

**Broad Development Parameters of the Indicative
Development Proposal in Respect of Application No. Y/YL-LFS/14**
关于申请编号 Y/YL-LFS/14 而只作指示用途的拟议发展计划的概括发展规范

Revised broad development parameters in view of
the further information received on 2.2.2024
因应於 2024 年 2 月 2 日接获的进一步资料而修订的概括发展规范

Application No. 申请编号	Y/YL-LFS/14
Location/address 位置/地址	<p>Lots 3 S.A ss.1, 3 S.B, 4, 5 S.A RP, 9, 10 RP, 12 S.A, 12 RP, 13, 14 S.A ss.1 S.A, 14 S.A ss.1 RP, 14 S.A ss.2, 14 S.A RP, 14 S.B ss.1 S.A, 14 S.B ss.1 RP, 14 S.B RP, 14 RP, 15 S.A ss.1, 15 S.A RP, 15 S.B, 15 RP, 16 S.A, 16 S.B, 16 RP, 17 S.A ss.1, 17 S.A RP, 17 S.B, 17 S.C and 17 RP in D.D. 128, Lots 2128, 2129, 2136 RP, 2138 RP, 2148, 2153 S.A and 2388 S.A ss.2 (Part) in D.D. 129, and adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories</p> <p>新界元朗流浮山丈量约份第 128 约地段第 3 号 A 分段第 1 小分段、第 3 号 B 分段、第 4 号、第 5 号 A 分段余段、第 9 号、第 10 号余段、第 12 号 A 分段、第 12 号余段、第 13 号、第 14 号 A 分段第 1 小分段 A 分段、第 14 号 A 分段第 1 小分段余段、第 14 号 A 分段第 2 小分段、第 14 号 A 分段余段、第 14 号 B 分段第 1 小分段 A 分段、第 14 号 B 分段第 1 小分段余段、第 14 号 B 分段余段、第 14 号余段、第 15 号 A 分段第 1 小分段、第 15 号 A 分段余段、第 15 号 B 分段、第 15 号余段、第 16 号 A 分段、第 16 号 B 分段、第 16 号余段、第 17 号 A 分段第 1 小分段、第 17 号 A 分段余段、第 17 号 B 分段、第 17 号 C 分段及第 17 号余段、第 129 约地段第 2128 号、第 2129 号、第 2136 号余段、第 2138 号余段、第 2148 号、第 2153 号 A 分段及第 2388 号 A 分段第 2 小分段(部分)和毗连政府土地</p>
Site area 地盘面积	About 约 20,455 sq. m 平方米 (Includes Government Land of about 包括政府土地约 4,594 sq. m 平方米)
Plan 图则	<u>Section 12A application</u> 第 12A 条申请 Draft Lau Fau Shan & Tsim Bei Tsui Outline Zoning Plan No. S/YL-LFS/10 流浮山及尖鼻咀分区计划大纲草图编号 S/YL-LFS/10
	<u>Further information received</u> 接获进一步资料 Approved Lau Fau Shan & Tsim Bei Tsui Outline Zoning Plan No. S/YL-LFS/11 流浮山及尖鼻咀分区计划大纲核准图编号 S/YL-LFS/11
Zoning 地带	<u>Section 12A application</u> 第 12A 条申请 "Residential (Group C)" and "Residential (Group D)" 「住宅(丙类)」及「住宅(丁类)」
	<u>Further information received</u> 接获进一步资料 "Residential (Group C)" and "Residential (Group D)" 「住宅(丙类)」及「住宅(丁类)」

Proposed Amendment(s) 拟议修订	To rezone the application site from "Residential (Group C)" and "Residential (Group D)" to "Residential (Group B)" 把申请地点由「住宅(丙类)」及「住宅(丁类)」地带改划为「住宅(乙类)」地带		
Gross floor area and/or plot ratio 总楼面面积及/或地积比率		sq. m 平方米	Plot ratio 地积比率
	Domestic 住用	About 约 61,365	Not more than 不多於 3
	Non-domestic 非住用	About 约 1,166	About 约 0.057
No. of block 幢数	Domestic 住用	13	
	Non-domestic 非住用	-	
	Composite 综合用途	1	
Building height/No. of storeys 建筑物高度/层数	Domestic 住用	-	m 米
		Not more than 不多於 90	mPD 米(主水平基准上)
		3 - 25	Storey(s) 层
		2	Exclude 不包括 Basement 地库
	Non-domestic 非住用	-	m 米
		-	mPD 米(主水平基准上)
		-	Storey(s) 层
	Composite 综合用途	-	m 米
		Not more than 不多於 90	mPD 米(主水平基准上)
		24	Storey(s) 层
		2	Exclude 不包括 Basement 地库
	Site coverage 上盖面积	-	
No. of units 单位数目	1,246 Flats 住宅单位		
Open space 休憩用地	Private 私人	Not less than 不少於 3,489	sq. m 平方米
	Public 公众	-	sq. m 平方米

No. of parking spaces and loading / unloading spaces 停车位及上落客货车位数目	Total no. of vehicle spaces 停车位总数	595
	Private Car Parking Spaces 私家车车位	417
	Motorcycle Parking Spaces 电单车车位	13
	Bicycle Parking Spaces 单车停泊位	165
	Total no. of vehicle loading/unloading bays/lay-bys 上落客货车位/停车处总数	7
	Heavy Goods Vehicle Spaces 重型货车车位	5
	Lay-by 停车处	2

* 有关资料是为方便市民大众参考而提供。对于所载资料在使用上的问题及文义上的歧异，城市规划委员会概不负责。若有任何疑问，应查阅申请人提交的文件。

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

Submitted Plans, Drawings and Documents 提交的图则、绘图及文件

	<u>Chinese</u> 中文	<u>English</u> 英文
<u>Plans and Drawings 图则及绘图</u>		
Master layout plan(s)/Layout plan(s) 总纲发展蓝图／布局设计图	<input type="checkbox"/>	<input type="checkbox"/>
Block plan(s) 楼宇位置图	<input type="checkbox"/>	<input type="checkbox"/>
Floor plan(s) 楼宇平面图	<input type="checkbox"/>	<input type="checkbox"/>
Sectional plan(s) 截视图	<input type="checkbox"/>	<input type="checkbox"/>
Elevation(s) 立视图	<input type="checkbox"/>	<input type="checkbox"/>
Photomontage(s) showing the proposed development 显示拟议发展的合成照片	<input type="checkbox"/>	<input type="checkbox"/>
Master landscape plan(s)/Landscape plan(s) 园境设计总图／园境设计图	<input type="checkbox"/>	<input type="checkbox"/>
Others (please specify) 其他（请注明）	<input type="checkbox"/>	<input type="checkbox"/>
<u>Reports 报告书</u>		
Planning Statement / Justifications 规划纲领 / 理据	<input type="checkbox"/>	<input type="checkbox"/>
Environmental assessment (noise, air and/or water pollutions) 环境评估（噪音、空气及／或水的污染）	<input type="checkbox"/>	<input type="checkbox"/>
Traffic impact assessment (on vehicles) 就车辆的交通影响评估	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Traffic impact assessment (on pedestrians) 就行人的交通影响评估	<input type="checkbox"/>	<input type="checkbox"/>
Visual impact assessment 视觉影响评估	<input type="checkbox"/>	<input type="checkbox"/>
Landscape impact assessment 景观影响评估	<input type="checkbox"/>	<input type="checkbox"/>
Tree Survey 树木调查	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical impact assessment 土力影响评估	<input type="checkbox"/>	<input type="checkbox"/>
Drainage impact assessment 排水影响评估	<input type="checkbox"/>	<input type="checkbox"/>
Sewerage impact assessment 排污影响评估	<input type="checkbox"/>	<input type="checkbox"/>
Risk Assessment 风险评估	<input type="checkbox"/>	<input type="checkbox"/>
Others (please specify) 其他（请注明）	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Revised Traffic Sensitivity Analysis and Mitigation Measures 修订後的交通敏感度测试及缓解措施</u>		

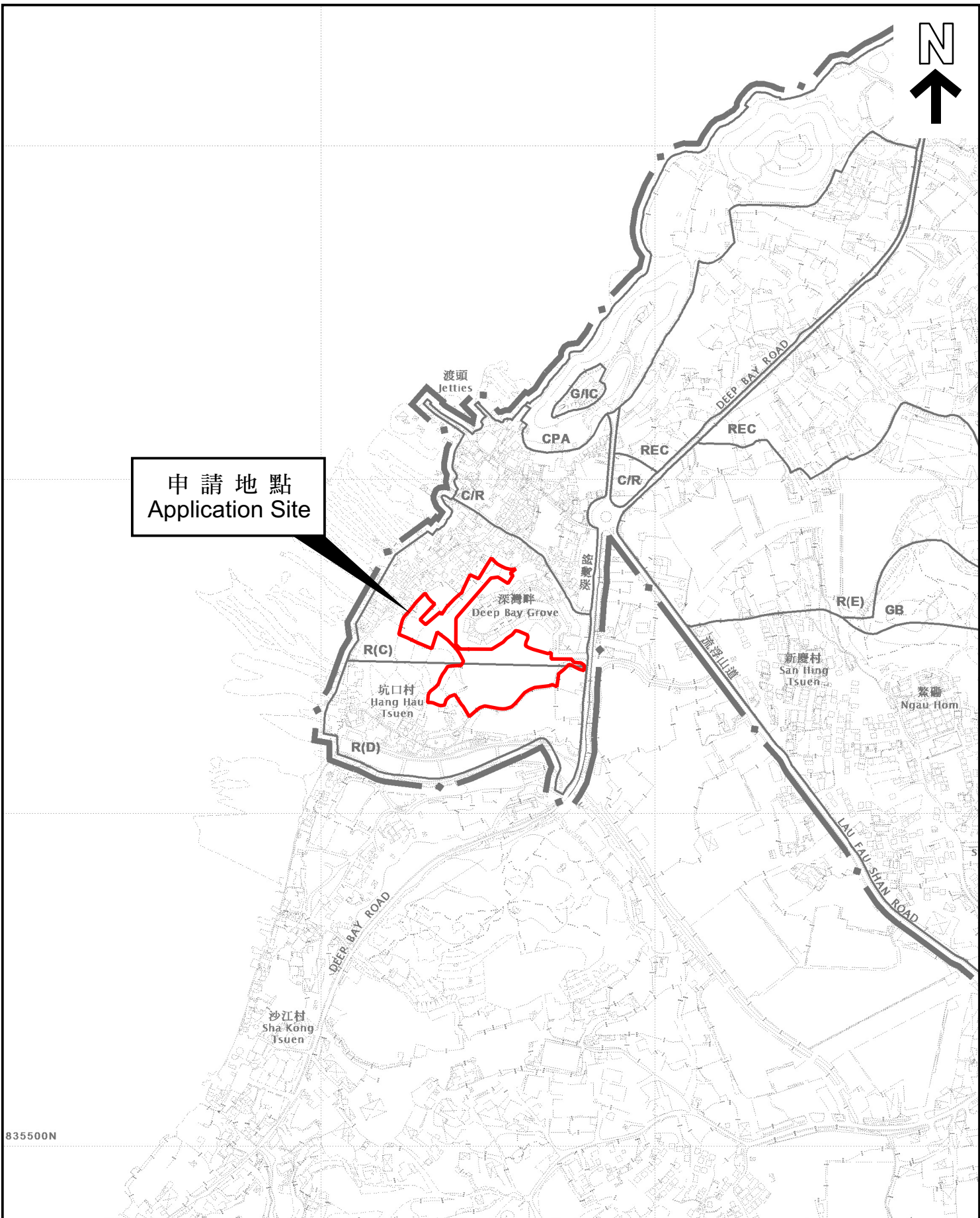
Note: May insert more than one 「✓」. 注：可在多於一个方格内加上「✓」号

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

注：上述申请摘要的资料是由申请人提供以方便市民大众参考。對於所载资料在使用上的问题及文义上的歧异，城市规划委员会概不负责。若有任何疑问，应查阅申请人提交的文件。



申請地點
Application Site

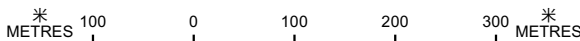


835500N

本摘要圖於2024年2月14日擬備，
所根據的資料為於2022年4月12日
核准的分區計劃大綱圖編號 S/YL-LFS/11
EXTRACT PLAN PREPARED ON 14.2.2024
BASED ON OUTLINE ZONING PLAN No.
S/YL-LFS/11 APPROVED ON 12.4.2022

位置圖 LOCATION PLAN

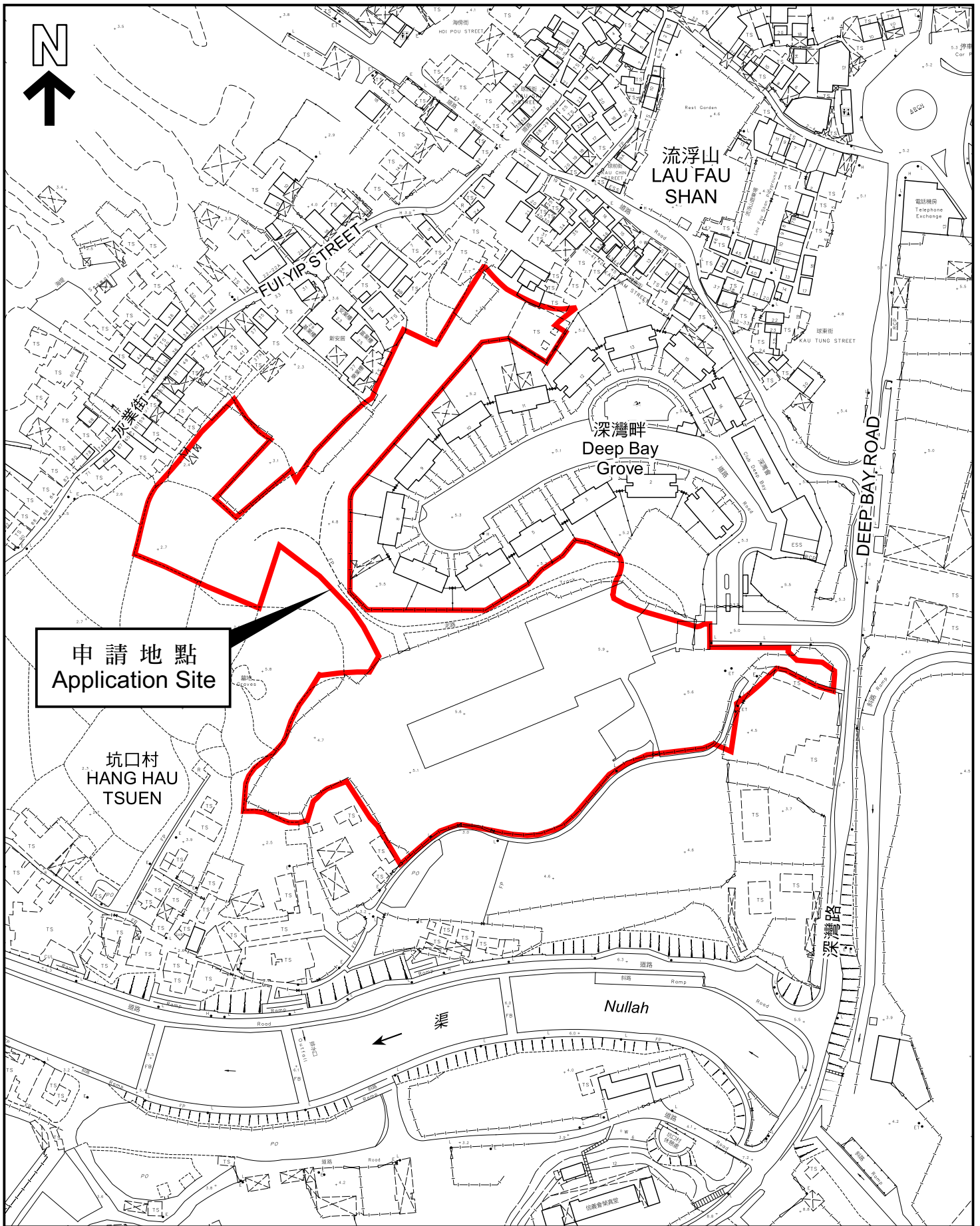
SCALE 1:7 500 比例尺



申請地點界線只作識別用
APPLICATION SITE BOUNDARY
FOR IDENTIFICATION PURPOSE ONLY

參考編號
REFERENCE No.

Y/YL-LFS/14



申請地點
Application Site

坑口村
HANG HAU
TSUEN

流浮山
LAU FAU
SHAN

深灣畔
Deep Bay
Grove

渠
Nullah

本摘要圖於2024年2月14日擬備，
所根據的資料為測量圖編號
2-SW-21D
EXTRACT PLAN PREPARED ON 14.2.2024
BASED ON SURVEY SHEET No.
2-SW-21D

平面圖 SITE PLAN

申請地點界線只作識別用
APPLICATION SITE BOUNDARY
FOR IDENTIFICATION PURPOSE ONLY

參考編號
REFERENCE No.

Y/YL-LFS/14

申請編號 Application No. : Y/YL-LFS/14

備註 Remarks

申請人提交進一步資料，以回應運輸署的意見，並附上修訂後的交通敏感度測試及緩解措施。

The applicant submitted Further Information in response to comments of Transport Department, and enclosed revised traffic sensitivity analysis and mitigation measures.

有關資料是為方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。The information is provided for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

Your ref TPB/YL-LFS/14
Our ref 283826/01/MYNL/TKML/05224

ARUP

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

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

Level 5 Festival Walk
80 Tat Chee Avenue
Kowloon Tong
Kowloon
Hong Kong
t +852 2528 3031
d +852 2268 3612
f +852 2779 8428
natalie.leung@arup.com
www.arup.com

2 February 2024

Dear Sir/Madam,

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories (Planning Application No. Y/YL-LFS/14)

Submission of Further Information

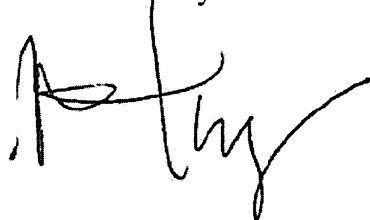
We refer to the comments from Transport Department on the captioned S12A Planning Application received on 27 December 2023.

We are pleased to submit our Response to Comment table (**Attachment A**) and Revised Traffic Review Report (**Appendix A**) with a revised junction improvement scheme proposed to accommodate the anticipated traffic flows at the design year for your kind consideration.

We sincerely seek favourable consideration from the Town Planning Board to approve the captioned S12A Planning Application.

Should you have any queries, please contact the undersigned or our Mr Mark Lim at 2268 3887.

Yours faithfully



Natalie LEUNG
Chief Urban Planner

Encl. - 70 copies of Response to Comment Table (Attachment A) and Revised Traffic Review Report (Appendix A)
cc - Client
- Tuen Mun and Yuen Long West District Planning Office - Mr WONG Pok Shaan, Keith (kpswong@pland.gov.hk)

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories
(Planning Application No. Y/YL-LFS/14)
Responses to Comments

Comments from Related Departments

Page No.

1. Transport Department, dated 27 December 2023 2

COMMENTS FROM RELATED DEPARTMENTS

No.	Comments	Responses
1.	<p>Transport Department, dated 27 December 2023</p> <p>I refer to your MUR</p> <p>2. The applicant shall review the road layout in Drawing No. 3.2 which is deviated from the road gazette plan of Tin Wah Road housing project in November 2022. For example, the pedestrian crossing across Tin Ying Road shall be straight crossing instead of stagger crossing.</p> <p>3. It is noted that the applicant proposed additional junction improvement works as shown in Drawing No. 3.4. However, the weaving length from Tin Wah Road westbound to Tin Ying Road southbound would be reduced under the proposed scheme. "Give-way" at Tin Wah Road westbound is very close to the junction. Motorist from Tin Wah Road westbound pending left turn to Tin Ying Road southbound may be unable to observe the vehicles turning from Tin Wah Road eastbound. This is undesirable from traffic engineering point of view and might lead to potential road safety problem. Please demonstrate that the proposed arrangement could provide sufficient sight distance and could cater for 890 pcu/hr left turn vehicles from Tin Wah Road westbound to Tin Ying Road southbound.</p>	<p>Noted. The Drawing No. 3.2 has been updated according to the road gazette plan in the Revised Traffic Review Report (Appendix A). Correspondingly, the junction operational performance of the planned junction Tin Wah Road/Tin Ying Road has been revised in Section 3.1 of Appendix A.</p> <p>Noted. The proposed improvement scheme at junction Tin Wah Road/ Tin Ying Road (J3) has been reviewed and revised accordingly in Drawing No. 3.4 of Appendix A. The revised junction assessment results in Section 3.3 of Appendix A demonstrated that the proposed improvement scheme could accommodate the anticipated traffic flows at the design year 2036.</p>

(Last updated on 1 February 2024)

Appendix A

Revised Traffic Review Report

Reference number CHK50605510/PTC/L2400172/sys

APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D. 128 AND D.D. 129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES (PLANNING APPLICATION NO. Y/YL-LFS/14)

TRAFFIC REVIEW



1. INTRODUCTION

1.1 Background

- 1.1.1 The Application site is located at various Lots in D.D.128 and D.D. 129, and adjoining government land, Lau Fau Shan as indicated in **Drawing No. 1.1**. A section 12A application (Planning Application No. Y/YL-LFS/14) has been submitted to the Government to rezone the Application site for the proposed residential development and Social Welfare Facility (Child Care Centre).
- 1.1.2 The tentative completion year of the proposed development is 2030. A traffic impact assessment (TIA) report for the design year of 2033 was submitted to the Government in support of the application. During the application, a proposed temporary transitional housing, being located at the subject rezoning site, was approved by Town Planning Board in 2022 (Application No. A/YL-LFS/425). In this regard, a sensitivity test for another assessment year has been requested by Transport Department (TD) to assess in case there is a later development completion year.
- 1.1.3 In response to TD’s request and taking into account of the planned operation period of transitional housing, a sensitivity test for the design year of 2036 was conducted by assuming that the completion year of the proposed development to be in year 2033. This traffic review is to review the traffic impact to the surrounding road network if the completion year of the proposed development is assumed to be in year 2033.

2. TRAFFIC FORECSATING

2.1 Design Year for Sensitivity Test

- 2.1.1 By assuming that the completion year of the proposed development to be in year 2033, the design year of 2036, three years upon operation of the proposed development, has been adopted for sensitivity test.

2.2 Identified Road Junction and Links

- 2.2.1 Same as previously submitted TIA report, a total of five junctions/road links, as listed in **Table 2.1**, have been identified for assessment purposes in accordance with the major ingress/egress routes. The locations of the identified junctions and road links are indicated in **Drawing 2.1**.

Table 2.1 Identified Key Junctions

Ref. ⁽¹⁾	Key Junction/Road Links	Type	Drawing No.
Junction			
J1	Lau Fau Shan Road / Deep Bay Road	Roundabout	2.2
J2	Tin Wah Road/Lau Fau Shan Road/Ping Ha Ro	Priority	2.3
J3	Tin Wah Road/Tin Ying Road	Signal	2.4
Road Link			
L1	Deep Bay Road (section between Lau Fau Shan Roundabout and the subject site)	Single Track Access Road	2.1
L2	Lau Fau Shan Road	Single-2	2.1

Remark: (1) Refer to **Drawing 2.1** for locations.

2.3 Forecasting Assumptions

- 2.3.1 According to the Legislative Council Paper No. CB(1)230/19-20(03) “Funding Applications for Hung Shui Kiu/Ha Tsuen New Development Area”, the Hung Shui Kiu/Ha Tsuen New Development Area (HSK/HT NDA) will be developed in phases. Phase 1 and Phase 2 developments are scheduled to be completed by 2032 whilst the Phase 3 development is scheduled to be completed in 2037/2038.
- 2.3.2 Phase 1 and Phase 2 developments of HSK/HT NDA would be completed before the design year 2036 and has been considered in this traffic forecast. Nevertheless, taking into consideration that the Phases 1 & 2 developments are not in close proximity to the identified study area, their traffic impact would be limited on the identified study area. Therefore, same as the previously submitted TIA report, the 2036 reference traffic flows were derived by adopting appropriate growth rates onto the observed traffic flows.
- 2.3.3 To derive the 2036 reference traffic flows for sensitivity test, the year 2033 reference flows in the previously submitted TIA report are adopted as basis.

Traffic Growth Rate from 2033 to 2036

- 2.3.4 For the long-term traffic growth rate from Year 2033 up to 2036, reference has been made to the Hong Kong Resident Population extracted from “Hong Kong Population Projections 2022-2046” published by Census and Statistics Department. The average annual growth from year 2033 to 2036 is illustrated in **Table 2.2**.

Table 2.2 Hong Kong Resident Population for Years 2033-2036

	Year 2033 (ppl)	Year 2036 (ppl)	Growth Rate per annum (2033/2036)
Hong Kong Population	7,903,600	8,022,400	+0.50%

- 2.3.5 As indicated in **Table 2.2**, the average growth rate of Hong Kong Resident Population is +0.5% p.a. from year 2033 to 2036, which was adopted to project the year 2033 traffic flows up to year 2036 traffic flows.

Adjacent Planned/Committed Developments

- 2.3.6 The planned/committed developments in the vicinity of the development that are expected to be completed by year 2036 will be included in the traffic forecast. The details of these committed developments and the estimated traffic flows are listed in **Table 2.3** and **Table 2.4** respectively. The locations of planned/committed developments in the vicinity are indicated in **Drawing 2.5**.

Table 2.3 Committed/Approved Developments

Ref. (1)	Committed/Approved Developments	Parameter
1	Proposed Public Housing Development nearby Tin Wah Road	4390 flats with 14580m ² retail GFA, 2906m ² GIC GFA and proposed ancillary facilities/carpark
2	Proposed Residential Development at Tin Shui Wai Area 112	2031 flats with 8403m ² retail GFA
3	Proposed Residential Development at Tin Shui Wai Area 115	1727 flats with 1858m ² retail GFA
4	Proposed Residential Development at Tin Shui Wai Area 33	1938 flats with 205m ² retail GFA

Remark: (1) Locations refer to **Drawing No. 2.5**.

Table 2.4 Estimated Trips for other Committed/Approved Developments

Ref. (1)	Committed/Approved Developments	Trip Generations (pcu/hr)			
		AM Peak		PM Peak	
		Gen	Attr	Gen	Attr
1	Proposed Public Housing Development nearby Tin Wah Road ⁽²⁾	400	287	232	341
2	Proposed Residential Development at Tin Shui Wai Area 112 ⁽³⁾	176	124	109	119
3	Proposed Residential Development at Tin Shui Wai Area 115	128	78	55	71
4	Proposed Residential Development at Tin Shui Wai Area 33	139	82	56	73

Remarks: (1) Locations refer to **Drawing No. 2.5**.

(2) Trip Generations are based on its TIA report under RNTPC Paper No.4/21.

(3) Included the trips of Public Vehicle Park (90 car parking, 45 coach parking & 9 motorcycle parking).

2.4 Development Traffic Generations

2.4.1 The subject site is proposed to be developed into a residential development of 1,246 unit with average flat size of about 50m² with a 100-place child care center. The traffic generated from the proposed development as derived from the previously submitted TIA would be included for traffic forecasting. The estimated trip generation of the proposed development extracted from TIA report is listed in **Table 2.5**.

Table 2.5 Estimated Trip Generation of Proposed Development

		AM Peak		PM Peak	
		Gen	Attr	Gen	Attr
Residential	Trip Rates (pcu/hr/flat) ⁽¹⁾	0.0718	0.0425	0.0286	0.037
	No. of Unit	1246			
	Proposed Development (pcu/hr)	89	53	36	46
G/IC	Child Care Centre (pcu/hr) ⁽²⁾	20	20	20	20
Total		109	73	56	66

Remarks: (1) Trip rates extracted from TPDM mean trip rates for Private Housing R(A) Average Flat Size of 60sqm.

(2) Nominal Trips.

2.5 Year 2036 Traffic Flows

- 2.5.1 According to the above, the anticipated 2036 peak hour reference traffic flows are obtained by applying the adopted growth rates to the 2033 traffic flows and superimposing the estimated trip generations of the planned developments. The 2036 reference peak-hour traffic flows are shown in **Drawing 2.6**.
- 2.5.2 The estimated development traffic trips as derived in **Table 2.5** are superimposed onto the year 2036 reference traffic flows, to produce the anticipated year 2036 peak hour design traffic flows. The year 2036 design peak-hour traffic flows are shown in **Drawings 2.7**.

3. TRAFFIC IMPACT ASSESSMENT FOR SENSITIVITY TEST

3.1 Junction Assessment

- 3.1.1 To investigate the traffic impact of the proposed development on the surrounding road network at the design year 2036, operational performance of the identified key local junctions and critical links have been assessed for both reference and design scenarios.

Government's Planned Junction Improvement Work at Tin Wah Road/Lau Fau Shan Road/Ping Ha Road (J2) and Road Widening Works at Tin Wah Road

- 3.1.2 The Government gazetted on 18 November 2022 the road works for PWP Item No. B847CL Site Formation and Infrastructure works for Public Housing Development at Tin Wah Road, Lau Fau Shan. Under the Gazette Plan, the existing priority junction at Tin Wah Road/Lau Fau Shan Road/Ping Ha Road (J2) will be converted to a roundabout, and a section of Tin Wah Road between Tin Ying Road and Lau Fau Shan Road will be widened to a dual 2-lane road. The possible planned layout for junction and road improvement works are shown in **Drawing No. 3.1** and **Drawing No. 3.2** respectively. The works are scheduled to commence in March 2024 and will take about 46 months to complete. The planned schematic improvement layouts were adopted for assessment.

Junction Operation Performance

- 3.1.3 Based on the existing/planned layouts, the junction assessment results for the 2036 reference and design scenarios are summarized in **Table 3.1**. The junction calculation sheets are attached in **Annex A**.

Table 3.1 Year 2036 Junction Operational Performance

Ref. (1)	Junction	Type	RC/RFC ⁽²⁾			
			Reference Case		Design Case	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Lau Fau Shan Road / Deep Bay Road	Roundabout	0.40	0.34	0.49	0.46
J2	Planned Junction of Tin Wah Road/Lau Fau Shan Road/Ping Ha Road ⁽²⁾	Roundabout ⁽²⁾	0.72	0.81	0.76	0.84
J3	Planned Junction of Tin Wah Road/Tin Ying Road ⁽³⁾	Signal	-14%	-2%	-17%	-4%

Remarks:(1) Refer to **Drawing 2.1** for junction locations.

(2) Based on the planned junction improvement works on **Drawing No. 3.1**.

(3) Based on the planned road improvement works on **Drawing No. 3.2**.

(4) RC = reserved capacity for signal junction, RFC = ratio-of-flow to capacity for roundabout junction.

3.1.4 The assessment results in **Table 3.1** revealed that among the identified key junctions, the planned junction Tin Wah Road/Tin Ying Road (J3) would be operated with over-capacity under both reference and design cases. That is, the planned junction would be operated with over-capacity even without the proposed development.

3.2 Road Link Assessment

3.2.1 Apart from junction capacity assessment, the road link operation performance was also undertaken for both reference and design scenarios.

PWP Item No. 6878th (Part)- Government's Planned Upgrading Works at Deep Bay Road

3.2.2 The Government gazetted on 10 December 2021 the widening works at a section of Deep Bay Road between Lau Fau Shan Roundabout and Nim Wan Road from a single track access road to a single two-lane carriageway to serve the traffic demand in the area. Under the Gazette Plan, a section of Deep Bay Road abutting the subject site will be widened to around 7m with footpath as illustrated in **Drawing No. 3.3**. The road widening works is anticipated to be completed in phases by around 2029 according to the LegCo Paper (No. CB(1)177/2022(05)). This road layout was adopted for assessment.

Link Operational Performance

3.2.3 Based on the existing/planned layouts with traffic forecast, the results of the assessment are summarized in **Table 3.2**.

Table 3.2 Year 2036 Road Link Operational Performance

Ref. (1)	Road Link	Capacity (veh/hr)	Reference Case				Design Case			
			Two-way Traffic Flows (veh/hr)		Volume to Capacity Ratio (V/C)		Two-way Traffic Flows (veh/hr)		Volume to Capacity Ratio (V/C)	
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
L1	Upgraded Deep Bay Road ⁽²⁾	1400 ⁽³⁾	205	320	0.15	0.23	375	435	0.27	0.31
L2	Lau Fau Shan Road	1400 ⁽³⁾	390	525	0.28	0.38	565	640	0.40	0.46

Remarks:(1) Refer to **Drawing 2.1** for locations.

(2) Based on the planned road layout as shown in **Drawing No. 3.3**.

(3) According to TPDM Volume 2 Section.2.4.1, road capacity of single 2-lane carriageway with the road width of 6.75m, the peak hourly flow of 1400 veh/hr for both directions under district distributor.

3.2.4 The assessment result in **Table 3.2** revealed that all the identified key road links will operate with ample capacity under both reference and design cases.

3.3 Improvement Proposal

Proposed Junction Improvement at Tin Wah Road/Tin Ying Road (J3)

- 3.3.1 To resolve the foreseeable traffic problems, a local junction improvement measure has been proposed for the planned junction Tin Wah Road/Tin Ying Road (J3). It is proposed to install a channelising island at Tin Wah Road eastbound to separate the split the straight and left-turn movement and modify the road marking at Tin Ying Road northbound. Detail of junction improvement scheme is shown in **Drawing No. 3.4**.
- 3.3.2 The operational performance of the junction of Tin Wah Road/Tin Ying Road (J3) was re-assessed based on the proposed improvement scheme. The result is summarized in **Table 3.3**.

Table 3.3 Year 2036 Junction Operational Performance with Proposed Improvement Scheme

Ref.	Junction	Type	Reserve Capacity	
			AM Peak	PM Peak
J3	Tin Wah Road/Tin Ying Road ⁽¹⁾	Signal	11%	28%

Remarks: (1) Based on the proposed junction improvement works on **Drawing 3.4**.

- 3.3.3 The junction assessment results shown in **Table 3.3** indicates that the proposed improvement scheme at junction Tin Wah Road/Tin Ying Road (J3) could accommodate the anticipated traffic flows at the design year 2036.

4. CONCLUSION

4.1 Summary

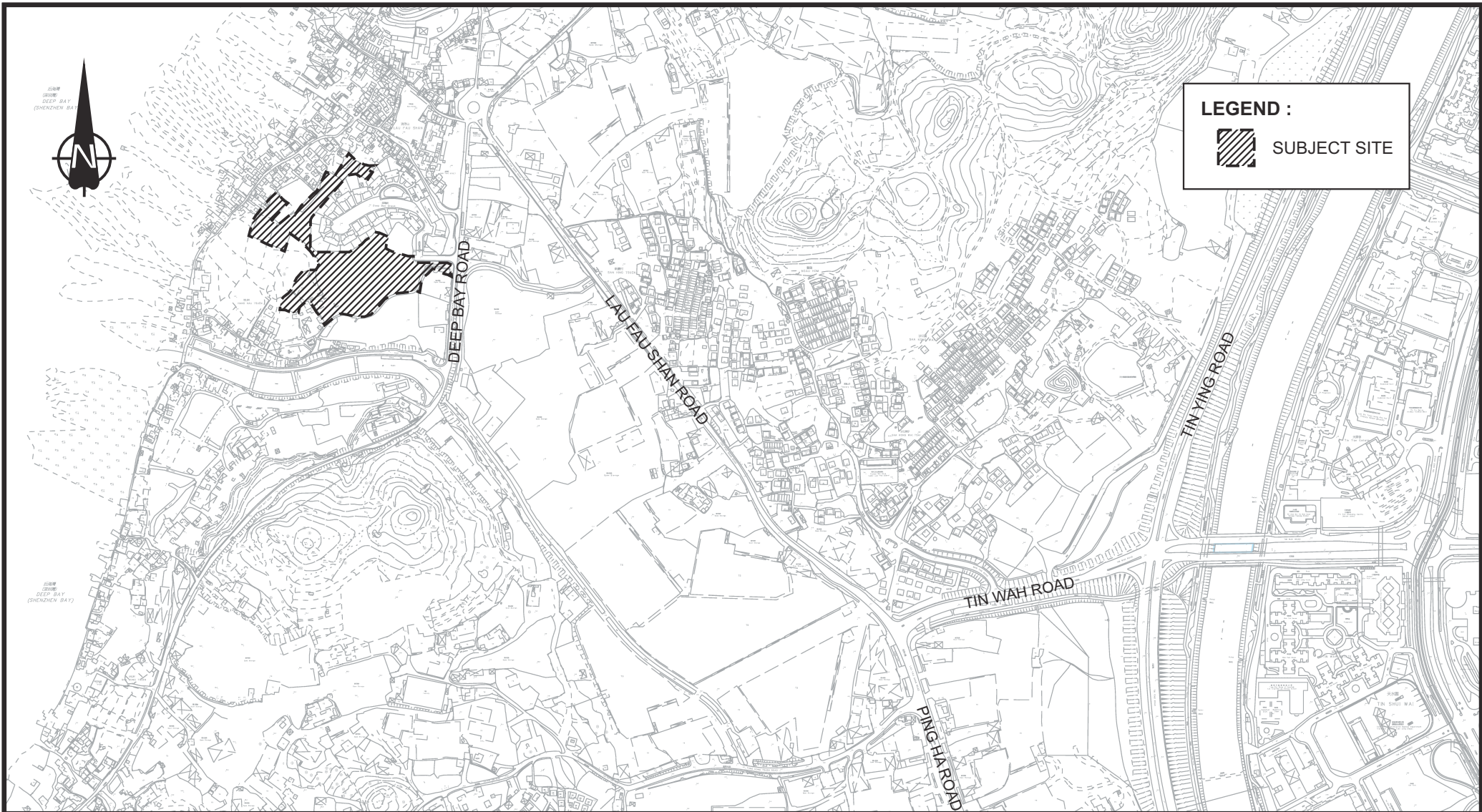
- 4.1.1 The Application site is located at various Lots in D.D.128 and D.D. 129, and adjoining government land, Lau Fau Shan as indicated in **Drawing No. 1.1**. A section 12A application (Planning Application No. Y/YL-LFS/14) has been submitted to the Government to rezone the Application site for the proposed residential development and Social Welfare Facility (Child Care Centre).
- 4.1.2 The tentative completion year of the proposed development is 2030. A traffic impact assessment (TIA) report for the design year of 2033 was submitted to the Government in support of the application. During the application, a proposed temporary transitional housing, being located at the subject rezoning site, was approved by Town Planning Board in 2022 (Application No. A/YL-LFS/425). In this regard, a sensitivity test for another assessment year has been requested by Transport Department (TD) to assess in case there is a later development completion year. In response to TD's request and taking into account of the planned operation period of transitional housing, a sensitivity test for the design year of 2036 was conducted by assuming that the completion year of the proposed development to be in year 2033.
- 4.1.3 The Government gazetted on 10 December 2021 the widening works at a section of Deep Bay between Lau Fau Shan Roundabout and Nim Wan Road from a single track access road to a single two-lane carriageway to serve the traffic demand in the area. Under the Gazette Plan, a section of Deep Bay Road abutting the subject site will be widened to around 7m with footpath as illustrated in **Drawing No. 3.3**. The road widening works is anticipated to be completed in phases by around 2029 according to the LegCo Paper. This planned road layout was adopted for assessment.

4.1.4 Peak-hour traffic forecast for year 2036 were generated based on the same methodology in the previously submitted TIA report. Operational performance of the identified local junctions and road links have been assessed based on the anticipated year 2036 traffic flows and the existing/planned layouts. The assessment results revealed that all identified key junctions and road links will operate with ample capacity, except the planned junction Tin Wah Road/Tin Ying Road (J3).

4.1.5 To resolve the foreseeable traffic problems, a local junction improvement measure has been proposed for the planned junction Tin Wah Road/Tin Ying Road (J3). According to the junction assessment result, the proposed improvement scheme at junction Tin Wah Road/Tin Ying Road (J3) could accommodate the anticipated traffic flows at the design year 2036.


4.2 Conclusion

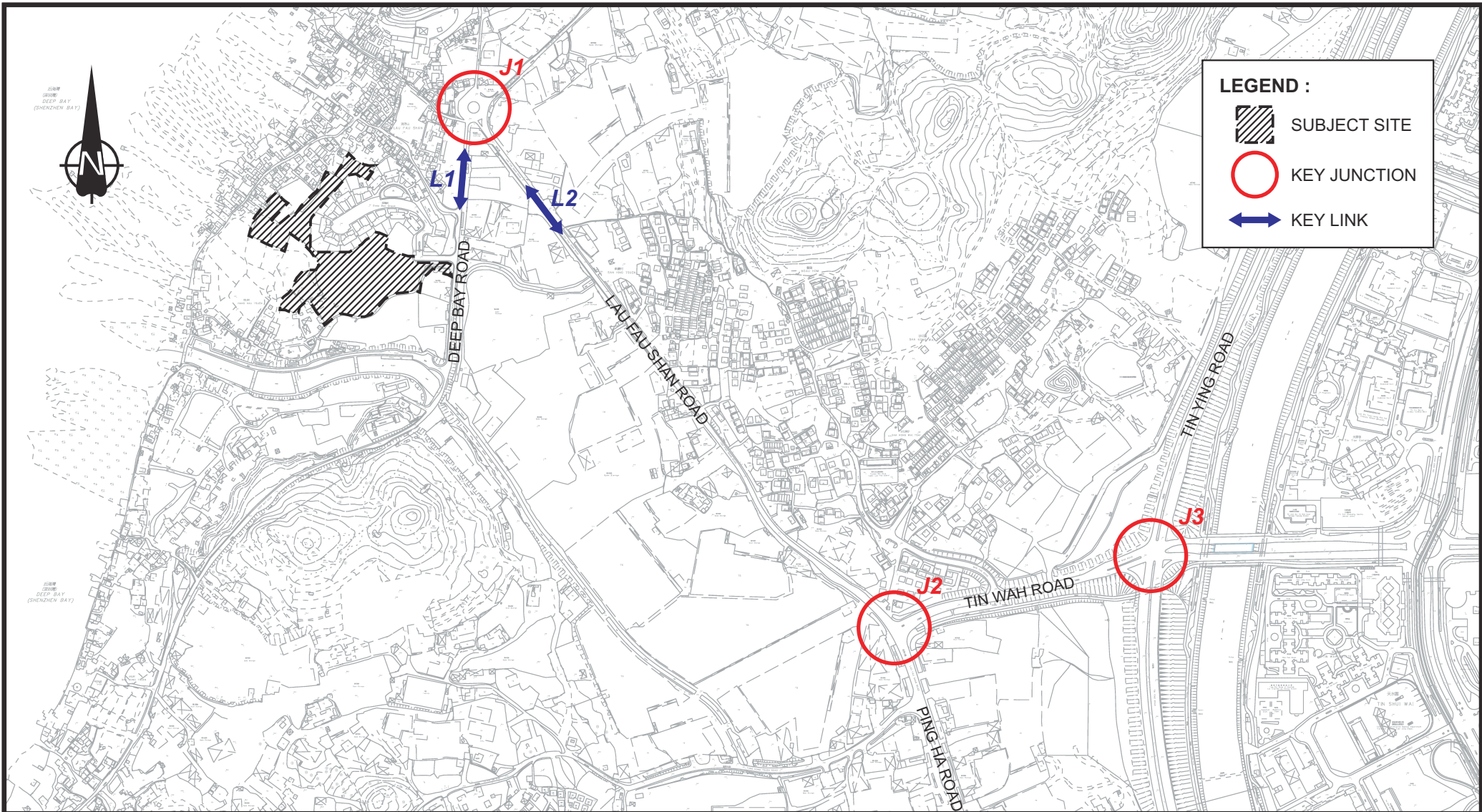
4.2.1 In conclusion, the result of the sensitivity test has demonstrated that even if the project completion year is postponed to 2033, the development traffic generation by the subject site can still be absorbed by the nearby road network and would not cause any adverse traffic impact (with the proposed local junction improvement).






LEGEND :


 SUBJECT SITE

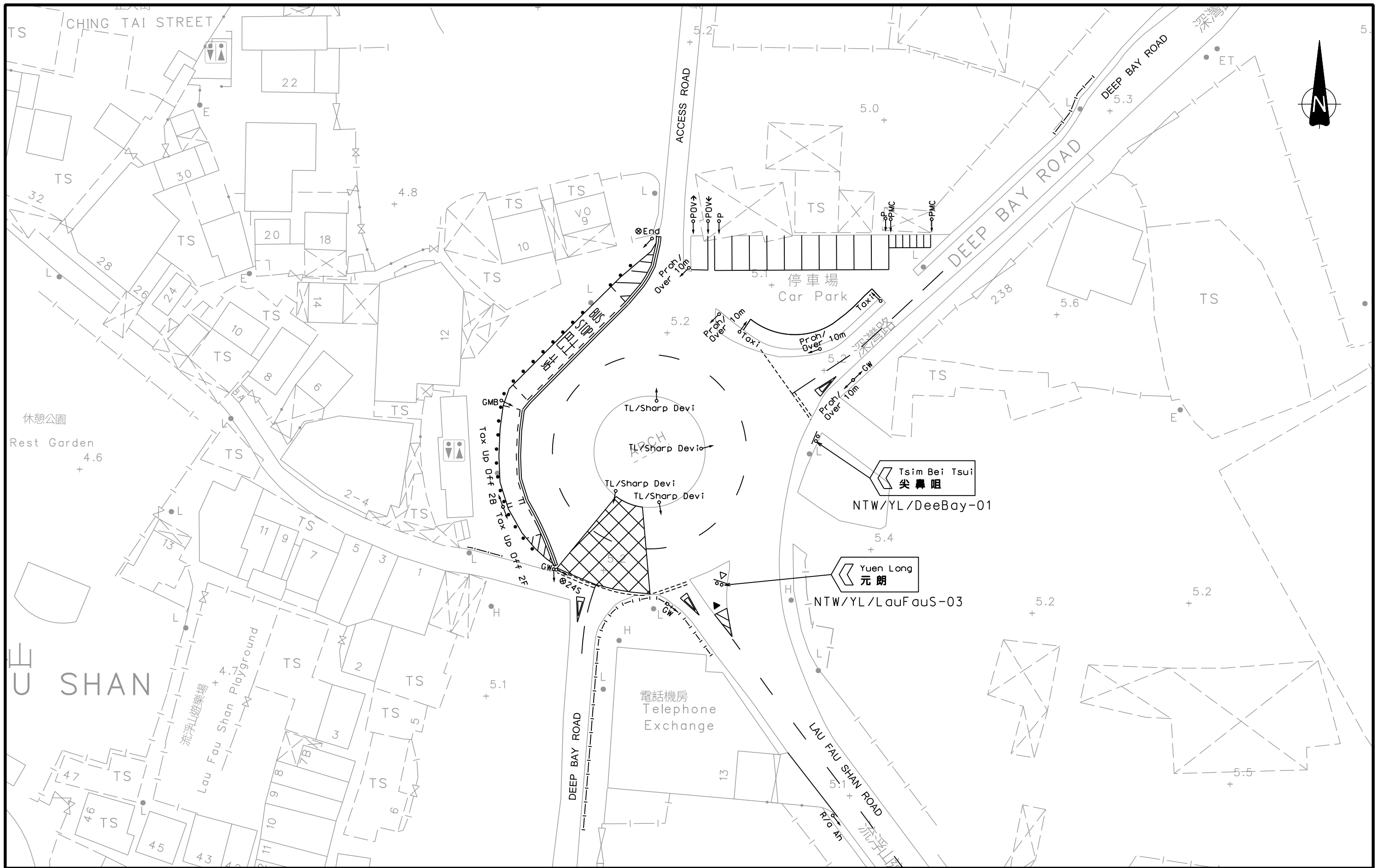
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Project Title				Drawing Title							
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES				SITE LOCATION							
Designed	FSC	Checked	PTC	Scale	NTS	Date	NOV 2023	Drawing No.	1.1	Rev.	-



LEGEND :

-  SUBJECT SITE
-  KEY JUNCTION
-  KEY LINK

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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date				
Project Title				Drawing Title											
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES				IDENTIFIED KEY JUNCTIONS											
Designed	FSC	Checked	PTC	Scale	NTS	Date	NOV 2023	Drawing No.	2.1	Rev.	-				



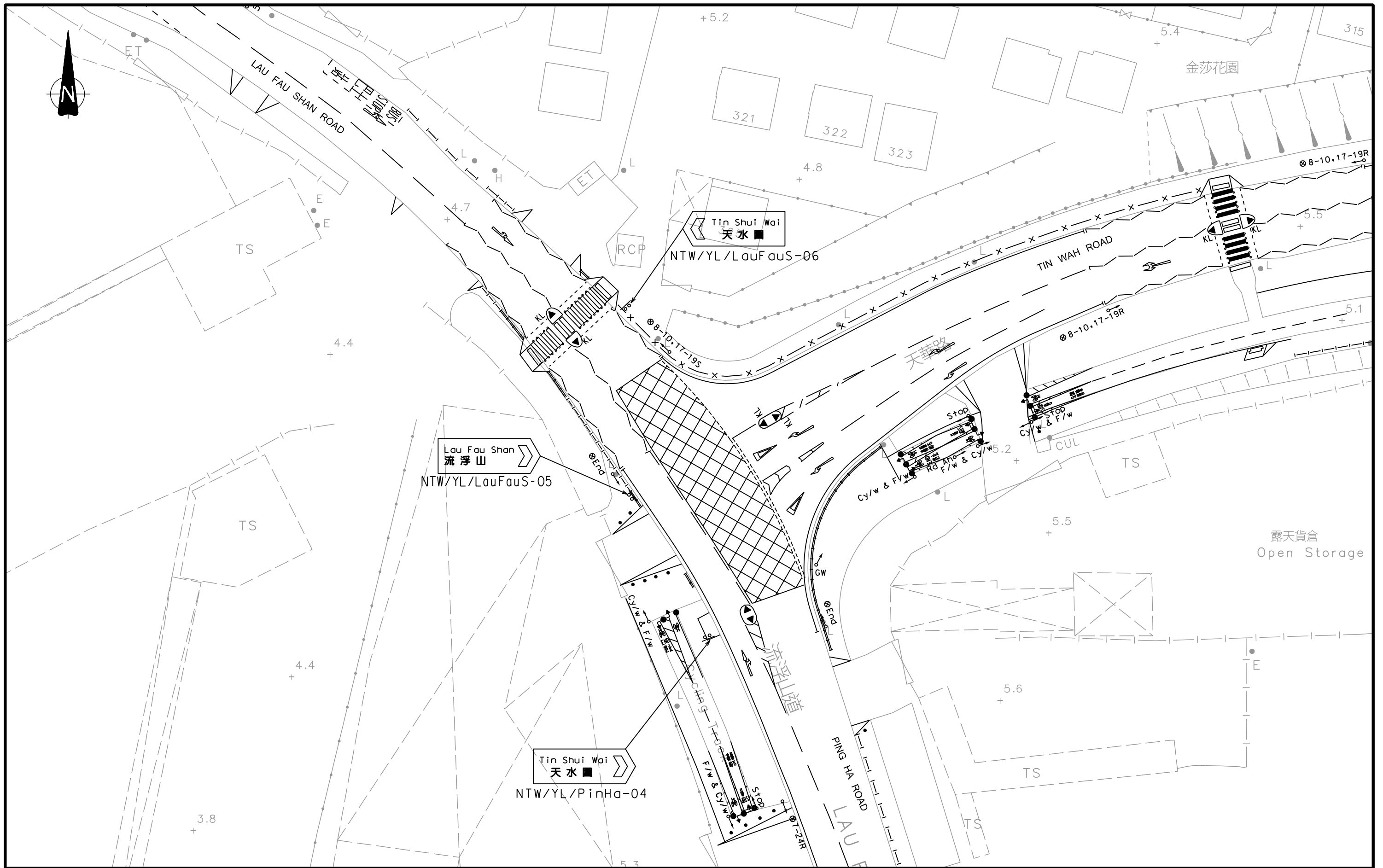
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Project Title
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
EXISTING JUNCTION LAYOUT OF LAU FAU SHAN ROAD / DEEP BAY ROAD (J1)

Designed	FSC	Checked	PTC	Scale	1:500(A3)	Date	NOV 2023	Drawing No.	2.2	Rev.	-
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Rev.	Description	Checked	Date
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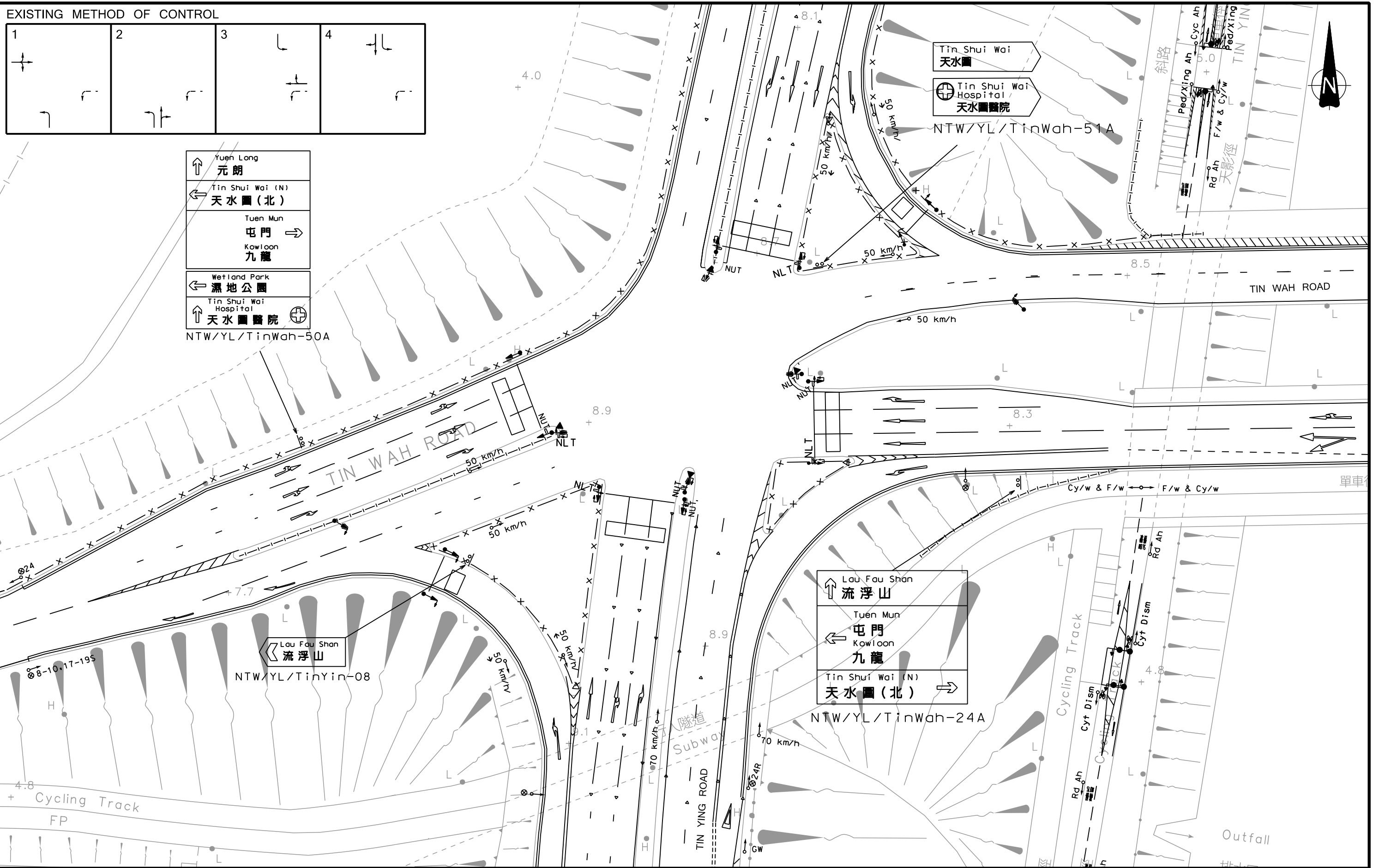
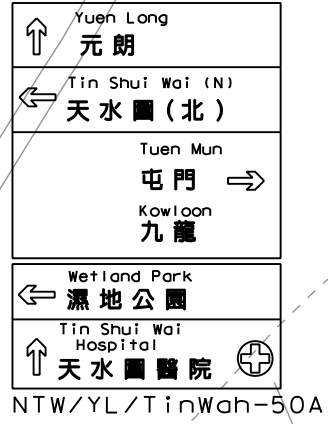
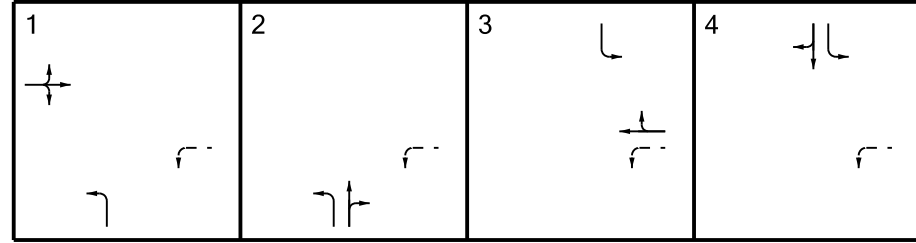
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 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
EXISTING JUNCTION LAYOUT OF TIN WAH ROAD / LAU FAU SHAN ROAD / PING HA ROAD (J2)

Designed: FSC Checked: PTC Scale: 1:500(A3) Date: NOV 2023 Drawing No.: **2.3** Rev.: -



EXISTING METHOD OF CONTROL



Rev.	Description	Checked	Date
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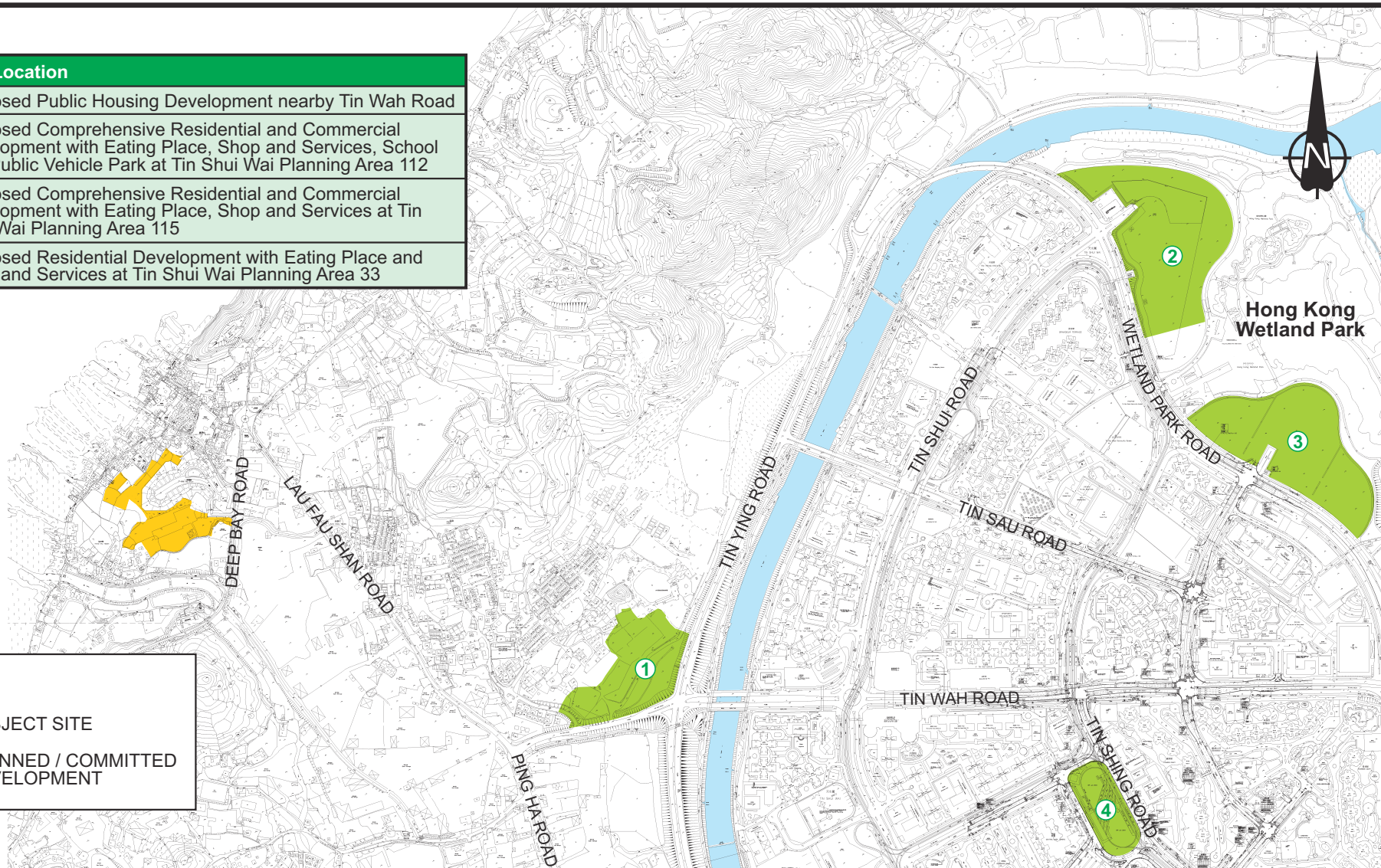
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Drawing Title
EXISTING JUNCTION LAYOUT OF TIN WAH ROAD / TIN YING ROAD (J3)

Designed FSC Checked PTC Scale 1:500(A3) Date NOV 2023 Drawing No. **2.4** Rev. -



Ref. No.	Site Location
①	Proposed Public Housing Development nearby Tin Wah Road
②	Proposed Comprehensive Residential and Commercial Development with Eating Place, Shop and Services, School and Public Vehicle Park at Tin Shui Wai Planning Area 112
③	Proposed Comprehensive Residential and Commercial Development with Eating Place, Shop and Services at Tin Shui Wai Planning Area 115
④	Proposed Residential Development with Eating Place and Shop and Services at Tin Shui Wai Planning Area 33



LEGEND :

	SUBJECT SITE
	PLANNED / COMMITTED DEVELOPMENT

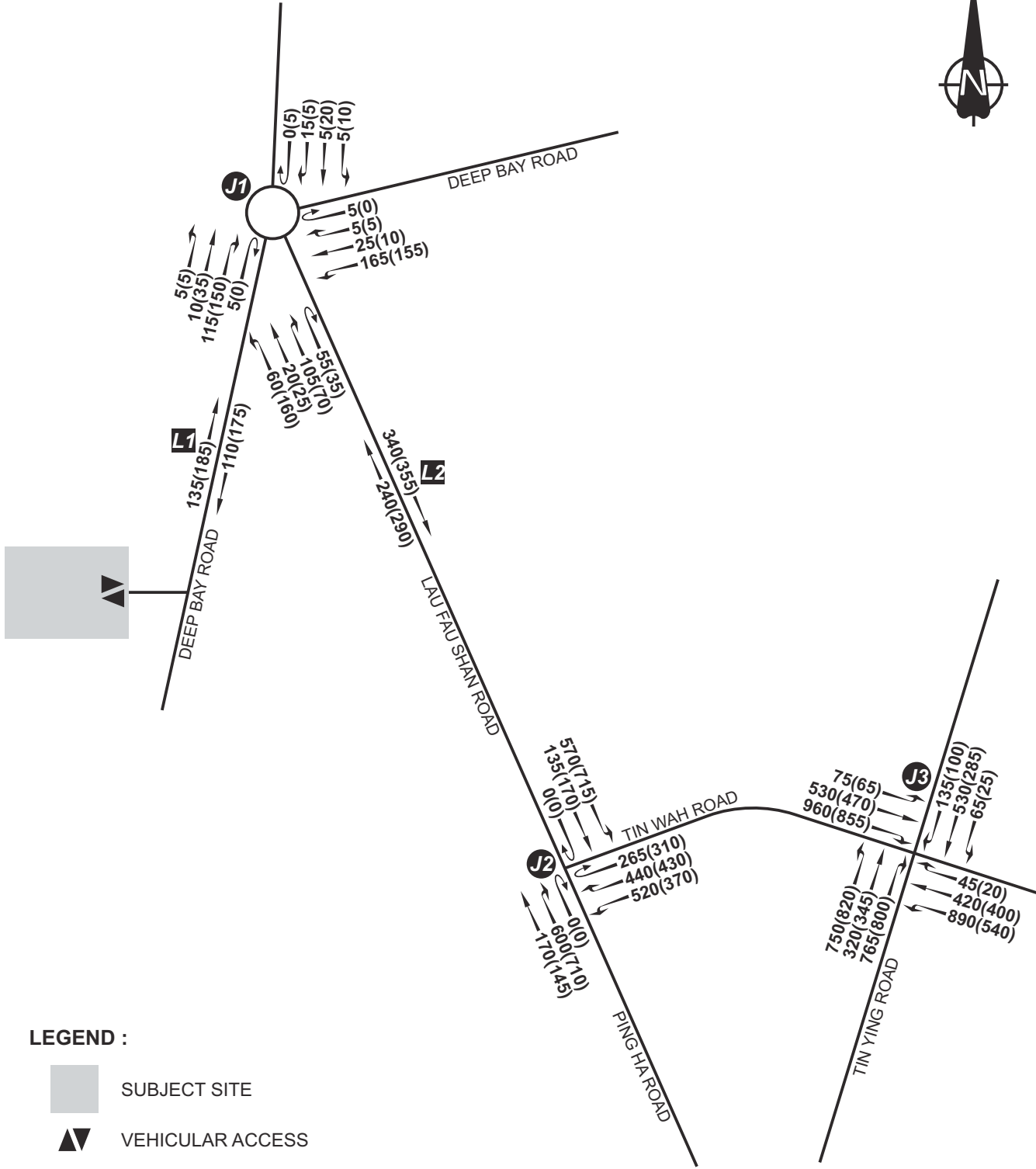
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Project Title
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
PLANNED / COMMITTED DEVELOPMENTS

Designed	FSC	Checked	PTC	Scale	NTS	Date	NOV 2023	Drawing No.	2.5	Rev.	-
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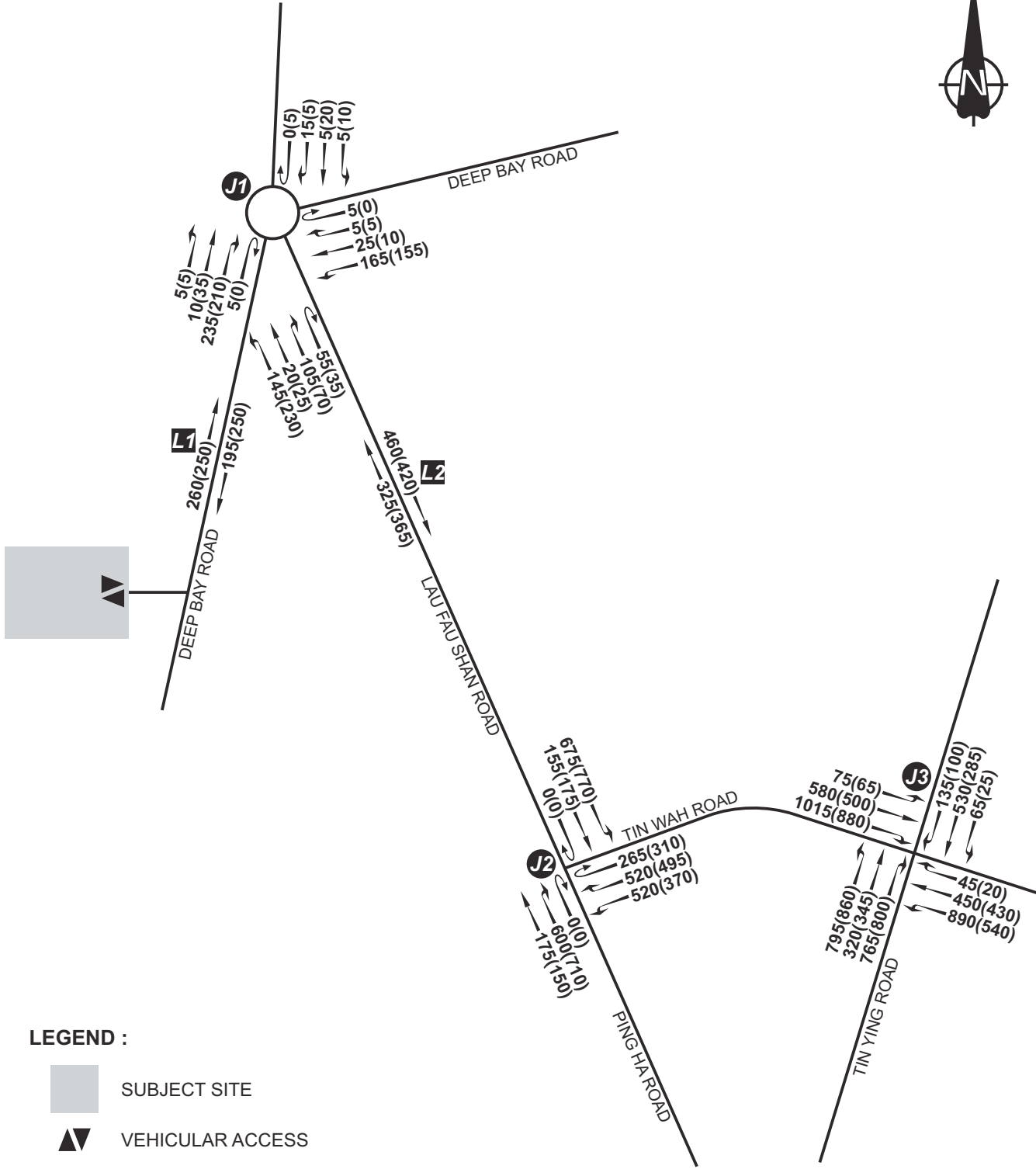
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Project Title
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
2036 REFERENCE TRAFFIC FLOWS



Designed	FSC	Checked	PTC	Scale	NTS	Date	NOV 2023	Drawing No.	2.6	Rev.	-
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Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

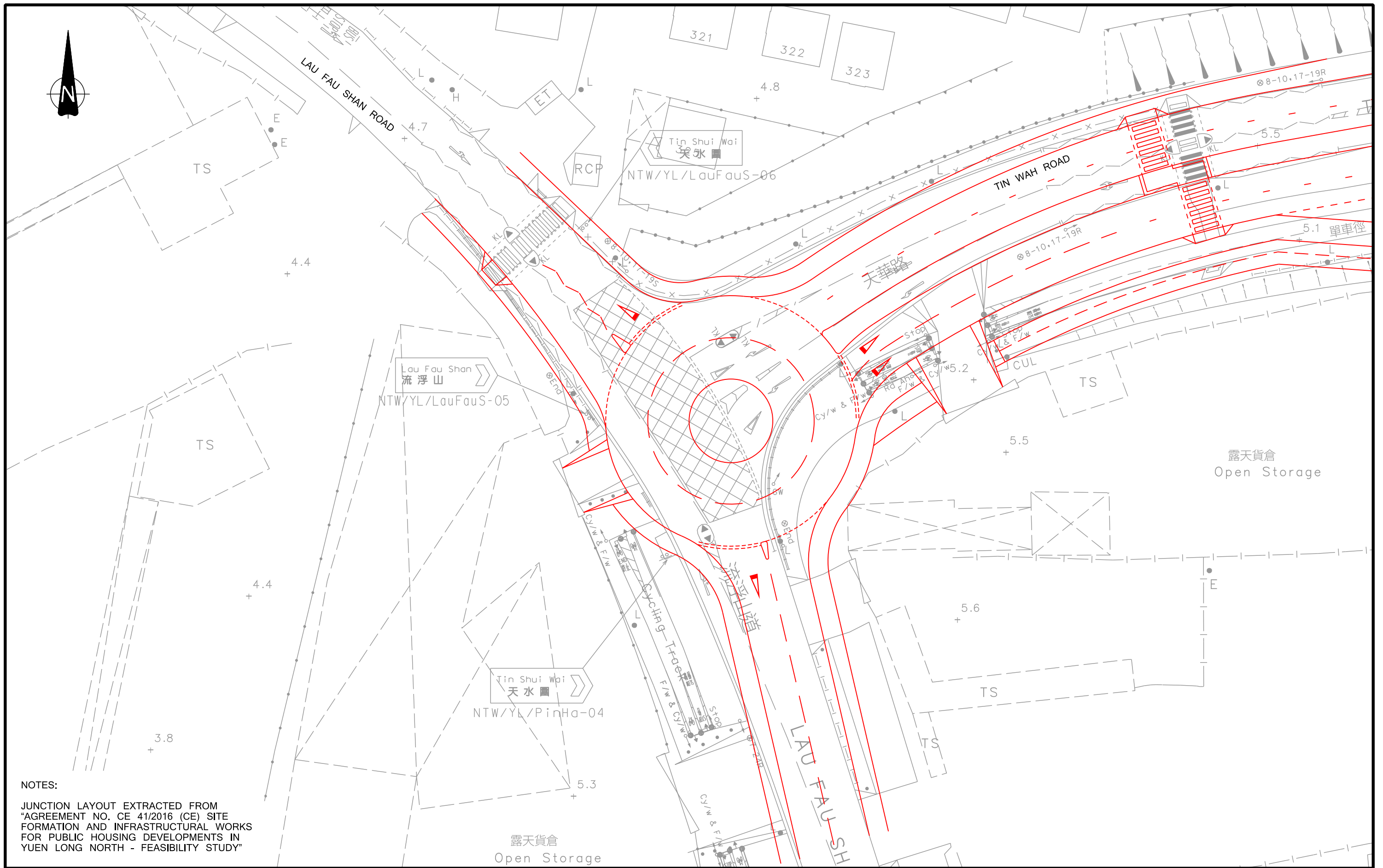
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 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title

2036 DESIGN TRAFFIC FLOWS



Designed	FSC	Checked	PTC	Scale	NTS	Date	NOV 2023	Drawing No.	2.7	Rev.	-
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NOTES:
 JUNCTION LAYOUT EXTRACTED FROM
 "AGREEMENT NO. CE 41/2016 (CE) SITE
 FORMATION AND INFRASTRUCTURAL WORKS
 FOR PUBLIC HOUSING DEVELOPMENTS IN
 YUEN LONG NORTH - FEASIBILITY STUDY"

Rev.	Description	Checked	Date
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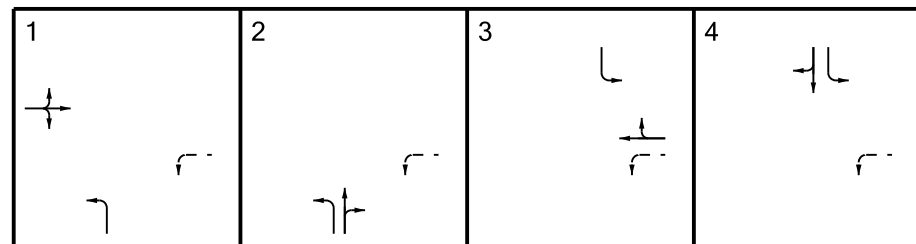
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APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
PLANNED JUNCTION IMPROVEMENT WORK AT TIN WAH ROAD / LAU FAU SHAN ROAD / PING HA ROAD (J2) AND ROAD WIDENING WORKS AT TIN WAH ROAD

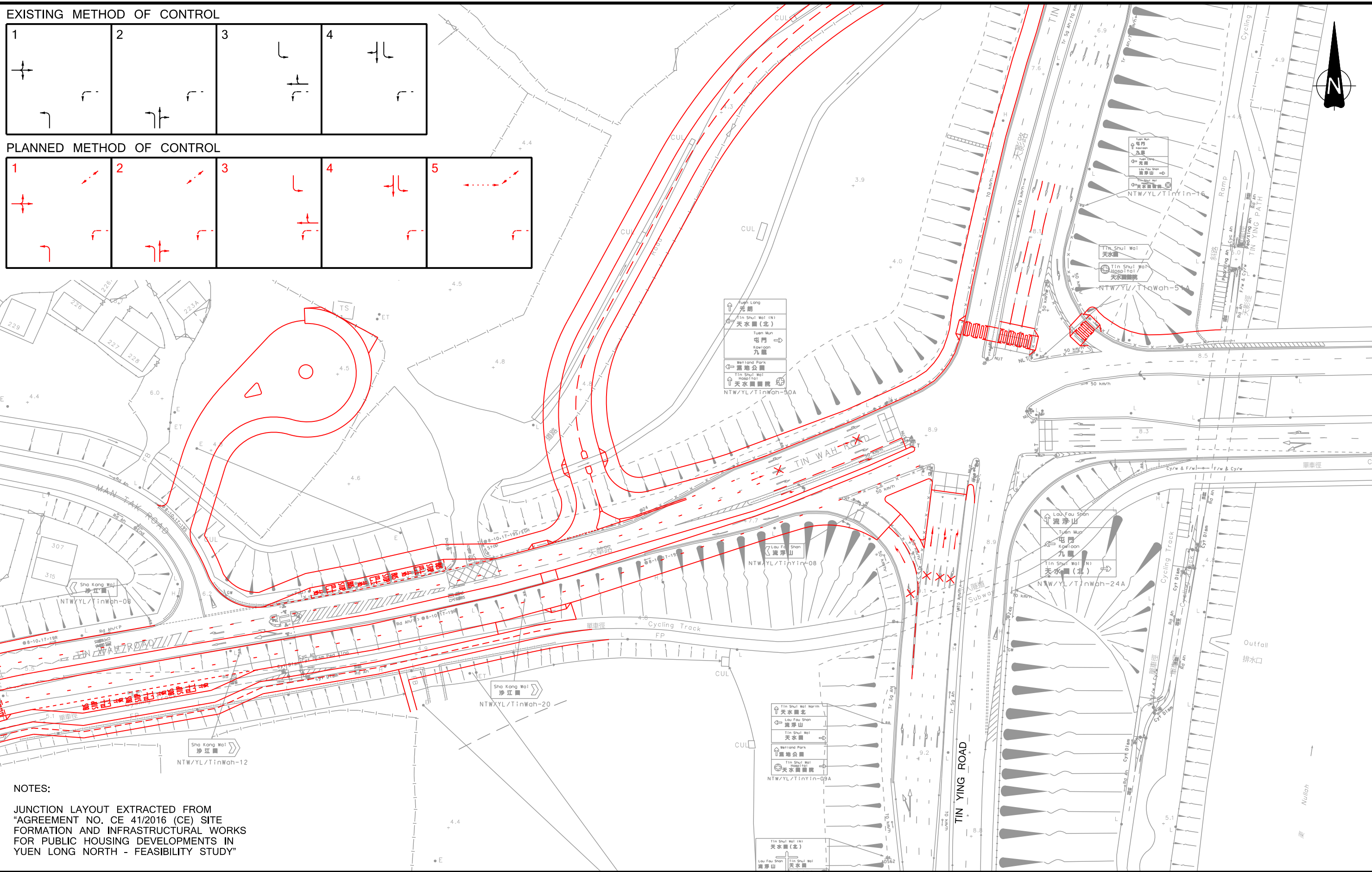
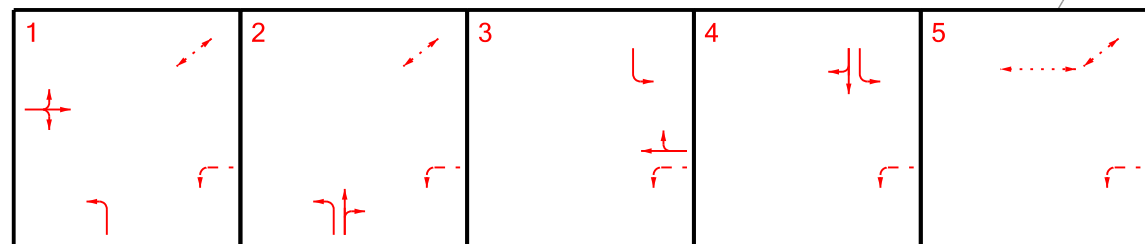
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EXISTING METHOD OF CONTROL



PLANNED METHOD OF CONTROL



NOTES:
 JUNCTION LAYOUT EXTRACTED FROM
 "AGREEMENT NO. CE 41/2016 (CE) SITE
 FORMATION AND INFRASTRUCTURAL WORKS
 FOR PUBLIC HOUSING DEVELOPMENTS IN
 YUEN LONG NORTH - FEASIBILITY STUDY"

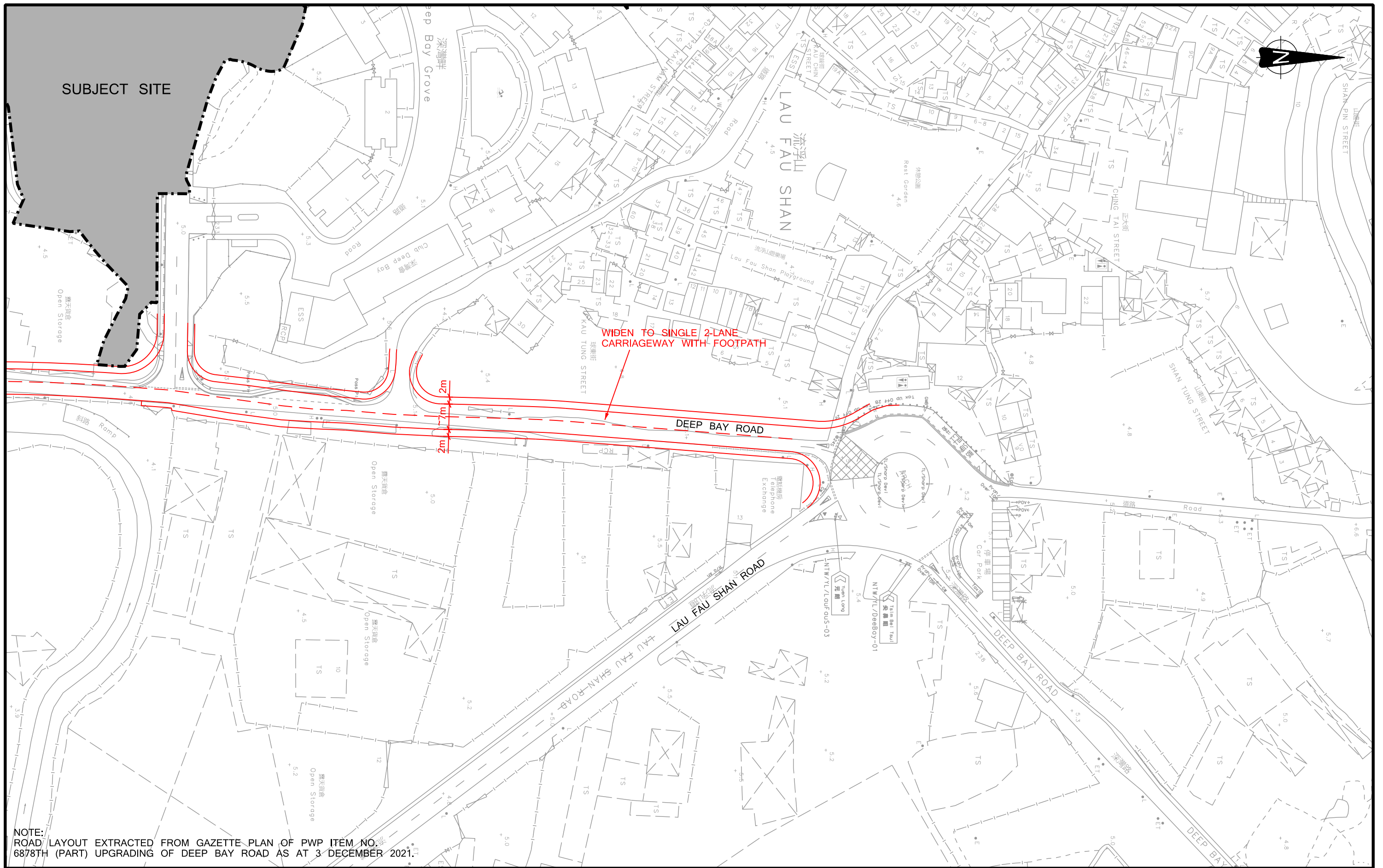
Rev.	Description	Checked	Date
A	MINOR AMENDMENT	PTC	03JAN24

Project Title
 APPLICATION FOR AMENDMENT OF PLAN UNDER
 SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131)
 FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL
 WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS
 LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT
 LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
**PLANNED JUNCTION IMPROVEMENT WORK
 AT TIN WAH ROAD / TIN YING ROAD (J3)
 AND ROAD WIDENING WORKS AT TIN WAH ROAD**

Designed WHC Checked PTC Scale 1:1000(A3) Date NOV 2023 Drawing No. **3.2** Rev. A





NOTE:
ROAD LAYOUT EXTRACTED FROM GAZETTE PLAN OF PWP ITEM NO. 6878TH (PART) UPGRADING OF DEEP BAY ROAD AS AT 3 DECEMBER 2021.

Rev.	Description	Checked	Date
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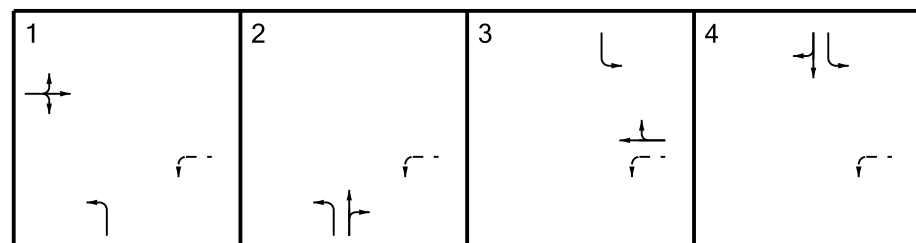
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APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title
PLANNED UPGRADING WORKS AT DEEP BAY ROAD

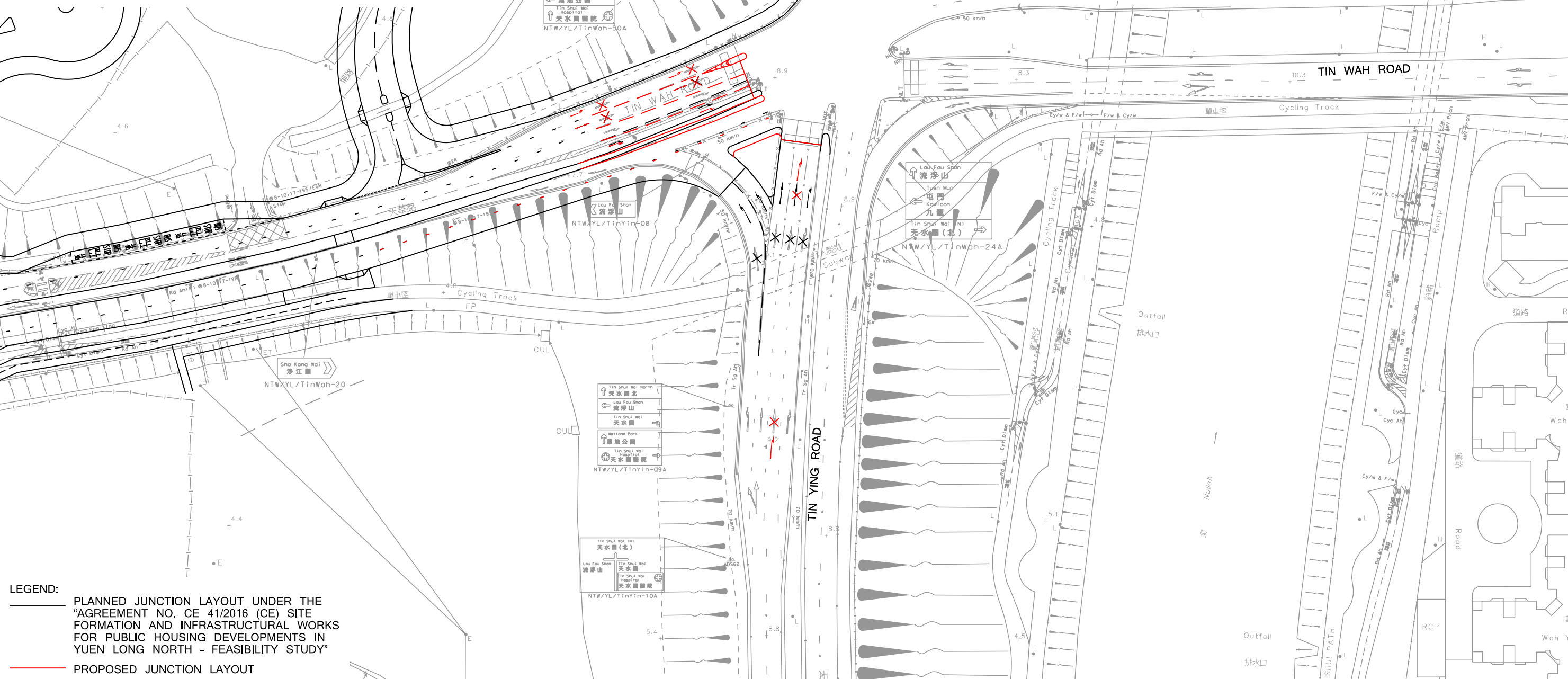
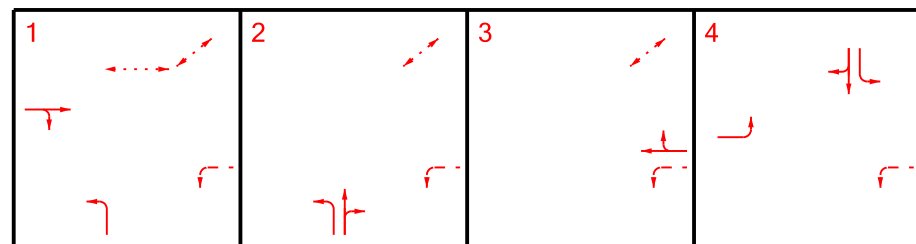
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EXISTING METHOD OF CONTROL



PROPOSED METHOD OF CONTROL



LEGEND:
 PLANNED JUNCTION LAYOUT UNDER THE "AGREEMENT NO. CE 41/2016 (CE) SITE FORMATION AND INFRASTRUCTURAL WORKS FOR PUBLIC HOUSING DEVELOPMENTS IN YUEN LONG NORTH - FEASIBILITY STUDY"
 PROPOSED JUNCTION LAYOUT

Rev.	Description	Checked	Date
A	MINOR AMENDMENT	PTC	03JAN24

Project Title
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

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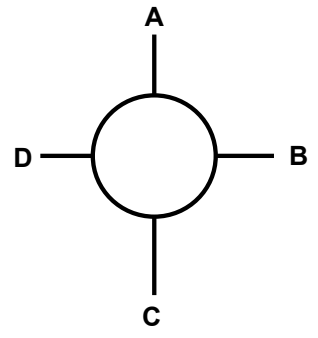


Annex A – Junction Calculation Sheets

Roundabout Capacity Calculation

Job Title: Section 12A Application for Proposed Residential Development in DD128 and DD129 Lau Fau Shan			
Junction: J1 - Deep Bay Road / Lau Fau Shan Road		Ref. No.: J1	
Scheme: 2036 - Reference		Ref. No.:	
Year: 2036	Job No.: CHK50605510	Rev.:	

AM PM Weekend
 ARM A: Deep Bay Road SB approach
 ARM B: Lau Fau Shan Road
 ARM C: Deep Bay Road NB approach
 ARM D: Access Road



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	1.50	4.10	2.3	46	38	52	1.81
B	3.20	4.20	1.5	7.4	38	19.5	1.07
C	1.90	3.70	1.8	7.5	38	51	1.60
D	1.50	1.50	1	14	38	42	0.00

AM FLOWS

from \ to	A	B	C	D	Circ	Entry
A	5	165	27	5	198	203
B	104	55	60	22	60	242
C	11	115	5	5	192	137
D	5	5	16	0	297	27

PM FLOWS

from \ to	A	B	C	D	Circ	Entry
A	0	154	11	5	214	170
B	71	33	159	27	27	291
C	33	148	0	5	143	187
D	11	22	5	5	286	44

CALCULATIONS

ARM	K	X ₂	M	F	t _D	f _c	Q _E		RFC	
							AM	PM	AM	PM
A	0.95	2.06	0.11	625	1.45	0.43	514	507	0.40	0.34
B	0.95	3.52	0.11	1066	1.45	0.52	986	1003	0.25	0.29
C	0.85	2.33	0.11	706	1.45	0.45	524	543	0.26	0.34
D	0.94	1.50	0.11	455	1.45	0.40	316	320	0.09	0.14

Critical Arm: A A
RFC: 0.40 0.34
AM PM

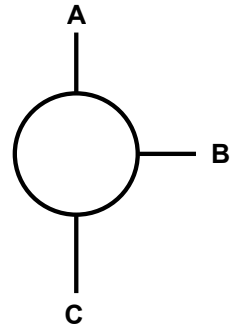
- In accordance with TPDM V2.4 & V2.Appendix 2

Calculated by: FSC	Date: Jan 2024	Checked by: PTC
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Roundabout Capacity Calculation

Job Title: Section 12A Application for Proposed Residential Development in DD128 and DD129 Lau Fau Shan			
Junction: J2 - Deep Bay Road / Lau Fau Shan Road		Ref. No.: J2	
Scheme: 2036 - Reference (with planned layout)		Ref. No.:	
Year: 2036	Job No.: CHK50605510	Rev.:	

AM PM Weekend
 ARM A: Lau Fau Shan Road SB approach
 ARM B: Tin Wah Road WB approach
 ARM C: Lau Fau Shan Road NB approach



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	5.50	7.50	15.6	11	36	65	0.21
B	7.30	7.30	1	15	36	30	0.00
C	5.20	6.50	2.1	15	36	66	0.99
D							

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	571	137	869	709
B	440	267	522	137	1229
C	170	602	0	707	773
				1479	0

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	714	170	1017	885
B	429	308	368	170	1105
C	143	709	0	736	852
				1588	0

CALCULATIONS

ARM	K	X ₂	M	F	t _D	f _c	Q _E		RFC	
							AM	PM	AM	PM
A	0.84	6.92	0.09	2096	1.46	0.73	1226	1135	0.58	0.78
B	0.98	7.30	0.09	2212	1.46	0.75	2074	2050	0.59	0.54
C	0.86	5.64	0.09	1708	1.46	0.65	1071	1055	0.72	0.81

Critical Arm: C C
RFC: 0.72 0.81
AM PM

- In accordance with TPDM V2.4 & V2.Appendix 2

Calculated by: FSC	Date: Jan 2024	Checked by: PTC
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TRAFFIC SIGNALS CALCULATION

Job No.: CHK50605510

MVA HONG KONG LIMITED

Junction: J3 - Tin Ying Road / Tin Wah Road

Design Year: 2036

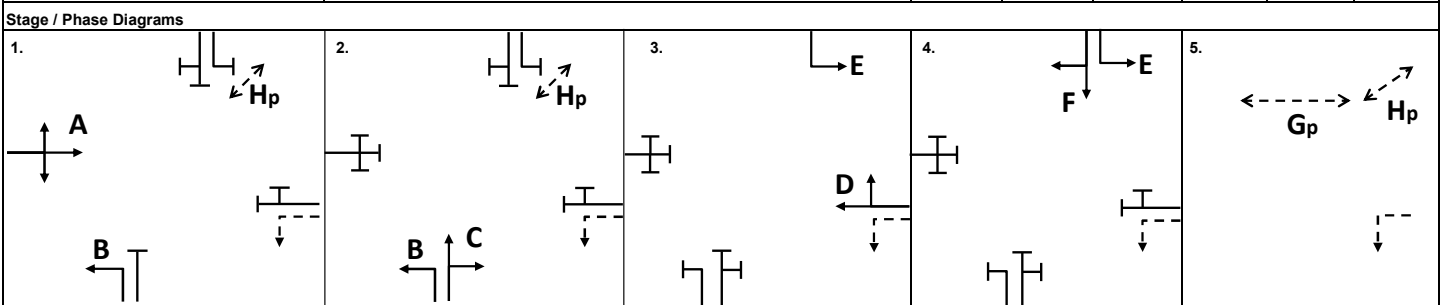
Description: 2036 - Reference (with planned layout)

Designed By: FSC

Checked By: PTC

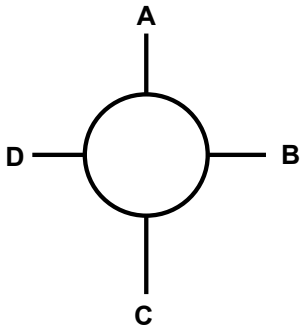
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak									
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y							
Tin Wah Road (EB)	↔	A	1	3.400	25			27%	26%	1925	1925	290	0.151	0.252	257	0.134	0.224							
	→	A	1	3.400														2095	2095	316	0.151	280	0.134	
	↔	A	1	3.400														15	1905	1905	480	0.252	427	0.224
	↔	A	1	3.400														15	1905	1905	479	0.251	427	0.224
Tin Ying Road (NB) *	↔	B	1,2	5.000	25			100%	100%	2025	2025	748	0.369	0.191	819	0.404	0.200							
	↑	C	2	3.350														2090	2090	322	0.154	343	0.164	
	↔	C	2	3.350														35	2005	2005	383	0.191	400	0.200
	↔	C	2	3.350														30	1990	1990	381	0.191	398	0.200
Tin Wah Road (WB)	←	D	3	3.300						2085	2085	210	0.101	0.101	201	0.096	0.096							
	←	D	3	3.300														2085	2085	210	0.101	200	0.096	
	↔	D	3	3.300														15	1895	1895	44	0.023	22	0.012
Tin Ying Road (SB)	↔	E	3,4	3.300	25					1835	1835	66	0.036	0.128	27	0.015	0.068							
	↓	F	4	3.300														2085	2085	266	0.128	142	0.068	
	↓	F	4	3.300														2085	2085	265	0.127	143	0.068	
	↓	F	4	3.300														45	2020	2020	137	0.068	99	0.049
Pedestrian Crossing	Gp	5	Min. Green + Flash =		9	+	17	=	26				*											
	Hp	1,2,5	Min. Green + Flash =		5	+	5	=	10															

Notes:	Flow: (pcu/hr)	Group	A,C,D,F,Gp	Group	A,C,D,F,Gp
* 30 pcu/hr has been added to the saturation flows due to flared approach		y	0.672	y	0.589
		L (sec)	43	L (sec)	43
		C (sec)	120	C (sec)	120
		y pract.	0.578	y pract.	0.578
		R.C. (%)	-14%	R.C. (%)	-2%



I/G= 2	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 4	26
I/G= 2	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 4	26
Date: JAN, 2024					Junction: J3 Tin Ying Road / Tin Wah Road	

Roundabout Capacity Calculation

Job Title: Section 12A Application for Proposed Residential Development in DD128 and DD129 Lau Fau Shan										
Junction: J1 - Deep Bay Road / Lau Fau Shan Road					Ref. No.: J1					
Scheme: 2036 - Design					Ref. No.:					
Year: 2036			Job No.: CHK50605510			Rev.:				
AM	PM	Weekend								
ARM A: Deep Bay Road SB approach										
ARM B: Lau Fau Shan Road										
ARM C: Deep Bay Road NB approach										
ARM D: Access Road										
										
GEOMETRY										
ARM	v	e	L	r	D	Phi	S			
A	1.50	4.10	2.3	46	33	52	1.81			
B	3.20	4.20	1.5	7.4	33	19.5	1.07			
C	1.90	3.70	1.8	7.5	33	51	1.60			
D	1.50	1.50	1	14	33	42	0.00			
AM FLOWS										
from \ to	A	B	C	D	Circ		Entry			
A	5	165	27	5	319		203			
B	104	55	145	22	60		327			
C	11	236	5	5	192		258			
D	5	5	16	0	418		27			
PM FLOWS										
from \ to	A	B	C	D	Circ		Entry			
A	0	154	11	5	276		170			
B	71	33	231	27	27		363			
C	33	210	0	5	143		249			
D	11	22	5	5	348		44			
CALCULATIONS										
ARM	K	X ₂	M	F	t _D	f _c	Q _E		RFC	
							AM	PM	AM	PM
A	0.95	2.06	0.07	625	1.47	0.44	463	480	0.44	0.35
B	0.95	3.52	0.07	1066	1.47	0.53	986	1003	0.33	0.36
C	0.85	2.33	0.07	706	1.47	0.45	523	542	0.49	0.46
D	0.94	1.50	0.07	455	1.47	0.40	269	295	0.10	0.15
Critical Arm:									C	C
RFC:									0.49	0.46
									AM	PM

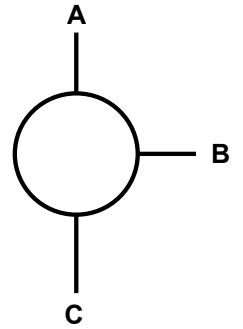
- In accordance with TPDM V2.4 & V2.Appendix 2

Calculated by: FSC	Date: Jan 2024	Checked by: PTC
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Roundabout Capacity Calculation

Job Title: Section 12A Application for Proposed Residential Development in DD128 and DD129 Lau Fau Shan			
Junction: J2 - Deep Bay Road / Lau Fau Shan Road		Ref. No.: J2	
Scheme: 2036 - Design (with planned layout)		Ref. No.:	
Year: 2036	Job No.: CHK50605510	Rev.:	

AM PM Weekend
 ARM A: Lau Fau Shan Road SB approach
 ARM B: Tin Wah Road WB approach
 ARM C: Lau Fau Shan Road NB approach



GEOMETRY

ARM	v	e	L	r	D	Phi	S
A	5.50	7.50	15.6	11	36	65	0.21
B	7.30	7.30	1	15	36	30	0.00
C	5.20	6.50	2.1	15	36	66	0.99
D							

AM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	677	153	869	830
B	519	267	522	153	1308
C	175	602	0	786	778
				1564	0

PM FLOWS

from \ to	A	B	C	Circ	Entry
A	0	769	177	1017	947
B	494	308	368	177	1170
C	149	709	0	802	858
				1660	0

CALCULATIONS

ARM	K	X ₂	M	F	t _D	f _c	Q _E		RFC	
							AM	PM	AM	PM
A	0.84	6.92	0.09	2096	1.46	0.73	1226	1135	0.68	0.83
B	0.98	7.30	0.09	2212	1.46	0.75	2063	2044	0.63	0.57
C	0.86	5.64	0.09	1708	1.46	0.65	1027	1018	0.76	0.84

Critical Arm: C C
RFC: 0.76 0.84
 AM PM

- In accordance with TPDM V2.4 & V2.Appendix 2

Calculated by: FSC	Date: Jan 2024	Checked by: PTC
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TRAFFIC SIGNALS CALCULATION

Job No.: CHK50605510

MVA HONG KONG LIMITED

Junction: J3 - Tin Ying Road / Tin Wah Road

Design Year: 2036

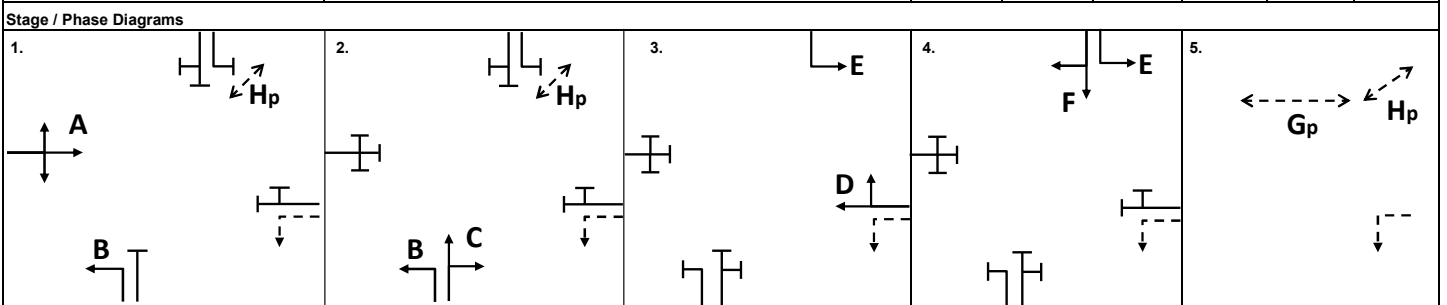
Description: 2036 - Design (with planned layout)

Designed By: FSC

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak						
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y				
Tin Wah Road (EB)	↔	A	1	3.400	25			24%	24%	1925	1925	315	0.164	0.266	270	0.140	0.231				
	→	A	1	3.400						2095	2095							342	0.163	294	0.140
	↔	A	1	3.400														507	0.266	441	0.231
	→	A	1	3.400														507	0.266	441	0.231
Tin Ying Road (NB) *	↔	B	1,2	5.000	25			100%	100%	2025	2025	796	0.393	0.191	858	0.424	0.200				
	↑	C	2	3.350						2090	2090							322	0.154	343	0.164
	↔	C	2	3.350														383	0.191	400	0.199
	↔	C	2	3.350														381	0.191	398	0.200
Tin Wah Road (WB)	←	D	3	3.300						2085	2085	226	0.108	0.108	214	0.103	0.103				
	←	D	3	3.300						2085	2085							226	0.108	214	0.102
	↔	D	3	3.300														44	0.023	22	0.012
Tin Ying Road (SB)	↔	E	3,4	3.300	25					1835	1835	66	0.036	0.128	27	0.015	0.068				
	↓	F	4	3.300						2085	2085							266	0.128	142	0.068
	↓	F	4	3.300						2085	2085							265	0.127	143	0.068
	↓	F	4	3.300						2020	2020							137	0.068	99	0.049
Pedestrian Crossing		Gp	5	Min. Green + Flash =		9	+	17	=	26			*			*					
		Hp	1,2,5	Min. Green + Flash =		5	+	5	=	10											

Notes:	Flow: (pcu/hr)	Group	A,C,D,F,Gp	Group	A,C,D,F,Gp
* 30 pcu/hr has been added to the saturation flows due to flared approach		y L (sec) C (sec) y pract. R.C. (%)	 0.694 43 120 0.578 -17%	y L (sec) C (sec) y pract. R.C. (%)	 0.603 43 120 0.578 -4%



I/G= 2	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 4	26
I/G= 2	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 4	26
Date: JAN, 2024					Junction: J3 Tin Ying Road / Tin Wah Road	

TRAFFIC SIGNALS CALCULATION

Job No.: CHK50605510

MVA HONG KONG LIMITED

Junction: J3 - Tin Ying Road / Tin Wah Road

Design Year: 2036

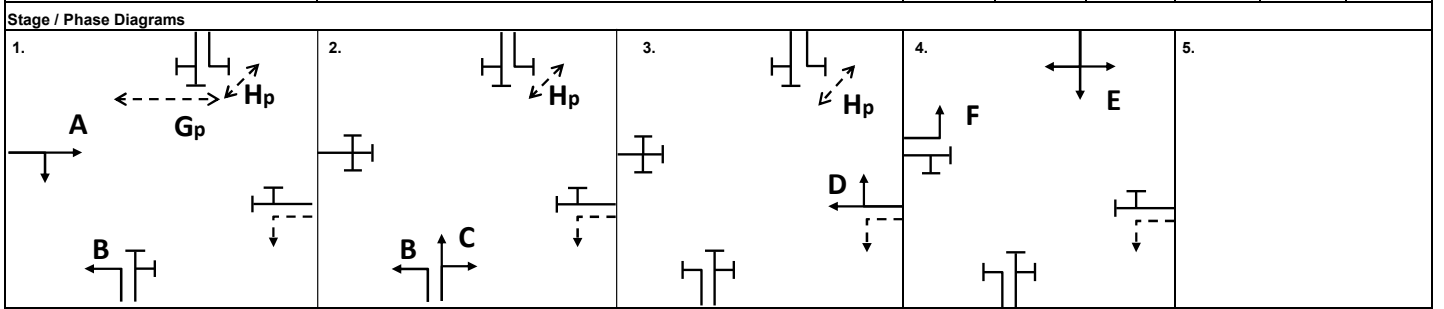
Description: 2036 - Design (Proposed Improvement on planned layout)

Designed By: FSC

Checked By: PTC

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Wah Road (EB)	↔	F	4	3.400	25					1845	1845	77	0.042		66	0.036	
	→	A	1	3.400						2095	2095	580	0.277	0.277	498	0.238	0.238
	↔	A	1	3.400	15					1905	1905	507	0.266		441	0.231	
	↔	A	1	3.400	15					1905	1905	507	0.266		441	0.231	
Tin Ying Road (NB) *	↔	B	1,2	5.000	25					2025	2025	796	0.393		858	0.424	
	↑	C	2	3.350						2090	2090	322	0.154		343	0.164	
	↔	C	2	3.350	35					2005	2005	383	0.191		401	0.200	0.200
	↔	C	2	3.350	30					1990	1990	381	0.191	0.191	397	0.200	
Tin Wah Road (WB)	←	D	3	3.300						2085	2085	226	0.108	0.108	214	0.103	0.103
	←	D	3	3.300						2085	2085	226	0.108		214	0.102	
	↔	D	3	3.300	15					1895	1895	44	0.023		22	0.012	
Tin Ying Road (SB)	↔	E	4	3.300	25					1835	1835	66	0.036		27	0.015	
	↓	E	4	3.300						2085	2085	266	0.128	0.128	143	0.069	0.069
	↔	E	4	3.300						2085	2085	265	0.127		142	0.068	
	↔	E	4	3.300	45					2020	2020	137	0.068		99	0.049	
Pedestrian Crossing	Gp	1	Min. Green + Flash =		9		+	17	=	26							
	Hp	1,2,3	Min. Green + Flash =		5		+	5	=	10							

Notes:	Flow: (pcu/hr)	Group	B,D,E	A,C,D,E	Group	B,D,E	A,C,D,E
* 30 pcu/hr has been added to the saturation flows due to flared approach		y	0.629	0.704	y	0.595	0.609
		L (sec)	12	16	L (sec)	12	16
		C (sec)	120	120	C (sec)	120	120
		y pract.	0.810	0.780	y pract.	0.810	0.780
		R.C. (%)	29%	11%	R.C. (%)	36%	28%



I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 5	I/G= 5
Date: JAN, 2024				Junction: Tin Ying Road / Tin Wah Road			
				J3			