

By Hand and Email (tpbpd@pland.gov.hk)
24 October 2025

Level 5 Festival Walk
80 Tat Chee Avenue
Kowloon Tong
Kowloon, Hong Kong

t +852 2528 3031
f +852 2779 8428

arup.com

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

Your ref TPB/Y/SK-HC/8
Our ref 295143/00/WSTY/MYNL/TYAL/NC/CHAC/05643

Dear Sir/Madam,

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from “Green Belt” and Area shown as ‘Road’ to “Residential (Group C)5” for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung (Planning Application No. Y/SK-HC/8)

Submission of Further Information – Responses to Departmental Comments

We refer to the comments received from various Government departments from 10 October to 17 October 2025 on the captioned Planning Application.

We are pleased to submit herewith a Responses-to-Comments Table (**Appendix A**) together with the revised Sewage Treatment and Disposal Proposal Report (**Appendix B**), Supplementary Information on the proposed public access (**Appendix C**) and the revised Traffic Impact Assessment (**Appendix D**) in support of the Planning Application for your consideration.

We sincerely seek favourable consideration from the Town Planning Board to agree to the captioned s.12A Application.

Should you have any queries, please contact the undersigned or our Miss Natalie CHAN at [REDACTED] or Mr. Alex CHENG at [REDACTED].

Yours faithfully,



Natalie Leung
Associate Town Planner

d +852 [REDACTED]

e [REDACTED]

Enc - 4 Copies of **Appendices A to D**

cc - Sai Kung & Island District Planning Office – Ms. KONG Sze Nga, Tammy ([REDACTED])
- Sai Kung & Island District Planning Office – Mr. YIP Ho Yeung, Jackin ([REDACTED])
- Client

Appendix A

Responses-to-Comments Table

Comments from Related Departments

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2. Environmental Protection Department, Water Quality Management Division, Sewerage Infrastructure Group, Regional Sewerage Infrastructure Planning (HK Island, Tolo Harbour & Port Shelter), dated 10 October 2025	2
3. Home Affairs Department, Sai Kung District Office, Sai Kung Office, dated 17 October 2025	3
4. Transport Department, NT Regional Office, Traffic Engineering (NTE) Division, Housing & Planning Section, dated 15 October 2025	4
5. Water Supplies Department, New Works Branch, Construction Division, System Planning Section, dated 17 October 2025	5

COMMENTS FROM RELATED DEPARTMENTS

No.	Comments	Responses
1.	<p>Electrical & Mechanical Services Department, Gas & General Legislation Branch, Gas Standards Division B, LPG Vehicle Sub-division, dated 17 October 2025</p> <ol style="list-style-type: none"> 1. There is a high pressure (HP) town gas pipe running along Hiram's Highway. 2. Increase in population brought in by the proposed development adjacent to the HP pipeline is significant. A Quantitative Risk Assessment (QRA) conducted by the project proponent is required to assess the potential risks associated with the HP pipeline, having considered the proposed development and implement mitigation measures if necessary for compliance with the risk guidelines of the Hong Kong Planning Standards and Guidelines. 3. The project proponent is required to observe the requirements of the Electrical and Mechanical Services Department’s “Guidance Note on Quantitative Risk Assessment Study for High Pressure Town Gas Installations in Hong Kong” for carrying out the QRA. The guidance note can be downloaded via the following web-link:- https://www.emsd.gov.hk/en/gas_safety/publications/guidance_notes/index.html 	<p>Noted.</p> <p>Noted. The Quantitative Risk Assessment (QRA) would be submitted at the detailed design stage after the planning application is agreed.</p> <p>Noted.</p>
2.	<p>Environmental Protection Department, Water Quality Management Division, Sewerage Infrastructure Group, Regional Sewerage Infrastructure Planning (HK Island, Tolo Harbour & Port Shelter), dated 10 October 2025</p> <p><u>Sewerage Impact</u></p> <ol style="list-style-type: none"> 1. Section 4.1 – Please provide the time of anticipated occupation of the proposed development. 2. Section 5.3.1 & 5.3.3 – The Guidelines for the Design of Small Sewage Treatment Plants (GDSSTP) has been updated in December 2024. Please check 	<p>Noted. The tentative completion year is about 2031, which has been incorporated into the revised Sewage Treatment and Disposal Proposal (STDP) Report (Appendix B refers).</p> <p>Noted. Sections 5.3.1 and 5.3.3 of the revised STDP Report have been updated accordingly.</p>

No.	Comments	Responses
	<p>and update Section 5.3.1 & 5.3.3 accordingly.</p> <p>3. Section 6.1 & 6.2 – Please review the instantaneous backwash flow rate of the swimming pool as it should not be dependent on the backwash duration.</p> <p>4. Section 6.2 – Please review the PDWF of the commercial flow from J11.</p> <p>5. Section 6.2 – Please remove the unit flow factor (10.500m³/day) of the swimming pool to avoid confusion.</p> <p>6. Section 6.2 & 6.3 – Please review the peak total sewage flow from the proposed development based on the comments above.</p>	<p>Noted. The instantaneous backwash flow rate of the swimming pool was not dependent on the backwash duration. The presentation of the revised STDP Report has been amended to avoid confusion.</p> <p>Noted and amended in the revised STDP Report.</p> <p>Noted and removed in the revised STDP Report.</p> <p>Noted and amended accordingly in the revised STDP Report. The peak total dry weather flow generated from the proposed development is 51.11 l/s.</p>
3.	<p>Home Affairs Department, Sai Kung District Office, Sai Kung Office, dated 17 October 2025</p> <p>1. The concerned location is one of the flooding black spots. Drainage works are scheduled to be carried out in the vicinity of lamp post no. VE4018.</p> <p>2. Please be informed that this office would not take up the management and maintenance responsibilities of the proposed vehicular access and the associated deck structure inside and solely used by/connected to the proposed residential site.</p> <p>3. It is noted that existing access inside the proposed residential site are connected to/used by some households. The developer is advised to provide an access for the affected households during and after the construction of the residential site. Map at the enclosure refers (please see Attachment II).</p> <p>4. The proposed site is in the vicinity of Hing Kong Shek Village, Pak Wei Village, Luk Mei Tsuen and Marina Cove, with an estimated population size of about 200 persons for each village and 535 units of households for Marina Cove.</p>	<p>Noted.</p> <p>Noted.</p> <p>Noted. An interim access during the construction of the proposed development a footpath for public use after the construction will be provided along the eastern boundary of the Application Site to the concerned households. Please refer to the Supplementary Information for the indicative road access to the households (Appendix C refers).</p> <p>Noted. Please be rest assured that the proposed development has been proved technically feasible from various aspects, including visual, landscape, traffic, environmental, drainage, sewerage, geotechnical and water supplies, with incorporation of appropriate mitigation</p>

Responses to Comments – Departmental Comments

No.	Comments	Responses
	<p>The local villagers and residents may very likely raise objections to the additional 120 household units from several aspects of traffic (regular congestion of Hiram’s Highway), public utility (refuse collection, drainage and sewage system) and everyday living (the only supermarket in a small shopping centre in Marina Cove).</p> <p>5. We also notice from the relevant OZP that the subject site largely falls within “Green Belt” (“GB”) zone. In general, it is envisaged that there will be strong local sentiment against housing development within a “GB” zone. In this connection, conducting a general consultation at the district level on the subject proposal is deemed necessary.</p>	<p>measures and improvement works. No adverse impacts on the surrounding environment are anticipated.</p> <p>Noted. In the event that the Section 12A Application is agreed by the Town Planning Board, an amendment to the OZP would be proposed to rezone the Application Site from “GB” and area shown as ‘Road’ to “R(C)5”. During the period, the amendment would be exhibited for public inspection for 2 months, within which the public, including the residents nearby, may make representation in respect of the amendment, which ensures that all local views on the subject proposal, if any, would be considered.</p>
4.	<p>Transport Department, NT Regional Office, Traffic Engineering (NTE) Division, Housing & Planning Section, dated 15 October 2025</p> <p>1. Re. Section 3.1.2, the latest AADT figure shall be adopted.</p> <p>2. Re. Section 3.2.1, it is noted that the traffic survey was carried out in December 2023. In order to assess the traffic impact of the proposed development, latest traffic figures shall be adopted.</p> <p>3. Re. Section 3.2.1, please include the Nam Pin Wai roundabout in the assessment.</p>	<p>Noted. The latest AADT figures are adopted accordingly. Please refer to Section 3.1.2 of the revised Traffic Impact Assessment (TIA) (Appendix D refers) for details.</p> <p>Noted. Additional traffic surveys have been conducted on 11 October 2025 (Saturday) and 13 October 2025 (Monday) for updating the report. In addition, a new junction, namely Nam Pin Wai roundabout has been surveyed included as one of the assessment locations. Please refer to Sections 3.2 and 3.3 of the revised TIA. As such, please refer to the updated Table 3.1 Existing Junction Capacity Assessment for details.</p> <p>Noted. Nam Pin Wai roundabout is included in the assessment accordingly with additional traffic survey conducted in October 2025. Please refer to Sections 3.2 and 3.3 of the revised TIA for details.</p>

No.	Comments	Responses
	<p>4. Re. Section 4.2.1, the latest Annual Traffic Census Reports shall be adopted.</p> <p>5. Re. Section 5.1, please review the pedestrian access arrangement across the Pak Wai roundabout.</p>	<p>Noted. The latest AADT figures are adopted accordingly. Please refer to Section 4.2.1 of the Updated TIA for details.</p> <p>Noted. A cautionary crossing is proposed to facilitate pedestrians across the Pak Wai roundabout. Please refer to Section 5.3 and Figure 5.5 for details.</p>
5.	<p>Water Supplies Department, New Works Branch, Construction Division, System Planning Section, dated 17 October 2025</p> <p>1. It is noted that existing water mains as shown in the enclosed sketch (please see Attachment I) are within the proposed lot and is likely to be affected. The grantee/applicant is required to either divert or protect the water mains found on site.</p> <p>2. If diversion is required, existing water mains inside the proposed lot are needed to be diverted outside the site boundary of the proposed development to lie in Government land. The cost of diversion of existing water mains upon request will have to be borne by the grantee/applicant; and the grantee/applicant shall submit all the relevant proposal to WSD for consideration and agreement before the works commence.</p> <p>3. If diversion is not required, the following conditions shall apply:</p> <p>(a) Existing water mains are affected as indicated on the site plan and no development which requires resiting of water mains will be allowed.</p> <p>(b) Details of site formation works shall be submitted to the Director of Water Supplies for approval prior to commencement of works.</p> <p>(c) No structures shall be built or materials stored within 1.5 metres from the centre line(s) of water main(s) shown on the plan. Free access shall be made</p>	<p>Noted.</p> <p>Noted.</p> <p>Noted.</p>

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from “Green Belt” and Area Shown as ‘Road’ to “Residential (Group C)3” for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung (No. Y/SK-HC/8)
Responses to Comments – Departmental Comments

No.	Comments	Responses
	<p>available at all times for staff of the Director of Water Supplies or their contractor to carry out construction, inspection, operation, maintenance and repair works.</p> <p>(d) No trees or shrubs with penetrating roots may be planted within the Water Works Reserve or in the vicinity of the water main(s) shown on the plan. No change of existing site condition may be undertaken within the aforesaid area without the prior agreement of the Director of Water Supplies. Rigid root barriers may be required if the clear distance between the proposed tree and the pipe is 2.5m or less, and the barrier must extend below the invert level of the pipe.</p> <p>(e) No planting or obstruction of any kind except turfing shall be permitted within the space of 1.5 metres around the cover of any valve or within a distance of 1 metre from any hydrant outlet.</p> <p>(f) Tree planting may be prohibited in the event that the Director of Water Supplies considers that there is any likelihood of damage being caused to water mains.</p>	

(Last updated 23 October 2025)

Appendix B

Revised Sewage Treatment and Disposal Proposal Report

**Application for Amendment of Plan under Section 12A of the Town
Planning Ordinance (Cap. 131) to Rezone the Application Site from
"Green Belt" and Area Shown as "Road" to "Residential (Group
C)5" for Proposed Residential Development at Various Lots in D.D.
210 and Adjoining Government Land, Pak Wai, Sai Kung**

(HT21130)

Sewage Treatment and Disposal Proposal (STDP) Report

(rev. 3)

October 2025

Sewerage & Sewage Treatment Consultant:

何田顧問工程師有限公司

HO TIN & ASSOCIATES

CONSULTING ENGINEERS LIMITED

香港九龍官塘鴻圖道26號威登中心12樓1201-3室

電話: 2895 2238 圖文傳真: 2890 8872 電郵: admin@hotin.com.hk

Rooms 1201-3, Westin Centre, 26 Hung To Road, Kwun Tong, Kowloon, Hong Kong

Tel: 2895 2238 Fax: 2890 8872 E-mail: admin@hotin.com.hk

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7. Proposed Sewage Treatment
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Table 2	Unit Flow Factors of Commercial Flows from General Operation
Table 3	Peaking Factors, P (Extracted from GESF)
Table 4	Estimated Sewage Flow from Swimming Pool
Table 5	Summary of Estimated Sewage from the Subject Proposed Development

List of Abbreviations

EPD	Environmental Protection Department
GESF	EPD's Report No. EPD/TP 1/05 - Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning
GDSSTP	EPD's Guidelines for the Design of Small Sewage Treatment Plants (Dec 2024)
HTA	Ho Tin & Associates Consulting Engineers Limited
OZP	Outline Zoning Plan
ADWF	Average Dry Weather Flow
PDWF	Peak Dry Weather Flow

1. Introduction

1.1 Ho Tin & Associates Consulting Engineers Limited (HTA) has been appointed by the client to prepare a Sewage Treatment and Disposal Proposal (STDP) Report in support of an application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung.

1.2 This report presents a technically feasible STDP for the subject proposed residential development under application.

1.3 The objectives of this STDP are to:-

- indicate any changes/increase in the sewage flow due to the subject proposed development scheme under application;
- assess any potential sewage impacts of the subject proposed development on the existing sewerage facilities; and
- propose mitigation measures and sewage treatment and disposal proposal to avoid any potential adverse environmental impact.

1.4 The scope of this STDP includes:-

- general site description;
- identification of existing sewerage facilities for the concerned area;
- estimation of sewage flow of the subject proposed development;
- feasibility of connection with existing public sewerage facilities; and
- proposal of sewage treatment and disposal to cater for sewage flow generated by the subject proposed development if found necessary.

2. General Site Description and the Subject Proposed Development

2.1 The subject site is currently zoned "Green Belt" and area shown as "Road" on the Draft Ho Chung Outline Zoning Plan No. S/SK-HC/12 (the OZP). It is located in the northwest side of Marina Cove on the opposite side of Hiram's Highway at Pak Wai, Sai Kung. It is currently occupied by botanical gardens, temporary structures and an access road. A site location plan is shown in **Figure S1**.

- 2.2 It is proposed to change the land use of the subject site to “Residential (Group C)5” with a plot ratio of 0.6 and maximum building heights of 4 storey (excluding basements). The proposed rezoning development covers a site area of about 12,692m² with a total GFA of about 7,615.2m². The designed total population is about 360 persons, and a total of 10 nos. of management staff is presumed in the sewage estimation.
- 2.3 The proposed vehicular ingress/egress point of the subject site abuts on the west side of Hing Keng Shek Road after exit from the roundabout of Hiram’s Highway at Pak Wai.

3. Existing Sewerage System

- 3.1 At present, there is no existing public sewers in the subject area or its vicinity.

4. Proposed Sewage Disposal Arrangement

- 4.1 Since there is no existing public sewers in the concerned area for connection, discharging sewage generated by the subject proposed development into public sewers is not feasible at least by the time of anticipated occupation of the subject proposed development, i.e. **Year 2031**. Therefore, an on-site sewage treatment plant is required until connection to public sewers can be carried out.
- 4.2 The subject site falls within Port Shelter catchment area where tidal flow is restricted. The subject proposed development shall be equipped with suitable on-site sewage treatment facility with treatment standards to handle the sewage generated from the proposal.
- 4.3 Sewage from the residential flats will be collected and carried down to the ground level via downpipes. Branch sewerage will be laid close to the blocks to receive sewage flows from the downpipes directly. The branch sewerage will then discharge into the trunk sewerage which will be laid running underneath the main access road. The trunk sewerage will collect and convey all sewage generated by the subject proposed development to an on-site sewage treatment plant located at the west of the subject site. A proposed sewerage management plan is shown in **Figure S2**.

- 4.4 All future treated effluent discharge shall comply with the Water Pollution Control Ordinance (Cap. 358). A licence granted under the Water Pollution Control Ordinance should be obtained before a new discharge is commenced.
- 4.5 All collected sewage will be treated in the proposed sewage treatment plant. The treated effluent shall comply with the mandatory standards and requirements in the TM-DSS, and will be discharged into the proposed stormwater drainage system of the subject proposed development and from which be discharged to the existing watercourse outside the subject site.

5. Design Sewage Flows and Criteria

5.1 General Criteria

- 5.1.1 The sewage flow generated from the subject proposed development for assessing sewers is estimated in accordance with the EPD's report No. EPD/TP 1/05 – "Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning" (GESF) and the Sewerage Manual Part 1 published by DSD (SM). For proposed on-site sewage treatment plant (STP), EPD's Guidelines for the Design of Small Sewage Treatment Plants (GDSSTP) is adopted.

5.2 Design Population

- 5.2.1 It is explicitly stated in the subject planning application statement that the design population will be about 360 persons plus 10 management staff. These design parameters are adopted in this STDP.

5.3 Unit Flow Factors

- 5.3.1 Unit flow factors as recommended in the Table T-1 and T-2 in **GESF** are adopted to estimate the total sewage flow generated from the subject proposed development.
- 5.3.2 The unit flow factors for domestic flows adopted for this study are summarized in **Table 1** below.

Table 1 : Unit Flow Factors for Domestic Flows

Development Type	Unit	Unit Flow Factor (m ³ /day)
Private R3	Person	0.370

5.3.3 The unit flow factors for commercial flows, i.e. from the management staff, adopted in this study are summarized in **Table 2** below.

Table 2 : Unit Flow Factors (UFF) of Commercial Flow from General Operation (referenced to GESF's Table T-2)

Description	Specific Trades	Unit (per)	Unit Flow Factors (m ³ /day)
Commercial Employee	Not applicable	Employee	0.080
Commercial Activities	J11 (Community, Social and Personal Services)	Employee	0.200

5.4 Peaking Factors

5.4.1 In this assessment, contributing population is calculated as follows:

$$\begin{aligned} \text{Contributing Population} &= (\text{Calculated total average flow} / 0.27) \text{ persons} \\ &= 153.54 / 0.27 = 569 \text{ persons} \end{aligned}$$

5.4.2 The contributing population is <1,000, and the proposed sewers of the subject development would be newly constructed hence infiltration and inflow in the sewerage system would be negligible. Therefore, a peaking factor of 6 as given in Table T-5 in the GESF and listed in below **Table 3** is applicable for the design of internal sewers of the subject development.

Table 3 : Peaking Factors, P (Extracted from GESF)

Population Range for sewers	Peaking Factor (including stormwater allowance) for facility with existing upstream sewerage	Peaking Factor (excluding stormwater allowance) for facility with new upstream sewerage
<1,000	8	6

5.4.3 For STP, with reference to GDSSTP, the design peaking factor would be

- 6 for population equal to or under 1,000
- 4 for population over 1000 but not less than that based on 1000 population.

6. Estimated Peak Sewage Flows

6.1 The design population of the proposed development is about 360 persons plus 10 employee. Tentatively, a 15m x 25m x 1.2m (average water depth) swimming pool is proposed. An instantaneous peak discharge flow of sewage generated from the backwashing is estimated to be approximately 0.2025 l/s in accordance with the general operation of backwashing as shown in **Table 4** below.

Table 4 : Estimated Sewage Flow from Swimming Pool

Description	
Pool Area	15m x 25m = 375 m ²
Pool Depth	1.2 m
Pool Volume	375 x 1.2 = 450.0m ³
Turnover Rate	6 hrs
Surface Loading Rate of Filter	25 m ³ /m ² /hr
Filter Areas Required	450.0 / 6 / 25 = 3.0 m ²
Backwash Flow Rate	50 m ³ /m ² /hr
Backwash Duration	7 min/day
Instantaneous Backwash Flow Rate	50 x 3.0 = 150.0 m³/hr (or 0.041667 m³/s)
Daily Design Flow of Swimming Pool	50 x 3.0 x 7 / 60 = 17.5 m ³ /day

6.2 The estimated total sewage flow generated from the proposed development are summarized in **Table 5** below.

Table 5 : Summary of Estimated Sewage from the Subject Proposed Development

Development Type	Population (number of people)	Unit Flow Factors (m ³ /day)	Catchment Inflow Factors	Peaking Factor	ADWF ⁽¹⁾ (m ³ /s)	PDWF ⁽²⁾ (m ³ /s)
Domestic	360	0.370	Referenced to para. 10.1 of the GESF – ‘not applicable to new catchments which are deemed to be free from misconnections and pipe defects’	6	0.001542	0.009252
J11 (Community, Social and Personal Services)	10	0.280		6	0.000032	0.000192
Swimming Pool	/	/		/	/	0.041667
				Total	0.001574 (excluding swimming pool)	0.051111

Notes:

(1) ADWF – Average dry weather flow, which is equivalent to population x unit flow factor x catchment inflow factor / (60 x 60 x 24)

(2) PDWF – Peak dry weather flow, which is equivalent to ADWF x Peaking Factor

6.3 The peak total dry weather flow generated from the subject proposed development is estimated to be 0.051111 m³/s and the daily total sewage generated (including the swimming pool) is about (0.001574 x 3600 x 24 + 17.50) m³/day = 153.49 m³/day.

7. Proposed Sewage Treatment

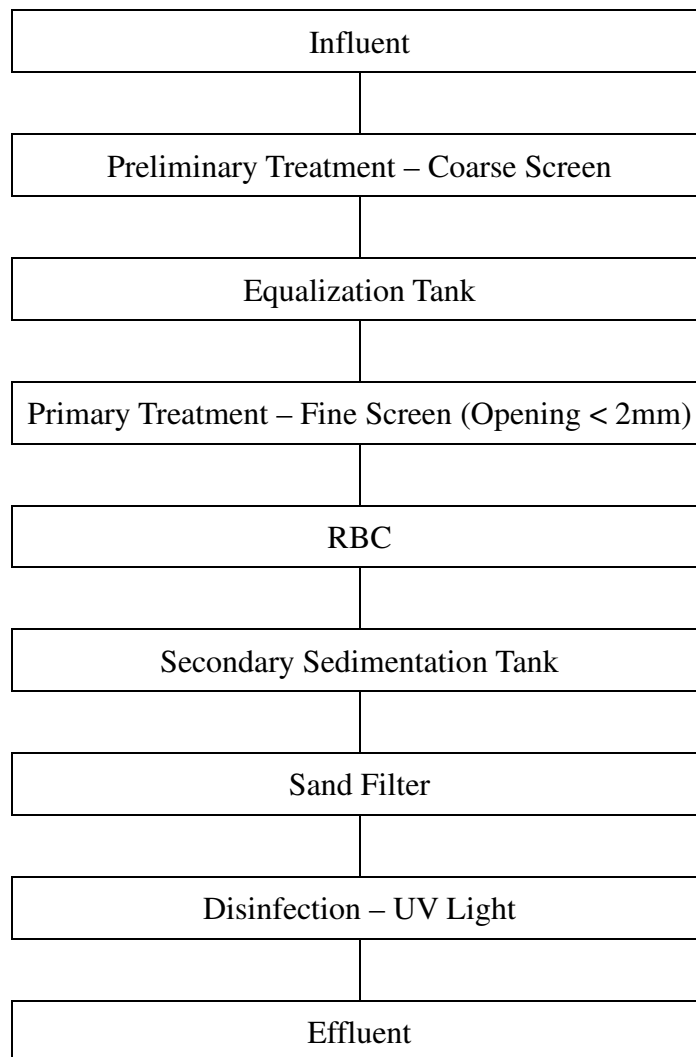
7.1 It is proposed to construct an on-site secondary sewage treatment plant (STP) as an interim measure to cater for the sewage generated from the subject proposed development. The plant will be abandoned after connection to public sewer is possible and acceptable to the authority. The STP will only be decommissioned after the sewer connection is satisfactorily completed.

7.2 The treated effluent will be discharged into the existing watercourse via the proposed stormwater system of the subject development. Effluent discharge will comply with the standards stipulated in the TM-DSS and be discharged into proposed stormwater drainage

system.

7.3 Incoming sewage will pass through a coarse screen before discharging into the equalization tank. The sewage will be pumped to the fine screen chamber to prevent any sizeable solid and minimize the organic solid content into the RBC system. The mixed liquor will then be discharged to the final sedimentation tank. Sludge from the sedimentation tanks will be dewatered by mechanical dewatering unit such as filter press. The dewatering sludge will then be disposed off by land burial to the designated site by a licensed contractor. The secondary treated sewage will pass the sand filter before disinfection process is carried out.

7.4 A flow chart of the proposed sewage treatment system is given below:

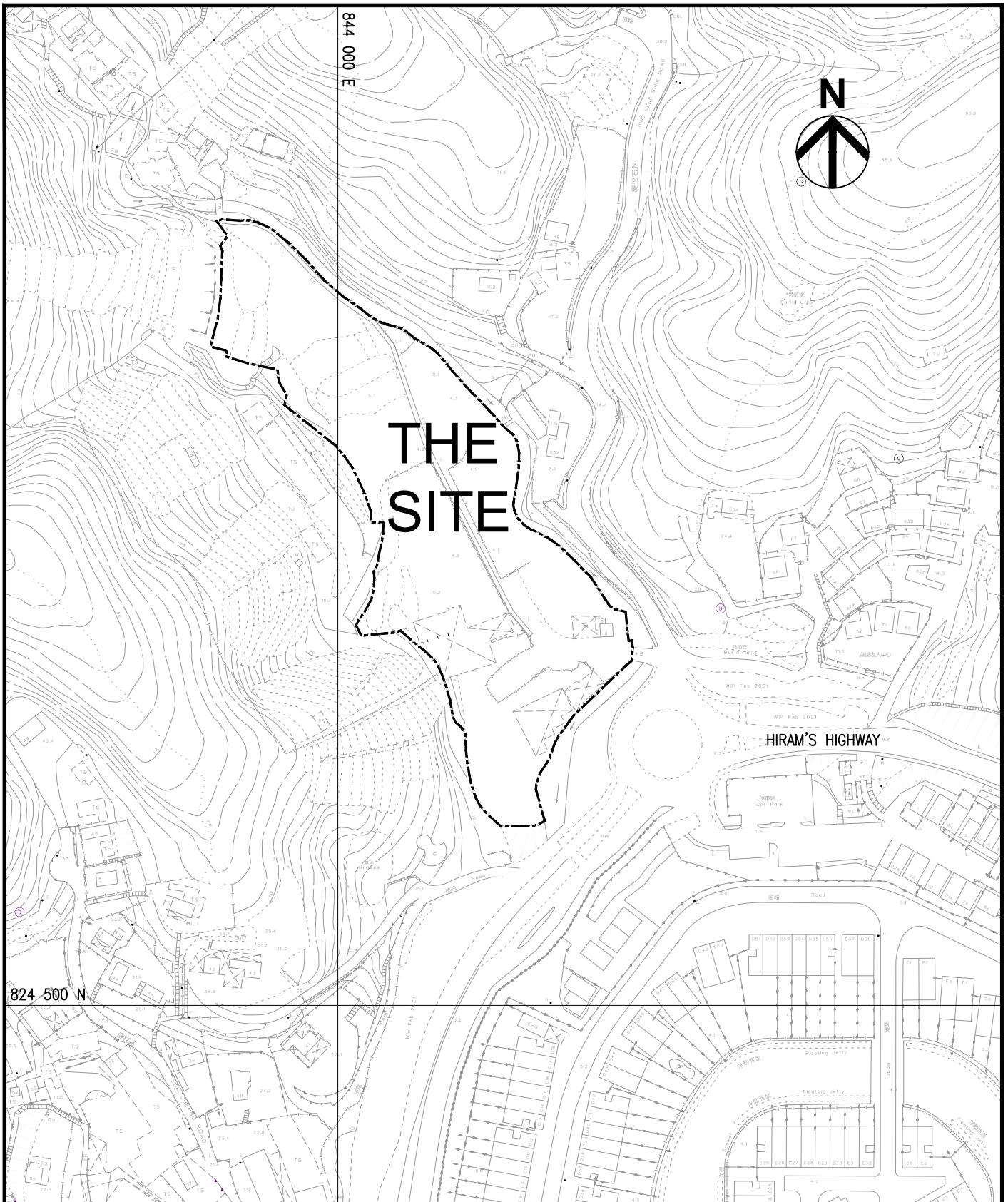


- 7.5 It is realized that on-site sewage treatment plants shall only be the last resort for any sewage treatment and disposal proposal, i.e. whenever sewer connection is not practicable. The pumping station within STP shall be capable of delivering the sewage from the development to the public sewer, when available, and the STP can then be abandoned when public sewer is available. It is envisaged to have no technical problem on sewage treatment process design.
- 7.6 The communal treatment plant serving the whole development is proposed to be located at the southern end near the entrance of the subject site. Sewage after treatment will be discharged into the stormwater drainage of the subject site and from with the flow will be discharged via a stormwater terminal manhole into the existing watercourse running along the southern boundary of the subject site. The location of the STP has been selected with due consideration given to minimization of potential sewer, odour, noise and safety problems to the residents. The design standards and criteria will comply with the latest version of "Guidelines for the Design of Small Sewage Treatment Plants" (December 2024) published by EPD.
- 7.7 If on-site STP is to be constructed, the following action will be taken in order to avoid possible nuisance:
- (a) The STP shall be fully enclosed by a concrete structure and equipped with deodorizing units at the ventilation and exhaust system.
 - (b) Ventilation exhaust pipes will be taken to roof level and away from neighbouring premises. It is recognized that odour from sewage treatment plants mainly originates from bad management. Fresh sewage is odourless and it is important that sewage should not be allowed to be accumulated in the inlet works which must be hosed down as frequent as possible to prevent any accumulation of sewage solids that will eventually become septic.
 - (c) The other source of odour in treatment plants is the sludge dewatering house. Odour will result from the exposed storage of sludge and the accumulation of sludge particles on floors which turn septic. Hence, the sludge dewatering house must be kept clean at all times and sludge storage bags be tied up as soon as they are full or drums be covered.
 - (d) All openable windows for ventilation, fresh air intake, and other planned outdoor locations for air sensitive uses of the proposed development should be located outside of the buffer regions to avoid potential air quality impact.
 - (e) Noise should not be problem since the selection of units will avoid the use of motors of high revolution. Air blowers too, will not be used. Instead, quiet machines such as submersible pumps and ejectors will be favoured. Particular attention shall

be paid to the selection of exhaust fans and the design of intake and exhaust grills to prevent whistling noises.

8. Conclusion

- 8.1 Sewage generated from the proposed development will be properly treated by an on-site sewage treatment plant. The treated effluent will be discharged to nearby watercourse.
- 8.2 All future treated effluent discharge shall comply with the Water Pollution Control Ordinance (Cap. 358). A licence granted under the Water Pollution Control Ordinance should be obtained before a new discharge is commenced.
- 8.3 In conclusion, the subject proposed development would not impose any adverse sewerage impact.



LEGEND:

----- SUBJECT SITE BOUNDARY

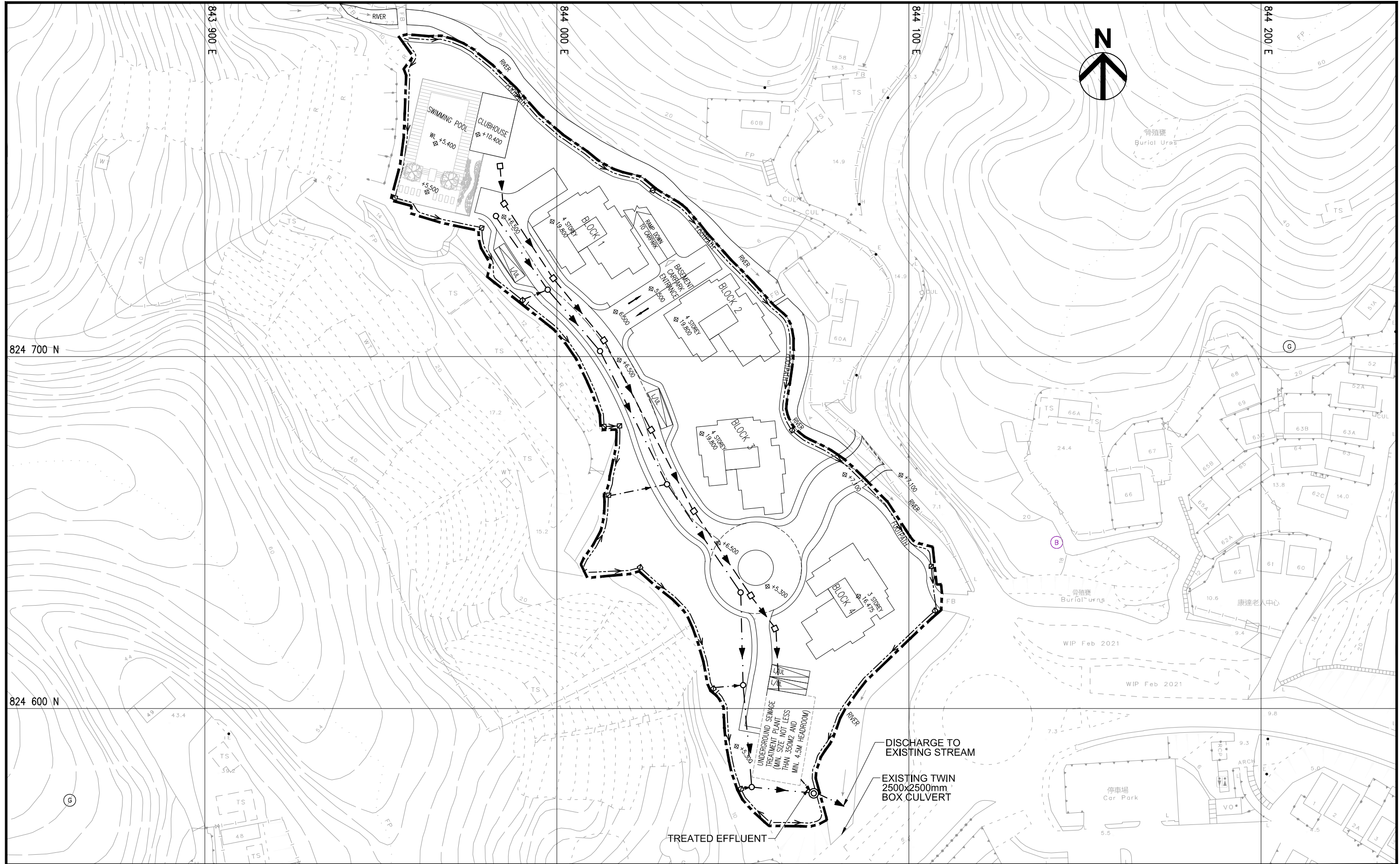
PROJECT APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D.210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

何田顧問工程師有限公司
HO TIN & ASSOCIATES
 CONSULTING ENGINEERS LIMITED

TITLE
 SITE LOCATION PLAN

SCALE
 1 : 2000 - A4

DRAWING No.
 FIGURE S1



LEGEND:

- | | | | |
|--|-----------------------|--|--------------------------------------|
| | SUBJECT SITE BOUNDARY | | PROPOSED STORMWATER TERMINAL MANHOLE |
| | PROPOSED GROUND LEVEL | | PROPOSED STORMWATER DRAIN & MANHOLE |
| | | | PROPOSED U-CHANNEL & CATCH PIT |
| | | | PROPOSED SEWER & MANHOLE |

PROJECT APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D.210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

TITLE SEWERAGE MANAGEMENT PLAN

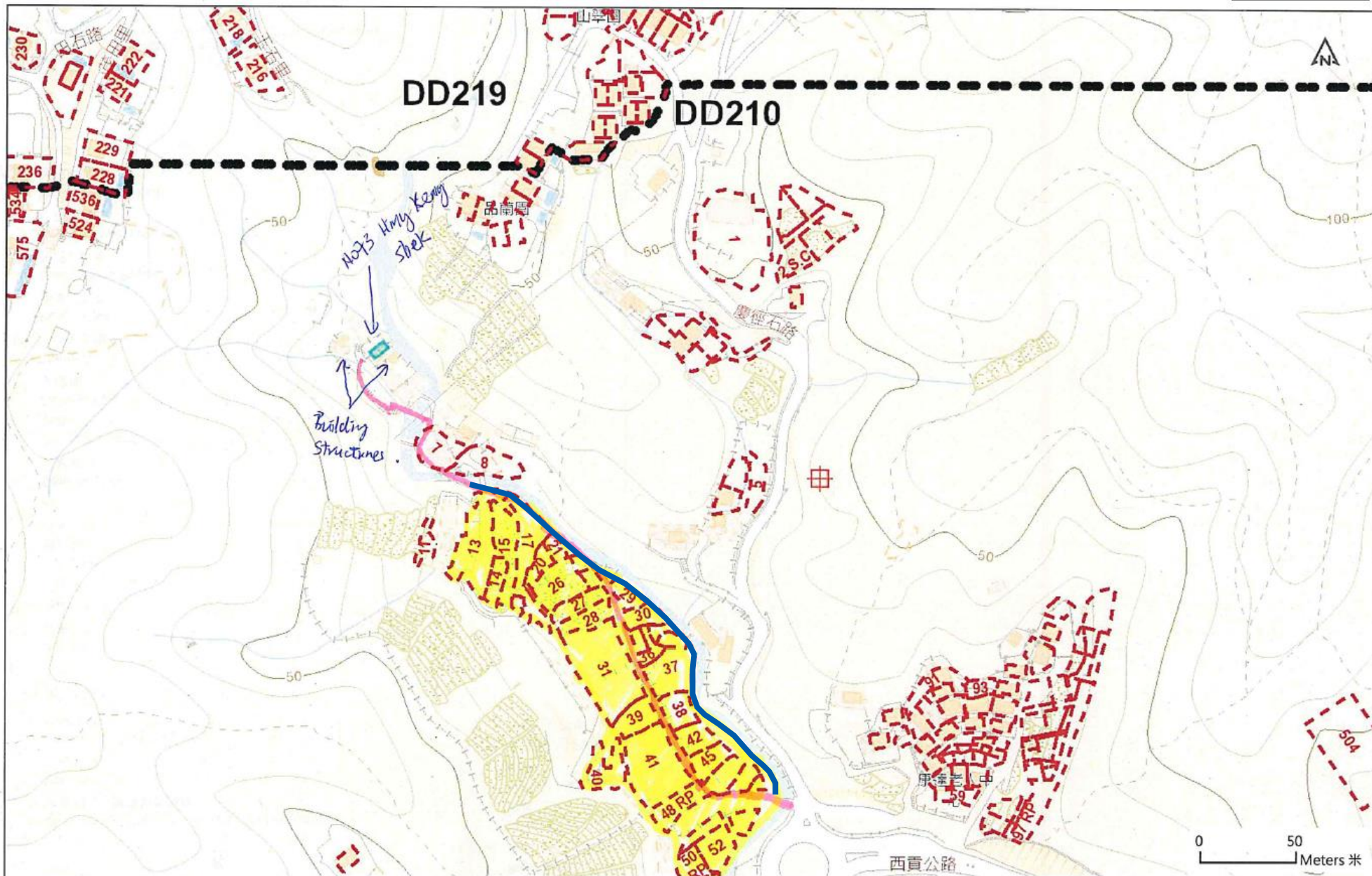
何田顧問工程師有限公司
HO TIN & ASSOCIATES
 CONSULTING ENGINEERS LIMITED

SCALE
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DRAWING No.
 FIGURE S2

Appendix C

Supplementary Information



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— Access for the households during and after the construction of the Application Site

— Existing access used by No. 73 Hing Keng Shek and households nearby

— proposed residential development

Print Date : 09/10/2025
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Appendix D

Revised Traffic Impact Assessment

DOCUMENT STATUS CONTROL RECORD

Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

Traffic Impact Assessment Report

Originating Organisation : LLA Consultancy Limited Unit 610, 6/F, Island Place Tower, 510 King's Road, North Point, Hong Kong	Prepared by: SKL	<i>SKL</i>	Date: 21 October 2025
	Approved by: SLN	<i>SLN</i>	Date: 21 October 2025
	Revision No.: -		Date of Issue: 21 October 2025

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1 INTRODUCTION

1.1 Background

- 1.1.1 The Applicant intends to develop the Site into a residential development at various lots in D.D.210, Pak Wai, Sai Kung ("the Site").
- 1.1.2 The Site is currently zoned as "Green Belt" ("GB") and "Road" under the Draft Ho Chung Outline Zoning Plan (OZP) No. S/SK-HC/12. The Applicant proposes amendments to the Draft Ho Chung Outline Zoning Plan (OZP) No. S/SK-HC/12 by rezoning the Application Site from "Green Belt" ("GB") and area shown as "Road" to "Residential (Group C)5" ("R(C)5"), with a maximum plot ratio of 0.6 and maximum building heights (BH) of 4 storeys (excluding basements) to facilitate the proposed residential development.
- 1.1.3 LLA Consultancy Limited was commissioned to carry out a traffic impact assessment study for the proposal to assess the potential traffic impact on its adjacent road network, in support of the planning application. This report presents the finding of the study.

1.2 Objectives

- 1.2.1 The objectives of the traffic impact assessment study are as follows:
- to review the existing traffic conditions in the surrounding road network;
 - to estimate the potential traffic generation due to the proposed development;
 - to assess the future traffic situation in the surrounding road network;
 - to appraise the potential traffic impact of the proposed development; and
 - to recommend the transport facilities provisions for the proposed development.

2 THE PROPOSED DEVELOPMENT

2.1 The Site

- 2.1.1 As shown in **Figure 2.1**, the Site is located near the J/O Hiram's Highway/Hing Keng Shek Road. The Site area is about 12,692 m².

2.2 Development Schedule

- 2.2.1 The Site will comprise of 4 residential towers with 120 residential units. The development parameters are summarized in **Table 2.1**.

Table 2.1 Proposed Development Schedule

Item	Parameter
Site Area	About 12,692 m ²
Plot Ratio	About 0.6
Total GFA	About 7,615.2 m ²
Domestic GFA	About 7,615.2 m ²
Number of Residential Blocks	4 blocks
Number of Residential Units	120 units
Estimated Residential Population	360

3 EXISTING TRAFFIC SITUATION

3.1 Existing Traffic Conditions

3.1.1 Hing Keng Shek Road serves as a local road connecting to Hiram's Highway. It is a single carriageway with few accesses for the low-density developments and villages nearby.

3.1.2 Hiram's Highway is a major road in the eastern part of New Territories connecting Sai Kung with Clear Water Bay Road. The section of Hiram's Highway between Clear Water Bay Road and Po Tung Road carried an AADT of 22,860 vehicles in 2023.

3.2 Existing Junction Capacity Assessment

3.2.1 In order to assess the existing traffic conditions, a traffic count survey was carried out at the following locations in the vicinity of the Site on 13 October 2025 (Monday) during 07:30 – 09:30 and 17:30 – 19:30 and 11 October 2025 (Saturday) from 12:00 to 19:00. The locations of the surveyed junctions are presented in **Figure 3.1**.

- Hiram's Highway/Hing Keng Shek Road Roundabout
- Hiram's Highway/Ho Chung Road
- Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

3.2.2 The identified weekday AM, weekday PM and weekend peak hours were 08:00 – 09:00, 17:45 – 18:45 and 16:45 – 17:45, respectively and the surveyed traffic flows are presented in **Figure 3.2**.

3.3 Existing Junction Capacity Assessment

3.3.1 Based on the existing traffic flows, the performances of the key junctions during the peak hour were assessed. The results are summarized and presented in **Table 3.1** and the detailed junction capacity calculation sheets are attached in **Appendix A**.

Table 3.1 Existing Junction Performance

No.	Junction Location	Type/ Capacity Index ⁽¹⁾	Junction Performance		
			Weekday AM Peak	Weekday PM Peak	Weekend Peak
J1	Hiram's Highway/Hing Keng Shek Road Roundabout	Roundabout /DFC	0.51	0.43	0.50
J2	Hiram's Highway/Ho Chung Road	Signalized/RC	106%	78%	97%
J3	Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road	Roundabout/ DFC	0.58	0.57	0.50

Note: (1) RC = Reserve Capacity; DFC = Design Flow to Capacity ratio

3.4 Existing Link Capacity Assessment

3.4.1 The Volume to Capacity (V/C) Ratios of Hiram's Highway were assessed and the results are presented in **Table 3.2**.

Table 3.2 Link Capacity Assessment

Direction	Bound	Capacity (pcu/hr) ⁽¹⁾	Traffic Flow (pcu/hr)			V/C Ratio		
			AM	PM	WN	AM	PM	WN
Hiram's Highway ⁽²⁾	EB	1,020	761	1,005	974	0.75	0.99	0.95
	WB	1,020	1,031	785	1,008	1.01	0.77	0.99
Hiram's Highway ⁽³⁾	NB	3,120	750	1,019	1,005	0.24	0.33	0.32
	SB	3,120	1,083	799	1,039	0.35	0.26	0.33
Hiram's Highway ⁽⁴⁾	NB	3,120	786	1,121	1,066	0.25	0.36	0.34
	SB	3,120	1,177	850	1,065	0.38	0.27	0.34
Hiram's Highway ⁽⁵⁾	NB	3,120	878	1,256	1,149	0.28	0.40	0.37
	SB	3,120	1,282	932	1,133	0.41	0.30	0.36
Hing Keng Shek Road	2-way	120	51	38	69	0.43	0.32	0.58

- Notes: AM – Weekday AM Peak Hour; PM – Weekday PM Peak Hour; WN – Weekend Peak Hour
(1) Capacity refers to TPDM Vol.2 Ch. 2.4. A factor of 1.2 (based on the traffic count survey result) is adopted to convert the capacity from veh/hr to pcu/hr.
(2) The section between Hing Keng Shek Road and Pak Sha Wan Street.
(3) The section between access of Luk Cheung Road and Hing Keng Shek Road.
(4) The section between Ho Chung Road and Luk Mei Tsuen Road.
(5) The section between Nam Pin Wai Road and Ho Chung Road.

3.4.2 As shown in **Table 3.2**, the concerned road sections are operating with spare capacity during weekday AM, weekday PM and weekend peak hours, except the section of Hiram's Highway between Hing Keng Shek Road and Pak Sha Wan Street which is operating at its capacity.

3.5 Public Transport Services

3.5.1 At present, there are few franchised bus and green minibus routes travelling along Hiram's Highway and the details of these routes. The nearby bus stops of the Site are listed out in **Table 3.3** and shown in **Figure 3.3**, respectively.

Table 3.3 Existing Public Transport Services

Mode	Route No.	Terminating Points	Frequency (min)
Bus	92	Sai Kung – Diamond Hill Station	15 – 30
	96R ⁽¹⁾	Wong Shek Pier – Diamond Hill Station	25 – 30
	292P	Sai Kung – Kwun Tong (Yue Man Square)	07:30
	792M	Sai Kung – Tseung Kwan O Station	15 – 30
GMB	1	Sai Kung – Kowloon Bay (Telford Gardens)	8 – 20
	1A	Sai Kung – Diamond Hill (Choi Hung Road) Public Transport Interchange	4
	1S ⁽²⁾	Sai Kung – Diamond Hill (Choi Hung Road) Public Transport Interchange	10 – 15
	2	Sai Kung – Ho Chung	15 – 30
	12	Sai Kung – Po Lam	10 – 15

Mode	Route No.	Terminating Points	Frequency (min)
	101M	Sai Kung – Hang Hau Station (via Sai Kung North Public Transport Interchange)	3 – 30

Note: (1) Service on Saturdays, Sundays and Holidays.
(2) Overnight Service.

3.5.2 An on-site observation was carried out to identify the occupancy of the franchised bus and green minibus services in the AM peak hour and the results are summarized in **Table 3.4**.

Table 3.4 Occupancy of Existing Franchised Bus and Green Minibus Services during AM Peak Hour

Route No.	Observed Vehicular Trips	Passenger Capacity ⁽¹⁾	Passengers on Bus upon Arrival	Total No. of passengers		Passengers on Bus upon Leave	Occupancy
				Boarding	Alighting		
		[a]	[b]	[c]	[d]	[e] = [b]+[c]-[d]	[f] = [e] / [a]
Sai Kung Bound							
Bus 92	3	360	80	0	4	76	21%
Bus 792M	3	360	50	0	0	50	14%
GMB 1	7	112	56	2	0	58	52%
GMB 1A	22	352	229	3	5	227	64%
GMB 2	3	48	23	0	0	23	48%
GMB 12	4	64	20	0	0	20	31%
GMB 101M	20	320	178	0	2	176	55%
Total	62	1616	636	5	11	630	39%
Kowloon Bound							
Bus 92	2	240	90	2	1	91	38%
Bus 792M	2	240	90	5	0	95	40%
GMB 1	4	64	64	0	0	64	100%
GMB 1A	23	368	361	2	0	363	99%
GMB 2	2	32	16	0	0	16	50%
GMB 12	2	32	32	0	0	32	100%
GMB 101M	17	272	272	0	0	272	100%
Total	52	1248	925	9	1	933	75%

Note: (1) Assume the capacity of each franchised bus and green minibus is 120 pax and 16 pax, respectively.

4 FUTURE TRAFFIC SITUATION

4.1 Design Year

4.1.1 The completion year of the proposed development is expected to be 2031. As a result, the design year of the traffic impact assessment should be three years after the completion year, i.e., 2034.

4.2 Traffic Forecast

ATC Historical Data

4.2.1 Reference was made to the 2019 to 2023 Annual Traffic Census Reports, published by the Transport Department, to determine the traffic growth. The traffic data recorded at the counting stations in the vicinity of the Development Site is shown in **Table 4.1**.

Table 4.1 Annual Traffic Census Data

Stn. No.	Road Section			AADT ⁽¹⁾					Average Growth%
	Road	From	To	2019	2020	2021	2022	2023	
5017	Clear Water Bay Rd	On Sau Rd	Hiram's Highway	28,980	28,900 (-0.3%)	29,100 (0.7%)	27,720 (-4.7%)	29,080 (4.9%)	0.1%
5466	Clear Water Bay Rd	Hang Hau Rd	Hiram's Highway	20,240	19,110 (-5.6%)	20,020 (4.8%)	19,140 (-4.4%)	19,160 (0.1%)	-1.4%
6055	Hiram's Highway	Clear Water Bay Rd	Po Tung Rd	24,280	23,360 (-3.8%)	24,460 (4.7%)	23,480 (-4%)	22,860 (-2.6%)	-1.5%
Total				73,500	71,370 (-2.9%)	73,580 (3.1%)	70,340 (-4.4%)	71,100 (1.1%)	-0.8%

Note: (1) Figures in bracket indicated the % increase between two years.

4.2.2 **Table 4.1** shows that the AADT at the concerned ATC stations has an overall annual growth of **negative 0.8%** in between the years **2019 to 2023**.

Territorial Population and Employment Data Matrix (TPEDM) Projection Data

4.2.3 Reference was also made to the 2019-based TPEDM published by the Planning Department. The population and employment data of year 2019 and 2031 in the Southeast New Territories (Other Area) are summarized in **Table 4.2**.

Table 4.2 Population and Employment Data in Southeast New Territories (Other Area)

Year	2019	2026	2031
Population	68,900	65,800	59,750
Employment	27,250	27,750	28,100
Total	96,150	93,550	87,850
Average Annual Growth %		-0.4% (2019 to 2026)	-1.2% (2026 to 2031)

4.2.4 As shown in **Table 4.2**, the projected average annual growth rates of the population and employment total number under the TPEDM in Southeast New Territories (Other Area) are negative 0.4% and negative 1.2% between the years 2019 – 2026 and 2026 – 2031, respectively. Having considered the rates derived from ATC and TPEDM data, to be conservative, a nominal growth rate of +1.0% will be adopted for the subsequent traffic forecast.

4.3 Traffic Generation of the Proposed Development

4.3.1 Reference was also made to the latest set of traffic generation and attraction rates documented in Chapter 3 "Transport Considerations of Town Plans" of the TPDM, for the estimation of the traffic generated by the proposed development. The traffic generation and attraction numbers were shown in **Table 4.3**

Table 4.3 Development Traffic Generation

Proposed Use	Unit / Content	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekend Peak Hour ⁽¹⁾		
		Gen.	Att.	Total	Gen.	Att.	Total	Gen.	Att.	Total
Mean Trip rates from TPDM										
Residential – 70m ²	pcu/hr/flat	0.0888	0.0515	-	0.0356	0.0480	-	0.0356	0.0480	-
Traffic Generation/Attraction										
Proposed Development	120 flats	11	7	18	5	6	11	5	6	11

Note: Gen. – Generation; Att. – Attraction.

(1) The trip rates for PM peak hour are adopted for the weekend peak hour.

4.3.2 In view of the above, the proposed development would generate two-way traffic flows of 18 pcu/hr in the weekday AM peak hour, 11 pcu/hr in the weekday PM peak hour and 11 pcu/hr in the weekend peak hour. The traffic distribution is shown diagrammatically in **Figure 4.1**.

4.4 Planned and Approved Developments

4.4.1 To estimate the future traffic flows generated and attracted by the nearby planned and approved developments, updated information has been obtained from available information regarding the planned and approved developments in the vicinity of the proposed development site, the details of these developments are listed in **Table 4.4**.

Table 4.4 Planned and Approved Developments

Ref.	Location	Use	Development Parameters
A	Various Lot in D.D. 210, Ho Chung	Residential	2,422 m ² GFA (15 flats)
B	Lot 1003 in D.D. 214, Ho Chung	Residential	5,344 m ² GFA (90 flats)
C	Lot 2189 in D.D. 244, Nam Pin Wai	Residential	8,320 m ² GFA (139 flats)
D	Various Lots in D.D. 244 and Adjoining Government Land, Ho Chung, Sai Kung	Residential	13,719 m ² GFA (58 flats)
E	Various Lots in D.D. 210 and 244 and Adjoining Government Land, Ho Chung, Sai Kung	Residential	2,393 m ² GFA (8 flats)

4.4.2 Reference is made to Volume 1 of the TPDM published by the TD on the trip rates of the foregoing developments to estimate their traffic generation and attraction. The total traffic generation and attraction by these adjacent planned/committed developments are summarized in **Table 4.5**.

Table 4.5 Traffic Generation of the Planned and Approved Developments

Use	Use / Content	AM Peak Hour			PM Peak Hour			Weekend Peak Hour ⁽¹⁾		
		Gen.	Att.	Total	Gen.	Att.	Total	Gen.	Att.	Total
Adopted TPDM Mean Trip Rates										
Residential – 60m ²	pcu/hr/flat	0.0718	0.0425	-	0.0286	0.0370	-	0.0286	0.0370	-
Residential – 180m ²	pcu/hr/flat	0.2772	0.1769	-	0.1635	0.2394	-	0.1635	0.2394	-
Residential – 240m ²	pcu/hr/flat	0.3012	0.2189	-	0.2235	0.3234	-	0.2235	0.3234	-
Residential – 300m ²	pcu/hr/flat	0.3252	0.2609	-	0.2835	0.4074	-	0.2835	0.4074	-
Traffic Generation										
Site A	15 flats	5	3	8	3	4	7	3	4	7
Site B	90 flats	7	4	11	3	4	7	3	4	7
Site C	139 flats	10	6	16	4	6	10	4	6	10
Site D	58 flats	18	13	31	13	19	32	13	19	32
Site E	8 flats	3	3	6	3	4	7	3	4	7
Total		43	29	72	26	37	63	26	37	63

Note: Gen. – Generation; Att. – Attraction.

(1) The trip rates for PM peak hour are adopted for weekend peak hour.

4.4.3 As shown in **Table 4.5**, the planned/committed developments will generate a total two-way traffic of 72, 63 and 63 pcu/hr during weekday AM, weekday PM peak hour and weekend peak hour respectively. The estimated traffic generation will be assumed to be travelling in the local road network in the same proportions as the existing traffic demands when traffic forecast is prepared in this Study.

4.5 Reference and Design Flows

4.5.1 The 2034 Reference Flows, i.e. the traffic flows in the vicinity without the proposed development, were estimated based on the following equation.

$$2034 \text{ Reference Flows} = 2025 \text{ Existing Traffic Flows} \times (1 + 1.0\%)^9$$

4.5.2 The 2034 Design Flows, i.e. the traffic flows in the local road network with the traffic generated by the proposed residential development, were estimated based on the following equation:

$$2034 \text{ Design Flows} = 2034 \text{ Reference Flows} + \text{Traffic Flows Generated by the Proposed Development}$$

4.5.3 The 2034 Reference and Design Flows are shown in **Figures 4.2** and **4.3**, respectively.

4.6 Junction Capacity Assessment

4.6.1 Junction capacity analysis was carried out for the assessment year 2034. The assessment results are shown in **Table 4.6** and the detailed calculation sheets are attached in **Appendix B**.

Table 4.6 2034 Junction Capacity Assessments

No.	Junction Location	Type/ Index ⁽¹⁾	Reference			Design		
			AM	PM	WN	AM	PM	WN
J1	Hiram's Highway/Hing Keng Shek Road Roundabout	Roundabout /DFC	0.56	0.47	0.55	0.56	0.47	0.55
J2	Hiram's Highway/Ho Chung Road	Signalized /RC	86%	69%	80%	85%	67%	80%
J3	Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road	Roundabout/ DFC	0.65	0.63	0.56	0.65	0.64	0.56

Notes: AM – Weekday AM Peak Hour; PM – Weekday PM Peak Hour; WN – Weekend Peak Hour.
(1) RC = Reserved Capacity; DFC = Design Flow to Capacity Ratio.

4.6.2 As shown in **Table 4.6**, all the concerned junctions will perform with spare capacity for both the Reference and Design Scenarios in 2034. Therefore, the adjacent road network will be able to cope with the traffic generated by the proposed development.

4.7 Link Capacity Assessment

4.7.1 The V/C Ratios of Hiram's Highway were assessed and the results are presented in **Table 4.7**.

Table 4.7 Year 2034 Link Capacity Assessments

Direction	Bound	Capacity (pcu/hr) ⁽¹⁾	Traffic Flow (pcu/hr)			V/C Ratio		
			AM	PM	WN	AM	PM	WN
2034 Reference Scenario								
Hiram's Highway ⁽²⁾⁽³⁾	EB	3,120	835	1,102	1,067	0.27	0.35	0.34
	WB	3,120	1,130	862	1,105	0.36	0.28	0.35
Hiram's Highway ⁽⁴⁾	NB	3,120	823	1,116	1,101	0.26	0.36	0.35
	SB	3,120	1,186	877	1,139	0.38	0.28	0.37
Hiram's Highway ⁽⁵⁾	NB	3,120	869	1,236	1,176	0.28	0.40	0.38
	SB	3,120	1,294	936	1,171	0.41	0.30	0.38
Hiram's Highway ⁽⁶⁾	NB	3,120	987	1,331	1,253	0.32	0.43	0.40
	SB	3,120	1,412	1,028	1,248	0.45	0.33	0.40
Hing Keng Shek Road	2-way	120	56	41	75	0.47	0.34	0.63
2034 Design Scenario								
Hiram's Highway ⁽²⁾⁽³⁾	EB	3,120 ⁽³⁾	836	1,102	1,067	0.27	0.35	0.34
	WB	3,120 ⁽³⁾	1,131	863	1,106	0.36	0.28	0.35

Direction	Bound	Capacity (pcu/hr) ⁽¹⁾	Traffic Flow (pcu/hr)			V/C Ratio		
			AM	PM	WN	AM	PM	WN
Hiram's Highway ⁽⁴⁾	NB	3,120	829	1,121	1,106	0.27	0.36	0.35
	SB	3,120	1,196	882	1,144	0.38	0.28	0.37
Hiram's Highway ⁽⁵⁾	NB	3,120	875	1,241	1,181	0.28	0.40	0.38
	SB	3,120	1,304	941	1,176	0.42	0.30	0.38
Hiram's Highway ⁽⁶⁾	NB	3,120	993	1,336	1,258	0.32	0.43	0.40
	SB	3,120	1,422	1,033	1,253	0.46	0.33	0.40
Hing Keng Shek Road	2-way	960 ⁽⁷⁾	74	52	86	0.08	0.05	0.09

Notes: AM – Weekday AM Peak Hour; PM – Weekday PM Peak Hour; WN – Weekend Peak Hour

- (1) Capacity refers to TPDM Vol.2 Ch. 2.4. A factor of 1.2 (based on the traffic count survey result) is adopted to convert the capacity from veh/hr to pcu/hr.
- (2) The section between Hing Keng Shek Road and Pak Sha Wan Street.
- (3) The section of Hiram's Highway will be widened to dual two-lane carriageway under Hiram's Highway Improvement Stage 2.
- (4) The section between access of Luk Cheung Road and Hing Keng Shek Road.
- (5) The section between Ho Chung Road and Luk Mei Tsuen Road.
- (6) The section between Nam Pin Wai Road and Ho Chung Road.
- (7) The section between proposed vehicular access and Hiram's Highway will be widened (discussed in **Section 5.1** below).

4.7.2 As shown in **Table 4.6**, all the concerned road sections will operate with capacity during weekday AM, weekday PM and weekend peak hours in both reference and design scenarios.

4.8 Review of Public Transport Facilities

4.8.1 Based on the tentative flat mix, the overall population of the proposed development is about 360. Reference has been made to the published "Travel Characteristics Survey (TCS) 2011 Final Report". According to the Report, the daily mechanized trip rate per population is 1.83 trips (two-way) and the morning peak hour accounted for about 12% of the daily trips for the two-way trips. It is assumed that 90% of the trips are in outbound direction in the AM peak hour. Based on the above and most of residents would use public transport services, the estimated public transport demand of the proposed development in outbound direction in AM peak hour is about 72 pax/hr (i.e. $360 \times 1.83 \times 0.12 \times 0.9$).

4.8.2 The public transport demand induced by the planned developments mentioned in **Section 4.4** is also considered. According to "Hong Kong Annual Digest of Statistics" published by the Census and Statistic Department, the average household size for the territory in year 2022 is 2.7, this figure is adopted for estimating the population of these developments. By following the methodology described in the aforesaid paragraph, the estimated public transport demand of the planned developments in outbound direction in AM peak hour is about 166 pax/hr (i.e. $(15+90+139+58+8) \times 2.7 \times 1.83 \times 0.12 \times 0.9$).

4.8.3 Based on the existing public transport vacancy (as estimated in **Table 3.3**) and the above projected demand, the existing bus/green minibus services will still operate with capacity after accommodating the future demand induced by the proposed development and the planned developments.

5 PROVISION OF TRANSPORT FACILITIES

5.1 Vehicular Access Arrangement

5.1.1 The vehicular access of the proposed development will be located at Hing Keng Shek Road. It is proposed to widen the existing section of Hing Keng Shek Road between the proposed vehicular access and Hiram's Highway to 6.0m for a 2-lane single carriageway. A 2.0m wide footpath will be also provided within the Site connecting the proposed development and Hiram's Highway and the footpath will also be opened for public use. The proposed traffic arrangement is shown in **Figure 5.1**. The project proponent will be responsible for implementing the improvement works and will undertake the management and maintenance responsibility for the footpath within the Site.

5.1.2 Swept path analysis is conducted to demonstrate the manoeuvring of vehicles entering and leaving the Site via the proposed vehicular access and shown in **Figures 5.2 – 5.3**. To ensure sufficient sightline is provided for the proposed run-out, a sightline analysis is conducted and presented in **Figure 5.4**.

5.2 Internal Transport Facilities

5.2.1 The internal transport facilities for the proposed development will be provided in accordance with the Hong Kong Planning Standards and Guidelines (HKPSG). The required and the proposed provisions for the proposed development are shown in **Table 5.1**.

Table 5.1 Proposed Car Parking and Loading/Unloading Facilities

Type	HKPSG's Requirements						Required Provision	Proposed Provision
Proposed Residential Development (120 flats)								
Car Parking Space	<u>For Residents</u> Parking Requirements = GPS x R1 x R2 x R3 where						14 – 24	24
	Unit Size	No. of Unit	GPS	R1	R2	R3		
	40 m ² <FS ≤ 70 m ²	60	1 space per 4 – 7 units	1.2	1	1.3		
	70 m ² < FS ≤ 100 m ²	60		2.4	1	1.3		
	<u>For Visitors</u> Visitor car parking for private residential developments with more than 75 units per block should be provided at 5 visitor spaces per block in addition to the requirements, or as determined by the Authority. For private residential developments with 75 units or less per block, the visitor car parking provision will be determined by TD on a case-by-case basis.						8	8
TOTAL CAR PARKING						49 – 79	79	
Motorcycle Parking Space	1 space per 100 - 150 flats						1 – 2	2
Loading / Unloading Bay	1 bay per residential block or as determined by the Authority.						4	4

5.2.2 **Table 5.2** lists out a summary of the numbers and the dimensions required for each type of spaces in the proposed development. The proposed car park layout plan is enclosed in **Appendix C**.

Table 5.2 Summary of Overall Transport Facilities Provision

Facilities	Dimensions	Proposed Provision
Car Parking Space	2.5m (W) x 5.0m (L) x 2.4 (H)	77
Disable Car Parking Space	3.5m (W) x 5.0m (L) x 2.4 (H)	2
Goods Vehicle Loading and Unloading Bay	3.5m (W) x 11.0m (L) x 4.7m(H)	4
Motorcycle Parking Space	1.0m (W) x 2.4m (L) x 2.4 (H)	2

5.3 Pedestrian Access Arrangement

5.3.1 At present, there is a cautionary crossing for pedestrians to walk across Hiram's Highway to reach the bus layby for Kowloon/TKO-bound buses. For the pedestrians to walk to the bus layby for Sai Kung-bound buses, it is proposed to improve the pedestrian connectivity by providing a cautionary crossing to walk across Hing Keng Shek Road as shown in **Figure 5.5**.

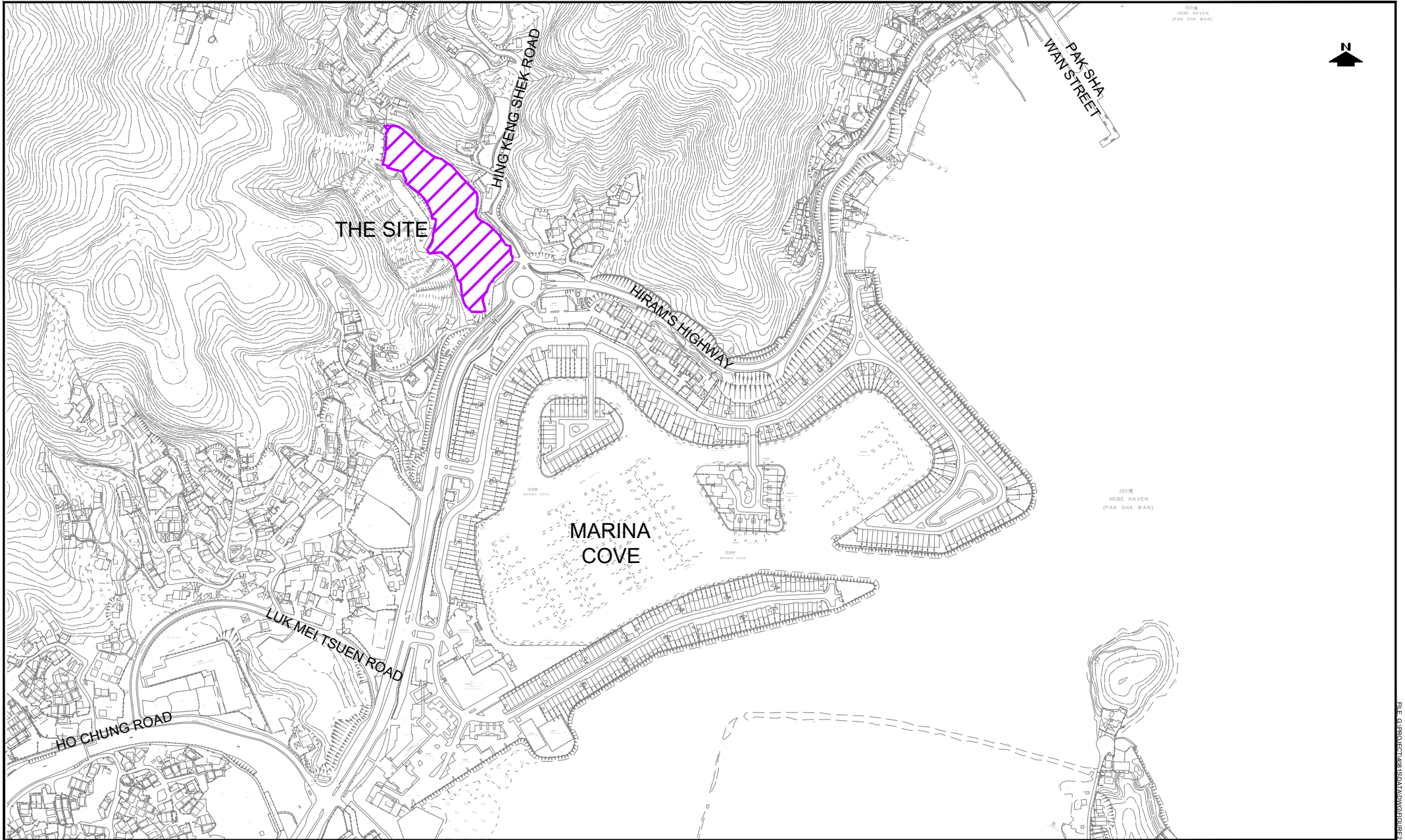
6 SUMMARY AND CONCLUSION

6.1 Summary

- 6.1.1 The Applicant intends to develop the Site into a residential development at various lots in D.D.210, Pak Wai, Sai Kung. The proposal will have about 120 residential units.
- 6.1.2 Traffic count surveys were carried out on 13 October 2025 (Monday) during 07:30 – 09:30 and 17:30 – 19:30 and 11 October 2025 (Saturday) from 12:00 to 19:00. The identified weekday AM, weekday PM and weekend peak hours were 08:00 – 09:00, 17:45 – 18:45 and 16:45 – 17:45, respectively. Junction and link capacity assessment based on the observed flows shows that all concerned junctions and road links are performing satisfactorily during weekday AM, weekday PM and weekend peak hours, except the section of Hiram's Highway between Hing Keng Shek Road and Pak Sha Wan Street which is operating at its capacity.
- 6.1.3 The proposed development would generate two-way traffic flows of 18 pcu/hr in the weekday AM peak hour, 11 pcu/hr in the weekday PM peak hour and 11 pcu/hr in the weekend peak hour. By assigning the additional development traffic to the 2034 Reference Flows, the 2034 Design Flows were obtained.
- 6.1.4 Junction and link capacity assessments were carried out for the key junctions and road links in the vicinity for the year 2034. The results indicated that all junctions and road links will operate satisfactorily for both reference and design scenarios. Therefore, it is anticipated that the proposed development will not induce significant traffic impact to the surrounding road network.
- 6.1.5 The vehicular access of the proposed development will be located at Hing Keng Shek Road. It is proposed to widen the existing section of Hing Keng Shek Road between the proposed vehicular access and Hiram's Highway to 6.0m for a 2-lane single carriageway. A 2.0m wide footpath will be also provided within the Site connecting the proposed development and Hiram's Highway and the footpath will also be opened for public use. The project proponent will be responsible for implementing the improvement works and will undertake the management and maintenance responsibility for the footpath within the Site. In order to improve the pedestrian connectivity, the project proponent will also be responsible for the construction of a cautionary crossing to walk across Hing Keng Shek Road under the proposed development.
- 6.1.6 The internal transport facilities of the proposed development will be provided in accordance with the recommendations in the HKPSG. The proposed development will provide a total of 79 private car parking spaces (including 2 nos. of parking space for disabled users), 2 motorcycle parking spaces and 4 goods vehicle loading / unloading bays.

6.2 Conclusion

- 6.2.1 The findings of the traffic impact assessment indicated that the road network in the vicinity of the Site would be able to cope with the proposed development and the project is considered acceptable in traffic viewpoint.

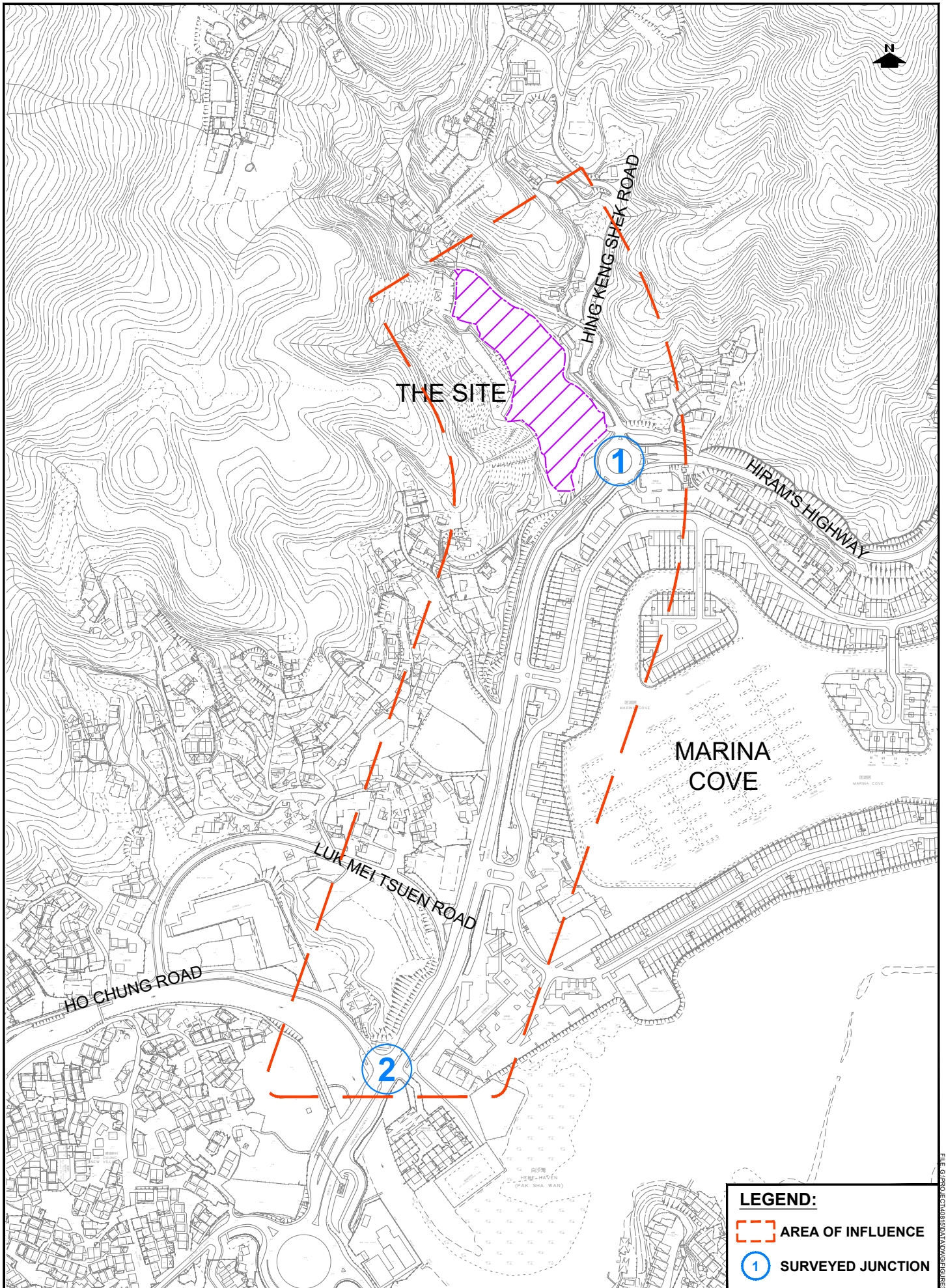


PROJECT NO.	40815	
DESIGNED	SLN	DATE JUL 2025
DRAWN	CLL	SCALE 1:6000
CHECKED	SLN	

PROJECT TITLE APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)S" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

DRAWING TITLE	LOCATION PLAN	
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DRAWING NO.	FIGURE 2.1	REV.	B
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LEGEND:

AREA OF INFLUENCE

1 SURVEYED JUNCTION

PROJECT NO.	40815
DESIGNED	SLN
DATE	JUL 2025
DRAWN	CLL
CHECKED	SLN
SCALE	1:5000

PROJECT TITLE	APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG
DRAWING TITLE	LOCATION OF SURVEYED JUNCTIONS

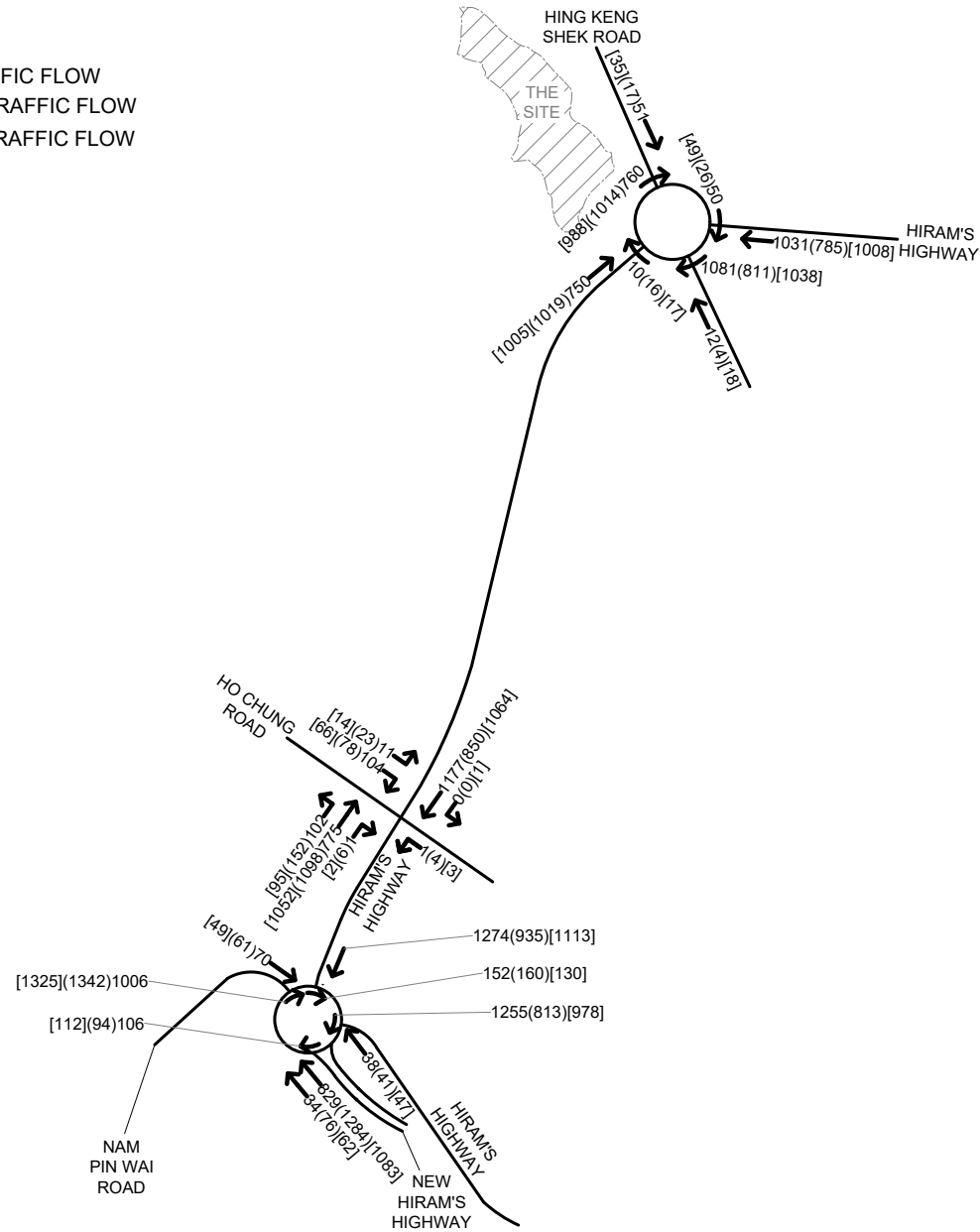
DRAWING NO.	FIGURE 3.1
REV.	B
LLA 顧問有限公司 Consultancy Limited	

LEGEND:

- 312(158)[361] ← WEEKEND PEAK HOUR TRAFFIC FLOW
- ↑ WEEKDAY PM PEAK HOUR TRAFFIC FLOW
- ↑ WEEKDAY AM PEAK HOUR TRAFFIC FLOW

NOTE:

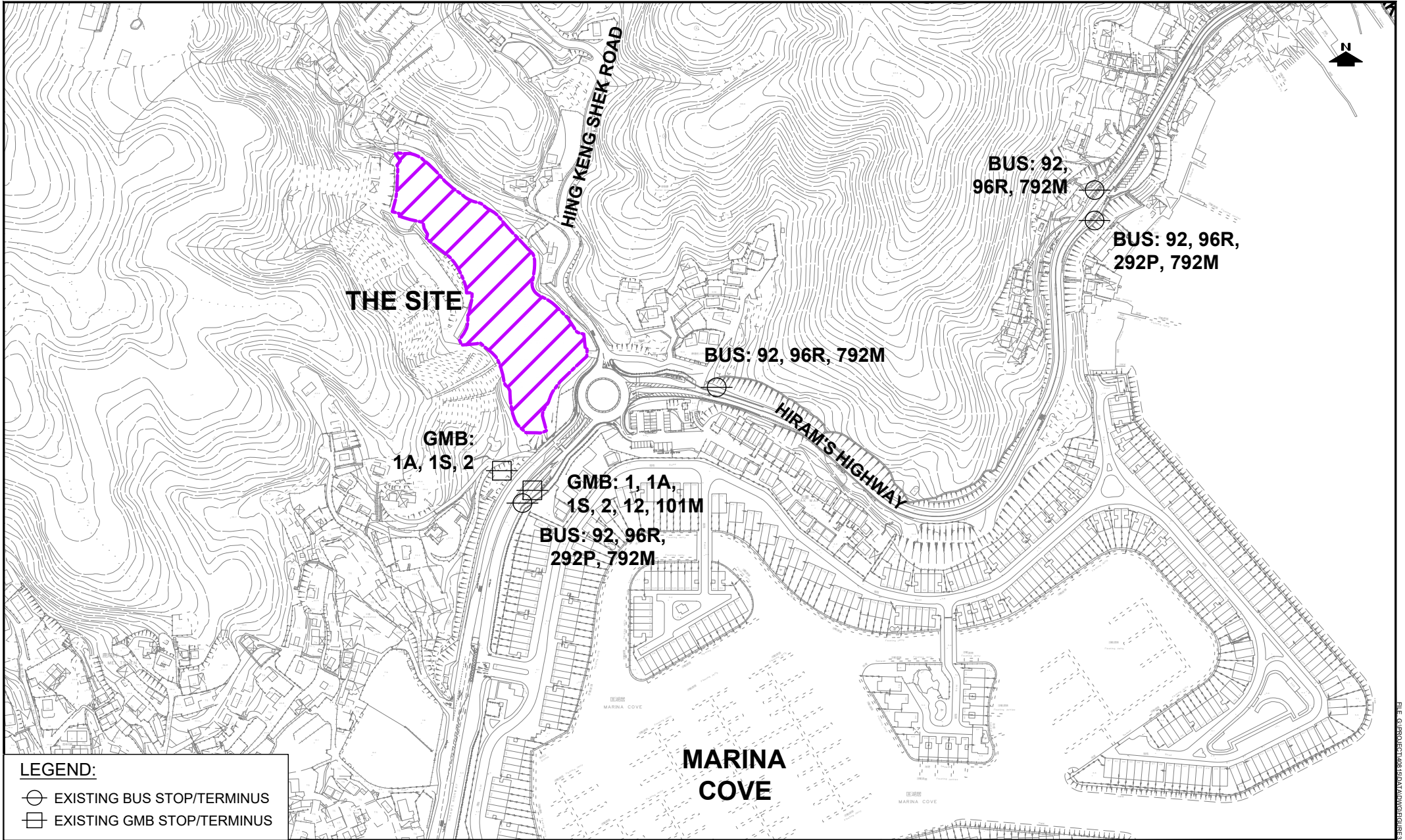
1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY



PROJECT NO.	40815	
DESIGNED	SLN	DATE OCT 2025
DRAWN	CLL	SCALE N.T.S.
CHECKED	SLN	

PROJECT TITLE	APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG
DRAWING TITLE	2025 EXISTING TRAFFIC FLOWS

DRAWING NO.	FIGURE 3.2	REV.	D



LEGEND:

- ⊕ EXISTING BUS STOP/TERMINUS
- ⊞ EXISTING GMB STOP/TERMINUS

PROJECT NO.	40815	
DESIGNED	SLN	DATE JUL 2025
DRAWN	CLL	SCALE 1:4000
CHECKED	SLN	

PROJECT TITLE APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

DRAWING TITLE	PUBLIC TRANSPORT FACILITIES IN THE VICINITY	
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DRAWING NO.	FIGURE 3.3	REV.	B
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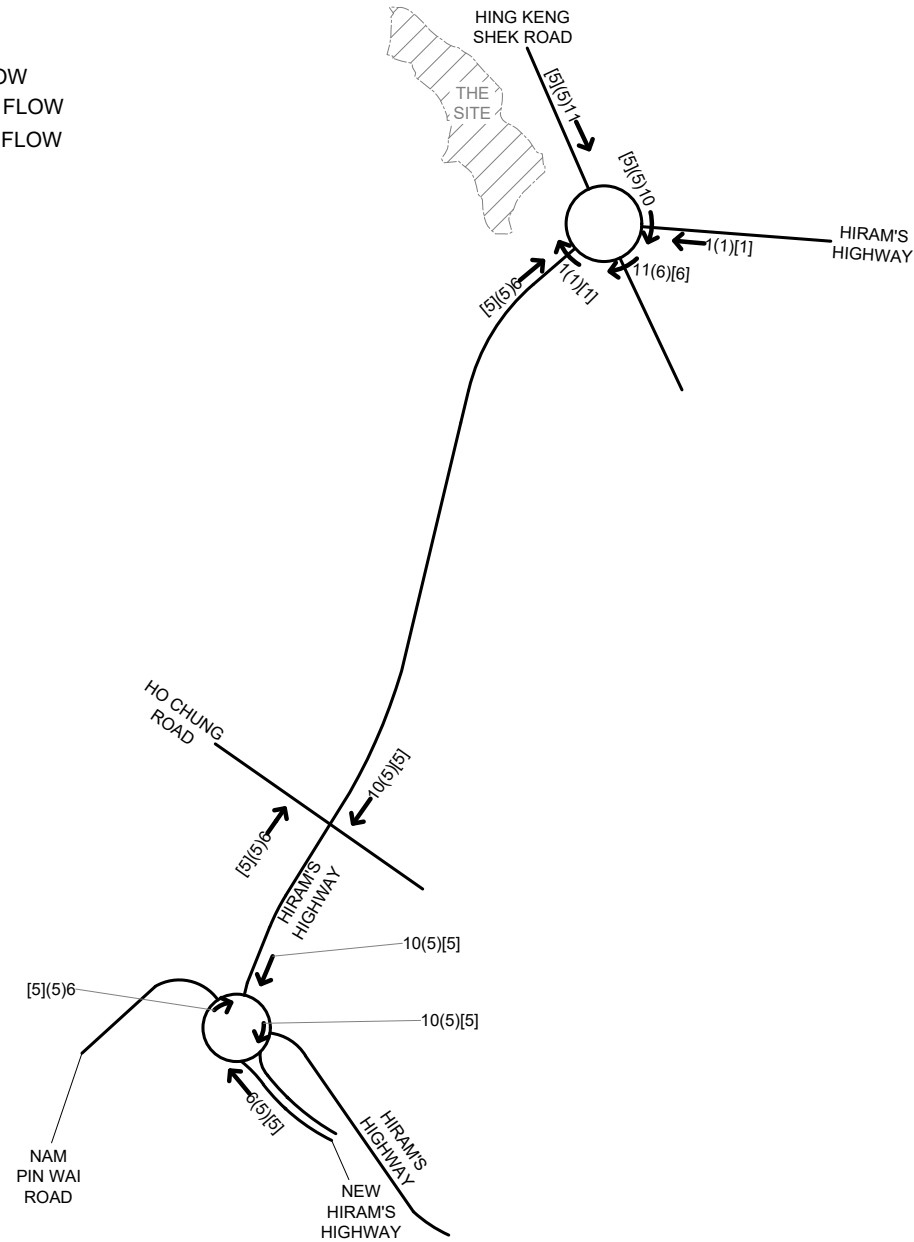
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Consultancy Limited

LEGEND:

- 312(158)[361] ← WEEKEND PEAK HOUR TRAFFIC FLOW
- ↑ WEEKDAY PM PEAK HOUR TRAFFIC FLOW
- ↑ WEEKDAY AM PEAK HOUR TRAFFIC FLOW

NOTE:

- 1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR
- 2. MINOR ROADS ARE NOT SHOWN FOR CLARITY



PROJECT NO.	40815	
DESIGNED	SLN	DATE OCT 2025
DRAWN	CLL	SCALE N.T.S.
CHECKED	SLN	

PROJECT TITLE APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

DRAWING TITLE	DEVELOPMENT TRAFFIC FLOWS	
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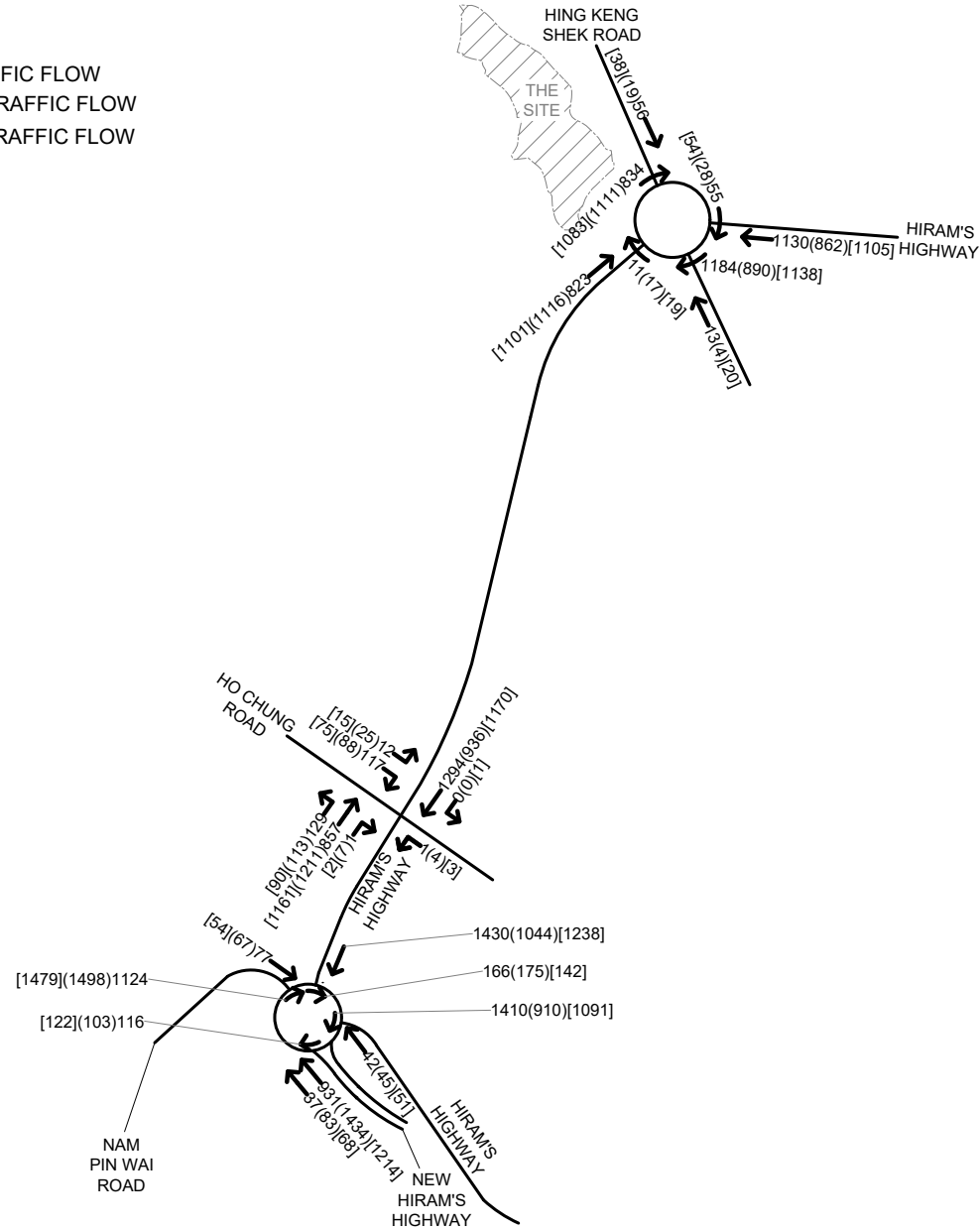
DRAWING NO.	FIGURE 4.1	REV.	E
LLA 顧問有限公司 Consultancy Limited			

LEGEND:

- 312(158)[361] ← WEEKEND PEAK HOUR TRAFFIC FLOW
- ↑ WEEKDAY PM PEAK HOUR TRAFFIC FLOW
- ↑ WEEKDAY AM PEAK HOUR TRAFFIC FLOW

NOTE:

1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY



PROJECT NO.	40815	
DESIGNED	SLN	DATE OCT 2025
DRAWN	CLL	SCALE N.T.S.
CHECKED	SLN	

PROJECT TITLE	APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG
DRAWING TITLE	2034 REFERENCE TRAFFIC FLOWS

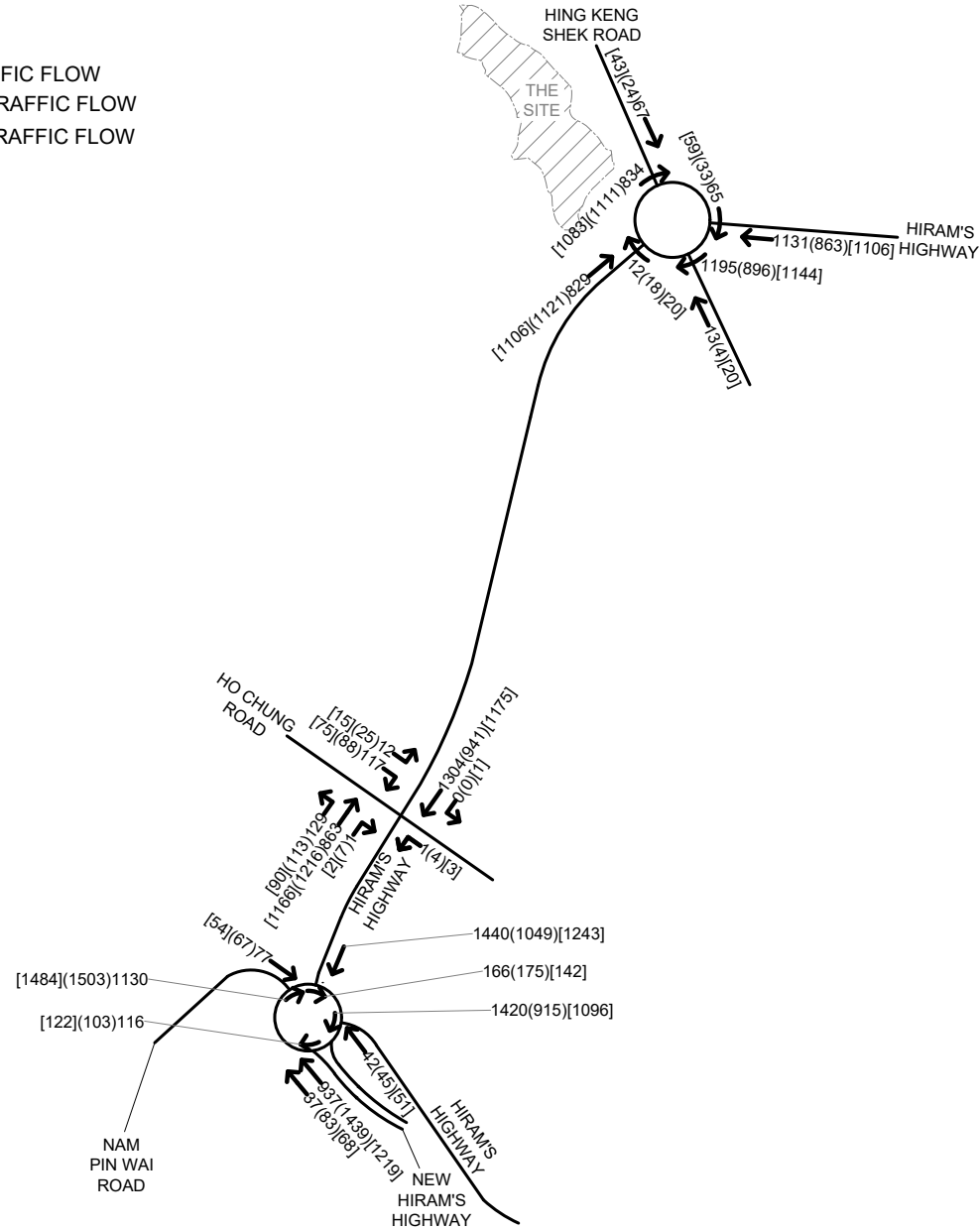
DRAWING NO.	FIGURE 4.2	REV.	E
LLA 顧問有限公司 Consultancy Limited			

LEGEND:

- 312(158)[361] ← WEEKEND PEAK HOUR TRAFFIC FLOW
- ↑ WEEKDAY PM PEAK HOUR TRAFFIC FLOW
- ↑ WEEKDAY AM PEAK HOUR TRAFFIC FLOW

NOTE:

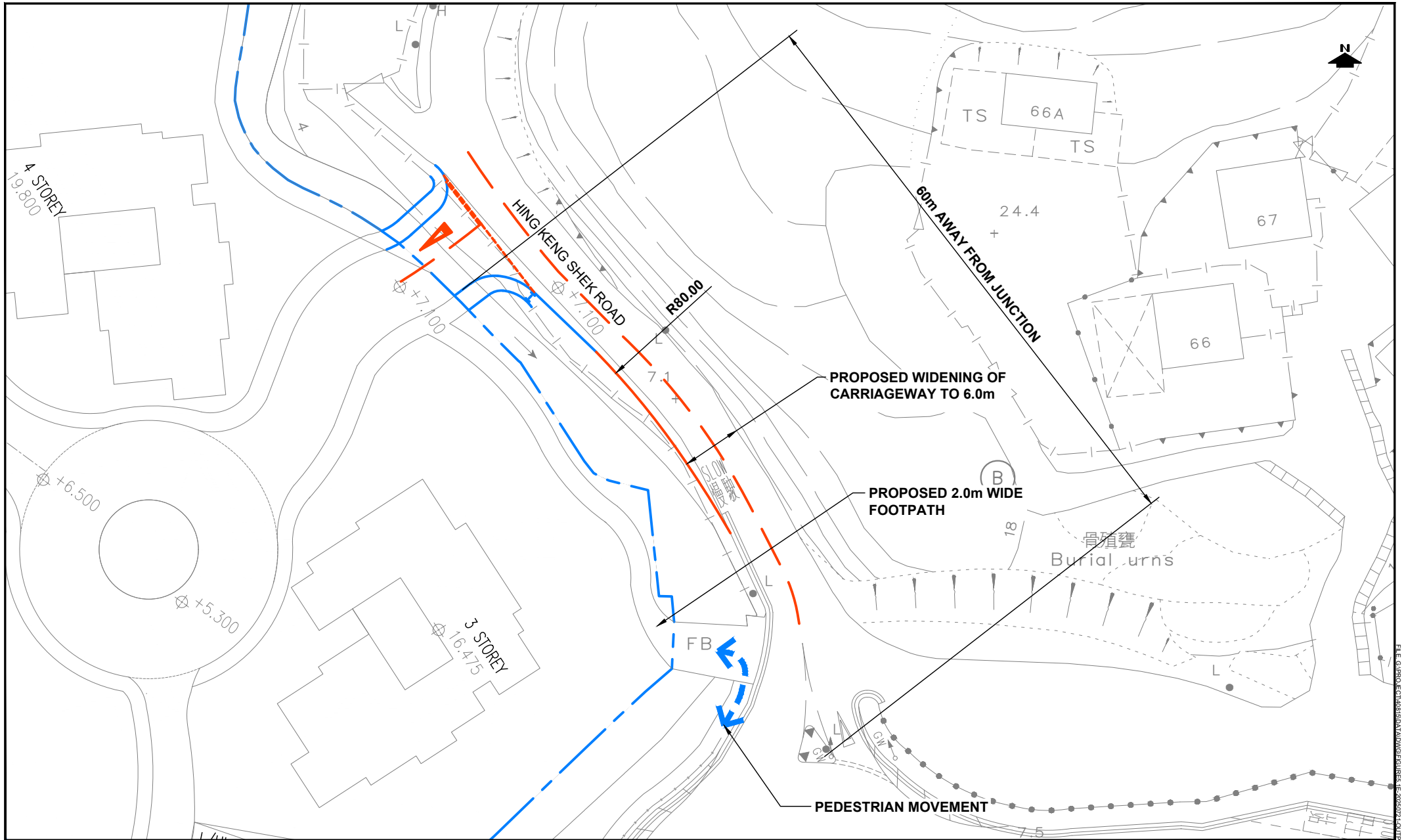
1. ALL TRAFFIC FLOWS ARE IN PCU/HOUR
2. MINOR ROADS ARE NOT SHOWN FOR CLARITY



PROJECT NO.	40815	
DESIGNED	SLN	DATE OCT 2025
DRAWN	CLL	SCALE N.T.S.
CHECKED	SLN	

PROJECT TITLE	APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG
DRAWING TITLE	2034 DESIGN TRAFFIC FLOWS

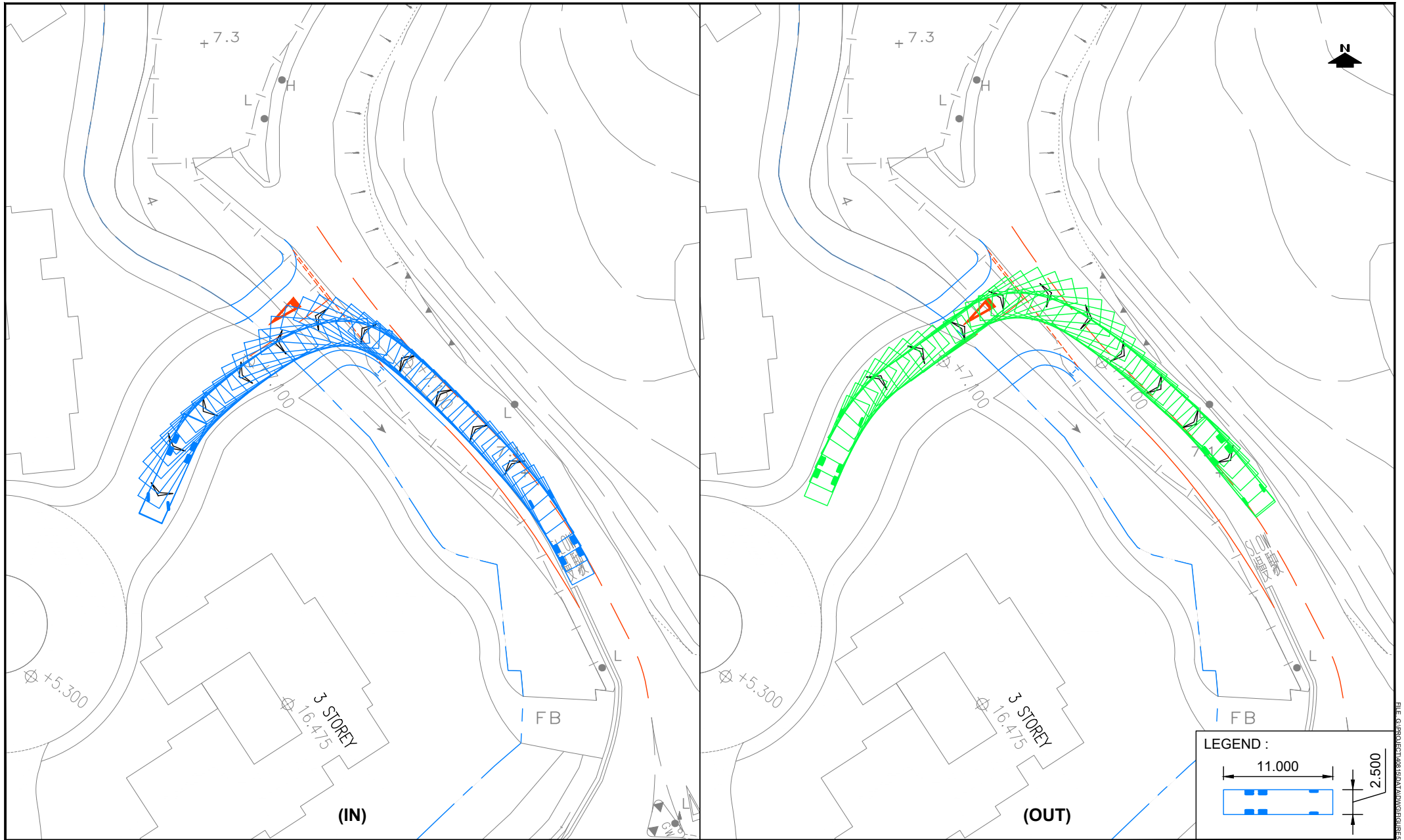
DRAWING NO.	FIGURE 4.3	REV.	F



PROJECT NO.	40815	
DESIGNED	SLN	DATE JUL 2025
DRAWN	CLL	SCALE 1:500
CHECKED	SLN	

PROJECT TITLE APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)S" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

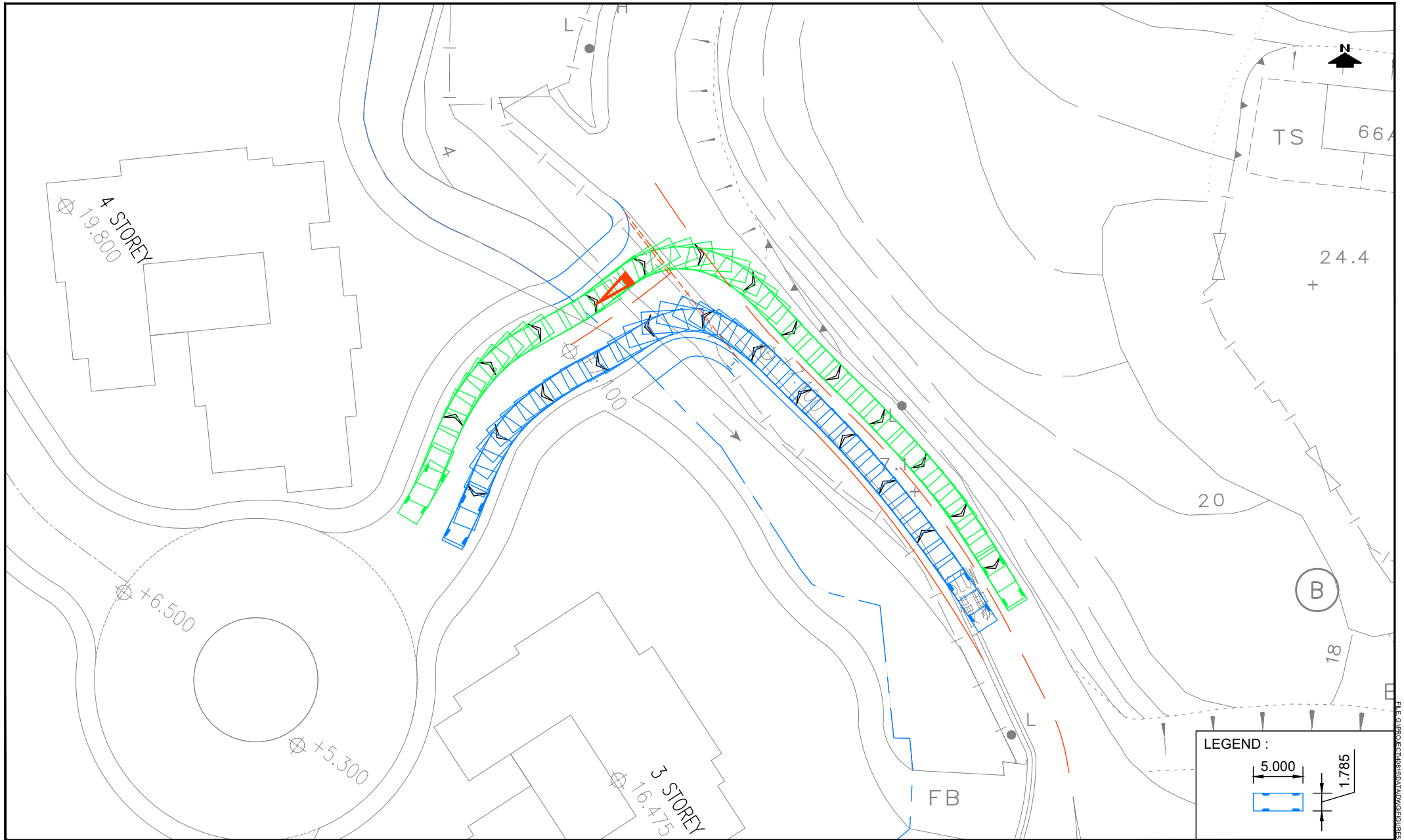
DRAWING TITLE	PROPOSED TRAFFIC ARRANGEMENT	
DRAWING NO.	FIGURE 5.1	REV. E
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PROJECT NO.	40815	
DESIGNED	SLN	DATE JUL 2025
DRAWN	CLL	SCALE 1:500
CHECKED	SLN	

PROJECT TITLE APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

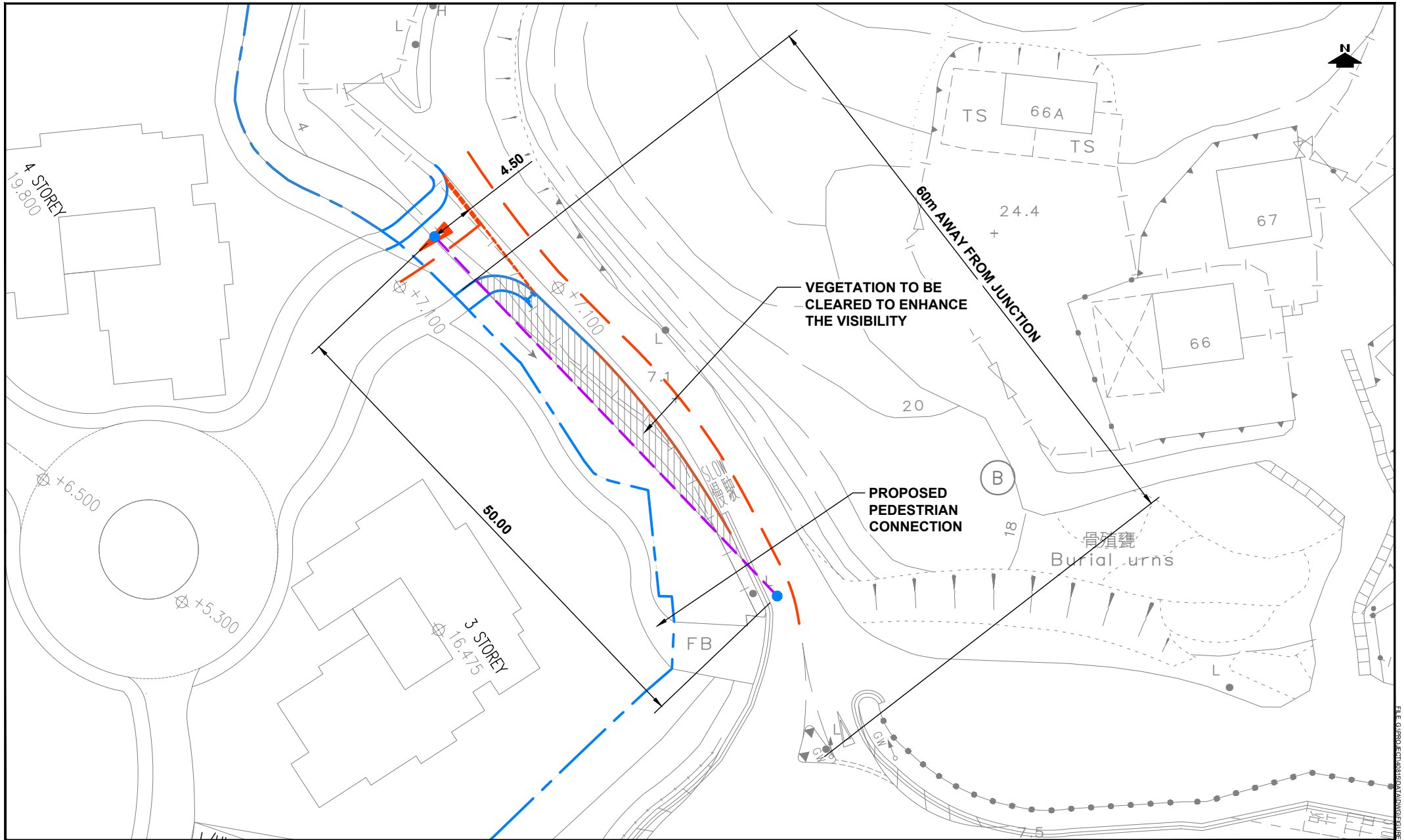
DRAWING TITLE	SWEPT PATH ANALYSIS - HGV	
DRAWING NO.	FIGURE 5.2	REV. B
LLA 顧問有限公司 Consultancy Limited		



PROJECT NO.	40815	
DESIGNED	SLN	DATE AUG 2025
DRAWN	CLL	SCALE 1:500
CHECKED	SLN	

PROJECT TITLE	APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG	
DRAWING TITLE	SWEPT PATH ANALYSIS - PRIVATE CARS TRAVEL SIMULTANEOUSLY	

DRAWING NO.	FIGURE 5.3	REV.	C
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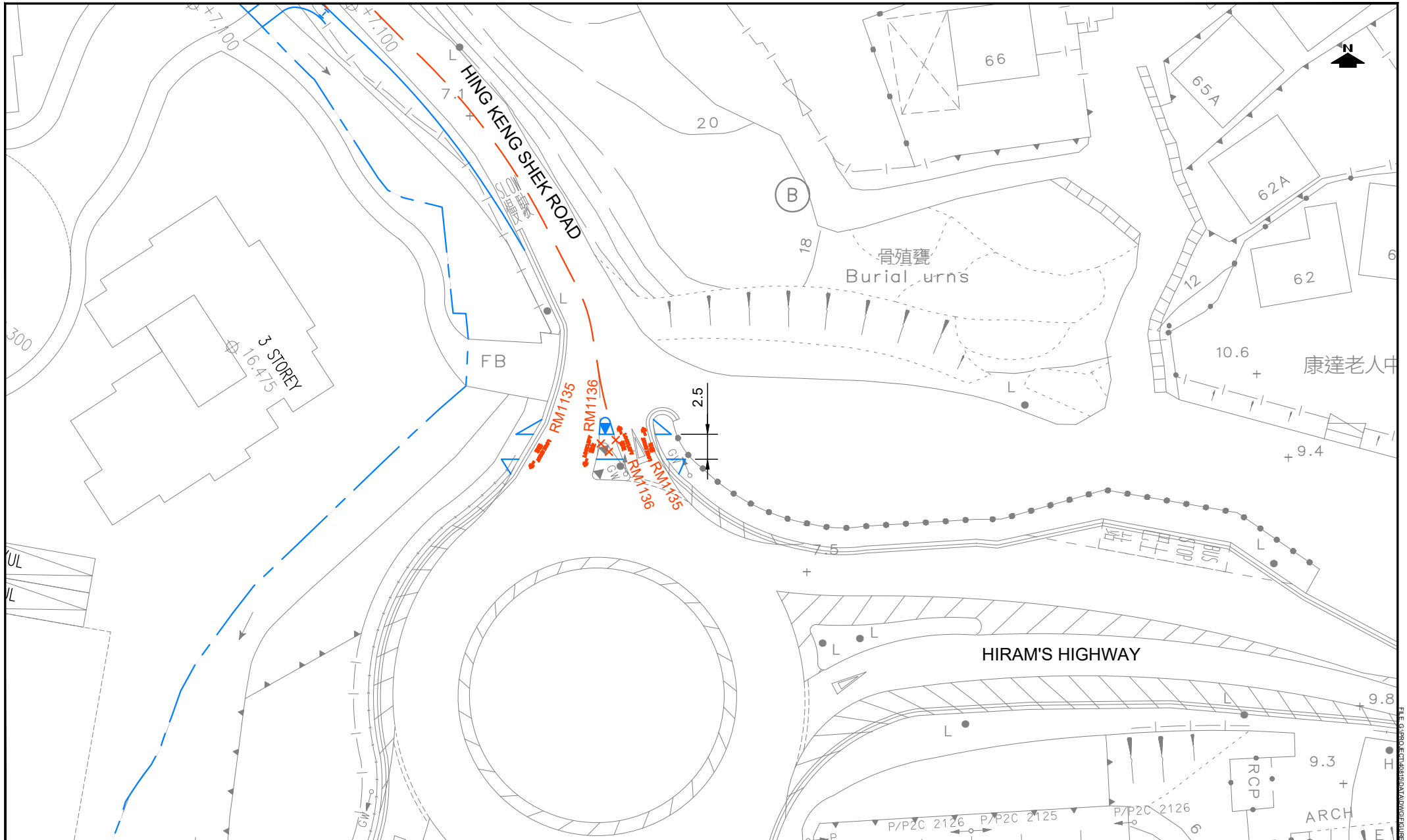


PROJECT NO.	40815	
DESIGNED	SLN	DATE AUG 2025
DRAWN	CLL	SCALE
CHECKED	SLN	1:500

PROJECT TITLE APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

DRAWING TITLE	SIGHTLINE ANALYSIS OF PROPOSED VEHICULAR ACCESS	
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DRAWING NO.	FIGURE 5.4	
REV.	-	
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PROJECT NO.	40815	
DESIGNED	SLN	DATE OCT 2025
DRAWN	CLL	SCALE 1:500
CHECKED	SLN	

PROJECT TITLE APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131) TO REZONE THE APPLICATION SITE FROM "GREEN BELT" AND AREA SHOWN AS "ROAD" TO "RESIDENTIAL (GROUP C)5" FOR PROPOSED RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 210 AND ADJOINING GOVERNMENT LAND, PAK WAI, SAI KUNG

DRAWING TITLE **PROPOSED CAUTIONARY CROSSING AT HING KENG SHEK ROAD**

DRAWING NO.	FIGURE 5.5	REV.	-
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Appendix A
Junction Capacity Assessment
– Existing Scenario

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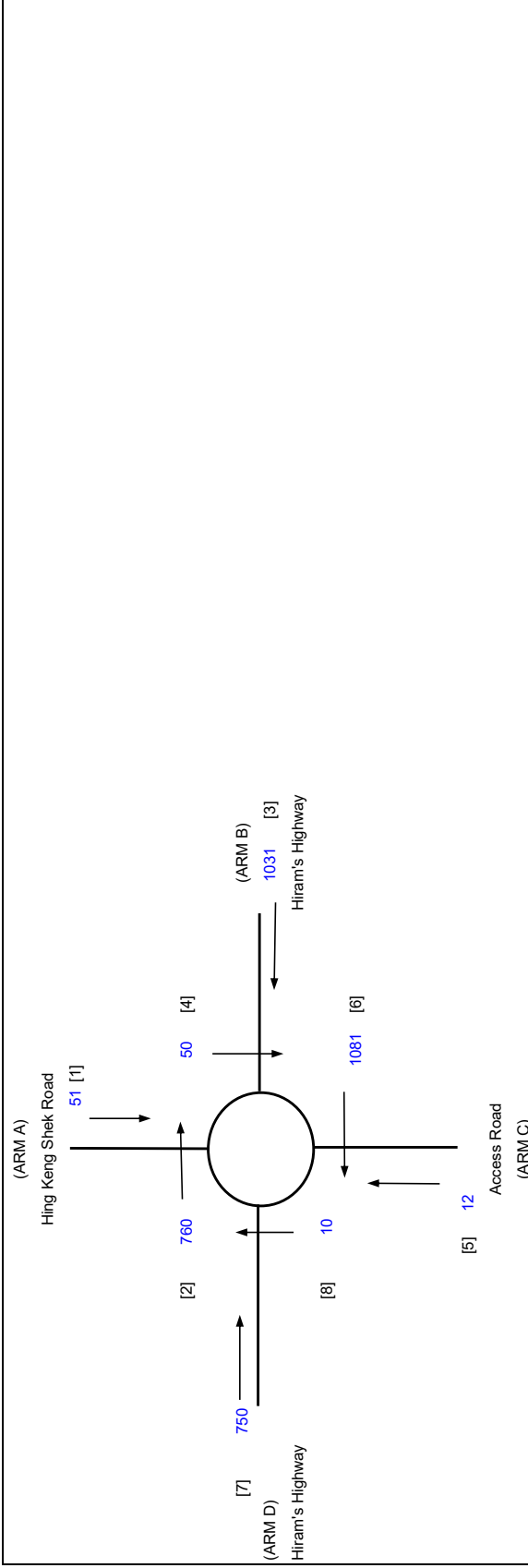
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

PROJECT NO.: 40815
 FILENAME : J1_HH_HKSR.xlsx
 REFERENCE NO.:
 PREPARED BY:
 CHECKED BY:
 REVIEWED BY:

INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	2.50	3.65	3.50	8.00
E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	48.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	51	1031	12	750
Qc = Circulating flow across entry (pcuh)	760	50	1081	10
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.36	0.14	0.00	0.00
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	0.96	0.94	0.98
X2 = V + ((E-V)/(1+2S))	3.67	7.05	3.50	8.00
M = EXP((D-60)/10)	0.25	0.25	0.25	0.25
F = 303*X2	1112	2137	1061	2424
Td = 1+(0.5/(1+M))	1.40	1.40	1.40	1.40
Fc = 0.21*Td(1+0.2*X2)	0.51	0.71	0.50	0.76
Qe = K(F-Fc*Qc) *	737	2021	487	2380
Total In Sum = 1844 PCU				
DFC = Design flow/Capacity = Q/Qe	0.07	0.51	0.02	0.32
DFC of Critical Approach = 0.51				

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Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

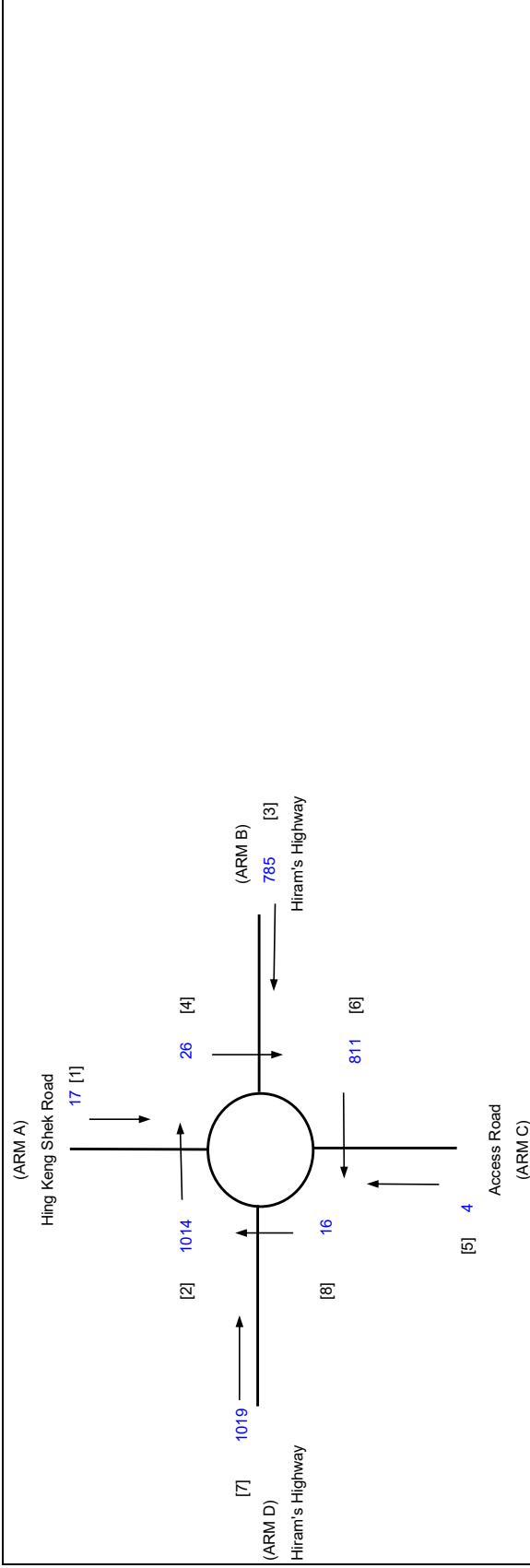
J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

PROJECT NO.: 40815
 FILENAME : J1_HH_HKSR.xlsx
 REFERENCE NO.:

PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 Oct-25
 Oct-25
 Oct-25



ARM	A	B	C	D
V = Approach half width (m)	2.50	3.65	3.50	8.00
E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	46.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	17	785	4	1019
Qc = Circulating flow across entry (pcuh)	1014	26	811	16
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.36	0.14	0.00	0.00
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	0.96	0.94	0.98
X2 = V + ((E-V)/(1+2S))	3.67	7.05	3.50	8.00
M = EXP((D-60)/10)	0.25	0.25	0.25	0.25
F = 303*X2	1112	2137	1061	2424
Td = 1+(0.5/(1+M))	1.40	1.40	1.40	1.40
Fc = 0.21*Td(1+0.2*X2)	0.51	0.71	0.50	0.76
Qe = K(F-Fc*Qc) *	605	2038	613	2376
DFC = Design flow/Capacity = Q/Qe	0.03	0.39	0.01	0.43
Total In Sum = 1825 PCU				
DFC of Critical Approach = 0.43				

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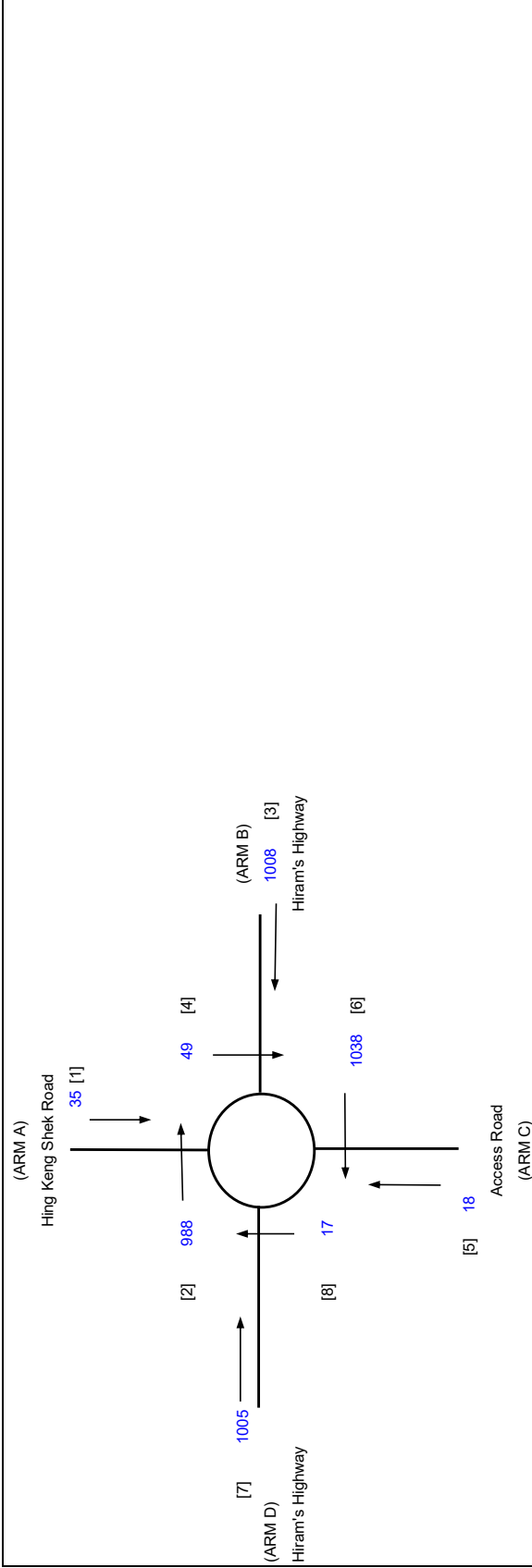
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J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

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 REFERENCE NO.:
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 REVIEWED BY:

INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



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E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	46.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	35	1008	18	1005
Qc = Circulating flow across entry (pcuh)	988	49	1038	17
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.36	0.14	0.00	0.00
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	0.96	0.94	0.98
X2 = V + ((E-V)/(1+2S))	3.67	7.05	3.50	8.00
M = EXP((D-60)/10)	0.25	0.25	0.25	0.25
F = 303*X2	1112	2137	1061	2424
Td = 1+(0.5/(1+M))	1.40	1.40	1.40	1.40
Fc = 0.21*Td(1+0.2*X2)	0.51	0.71	0.50	0.76
Qe = K(F-Fc*Qc) *	619	2022	507	2375
DFC = Design flow/Capacity = Q/Qe	0.06	0.50	0.04	0.42
Total In Sum = 2066 PCU				
DFC of Critical Approach = 0.50				

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Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)s" for Proposed Residential Development at Various Lots in D. 2 to and Adjoining Government Land, Pak Wai, Sai Kung

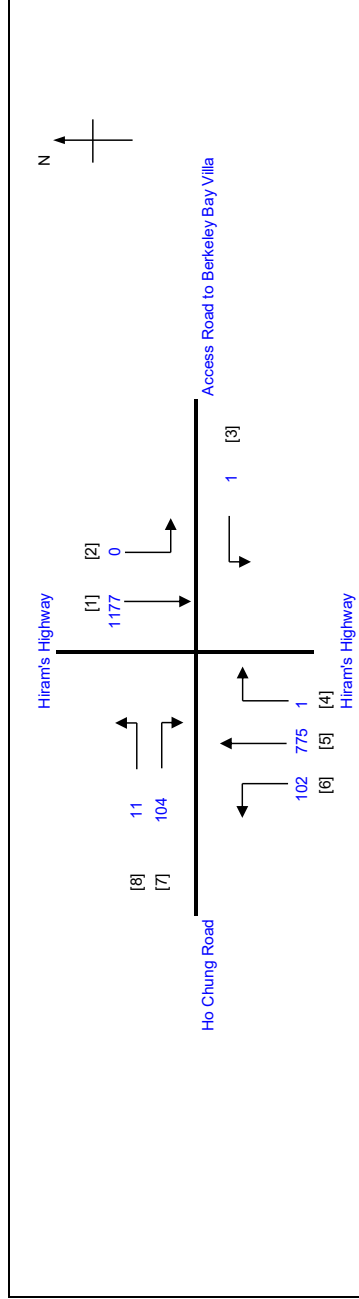
TRAFFIC SIGNAL CALCULATION

PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx

Prepared By:
 Checked By:
 Reviewed By:

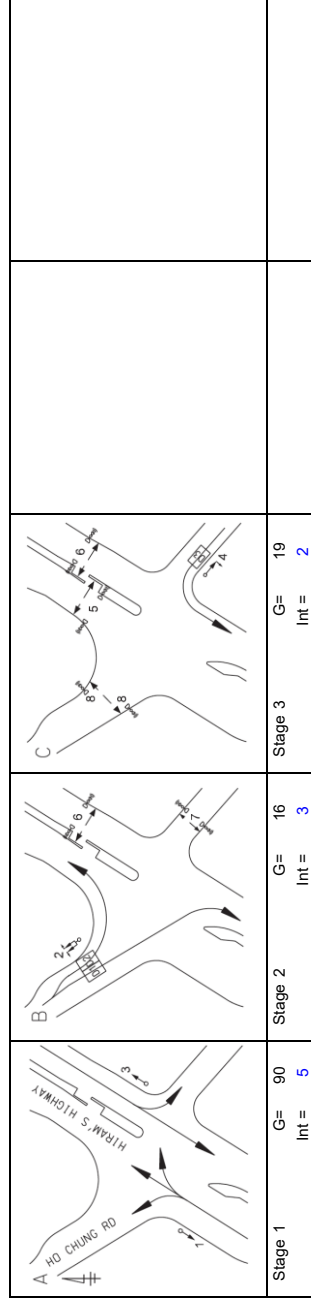
INITIALS
 SKL
 SLN
 SLN

DATE
 Oct-25
 Oct-25
 Oct-25



No. of stages per cycle
 Cycle time
 Sum(y)
 Loss time
 Total Flow
 Co
 Crm
 Yult
 R.C.ult
 Cp
 Ymax
R.C.(C) = (0.9*Ymax-Y)*100% = 106 %

N = 3
 C = 135 sec
 Y = 0.344
 L = 29 sec
 = 2171 pcu
 = 73.9 sec
 = 44.2 sec
 = 0.683
 = 98.6 %
 = 46.9 sec
 = 0.785



Pedestrian Phase	Stage	Green Time Required SG	Delay FG	Green Time Provided SG	FG
P1	3	10	8	13	8
P2	2,3	13	12	20	12
P3	2	8	7	8	7
P4	3	8	7	10	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	0	568	0.00	1935								1935	0.294	0.294	8	91	91	0.438	42	10	
1	1	3.20	1	15		N	2075	609	609	0.00	2075								2075	0.293	0.293		91	91	0.438	42	10	
5,6	1	3.50	1	12		N	1965	102	372	0.22	1914	18	119						2032	0.233	0.233		91	91	0.438	48	18	
4,5	1	3.50	1	12	O	N	1965	403	403	0.00	1734								1734	0.233	0.233		91	91	0.438	42	19	
7,8	2	3.50	1	12		N	2105	11	104	1.00	1871	12	424						2295	0.050	0.050	2	15	17	0.438	18	55	
3	3	3.30	1	15		N	1945	1	1	1.00	1768								1768	0.001	0.001	19	0	19	0.438	0	612	
PED	3																											

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

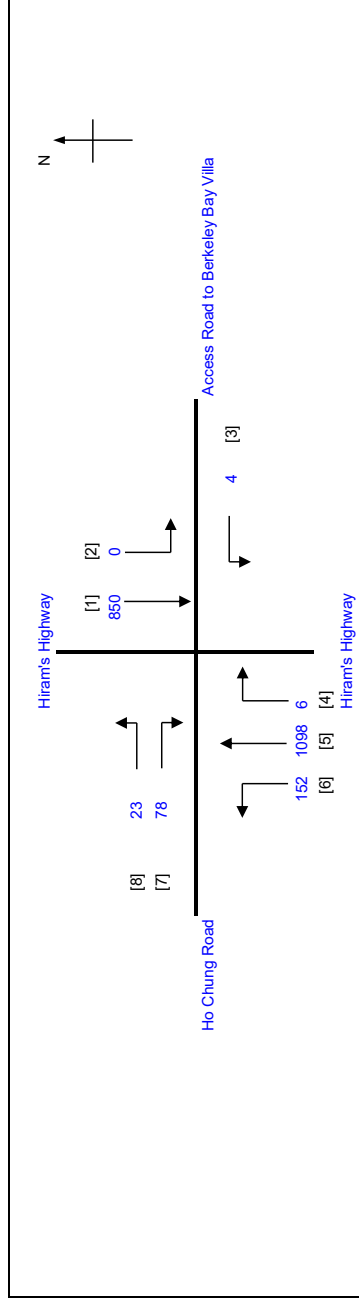
LLA CONSULTANCY LIMITED

Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)s" for Proposed Residential Development at Various Lots in D. 2 to and Adjoining Government Land, Pak Wai, Sai Kung

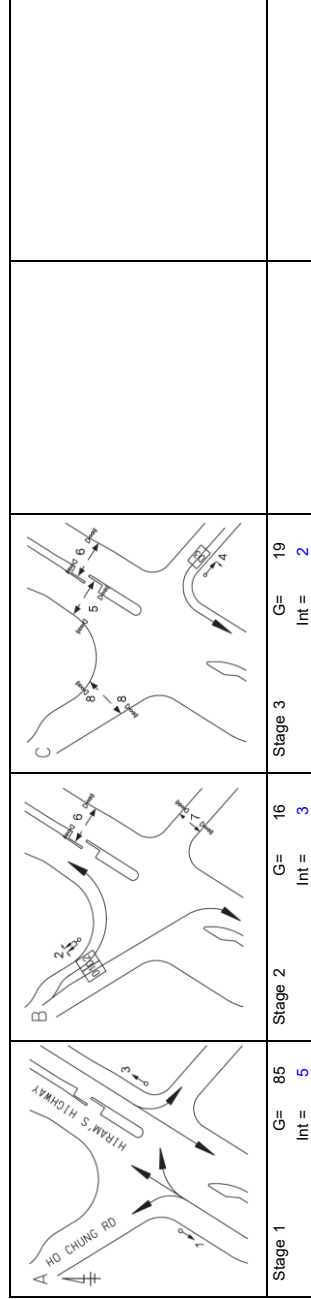
TRAFFIC SIGNAL CALCULATION

PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx
 Prepared By:
 Checked By:
 Reviewed By:

INITIALS	DATE
SKL	Oct-25
SLN	Oct-25
SLN	Oct-25



No. of stages per cycle	N = 3
Cycle time	C = 130 sec
Sum(y)	Y = 0.377
Loss time	L = 33 sec
Total Flow	= 2211 pcu
Co	= 87.5 sec
Cm	= 53.0 sec
Yult	= 0.653
R.C.ult	= 72.9 %
Cp	= 56.8 sec
Ymax	= 0.746
R.C.(C)	= (0.9*Ymax-Y)*Y*100% = 78 %



Green Time Provided	Green Time Required	Delay	Green Time Provided
SG	FG	FG	FG
10	8	0	13
13	12	8	20
8	7	4	8
8	7	4	10

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	0	410	0.00	1935								1935	0.212		8	54	86	0.506	48	27	
1	1	3.20	1	15		N	2075	440	440	0.00	2075								2075	0.212			55	86	0.506	54	27	
5,6	1	3.50	1	12		N	1965	152	679	0.22	1912	18	126						2037	0.333	0.333		86	86	0.506	48	11	
4,5	1	3.50	1	12	O	N	1965	571	577	0.01	1733								1733	0.333	0.333		86	86	0.506	42	12	
7,8	2	3.50	1	12		N	2105	23	101	1.00	1871	12	424						2295	0.044	0.044	6	11	17	0.506	18	59	
3	3	3.30	1	15		N	1945	4	4	1.00	1768								1768	0.002	0.002	19	1	19	0.506	0	268	
PED	3																											

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

LLA CONSULTANCY LIMITED

Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)s" for Proposed Residential Development at Various Lots in D. 2 to Adjoining Government Land, Pak Wai, Sai Kung

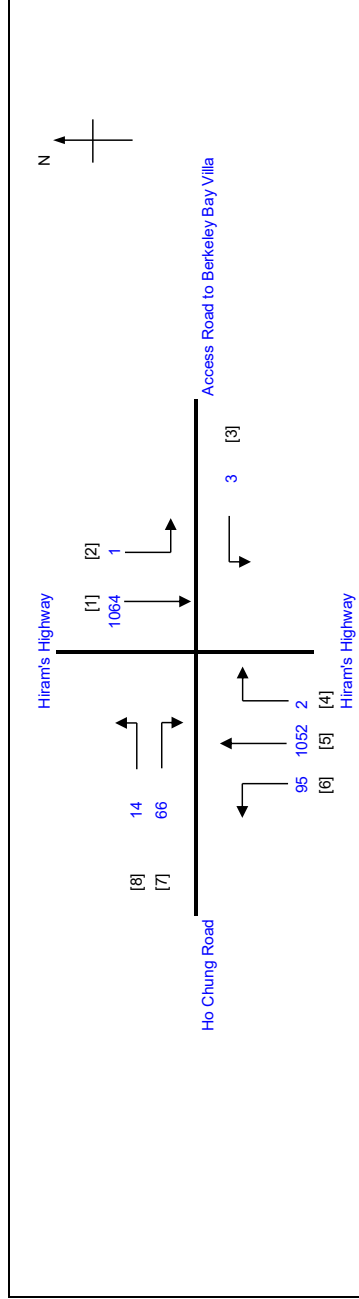
TRAFFIC SIGNAL CALCULATION

PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx

Prepared By:
 Checked By:
 Reviewed By:

INITIALS
 SKL
 SLN
 SLN

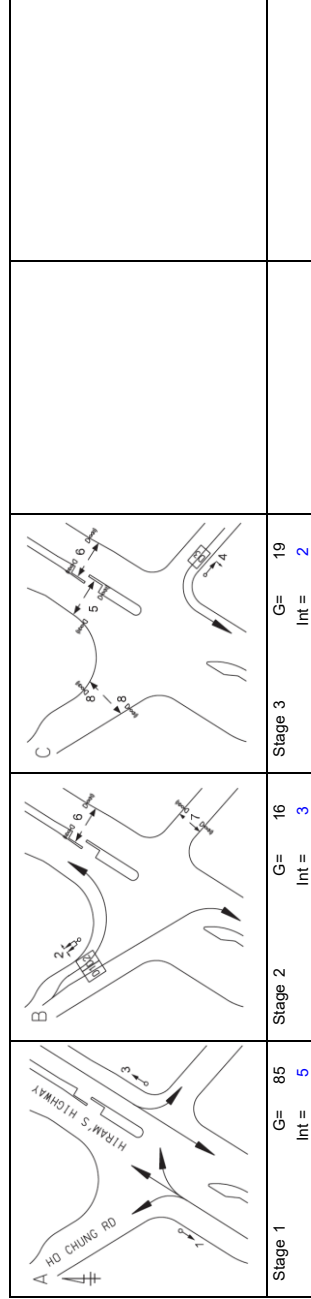
DATE
 Oct-25
 Oct-25
 Oct-25



No. of stages per cycle = 3

Cycle time = 130 sec
 Sum(y) = 0.338
 Loss time = 34 sec
 Total Flow = 2297 pcu
 Co = 84.6 sec
 Crm = 51.4 sec
 Yult = 0.645
 R.C.ult = 90.7 %
 Cp = 54.5 sec
 Ymax = 0.738

R.C.(C) = (0.9*Ymax-Y)*100% = 97 %



Pedestrian Phase	Stage	Green Time Required SG	Delay	Green Time Provided SG	FG
P1	3	10	0	13	8
P2	2,3	13	8	20	12
P3	2	8	7	8	7
P4	3	8	7	10	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	513	1	514	0.00	1935							1935	0.266		8	75	86	0.458	42	15	
1	1	3.20	1	15		N	2075	551		551	0.00	2075							2075	0.266			75	86	0.458	48	15	
5,6	1	3.50	1	12		N	1965	528	95	623	0.15	1928	18	126					2054	0.303	0.303		86	86	0.458	42	11	
4,5	1	3.50	1	12	O	N	1965	524	2	526	0.00	1734							1734	0.303	0.303		86	86	0.458	36	11	
7,8	2	3.50	1	12		N	2105		14	80	1.00	1871	12	424					2295	0.035	0.035	7	10	17	0.458	12	60	
3	3	3.30	1	15		N	1945		3	3	1.00	1768							1768	0.002	0.002	19	0	19	0.458	0	267	
PED	3																											

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

LLA CONSULTANCY LIMITED

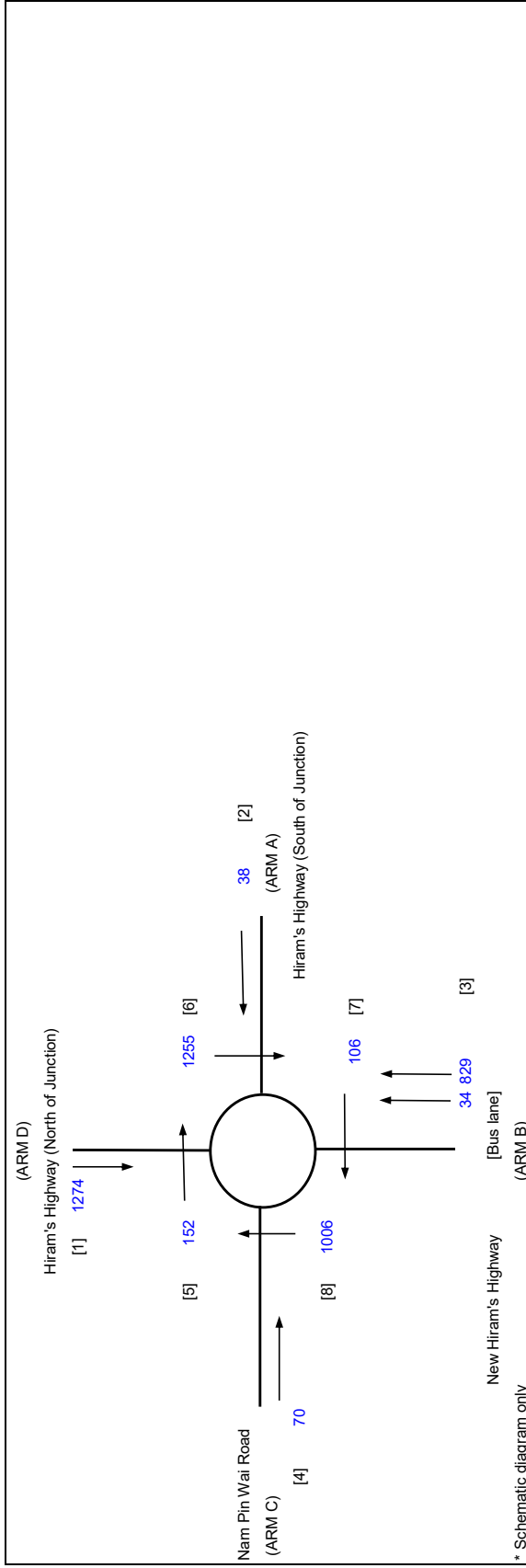
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J3 Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

ROUNDABOUT CALCULATION

PROJECT NO.: 40815
 FILENAME : J3_HH_NHH.xlsx
 REFERENCE NO.:
 PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	3.70	7.40	4.30	7.70
E = Entry width (m)	7.30	11.00	7.30	7.80
L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcu/h)	38	829	70	1274
Qc = Circulating flow across entry (pcu/h)	1255	106	1006	152
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc)*Qc	1039	2261	1316	2209
DFC = Design flow/Capacity = Q/Qe	0.04	0.37	0.05	0.58
Total In Sum =				2211 PCU
DFC of Critical Approach =				0.58

LLA CONSULTANCY LIMITED

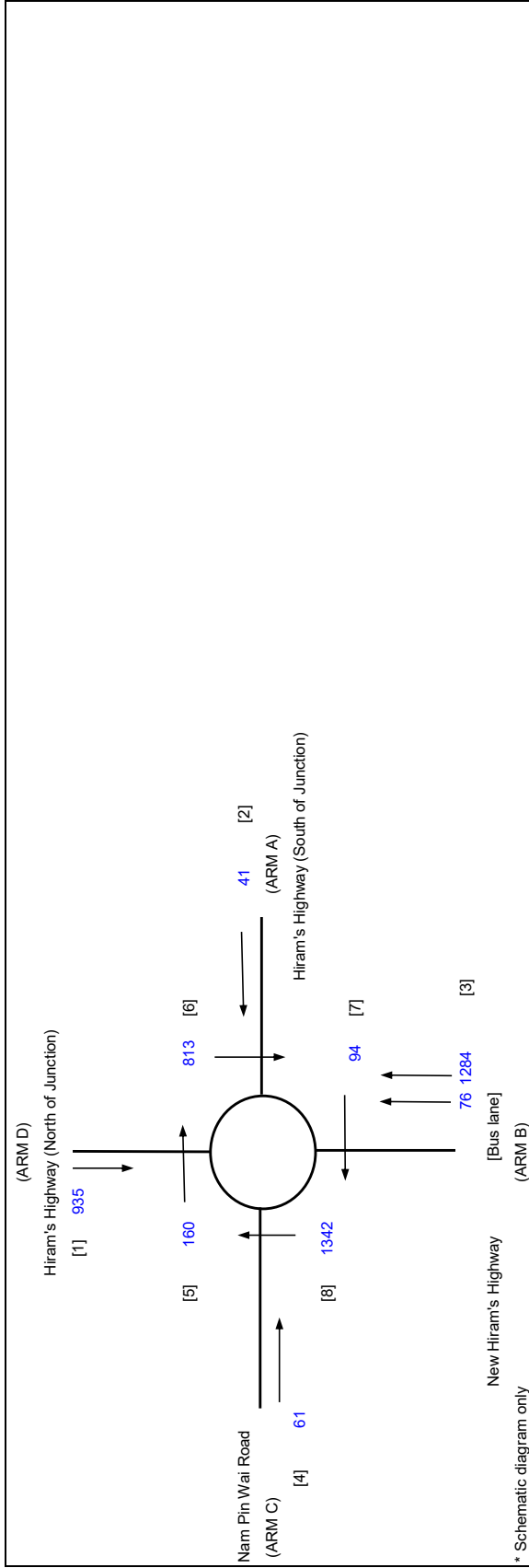
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)S" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J3 Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

ROUNDABOUT CALCULATION

PROJECT NO.: 40815
 FILENAME : J3_HH_NHH.xlsx
 REFERENCE NO.:
 PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	3.70	7.40	4.30	7.70
E = Entry width (m)	7.30	11.00	7.30	7.80
L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcuh)	41	1284	61	935
Qc = Circulating flow across entry (pcuh)	813	94	1342	160
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc)*Qc	1242	2268	1156	2205
DFC = Design flow/Capacity = Q/Qe	0.03	0.57	0.05	0.42
Total In Sum =				2321 PCU
DFC of Critical Approach =				0.57

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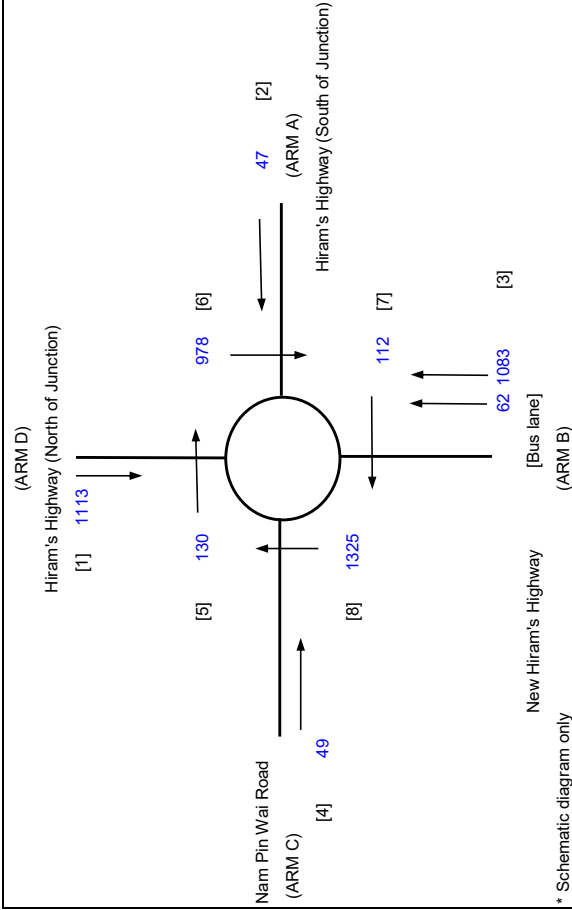
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J3 Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

ROUNDABOUT CALCULATION

PROJECT NO.: 40815
 FILENAME : J3_HH_NHH.xlsx
 REFERENCE NO.:
 PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	3.70	7.40	4.30	7.70
E = Entry width (m)	7.30	11.00	7.30	7.80
L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcuh)	47	1083	49	1113
Qc = Circulating flow across entry (pcuh)	978	112	1325	130

S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc)*Qc	1166	2257	1164	2221

DFC = Design flow/Capacity = Q/Qe	0.04	0.48	0.04	0.50
Total In Sum =			2292	PCU
DFC of Critical Approach =				0.50

Appendix B
Junction Capacity Assessment
– Reference & Design Scenarios

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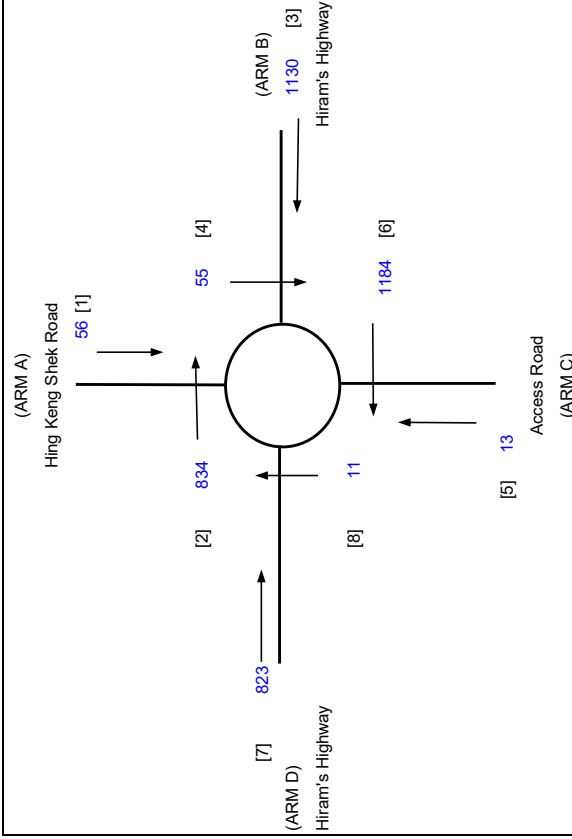
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

PROJECT NO.: 40815
 FILENAME: J1_HH_HKSR.xlsx
 REFERENCE NO.:
 PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS: SKL
 DATE: Oct-25



ARM	A	B	C	D
V = Approach half width (m)	2.50	3.65	3.50	8.00
E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	46.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	56	1130	13	823
Qc = Circulating flow across entry (pcuh)	834	55	1184	11
S = Sharpness of flare = 1.6(E-V)/L	0.36	0.14	0.00	0.00
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	0.96	0.94	0.98
X2 = V + ((E-V)/(1+2S))	3.67	7.05	3.50	8.00
M = EXP((D-60)/10)	0.25	0.25	0.25	0.25
F = 303*X2	1112	2137	1061	2424
Td = 1+(0.5/(1+M))	1.40	1.40	1.40	1.40
Fc = 0.21*Td*(1+0.2*X2)	0.51	0.71	0.50	0.76
Qe = K(F-Fc)*Qc *	699	2018	438	2379
DFC = Design flow/Capacity = Q/Qe	0.08	0.56	0.03	0.35

Total In Sum = 2022 PCU
 DFC of Critical Approach = 0.56

LLA CONSULTANCY LIMITED

Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

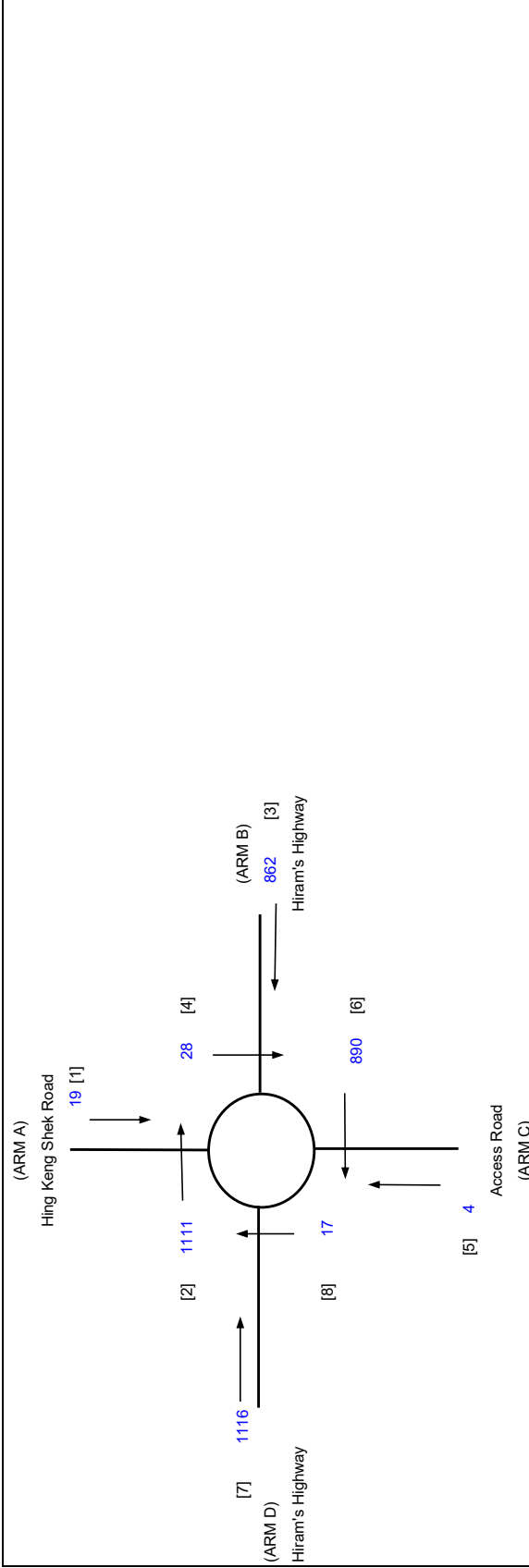
J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

PROJECT NO.: 40815
 FILENAME: J1_HH_HKSR.xlsx
 REFERENCE NO.:
 PREPARED BY:
 CHECKED BY:
 REVIEWED BY:

INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25

2034 Reference PM



ARM

INPUT PARAMETERS:

	A	B	C	D
V = Approach half width (m)	2.50	3.65	3.50	8.00
E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	46.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	19	862	4	1116
Qc = Circulating flow across entry (pcuh)	1111	28	890	17

OUTPUT PARAMETERS:

S = Sharpness of flare = $1.6(E-V)/L$	0.36	0.14	0.00	0.00
K = $1-0.00347(A-30)-0.978(1/R-0.05)$	1.02	0.96	0.94	0.98
X2 = $V + ((E-V)/(1+2S))$	3.67	7.05	3.50	8.00
M = $EXP((D-60)/10)$	0.25	0.25	0.25	0.25
F = $303 \times X2$	1112	2137	1061	2424
Td = $1+(0.5/(1+M))$	1.40	1.40	1.40	1.40
Fc = $0.21 \times Td \times (1+0.2 \times X2)$	0.51	0.71	0.50	0.76
Qe = $K(F-Fc \times Qc)^*$	555	2036	576	2375

DFC = Design flow/Capacity = Q/Qe

Total In Sum = 2001 PCU

DFC of Critical Approach = 0.47

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Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

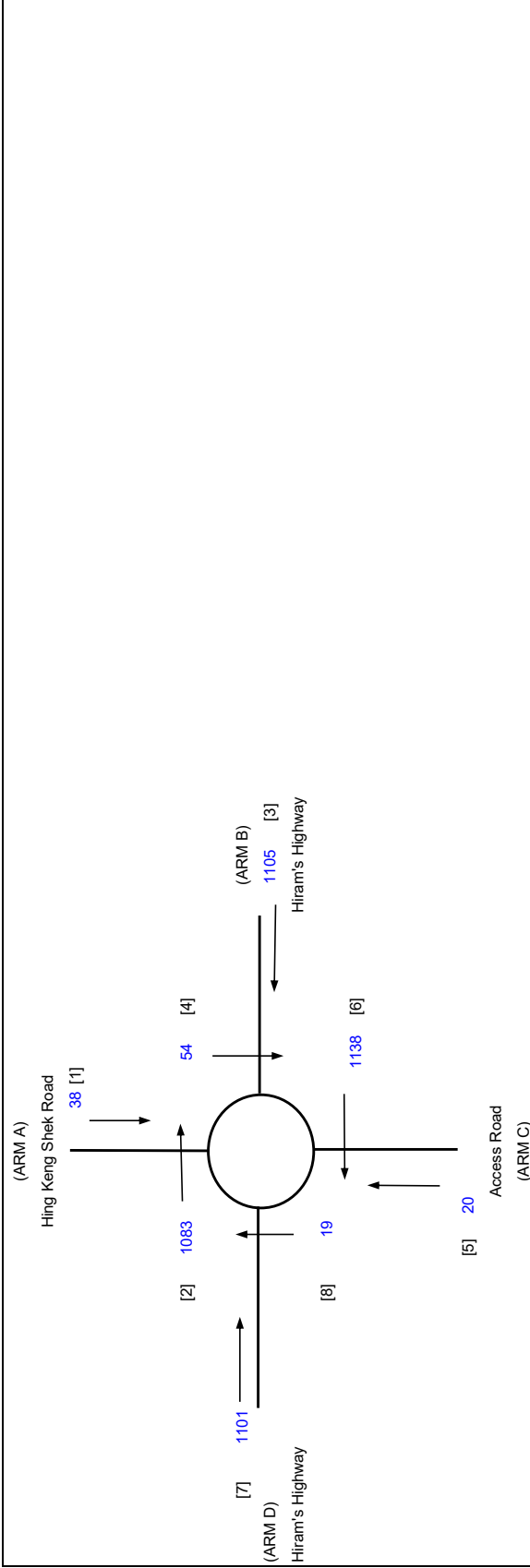
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 FILENAME : J1_HH_HKSR.xlsx
 REFERENCE NO.:

PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS

DATE

2034 Reference WN



ARM

INPUT PARAMETERS:

	A	B	C	D
V = Approach half width (m)	2.50	3.65	3.50	8.00
E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	46.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	38	1105	20	1101
Qc = Circulating flow across entry (pcuh)	1083	54	1138	19

OUTPUT PARAMETERS:

S = Sharpness of flare = $1.6(E-V)/L$	0.36	0.14	0.00	0.00
K = $1-0.00347(A-30)-0.978(1/R-0.05)$	1.02	0.96	0.94	0.98
X2 = $V + ((E-V)/(1+2S))$	3.67	7.05	3.50	8.00
M = $EXP((D-60)/10)$	0.25	0.25	0.25	0.25
F = $303 \times X2$	1112	2137	1061	2424
Td = $1+(0.5/(1+M))$	1.40	1.40	1.40	1.40
Fc = $0.21 \times Td(1+0.2 \times X2)$	0.51	0.71	0.50	0.76
Qe = $K(F-Fc) \times Qc$	570	2019	460	2373

DFC = Design flow/Capacity = Q/Qe

Total In Sum = 2264 PCU

DFC of Critical Approach = 0.55

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Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

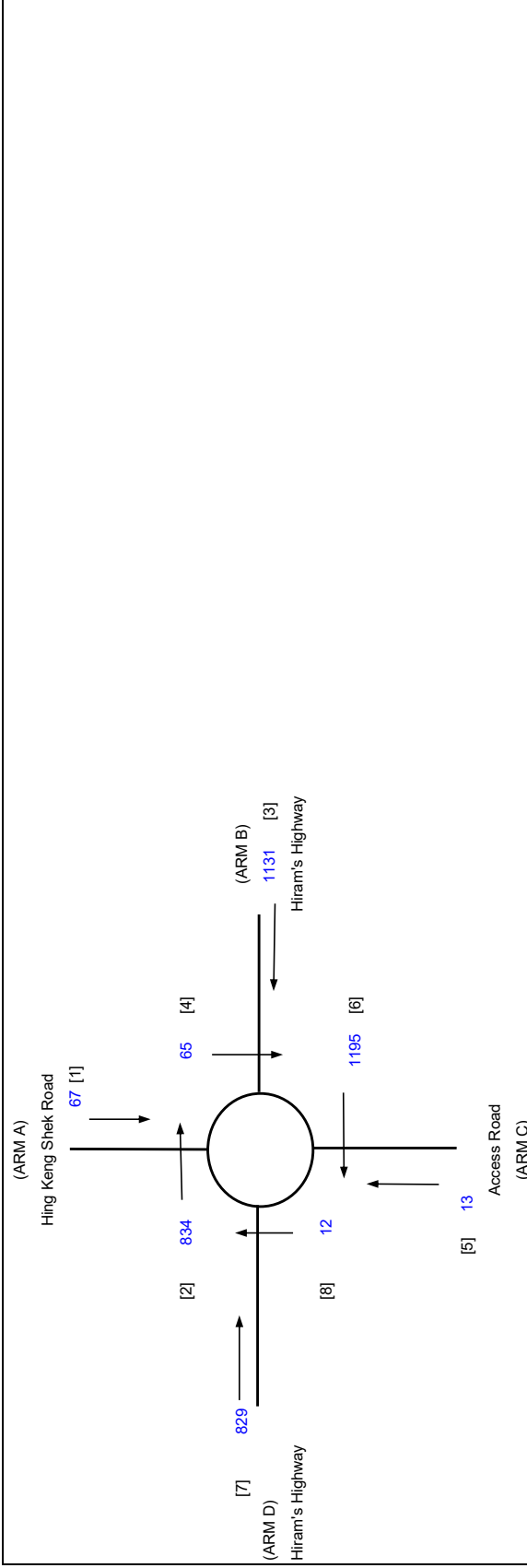
J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

PROJECT NO.: 40815
 FILENAME : J1_HH_HKSR.xlsx
 REFERENCE NO.:

PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 Oct-25
 Oct-25
 Oct-25



ARM	A	B	C	D
V = Approach half width (m)	2.50	3.65	3.50	8.00
E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	46.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	67	1131	13	829
Qc = Circulating flow across entry (pcuh)	834	65	1195	12
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.36	0.14	0.00	0.00
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	0.96	0.94	0.98
X2 = V + ((E-V)/(1+2S))	3.67	7.05	3.50	8.00
M = EXP((D-60)/10)	0.25	0.25	0.25	0.25
F = 303*X2	1112	2137	1061	2424
Td = 1+(0.5/(1+M))	1.40	1.40	1.40	1.40
Fc = 0.21*Td(1+0.2*X2)	0.51	0.71	0.50	0.76
Qe = K(F-Fc*Qc) *	699	2011	433	2379
Total In Sum = 2040 PCU				
DFC = Design flow/Capacity = Q/Qe	0.10	0.56	0.03	0.35
DFC of Critical Approach = 0.56				

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Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

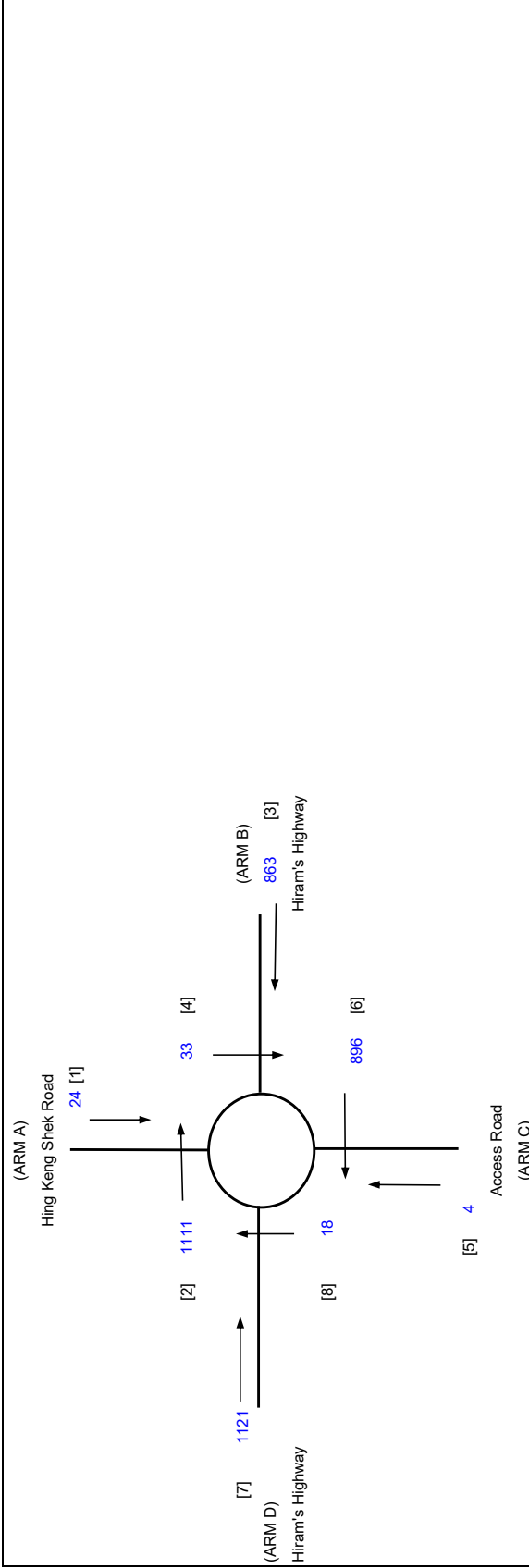
J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

PROJECT NO.: 40815
 FILENAME : J1_HH_HKSR.xlsx
 REFERENCE NO.:
 PREPARED BY:
 CHECKED BY:
 REVIEWED BY:

INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25

2034 Design PM



ARM	A	B	C	D
V = Approach half width (m)	2.50	3.65	3.50	8.00
E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	46.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	24	863	4	1121
Qc = Circulating flow across entry (pcuh)	1111	33	896	18
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.36	0.14	0.00	0.00
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	0.96	0.94	0.98
X2 = V + ((E-V)/(1+2S))	3.67	7.05	3.50	8.00
M = EXP((D-60)/10)	0.25	0.25	0.25	0.25
F = 303*X2	1112	2137	1061	2424
Td = 1+(0.5/(1+M))	1.40	1.40	1.40	1.40
Fc = 0.21*Td*(1+0.2*X2)	0.51	0.71	0.50	0.76
Qe = K(F-Fc*Qc) *	555	2033	573	2374
DFC = Design flow/Capacity = Q/Qe	0.04	0.42	0.01	0.47
Total In Sum = 2012 PCU				
DFC of Critical Approach = 0.47				

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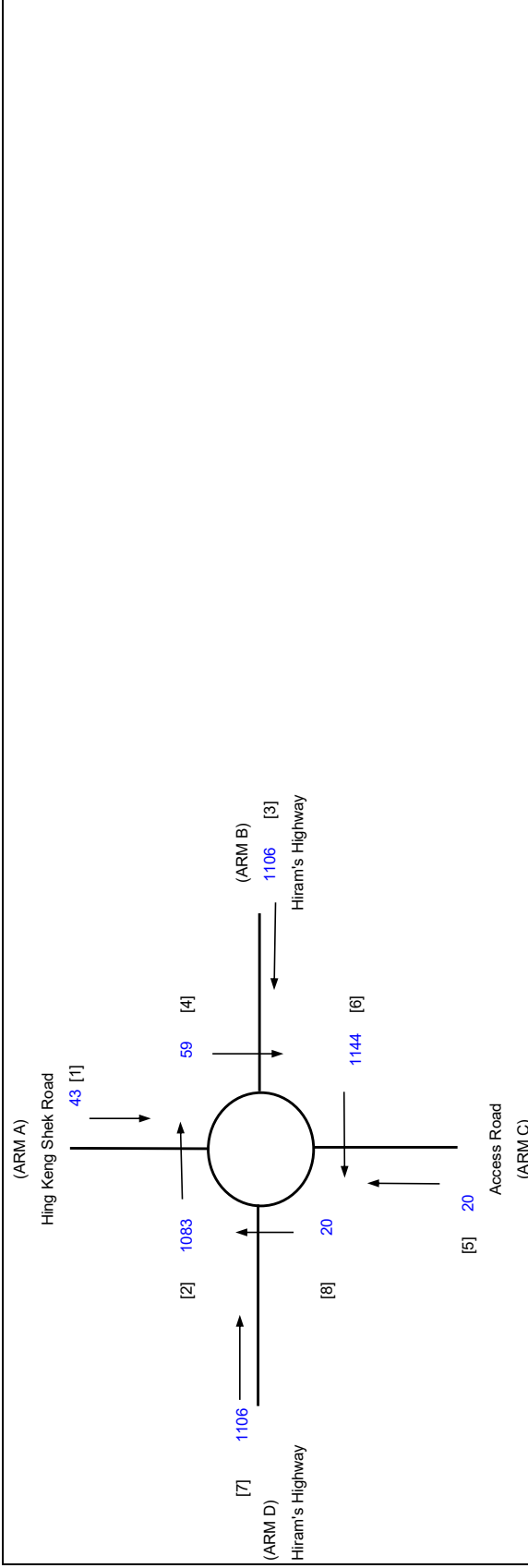
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J1 Hiram's Highway/Hing Keng Shek Road Roundabout

PRIORITY JUNCTION CALCULATION

PROJECT NO.: 40815
 FILENAME: J1_HH_HKSR.xlsx
 REFERENCE NO.:
 PREPARED BY:
 CHECKED BY:
 REVIEWED BY:

INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	2.50	3.65	3.50	8.00
E = Entry width (m)	4.50	8.00	3.50	8.00
L = Effective length of flare (m)	9.00	50.00	1.00	1.00
R = Entry radius (m)	24.00	20.00	12.50	21.00
D = Inscribed circle diameter (m)	46.00	46.00	46.00	46.00
A = Entry angle (degree)	27.00	41.00	40.00	35.00
Q = Entry flow (pcuh)	43	1106	20	1106
Qc = Circulating flow across entry (pcuh)	1083	59	1144	20
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.36	0.14	0.00	0.00
K = 1-0.00347(A-30)-0.978(1/R-0.05)	1.02	0.96	0.94	0.98
X2 = V + ((E-V)/(1+2S))	3.67	7.05	3.50	8.00
M = EXP((D-60)/10)	0.25	0.25	0.25	0.25
F = 303*X2	1112	2137	1061	2424
Td = 1+(0.5/(1+M))	1.40	1.40	1.40	1.40
Fc = 0.21*Td(1+0.2*X2)	0.51	0.71	0.50	0.76
Qe = K(F-Fc*Qc) *	570	2015	457	2373
DFC = Design flow/Capacity = Q/Qe	0.08	0.55	0.04	0.47
Total In Sum =				2275 PCU
DFC of Critical Approach =				0.55

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Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)s" for Proposed Residential Development at Various Lots in D. 2 to Adjoining Government Land, Pak Wai, Sai Kung

J2 Hiram's Highway/Ho Chung Road

TRAFFIC SIGNAL CALCULATION

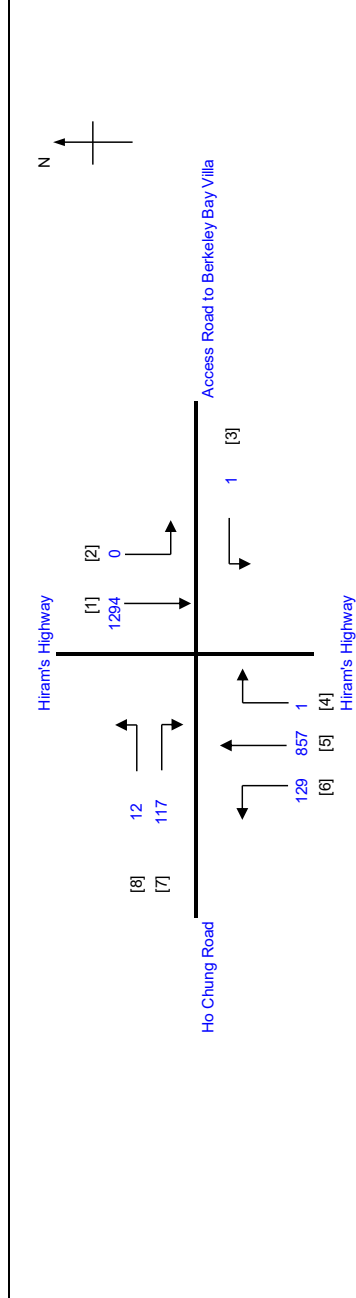
2034 Reference AM

PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx

Prepared By:
 Checked By:
 Reviewed By:

INITIALS
 SKL
 SLN
 SLN

DATE
 Oct-25
 Oct-25
 Oct-25



No. of stages per cycle = 3

Cycle time = 135 sec

Sum(y) = 0.380

Loss time = 29 sec

Total Flow = 2411 pcu

Co = 78.2 sec

Cm = 46.8 sec

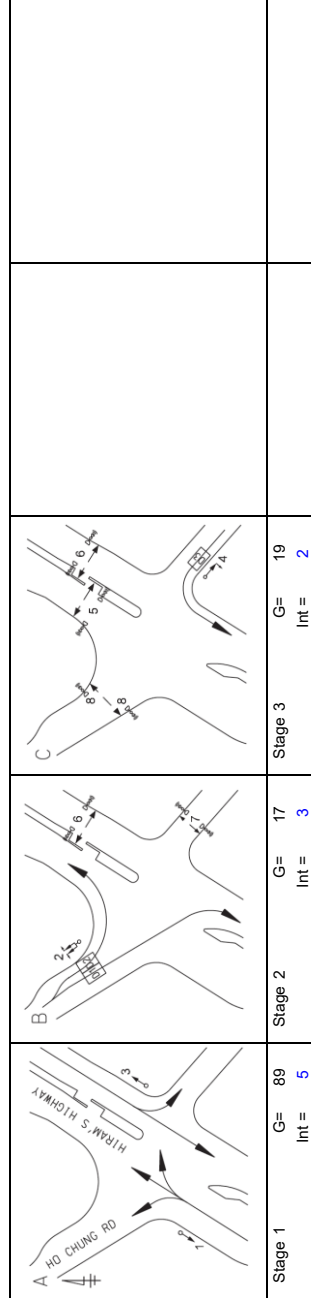
Yult = 0.683

R.C.ult = 79.7 %

Cp = 50.2 sec

Ymax = 0.785

R.C.(C) = (0.9*Ymax-Y)*100% = 86 %



Pedestrian Phase	Stage	Green Time Required SG	Delay FG	Green Time Provided SG	FG
P1	3	10	8	13	8
P2	2,3	13	12	21	12
P3	2	8	7	9	7
P4	3	8	7	10	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	0	625	0.00	1935								1935	0.323	0.323	8	90	90	0.484	42	11	
1	1	3.20	1				2075	669	669	0.00	2075								2075	0.322	0.322		90	90	0.484	48	11	
5,6	1	3.50	1	12		N	1965	129	532	0.24	1907	18	120						2027	0.262	0.262		73	90	0.484	54	19	
4,5	1	3.50	1	12	O	N	1965	454	455	0.00	1735								1735	0.262	0.262		73	90	0.484	42	19	
7,8	2	3.50	1	12		N	2105	12	129	1.00	1871	12	400						2271	0.057	0.057	2	16	18	0.484	24	56	
3	3	3.30	1	15		N	1945	1	1	1.00	1768								1768	0.001	0.001	19	0	19	0.484	0	795	
PED	3																											

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

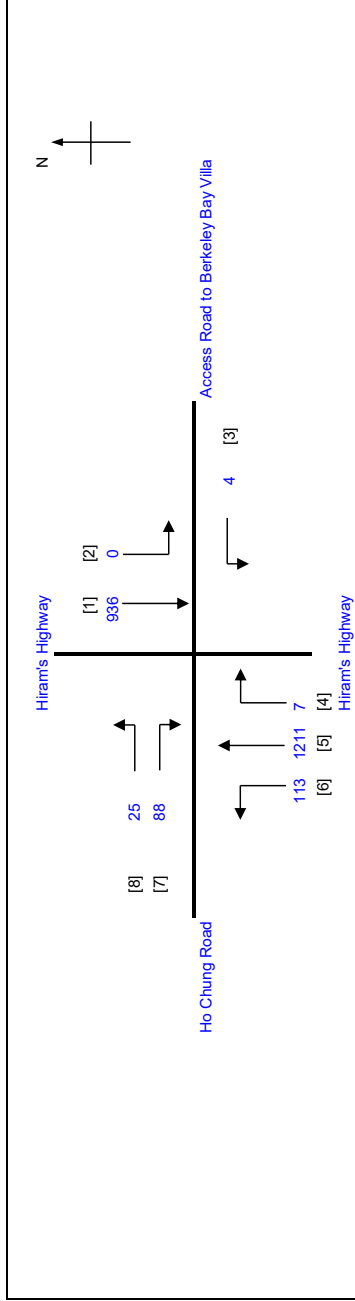
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Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road to Residential (Group C)s" for Proposed Residential Development at Various Lots in D. 2 to Adjoining Government Land, Pak Wai, Sai Kung

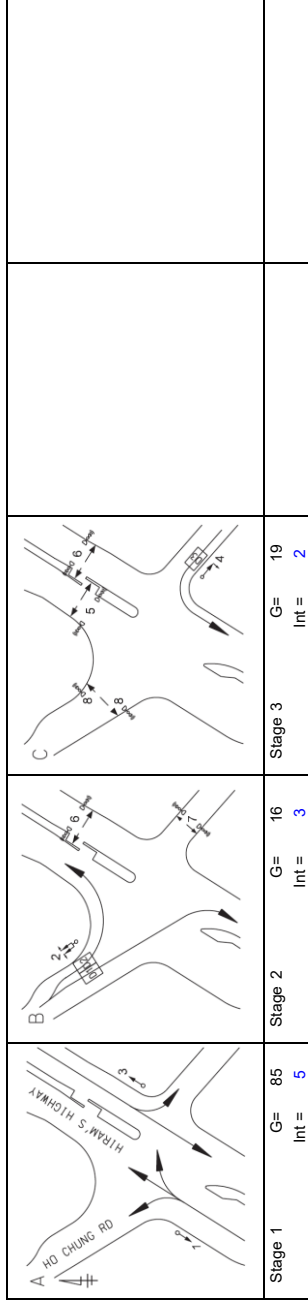
TRAFFIC SIGNAL CALCULATION

PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx
 Prepared By:
 Checked By:
 Reviewed By:

INITIALS	DATE
SKL	Oct-25
SLN	Oct-25
SLN	Oct-25



No. of stages per cycle	N = 3
Cycle time	C = 130 sec
Sum(y)	0.401
Loss time	Y = 32 sec
Total Flow	L = 2384 pcu
Co	= (1.5*L+5)/(1-Y) = 88.5 sec
Cm	= L/(1-Y) = 53.4 sec
Yult	= 0.660
R.C.ult	= (Yult-Y)*100% = 64.6 %
Cp	= 0.9*L/(0.9-Y) = 57.7 sec
Ymax	= 1-L/C = 0.754
R.C.(C)	= (0.9*Ymax-Y)*100% = 69 %



Green Time Required	Green Time Provided
SG	SG
FG	FG
Delay	Delay
10	13
8	20
12	8
7	7
7	10
7	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	0	452	0.00	1935								1935	0.234		8	57	86	0.532	54	26	
1	1	3.20	1			N	2075	484	484	0.00	2075								2075	0.233			57	86	0.532	54	26	
5,6	1	3.50	1	12		N	1965	113	722	0.16	1927	18	126						2053	0.352	0.352		86	86	0.532	48	12	
4,5	1	3.50	1	12	O	N	1965	602	609	0.01	1733								1733	0.352	0.352		86	86	0.532	42	12	
7,8	2	3.50	1	12		N	2105	25	113	1.00	1871	12	424						2295	0.049	0.049	5	12	17	0.532	18	59	
3	3	3.30	1	15		N	1945	4	4	1.00	1768								1768	0.002	0.002	19	1	19	0.532	0	303	
PED	3																											

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

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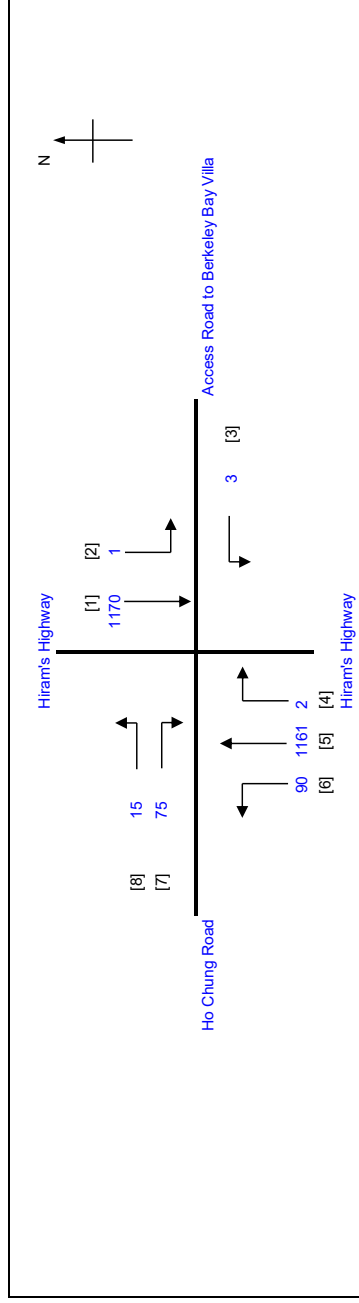
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road to Residential (Group C)s" for Proposed Residential Development at Various Lots in D.D. 2 to Adjoining Government Land, Pak Wai, Sai Kung

TRAFFIC SIGNAL CALCULATION

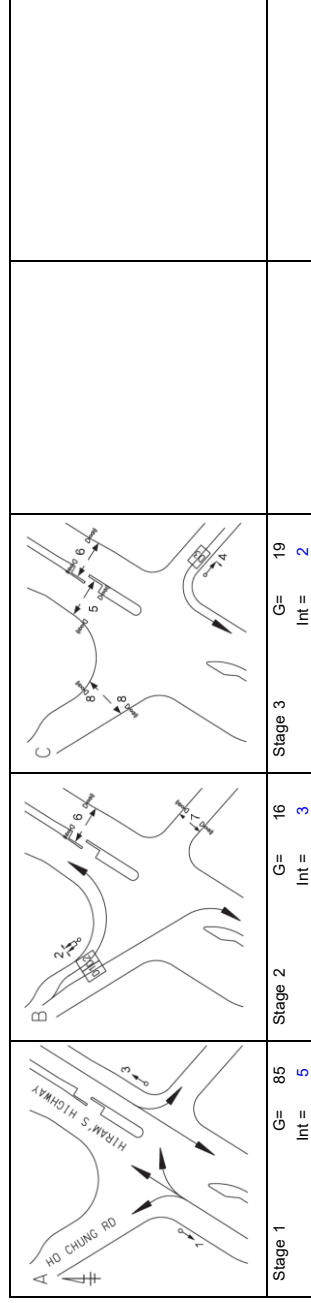
PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx

Prepared By:
 Checked By:
 Reviewed By:

INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



No. of stages per cycle	N = 3
Cycle time	C = 130 sec
Sum(y)	0.370
Loss time	Y = 34 sec
Total Flow	L = 2517 pcu
Co	= (1.5*L+5)/(1-Y)
Cm	= L/(1-Y)
Yult	= 0.645
R.C.ult	= (Yult-Y)*100%
Cp	= 0.9*L/(0.9-Y)
Ymax	= 1-L/C
R.C.(C)	= (0.9*Ymax-Y)*100% = 80 %



Pedestrian Phase	Stage	Green Time Required SG	Green Time Provided SG	Delay	Green Time Provided FG
P1	3	10	13	0	8
P2	2,3	13	12	8	20
P3	2	8	7	4	8
P4	3	8	7	4	10

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	564	1	565	0.00	1935							1935	0.292		8	76	86	0.501	48	16	
1	1	3.20	1	15		N	2075	606		606	0.00	2075							2075	0.292			76	86	0.501	54	16	
5,6	1	3.50	1	12		N	1965	590	90	680	0.13	1933	18	126					2059	0.330	0.330		86	86	0.501	48	11	
4,5	1	3.50	1	12	O	N	1965	571	2	573	0.00	1734							1734	0.330	0.330		86	86	0.501	42	12	
7,8	2	3.50	1	12		N	2105	15	15	90	1.00	1871	12	424					2295	0.039	0.039	7	10	17	0.501	18	61	
3	3	3.30	1	15		N	1945	3	3	3	1.00	1768							1768	0.002	0.002	19	0	19	0.501	0	329	
PED	3																											

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

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Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road to Residential (Group C)s" for Proposed Residential Development at Various Lots in D. 2 to Adjoining Government Land, Pak Wai, Sai Kung

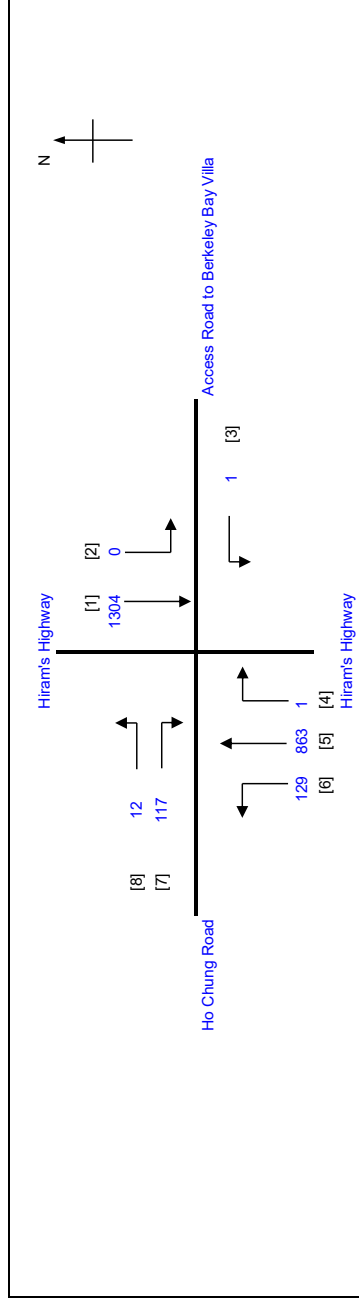
J2 Hiram's Highway/Ho Chung Road

TRAFFIC SIGNAL CALCULATION

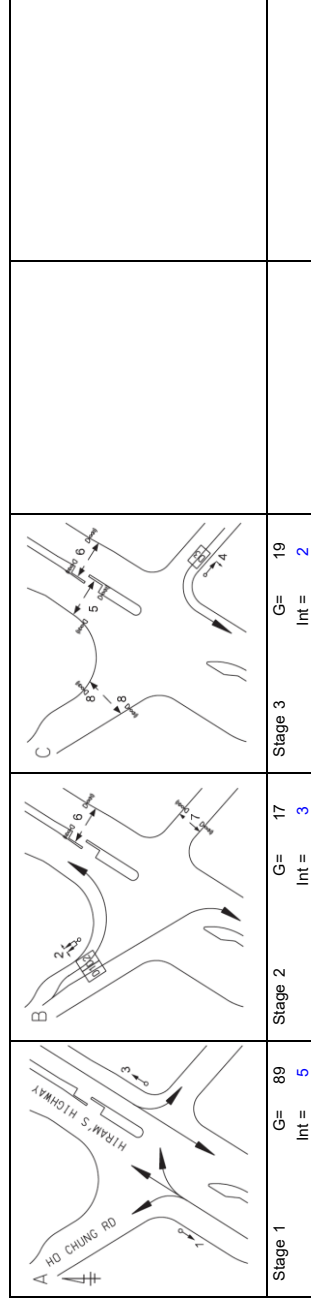
PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx

Prepared By:
 Checked By:
 Reviewed By:

INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



No. of stages per cycle	N =	3
Cycle time	C =	135 sec
Sum(y)	Y =	0.382
Loss time	L =	29 sec
Total Flow	=	2427 pcu
Co	= (1.5*L+5)/(1-Y)	78.5 sec
Cm	= L/(1-Y)	46.9 sec
Yult	=	0.683
R.C.ult	= (Yult-Y)*100%	78.6 %
Cp	= 0.9*L/(0.9-Y)	50.4 sec
Ymax	= 1-L/C	0.785
R.C.(C)	= (0.9*Ymax-Y)*100%	85 %



Stage	Green Time Required SG	Green Time Required FG	Delay	Green Time Provided SG	Green Time Provided FG
P1	10	8	0	13	8
P2	13	12	8	21	12
P3	8	7	4	9	7
P4	8	7	4	10	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	0	629	0.00	1935								1935	0.325		8	90	90	0.487	42	11	
1	1	3.20	1	15		N	2075	675	675	0.00	2075								2075	0.325	0.325		90	90	0.487	48	11	
5,6	1	3.50	1	12	O	N	1965	129	535	0.24	1908	18	120						2028	0.264	0.264		73	90	0.487	54	19	
4,5	1	3.50	1	12		N	1965	457	458	0.00	1735								1735	0.264	0.264		73	90	0.487	42	19	
7,8	2	3.50	1	12		N	2105	12	129	1.00	1871	12	400						2271	0.057	0.057	2	16	18	0.487	24	56	
3	3	3.30	1	15		N	1945	1	1	1.00	1768								1768	0.001	0.001	19	0	19	0.487	0	808	
PED	3																											

NOTE : O - OPPOSING TRAFFIC

N - NEAR SIDE LANE

SG - STEADY GREEN

FG - FLASHING GREEN

PEDESTRAIN WALKING SPEED = 1.2m/s

QUEUEING LENGTH = AVERAGE QUEUE * 6m

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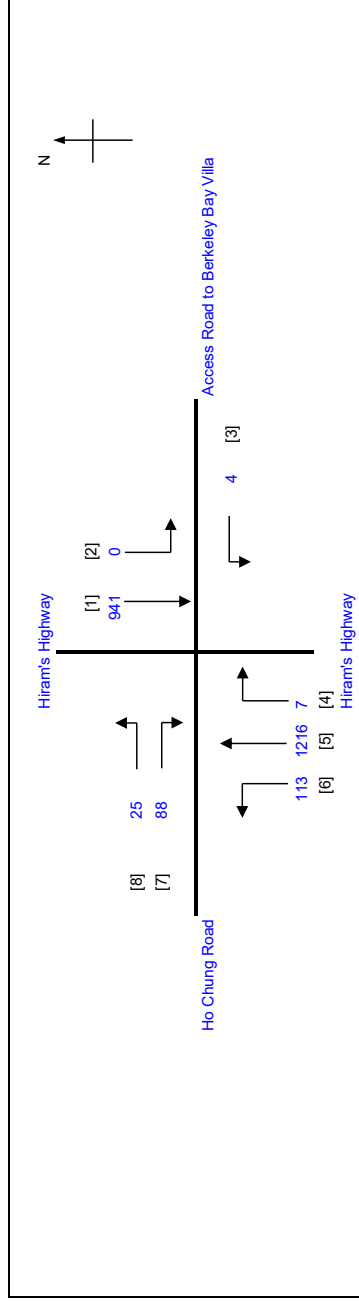
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road to Residential (Group C)s" for Proposed Residential Development at Various Lots in D. 2 to Adjoining Government Land, Pak Wai, Sai Kung

TRAFFIC SIGNAL CALCULATION

PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx

Prepared By:
 Checked By:
 Reviewed By:

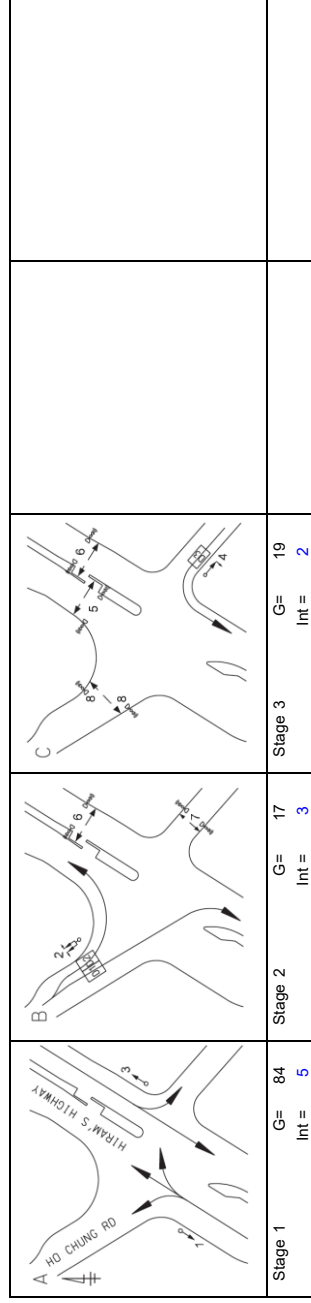
INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



No. of stages per cycle = 3

Cycle time = 130 sec
 Sum(y) = 0.403
 Loss time = 33 sec
 Total Flow = 2394 pcu
 Co = (1.5*L+5)/(1-Y) = 91.2 sec
 Crm = L/(1-Y) = 55.2 sec
 Yult = 0.653
 R.C.ult = (Yult-Y)*100% = 62.1 %
 Cp = 0.9*L/(0.9-Y) = 59.7 sec
 Ymax = 1-L/C = 0.746

R.C.(C) = (0.9*Ymax-Y)*100% = 67 %



Stage	Green Time Required SG	Green Time Provided SG	Delay	Green Time Provided FG
3	10	13	0	8
2,3	13	12	8	21
2	8	7	4	9
3	8	7	4	10

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	0	454	454	0.00	1935							1935	0.235		8	57	85	0.540	54	27	
1	1	3.20	1	15		N	2075	487	487	487	0.00	2075							2075	0.235			57	85	0.540	54	27	
5,6	1	3.50	1	12		N	1965	113	612	725	0.16	1927	18	127					2055	0.353	0.353		85	85	0.540	54	12	
4,5	1	3.50	1	12	O	N	1965	604	604	611	0.01	1733							1733	0.353	0.353		85	85	0.540	42	13	
7,8	2	3.50	1	12		N	2105	25	88	113	1.00	1871	12	400					2271	0.050	0.050	6	12	18	0.540	18	60	
3	3	3.30	1	15		N	1945	4	4	4	1.00	1768							1768	0.002	0.002	19	19	19	0.540	0	314	
PED	3																											

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

LLA CONSULTANCY LIMITED

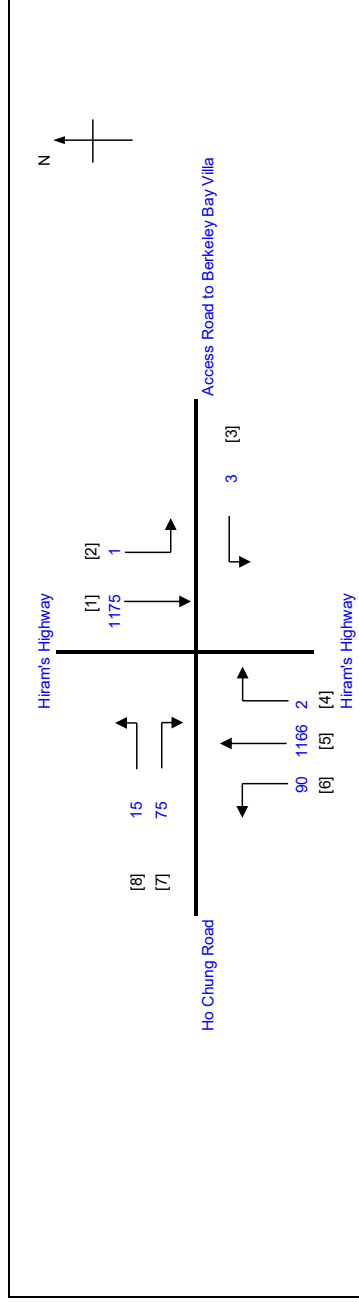
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road to Residential (Group C)s" for Proposed Residential Development at Various Lots in D. 2 to Adjoining Government Land, Pak Wai, Sai Kung

TRAFFIC SIGNAL CALCULATION

PROJECT NO.: 40815
 FILENAME: J2_HH_HCR.xlsx

Prepared By:
 Checked By:
 Reviewed By:

INITIALS DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



No. of stages per cycle = 3

Cycle time = 130 sec

Sum(y) = 0.371

Loss time = 34 sec

Total Flow = 2527 pcu

Co = 89.0 sec

Cm = 54.1 sec

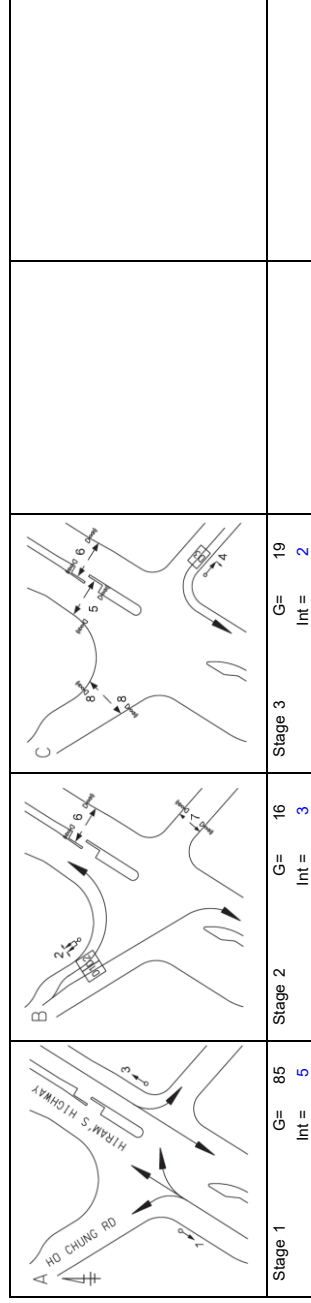
Yult = 0.645

R.C.ult = 73.9 %

Cp = 57.8 sec

Ymax = 0.738

R.C.(C) = (0.9*Ymax-Y)*100% = 79 %



Stage	Green Time Required SG	Green Time Provided SG	Delay	FG
1	10	13	0	8
2	13	12	8	20
3	8	7	4	8
4	8	7	4	10

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight Ahead Sat. Flow	Movement			Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m /lane)	Average Delay (seconds)
								Left pcu/h	Straight pcu/h	Right pcu/h																		
1,2	1	3.20	1	15		N	1935	566	1	609	593	2	567	0.00	1935				1935	0.293		8	76	86	0.502	48	16	
1	1	3.20	1	15		N	2075	609		609			609	0.00	2075				2075	0.293			76	86	0.502	54	16	
5,6	1	3.50	1	12		N	1965	90	90	593	2	683	18	126					2059	0.332	0.332		86	86	0.502	48	11	
4,5	1	3.50	1	12	O	N	1965	573		573		575		1734					1734	0.332			86	86	0.502	42	12	
7,8	2	3.50	1	12		N	2105	15	15	75	1.00	90	12	424					2295	0.039	0.039	7	10	17	0.502	18	61	
3	3	3.30	1	15		N	1945	3	3	3	1.00	3		1768					1768	0.002		19	0	19	0.502	0	332	
PED	3																											

NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

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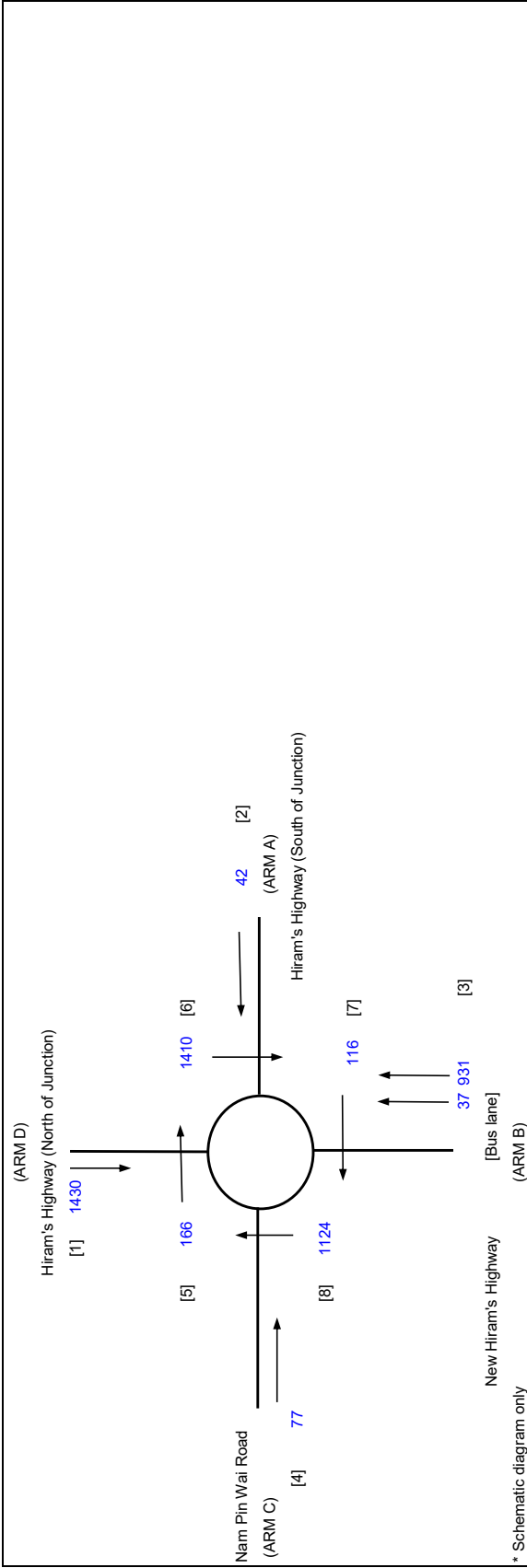
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J3 Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

ROUNDABOUT CALCULATION

PROJECT NO.: 40815
 FILENAME : J3_HH_NHH.xlsx
 REFERENCE NO.:
 PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	3.70	7.40	4.30	7.70
E = Entry width (m)	7.30	11.00	7.30	7.80
L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcuh)	42	931	77	1430
Qc = Circulating flow across entry (pcuh)	1410	116	1124	166

OUTPUT PARAMETERS:	A	B	C	D
S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc)*Qc	968	2255	1260	2201

Total In Sum = 2480 PCU

DFC = Design flow/Capacity = Q/Qe = 0.04 0.41 0.06 0.65

DFC of Critical Approach = 0.65

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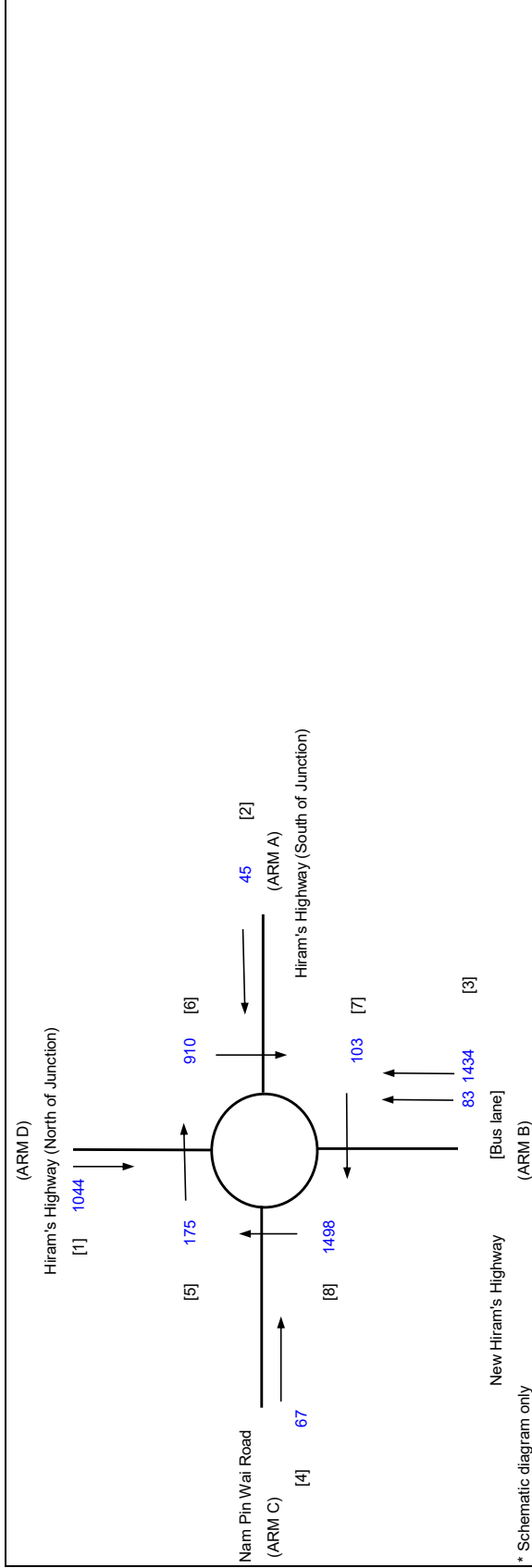
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J3 Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

ROUNDABOUT CALCULATION

PROJECT NO.: 40815
 FILENAME : J3_HH_NHH.xlsx
 REFERENCE NO.:
 PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	3.70	7.40	4.30	7.70
E = Entry width (m)	7.30	11.00	7.30	7.80
L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcu/h)	45	1434	67	1044
Qc = Circulating flow across entry (pcu/h)	910	103	1498	175
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc)*Qc	1197	2262	1081	2196
Total In Sum = 2590 PCU				
DFC = Design flow/Capacity = Q/Qe	0.04	0.63	0.06	0.48
DFC of Critical Approach = 0.63				

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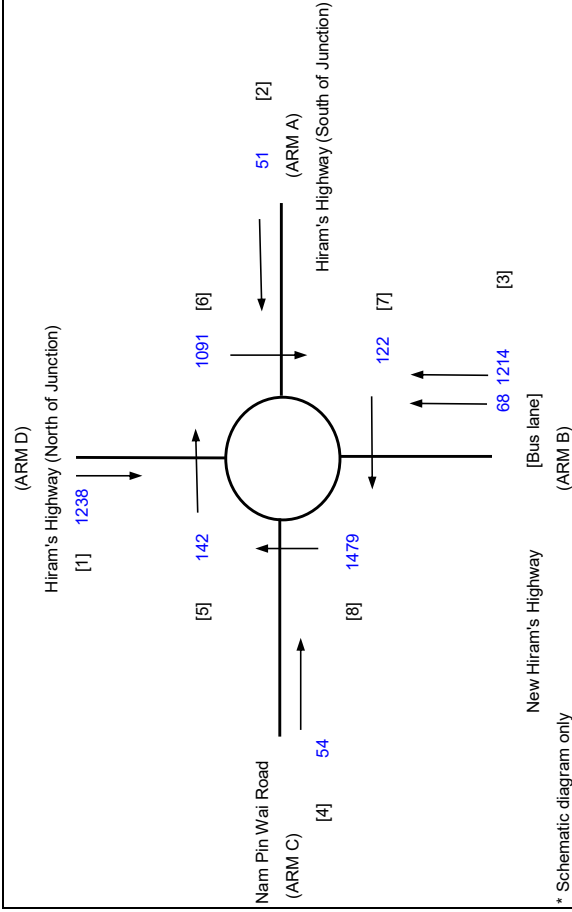
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J3 Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

ROUNDABOUT CALCULATION

PROJECT NO.: 40815
 FILENAME : J3_HH_NHH.xlsx
 REFERENCE NO.:
 PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	3.70	7.40	4.30	7.70
E = Entry width (m)	7.30	11.00	7.30	7.80
L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcuh)	51	1214	54	1238
Qc = Circulating flow across entry (pcuh)	1091	122	1479	142

S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc)*Qc	1114	2252	1090	2215

DFC = Design flow/Capacity = Q/Qe	0.05	0.54	0.05	0.56
Total In Sum =			2557	PCU
DFC of Critical Approach =				0.56

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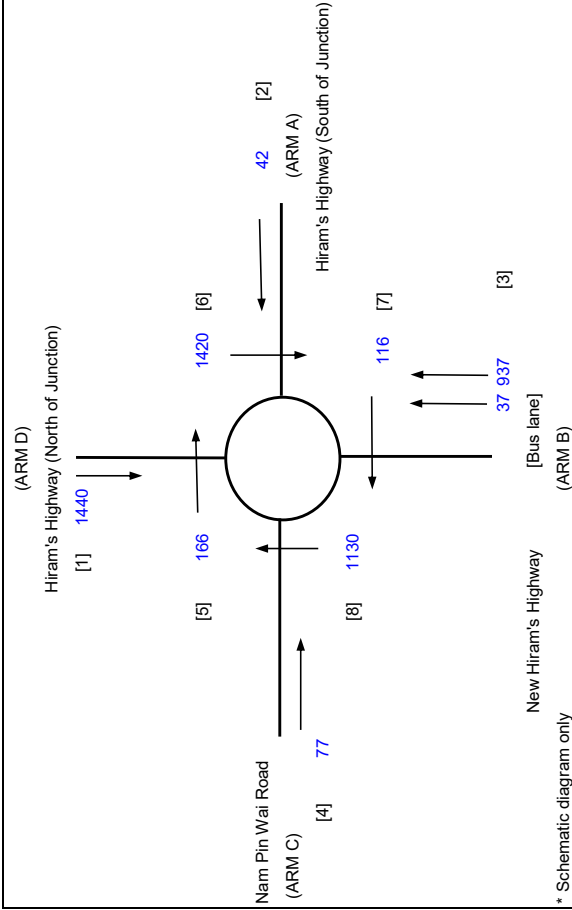
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)S" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J3 Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

ROUNDABOUT CALCULATION

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 REFERENCE NO.:
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 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM

INPUT PARAMETERS:

	A	B	C	D
V = Approach half width (m)	3.70	7.40	4.30	7.70
E = Entry width (m)	7.30	11.00	7.30	7.80
L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcu/h)	42	937	77	1440
Qc = Circulating flow across entry (pcu/h)	1420	116	1130	166

OUTPUT PARAMETERS:

S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc)*Qc	963	2255	1257	2201

DFC = Design flow/Capacity = Q/Qe

Total In Sum = 2496 PCU
 DFC of Critical Approach = 0.65

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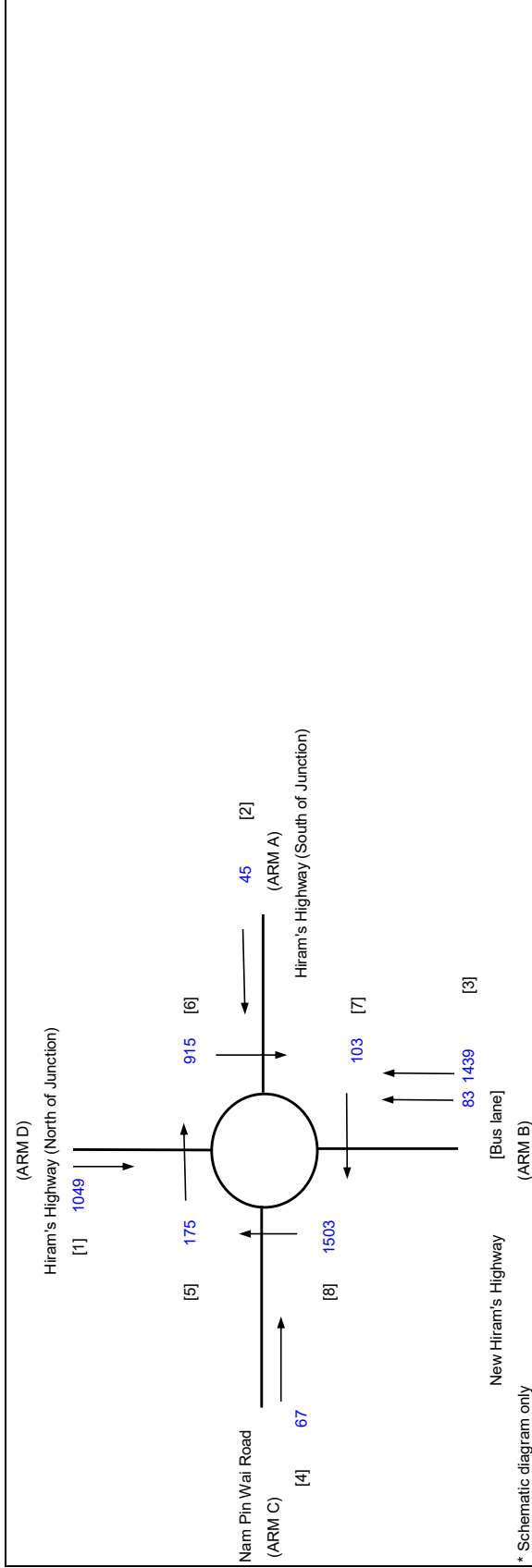
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)S" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

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L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcu/h)	45	1439	67	1049
Qc = Circulating flow across entry (pcu/h)	915	103	1503	175
OUTPUT PARAMETERS:				
S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc)*Qc	1195	2262	1079	2196
Total In Sum = 2600 PCU				
DFC = Design flow/Capacity = Q/Qe	0.04	0.64	0.06	0.48
DFC of Critical Approach = 0.64				

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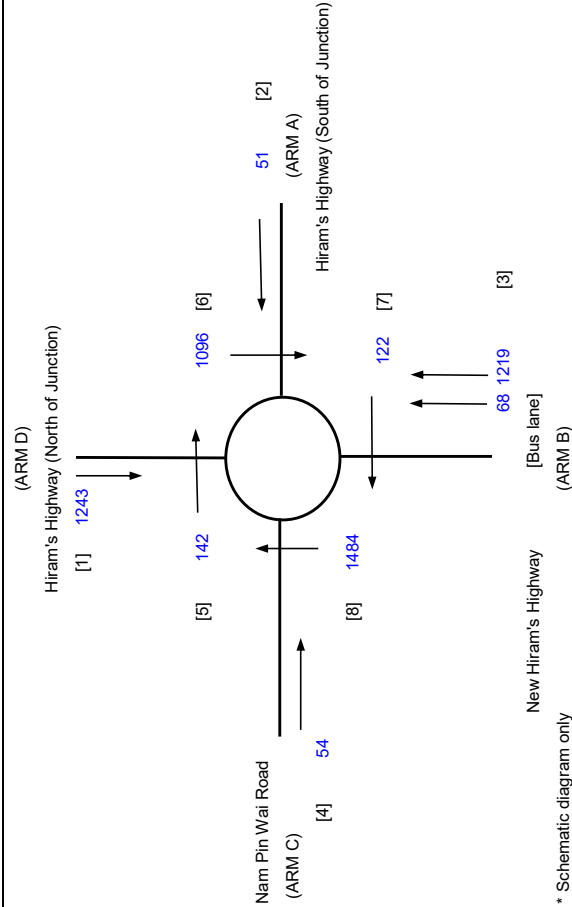
Application for Amendment of Plan under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area Shown as "Road" to "Residential (Group C)S" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

J3 Hiram's Highway/ New Hiram's Highway/ Nam Pin Wai Road

ROUNDABOUT CALCULATION

PROJECT NO.: 40815
 FILENAME : J3_HH_NHH.xlsx
 REFERENCE NO.:
 PREPARED BY: SKL
 CHECKED BY: SLN
 REVIEWED BY: SLN

INITIALS
 DATE
 SKL Oct-25
 SLN Oct-25
 SLN Oct-25



ARM	A	B	C	D
V = Approach half width (m)	3.70	7.40	4.30	7.70
E = Entry width (m)	7.30	11.00	7.30	7.80
L = Effective length of flare (m)	11.00	1.00	20.00	1.00
R = Entry radius (m)	15.00	55.00	23.00	18.00
D = Inscribed circle diameter (m)	78.00	78.00	78.00	78.00
A = Entry angle (degree)	32.00	40.00	50.00	36.00
Q = Entry flow (pcu/h)	51	1219	54	1243
Qc = Circulating flow across entry (pcu/h)	1096	122	1484	142

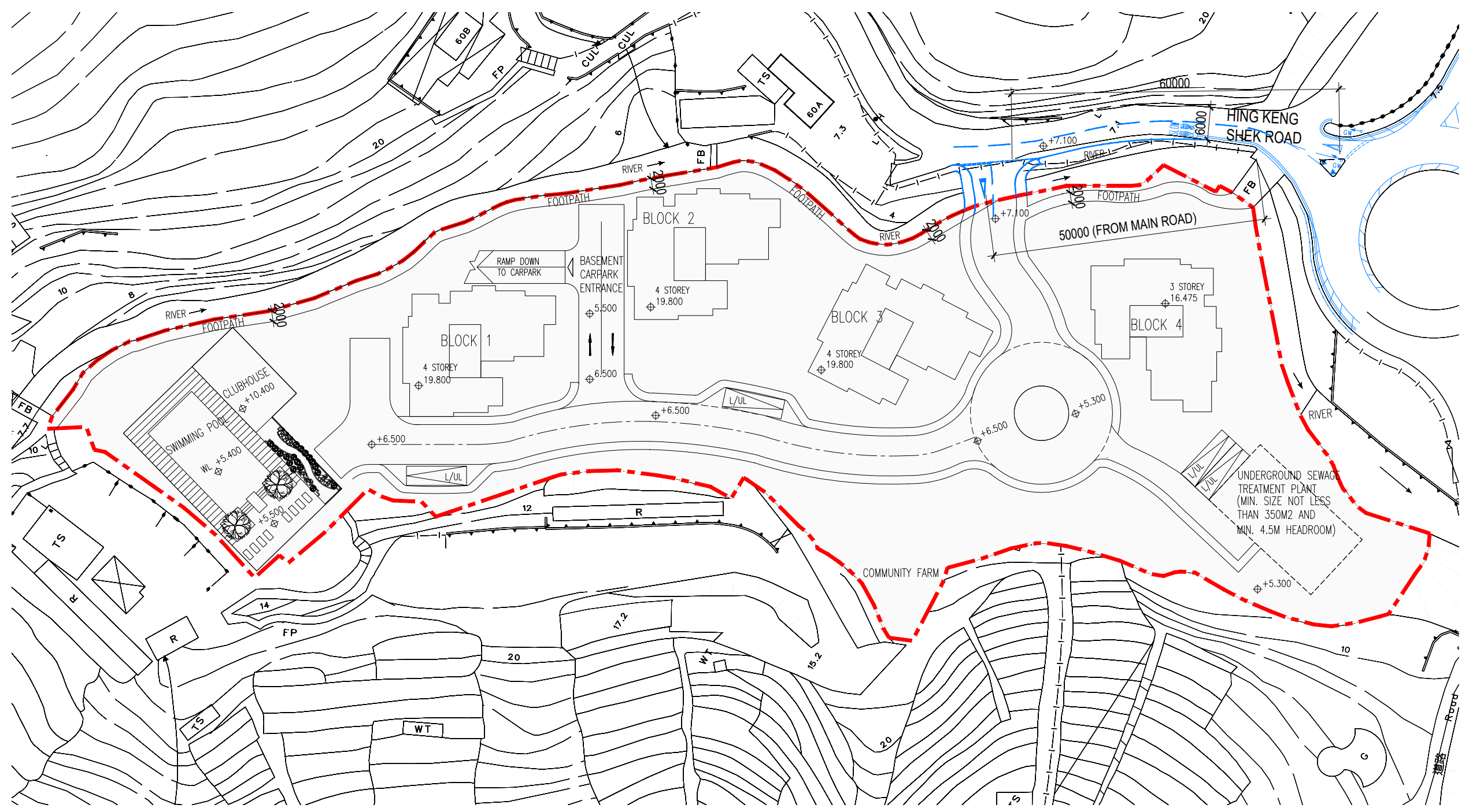
S = Sharpness of flare = 1.6(E-V)/L	0.52	5.76	0.24	0.16
K = 1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.00	0.94	0.97
X2 = V + ((E-V)/(1+2S))	5.46	7.69	6.33	7.78
M = EXP((D-60)/10)	6.05	6.05	6.05	6.05
F = 303*X2	1654	2329	1917	2356
Td = 1+(0.5/(1+M))	1.07	1.07	1.07	1.07
Fc = 0.21*Td(1+0.2*X2)	0.47	0.57	0.51	0.57
Qe = K(F-Fc*Qc)	1112	2252	1088	2215

Total In Sum = 2567 PCU

DFC = Design flow/Capacity = Q/Qe = 0.05 0.54 0.05 0.56

DFC of Critical Approach = 0.56

Appendix C
Proposed Layout Plan



K & W Architects Ltd.
 關黃建築師有限公司

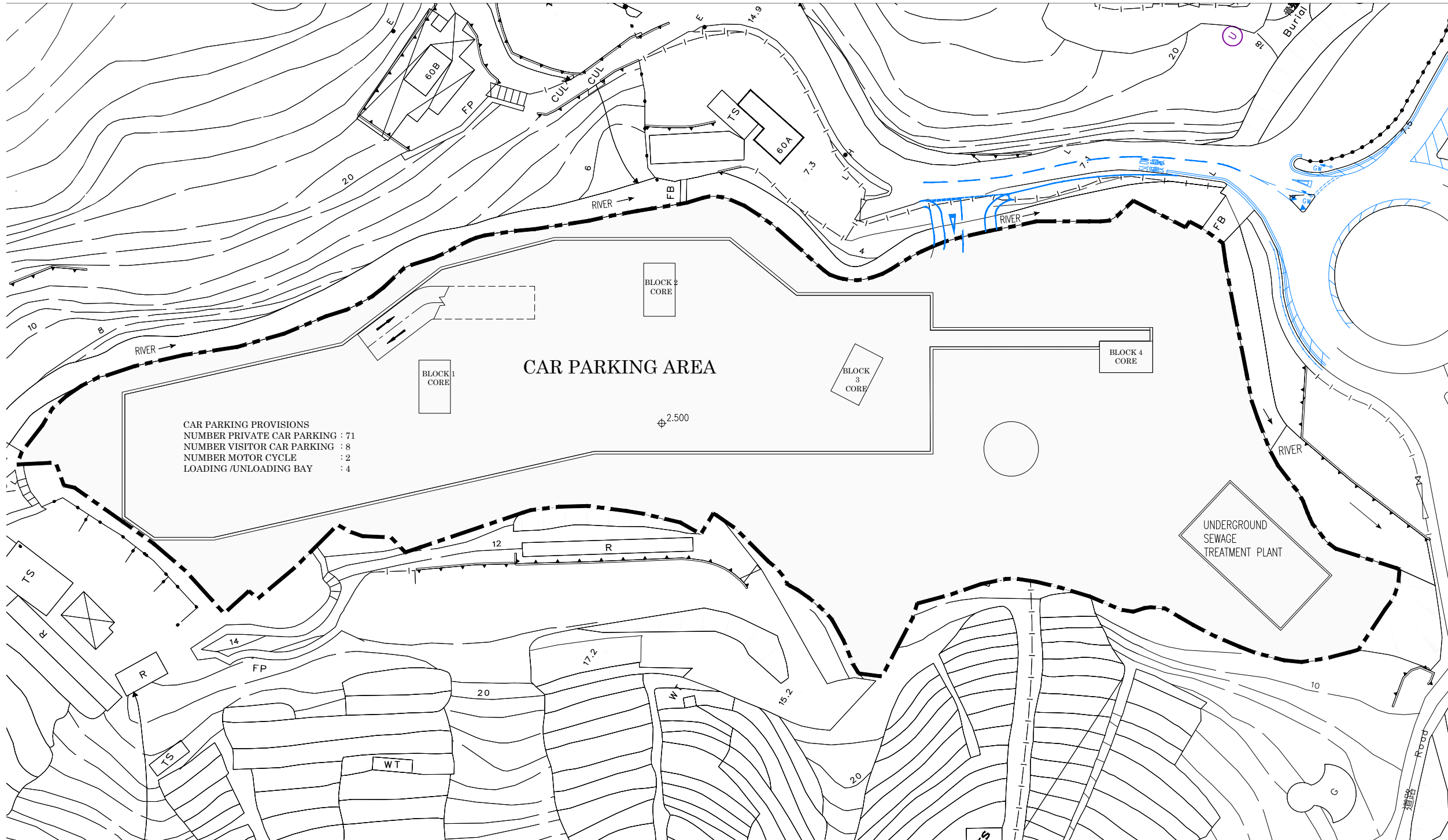


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- Notify the Architect immediately of any discrepancy found herein.

Client
 Project
 Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

Drawing Title
MASTER LAYOUT PLAN

Job No.	Drawing No.	Revision No.
D1186	MLP-01	N
Scale	Date	CAD Ref.
1:800	09/06/2025	
Drawn	Checked	Approved
SF	SF	



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Client

Project

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap. 131) to Rezone the Application Site from "Green Belt" and Area shown as "Road" to "Residential (Group C)5" for Proposed Residential Development at Various Lots in D.D. 210 and Adjoining Government Land, Pak Wai, Sai Kung

Drawing Title

BASEMENT PLAN

Job No.	Drawing No.	Revision No.
D1186	FL-02	L
Scale	Date	CAD Ref.
1:500	23/08/2023	
Drawn	Checked	Approved
PC	PC	