ARUP

Appendix E

Revised Traffic Impact Assessment

Document Status Control Record

Application for Planning Permission
Under Section 16 of the Town Planning Ordinance (Cap. 131)
for Proposed Hotel Use and Minor Relaxation
of Plot Ratio and Building Height Restrictions
at "Other Specified Uses" Annotated "Business" Zone
at Tsun Wan Inland Lot No. 46 S.C,
Nos. 46-48 Pak Tin Par Street, Tsuen Wan,
New Territories

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	SKL	Date: 26 November 2025
	Approved by: SLN		Date: 26 November 2025
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1 INTRODUCTION

1.1 Background

1.1.1 The owner of Tsuen Wan Inland Lot 46 S.C, Nos. 46-48 (even numbers only) Pak Tin Par Street, Tsuen Wan (hereinafter called "the Site"), intends to redevelop the Site into a hotel development (hereinafter called "the Proposed Hotel Development"). The location of the Site is shown in **Figure 1.1**.

1.1.2 On 28th January 2022, the Site was approved by the Town Planning Board (Application No. A/TW/529) for an office development cum shop and services and eating place uses with minor relaxation of plot ratio and building height restrictions (hereinafter called "the Previous Approved Scheme").

1.1.3 LLA Consultancy Limited has been commissioned by the owner to undertake a traffic impact assessment study to support the planning application of the Proposed Hotel Development. This report presents the findings of the study.

1.2 Study Objectives

1.2.1 The objectives of this study can be summarised as follows:

- to review the existing traffic conditions in vicinity of the Proposed Hotel Development;
- to estimate the volume of traffic that will be induced by the Proposed Hotel Development;
- to assess the future traffic situation of the surrounding network in vicinity of the Proposed Hotel Development;
- to appraise the potential traffic impact of the Proposed Hotel Development;
- to recommend the transport facilities provisions for the Proposed Hotel Development.

2 THE PROPOSED DEVELOPMENT

2.1 The Development Site

2.1.1 As shown in **Figure 1.1**, the Site is located at Nos. 46 – 48 (even numbers only) Pak Tin Par Street, Tsuen Wan and has a site area of about 721.59 m^2. The Site was previously occupied by an industrial building, named the Ideal Plaza, and is currently vacant. The Site has a single frontage at Pak Tin Par Street only.

2.2 Proposed Development Content

2.2.1 The Proposed Hotel Development will comprise of 299 hotel guestrooms and **Table 2.1** summarizes the key development parameters.

Table 2.1 Development Parameters

Item	Parameter
Site Area (about)	721.59 m^2
Plot Ratio (about)	11.4
Total GFA (about)	8,226.13 m^2
No. of hotel guestrooms (about)	299

3 EXISTING TRAFFIC SITUATION

3.1 Existing Traffic Conditions

3.1.1 Pak Tin Par Street is a one-way 2-lane eastbound local distributor which connects Sha Tsui Road to Tai Chung Road.

3.1.2 Tai Chung Road is a dual 3-lane primary distributor which connects Castle Peak Road – Tsuen Wan and Sha Tsui Road.

3.1.3 Sha Tsui Road is a dual 2-lane district distributor. The road connects to Pak Tin Par Street and Tai Ho Road, in the west and east of Tai Chung Road, respectively. The section of Sha Tsui Road between Pun Shan Street and Tso Kung Street carried an Annual Average Daily Traffic (AADT) of 17,430 vehicles in 2023.

3.2 Traffic Count Survey

3.2.1 In order to assess the existing traffic conditions, traffic count surveys were carried out at the following locations in the vicinity of the Site on 4 September 2025 (Thursday) and 17 November 2025 (Monday) during the peak hour period, i.e., from 07:30 to 09:30 and 17:00 to 19:00. The locations of the surveyed junctions are as follows and presented in **Figure 3.1**.

J1 – Castle Peak Road – Tsuen Wan / Tai Chung Road

J2 – Tai Chung Road / Pak Tin Par Street; and

J3 – Tai Chung Road / Sha Tsui Road

J4 – Castle Peak Road – Tsuen Wan / Tsuen King Circuit

J5 – Castle Peak Road – Tsuen Wan / Sai Lau Kok Road

J6 – Castle Peak Road – Tsuen Wan / Tai Ho Road

J7 – Tai Chung Road / Hoi Hing Road

J8 – Sha Tsui Road / Tai Ho Road (W)

J9 – Sha Tsui Road / Tai Ho Road (E)

3.2.2 The identified AM and PM peak hours are 08:30 – 09:30 and 17:30 – 18:30, respectively. The recorded peak hour traffic flows are presented in **Figure 3.2**.

3.3 Junction Capacity Assessment

3.3.1 Junction capacity assessment was carried out to reveal the existing performance of the key junctions with the 2025 surveyed traffic flows. The assessment results are tabulated in **Table 3.1** and the detailed calculation sheets are presented in **Appendix A**.

Table 3.1 Existing Junction Performance

No.	Junction	Type /Capacity Index(1)	AM Peak	PM Peak
J1	Castle Peak Road – Tsuen Wan / Tai Chung Road	Signalized/RC	54%	61%
J2	Tai Chung Road / Pak Tin Par Street	Priority/DFC	0.51	0.55
J3	Tai Chung Road / Sha Tsui Road	Signalized/RC	53%	55%
J4	Castle Peak Road – Tsuen Wan / Tsuen King Circuit	Signalized/RC	58%	43%
J5	Castle Peak Road – Tsuen Wan / Sai Lau Kok Road	Signalized/RC	98%	151%
J6	Castle Peak Road - Tsuen Wan / Tai Ho Road	Signalized/RC	84%	83%
J7	Tai Chung Road / Hoi Hing Road	Roundabout/DFC	0.66	0.57
J8	Sha Tsui Road / Tai Ho Road (W)	Signalized/RC	46%	29%
J9	Sha Tsui Road / Tai Ho Road (E)	Signalized/RC	70%	48%

Note: (1) RC = Reserve Capacity for signalized junction; DFC = Design Flow to Capacity ratio for priority junction.

3.3.2 **Table 3.1** has indicated that the concerned junctions are operating satisfactorily during both AM and PM peak hours.

3.4 Existing Public Transport Facilities

3.4.1 Numerous franchised bus and scheduled minibus (GMB) routes operate in the vicinity of the Site along Sha Tsui Road, Tai Chung Road and Castle Peak Road – Tsuen Wan. **Table 3.2 and Figure 3.3** show the existing bus and minibus routes running in the vicinity of the Site.

Table 3.2 Existing Public Transport Routes

Mode	Route No.	Origin - Destination	Frequency (min)
Bus	30	Tsuen Wan (Allway Gardens) – Cheung Sha Wan	25 – 30
	30X	Tsuen Wan (Allway Gardens) – Whampoa Garden	13 – 30
	33R	Tsuen Wan (Discovery Park) – Pak Tam Chung	60
	34	Kwai Shing(Central) – Tsuen Wan (Bayview Garden)	14 – 25
	34M	Tsuen Wan (Bayview Garden) – Tsuen Wan Station (Circular)	8 – 25
	39A	Tsuen Wan West Station – Allway Gardens (Circular)	15 – 25
	39M	Tsuen Wan (Allway Gardens) – Tsuen Wan Station (Circular)	7 – 15
	40	Tsuen Wan (Belvedere Garden) – Laguna City	10 – 25
	48P	Fo Tan Chun Yeung Estate – Tsing Lung Tau	9 trips per day
	48X	Wo Che – Tsuen Wan (Bayview Garden)	5 – 20
	53	Yoho Mall (Yuen Long) – Tsuen Wan (Nina Tower)	25 – 35
	57M	Tuen Mun (Shan King Estate) – Lai King (North)	10 – 30
	58M	Tuen Mun (Leung King Estate) – Kwai Fong Station	3 – 20
	58P	Kwai Fong Station – Tin King Estate (Tin Yue House)	15 – 20
	59A	Tuen Mun Pier Head – Kwai Fong (Kwai Tsui Estate)	6 – 60
	59M	Tuen Mun Pier Head – Tsuen Wan Station	3 – 20
	60M	Tuen Mun Station – Tsuen Wan Station	7 – 30
	61M	Tuen Mun (Yau Oi South) – Lai King (North)	8 – 25
	61P	So Kwun Wat – Tsuen Wan Station	6 trips per day
	66M	Tuen Mun (Tai Hing Estate) – Tsuen Wan (Nina Tower)	15 – 30
	67A	Tuen Mun (Po Tin Estate) – Kwai Fong (Kwai Tsui Estate)	20 – 30
	67M	Tuen Mun (Siu Hong Court) – Kwai Fong Station	5 – 20
	68A	Long Ping Estate – Tsing Yi Station	12 – 30
	68M	Tsuen Wan Station – Yuen Long (West) B/T	5 – 20
	69M	Kwai Fong Station – Tin Shui Wai Town Centre	6 – 30
	69P	Tin Shui Wai Station – Kwai Fong Station	12 – 20
	230X	Tsuen Wan (Allway Gardens) – Whampoa Garden	3 trips per day
	234A	Sham Tseng (Sea Crest Villa) – Tsuen Wan West Station	12 – 27
	234B	Tsuen Wan West Station – Sham Tseng (Sea Crest Villa)	12 – 30
	234C	Sham Tseng – Kwun Tong (Tsui Ping North Estate)	6 trips per day
	234D	Tsing Lung Tau – Kwun Tong (Tsui Ping North Estate)	5 trips per day
	234P	Tsuen Wan (Bayview Garden) – Star Ferry	1 trip per day
	234X	Tsim Sha Tsui East (Mody Road) – Tsuen Wan (Bayview Garden)	15 – 25
	235	Kwai Chung (On Yam Estate) – Tsuen Wan (Circular)	8 – 20

Mode	Route No.	Origin - Destination	Frequency (min)
	243P	Tsing Yi (Mayfair Garden) – Tsuen Wan (Allway Gardens)	2 trips per day
	251M	Sheung Tsuen – Tsuen Wan	3 trips per day
	259E	Tuen Mun (Lung Mun Oasis) – Tsuen Wan Station	3 trips per day
	260C	Tuen Mun (Sam Shing Estate) – Kwai Fong Station	15 – 30
	265M	Tin Heng Estate – Lai Yiu	5 – 35
	265P	Tin Yan – Tsuen Wan	4 trips per day
	268M	Park Yoho – Tsuen Wan West Station	10 – 30
	269A	Wetland Park Road – Kwai Chung (Kwai Fong Estate)	9 trips per day
	269M	Tin Yan Estate – Cho Yiu	15 – 30
	269P	Kwai Chung (Kwai Fong Estate) – Wetland Park Road	7 trips per day
	930	Exhibition Centre Station – Tsuen Wan (Discovery Park)	10 – 25
	930X	Causeway Bay (Moreton Terrace) – Tsuen Wan (Discovery Park)	8 – 25
	934	Tsuen Wan (Bayview Garden) – Wan Chai (Fleming Road)	5 – 30
	934A	Tsuen Wan (Allway Gardens) – Wan Chai (Fleming Road)	4 trips per day
	A31	Tsuen Wan (Nina Tower) – Airport (Ground Transportation Centre)	15 – 30
	A38	Tsuen Wan (Allway Gardens) – Airport (Ground Transportation Centre)	30 – 60
	E32A	Tung Chung Development Pier – Kwai Fong (South)	12 – 30
	N39	Tsuen Wan Station – Allway Gardens (Circular)	30
	N252	Mei Foo – Tuen Mun (Sam Shing Estate)	2 trips per day
	N260	Tuen Mun Pier Head – Mei Foo	30
	N269	Tin Tsz – Mei Foo	20 – 25
	N930	Tsuen Wan (Discovery Park) – Causeway Bay (Moreton Terrace)	3 trips per day
	NA31	HZMB Hong Kong Port – Tsuen Wan (Nina Tower)	5 trips per day
	XR	Tsuen Wan – Huanggang(Night)	-
	XR	Tsuen Wan – Huanggang	-
GMB	84	Tsuen Wan Chung On Street – Allway Gardens	7 – 15
	95	Tsuen Wan Centre – Hoi Kwai Road Public Transport Interchange	5 – 25
	95A	Tsuen Tak Garden – Tsuen Wan Staion (Circular route)	7 – 15
	95M	Tsuen Wan Station – Tsuen Wan Centre	2 – 20
	96	Tsuen Wan (Hoi Pa Street) – Tsing Lung Tau	6 – 25
	96A	Yau Kom Tau Village – Tsuen Wan Station (Circular route)	15 – 30
	96B	Belvedere Garden – Tsuen Wan Station (Circular route)	2 – 20
	96C	Tsuen Wan Station – Bellagio	15 – 30
	96M	Tsuen Wan Station – Tsing Lung Tau	10 – 25
	301	Clague Garden Estate – Tsuen Wan Station (Circular route)	15 – 20
	301M	Tsuen Wan West Station Public Transport Interchange – Tsuen Wan Station (Circular route)	2 trips per day
	302	Hong Kong Garden – Kwai Fong (Circular route)	8 – 30
	313	Tsuen Wan (Tso Kung Street) – Princess Margaret Hospital	6 – 11

4 FUTURE TRAFFIC SITUATION

4.1 Design Year

4.1.1 It is anticipated that the Proposed Hotel Development can be operated by 2030. To consider 3 years after the planned completion of the Proposed Hotel Development, a design year of 2033 will be adopted in this study.

4.2 Traffic Generation for the Previous Approved Scheme and the Proposed Hotel Development

4.2.1 Based on the development parameters as listed in **Table 2.1**, the development traffic generation of the Previous Approved Scheme and the Proposed Hotel Development were estimated and compared in **Table 4.1**, based on the trip rates as documented in the Transport Planning and Design Manual, Volume 1 Chapter 3 – Transport Considerations of Town Plans (TPDM) published by the Transport Department.

Table 4.1 Traffic Generation of the Previous Approved Scheme and the Proposed Hotel Development

Use	Unit/Content	AM Peak Hour			PM Peak Hour		
		Gen.	Att.	Total	Gen.	Att.	Total
Adopted Trip Rates (1)							
Office	pcu/hr/100m^2	0.1703	0.2452	-	0.1573	0.1175	-
Retail	pcu/hr/100m^2	0.2296	0.2434	-	0.3100	0.3563	-
Hotel	pcu/hr/room	0.1329	0.1457	-	0.1290	0.1546	-
Traffic Generation of the Previous Approved Scheme [A]							
Office	7,793 m^2 GFA	14	20	34	13	10	23
Retail	433 m^2 GFA	1	2	3	2	2	4
	Total	15	22	37	15	12	27
Traffic Generation of the Proposed Hotel Development [B]							
Hotel	299 guestrooms	40	44	84	39	47	86
Change in traffic generation: [B] – [A]		**25**	**22**	**47**	**24**	**35**	**59**

Note: (1) Mean trip rates are adopted from TPDM, Transport Department.

4.2.2 As shown in **Table 4.1**, the Proposed Hotel Development will generate a two-way traffic of 84 pcu and 86 pcu during the AM peak hour and PM peak hour, respectively. As compared with the Previous Approved scheme, the Proposed Hotel Development would result in generating additional traffic volumes of 47 pcu/hr and 59 pcu/hr during the AM and PM peak hour, respectively. The additional development traffic flows are distributed onto the road network as shown in **Figure 4.1**.

4.3 Traffic Generation for Planned/Committed Developments

4.3.1 To estimate the future traffic flows, updated information is being obtained from public domain regarding the planned and committed developments in the vicinity. The details of these developments are provided in **Table 4.2**.

Table 4.2 Planned / Committed Developments

Site Ref.	Reference	Location	Proposed Use	Content
1	Planning Application No. A/TW/522	18 – 20 Pun Shan Street	Data Centre	26,477.15 m^2
2	BD Monthly Digest (March 2023)	23 – 33 Chai Wan Kok Street	Data Centre	22,032.9 m^2

4.3.2 The traffic flows that would be generated by these developments have been considered, by making reference to the trip generation rates in the TPDM. The traffic generation and attraction numbers are shown in **Table 4.3**.

Table 4.3 Traffic Generation and Attraction of Planned / Committed Developments

Type / Development	Use	Unit / Content	AM Peak Hour			PM Peak Hour		
			Gen.	Att.	2-way	Gen.	Att.	2-way
Adopted Trip Rates								
Data Centre (1)		pcu/hr/100 m^2 GFA	0.0227	0.017	-	0.0170	0.0113	-
Traffic Generation of the Planned Developments								
Site 1	Data Centre	26,477.15 m^2	7	5	12	5	3	8
Site 2	Data Centre	22,032.9 m^2	6	4	10	4	3	7
		Total	**13**	**9**	**22**	**9**	**6**	**15**

Notes: Gen. – Generation; Att. – Attraction
(1) Trip rates from the TIA report of A/TW/522 are adopted.

4.4 Traffic Forecast

Annual Traffic Census (ATC) – Historical Data

4.4.1 In order to establish the traffic growth rate in the vicinity of the Site, reference was made to the 2019 to 2023 Annual Traffic Census Reports published by the Transport Department, reporting on the AADT at the counting stations in the territory. The details of the counting stations in the vicinity and the corresponding counts are shown in **Table 4.4**.

Table 4.4 Annual Traffic Census Data

Stn. No.	Road Section			AADT(1)					Avg. Growth%
	Road	From	To	2019	2020	2021	2022	2023	
5227	Sha Tsui Rd	Pun Shan St	Tso Kung St	19,260	19,080 (-0.9%)	19,810 (3.8%)	19,610 (-1%)	17,430 (-11.1%)	-2.5%
5409	Castle Peak Rd - Tsuen Wan	Tai Ho Rd	Tai Chung Rd	31,620	28,220 (-10.8%)	27,420 (-2.8%)	26,450 (-3.5%)	29,880 (13%)	-1.4%
Total				**50,880**	**47,300 (-7%)**	**47,230 (-0.1%)**	**46,060 (-2.5%)**	**47,310 (2.7%)**	**-1.8%**

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

4.4.2 **Table 4.4** showed that the recorded average annual growth rate of the concerned counting stations is -1.8% between years 2019 to 2023.

Territorial Population and Employment Data Matrix (TPEDM) – Projection Data

4.4.3 Reference was also made to the 2021 based Territorial Population and Employment Data Matrix (TPEDM) published by the Planning Department. The population and employment data of year 2021 and 2031 are summarized in **Table 4.5**.

Table 4.5 Population and Employment Data in Tsuen Wan District

Year	2021	2026	2031
Population	320,100	296,150	295,850
Employment	167,350	168,150	163,800
Total	487,450	464,300	459,650
Average Annual Growth %		-1.0% (2021 to 2026)	-0.2% (2026 to 2031)

4.4.4 As shown in **Table 4.5**, the average annual growth rate for both population and employment of Tsuen Wan district is -1.0% and -0.2% during 2021–2026 and 2026–2031, respectively. Having considered the rates derived from the ATC and the TPEDM data, to be conservative, a nominal growth rate of +1.0% will be adopted for the subsequent traffic forecasting.

4.5 Reference and Design Flows

4.5.1 The 2033 Reference Flows, i.e., the traffic flows in the vicinity **without** the traffic flows generated by the Proposed Hotel Development, were estimated based on the following equation.

2033 Reference Flows = 2025 Existing Flows x $(1 + 1.0\%)^8$ + Traffic Flows Generated by the Approved and Planned/Committed Developments

4.5.2 The 2033 Design Flows, i.e., the traffic flows in the vicinity **with** the traffic flows generated by the Proposed Hotel Development, were estimated based on the following equation:

2033 Design Flows = 2033 Reference Flows + Traffic Flows Generated by the Proposed Hotel Development

4.5.3 The 2033 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 2033. The assessment results are shown in **Table 4.6** and the detailed calculation sheets are attached in **Appendix B**.

Table 4.6 2033 Junction Capacity Assessment

No.	Junction	Type /Capacity Index(1)	2033 Reference		2033 Design	
			AM	PM	AM	PM
J1	Castle Peak Road – Tsuen Wan / Tai Chung Road	Signalized/RC	42%	49%	41%	48%
J2	Tai Chung Road / Pak Tin Par Street	Priority/DFC	0.56	0.60	0.60	0.64
J3	Tai Chung Road / Sha Tsui Road	Signalized/RC	40%	42%	40%	41%
J4	Castle Peak Road – Tsuen Wan / Tsuen King Circuit	Signalized/RC	45%	31%	43%	30%
J5	Castle Peak Road – Tsuen Wan / Sai Lau Kok Road	Signalized/RC	83%	130%	82%	129%
J6	Castle Peak Road - Tsuen Wan / Tai Ho Road	Signalized/RC	70%	68%	69%	66%
J7	Tai Chung Road / Hoi Hing Road	Roundabout/DFC	0.76	0.65	0.76	0.65
J8	Sha Tsui Road / Tai Ho Road (W)	Signalized/RC	34%	19%	34%	19%
J9	Sha Tsui Road / Tai Ho Road (E)	Signalized/RC	58%	36%	57%	36%

Note: (1) RC = Reserve Capacity for signalized junction; DFC = Design Flow to Capacity ratio for priority junction.

4.6.2 As shown in **Table 4.6**, the assessed junctions will operate with capacities during the peak hours in 2033 with the expected traffic growth and the additional traffic flows generated by the Proposed Development.

5 PROVISION OF TRANSPORT FACILITIES

5.1 Access Arrangement

5.1.1 There is an existing vehicular access located at Pak Tin Par Street serving the Site and it will be maintained as the vehicular access for the Proposed Hotel Development.

5.2 HKPSG Requirements in Car Parking and Loading/Unloading Provisions

5.2.1 The requirements of car parking and loading/unloading facilities are being estimated, taking into consideration of the latest requirements set out in the Hong Kong Planning Standards and Guidelines (HKPSG). The required car parking and loading/unloading facilities for the Proposed Hotel Development are outlined in **Table 5.1**.

Table 5.1 Car Parking and Loading/Unloading Facilities as Required by HKPSG

Facility	HKPSG Requirements	Required Nos.	Proposed Provision
Car Parking	1 car parking space per 100 rooms	3	3
Goods Vehicle Loading/ Unloading	0.5-1 goods vehicle bay per 100 rooms	2 – 3	3
Motorcycle Parking	10% of total car parking space	1	1
Lay-by for taxi and private car	2 lay-bys for hotel less than 299 rooms	2	2
Coach Space	1 space for hotel less than 299 rooms	1	1

5.2.2 As shown in **Table 5.1**, 3 nos. of private car parking spaces (including 1 no. of parking space for disabled users), 2 nos. of goods vehicle loading / unloading bays, 1 no. of motorcycle parking space, 1 no. of lay-by for taxi and private car and 1 no. coach space will be provided to fulfil the requirements of the HKPSG. The indicative ground floor car park layout plan is enclosed in **Appendix C**.

5.2.3 According to "Section 3: Parking Standards for Commercial Facilities" under HKPSG, goods vehicle provision is divided into 65% LGV and 35% HGV, which the proposed 2 goods vehicle loading/unloading bays, 1 no. (2 x 65% = 1.3, say 1 no.) should be for LGV and the remaining should be for HGV. **Table 5.2** lists out a summary of the numbers and the dimensions required for each type of space in the Proposed Development.

Table 5.2 Summary of Overall Transport Facilities Provisions

Facilities	Dimensions	Proposed Provision
Car Parking Space	2.5m (W) x 5.0m (L) x 2.4m (H)	2
Disabled Car Parking Space	3.5m (W) x 5.0m (L) x 2.4m (H)	1
Motorcycle Parking Space	1.0m (W) x 2.4m (L) x 2.4m (H)	1
Goods Vehicle Loading / Unloading Bay	3.5m (W) x 11.0m (L) x 4.7m (H)	1
	3.5m (W) x 7.0m (L) x 3.6m (H)	1
Lay-by for Taxi and Private Car	2.5m (W) x 5.0m (L) x 2.4m (H)	2
Coach Space	3.5m (W) x 12.0m (L) x 3.8m (H)	1

6 SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 The owner of Tsuen Wan Inland Lot No. 46 S.C intends to redevelop the Site into a hotel development.

6.1.2 Traffic count surveys were carried out on 4 September 2025 (Thursday) and 17 November 2025 (Monday) during the peak hour period from 07:30 to 9:30 and 17:00 to 19:00 at the identified key junctions, and the AM and PM peak hours were found to be 08:30 – 09:30 and 17:30 – 18:30, respectively. The capacity of the key junctions in the vicinity of the Site was analysed and they are operating satisfactorily.

6.1.3 The Proposed Hotel Development would generate two-way traffic flows of 84 pcu/hr in the AM peak, 86 pcu/hr in the PM peak. By assigning the additional development traffic to the 2033 Reference Flows, the 2033 Design Flows were obtained.

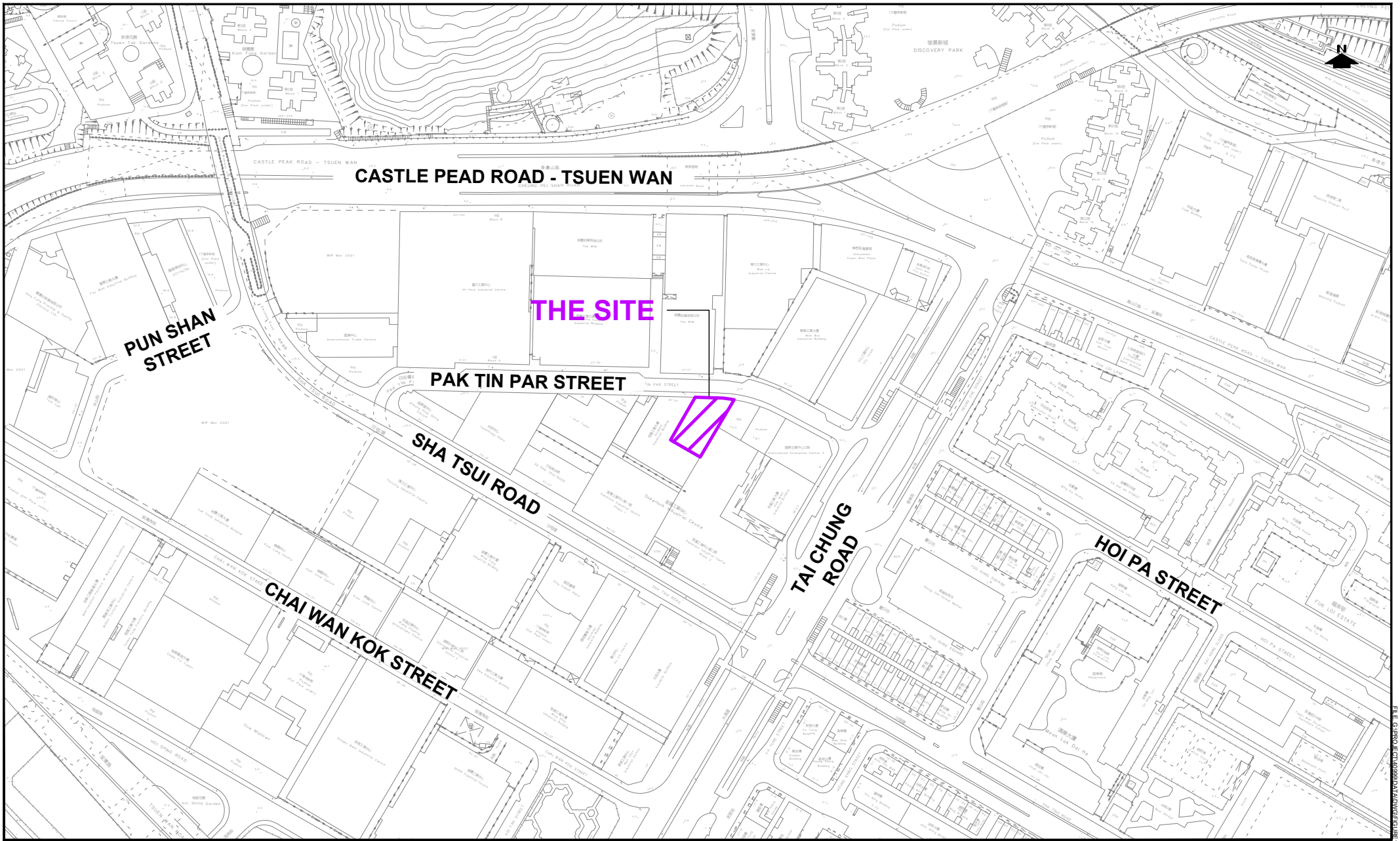
6.1.4 Junction capacity assessments were carried out at the key junctions in the vicinity for the year 2033. The results have indicated that all junctions will operate satisfactorily for both reference and design scenarios. Therefore, it is anticipated that the Proposed Hotel Development will not induce significant traffic impact to the surrounding road network.

6.1.5 There is an existing vehicular access located at Pak Tin Par Street serving the Site and it will be maintained as the vehicular access for the Proposed Hotel Development.

6.1.6 It is proposed to provide a total of 3 car parking spaces, 2 loading/unloading bays, 1 motorcycle parking space, 1 lay-by for taxi and private cars and 1 coach space within the Proposed Hotel Development. The internal transport facilities of the Proposed Hotel Development can meet the requirements as set out in the latest HKPSG.

6.2 Conclusion

6.2.1 Based on the findings of the traffic impact assessment, it can be concluded that the Proposed Hotel Development will not induce adverse traffic impact onto the adjacent road network and shall be approved in traffic viewpoint.



PROJECT NO.	PROJECT TITLE	DRAWING NO.	REV.
40999	APPLICATION FOR PLANNING PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131) FOR PROPOSED HOTEL USE AND MINOR RELAXATION OF PLOT RATIO AND BUILDING HEIGHT RESTRICTIONS AT "OTHER SPECIFIED USES" ANNOTATED "BUSINESS" ZONE AT TSUN WAN INLAND LOT NO. 46 S.C, NOS. 46-48 PAK TIN PAR STREET, TSUEN WAN, NEW TERRITORIES	FIGURE 1.1	·

DESIGNED	SKL	DATE	JUL 2025	DRAWING TITLE
DRAWN	CLL	SCALE	1:3000	LOCATION PLAN
CHECKED	SLN			

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FILE. G:\PROJECT\40999\DATA\DWG\FIGURE1.1.DWG PLOT SCALE : 1 = 1

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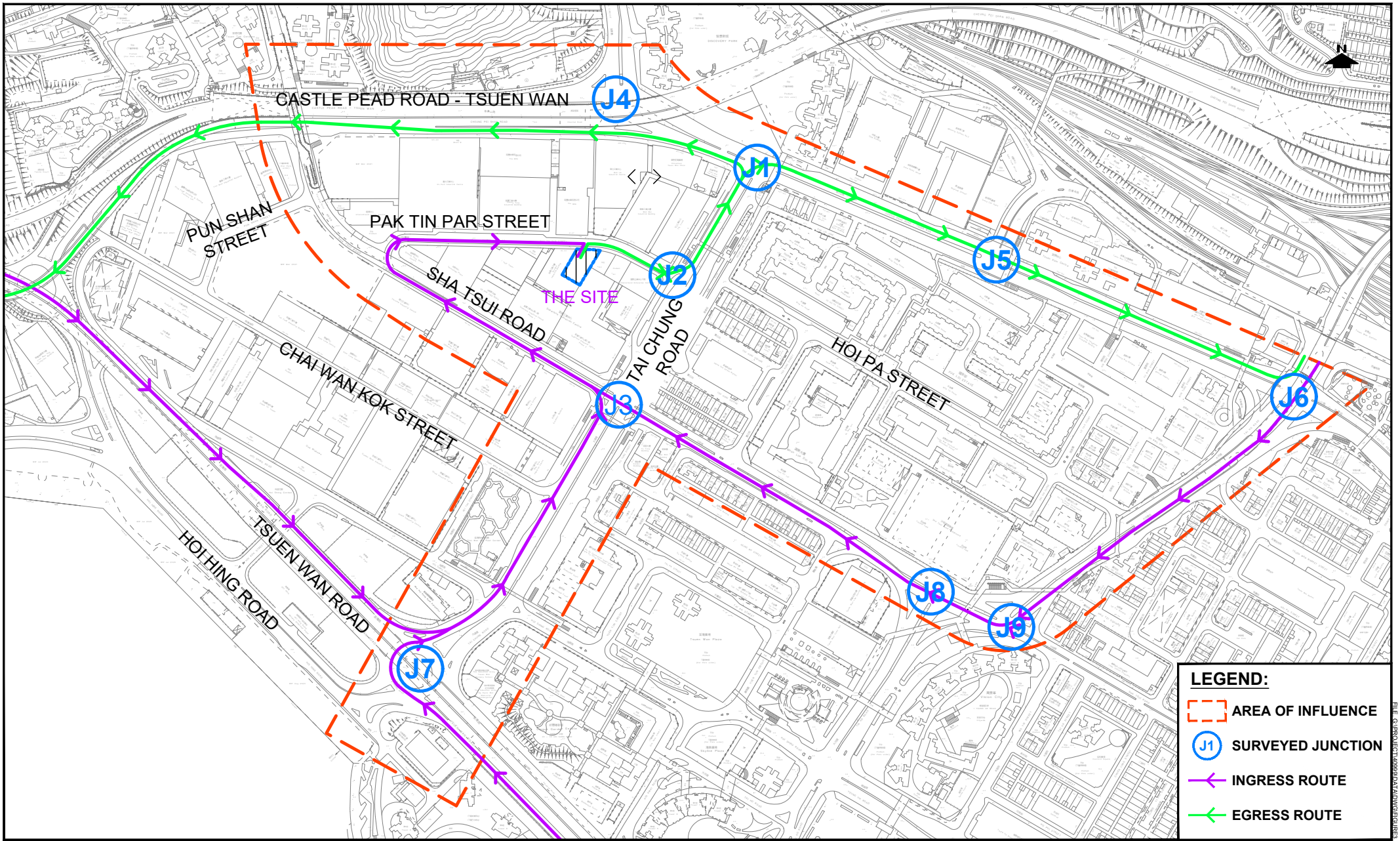

PROJECT NO.	PROJECT TITLE	DRAWING NO.	REV.
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DESIGNED	SKL	DATE	NOV 2025
DRAWN	CLL	SCALE	1:5000
CHECKED	SLN		

DRAWING TITLE

AREA OF INFLUENCE AND LOCATION OF SURVEYED JUNCTIONS

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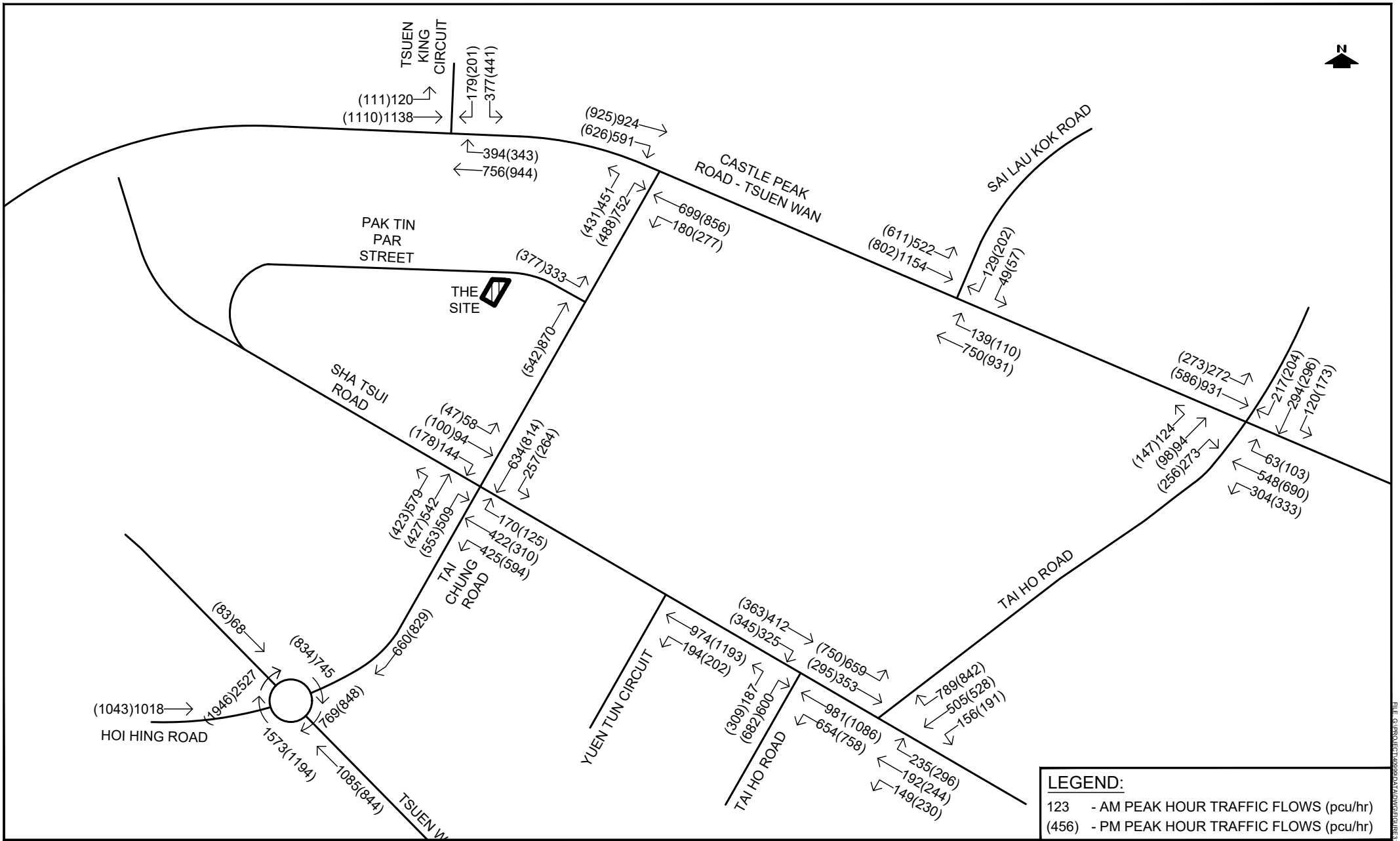
FILE: G:\PROJECT\40999\DATA\DWG\FIGURE3.1A.DWG PLOT SCALE : 1 = 1



PROJECT NO.	PROJECT TITLE	DRAWING NO.	REV.
40999	APPLICATION FOR PLANNING PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131) FOR PROPOSED HOTEL USE AND MINOR RELAXATION OF PLOT RATIO AND BUILDING HEIGHT RESTRICTIONS AT "OTHER SPECIFIED USES" ANNOTATED "BUSINESS" ZONE AT TSUN WAN INLAND LOT NO. 46 S.C, NOS. 46-48 PAK TIN PAR STREET, TSUEN WAN, NEW TERRITORIES	FIGURE 3.2	A

DESIGNED	DATE	DRAWING TITLE
SKL	NOV 2025	2025 EXISTING PEAK HOUR TRAFFIC FLOW
DRAWN CLL	SCALE N.T.S.	
CHECKED SLN		

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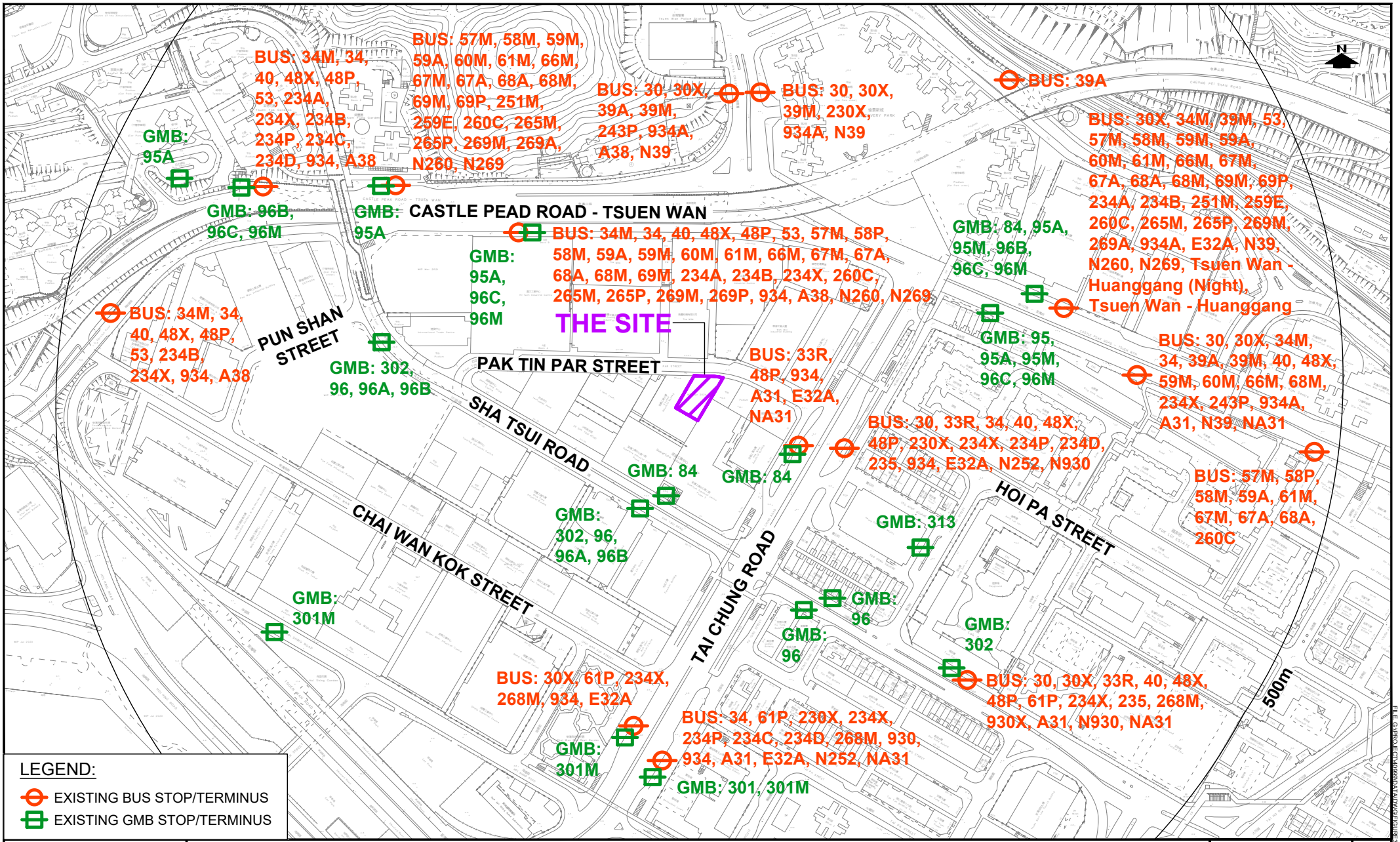
FILE: G:\PROJECT\40999\DATA\DWG\FIGURE3.2A.DWG PLOT SCALE : 1 = 1

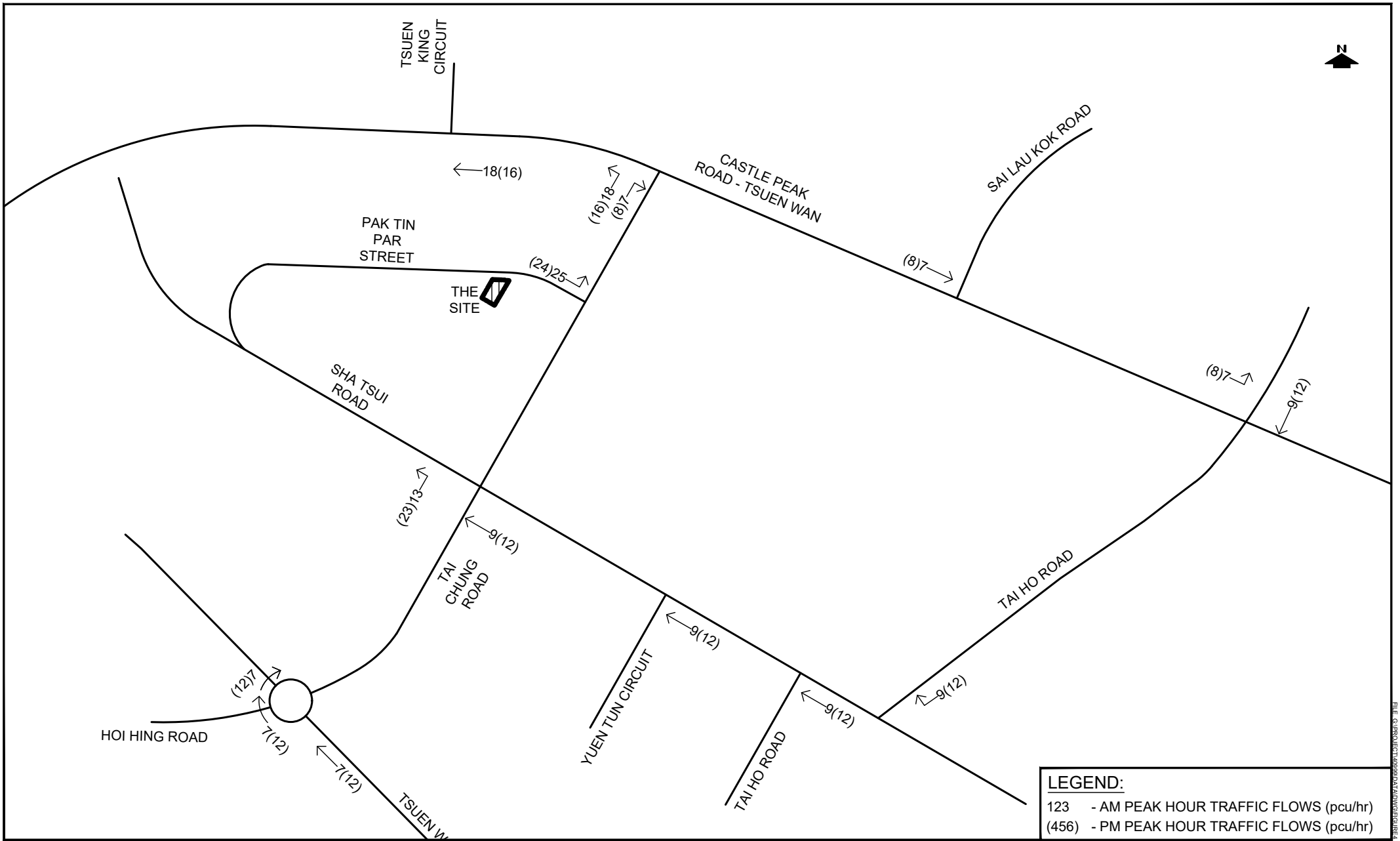


PROJECT NO.	PROJECT TITLE	DRAWING NO.	REV.
40999	APPLICATION FOR PLANNING PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131) FOR PROPOSED HOTEL USE AND MINOR RELAXATION OF PLOT RATIO AND BUILDING HEIGHT RESTRICTIONS AT "OTHER SPECIFIED USES" ANNOTATED "BUSINESS" ZONE AT TSUN WAN INLAND LOT NO. 46 S.C, NOS. 46-48 PAK TIN PAR STREET, TSUEN WAN, NEW TERRITORIES	FIGURE 3.3	·

DESIGNED	SKL	DATE	JUL 2025	DRAWING TITLE
DRAWN	CLL	SCALE	1:4000	PUBLIC TRANSPORT SERVICES IN THE VICINITY
CHECKED	SLN			

LLA 顧問有限公司 Consultancy Limited

FILE. G:\PROJECT\40999\DATA\DWG\FIGURE3.3.DWG PLOT SCALE : 1 = 1

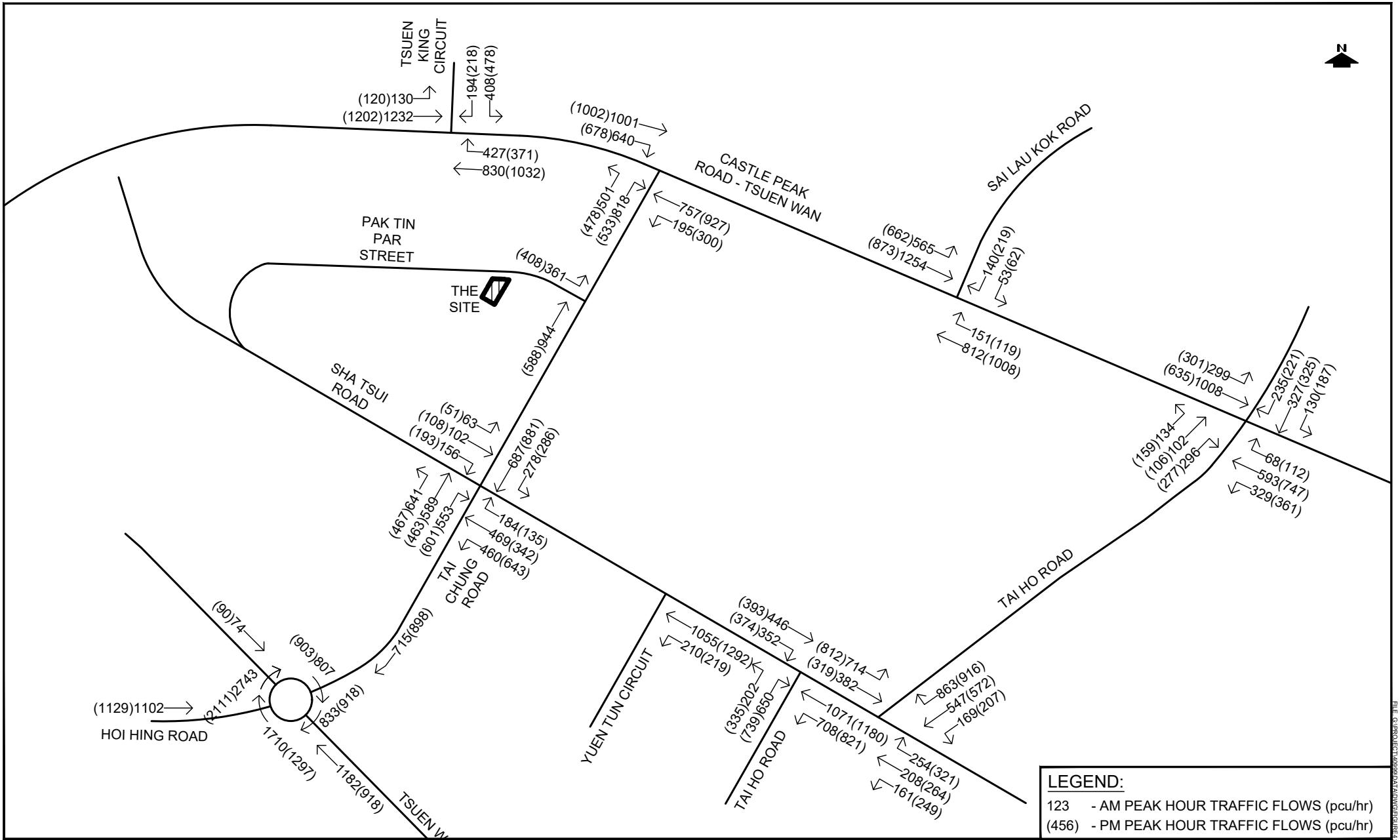


PROJECT NO.	PROJECT TITLE	DRAWING NO.	REV.
40999	APPLICATION FOR PLANNING PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131) FOR PROPOSED HOTEL USE AND MINOR RELAXATION OF PLOT RATIO AND BUILDING HEIGHT RESTRICTIONS AT "OTHER SPECIFIED USES" ANNOTATED "BUSINESS" ZONE AT TSUN WAN INLAND LOT NO. 46 S.C, NOS. 46-48 PAK TIN PAR STREET, TSUEN WAN, NEW TERRITORIES	FIGURE 4.1	A

DESIGNED	DATE	DRAWING TITLE
SKL	NOV 2025	ADDITIONAL DEVELOPMENT PEAK HOUR TRAFFIC FLOW
DRAWN CLL	SCALE N.T.S.	
CHECKED SLN		

LLA 顧問有限公司 Consultancy Limited

FILE: G:\PROJECT\40999\DATA\DWG\FIGURE4.1A.DWG PLOT SCALE : 1 = 1



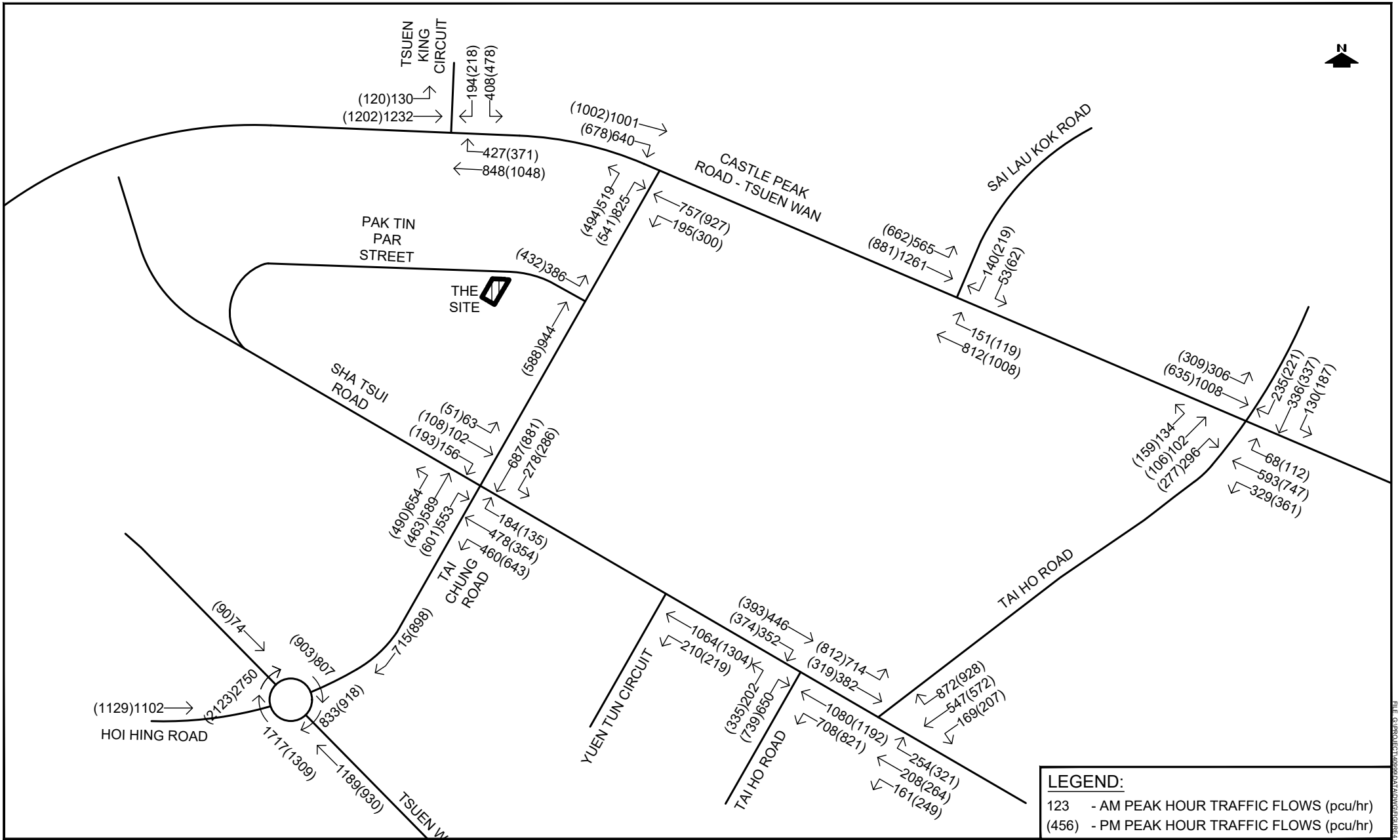
LEGEND:

123 - AM PEAK HOUR TRAFFIC FLOWS (pcu/hr)

(456) - PM PEAK HOUR TRAFFIC FLOWS (pcu/hr)

PROJECT NO. 40999	PROJECT TITLE APPLICATION FOR PLANNING PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131) FOR PROPOSED HOTEL USE AND MINOR RELAXATION OF PLOT RATIO AND BUILDING HEIGHT RESTRICTIONS AT "OTHER SPECIFIED USES" ANNOTATED "BUSINESS" ZONE AT TSUN WAN INLAND LOT NO. 46 S.C, NOS. 46-48 PAK TIN PAR STREET, TSUEN WAN, NEW TERRITORIES	DRAWING NO. FIGURE 4.2	REV. A
DESIGNED SKL / DATE NOV 2025	DRAWING TITLE		
DRAWN CLL / SCALE N.T.S.	2033 REFERENCE PEAK HOUR TRAFFIC FLOW	LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

FILE: G:\PROJECT\40999\DATA\DWG\FIGURE4.2A.DWG PLOT SCALE : 1 = 1



LEGEND:

123 - AM PEAK HOUR TRAFFIC FLOWS (pcu/hr)

(456) - PM PEAK HOUR TRAFFIC FLOWS (pcu/hr)

PROJECT NO. 40999	PROJECT TITLE APPLICATION FOR PLANNING PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131) FOR PROPOSED HOTEL USE AND MINOR RELAXATION OF PLOT RATIO AND BUILDING HEIGHT RESTRICTIONS AT "OTHER SPECIFIED USES" ANNOTATED "BUSINESS" ZONE AT TSUN WAN INLAND LOT NO. 46 S.C, NOS. 46-48 PAK TIN PAR STREET, TSUEN WAN, NEW TERRITORIES	DRAWING NO. FIGURE 4.3	REV. A
DESIGNED SKL / DATE NOV 2025	DRAWING TITLE		
DRAWN CLL / SCALE N.T.S.	2033 DESIGN PEAK HOUR TRAFFIC FLOW	LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

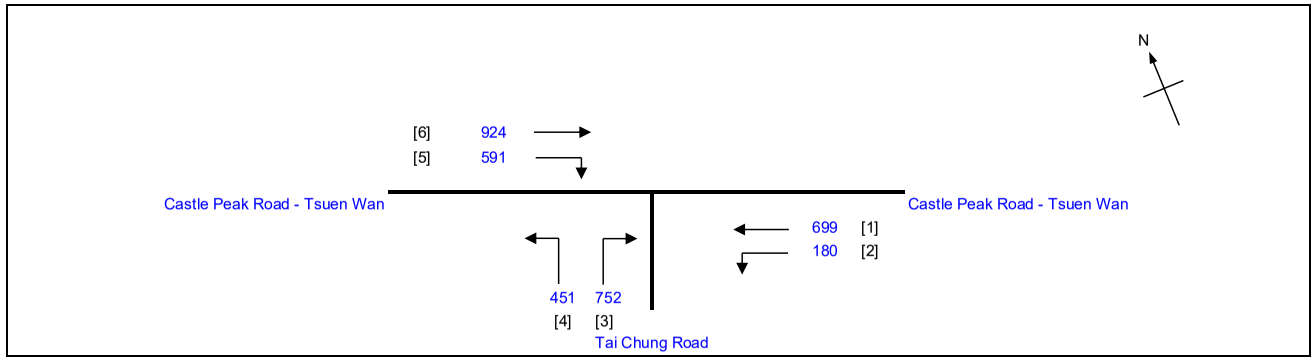
FILE: G:\PROJECT\40999\DATA\DWG\FIGURE4.3A.DWG PLOT SCALE : 1 = 1

FILE: G:\PROJECT\40999\DATA\DWG\FIGURE4.3A.DWG PLOT SCALE : 1 = 1

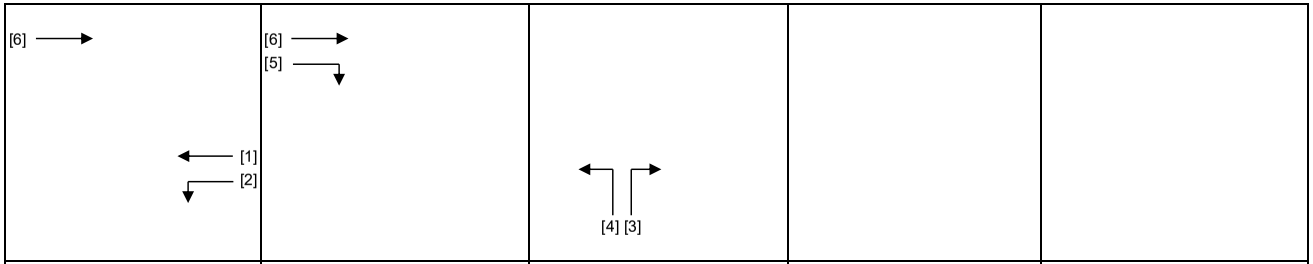
Appendix A

Junction Calculation Sheets
- Existing Scenario

LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J1_CPRTW_TCR.xlsx	Checked By:	SLN	Nov-25
J1 Castle Peak Road – Tsuen Wan / Tai Chung Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	112 sec
Sum(y)		Y =	0.512
Loss time		L =	14 sec
Total Flow		=	3597 pcu
Co	= (1.5*L+5)/(1-Y)	=	53.3 sec
Cm	= L/(1-Y)	=	28.7 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	55.2 %
Cp	= 0.9*L/(0.9-Y)	=	32.5 sec
Ymax	= 1-L/C	=	0.875
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**54 %**



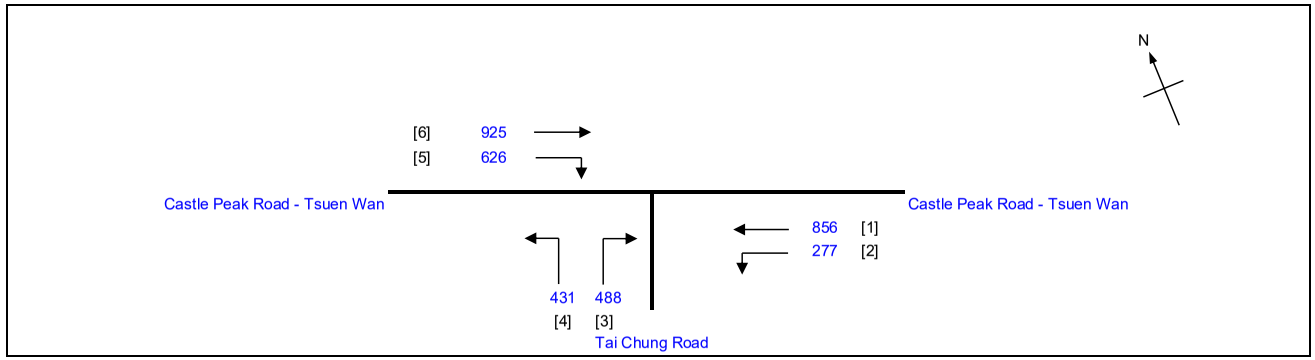
Stage 1	G= 27	Stage 2	G= 30	Stage 3	G= 38		
	Int = 6		Int = 5		Int = 6		

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

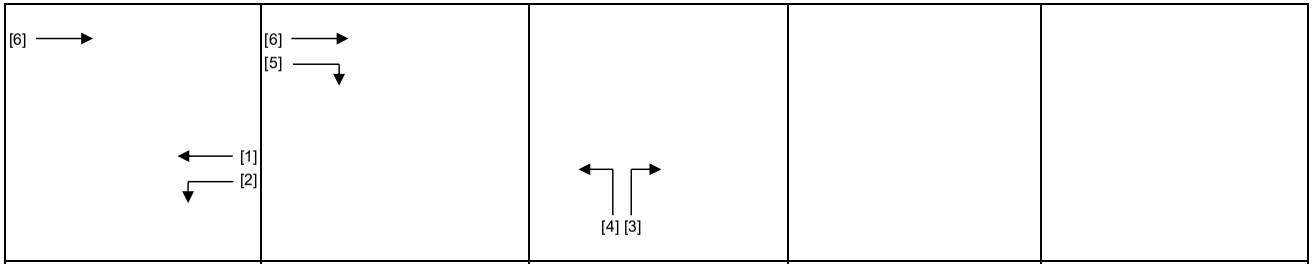
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							14					
6	1,2	3.00	2			N	3970		924		924	0.00	3970							3970	0.233			45	59	0.585	51	25
5	2	3.00	2	13			4110			591	591	1.00	3685							3685	0.160	0.160		31	31	0.585	39	34
1,2	1	3.40	1	12		N	1955	180	86		266	0.68	1803							1803	0.148			28	28	0.585	36	38
1	1	3.20	2				4150		613		613	0.00	4150							4150	0.148	0.148		28	28	0.585	42	35
4	2,3	3.00	2	13		N	3970	451			451	1.00	3559							3559	0.127			24	70	0.585	30	38
3	3	3.00	2	13			4110			752	752	1.00	3685							3685	0.204	0.204		39	39	0.585	45	29

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J1_CPRTW_TCR.xlsx	Checked By:	SLN	Nov-25
J1 Castle Peak Road – Tsuen Wan / Tai Chung Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	122 sec
Sum(y)		Y =	0.494
Loss time		L =	14 sec
Total Flow		=	3603 pcu
Co	= (1.5*L+5)/(1-Y)	=	51.3 sec
Cm	= L/(1-Y)	=	27.6 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	61.0 %
Cp	= 0.9*L/(0.9-Y)	=	31.0 sec
Ymax	= 1-L/C	=	0.885
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**61 %**



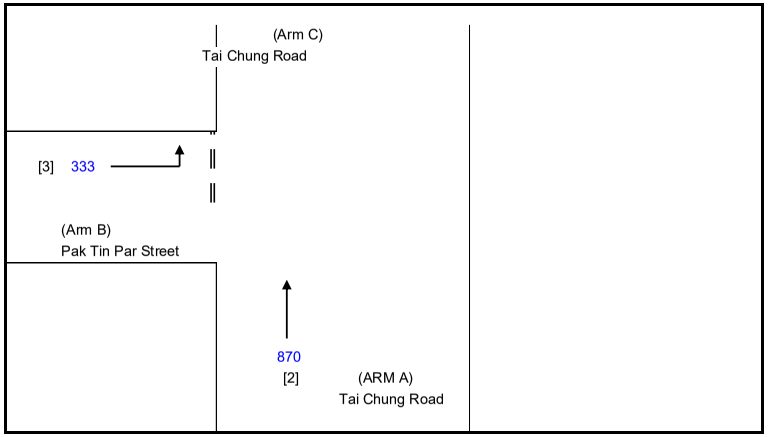
Stage 1	G= 41	Stage 2	G= 36	Stage 3	G= 28
	Int = 6		Int = 5		Int = 6

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							14					
6	1,2	3.00	2			N	3970		925		925	0.00	3970							3970	0.233			51	79	0.558	54	25
5	2	3.00	2	13			4110			626	626	1.00	3685							3685	0.170	0.170		37	37	0.558	42	34
1,2	1	3.40	1	12		N	1955	277	62		339	0.82	1774							1774	0.191			42	42	0.558	42	33
1	1	3.20	2				4150		794		794	0.00	4150							4150	0.191	0.191		42	42	0.558	51	31
4	2,3	3.00	2	13		N	3970	431			431	1.00	3559							3559	0.121			26	66	0.558	33	41
3	3	3.00	2	13			4110			488	488	1.00	3685							3685	0.132	0.132		29	29	0.558	36	39

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	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing AM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J2_TCR_PTP	CHECKED BY:	SLN	Nov-25
J2 Tai Chung Road / Pak Tin Par Street		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	20.00	(metres)
W cr	=	3.4	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	870	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	0.00	(metres)
Vr c-b	=	0	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	4.50	(metres)
Vl b-a	=	0	(metres)
Vr b-a	=	0	(metres)
Vr b-c	=	40	(metres)
q b-a	=	0	(pcu/hr)
q b-c	=	333	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.53322
E	=	1.00215
F	=	0.58595
Y	=	0.31000
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

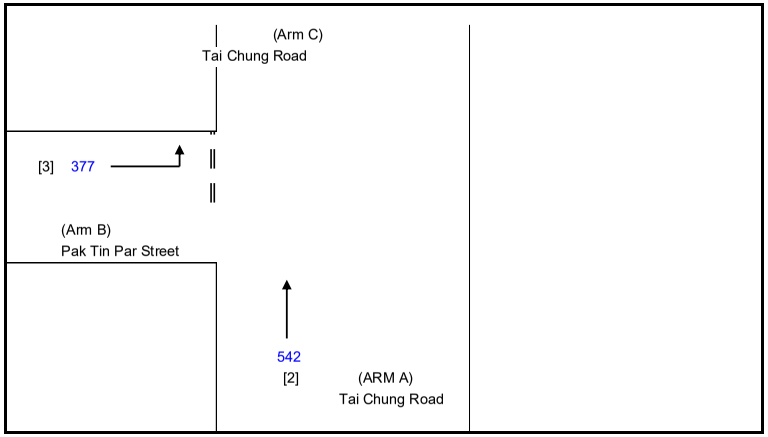
Q b-a	=	307		
Q b-c	=	648	Q b-c (O) =	648
Q c-b	=	379		
Q b-ac	=	648		
TOTAL FLOW	=	1203	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.5139
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.5139

CRITICAL DFC = 0.51

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing PM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J2_TCR_PTP	CHECKED BY:	SLN	Nov-25
J2 Tai Chung Road / Pak Tin Par Street		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	20.00	(metres)
W cr	=	3.4	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	542	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	0.00	(metres)
Vr c-b	=	0	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	4.50	(metres)
Vl b-a	=	0	(metres)
Vr b-a	=	0	(metres)
Vr b-c	=	40	(metres)
q b-a	=	0	(pcu/hr)
q b-c	=	377	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.53322
E	=	1.00215
F	=	0.58595
Y	=	0.31000
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

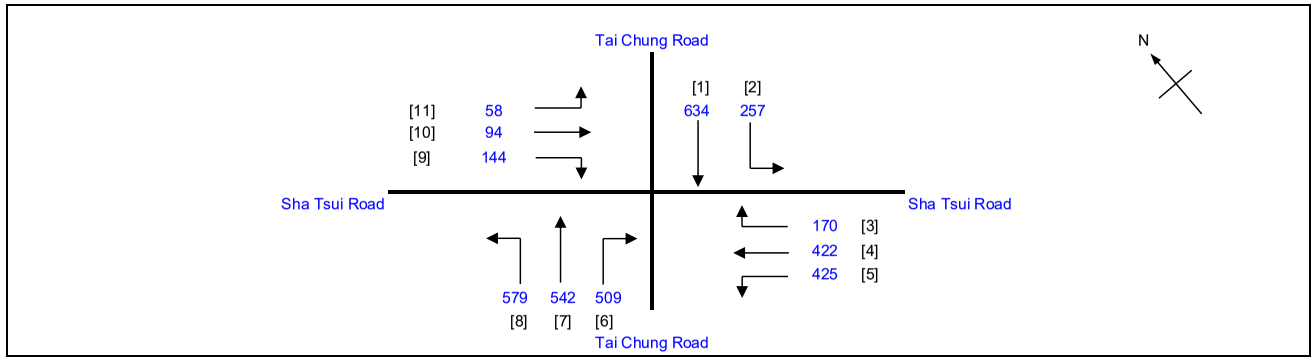
Q b-a	=	327		
Q b-c	=	685	Q b-c (O) =	685
Q c-b	=	401		
Q b-ac	=	685		
TOTAL FLOW	=	919	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

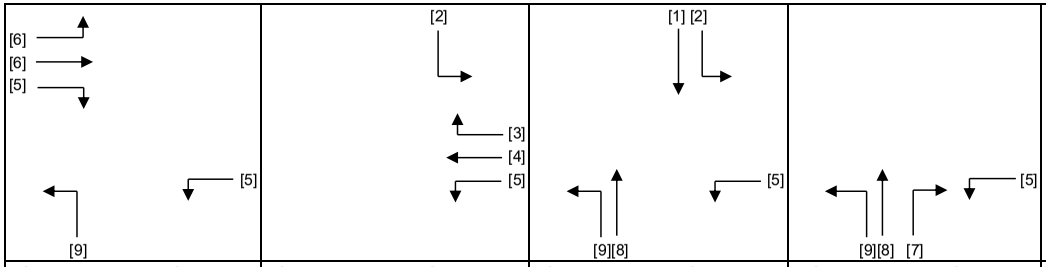
DFC b-a	=	0.0000
DFC b-c	=	0.5504
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.5504

CRITICAL DFC = 0.55

LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J3_TCR_STR.xlsx	Checked By:	SLN	Nov-25
J3 Tai Chung Road / Sha Tsui Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	112 sec
Sum(y)		Y =	0.488
Loss time		L =	19 sec
Total Flow		=	3409 pcu
Co	= (1.5*L+5)/(1-Y)	=	65.5 sec
Cm	= L/(1-Y)	=	37.1 sec
Yult		=	0.758
R.C.ult	= (Yult-Y)/Y*100%	=	55.1 %
Cp	= 0.9*L/(0.9-Y)	=	41.5 sec
Ymax	= 1-L/C	=	0.830
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**53 %**



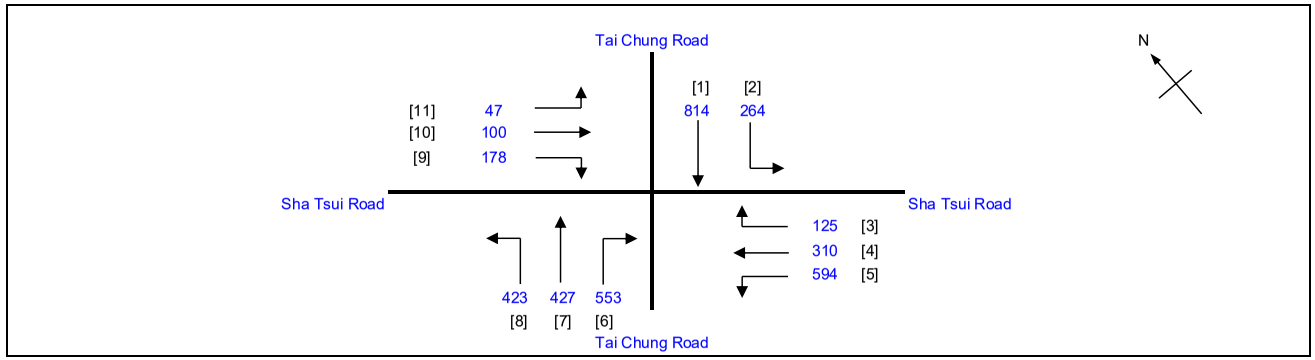
Stage 1	G= 14	Stage 2	G= 27	Stage 3	G= 20	Stage 4	G= 29
	Int = 7		Int = 8		Int =		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

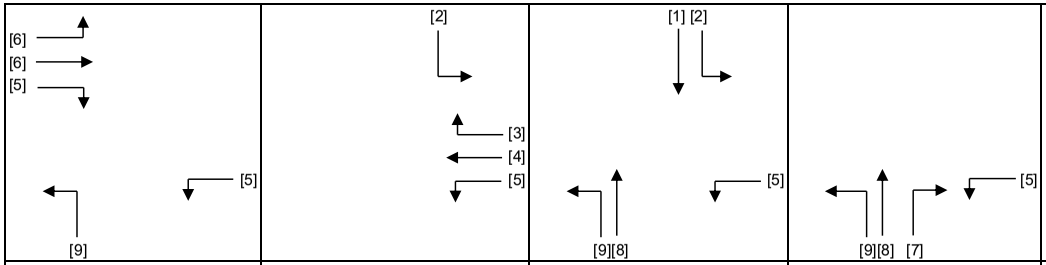
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							19					
10,11	1	3.40	1	8		N	1955	58	88		146	0.40	1819							1819	0.080			15	15	0.588	18	50
9,10	1	3.20	1	13			2075		6	144	150	0.96	1868							1868	0.080	0.080		15	15	0.588	24	50
2	2,3	3.00	2	12		N	3970	257			257	1.00	3529							3529	0.073			14	47	0.588	21	47
1	3	3.00	3				6165		634		634	0.00	6165							6165	0.103			20	20	0.588	32	40
4	2	3.80	1				2135		310		310	0.00	2135							2135	0.145			28	28	0.588	42	38
3,4	2	3.00	1	15			2055		112	170	282	0.60	1938							1938	0.145	0.145		28	28	0.588	36	38
8	1,3,4	3.10	1	20		N	1925	579			579	1.00	1791							1791	0.323			62	65	0.588	48	17
7	3,4	3.10	1				2065		542		542	0.00	2065							2065	0.262	0.262		50	50	0.588	54	23
6	4	3.10	2	12			4130			509	509	1.00	3671							3671	0.139			26	30	0.588	36	37

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J3_TCR_STR.xlsx	Checked By:	SLN	Nov-25
J3 Tai Chung Road / Sha Tsui Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.485
Loss time		L =	20 sec
Total Flow		=	3241 pcu
Co	= (1.5*L+5)/(1-Y)	=	68.0 sec
Cm	= L/(1-Y)	=	38.8 sec
Yult		=	0.750
R.C.ult	= (Yult-Y)/Y*100%	=	54.6 %
Cp	= 0.9*L/(0.9-Y)	=	43.4 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**55 %**



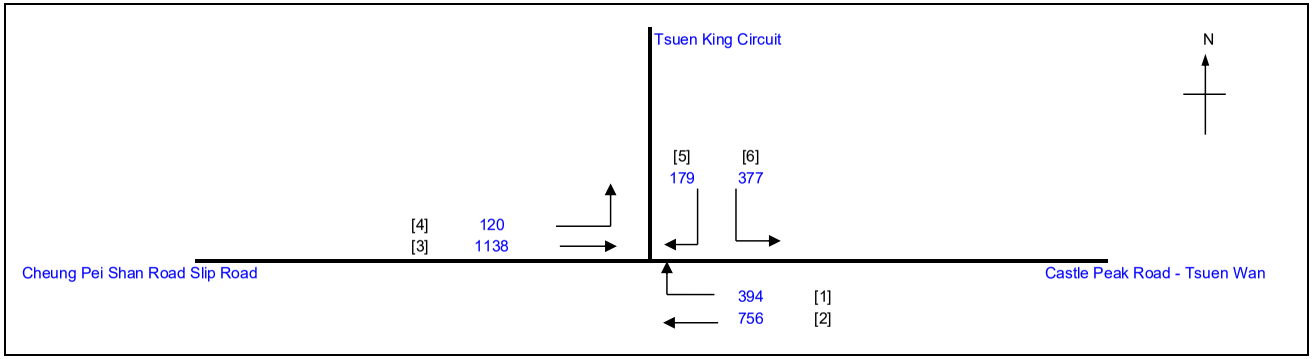
Stage 1	G= 19	Stage 2	G= 21	Stage 3	G= 26	Stage 4	G= 30
	Int = 7		Int = 5		Int = 5		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

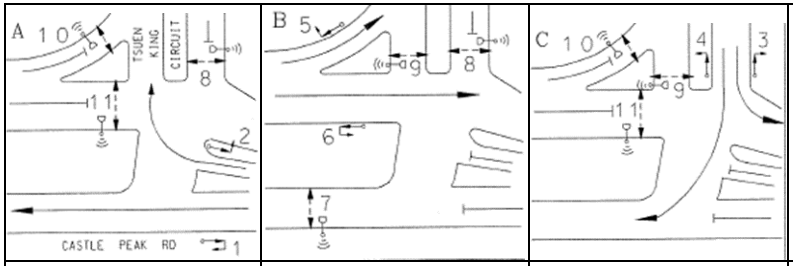
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							20					
10,11	1	3.40	1	8		N	1955	47	100		147	0.32	1844							1844	0.080			16	20	0.582	24	53
9,10	1	3.20	1	13			2075		0	178	178	1.00	1860							1860	0.096	0.096		20	20	0.582	24	49
2	2,3	3.00	2	12		N	3970	264			264	1.00	3529							3529	0.075			15	49	0.582	21	49
1	3	3.00	3				6165		814		814	0.00	6165							6165	0.132	0.132		27	27	0.582	40	39
4	2	3.80	1				2135		228		228	0.00	2135							2135	0.107			22	22	0.582	36	46
3,4	2	3.00	1	15			2055		82	125	207	0.60	1938							1938	0.107	0.107		22	22	0.582	30	47
8	1,3,4	3.10	1	20		N	1925	423			423	1.00	1791							1791	0.236			49	78	0.582	48	28
7	3,4	3.10	1				2065		427		427	0.00	2065							2065	0.207			43	58	0.582	54	31
6	4	3.10	2	12			4130			553	553	1.00	3671							3671	0.151	0.151		31	31	0.582	39	37

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J4_CRPTW_TKC.xlsx	Checked By:	SLN	Nov-25
J4 Castle Peak Road – Tsuen Wan / Tsuen King Circuit			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	112 sec
Sum(y)		Y =	0.423
Loss time		L =	29 sec
Total Flow		=	2964 pcu
Co	= (1.5*L+5)/(1-Y)	=	84.1 sec
Cm	= L/(1-Y)	=	50.3 sec
Yult		=	0.683
R.C.ult	= (Yult-Y)/Y*100%	=	61.2 %
Cp	= 0.9*L/(0.9-Y)	=	54.8 sec
Ymax	= 1-L/C	=	0.741
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**58 %**



Stage 1	G= 36	Stage 2	G= 28	Stage 3	G= 17
	Int = 11		Int = 7		Int = 14

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2	5	6	2	27	6
P2	1,2	5	13	0	68	13
P3	2,3	5	13	6	46	13
P4	1,3	5	8	0	69	8
P5	1,3	5	13	0	64	13

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							29					
1	1	3.65	3	33			6360			394	394	1.00	6083							6083	0.065			13	37	0.571	20	45
2	1	3.40	2			N	4050		756		756	0.00	4050							4050	0.187	0.187		37	37	0.571	45	30
3,4	2	3.60	1	48		N	1975	120	167		287	0.42	1950							1950	0.147			29	29	0.571	36	37
3	2	3.60	3				6345		971		971	0.00	6345	12	248					6593	0.147	0.147		29	29	0.571	44	34
6	3	3.00	2	15		N	3970	374			374	1.00	3609	18	600					4209	0.089			17	18	0.571	0	0
5,6	3	3.40	1	50			2095	3		179	182	1.00	2034							2034	0.089	0.089		18	18	0.571	24	46

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

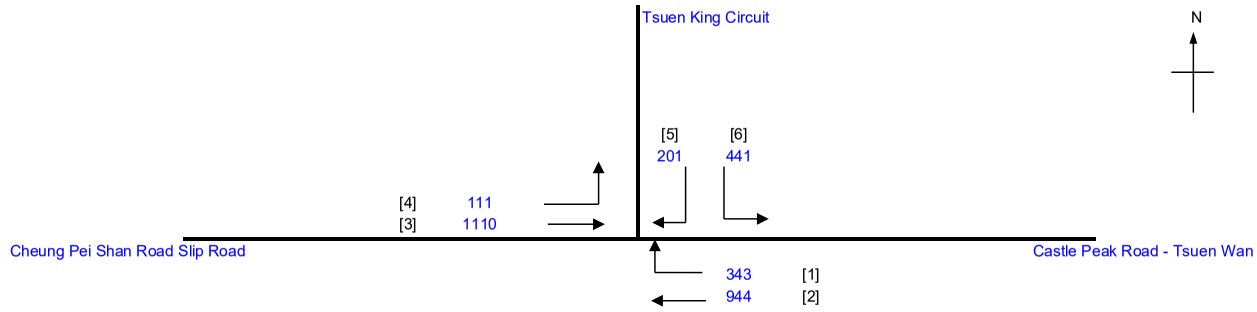
TRAFFIC SIGNAL CALCULATION

Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

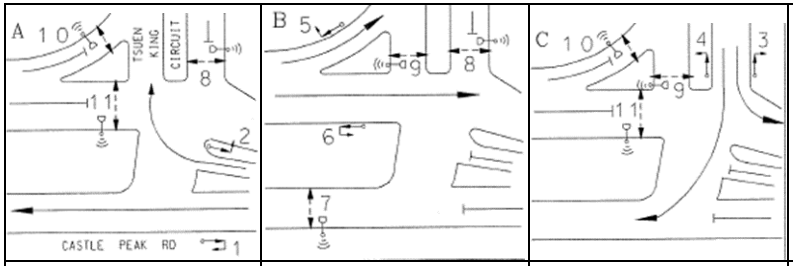
J4 Castle Peak Road – Tsuen Wan / Tsuen King Circuit

2025 Existing PM

			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J4_CRPTW_TKC.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	122 sec
Sum(y)		Y =	0.480
Loss time		L =	29 sec
Total Flow		=	3150 pcu
Co	= (1.5*L+5)/(1-Y)	=	93.3 sec
Cm	= L/(1-Y)	=	55.8 sec
Yult		=	0.683
R.C.ult	= (Yult-Y)/Y*100%	=	42.1 %
Cp	= 0.9*L/(0.9-Y)	=	62.2 sec
Ymax	= 1-L/C	=	0.762
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**43 %**



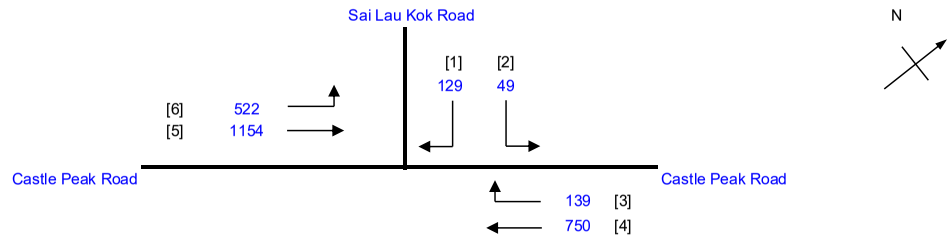
Stage 1	G= 44	Stage 2	G= 27	Stage 3	G= 19
	Int = 11		Int = 7		Int = 14

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2	5	6	2	26	6
P2	1,2	5	13	0	76	13
P3	2,3	5	13	6	48	13
P4	1,3	5	8	0	80	8
P5	1,3	5	13	0	75	13

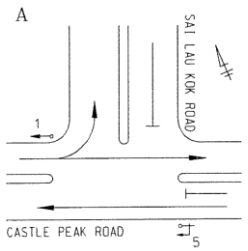
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							29					
1	1	3.65	3	33			6360			343	343	1.00	6083							6083	0.056			11	45	0.630	20	53
2	1	3.40	2			N	4050		944		944	0.00	4050							4050	0.233	0.233		45	45	0.630	60	30
3,4	2	3.60	1	48		N	1975	111	167		278	0.40	1951							1951	0.143			28	28	0.630	42	45
3	2	3.60	3				6345		943		943	0.00	6345	12	257					6602	0.143	0.143		28	28	0.630	48	40
6	3	3.00	2	15		N	3970	430			430	1.00	3609	18	540					4149	0.104			20	20	0.630	0	0
5,6	3	3.40	1	50			2095	11		201	212	1.00	2034							2034	0.104	0.104		20	20	0.630	30	51

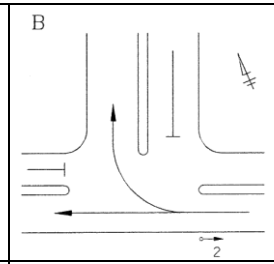
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

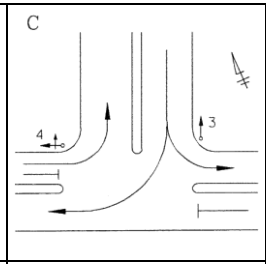
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J5_CPRTW_SLKR.xlsx	Checked By:	SLN	Nov-25
J5 Castle Peak Road – Tsuen Wan / Sai Lau Kok Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.390
Loss time		L =	17 sec
Total Flow		=	2743 pcu
Co	= (1.5*L+5)/(1-Y)	=	50.0 sec
Cm	= L/(1-Y)	=	27.9 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	98.2 %
Cp	= 0.9*L/(0.9-Y)	=	30.0 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**98 %**







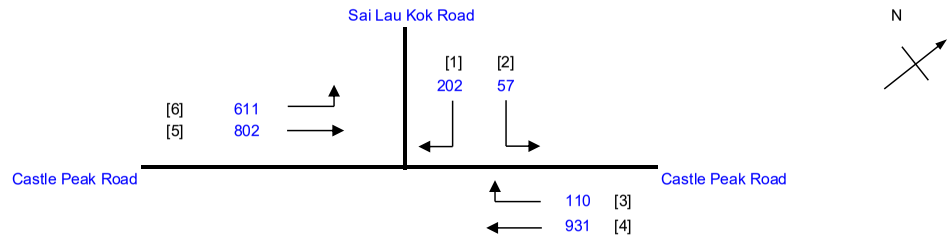
Stage 1	G= 73	Stage 2	G= 18	Stage 3	G= 8
	Int = 5		Int = 8		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

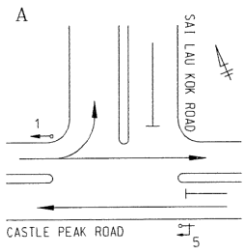
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							17					
6	1,3	3.00	2	12		N	3970	522			522	1.00	3529							3529	0.148			39	84	0.454	33	30
5	1	3.00	2				4110		1154		1154	0.00	4110							4110	0.281	0.281		74	74	0.454	42	11
4	1,2	3.00	3			N	6025		750		750	0.00	6025							6025	0.124			33	94	0.454	36	33
3	2	3.00	1	17			2055			139	139	1.00	1888							1888	0.074	0.074		19	19	0.454	18	45
2	3	3.60	1	20		N	1975	49			49	1.00	1837							1837	0.027			7	9	0.454	6	62
1,2	3	3.60	1	10			2115	0		65	65	1.00	1839							1839	0.035	0.035		9	9	0.454	12	57
1	3	3.60	1	10			2115			64	64	1.00	1839							1839	0.035			9	9	0.454	12	57

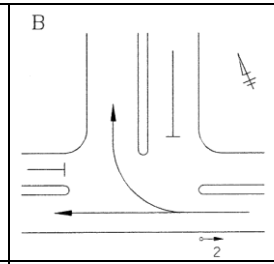
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

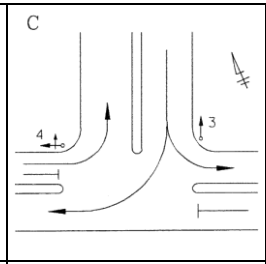
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J5_CPRTW_SLKR.xlsx	Checked By:	SLN	Nov-25
J5 Castle Peak Road – Tsuen Wan / Sai Lau Kok Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.308
Loss time		L =	17 sec
Total Flow		=	2713 pcu
Co	= (1.5*L+5)/(1-Y)	=	44.1 sec
Cm	= L/(1-Y)	=	24.6 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	150.6 %
Cp	= 0.9*L/(0.9-Y)	=	25.9 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**151 %**







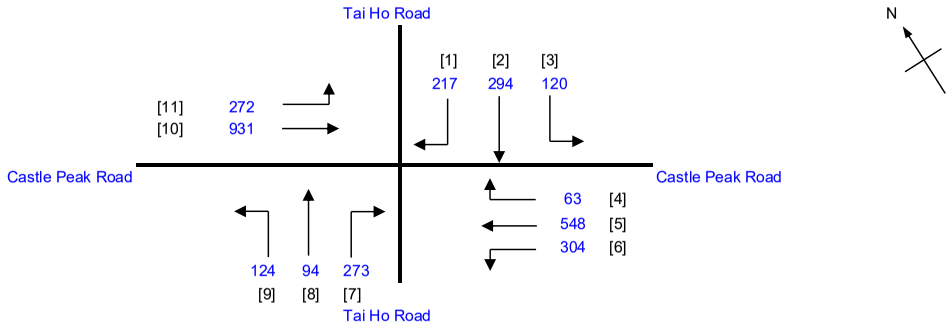
Stage 1	G= 64	Stage 2	G= 18	Stage 3	G= 17
	Int = 5		Int = 8		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

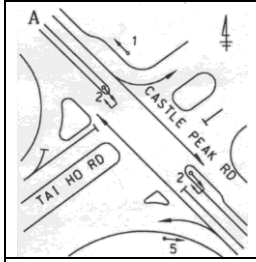
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							17					
6	1,3	3.00	2	12		N	3970	611			611	1.00	3529							3529	0.173			58	84	0.359	30	18
5	1	3.00	2				4110		802		802	0.00	4110							4110	0.195	0.195		65	65	0.359	36	14
4	1,2	3.00	3			N	6025		931		931	0.00	6025							6025	0.155			52	85	0.359	34	21
3	2	3.00	1	17			2055			110	110	1.00	1888							1888	0.058	0.058		19	19	0.359	18	43
2	3	3.60	1	20		N	1975	57			57	1.00	1837							1837	0.031			10	18	0.359	6	52
1,2	3	3.60	1	10			2115	0		101	101	1.00	1839							1839	0.055	0.055		18	18	0.359	12	44
1	3	3.60	1	10			2115			101	101	1.00	1839							1839	0.055			18	18	0.359	12	44

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

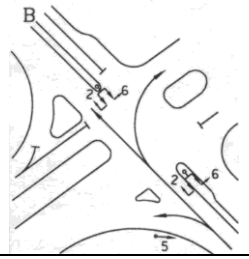
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J6_CPRTW_THR.xlsx	Checked By:	SLN	Nov-25
J6 Castle Peak Road - Tsuen Wan / Tai Ho Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.386
Loss time		L =	25 sec
Total Flow		=	3240 pcu
Co	= (1.5*L+5)/(1-Y)	=	69.3 sec
Cm	= L/(1-Y)	=	40.7 sec
Yult		=	0.713
R.C.ult	= (Yult-Y)/Y*100%	=	84.4 %
Cp	= 0.9*L/(0.9-Y)	=	43.8 sec
Ymax	= 1-L/C	=	0.792
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**84 %**

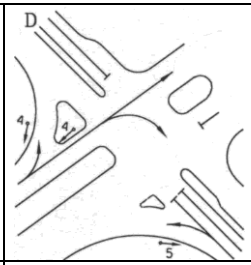


Stage 1 G= 47 Int = 6



Stage 2 G= 7 Int = 6

Stage 3 G= 20 Int = 10



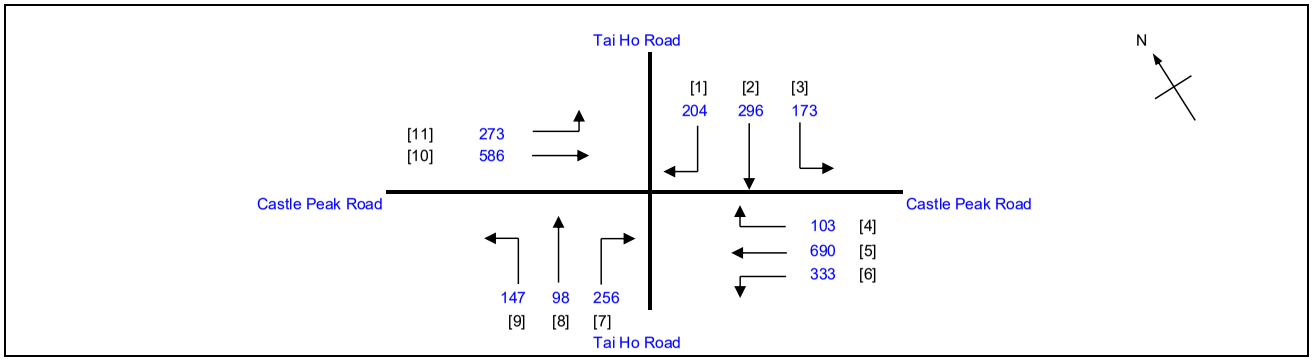
Stage 4 G= 18 Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

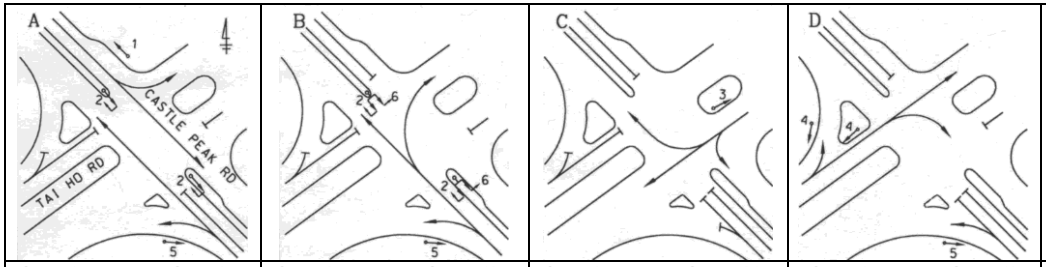
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
10,11	1	3.50	1	12		N	1965	272	74		346	0.79	1789							1789	0.193	0.193		48	48	0.488	36	27
10	1	3.50	2				4210		857		857	0.00	4210	18	225					4435	0.193			48	48	0.488	51	25
6	1,2,4	3.65	1	70		N	1980	304			304	1.00	1938	30	243					2181	0.139			34	74	0.488	42	35
5	1,2	3.65	2				4240		548		548	0.00	4240	18	196					4436	0.124			30	55	0.488	39	36
4	2	3.65	1	20			2120			63	63	1.00	1972							1972	0.032	0.032		8	8	0.488	12	61
3	3	3.30	1	11		N	1945	120			120	1.00	1712							1712	0.070			17	21	0.488	18	49
2	3	3.30	1				2085		176		176	0.00	2085							2085	0.084	0.084		21	21	0.488	24	45
1,2	3	3.30	1	24			2085		118	53	171	0.31	2045							2045	0.084			21	21	0.488	24	45
1	3	3.30	1	24			2085			164	164	1.00	1962							1962	0.084			21	21	0.488	24	45
8,9	4	3.50	1	28		N	1965	124	20		144	0.86	1878							1878	0.077	0.077		19	19	0.488	24	47
7,8	4	3.50	1	22			2105		74	123	197	0.62	2019	18	568					2587	0.076			19	19	0.488	30	45
7	4	3.50	1	22			2105			150	150	1.00	1971							1971	0.076			19	19	0.488	24	47

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J6_CPRTW_THR.xlsx	Checked By:	SLN	Nov-25
J6 Castle Peak Road - Tsuen Wan / Tai Ho Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.388
Loss time		L =	25 sec
Total Flow		=	3159 pcu
Co	= (1.5*L+5)/(1-Y)	=	69.5 sec
Cm	= L/(1-Y)	=	40.9 sec
Yult		=	0.713
R.C.ult	= (Yult-Y)/Y*100%	=	83.4 %
Cp	= 0.9*L/(0.9-Y)	=	44.0 sec
Ymax	= 1-L/C	=	0.792
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**83 %**



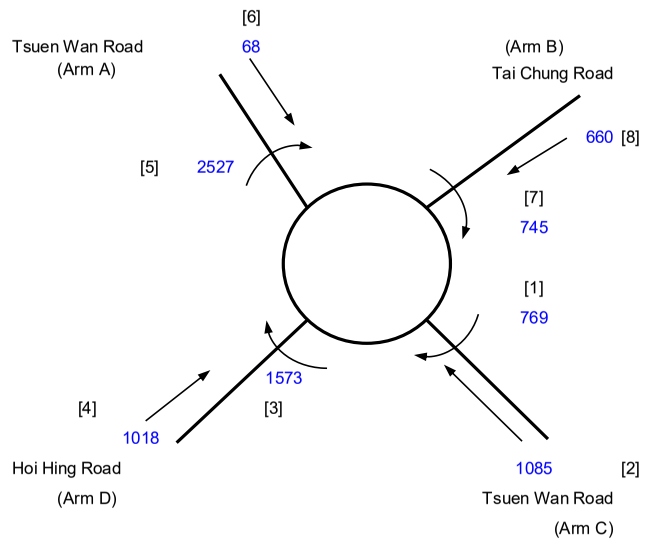
Stage 1	G= 37	Stage 2	G= 12	Stage 3	G= 24	Stage 4	G= 18
	Int = 6		Int = 6		Int = 10		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							25					
10,11	1	3.50	1	12		N	1965	273	0		273	1.00	1747							1747	0.156	0.156		38	38	0.491	36	33
10	1	3.50	2				4210		586		586	0.00	4210	18	284					4494	0.130			32	38	0.491	42	35
6	1,2,4	3.65	1	70		N	1980	333			333	1.00	1938	30	257					2195	0.152			37	70	0.491	42	33
5	1,2	3.65	2				4240		690		690	0.00	4240	18	212					4452	0.155			38	51	0.491	45	31
4	2	3.65	1	20			2120			103	103	1.00	1972							1972	0.052	0.052		13	13	0.491	18	53
3	3	3.30	1	11		N	1945	173			173	1.00	1712							1712	0.101	0.101		25	25	0.491	24	42
2	3	3.30	1				2085		171		171	0.00	2085							2085	0.082			20	25	0.491	24	45
1,2	3	3.30	1	24			2085		125	43	168	0.26	2052							2052	0.082			20	25	0.491	24	45
1	3	3.30	1	24			2085			161	161	1.00	1962							1962	0.082			20	25	0.491	24	46
8,9	4	3.50	1	28		N	1965	147	0		147	1.00	1865							1865	0.079	0.079		19	19	0.491	24	47
7,8	4	3.50	1	22			2105		98	104	202	0.51	2034	18	568					2602	0.078			19	19	0.491	30	45
7	4	3.50	1	22			2105			152	152	1.00	1971							1971	0.077			19	19	0.491	24	47

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	ROUNDABOUT CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing AM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J7_TCR_HHR.xls	CHECKED BY:	SLN	Nov-25
J7 Tai Chung Road / Hoi Hing Road		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25

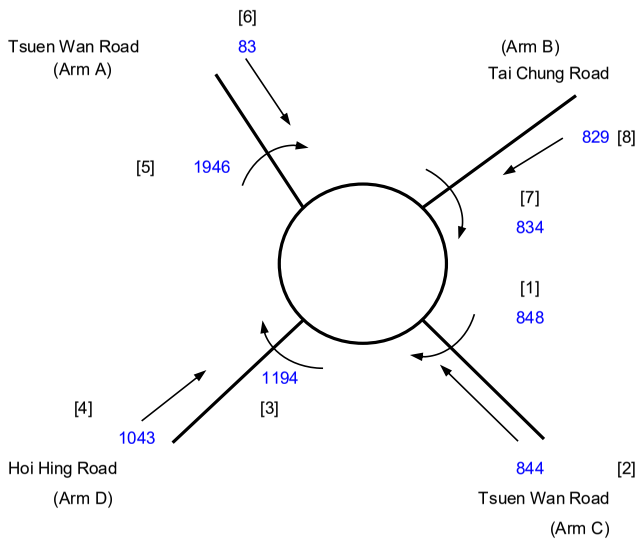


ARM			A	B	C	D
INPUT PARAMETERS:						
V	=	Approach half width (m)	5.40	6.90	6.60	6.50
E	=	Entry width (m)	8.20	7.60	10.50	15.00
L	=	Effective length of flare (m)	50.00	100.00	9.00	13.00
R	=	Entry radius (m)	15.00	100.00	65.00	20.00
D	=	Inscribed circle diameter (m)	60.00	60.00	60.00	60.00
A	=	Entry angle (degree)	30.00	35.00	23.00	43.00
Q	=	Entry flow (pcu/h)	68	660	1085	1018
Qc	=	Circulating flow across entry (pcu/h)	2527	745	769	1573
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L	0.09	0.01	0.69	1.05
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.02	1.06	0.95
X2	=	V + ((E-V)/(1+2S))	7.77	7.58	8.23	9.25
M	=	EXP((D-60)/10)	1	1	1	1
F	=	303*X2	2356	2298	2495	2802
Td	=	1+(0.5/(1+M))	1.25	1.25	1.25	1.25
Fc	=	0.21*Td(1+0.2*X2)	0.67	0.66	0.69	0.75
Qe	=	K(F-Fc*Qc)	650	1845	2075	1552
DFC	=	Design flow/Capacity = Q/Qe	0.10	0.36	0.52	0.66

Total In Sum = 2831 PCU

DFC of Critical Approach = 0.66

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing PM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J7_TCR_HHR.xls	CHECKED BY:	SLN	Nov-25
J7 Tai Chung Road / Hoi Hing Road		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25



ARM			A	B	C	D
INPUT PARAMETERS:						
V	=	Approach half width (m)	5.40	6.90	6.60	6.50
E	=	Entry width (m)	8.20	7.60	10.50	15.00
L	=	Effective length of flare (m)	50.00	100.00	9.00	13.00
R	=	Entry radius (m)	15.00	100.00	65.00	20.00
D	=	Inscribed circle diameter (m)	60.00	60.00	60.00	60.00
A	=	Entry angle (degree)	30.00	35.00	23.00	43.00
Q	=	Entry flow (pcu/h)	83	829	844	1043
Qc	=	Circulating flow across entry (pcu/h)	1946	834	848	1194
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L	0.09	0.01	0.69	1.05
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.02	1.06	0.95
X2	=	V + ((E-V)/(1+2S))	7.77	7.58	8.23	9.25
M	=	EXP((D-60)/10)	1	1	1	1
F	=	303*X2	2356	2298	2495	2802
Td	=	1+(0.5/(1+M))	1.25	1.25	1.25	1.25
Fc	=	0.21*Td(1+0.2*X2)	0.67	0.66	0.69	0.75
Qe	=	K(F-Fc*Qc)	1033	1785	2017	1823
DFC	=	Design flow/Capacity = Q/Qe	0.08	0.46	0.42	0.57

Total In Sum = 2799 PCU

DFC of Critical Approach = 0.57

LLA CONSULTANCY LIMITED

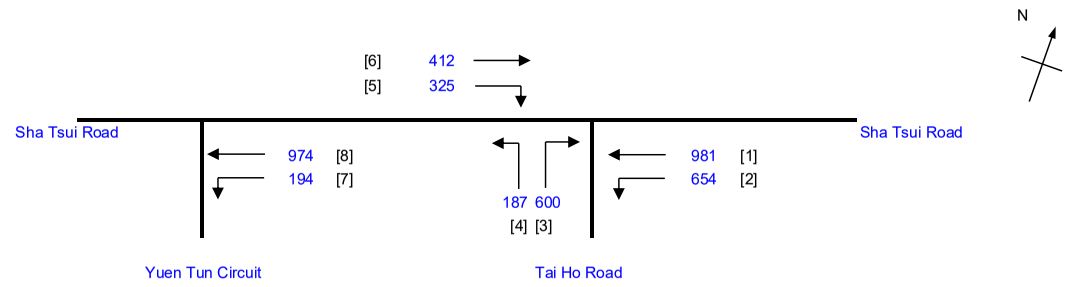
TRAFFIC SIGNAL CALCULATION

Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

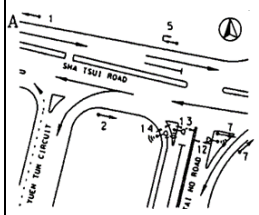
J8 Sha Tsui Road / Tai Ho Road (W)

2025 Existing AM

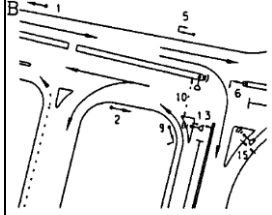
			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J8_STR_THRW.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



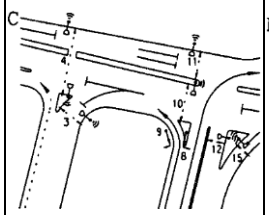
No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.557
Loss time		L =	12 sec
Total Flow		=	4327 pcu
Co	= (1.5*L+5)/(1-Y)	=	51.9 sec
Cm	= L/(1-Y)	=	27.1 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	45.5 %
Cp	= 0.9*L/(0.9-Y)	=	31.5 sec
Ymax	= 1-L/C	=	0.900
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**46 %**



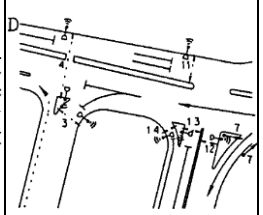
Stage 1 G= 9 Int = 5



Stage 2 G= 26 Int = 5



Stage 3 G= 24 Int = 5



Stage 4 G= 46 Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3,4	5	5	4	67	5
P2	3,4	5	10	4	62	10
P3	2,3	5	10	6	44	10
P4	3,4	7	13	3	60	13
P5	1,3,4	5	9	10	70	9
P6	1,2,4	5	10	3	78	10
P7	1,4	5	7	3	50	7
P8	2,3	5	7	3	50	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							12					
1,2	1,4	4.00	1	67		N	2015	654	0		654	1.00	1971	28	300					2271	0.288	0.288		56	56	0.618	66	24
1	1,4	4.00	2				4310		981		981	0.00	4310	28	300					4610	0.213			41	56	0.618	63	31
7,8	1,2	3.50	1	37		N	1965	194	166		360	0.54	1923							1923	0.187			36	36	0.618	48	37
8	1,2	3.50	2				4210		808		808	0.00	4210	6	100					4310	0.187			36	36	0.618	54	34
6	1,2	3.50	2			N	4070		412		412	0.00	4070							4070	0.101			20	36	0.618	33	46
5	2	3.50	1	15			2105			325	325	1.00	1914	20	444					2358	0.138	0.138		27	27	0.618	48	43
4	2,3	3.50	1	78		N	1965	187			187	1.00	1928							1928	0.097			19	52	0.618	30	51
3	3	3.50	2	20			4210			600	600	1.00	3916	28	672					4588	0.131	0.131		25	25	0.618	45	41

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

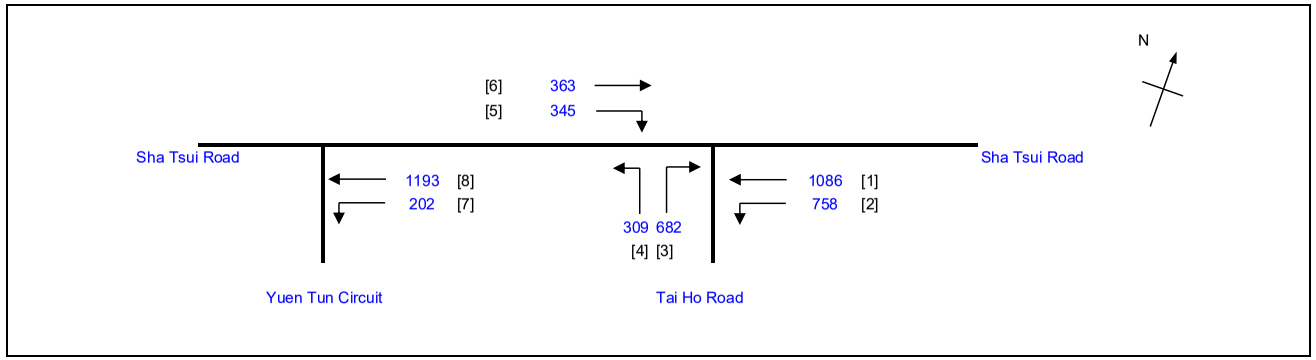
TRAFFIC SIGNAL CALCULATION

Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

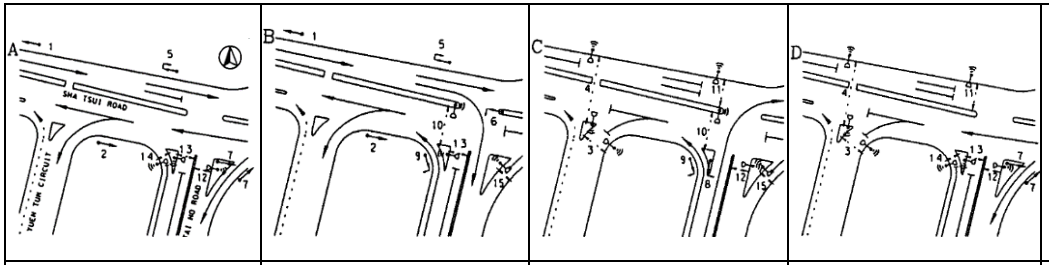
J8 Sha Tsui Road / Tai Ho Road (W)

2025 Existing PM

			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J8_STR_THRW.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.629
Loss time		L =	12 sec
Total Flow		=	4938 pcu
Co	= (1.5*L+5)/(1-Y)	=	62.0 sec
Cm	= L/(1-Y)	=	32.3 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	28.8 %
Cp	= 0.9*L/(0.9-Y)	=	39.8 sec
Ymax	= 1-L/C	=	0.900
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**29 %**



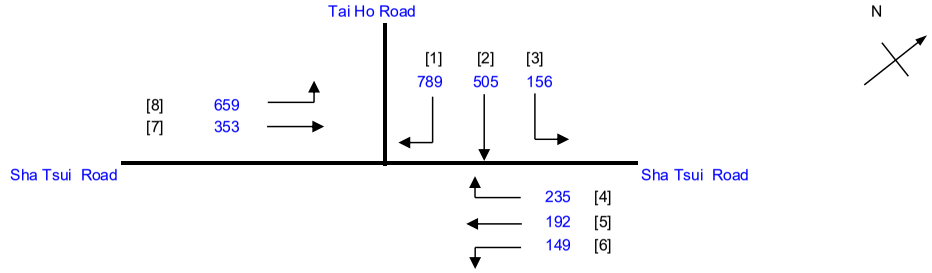
Stage	G=	Int =
Stage 1	13	5
Stage 2	24	5
Stage 3	25	5
Stage 4	44	

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3,4	5	5	4	65	5
P2	3,4	5	10	4	60	10
P3	2,3	5	10	6	42	10
P4	3,4	7	13	3	58	13
P5	1,3,4	5	9	10	72	9
P6	1,2,4	5	10	3	77	10
P7	1,4	5	7	3	52	7
P8	2,3	5	7	3	48	7

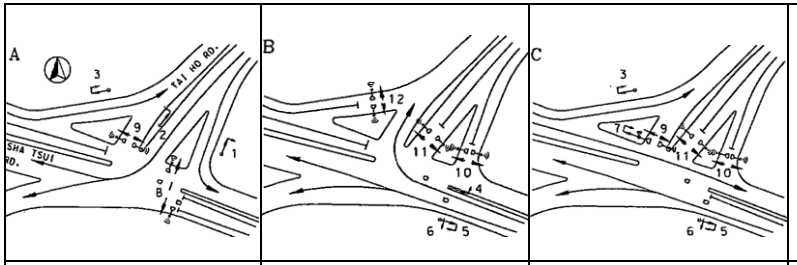
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							12					
1,2	1,4	4.00	1	67		N	2015	758	0		758	1.00	1971	28	290					2261	0.335	0.335		58	58	0.699	78	25
1	1,4	4.00	2				4310		1086		1086	0.00	4310	28	290					4600	0.236			41	58	0.699	69	33
7,8	1,2	3.50	1	37		N	1965	202	229		431	0.47	1928							1928	0.224			38	38	0.699	54	38
8	1,2	3.50	2				4210		964		964	0.00	4210	6	95					4305	0.224			38	38	0.699	63	35
6	1,2	3.50	2			N	4070		363		363	0.00	4070							4070	0.089			15	38	0.699	30	52
5	2	3.50	1	15			2105			345	345	1.00	1914	20	480					2394	0.144	0.144		25	25	0.699	54	47
4	2,3	3.50	1	78		N	1965	309			309	1.00	1928							1928	0.160			28	50	0.699	42	47
3	3	3.50	2	20			4210			682	682	1.00	3916	28	646					4562	0.149	0.149		26	26	0.699	51	43

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
J9 Sha Tsui Road / Tai Ho Road (E)		FILENAME : J9_STR_THRE.xlsx	Checked By:	SLN	Nov-25
			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.453
Loss time		L =	17 sec
Total Flow		=	3038 pcu
Co	= (1.5*L+5)/(1-Y)	=	55.8 sec
Cm	= L/(1-Y)	=	31.1 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	70.5 %
Cp	= 0.9*L/(0.9-Y)	=	34.2 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**70 %**



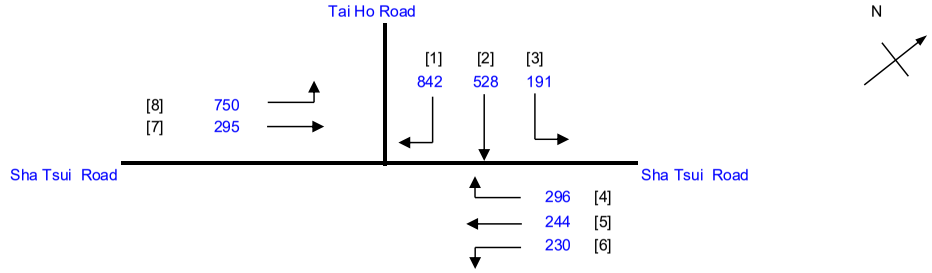
Stage 1	G= 54	Stage 2	G= 28	Stage 3	G= 18
	Int = 6		Int = 8		Int = 6

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	8	15	4	41	15
P2	1,3	5	9	5	70	9
P3	2,3	5	10	1	49	10
P4	2,3	5	9	0	51	9
P3	2	5	8	1	27	8

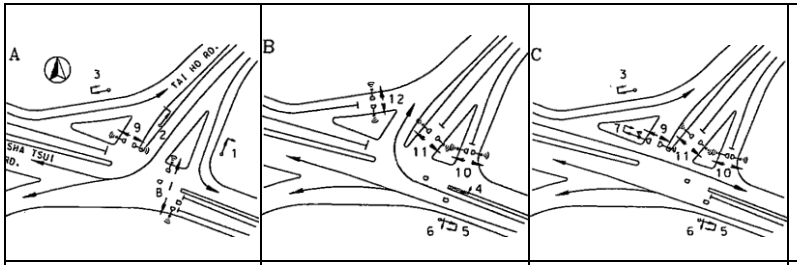
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							17					
2,3	1	3.30	1	10		N	1945	156	321		477	0.33	1854	12	131					1985	0.240	0.240		55	55	0.528	48	23
1,2	1	3.30	1	20			2085		184	324	508	0.64	1990	12	131					2121	0.240			54	55	0.528	54	23
1	1	3.30	1	20			2085			465	465	1.00	1940							1940	0.240			54	55	0.528	48	23
8	1,3	3.50	1	45		N	1965	659			659	1.00	1902	12	97					1999	0.330			75	74	0.528	48	13
5,6	2,3	3.40	1	65		N	1955	149	192		341	0.44	1935							1935	0.176			40	48	0.528	42	32
4	2	3.40	1	10			2095			235	235	1.00	1822							1822	0.129	0.129		29	29	0.528	30	39
7	3	3.50	2				4210		353		353	0.00	4210							4210	0.084	0.084		19	19	0.528	27	44

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2025 Existing PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
J9 Sha Tsui Road / Tai Ho Road (E)		FILENAME : J9_STR_THRE.xlsx	Checked By:	SLN	Nov-25
			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.538
Loss time		L =	14 sec
Total Flow		=	3376 pcu
Co	= (1.5*L+5)/(1-Y)	=	56.2 sec
Cm	= L/(1-Y)	=	30.3 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	47.8 %
Cp	= 0.9*L/(0.9-Y)	=	34.8 sec
Ymax	= 1-L/C	=	0.883
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**48 %**



Stage 1	G= 50	Stage 2	G= 31	Stage 3	G= 23
	Int = 5		Int = 11		Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	8	15	4	36	15
P2	1,3	5	9	5	64	9
P3	2,3	5	10	1	54	10
P4	2,3	5	9	0	56	9
P3	2	5	8	1	33	8

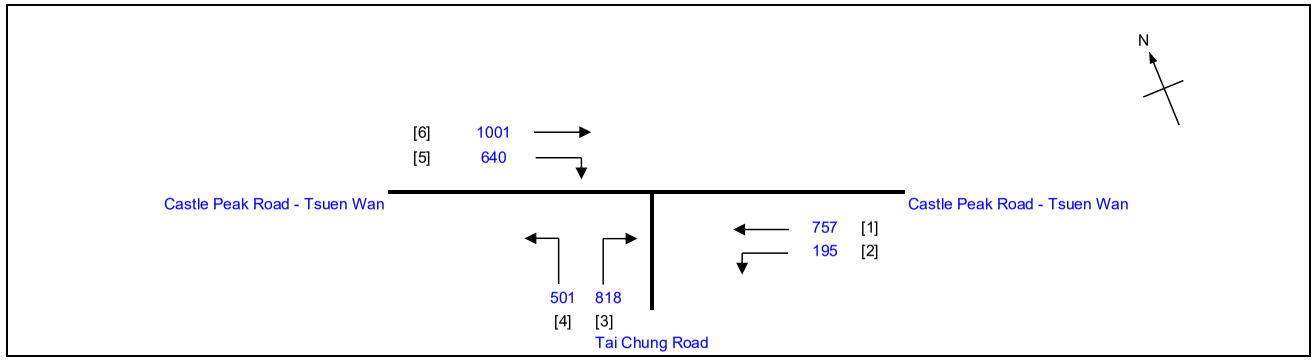
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							14					
2,3	1	3.30	1	10		N	1945	191	320		511	0.37	1842	12	141					1983	0.258			51	51	0.609	54	27
1,2	1	3.30	1	20			2085		208	342	550	0.62	1992	12	141					2133	0.258			51	51	0.609	60	27
1	1	3.30	1	20			2085			500	500	1.00	1940							1940	0.258			51	51	0.609	54	27
8	1,3	3.50	1	45		N	1965	750			750	1.00	1902	12	97					1999	0.375	0.375		74	74	0.609	54	15
5,6	2,3	3.40	1	65		N	1955	230	244		474	0.49	1933							1933	0.245			48	55	0.609	54	29
4	2	3.40	1	10			2095			296	296	1.00	1822							1822	0.162	0.162		32	32	0.609	42	40
7	3	3.50	2				4210		295		295	0.00	4210							4210	0.070			14	23	0.609	24	51

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

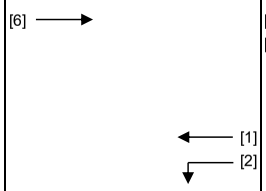
Appendix B

Junction Calculation Sheets
- Reference & Design Scenarios

LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J1_CPRTW_TCR.xlsx	Checked By:	SLN	Nov-25
J1 Castle Peak Road – Tsuen Wan / Tai Chung Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	112 sec
Sum(y)		Y =	0.556
Loss time		L =	14 sec
Total Flow		=	3912 pcu
Co	= (1.5*L+5)/(1-Y)	=	58.5 sec
Cm	= L/(1-Y)	=	31.5 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	43.1 %
Cp	= 0.9*L/(0.9-Y)	=	36.6 sec
Ymax	= 1-L/C	=	0.875
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**42 %**



Stage 1	G= 27	Stage 2	G= 30	Stage 3	G= 38
	Int = 6		Int = 5		Int = 6

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							14					
6	1,2	3.00	2			N	3970		1001		1001	0.00	3970							3970	0.252			44	59	0.635	54	26
5	2	3.00	2	13			4110			640	640	1.00	3685							3685	0.174	0.174		31	31	0.635	42	35
1,2	1	3.40	1	12		N	1955	195	93		288	0.68	1802							1802	0.160			28	28	0.635	36	40
1	1	3.20	2				4150		664		664	0.00	4150							4150	0.160	0.160		28	28	0.635	45	36
4	2,3	3.00	2	13		N	3970	501			501	1.00	3559							3559	0.141			25	70	0.635	36	39
3	3	3.00	2	13			4110			818	818	1.00	3685							3685	0.222	0.222		39	39	0.635	48	30

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
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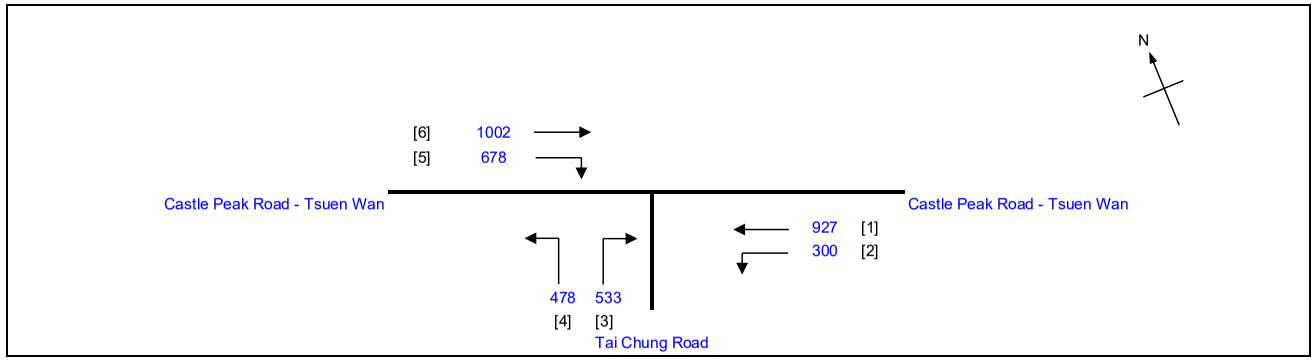
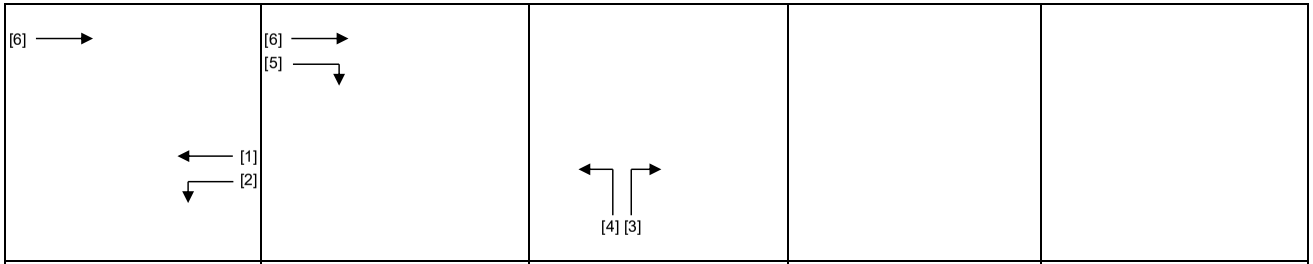
		FILENAME : J1_CPRTW_TCR.xlsx	Checked By:	SLN	Nov-25
J1 Castle Peak Road – Tsuen Wan / Tai Chung Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	122 sec
Sum(y)		Y =	0.536
Loss time		L =	14 sec
Total Flow		=	3918 pcu
Co	= (1.5*L+5)/(1-Y)	=	56.0 sec
Cm	= L/(1-Y)	=	30.2 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	48.3 %
Cp	= 0.9*L/(0.9-Y)	=	34.6 sec
Ymax	= 1-L/C	=	0.885
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**49 %**



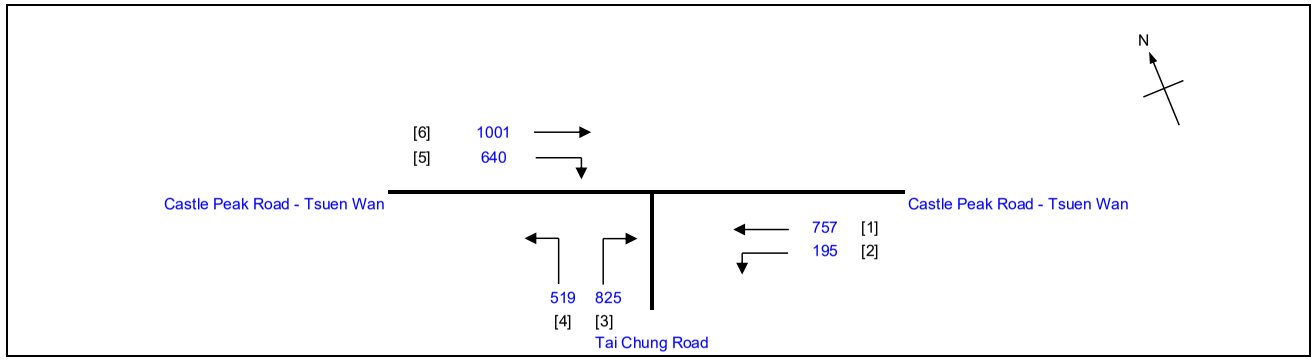
Stage 1	G= 41	Stage 2	G= 36	Stage 3	G= 28
	Int = 6		Int = 5		Int = 6

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							14					
6	1,2	3.00	2			N	3970		1002		1002	0.00	3970							3970	0.252			51	79	0.606	57	26
5	2	3.00	2	13			4110			678	678	1.00	3685							3685	0.184	0.184		37	37	0.606	45	35
1,2	1	3.40	1	12		N	1955	300	68		368	0.82	1774							1774	0.207	0.207		42	42	0.606	48	34
1	1	3.20	2				4150		859		859	0.00	4150							4150	0.207			42	42	0.606	57	32
4	2,3	3.00	2	13		N	3970	478			478	1.00	3559							3559	0.134			27	66	0.606	36	42
3	3	3.00	2	13			4110			533	533	1.00	3685							3685	0.145	0.145		29	29	0.606	39	40

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
J1 Castle Peak Road – Tsuen Wan / Tai Chung Road		FILENAME : J1_CPRTW_TCR.xlsx	Checked By:	SLN	Nov-25
			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	112 sec
Sum(y)		Y =	0.558
Loss time		L =	14 sec
Total Flow		=	3937 pcu
Co	= (1.5*L+5)/(1-Y)	=	58.8 sec
Cm	= L/(1-Y)	=	31.6 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	42.6 %
Cp	= 0.9*L/(0.9-Y)	=	36.8 sec
Ymax	= 1-L/C	=	0.875
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**41 %**

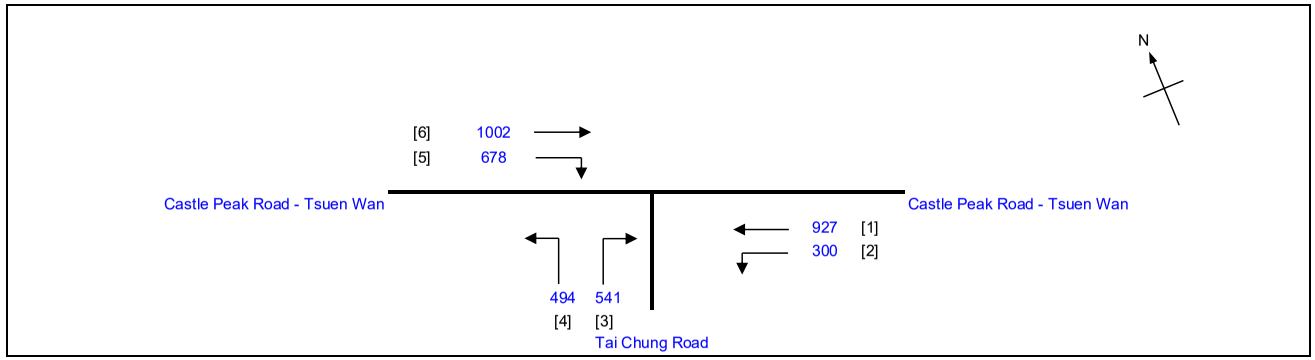
Stage 1	Stage 2	Stage 3		
[6] → ← [1] ↓ [2]	[6] → [5] ↓	← [4] → [3]		
G= 27 Int = 6	G= 30 Int = 5	G= 38 Int = 6		

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							14					
6	1,2	3.00	2			N	3970		1001		1001	0.00	3970							3970	0.252			44	59	0.637	54	26
5	2	3.00	2	13			4110			640	640	1.00	3685							3685	0.174	0.174		31	31	0.637	42	35
1,2	1	3.40	1	12		N	1955	195	93		288	0.68	1802							1802	0.160			28	28	0.637	36	40
1	1	3.20	2				4150		664		664	0.00	4150							4150	0.160	0.160		28	28	0.637	45	36
4	2,3	3.00	2	13		N	3970	519			519	1.00	3559							3559	0.146			26	70	0.637	36	39
3	3	3.00	2	13			4110			825	825	1.00	3685							3685	0.224	0.224		39	39	0.637	48	30

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J1_CPRTW_TCR.xlsx	Checked By:	SLN	Nov-25
J1 Castle Peak Road – Tsuen Wan / Tai Chung Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	122 sec
Sum(y)		Y =	0.538
Loss time		L =	14 sec
Total Flow		=	3942 pcu
Co	= (1.5*L+5)/(1-Y)	=	56.3 sec
Cm	= L/(1-Y)	=	30.3 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	47.7 %
Cp	= 0.9*L/(0.9-Y)	=	34.8 sec
Ymax	= 1-L/C	=	0.885
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**48 %**

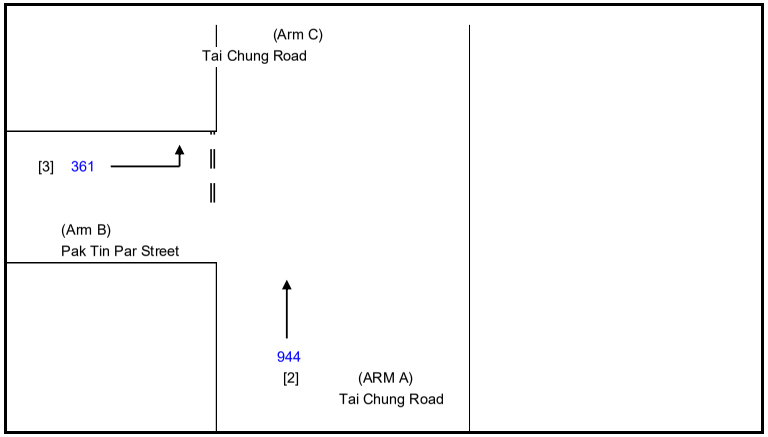
Stage 1	Stage 2	Stage 3		
[6] [1] [2]	[6] [5]	[4] [3]		
G= 41	G= 36	G= 28		
Int = 6	Int = 5	Int = 6		

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							14					
6	1,2	3.00	2			N	3970		1002		1002	0.00	3970							3970	0.252			51	79	0.608	57	27
5	2	3.00	2	13			4110			678	678	1.00	3685							3685	0.184	0.184		37	37	0.608	48	35
1,2	1	3.40	1	12		N	1955	300	68		368	0.82	1774							1774	0.207	0.207		42	42	0.608	48	34
1	1	3.20	2				4150		859		859	0.00	4150							4150	0.207			42	42	0.608	57	32
4	2,3	3.00	2	13		N	3970	494			494	1.00	3559							3559	0.139			28	66	0.608	36	41
3	3	3.00	2	13			4110			541	541	1.00	3685							3685	0.147	0.147		29	29	0.608	39	40

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	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference AM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J2_TCR_PTP	CHECKED BY:	SLN	Nov-25
J2 Tai Chung Road / Pak Tin Par Street		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	20.00	(metres)
W cr	=	3.4	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	944	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	0.00	(metres)
Vr c-b	=	0	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	4.50	(metres)
Vl b-a	=	0	(metres)
Vr b-a	=	0	(metres)
Vr b-c	=	40	(metres)
q b-a	=	0	(pcu/hr)
q b-c	=	361	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.53322
E	=	1.00215
F	=	0.58595
Y	=	0.31000
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

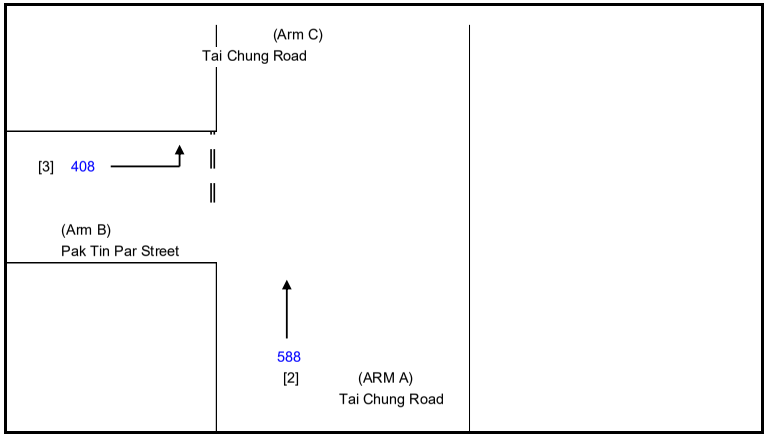
Q b-a	=	303		
Q b-c	=	640	Q b-c (O) =	640
Q c-b	=	374		
Q b-ac	=	640		
TOTAL FLOW	=	1305	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.5641
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.5641

CRITICAL DFC = 0.56

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference PM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J2_TCR_PTP	CHECKED BY:	SLN	Nov-25
J2 Tai Chung Road / Pak Tin Par Street		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	20.00	(metres)
W cr	=	3.4	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	588	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	0.00	(metres)
Vr c-b	=	0	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	4.50	(metres)
Vl b-a	=	0	(metres)
Vr b-a	=	0	(metres)
Vr b-c	=	40	(metres)
q b-a	=	0	(pcu/hr)
q b-c	=	408	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.53322
E	=	1.00215
F	=	0.58595
Y	=	0.31000
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

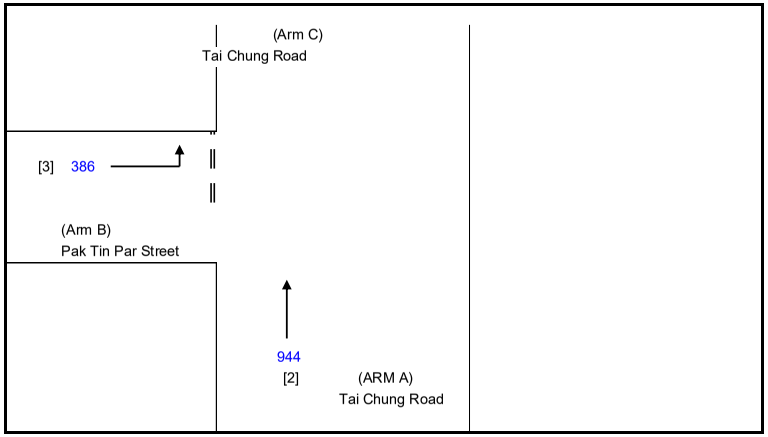
Q b-a	=	324		
Q b-c	=	680	Q b-c (O) =	680
Q c-b	=	398		
Q b-ac	=	680		
TOTAL FLOW	=	996	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.6000
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.6000

CRITICAL DFC = 0.60

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design AM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J2_TCR_PTP	CHECKED BY:	SLN	Nov-25
J2 Tai Chung Road / Pak Tin Par Street		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	20.00	(metres)
W cr	=	3.4	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	944	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	0.00	(metres)
Vr c-b	=	0	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	4.50	(metres)
Vl b-a	=	0	(metres)
Vr b-a	=	0	(metres)
Vr b-c	=	40	(metres)
q b-a	=	0	(pcu/hr)
q b-c	=	386	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.53322
E	=	1.00215
F	=	0.58595
Y	=	0.31000
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

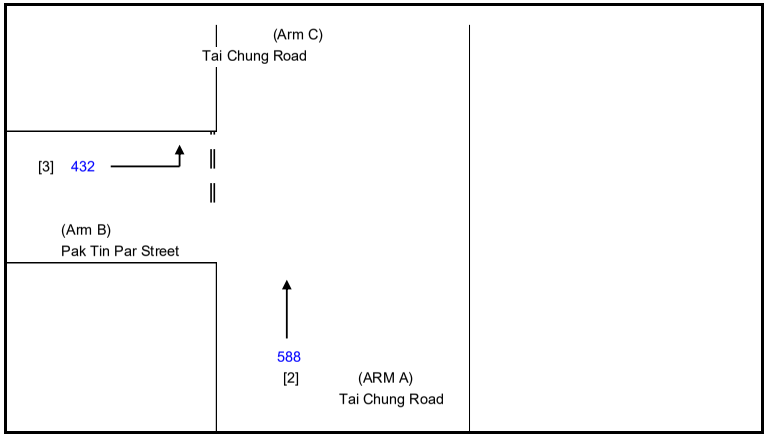
Q b-a	=	303		
Q b-c	=	640	Q b-c (O) =	640
Q c-b	=	374		
Q b-ac	=	640		
TOTAL FLOW	=	1330	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.6031
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.6031

CRITICAL DFC = 0.60

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design PM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J2_TCR_PTP	CHECKED BY:	SLN	Nov-25
J2 Tai Chung Road / Pak Tin Par Street		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	20.00	(metres)
W cr	=	3.4	(metres)
q a-b	=	0	(pcu/hr)
q a-c	=	588	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	0.00	(metres)
Vr c-b	=	0	(metres)
q c-a	=	0	(pcu/hr)
q c-b	=	0	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	4.50	(metres)
Vl b-a	=	0	(metres)
Vr b-a	=	0	(metres)
Vr b-c	=	40	(metres)
q b-a	=	0	(pcu/hr)
q b-c	=	432	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.53322
E	=	1.00215
F	=	0.58595
Y	=	0.31000
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

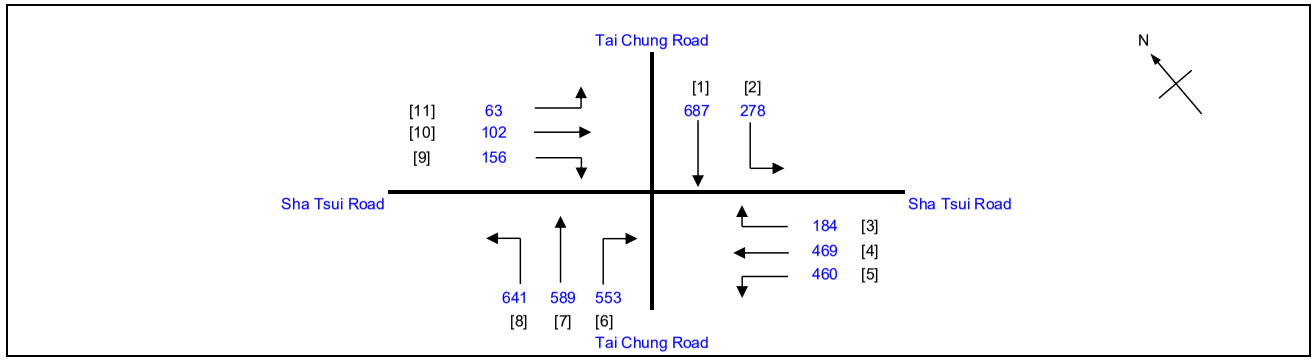
Q b-a	=	324		
Q b-c	=	680	Q b-c (O) =	680
Q c-b	=	398		
Q b-ac	=	680		
TOTAL FLOW	=	1020	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

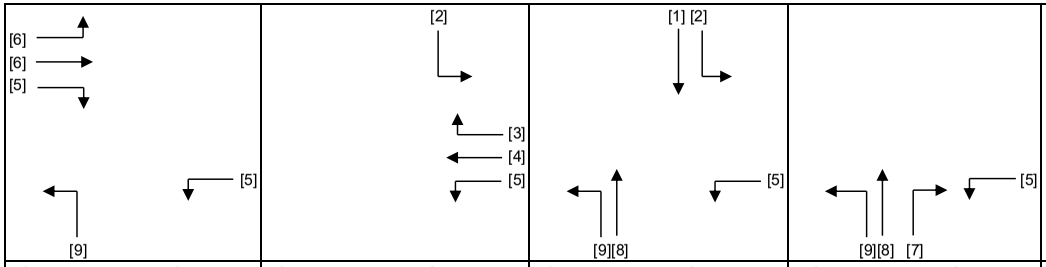
DFC b-a	=	0.0000
DFC b-c	=	0.6353
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.6353

CRITICAL DFC = 0.64

LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J3_TCR_STR.xlsx	Checked By:	SLN	Nov-25
J3 Tai Chung Road / Sha Tsui Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	112 sec
Sum(y)		Y =	0.533
Loss time		L =	19 sec
Total Flow		=	3722 pcu
Co	= (1.5*L+5)/(1-Y)	=	71.7 sec
Cm	= L/(1-Y)	=	40.7 sec
Yult		=	0.758
R.C.ult	= (Yult-Y)/Y*100%	=	42.1 %
Cp	= 0.9*L/(0.9-Y)	=	46.6 sec
Ymax	= 1-L/C	=	0.830
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**40 %**



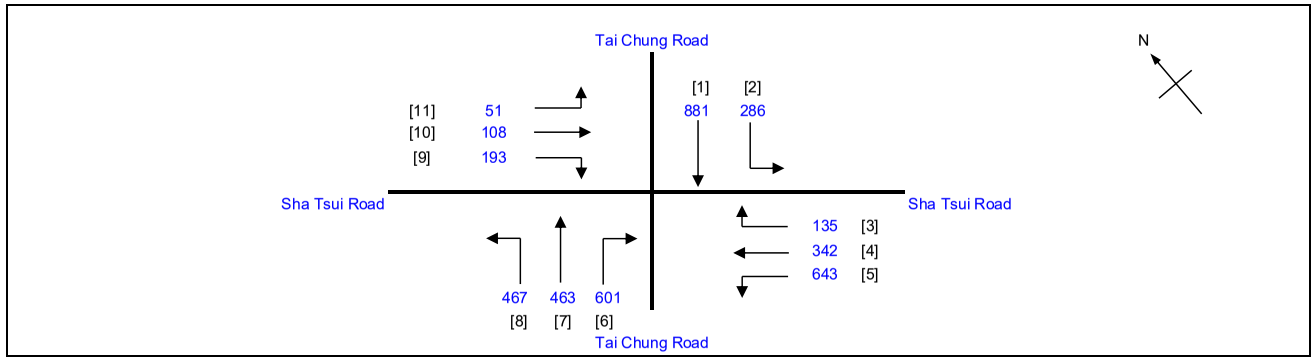
Stage 1	G= 14	Stage 2	G= 27	Stage 3	G= 19	Stage 4	G= 29
	Int = 7		Int = 8		Int =		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

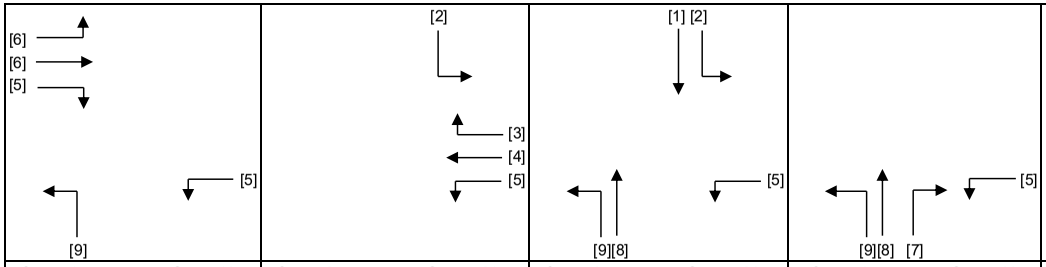
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							19					
10,11	1	3.40	1	8		N	1955	63	96		159	0.40	1820							1820	0.087	0.087		15	15	0.642	24	53
9,10	1	3.20	1	13			2075		6	156	162	0.96	1868							1868	0.087			15	15	0.642	24	53
2	2,3	3.00	2	12		N	3970	278			278	1.00	3529							3529	0.079			14	47	0.642	21	49
1	3	3.00	3				6165		687		687	0.00	6165							6165	0.111			19	19	0.642	34	41
4	2	3.80	1				2135		342		342	0.00	2135							2135	0.160			28	28	0.642	42	39
3,4	2	3.00	1	15			2055		127	184	311	0.59	1940							1940	0.160	0.160		28	28	0.642	42	40
8	1,3,4	3.10	1	20		N	1925	641			641	1.00	1791							1791	0.358			62	65	0.642	48	18
7	3,4	3.10	1				2065		589		589	0.00	2065							2065	0.285	0.285		50	50	0.642	60	25
6	4	3.10	2	12			4130			553	553	1.00	3671							3671	0.151			26	30	0.642	39	38

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J3_TCR_STR.xlsx	Checked By:	SLN	Nov-25
J3 Tai Chung Road / Sha Tsui Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.527
Loss time		L =	20 sec
Total Flow		=	3527 pcu
Co	= (1.5*L+5)/(1-Y)	=	74.1 sec
Cm	= L/(1-Y)	=	42.3 sec
Yult		=	0.750
R.C.ult	= (Yult-Y)/Y*100%	=	42.2 %
Cp	= 0.9*L/(0.9-Y)	=	48.3 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**42 %**



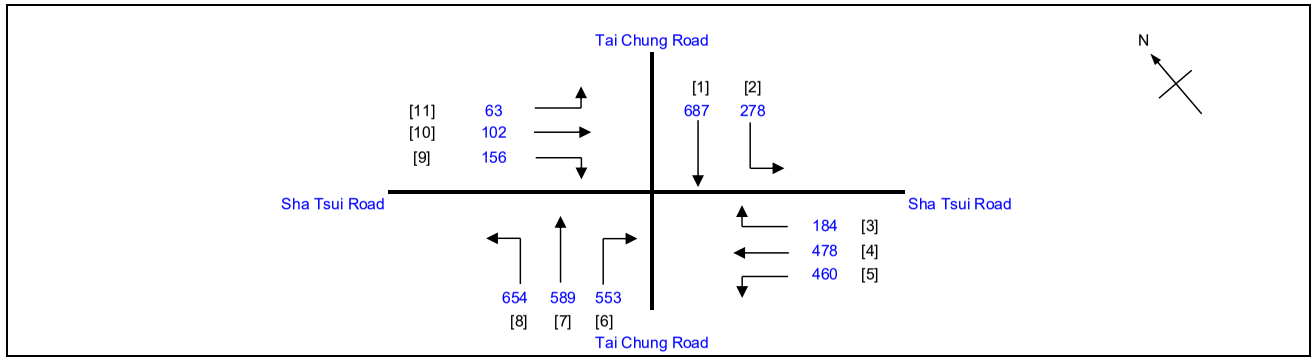
Stage 1	G= 19	Stage 2	G= 21	Stage 3	G= 26	Stage 4	G= 30
	Int = 7		Int = 5		Int = 5		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

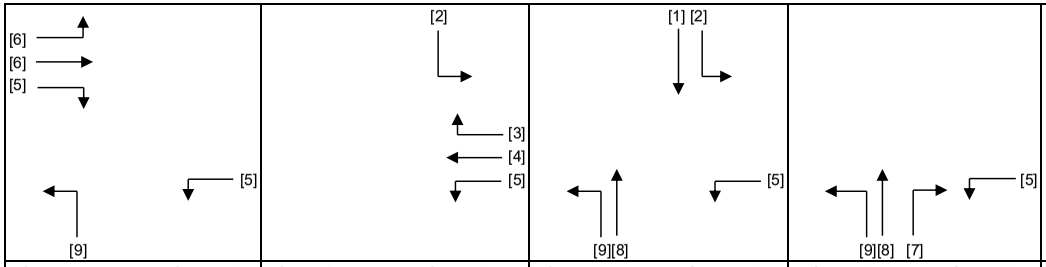
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							20					
10,11	1	3.40	1	8		N	1955	51	108		159	0.32	1844							1844	0.086			16	20	0.633	24	55
9,10	1	3.20	1	13			2075		0	193	193	1.00	1860							1860	0.104	0.104		20	20	0.633	30	51
2	2,3	3.00	2	12		N	3970	286			286	1.00	3529							3529	0.081			15	49	0.633	24	51
1	3	3.00	3				6165		881		881	0.00	6165							6165	0.143	0.143		27	27	0.633	44	40
4	2	3.80	1				2135		250		250	0.00	2135							2135	0.117	0.117		22	22	0.633	36	48
3,4	2	3.00	1	15			2055		92	135	227	0.59	1940							1940	0.117			22	22	0.633	36	48
8	1,3,4	3.10	1	20		N	1925	467			467	1.00	1791							1791	0.261			49	78	0.633	54	29
7	3,4	3.10	1				2065		463		463	0.00	2065							2065	0.224			43	58	0.633	54	33
6	4	3.10	2	12			4130			601	601	1.00	3671							3671	0.164	0.164		31	31	0.633	42	38

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J3_TCR_STR.xlsx	Checked By:	SLN	Nov-25
J3 Tai Chung Road / Sha Tsui Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	112 sec
Sum(y)		Y =	0.535
Loss time		L =	19 sec
Total Flow		=	3744 pcu
Co	= (1.5*L+5)/(1-Y)	=	72.1 sec
Cm	= L/(1-Y)	=	40.9 sec
Yult		=	0.758
R.C.ult	= (Yult-Y)/Y*100%	=	41.6 %
Cp	= 0.9*L/(0.9-Y)	=	46.9 sec
Ymax	= 1-L/C	=	0.830
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**40 %**



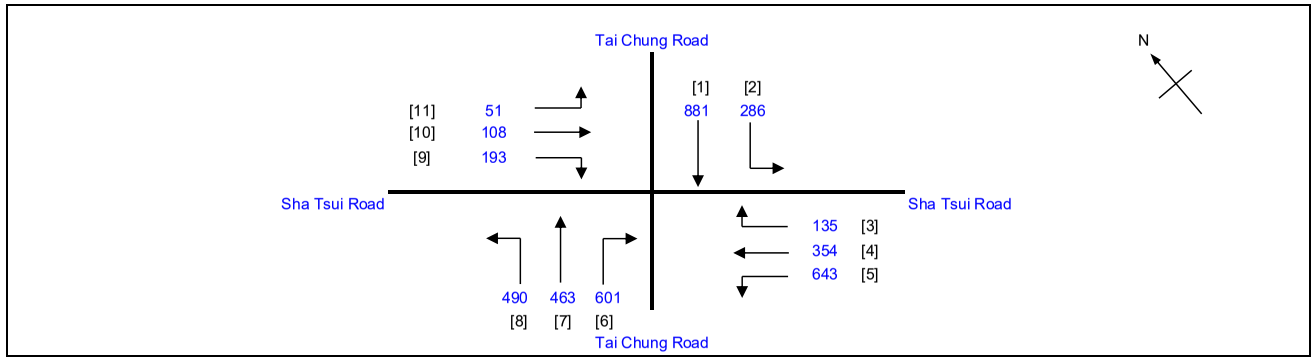
Stage 1	G= 14	Stage 2	G= 27	Stage 3	G= 19	Stage 4	G= 29
	Int = 7		Int = 8		Int =		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

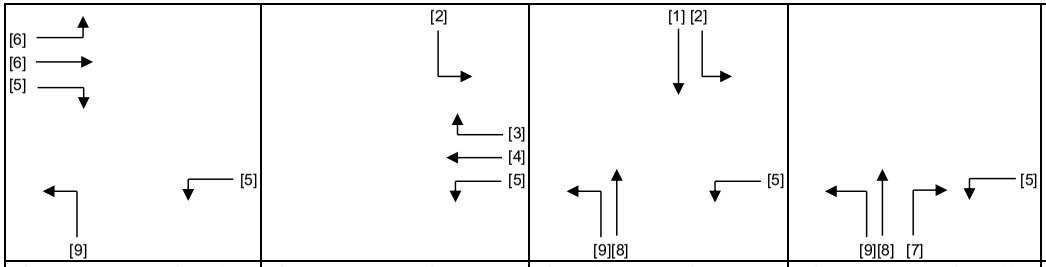
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							19					
10,11	1	3.40	1	8		N	1955	63	96		159	0.40	1820							1820	0.087	0.087		15	15	0.644	24	53
9,10	1	3.20	1	13			2075		6	156	162	0.96	1868							1868	0.087			15	15	0.644	24	53
2	2,3	3.00	2	12		N	3970	278			278	1.00	3529							3529	0.079			14	48	0.644	21	49
1	3	3.00	3				6165		687		687	0.00	6165							6165	0.111			19	19	0.644	34	42
4	2	3.80	1				2135		347		347	0.00	2135							2135	0.163	0.163		28	28	0.644	48	39
3,4	2	3.00	1	15			2055		131	184	315	0.58	1942							1942	0.162			28	28	0.644	42	40
8	1,3,4	3.10	1	20		N	1925	654			654	1.00	1791							1791	0.365			63	65	0.644	48	18
7	3,4	3.10	1				2065		589		589	0.00	2065							2065	0.285	0.285		50	50	0.644	60	25
6	4	3.10	2	12			4130			553	553	1.00	3671							3671	0.151			26	30	0.644	39	38

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J3_TCR_STR.xlsx	Checked By:	SLN	Nov-25
J3 Tai Chung Road / Sha Tsui Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.530
Loss time		L =	20 sec
Total Flow		=	3562 pcu
Co	= (1.5*L+5)/(1-Y)	=	74.5 sec
Cm	= L/(1-Y)	=	42.6 sec
Yult		=	0.750
R.C.ult	= (Yult-Y)/Y*100%	=	41.4 %
Cp	= 0.9*L/(0.9-Y)	=	48.7 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**41 %**



Stage 1	G= 19	Stage 2	G= 22	Stage 3	G= 26	Stage 4	G= 30
	Int = 7		Int = 5		Int = 5		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							20					
10,11	1	3.40	1	8		N	1955	51	108		159	0.32	1844							1844	0.086			16	20	0.636	24	56
9,10	1	3.20	1	13			2075		0	193	193	1.00	1860							1860	0.104	0.104		20	20	0.636	30	52
2	2,3	3.00	2	12		N	3970	286			286	1.00	3529							3529	0.081			15	50	0.636	24	51
1	3	3.00	3				6165		881		881	0.00	6165							6165	0.143	0.143		27	27	0.636	44	40
4	2	3.80	1				2135		256		256	0.00	2135							2135	0.120			23	23	0.636	36	47
3,4	2	3.00	1	15			2055		98	135	233	0.58	1942							1942	0.120	0.120		23	23	0.636	36	48
8	1,3,4	3.10	1	20		N	1925	490			490	1.00	1791							1791	0.274			52	77	0.636	54	28
7	3,4	3.10	1				2065		463		463	0.00	2065							2065	0.224			42	58	0.636	54	33
6	4	3.10	2	12			4130			601	601	1.00	3671							3671	0.164	0.164		31	31	0.636	42	39

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

TRAFFIC SIGNAL CALCULATION

INITIALS	DATE
SKL	Nov-25
SLN	Nov-25
SLN	Nov-25

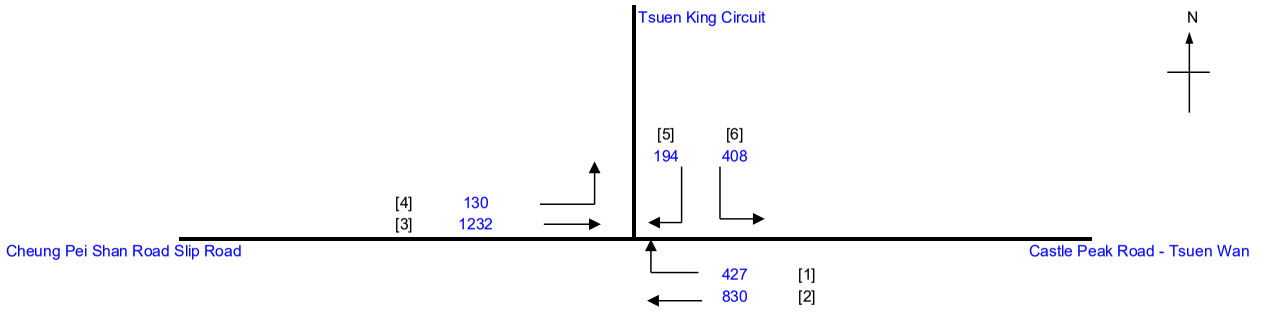
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

J4 Castle Peak Road – Tsuen Wan / Tsuen King Circuit

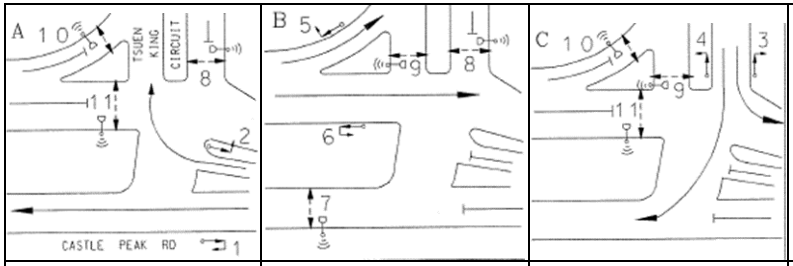
2033 Reference AM

PROJECT NO.: 40999
FILENAME : J4_CRPTW_TKC.xlsx

Prepared By: SKL Nov-25
Checked By: SLN Nov-25
Reviewed By: SLN Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	112 sec
Sum(y)		Y =	0.461
Loss time		L =	29 sec
Total Flow		=	3221 pcu
Co	= (1.5*L+5)/(1-Y)	=	90.0 sec
Cm	= L/(1-Y)	=	53.8 sec
Yult		=	0.683
R.C.ult	= (Yult-Y)/Y*100%	=	48.1 %
Cp	= 0.9*L/(0.9-Y)	=	59.4 sec
Ymax	= 1-L/C	=	0.741
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**45 %**



Stage	G=	Int =
Stage 1	36	11
Stage 2	28	7
Stage 3	16	14

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2	5	6	2	27	6
P2	1,2	5	13	0	69	13
P3	2,3	5	13	6	46	13
P4	1,3	5	8	0	69	8
P5	1,3	5	13	0	64	13

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							29					
1	1	3.65	3	33			6360			427	427	1.00	6083							6083	0.070			13	37	0.622	22	47
2	1	3.40	2			N	4050		830		830	0.00	4050							4050	0.205	0.205		37	37	0.622	51	30
3,4	2	3.60	1	48		N	1975	130	181		311	0.42	1950							1950	0.160	0.160		29	29	0.622	42	38
3	2	3.60	3				6345		1051		1051	0.00	6345	12	248					6593	0.159			29	29	0.622	48	35
6	3	3.00	2	15		N	3970	406			406	1.00	3609	18	635					4244	0.096			17	17	0.622	0	0
5,6	3	3.40	1	50			2095	2		194	196	1.00	2034							2034	0.096	0.096		17	17	0.622	30	48

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

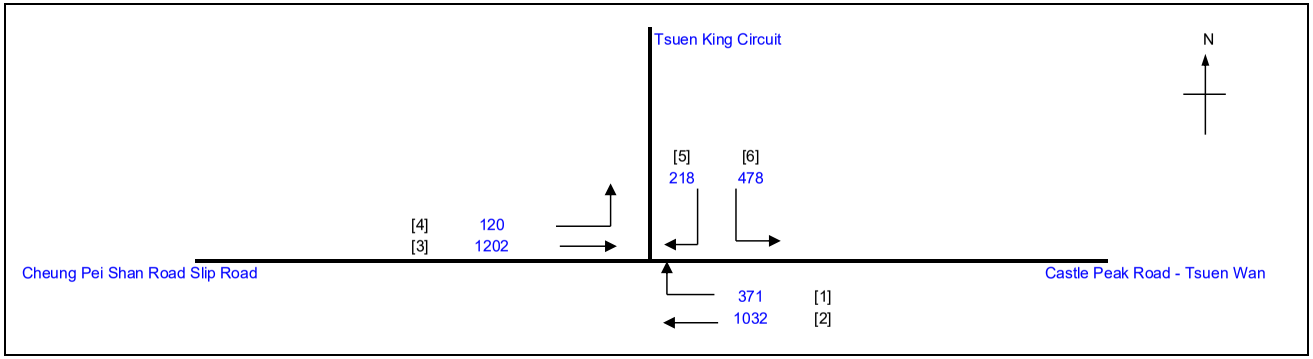
TRAFFIC SIGNAL CALCULATION

Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

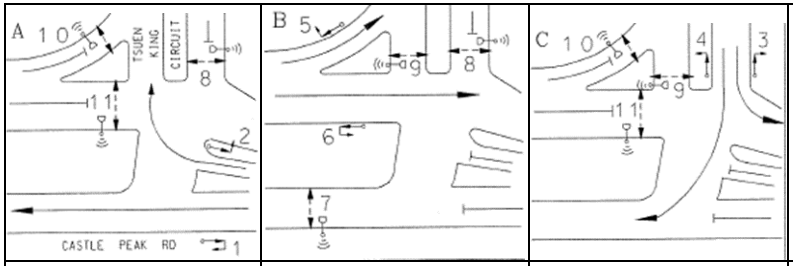
J4 Castle Peak Road – Tsuen Wan / Tsuen King Circuit

2033 Reference PM

			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J4_CRPTW_TKC.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	122 sec
Sum(y)		Y =	0.522
Loss time		L =	29 sec
Total Flow		=	3421 pcu
Co	= (1.5*L+5)/(1-Y)	=	101.5 sec
Cm	= L/(1-Y)	=	60.7 sec
Yult		=	0.683
R.C.ult	= (Yult-Y)/Y*100%	=	30.7 %
Cp	= 0.9*L/(0.9-Y)	=	69.1 sec
Ymax	= 1-L/C	=	0.762
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**31 %**



Stage 1	G= 44	Stage 2	G= 27	Stage 3	G= 19
	Int = 11		Int = 7		Int = 14

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2	5	6	2	26	6
P2	1,2	5	13	0	76	13
P3	2,3	5	13	6	48	13
P4	1,3	5	8	0	80	8
P5	1,3	5	13	0	75	13

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							29					
1	1	3.65	3	33			6360			371	371	1.00	6083							6083	0.061			11	45	0.685	22	55
2	1	3.40	2			N	4050		1032		1032	0.00	4050							4050	0.255	0.255		45	45	0.685	63	31
3,4	2	3.60	1	48		N	1975	120	182		302	0.40	1951							1951	0.155	0.155		28	28	0.685	42	47
3	2	3.60	3				6345		1020		1020	0.00	6345	12	257					6602	0.154			28	28	0.685	52	41
6	3	3.00	2	15		N	3970	467			467	1.00	3609	18	540					4149	0.113			20	20	0.685	0	0
5,6	3	3.40	1	50			2095	11		218	229	1.00	2034							2034	0.113	0.113		20	20	0.685	36	54

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

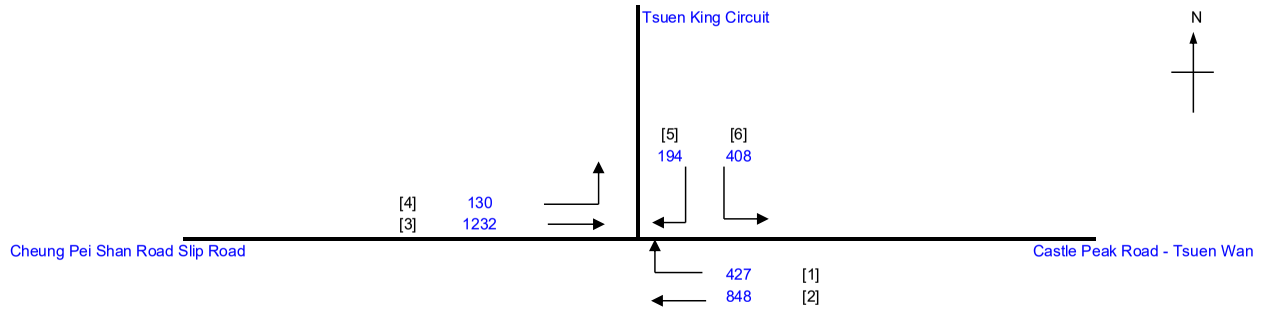
TRAFFIC SIGNAL CALCULATION

Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

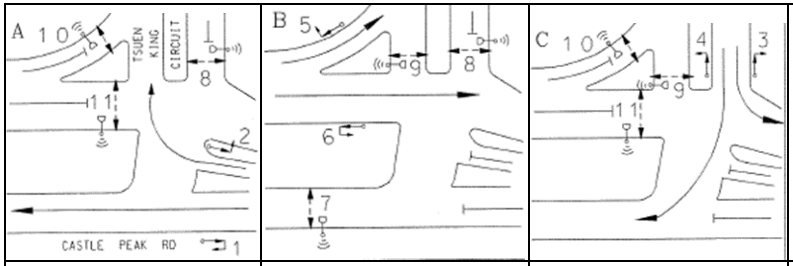
J4 Castle Peak Road – Tsuen Wan / Tsuen King Circuit

2033 Design AM

			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J4_CRPTW_TKC.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	112 sec
Sum(y)		Y =	0.465
Loss time		L =	29 sec
Total Flow		=	3239 pcu
Co	= (1.5*L+5)/(1-Y)	=	90.7 sec
Cm	= L/(1-Y)	=	54.2 sec
Yult		=	0.683
R.C.ult	= (Yult-Y)/Y*100%	=	46.7 %
Cp	= 0.9*L/(0.9-Y)	=	60.0 sec
Ymax	= 1-L/C	=	0.741
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**43 %**



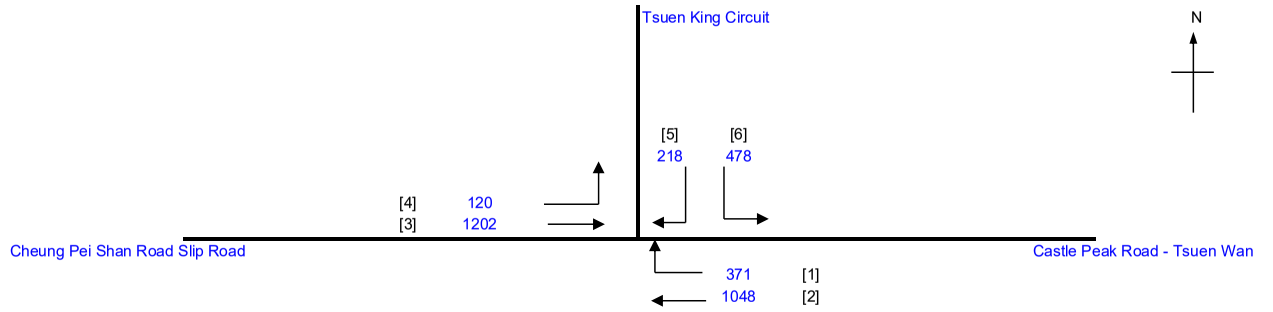
Stage 1	G= 36	Int = 11	
Stage 2	G= 27	Int = 7	
Stage 3	G= 16	Int = 14	

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2	5	6	2	26	6
P2	1,2	5	13	0	69	13
P3	2,3	5	13	6	46	13
P4	1,3	5	8	0	70	8
P5	1,3	5	13	0	65	13

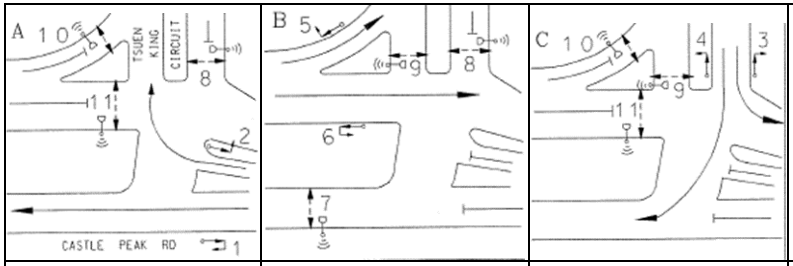
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							29					
1	1	3.65	3	33			6360			427	427	1.00	6083							6083	0.070			13	37	0.628	22	47
2	1	3.40	2			N	4050		848		848	0.00	4050							4050	0.209	0.209		37	37	0.628	51	30
3,4	2	3.60	1	48		N	1975	130	181		311	0.42	1950							1950	0.160	0.160		28	28	0.628	42	39
3	2	3.60	3				6345		1051		1051	0.00	6345	12	248					6593	0.159			28	28	0.628	48	35
6	3	3.00	2	15		N	3970	406			406	1.00	3609	18	635					4244	0.096			17	17	0.628	0	0
5,6	3	3.40	1	50			2095	2		194	196	1.00	2034							2034	0.096	0.096		17	17	0.628	30	49

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J4_CRPTW_TKC.xlsx	Checked By:	SLN	Nov-25
J4 Castle Peak Road – Tsuen Wan / Tsuen King Circuit			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	122 sec
Sum(y)		Y =	0.526
Loss time		L =	29 sec
Total Flow		=	3437 pcu
Co	= (1.5*L+5)/(1-Y)	=	102.4 sec
Cm	= L/(1-Y)	=	61.2 sec
Yult		=	0.683
R.C.ult	= (Yult-Y)/Y*100%	=	29.7 %
Cp	= 0.9*L/(0.9-Y)	=	69.8 sec
Ymax	= 1-L/C	=	0.762
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**30 %**



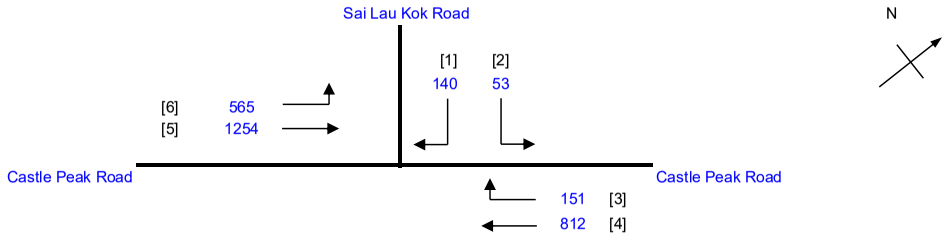
Stage 1	G= 45	Stage 2	G= 26	Stage 3	G= 19
	Int = 11		Int = 7		Int = 14

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2	5	6	2	25	6
P2	1,2	5	13	0	76	13
P3	2,3	5	13	6	47	13
P4	1,3	5	8	0	81	8
P5	1,3	5	13	0	76	13

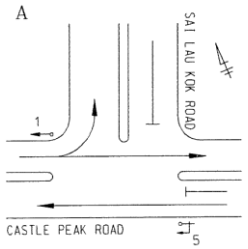
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							29					
1	1	3.65	3	33			6360			371	371	1.00	6083							6083	0.061			11	46	0.690	22	55
2	1	3.40	2			N	4050		1048		1048	0.00	4050							4050	0.259	0.259		46	46	0.690	66	31
3,4	2	3.60	1	48		N	1975	120	182		302	0.40	1951							1951	0.155	0.155		27	27	0.690	42	47
3	2	3.60	3				6345		1020		1020	0.00	6345	12	267					6612	0.154			27	27	0.690	52	42
6	3	3.00	2	15		N	3970	467			467	1.00	3609	18	540					4149	0.113			20	20	0.690	0	0
5,6	3	3.40	1	50			2095	11		218	229	1.00	2034							2034	0.113	0.113		20	20	0.690	36	54

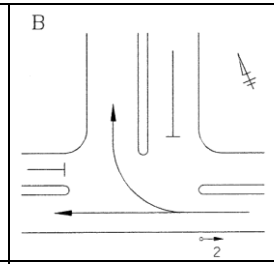
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

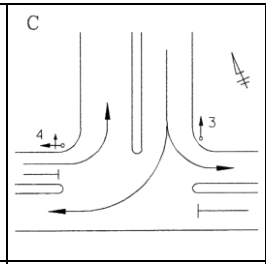
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J5_CPRTW_SLKR.xlsx	Checked By:	SLN	Nov-25
J5 Castle Peak Road – Tsuen Wan / Sai Lau Kok Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.423
Loss time		L =	17 sec
Total Flow		=	2975 pcu
Co	= (1.5*L+5)/(1-Y)	=	52.9 sec
Cm	= L/(1-Y)	=	29.5 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	82.6 %
Cp	= 0.9*L/(0.9-Y)	=	32.1 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**83 %**







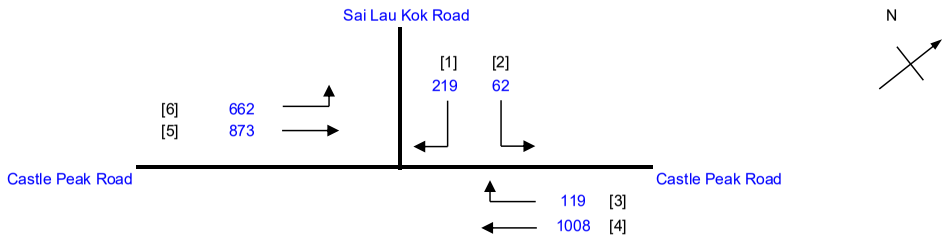
Stage 1	G= 73	Stage 2	G= 18	Stage 3	G= 8
	Int = 5		Int = 8		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

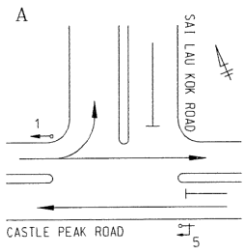
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							17					
6	1,3	3.00	2	12		N	3970	565			565	1.00	3529							3529	0.160			39	84	0.493	36	31
5	1	3.00	2				4110		1254		1254	0.00	4110							4110	0.305	0.305		74	74	0.493	45	12
4	1,2	3.00	3			N	6025		812		812	0.00	6025							6025	0.135			33	94	0.493	38	34
3	2	3.00	1	17			2055			151	151	1.00	1888							1888	0.080	0.080		19	19	0.493	24	46
2	3	3.60	1	20		N	1975	53			53	1.00	1837							1837	0.029			7	9	0.493	6	64
1,2	3	3.60	1	10			2115	0		70	70	1.00	1839							1839	0.038	0.038		9	9	0.493	12	59
1	3	3.60	1	10			2115			70	70	1.00	1839							1839	0.038			9	9	0.493	12	59

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

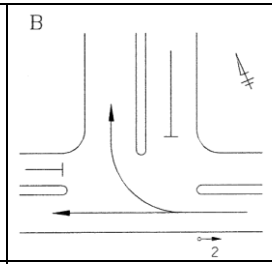
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J5_CPRTW_SLKR.xlsx	Checked By:	SLN	Nov-25
J5 Castle Peak Road – Tsuen Wan / Sai Lau Kok Road			Reviewed By:	SLN	Nov-25



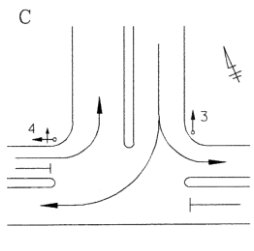
No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.335
Loss time		L =	17 sec
Total Flow		=	2943 pcu
Co	= (1.5*L+5)/(1-Y)	=	45.9 sec
Cm	= L/(1-Y)	=	25.6 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	130.4 %
Cp	= 0.9*L/(0.9-Y)	=	27.1 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**130 %**



Stage 1 G= 64 Int = 5



Stage 2 G= 18 Int = 8



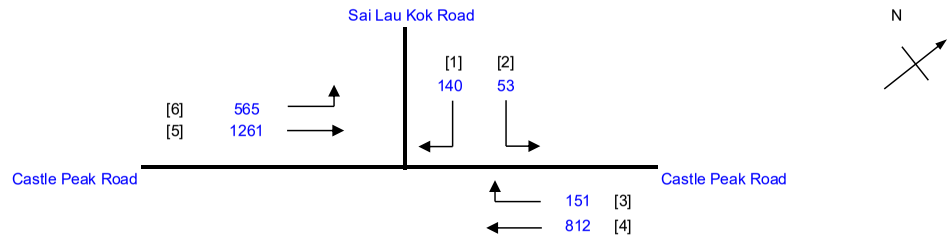
Stage 3 G= 17 Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

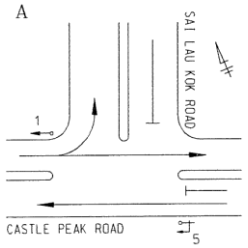
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							17					
6	1,3	3.00	2	12		N	3970	662			662	1.00	3529							3529	0.188			58	84	0.391	33	19
5	1	3.00	2				4110		873		873	0.00	4110							4110	0.212	0.212		65	65	0.391	39	15
4	1,2	3.00	3			N	6025		1008		1008	0.00	6025							6025	0.167			51	85	0.391	38	22
3	2	3.00	1	17			2055			119	119	1.00	1888							1888	0.063	0.063		19	19	0.391	18	44
2	3	3.60	1	20		N	1975	62			62	1.00	1837							1837	0.034			10	18	0.391	6	53
1,2	3	3.60	1	10			2115	0		109	109	1.00	1839							1839	0.059			18	18	0.391	18	45
1	3	3.60	1	10			2115			110	110	1.00	1839							1839	0.060	0.060		18	18	0.391	18	45

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

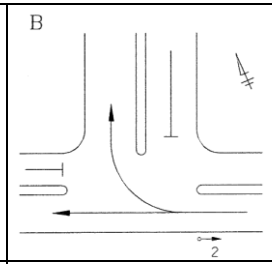
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J5_CPRTW_SLKR.xlsx	Checked By:	SLN	Nov-25
J5 Castle Peak Road – Tsuen Wan / Sai Lau Kok Road			Reviewed By:	SLN	Nov-25



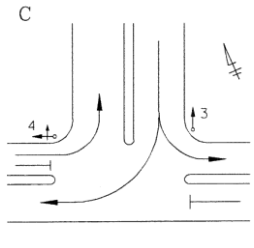
No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.425
Loss time		L =	17 sec
Total Flow		=	2982 pcu
Co	= (1.5*L+5)/(1-Y)	=	53.0 sec
Cm	= L/(1-Y)	=	29.6 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	81.8 %
Cp	= 0.9*L/(0.9-Y)	=	32.2 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**82 %**



Stage 1 G= 73 Int = 5



Stage 2 G= 18 Int = 8



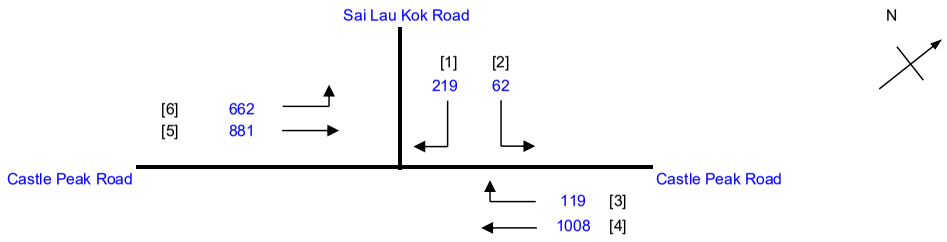
Stage 3 G= 8 Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

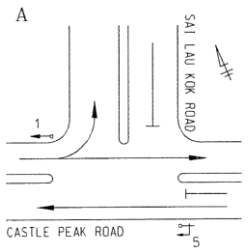
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							17					
6	1,3	3.00	2	12		N	3970	565			565	1.00	3529							3529	0.160			39	84	0.495	36	31
5	1	3.00	2				4110		1261		1261	0.00	4110							4110	0.307	0.307		74	74	0.495	45	12
4	1,2	3.00	3			N	6025		812		812	0.00	6025							6025	0.135			33	94	0.495	38	34
3	2	3.00	1	17			2055			151	151	1.00	1888							1888	0.080	0.080		19	19	0.495	24	46
2	3	3.60	1	20		N	1975	53			53	1.00	1837							1837	0.029			7	9	0.495	6	64
1,2	3	3.60	1	10			2115	0		70	70	1.00	1839							1839	0.038	0.038		9	9	0.495	12	59
1	3	3.60	1	10			2115			70	70	1.00	1839							1839	0.038			9	9	0.495	12	59

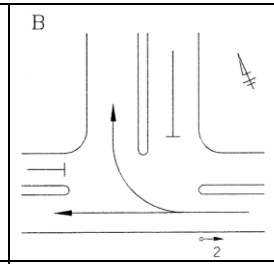
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

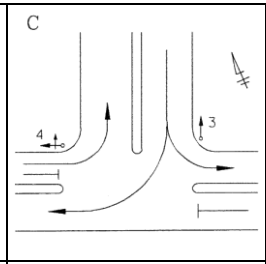
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J5_CPRTW_SLKR.xlsx	Checked By:	SLN	Nov-25
J5 Castle Peak Road – Tsuen Wan / Sai Lau Kok Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.337
Loss time		L =	17 sec
Total Flow		=	2951 pcu
Co	= (1.5*L+5)/(1-Y)	=	46.0 sec
Cm	= L/(1-Y)	=	25.6 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	129.1 %
Cp	= 0.9*L/(0.9-Y)	=	27.2 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**129 %**







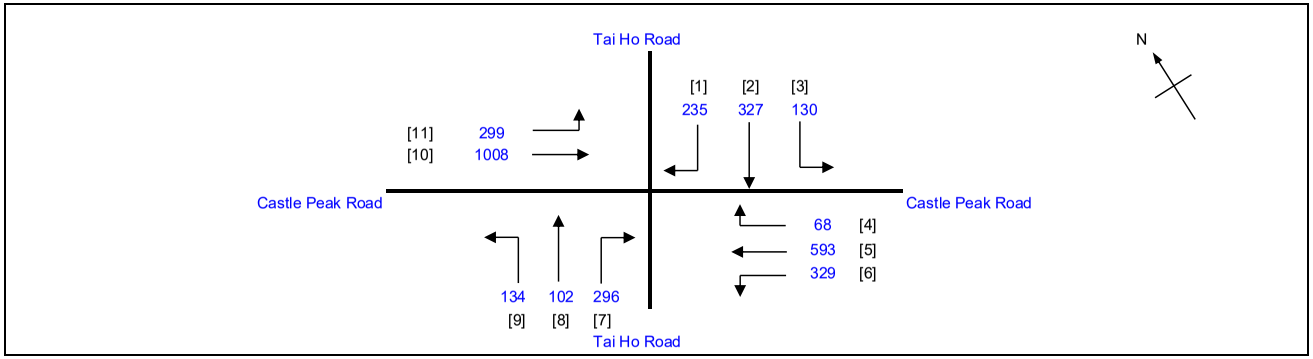
Stage 1	G= 64	Stage 2	G= 18	Stage 3	G= 17
	Int = 5		Int = 8		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

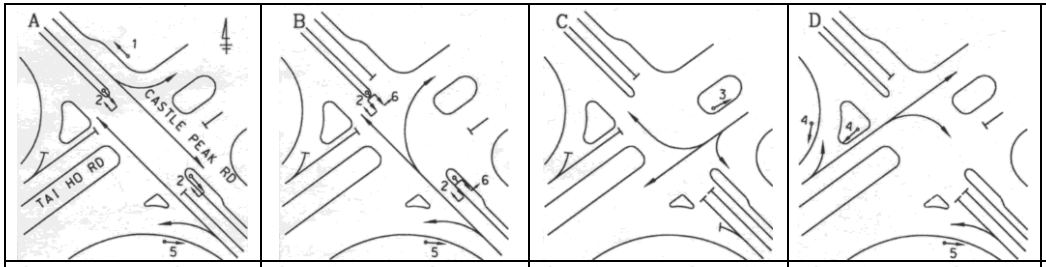
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							17					
6	1,3	3.00	2	12		N	3970	662			662	1.00	3529							3529	0.188			57	84	0.393	33	19
5	1	3.00	2				4110		881		881	0.00	4110							4110	0.214	0.214		65	65	0.393	39	15
4	1,2	3.00	3			N	6025		1008		1008	0.00	6025							6025	0.167			51	85	0.393	38	22
3	2	3.00	1	17			2055			119	119	1.00	1888							1888	0.063	0.063		19	19	0.393	18	44
2	3	3.60	1	20		N	1975	62			62	1.00	1837							1837	0.034			10	18	0.393	6	53
1,2	3	3.60	1	10			2115	0		109	109	1.00	1839							1839	0.059			18	18	0.393	18	45
1	3	3.60	1	10			2115			110	110	1.00	1839							1839	0.060	0.060		18	18	0.393	18	45

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J6_CPRTW_THR.xlsx	Checked By:	SLN	Nov-25
J6 Castle Peak Road - Tsuen Wan / Tai Ho Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.420
Loss time		L =	25 sec
Total Flow		=	3521 pcu
Co	= (1.5*L+5)/(1-Y)	=	73.3 sec
Cm	= L/(1-Y)	=	43.1 sec
Yult		=	0.713
R.C.ult	= (Yult-Y)/Y*100%	=	69.6 %
Cp	= 0.9*L/(0.9-Y)	=	46.9 sec
Ymax	= 1-L/C	=	0.792
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**70 %**



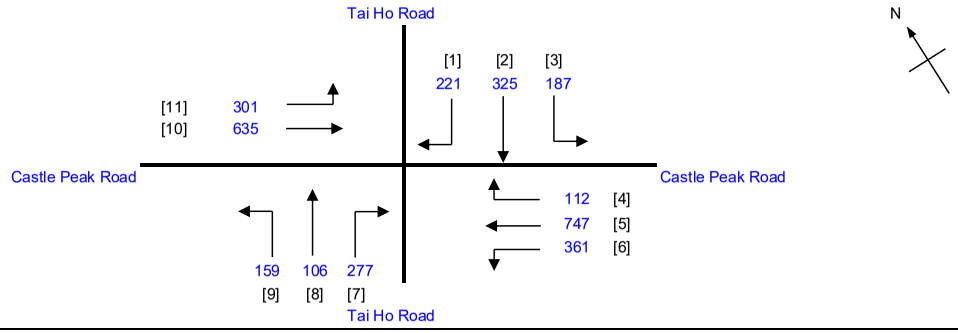
Stage 1	G= 46	Stage 2	G= 7	Stage 3	G= 20	Stage 4	G= 18
	Int = 6		Int = 6		Int = 10		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

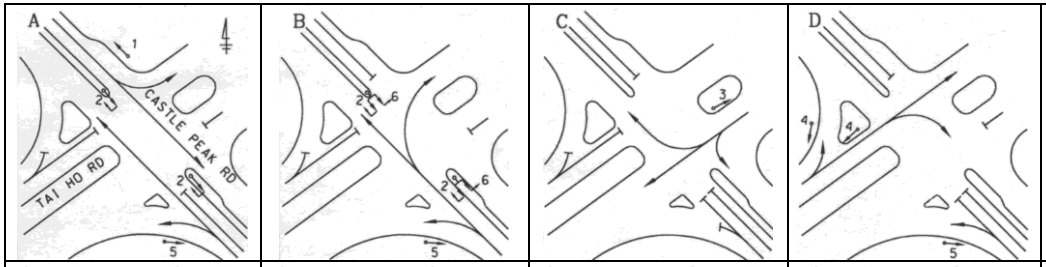
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
10,11	1	3.50	1	12		N	1965	299	76		375	0.80	1787							1787	0.210			47	47	0.531	42	28
10	1	3.50	2				4210		932		932	0.00	4210	18	230					4440	0.210	0.210		47	47	0.531	54	26
6	1,2,4	3.65	1	70		N	1980	329			329	1.00	1938	30	243					2181	0.151			34	74	0.531	42	36
5	1,2	3.65	2				4240		593		593	0.00	4240	18	196					4436	0.134			30	55	0.531	42	37
4	2	3.65	1	20			2120			68	68	1.00	1972							1972	0.034	0.034		8	8	0.531	12	63
3	3	3.30	1	11		N	1945	130			130	1.00	1712							1712	0.076			17	21	0.531	18	50
2	3	3.30	1				2085		193		193	0.00	2085							2085	0.093	0.093		21	21	0.531	30	46
1,2	3	3.30	1	24			2085		134	55	189	0.29	2048							2048	0.092			21	21	0.531	30	46
1	3	3.30	1	24			2085			180	180	1.00	1962							1962	0.092			21	21	0.531	24	46
8,9	4	3.50	1	28		N	1965	134	22		156	0.86	1879							1879	0.083	0.083		19	19	0.531	24	48
7,8	4	3.50	1	22			2105		80	133	213	0.62	2019	18	568					2587	0.082			19	19	0.531	30	47
7	4	3.50	1	22			2105			163	163	1.00	1971							1971	0.083			19	19	0.531	24	48

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J6_CPRTW_THR.xlsx	Checked By:	SLN	Nov-25
J6 Castle Peak Road - Tsuen Wan / Tai Ho Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.424
Loss time		L =	25 sec
Total Flow		=	3431 pcu
Co	= (1.5*L+5)/(1-Y)	=	73.7 sec
Cm	= L/(1-Y)	=	43.4 sec
Yult		=	0.713
R.C.ult	= (Yult-Y)/Y*100%	=	68.2 %
Cp	= 0.9*L/(0.9-Y)	=	47.2 sec
Ymax	= 1-L/C	=	0.792
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**68 %**



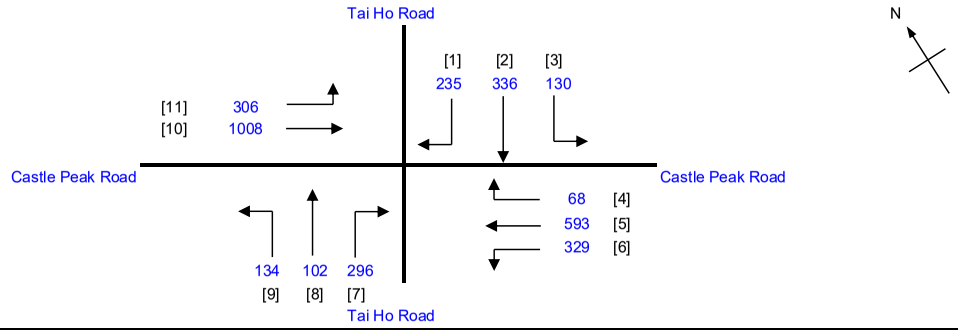
Stage 1	G= 38	Int = 6	Stage 2	G= 12	Int = 6	Stage 3	G= 24	Int = 10	Stage 4	G= 18	Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

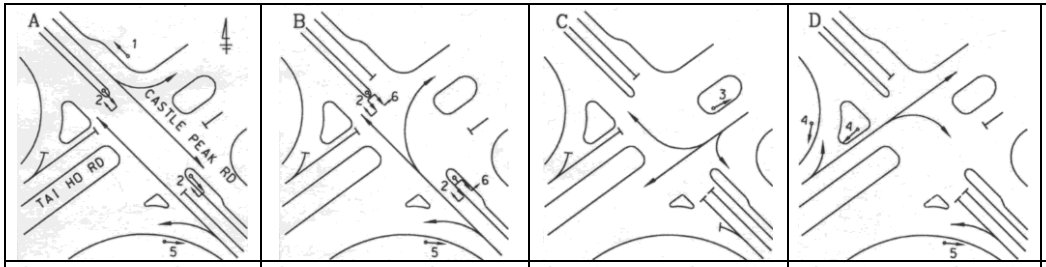
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
10,11	1	3.50	1	12		N	1965	301	0		301	1.00	1747							1747	0.172	0.172		39	39	0.535	36	33
10	1	3.50	2				4210		635		635	0.00	4210	18	277					4487	0.142			32	39	0.535	45	36
6	1,2,4	3.65	1	70		N	1980	361			361	1.00	1938	30	257					2195	0.164			37	70	0.535	48	34
5	1,2	3.65	2				4240		747		747	0.00	4240	18	212					4452	0.168			38	51	0.535	51	32
4	2	3.65	1	20			2120			112	112	1.00	1972							1972	0.057	0.057		13	13	0.535	18	55
3	3	3.30	1	11		N	1945	187			187	1.00	1712							1712	0.109	0.109		25	25	0.535	24	44
2	3	3.30	1				2085		187		187	0.00	2085							2085	0.090			20	25	0.535	30	46
1,2	3	3.30	1	24			2085		138	46	184	0.25	2053							2053	0.090			20	25	0.535	30	47
1	3	3.30	1	24			2085			175	175	1.00	1962							1962	0.089			20	25	0.535	24	47
8,9	4	3.50	1	28		N	1965	159	0		159	1.00	1865							1865	0.085	0.085		19	19	0.535	24	48
7,8	4	3.50	1	22			2105		106	112	218	0.51	2034	18	568					2602	0.084			19	19	0.535	36	47
7	4	3.50	1	22			2105			165	165	1.00	1971							1971	0.084			19	19	0.535	24	48

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J6_CPRTW_THR.xlsx	Checked By:	SLN	Nov-25
J6 Castle Peak Road - Tsuen Wan / Tai Ho Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.423
Loss time		L =	25 sec
Total Flow		=	3537 pcu
Co	= (1.5*L+5)/(1-Y)	=	73.6 sec
Cm	= L/(1-Y)	=	43.3 sec
Yult		=	0.713
R.C.ult	= (Yult-Y)/Y*100%	=	68.6 %
Cp	= 0.9*L/(0.9-Y)	=	47.1 sec
Ymax	= 1-L/C	=	0.792
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**69 %**



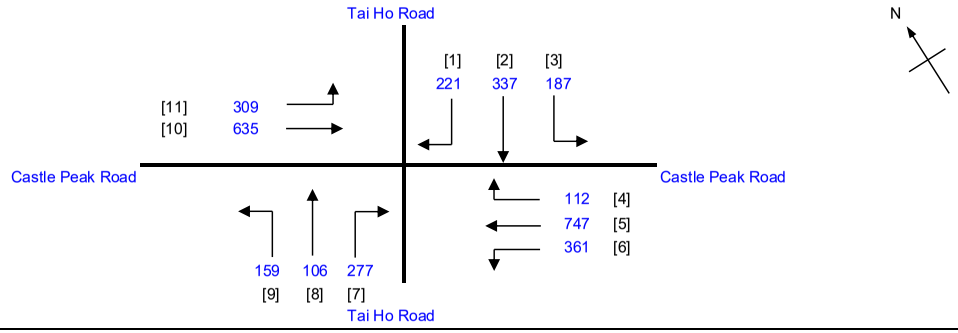
Stage 1	G= 47	Stage 2	G= 7	Stage 3	G= 20	Stage 4	G= 18
	Int = 6		Int = 6		Int = 10		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

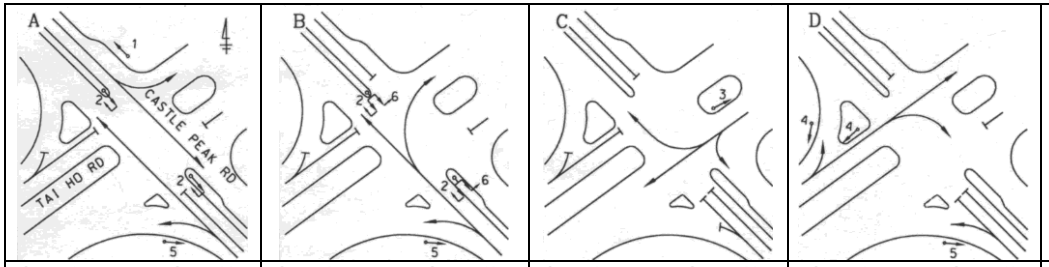
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
10,11	1	3.50	1	12		N	1965	306	71		377	0.81	1784							1784	0.211	0.211		48	48	0.534	42	28
10	1	3.50	2				4210		937		937	0.00	4210	18	225					4435	0.211			47	48	0.534	54	26
6	1,2,4	3.65	1	70		N	1980	329			329	1.00	1938	30	243					2181	0.151			34	74	0.534	42	36
5	1,2	3.65	2				4240		593		593	0.00	4240	18	196					4436	0.134			30	55	0.534	42	37
4	2	3.65	1	20			2120			68	68	1.00	1972							1972	0.034	0.034		8	8	0.534	12	63
3	3	3.30	1	11		N	1945	130			130	1.00	1712							1712	0.076			17	21	0.534	18	51
2	3	3.30	1				2085		195		195	0.00	2085							2085	0.094			21	21	0.534	30	46
1,2	3	3.30	1	24			2085		141	51	192	0.27	2051							2051	0.094			21	21	0.534	30	46
1	3	3.30	1	24			2085			184	184	1.00	1962							1962	0.094	0.094		21	21	0.534	30	46
8,9	4	3.50	1	28		N	1965	134	22		156	0.86	1879							1879	0.083	0.083		19	19	0.534	24	48
7,8	4	3.50	1	22			2105		80	133	213	0.62	2019	18	568					2587	0.082			19	19	0.534	36	47
7	4	3.50	1	22			2105			163	163	1.00	1971							1971	0.083			19	19	0.534	24	48

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design PM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J6_CPRTW_THR.xlsx	Checked By:	SLN	Nov-25
J6 Castle Peak Road - Tsuen Wan / Tai Ho Road			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.428
Loss time		L =	25 sec
Total Flow		=	3451 pcu
Co	= (1.5*L+5)/(1-Y)	=	74.3 sec
Cm	= L/(1-Y)	=	43.7 sec
Yult		=	0.713
R.C.ult	= (Yult-Y)/Y*100%	=	66.4 %
Cp	= 0.9*L/(0.9-Y)	=	47.7 sec
Ymax	= 1-L/C	=	0.792
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**66 %**



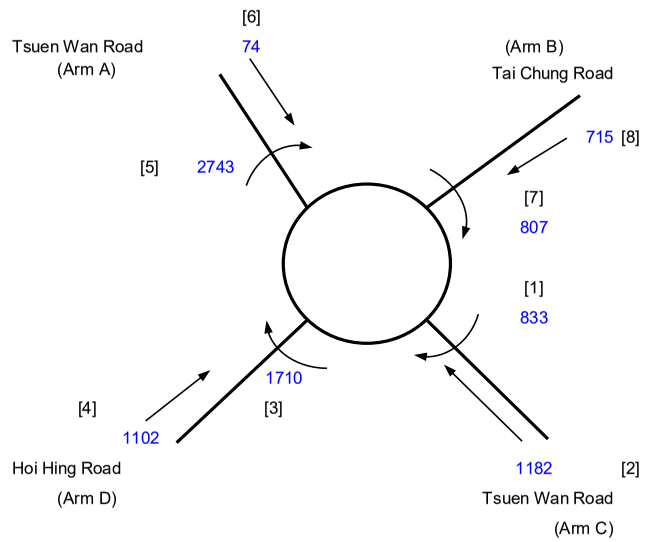
Stage 1	G= 38	Stage 2	G= 12	Stage 3	G= 23	Stage 4	G= 18
	Int = 6		Int = 6		Int = 10		Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							25					
10,11	1	3.50	1	12		N	1965	309	0		309	1.00	1747							1747	0.177	0.177		39	39	0.541	36	33
10	1	3.50	2				4210		635		635	0.00	4210	18	277					4487	0.142			31	39	0.541	45	36
6	1,2,4	3.65	1	70		N	1980	361			361	1.00	1938	30	254					2192	0.165			37	71	0.541	48	34
5	1,2	3.65	2				4240		747		747	0.00	4240	18	208					4448	0.168			37	52	0.541	51	32
4	2	3.65	1	20			2120			112	112	1.00	1972							1972	0.057	0.057		13	13	0.541	18	55
3	3	3.30	1	11		N	1945	187			187	1.00	1712							1712	0.109	0.109		24	24	0.541	24	44
2	3	3.30	1				2085		191		191	0.00	2085							2085	0.092			20	24	0.541	30	46
1,2	3	3.30	1	24			2085		146	42	188	0.22	2056							2056	0.091			20	24	0.541	30	47
1	3	3.30	1	24			2085			179	179	1.00	1962							1962	0.091			20	24	0.541	24	47
8,9	4	3.50	1	28		N	1965	159	0		159	1.00	1865							1865	0.085	0.085		19	19	0.541	24	48
7,8	4	3.50	1	22			2105		106	112	218	0.51	2034	18	568					2602	0.084			19	19	0.541	36	47
7	4	3.50	1	22			2105			165	165	1.00	1971							1971	0.084			19	19	0.541	24	48

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	ROUNDABOUT CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference AM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J7_TCR_HHR.xls	CHECKED BY:	SLN	Nov-25
J7 Tai Chung Road / Hoi Hing Road		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25

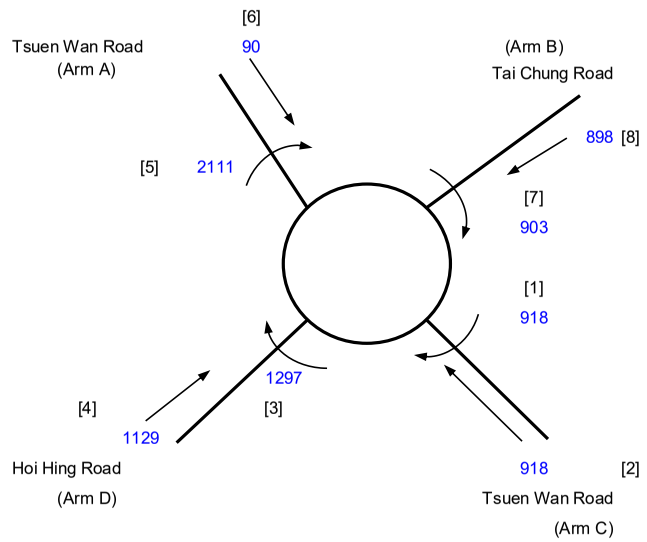


ARM			A	B	C	D
INPUT PARAMETERS:						
V	=	Approach half width (m)	5.40	6.90	6.60	6.50
E	=	Entry width (m)	8.20	7.60	10.50	15.00
L	=	Effective length of flare (m)	50.00	100.00	9.00	13.00
R	=	Entry radius (m)	15.00	100.00	65.00	20.00
D	=	Inscribed circle diameter (m)	60.00	60.00	60.00	60.00
A	=	Entry angle (degree)	30.00	35.00	23.00	43.00
Q	=	Entry flow (pcu/h)	74	715	1182	1102
Qc	=	Circulating flow across entry (pcu/h)	2743	807	833	1710
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L	0.09	0.01	0.69	1.05
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.02	1.06	0.95
X2	=	V + ((E-V)/(1+2S))	7.77	7.58	8.23	9.25
M	=	EXP((D-60)/10)	1	1	1	1
F	=	303*X2	2356	2298	2495	2802
Td	=	1+(0.5/(1+M))	1.25	1.25	1.25	1.25
Fc	=	0.21*Td(1+0.2*X2)	0.67	0.66	0.69	0.75
Qe	=	K(F-Fc*Qc)	508	1803	2028	1454
DFC	=	Design flow/Capacity = Q/Qe	0.15	0.40	0.58	0.76

Total In Sum = 3073 PCU

DFC of Critical Approach = 0.76

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference PM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J7_TCR_HHR.xls	CHECKED BY:	SLN	Nov-25
J7 Tai Chung Road / Hoi Hing Road		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25

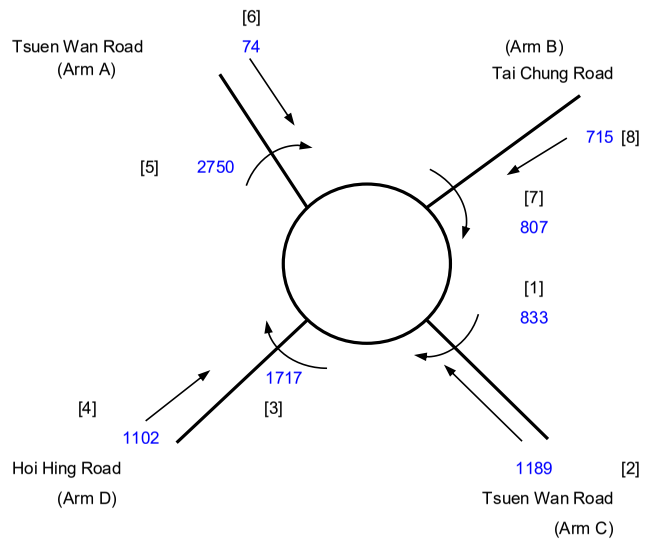


ARM			A	B	C	D
INPUT PARAMETERS:						
V	=	Approach half width (m)	5.40	6.90	6.60	6.50
E	=	Entry width (m)	8.20	7.60	10.50	15.00
L	=	Effective length of flare (m)	50.00	100.00	9.00	13.00
R	=	Entry radius (m)	15.00	100.00	65.00	20.00
D	=	Inscribed circle diameter (m)	60.00	60.00	60.00	60.00
A	=	Entry angle (degree)	30.00	35.00	23.00	43.00
Q	=	Entry flow (pcu/h)	90	898	918	1129
Qc	=	Circulating flow across entry (pcu/h)	2111	903	918	1297
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L	0.09	0.01	0.69	1.05
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.02	1.06	0.95
X2	=	V + ((E-V)/(1+2S))	7.77	7.58	8.23	9.25
M	=	EXP((D-60)/10)	1	1	1	1
F	=	303*X2	2356	2298	2495	2802
Td	=	1+(0.5/(1+M))	1.25	1.25	1.25	1.25
Fc	=	0.21*Td(1+0.2*X2)	0.67	0.66	0.69	0.75
Qe	=	K(F-Fc*Qc)	925	1739	1965	1749
DFC	=	Design flow/Capacity = Q/Qe	0.10	0.52	0.47	0.65

Total In Sum = 3035 PCU

DFC of Critical Approach = 0.65

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design AM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J7_TCR_HHR.xls	CHECKED BY:	SLN	Nov-25
J7 Tai Chung Road / Hoi Hing Road		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25

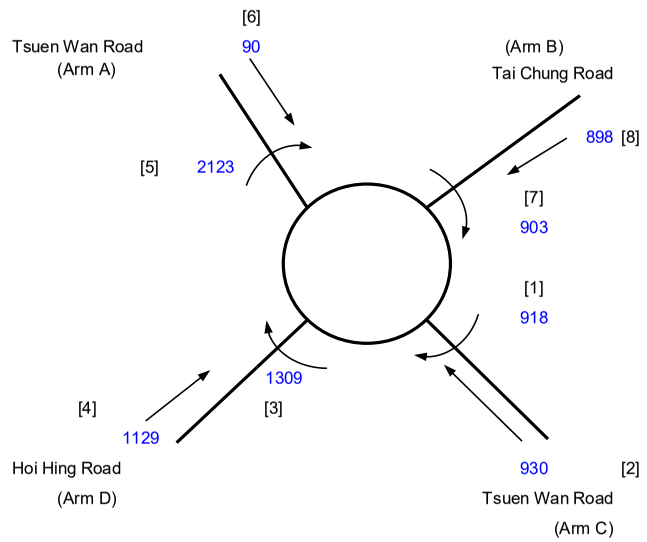


ARM			A	B	C	D
INPUT PARAMETERS:						
V	=	Approach half width (m)	5.40	6.90	6.60	6.50
E	=	Entry width (m)	8.20	7.60	10.50	15.00
L	=	Effective length of flare (m)	50.00	100.00	9.00	13.00
R	=	Entry radius (m)	15.00	100.00	65.00	20.00
D	=	Inscribed circle diameter (m)	60.00	60.00	60.00	60.00
A	=	Entry angle (degree)	30.00	35.00	23.00	43.00
Q	=	Entry flow (pcu/h)	74	715	1189	1102
Qc	=	Circulating flow across entry (pcu/h)	2750	807	833	1717
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L	0.09	0.01	0.69	1.05
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.02	1.06	0.95
X2	=	V + ((E-V)/(1+2S))	7.77	7.58	8.23	9.25
M	=	EXP((D-60)/10)	1	1	1	1
F	=	303*X2	2356	2298	2495	2802
Td	=	1+(0.5/(1+M))	1.25	1.25	1.25	1.25
Fc	=	0.21*Td(1+0.2*X2)	0.67	0.66	0.69	0.75
Qe	=	K(F-Fc*Qc)	503	1803	2028	1449
DFC	=	Design flow/Capacity = Q/Qe	0.15	0.40	0.59	0.76

Total In Sum = 3080 PCU

DFC of Critical Approach = 0.76

LLA CONSULTANCY LIMITED	ROUNDABOUT CALCULATION			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Design PM**	PROJECT NO.: 40999	PREPARED BY:	SKL	Nov-25
		FILENAME : J7_TCR_HHR.xls	CHECKED BY:	SLN	Nov-25
J7 Tai Chung Road / Hoi Hing Road		REFERENCE NO.:	REVIEWED BY:	SLN	Nov-25

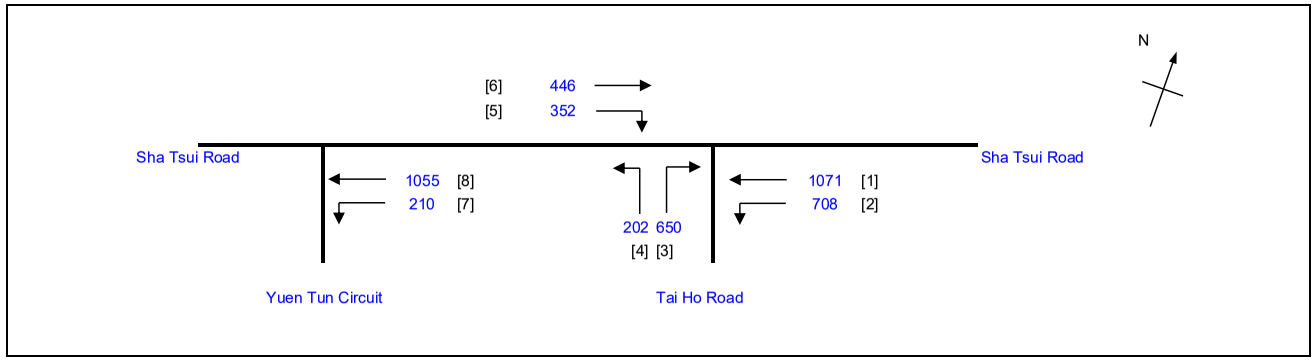


ARM			A	B	C	D
INPUT PARAMETERS:						
V	=	Approach half width (m)	5.40	6.90	6.60	6.50
E	=	Entry width (m)	8.20	7.60	10.50	15.00
L	=	Effective length of flare (m)	50.00	100.00	9.00	13.00
R	=	Entry radius (m)	15.00	100.00	65.00	20.00
D	=	Inscribed circle diameter (m)	60.00	60.00	60.00	60.00
A	=	Entry angle (degree)	30.00	35.00	23.00	43.00
Q	=	Entry flow (pcu/h)	90	898	930	1129
Qc	=	Circulating flow across entry (pcu/h)	2123	903	918	1309
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L	0.09	0.01	0.69	1.05
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.98	1.02	1.06	0.95
X2	=	V + ((E-V)/(1+2S))	7.77	7.58	8.23	9.25
M	=	EXP((D-60)/10)	1	1	1	1
F	=	303*X2	2356	2298	2495	2802
Td	=	1+(0.5/(1+M))	1.25	1.25	1.25	1.25
Fc	=	0.21*Td(1+0.2*X2)	0.67	0.66	0.69	0.75
Qe	=	K(F-Fc*Qc)	917	1739	1965	1741
DFC	=	Design flow/Capacity = Q/Qe	0.10	0.52	0.47	0.65

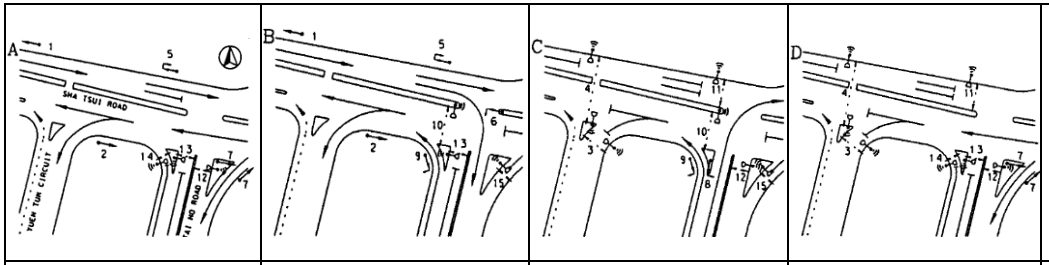
Total In Sum = 3047 PCU

DFC of Critical Approach = 0.65

LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J8_STR_THRW.xlsx	Checked By:	SLN	Nov-25
J8 Sha Tsui Road / Tai Ho Road (W)			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.603
Loss time		L =	12 sec
Total Flow		=	4694 pcu
Co	= (1.5*L+5)/(1-Y)	=	57.9 sec
Cm	= L/(1-Y)	=	30.2 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	34.4 %
Cp	= 0.9*L/(0.9-Y)	=	36.3 sec
Ymax	= 1-L/C	=	0.900
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**34 %**



Stage 1	G= 9	Stage 2	G= 26	Stage 3	G= 24	Stage 4	G= 46
	Int = 5		Int = 5		Int = 5		Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3,4	5	5	4	67	5
P2	3,4	5	10	4	62	10
P3	2,3	5	10	6	44	10
P4	3,4	7	13	3	60	13
P5	1,3,4	5	9	10	70	9
P6	1,2,4	5	10	3	78	10
P7	1,4	5	7	3	50	7
P8	2,3	5	7	3	50	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							12					
1,2	1,4	4.00	1	67		N	2015	708	0		708	1.00	1971	28	300					2271	0.312	0.312		56	56	0.670	72	26
1	1,4	4.00	2				4310		1071		1071	0.00	4310	28	300					4610	0.232			42	56	0.670	69	32
7,8	1,2	3.50	1	37		N	1965	210	180		390	0.54	1923							1923	0.203			36	36	0.670	54	39
8	1,2	3.50	2				4210		875		875	0.00	4210	6	100					4310	0.203			36	36	0.670	60	35
6	1,2	3.50	2			N	4070		446		446	0.00	4070							4070	0.110			20	36	0.670	36	47
5	2	3.50	1	15			2105			352	352	1.00	1914	20	444					2358	0.149	0.149		27	27	0.670	54	45
4	2,3	3.50	1	78		N	1965	202			202	1.00	1928							1928	0.105			19	52	0.670	30	54
3	3	3.50	2	20			4210			650	650	1.00	3916	28	672					4588	0.142	0.142		25	25	0.670	51	42

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

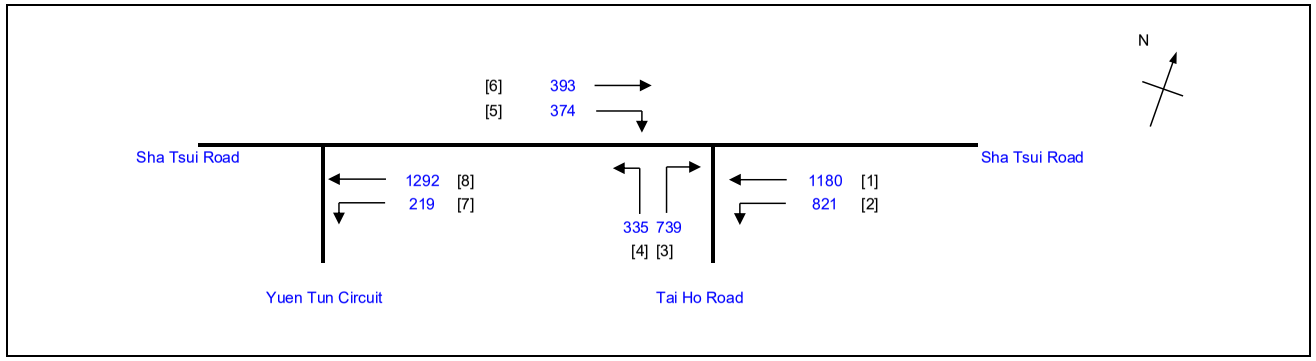
TRAFFIC SIGNAL CALCULATION

Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

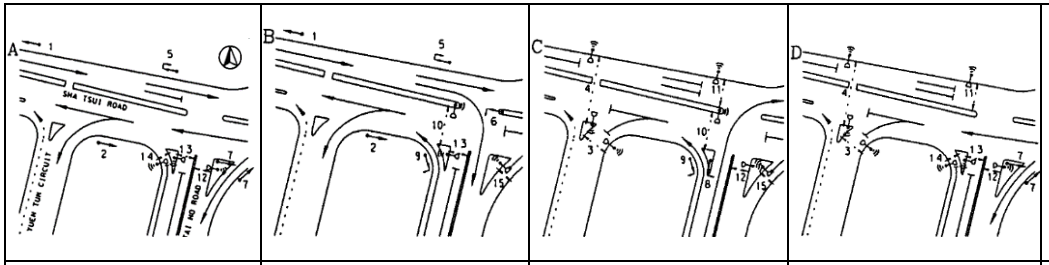
J8 Sha Tsui Road / Tai Ho Road (W)

2033 Reference PM

			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J8_STR_THRW.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.681
Loss time		L =	12 sec
Total Flow		=	5353 pcu
Co	= (1.5*L+5)/(1-Y)	=	72.0 sec
Cm	= L/(1-Y)	=	37.6 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	19.0 %
Cp	= 0.9*L/(0.9-Y)	=	49.2 sec
Ymax	= 1-L/C	=	0.900
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**19 %**



Stage 1	G= 13	Stage 2	G= 24	Stage 3	G= 25	Stage 4	G= 44
	Int = 5		Int = 5		Int = 5		Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3,4	5	5	4	64	5
P2	3,4	5	10	4	59	10
P3	2,3	5	10	6	43	10
P4	3,4	7	13	3	57	13
P5	1,3,4	5	9	10	72	9
P6	1,2,4	5	10	3	77	10
P7	1,4	5	7	3	51	7
P8	2,3	5	7	3	49	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							12					
1,2	1,4	4.00	1	67		N	2015	821	0		821	1.00	1971	28	295					2266	0.362	0.362		57	57	0.756	84	28
1	1,4	4.00	2				4310		1180		1180	0.00	4310	28	295					4605	0.256			41	57	0.756	78	35
7,8	1,2	3.50	1	37		N	1965	219	247		466	0.47	1928							1928	0.242			38	39	0.756	60	41
8	1,2	3.50	2				4210		1045		1045	0.00	4210	6	92					4302	0.243			39	39	0.756	69	36
6	1,2	3.50	2			N	4070		393		393	0.00	4070							4070	0.097			15	39	0.756	33	55
5	2	3.50	1	15			2105			374	374	1.00	1914	20	480					2394	0.156	0.156		25	25	0.756	60	50
4	2,3	3.50	1	78		N	1965	335			335	1.00	1928							1928	0.174			28	51	0.756	48	50
3	3	3.50	2	20			4210			739	739	1.00	3916	28	646					4562	0.162	0.162		26	26	0.756	57	45

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

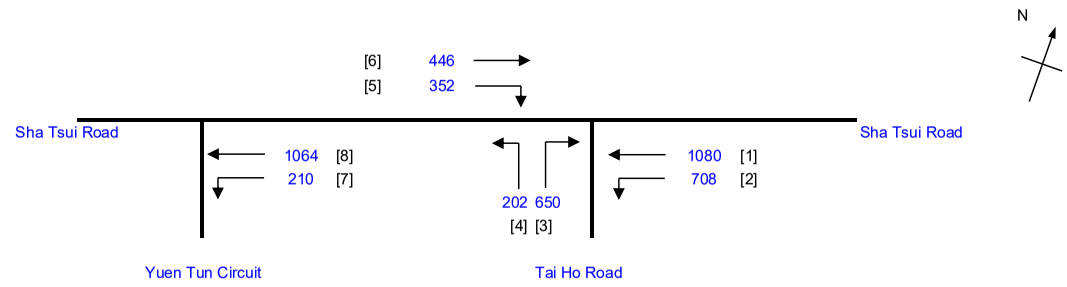
TRAFFIC SIGNAL CALCULATION

Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

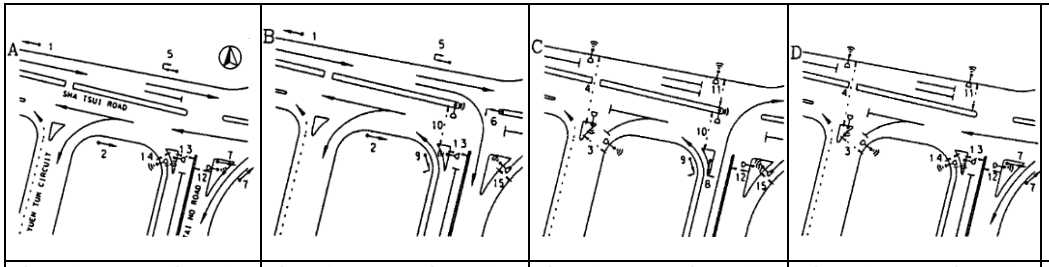
J8 Sha Tsui Road / Tai Ho Road (W)

2033 Design AM

			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J8_STR_THRW.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.603
Loss time		L =	12 sec
Total Flow		=	4712 pcu
Co	= (1.5*L+5)/(1-Y)	=	57.9 sec
Cm	= L/(1-Y)	=	30.2 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	34.4 %
Cp	= 0.9*L/(0.9-Y)	=	36.3 sec
Ymax	= 1-L/C	=	0.900
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**34 %**



Stage 1	G= 9	Int = 5	
Stage 2	G= 26	Int = 5	
Stage 3	G= 24	Int = 5	
Stage 4	G= 46	Int =	

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3,4	5	5	4	66	5
P2	3,4	5	10	4	61	10
P3	2,3	5	10	6	44	10
P4	3,4	7	13	3	59	13
P5	1,3,4	5	9	10	70	9
P6	1,2,4	5	10	3	78	10
P7	1,4	5	7	3	50	7
P8	2,3	5	7	3	50	7

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							12					
1,2	1,4	4.00	1	67		N	2015	708	0		708	1.00	1971	28	300					2271	0.312	0.312		56	56	0.670	72	26
1	1,4	4.00	2				4310		1080		1080	0.00	4310	28	300					4610	0.234			42	56	0.670	69	32
7,8	1,2	3.50	1	37		N	1965	210	183		393	0.53	1923							1923	0.204			37	37	0.670	54	38
8	1,2	3.50	2				4210		881		881	0.00	4210	6	97					4307	0.205			37	37	0.670	60	35
6	1,2	3.50	2			N	4070		446		446	0.00	4070							4070	0.110			20	37	0.670	36	47
5	2	3.50	1	15			2105			352	352	1.00	1914	20	444					2358	0.149	0.149		27	27	0.670	54	45
4	2,3	3.50	1	78		N	1965	202			202	1.00	1928							1928	0.105			19	52	0.670	30	54
3	3	3.50	2	20			4210			650	650	1.00	3916	28	672					4588	0.142	0.142		25	25	0.670	51	42

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

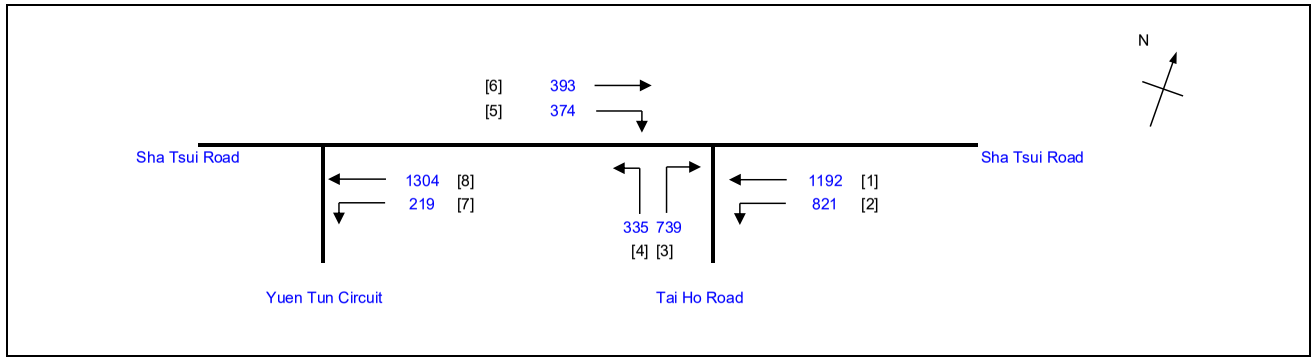
TRAFFIC SIGNAL CALCULATION

Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories

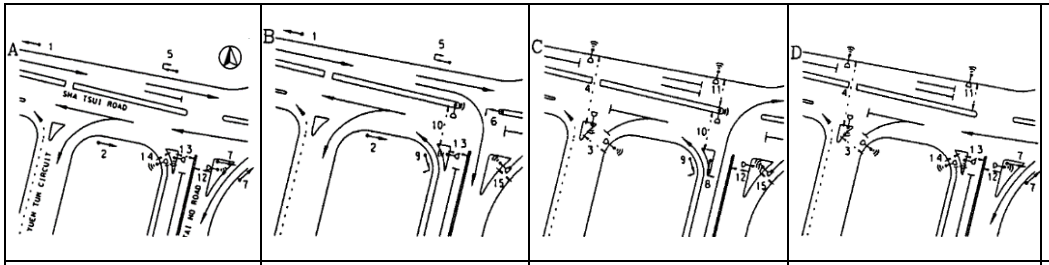
J8 Sha Tsui Road / Tai Ho Road (W)

2033 Design PM

			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J8_STR_THRW.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.681
Loss time		L =	12 sec
Total Flow		=	5377 pcu
Co	= (1.5*L+5)/(1-Y)	=	72.0 sec
Cm	= L/(1-Y)	=	37.6 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	19.0 %
Cp	= 0.9*L/(0.9-Y)	=	49.2 sec
Ymax	= 1-L/C	=	0.900
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**19 %**



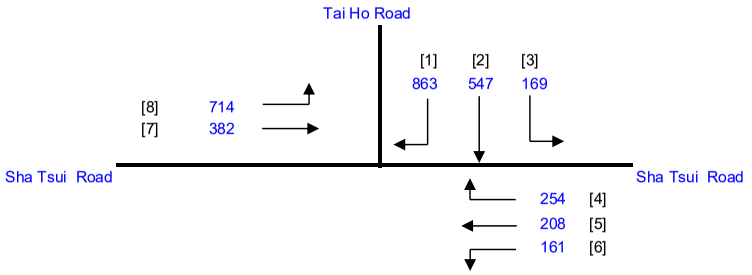
Stage 1	G= 13	Stage 2	G= 24	Stage 3	G= 25	Stage 4	G= 43
	Int = 5		Int = 5		Int = 5		Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3,4	5	5	4	64	5
P2	3,4	5	10	4	59	10
P3	2,3	5	10	6	43	10
P4	3,4	7	13	3	57	13
P5	1,3,4	5	9	10	72	9
P6	1,2,4	5	10	3	77	10
P7	1,4	5	7	3	51	7
P8	2,3	5	7	3	49	7

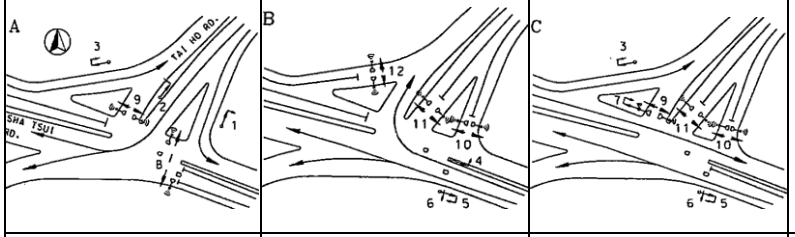
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							12					
1,2	1,4	4.00	1	67		N	2015	821	0		821	1.00	1971	28	295					2266	0.362	0.362		57	57	0.756	84	28
1	1,4	4.00	2				4310		1192		1192	0.00	4310	28	295					4605	0.259			41	57	0.756	78	35
7,8	1,2	3.50	1	37		N	1965	219	253		472	0.46	1929							1929	0.245			39	39	0.756	60	41
8	1,2	3.50	2				4210		1051		1051	0.00	4210	6	92					4302	0.244			39	39	0.756	69	36
6	1,2	3.50	2			N	4070		393		393	0.00	4070							4070	0.097			15	39	0.756	33	55
5	2	3.50	1	15			2105			374	374	1.00	1914	20	480					2394	0.156	0.156		25	25	0.756	60	50
4	2,3	3.50	1	78		N	1965	335			335	1.00	1928							1928	0.174			28	51	0.756	48	50
3	3	3.50	2	20			4210			739	739	1.00	3916	28	646					4562	0.162	0.162		26	26	0.756	57	45

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Application for Planning Permission Under Section 16 of the Town Planning Ordinance (Cap. 131) for Proposed Hotel Use and Minor Relaxation of Plot Ratio and Building Height Restrictions at "Other Specified Uses" Annotated "Business" Zone at Tsun Wan Inland Lot No. 46 S.C, Nos. 46-48 Pak Tin Par Street, Tsuen Wan, New Territories	**2033 Reference AM**	PROJECT NO.: 40999	Prepared By:	SKL	Nov-25
		FILENAME : J9_STR_THRE.xlsx	Checked By:	SLN	Nov-25
J9 Sha Tsui Road / Tai Ho Road (E)			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.495
Loss time		L =	17 sec
Total Flow		=	3298 pcu
Co	= (1.5*L+5)/(1-Y)	=	60.4 sec
Cm	= L/(1-Y)	=	33.6 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	56.2 %
Cp	= 0.9*L/(0.9-Y)	=	37.7 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**56 %**



Stage 1	G= 54	Stage 2	G= 28	Stage 3	G= 18
	Int = 6		Int = 8		Int = 6

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	8	15	4	41	15
P2	1,3	5	9	5	70	9
P3	2,3	5	10	1	49	10
P4	2,3	5	9	0	51	9
P3	2	5	8	1	27	8

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							17					
2,3	1	3.30	1	10		N	1945	169	347		516	0.33	1854	12	131					1985	0.260			54	55	0.576	54	24
1,2	1	3.30	1	20			2085		200	350	550	0.64	1990	12	131					2121	0.259			54	55	0.576	60	24
1	1	3.30	1	20			2085			513	513	1.00	1940							1940	0.264	0.264		55	55	0.576	54	24
8	1,3	3.50	1	45		N	1965	714			714	1.00	1902	12	97					1999	0.357			74	74	0.576	54	14
5,6	2,3	3.40	1	65		N	1955	161	208		369	0.44	1936							1936	0.191			40	48	0.576	48	33
4	2	3.40	1	10			2095			254	254	1.00	1822							1822	0.139	0.139		29	29	0.576	36	41
7	3	3.50	2				4210		382		382	0.00	4210							4210	0.091	0.091		19	19	0.576	30	45

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
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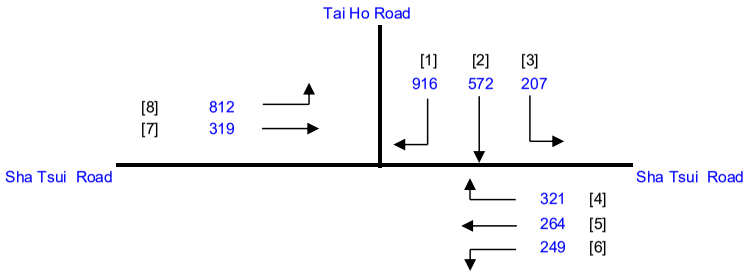
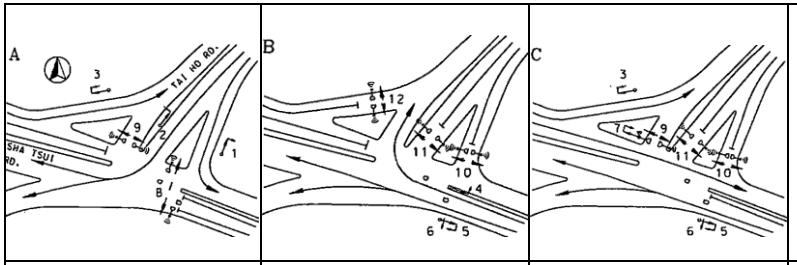
		FILENAME : J9_STR_THRE.xlsx	Checked By:	SLN	Nov-25
J9 Sha Tsui Road / Tai Ho Road (E)			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.582
Loss time		L =	14 sec
Total Flow		=	3660 pcu
Co	= (1.5*L+5)/(1-Y)	=	62.3 sec
Cm	= L/(1-Y)	=	33.5 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	36.5 %
Cp	= 0.9*L/(0.9-Y)	=	39.7 sec
Ymax	= 1-L/C	=	0.883
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**36 %**



Stage 1	G= 50	Stage 2	G= 31	Stage 3	G= 23
	Int = 5		Int = 11		Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	8	15	4	36	15
P2	1,3	5	9	5	64	9
P3	2,3	5	10	1	54	10
P4	2,3	5	9	0	56	9
P3	2	5	8	1	33	8

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							14					
2,3	1	3.30	1	10		N	1945	207	347		554	0.37	1842	12	141					1983	0.279			51	51	0.659	60	29
1,2	1	3.30	1	20			2085		225	370	595	0.62	1992	12	141					2133	0.279			51	51	0.659	66	28
1	1	3.30	1	20			2085			546	546	1.00	1940							1940	0.282			51	51	0.659	60	28
8	1,3	3.50	1	45		N	1965	812			812	1.00	1902	12	97					1999	0.406	0.406		74	74	0.659	60	16
5,6	2,3	3.40	1	65		N	1955	249	264		513	0.49	1933							1933	0.265			48	55	0.659	60	30
4	2	3.40	1	10			2095			321	321	1.00	1822							1822	0.176	0.176		32	32	0.659	42	42
7	3	3.50	2				4210		319		319	0.00	4210							4210	0.076			14	23	0.659	27	52

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	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
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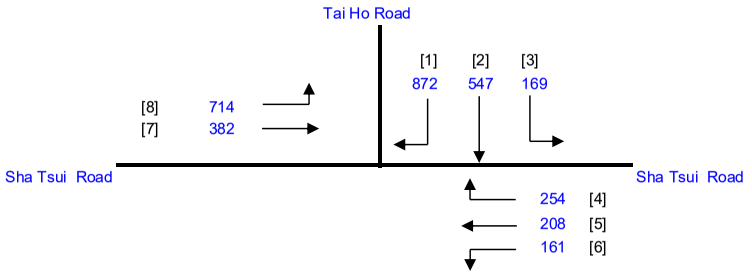
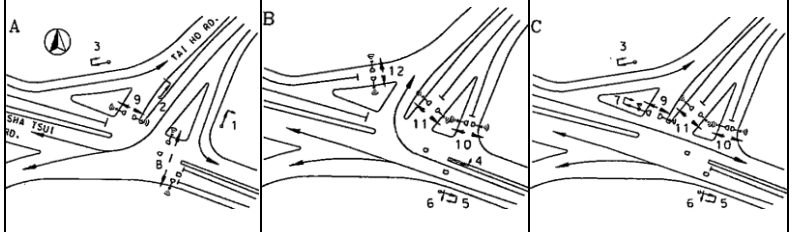
		FILENAME : J9_STR_THRE.xlsx	Checked By:	SLN	Nov-25
J9 Sha Tsui Road / Tai Ho Road (E)			Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.496
Loss time		L =	17 sec
Total Flow		=	3307 pcu
Co	= (1.5*L+5)/(1-Y)	=	60.5 sec
Cm	= L/(1-Y)	=	33.7 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	55.7 %
Cp	= 0.9*L/(0.9-Y)	=	37.9 sec
Ymax	= 1-L/C	=	0.858
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**56 %**



Stage 1	G= 54	Stage 2	G= 28	Stage 3	G= 18
	Int = 6		Int = 8		Int = 6

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	8	15	4	41	15
P2	1,3	5	9	5	70	9
P3	2,3	5	10	1	49	10
P4	2,3	5	9	0	51	9
P3	2	5	8	1	27	8

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							17					
2,3	1	3.30	1	10		N	1945	169	349		518	0.33	1854	12	131					1985	0.261			54	55	0.578	54	24
1,2	1	3.30	1	20			2085		198	356	554	0.64	1989	12	131					2120	0.261			54	55	0.578	60	24
1	1	3.30	1	20			2085			516	516	1.00	1940							1940	0.266	0.266		55	55	0.578	54	24
8	1,3	3.50	1	45		N	1965	714			714	1.00	1902	12	97					1999	0.357			74	74	0.578	54	14
5,6	2,3	3.40	1	65		N	1955	161	208		369	0.44	1936							1936	0.191			40	48	0.578	48	33
4	2	3.40	1	10			2095			254	254	1.00	1822							1822	0.139	0.139		29	29	0.578	36	41
7	3	3.50	2				4210		382		382	0.00	4210							4210	0.091	0.091		19	19	0.578	30	46

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

TRAFFIC SIGNAL CALCULATION

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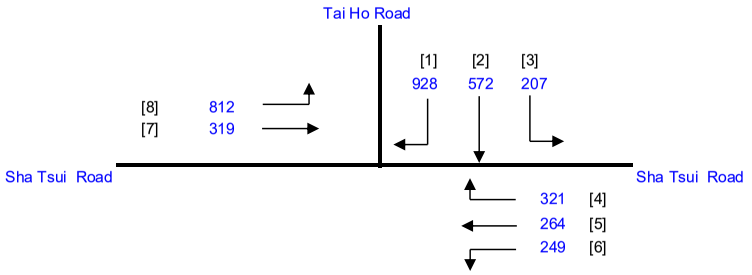
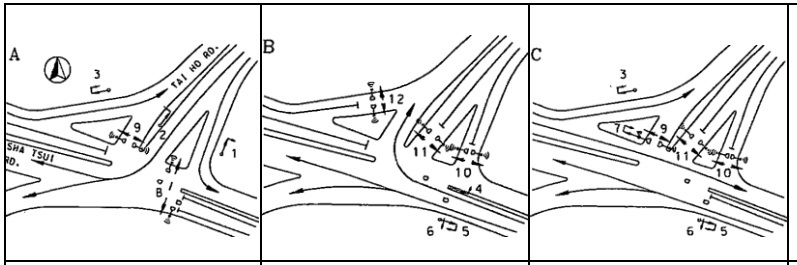
J9 Sha Tsui Road / Tai Ho Road (E)

2033 Design PM

			INITIALS	DATE
PROJECT NO.:	40999	Prepared By:	SKL	Nov-25
FILENAME :	J9_STR_THRE.xlsx	Checked By:	SLN	Nov-25
		Reviewed By:	SLN	Nov-25



No. of stages per cycle		N =	3
Cycle time		C =	120 sec
Sum(y)		Y =	0.582
Loss time		L =	14 sec
Total Flow		=	3672 pcu
Co	= (1.5*L+5)/(1-Y)	=	62.3 sec
Cm	= L/(1-Y)	=	33.5 sec
Yult		=	0.795
R.C.ult	= (Yult-Y)/Y*100%	=	36.5 %
Cp	= 0.9*L/(0.9-Y)	=	39.7 sec
Ymax	= 1-L/C	=	0.883
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**36 %**



Stage 1	G= 51	Stage 2	G= 31	Stage 3	G= 22
	Int = 5		Int = 11		Int =

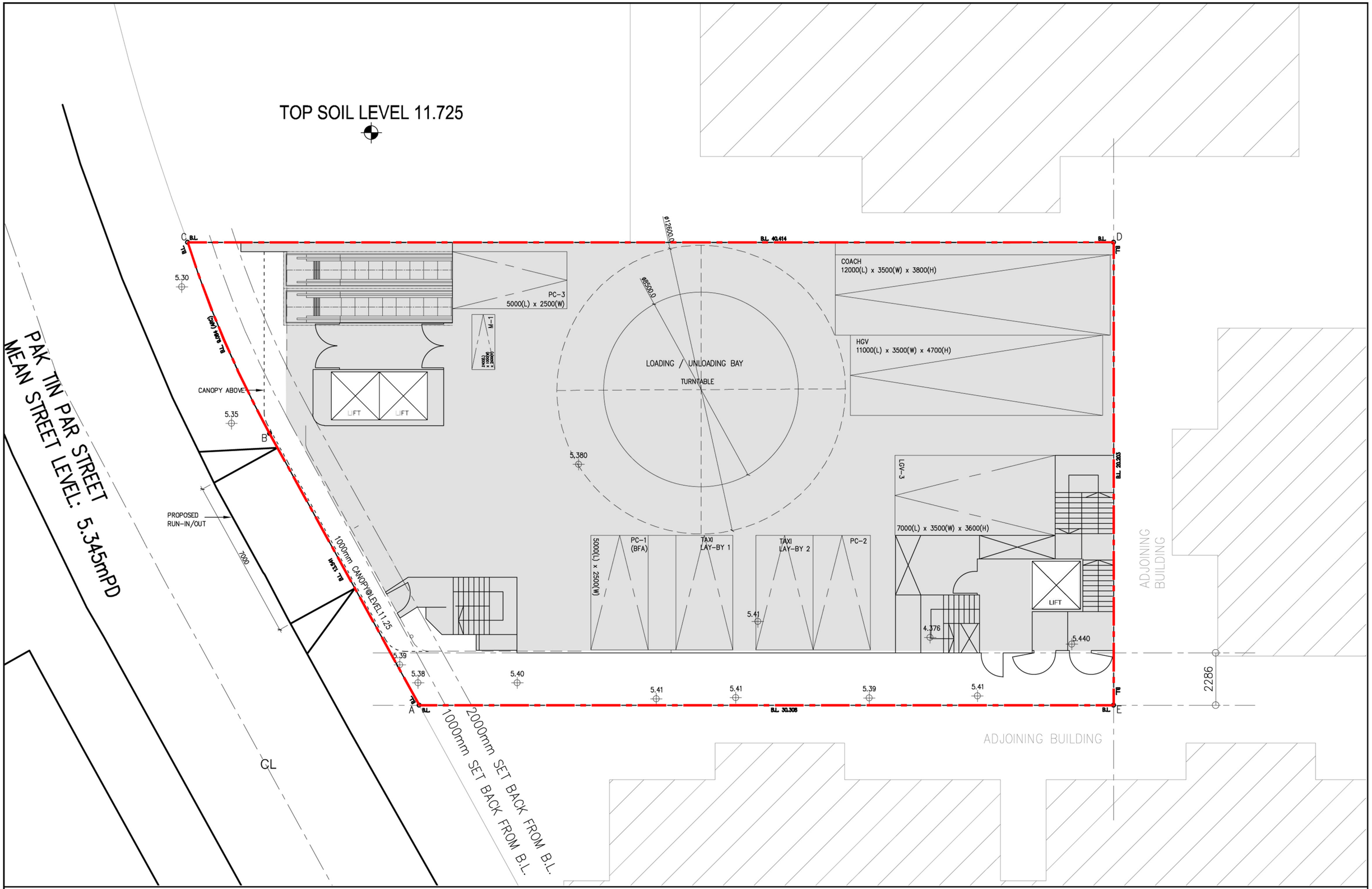
Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	8	15	4	37	15
P2	1,3	5	9	5	64	9
P3	2,3	5	10	1	53	10
P4	2,3	5	9	0	55	9
P3	2	5	8	1	33	8

Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	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)
																							14					
2,3	1	3.30	1	10		N	1945	207	351		558	0.37	1842	12	141					1983	0.281			51	52	0.659	60	28
1,2	1	3.30	1	20			2085		221	379	600	0.63	1991	12	141					2132	0.281			51	52	0.659	66	28
1	1	3.30	1	20			2085			549	549	1.00	1940							1940	0.283			52	52	0.659	60	28
8	1,3	3.50	1	45		N	1965	812			812	1.00	1902	12	97					1999	0.406	0.406		74	74	0.659	60	16
5,6	2,3	3.40	1	65		N	1955	249	264		513	0.49	1933							1933	0.265			48	54	0.659	60	30
4	2	3.40	1	10			2095			321	321	1.00	1822							1822	0.176	0.176		32	32	0.659	42	42
7	3	3.50	2				4210		319		319	0.00	4210							4210	0.076			14	22	0.659	27	52

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

Appendix C

Indicative Ground Floor Layout Plan



A & N ARCHITECT & INTERIOR DESIGNER LTD.
奧鐘 設計有限公司
香港 灣仔 軒尼詩道 245-251號 守時商業大廈 23樓 B室 Unit B, 23/F., Success Commercial Building, 245-251 Hennessy Road, Wanchai, Hong Kong.
Tel. 電話 : 2143 6782 Fax 傳真 : 2143 6799 email 電子郵件 : info@anaid.com.hk

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REVISION

PROJECT
APPLICATION FOR PLANNING PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131) FOR PROPOSED HOTEL USE AND MINOR RELAXATION OF PLOT RATIO AND BUILDING HEIGHT RESTRICTIONS AT "OTHER SPECIFIED USES" ANNOTATED "BUSINESS" ZONE AT TSUN WAN INLAND LOT NO. 46 S.C, NOS. 46-48 PAK TIN PAR STREET, TSUEN WAN, NEW TERRITORIES

TITLE
GROUND FLOOR PLAN

DRAWN	CHECKED
RC	NH
SCALE 1:150	DATE 01-09-25
JOB NO. 2520	DRAWING NO. 2520-DWG-01(A)