department
The Government of Hong Kong Special Administrative Region
P2F2000

Year 2003


香港特別行政區政府 地政總署測繪處
Survey & Mapping Office, Lands Department
The Government of Hong Kong Special Administrative Region
P2F2000
0036
CW103750 31 May 2013 2000' PAK SHEK KOK
OBLIQUE
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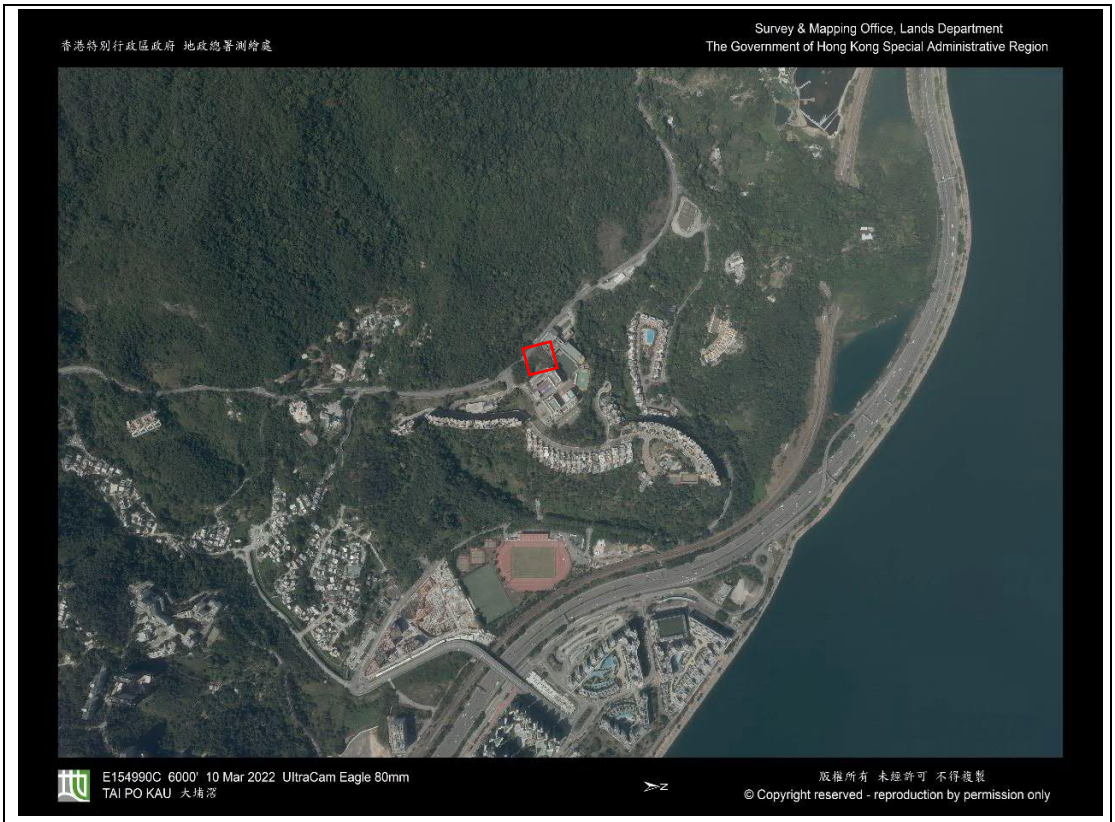
© Copyright reserved - reproduction by permission only

Year 2013


香港特別行政區政府 地政總署測繪處
Survey & Mapping Office, Lands Department
The Government of Hong Kong Special Administrative Region
E154990C 6000' 10 Mar 2022 UltraCam Eagle 80mm
TAI PO KAU 大埔滘
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Year 2022


香港特別行政區政府 地政總署測繪處
Survey & Mapping Office, Lands Department
The Government of Hong Kong Special Administrative Region
E189302C 6900' 27 Feb 2023 UltraCam Eagle 210mm
PAK SHEK KOK 白石角
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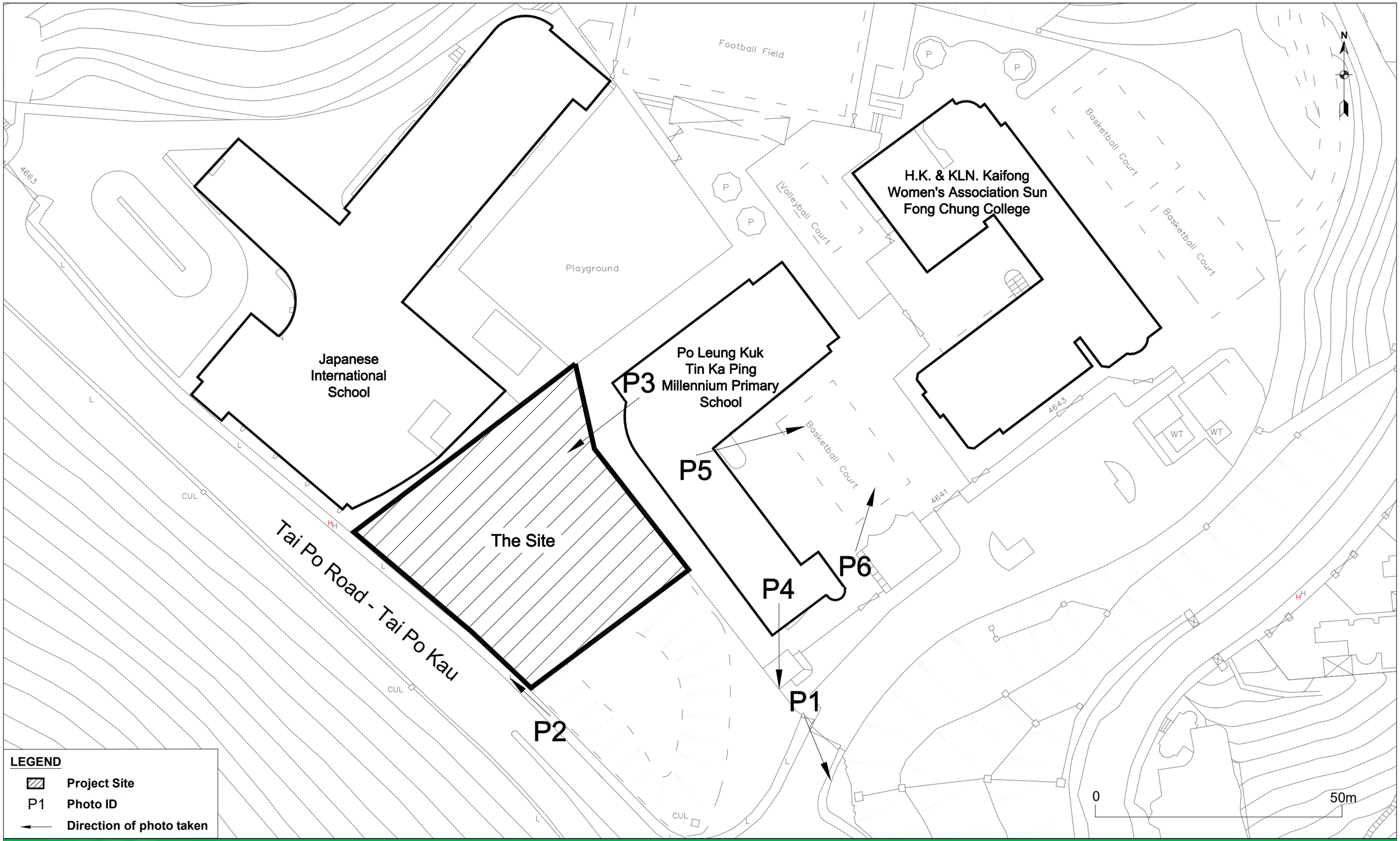
Year 2023

Appendix I

Site Visit Photographs



URBAN GREEN

Proposed Development of Hong Kong Sheung Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D.34 Tai Po St. Christopher's Complex at Tai Po

Photo Index Plan

Appendix J

Rev. 0

Site visit photo record

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P5

P6

Appendix J

Site Walker Checklists

Site Walkover Checklist

Site Walkover Details

Date	10 June 2024
Time	14:30 – 15:30

General Site Details

Site Owner/ Client	
Property Address	Taxlord Lot No. T77 in D.D.34, Tai Po

Person Conducted the Questionnaire

Name	Cheryl Chen
Position	Environmental Consultant
Company	Urban Green Consultants Ltd.
Telephone	35653317

Site Activities

Briefly describe activities carried out on site, including types of products/ chemicals/ materials handled. Obtain a flow schematic if possible.

Please see the last page of **Site Walkover Observations**.

No. of employees	Full-time	N/A
	Part-time	N/A
	Temporary/ Seasonal	N/A
Maximum no. of people on site at any time		N/A
Typical hours of operation (per week)		N/A
No. of shifts		N/A
Days per week		N/A
Weeks per year		N/A
Scheduled/ expected date of service discontinuance		N/A

Detail the main sources of energy at the site:

Gas	~~YES/ NO~~/ NA
Electricity	~~YES/ NO~~/ NA
Coal	~~YES/ NO~~/ NA
Oil	~~YES/ NO~~/ NA
Other	~~YES/ NO~~/ NA

Site Description

This section is intended to gather information on-site setting and environmental receptors on, adjacent or close to the site.

What is the total site area?	2210.12m^2
Please list all current and previous owners/ occupiers of possible.	N/A
Is a site plan available? If yes, please attach.	N/A
Are there any other parties on-site as tenants or sub-tenants?	N/A
If yes, identify those parties.	N/A

Describe surrounding land use (residential, industrial, rural, etc.) and identify neighbouring facilities and types of industry.

North	PLK Tin Ka Ping Millennium Primary School
East	Deerhill Tower Deerhill Bay
South	Natural Hillside
West	Japanese International School

Describe the topography of the area (flat terrain, rolling hills, mountains, by a large body of water, vegetation, etc.).

Flat terrain

State the size and location of the nearest residential communities.

Japanese International School is about 3.5 m from the project boundary. PLK Tin Ka Ping Millennium Primary School is about 7.2 m from the project boundary. Hong Kong & Kowloon Kaifong Women's Association Sun Fong Chung College is about 62.8m from the project boundary.

Are there any sensitive habitats nearby, such as nature reserves, parks, wetlands or sites of special scientific interest?

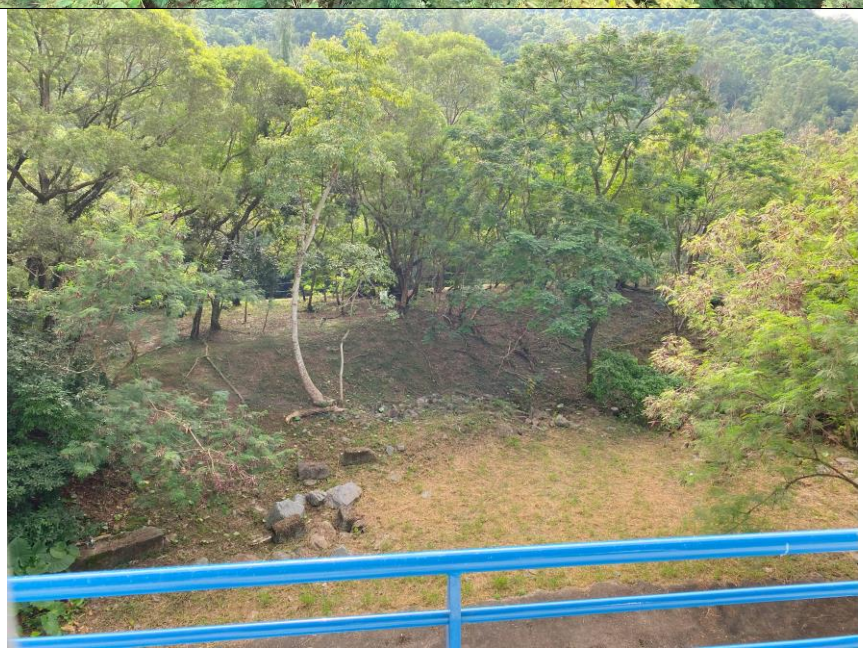
Tai Po Kau Natural Reserves

Site Walkover Observations

		Yes/No/ NA	**Notes**
1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	NA	-
2.	What are the conditions of the bund walls and floors?	**NA**	-

3.	Are there any surface water drains located near to drum storage and unloading areas?	**NA**	-
4.	Are there any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	**NA**	-
5.	Is there a storage site for the wastes?	**NA**	-
6.	Is there an on-site landfill?	**NA**	-
7.	Was there any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	**NA**	-
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	**NA**	-
9.	Are there any potential off-site sources of contamination?	NA	-
10.	Does the site have any equipment which might contain polychlorinated biphenyls (PCBs)?	NA	-
11.	Are there any sumps, effluent pits, interceptors, or lagoons on site?	NA	-
12.	Any noticeable odours during site walkover?	NA	-
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	NA	-

Photo Records

1	
2	

3	
4	

Appendix K

Confirmation Email from Highways Department

Joan Choi

From: detp1.nt@hyd.gov.hk
Sent: Wednesday, March 5, 2025 2:56 PM
To: Emily Tang
Cc: Joan Choi; ctotp.nt@hyd.gov.hk
Subject: Re: Proposed Development of HKSKH St. Christopher Complex on the Vacant Site in Tai Po (Planning No. A/TP/702) - Propose Low Noise Road Surface
Attachments: 4.4 Location of Proposed Low Noise Surface Road.pdf

Dear Emily,

I spoke with your colleague just now.

It is understood that the project is in a preliminary planning stage. Provided that the proposed LNRS design follow HyD's Guidance Notes on Low Noise Road Surfacing (RD/GN/011C) and the works will be implemented by the project proponent at his own expense, we have no objection at this stage to the proposed use of LNRS on road maintained by HyD.

We would provide further comments when detailed design (e.g. material to be adopted) is available. Thanks.

Regards,

Roy LI
DE/TP(1) & DE/TP(2) (Atg.)
NT Region
Highways Department
Tel. 2762 4948

From: "Emily Tang" <emily.tang@urbangreen.hk>
To: "detp1.nt@hyd.gov.hk" <detp1.nt@hyd.gov.hk>
Cc: "Joan Choi" <joan.choi@urbangreen.hk>
Date: 23/01/2025 16:18
Subject: Proposed Development of HKSKH St. Christopher Complex on the Vacant Site in Tai Po (Planning No. A/TP/702) - Propose Low Noise Road Surface

---

Dear Mr. Li,

We are the environmental consultant responsible for conducting the Noise Impact Assessment (NIA) for the Proposed Development of the HKSKH St. Christopher Complex on the vacant site in Tai Po (Planning No. A/TP/702).

We have received a comment from the EPD - Environmental Assessment team regarding our proposed low-noise road surface treatment along sections of Tai Po Road (Tai Po Road (Tai Po Kau)) near the proposed development (as shown in the attached figure) as the noise mitigation measure for the road traffic noise. To facilitate further progress, we would greatly appreciate your confirmation on the feasibility of implementing the proposed low-noise road surface on Tai Po Road (Tai Po Kau). Thank you.

Attached the comment from EPD for your kind reference.

Best regards,
Emily Tang

Urban Green Consultants Limited
23/F, Wui Tat Centre, No. 55 Connaught Road West, Hong Kong
Tel: 3114 1147 Fax: 3114 1580
(File-Checksum-00000001)

Appendix 7

Sewerage Impact Assessment

URBAN GREEN

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po

Sewerage Impact Assessment Report

Reference: P060/01 Issue 7
Date: March 2025
Confidential

URBAN GREEN

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po

Sewerage Impact Assessment Report

Reference: P060/01 Issue 7

Date: March 2025

Issue	Status	Prepared By	Date	Checked by	Date	Approved By	Date
1	Final	AIC	26-May-22	EMT	26-May-22	JOC	26-May-22
2	Draft	AIC	7-Feb-24	EMT	7-Feb-24	JOC	7-Feb-24
3	Final	Various	9-Jul-24	EMT	9-Jul-24	JOC	9-Jul-24
4	Final	Various	30-Aug-24	EMT	30-Aug-24	JOC	30-Aug-24
5	Final	Various	13-Dec-24	EMT	13-Dec-24	JOC	13-Dec-24
6	Final	Various	27-Jan-25	EMT	27-Jan-25	JOC	27-Jan-25
7	Final	Various	5- Mar-25	EMT	5- Mar-25	JOC	5- Mar-25

23/F, Wui Tat Centre, No. 55 Connaught Road West, Hong Kong
Tel: (852) 3114 1144

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1 Introduction

1.1 Background

1.1.1 The Applicant intends to develop a community service complex (hereafter as "the proposed development") for providing childcare and elderly care services at the remaining portion of Taxlord Lot No. T77 in D.D.34, Tai Po (hereafter as "the Site").

1.1.2 According to the Approved Tai Po Outline Zoning Plan (OZP) (OZP No.: S/TP/30) published by Town Planning Board in July 2022, the Site is in the "Government, Institution or Community" Zone.

1.1.3 Urban Green Consultants Limited (UGC) was commissioned by the Applicant to conduct a Sewerage Impact Assessment (SIA) to assess the potential sewerage impacts arising from the change of sewerage generation due to the Proposed Development.

1.2 Objective of the SIA

1.2.1 The objectives of this SIA are to assess the potential sewerage impacts arising from the proposed development and recommend the mitigation measures, if necessary, to alleviate the impacts.

1.3 Report Structure

1.3.1 The remaining chapters of this report are shown below:

Chapter 2 – Site Context

Chapter 3 – Evaluation of Sewerage Impact

Chapter 4 – Environmental Considerations

2 Site Context

2.1 Site Location and Its Environs

2.1.1 The Site is bounded by Tai Po Road – Tai Po Kau to its South. The Japanese International School is located at the West of the Site, while Po Leung Kuk Tin Ka Ping Millennium Primary School is at the Northeast of the Site. The site area is approximately 2,210.2m^2.

2.1.2 Figure 2.1 shows the Site location and its environs.

2.2 Proposed Development Scheme

2.2.1 The proposed development is a 10-storey building which consists of seven department units, i.e. Special Child Care Centre (SCCC), Care and Attention Home Providing Continuum of Care (CoC Home), Small Group Home (SGH), Foster Care Service and Agency-based Enhancement of Professional Staff Support Services (FCS), Staff Training Unit (STU), and Child Care Centre (CCC). There will also be residential places for the elderly, a basement carpark, and a localized sewerage treatment plant on B2/F. The anticipated commissioning year of the proposed development is 2030.

2.2.2 The development plans are shown in Appendix A.

2.3 Existing Sewerage Condition

2.3.1 Based on the review of drainage plans (reference no.: 7-NE-11C-4, 7-NE-11D-3, 7-NE-16A-2 and 7-NE-16B-1) from Drainage Services Department (DSD) in November 2015, it has revealed that the Site is not served by any form of DSD's sewerage facility currently.

3 Evaluation of Sewerage Impact

3.1 Assumptions and Methodology

3.1.1 For the sewerage flow estimation from the proposed development, the ceiling unit flow rates as recommended in the "Guidelines for Estimating Sewerage Flows for Sewerage Infrastructure Planning" (hereafter as "GESF") published by the Environmental Protection Department (EPD) in 2005 have been adopted in the assessment.

3.1.2 The sewerage generation from the proposed development includes the flow contribution from the staffs, visitors and residents in the proposed development. The population for the proposed development is summarised in Table 3.1.

3.1.3 The estimation of pollution loadings from the Proposed Development is based on the basic design parameters of Biochemical Oxygen Demand (BOD) and Suspended Solid (SS) loads for commercial populations as stipulated in "Guidelines for the Design of Small Sewerage Treatment Plants".

3.1.4 In the calculation of sewerage generation from both overnight and non-overnight staff , the unit flow factor of 0.28m^3/person/day was adopted. And the unit flow factor of 0.19m^3/person/day was adopted for residents. As for visitors, the unit flow factor adopted is 0.015m^3/person/day. For kitchen staff, the unit flow factor adopted is 1.58m^3/person/day

Table 3.1 Estimated Population of the Proposed Development

Type of People	No. of persons	Unit Flow Factor (m^3/person/day)	Category
Staff (non-overnight)	235	0.28	Commercial Employee + Commercial activities – J11 Community, Social & Personal Services in Table T-2 of GESF [1]
Staff (overnight)	20	0.28	"Services" in Appendix 2 of GDSSTP [2]
Residents	454	0.19	Domestic – Institutional and special class in Table T-1 of GESF [1]
Visitors	190	0.015	"Visitor" of Table 3-4 of "Wastewater Engineering Treatment and Reuse" published by Metcalf & Eddy
Staff (Kitchen)	5	1.58	Commercial Employee + Commercial Activities J10 - Restaurants & Hotels in Table T-2 of GESF(b) [1]

Notes:

[1] Environmental Protection Department, HKSARG [EPD] (2005). Guidelines for estimating sewerage flows for sewerage infrastructure planning (EPD/TP 1/05).

[2] Environmental Protection Department, HKSARG [EPD] (2006). Guidelines for the Design of Small Sewage Treatment Plants

3.1.5 The estimated daily flow and hourly flow from the proposed development will be 168.41m^3/day and 42.10m^3/hr, respectively. The calculations have been provided in Appendix B for reference.

3.2 Proposed Sewerage Treatment Plant

3.2.1 As the Site is not served by public sewer, it is required to provide their own sewerage treatment or disposal facilities to ensure sewerage can be discharged in a proper manner and hence to achieve the best protection to the public and the environment. The use of small Sewerage Treatment Plant (STP) with tertiary wastewater treatment technology is recommended to ensure the sewerage generated from the proposed development will be treated to acceptable level before discharge. The location of the proposed underground sewerage treatment plant is shown in Figure 3.1 at level B2 of the proposed development. The detailed calculation of the size of STP is shown in Appendix C.

3.2.2 The “Guidelines for the Design of Small Sewerage Treatment Plants” published by the EPD for the design, construction, operation, and maintenance of STP should be followed. The effluent quality should comply with the “Standards for effluents discharged into Group D inland waters” and the “Standards for effluents discharged into the coastal waters of Tolo and Port Shelter Water Control Zones” as specified in the “Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS)”. The discharge standards of the proposed STP shall adopt the higher standards of the above standards. The key parameters are summarised in Table 3.2.

Table 3.2 Key Parameters of Discharge Standards

Key Parameters	Standards for effluents discharged into Group D inland waters (for flow ≤200 m^3/d)	Standards for effluents discharged into coastal waters of Tolo and Port Shelter Water Control Zones (for flow >10 and ≤200 m3/d)	Standards for effluents discharged into Group D inland waters (for flow >600 and ≤800 m^3/d)	Standards for effluents discharged into coastal waters of Tolo and Port Shelter Water Control Zones (for flow >600 and ≤800 m^3/d)	Discharge Standard for the Proposed Development
Biochemical Oxygen Demand BOD (mg/L)	20	20	20	20	20
Suspended Solids TSS (mg/L)	30	30	30	30	30
Ammonia Nitrogen NH_3-N (mg/L)	20	-	20	-	20
E.coli (count/100mL)	1000	1000	1000	1000	1000
Total Phosphorus TP (mg/L)	10	8	8	5	5
COD	80	80	80	80	80
Surfactants	15	15	15	15	15
Oil & grease	10	20	10	20	10
Total Nitrogen	-	20	-	15	15
Nitrate + Nitrite Nitrogen	50	-	30	-	30

Notes:
[i] All units in mg/L
[ii] All figures are upper limits

3.2.3 In order to fulfil the required discharge standards, the proposed STP will provide tertiary treatment and nitrogen, phosphorus removal treatment. The proposed STP will be equipped with biological treatment by Contact Aeration Process, Ultra Filtration System and Ultra Violet (UV) Sterilization. Furthermore, the treated sewerage from the Site will be discharged in accordance with the Water Pollution Control (General) Regulation. Therefore, no adverse water quality impact due to sewerage generation from the proposed development will be anticipated.

3.2.4 The treated sewerage and the drainage discharge from the site boundary will be discharged into the existing drainage system through DSD catchpit SCH1003542. Peak runoff is estimated to be 0.113m^3/s, which exceeds the capacity of the drainage pipes, as shown in Appendix E. Upgrading works of the drainage system will be required to cater the treated sewerage and drainage discharge. The lot owner shall effect the necessary modification/upgrading work of downstream drainage system.

3.2.5 The treated sewage and drainage discharge from the site boundary will be directed into the existing drainage system via DSD catchpit SCH1003542, which connects to box culvert SBP1001645 and subsequently discharges into Tolo Harbour through box

culvert SBP100293. These two box culverts are linked by a channelized culvert passing through Villa Castell. No other beneficial uses of inland water were identified in the downstream receiving waters. The location of the downstream receiving water bodies is shown in Figure 3.3.

3.3 Emergency Measures

3.3.1 Submersible pump, air blower, chemical dosing pump and submersible ejector will be provided with standby unit. An emergency generator will be provided in case electric power supply for whole system fails. As such, suspension of whole STP operation is rare under normal operation.

3.3.2 Regular preventive maintenance service will be provided to check operation condition of equipment and plan the repairing and replacement scheme for equipment and material of treatment system. An operation and maintenance manual will be prepared by the contractor and then the future operator should appoint competent technician(s) to operate the STP. The operator should be fully conversant with the recommended operating procedures as stipulated in the operation and maintenance manual.

3.3.3 In case of STP failure, raw sewerage will be temporarily stored in the equalization tank with volume to 2.19 hours retention time on peak flow, a 30.80m^3 effective tank volume of equalization tank will be provided. The detailed design calculation as shown in Appendix C. Real-time monitor will be provided to monitoring the sewerage flow. In the event of any emergency overflow, on-call crews will follow the overflow emergency response plan and proceed with the best response to correct the problem at once. For example, the alarm system will be activated once overflow occurs. The on-call crews will provide instant response by acknowledging the alarm, to investigate the cause of overflow and correct the problem. The alarm system will be repeated until it is acknowledged. In addition, the on-call crews will ensure the standby pump is switched on and contains the overflow sewage using temporary weirs or vacuum trucks, where applicable. Furthermore, tanker away service will be arranged immediately to draw away the sewerage from equalization tank to avoid flooding from treatment system.

3.4 Recommendation

3.4.1 Upon detailed design stage of the Project, the project proponent will appoint authorized Persons and consultant to design the STP. Detailed information of the proposed STP and upgrading works of the public drainage system will be prepared and submitted to EPD and DSD during the detailed design stage.

4 Environmental Considerations

4.1.1 The proposed on-site STP will be fully enclosed and integrated with ventilation system equipped. Odour treatment facilities shall be installed with the ventilation system to remove any odour from the STP.

4.1.2 To be prudent, the STP should also implement good housekeeping practices to ensure that the continuous operation of the on-site STP will not generate any unacceptable odour impact on the surrounding environment. These should include the regular inspection of treatment components where odour could be produced, regular cleaning and flushing of screens and other sewerage handling equipment to remove odorous sources, proper handling, and disposal of collected grit and sludge, regular inspections and maintenance of the deodorisation and ventilation systems.

4.1.3 As the proposed on-site STP will be fully enclosed by the building structure of the proposed development, the potential breakout noise from the STP upon the surroundings should be minimal.

4.1.4 After the implementation of the above measures, the potential odour and noise impact due to the operation of the on-site STP would be minimal or negligible.

5 Conclusion

5.1.1 A Sewerage Impact Assessment (SIA) has been conducted to evaluate the potential impacts due to the sewerage generation from the proposed development.

5.1.2 The proposed development will serve approximately 904 people and the estimated sewerage generation from the proposed development will be approximately 168.41m^3/day.

5.1.3 As there is no existing public sewerage in the vicinity of the Site and, to fulfil the required discharge standards, an underground Sewerage Treatment Plant (STP) will be provided by the Applicant.

5.1.4 The proposed STP will be designed, constructed, operated and maintained in accordance with the “Guidelines for the Design of Small Sewerage Treatment Plants” published by the EPD to ensure the sewerage generated from the proposed development will be treated to acceptable standards before discharge to the receiving water. Effluent discharge location from the proposed underground STP will be discharged into the existing drainage system to the west of the Site. No adverse water quality impact due to sewerage generation from the proposed development is anticipated.

5.1.5 With the implementation of mitigation measures including the emergency generator, spare pumps, emergency storage and control system etc, no emergency sewage discharge during the operation of STP is anticipated.

5.1.6 The flow of the sewerage generated and stormwater runoff from the Site will, however, exceed the capacity of the existing drainage system. Upgrading works of the drainage pipes will be required to cater the treated sewerage and drainage discharge.

5.1.7 With the proposed upgrading works, it is concluded that there shall be no sewerage impact arising from the proposed development.

Figures

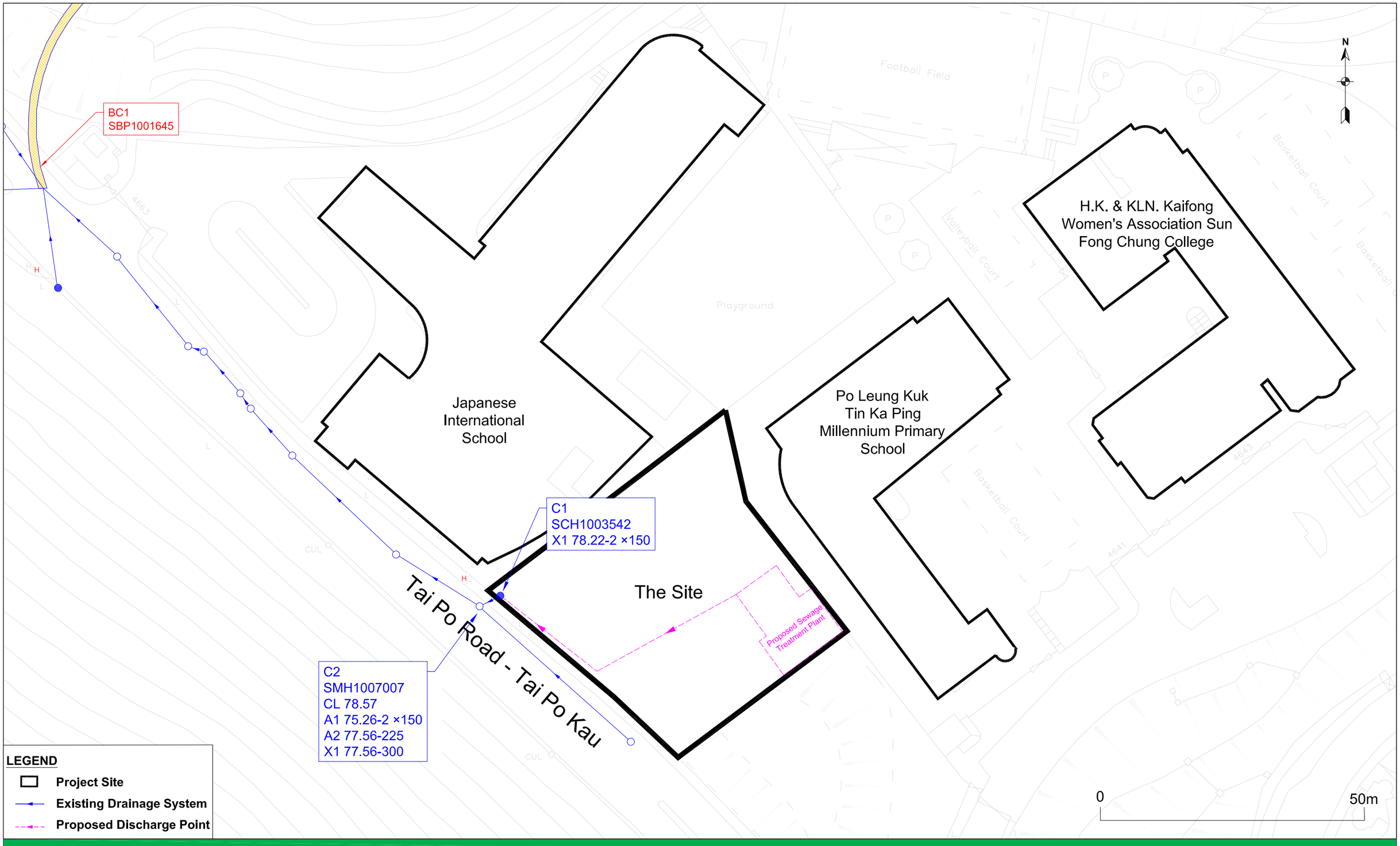
URBAN GREEN

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po

Location of the Proposed Sewage Treatment Plant

Figure 3.1

Rev. 1



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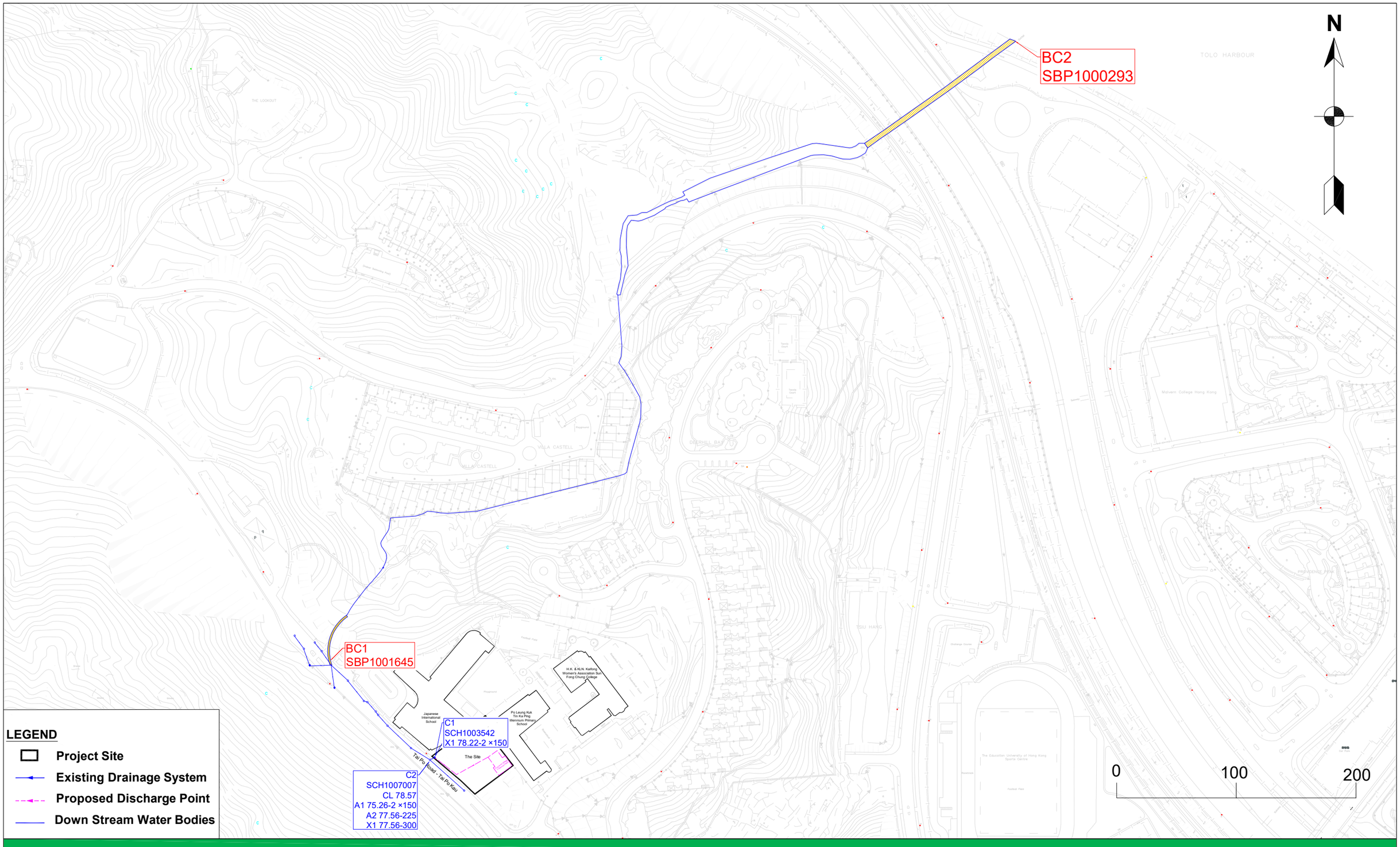
Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po

Proposed Discharge Location

Figure 3.2

Rev. 1



URBAN GREEN

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 in D.D.34 Tai Po

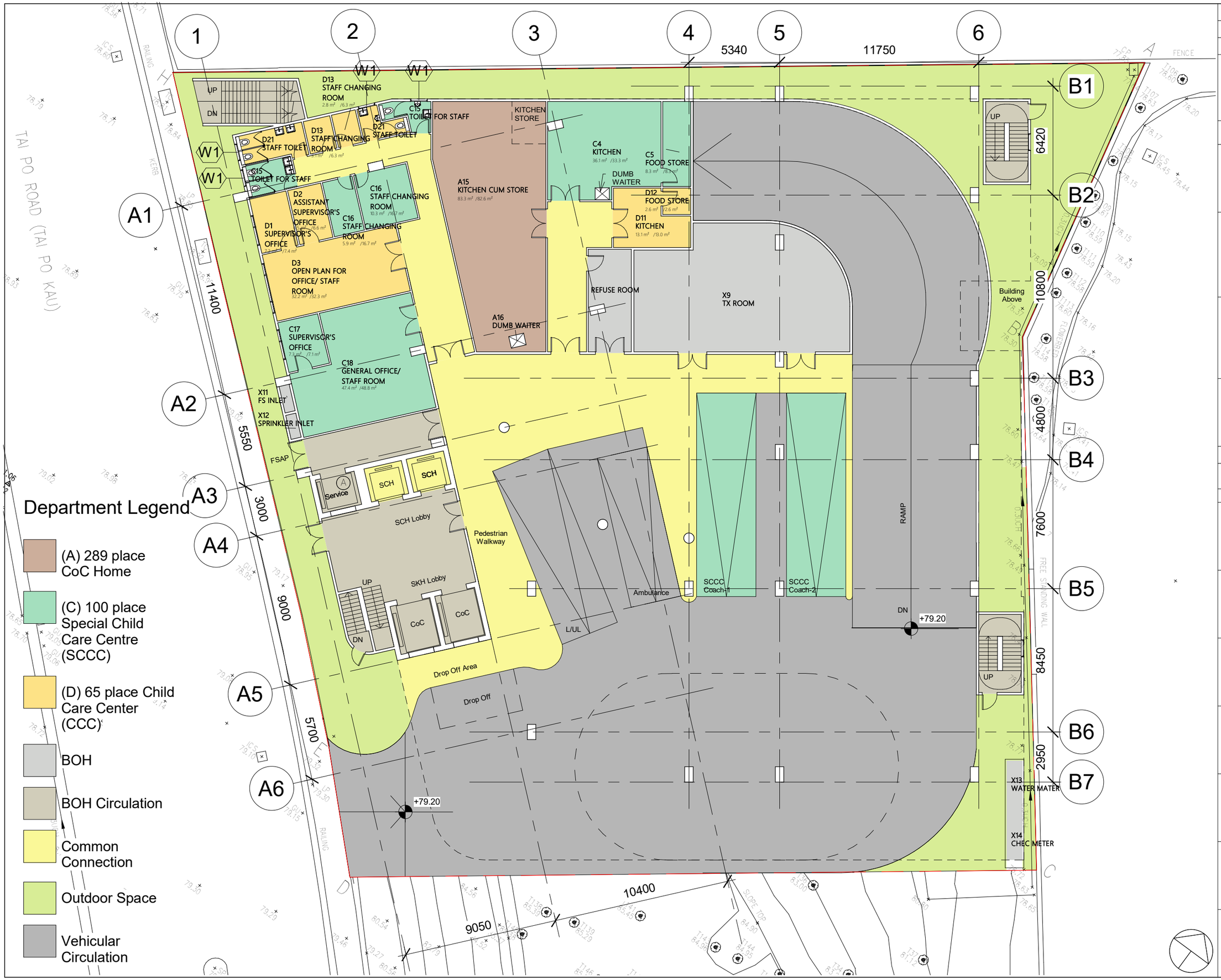
Location of the Downstream Receiving Water Bodies

Figure 3.3

Rev. 0

Appendix A

Development Plan



Department Legend

- (A) 289 place CoC Home
- (C) 100 place Special Child Care Centre (SCCC)
- (D) 65 place Child Care Center (CCC)
- BOH
- BOH Circulation
- Common Connection
- Outdoor Space
- Vehicular Circulation

BD REF -	
BIM REF -	
FSD REF -	

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
GF Plan

SCALE 1 : 200 @A3

DRAWING NO. A001

ISSUE DATE 07/03/24

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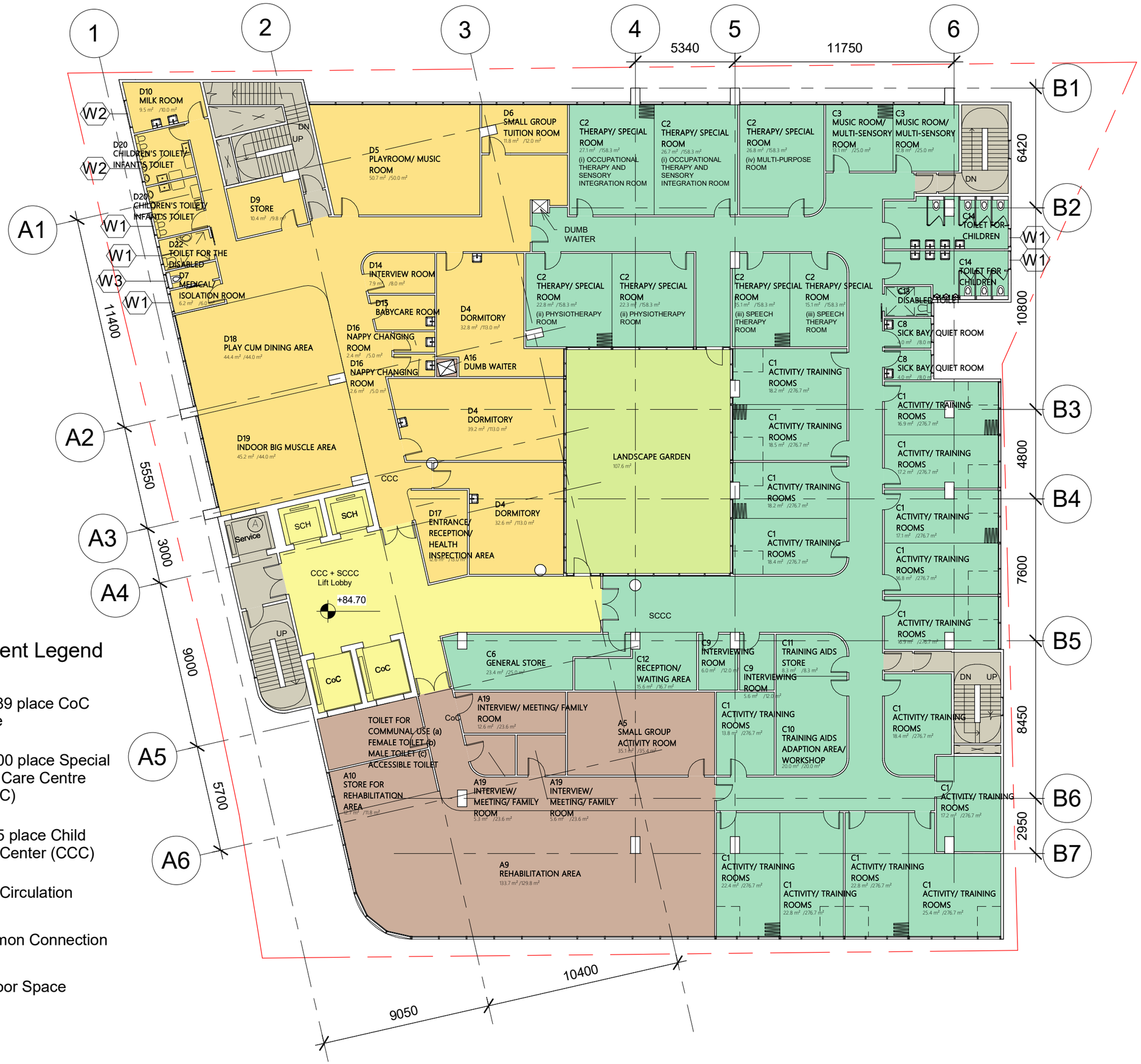

Department Legend

- (A) 289 place CoC Home
- (C) 100 place Special Child Care Centre (SCCC)
- (D) 65 place Child Care Center (CCC)
- BOH Circulation
- Common Connection
- Outdoor Space

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BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
1F Plan

SCALE 1 : 200 @A3

DRAWING NO. A002

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Department Legend

- (A) 289 place CoC Home
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

2F Plan

SCALE 1 : 200 @A3

DRAWING NO. A003

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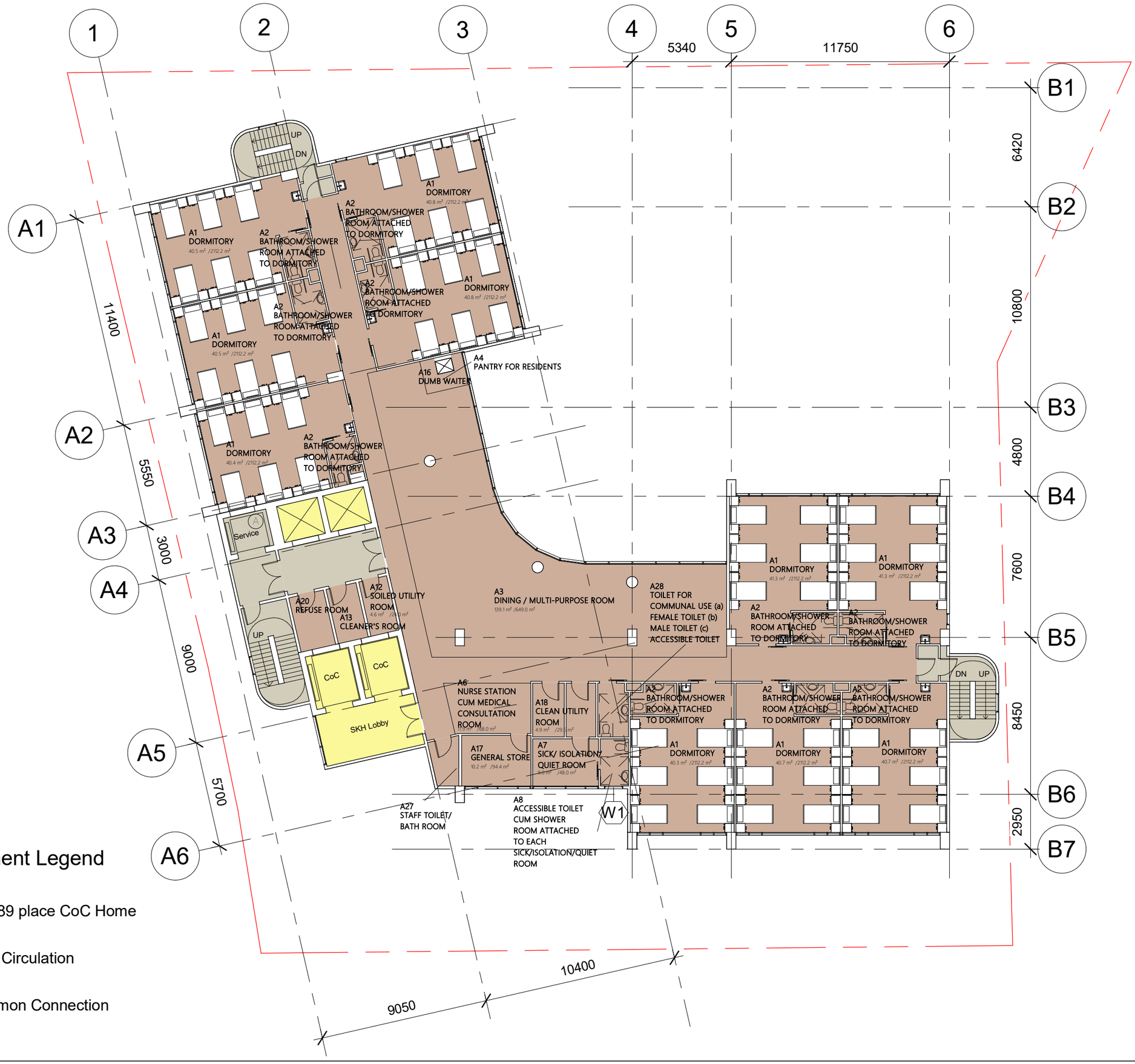

Department Legend

- (A) 289 place CoC Home
- BOH Circulation
- Common Connection

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

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PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

3F Plan

SCALE 1 : 200 @A3

DRAWING NO. A004

ISSUE DATE 28/02/24

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Department Legend

- (A) 289 place CoC Home
- (F) Foster Care Services and Agency based Enhancement of Professional Staff Support Services (FSC & APBSS)
- (G) Staff Training Unit (STU)
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
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PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

1 E005

DRAWING TITLE
7F Plan

SCALE 1 : 200 @A3

DRAWING NO. A005

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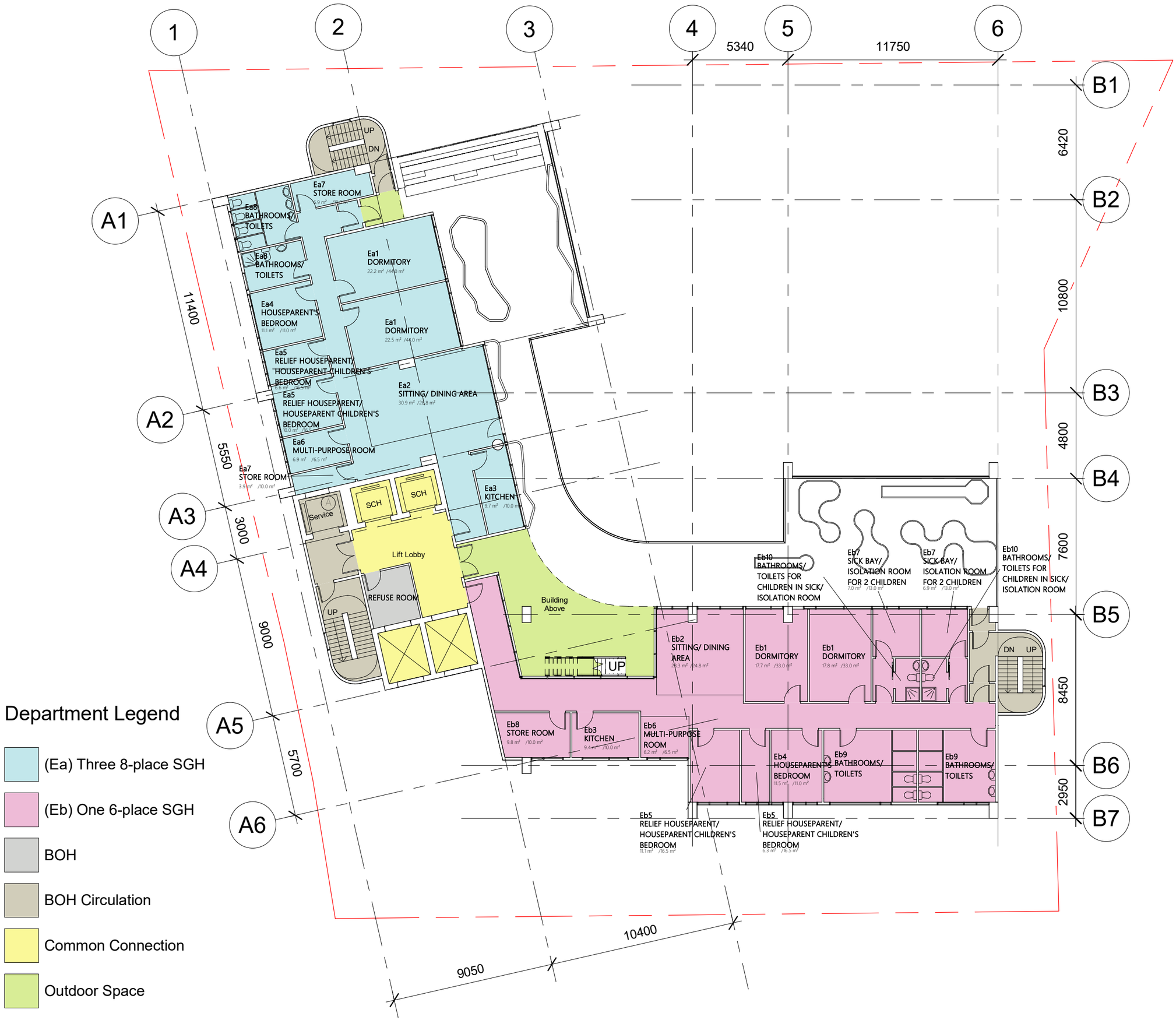
1 E001



Department Legend

- (Ea) Three 8-place SGH
- (Eb) One 6-place SGH
- BOH
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

8F Plan

SCALE 1 : 200 @A3

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LANDSCAPE ARCHITECT
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Department Legend

- (Ec) Three 8-place SGH
- (Ed) Three 8-place SGH
- BOH
- BOH Circulation
- Common Connection
- Outdoor Space

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

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PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

9F Plan

SCALE 1 : 200 @A3

DRAWING NO. A007

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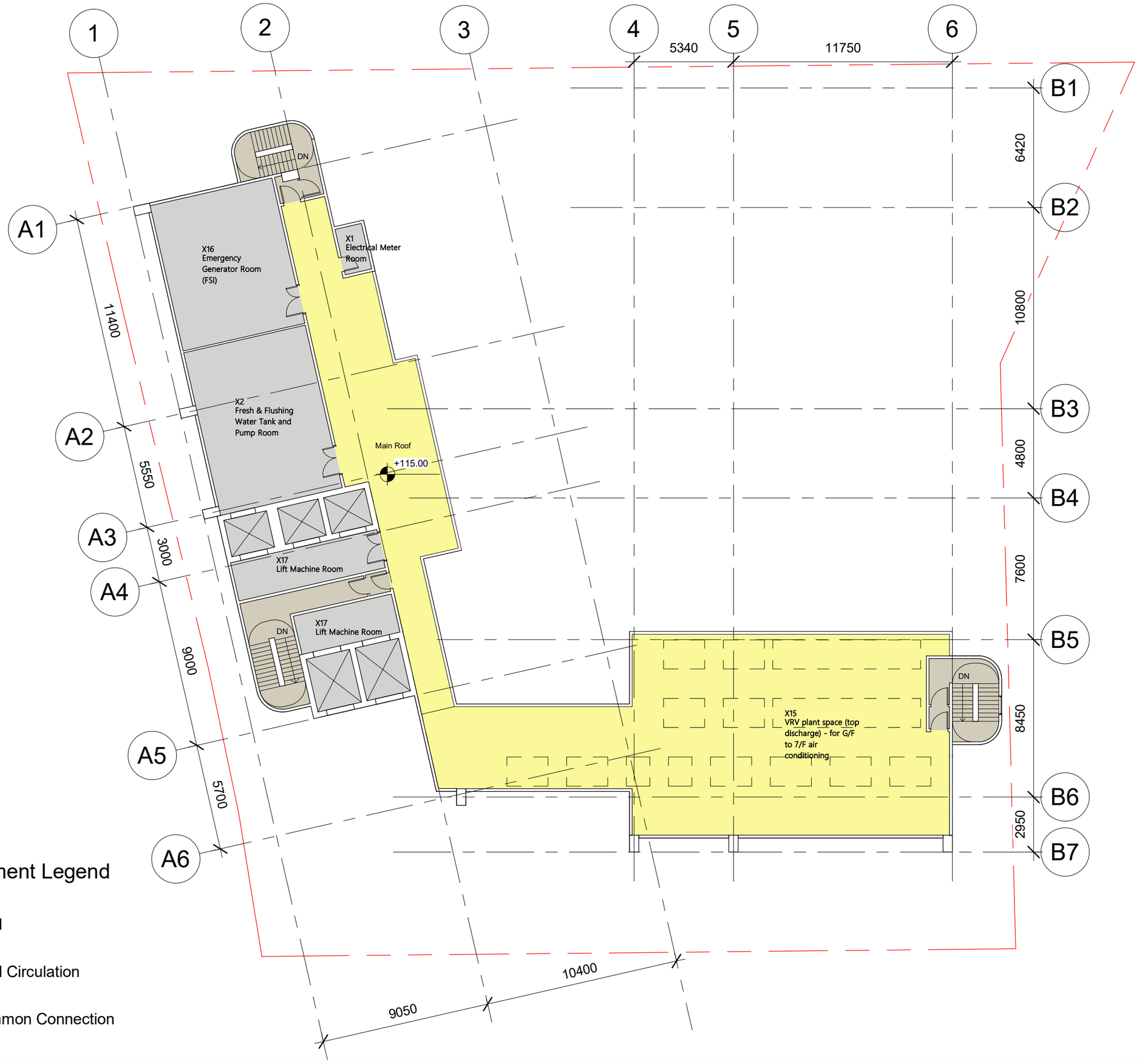

Department Legend

- BOH
- BOH Circulation
- Common Connection

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
RF Plan

SCALE 1 : 200 @A3

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ISSUE DATE 15/01/24

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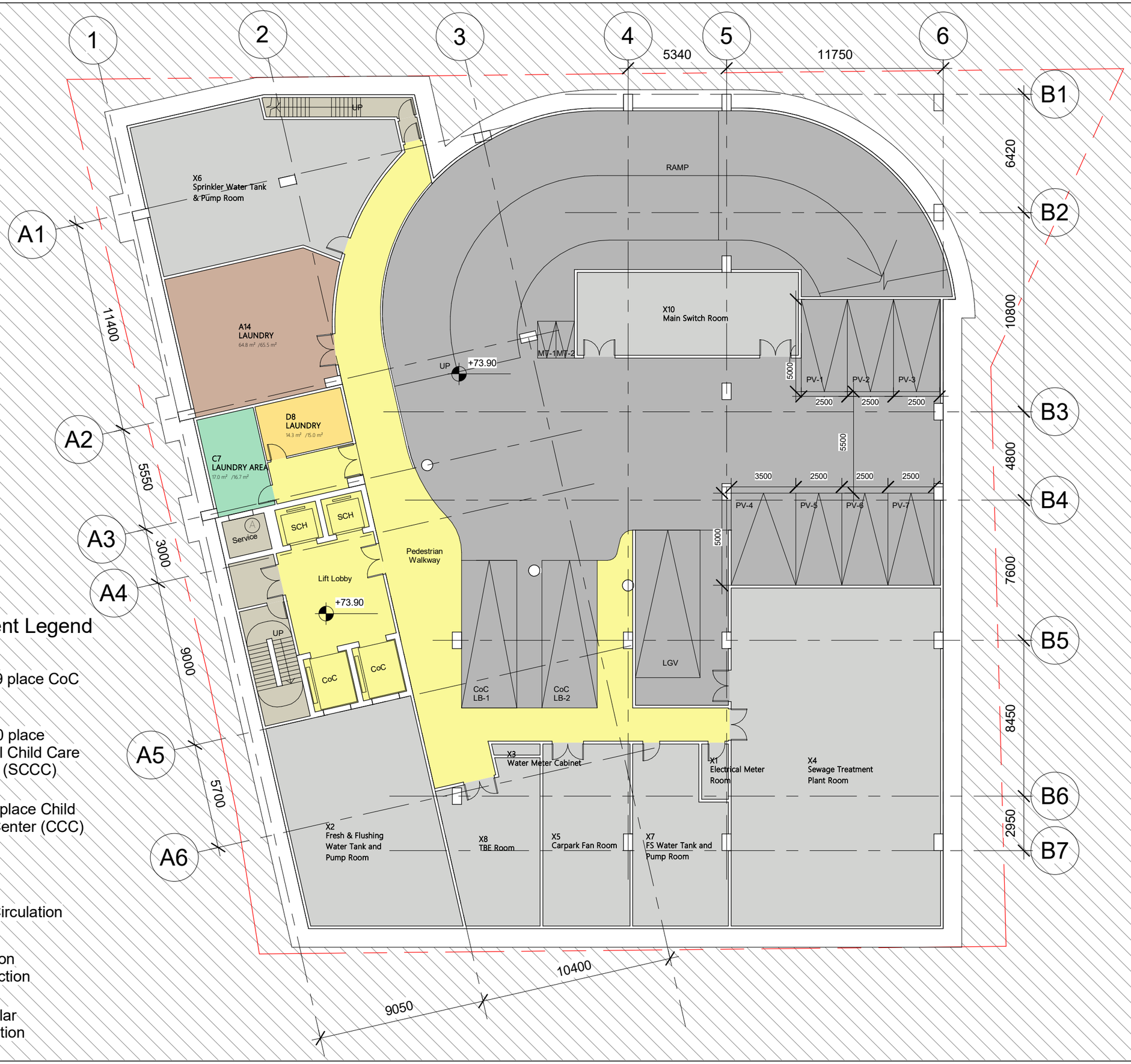

Department Legend

- (A) 289 place CoC Home
- (C) 100 place Special Child Care Centre (SCCC)
- (D) 65 place Child Care Center (CCC)
- BOH
- BOH Circulation
- Common Connection
- Vehicular Circulation

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

B1F Plan

SCALE 1 : 200 @A3

DRAWING NO. A009

ISSUE DATE 15/01/24

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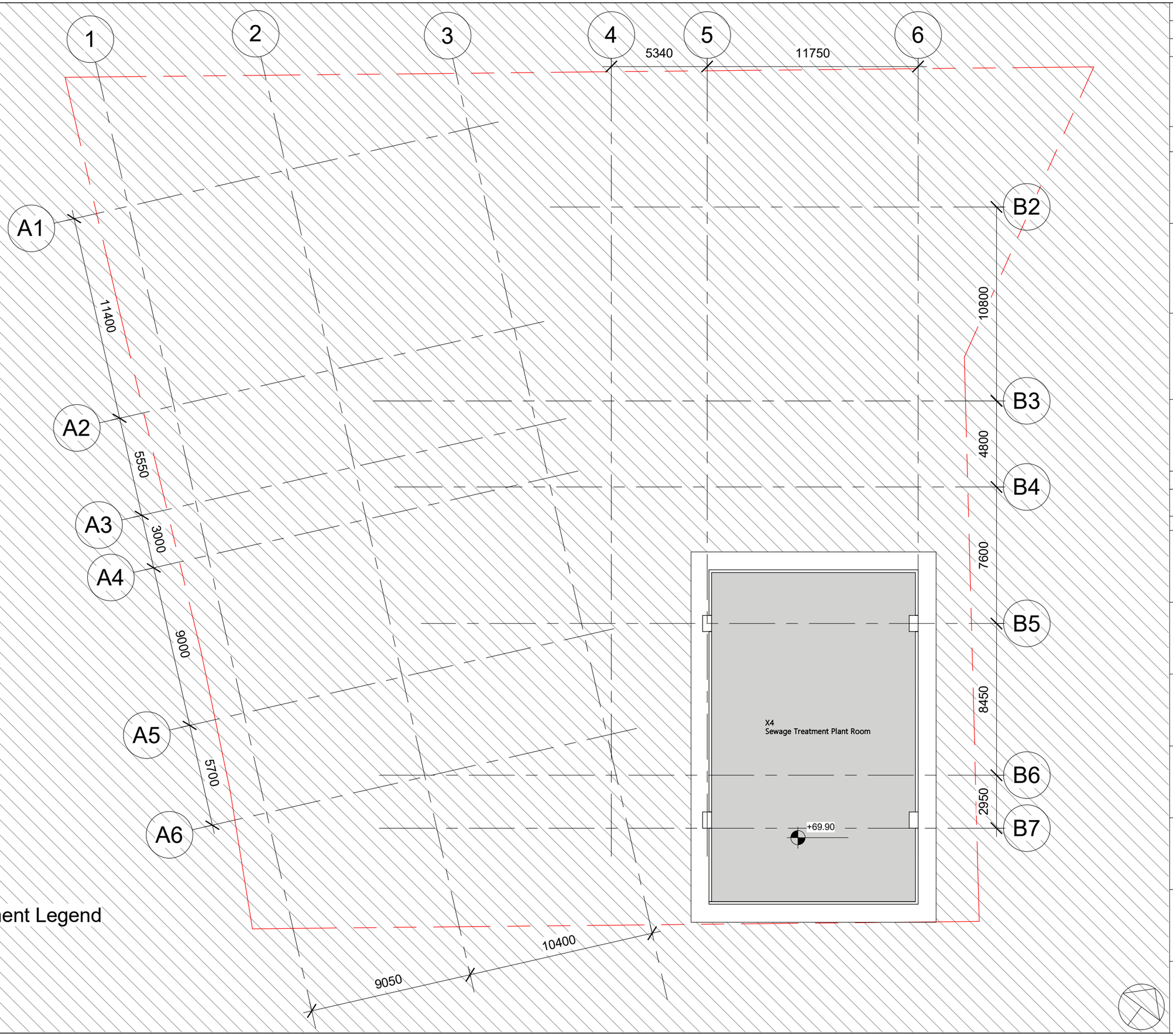

Department Legend

BOH

BD REF -

BIM REF -

FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT

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PROJECT

TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE

B2F Plan

SCALE 1 : 200 @A3

DRAWING NO. A010

ISSUE DATE 15/01/24

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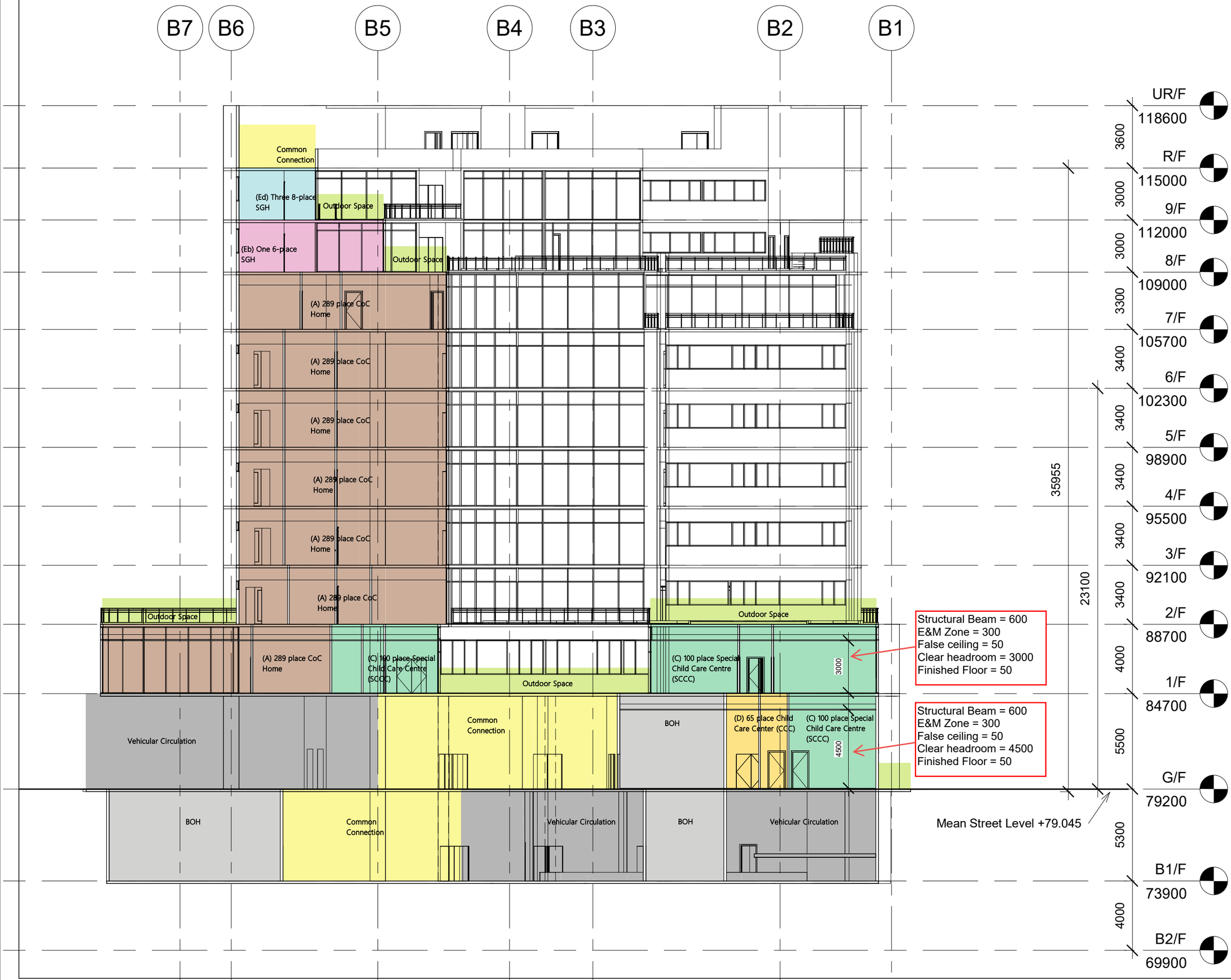

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FSD REF -

Rev.	Date	Amendment	Purpose

PROJECT NO.: HKA-P-01757

CLIENT
Hong Kong Sheng Kung Hui Welfare Council Limited

PROJECT
TFS for The Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex

DRAWING TITLE
Section

SCALE 1 : 200 @A3

DRAWING NO. S001

ISSUE DATE 03/07/24

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Appendix B

Calculation of Peak Flow

Sewage Impact Assessment
Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po

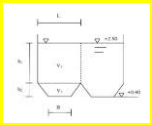
A	**Estimation of Daily Flow from the Proposed Development**			**Remark**
	Daily Flow			
1	**Generation from Staff**			
	Number of staff (non-overnight)	235	persons	Provided by client.
	Unit flow	0.280	m^3/person/day	Referred to the planning unit flow for Commercial Employee + Commercial activities - J11 Community, Social & Personal Services in Table T-2 of GESF[(a)].
	Number of staff (overnight)	20	persons	Provided by client.
	Unit flow	0.280	m^3/person/day	Referred to the planning unit flow for" Services" in Appendix 2 of GDSSTP[(b)].
	Estimated daily flow	71.40	m^3/day	
2	**Generation from Dormitory**			
	Number of residents	454	persons	Provided by client.
	Unit flow	0.190	m^3/person/day	Referred to the planning unit flow for Domestic - Institutional and special class in Table T-1 of GESF[(a)].
	Estimated daily flow	86.26	m^3/day	
3	**Generation from Visitors**			
	Number of persons	190	persons	Provided by client.
	Unit flow	0.015	m^3/person/day	Referred to the unit flow factor for "Visitor" of Table 3-4 of "Wastewater EngineeringTreatment and Reuse" published by Metcalf & Eddy.
	Estimated peak daily flow	2.85	m^3/day	
4	**Generation from Proposed Kitchen**			
	Total Gross Floor Area	83.70	m^2	Provided by client.
	Worker density	5.10	persons/ 100m^2 GFA	Referred to worker density for Restaurants + All Types in Table 8 of CIFSUS(a)
	Total number of persons	5	persons	
	Unit flow	1.58	m^3/person/day	Referred to the planning unit flow for Commercial Employee + Commercial Activities J10 - Restaurants & Hotels in Table T-2 of GESF(b)
	Estimated daily flow	7.90	m^3/day	
	Total estimated daily flow	**168.41**	m^3/day	

Notes:
(a) GESF - "Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning" published by Environmental Protection Department (EPD) in 2005.
(b) GDSSTP - "Guidelines for the Design of Small Sewage Treatment Plants" published by Environmental Protection Department (EPD) in 2006.

Appendix C

Sewerage Treatment Plant Design Calculation (Tentative)

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po
Sewage Treatment Plant Design Calculation

					Remark
A	**Estimation of Peak Flow from Proposed Development**				
	1 **Generation from Staff**				
	Number of staff (non-overnight)	235	persons		Provided by client.
	Unit flow	0.280	m^3/person/day		Referred to the planning unit flow for Commercial Employee + Commercial activities - J11 Community, Social & Personal Services in Table T-2 of GESF[(a)].
	Number of staff (overnight)	20	persons		Provided by client.
	Unit flow	0.280	m^3/person/day		Referred to the planning unit flow for" Services" in Appendix 2 of GDSSTP[(b)].
	Estimated daily flow	71.40	m^3/day		
	2 **Generation from Dormitory**				
	Number of bed spaces	454	beds		Provided by client.
	Unit flow	0.190	m^3/person/day		Referred to the planning unit flow for Domestic - Institutional and special class in Table T-1 of GESF[(a)].
	Estimated peak daily flow	86.26	m^3/day		
	3 **Generation from Visitors**				
	Number of persons	190	persons		Provided by client.
	Unit flow	0.015	m^3/person/day		Referred to the unit flow factor for "Visitor" of Table 3-4 of "Wastewater EngineeringTreatment and Reuse" published by Metcalf & Eddy.
	Estimated daily flow	2.85	m^3/day		
	4 **Generation from Kitchen**				
	Number of persons	5.0	persons		Provided by client.
	Unit flow	1.6	m3/person/day		Referred to the planning unit flow for Commercial Employee + Commercial Activities J10 - Restaurants & Hotels in Table T-2 of GESF(b)
	Estimated daily flow	7.9	m3/day		
	Total estimated daily flow	168.41	m^3/day		
	Average hourly flow (DWF)	7.02	m^3/hour		Dry Weather Flow
	Total estimated peak hourly flow	42.10	m^3/hour		6 DWF
B	**BOD loading**				
	Generation from Proposed Development				
	Total Number of population	904	persons		
	Unit flow	0.055	kg/h/day		Referred to Guidelines for the Design of Small Sewage Treatment Plants by EPD.
	Total BOD loading	49.72	kg/day		
C	**Design Flow for STP**				
	Design Flow	28.07	m^3/hour		Design flow = average hourly flow * 4 DWF
D	**Design Calculation**				
	1 Equalization tank				
	Minimum flow capacity	28.07	m^3		
	Tank length	4	m		
	Tank Width	3.5	m		
	Tank depth	3	m		
	Design water depth	2.6	m		
	Effective water level	2.2	m		
	Effective tank volume	30.80	m^3		
	Retention time	2.19	hr		Minimum retention time of 2 hours at peak flow. Retention time = Tank Volume/(Estimated Peak Hourly Flow - Design Flow)
	2 Contact aeration tank				
	Tank length	5	m		
	Tank width	4	m		
	Tank depth	3.5	m		
	Design water depth	3.1	m		
	Effective tank volume	62	m^3		
	Contact media bed				
	Length	5	m		
	Width	4	m		
	Depth	3	m		
	Volume	60	m^3		
	Detention time	2.21	hr		Detention time = Tank Volume/ Design Flow
	3 Final settling tank				
	No. of hopper	2			
	Hopper length (L)	2.5			
	Hopper base width (B)	1.8			
	Top water level	+2.5			
	Tank bottom level	+0.9			
	Water depth	3	m		
	h_2	0.61	m		h_2= ((L-B)/2)tan60
	h_1	2.39	m		h_1 = Water depth - h_2
	V_1	14.96	m^3		Lx Lx h_1
	V_2	2.83	m^3		/1/3) x h_2 x /(L^2+ L x B + B^2)
	Total volume	35.58	m^3		V_1+V_2
	Retention time	2.53	hr		Retention time = Tank Volume/(Estimated Peak Hourly Flow - Design Flow)
	4 Filtration pump sump				
	Tank length	4	m		
	Tank width	3	m		
	Design water depth	3	m		
	Effective tank volume	36	m^2		
	5 Ultra filtration system				
	No. of module	1	module		
	Effective area	33	m^2/module		According to the Manual-Ultrafiltration Technical
	Effective area in all module	33	m^2		
	Design filtration rate	0.5	m/h		According to the Manual-Ultrafiltration Technical
	Flow capacity	16.5	m^3/hour		
	6 Sluge holding tank				
	Tank length	5.5	m		
	Tank width	5	m		
	Design water depth	5	m		
	Effective tank volume	137.5	m^2		
	BOD loading for biological treatment	45.99	kg/day		7.5% BOD removed after fine bar screen
		273.09	mg/l		=BOD loading/ Total estimated daily flow x 1000
	Effluent BOD concentration	20	mg/l		BOD discharge standard
	BOD removal rate	42.62	kg/day		=Total estimated daily flow x 1000 x (BOD loading for biological treatment - Effluent BOD concentration)x 10^{-6}
	Sludge production rate	42.62	kg/day		1.0 kg/kg BOD removal
		2.110	m^3/day		= sludge production rate (kg/day) / 0.02 / 1.01 / 1000 Assuming that the wet sludge solid content is 2% and specific gravity of 1.01.
	Storage time	65.16	days		=Effective tank volume/ Sludge production rate at least 60 days

Notes:
(a) GESF - "Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning" published by Environmental Protection Department (EPD) in 2005.
(b) GDSSTP - "Guidelines for the Design of Small Sewage Treatment Plants" published by Environmental Protection Department (EPD) in 2006.

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sewage Treatment Plant Design

STP size

	length,m	width,m	depth,m	
Equalization tank	4	3.5	3	
Contact aeration tank	5	4	3.5	
Final settling tank	4.5	3.5	3	
Filtration pump sum	4	3	3	
Sludge holding tank	5.5	5	5	
Side wall	0.5			
Seperation wall	0.3			
	length,m	width,m	depth,m	
STP	15.1	9.8	6	147.98 m2

Appendix D

Relevant Effluent Quality Standards

Proposed Hong Kong Sheng Kung Hui St. Christopher's Complex at Tai Po
Sewage Treatment Plant Design

STP size

	length,m	width,m	depth,m	
Equalization tank	4	3.5	3	
Contact aeration tank	5	4	3.5	
Final settling tank	2.5	1.8	3	
Filtration pump sum	4	3	3	
Sludge holding tank	5.5	5	5	
Side wall	0.5			
Seperation wall	0.3			
	length,m	width,m	depth,m	
STP	15.1	8.8	6	132.88 m2

Appendix E

Existing Drainage System Capacity Calculation

Proposed Development of Hong Kong Sheng Kung Hui St. Christopher's Complex at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po
Existing Drainage System Capacity Calculation

Calculation of Runoff from Site into Storm Drainage Network

Catchment ID	Surface Type	Catchment Area (A), m^2	Catchment Area (A), km^2	Average Slope (H), m/100m	Flow path length (L), m	Inlet time (t_0), min	Time of Concentration (t_0), min	Duration (t_d), min	a (50 year return period)	b (50 year return period)	c (50 year return period)	Runoff intensity (i) mm/hr	Runoff coefficient (C)	C × A	Peak runoff (Q_p), m^3/s
Site Boundary	80% Concrete +20% Grassland (heavysoil), flat	2,208	0.002208	-	-	-	-	5.00	451.3	2.5	0.34	227	0.81	0.001788	0.113

Capacity Flow Estimation and Adequacy Check for Existing Drainage System

Point (channel no.)	Shape	Diameter, m	Depth, m	Slope	Length, m	Manning's roughness coefficient	Cross Section Area, m^2	Wetted perimeter, m	Hydraulic radius, m	Mean velocity, m/s	Capacity flow, m^3/s	Sewage Treatment Plant and Stormwater Catchment Peak Flow, m^3/s	% of capacity flow	Sufficient Capacity? (Y/N)
SMD1000600	Circular Pipe × 2 nos.	0.150	--	0.216	3.0	0.015	0.018	0.471	0.04	3.48	0.123	0.125	102%	N
SWD1011379	Circular Pipe	0.300	--	0.007	18.5	0.015	0.071	0.942	0.08	0.99	0.070	0.125	178%	N
SWD1011376	Circular Pipe	0.300	--	0.011	26.6	0.015	0.071	0.942	0.08	1.22	0.086	0.125	145%	N
SWD1011377	Circular Pipe	0.300	--	0.020	10.7	0.015	0.071	0.942	0.08	1.66	0.117	0.125	106%	N
SWD1011381	Circular Pipe	0.300	--	0.009	8.8	0.015	0.071	0.942	0.08	1.13	0.080	0.125	156%	N
SWD1011383	Circular Pipe	0.300	--	0.018	20.0	0.015	0.071	0.942	0.08	1.59	0.113	0.125	111%	N
SWD1014090	Circular Pipe	0.375	--	0.018	17.4	0.015	0.110	1.178	0.09	1.85	0.204	0.125	61%	Y

Appendix F

Comment from Regional Officer

From: maverickckau@epd.gov.hk
To: Emily Tang
Cc: "SI[RN]13"@Not_For_Reply_From_Internet.hksarg.hk; "E[RN]41"@Not_For_Reply_From_Internet.hksarg.hk
Subject: Re: Request the Information Advice on District Discharge Standard at Taxlord Lot No. T77 In D.D.34. Tai Po
Date: Tuesday, August 27, 2024 4:40:41 PM

Dear Emily,

Refer to your SIA report for Taxlord Lot No. T77 in D.D.34, please find our comment below:

"1. In Table 3.2, it is suggested to also include Nitrate + nitrite nitrogen.
2. In part 5 "Ultra filtration system" under Appendix C, the flow capacity (ie. 6m^3/hour) is not enough for design capacity (ie. 168.41m^3/day). Please review."

If you have further enquiry please contact me at anytime, thank you.

Regards,
Maverick C.K. AU / E(RN)13
Regional Office (North) / EPD
2158 5801 / 9189 0112

From: Emily Tang <emily.tang@urbangreen.hk>
To: "maverickckau@epd.gov.hk" <maverickckau@epd.gov.hk>
Date: 23/08/2024 10:09
Subject: Request the Information Advice on District Discharge Standard at Taxlord Lot No. T77 In D.D.34. Tai Po

---

Dear Mr. Au,

We are the environmental consultant undertake the Sewerage Impact Assessment for a service complex development at the Remaining Portion of Taxlord Lot No. T77 In D.D.34. Tai Po. We have received a comment from the EPD-Water Quality Mgt team regarding the discharge standard of the proposed sewerage treatment plant. It would be appreciated if you could advise if the discharge standard listed in Table 3.2 of our SIA report could comply with the district discharge requirements.

Attached the comment below and full set SIA report for your kind reference. We would be grateful if you could provide us the relevant advice at your earliest convenience. Thank you.

Best regards,

Emily Tang

Urban Green Consultants Limited
23/F, Wui Tat Centre, No. 55 Connaught Road West, Hong Kong
Tel: 3114 1147 Fax: 3114 1580

[attachment "P060-R01-SIA-I4_revised.pdf" deleted by Maverick CK AU/EPD/HKSARG]

Appendix 8

Setback Diagram

Playground

Japanese International School

Po Leung Kuk Tin Ka Ping Millennium Primary School

Basketball Court

TAI PO ROAD - TAI PO KAU

ROAD

77.5

77.2

77.4

78.7

78.6

80

79.2

78.7

85.2

79.7

79.3

79.5

+79.20

+88.70

+109.00

+84.70

+118.60

+115.00

+112.00

+105.70

+79.20

ABOUT 4M

ABOUT 29M

ABOUT 31M

ABOUT 28M

ABOUT 3M

ABOUT 4M

ABOUT 34M

ABOUT 8M

ABOUT 10M

ABOUT 7M

ABOUT 2M

ABOUT 20M

Key Vehicular and Pedestrian Entrance

MLP Legend

- Roof
- Open Space/ Landscaped Areas
- Road
- Site Boundary
- Podium Setback (G/F - 2/F)
- Tower Setback (3/F & Above)

Appendix 9

Response to Departmental Comments

submitted between 27.1.2025 and 21.3.2025

Response to Comments s.16 Planning Application No. A/TP/702

Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility at Taxlord Lot T77 RP in D.D. 34, Tai Po, New Territories

Comments from Director of Environmental Protection **[Contact person: Ms. Winnie TANG (Tel: 2835 1096)]**		**Response**
1	**Sewerage Impact Assessment (Issue 5) (P060/01 Issue 5)** Please be advised that we have no further comments on the SIA with the incorporation of the following textual comments: Comments Section 1.1.2: Please revise to read as "According to the Draft Approved Tai Po Outline Zoning Plan (OZP) (OZP No.: S/TP/29 30) published by Town Planning Board in September 2021 July 2022, the Site is in the "Government, Institution or Community" Zone."	Section 1.1.2 is revised accordingly and reflected in SIA (Issue 6) attached. SIA (Issue 3) was submitted on 18.12.2024 in support of the planning application. For processing the planning application, the relevant changes from SIA (Issue 3) to the latest version (i.e. Issue 6) is highlighted in the FI for PlanD's reference.
2	Please also be reminded: (i.) to tally Section 4 – Environmental Consideration in the SIA with the findings in the finalized EA report (ii.) to seek comments from DSD on the drainage aspects.	(i) Noted. (ii) It is noted that the application including the SIA has been circulated to DSD for comments.

(submitted on 27.1.2025)

Response to Comments s.16 Planning Application No. A/TP/702

Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility at Taxlord Lot T77 RP in D.D. 34, Tai Po, New Territories

Contents

Appendices

(submitted on 5.2.2025)

Table R1: Response to Departmental Comments of EPD, DLO, SWD

Comments from Director of Environmental Protection

Comments from Director of Environmental Protection [Contact person: Ms. Winnie TANG (Tel: 2835 1096)]		**Response**
1	It is noted that Environmental Assessment (EA) (Issue 3) is submitted in support of the planning application. Nonetheless, updated EA (Issue 4) and Sewerage Impact Assessment (SIA) (Issue 5) for the same site have been submitted on 20 December 2024 to seek our comments.	Noted. Please find the latest EA in **Appendix 1**.
2	As per clarification with the environmental consultant, Urban Green, via tele-conversation, we will review and provide comments on the updated EA (Issue 4) and SIA (Issue 5). Hence, attached please find our comments on EA (Issue 4) and SIA (Issue 5) for your reference	Noted. Please find our response to your comments below and relevant changes in **Appendix 1**.
3	**EPD's Comments on EA (Issue 4) and SIA (Issue 5) received on 20 December 2024** General Section 1.1.1.2: Please revise to read as "~~**Draft**~~ **Approved** Tai Po Outline Zoning Plan (OZP) (OZP No.: A/TP/30)"	Noted and revised (**Appendix 1**).
4	Air Quality Section 3.2.1.3: - Please provide more supporting information e.g. the comparison between the estimated traffic flow of Tai Po Road – Tai Po Kau and other local distributors in order to justify the proposed buffer distances for Tai Po Road – Tai Po Kau. - Please move "The relevant minimum buffer … is shown in Figure 3.2" and Table 3.2 to Section 3.7 and combine with Section 3.7.1.5. Then delete :"The relevant buffer … and ASRs is summarized in Table 3.2""	- Noted. Please refer to Section 3.2.1.3, 3.2.1.4 and Table 3.2 (**Appendix 1**). - Noted and revised. Please refer to Section 3.7.1.5 (**Appendix 1**).
5	Table 3.3: Please add grid lines for clarity.	Noted and revised. Please refer to Table 3.3 (**Appendix 1**).
6	Table 3.5: There is no AQO for annual SO2. Please revise.	Noted and revised. AQO for 10 minutes SO2 is presented in Table 3.5 (**Appendix 1**).
7	Noise *Previous comment not addressed properly* Item 1 of the RtC under Noise: Given the TD had no comment on the methodology for traffic forecast only, the traffic consultant should confirm the traffic data is prepared based on the endorsed methodology and mention this in the EA report.	Noted. The traffic consultant has confirmed that traffic data is prepared based on the methodology which approved by TD. Please refer to Section 4.4.1.1 (**Appendix 1**).

(submitted on 5.2.2025)

8	Item 2 of the RtC under Noise: The proposed Type A acoustic window has 2 window openings while the reference case does not have the same nos. of openings. Therefore, it is not appropriate to directly apply the noise reduction of the reference case. Please consider the revised the design of the acoustic windows or apply correction factor for the additional window opening to obtain the noise reduction.	Noted. Correction factor +3dB(A) has been applied to all the room which using Type A acoustic window to calculate the noise reduction. Please refer to Appendix C1, C2 and D for the updated calculation (**Appendix 1**).
9	Item 6 of the RtC under Noise: Please revise the row name of "Inner Window Opening Width" and "Inner Window Opening Width" based on your input in the table.	Noted. Please refer to the updated Table 4.1 (**Appendix 1**).
10	<u>Comment on the revised EA report</u> Section 4.6.1.1: Please obtain the consent from the HyD for the proposed implementation and maintenance of LNRS on the Tai Po Road – Tai Po Kau Section. Our comment on the noise model is reserved upon receipt of the confirmation from the HyD.	Noted. The project proponent is seeking the consent from HyD, HyD's reply will be attached once available (**Appendix 1**).
11	Section 4.6.1.7 and Section 4.6.1.8: - Please provide the brief comparison of the design of the proposed acoustic window with the reference design, such as the change the change of overlapping length, the to justify the noise reduction. - The noise reduction should be capped at noise reduction in the reference case and room size correction should only applicable to adjust the noise reduction downward.	- Noted. Please refer to the updated Section 4.6.1.7 and 4.6.1.8 (**Appendix 1**). - Noted. Please refer to the revised Appendix D.
12	Table 4.1: The title of the table should be revised as "Key Configuration of Proposed Acoustic Window".	Noted and revised (**Appendix 1**).
13	Section 5.5.3.1: - The sentence "Two reference chillers will be evaluated as a single set chiller to accurately represent the chiller system at the JIS will be utilized for the fixed noise calculation" is not understandable. Please revise accordingly.	It is clarified that site observations confirmed that each of chiller set at JIS consists of two individual chillers, each equipped with six fan motors. To accurately represent the chiller system, two reference chillers (each with six fan motors) were combined and evaluated as a single chiller set (12 fan motors in total) for the fixed noise calculations. Please refer to the revised Section 5.5.3.1 (**Appendix 1**).
	- Please mention that the sound power level of the equipment for the PLK is obtained based on the equipment models identified during the site survey on 14 September 2024.	Noted. Please refer to the revised Section 5.5.3.1 (**Appendix 1**).
14	Section 5.5.3.2: please delete the tonality correction and barrier correction as they are not provided in the equation.	Noted and revised (**Appendix 1**).
15	Section 5.5.3.3:	- Noted and revised. It is clarified that the "Cabsorption" in the equation mean "Cfacade"

	- Please clarify the whether the "Cabsorption" in the equation should mean "Cfacade".	and the formula has been revised accordingly (**Appendix 1**).
	- Please also add the correction for intermittency in IND-TM.	- Noted and revised. Please refer to Section 5.5.3.4 for the correction for intermittency and correction for impulsiveness (**Appendix 1**).
	- For the barrier correction, please explain why the wavelength corresponding to 500Hz is selected in the calculation as the noise sources are in broadband spectrum. Alternatively, you can consider to apply a barrier correction of -5 dB(A) if the noise sources is screened off such that there is no direct line of sight to noise sources from the NSRs.	- Noted. -5 dB(A) is applied for the barrier correction, please refer to the Appendix G for the updated calculation (**Appendix 1**).
16	Section 5.5.3.4: Please explain why the correction for impulsiveness and intermittency are not applied.	Noted. Please refer to the Section 5.5.3.4 for the explanation (**Appendix 1**).
17	Section 5.5.3.5: Please add the wording "and the noise sources are totally screened by the PLK Tin Ka Ping Primary School." at the end of the 2nd sentence.	Noted and revised (**Appendix 1**).
18	Section 6.2.1.1: The Practice Note for Professional Persons No. ProPECC PN No. 4/23 "Planning of Residential Developments Against Road Traffic Noise" is not relevant to construction noise and should be deleted.	Noted and revised (**Appendix 1**).
19	Appendix D: - The outer opening width, height and area of the "acoustic window (baffle type) (Type A)" in the "summary table of major parameters of AW(BT) as per ProPECC PN 5/23" is incorrect. - The noise reduction adopted should only be adjusted downward and please revise those higher than the reference value accordingly.	- Noted and revised. Please refer to Appendix D for the updated (**Appendix 1**). - Noted and revised. Please refer to Appendix D for the updated (**Appendix 1**).
20	Appendix F: The monitoring location should be N1, N2 and N3 instead of NSR1, NSR2 and NSR3 respectively.	Noted and revised (**Appendix 1**).
21	Appendix G: - The measuring distance should depend on the information from the manufacturer based on how to sound pressure level in the catalogue was obtained instead of referring to the ISO 3745.	- It is clarified that due to the lack of noise data from the available catalogues and manuals, reference equipment for ST(2/F), TY3 and TY4 which share the similar Cooling capacity, COP and size has been adopted for the calculation. Due to the result is similar to the previous calculation which following ISO 3745, The sound power level is sufficient to represent the proposed chiller (**Appendix 1**).

	- The sound power level of the chillers seems to be on low side. Please provide another catalogue of chiller with similar size to justify the proposed sound power level of the chillers in JIS is acceptable.	- Noted. Please refer to the Appendix G for some other reference catalogue of chiller with similar size share the similar proposed sound power level of the chiller in JIS for supporting (**Appendix 1**).
22	<u>Water Quality</u> Section 7.2: Suggest to include ETWB TC(W) No. 5/2005 "Protection of natural streams/rivers from adverse impacts arising from construction works"	- Noted. Please refer to the last item in the section 7.2.1.1 (**Appendix 1**).
23	Section 7.2.1.1 and Section 7.4.4.1: Please note that ProPECC NO 2/23 has been superseded by ProPECC PN 2/24. Please update all relevant sections accordingly.	Noted and revised (**Appendix 1**).
24	Section 7.2.1.2 (Rtc No. 1): Please clarify Port Shelter WCZ.	Noted and revised. It is clarified that it is Tolo Harbour WCZ instead of Port Shelter WCZ (**Appendix 1**).
25	Table 7.1: - Please include Water Quality Objectives for Watercourses in Tolo Harbour and Channel Water Control Zone as well.	- Noted, please refer to Table 7.2 for the Water Quality Objective for Watercourses in Tolo Harbour and Channel Water Control Zone (**Appendix 1**).
	- Please check if the WQO for salinity is accurate.	- Noted and revised (**Appendix 1**).
26	Section 7.2.1.2, Section 7.3.1.2 and Table 7.3: please note that EPD's River Water Quality in Hong Kong in 2023 has been published and update these sections.	Noted and updated accordingly. Please refer to Section 7.2.1.2, Section 7.3.1.2 and Table 7.4 (**Appendix 1**)..
27	Table 7.2 and Figure 7.1: With reference to EPD's Hong Kong Environmental database (HKED), there are several watercourses in close proximity to the Project Site. Please review if they should be included as WSRs.	Noted and revised. Please refer to Figure 7.1 and Table 7.3 for the updated WSRs (**Appendix 1**).
28	Section 7.4.1.4: - 7th bullet: please remove "with backfill". - 8th bullet: suggest to remove as repetitive with Section 7.4.2.1.	Noted and revised (**Appendix 1**).
29	Section 7.4.3.3.: Suggest to remove as this paragraph as the Project foes not fall with Water Gathering Grounds.	Noted and revised (**Appendix 1**).
30	Section 7.4.4: Please remove this Section and move the relevant points to under Section 7.4.1.4 for construction site drainage (without replicating the existing points).	Noted and revised (**Appendix 1**).
31	Section 7.5.2.3: - Best Management Practices (BMPs) for stormwater discharge to minimize storm water pollution arising from the Project shall be incorporated.	- Noted and revised. Please refer to Section 7.5.2.3 (**Appendix 1**).

	- Suggest revise as "… to comply with the relevant regulations **and guidelines (e.g. ProPECC PN 2/24)**."	- Noted and revised. Please refer to Section 7.5.2.3 (**Appendix 1**).
32	Section 7.5.2.4: Suggest revise as "With the abovementioned mitigation measures implemented, no adverse water quality impact is anticipated during both construction and operation phase."	Noted and revised accordingly (**Appendix 1**).
33	Figure 7.1: Suggest to use different colours to represent WSR 7 and WSR 8 which are not watercourses.	Noted and revised. Please refer to updated Figure 7.1 (**Appendix 1**).

Comments from District Lands Officer/Tai Po, Lands Department

Comments from District Lands Officer/Tai Po, Lands Department [Contact person: Ms. Algie LEUNG (Tel: 2654 1187)]		**Response**
1	The application site comprises an Old Schedule Agricultural Lot (OSAL) 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 site does not fall within any village environs and is not covered by any MOT/ Building Licence. Existing, the site is vacant and two slope feature nos. 7/NE-C/C392(2) and 7/NE-C/C440(1) situated therein are affected.	Noted.
2	At present, no application for lease modification / land exchange application has been received by this office. Should the Town Planning Board approve the subject planning application, the lot owner(s) is required to submit a lease modification / land exchange application to LandsD to implement the proposed development. The application, if any, will be considered by the LandsD acting in the capacity of the landlord 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, as may be imposed by the LandsD.	Noted.
3	According to para. 8.5.4 of the Planning Statement, the Applicant proposed two schemes to facilitate the site formation works of the application site, viz. either remove (Scheme 1) or retain (Scheme 2) slope feature no. 7NE-C/C403 which wholly falls within the adjoining Tai Po Town Lot No. 156. Since the slope feature falls within a private lot and is maintained by the concerned lot owner(s), consent/agreement from the lot owner(s) shall be obtained prior to any removal or strengthening works and/or interference as proposed in both schemes.	Noted.
4	I would leave the relevant departments to offer comments on the technical impact assessments attached to the planning application, namely Landscape Proposal at Appendix 2, Traffic Impact Assessment at Appendix 3, Visual Impact Assessment at Appendix 4, Geotechnical Planning	Noted.

	Review Report at Appendix 5, Environmental Assessment at Appendix 6 and Sewerage Impact Assessment at Appendix 7 thereto.	
5	According to para. 2.1.2 of the Planning Statement, the Applicant advised the application site has an area of about 2,191.3m^2. However, our records revealed that the registered site area of the lot is 2,210.2m^2. The area of the application site and other details submitted by the Applicant have not been verified.	A certified land surveyor was engaged in the project team to determine the lot boundary. The site area was found to be (about) 2,191.3m^2 by initial measurement (which is slightly smaller than 2,210.2m^2 by less than 1%). Therefore, it was appropriate to be used in the TFS and in the current planning application as a conservative estimate. Should the subject planning application be approved, a lease modification / land exchange application will be submitted to LandsD to implement the proposed development. The site area will be subject to detailed survey and verification at that stage.

Comments from Social Welfare Department

Comments from Project Planning Section (Team 2), Planning & Development Branch, Social Welfare Department [Contact person: Ms. Sami HUI (Tel: 3575 8427)]		**Response**
1	**HKSKH's Development Proposal** The application site (about 2 191.3 m^2) falls within an area zoned "Government, Institution or Community (G/IC) on the approved Tai Po Outline Zoning Plan No. S/TP/30 and is subject to a maximum building height of eight storeys. Currently, the site is vacant and occupied by a massive hummock.	Noted.
2	A Lotteries Fund grant of $5.394 million was approved in January 2021 for HKSKH to conduct a technical feasibility study (TFS) for the development of the site, and the TFS is now underway. According to HKSKH's application, a 10-storey building with two levels of basement (as carpark, sewage treatment plant and supporting facilities) with an estimated total GFA of about 12 521.1 m^2 will be built on the site for the provision of the following facilities – **Welfare facilities on the "Shopping List" on a subvention basis**	Noted.

	a) a 289-place Care and Attention Home for the Elderly with Continuum of Care (including 240 subvented and 49 self-financing places); b) a subvented 100-place Special Child Care Centre; c) an aided 65-place Child Care Centre; d) a subvented 30-place Small Group Home; **Other Welfare Facilities** e) a subvented Foster Care Services and Agency based Enhancement of Professional Staff Support Services; and **Welfare-related ancillary to be operated on a self-financing basis** f) a Staff Training Unit (STU).	
3	**s.16 Planning Application** 3. To give effect to the proposed development, HKSKH has made a s.16 application to the Town Planning Board (TPB) for seeking planning permission for minor relaxation of the building height restriction from 8 storeys to 10 storeys for the G/IC site.	Noted.
4	We consider that HKSKH's development proposal is support-worthy as the proposed welfare facilities will meet the existing and future service demand for elderly, child care and rehabilitation services, and is in line with the government's policy as well as the intention of SSS. Thus, we support HKSKH's s.16 Planning Application.	Noted.
5	It is noted that the service proposal and layout plans are the same as those submitted by HKSKH under its 3rd draft of TFS report dated 31.10.2024, and SWD's and ArchSD's comments were provided to HKSKH on 13.12.2024 for review. HKSKH should duly address our previous comments and revise its planning application accordingly. Specifically, HKSKH's attention is drawn to the following -	Noted.
	(i) Para 5.3.1 and Para 5.3.2 of Code of Practice for Residential Care Homes (Elderly Persons) June 2024 (Revised Edition) stipulate that under section 20 of the Residential Care Homes (Elderly Persons) Regulation, no part of an RCHE shall be situated at a height more than 24 m above the ground floor, measuring vertically from the ground of the building.	Only ancillary facilities of RCHE are situated at a height more than 24m above the ground floor, to which the residents normally do not have access. The arrangement of CoC home is subject to detail design in TFS submission.
	(ii) Inconsistencies (e.g. development parameters and programme) were found between the planning statement and TFS report. Please review.	Regarding the calculation of GFA, please be advised that it is assumed in this planning submission that GFA equals to Construction Floor Area (CFA), i.e. no GFA concession. Normally the actual GFA will not exceed CFA.

		The development parameters and programme are subject to detailed design and to be approved in TFS submission.
	(iii) Please revise the supporting planning statement p.9 (Appendix I);	P.9 of the Planning Statement is amended accordingly (**Appendix 2**).
	(iv) Please note that the short form of the scheme is “Special Sites Scheme.” (p.10) (Appendix II);	P.10 of the Planning Statement is revised accordingly (**Appendix 2**).
	(v) Spelling mistakes are found and relevant pages are extracted. Revisions are marked in RED (Appendix III). Please revise.	Suggested changes are incorporated into the Planning Statement (**Appendix 2**).

Response to Comments s.16 Planning Application No. A/TP/702

Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility at Taxlord Lot T77 RP in D.D. 34, Tai Po, New Territories

Contents

Appendices

(submitted on 20.2.2025)

Table R1: Response to Departmental Comments of Planning Department

Comments from Urban Design & Landscape Section, Planning Department

	Comments from Chief Town Planner/Urban Design and Landscape, Planning Department [Contact person: Mr. Jason KO (Tel: 3565 3941)]	**Response**
1	**Visual Impact Assessment (VIA)** Plans of Key Public Viewing Points (VP) (P. 2 & 6) and Table for VP5 (P. 9 & 10) – VP5 is at the Lake Egret Nature Park and the activity of viewers there should also and mainly be recreation in nature.	Noted. The Type of Public Viewers has been updated (**Appendix 1**).
2	There are some observations of the photomontages. For examples: (a) Viewpoint (VP)1 Photomontage (P. 11) - It seems that the proposed development should appear to be slightly shorter.	Noted. The VP1 Photomontage has been updated (**Appendix 1**).
	(b) VP4 Photomontage (P. 12) - It seems that the proposed development should shift to the left such that its upper part shall be partially visible behind the Po Leung Kuk Tin Ka Ping Millennium Primary School instead of the H.K. & KLN. Kaifong Women's Association Sun Fong Chung College.	Noted. The VP4 Photomontage has been updated (**Appendix 1**).
3	Judging from the VP1 Photomontage and the visual analysis in Sections 2 to 4 (taking into account our observations above on the accuracy of photomontage), only a small part of the proposed development would be visible, causing small visual obstruction to sky view and reduction of visual openness. The grading of Effect on Public Viewers and visual impact is considered as "slight" and "slightly adverse" respectively at VP1.	Noted. The mentioned description has been updated (**Appendix 1**).
4	Sections 2 to 4 for VP2 – There is contradictory information/analysis among VP2 Photomontage and the visual analysis in Section 3 and Section 4.3 on whether there would be loss of vegetation/woodland in front of the proposed development, which should be clarified to determine the visual impact at VP2.	Noted. The information has been revised and clarified (**Appendix 1**).

	Comments from Chief Town Planner/Urban Design and Landscape, Planning Department [Contact person: Mr. Ivan WONG (Tel: 3565 3947)]	**Response**
1	**General Comments** Based on the aerial photo of 2023, the site is situated in an area of residential urban fringe landscape character surrounded by schools, existing low-rise residential buildings in adjacent "R(C)" zone, and vegetation and woodland in adjacent "CA" and "GB" zone. The proposed amendment is considered generally not incompatible with the surrounding environment.	Noted.
2	With reference to the Appendix 2 - Landscape Proposal, 77 trees of common species are identified within the application boundary. All trees (including 46 undesirable species and 1 dead tree) will be affected by the proposed development and are proposed to be felled. Mitigation measures including 46 trees (DBH of 80-95mm) within application boundary are proposed. Landscape	Noted.

	treatments, such as sensory garden, aromatic garden, play elements, seating areas, fish pond and farming box etc. are proposed. According to para 4.3 and 4.4 of Appendix 2, more than 20% greenery coverage will be provided and approx. 325 sqm of open space provision for an estimated population of 325 residents in accordance with the requirements of the HKPSG is proposed. Significant adverse landscape impact on the existing landscape resource arising from the proposed use is not anticipated.	
3	**Advisory Comments on s16 form and Planning Statement (PS)** It is noted in the s.16 application form that no tree felling is caused by the proposed development, which is different with the planning statement provided. Please review and ensure correct statement/ information is provided.	Please note a clarification that all trees are proposed to be felled. A replacement page of the application form is in **Appendix 4**.
4	Planning Statement (PS) Figure 6, 7:- It is noted that the extent of open space/ landscape area is different from that indicated in other part of the PS. Please review and ensure consistency.	Figures 6 and 7 are revised to ensure consistency (**Appendix 2**).
5	**Advisory Comments on Appendix 2 – Landscape Proposal** Appendix 2 para 4.1(ii):- Please clarify what is the soft moss touching facility and indicate its location on the landscape layout plan.	The wordings of "soft moss touching" is deleted from Para. 4.1(ii) in **Appendix 3**.
6	Tree assessment schedule:- Tree treatment "in initial/ approved application" is noted in the "Proposed Treatment" column. Please clarify whether the approval of proposed tree works have been obtained from relevant departments.	The proposed treatment of existing trees will be submitted to relevant departments for approval in detail design stage. Approval of those proposed tree treatment is yet to be obtained at the moment (**Appendix 3**).
7	Tree group photos/ tree photos should be provided to facilitate the application.	Please be clarified that tree group photos and aerial photos had been provided in Appendix C of Landscape Proposal. Individual tree photos can be provided if considered necessary.
8	Landscape layout plan:- Separate legend should be provided for pedestrian pavement/ road for clarity.	Noted. The Landscape Layout Plan has been revised (**Appendix 3**).
9	Landscape layout plan:- Legend should be provided for play equipment.	No play equipment is proposed in this landscape design (**Appendix 3**).
10	Please provide key plan and section cutline for landscape section.	Noted. Key Plan and Section cutline had been added (**Appendix 3**).
11	Section B-B:- The tree planting area adjacent to the dining area seems do not have sufficient soil depth (i.e. 1200mm as stated in para 4.5(i)) for the proposed new tree. Furthermore, liquidambar formosana is a large tree species and might not be suitable for podium area and adjacent to building facade. The applicant is advised to review whether this species is suitable and is reminded that sufficient space for root growth and crown spread should be provided.	Noted. The tree planting area will be provided with sufficient soil depth for tree growth, please refer to the slab level and top of soil level, there is a berm to allow the tree growth. In addition, the proposed tree species has been changed to *Ilex*

		rotunda instead of *liquidambar formosana* (**Appendix 3**).
12	The applicant is suggested to provide more sections, in particularly from northwest to southeast of the site to show the interface of the site and the surrounding terrain.	Noted. Please refer to Appendix E for additional section for your information (**Appendix 3**).
13	The applicant is reminded that approval of the application does not imply approval of tree works such as pruning, transplanting and felling. The applicant should seek approval for any proposed tree works from relevant departments prior to commencement of the work.	Noted.

Comments from Sha Tin, Tai Po & North District Planning Office, Planning Department

Comments from Sha Tin, Tai Po & North District Planning Office, Planning Department [Contact person: Mr. Benson LAU (Tel: 2158 6225)]		**Response**
1	**General Comments** The subject site falls within an area zoned "Government, Institution, or Community" ("G/IC") on the approved Tai Po Outline Zoning Plan (OZP) No. S/TP/30 and subject to a building height restriction of eight storeys. According to the Notes of the OZP, 'Social Welfare Facility' use is always permitted under the "G/IC" zone and no planning permission from the Town Planning Board (TPB) is required. As the proposed building height of 10 storeys exceeds the building height restriction of eight storeys under the "G/IC" zone, s.16 planning application for relaxation of building height restriction is required.	Noted.
2	It seems that both 'TPKM Primary School' and 'PLKTKPM Primary School' are used for the same school in the Planning Statement and technical assessments. Please make sure the abbreviation is in order.	Noted. Abbreviation of the school in Planning Statement is revised for consistency (**Appendix 2**).
3	**Specific Comments** Planning Statement - Para. 6.1.1 (b) – please review if 'Residential Care Home for the Elderly' should read 'Care and Attention Home providing Continuum of Care' (i.e. CoC Home) as stated in the technical assessments, e.g. Landscape Proposal and Traffic Impact Assessment.	Para. 6.1.1(b) of the Planning Statement is revised accordingly (**Appendix 2**).
4	Landscape Proposal Section B-B – please show the cutting line of Section B-B on the plan.	A cut line is shown on Section B-B on the plan (**Appendix 3**).
5	It is noted that some undesirable species e.g. *Leucaena leucocephala* could be excluded from tree compensation according to "Lands Department Practice Note Issue No. 6/2023 - Guidance Notes on Tree Preservation and Removal Proposal for Building Development in Private Projects". Please consider highlighting relevant information in the submission.	Noted. The "Landscape Resources Description" Table is updated accordingly. The relevant indication of such undesirable species is also highlighted with red boxes in the Landscape Proposal (**Appendix 3**).

6	<u>Traffic Impact Assessment</u> Table 2.1 – Small Group Home (SGH) is missing from the table. Please elaborate.	Noted. An update is made to Table 2.1 in the replacement pages of TIA (**Appendix 5)**. SGH has already been considered in the approved TIA.
7	<u>Table 4.6</u> (a) First item: the application number should be '~~**S**~~***Y***/TP/28' and the planned development name should read 'Proposed ~~**Public and Private**~~ Housing Development [at Tsiu Hang]'.	Relevant item is updated accordingly in Table 4.6 **(Appendix 5)**.
	(b) Second item: please remove application no. A/TP/656 as it is for proposed social welfare facility at the subject site only.	Noted. Since the development (App. No. A/TP/656) is under construction during our traffic survey period in the TIA, thus, the additional traffic development from this site is considered.
	(c) Third item: the planned development name should read '~~**Proposed Amendments to the Approved Tai Po Outline Zoning Plan No. S/TP/28 (Item A) [at To Yuen Tung]**~~ ***Public Housing Development at To Yuen Tung***' with application number removed. The site falls within an area zoned "R(A)10" which is subject to a total maximum plot ratio (PR) of 6.8 including a non-domestic PR of 0.3. According to RNTPC Paper No. 7/21, the estimated no. of flats is 2,400. Please rectify the table.	Noted. Please refer to Table 4.6 of **Appendix 5**.
	(d) Fourth item: please note that the completion year for the development is 2024. Please ensure the parameters as stated in the development scale column are up-to-date.	Noted. Please refer to Table 4.6 of **Appendix 5**.
	(e) Sixth and seventh items: please ensure the parameters as stated in the development scale column are up-to-date.	Noted. Please refer to Table 4.6 of **Appendix 5**.
	(f) s.16 planning application no. A/TP/694 (Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility (Residential Care Home for Persons with Disabilities) (RCHD) in "Government, Institution or Community" Zone and Proposed Social Welfare Facility (RCHD)) was approved by the RNTPC of the TPB on 10.5.2024. Please consider if it should be included as one of the planned developments in the table.	Noted. This development site is a G/IC development with only 6 private car parking spaces and 1 light bus loading/ unloading. Thus, it is anticipated that the traffic generation and associated traffic impact is minimal and is not included in the approved TIA.
8	<u>Environmental Assessment Report (Issue 5 dated February 2025)</u> Para. 1.1.1.2 – the sentence should read "According to the Approved Tai Po Outline Zoning Plan (OZP) (OZP No.: S/TP/30) ~~**published by Town Planning Board**~~ ***gazetted*** in July 2022, the Site is in the "Government, Institution or Community" Zone."	Noted and revised accordingly (**Appendix 6**).

(submitted on 20.2.2025)

9. Impacts of Development Proposal 擬議發展計劃的影響

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

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	☑
Does the development proposal involve the operation on the right? 擬議發展是否涉及右列的工程? (Note: where Type (ii) application is the subject of application, please skip this section. 註：如申請涉及第(ii)類申請，請跳至下一條問題。)	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 2,191.3 sq.m 平方米 ☑About 約 Depth of excavation 挖土深度 9.3 m 米 ☑About 約
	No 否	☐

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)

Please refer to the planning statement.
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Response to Comments s.16 Planning Application No. A/TP/702

Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility at Taxlord Lot T77 RP in D.D. 34, Tai Po, New Territories

Contents

Appendix 1: Replacement Pages of SIA

(submitted on 6.3.2025)

Table R1: Response to Departmental Comments

Comments from Social Welfare Department

	Comments from Social Welfare Department, dated 7.2.2025 [Contact person: Ms. HUI Kai Shan, Sami (Tel: 3575 8427)]	**Response**
1	Provided that the applicant NGO will address our comments conveyed on 13.12.2024 in its upcoming TFS submission and to incorporate those changes into its Section 16 planning application (if applicable), we have no further comments on the subject submission.	Noted.

Comments from Drainage Services Department

	Comments from Drainage Services Department, dated 20.2.2025 [Contact person: Mr. LAU Hong Lok, Justin (Tel: 2300 1545)]	**Response**
1	Please note that EPD is the planning authority of sewerage infrastructure, submission of sewerage impact assessment (SIA) or any sewerage review shall be circulated to SIG/EPD for their comments and approval. Subject to EPD, it may be required to assess and demonstrate the potential sewerage impact to the existing sewerage system, and formulate appropriate mitigation measures if any adverse sewerage impact is identified;	Noted.
2	Section 3.1.4 Table 3.1 and Appendix B - Please ensure that the proposed unit flow factors have been reviewed and agreed with the EPD. Special attention may be required if there may be unusual water consumption and wastewater/sewage generation that have not been accounted for by the typical unit flow factors recommended in the EPD's Guidelines;	Noted. The SIA report has been reviewed by EPD and no further comments are received.
3	Section 3.2 - Please note that the proposed use and design of the proposed on-site sewage treatment plant should be subject to the views and agreement of EPD and the relevant statutory requirements.	Noted. The SIA report has been reviewed by EPD and no further comments are received.
4	For report completeness, please provide tentative details of the sewerage treatment facilities including the plant size, location, elevation, pipe size, etc.	The tentative details of the sewerage treatment facilities were mentioned in Appendix C in SIA submitted on 27.1.2025 (i.e. Further Information (1) of the planning application). Relevant references to Appendix C and details on location and elevation are also added in revised section

		3.2.1 and Figure 3.1 (**Appendix 1**). Further details could be supplemented in the detail design stage.
5	According to your report, the flow of the sewerage generated and stormwater runoff from the Site will exceed the capacity of the existing drainage system. Please submit the upgrading works of the drainage pipes to cater the treated sewerage and drainage discharge. Stormwater drainage proposal demonstrating stormwater drainage collection and disposal facilities of adequate flow capacity already exist/to be provided can deal with surface runoff within the lots or flow from adjacent areas including overland flow. The lot owner shall effect the necessary modification/upgrading work of downstream drainage system.	The calculation of the upgrading works of the drainage pipes will be conducted in detailed design stage and calculations could be supplemented for the compliance of relevant planning approval conditions related to SIA. The lot owner shall effect the necessary modification/upgrading work of downstream drainage system as stated in section 3.2.4. (**Appendix 1**).

Comments from Lands Department

Comments from Lands Department, dated 27.2.2025 [Contact person: Ms. LEUNG Man Chi, Algie (Tel: 2654 1187)]		**Response**
1	Please note that this office has no further comment on the RtoC relating to LandsD.	Noted.

(submitted on 6.3.2025)

Response to Comments s.16 Planning Application No. A/TP/702

Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility at Taxlord Lot T77 RP in D.D. 34, Tai Po, New Territories

Contents

Appendix 1: Replacement pages of Environmental Assessment

(submitted on 11.3.2025)

Table R1: Response to Departmental Comments

Comments from Environmental Protection Department

Comments from Environmental Protection Department, dated 5.3.2025 [Contact person: Ms. TANG Wing Yee, Winnie (Tel: 2835 1096)]		**Response**
1	**EPD's Comments on Environmental Assessment Report (P060/02 Issue 5)** Air Quality Section 2.2.1.2: Please rectify the typo: …the Proposed Development **does not classify**…	Noted and revised.
2	Section 3.2.1.3 and 3.2.1.4: Please retain the general discussion of the buffer distance requirements but move all the specific discussion about Tai Po Road – Tai Po Kau to Section 3.7.	Please refer to revised sections 3.2.1.3, 3.7.1.5 and 3.7.1.6 (**Appendix 1**).
3	Table 3.5 and 3.6: Please repeat the header row if the table splits across two pages.	Table splits across two pages are avoided in the revised report (**Appendix 1**).
4	Table 3.5: Please delete the data for annual ozone which is not one of the AQOs.	Noted and deleted (**Appendix 1**).
5	Section 3.6.1.1: Please rectify the typo: …will **be avoid or rearrange**…	Noted and revised (**Appendix 1**).
6	Section 3.6.1.1: Please consider the following enhanced dust mitigation measures for the ASRs in proximity to the Proposed Development e.g. ASR 4 and 5 which are within 10m from the site boundary: - Adopt site hoarding at sufficient height close to those concerned ASRs; - Locate the haul road away from those concerned ASRs; - Avoid dusty works or placing stockpiles near to those concerned ASRs; - Minimization of unpaved, exposed earth by immediate covering/ permanent paving as soon as the works have been completed.	Please refer to revised section 3.6.1.1 (**Appendix 1**).
7	Section 3.7.1.5: "Transportation Department" should read "Transport Department". Please revise.	Noted and revised (see paragraph 3.2.1.3 in **Appendix 1**).
8	Figure 3.1: It seems that ASR 8 falls within the buffer zone of the nearby road. Please check.	Please refer to Figure 3.2. While only the staircases are touching the buffer zone, all the other habitable rooms and fresh air intakes of the Proposed Development do not fall within the buffer zone of the nearby road (**Appendix 1**).

(submitted on 11.3.2025)

9	Figure 3.1: Please overlay the PATH gird on this figure.	Please refer to revised Figure 3.1 (**Appendix 1**).
10	Figure 3.2: Please show the ASR at the proposed development on this figure in order to demonstrate that it complies with the buffer distance requirements.	Please refer to revised Figure 3.2 (**Appendix 1**).
11	<u>Noise</u> Item 8 of RtC: While it is noted that a -3dB(A) correction was adopted for rooms with 2 nos. of window openings, the consultant can consider making reference to the design of the acoustic windows for the Type C Flat in public housing development with appropriate correction, i.e. room size correction, to achieve a higher noise reduction. For the correction for windows opening size for proposed Type B acoustic window, instead of applying -3dB(A) correction directly, it should be adjusted based on the difference of the actual window opening size of the reference case and proposed design, similar to the methodology for room size correction.	Noted. Please refer to Section 4.6.1.7 and Appendices D & E for details of the updated reference and calculation. It is clarified that the design of the acoustic window for the Type C Flat in the "Proposed Public Housing Development at Tung Chung Area 46" has been adopted for the reference case (**Appendix 1**). Noted. It is clarified that the window opening size of the reference case and proposed design are now the same. Please refer to the Appendix D for the detail (**Appendix 1**). Further information related to detail design could be supplemented at the detail design stage and for the satisfaction of relevant planning approval condition if needed.
12	Item 10 of the RtC: The implementation of the LNRS is a key noise mitigation measure affecting the compliance rate of the proposed development. Therefore, we have to reserve our comment on the road traffic noise impact assessment upon receipt of the confirmation on implementation of the proposed LNRS from the HyD. Alternatively, the consultant should explore other at-receiver noise mitigation measures in order to achieve full compliance of the road traffic noise standard without the implementation of the LNRS.	Confirmation of the implementation of the proposed LNRS from Highways Department was received. Please refer to Appendix K for reference (**Appendix 1**).
13	Section 4.3.1.1: Please confirm and supplement the thickness of the window pane by adding the wording "the openable window is well-gasketted with at least 6mm thick window pane" after the 3rd sentence.	Please refer to revised section 4.3.1.1 (**Appendix 1**).
14	Section 5.5.3.3: The "SPLi" should be the sound power level of individual source and rename as "SWLi". Please rectify.	Noted and revised (**Appendix 1**).

15	Appendix D: Please add a column "No. of window opening" in both the proposed development and the reference case.	Noted and revised (**Appendix 1**).
16	Appendix G: The calculation sheet for NSR14 on 4/F does not tally with other calculation sheets (for the column "Distance" and "Impulse effect") and please revise accordingly.	The header of the calculation sheet for NSR14 on 4/F is revised (**Appendix 1**).
17	Water Quality Section 7.2.1.2: Suggest revise as "…in Table 7.1 ~~**in**~~ **and** Table 7.2 **respectively**."	Noted and revised (**Appendix 1**).
18	Section 7.3.1.1: Please clarify whether there are eight potential WSRs only.	There are totally eighteen potential WSRs. Section 7.3.1.1 is revised (**Appendix 1**).
19	Table 7.3: Suggest to double check the distance of WSR18 from the Project Boundary.	Noted and revised (**Appendix 1**).
20	Section 7.5.1.1: Please include the proposed ADWF and treatment level of on-site STP.	Noted. Please refer to Section 7.5.1.1 for the proposed ADWF and treatment level of on-site STP (**Appendix 1**).
21	Section 7.5.2.3: Suggest revise as "…the permanent drainage system will be designed to comply with the relevant regulations **and guidelines (e.g. ProPECC PN 1/23)**."	Noted and revised (**Appendix 1**).
22	Figure 7.1 (RtC No. 33): - Suggest to use different colour for WSR8 which is not a watercourse. - Suggest to indicate WSR7 and WSR8 as Conservation Areas in the legend.	Please refer to revised Figure 7.1 (**Appendix 1**).

Response to Comments s.16 Planning Application No. A/TP/702

Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility at Taxlord Lot T77 RP in D.D. 34, Tai Po, New Territories

Contents

(submitted on 21.3.2025)

Table R1: Response to Departmental Comments

Comments from Urban Design Unit, Urban Design and Landscape Section, Planning Department

	Comments from Urban Design Unit, Urban Design and Landscape Section, Planning Department [Contact person: Mr. KO Chun Ki, Jason (Tel: 3565 3941)]	**Response**
1	**General Comments** Having reviewed the FI2, please note that paras. 2, 3, 11 and 12 of our previous comments dated 17.1.2025 shall remain valid.	Noted.
2	**Detailed Comments** Replacement Pages of VIA Table and Section 4.3 for VP2 –According to this Table and Section, "the existing tree in the photomontage is on Government land outside of the application site". However, there is contradictory information for "**potential loss of quality woodland at the junction to primary school and residential blocks**", which should be clarified to determine the visual impact at VP2.	Noted. The relevant mentioning has been removed to avoid contradiction. Accordingly, the Effects on Visual Resources of VP2 has been revised and the evaluation of overall visual impact of VP2 has been revised to "slightly adverse" (**Appendix 1** and **Appendix 3**).
3	VP4 Photomontage (P. 12) – It seems that the proposed development should appear to be **shorter and narrower** in the photomontage (i.e. slightly taller than Po Leung Kuk Tin Ka Ping Millennium Primary School) and its extent should be approximately up to the right side of the staircase of the said school).	Noted. VP4 Photomontage has been revised (**Appendix 1**).

Comments from Landscape Unit, Urban Design and Landscape Section, Planning Department

	Comments from Landscape Unit, Urban Design and Landscape Section, Planning Department [Contact person: Mr. WONG Wai Ching, Ivan (Tel: 3565 3947)]	**Response**
1	RtC item 6:- The applicant's response is noted. It is advised to remove the word "approved" in Appendix B Tree Assessment Schedule to reflect the current status of tree preservation and removal application.	Noted.
2	RtC item 7:- Only 2 Tree group photos (including one photo from far away from the site and blocked by trees outside application site) is observed in the landscape proposal, which is considered insufficient. The applicant is advised to provide more photos of tree groups in different angles to facilitate the application.	Noted. Individual tree Photo Records have been included. Please refer to Appendix I of Landscape Proposal (**Appendix 2**).
3	Section B-B:- It is observed that soil depth of 1200mm is measured from the top of the berm, while only 600mm of soil depth from the slab level is proposed. Please be advised that the soil depth/	Noted. 1200mm soil depth has been provided in Section B-B (**Appendix 2**).

(submitted on 21.3.2025)

	volume is considered inadequate. The applicant should review the feasibility and is reminded to provide sufficient space for root growth.	
4	Landscape Layout Plan at 2/F:- Spot levels for key landscape areas should be provided.	Noted. Spot Levels has been added on 2/F Landscape Layout Plan (**Appendix 2**).
5	Landscape Section:- It is observed that the layout of landscape area at 2/F as shown in the landscape section is different from the landscape plan (e.g. hard-paved area, planter wall, void area and deck are missing from the landscape section). Inconsistencies should be reviewed and rectified.	Noted. Landscape Area at 2/F in the Section has been revised (**Appendix 2**).
6	Landscape Section:- The applicant is advised to enhance the graphic presentation of landscape section (e.g. indicating hard paved areas within the landscape area, using separate color for section/ elevation of the building, etc.) for clarity.	Noted. The graphic of the landscape section has been enhanced (**Appendix 2**).
7	The applicant is advised that landscape information and proposed formation work outside the application boundary is for reference only and would not be reviewed by PlanD.	Noted.
8	The applicant is reminded that approval of the application does not imply approval of tree works such as pruning, transplanting and felling. The applicant should seek approval for any proposed tree works from relevant departments prior to commencement of the work.	Noted.

Similar Application within "G/IC" zone
in the vicinity of the Site

Approved Application

Application No.	Proposed Development	Date of Consideration
A/TP/694	Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facility (Residential Care Home for Persons with Disabilities) (RCHD) in "Government, Institution or Community" Zone and Proposed Social Welfare Facility (RCHD) in "Green Belt" Zone	10.5.2024

Appendix III of RNTPC
Paper No. A/TP/702A

Recommended Advisory Clauses

(a) to note the comments of the District Lands Office/Tai Po, Lands Department (DLO/TP, LandsD) that:

i. the applicant is required to submit a lease modification/ land exchange application to LandsD to implement the proposed development. The application, if any, will be considered by the LandsD acting in the capacity of the landlord 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, as may be imposed by the LandsD; and

ii. according to the submission, the applicant proposed two schemes to facilitate the site formation works of the application site, viz. either remove (Scheme 1) or retain (Scheme 2) slope feature no. 7NE-C/C403 which wholly falls within the adjoining Tai Po Town Lot No. 156. Since the slope feature falls within a private lot and is maintained by the concerned lot owner(s), consent/agreement from the lot owner(s) shall be obtained prior to any removal or strengthening works and/or interference as proposed in both schemes;

(b) to note the comments of the Director of Environmental Protection (DEP) that the applicant should submit a revised noise impact assessment and sewerage impact assessment at the detailed design stage to confirm the proper implementation of recommended measures;

(c) to note the comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD) that:

i. stormwater drainage proposal shall be provided to demonstrate stormwater drainage collection and disposal facilities of adequate flow capacity already exist/to be provided can deal with surface runoff within the lets or flow from adjacent areas including overland flow. The applicant shall effect the necessary modification/upgrading work of downstream drainage system. The applicant/owner shall also be liable for and shall indemnify claims and demands arising out of damage or nuisance caused by failure of the systems.

ii. public sewerage are not available near the Site;

iii. the applicant shall resolve any conflict/ disagreement with relevant lot owner(s) and seek LandsD's permission for laying new drains/channels and/or modifying/upgrading existing ones in other private lots or on Government land (where required) outside the Site; and

iv. the applicant is reminded to submit and implement a revised sewerage impact assessment at the detailed design stage to confirm the proper implementation of recommended measures, and to implement the local upgrading/ connection works identified in the revised sewerage impact assessment to the satisfaction of the Director of Drainage Services;

(d) to note the comments of the Director of Fire Services (D of FS) that detailed fire services requirements will be formulated upon receipt of a formal submission of general building plans, or referral from licensing authority. In the meantime, the height restrictions as stipulated in S.19 of Child Care Services Regulation, Cap. 243A should be observed accordingly;

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

i. should there be any access arrangement affecting the road maintained by HyD, the applicant should ensure proper vehicular accesses should be designed and constructed to the satisfactions of the Transport Department and HyD in accordance with the prevailing Transport Planning and Design Manual and HyD standards at the applicant's own expenses;

ii. the applicant shall design and construct the run-in/out according to the latest version of Highway Standard Drawings no. H113 and H1114, or H5133, H5134 and H5135, whichever set if appropriate to match with the existing adjacent pavement;

iii. adequate drainage measures shall be provided to prevent surface water running from the application site to the nearby public roads and drains; and

iv. should excavation works on public roads be required, an Excavation Permit should be obtained from HyD prior to commencement of excavation works.

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

i. before any new building works are to be carried out on the Site, prior approval and consent of the Building Authority (BA) should be obtained, otherwise they are unauthorized building works (UBW). An Authorized Person should be appointed as the coordinator for the proposed building works in accordance with the Buildings Ordinance (BO);

ii. for the operation of the proposed development, the following issues should be addressed when making application for approval of plans for the carrying out of building works under the BO as appropriate:

- the site abuts on Tai Po Road - Tai Po Kau and is a Class A site. The site coverage and plot ratio for the proposed development should comply with the First Schedule of Building Planning Regulations (B(P)R);

- Small Group Home and Residential Care Home for the Elderly (RCHE) which are for habitation is domestic use under the BO. Modification may be granted by the BA for treating RCHE as non-domestic building for the purposes of regulations 19, 20, 21, 22 and 25 of the B(P)R, subject to requirements laid down in Practice Note for Authorized Persons and Registered Structural Engineers (PNAP) APP-172;

- it is noted that upgrading works of existing drainage system are required to cater the sewerage and stormwater runoff from the Site. Our no objection to the application is subject to the provision of proper drainage facilities to DSD's acceptance;

- 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 B(P)R respectively;

- any parking spaces to be disregarded from gross floor area (GFA) calculation under the regulation 23(3)(b) of the B(P)R shall be subject to the requirements laid down in Appendix C of PNAP APP-2;

- for features applied to be excluded from the calculation of total GFA, it shall be subject to compliance with the requirements laid down in the relevant Joint Practice Notes and PNAP;

- provision of prescribed windows for habitable areas and kitchen to comply with regulations 30, 31 and 32 of the B(P)R;

- provision of windows for rooms containing soil fitments to comply with regulation 36 of the B(P)R;

- provision of the means of escape in case of fire or emergency to comply with regulation 41 of the B(P)R;

- provision of access and facilities for persons with a disability in accordance with regulation 72 of the B(P)R;

- the proposed building may be subject to the issue of license and should comply with the building and other relevant requirements as may be imposed by the licensing authority; and

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

(g) to note the comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD) that

i. landscape information and proposed formation work outside the application boundary is for reference only and would not be reviewed by PlanD; and

ii. approval of the application does not imply approval of tree works such as pruning, transplanting and felling. The applicant should seek approval for any proposed tree works from relevant departments prior to commencement of the work.

致城市規劃委員會秘書：
專人送遞或郵遞:香港北角渣華道 333 號北角政府合署 15 樓
傳真 : 2877 0245 或 2522 8426
電郵: tpbpd@pland.gov.hk

To : Secretary, Town Planning Board
By hand or post : 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong
By Fax : 2877 0245 or 2522 8426
By e-mail : tpbpd@pland.gov.hk

RECEIVED
- 9 JAN 2025
Town Planning Board

有關的規劃申請編號 The application no. to which the comment relates
A/TP/702

意見詳情 (如有需要，請另頁說明)
Details of the Comment (use separate sheet if necessary)

就 貴署來函所述的規劃申請（申請編號：A/TP/702），本校有以下疑慮：

1. 因施工範圍太接近學校，施工期間發出的噪音會嚴重影響學生上課；
2. 另外，由於施工範圍太接近學校，因此工程進行期間發出的灰塵會引致學生的呼吸系統不適；
3. 興建有關設施期間及設施開放使用後（尤其後者）會加劇交通擠塞問題。

就以上問題，請問 貴署會如何跟進及處理？

港九街坊婦女會孫方中書院

「提意見人」姓名/名稱 Name of person/company making this comment _____

簽署 Signature _____ 日期 Date 07 JAN 2025

2

☐Urgent ☐Return receipt ☐Expand Group ☐Restricted ☐Prevent Copy

From:
Sent: 2025-01-10 星期五 11:57:47
To: tpbpd/PLAND <tpbpd@pland.gov.hk>
Subject: 保良局田家炳千禧小學
Attachment: SKM_C551i25011011520.pdf

請查閱附件，謝謝！

致城市規劃委員會秘書：
專人送遞或郵遞:香港北角渣華道 333 號北角政府合署 15 樓
傳真 ：2877 0245 或 2522 8426
電郵: tpbpd@pland.gov.hk

To : Secretary, Town Planning Board
By hand or post : 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong
By Fax : 2877 0245 or 2522 8426
By e-mail : tpbpd@pland.gov.hk

有關的規劃申請編號 **The application no. to which the comment relates**
A/TP/702

意見詳情 (如有需要，請另頁說明)
Details of the Comment (use separate sheet if necessary)

本校反對放寬建築物高度限制，由於大樓興建位置正正為本校教學大樓旁，嚴重影響課室採光度，影響學生在課室上課。

興建時的噪音、塵埃對師生們也有一定的影響，附近已有三所學校，但只有一條大埔公路，交通問題亦不可忽視。

另外本校向優質教育基金申請了撥款進行環境教育課程，因此本校的課程設計是利用校園的自然環境讓學生多觀察、多體驗、多接觸大自然，若興建建築物實對學生的學習環境造成一定的影響。

「提意見人」姓名/名稱 Name of person/company making this comment _____

簽署 Signature _____ 日期 Date 10 JAN 2025

3

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

參考編號 **Reference Number:**	250111-131033-20218
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	11/01/2025 13:10:33
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	先生 Mr. Lau Peter

意見詳情
Details of the Comment :

本身興建住宅或社會福利設施已經破壞大埔郊野整體景觀及破壞生態環境。現在考慮放寬高度限制嚴重影響整體大埔整體景觀。懇請城規會重新考慮不接受放寬建築物高度限制。

☐Urgent ☐Return receipt ☐Expand Group ☐Restricted ☐Prevent Copy

4

From:
Sent: 2025-01-19 星期日 05:52:45
To: tpbpd/PLAND <tpbpd@pland.gov.hk>
Subject: A/TP/702 Hong Kong Sheng Kung Hui St. Christopher's Complex DD 34, Tai Po

A/TP/702 Hong Kong Sheng Kung Hui St. Christopher's Complex

Taxlord Lot T77 RP in D.D. 34, Tai Po

Site area: About 2,191.3sq.m

Zoning: "GIC"

Applied development: MR BHR for Permitted Social Welfare Facility

Special Child Care Centre 100 sub vented places

RCHE 240 sub vented places and 49 self financing places

Small Group Home 30 sub vented places, 4 flats

Foster Care Services and Agency-based Enhancement of Professional Staff Support

Services (FSC & ABPSS sub vented

Child Care Centre 65 aided places

Staff Training Unit self-financed

10 Floors / PR 5.7 / 325sq.m OS / 17 Vehicle Parking

Dear TPB Members,

While supporting the provision of community service, object to the additional height. The local schools will be deprived of the current green surroundings, 77 trees to be felled and only 46 compensation. Moreover, some of these will be merely spindly ornamental varieties, fluffy shrubs as described by the applicant itself. In addition, they would be overshadowed by the wall effect of a higher adjacent building.

As most of the services will be funded by the tax payer, the intention is more about SKH reaping more financial return than providing genuine community services. The SGH is superfluous as it does not provide sufficient places to create a genuine community milieu and it is inappropriate to house "children of limited intelligence, children with mild behavioural or emotional problems" on higher floors.

The development should be in harmony with the surrounding structures: Japanese International School (JIS) with a BHR of 6-storey; Po Leung Kuk Tin Ka Ping Millennium

☐Urgent ☐Return receipt ☐Expand Group ☐Restricted ☐Prevent Copy

Primary School (PLKTKPM Primary School) with BHR of 8-storey and Hong Kong & Kowloon Kaifong Women's Association Sun Fong Chung College (SFCC) with BHR of 8-storey.

Mary Mulvihill

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

參考編號 **Reference Number:**	250121-123327-04418
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 12:33:27
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	女士 Ms. 張

意見詳情
Details of the Comment :

放寬樓宇高度限制時，應考慮附近相關公共交通設施及道路配套，吐露港一帶道路每日出現嚴重擠塞，一直未能解決。
此外，亦應考慮融入附近建築物高度，避免影響附近景觀和諧及居民生活，謝謝參考意見。

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

參考編號 **Reference Number:**	250121-165516-54813
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 16:55:16
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	小姐 Miss 洪心

意見詳情
Details of the Comment :

本人於鹿茵山莊居住已有二十多年，當年不惜斥資巨額購入單位都是因為嚮往鹿茵山莊背山面海，景觀開揚空氣清新，達離繁囂的市區，盡享郊區獨有的寧靜環境，希望退休後可以维續好好地享受平靜的生活。

現在城規會申請放寬建築物高度限制以作准許的社會福利設施，這個申請將會破壞寧靜的環境海景也會被遮擋，空氣更不用說了，原先鹿茵山莊的優勢也會被徹底破壞，這不是要我被迫遷嗎？同時也使我增添憂慮，精神受損。

希望城規會慎重考慮，並多點為我們住客着想。

就規劃申請/覆核提出意見 **Making Comment on Planning Application / Review**	
參考編號 **Reference Number:**	250121-165759-66720
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 16:57:59
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	先生 Mr. Kwong Chi Wai King

意見詳情
Details of the Comment :

反對反對

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

參考編號 **Reference Number:**	250121-170318-15783
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 17:03:18
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	小姐 Miss May Cheung

意見詳情
Details of the Comment :

對於 Taxlord Lot 77 RP on DD 34 Tai Po,NT. 擬申請放寬建築物高度限制,本人對此表示強烈反對,因為社會福利設施,毋須要特別加高樓宇的高度。加上是次建築物在地面以上的高度已接近10層,約40米高;還有地下的停車場。
此建築物的高度,因應周邊的環境,顯得十分不協調,影響觀感。此外,現時鄰近已有3所學校，每當返放學時間,有校車及家長接送學生的車輛出入,造成交通堵塞,令到出入鹿茵山莊的車輛難以前行。

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

參考編號 **Reference Number:**	250121-171024-88641
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 17:10:24
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	先生 Mr. Patrick Lai

意見詳情
Details of the Comment :

對新界大埔丈量約份第34約補租地段, 第T77號餘段擬略為放寬建築物高度限制，現表示強烈反對，原因如下:

由於是次申請改寬的建築物在地面以上的高度已接近40m，有10層，此外，地下還有停車場，首先,此建築物的高度相對應周邊環境路段的建築物會顯得很突兀，十分不協調，影響觀感，再者現時鄰近已有3所學校，每當返放學時間，會有校車，私家車，小巴，巴士停泊或使用該路段，造成交通阻塞和危及行人的安全。也令進出鹿茵山莊的車輛難以前行。

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

參考編號 **Reference Number:**	250121-171215-25561
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 17:12:15
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	女士 Ms. 洪桃

意見詳情
Details of the Comment :

致:有關部門

關於新界大埔第77号余段擬議略為放寬建築物高度限制事宜:

本人提出嚴重反对,嚴重違反本人初衷买此物業的意願,之前买這位置就是看中此位置的空氣清新,位置空曠,低密度住宅,如果中途突然加高某些位置,对我們的身心和身體健康都會造成很大不利影響, 請有關部門重视

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

參考編號 **Reference Number:**	250121-171354-15888
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 17:13:54
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	先生 Mr. 呂海賢

意見詳情
Details of the Comment :

致:有關部門

關於新界大埔第T77号余段擬議略為放寬建築物高度限制事宜:

本人提出嚴重反对,嚴重違反本人初衷买此物業的意願,之前买這位置就是看中此位置的空氣清新,位置空曠,低密度住宅,如果中途突然加高某些位置,會增加我們的精神壓力並會嚴重造成我們的身心和身體健康, 請有關部門重視並關注我們这一批小業主的福利

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

參考編號 **Reference Number:**	250121-171651-50581
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 17:16:51
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	夫人 Mrs. Wong Mang Ning

意見詳情
Details of the Comment :

本人反對上述規劃申請,意見如下:

1.破壞鄉郊氛圍,與大埔滘附近的鄉郊特色不相協調, 還背現有的規劃意向。

2.既定的高度限制是為了保護附近的山脊線及景觀, 不應隨便打破。山脊線和山峰是香港珍貴資產,應加以保存,一經破壞,不能復原。

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

參考編號 **Reference Number:**	250121-172037-27838
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 17:20:37
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	先生 Mr. 張先生

意見詳情
Details of the Comment :

本人反對興建福利設施在此地段

1.兴建的地点是鹿茵山莊可見的绿化带附近已經建成很多新樓房,已有相當密度,不應再加插任何建築物。

2. 高度及建築物阻礙山莊外望景觀

3.交通也不能配套,我們只有一條双向車道,只夠本身居民使用,不宜在這郊區地方再插入福利區設施

4. 不要令這寧靜的地方增加繁囂,請號選地方興建

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

參考編號 **Reference Number:**	250121-222819-84181
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 22:28:19
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	先生 Mr. Mak FY

意見詳情
Details of the Comment :

我們有以下意見：
a）所選地點，交通並不通達，社區設施設立在這位置，不能服務最多數的大眾。
b）地盤範圍細小，今次加高，以高度補救，以現時社區設施的運作模式及能力，是種不合乎經濟效益的安排。
c）原地是林木，對應整個環境，配套大埔道，保育了一條獨特的交通通道。在現時香港的地貌是少有的。沿途加設建築物，是對保育的破壞。
d）鄰近油站，以公共設施的地方衡量，這是個風險。

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

參考編號 **Reference Number:**	250121-223233-72299
提交限期 **Deadline for submission:**	21/01/2025
提交日期及時間 **Date and time of submission:**	21/01/2025 22:32:33
有關的規劃申請編號 **The application no. to which the comment relates:**	A/TP/702
「提意見人」姓名/名稱 **Name of person making this comment:**	夫人 Mrs. Sun

意見詳情
Details of the Comment :

我們有以下意見：
a）所選地點，交通並不通達，社區設施設立在這位置，不能服務最多數的大眾。
b）地盤範圍細小，今次加高，以高度補救，以現時社區設施的運作模式及能力，是種不合乎經濟效益的安排。
c）原地是林木，對應整個環境，配套大埔道，保育了一條獨特的交通通道。在現時香港的地貌是少有的。沿途加設建築物，是對保育的破壞。
d）鄰近油站，以公共設施的地方衡量，這是個風險。

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16

From:
Sent: 2025-01-21 星期二 11:09:39
To: tpbpd/PLAND <tpbpd@pland.gov.hk>
Subject: Fw: Comments of Planning Application - A/TP/702
Attachment: Comments of Planning Application.pdf

Dear Sir,

Further to the attachment below, I also find there is no observation of traffic flow during dismission school time of the two neighbouring schools in the plan. It is certain that there is traffic congestion around that time each day. I should be grateful if you would scrutinize the matter.

If you have any question, please feel free to contact me.

Best Regards,

Chan Chi Chung

----- 轉寄的郵件 -----
寄件人：
收件人： tpbpd@pland.gov.hk <tpbpd@pland.gov.hk>
傳送日期： 2025 年 1 月 21 日星期二 上午 10:39:43 [GMT+8]
主旨： Comments of Planning Application - A/TP/702

Dear Sir,

Attached please find the comments.

Regards

Chan Chi Chung

致城市規劃委員會秘書：
專人送遞或郵遞:香港北角渣華道 333 號北角政府合署 15 樓
傳真 ：2877 0245 或 2522 8426
電郵: tpbpd@pland.gov.hk

To : Secretary, Town Planning Board
By hand or post : 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong
By Fax : 2877 0245 or 2522 8426
By e-mail : tpbpd@pland.gov.hk

有關的規劃申請編號 **The application no. to which the comment relates**
A/TP/702

意見詳情 (如有需要，請另頁說明)
Details of the Comment (use separate sheet if necessary)

兩間學校在正前方，現在上學放學時，私家車
與校巴已引發到水泄不通，有些校車甚至要
在大埔道影響駕駛，已超過負荷。
所以我是反對放寬增建學物高度限制的。

「提意見人」姓名/名稱 Name of person/company making this comment Chan Chi Chung

簽署 Signature CCC 日期 Date ~~27/11/2025~~ 21/11/2025

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致城市規劃委員會秘書：
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Details of the Comment (use separate sheet if necessary)

We hope that the contractor will be mindful of the schools within the vicinity and the noise of the construction.

「提意見人」姓名/名稱 Name of person/company making this comment Japanese International School

簽署 Signature _____ 日期 Date 21 January 2025