Appendix 5

TRAFFIC IMPACT ASSESSMENT

DOCUMENT STATUS CONTROL RECORD

Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

Traffic Impact Assessment Report

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1 INTRODUCTION

1.1 Background

1.1.1 LLA Consultancy Limited has been appointed to prepare a traffic impact assessment to support the Section 12A ("**S12A**") Planning Application / Rezoning Request ("**RR**") to amend the Approved Sha Tin Outline Zoning Plan No. S/ST/40 ("**Approved OZP**") gazetted on 16 January 2026 at Nos.8-14 Siu Lek Yune Road, Sha Tin, New Territories (the "**Site**"/ "**Rezoning Site**") (Sha Tin Town Lot ("**STTL**") Nos. 196 and 276). The location of the Site is shown in **Figure 1.1**.

1.1.2 The Rezoning Site has an area of approx. 7,668m^2 and is currently zoned Industrial (1)" ("**I(1)**") on the Approved OZP. There are no development restrictions on plot ratio ("**PR**"), building height ("**BH**"), gross floor area ("**GFA**") or site coverage ("**SC**") stipulated on "I(I)" zone. 'Flat' is neither a Column 1 nor Column 2 use under the "I(1)" zone. This RR seeks to rezone the Site from "I(1)" zone to "Residential (Group A)10" ("**R(A)10**") zone subject to a PR restriction of 6 and BH restriction of 127mPD, as stipulated on the Plan, to facilitate the comprehensive redevelopment of two(2) existing Industrial Buildings ("**IBs**") into a private residential development with commercial uses ("**Proposed Redevelopment**"). An Indicative Development Scheme (***Appendix 1 of the Planning Statement*** refers) is prepared to demonstrate feasibility of the proposed zoning and to illustrate the proposed zoning parameters.

1.1.3 The Proposed Redevelopment comprises of two (2) 32-storey residential towers above a 3-storey Podium at a proposed building height ("**BH**") of 127mPD and with a plot ratio ("**PR**") of 6.

1.2 Objectives

1.2.1 The objectives of the traffic impact assessment study are as follows:

- to review the existing traffic conditions in the vicinity of the Site;
- to estimate the traffic generation and attraction of the Proposed Redevelopment;
- to project the future traffic situation in the surrounding road network;
- to appraise the potential traffic impact of the Proposed Redevelopment and to consider traffic improvement proposals, if required; and
- to quantify the internal transport facilities for the Proposed Redevelopment.

2 THE PROPOSED REDEVELOPMENT

2.1 The Site

2.1.1 The Site is located at 8-14 Siu Lek Yuen Road, Sha Tin. It is bounded by Siu Lek Yuen Telephone Exchange to the southeast, Yuen Shun Circuit to the southwest, Shatin Industrial Centre to the northwest and Siu Lek Yuen Road to the northeast. At present, the existing buildings on the Site, namely the Chiaphua Industries Building and the Chiaphua Centre, are equipped with a vehicular access at Yuen Shun Circuit.

2.2 The Proposed Redevelopment Parameters

2.2.1 **Table 2.1** summarizes the key development parameters of the Proposed Redevelopment.

Table 2.1 Key Development Parameters

Item	Proposed Parameters
Site Area	About 7,668 m^2
Plot Ratio	6.00
Total GFA	About 46,008 m^2
Plot Ratio (Domestic)	5.75
Domestic GFA **[A]**	About 44,091 m^2
Total Number of Residential Units	928
Number of Residential Blocks	2
Number of Storeys	32 domestic storeys above a 3-storey Podium
Plot Ratio (Non-domestic)	0.25
Non-domestic GFA **[B]**	About 1,917 m^2

3 EXISTING TRAFFIC SITUATION

3.1 Existing Road Network

3.1.1 The Site has two frontages on public roads, one at Yuen Shun Circuit and another at Siu Lek Yuen Road. The vehicular access for the existing buildings on the Site is at Yuen Shun Circuit which is a single four-lane local road serving as an access road for the Siu Lek Yuen area and connects to Ngau Pei Sha Street on both ends.

3.1.2 Siu Lek Yuen Road is a primary distributor connects Kwong Yuen and City One area to Tai Chung Kiu Road and Tate's Cairn Highway. The section of Siu Lek Yuen Road between Ngan Shing Street and Sha Tin Wai Road is dual 3-lane carriageway which carried an Annual Average Daily Traffic (AADT) of 12,840 vehicles in 2024.

3.2 Traffic Count Survey

3.2.1 A traffic count survey was carried out on 17 September 2025 (Wednesday) and 21 January 2026 (Wednesday) during the peak hour period from 07:00 to 9:00 and 17:00 to 19:00 at the following junctions. The locations of the key junctions and area of influence (AOI) are shown in **Figure 3.1**.

- Yuen Shun Circuit / Yuen Hong Street
- Siu Lek Yuen Road / Yuen Hong Street
- Siu Lek Yuen Road / Sha Tin Wai Road / Slip Road to Tate's Cairn Highway
- Siu Lek Yuen Road / Slip Road to Tate's Cairn Highway
- Yuen Shun Circuit / Yuen On Street (East)
- Ngau Pei Sha Street / Yuen Shun Circuit (East junction)
- Sha Tin Wai Road / Ngau Pei Sha Street
- Sha Tin Wai Road / Slip Road from Tate's Cairn Highway
- Chap Wai Kon Street / Siu Lek Yuen Road
- Fo Tan Road / Tai Chung Kiu Road
- Tai Chung Kiu Road / Siu Lek Yuen Road
- Siu Lek Yuen Road /Ngan Shing Street
- Chap Wai Kon Street / Ngau Pei Sha Street
- Chap Wai Kon Street / Ngan Shing Street
- Ngan Shing Street / Sha Tin Wai Street

3.2.2 The identified AM and PM peak hours were 07:30 – 08:30 and 17:15 – 18:15, respectively and the surveyed traffic flows are presented in **Figure 3.2**.

3.3 Existing Junction Capacity Assessment

3.3.1 Based on the surveyed traffic flows, the performance of the key junctions were assessed. The assessment results are tabulated in **Table 3.1** and detailed junction capacity calculation sheets are presented in **Appendix A**.

Table 3.1 Existing Junction Performance

No.	Junction	Type/ Capacity Index(1)	AM Peak	PM Peak
J1	Yuen Shun Circuit / Yuen Hong Street	Priority/DFC	0.32	0.30
J2	Siu Lek Yuen Road / Yuen Hong Street	Signalized/RC	91%	127%
J3	Siu Lek Yuen Road / Sha Tin Wai Road / Slip road to/from Tate's Cairn Highway	Signalized/RC	37%	59%
J4	Siu Lek Yuen Road / Slip road to Tate's Cairn Highway	Signalized/RC	75%	329%
J5	Yuen Shun Circuit/ Yuen On Street (East)	Priority/DFC	0.05	0.07
J6	Ngau Pei Sha Street / Yuen Shun Circuit (East)	Priority/DFC	0.28	0.28
J7	Ngau Pei Sha Street / Sha Tin Wai Road	Signalized/RC	38%	77%
J8	Sha Tin Wai Road / Slip road from Tate's Cairn Highway	Signalized/RC	212%	301%
J9	Chap Wai Kon Street/ Siu Lek Yuen Road	Signalized/RC	58%	118%
J10	Fo Tan Road / Tai Chung Kiu Road	Signalized/RC	16%	23%
J11	Tai Chung Kiu Road / Siu Lek Yuen Road	Signalized/RC	28%	56%
J12	Siu Lek Yuen Road /Ngan Shing Street	Signalized/RC	30%	70%
J13	Chap Wai Kon Street / Ngau Pei Sha Street	Signalized/RC	159%	153%
J14	Chap Wai Kon Street / Ngan Shing Street	Signalized/RC	31%	36%
J15	Ngan Shing Street / Sha Tin Wai Street	Signalized/RC	77%	91%

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

3.3.2 It can be seen from **Table 3.1** that all concerned junctions performed satisfactorily during AM and PM peak hours.

3.4 Existing Public Transport Facilities

3.4.1 MTR City One Station and MTR Shek Mun Station is located about 500m from the Site. The MTR Station could be easily accessed via the existing footpath and crossings. Numerous franchised bus and scheduled minibus (GMB) routes operate in the vicinity of the Site along Siu Lek Yuen Road, Ngau Pei Sha Street and Chap Wai Kon Street. **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 Services

Mode	Route No.	Origin-Destination	Frequency (min)
Bus	38B	Tsuen Wan (Riviera Gardens) – Shek Mun	2 trips per day
	49X	Kwong Yuen – Tsing Yi Ferry	8 – 20
	73A	Fanling (Wah Ming) – Yu Chui Court	20 – 35
	80K	Sun Chui – Yu Chui Court	12 – 30
	82C	Kwong Yuen – Hong Kong Science Park	10 – 30
	82K	Mei Tin – Yu Chui Court	30 – 40
	82X	Ravana Garden – Wong Tai Sin (Circular)	15 – 25

Mode	Route No.	Origin-Destination	Frequency (min)
	83K	Wong Nai Tau – Sha Tin Central (Circular)	12 – 30
	83X	Shui Chuen O – Kwun Tong Ferry	10 – 30
	84M	Chevalier Garden – Lok Fu	25 – 30
	85A	Kwong Yuen – Kowloon City Ferry	25 – 30
	85X	Ma On Shan Town Centre – Hung Hom (Hung Luen Road)	9 – 30
	86	Wong Nai Tau – Mei Foo	15 – 25
	89C	Heng On – Kwun Tong (Tsui Ping Road)	12 – 30
	89S	Shui Chuen O – Wu Kai Sha Station	20 – 30
	89X	Shatin Station – Kwun Tong (Tsui Ping Road)	10 – 25
	90	Shek Mun Estate – Tseung Kwan O (Choi Ming)	2 trips per day
	182	Yu Chui Court – Central (Macau Ferry)	15 – 30
	182X	Central (Macau Ferry) – Yu Chui Court	6 trips per day
	240X	Wong Nai Tau – Kwai Hing Station	12 trips per day
	281A	Kwong Yuen – Kowloon Station	10 – 30
	281B	Shek Mun Estate – Tsim Sha Tsui East (Mody Road)	20 – 30
	281E	Haiphong Road Tsim Sha Tsui – Kwong Yuen	2 trips per day
	286D	Ma On Shan Town Centre – Sham Shui Po	2 trips per day
	288D	Ravana Garden – Shui Chuen O	1 trip per day
	680	Lee On – Admiralty Station (East) (Via Chung On Estate)	12 – 30
	682	Lee On – Chai Wan (East)	10 – 30
	682B	Shui Chueu O Estate – Chai Wan (East)	20 – 30
	980A	Shek Mun Estate – Wan Chai (Fleming Road)	4 trips per day
	982C	Shek Mun Estate – Sai Wan Ho	2 trips per day
	982X	Yu Chui Court – Wan Chai(Fleming Road)	7 trips per day
	A41	Shek Mun Estate – Airport (Ground Transportation Centre)	15 – 35
	N42	Yiu On Bus Terminus – Tung Chung Station	3 trips per day
	N182	Kwong Yuen – Central (Macau Ferry)	20 – 30
	N283	Tsim Sha Tsui East (Mody Road) – Wong Nai Tau	3 trips per day
	N680	Kam Ying Court – Central (Macau Ferry)	20 – 30
	NA41	Shui Chuen O – HZMB Hong Kong Port	6 trips per day
Resident's service	NR61	City One Shatin – Lam Tin Station	25 – 30
	NR88	City One Shatin – Central	15 – 45
GMB	65A	Wong Nai Tau – Sha Tin Central	5
	65K	Wong Nai Tau – Fo Tan Station (Circular)	10 – 20
	65M	Wong Nai Tau – Shek Mun Station	8 – 10
	65S	Wong Nai Tau – Mong Kok Station (Circular)	20 – 25

Mode	Route No.	Origin-Destination	Frequency (min)
	65X	Pamela Youde Nethersole Eastern Hospital – North Point Ferry Pier Public Transport Interchange	15 – 20
	67A	Shek Mun Estate – Sha Tin Station	10 – 15
	505	Sheung Shui San Fat Street – Sha Tin Yuen Chau Kok	15 – 30
	804	Kwong Yuen – Hin Keng	5 – 10
	806A	Wong Nai Tau – Wan Tau Tong	12 – 20
	806B	Shek Mun – Wan Tau Tong	20 – 25
	806M	Pak Shek Kok – Shek Mun (Circular)	30
	806X	Wong Nai Tau – Wan Tau Tong	30
	808	Kam Ying Court – Prince Of Wales Hospital	6 – 8
	808P	Heng On Bus Terminus – Prince Of Wales Hospital	30
	811	Sui Wo Court – Yu Chui Court	8
	811A	Greenwood Terrace – Pictorial Garden	20
	811P	City One Plaza – Royal Ascot	8
	813	Shui Chuen O – Shek Mun Station	10 – 25
	813A	Shui Chuen O – Shatin Hospital (Circular)	15 – 25

3.5 Occupancy of Existing Franchised Bus Service

3.5.1 In order to review the occupancy of the franchised bus services, an occupancy survey was conducted on 21 January 2026 (Wednesday) for the time periods of 07:00 - 09:00 hours and 17:00 - 19:00 hours at the northbound bus stop ("Siu Lek Yuen Road near Yuen Hong Street (Lamp Post No. 1723-4)") and southbound bus stop ("Siu Lek Yuen Road near Yuen Hong Street") along Siu Lek Yuen Road. The results are presented in **Table 3.3.**

Table 3.3 Occupancy of Existing Franchised Bus Service

Items	AM Peak		PM Peak	
	Northbound	Southbound	Northbound	Southbound
No. of Vehicles **[A]**	13	22	17	15
Total Capacity (pax/hour) **[B]**	1,711	2,917	2,195	1,980
No. of Pax. on-board when arrived **[C]**	896	1,640	1,339	976
No. of Pax. alighting **[D]**	119	11	95	6
No. of Pax. boarding **[E]**	5	95	19	126
No. of Pax on-board when leave **[F] = [C] – [D] + [E]**	782	1,724	1,263	1,096
Occupancy (%) **[G] = [F] / [B]**	46%	59%	58%	55%

3.5.2 The survey result shows that the existing public transport services are operating with spare capacity.

3.6 Existing Footpath Capacity Assessment

3.6.1 It is anticipated that most of the pedestrians to be generated and attracted by the proposed development will use the public transport services in its vicinity, i.e. MTR City One Station and bus stops at Siu Lek Yuen Road. The pedestrians to be generated by the proposed development are anticipated to access the public transport services on foot via the local footpath system as shown in **Figure 3.4**.

3.6.2 Assessments were conducted for the foregoing footpath and crossing sections to appraise their existing performances. **Table 3.4** is an extract of the definition of pedestrian walkway LOS according to the Highway Capacity Manual.

Table 3.4 Description of Level-of-service

LOS	Flow (ped/m/min)	Description
A	≤16	Pedestrians basically move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected, and conflicts between pedestrians are unlikely.
B	16-23	Sufficient space is provided for pedestrians to freely select their walking speeds, to bypass other pedestrians and to avoid crossing conflicts with others. At this level, pedestrians begin to be aware of other pedestrians and to respond to their presence in the selection of walking paths.
C	23-33	Sufficient space is available to select normal walking speeds and to bypass other pedestrians primarily in unidirectional stream. Where reverse direction or crossing movement exist, minor conflicts will occur, and speed and volume will be somewhat lower.
D	33-49	Freedom to select individual walking speeds and bypass other pedestrians is restricted. Where crossing or reverse flow movements exist, the probability of conflicts is high and its avoidance requires changes of speeds and position. The LOS provides reasonable fluid flow; however, considerable friction and interactions between pedestrians are likely to occur.
E	49-75	Virtually, all pedestrians would have their normal walking speeds restricted. At the lower range of this LOS, forward movement is possible only by shuffling. Space is insufficient to pass over slower pedestrians. Cross- and reverse-movement are possible only with extreme difficulties. Design volumes approach the limit of walking capacity with resulting stoppages and interruptions to flow.
F	>75	Walking speeds are severely restricted. Forward progress is made only by shuffling. There are frequent and unavoidable conflicts with other pedestrians. Cross- and reverse-movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristics of queued pedestrians than of moving pedestrian streams.

Notes: (1) source: Highway Capacity Manual 2000 published by the US Transportation Research Board
(2) ped/m/min = pedestrians per metre per minute

3.6.3 Based on the collected data of pedestrian movements, the LOS of the footways and capacity of signalized crossing in accommodating the existing pedestrian movements have been assessed and the results of the assessment are summarized in **Tables 3.5 – 3.6**.

Table 3.5 Existing Capacity Analysis of the Concerned Footpaths

Ref.	Location	Actual Width (m)	Effective Width (m)(1)	Peak Hour flow (ped/hr)		Flow Rate(2) ped/m/min [LOS]	
				AM	PM	AM	PM
P1	Southwest footpath of Siu Lek Yuen Road	3.2	2.2	204	303	1.5 [A]	2.3 [A]
P2	Southeast footpath of Chap Wai Kon Street	3.5	2.5	330	324	2.2 [A]	2.2 [A]
P3	Southwest footpath of Siu Lek Yuen Road	6.5	5.5	37	86	0.1 [A]	0.3 [A]
P4	Northeast footpath of Siu Lek Yuen Road	3.6	2.6	86	110	0.6 [A]	0.7 [A]

Notes: (1) A clearance zone of 0.5m on side with obstruction was adopted.
(2) For LOS "C" or above, flow volumes should be less than 33 ped/m/min.

Table 3.6 Demand/Capacity Ratio of Crossing (Northeast) at J/O Ngau Pei Sha Street /Chap Wai Kon Street

Crossing	Green Time (sec) [A]	Flashing Green Time (sec) [B]	Cycle Time (sec) [C]	Green Time Proportion (GTP) [D] = ([A]+[B])/[C]	Lateral Width (m) [E]	Pedestrian Crossing Capacity (ped/hr) [F] = 1,900 x [D] x [E]	Surveyed Peak Hour Pedestrian Flows (ped/hr) [G]	Demand / Capacity Ratio [G] / [F]
2026 Existing Peak Hour								
AM Peak	26	7	125	0.264	4.4	2,207	708	0.32
PM Peak	26	7	125	0.264	4.4	2,207	1,239	0.56

Note: Reference was made to Chapter 3.2, Volume 4 of TPDM

3.6.4 The results show that the existing pedestrian facilities are operating with spare capacity during both AM and PM peak hours with LOS "C" or above.

4 FUTURE TRAFFIC SITUATION

4.1 Design Year

4.1.1 The tentative completion year for the Proposed Redevelopment is 2033. The guideline from the Transport Department recommended that the traffic impact assessment should be conducted for whichever is later: (i) three years after the completion date (2033 + 3 = 2036), or (ii) five years after the submission (2025 + 5 = 2030). As a result, the design year adopted for the subsequent traffic analysis is 2036.

4.2 Traffic Forecast

Annual Traffic Census – Historical Data

4.2.1 In order to establish the traffic growth rate in the vicinity of the Site, reference was made to the 2019 to 2024 Annual Traffic Census (ATC) 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 study area and the corresponding counts are shown in **Table 4.1**.

Table 4.1 Annual Traffic Census Data

Stn. No.	Road Section			AADT(1)						Avg. Growth%
	Road	From	To	2019	2020	2021	2022	2023	2024	
5104	Chap Wai Kon St	Bus Terminus	Siu Lek Yuen Rd	5,560	4,970 (-10.6%)	5,260 (5.8%)	5,280 (0.4%)	5,550 (5.1%)	5,720 (3.1%)	0.6%
5813	Siu Lek Yuen Rd	Ngan Shing St	Sha Tin Wai Rd	12,600	11,880 (-5.7%)	12,970 (9.2%)	12,590 (-2.9%)	13,030 (3.5%)	12,840 (-1.5%)	0.4%
5817	Sha Tin Wai Rd	Siu Lek Yuen Rd	Ngan Shing St	18,410	17,360 (-5.7%)	19,120 (10.1%)	16,580 (-13.3%)	17,160 (3.5%)	16,910 (-1.5%)	-1.7%
Total				**36,570**	**34,210 (-6.5%)**	**37,350 (9.2%)**	**34,450 (-7.8%)**	**35,740 (3.7%)**	**35,470 (-0.8%)**	**-0.6%**

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

4.2.2 **Table 4.1** showed that the recorded average annual growth rate of the concerned counting stations is -0.6% between years 2019 to 2024.

Territorial Population and Employment Data Matrix – Projection Data

4.2.3 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 2026 and 2031 are summarized in **Table 4.2**.

Table 4.2 Population and Employment Data in Sha Tin District

Year	Population	Employment	Total
2026	687,450	230,600	918,050
2031	667,750	220,400	888,150
Average Annual Growth Rate			**-0.7%**

4.2.4 As shown in **Table 4.2**, the average annual growth rate for population and employment of Sha Tin district is -0.7% during 2026 – 2031. Having considered the rates derived from ATC and TPEDM data, to be conservative, a nominal growth rate of +0.5% will be adopted for the subsequent traffic forecasting.

4.3 Planned/Committed Developments

4.3.1 To estimate the future traffic flows, updated information is being obtained from available information regarding the planned and approved developments in the vicinity of the Site. The traffic flows that would be generated by these developments have been considered, by making reference to the trip generation rates in the Transport Planning and Design Manual (TPDM). The traffic generation and attraction numbers are shown in **Table 4.3**.

Table 4.3 Traffic Generation and Attraction of Planned / Committed Developments

Proposed Use		Unit /Content	AM Peak Hour			PM Peak Hour		
			Gen.	Att.	Total	Gen.	Att.	Total
Adopted Trip rates (1)								
Retail		pcu/hr100 m^2	0.2296	0.2434	-	0.3100	0.3563	-
Office		pcu/hr/100m^2	0.1703	0.2452	-	0.1573	0.1175	-
Private housing: High-Density/ R(A):60 m^2		pcu/hr/flat	0.0718	0.0425	-	0.0286	0.0370	-
Hospital (2)		pcu/hr/10-bed	2.4113	2.695	-	2.9551	3.0260	-
Estimated Traffic Generation/Attraction								
Planning Application No. A/ST/988		2,822.5m^2 retail GFA	7	7	14	9	11	20
		43,870m^2 office GFA	75	108	183	70	52	122
Private Residential Development at STTL 623		291 flats (3)	21	13	34	9	11	20
Private Residential Development at STTL 625		565 flats (4)	41	25	66	17	21	38
Redevelopment of Prince of Wales Hospital Phase 2	Stage 1	450 beds (5)	109	122	231	133	137	270
	Stage 2	850 beds (6)	205	230	435	252	258	510
Student Hostel at junction of Yuen Shun Circuit / Yuen Hong Street		600 beds (7)(8)	44	26	70	18	23	41
Total			**502**	**531**	**1,033**	**508**	**513**	**1,021**

Notes: Gen. – Generation; Att. – Attraction
(1) TPDM mean trip rates are adopted.
(2) In-house trip rates at Union Hospital are adopted.
(3) According to press release of HKSAR regarding the tender awarded for STTL 623, the maximum gross floor area is 14,550 m^2. (Source: https://www.info.gov.hk/gia/general/202407/17/P2024071700583.htm) Assume all GFA is for domestic and the average flat size to be 50 m^2, 291 flats (14,550 / 50 = 291) are adopted as the number of flats for estimation of traffic generation and attraction.
(4) According to press release of HKSAR regarding the tender awarded for STTL 625, the maximum gross floor area is 28,260 m^2. (Source: https://www.info.gov.hk/gia/general/202410/29/P2024102900449.htm) Assume all GFA is for domestic and the average flat size to be 50 m^2, 565 flats (28,260 / 50 = 565) are adopted as the number of flats for estimation of traffic generation and attraction.

(5) According to website of Hospital Authority, the redevelopment of Prince of Wales Hospital Phase 2 will provide 450 additional beds.
(Source: https://www32.ha.org.hk/capitalworksprojects/en/Project/10years/Redevelopment-Of-Prince-Of-Wales-Hospital/Special-Features/Project-Highlights.html)
(6) According to Legislative Council Paper No. CB(4)600/20-21(08), the redevelopment of Prince of Wales Hospital Phase 2 Stage 2 will provide 850 additional beds.
(7) According to press release of HKSAR the Development Bureau invites the market to submit expressions of interest (EOI) for converting the site into student hostel with maximum gross floor area of 10,000 m^2 (Source: https://www.info.gov.hk/gia/general/202601/20/P2026012000386.htm?fontSize=1).
Assume all GFA is for domestic and the average flat size to be 16.7 m^2, 600 beds (10,000 /16.7 ~ 600) are adopted as the number of beds for estimation of traffic generation and attraction.
(8) For conservative purposes, trip rates for private housing: High-Density/ R(A):60 m^2 are adopted.

4.4 Proposed Redevelopment Traffic Generation

4.4.1 In order to examine the traffic impact of the Proposed Redevelopment, additional traffic generated/ attracted by the Proposed Redevelopment should be estimated based on the development parameters as outlined in **Table 2.1** and the trip rates documented in TPDM Volume 1 Chapter 3 – Transport Considerations of Town Plans. The traffic generation of the Proposed Redevelopment has been estimated and presented in **Table 4.4**.

Table 4.4 Development Traffic Generation

Proposed Use	Unit /Content	AM Peak Hour			PM Peak Hour		
		Gen.	Att.	Total	Gen.	Att.	Total
Adopted Trip rates (1)							
Private housing: High-Density/ R(A):60 m^2 (1)	pcu/hr/flat	0.0718	0.0425	-	0.0286	0.0370	-
Retail	pcu/hr/100 m^2	0.2296	0.2434	-	0.3100	0.3563	-
Estimated Traffic Generation/Attraction							
Residential	928 flats	67	40	107	27	35	62
Retail & Eating place	1,917 m^2	5	5	10	6	7	13
Total		**72**	**45**	**117**	**33**	**42**	**75**

Notes: Gen. – Generation; Att. – Attraction
(1) TPDM mean trip rates are adopted.

4.4.2 As shown in **Table 4.4**, the Proposed Redevelopment would generate two-way traffic flows of 117 pcu/hr and 75 pcu/hr during the AM and PM peak hours, respectively. The development traffic was distributed onto the road work with reference to surveyed traffic flows and presented in **Figure 4.1**.

4.5 Reference and Design Flows

4.5.1 The 2036 Reference Flows, i.e., the traffic flows in the vicinity **without** the traffic flows generated by the Proposed Redevelopment, were estimated based on the following equation.

2036 Reference Flows = 2025 Existing Flows x $(1 + 0.5\%)^{11}$ + Traffic Flows Generated by the Planned/Committed Developments

4.5.2 The 2036 Design Flows, i.e., the traffic flows in the vicinity **with** the traffic flows generated by the Proposed Redevelopment, were estimated based on the following equation:

2036 Design Flows = 2036 Reference Flows + Traffic Flows Generated by the Proposed Redevelopment

4.5.3 The 2036 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 2036. The assessment results are shown in **Table 4.5** and the detailed calculation sheets are presented in **Appendix B**.

Table 4.5 Year 2036 Junction Capacity Assessment

No.	Junction	Junction Type/Index (1)	2036 Reference		2036 Design	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Yuen Shun Circuit / Yuen Hong Street	Priority/DFC	0.43	0.40	0.48	0.45
J2	Siu Lek Yuen Road / Yuen Hong Street	Signalized/RC	53%	91%	44%	85%
J3	Siu Lek Yuen Road / Sha Tin Wai Road / Slip road to/from Tate's Cairn Highway	Signalized/RC	18%	34%	15%	32%
J4	Siu Lek Yuen Road / Slip road to Tate's Cairn Highway	Signalized/RC	54%	234%	53%	231%
J5	Yuen Shun Circuit/ Yuen On Street (East)	Priority/DFC	0.10	0.10	0.10	0.10
J6	Ngau Pei Sha Street / Yuen Shun Circuit (East)	Priority/DFC	0.28	0.28	0.28	0.29
J7	Ngau Pei Sha Street / Sha Tin Wai Road	Signalized/RC	21%	49%	20%	47%
J8	Sha Tin Wai Road / Slip road from Tate's Cairn Highway	Signalized/RC	124%	167%	124%	167%
J9	Chap Wai Kon Street/ Siu Lek Yuen Road	Signalized/RC	49%	105%	49%	103%
J10	Fo Tan Road / Tai Chung Kiu Road (2)	Signalized/RC	15%	23%	15%	23%
J11	Tai Chung Kiu Road / Siu Lek Yuen Road	Signalized/RC	21%	48%	21%	48%
J12	Siu Lek Yuen Road /Ngan Shing Street	Signalized/RC	22%	59%	21%	59%
J13	Chap Wai Kon Street / Ngau Pei Sha Street	Signalized/RC	145%	138%	145%	138%
J14	Chap Wai Kon Street / Ngan Shing Street	Signalized/RC	23%	28%	23%	28%
J15	Ngan Shing Street / Sha Tin Wai Street	Signalized/RC	18%	22%	18%	22%

Note: (1) RC = Reserve Capacity for signalized junction; DFC = Design Flow to Capacity ratio for priority junction.
(2) Junction improvement scheme to be implemented by others (see **Appendix C**) is incorporated.

4.6.2 As shown in **Table 4.5**, the assessed junctions will operate with capacities during the peak hours in 2036 with the expected traffic growth and the additional traffic flows generated by the Proposed Redevelopment.

Sensitivity Test at junction of Ngan Pei Sha Street/Yuen Shun Circuit

4.6.3 A sensitivity test is conducted to convert the priority junction of Ngan Pei Sha Street/Yuen Shun Circuit to a signalized junction for sake of road safety due to the increased traffic flow for the concerned junction. The schematic layout is shown in **Figure 4.4** and the result is shown in **Table 4.6**.

Table 4.6 Year 2036 Junction Capacity Assessment – Sensitivity Test

No.	Junction	Junction Type/Index (1)	2036 Reference		2036 Design	
			AM Peak	PM Peak	AM Peak	PM Peak
J6	Ngau Pei Sha Street / Yuen Shun Circuit (East)	Signalized/RC	42%	42%	42%	42%

Note: (1) RC = Reserve Capacity for signalized junction.

4.6.4 The result shows that the junction will operate with capacity for both reference and design scenarios. Since the traffic impact induced by the Proposed Redevelopment is insignificant to this junction, the sensitivity test is for reference only, the applicant will not responsible for the junction modification.

4.7 Public Transport Services Assessment

Pedestrian Demand on Public Transport Services

4.7.1 In order to identify the sufficiency of pedestrian facilities, additional passengers generated by the Proposed Redevelopment should be estimated. As there are no pedestrian trip rates established in TPDM, two methodologies were introduced to estimate the pedestrian generation and attraction based on design population (for residential component) and in-house pedestrian trip generation surveys conducted at buildings with similar uses (for retail component). The methodology that results in larger number would be adopted for conservative assessment purpose.

Estimated Pedestrian Trip Rates based on Design Population – Residential Component

4.7.2 According to the 2021 Population Census published by the Census and Statistics Department, the average household size is 2.8 in Siu Lek Yuen area (Tertiary Planning Unit 756 and 761 - 762), the overall population of the Proposed Redevelopment is therefore about 2,599 (928 flats x 2.8 = 2,598.4, say 2,599).

4.7.3 Reference has been made to the published "Travel Characteristics Survey (TCS) 2011 Final Report". According to the Report, the daily mechanized trip rate per population is 1.83 trips (two-way) and the morning and evening peak hour accounted for about 12% of the daily trips for the two-way trips. It is assumed that 90% of the trips are in outbound direction in the AM peak hour. Based on the above, the estimated outbound and inbound trips in AM peak hour are about 514 persons/hr (i.e. 2,599 x 1.83 x 0.12 x 0.9) and 58 persons/hr (i.e. 2,599 x 1.83 x 0.12 x 0.1), respectively. The outbound and inbound trips are swapped for PM peak hour, which about 58 persons/hr (i.e. 2,599 x 1.83 x 0.12 x 0.1) would be generated and 514 persons/hr (i.e. 2,599 x 1.83 x 0.12 x 0.9) would be attracted by the Proposed Redevelopment.

4.7.4 The derived pedestrian generation and attraction trip rates during AM peak would be 0.56 persons/hr/unit (i.e. 514 / 928) and 0.07 persons/hr/unit (i.e. 58 / 928). The derived pedestrian generation and attraction trip rates during PM peak would be 0.07 persons/hr/unit (i.e. 58 / 928) and 0.56 persons/hr/unit (i.e. 514 / 928).

Estimated Pedestrian Trip Rates based on Trip Generation Survey – Retail Component

4.7.5 In-house pedestrian trip rates for retail use were retrieved and presented in **Table 4.7**.

Table 4.7 In-house Pedestrian Trip Rates

Use	Unit/ Content	AM Peak Hour			PM Peak Hour		
		Gen.	Att.	2-way	Gen.	Att.	2-way
In-house Trip Rates for Retail							
Retail	persons /hr/100 m^2	1.70	2.45	–	11.5	15	–

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

Total Pedestrian Traffic Generated by the Proposed Redevelopment

4.7.6 By considering the pedestrian trip rates estimated for residential and retail components, the pedestrian generation and attraction of the Proposed Redevelopment are also estimated and tabulated in **Table 4.8**.

Table 4.8 Estimated Pedestrian Traffic Generation of the Proposed Redevelopment

Use	Unit/ Content	AM Peak			PM Peak		
		Gen.	Att.	Total	Gen.	Att.	Total
Adopted Pedestrian Trip Rates (1)							
Residential (1)	persons/hr/units	0.56	0.07	–	0.07	0.56	–
Retail (2)	persons/hr/100 m^2	1.60	2.40	-	12.00	15.20	-
Estimated Pedestrian Generation of the Proposed Redevelopment							
Residential	928 units	520	65	585	65	520	585
Retail	About 1,917 m^2	31	47	78	231	292	523
Total		**551**	**112**	**663**	**296**	**812**	**1,108**

Notes: Gen. – Generation; Att. – Attraction.
(1) The pedestrian trip rates derived based on design population are adopted.
(2) The pedestrian trip rates shown in **Table 4.6** are adopted.

4.7.7 The Proposed Redevelopment is estimated to generate 2-way pedestrian flows of 663 and 1,108 person/ hour during AM and PM peak hours, respectively.

4.7.8 In order to establish the pedestrian flow pattern to the different public transport facilities, reference was made to the number of passenger journeys by public transport operators recorded in the Monthly Traffic and Transport Digest (MTTD) October 2025. The modal split of the public transport for the Proposed Redevelopment was estimated as shown in **Table 4.9**.

Table 4.9 Estimated Modal Split for the Proposed Redevelopment

Mode	Distribution of Average Daily Public Transport Passenger Journeys by Mode (1)	Adjusted Modal Split for the Proposed Redevelopment
Rail-based PT	45.8%	46.3%
Road-based PT (excluding Taxi)	47.6%	48.1%
Taxi	5.6%	5.7%
Total	99.0% (2)	100.0%

Note: (1) Source: Chart 2.7 in Monthly Traffic and Transport Digest (Oct 2025).
(2) Marine transport is omitted.

4.7.9 The passenger generation to / from the MTR Stations, the bus / mini-bus stops and the taxi stands / the roadside available for taxi passenger pick-up & drop-off in the vicinity of the Proposed Redevelopment in AM and PM peak hours is estimated in **Table 4.10**.

Table 4.10 Estimated Pedestrian Generation to the Public Transport Facilities

Public Transport Facilities	Modal Split (for the Proposed Redevelopment)	AM Peak			PM Peak		
		Gen.	Att.	Total	Gen.	Att.	Total
MTR Station	46.3%	255	52	307	137	376	513
Bus / Mini-bus Stops	48.1%	265	54	318	142	390	532
Taxi Stand / Roadside	5.7%	31	6	38	17	46	63
Total	**100%**	**551**	**112**	**663**	**296**	**812**	**1,108**

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

4.8 Reference and Design Pedestrian Flows

4.8.1 The 2036 Reference Pedestrian Flows, i.e. the pedestrian flows in the local road without the proposed development, were estimated based on the following equation.

2036 Reference Pedestrian Flows = 2026 Existing Pedestrian Flows x $(1 + 0.5\%)^{10}$

4.8.2 The 2036 Design Pedestrian Flows, i.e. the pedestrian flows in the local road network with the proposed development, were estimated based on the following equation:

2036 Design Pedestrian Flows = 2036 Reference Flows + Additional Pedestrians Induced by the Proposed Development

4.9 Future Pedestrian Facilities Assessment

4.9.1 Capacity analysis of the concerned footpaths and crossing were carried out for the assessment year 2036. The pedestrians generated and attracted by the proposed development are distributed into the network with reference to the existing flow pattern. The assessment results are shown in **Tables 4.11 – 4.12**.

Table 4.11 Year 2036 Capacity Analysis of the Concerned Footpaths

Ref.	Location	Actual Width (m)	Effective Width (m)(1)	Peak Hour flow (ped/hr)		Flow Rate(2) ped/m/min [LOS]	
				AM	PM	AM	PM
2036 Reference Scenario							
P1	Southwest footpath of Siu Lek Yuen Road	3.2	2.2	214	318	1.6 [A]	2.4 [A]
P2	Southeast footpath of Chap Wai Kon Street	3.5	2.5	347	341	2.3 [A]	2.3 [A]
P3	Southwest footpath of Siu Lek Yuen Road	6.5	5.5	39	90	0.1 [A]	0.3 [A]
P4	Northeast footpath of Siu Lek Yuen Road	3.6	2.6	90	116	0.6 [A]	0.7 [A]
2036 Design Scenario							
P1	Southwest footpath of Siu Lek Yuen Road	3.2	2.2	521	318	3.9 [A]	2.4 [A]

Ref.	Location	Actual Width (m)	Effective Width (m)(1)	Peak Hour flow (ped/hr)		Flow Rate(2) ped/m/min [LOS]	
				AM	PM	AM	PM
P2	Southeast footpath of Chap Wai Kon Street	3.5	2.5	654	341	4.4 [A]	2.3 [A]
P3	Southwest footpath of Siu Lek Yuen Road	6.5	5.5	93	480	0.3 [A]	1.5 [A]
P4	Northeast footpath of Siu Lek Yuen Road	3.6	2.6	355	258	2.3 [A]	1.7 [A]

Notes: (1) A clearance zone of 0.5m on side with obstruction was adopted.
(3) For LOS "C" or above, flow volumes should be less than 33 ped/m/min.

Table 4.12 2036 Demand/Capacity Ratio of Crossing (Northeast) at J/O Ngau Pei Sha Street /Chap Wai Kon Street

Crossing	Green Time (sec) [A]	Flashing Green Time (sec) [B]	Cycle Time (sec) [C]	Green Time Proportion (GTP) [D] = ([A]+[B])/[C]	Lateral Width (m) [E]	Pedestrian Crossing Capacity (ped/hr) [F] = 1,900 x [D] x [E]	Estimated Peak Hour Pedestrian Demand (ped/hr) [G]	Demand / Capacity Ratio [G] / [F]
2036 Reference (Without the proposed development) Peak Hour								
AM Peak	26	7	125	0.264	4.4	2,207	744	0.34
PM Peak	26	7	125	0.264	4.4	2,207	1,302	0.59
2036 Design (With the proposed development) Peak Hour								
AM Peak	26	7	125	0.264	4.4	2,207	1,051	0.48
PM Peak	26	7	125	0.264	4.4	2,207	1,815	0.82

Note: Reference was made to Chapter 3.2, Volume 4 of TPDM

4.9.2 **Table 4.12** shows that the condition of the concerned footpaths will be satisfactory after accommodating the pedestrians generated and attracted by the proposed development in both AM and PM Peak hours with LOS "C" or above.

4.10 Future Occupancy of Franchised Bus Services

4.10.1 The additional pedestrians generated by the Proposed Redevelopment are distributed onto the nearest bus stops accordingly. The future occupancy of public transport services is then estimated and presented in **Table 4.13**.

Table 4.13 Future Occupancy of Public Transport Services

Items	AM Peak		PM Peak	
	Northbound	**Southbound**	**Northbound**	**Southbound**
No. of Vehicles **[A]**	13	22	17	15
Total Capacity (pax/hour) **[B]**	1,711	2,917	2,195	1,980
No. of Pax on-board when leave **[C]**	782	1,724	1,263	1,096
Additional Pax. Demand induced by the Proposed Redevelopment **[D]**	54	265	390	142
Projected No. of Pax. **[E] = [C] x (1+0.5%)^{10} + [D]**	876	2,078	1,718	1,295
Estimated Occupancy (%) **[F] = [E] / [B]**	51%	71%	78%	65%

4.10.2 As shown in **Table 4.12**, the existing bus routes would have spare capacity to accommodate the additional passengers generated by the Proposed Redevelopment during AM and PM peak hour in the future.

5 PROPOSED TRANSPORT FACILITIES PROVISIONS

5.1 Access Arrangement

5.1.1 There is an existing vehicular access located at Yuen Shun Circuit serving the existing buildings on the Site and will be maintained for the Proposed Redevelopment.

5.2 Internal Transport Facilities

5.2.1 The requirements of car parking and loading/unloading facilities for the Proposed Redevelopment should be provided in accordance with the latest Hong Kong Planning Standards and Guidelines (HKPSG) as listed out in **Table 5.1**.

Table 5.1 Proposed Transport Facilities Provisions

Development Type		**HKPSG Requirements**					**Required Nos. under HKPSG**
Proposed Redevelopment – 928 units and 1,917 m^2 for Retail Facilities							
Car parking	Residential	Parking Requirements = GPS x R1 x R2 x R3 where GPS = 1 space per 4 - 7 units					
		Unit Size (Y)	No. of Unit	R1	R2	R3	
		Y <= 40 m^2	192	0.5	0.75	0.9	10 – 17
		40m^2 < FS ≤ 70m^2	608	1.2	0.75	0.9	71 – 124
		70m^2 < FS ≤ 100m^2	128	2.4	0.75	0.9	30 – 52
		For Visitors For private residential developments with more than 75 units per block should include 5 visitor spaces per block					10
	Retail	1 car space per 150 - 300m² GFA					7 – 13
						TOTAL CAR PARKING	**128 – 216**
Loading /unloading	Residential	Minimum of 1 loading / unloading bay for goods vehicles within the site for every 800 flats or part thereof, subject to a minimum of 1 bay for each housing block					2
	Retail	1 loading/ unloading bay for goods vehicles for every 800 to 1,200m², or part thereof, GF					2 – 3
						TOTAL LOADING/UNLOADING	**4 – 5**
Motorcycle Parking	Residential	1 space per 100-150 flats					7 – 10
	Retail	10% of the total provision for private cars					1 – 2
						TOTAL MOTORCYCLE PARKING	**8 – 12**
Refuse Collection Vehicle	Residential	No specific requirement in HKPSG					1
						TOTAL RCV PARKING	**1**

5.2.2 As shown in **Table 5.1**, 216 nos. of private car parking spaces (including 3 nos. of parking space for disabled users), 5 nos. of goods vehicle loading / unloading bays, 12 nos. of motorcycle parking spaces and 1 no. of refuse collection vehicle parking space are required to fulfil the high-side requirements of the HKPSG.

5.2.3 **Table 5.2** summarizes the required and proposed car parking space and loading/unloading space numbers (with the dimensions required for each type of space) in the Proposed Redevelopment.

Table 5.2 Summary of Overall Transport Facilities Provisions

<table>
<tr><th>Facilities</th><th>Dimensions</th><th colspan="2">HKPSG (High-side) Requirement</th><th colspan="2">Proposed Provision</th></tr>
<tr><td>Car Parking Space</td><td>2.5m (W) x 5.0m (L) x 2.4m (H)</td><td>213</td><td rowspan="2">216</td><td>213</td><td rowspan="2">216</td></tr>
<tr><td>Disabled Car Parking Space</td><td>3.5m (W) x 5.0m (L) x 2.4m (H)</td><td>3</td><td>3</td></tr>
<tr><td>Motorcycle Parking Space</td><td>1.0m (W) x 2.4m (L) x 2.4m (H)</td><td colspan="2">12</td><td colspan="2">12</td></tr>
<tr><td>Goods Vehicle Loading / Unloading Bay</td><td>3.5m (W) x 11.0m (L) x 4.7m (H)</td><td colspan="2">5</td><td colspan="2">5</td></tr>
<tr><td>Refuse Collection Vehicle Parking Space</td><td>5.0m (W) x 12.0m (L) x 4.5m (H)</td><td colspan="2">-</td><td colspan="2">1</td></tr>
</table>

6 SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 The Site comprises of Sha Tin Town Lot Nos. 196 & 276 to the southwest of Siu Lek Yuen Road, Shatin, New Territories and it falls within an area zoned as "Industrial (1)" zone under the Approved Sha Tin Outline Zoning Plan (OZP), Plan No. S/ST/40. It is proposed to rezone the Site for a residential development with two (2) 32-storey residential towers above a 3-storey podium.

6.1.2 A traffic count survey was carried out on 17 September 2025 (Wednesday) and 21 January 2026 (Wednesday) during the peak hour period from 07:00 to 9:00 and 17:00 to 19:00 at the identified key junctions, and the AM and PM peak hours were found to be 07:30 – 08:30 and 17:15 – 18:15, 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 Redevelopment would generate two-way traffic flows of 117 pcu/hr in the AM peak, 75 pcu/hr in the PM peak. By assigning the additional development traffic to the 2036 Reference Flows, the 2036 Design Flows were obtained.

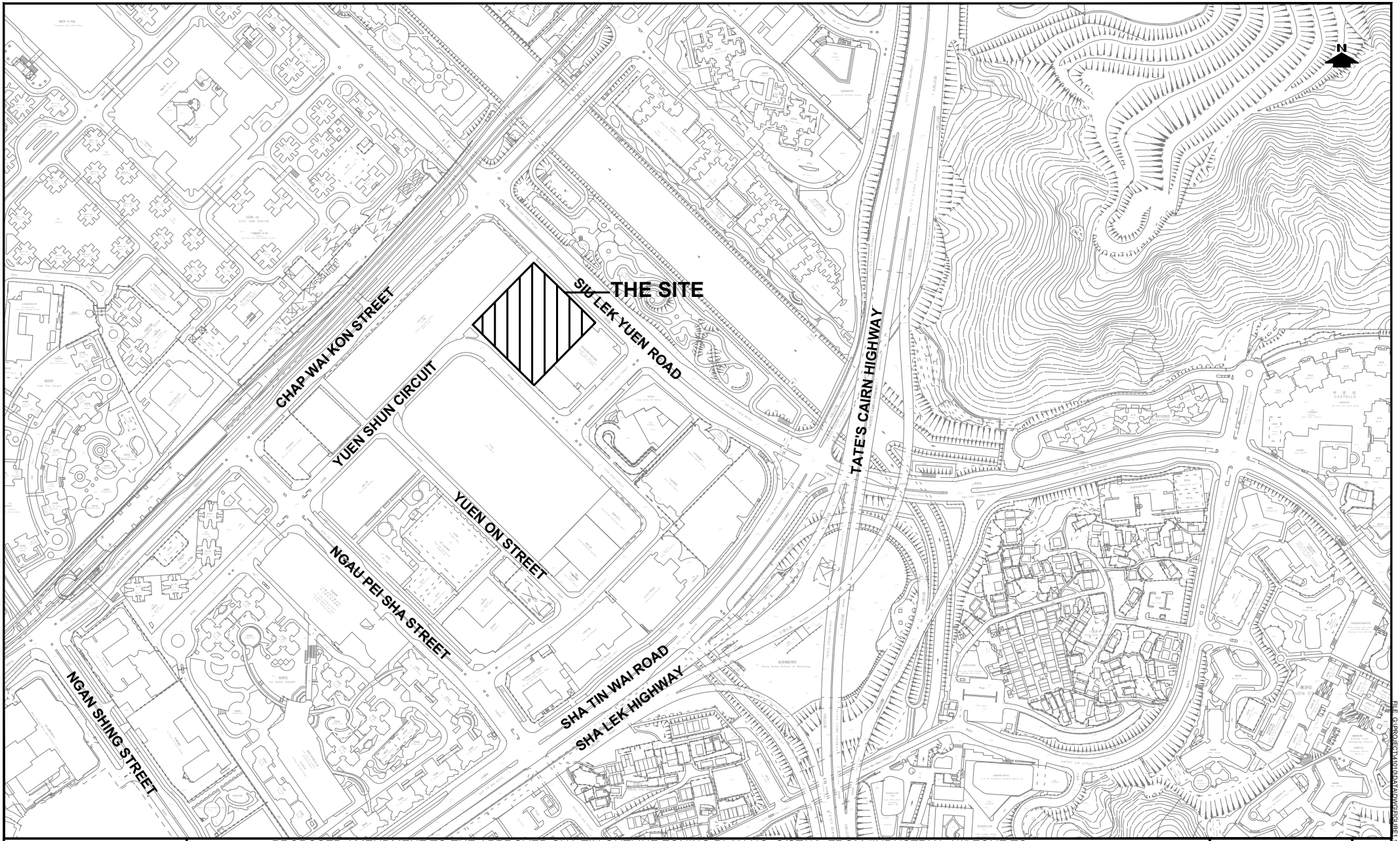
6.1.4 Junction capacity assessments were carried out at the key junctions in the vicinity for the year 2036. The results have indicated that all junctions will operate satisfactorily for both reference and design scenarios. Therefore, it is anticipated that the Proposed Redevelopment will not induce significant traffic impact to the surrounding road network.

6.1.5 There is an existing vehicular access located at Yuen Shun Circuit serving the Site and will be maintained for the Proposed Redevelopment.

6.1.6 It is proposed to provide a total of 216 car parking spaces (including 3 nos. of parking space for disabled users), 5 loading/unloading spaces, 12 motorcycle parking spaces and 1 refuse collection vehicle parking space within the Proposed Redevelopment. The internal transport facilities of the Proposed Redevelopment can meet the high side requirements as set out in the latest HKPSG.

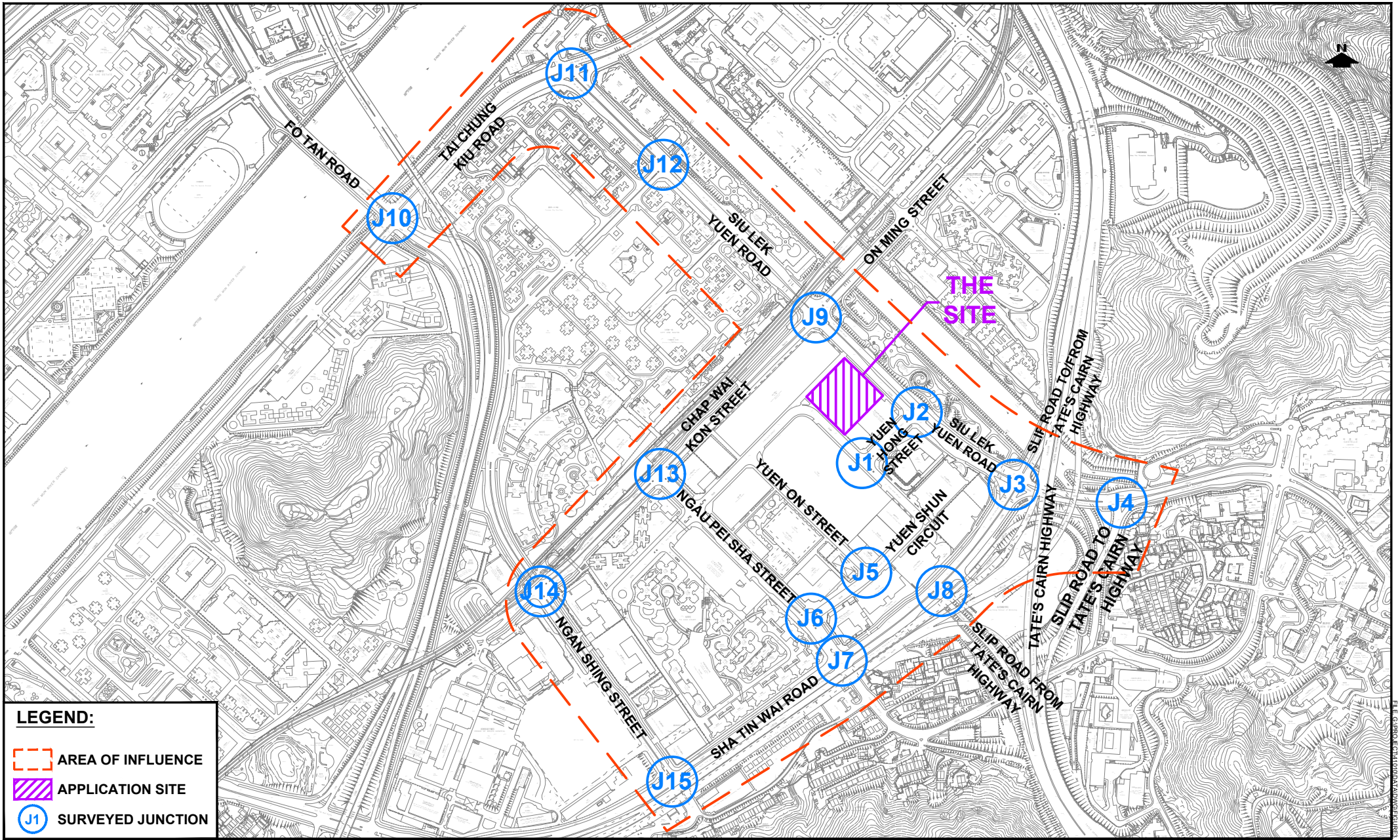
6.2 Conclusion

6.2.1 From the assessment results, it can be concluded that the Proposed Redevelopment will have no significant adverse traffic impact on the surrounding road network. The development proposal is considered acceptable from the traffic engineering point of view.



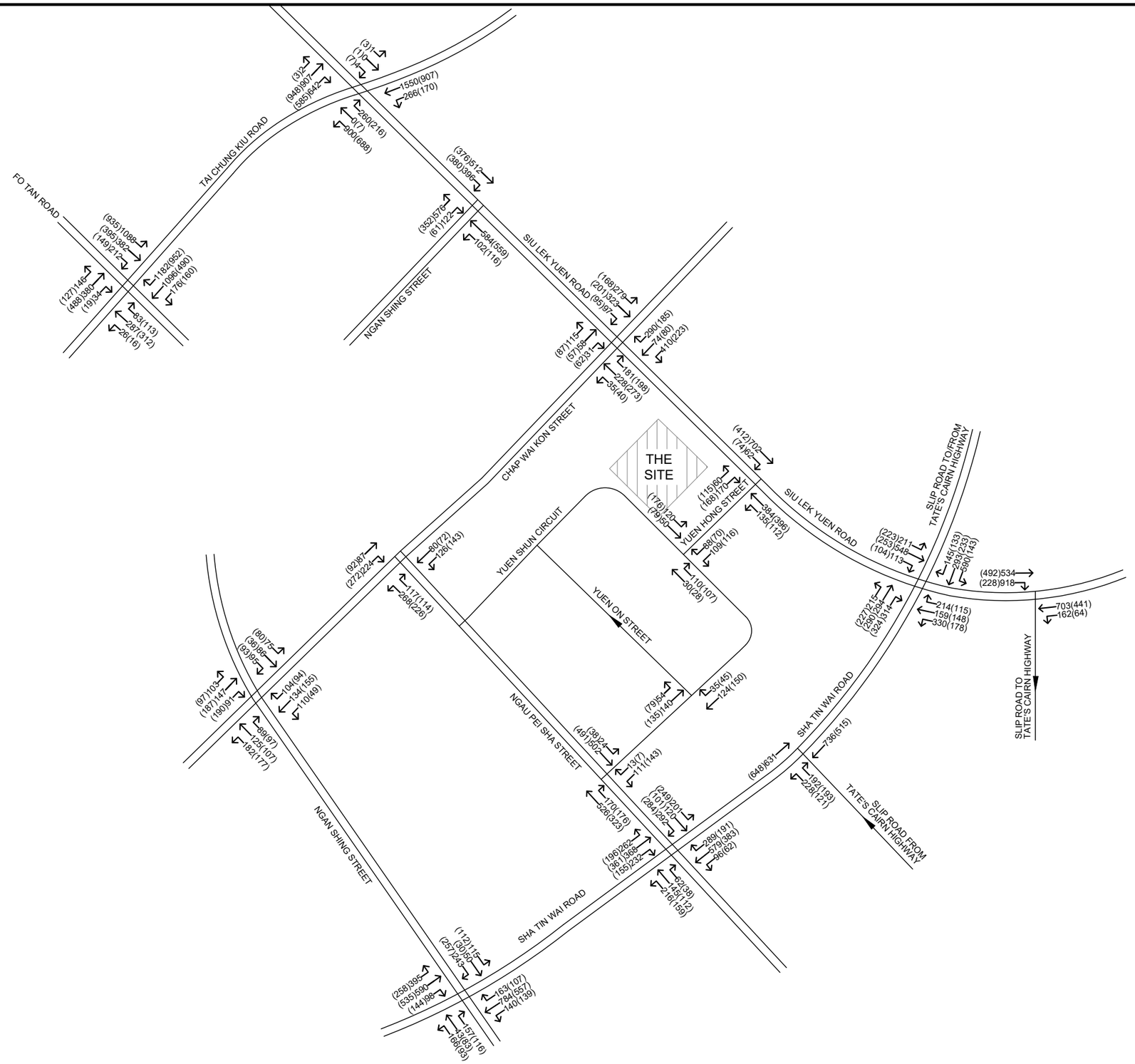
PROJECT NO. 41010	PROJECT TITLE PROPOSED AMENDMENT TO THE APPROVED SHA TIN OUTLINE ZONING PLAN NO. S/ST/40 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 1.1	REV. B
DESIGNED SKL / DATE AUG 2026	DRAWING TITLE LOCATION PLAN	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:5000			
CHECKED SLN			

FILE: G:\PROJECT\41010\DATA\DWG\FIGURE1.1B.DWG PLOT SCALE : 1 = 1



PROJECT NO. 41010	PROJECT TITLE PROPOSED AMENDMENT TO THE APPROVED SHA TIN OUTLINE ZONING PLAN NO. S/ST/40 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 3.1	REV. C
DESIGNED SKL / DATE AUG 2026	DRAWING TITLE LOCATION OF SURVEYED JUNCTIONS AND AREA OF INFLUENCE	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:8000			
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FILE: G:\PROJECT\41010\DATA\DWG\FIGURE3.1C.DWG PLOT SCALE : 1 = 1



LEGEND:

312 (158) ← PM PEAK HOUR TRAFFIC FLOWS

↑ AM PEAK HOUR TRAFFIC FLOWS

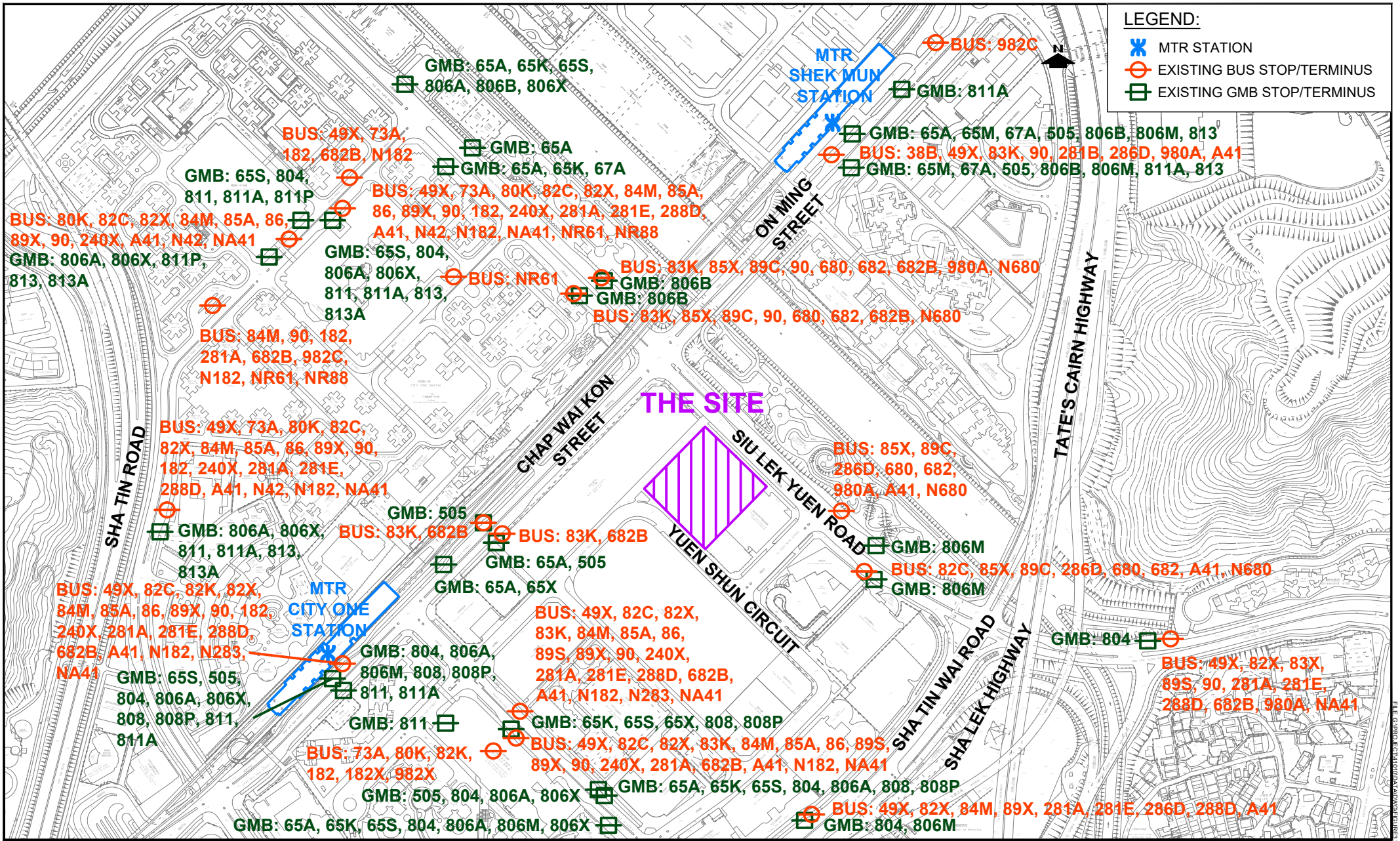
NOTE:

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

PROJECT NO. 41010	PROJECT TITLE PROPOSED AMENDMENT TO THE APPROVED SHA TIN OUTLINE ZONING PLAN NO. S/ST/40 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 3.2	REV. C
DESIGNED SKL / DATE AUG 2026	DRAWING TITLE 2025 EXISTING TRAFFIC FLOW		
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN		LLA 顧問有限公司 Consultancy Limited	

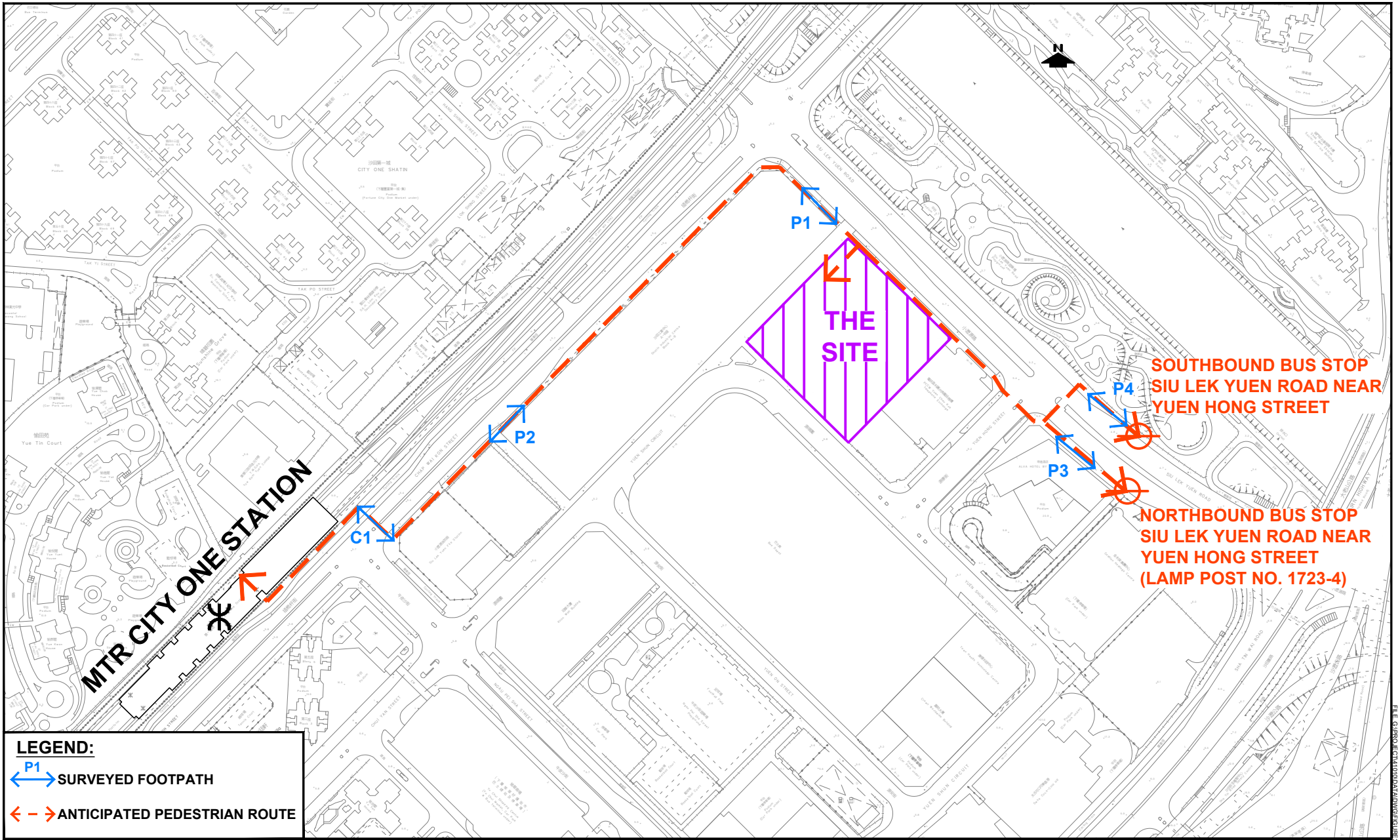
FILE. G:\PROJECT\41010\DATA\DWG\FIGURE3.2C.DWG PLOT SCALE : 1 = 1

FILE. G:\PROJECT\41010\DATA\DWG\FIGURE3.2C.DWG PLOT SCALE : 1 = 1



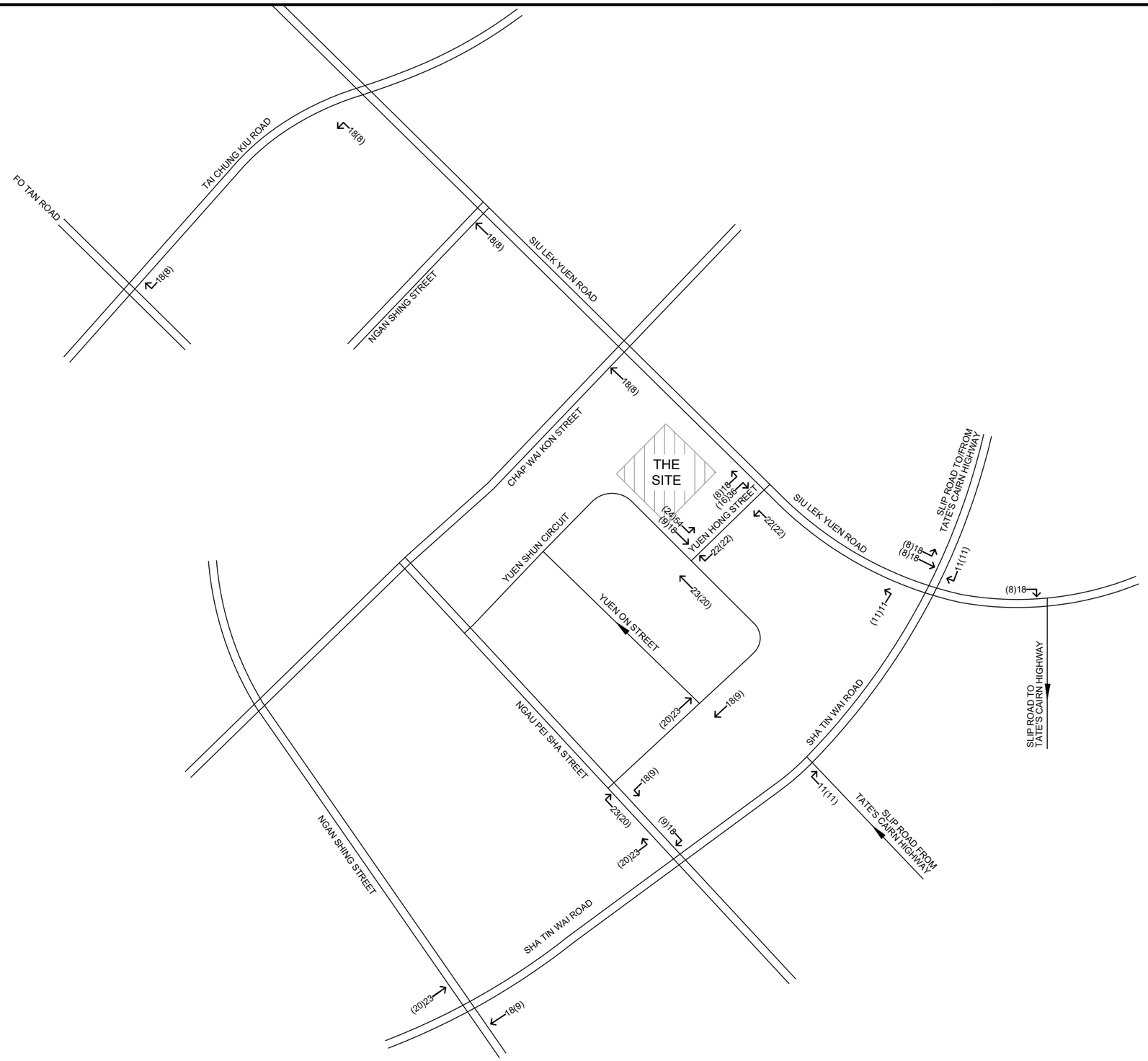
PROJECT NO. 41010	PROJECT TITLE PROPOSED AMENDMENT TO THE APPROVED SHA TIN OUTLINE ZONING PLAN NO. S/ST/40 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 3.3	REV. C
DESIGNED SKL / DATE AUG 2026	DRAWING TITLE PUBLIC TRANSPORT SERVICES IN THE VICINITY	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:5000			
CHECKED SLN			

FILE: G:\PROJECT\41010\DATA\DWG\FIGURE3.3C.DWG PLOT SCALE : 1 = 1



PROJECT NO. 41010	PROJECT TITLE PROPOSED AMENDMENT TO THE APPROVED SHA TIN OUTLINE ZONING PLAN NO. S/ST/40 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 3.4	REV. -
DESIGNED SKL / DATE AUG 2026	DRAWING TITLE ANTICIPATED PEDESTRIAN ROUTINGS AND LOCATION OF SURVEYED FOOTPATHS	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:5000			
CHECKED SLN			

FILE: G:\PROJECT\41010\DATA\DWG\FIGURE3.4.DWG PLOT SCALE : 1 = 1



LEGEND:

312 (158) ← PM PEAK HOUR TRAFFIC FLOWS

↑ AM PEAK HOUR TRAFFIC FLOWS

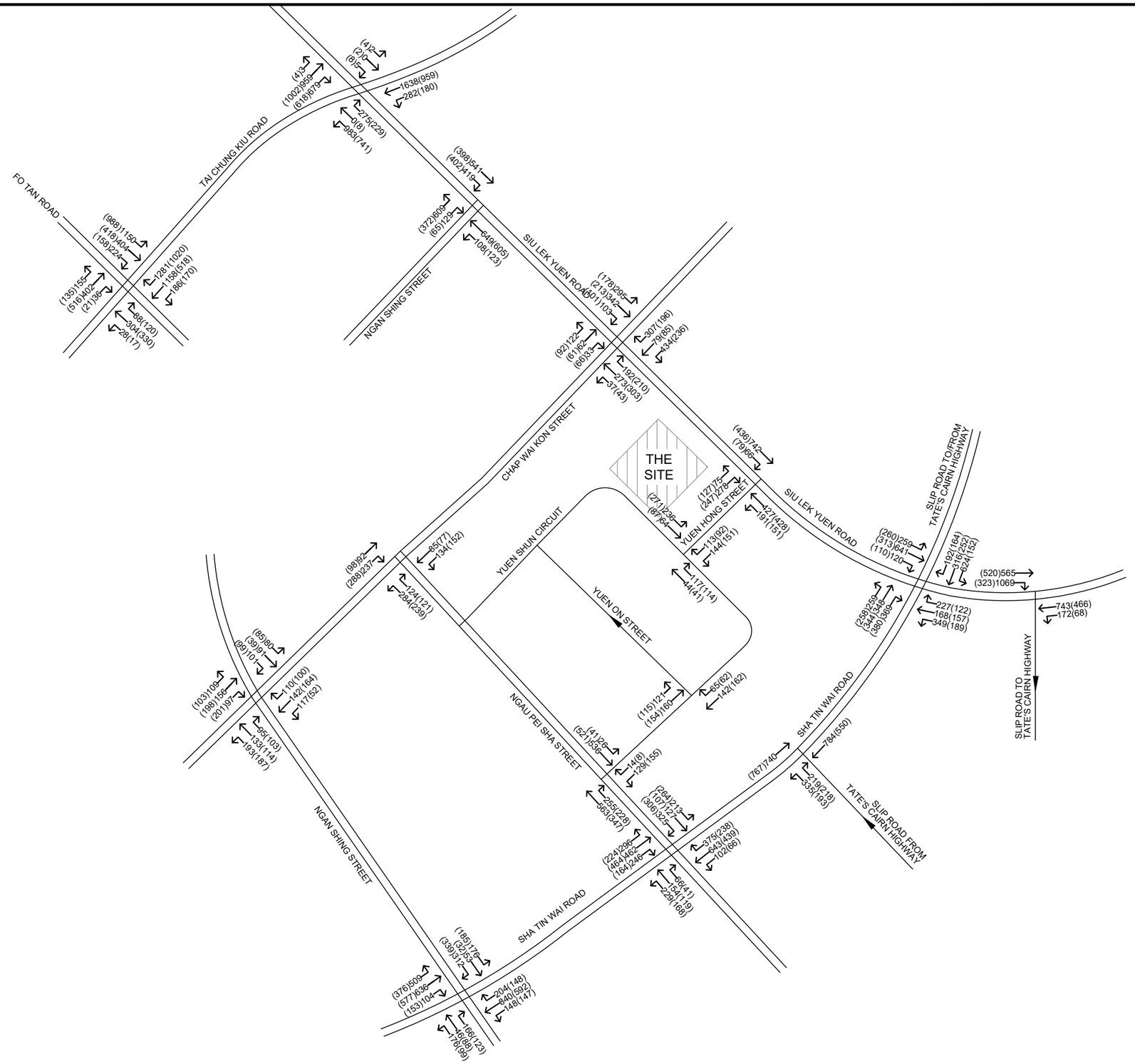
NOTE:

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

PROJECT NO. 41010	PROJECT TITLE: PROPOSED AMENDMENT TO THE APPROVED SHA TIN OUTLINE ZONING PLAN NO. S/ST/40 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 4.1	REV. C
DESIGNED SKL / DATE AUG 2026	DRAWING TITLE: DEVELOPMENT TRAFFIC FLOW	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE N.T.S.			
CHECKED SLN			

FILE. G:\PROJECT\41010\DATA\DWG\FIGURE4.1C.DWG PLOT SCALE : 1 = 1

FILE. G:\PROJECT\41010\DATA\DWG\FIGURE4.1C.DWG PLOT SCALE : 1 = 1



LEGEND:

312 (158) ← PM PEAK HOUR TRAFFIC FLOWS

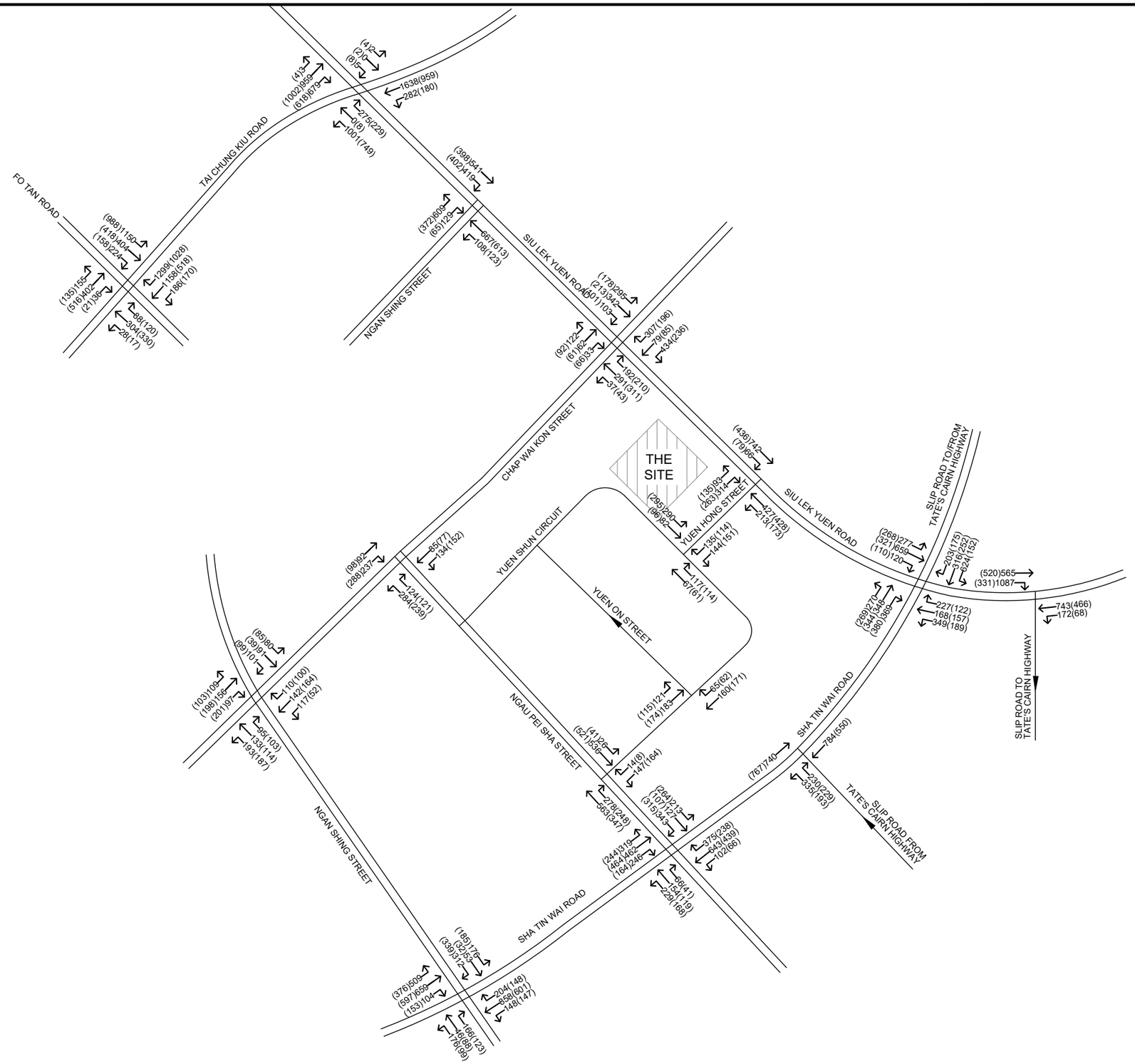
↑ AM PEAK HOUR TRAFFIC FLOWS

NOTE:

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

PROJECT NO. 41010	PROJECT TITLE: PROPOSED AMENDMENT TO THE APPROVED SHA TIN OUTLINE ZONING PLAN NO. S/ST/40 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 4.2	REV. C
DESIGNED SKL / DATE AUG 2026	DRAWING TITLE: 2036 REFERENCE TRAFFIC FLOW		
DRAWN CLL / SCALE N.T.S.		LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

FILE. G:\PROJECT\41010\DATA\DWG\FIGURE4.2C.DWG PLOT SCALE : 1 = 1



LEGEND:

312 (158) ← PM PEAK HOUR TRAFFIC FLOWS

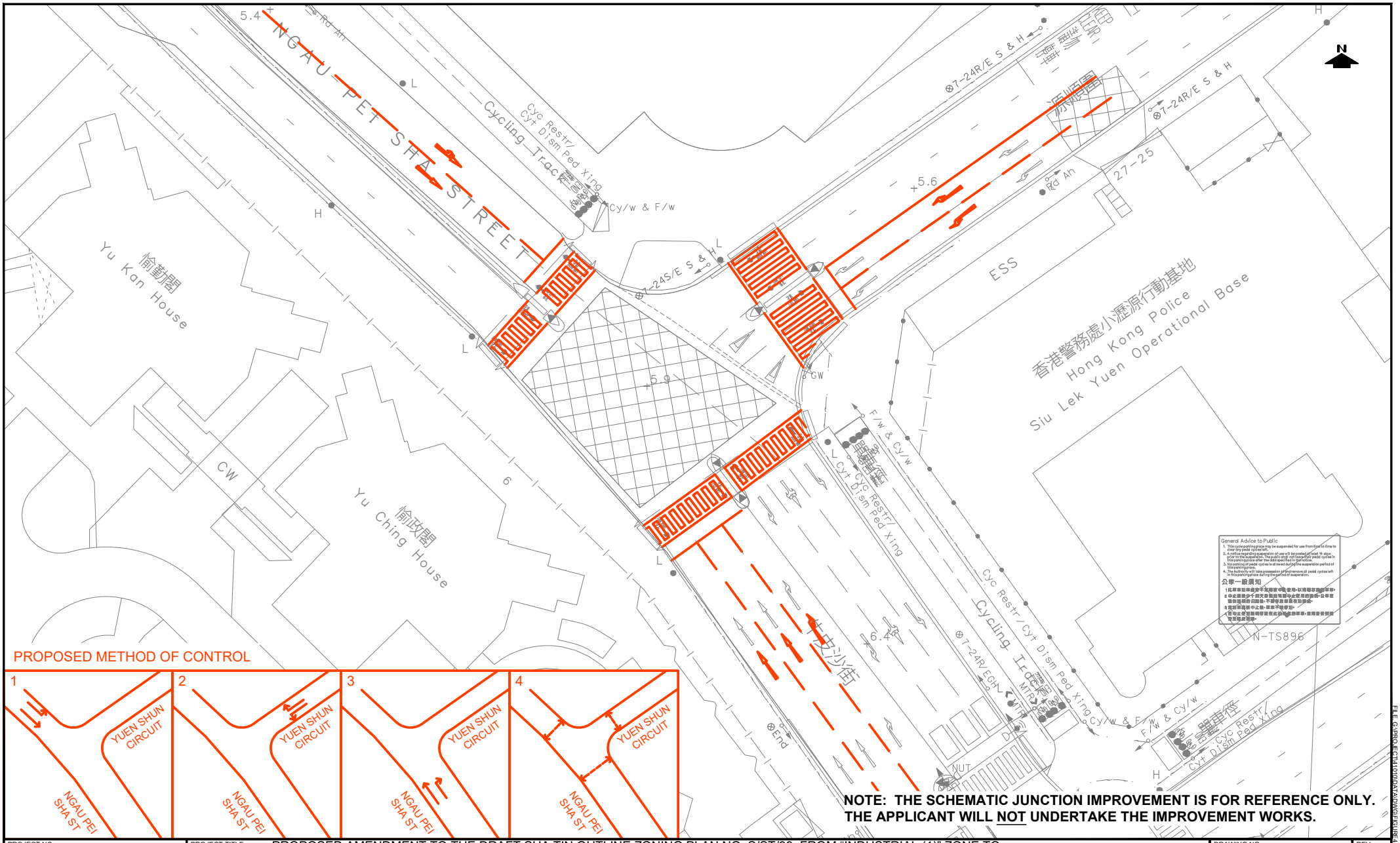
↑ AM PEAK HOUR TRAFFIC FLOWS

NOTE:

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

PROJECT NO. 41010	PROJECT TITLE: PROPOSED AMENDMENT TO THE APPROVED SHA TIN OUTLINE ZONING PLAN NO. S/ST/40 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 4.3	REV. C
DESIGNED SKL / DATE AUG 2026	DRAWING TITLE: 2036 DESIGN TRAFFIC FLOW		
DRAWN CLL / SCALE N.T.S.		LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

FILE. G:\PROJECT\41010\DATA\DWG\FIGURE4.3C.DWG PLOT SCALE : 1 = 1



NOTE: THE SCHEMATIC JUNCTION IMPROVEMENT IS FOR REFERENCE ONLY. THE APPLICANT WILL NOT UNDERTAKE THE IMPROVEMENT WORKS.

PROJECT NO. 41010	PROJECT TITLE: PROPOSED AMENDMENT TO THE DRAFT SHA TIN OUTLINE ZONING PLAN NO. S/ST/39 FROM "INDUSTRIAL (1)" ZONE TO "RESIDENTIAL (GROUP A)10" ZONE AT NOS.8-14 SIU LEK YUEN ROAD, SHA TIN, NEW TERRITORIES (STTL NOS. 196 AND 276)	DRAWING NO. FIGURE 4.4	REV. -
DESIGNED SKL / DATE MAR 2026	DRAWING TITLE: **SCHEMATIC JUNCTION IMPROVEMENT AT JUNCTION OF NGAU PEI SHA STREET / YUEN SHUN CIRCUIT (J6)**	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:600			
CHECKED SLN			

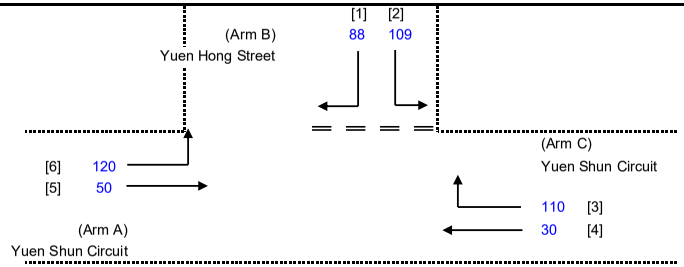
FILE: G:\PROJECT\41010\DATA\DWG\FIGURE4.4.DWG PLOT SCALE : 1 = 1

Appendix A

Junction Capacity Assessments

- Existing Scenario

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J1_YSC_YHS	CHECKED BY:	SLN	Sep-26
J1 Yuen Shun Circuit / Yuen Hong Street		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	13.20	(metres)
W cr	=	1.5	(metres)
q a-b	=	120	(pcu/hr)
q a-c	=	50	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.10	(metres)
Vr c-b	=	55	(metres)
q c-a	=	30	(pcu/hr)
q c-b	=	110	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.80	(metres)
W b-c	=	3.80	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	55	(metres)
q b-a	=	88	(pcu/hr)
q b-c	=	109	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.90753
E	=	0.95478
F	=	0.89282
Y	=	0.54460
F for (Qb-ac)	=	0.55329949

THE CAPACITY OF MOVEMENT :

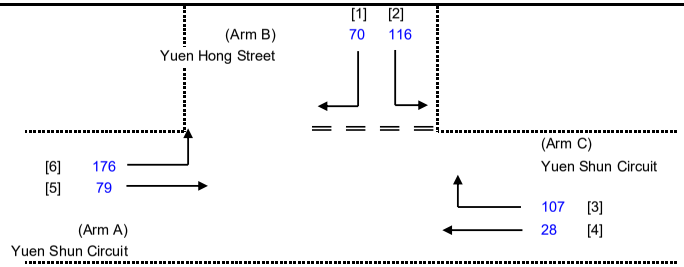
Q b-a	=	539			
Q b-c	=	693	Q b-c (O) =	664.7	
Q c-b	=	635			
Q b-ac	=	615			
TOTAL FLOW	=	507	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1633
DFC b-c	=	0.1573
DFC c-b	=	0.1732
DFC b-ac (share lane)	=	0.3206

CRITICAL DFC = 0.32

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J1_YSC_YHS	CHECKED BY:	SLN	Sep-26
J1 Yuen Shun Circuit / Yuen Hong Street		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	13.20	(metres)
W cr	=	1.5	(metres)
q a-b	=	176	(pcu/hr)
q a-c	=	79	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.10	(metres)
Vr c-b	=	55	(metres)
q c-a	=	28	(pcu/hr)
q c-b	=	107	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.80	(metres)
W b-c	=	3.80	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	55	(metres)
q b-a	=	70	(pcu/hr)
q b-c	=	116	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.90753
E	=	0.95478
F	=	0.89282
Y	=	0.54460
F for (Qb-ac)	=	0.62365591

THE CAPACITY OF MOVEMENT :

Q b-a	=	531			
Q b-c	=	683	Q b-c (O) =	660.5	
Q c-b	=	620			
Q b-ac	=	617			
TOTAL FLOW	=	576	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1318
DFC b-c	=	0.1698
DFC c-b	=	0.1726
DFC b-ac (share lane)	=	0.3017

CRITICAL DFC = 0.30

LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

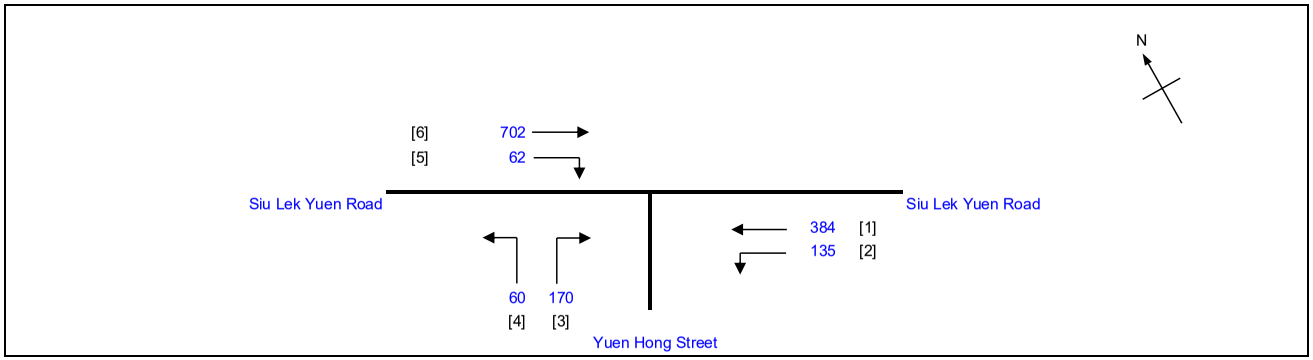
	INITIALS	DATE
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

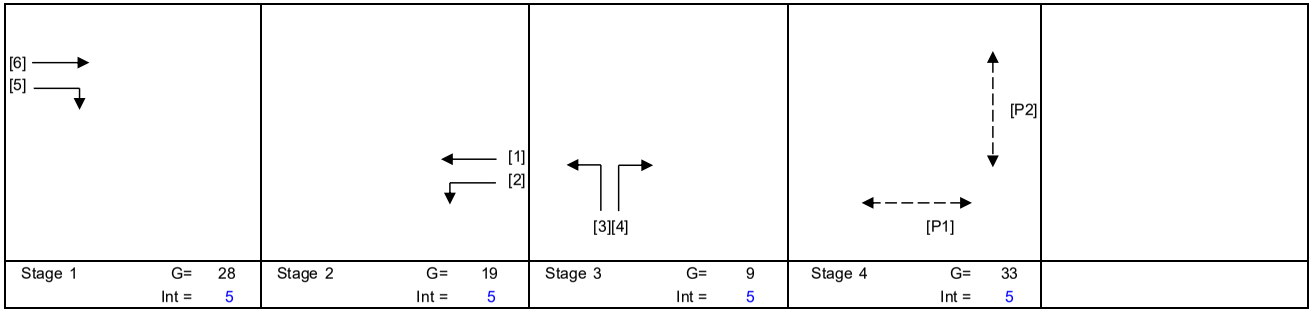
J2 Siu Lek Yuen Road / Yuen Hong Street

2025 Existing AM

PROJECT NO.: 41010
FILENAME : J2_SLYR_YHS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.257
Loss time		L =	50 sec
Total Flow		=	1513 pcu
Co	= (1.5*L+5)/(1-Y)	=	107.6 sec
Cm	= L/(1-Y)	=	67.3 sec
Yult		=	0.525
R.C.ult	= (Yult-Y)/Y*100%	=	104.4 %
Cp	= 0.9*L/(0.9-Y)	=	70.0 sec
Ymax	= 1-L/C	=	0.545
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**91 %**

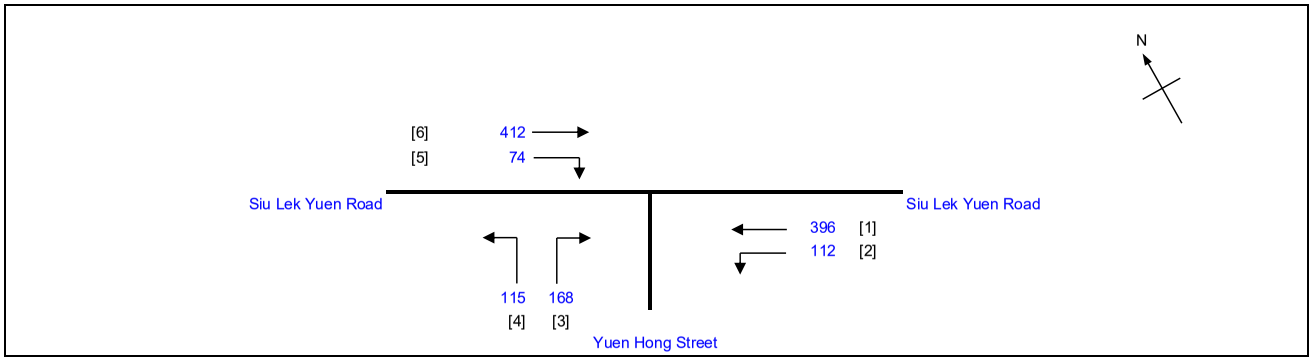


Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	5	17	0	21	17
P2	4	5	21	0	17	21

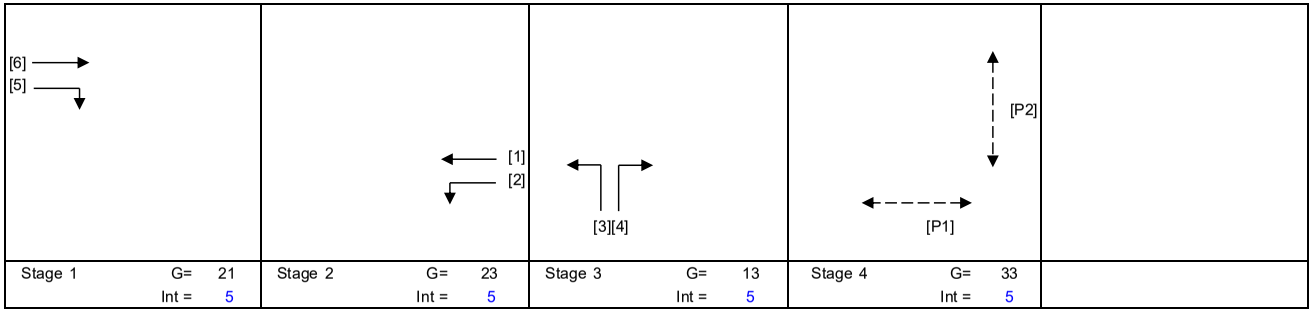
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
5,6	1	3.40	1	18			2095		195	62	257	0.24	2054							2054	0.125			29	29	0.471	30	33
6	1	3.40	2			N	4050		507		507	0.00	4050							4050	0.125	0.125		29	29	0.471	33	32
1	2	3.40	2				4190		365		365	0.00	4190							4190	0.087			20	20	0.471	27	38
1,2	2	3.40	1	12		N	1955	135	19		154	0.88	1762							1762	0.087	0.087		20	20	0.471	18	40
3	3	3.10	1	24			2065			86	86	1.00	1944							1944	0.044	0.044		10	10	0.471	12	50
3,4	3	3.10	1	18			2065	0		84	84	1.00	1906							1906	0.044			10	10	0.471	12	51
4	3	3.10	1	12		N	1925	60			60	1.00	1711							1711	0.035			8	10	0.471	6	55
PED	4																						33					

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J2 Siu Lek Yuen Road / Yuen Hong Street		FILENAME : J2_SLYR_YHS.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	110 sec
Sum(y)	Y =	0.216
Loss time	L =	50 sec
Total Flow	=	1277 pcu
Co = (1.5*L+5)/(1-Y)	=	102.1 sec
Cm = L/(1-Y)	=	63.8 sec
Yult	=	0.525
R.C.ult = (Yult-Y)/Y*100%	=	142.9 %
Cp = 0.9*L/(0.9-Y)	=	65.8 sec
Ymax = 1-L/C	=	0.545
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**127 %**

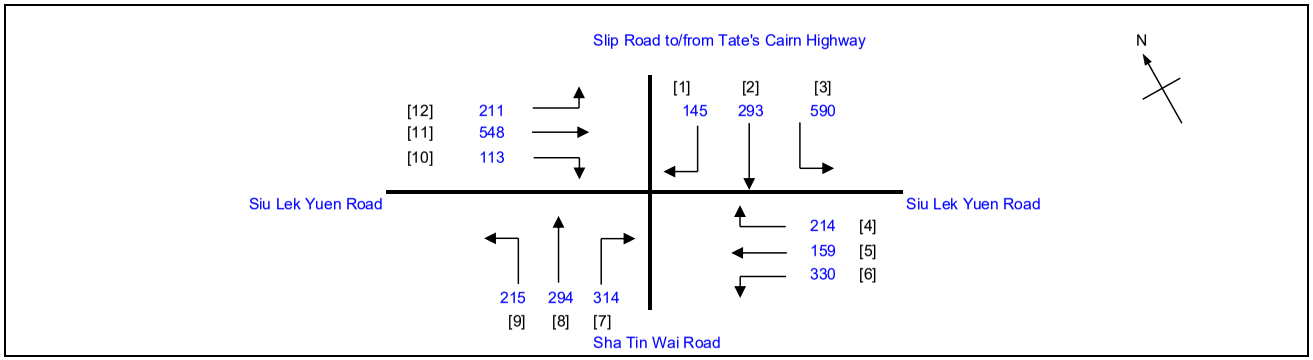


Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	5	17	0	21	17
P2	4	5	21	0	17	21

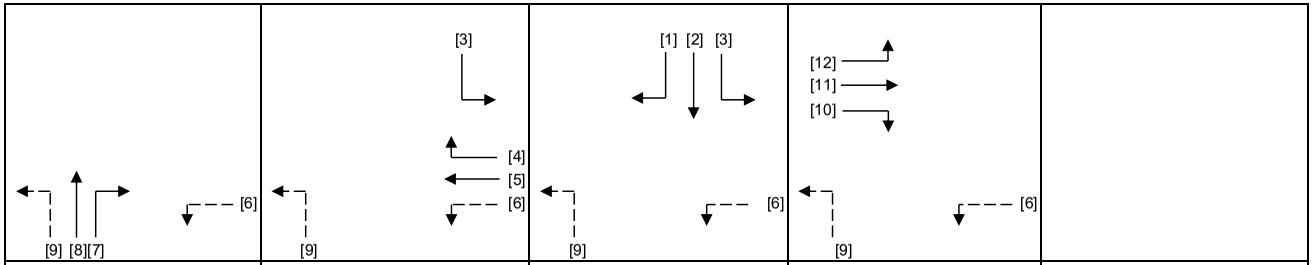
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
5,6	1	3.40	1	18			2095		88	74	162	0.46	2018							2018	0.080	0.080		22	22	0.396	18	37
6	1	3.40	2			N	4050		324		324	0.00	4050							4050	0.080			22	22	0.396	21	36
1	2	3.40	2				4190		356		356	0.00	4190							4190	0.085	0.085		24	24	0.396	24	35
1,2	2	3.40	1	12		N	1955	112	40		152	0.74	1790							1790	0.085			24	24	0.396	18	36
3	3	3.10	1	24			2065			99	99	1.00	1944							1944	0.051	0.051		14	14	0.396	12	44
3,4	3	3.10	1	18			2065	28		69	97	1.00	1906							1906	0.051			14	14	0.396	12	44
4	3	3.10	1	12		N	1925	87			87	1.00	1711							1711	0.051			14	14	0.396	12	44
PED	4																						33					

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J3 Siu Lek Yuen Road / Sha Tin Wai Road / Slip road to/from Tate's Cairn Highway		FILENAME : J3_SLYR_STWR.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	120 sec
Sum(y)	Y =	0.544
Loss time	L =	21 sec
Total Flow	=	3426 pcu
Co = (1.5*L+5)/(1-Y)	=	80.0 sec
Cm = L/(1-Y)	=	46.0 sec
Yult	=	0.743
R.C.ult = (Yult-Y)/Y*100%	=	36.5 %
Cp = 0.9*L/(0.9-Y)	=	53.1 sec
Ymax = 1-L/C	=	0.825
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**37 %**



Stage 1	G= 17	Int = 7
Stage 2	G= 19	Int = 5
Stage 3	G= 36	Int = 7
Stage 4	G= 23	Int = 6
Stage 5	G=	Int =

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)
																							21					
7	1	3.50	1	20			2105			196	196	1.00	1958							1958	0.100			18	18	0.659	30	54
7,8	1	3.50	1	20			2105		83	118	201	0.59	2016							2016	0.100			18	18	0.659	30	53
8	1	3.50	1				2105		211		211	0.00	2105							2105	0.100	0.100		18	18	0.659	36	53
4,5	2	3.50	1	20			2105		0	214	214	1.00	1958							1958	0.109	0.109		20	20	0.659	36	52
5	2	3.50	1				2105		159		159	0.00	2105							2105	0.076			14	20	0.659	24	59
3	2,3	4.50	1	12		N	2065	590			590	1.00	1836							1836	0.321			59	60	0.659	60	24
1,2	3	4.50	1	20			2205		293	145	438	0.33	2152							2152	0.204	0.204		37	37	0.659	60	37
10	4	3.40	1	15			2095			113	113	1.00	1905							1905	0.059			11	24	0.659	18	66
10,11	4	3.40	1	15			2095		274	0	274	0.00	2095							2095	0.131	0.131		24	24	0.659	42	47
11	4	3.40	1				2095		274		274	0.00	2095							2095	0.131			24	24	0.659	42	47
12	4	3.40	1	11		N	1955	211			211	1.00	1720							1720	0.123			22	24	0.659	30	51
6	FREE	5.00	1	40		N	2115	330			330																	
9	FREE	5.00	1	40		N	2115	215			215																	

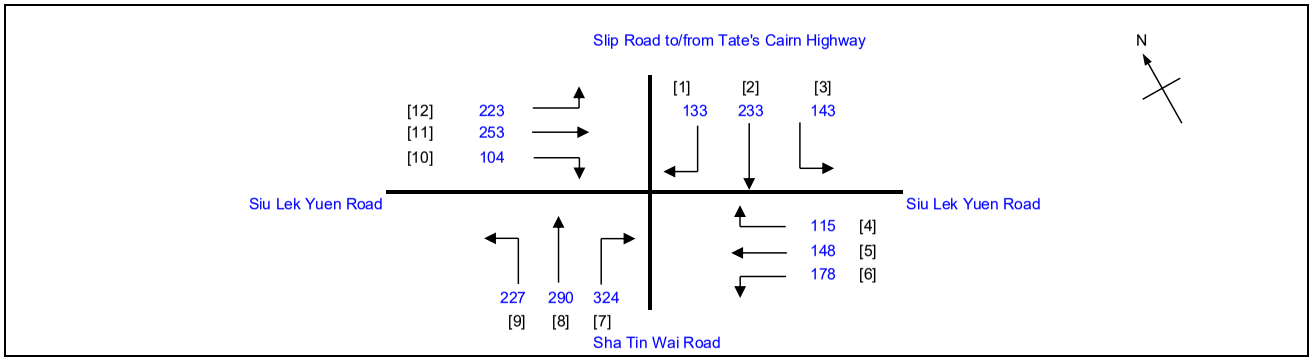
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

LLA CONSULTANCY LIMITED

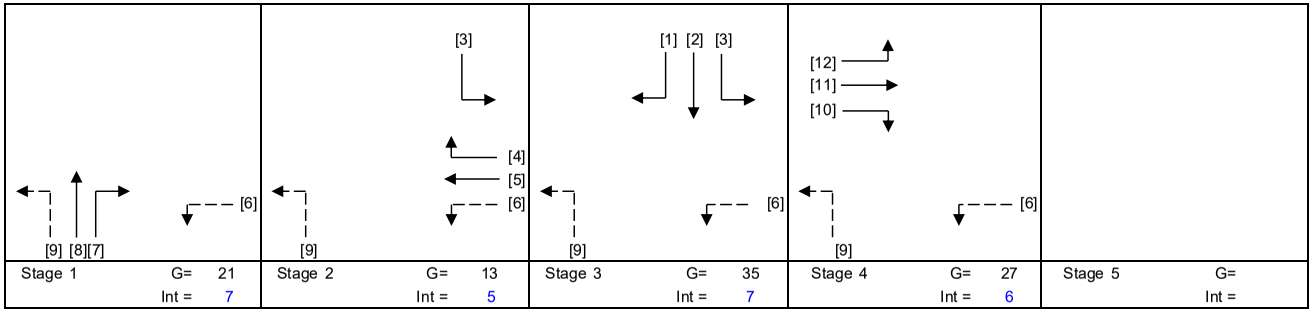
TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)			
J3 Siu Lek Yuen Road / Sha Tin Wai Road / Slip road to/from Tate's Cairn Highway	**2025 Existing PM**		

PROJECT NO.:	41010	Prepared By:	SKL Sep-26
FILENAME :	J3_SLYR_STWR.xlsx	Checked By:	SLN Sep-26
		Reviewed By:	SLN Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	120 sec
Sum(y)	Y =	0.466
Loss time	L =	21 sec
Total Flow	=	2371 pcu
Co = (1.5*L+5)/(1-Y)	=	68.4 sec
Cm = L/(1-Y)	=	39.4 sec
Ylt	=	0.743
R.C.ult = (Ylt-Y)/Y*100%	=	59.2 %
Cp = 0.9*L/(0.9-Y)	=	43.6 sec
Ymax = 1-L/C	=	0.825
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**59 %**



Stage 1	G= 21	Int = 7
Stage 2	G= 13	Int = 5
Stage 3	G= 35	Int = 7
Stage 4	G= 27	Int = 6
Stage 5	G=	Int =

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

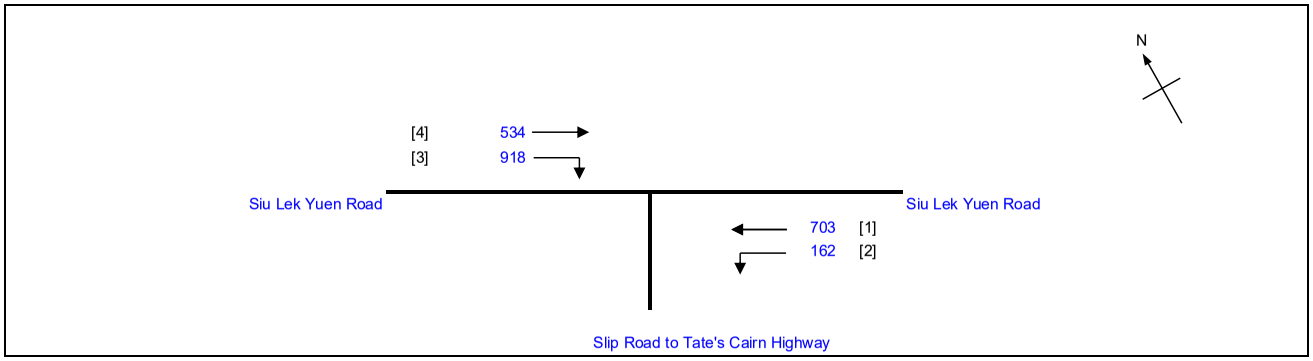
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
7	1	3.50	1	20			2105			198	198	1.00	1958							1958	0.101			21	22	0.565	30	47
7,8	1	3.50	1	20			2105		78	126	204	0.62	2012							2012	0.101	0.101		22	22	0.565	30	46
8	1	3.50	1				2105		212		212	0.00	2105							2105	0.101			21	22	0.565	30	46
4,5	2	3.50	1	20			2105		13	115	128	0.90	1972							1972	0.065	0.065		14	14	0.565	18	55
5	2	3.50	1				2105		135		135	0.00	2105							2105	0.064			14	14	0.565	24	54
3	2,3	4.50	1	12		N	2065	143			143	1.00	1836							1836	0.078			17	53	0.565	24	52
1,2	3	4.50	1	20			2205		233	133	366	0.36	2146							2146	0.171	0.171		36	36	0.565	48	35
10	4	3.40	1	15			2095			104	104	1.00	1905							1905	0.055			12	28	0.565	18	58
10,11	4	3.40	1	15			2095		127	0	127	0.00	2095							2095	0.061			13	28	0.565	18	55
11	4	3.40	1				2095		126		126	0.00	2095							2095	0.060			13	28	0.565	18	55
12	4	3.40	1	11		N	1955	223			223	1.00	1720							1720	0.130	0.130		28	28	0.565	30	42
6	FREE	5.00	1	40		N	2115	178			178																	
9	FREE	5.00	1	40		N	2115	227			227																	

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

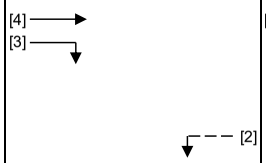
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

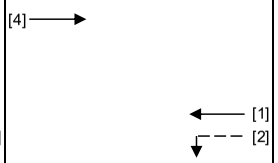
		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2025 Existing AM	FILENAME : J4_SLYR_SlipRoadtoTCH.xlsx	Checked By:	SLN	Sep-26
J4 Siu Lek Yuen Road / Slip road to Tate's Cairn Highway		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.413
Loss time		L =	12 sec
Total Flow		=	2317 pcu
Co	= (1.5*L+5)/(1-Y)	=	39.2 sec
Cm	= L/(1-Y)	=	20.4 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	96.3 %
Cp	= 0.9*L/(0.9-Y)	=	22.2 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**75 %**



Stage 1 G= 27 Int = 7



Stage 2 G= 19 Int = 7

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

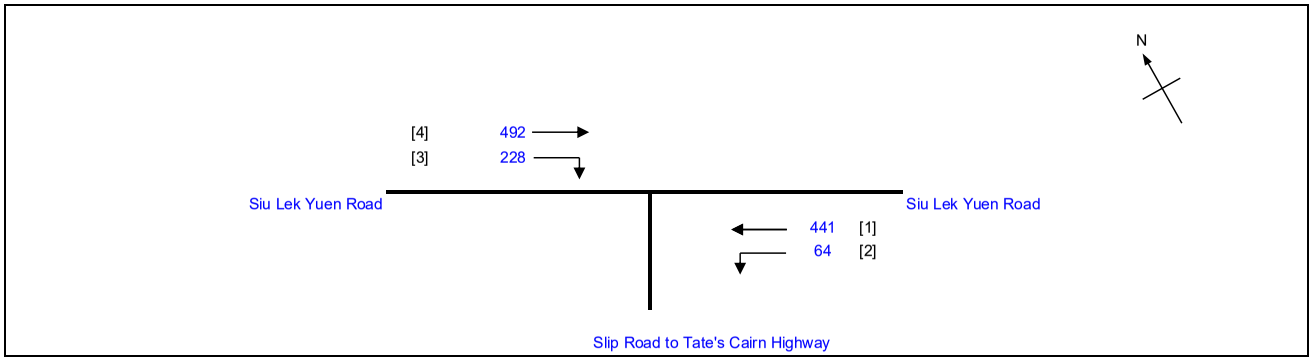
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							12					
3	1	3.50	2	15			4210			918	918	1.00	3827							3827	0.240	0.240		28	28	0.516	24	11
4	1,2	3.50	1			N	1965		534		534	0.00	1965							1965	0.272			32	53	0.516	24	10
1	2	3.50	2			N	4070		703		703	0.00	4070							4070	0.173	0.173		20	20	0.516	21	16
2	FREE	6.00	1	60			2355	162			162																	

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

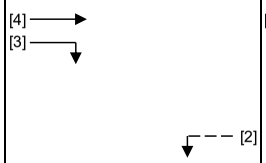
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

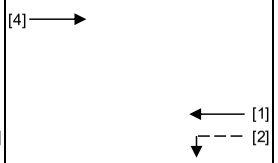
		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)			
J4 Siu Lek Yuen Road / Slip road to Tate's Cairn Highway	**2025 Existing PM**		
PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
FILENAME : J4_SLYR_SlipRoadtoTCH.xlsx	Checked By:	SLN	Sep-26
	Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.168
Loss time		L =	12 sec
Total Flow		=	1225 pcu
Co	= (1.5*L+5)/(1-Y)	=	27.6 sec
Cm	= L/(1-Y)	=	14.4 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	382.4 %
Cp	= 0.9*L/(0.9-Y)	=	14.8 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**329 %**



Stage 1 G= 16 Int = 7



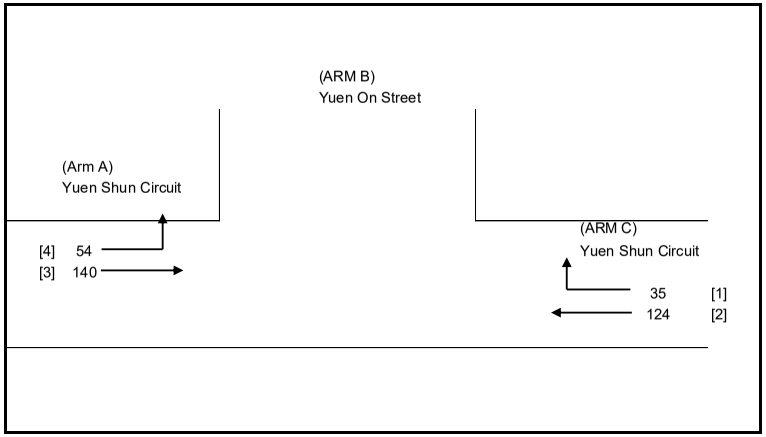
Stage 2 G= 30 Int = 7

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)
																							12					
3	1	3.50	2	15			4210			228	228	1.00	3827							3827	0.060	0.060		17	17	0.210	6	15
4	1,2	3.50	1			N	1965		492		492	0.00	1965							1965	0.250			72	53	0.210	-6	2
1	2	3.50	2			N	4070		441		441	0.00	4070							4070	0.108	0.108		31	31	0.210	9	7
2	FREE	6.00	1	60			2355	64			64																	

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J5_YSC_YOS	CHECKED BY:	SLN	Sep-26
J5 Yuen Shun Circuit/ Yuen On Street (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	11.8	(metres)
W cr	=	0	(metres)
q a-b	=	54	(pcu/hr)
q a-c	=	140	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.30	(metres)
Vr c-b	=	100	(metres)
q c-a	=	124	(pcu/hr)
q c-b	=	35	(pcu/hr)

MINOR ROAD (ARM B)

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

GEOMETRIC FACTORS :

D	=	0.53322
E	=	0.58595
F	=	0.94969
Y	=	0.59463
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

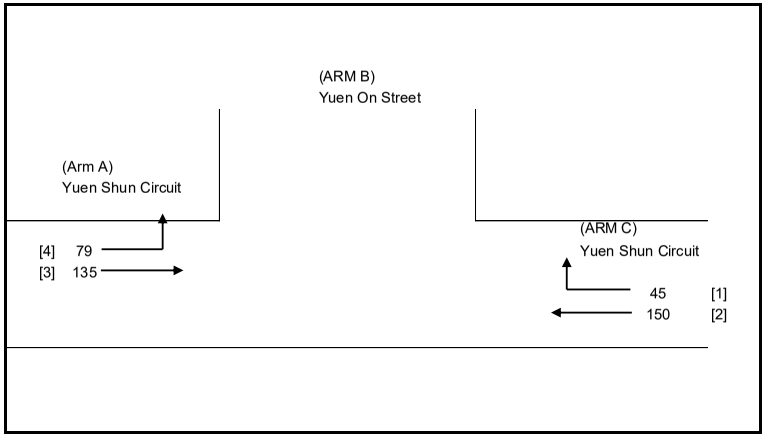
Q b-a	=	301		
Q b-c	=	416	Q b-c (O) =	416
Q c-b	=	668		
Q b-ac	=	0		
TOTAL FLOW	=	353	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0000
DFC c-b	=	0.0524
DFC b-ac (share lane)	=	0.0000

CRITICAL DFC = 0.05

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J5_YSC_YOS	CHECKED BY:	SLN	Sep-26
J5 Yuen Shun Circuit/ Yuen On Street (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	11.8	(metres)
W cr	=	0	(metres)
q a-b	=	79	(pcu/hr)
q a-c	=	135	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.30	(metres)
Vr c-b	=	100	(metres)
q c-a	=	150	(pcu/hr)
q c-b	=	45	(pcu/hr)

MINOR ROAD (ARM B)

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

GEOMETRIC FACTORS :

D	=	0.53322
E	=	0.58595
F	=	0.94969
Y	=	0.59463
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

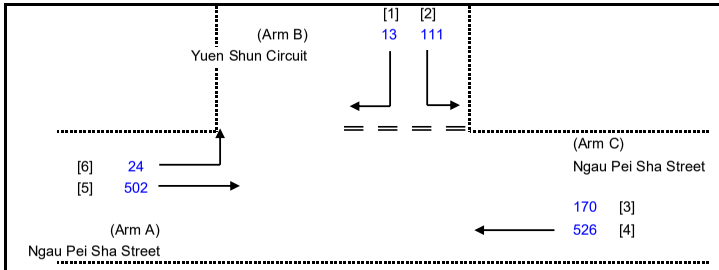
Q b-a	=	297		
Q b-c	=	415	Q b-c (O) =	415
Q c-b	=	664		
Q b-ac	=	0		
TOTAL FLOW	=	409	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0000
DFC c-b	=	0.0678
DFC b-ac (share lane)	=	0.0000

CRITICAL DFC = 0.07

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J6_NPSS_YS	CHECKED BY:	SLN	Sep-26
J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	15.00	(metres)
W cr	=	1.5	(metres)
q a-b	=	24	(pcu/hr)
q a-c	=	502	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.70	(metres)
Vr c-b	=	50	(metres)
q c-a	=	526	(pcu/hr)
q c-b	=	170	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	65	(metres)
Vr b-c	=	60	(metres)
q b-a	=	13	(pcu/hr)
q b-c	=	111	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.83620
E	=	0.88820
F	=	0.94140
Y	=	0.48250
F for (Qb-ac)	=	0.89516129

THE CAPACITY OF MOVEMENT :

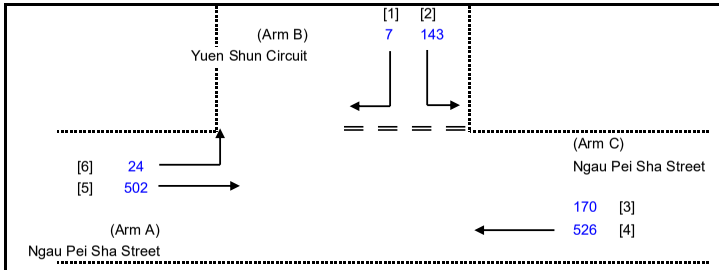
Q b-a	=	382		
Q b-c	=	582	Q b-c (O) =	577
Q c-b	=	614		
Q b-ac	=	552		
TOTAL FLOW	=	1346	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0340
DFC b-c	=	0.1907
DFC c-b	=	0.2769
DFC b-c(share lane)	=	0.2012

CRITICAL DFC = 0.28

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J6_NPSS_YS	CHECKED BY:	SLN	Sep-26
J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	15.00	(metres)
W cr	=	1.5	(metres)
q a-b	=	24	(pcu/hr)
q a-c	=	502	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.70	(metres)
Vr c-b	=	50	(metres)
q c-a	=	526	(pcu/hr)
q c-b	=	170	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	65	(metres)
Vr b-c	=	60	(metres)
q b-a	=	7	(pcu/hr)
q b-c	=	143	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.83620
E	=	0.88820
F	=	0.94140
Y	=	0.48250
F for (Qb-ac)	=	0.95333333

THE CAPACITY OF MOVEMENT :

Q b-a	=	382		
Q b-c	=	582	Q b-c (O) =	579.3
Q c-b	=	614		
Q b-ac	=	568		
TOTAL FLOW	=	1372	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0183
DFC b-c	=	0.2457
DFC c-b	=	0.2769
DFC b-c(share lane)	=	0.2517

CRITICAL DFC = 0.28

LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

	INITIALS	DATE
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

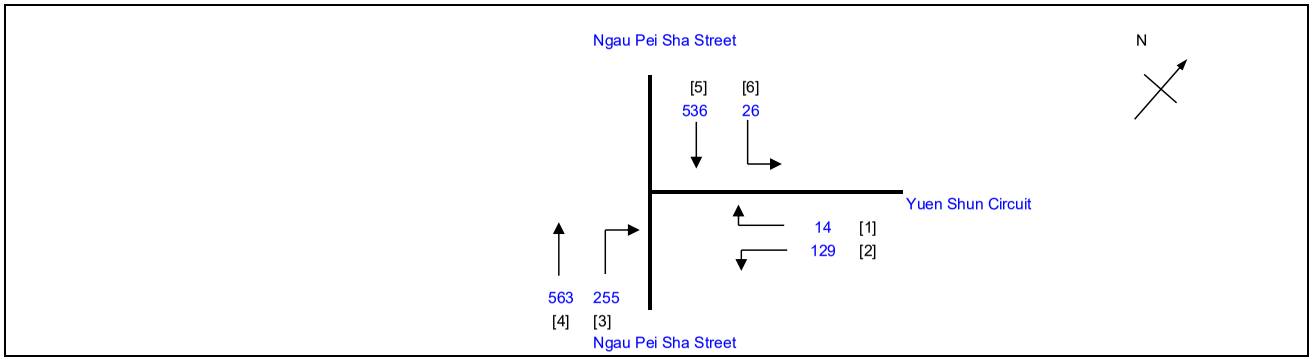
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)

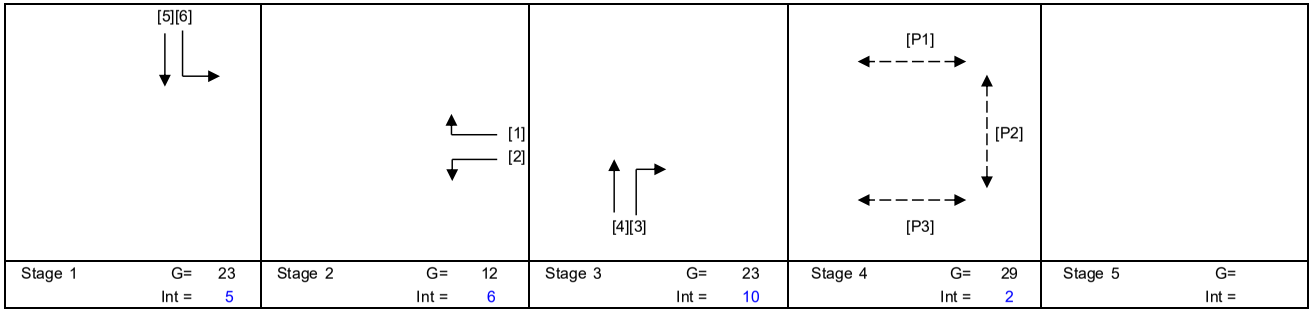
2036 Reference AM [Sensitivity Test]

PROJECT NO.: 41010

FILENAME : J6_NPSS_YSC_Signal.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.351
Loss time		L =	49 sec
Total Flow		=	1523 pcu
Co	= (1.5*L+5)/(1-Y)	=	121.0 sec
Cm	= L/(1-Y)	=	75.5 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	51.7 %
Cp	= 0.9*L/(0.9-Y)	=	80.3 sec
Ymax	= 1-L/C	=	0.555
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**42 %**



Stage 1	G= 23	Int = 5
Stage 2	G= 12	Int = 6
Stage 3	G= 23	Int = 10
Stage 4	G= 29	Int = 2
Stage 5	G=	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3	6	13		20	13
P2	3	6	13		20	13
P3	3	10	19		14	19

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					
5,6	1	3.65	1	13		N	1980	26	244		270	0.10	1958							1958	0.138	0.138		24	24	0.633	36	42
5	1	3.65	1				2120		292		292	0.00	2120							2120	0.138			24	24	0.633	36	41
2	2	3.00	1	12		N	1915	129			129	1.00	1702							1702	0.076	0.076		13	13	0.633	18	55
1	2	3.00	1	25			2055			14	14	1.00	1939							1939	0.007			1	13	0.633	0	175
4	3	3.65	2			N	4100		563		563	0.00	4100							4100	0.137	0.137		24	24	0.633	39	38
3	3	3.65	1	16			2120			255	255	1.00	1938							1938	0.132			23	24	0.633	36	43
PED	4																						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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

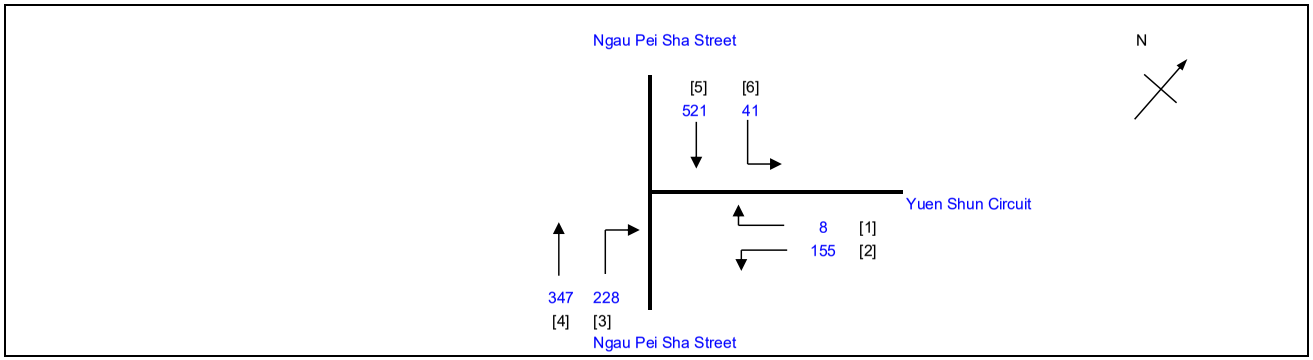
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)

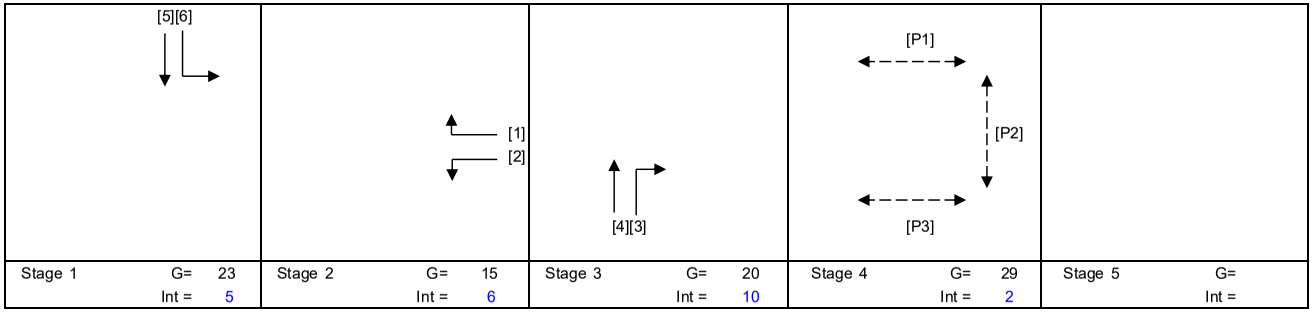
2036 Reference PM [Sensitivity Test]

PROJECT NO.: 41010

FILENAME : J6_NPSS_YSC_Signal.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.347
Loss time		L =	49 sec
Total Flow		=	1300 pcu
Co	= (1.5*L+5)/(1-Y)	=	120.2 sec
Cm	= L/(1-Y)	=	75.0 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	53.5 %
Cp	= 0.9*L/(0.9-Y)	=	79.7 sec
Ymax	= 1-L/C	=	0.555
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**44 %**



Stage 1	G= 23	Int = 5	Stage 2	G= 15	Int = 6	Stage 3	G= 20	Int = 10	Stage 4	G= 29	Int = 2	Stage 5	G=	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3	6	13		17	13
P2	3	6	13		17	13
P3	3	10	19		11	19

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					
5,6	1	3.65	1	13		N	1980	41	228		269	0.15	1946							1946	0.138	0.138		24	24	0.626	36	41
5	1	3.65	1				2120		293		293	0.00	2120							2120	0.138			24	24	0.626	36	41
2	2	3.00	1	12		N	1915	155			155	1.00	1702							1702	0.091	0.091		16	16	0.626	24	51
1	2	3.00	1	25			2055			8	8	1.00	1939							1939	0.004			1	16	0.626	0	261
4	3	3.65	2			N	4100		347		347	0.00	4100							4100	0.085			15	21	0.626	27	45
3	3	3.65	1	16			2120			228	228	1.00	1938							1938	0.118	0.118		21	21	0.626	30	44
PED	4																						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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

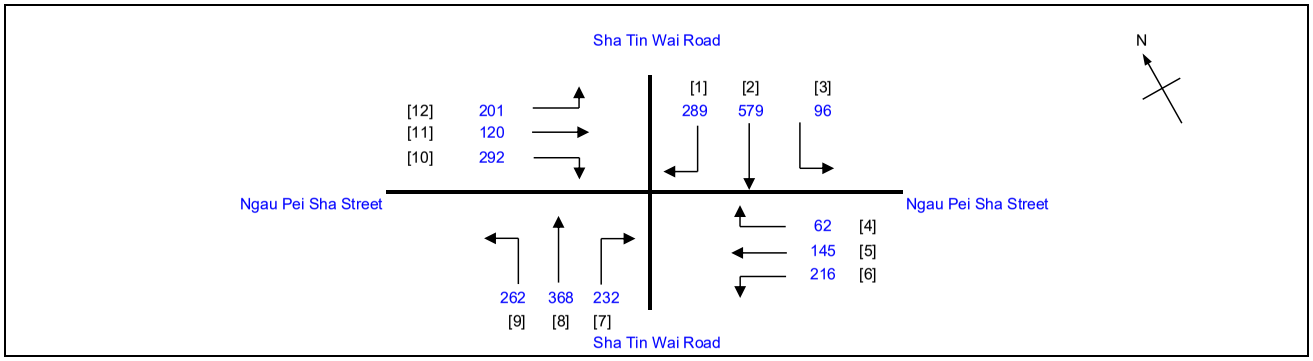
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J7 Ngau Pei Sha Street / Sha Tin Wai Road

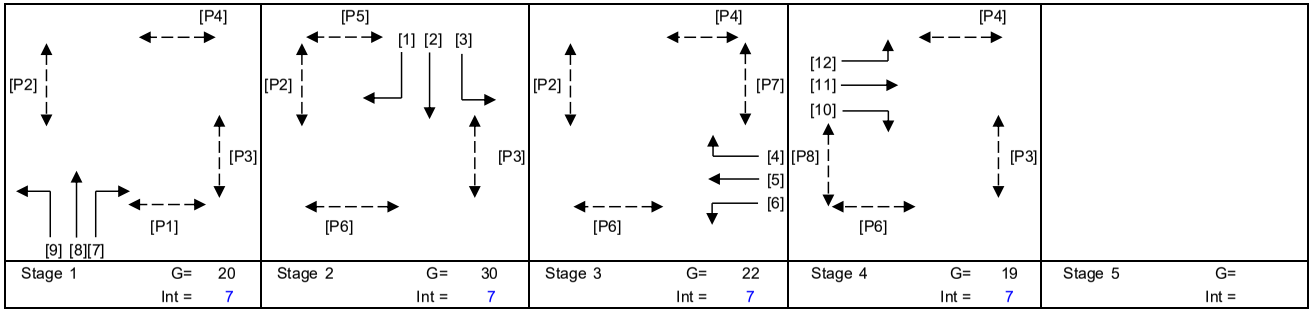
2025 Existing AM

PROJECT NO.: 41010

FILENAME : J7_NPSS_STWR.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.522
Loss time		L =	24 sec
Total Flow		=	2862 pcu
Co	= (1.5*L+5)/(1-Y)	=	85.9 sec
Cm	= L/(1-Y)	=	50.3 sec
Yult		=	0.720
R.C.ult	= (Yult-Y)/Y*100%	=	37.8 %
Cp	= 0.9*L/(0.9-Y)	=	57.2 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**38 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	7	12	8
P2	1,2,3	5	8	1	84	8
P3	1,2,4	5	6	1	83	6
P4	1,3,4	5	9	1	72	9
P5	2	5	12	1	24	12
P6	2,3,4	5	10	4	78	10
P7	3	5	6	3	20	6
P8	4	5	11	4	11	11

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)
																							24					
7,8	1	3.50	1	25			2105		0	232	232	1.00	1986							1986	0.117	0.117		21	21	0.653	36	50
8	1	3.50	1				2105		224		224	0.00	2105							2105	0.106			20	21	0.653	36	51
8,9	1	3.50	1	15			2105	72	144		216	0.33	2037							2037	0.106			19	21	0.653	36	52
9	1	3.50	1	15		N	1965	190			190	1.00	1786							1786	0.106			20	21	0.653	30	53
1	2	3.30	1	20			2085			289	289	1.00	1940							1940	0.149			27	31	0.653	42	45
1,2	2	3.30	1	20			2085		356	0	356	0.00	2085							2085	0.171			31	31	0.653	48	41
2,3	2	3.30	1	10		N	1945	96	223		319	0.30	1861							1861	0.171	0.171		31	31	0.653	42	42
4,5	3	3.30	1	15			2085		145	62	207	0.30	2024							2024	0.102			19	23	0.653	30	52
5,6	3	3.30	1	12		N	1945	216	0		216	1.00	1729							1729	0.125	0.125		23	23	0.653	30	50
10	4	3.20	1	20			2075			210	210	1.00	1930							1930	0.109			20	20	0.653	30	52
10,11,12	4	3.20	1	15			2075	13	120	82	215	0.44	1987							1987	0.108			20	20	0.653	36	51
12	4	3.20	1	12		N	1935	188			188	1.00	1720							1720	0.109	0.109		20	20	0.653	30	53

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

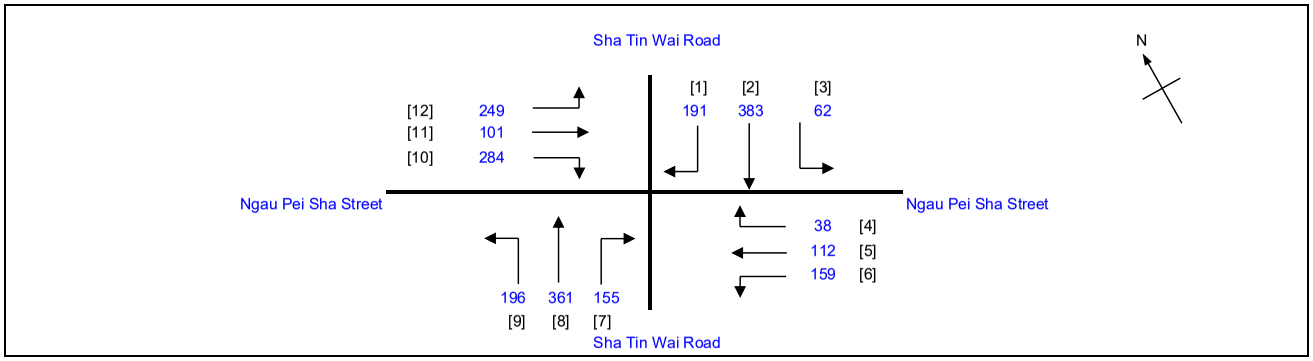
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

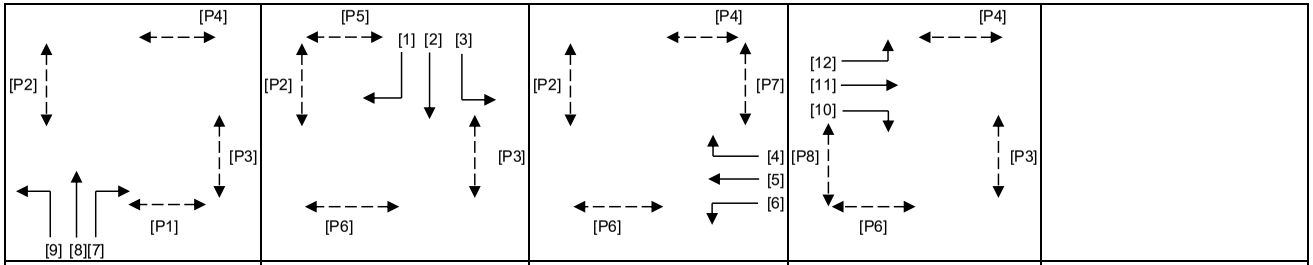
	INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)		
J7 Ngau Pei Sha Street / Sha Tin Wai Road		

2025 Existing PM

PROJECT NO.:	41010	Prepared By:	SKL	Sep-26
FILENAME :	J7_NPSS_STWR.xlsx	Checked By:	SLN	Sep-26
		Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	120 sec
Sum(y)	Y =	0.408
Loss time	L =	24 sec
Total Flow	=	2291 pcu
Co = (1.5*L+5)/(1-Y)	=	69.2 sec
Cm = L/(1-Y)	=	40.5 sec
Yult	=	0.720
R.C.ult = (Yult-Y)/Y*100%	=	76.6 %
Cp = 0.9*L/(0.9-Y)	=	43.9 sec
Ymax = 1-L/C	=	0.800
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**77 %**



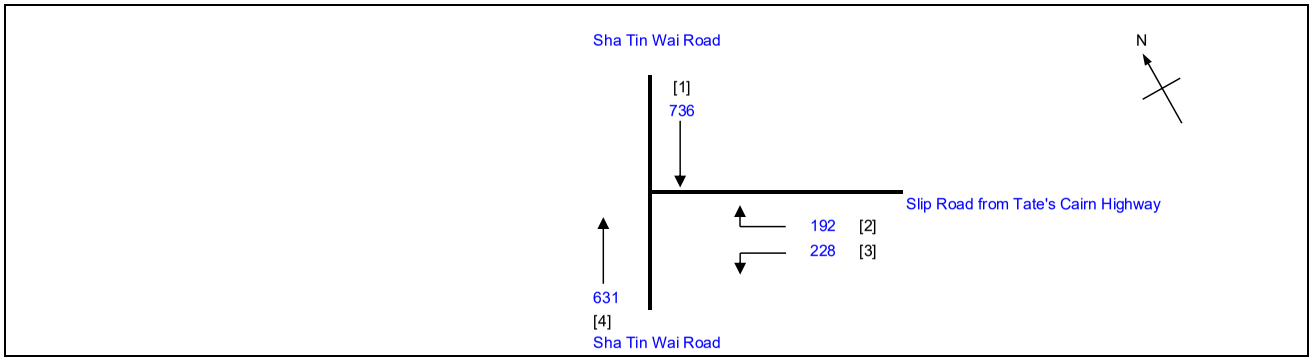
Stage 1	G= 20	Int = 7
Stage 2	G= 26	Int = 7
Stage 3	G= 21	Int = 7
Stage 4	G= 26	Int = 7
Stage 5	G=	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	7	12	8
P2	1,2,3	5	8	1	79	8
P3	1,2,4	5	6	1	86	6
P4	1,3,4	5	9	1	78	9
P5	2	5	12	1	20	12
P6	2,3,4	5	10	4	80	10
P7	3	5	6	3	19	6
P8	4	5	11	4	18	11

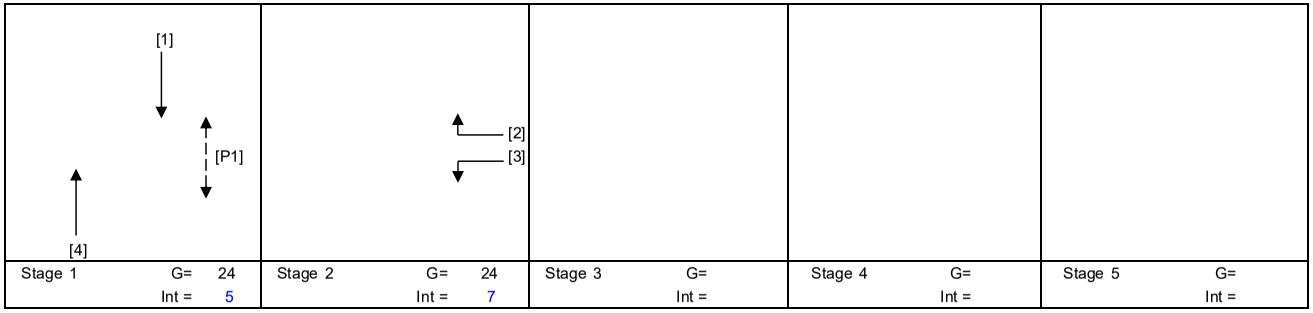
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							24					
7,8	1	3.50	1	25			2105		25	155	180	0.86	2002							2002	0.090	0.090		21	21	0.509	24	45
8	1	3.50	1				2105		189		189	0.00	2105							2105	0.090			21	21	0.509	30	45
8,9	1	3.50	1	15			2105	36	147		183	0.20	2064							2064	0.089			21	21	0.509	30	45
9	1	3.50	1	15		N	1965	160			160	1.00	1786							1786	0.090			21	21	0.509	24	46
1	2	3.30	1	20			2085			191	191	1.00	1940							1940	0.098			23	27	0.509	30	43
1,2	2	3.30	1	20			2085		235	0	235	0.00	2085							2085	0.113			27	27	0.509	36	41
2,3	2	3.30	1	10		N	1945	62	148		210	0.30	1863							1863	0.113	0.113		27	27	0.509	30	41
4,5	3	3.30	1	15			2085		112	38	150	0.25	2033							2033	0.074			17	22	0.509	24	48
5,6	3	3.30	1	12		N	1945	159	0		159	1.00	1729							1729	0.092	0.092		22	22	0.509	24	45
10	4	3.20	1	20			2075			218	218	1.00	1930							1930	0.113	0.113		27	27	0.509	30	41
10,11,12	4	3.20	1	15			2075	55	101	66	222	0.55	1968							1968	0.113			27	27	0.509	30	41
12	4	3.20	1	12		N	1935	194			194	1.00	1720							1720	0.113			27	27	0.509	30	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**			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
		FILENAME : J8_STWR_SlipRoadfromTCH.x	Checked By:	SLN	Sep-26
J8 Sha Tin Wai Road / Slip road from Tate's Cairn Highway			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.241
Loss time		L =	10 sec
Total Flow		=	1787 pcu
Co	= (1.5*L+5)/(1-Y)	=	26.3 sec
Cm	= L/(1-Y)	=	13.2 sec
Yult		=	0.825
R.C.ult	= (Yult-Y)/Y*100%	=	242.9 %
Cp	= 0.9*L/(0.9-Y)	=	13.6 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**212 %**



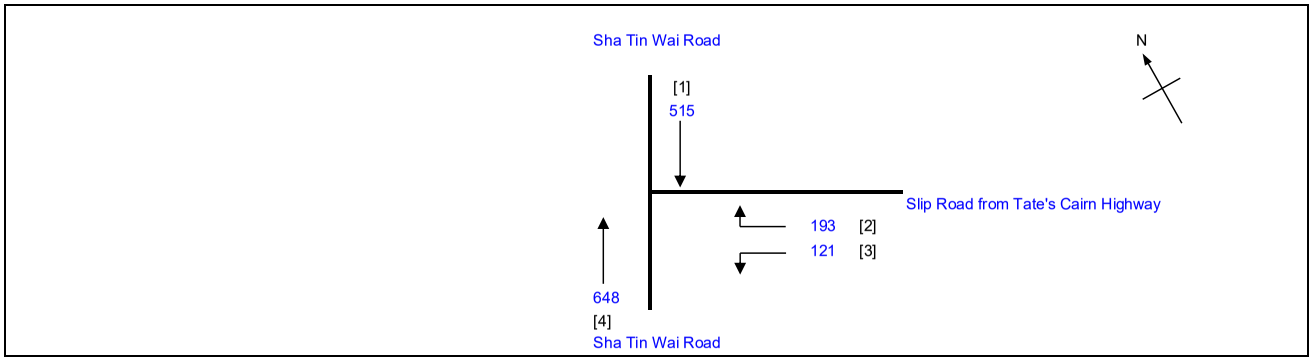
Stage 1	G= 24	Stage 2	G= 24	Stage 3	G=	Stage 4	G=	Stage 5	G=
	Int = 5		Int = 7		Int =		Int =		Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	1	20	8

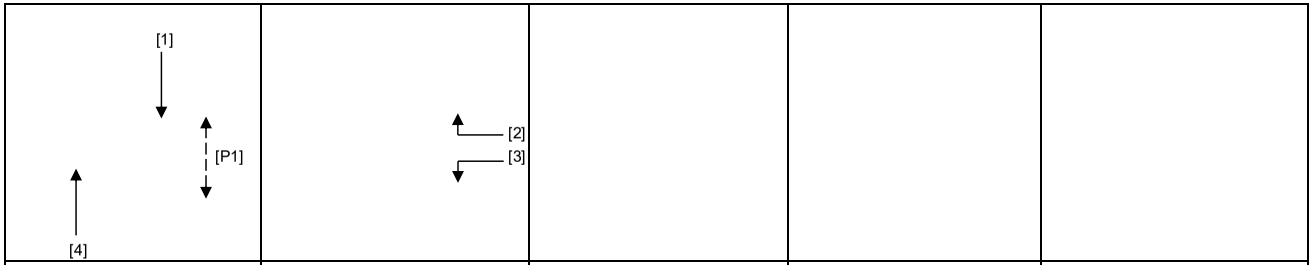
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							10					
1	1	3.10	3			N	6055		736		736	0.00	6055							6055	0.122	0.122		25	25	0.289	14	11
4	1	3.30	3			N	6115		631		631	0.00	6115							6115	0.103			21	25	0.289	12	13
2	2	4.00	1	15			2155			192	192	1.00	1959							1959	0.098			20	25	0.289	12	14
2,3	2	4.00	1	12			2155	228		0	228	1.00	1916							1916	0.119	0.119		25	25	0.289	12	11

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
		FILENAME : J8_STWR_SlipRoadfromTCH.x	Checked By:	SLN	Sep-26
J8 Sha Tin Wai Road / Slip road from Tate's Cairn Highway			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.187
Loss time		L =	10 sec
Total Flow		=	1477 pcu
Co	= (1.5*L+5)/(1-Y)	=	24.6 sec
Cm	= L/(1-Y)	=	12.3 sec
Yult		=	0.825
R.C.ult	= (Yult-Y)/Y*100%	=	340.9 %
Cp	= 0.9*L/(0.9-Y)	=	12.6 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**301 %**



Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
G= 27	G= 21	G=	G=	G=
Int = 5	Int = 7	Int =	Int =	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	1	23	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)
																							10					
1	1	3.10	3			N	6055		515		515	0.00	6055							6055	0.085			23	28	0.225	10	12
4	1	3.30	3			N	6115		648		648	0.00	6115							6115	0.106	0.106		28	28	0.225	10	9
2	2	4.00	1	15			2155			159	159	1.00	1959							1959	0.081	0.081		22	22	0.225	6	13
2,3	2	4.00	1	12			2155	121		34	155	1.00	1916							1916	0.081			22	22	0.225	6	13

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

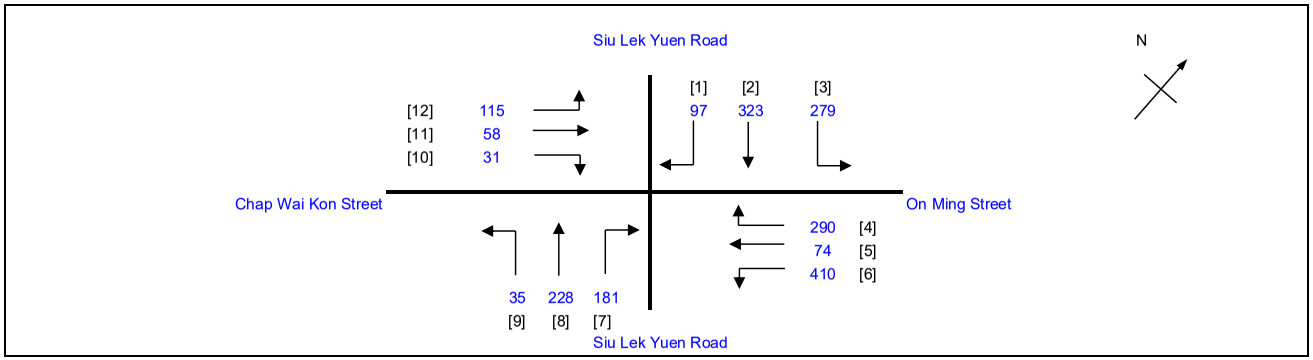
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

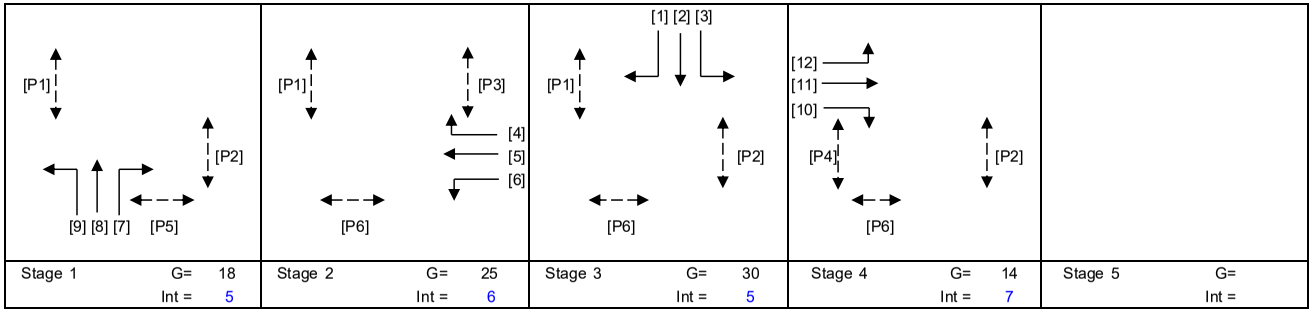
	INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)		
J9 Chap Wai Kon Street/ Siu Lek Yuen Road		

2025 Existing AM

PROJECT NO.:	41010	Prepared By:	SKL Sep-26
FILENAME :	J9_CWKS_SLYR.xlsx	Checked By:	SLN Sep-26
		Reviewed By:	SLN Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	110 sec
Sum(y)	Y =	0.452
Loss time	L =	23 sec
Total Flow	=	2121 pcu
Co = (1.5*L+5)/(1-Y)	=	72.0 sec
Cm = L/(1-Y)	=	41.9 sec
Yult	=	0.728
R.C.ult = (Yult-Y)/Y*100%	=	61.1 %
Cp = 0.9*L/(0.9-Y)	=	46.2 sec
Ymax = 1-L/C	=	0.791
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**58 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	9	0	80	9
P2	1,3,4	5	10	0	69	10
P3	2	5	9	9	13	9
P4	4	5	8	8	5	8
P5	1	5	8	9	6	8
P6	1,2,3	5	12	2	75	12

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					
9	1	3.30	1	18		N	1945	35			35	1.00	1795							1795	0.019			4	19	0.571	6	82
8	1	3.30	2				4170		228		228	0.00	4170							4170	0.055			11	19	0.571	18	48
7	1	3.30	1	24			2085			181	181	1.00	1962							1962	0.092	0.092	1	18	19	0.571	24	45
6	2	3.50	1	15		N	1965	243			243	1.00	1786							1786	0.136	0.136		26	26	0.571	30	38
4,5,6	2	3.50	1	15			2105	167	74	26	267	0.72	1963							1963	0.136			26	26	0.571	36	38
4	2	3.50	1	18			2105			264	264	1.00	1943							1943	0.136			26	26	0.571	36	38
3	3	3.20	1	15		N	1935	279			279	1.00	1759							1759	0.159	0.159		31	31	0.571	36	35
2	3	3.20	2				4150		323		323	0.00	4150							4150	0.078			15	31	0.571	24	44
1	3	3.20	1	24			2075			97	97	1.00	1953							1953	0.050			10	31	0.571	12	56
11,12	4	3.20	1	17		N	1935	115	0		115	1.00	1778							1778	0.065	0.065	3	12	15	0.571	18	52
10,11	4	3.20	1	17			2075		58	0	58	0.00	2075							2075	0.028			5	15	0.571	6	67
10	4	3.20	1	24			2075			31	31	1.00	1953							1953	0.016			3	15	0.571	6	87

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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

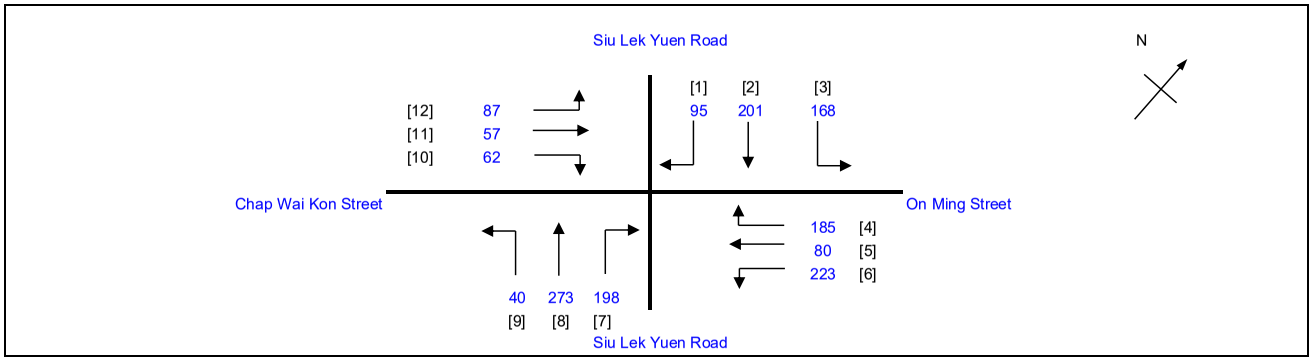
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J9 Chap Wai Kon Street/ Siu Lek Yuen Road

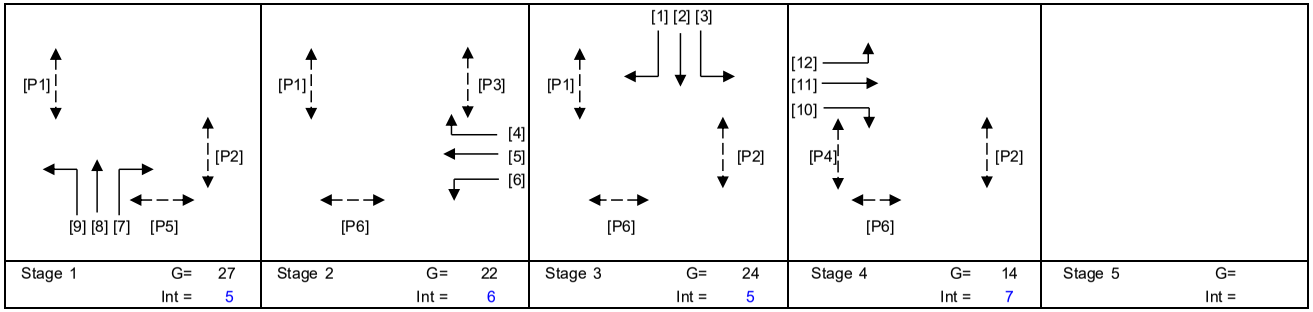
2025 Existing PM

PROJECT NO.: 41010

FILENAME : J9_CWKS_SLYR.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.331
Loss time		L =	22 sec
Total Flow		=	1669 pcu
Co	= (1.5*L+5)/(1-Y)	=	56.8 sec
Cm	= L/(1-Y)	=	32.9 sec
Yult		=	0.735
R.C.ult	= (Yult-Y)/Y*100%	=	122.2 %
Cp	= 0.9*L/(0.9-Y)	=	34.8 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**118 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	9	0	80	9
P2	1,3,4	5	10	0	72	10
P3	2	5	9	9	10	9
P4	4	5	8	8	5	8
P5	1	5	8	9	15	8
P6	1,2,3	5	12	2	75	12

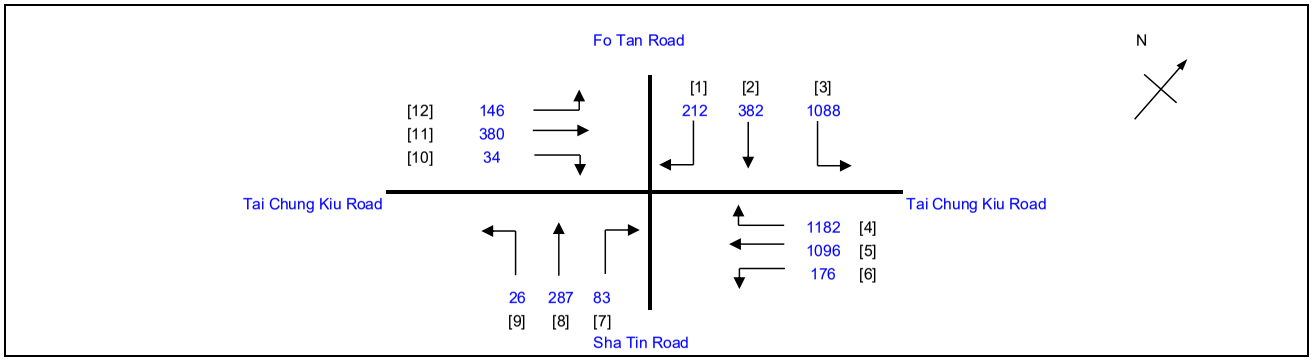
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
9	1	3.30	1	18		N	1945	40			40	1.00	1795							1795	0.022			6	28	0.413	6	57
8	1	3.30	2				4170		273		273	0.00	4170							4170	0.065			17	28	0.413	21	39
7	1	3.30	1	24			2085			198	198	1.00	1962							1962	0.101	0.101	1	27	28	0.413	24	34
6	2	3.50	1	15		N	1965	152			152	1.00	1786							1786	0.085			23	23	0.413	18	37
4,5,6	2	3.50	1	15			2105	71	80	19	170	0.53	1999							1999	0.085			23	23	0.413	24	37
4	2	3.50	1	18			2105			166	166	1.00	1943							1943	0.085	0.085		23	23	0.413	24	37
3	3	3.20	1	15		N	1935	168			168	1.00	1759							1759	0.096	0.096		25	25	0.413	18	35
2	3	3.20	2				4150		201		201	0.00	4150							4150	0.048			13	25	0.413	15	43
1	3	3.20	1	24			2075			95	95	1.00	1953							1953	0.049			13	25	0.413	12	45
11,12	4	3.20	1	17		N	1935	87	0		87	1.00	1778							1778	0.049	0.049	2	13	15	0.413	12	46
10,11	4	3.20	1	17			2075		57	4	61	0.07	2063							2063	0.030			8	15	0.413	6	52
10	4	3.20	1	24			2075			58	58	1.00	1953							1953	0.030			8	15	0.413	6	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

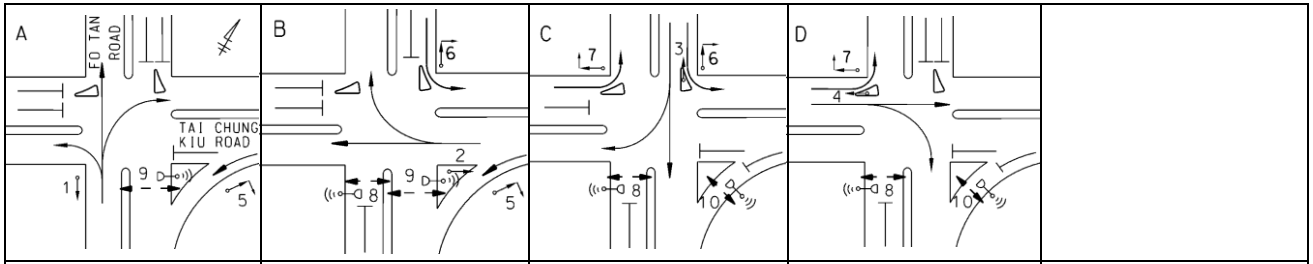
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2025 Existing AM	FILENAME : J10_FTR_TCKR.xlsx	Checked By:	SLN	Sep-26
J10 Fo Tan Road / Tai Chung Kiu Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.650
Loss time		L =	21 sec
Total Flow		=	5092 pcu
Co	= (1.5*L+5)/(1-Y)	=	104.1 sec
Cm	= L/(1-Y)	=	59.9 sec
Yult		=	0.743
R.C.ult	= (Yult-Y)/Y*100%	=	14.3 %
Cp	= 0.9*L/(0.9-Y)	=	75.5 sec
Ymax	= 1-L/C	=	0.838
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**16 %**



Stage 1	G= 16	Int = 7
Stage 2	G= 51	Int = 6
Stage 3	G= 24	Int = 7
Stage 4	G= 15	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	9	1	97	9
P2	1,2	5	8	8	64	8
P3	3,4	5	5	2	43	5

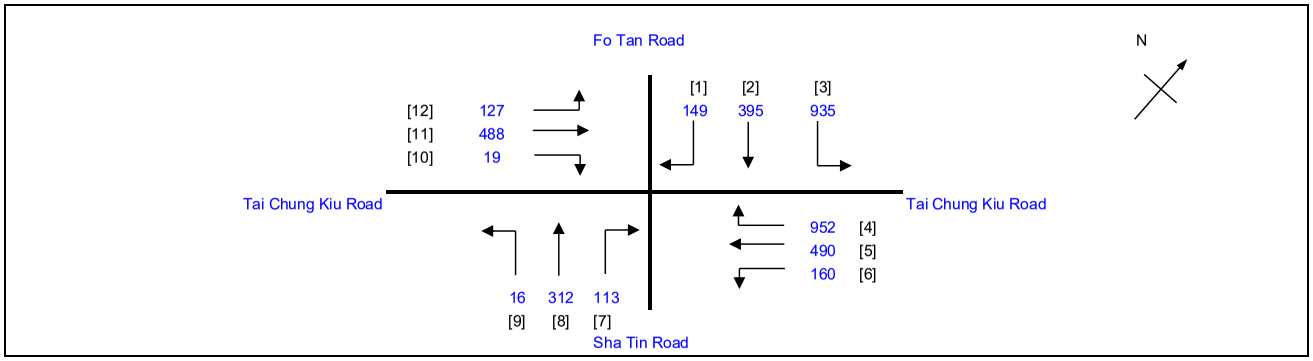
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
8,9	1	3.30	1	8		N	1945	26	165		191	0.14	1897							1897	0.101			17	17	0.775	36	72
7,8	1	3.30	1	23			2085		122	83	205	0.40	2031							2031	0.101	0.101		17	17	0.775	42	70
6	1,2	3.50	1	40		N	1965	176			176	1.00	1894							1894	0.093			16	69	0.775	36	74
5	2	3.00	2				4110		1096		1096	0.00	4110	28	323					4433	0.247			41	52	0.775	78	40
4	2	3.00	2	20			4110			1182	1182	1.00	3823							3823	0.309	0.309		52	52	0.775	75	34
3	2,3	3.20	2	12		N	4010	1088			1088	1.00	3564							3564	0.305			51	77	0.775	69	35
2	3	3.20	1				2075		305		305	0.00	2075							2075	0.147	0.147		25	25	0.775	54	59
1,2	3	3.20	1	20			2075		77	212	289	0.73	1967							1967	0.147			25	25	0.775	54	60
12	3,4	3.00	1	12		N	1915	146			146	1.00	1702							1702	0.086			14	40	0.775	30	80
11	4	3.00	1				2055		190		190	0.00	2055							2055	0.092	0.092		16	16	0.775	36	73
10,11	4	3.00	1	21			2055		190	0	190	0.00	2055							2055	0.092			16	16	0.775	36	73
10	4	3.00	1	21			2055			34	34	1.00	1918							1918	0.018			3	16	0.775	12	184

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

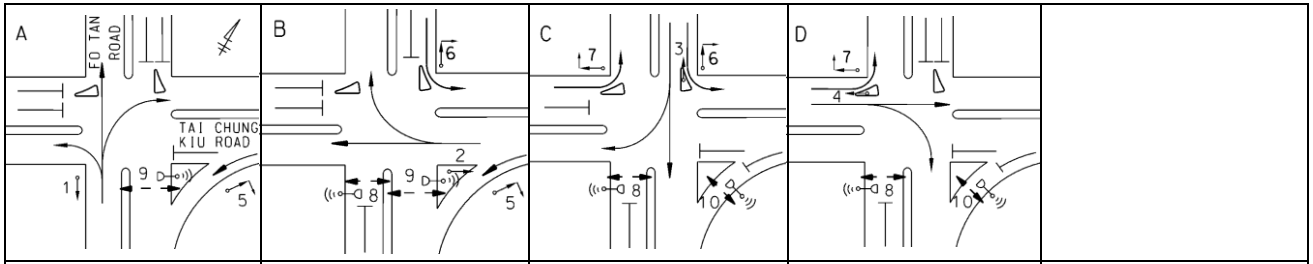
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2025 Existing PM	FILENAME : J10_FTR_TCKR.xlsx	Checked By:	SLN	Sep-26
J10 Fo Tan Road / Tai Chung Kiu Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.614
Loss time		L =	21 sec
Total Flow		=	4156 pcu
Co	= (1.5*L+5)/(1-Y)	=	94.6 sec
Cm	= L/(1-Y)	=	54.4 sec
Yult		=	0.743
R.C.ult	= (Yult-Y)/Y*100%	=	20.9 %
Cp	= 0.9*L/(0.9-Y)	=	66.1 sec
Ymax	= 1-L/C	=	0.838
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**23 %**



Stage 1	G= 19	Int = 7
Stage 2	G= 43	Int = 6
Stage 3	G= 23	Int = 7
Stage 4	G= 20	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	9	1	94	9
P2	1,2	5	8	8	59	8
P3	3,4	5	5	2	48	5

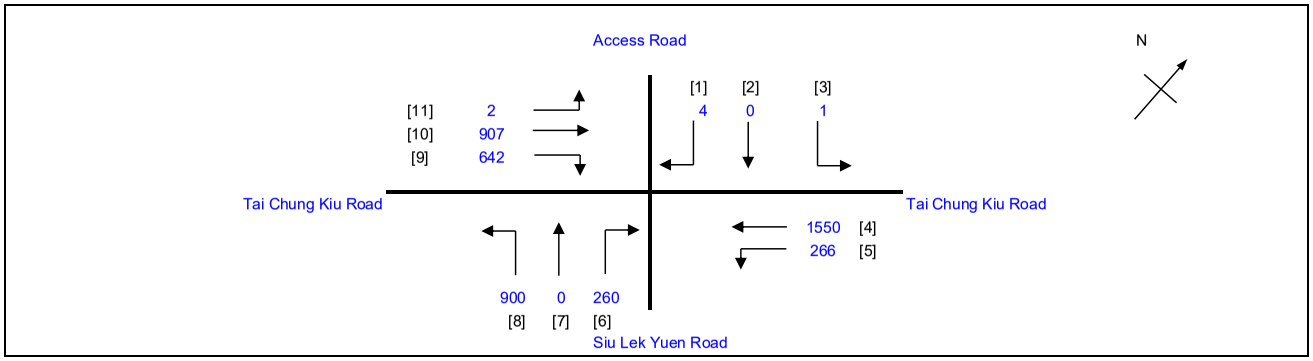
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
8,9	1	3.30	1	8		N	1945	16	198		214	0.07	1918							1918	0.112			20	20	0.732	36	62
7,8	1	3.30	1	23			2085		114	113	227	0.50	2019							2019	0.112	0.112		20	20	0.732	42	62
6	1,2	3.50	1	40		N	1965	160			160	1.00	1894							1894	0.084			15	64	0.732	30	70
5	2	3.00	2				4110		490		490	0.00	4110	28	382					4492	0.109			19	44	0.732	45	54
4	2	3.00	2	20			4110			952	952	1.00	3823							3823	0.249	0.249		44	44	0.732	66	37
3	2,3	3.20	2	12		N	4010	935			935	1.00	3564							3564	0.262			47	68	0.732	63	36
2	3	3.20	1				2075		278		278	0.00	2075							2075	0.134	0.134		24	24	0.732	48	57
1,2	3	3.20	1	20			2075		117	149	266	0.56	1991							1991	0.134			24	24	0.732	48	57
12	3,4	3.00	1	12		N	1915	127			127	1.00	1702							1702	0.075			13	45	0.732	24	77
11	4	3.00	1				2055		244		244	0.00	2055							2055	0.119	0.119		21	21	0.732	42	60
10,11	4	3.00	1	21			2055		244	0	244	0.00	2055							2055	0.119			21	21	0.732	42	60
10	4	3.00	1	21			2055			19	19	1.00	1918							1918	0.010			2	21	0.732	6	228

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

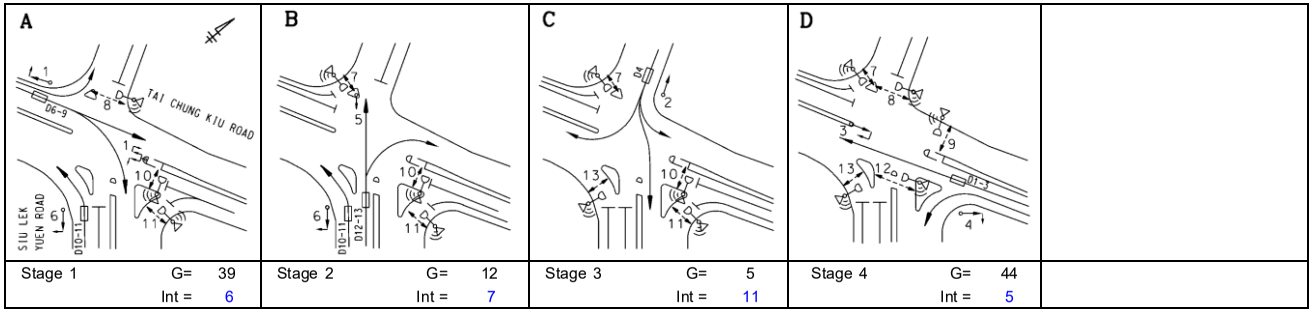
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2025 Existing AM	FILENAME : J11_TCKR_SLYR.xlsx	Checked By:	SLN	Sep-26
J11 Tai Chung Kiu Road / Siu Lek Yuen Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	130 sec
Sum(y)	Y =	0.535
Loss time	L =	31 sec
Total Flow	=	4532 pcu
Co = (1.5*L+5)/(1-Y)	=	110.8 sec
Cm = L/(1-Y)	=	66.7 sec
Yult	=	0.668
R.C.ult = (Yult-Y)/Y*100%	=	24.7 %
Cp = 0.9*L/(0.9-Y)	=	76.5 sec
Ymax = 1-L/C	=	0.762
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**28 %**



Stage 1	G= 39	Stage 2	G= 12	
	Int = 6		Int = 7	
Stage 3	G= 5	Stage 4	G= 44	
	Int = 11		Int = 5	

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	7	3	75	7
P2	1,4	6	9	6	80	9
P3	4	6	10	9	30	10
P4	1,2,3	5	7	7	67	7
P5	1,2,3	5	5	7	69	5
P6	4	10	8	9	32	8
P7	3,4	5	8	5	53	8

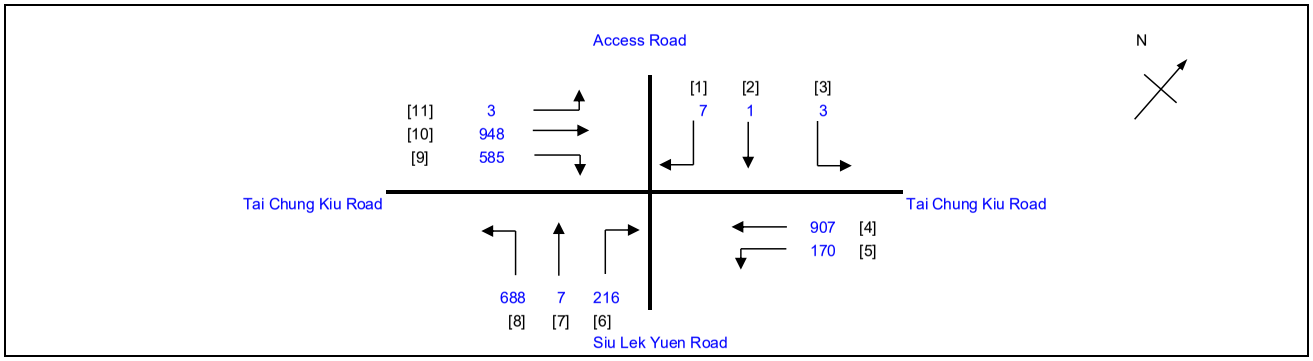
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
11	1	3.20	1	15		N	1935	2			2	1.00	1759							1759	0.001			0	40	0.703	0	1404
10	1	3.20	2				4150		907		907	0.00	4150							4150	0.219	0.219		40	40	0.703	66	39
9	1	3.20	2	27			4150			642	642	1.00	3932							3932	0.163			30	40	0.703	51	45
8	1,2	3.10	2	41		N	3990	900			900	1.00	3849							3849	0.234			43	53	0.703	63	37
6,7	2	3.10	1	13			2065		0	130	130	1.00	1851							1851	0.070	0.070		13	13	0.703	24	72
6	2	3.10	1	13			2065			130	130	1.00	1851							1851	0.070			13	13	0.703	24	72
1,2,3	3	5.50	1	9		N	2165	1	0	4	5	1.00	1856							1856	0.003	0.003	6	0	6	0.703	0	597
5	4	3.65	1	12		N	1980	266			266	1.00	1760							1760	0.151			28	45	0.703	42	53
4	4	3.65	3				6360		1550		1550	0.00	6360							6360	0.244	0.244		45	45	0.703	72	35

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

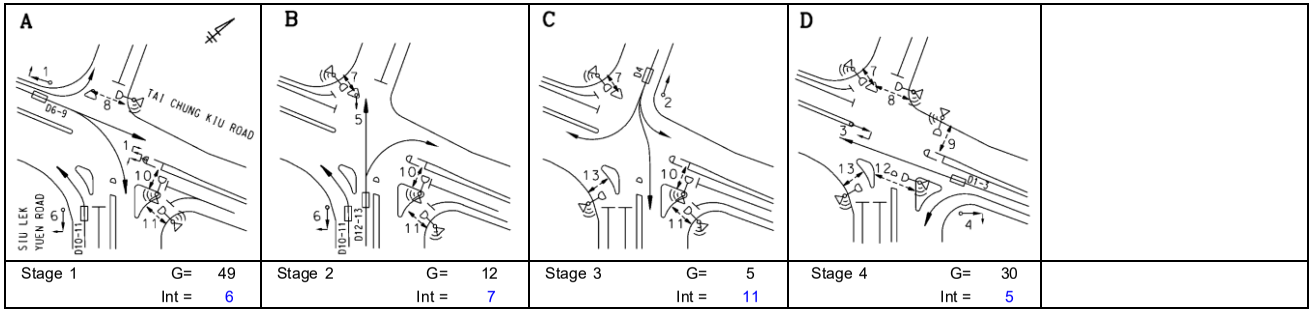
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J11 Tai Chung Kiu Road / Siu Lek Yuen Road		FILENAME : J11_TCKR_SLYR.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	125 sec
Sum(y)	Y =	0.437
Loss time	L =	30 sec
Total Flow	=	3535 pcu
Co = (1.5*L+5)/(1-Y)	=	88.9 sec
Cm = L/(1-Y)	=	53.3 sec
Yult	=	0.675
R.C.ult = (Yult-Y)/Y*100%	=	54.3 %
Cp = 0.9*L/(0.9-Y)	=	58.4 sec
Ymax = 1-L/C	=	0.760
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**56 %**



Stage 1	G= 49	Int = 6
Stage 2	G= 12	Int = 7
Stage 3	G= 5	Int = 11
Stage 4	G= 30	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	7	3	60	7
P2	1,4	6	9	6	75	9
P3	4	6	10	9	16	10
P4	1,2,3	5	7	7	76	7
P5	1,2,3	5	5	7	78	5
P6	4	10	8	9	18	8
P7	3,4	5	8	5	38	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)
																							25					
11	1	3.20	1	15		N	1935	3			3	1.00	1759							1759	0.002			0	50	0.576	0	477
10	1	3.20	2				4150		948		948	0.00	4150							4150	0.228	0.228		50	50	0.576	57	28
9	1	3.20	2	27			4150			585	585	1.00	3932							3932	0.149			32	50	0.576	45	38
8	1,2	3.10	2	41		N	3990	688			688	1.00	3849							3849	0.179			39	63	0.576	48	34
6,7	2	3.10	1	13			2065		7	104	111	0.94	1864							1864	0.060			13	13	0.576	18	59
6	2	3.10	1	13			2065			112	112	1.00	1851							1851	0.060	0.060		13	13	0.576	18	59
1,2,3	3	5.50	1	9		N	2165	3	1	7	11	0.91	1880							1880	0.006	0.006	5	1	6	0.576	0	170
5	4	3.65	1	12		N	1980	170			170	1.00	1760							1760	0.097			21	31	0.576	24	51
4	4	3.65	3				6360		907		907	0.00	6360							6360	0.143	0.143		31	31	0.576	46	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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

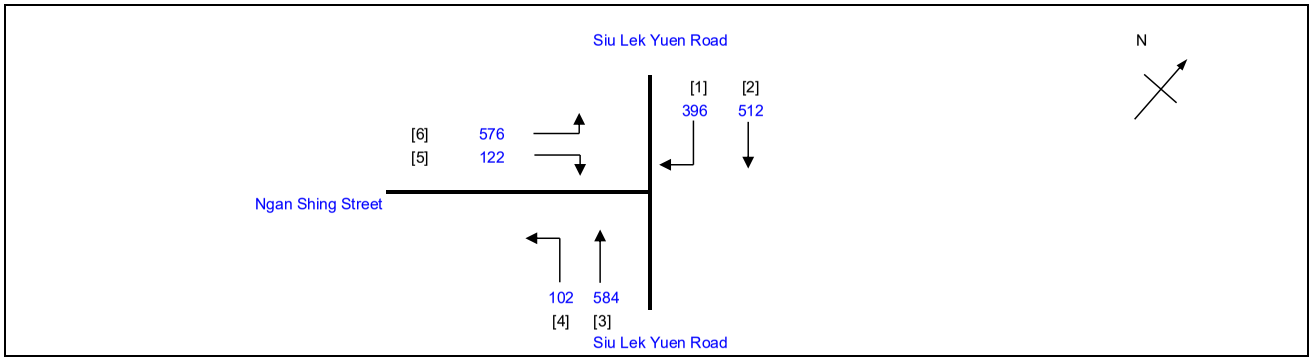
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J12 Siu Lek Yuen Road /Ngan Shing Street

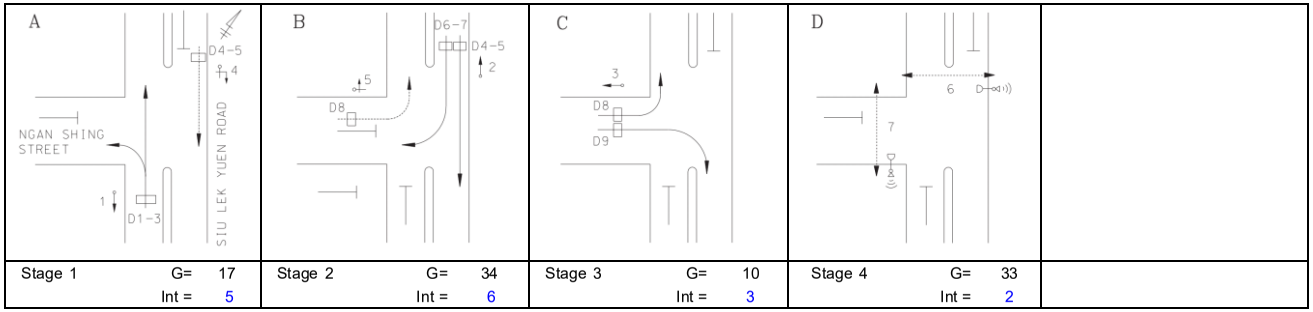
2025 Existing AM

PROJECT NO.: 41010

FILENAME : J12_SLYR_NSS.xlsx



No. of stages per cycle	N =	4
Cycle time	C =	110 sec
Sum(y)	Y =	0.402
Loss time	L =	46 sec
Total Flow	=	2292 pcu
Co = (1.5*L+5)/(1-Y)	=	123.8 sec
Cm = L/(1-Y)	=	77.0 sec
Yult	=	0.555
R.C.ult = (Yult-Y)/Y*100%	=	37.9 %
Cp = 0.9*L/(0.9-Y)	=	83.2 sec
Ymax = 1-L/C	=	0.582
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**30 %**



Stage 1	G=	17	Stage 2	G=	34	Stage 3	G= 10
	Int =	5		Int =	6		Int = 3

Stage 4	G=	33
	Int =	2

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	15	13	5	17	13
P2	4	11	10	2	23	10

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)
																							13					
3,4	1	3.30	1	18		N	1945	102	110		212	0.48	1870							1870	0.113			18	18	0.692	30	51
3	1	3.30	2				4170		474		474	0.00	4170							4170	0.114	0.114		18	18	0.692	36	44
2	2	3.80	1			N	1995		512		512	0.00	1995	18	309					2304	0.222	0.222		35	35	0.692	60	34
1	2	3.80	2	17			4270			396	396	1.00	3924							3924	0.101			16	35	0.692	30	47
6	2,3	3.60	1	16			2115	576			576	1.00	1934							1934	0.298			47	46	0.692	60	27
5	3	3.60	1	20		N	1975			122	122	1.00	1837							1837	0.066	0.066		11	11	0.692	18	64
PED	4																						33					

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

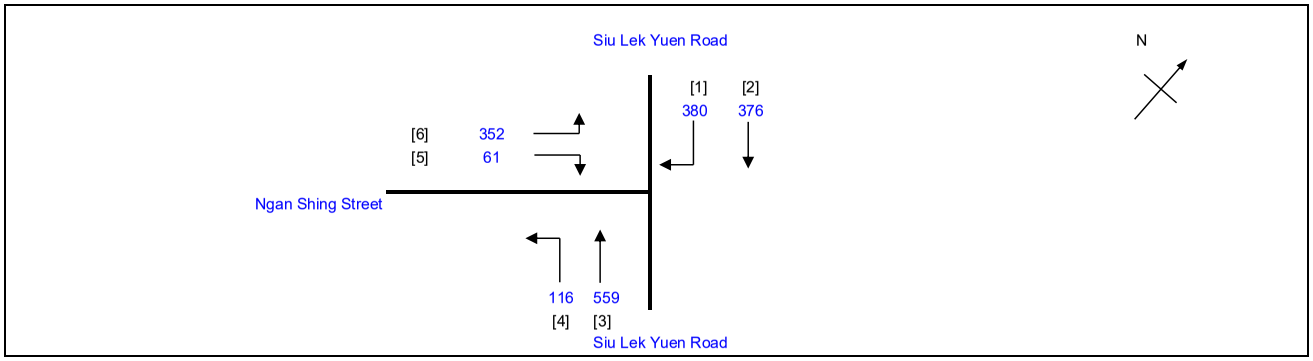
	INITIALS	DATE
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

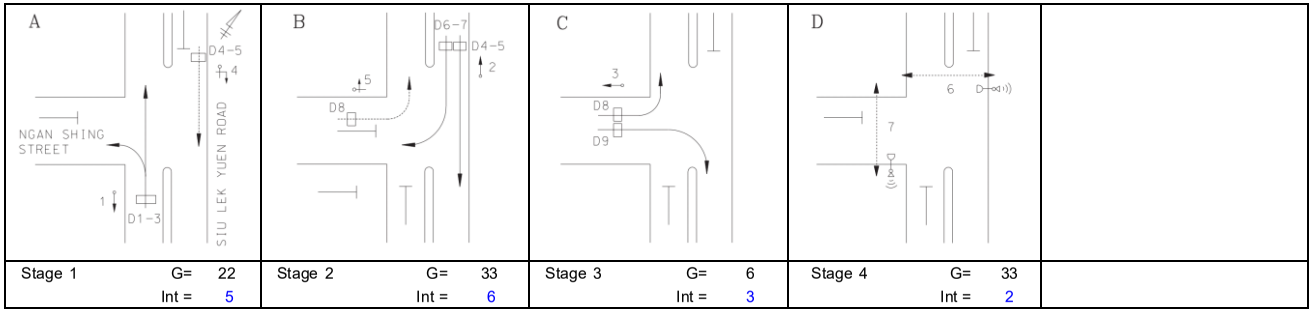
J12 Siu Lek Yuen Road /Ngan Shing Street

2025 Existing PM

PROJECT NO.: 41010
FILENAME : J12_SLYR_NSS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.308
Loss time		L =	46 sec
Total Flow		=	1844 pcu
Co	= (1.5*L+5)/(1-Y)	=	107.0 sec
Cm	= L/(1-Y)	=	66.5 sec
Yult		=	0.555
R.C.ult	= (Yult-Y)/Y*100%	=	80.1 %
Cp	= 0.9*L/(0.9-Y)	=	70.0 sec
Ymax	= 1-L/C	=	0.582
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**70 %**



Stage 1	G=	22	Stage 2	G=	33	Stage 3	G= 6
	Int =	5		Int =	6		Int = 3
Stage 4	G=	33					
	Int =	2					

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	15	13	5	17	13
P2	4	11	10	2	23	10

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)
																							13					
3,4	1	3.30	1	18		N	1945	116	93		209	0.56	1859							1859	0.112	0.112		23	23	0.530	30	39
3	1	3.30	2				4170		466		466	0.00	4170							4170	0.112			23	23	0.530	33	37
2	2	3.80	1			N	1995		376		376	0.00	1995	18	318					2313	0.163	0.163		34	34	0.530	42	31
1	2	3.80	2	17			4270			380	380	1.00	3924							3924	0.097			20	34	0.530	27	39
6	2,3	3.60	1	16			2115	352			352	1.00	1934							1934	0.182			38	41	0.530	42	29
5	3	3.60	1	20		N	1975			61	61	1.00	1837							1837	0.033	0.033		7	7	0.530	6	61
PED	4																						33					

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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

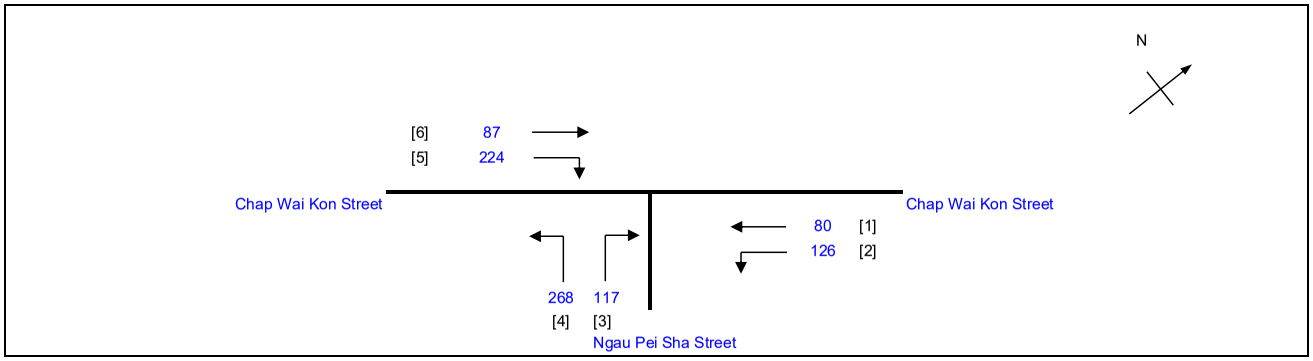
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J13 Chap Wai Kon Street / Ngau Pei Sha Street

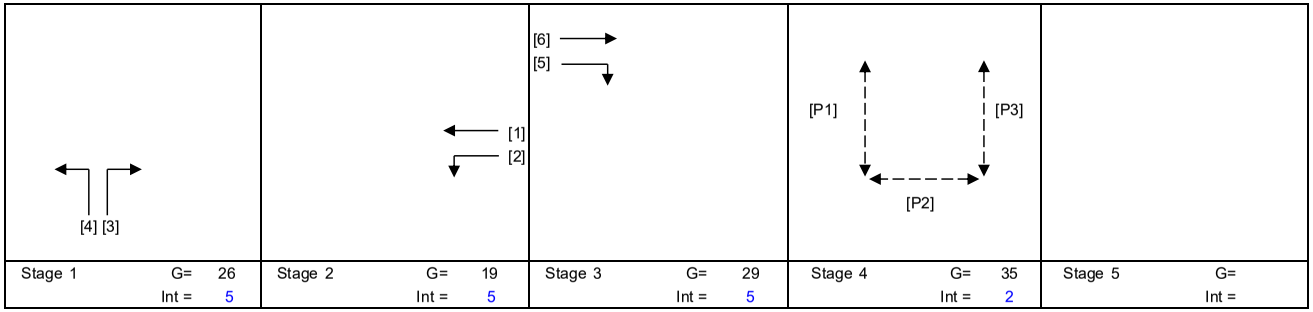
2025 Existing AM

PROJECT NO.: 41010

FILENAME : J13_CWKS_NPSS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	125 sec
Sum(y)		Y =	0.211
Loss time		L =	49 sec
Total Flow		=	902 pcu
Co	= (1.5*L+5)/(1-Y)	=	99.6 sec
Cm	= L/(1-Y)	=	62.1 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	151.8 %
Cp	= 0.9*L/(0.9-Y)	=	64.1 sec
Ymax	= 1-L/C	=	0.608
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**159 %**



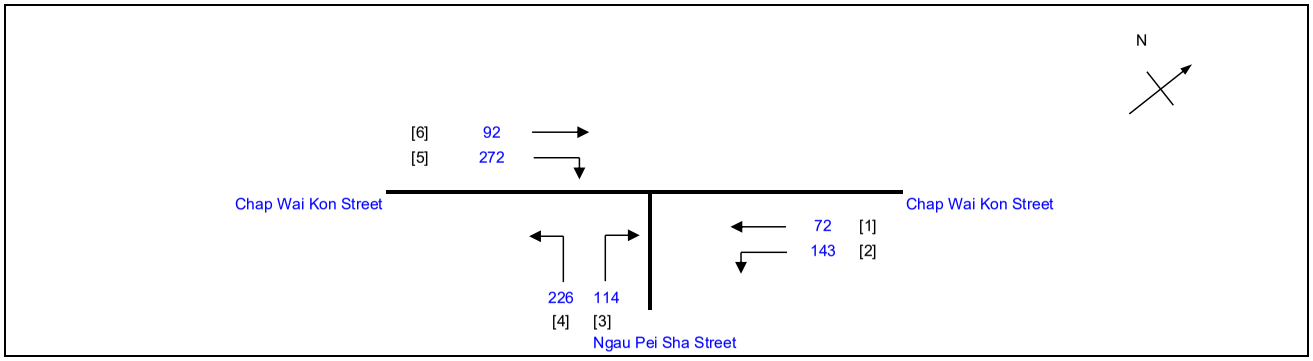
Stage 1	G= 26	Int = 5
Stage 2	G= 19	Int = 5
Stage 3	G= 29	Int = 5
Stage 4	G= 35	Int = 2
Stage 5	G=	Int =

Pedestrian Phase	Stage	Width (m)	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	16	10	8	0	29	8
P2	4	22	13	12	8	17	12
P3	4	16	8	7	4	26	7

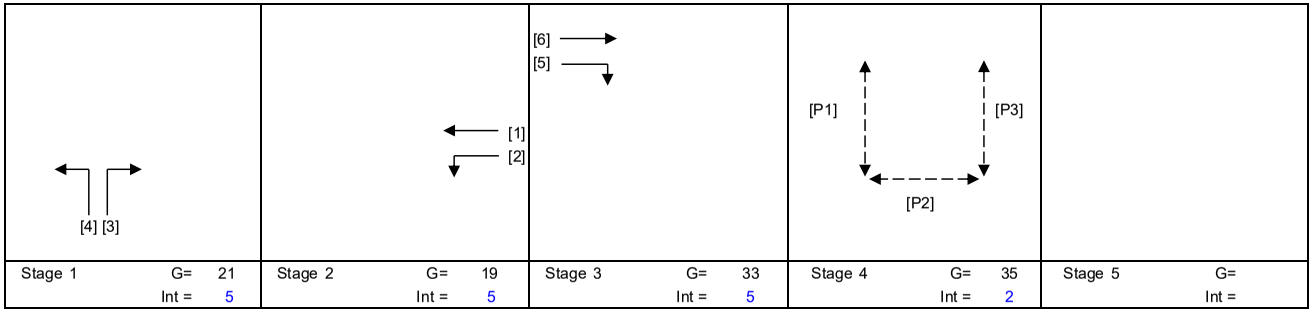
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							14					
4	1	3.20	1	15		N	1935	130			130	1.00	1759							1759	0.074	0.074		27	27	0.348	18	40
3,4	1	3.20	1	15			2075	138		0	138	1.00	1886							1886	0.073			26	27	0.348	18	40
3	1	3.20	1	22			2075			117	117	1.00	1943							1943	0.060			22	27	0.348	18	43
2	2	3.50	1	12		N	1965	96			96	1.00	1747							1747	0.055	0.055		20	20	0.348	12	45
1,2	2	3.50	1	12			2105	30	80		110	0.27	2036							2036	0.054			19	20	0.348	18	45
5,6	3	3.30	1	15		N	1945		87	67	154	0.44	1864							1864	0.083	0.083		30	30	0.348	24	38
5	3	3.30	1	15			2085			157	157	1.00	1895							1895	0.083			30	30	0.348	24	38
PED	4																						35					

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
		FILENAME : J13_CWKS_NPSS.xlsx	Checked By:	SLN	Sep-26
J13 Chap Wai Kon Street / Ngau Pei Sha Street			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	125 sec
Sum(y)		Y =	0.216
Loss time		L =	49 sec
Total Flow		=	919 pcu
Co	= (1.5*L+5)/(1-Y)	=	100.2 sec
Cm	= L/(1-Y)	=	62.5 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	146.1 %
Cp	= 0.9*L/(0.9-Y)	=	64.5 sec
Ymax	= 1-L/C	=	0.608
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**153 %**



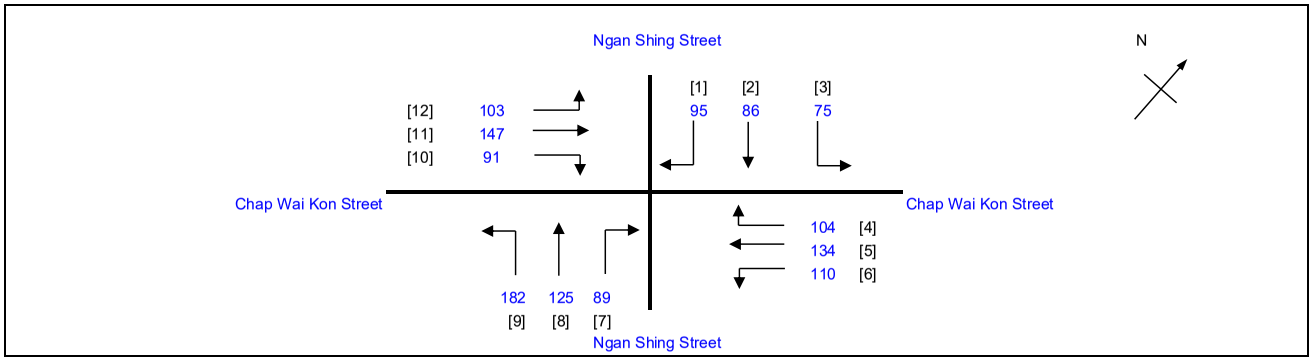
Stage 1	G= 21	Stage 2	G= 19	Stage 3	G= 33	Stage 4	G= 35	Stage 5	G=
	Int = 5		Int = 5		Int = 5		Int = 2		Int =

Pedestrian Phase	Stage	Width (m)	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	16	10	8	0	29	8
P2	4	22	13	12	8	17	12
P3	4	16	8	7	4	26	7

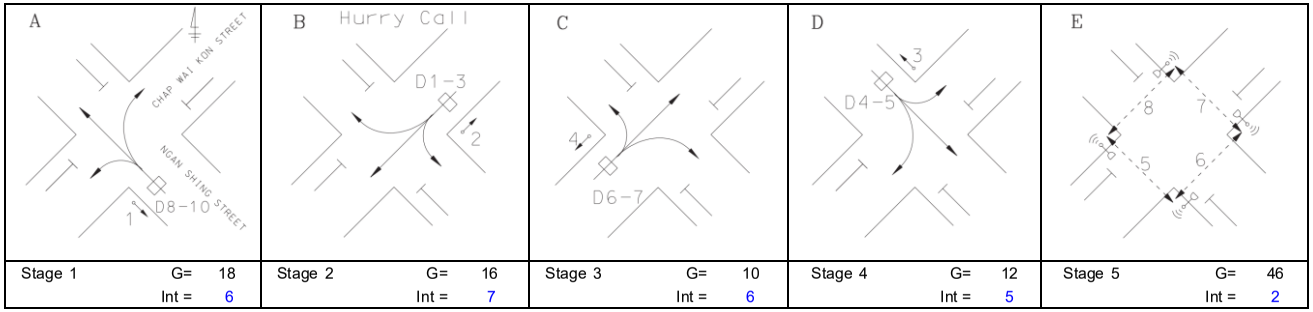
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							14					
4	1	3.20	1	15		N	1935	109			109	1.00	1759							1759	0.062			22	22	0.356	18	44
3,4	1	3.20	1	15			2075	117		0	117	1.00	1886							1886	0.062	0.062		22	22	0.356	18	44
3	1	3.20	1	22			2075			114	114	1.00	1943							1943	0.059			21	22	0.356	18	44
2	2	3.50	1	12		N	1965	100			100	1.00	1747							1747	0.057	0.057		20	20	0.356	12	45
1,2	2	3.50	1	12			2105	43	72		115	0.37	2011							2011	0.057			20	20	0.356	18	45
5,6	3	3.30	1	15		N	1945		92	88	180	0.49	1854							1854	0.097	0.097		34	34	0.356	24	35
5	3	3.30	1	15			2085			184	184	1.00	1895							1895	0.097			34	34	0.356	24	35
PED	4																						35					

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J14 Chap Wai Kon Street / Ngan Shing Street		FILENAME : J14_CWKS_NSS.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	128 sec
Sum(y)		Y =	0.322
Loss time		L =	68 sec
Total Flow		=	1341 pcu
Co	= (1.5*L+5)/(1-Y)	=	157.8 sec
Cm	= L/(1-Y)	=	100.3 sec
Yult		=	0.390
R.C.ult	= (Yult-Y)/Y*100%	=	21.1 %
Cp	= 0.9*L/(0.9-Y)	=	105.9 sec
Ymax	= 1-L/C	=	0.469
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**31 %**



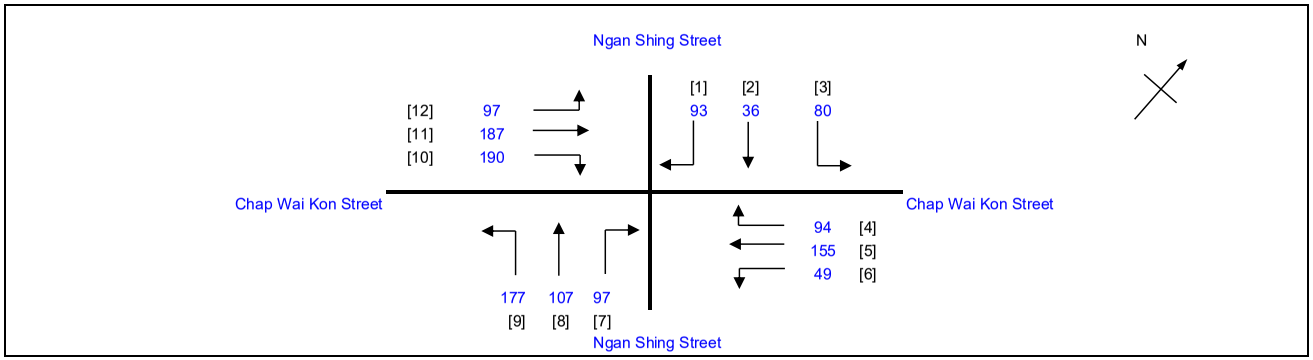
Stage 1	G= 18	Stage 2	G= 16	Stage 3	G= 10
	Int = 6		Int = 7		Int = 6
Stage 4	G= 12	Stage 5	G= 46		
	Int = 5		Int = 2		

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	5	12	11	6	31	11
P2	5	13	12	4	32	12
P3	5	13	12	4	32	12
P4	5	11	9	0	39	9

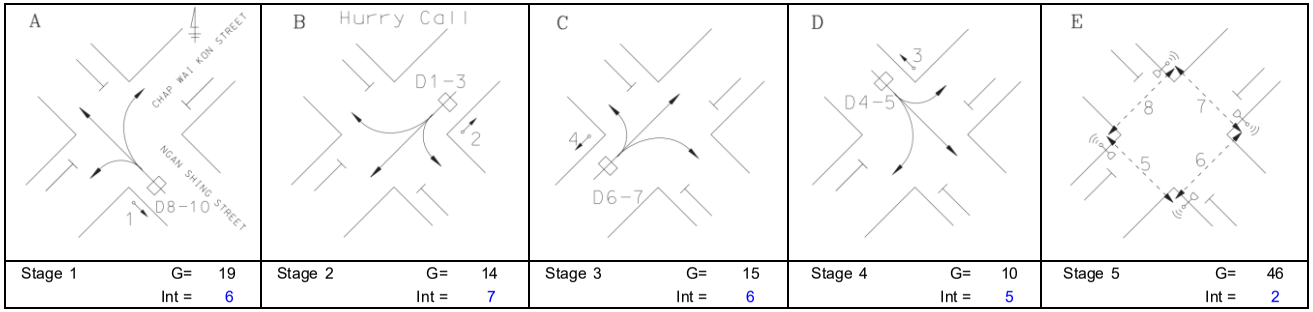
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							22					
9	1	3.30	1	14		N	1945	182			182	1.00	1757							1757	0.104	0.104		19	19	0.687	30	60
8	1	3.30	1				2085		111		111	0.00	2085							2085	0.053			10	19	0.687	24	74
7,8	1	3.30	1	19			2085		14	89	103	0.86	1952							1952	0.053			10	19	0.687	18	76
5,6	2	3.40	1	12		N	1955	110	56		166	0.66	1805							1805	0.092	0.092		17	17	0.687	30	62
4,5	2	3.40	1	17			2095		78	104	182	0.57	1994							1994	0.091			17	17	0.687	30	61
11,12	3	3.40	1	14		N	1955	103	1		104	0.99	1767							1767	0.059	0.059		11	11	0.687	18	75
10,11	3	3.40	2	18			4190		146	91	237	0.38	4060							4060	0.058			11	11	0.687	21	62
2,3	4	3.40	1	11		N	1955	75	47		122	0.61	1804							1804	0.068			13	13	0.687	24	70
1,2	4	3.40	1	18			2095		39	95	134	0.71	1978							1978	0.068	0.068		13	13	0.687	24	68
PED	5																						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**			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2025 Existing PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J14 Chap Wai Kon Street / Ngan Shing Street		FILENAME : J14_CWKS_NSS.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.316
Loss time		L =	68 sec
Total Flow		=	1362 pcu
Co	= (1.5*L+5)/(1-Y)	=	156.4 sec
Cm	= L/(1-Y)	=	99.4 sec
Yult		=	0.390
R.C.ult	= (Yult-Y)/Y*100%	=	23.5 %
Cp	= 0.9*L/(0.9-Y)	=	104.8 sec
Ymax	= 1-L/C	=	0.477
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**36 %**



Stage 1	G= 19	Int = 6	Stage 2	G= 14	Int = 7	Stage 3	G= 15	Int = 6	Stage 4	G= 10	Int = 5	Stage 5	G= 46	Int = 2

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	5	12	11	6	31	11
P2	5	13	12	4	32	12
P3	5	13	12	4	32	12
P4	5	11	9	0	39	9

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)
																							22					
9	1	3.30	1	14		N	1945	177			177	1.00	1757							1757	0.101	0.101		20	20	0.662	30	59
8	1	3.30	1				2085		106		106	0.00	2085							2085	0.051			10	20	0.662	18	72
7,8	1	3.30	1	19			2085		1	97	98	0.99	1934							1934	0.051			10	20	0.662	18	74
5,6	2	3.40	1	12		N	1955	49	96		145	0.34	1876							1876	0.077	0.077		15	15	0.662	24	64
4,5	2	3.40	1	17			2095		59	94	153	0.61	1987							1987	0.077			15	15	0.662	30	63
11,12	3	3.40	1	14		N	1955	97	52		149	0.65	1828							1828	0.082	0.082		16	16	0.662	24	63
10,11	3	3.40	2	18			4190		135	190	325	0.58	3995							3995	0.081			16	16	0.662	30	55
2,3	4	3.40	1	11		N	1955	80	19		99	0.81	1761							1761	0.056			11	11	0.662	18	73
1,2	4	3.40	1	18			2095		17	93	110	0.85	1957							1957	0.056	0.056		11	11	0.662	18	71
PED	5																						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

	INITIALS	DATE
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

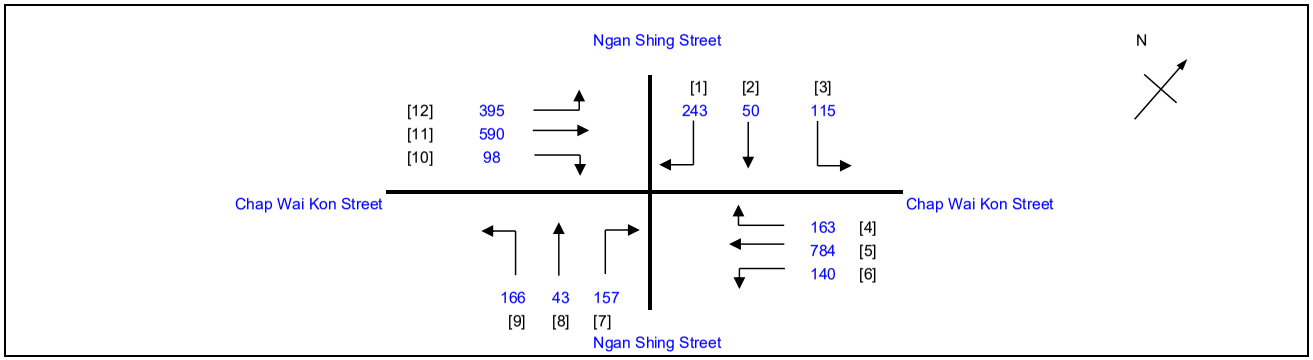
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J15 Ngan Shing Street / Sha Tin Wai Street

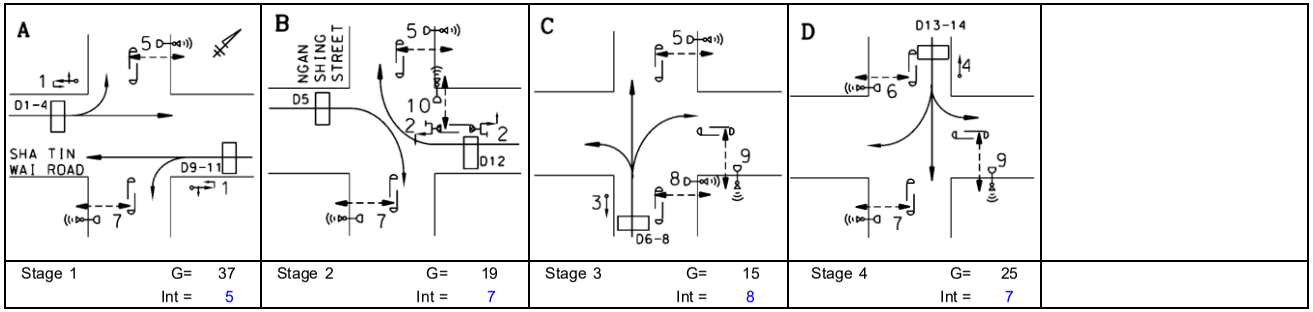
2025 Existing AM

PROJECT NO.: 41010

FILENAME : J15_NSS_STWS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	124 sec
Sum(y)		Y =	0.415
Loss time		L =	23 sec
Total Flow		=	2944 pcu
Co	= (1.5*L+5)/(1-Y)	=	67.5 sec
Cm	= L/(1-Y)	=	39.3 sec
Yult		=	0.728
R.C.ult	= (Yult-Y)/Y*100%	=	75.4 %
Cp	= 0.9*L/(0.9-Y)	=	42.7 sec
Ymax	= 1-L/C	=	0.815
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**77 %**



Stage 1	G=	37	Stage 2	G=	19	Stage 3	G= 15
	Int =	5		Int =	7		Int = 8

Stage 4	G=	25
	Int =	7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	7	1	84	7
P2	4	5	15	6	11	15
P3	1,2,4	5	11	1	89	11
P4	3	5	11	6	6	11
P5	3,4	5	16	2	38	16
P6	1,2	5	9	6	53	9

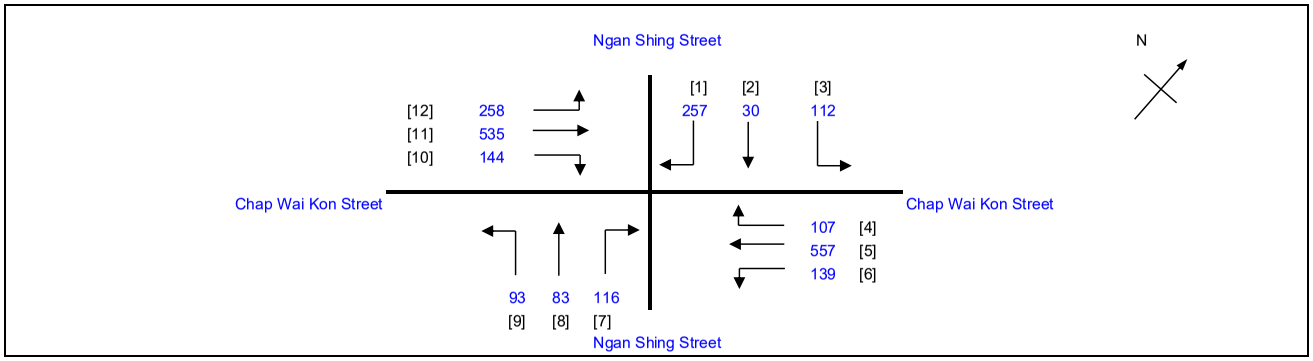
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							23					
12	1	3.20	2	12		N	4010	395			395	1.00	3564							3564	0.111			27	38	0.509	30	41
11	1	3.20	2				4150		590		590	0.00	4150							4150	0.142			35	38	0.509	42	35
5,6	1	3.40	1	7		N	1955	140	133		273	0.51	1761							1761	0.155			38	38	0.509	36	35
5	1	3.40	2				4190		651		651	0.00	4190							4190	0.155	0.155		38	38	0.509	45	33
10	2	3.20	1	20			2075			98	98	1.00	1930							1930	0.051			12	20	0.509	18	56
4	2	3.40	1	20			2095			163	163	1.00	1949							1949	0.084	0.084		20	20	0.509	24	48
9	3	3.10	1	10		N	1925	112			112	1.00	1674							1674	0.067			16	16	0.509	18	53
7,8,9	3	3.10	1	10			2065	54	43	29	126	0.66	1879							1879	0.067	0.067		16	16	0.509	18	52
7	3	3.10	1	20			2065			128	128	1.00	1921							1921	0.067			16	16	0.509	18	52
1,2,3	4	3.40	1	14		N	1955	115	50	31	196	0.74	1811							1811	0.108			26	26	0.509	30	43
1	4	3.40	1	20			2095			212	212	1.00	1949							1949	0.109	0.109		26	26	0.509	30	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

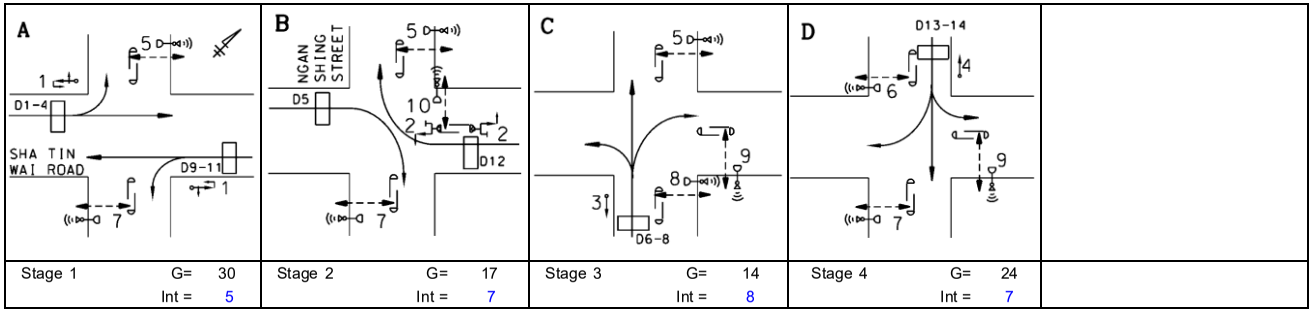
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2025 Existing PM	FILENAME : J15_NSS_STWS.xlsx	Checked By:	SLN	Sep-26
J15 Ngan Shing Street / Sha Tin Wai Street		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	112 sec
Sum(y)		Y =	0.363
Loss time		L =	26 sec
Total Flow		=	2431 pcu
Co	= (1.5*L+5)/(1-Y)	=	69.0 sec
Cm	= L/(1-Y)	=	40.8 sec
Yult		=	0.705
R.C.ult	= (Yult-Y)/Y*100%	=	94.4 %
Cp	= 0.9*L/(0.9-Y)	=	43.6 sec
Ymax	= 1-L/C	=	0.768
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**91 %**



Stage 1	G=	30	Stage 2	G=	17	Stage 3	G= 14
	Int =	5		Int =	7		Int = 8

Stage 4	G=	24
	Int =	7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	7	1	73	7
P2	4	5	15	6	10	15
P3	1,2,4	5	11	1	78	11
P4	3	5	11	6	5	11
P5	3,4	5	16	2	36	16
P6	1,2	5	9	6	43	9

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)
																							23					
12	1	3.20	2	12		N	4010	258			258	1.00	3564							3564	0.072			17	31	0.472	18	42
11	1	3.20	2				4150		535		535	0.00	4150							4150	0.129	0.129		31	31	0.472	36	32
5,6	1	3.40	1	7		N	1955	139	62		201	0.69	1703							1703	0.118			28	31	0.472	24	36
5	1	3.40	2				4190		495		495	0.00	4190							4190	0.118			28	31	0.472	33	34
10	2	3.20	1	20			2075			144	144	1.00	1930							1930	0.075	0.075		18	18	0.472	18	43
4	2	3.40	1	20			2095			107	107	1.00	1949							1949	0.055			13	18	0.472	12	48
9	3	3.10	1	10		N	1925	87			87	1.00	1674							1674	0.052			12	15	0.472	12	50
7,8,9	3	3.10	1	10			2065	6	83	16	105	0.21	2002							2002	0.052	0.052	3	12	15	0.472	12	49
7	3	3.10	1	20			2065			100	100	1.00	1921							1921	0.052			12	15	0.472	12	49
1,2,3	4	3.40	1	14		N	1955	112	30	49	191	0.84	1793							1793	0.107			25	25	0.472	24	37
1	4	3.40	1	20			2095			208	208	1.00	1949							1949	0.107	0.107		25	25	0.472	30	37

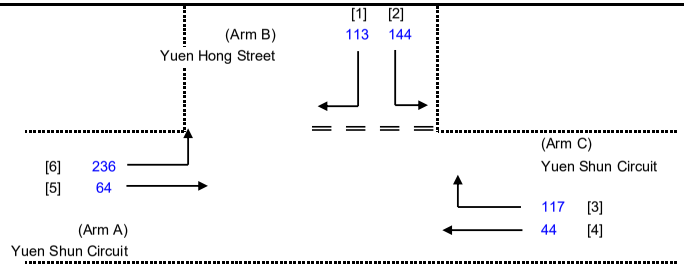
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

Appendix B

Junction Capacity Assessments

- Reference & Design Scenarios

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J1_YSC_YHS	CHECKED BY:	SLN	Sep-26
J1 Yuen Shun Circuit / Yuen Hong Street		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	13.20	(metres)
W cr	=	1.5	(metres)
q a-b	=	236	(pcu/hr)
q a-c	=	64	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.10	(metres)
Vr c-b	=	55	(metres)
q c-a	=	44	(pcu/hr)
q c-b	=	117	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.80	(metres)
W b-c	=	3.80	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	55	(metres)
q b-a	=	113	(pcu/hr)
q b-c	=	144	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.90753
E	=	0.95478
F	=	0.89282
Y	=	0.54460
F for (Qb-ac)	=	0.56031128

THE CAPACITY OF MOVEMENT :

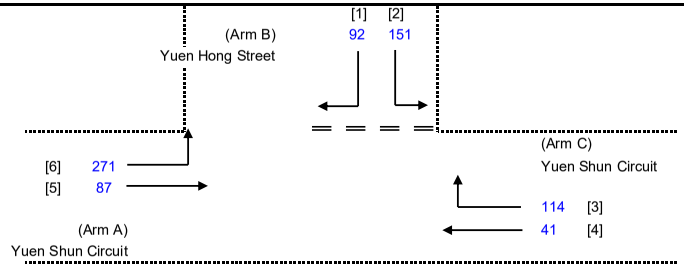
Q b-a	=	525		
Q b-c	=	682	Q b-c (O) =	645.3
Q c-b	=	612		
Q b-ac	=	603		
TOTAL FLOW	=	718	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2152
DFC b-c	=	0.2111
DFC c-b	=	0.1912
DFC b-ac (share lane)	=	0.4264

CRITICAL DFC = 0.43

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J1_YSC_YHS	CHECKED BY:	SLN	Sep-26
J1 Yuen Shun Circuit / Yuen Hong Street		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	13.20	(metres)
W cr	=	1.5	(metres)
q a-b	=	271	(pcu/hr)
q a-c	=	87	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.10	(metres)
Vr c-b	=	55	(metres)
q c-a	=	41	(pcu/hr)
q c-b	=	114	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.80	(metres)
W b-c	=	3.80	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	55	(metres)
q b-a	=	92	(pcu/hr)
q b-c	=	151	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.90753
E	=	0.95478
F	=	0.89282
Y	=	0.54460
F for (Qb-ac)	=	0.62139918

THE CAPACITY OF MOVEMENT :

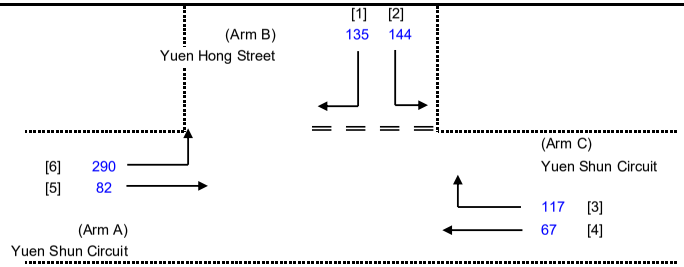
Q b-a	=	519			
Q b-c	=	675	Q b-c (O) =	645.1	
Q c-b	=	602			
Q b-ac	=	606			
TOTAL FLOW	=	756	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1773
DFC b-c	=	0.2237
DFC c-b	=	0.1894
DFC b-ac (share lane)	=	0.4010

CRITICAL DFC = 0.40

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J1_YSC_YHS	CHECKED BY:	SLN	Sep-26
J1 Yuen Shun Circuit / Yuen Hong Street		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	13.20	(metres)
W cr	=	1.5	(metres)
q a-b	=	290	(pcu/hr)
q a-c	=	82	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.10	(metres)
Vr c-b	=	55	(metres)
q c-a	=	67	(pcu/hr)
q c-b	=	117	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.80	(metres)
W b-c	=	3.80	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	55	(metres)
q b-a	=	135	(pcu/hr)
q b-c	=	144	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.90753
E	=	0.95478
F	=	0.89282
Y	=	0.54460
F for (Qb-ac)	=	0.51612903

THE CAPACITY OF MOVEMENT :

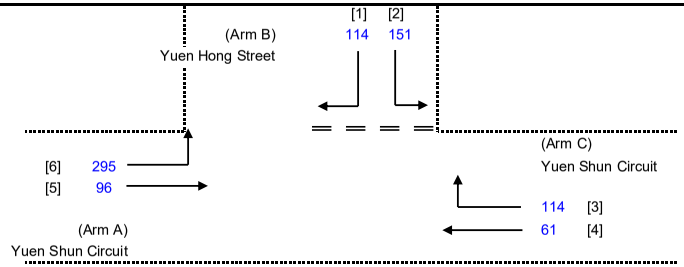
Q b-a	=	515		
Q b-c	=	674	Q b-c (O) =	629.8
Q c-b	=	599		
Q b-ac	=	586		
TOTAL FLOW	=	835	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2621
DFC b-c	=	0.2136
DFC c-b	=	0.1953
DFC b-ac (share lane)	=	0.4758

CRITICAL DFC = 0.48

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J1_YSC_YHS	CHECKED BY:	SLN	Sep-26
J1 Yuen Shun Circuit / Yuen Hong Street		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	13.20	(metres)
W cr	=	1.5	(metres)
q a-b	=	295	(pcu/hr)
q a-c	=	96	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.10	(metres)
Vr c-b	=	55	(metres)
q c-a	=	61	(pcu/hr)
q c-b	=	114	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.80	(metres)
W b-c	=	3.80	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	55	(metres)
q b-a	=	114	(pcu/hr)
q b-c	=	151	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.90753
E	=	0.95478
F	=	0.89282
Y	=	0.54460
F for (Qb-ac)	=	0.56981132

THE CAPACITY OF MOVEMENT :

Q b-a	=	514		
Q b-c	=	671	Q b-c (O) =	633.8
Q c-b	=	596		
Q b-ac	=	593		
TOTAL FLOW	=	831	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2218
DFC b-c	=	0.2250
DFC c-b	=	0.1913
DFC b-ac (share lane)	=	0.4468

CRITICAL DFC = 0.45

LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

	INITIALS	DATE
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

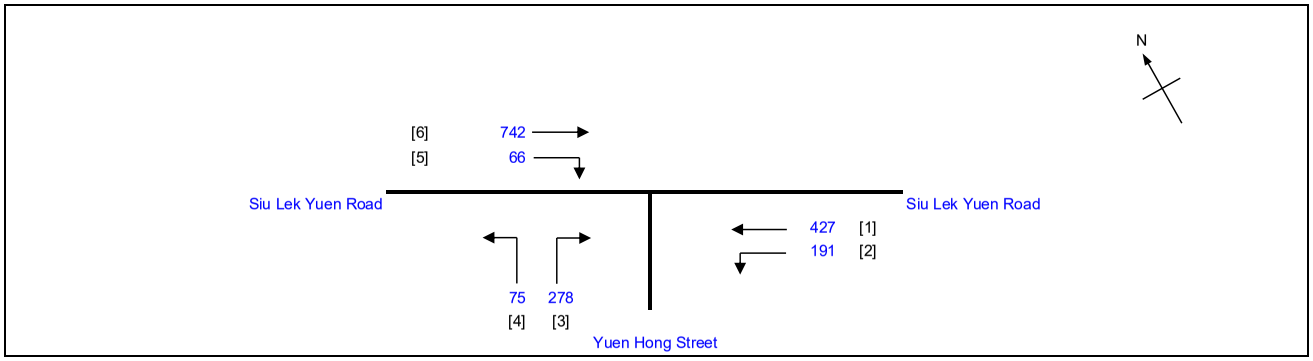
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J2 Siu Lek Yuen Road / Yuen Hong Street

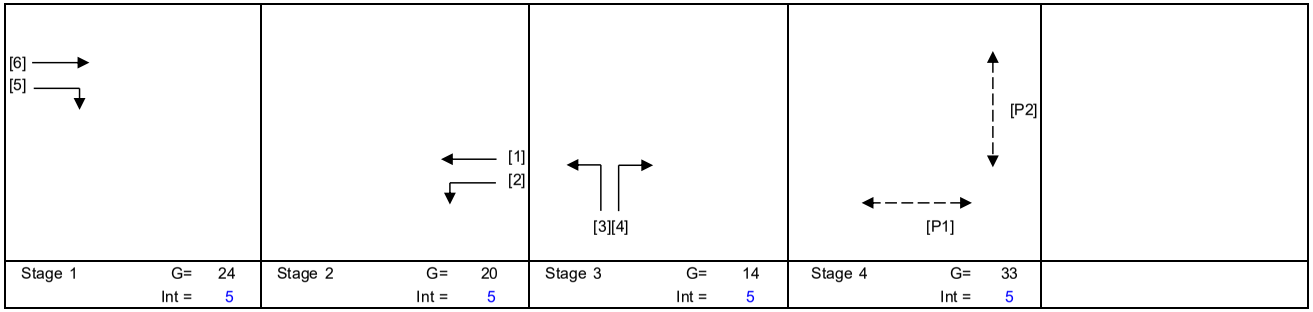
2036 Reference AM

PROJECT NO.: 41010

FILENAME : J2_SLYR_YHS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.321
Loss time		L =	50 sec
Total Flow		=	1779 pcu
Co	= (1.5*L+5)/(1-Y)	=	117.7 sec
Cm	= L/(1-Y)	=	73.6 sec
Yult		=	0.525
R.C.ult	= (Yult-Y)/Y*100%	=	63.8 %
Cp	= 0.9*L/(0.9-Y)	=	77.7 sec
Ymax	= 1-L/C	=	0.545
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**53 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	5	17	0	21	17
P2	4	5	21	0	17	21

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					
5,6	1	3.40	1	18			2095		206	66	272	0.24	2053							2053	0.132	0.132		25	25	0.588	36	39
6	1	3.40	2			N	4050		536		536	0.00	4050							4050	0.132			25	25	0.588	36	37
1	2	3.40	2				4190		427		427	0.00	4190							4190	0.102			19	21	0.588	30	41
1,2	2	3.40	1	12		N	1955	191	0		191	1.00	1738							1738	0.110	0.110		21	21	0.588	24	44
3	3	3.10	1	24			2065			152	152	1.00	1944							1944	0.078	0.078		15	15	0.588	24	49
3,4	3	3.10	1	18			2065	0		126	126	1.00	1906							1906	0.066			12	15	0.588	18	53
4	3	3.10	1	12		N	1925	75			75	1.00	1711							1711	0.044			8	15	0.588	12	62
PED	4																						33					

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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

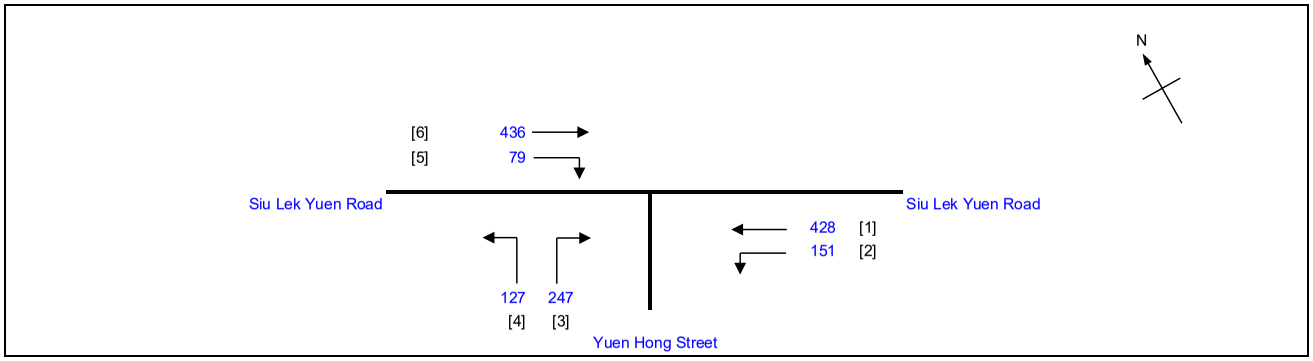
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J2 Siu Lek Yuen Road / Yuen Hong Street

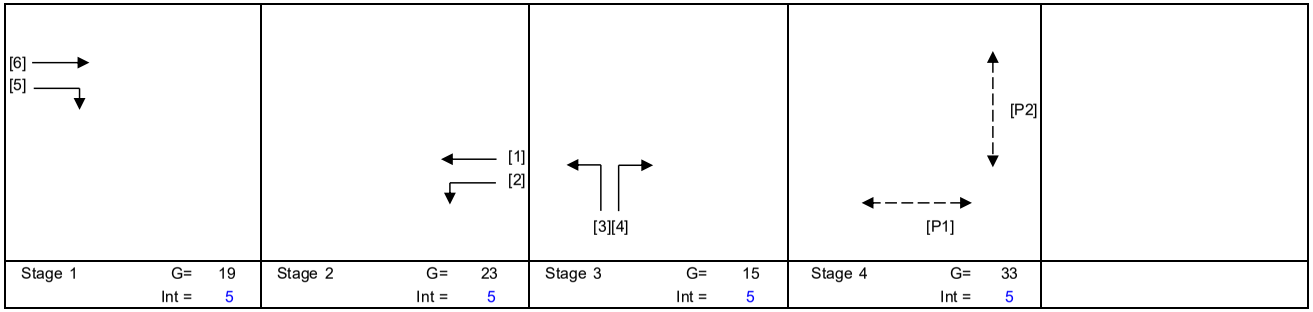
2036 Reference PM

PROJECT NO.: 41010

FILENAME : J2_SLYR_YHS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.257
Loss time		L =	50 sec
Total Flow		=	1468 pcu
Co	= (1.5*L+5)/(1-Y)	=	107.7 sec
Cm	= L/(1-Y)	=	67.3 sec
Yult		=	0.525
R.C.ult	= (Yult-Y)/Y*100%	=	103.9 %
Cp	= 0.9*L/(0.9-Y)	=	70.0 sec
Ymax	= 1-L/C	=	0.545
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**91 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	5	17	0	21	17
P2	4	5	21	0	17	21

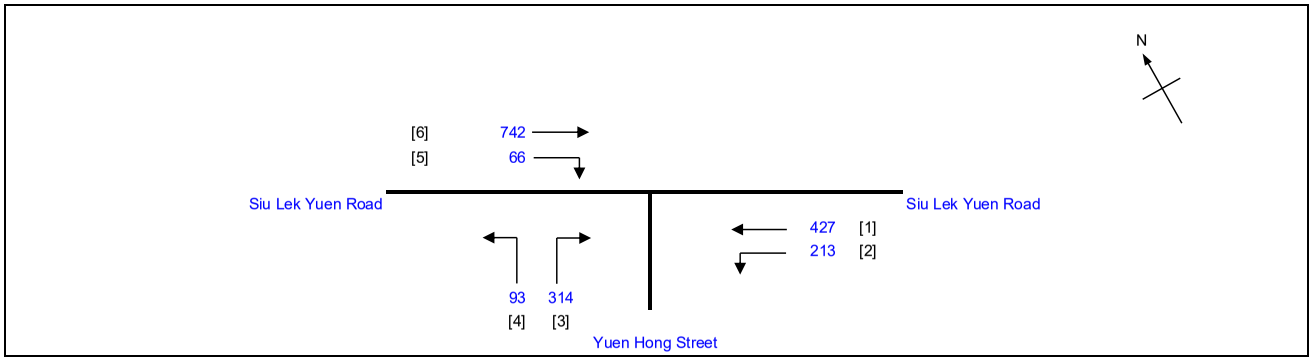
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
5,6	1	3.40	1	18			2095		93	79	172	0.46	2018							2018	0.085	0.085		20	20	0.472	24	40
6	1	3.40	2			N	4050		343		343	0.00	4050							4050	0.085			20	20	0.472	24	38
1	2	3.40	2				4190		398		398	0.00	4190							4190	0.095			22	24	0.472	27	37
1,2	2	3.40	1	12		N	1955	151	30		181	0.83	1770							1770	0.102	0.102		24	24	0.472	24	38
3	3	3.10	1	24			2065			136	136	1.00	1944							1944	0.070	0.070		16	16	0.472	18	44
3,4	3	3.10	1	18			2065	12		111	123	1.00	1906							1906	0.065			15	16	0.472	18	45
4	3	3.10	1	12		N	1925	115			115	1.00	1711							1711	0.067			16	16	0.472	18	45
PED	4																						33					

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

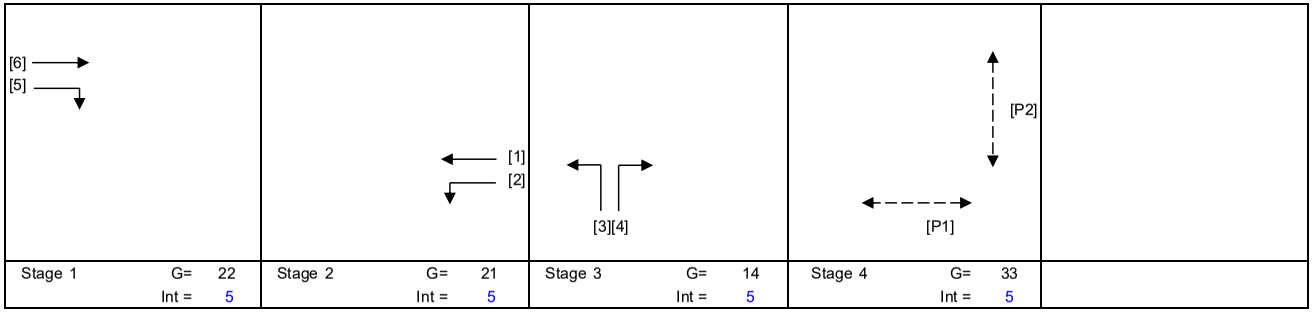
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	PROJECT NO.: 41010 / Prepared By:	SKL	Sep-26
J2 Siu Lek Yuen Road / Yuen Hong Street		FILENAME : J2_SLYR_YHS.xlsx / Checked By:	SLN	Sep-26
		Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	110 sec
Sum(y)	Y =	0.342
Loss time	L =	50 sec
Total Flow	=	1855 pcu
Co = (1.5*L+5)/(1-Y)	=	121.6 sec
Cm = L/(1-Y)	=	76.0 sec
Yult	=	0.525
R.C.ult = (Yult-Y)/Y*100%	=	53.5 %
Cp = 0.9*L/(0.9-Y)	=	80.6 sec
Ymax = 1-L/C	=	0.545
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**44 %**

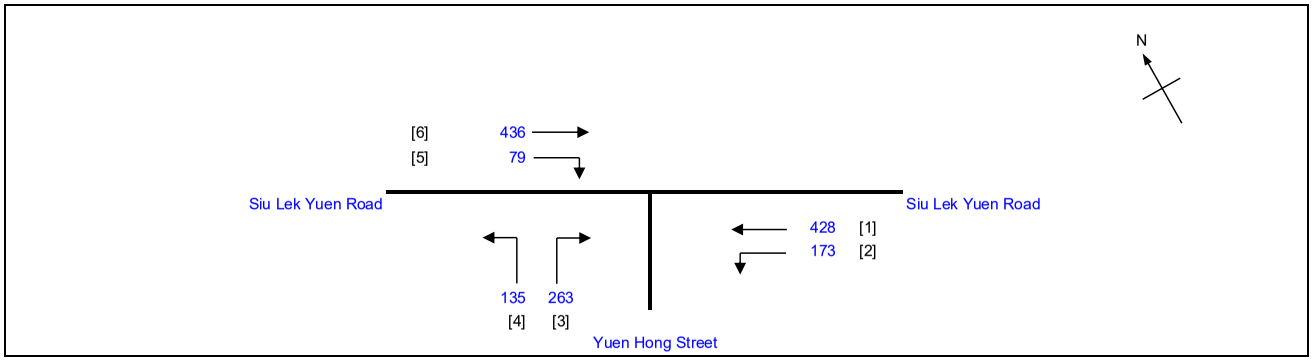


Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	5	17	0	21	17
P2	4	5	21	0	17	21

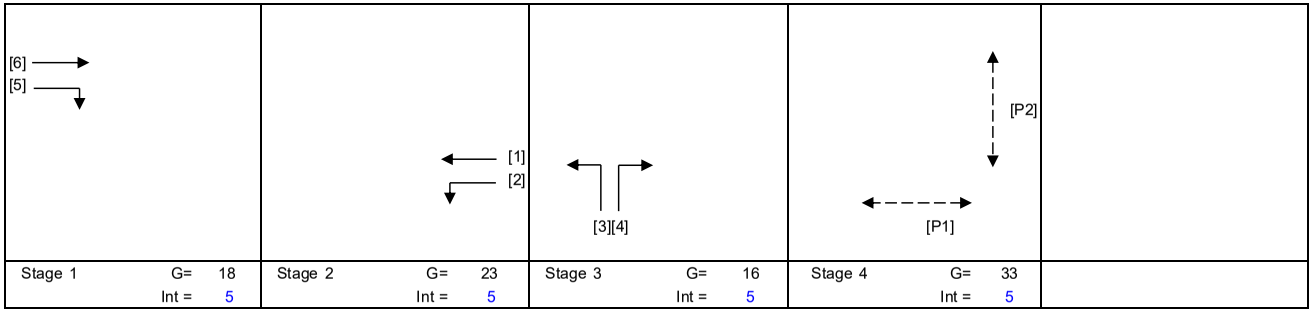
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
5,6	1	3.40	1	18			2095		206	66	272	0.24	2053							2053	0.132	0.132		23	23	0.627	36	42
6	1	3.40	2			N	4050		536		536	0.00	4050							4050	0.132			23	23	0.627	36	39
1	2	3.40	2				4190		427		427	0.00	4190							4190	0.102			18	22	0.627	30	43
1,2	2	3.40	1	12		N	1955	213	0		213	1.00	1738							1738	0.123	0.123		22	22	0.627	30	45
3	3	3.10	1	24			2065			169	169	1.00	1944							1944	0.087	0.087		15	15	0.627	24	50
3,4	3	3.10	1	18			2065	0		145	145	1.00	1906							1906	0.076			13	15	0.627	24	53
4	3	3.10	1	12		N	1925	93			93	1.00	1711							1711	0.054			10	15	0.627	12	62
PED	4																						33					

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
		FILENAME : J2_SLYR_YHS.xlsx	Checked By:	SLN	Sep-26
J2 Siu Lek Yuen Road / Yuen Hong Street			Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	110 sec
Sum(y)	Y =	0.266
Loss time	L =	50 sec
Total Flow	=	1514 pcu
Co = (1.5*L+5)/(1-Y)	=	109.0 sec
Cm = L/(1-Y)	=	68.1 sec
Yult	=	0.525
R.C.ult = (Yult-Y)/Y*100%	=	97.3 %
Cp = 0.9*L/(0.9-Y)	=	71.0 sec
Ymax = 1-L/C	=	0.545
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**85 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	5	17	0	21	17
P2	4	5	21	0	17	21

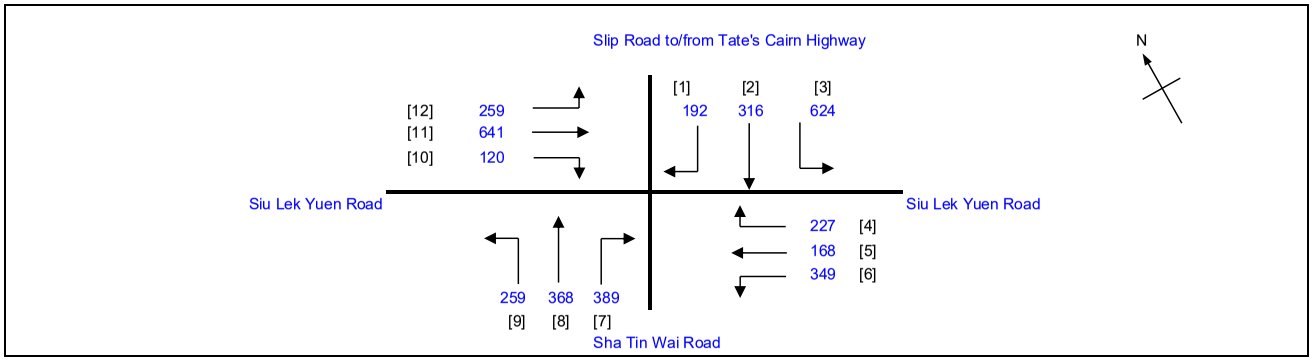
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
5,6	1	3.40	1	18			2095		93	79	172	0.46	2018							2018	0.085	0.085		19	19	0.488	24	41
6	1	3.40	2			N	4050		343		343	0.00	4050							4050	0.085			19	19	0.488	24	39
1	2	3.40	2				4190		415		415	0.00	4190							4190	0.099			22	24	0.488	30	37
1,2	2	3.40	1	12		N	1955	173	13		186	0.93	1751							1751	0.106	0.106		24	24	0.488	24	38
3	3	3.10	1	24			2065			145	145	1.00	1944							1944	0.075	0.075		17	17	0.488	18	44
3,4	3	3.10	1	18			2065	12		118	130	1.00	1906							1906	0.068			15	17	0.488	18	45
4	3	3.10	1	12		N	1925	123			123	1.00	1711							1711	0.072			16	17	0.488	18	45
PED	4																						33					

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

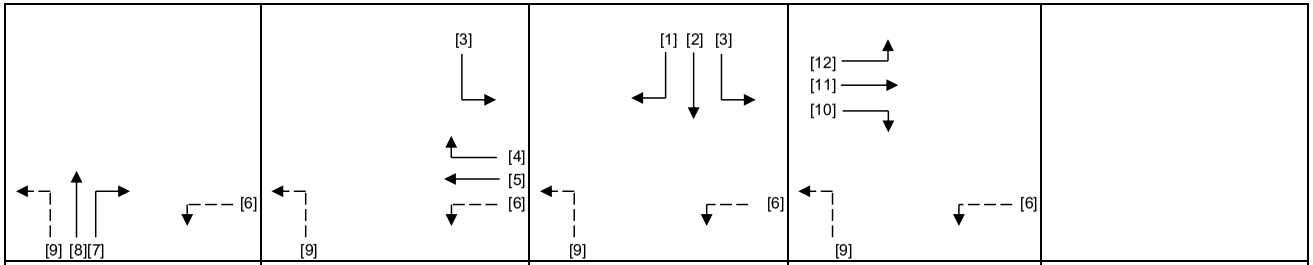
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)			
J3 Siu Lek Yuen Road / Sha Tin Wai Road / Slip road to/from Tate's Cairn Highway	**2036 Reference AM**		
	PROJECT NO.: 41010	Prepared By:	SKL Sep-26
	FILENAME : J3_SLYR_STWR.xlsx	Checked By:	SLN Sep-26
		Reviewed By:	SLN Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.631
Loss time		L =	21 sec
Total Flow		=	3912 pcu
Co	= (1.5*L+5)/(1-Y)	=	98.8 sec
Cm	= L/(1-Y)	=	56.9 sec
Ylt		=	0.743
R.C.ult	= (Ylt-Y)/Y*100%	=	17.7 %
Cp	= 0.9*L/(0.9-Y)	=	70.2 sec
Ymax	= 1-L/C	=	0.825
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**18 %**



Stage 1	G= 19	Int = 7
Stage 2	G= 17	Int = 5
Stage 3	G= 36	Int = 7
Stage 4	G= 23	Int = 6
Stage 5	G=	Int =

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

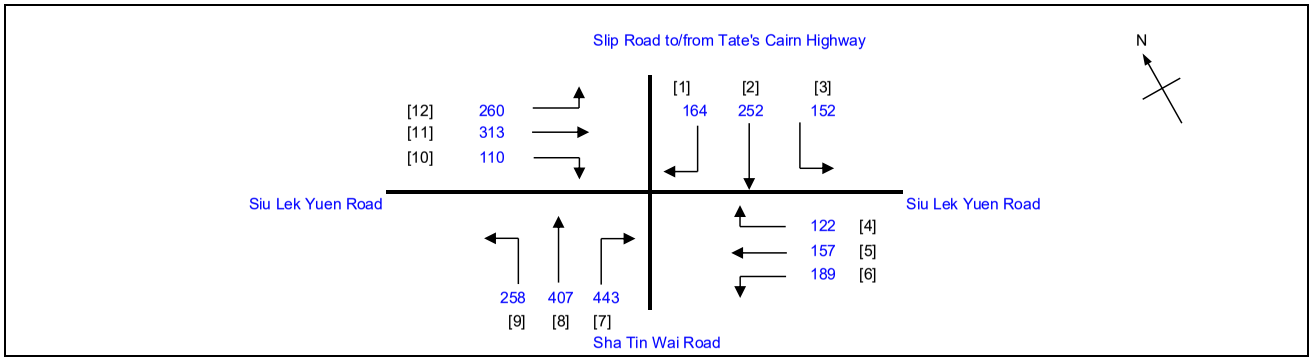
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
7	1	3.50	1	20			2105			244	244	1.00	1958							1958	0.125	0.125		20	20	0.764	42	60
7,8	1	3.50	1	20			2105		106	145	251	0.58	2018							2018	0.124			20	20	0.764	42	59
8	1	3.50	1				2105		262		262	0.00	2105							2105	0.124			20	20	0.764	42	59
4,5	2	3.50	1	20			2105		0	227	227	1.00	1958							1958	0.116	0.116		18	18	0.764	42	62
5	2	3.50	1				2105		168		168	0.00	2105							2105	0.080			13	18	0.764	30	71
3	2,3	4.50	1	12		N	2065	624			624	1.00	1836							1836	0.340			53	58	0.764	66	32
1,2	3	4.50	1	20			2205		316	192	508	0.38	2144							2144	0.237	0.237		37	37	0.764	66	42
10	4	3.40	1	15			2095			120	120	1.00	1905							1905	0.063			10	24	0.764	24	82
10,11	4	3.40	1	15			2095		321	0	321	0.00	2095							2095	0.153	0.153		24	24	0.764	54	53
11	4	3.40	1				2095		320		320	0.00	2095							2095	0.153			24	24	0.764	54	53
12	4	3.40	1	11		N	1955	259			259	1.00	1720							1720	0.151			24	24	0.764	42	57
6	FREE	5.00	1	40		N	2115	349			349																	
9	FREE	5.00	1	40		N	2115	259			259																	

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

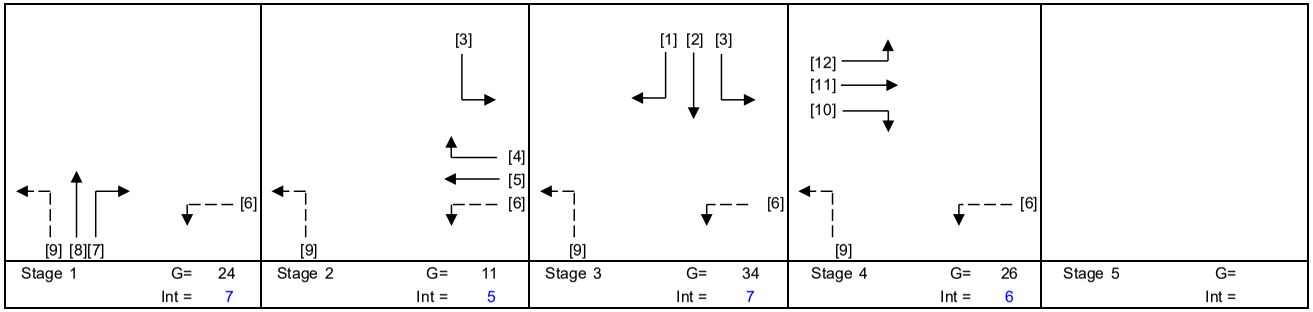
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Reference PM	FILENAME : J3_SLYR_STWR.xlsx	Checked By:	SLN	Sep-26
J3 Siu Lek Yuen Road / Sha Tin Wai Road / Slip road to/from Tate's Cairn Highway		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.554
Loss time		L =	21 sec
Total Flow		=	2827 pcu
Co	= (1.5*L+5)/(1-Y)	=	81.8 sec
Cm	= L/(1-Y)	=	47.1 sec
Yult		=	0.743
R.C.ult	= (Yult-Y)/Y*100%	=	34.0 %
Cp	= 0.9*L/(0.9-Y)	=	54.6 sec
Ymax	= 1-L/C	=	0.825
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**34 %**



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

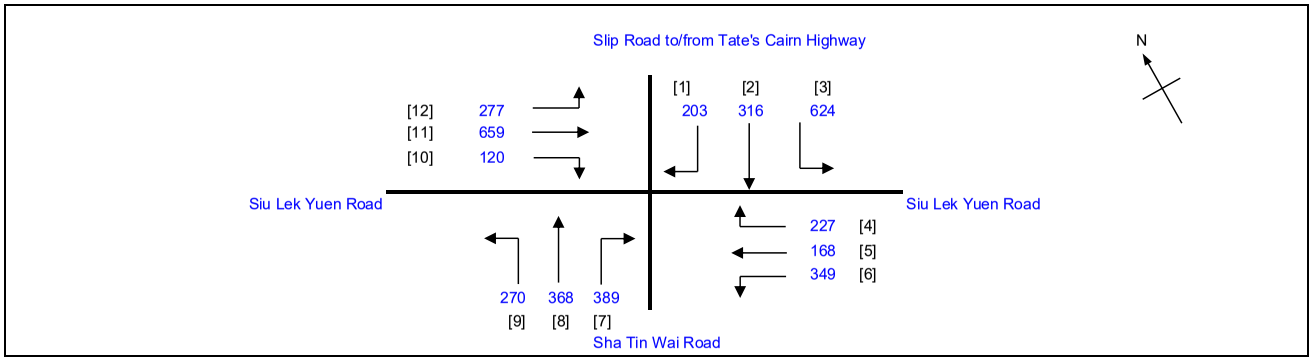
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
7	1	3.50	1	20			2105			274	274	1.00	1958							1958	0.140			25	25	0.672	42	47
7,8	1	3.50	1	20			2105		112	169	281	0.60	2014							2014	0.140			25	25	0.672	42	47
8	1	3.50	1				2105		295		295	0.00	2105							2105	0.140	0.140		25	25	0.672	42	47
4,5	2	3.50	1	20			2105		13	122	135	0.90	1971							1971	0.068	0.068		12	12	0.672	24	63
5	2	3.50	1				2105		144		144	0.00	2105							2105	0.068			12	12	0.672	24	62
3	2,3	4.50	1	12		N	2065	152			152	1.00	1836							1836	0.083			15	50	0.672	24	60
1,2	3	4.50	1	20			2205		252	164	416	0.39	2142							2142	0.194	0.194		35	35	0.672	54	39
10	4	3.40	1	15			2095			110	110	1.00	1905							1905	0.058			10	27	0.672	18	68
10,11	4	3.40	1	15			2095		157	0	157	0.00	2095							2095	0.075			13	27	0.672	24	60
11	4	3.40	1				2095		156		156	0.00	2095							2095	0.074			13	27	0.672	24	60
12	4	3.40	1	11		N	1955	260			260	1.00	1720							1720	0.151	0.151		27	27	0.672	36	47
6	FREE	5.00	1	40		N	2115	189			189																	
9	FREE	5.00	1	40		N	2115	258			258																	

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

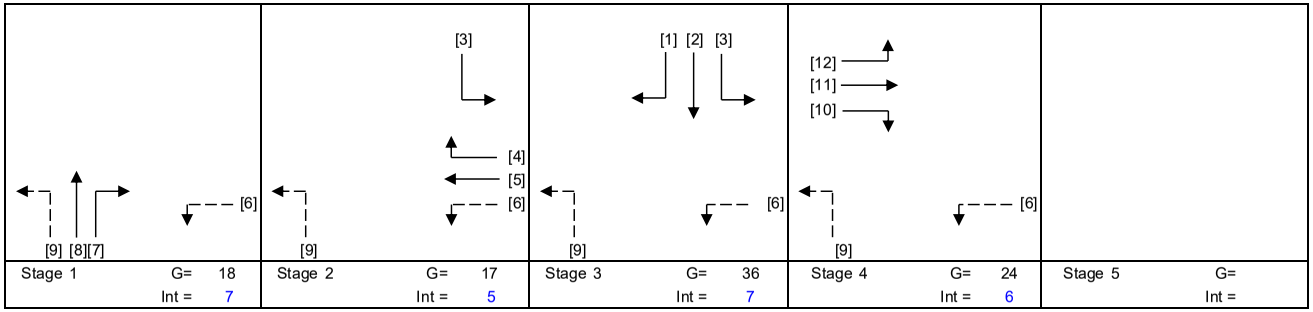
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)			
J3 Siu Lek Yuen Road / Sha Tin Wai Road / Slip road to/from Tate's Cairn Highway	**2036 Design AM**		
	PROJECT NO.: 41010	Prepared By:	SKL Sep-26
	FILENAME : J3_SLYR_STWR.xlsx	Checked By:	SLN Sep-26
		Reviewed By:	SLN Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	120 sec
Sum(y)	Y =	0.644
Loss time	L =	21 sec
Total Flow	=	3970 pcu
Co = (1.5*L+5)/(1-Y)	=	102.5 sec
Cm = L/(1-Y)	=	59.0 sec
Yult	=	0.743
R.C.ult = (Yult-Y)/Y*100%	=	15.3 %
Cp = 0.9*L/(0.9-Y)	=	73.8 sec
Ymax = 1-L/C	=	0.825
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**15 %**



Stage 1	G= 18	Int = 7
Stage 2	G= 17	Int = 5
Stage 3	G= 36	Int = 7
Stage 4	G= 24	Int = 6
Stage 5	G=	Int =

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)
																							21					
7	1	3.50	1	20			2105			244	244	1.00	1958							1958	0.125	0.125		19	19	0.780	42	62
7,8	1	3.50	1	20			2105		106	145	251	0.58	2018							2018	0.124			19	19	0.780	42	61
8	1	3.50	1				2105		262		262	0.00	2105							2105	0.124			19	19	0.780	48	61
4,5	2	3.50	1	20			2105		0	227	227	1.00	1958							1958	0.116	0.116		18	18	0.780	42	64
5	2	3.50	1				2105		168		168	0.00	2105							2105	0.080			12	18	0.780	30	74
3	2,3	4.50	1	12		N	2065	624			624	1.00	1836							1836	0.340			52	58	0.780	66	33
1,2	3	4.50	1	20			2205		316	203	519	0.39	2142							2142	0.242	0.242		37	37	0.780	72	43
10	4	3.40	1	15			2095			120	120	1.00	1905							1905	0.063			10	25	0.780	24	86
10,11	4	3.40	1	15			2095		330	0	330	0.00	2095							2095	0.158			24	25	0.780	54	54
11	4	3.40	1				2095		329		329	0.00	2095							2095	0.157			24	25	0.780	54	55
12	4	3.40	1	11		N	1955	277			277	1.00	1720							1720	0.161	0.161		25	25	0.780	48	57
6	FREE	5.00	1	40		N	2115	349			349																	
9	FREE	5.00	1	40		N	2115	270			270																	

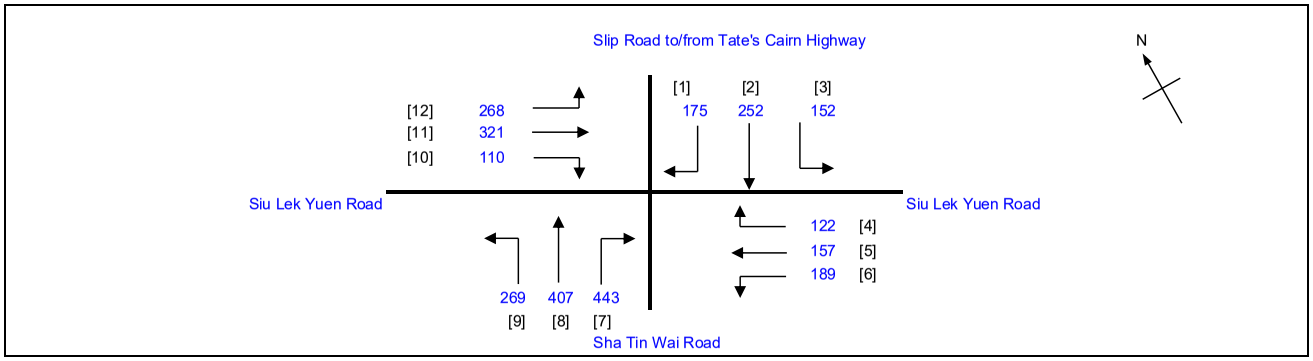
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

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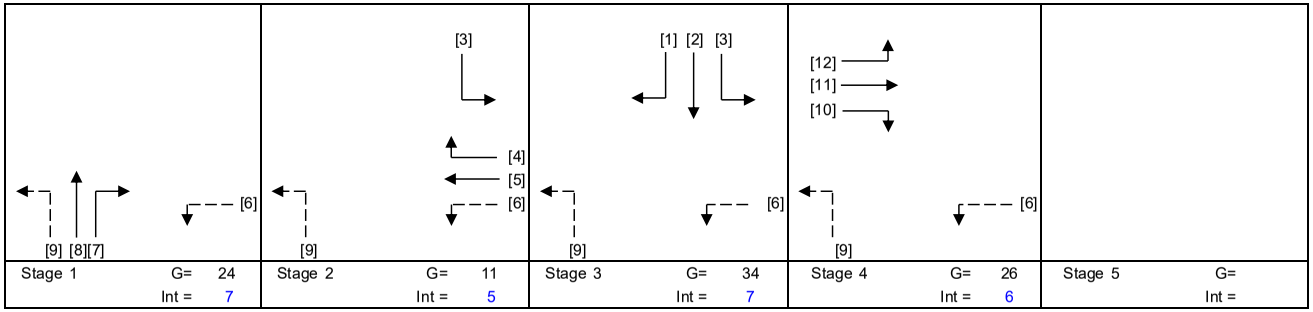
TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)			
J3 Siu Lek Yuen Road / Sha Tin Wai Road / Slip road to/from Tate's Cairn Highway	**2036 Design PM**		

PROJECT NO.:	41010	Prepared By:	SKL Sep-26
FILENAME :	J3_SLYR_STWR.xlsx	Checked By:	SLN Sep-26
		Reviewed By:	SLN Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.564
Loss time		L =	21 sec
Total Flow		=	2865 pcu
Co	= (1.5*L+5)/(1-Y)	=	83.7 sec
Cm	= L/(1-Y)	=	48.2 sec
Ylt		=	0.743
R.C.ult	= (Ylt-Y)/Y*100%	=	31.6 %
Cp	= 0.9*L/(0.9-Y)	=	56.3 sec
Ymax	= 1-L/C	=	0.825
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**32 %**



Stage 1	G= 24	Int = 7
Stage 2	G= 11	Int = 5
Stage 3	G= 34	Int = 7
Stage 4	G= 26	Int = 6
Stage 5	G=	Int =

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

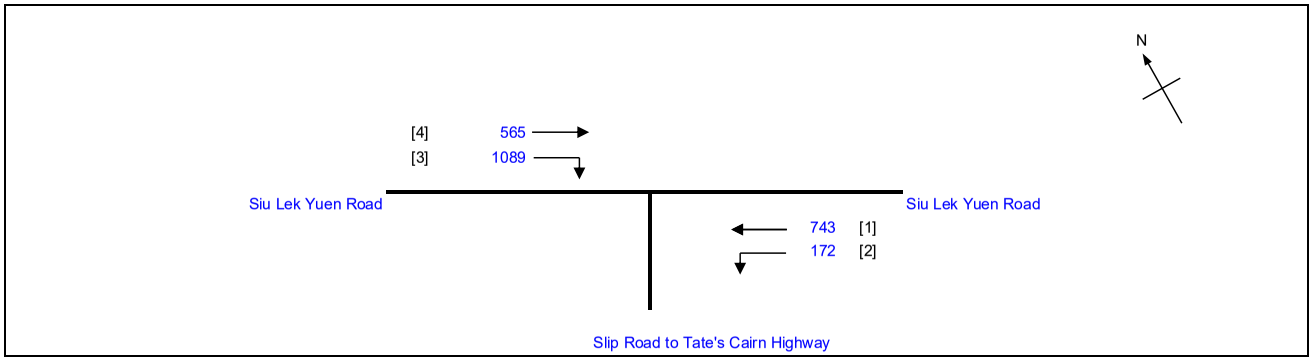
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
7	1	3.50	1	20			2105			274	274	1.00	1958							1958	0.140			25	25	0.684	42	48
7,8	1	3.50	1	20			2105		112	169	281	0.60	2014							2014	0.140			24	25	0.684	42	48
8	1	3.50	1				2105		295		295	0.00	2105							2105	0.140	0.140		25	25	0.684	42	48
4,5	2	3.50	1	20			2105		13	122	135	0.90	1971							1971	0.068	0.068		12	12	0.684	24	65
5	2	3.50	1				2105		144		144	0.00	2105							2105	0.068			12	12	0.684	24	64
3	2,3	4.50	1	12		N	2065	152			152	1.00	1836							1836	0.083			15	50	0.684	24	61
1,2	3	4.50	1	20			2205		252	175	427	0.41	2139							2139	0.200	0.200		35	35	0.684	60	39
10	4	3.40	1	15			2095			110	110	1.00	1905							1905	0.058			10	27	0.684	18	70
10,11	4	3.40	1	15			2095		161	0	161	0.00	2095							2095	0.077			13	27	0.684	30	61
11	4	3.40	1				2095		160		160	0.00	2095							2095	0.076			13	27	0.684	30	61
12	4	3.40	1	11		N	1955	268			268	1.00	1720							1720	0.156	0.156		27	27	0.684	36	47
6	FREE	5.00	1	40		N	2115	189			189																	
9	FREE	5.00	1	40		N	2115	269			269																	

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

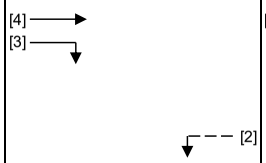
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

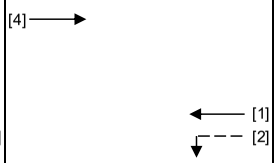
		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Reference AM	FILENAME : J4_SLYR_SlipRoadtoTCH.xlsx	Checked By:	SLN	Sep-26
J4 Siu Lek Yuen Road / Slip road to Tate's Cairn Highway		Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	2
Cycle time	C =	60 sec
Sum(y)	Y =	0.467
Loss time	L =	12 sec
Total Flow	=	2569 pcu
Co = (1.5*L+5)/(1-Y)	=	43.2 sec
Cm = L/(1-Y)	=	22.5 sec
Ylult	=	0.810
R.C.ult = (Ylult-Y)/Y*100%	=	73.4 %
Cp = 0.9*L/(0.9-Y)	=	24.9 sec
Ymax = 1-L/C	=	0.800
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**54 %**



Stage 1 G= 28 Int = 7



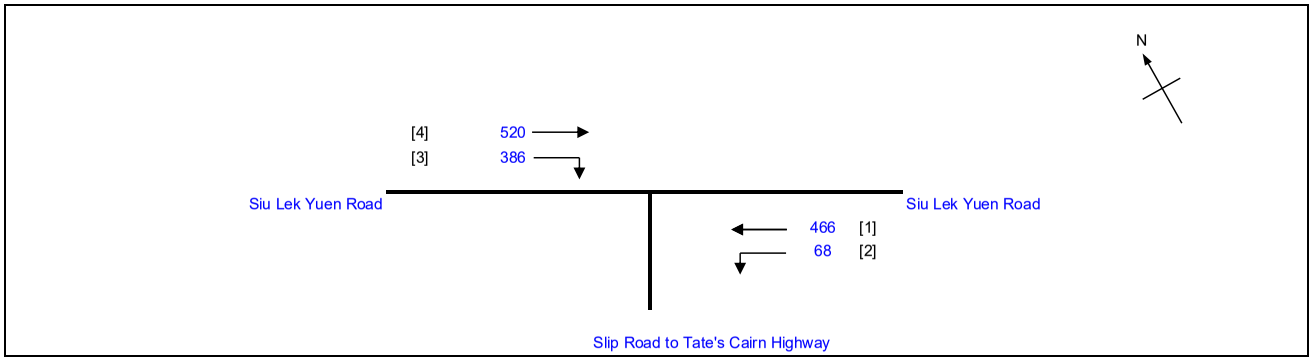
Stage 2 G= 18 Int = 7

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

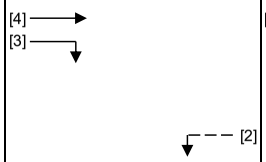
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Movement Straight pcu/h	Movement Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect 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					
3	1	3.50	2	15			4210			1089	1089	1.00	3827							3827	0.285	0.285		29	29	0.584	27	11
4	1,2	3.50	1			N	1965		565		565	0.00	1965							1965	0.288			30	53	0.584	24	12
1	2	3.50	2			N	4070		743		743	0.00	4070							4070	0.183	0.183		19	19	0.584	24	17
2	FREE	6.00	1	60			2355	172			172																	

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

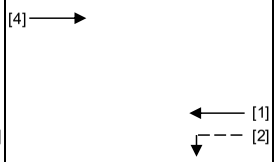
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J4 Siu Lek Yuen Road / Slip road to Tate's Cairn Highway		FILENAME : J4_SLYR_SlipRoadtoTCH.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	2
Cycle time	C =	60 sec
Sum(y)	Y =	0.215
Loss time	L =	12 sec
Total Flow	=	1440 pcu
Co = (1.5*L+5)/(1-Y)	=	29.3 sec
Cm = L/(1-Y)	=	15.3 sec
Yult	=	0.810
R.C.ult = (Yult-Y)/Y*100%	=	276.1 %
Cp = 0.9*L/(0.9-Y)	=	15.8 sec
Ymax = 1-L/C	=	0.800
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**234 %**



Stage 1 G= 21 Int = 7



Stage 2 G= 25 Int = 7

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

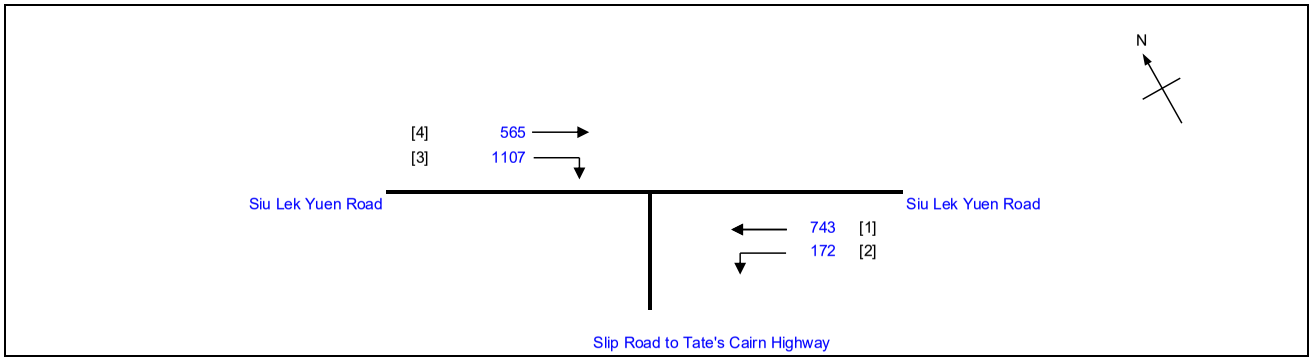
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							12					
3	1	3.50	2	15			4210			386	386	1.00	3827							3827	0.101	0.101		22	22	0.269	12	12
4	1,2	3.50	1			N	1965		520		520	0.00	1965							1965	0.265			59	53	0.269	0	0
1	2	3.50	2			N	4070		466		466	0.00	4070							4070	0.114	0.114		26	26	0.269	12	10
2	FREE	6.00	1	60			2355	68			68																	

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

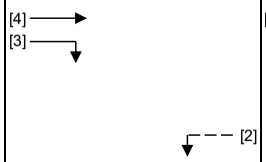
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

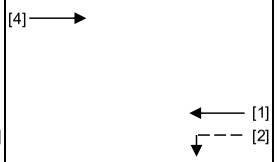
			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J4 Siu Lek Yuen Road / Slip road to Tate's Cairn Highway		FILENAME : J4_SLYR_SlipRoadtoTCH.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.472
Loss time		L =	12 sec
Total Flow		=	2587 pcu
Co	= (1.5*L+5)/(1-Y)	=	43.5 sec
Cm	= L/(1-Y)	=	22.7 sec
Yult		=	0.810
R.C.ult	= (Yult-Y)/Y*100%	=	71.7 %
Cp	= 0.9*L/(0.9-Y)	=	25.2 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**53 %**



Stage 1 G= 28 Int = 7



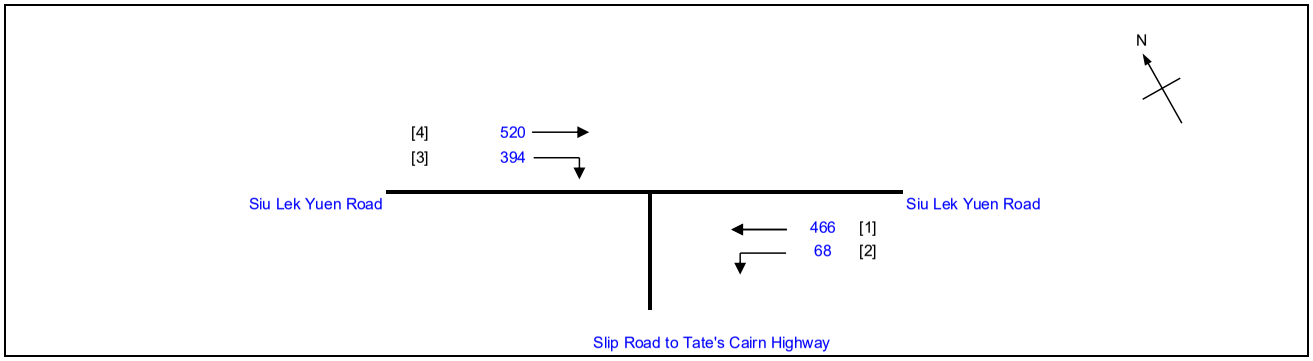
Stage 2 G= 18 Int = 7

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

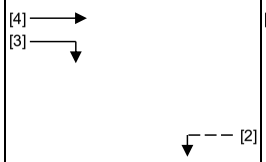
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							12					
3	1	3.50	2	15			4210			1107	1107	1.00	3827							3827	0.289	0.289		29	29	0.590	27	11
4	1,2	3.50	1			N	1965		565		565	0.00	1965							1965	0.288			29	53	0.590	24	12
1	2	3.50	2			N	4070		743		743	0.00	4070							4070	0.183	0.183		19	19	0.590	24	18
2	FREE	6.00	1	60			2355	172			172																	

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

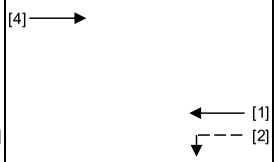
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J4 Siu Lek Yuen Road / Slip road to Tate's Cairn Highway		FILENAME : J4_SLYR_SlipRoadtoTCH.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	2
Cycle time	C =	60 sec
Sum(y)	Y =	0.217
Loss time	L =	12 sec
Total Flow	=	1448 pcu
Co = (1.5*L+5)/(1-Y)	=	29.4 sec
Cm = L/(1-Y)	=	15.3 sec
Yult	=	0.810
R.C.ult = (Yult-Y)/Y*100%	=	272.5 %
Cp = 0.9*L/(0.9-Y)	=	15.8 sec
Ymax = 1-L/C	=	0.800
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**231 %**



Stage 1 G= 22 Int = 7



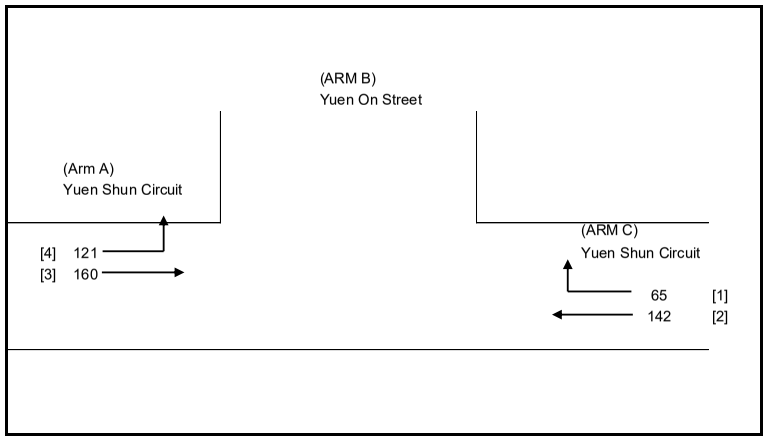
Stage 2 G= 24 Int = 7

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)
																							12					
3	1	3.50	2	15			4210			394	394	1.00	3827							3827	0.103	0.103		23	23	0.272	12	12
4	1,2	3.50	1			N	1965		520		520	0.00	1965							1965	0.265			58	53	0.272	0	0
1	2	3.50	2			N	4070		466		466	0.00	4070							4070	0.114	0.114		25	25	0.272	12	11
2	FREE	6.00	1	60			2355	68			68																	

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J5_YSC_YOS	CHECKED BY:	SLN	Sep-26
J5 Yuen Shun Circuit/ Yuen On Street (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	11.8	(metres)
W cr	=	0	(metres)
q a-b	=	121	(pcu/hr)
q a-c	=	160	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.30	(metres)
Vr c-b	=	100	(metres)
q c-a	=	142	(pcu/hr)
q c-b	=	65	(pcu/hr)

MINOR ROAD (ARM B)

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

GEOMETRIC FACTORS :

D	=	0.53322
E	=	0.58595
F	=	0.94969
Y	=	0.59463
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

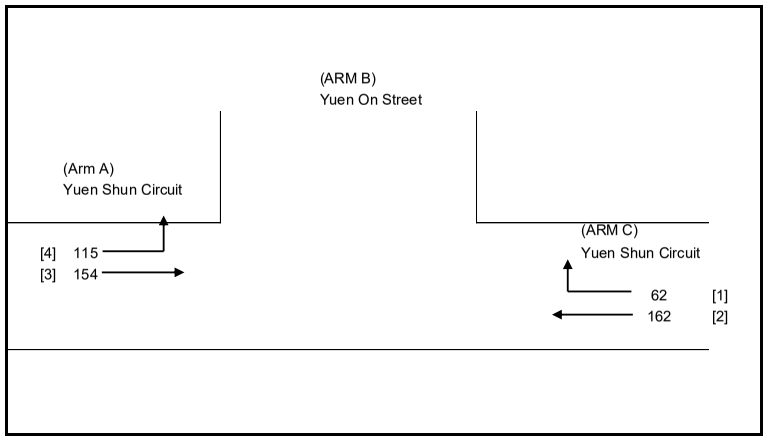
Q b-a	=	289		
Q b-c	=	410	Q b-c (O) =	410
Q c-b	=	650		
Q b-ac	=	0		
TOTAL FLOW	=	488	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0000
DFC c-b	=	0.1000
DFC b-ac (share lane)	=	0.0000

CRITICAL DFC = 0.10

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J5_YSC_YOS	CHECKED BY:	SLN	Sep-26
J5 Yuen Shun Circuit/ Yuen On Street (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	11.8	(metres)
W cr	=	0	(metres)
q a-b	=	115	(pcu/hr)
q a-c	=	154	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.30	(metres)
Vr c-b	=	100	(metres)
q c-a	=	162	(pcu/hr)
q c-b	=	62	(pcu/hr)

MINOR ROAD (ARM B)

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

GEOMETRIC FACTORS :

D	=	0.53322
E	=	0.58595
F	=	0.94969
Y	=	0.59463
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

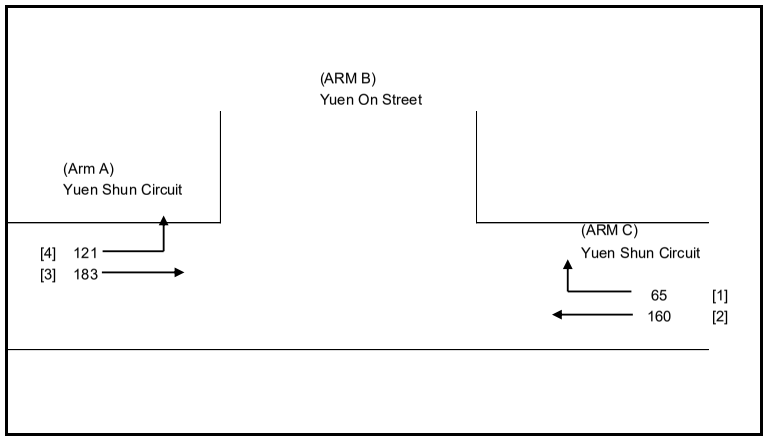
Q b-a	=	289		
Q b-c	=	411	Q b-c (O) =	411
Q c-b	=	652		
Q b-ac	=	0		
TOTAL FLOW	=	493	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0000
DFC c-b	=	0.0951
DFC b-ac (share lane)	=	0.0000

CRITICAL DFC = 0.10

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J5_YSC_YOS	CHECKED BY:	SLN	Sep-26
J5 Yuen Shun Circuit/ Yuen On Street (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	11.8	(metres)
W cr	=	0	(metres)
q a-b	=	121	(pcu/hr)
q a-c	=	183	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.30	(metres)
Vr c-b	=	100	(metres)
q c-a	=	160	(pcu/hr)
q c-b	=	65	(pcu/hr)

MINOR ROAD (ARM B)

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

GEOMETRIC FACTORS :

D	=	0.53322
E	=	0.58595
F	=	0.94969
Y	=	0.59463
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

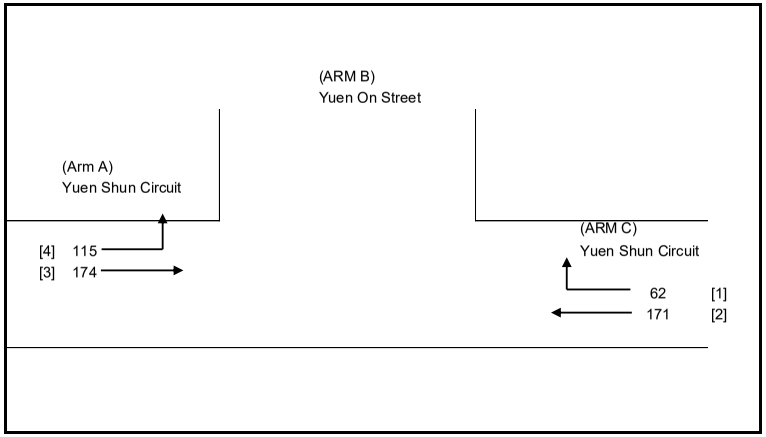
Q b-a	=	285		
Q b-c	=	407	Q b-c (O) =	407
Q c-b	=	645		
Q b-ac	=	0		
TOTAL FLOW	=	529	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0000
DFC c-b	=	0.1008
DFC b-ac (share lane)	=	0.0000

CRITICAL DFC = 0.10

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J5_YSC_YOS	CHECKED BY:	SLN	Sep-26
J5 Yuen Shun Circuit/ Yuen On Street (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	11.8	(metres)
W cr	=	0	(metres)
q a-b	=	115	(pcu/hr)
q a-c	=	174	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.30	(metres)
Vr c-b	=	100	(metres)
q c-a	=	171	(pcu/hr)
q c-b	=	62	(pcu/hr)

MINOR ROAD (ARM B)

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

GEOMETRIC FACTORS :

D	=	0.53322
E	=	0.58595
F	=	0.94969
Y	=	0.59463
F for (Qb-ac)	=	0

THE CAPACITY OF MOVEMENT :

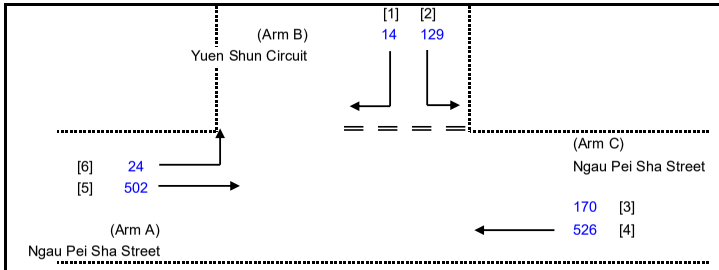
Q b-a	=	286		
Q b-c	=	409	Q b-c (O) =	409
Q c-b	=	648		
Q b-ac	=	0		
TOTAL FLOW	=	522	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0000
DFC c-b	=	0.0957
DFC b-ac (share lane)	=	0.0000

CRITICAL DFC = 0.10

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J6_NPSS_YS	CHECKED BY:	SLN	Sep-26
J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	15.00	(metres)
W cr	=	1.5	(metres)
q a-b	=	24	(pcu/hr)
q a-c	=	502	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.70	(metres)
Vr c-b	=	50	(metres)
q c-a	=	526	(pcu/hr)
q c-b	=	170	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	65	(metres)
Vr b-c	=	60	(metres)
q b-a	=	14	(pcu/hr)
q b-c	=	129	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.83620
E	=	0.88820
F	=	0.94140
Y	=	0.48250
F for (Qb-ac)	=	0.9020979

THE CAPACITY OF MOVEMENT :

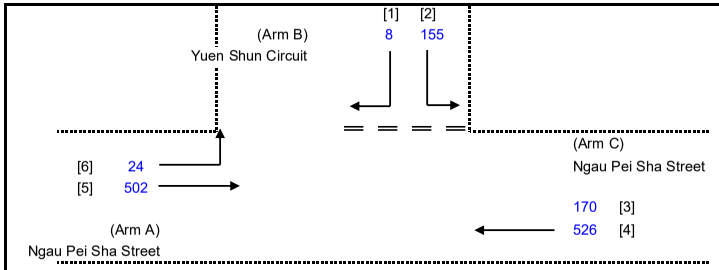
Q b-a	=	382		
Q b-c	=	582	Q b-c (O) =	576.7
Q c-b	=	614		
Q b-ac	=	554		
TOTAL FLOW	=	1365	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0366
DFC b-c	=	0.2216
DFC c-b	=	0.2769
DFC b-c(share lane)	=	0.2330

CRITICAL DFC = 0.28

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J6_NPSS_YS	CHECKED BY:	SLN	Sep-26
J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	15.00	(metres)
W cr	=	1.5	(metres)
q a-b	=	24	(pcu/hr)
q a-c	=	502	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.70	(metres)
Vr c-b	=	50	(metres)
q c-a	=	526	(pcu/hr)
q c-b	=	170	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	65	(metres)
Vr b-c	=	60	(metres)
q b-a	=	8	(pcu/hr)
q b-c	=	155	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.83620
E	=	0.88820
F	=	0.94140
Y	=	0.48250
F for (Qb-ac)	=	0.95092025

THE CAPACITY OF MOVEMENT :

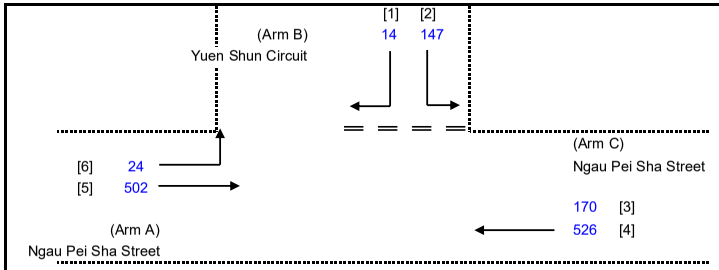
Q b-a	=	382		
Q b-c	=	582	Q b-c (O) =	579
Q c-b	=	614		
Q b-ac	=	567		
TOTAL FLOW	=	1385	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0209
DFC b-c	=	0.2663
DFC c-b	=	0.2769
DFC b-c(share lane)	=	0.2732

CRITICAL DFC = 0.28

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J6_NPSS_YS	CHECKED BY:	SLN	Sep-26
J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	15.00	(metres)
W cr	=	1.5	(metres)
q a-b	=	24	(pcu/hr)
q a-c	=	502	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.70	(metres)
Vr c-b	=	50	(metres)
q c-a	=	526	(pcu/hr)
q c-b	=	170	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	65	(metres)
Vr b-c	=	60	(metres)
q b-a	=	14	(pcu/hr)
q b-c	=	147	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.83620
E	=	0.88820
F	=	0.94140
Y	=	0.48250
F for (Qb-ac)	=	0.91304348

THE CAPACITY OF MOVEMENT :

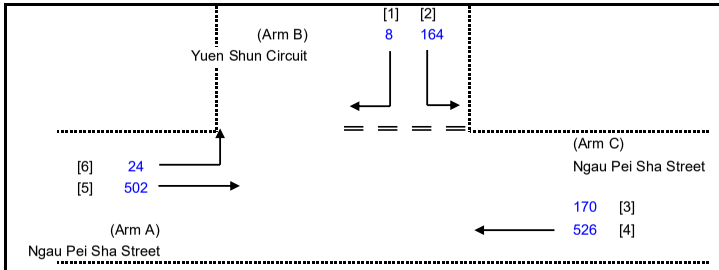
Q b-a	=	382		
Q b-c	=	582	Q b-c (O) =	576.7
Q c-b	=	614		
Q b-ac	=	557		
TOTAL FLOW	=	1383	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0366
DFC b-c	=	0.2526
DFC c-b	=	0.2769
DFC b-c(share lane)	=	0.2641

CRITICAL DFC = 0.28

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design PM**	PROJECT NO.: 41010	PREPARED BY:	SKL	Sep-26
		FILENAME : J6_NPSS_YS	CHECKED BY:	SLN	Sep-26
J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)		REFERENCE NO.:	REVIEWED BY:	SLN	Sep-26



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	=	15.00	(metres)
W cr	=	1.5	(metres)
q a-b	=	24	(pcu/hr)
q a-c	=	502	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.70	(metres)
Vr c-b	=	50	(metres)
q c-a	=	526	(pcu/hr)
q c-b	=	170	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.00	(metres)
W b-c	=	3.00	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	65	(metres)
Vr b-c	=	60	(metres)
q b-a	=	8	(pcu/hr)
q b-c	=	164	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.83620
E	=	0.88820
F	=	0.94140
Y	=	0.48250
F for (Qb-ac)	=	0.95348837

THE CAPACITY OF MOVEMENT :

Q b-a	=	382		
Q b-c	=	582	Q b-c (O) =	579
Q c-b	=	614		
Q b-ac	=	568		
TOTAL FLOW	=	1394	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0209
DFC b-c	=	0.2818
DFC c-b	=	0.2769
DFC b-c(share lane)	=	0.2886

CRITICAL DFC = 0.29

LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

	INITIALS	DATE
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

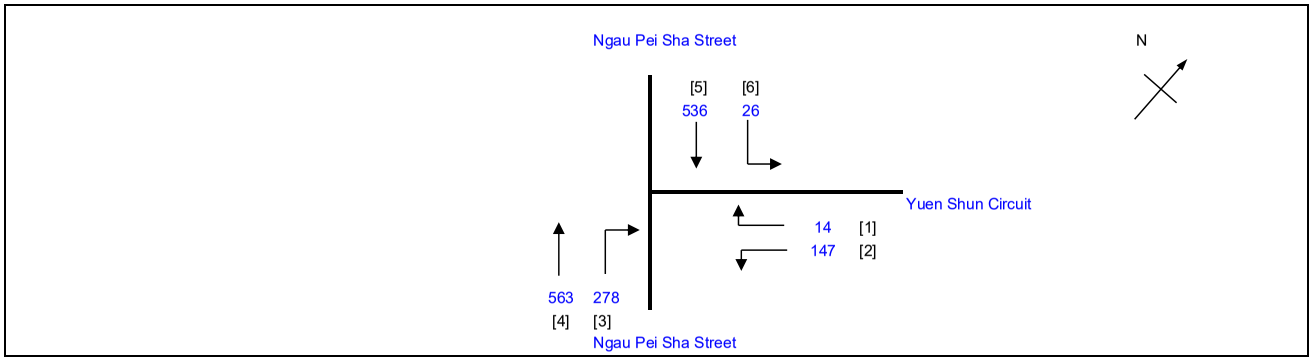
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)

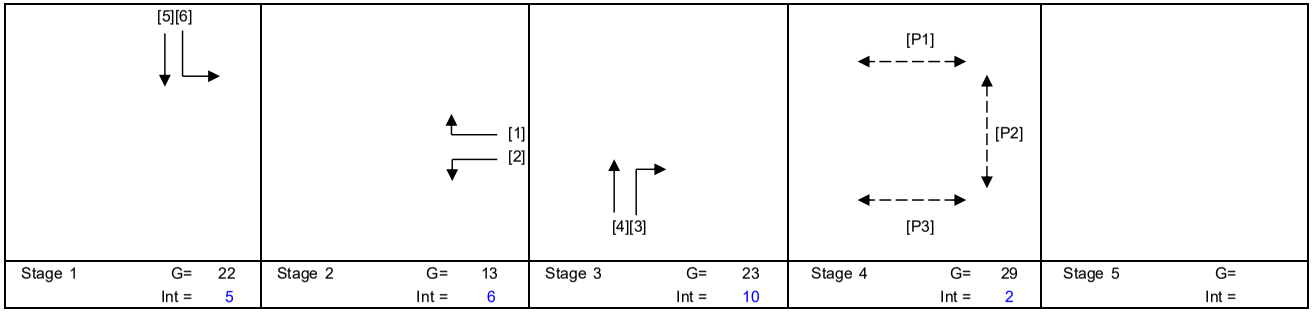
2036 Design AM [Sensitivity Test]

PROJECT NO.: 41010

FILENAME : J6_NPSS_YSC_Signal.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.368
Loss time		L =	49 sec
Total Flow		=	1564 pcu
Co	= (1.5*L+5)/(1-Y)	=	124.1 sec
Cm	= L/(1-Y)	=	77.5 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	44.8 %
Cp	= 0.9*L/(0.9-Y)	=	82.8 sec
Ymax	= 1-L/C	=	0.555
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**36 %**



Stage 1	G= 22	Int = 5
Stage 2	G= 13	Int = 6
Stage 3	G= 23	Int = 10
Stage 4	G= 29	Int = 2
Stage 5	G=	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3	6	13		20	13
P2	3	6	13		20	13
P3	3	10	19		14	19

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					
5,6	1	3.65	1	13		N	1980	26	244		270	0.10	1958							1958	0.138	0.138		23	23	0.663	36	44
5	1	3.65	1				2120		292		292	0.00	2120							2120	0.138			23	23	0.663	42	43
2	2	3.00	1	12		N	1915	147			147	1.00	1702							1702	0.086	0.086		14	14	0.663	24	55
1	2	3.00	1	25			2055			14	14	1.00	1939							1939	0.007			1	14	0.663	0	200
4	3	3.65	2			N	4100		563		563	0.00	4100							4100	0.137			23	24	0.663	39	40
3	3	3.65	1	16			2120			278	278	1.00	1938							1938	0.143	0.143		24	24	0.663	36	43
PED	4																						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

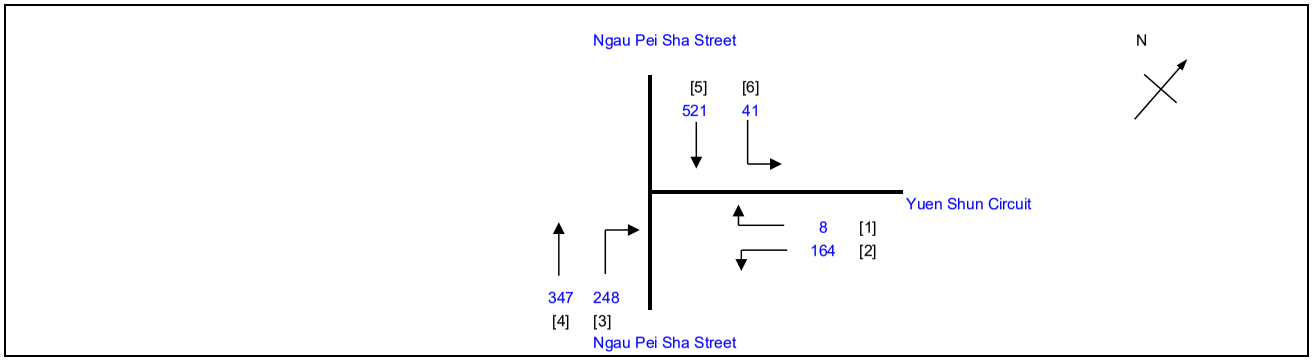
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

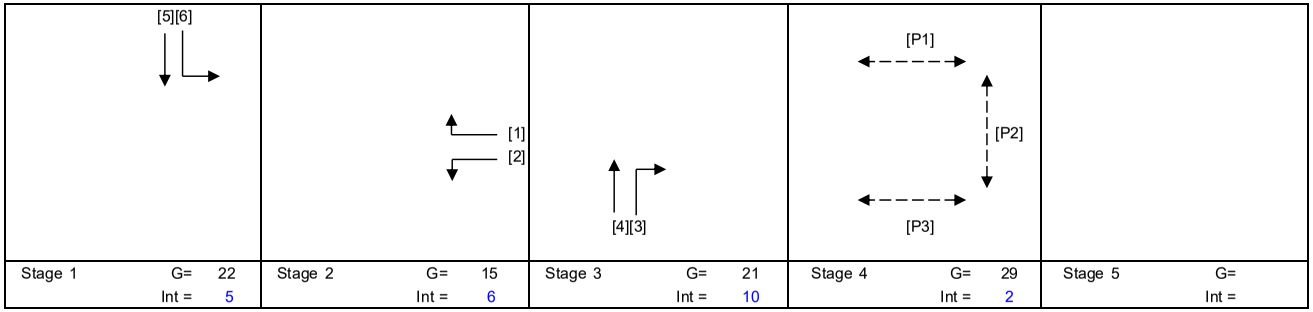
	INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)		
J6 Ngau Pei Sha Street / Yuen Shun Circuit (East)		

2036 Design PM [Sensitivity Test]

PROJECT NO.:	41010	Prepared By:	SKL Sep-26
FILENAME :	J6_NPSS_YSC_Signal.xlsx	Checked By:	SLN Sep-26
		Reviewed By:	SLN Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	110 sec
Sum(y)	Y =	0.363
Loss time	L =	49 sec
Total Flow	=	1329 pcu
Co = (1.5*L+5)/(1-Y)	=	123.1 sec
Cm = L/(1-Y)	=	76.9 sec
Yult	=	0.533
R.C.ult = (Yult-Y)/Y*100%	=	46.9 %
Cp = 0.9*L/(0.9-Y)	=	82.1 sec
Ymax = 1-L/C	=	0.555
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**38 %**



Stage 1	G= 22	Int = 5
Stage 2	G= 15	Int = 6
Stage 3	G= 21	Int = 10
Stage 4	G= 29	Int = 2
Stage 5	G=	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	3	6	13		18	13
P2	3	6	13		18	13
P3	3	10	19		12	19

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					
5,6	1	3.65	1	13		N	1980	41	228		269	0.15	1946							1946	0.138	0.138		23	23	0.654	36	43
5	1	3.65	1				2120		293		293	0.00	2120							2120	0.138			23	23	0.654	42	43
2	2	3.00	1	12		N	1915	164			164	1.00	1702							1702	0.096	0.096		16	16	0.654	24	52
1	2	3.00	1	25			2055			8	8	1.00	1939							1939	0.004			1	16	0.654	0	299
4	3	3.65	2			N	4100		347		347	0.00	4100							4100	0.085			14	22	0.654	27	47
3	3	3.65	1	16			2120			248	248	1.00	1938							1938	0.128	0.128		22	22	0.654	36	45
PED	4																						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

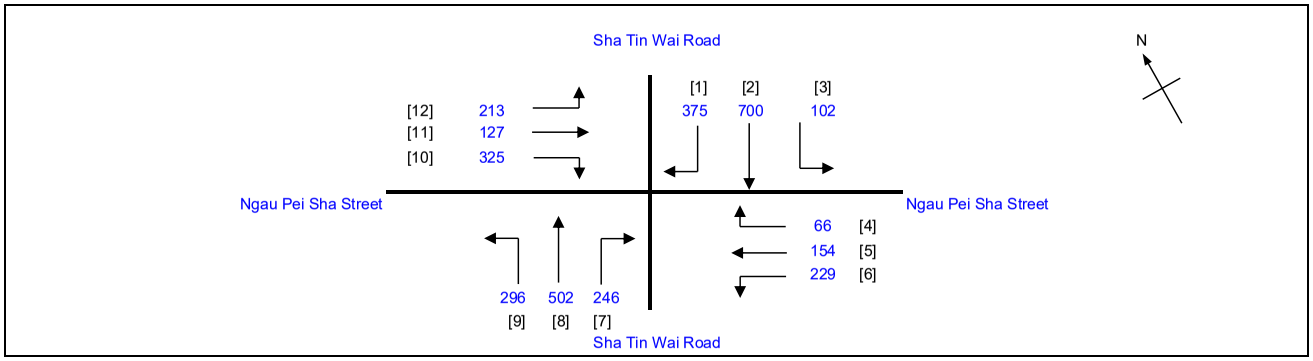
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

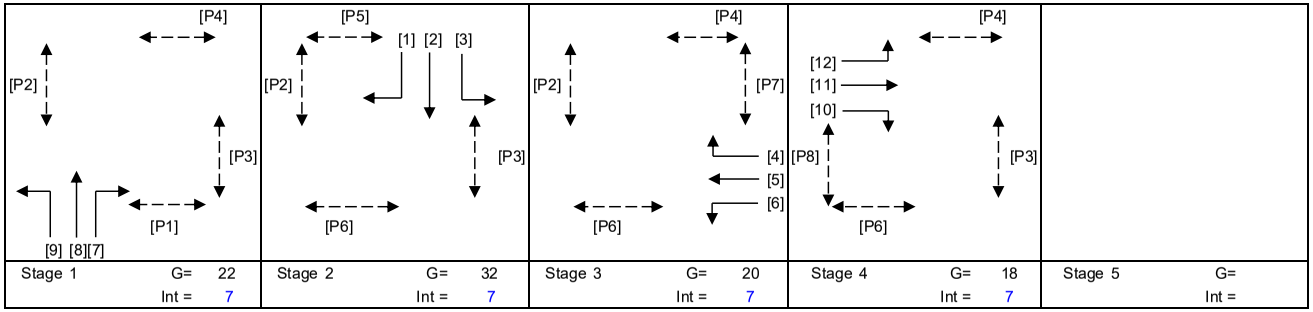
	INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)		
J7 Ngau Pei Sha Street / Sha Tin Wai Road		

2036 Reference AM

PROJECT NO.:	41010	Prepared By:	SKL	Sep-26
FILENAME :	J7_NPSS_STWR.xlsx	Checked By:	SLN	Sep-26
		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.593
Loss time		L =	24 sec
Total Flow		=	3335 pcu
Co	= (1.5*L+5)/(1-Y)	=	100.7 sec
Cm	= L/(1-Y)	=	58.9 sec
Yult		=	0.720
R.C.ult	= (Yult-Y)/Y*100%	=	21.4 %
Cp	= 0.9*L/(0.9-Y)	=	70.3 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**21 %**



Stage 1	G= 22	Int = 7
Stage 2	G= 32	Int = 7
Stage 3	G= 20	Int = 7
Stage 4	G= 18	Int = 7
Stage 5	G=	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	7	14	8
P2	1,2,3	5	8	1	86	8
P3	1,2,4	5	6	1	86	6
P4	1,3,4	5	9	1	71	9
P5	2	5	12	1	26	12
P6	2,3,4	5	10	4	77	10
P7	3	5	6	3	18	6
P8	4	5	11	4	10	11

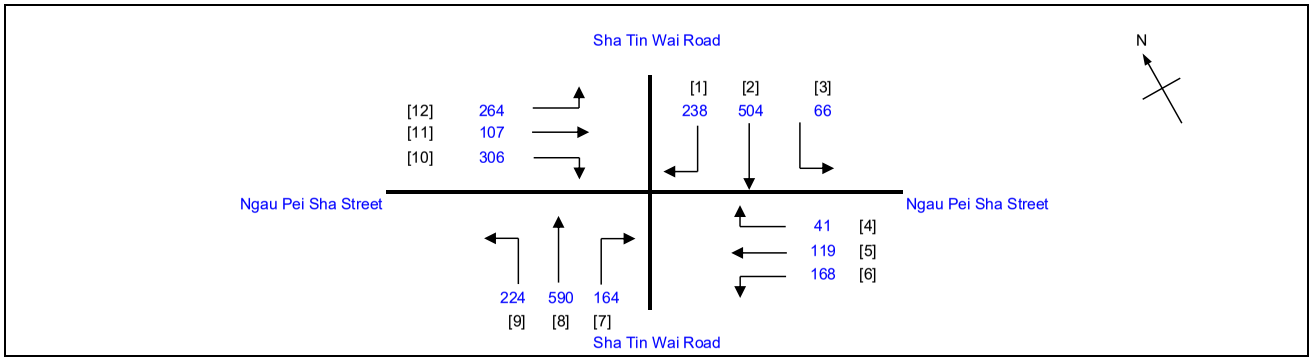
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							24					
7,8	1	3.50	1	25			2105		32	246	278	0.88	1999							1999	0.139			23	23	0.741	42	54
8	1	3.50	1				2105		229		229	0.00	2105							2105	0.109			18	23	0.741	42	59
8,9	1	3.50	1	15			2105	47	241		288	0.16	2071							2071	0.139			23	23	0.741	48	53
9	1	3.50	1	15		N	1965	249			249	1.00	1786							1786	0.139	0.139		23	23	0.741	42	55
1	2	3.30	1	20			2085			375	375	1.00	1940							1940	0.193			31	33	0.741	54	46
1,2	2	3.30	1	20			2085		423	0	423	0.00	2085							2085	0.203	0.203		33	33	0.741	60	44
2,3	2	3.30	1	10		N	1945	102	277		379	0.27	1870							1870	0.203			33	33	0.741	54	45
4,5	3	3.30	1	15			2085		154	66	220	0.30	2024							2024	0.109			18	21	0.741	36	60
5,6	3	3.30	1	12		N	1945	229	0		229	1.00	1729							1729	0.132	0.132		21	21	0.741	36	57
10	4	3.20	1	20			2075			228	228	1.00	1930							1930	0.118	0.118		19	19	0.741	36	58
10,11,12	4	3.20	1	15			2075	10	127	97	234	0.46	1984							1984	0.118			19	19	0.741	42	58
12	4	3.20	1	12		N	1935	203			203	1.00	1720							1720	0.118			19	19	0.741	36	60

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

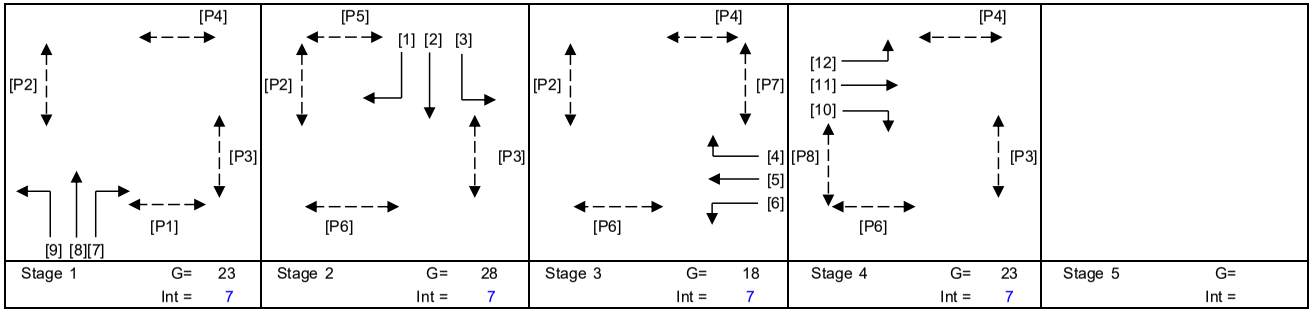
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Reference PM	FILENAME : J7_NPSS_STWR.xlsx	Checked By:	SLN	Sep-26
J7 Ngau Pei Sha Street / Sha Tin Wai Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.484
Loss time		L =	24 sec
Total Flow		=	2791 pcu
Co	= (1.5*L+5)/(1-Y)	=	79.5 sec
Cm	= L/(1-Y)	=	46.5 sec
Yult		=	0.720
R.C.ult	= (Yult-Y)/Y*100%	=	48.7 %
Cp	= 0.9*L/(0.9-Y)	=	51.9 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**49 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	7	15	8
P2	1,2,3	5	8	1	81	8
P3	1,2,4	5	6	1	88	6
P4	1,3,4	5	9	1	75	9
P5	2	5	12	1	22	12
P6	2,3,4	5	10	4	76	10
P7	3	5	6	3	16	6
P8	4	5	11	4	15	11

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)
																							24					
7,8	1	3.50	1	25			2105		82	164	246	0.67	2024							2024	0.122			24	24	0.605	36	45
8	1	3.50	1				2105		257		257	0.00	2105							2105	0.122			24	24	0.605	36	45
8,9	1	3.50	1	15			2105	6	251		257	0.02	2100							2100	0.122	0.122		24	24	0.605	36	45
9	1	3.50	1	15		N	1965	218			218	1.00	1786							1786	0.122			24	24	0.605	30	46
1	2	3.30	1	20			2085			238	238	1.00	1940							1940	0.123			24	29	0.605	36	45
1,2	2	3.30	1	20			2085		300	0	300	0.00	2085							2085	0.144			29	29	0.605	42	42
2,3	2	3.30	1	10		N	1945	66	204		270	0.24	1876							1876	0.144	0.144		29	29	0.605	36	42
4,5	3	3.30	1	15			2085		119	41	160	0.26	2033							2033	0.079			16	19	0.605	24	54
5,6	3	3.30	1	12		N	1945	168	0		168	1.00	1729							1729	0.097	0.097		19	19	0.605	24	51
10	4	3.20	1	20			2075			233	233	1.00	1930							1930	0.121	0.121		24	24	0.605	36	46
10,11,12	4	3.20	1	15			2075	57	107	73	237	0.55	1967							1967	0.120			24	24	0.605	36	46
12	4	3.20	1	12		N	1935	207			207	1.00	1720							1720	0.120			24	24	0.605	30	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

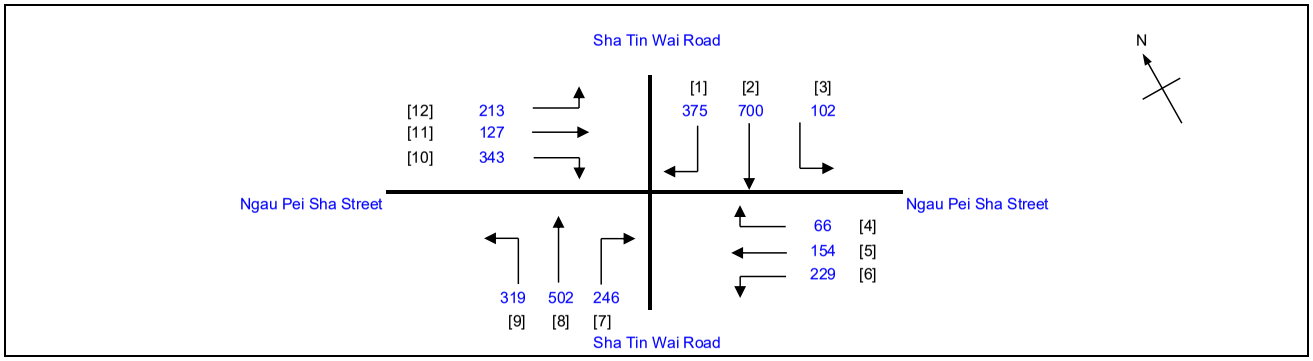
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TRAFFIC SIGNAL CALCULATION

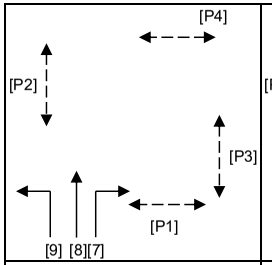
	INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)		
J7 Ngau Pei Sha Street / Sha Tin Wai Road		

2036 Design AM

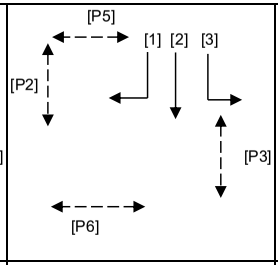
PROJECT NO.:	41010	Prepared By:	SKL Sep-26
FILENAME :	J7_NPSS_STWR.xlsx	Checked By:	SLN Sep-26
		Reviewed By:	SLN Sep-26



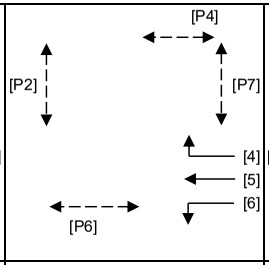
No. of stages per cycle	N =	4
Cycle time	C =	120 sec
Sum(y)	Y =	0.599
Loss time	L =	24 sec
Total Flow	=	3376 pcu
Co = (1.5*L+5)/(1-Y)	=	102.4 sec
Cm = L/(1-Y)	=	59.9 sec
Yult	=	0.720
R.C.ult = (Yult-Y)/Y*100%	=	20.1 %
Cp = 0.9*L/(0.9-Y)	=	71.9 sec
Ymax = 1-L/C	=	0.800
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**20 %**



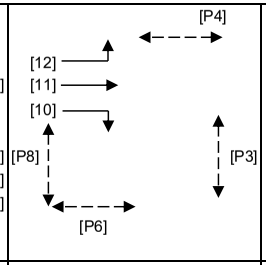
Stage 1 G= 22 Int = 7



Stage 2 G= 31 Int = 7



Stage 3 G= 20 Int = 7



Stage 4 G= 18 Int = 7

Stage 5 G= Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	7	14	8
P2	1,2,3	5	8	1	85	8
P3	1,2,4	5	6	1	85	6
P4	1,3,4	5	9	1	71	9
P5	2	5	12	1	25	12
P6	2,3,4	5	10	4	76	10
P7	3	5	6	3	18	6
P8	4	5	11	4	10	11

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)
																							24					
7,8	1	3.50	1	25			2105		39	246	285	0.86	2001							2001	0.142	0.142		23	23	0.749	48	54
8	1	3.50	1				2105		235		235	0.00	2105							2105	0.112			18	23	0.749	42	59
8,9	1	3.50	1	15			2105	65	228		293	0.22	2059							2059	0.142			23	23	0.749	48	54
9	1	3.50	1	15		N	1965	254			254	1.00	1786							1786	0.142			23	23	0.749	42	56
1	2	3.30	1	20			2085			375	375	1.00	1940							1940	0.193			31	32	0.749	54	47
1,2	2	3.30	1	20			2085		423	0	423	0.00	2085							2085	0.203	0.203		32	32	0.749	60	45
2,3	2	3.30	1	10		N	1945	102	277		379	0.27	1870							1870	0.203			32	32	0.749	54	46
4,5	3	3.30	1	15			2085		154	66	220	0.30	2024							2024	0.109			17	21	0.749	36	61
5,6	3	3.30	1	12		N	1945	229	0		229	1.00	1729							1729	0.132	0.132		21	21	0.749	36	58
10	4	3.20	1	20			2075			235	235	1.00	1930							1930	0.122	0.122		19	19	0.749	42	59
10,11,12	4	3.20	1	15			2075	4	127	108	239	0.47	1982							1982	0.121			19	19	0.749	42	58
12	4	3.20	1	12		N	1935	209			209	1.00	1720							1720	0.122			19	19	0.749	36	61

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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

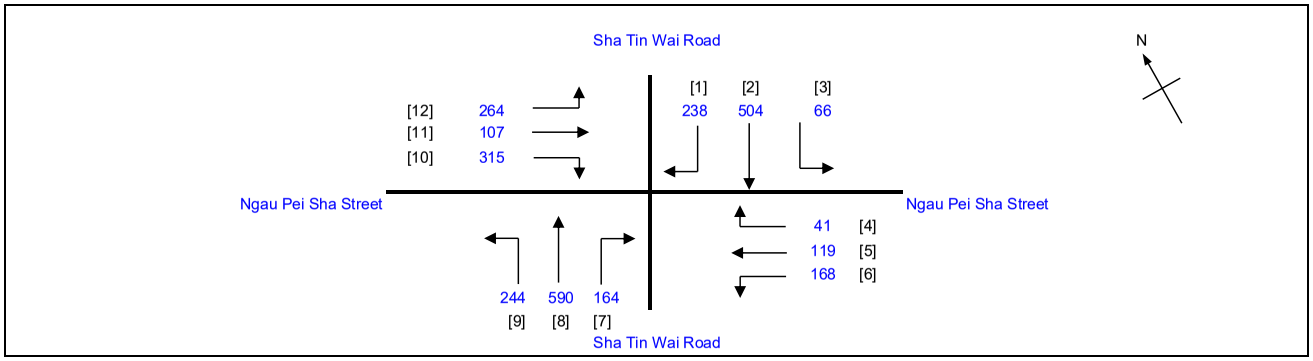
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J7 Ngau Pei Sha Street / Sha Tin Wai Road

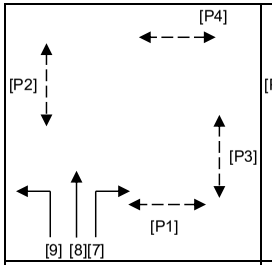
2036 Design PM

PROJECT NO.: 41010

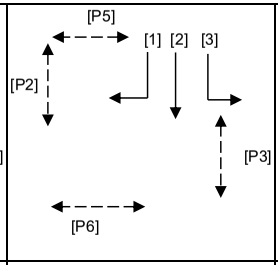
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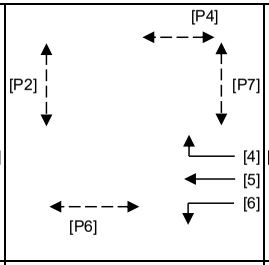
No. of stages per cycle		N =	4
Cycle time		C =	120 sec
Sum(y)		Y =	0.488
Loss time		L =	24 sec
Total Flow		=	2820 pcu
Co	= (1.5*L+5)/(1-Y)	=	80.1 sec
Cm	= L/(1-Y)	=	46.9 sec
Yult		=	0.720
R.C.ult	= (Yult-Y)/Y*100%	=	47.5 %
Cp	= 0.9*L/(0.9-Y)	=	52.5 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**47 %**



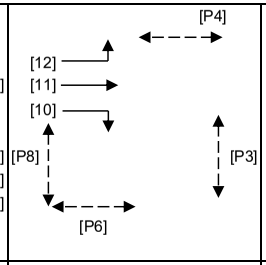
Stage 1 G= 24 Int = 7



Stage 2 G= 27 Int = 7



Stage 3 G= 18 Int = 7



Stage 4 G= 23 Int = 7

Stage 5 G= Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	7	16	8
P2	1,2,3	5	8	1	81	8
P3	1,2,4	5	6	1	88	6
P4	1,3,4	5	9	1	76	9
P5	2	5	12	1	21	12
P6	2,3,4	5	10	4	75	10
P7	3	5	6	3	16	6
P8	4	5	11	4	15	11

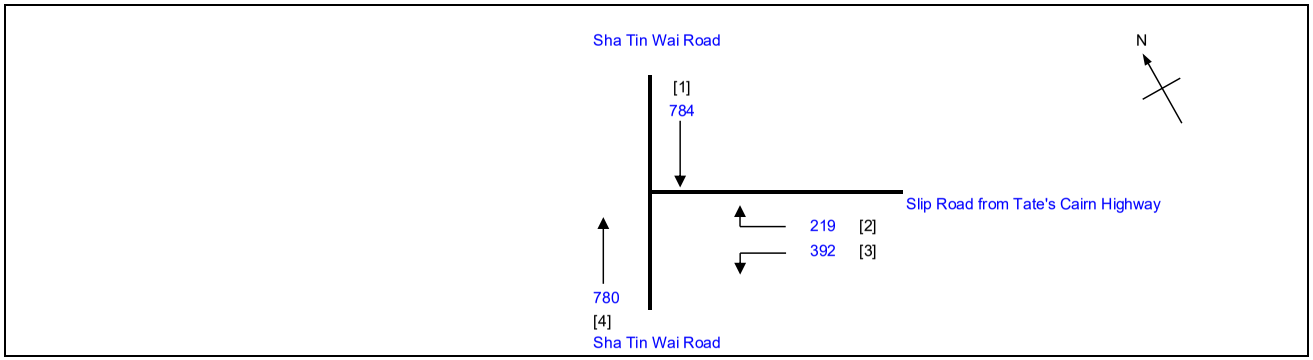
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							24					
7,8	1	3.50	1	25			2105		89	164	253	0.65	2026							2026	0.125	0.125		25	25	0.610	36	45
8	1	3.50	1				2105		262		262	0.00	2105							2105	0.124			24	25	0.610	36	45
8,9	1	3.50	1	15			2105	21	239		260	0.08	2088							2088	0.125			24	25	0.610	36	45
9	1	3.50	1	15		N	1965	223			223	1.00	1786							1786	0.125			25	25	0.610	30	46
1	2	3.30	1	20			2085			238	238	1.00	1940							1940	0.123			24	28	0.610	36	46
1,2	2	3.30	1	20			2085		300	0	300	0.00	2085							2085	0.144			28	28	0.610	42	42
2,3	2	3.30	1	10		N	1945	66	204		270	0.24	1876							1876	0.144	0.144		28	28	0.610	36	43
4,5	3	3.30	1	15			2085		119	41	160	0.26	2033							2033	0.079			15	19	0.610	24	54
5,6	3	3.30	1	12		N	1945	168	0		168	1.00	1729							1729	0.097	0.097		19	19	0.610	24	51
10	4	3.20	1	20			2075			236	236	1.00	1930							1930	0.122	0.122		24	24	0.610	36	46
10,11,12	4	3.20	1	15			2075	54	107	79	240	0.55	1966							1966	0.122			24	24	0.610	36	46
12	4	3.20	1	12		N	1935	210			210	1.00	1720							1720	0.122			24	24	0.610	30	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

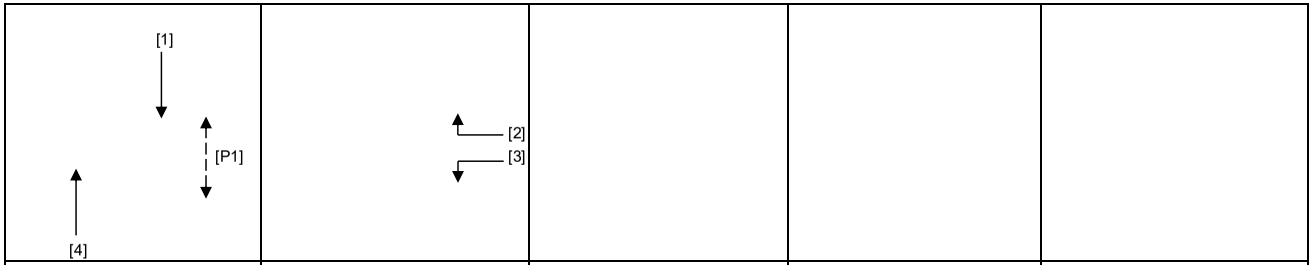
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference AM**	Prepared By:	SKL	Sep-26
J8 Sha Tin Wai Road / Slip road from Tate's Cairn Highway	PROJECT NO.: 41010	Checked By:	SLN	Sep-26
	FILENAME : J8_STWR_SlipRoadfromTCH.x	Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.334
Loss time		L =	10 sec
Total Flow		=	2175 pcu
Co	= (1.5*L+5)/(1-Y)	=	30.0 sec
Cm	= L/(1-Y)	=	15.0 sec
Yult		=	0.825
R.C.ult	= (Yult-Y)/Y*100%	=	146.9 %
Cp	= 0.9*L/(0.9-Y)	=	15.9 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**124 %**



Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
G= 18	G= 30	G=	G=	G=
Int = 5	Int = 7	Int =	Int =	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	1	14	8

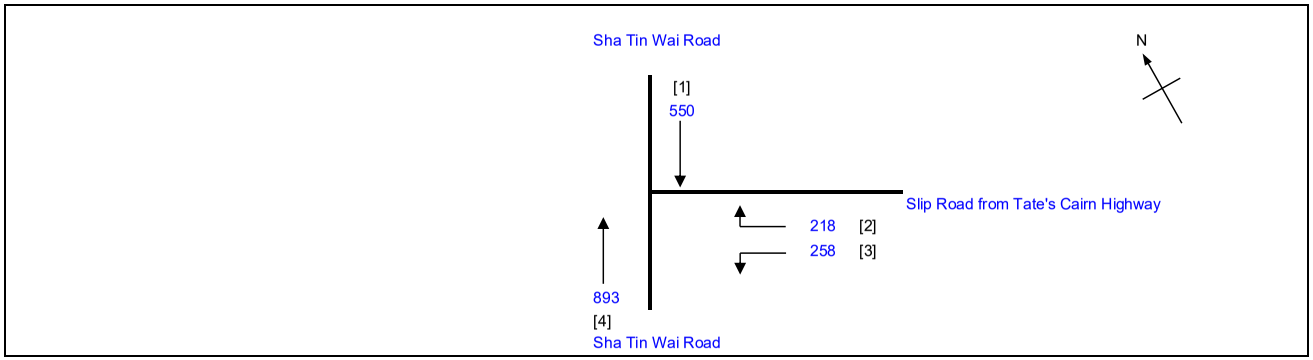
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							10					
1	1	3.10	3			N	6055		784		784	0.00	6055							6055	0.129	0.129		19	19	0.401	16	15
4	1	3.30	3			N	6115		780		780	0.00	6115							6115	0.128			19	19	0.401	16	15
2	2	4.00	1	15			2155			219	219	1.00	1959							1959	0.112			17	31	0.401	12	18
2,3	2	4.00	1	12			2155	392		0	392	1.00	1916							1916	0.205	0.205		31	31	0.401	18	9

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

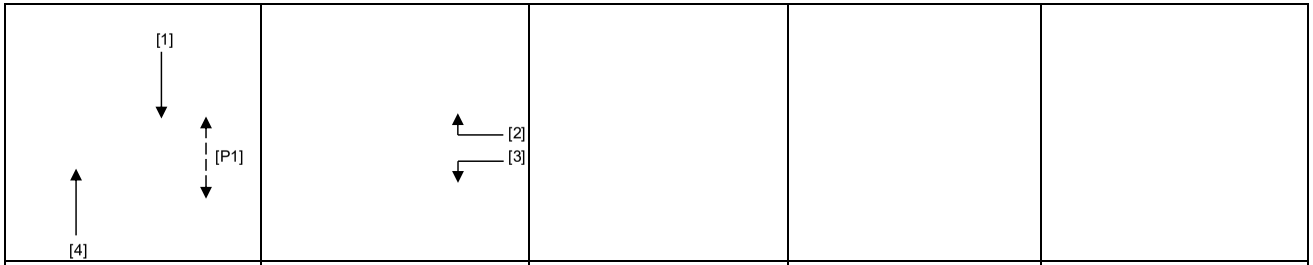
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference PM**	Prepared By:	SKL	Sep-26
J8 Sha Tin Wai Road / Slip road from Tate's Cairn Highway	PROJECT NO.: 41010	Checked By:	SLN	Sep-26
	FILENAME : J8_STWR_SlipRoadfromTCH.x	Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.281
Loss time		L =	10 sec
Total Flow		=	1919 pcu
Co	= (1.5*L+5)/(1-Y)	=	27.8 sec
Cm	= L/(1-Y)	=	13.9 sec
Yult		=	0.825
R.C.ult	= (Yult-Y)/Y*100%	=	193.9 %
Cp	= 0.9*L/(0.9-Y)	=	14.5 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**167 %**



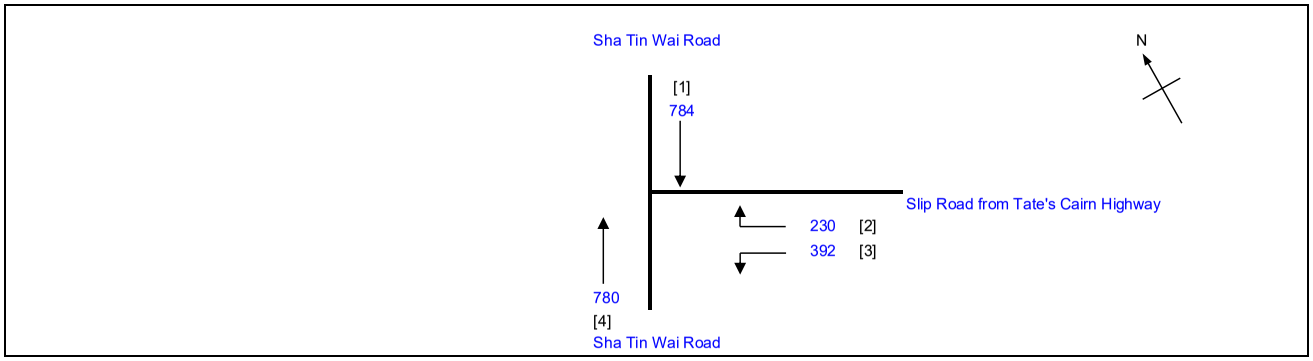
Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
G= 25	G= 23	G=	G=	G=
Int = 5	Int = 7	Int =	Int =	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	1	21	8

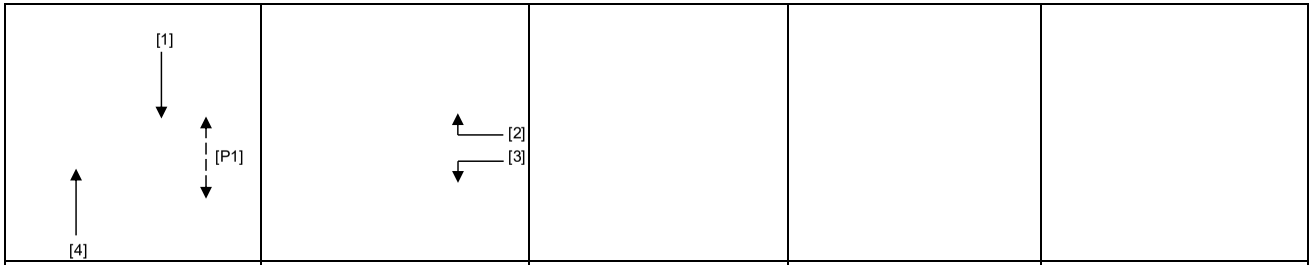
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							10					
1	1	3.10	3			N	6055		550		550	0.00	6055							6055	0.091			16	26	0.337	12	16
4	1	3.30	3			N	6115		893		893	0.00	6115							6115	0.146	0.146		26	26	0.337	16	10
2	2	4.00	1	15			2155			218	218	1.00	1959							1959	0.111			20	24	0.337	12	15
2,3	2	4.00	1	12			2155	258		0	258	1.00	1916							1916	0.135	0.135		24	24	0.337	12	12

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
		FILENAME : J8_STWR_SlipRoadfromTCH.x	Checked By:	SLN	Sep-26
J8 Sha Tin Wai Road / Slip road from Tate's Cairn Highway			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.334
Loss time		L =	10 sec
Total Flow		=	2186 pcu
Co	= (1.5*L+5)/(1-Y)	=	30.0 sec
Cm	= L/(1-Y)	=	15.0 sec
Yult		=	0.825
R.C.ult	= (Yult-Y)/Y*100%	=	146.9 %
Cp	= 0.9*L/(0.9-Y)	=	15.9 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**124 %**



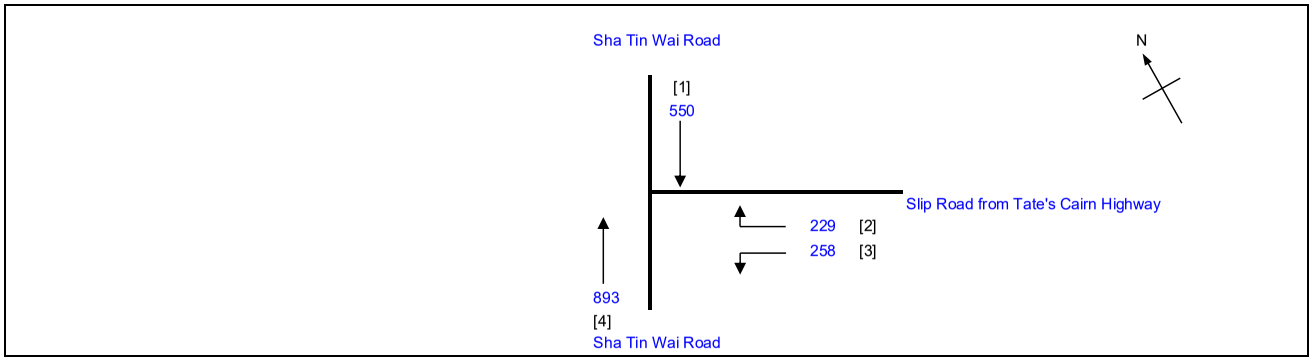
Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
G= 18	G= 30	G=	G=	G=
Int = 5	Int = 7	Int =	Int =	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	1	14	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)
																							10					
1	1	3.10	3			N	6055		784		784	0.00	6055							6055	0.129	0.129		19	19	0.401	16	15
4	1	3.30	3			N	6115		780		780	0.00	6115							6115	0.128			19	19	0.401	16	15
2	2	4.00	1	15			2155			230	230	1.00	1959							1959	0.117			18	31	0.401	12	17
2,3	2	4.00	1	12			2155	392		0	392	1.00	1916							1916	0.205	0.205		31	31	0.401	18	9

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
		FILENAME : J8_STWR_SlipRoadfromTCH.x	Checked By:	SLN	Sep-26
J8 Sha Tin Wai Road / Slip road from Tate's Cairn Highway			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	2
Cycle time		C =	60 sec
Sum(y)		Y =	0.281
Loss time		L =	10 sec
Total Flow		=	1930 pcu
Co	= (1.5*L+5)/(1-Y)	=	27.8 sec
Cm	= L/(1-Y)	=	13.9 sec
Yult		=	0.825
R.C.ult	= (Yult-Y)/Y*100%	=	193.9 %
Cp	= 0.9*L/(0.9-Y)	=	14.5 sec
Ymax	= 1-L/C	=	0.833
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**167 %**



Stage 1	G= 25	Stage 2	G= 23	Stage 3	G=	Stage 4	G=	Stage 5	G=
	Int = 5		Int = 7		Int =		Int =		Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1	5	8	1	21	8

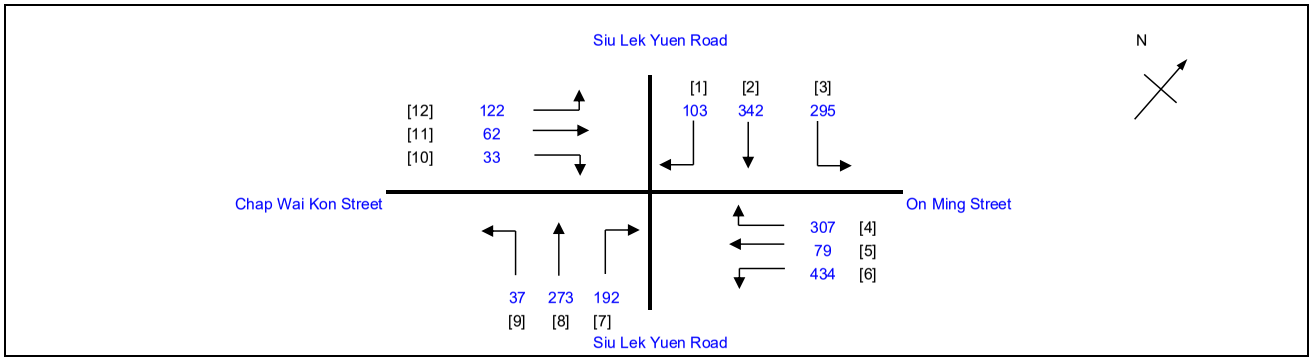
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							10					
1	1	3.10	3			N	6055		550		550	0.00	6055							6055	0.091			16	26	0.337	12	16
4	1	3.30	3			N	6115		893		893	0.00	6115							6115	0.146	0.146		26	26	0.337	16	10
2	2	4.00	1	15			2155			229	229	1.00	1959							1959	0.117			21	24	0.337	12	14
2,3	2	4.00	1	12			2155	258		0	258	1.00	1916							1916	0.135	0.135		24	24	0.337	12	12

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

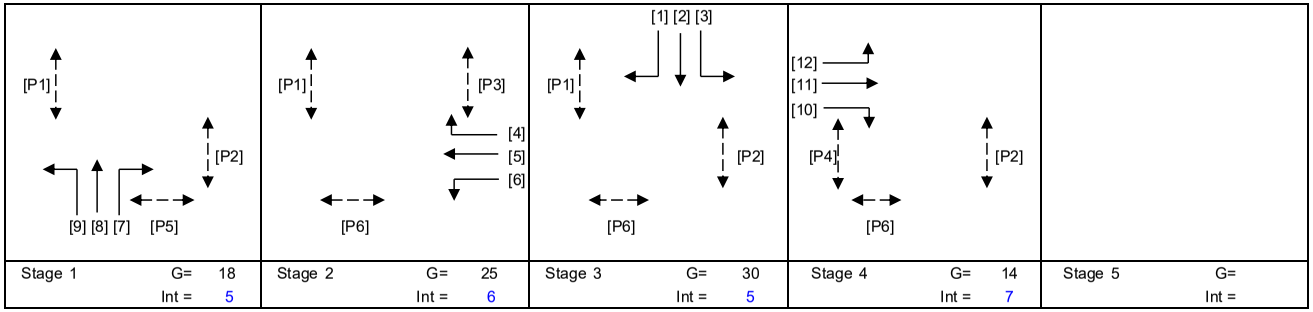
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Reference AM	FILENAME : J9_CWKS_SLYR.xlsx	Checked By:	SLN	Sep-26
J9 Chap Wai Kon Street/ Siu Lek Yuen Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.478
Loss time		L =	23 sec
Total Flow		=	2279 pcu
Co	= (1.5*L+5)/(1-Y)	=	75.7 sec
Cm	= L/(1-Y)	=	44.1 sec
Yult		=	0.728
R.C.ult	= (Yult-Y)/Y*100%	=	52.1 %
Cp	= 0.9*L/(0.9-Y)	=	49.1 sec
Ymax	= 1-L/C	=	0.791
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**49 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	9	0	80	9
P2	1,3,4	5	10	0	69	10
P3	2	5	9	9	13	9
P4	4	5	8	8	5	8
P5	1	5	8	9	6	8
P6	1,2,3	5	12	2	75	12

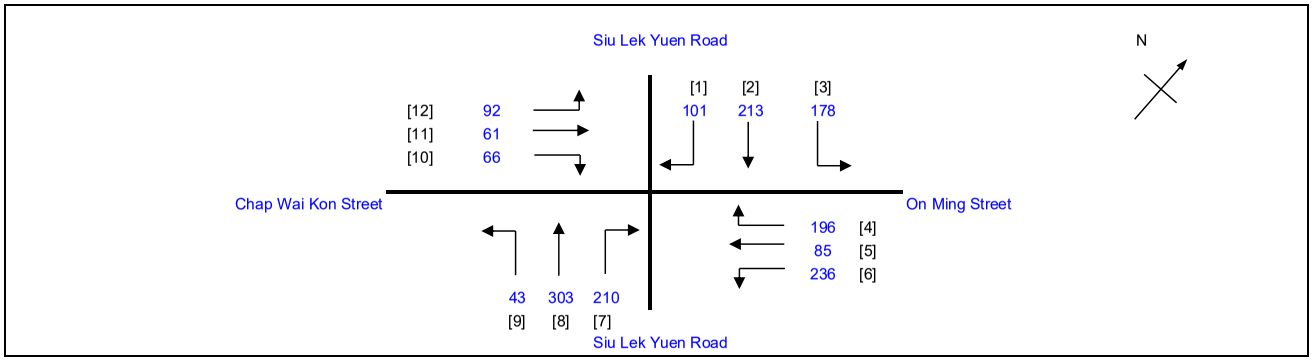
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
9	1	3.30	1	18		N	1945	37			37	1.00	1795							1795	0.021			4	19	0.605	6	88
8	1	3.30	2				4170		273		273	0.00	4170							4170	0.065			12	19	0.605	21	48
7	1	3.30	1	24			2085			192	192	1.00	1962							1962	0.098	0.098	1	18	19	0.605	24	46
6	2	3.50	1	15		N	1965	257			257	1.00	1786							1786	0.144			26	26	0.605	30	39
4,5,6	2	3.50	1	15			2105	177	79	27	283	0.72	1963							1963	0.144	0.144		26	26	0.605	36	39
4	2	3.50	1	18			2105			280	280	1.00	1943							1943	0.144			26	26	0.605	36	39
3	3	3.20	1	15		N	1935	295			295	1.00	1759							1759	0.168	0.168		31	31	0.605	36	36
2	3	3.20	2				4150		342		342	0.00	4150							4150	0.082			15	31	0.605	27	45
1	3	3.20	1	24			2075			103	103	1.00	1953							1953	0.053			10	31	0.605	18	58
11,12	4	3.20	1	17		N	1935	122	0		122	1.00	1778							1778	0.069	0.069	3	12	15	0.605	18	54
10,11	4	3.20	1	17			2075		62	0	62	0.00	2075							2075	0.030			5	15	0.605	12	70
10	4	3.20	1	24			2075			33	33	1.00	1953							1953	0.017			3	15	0.605	6	93

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

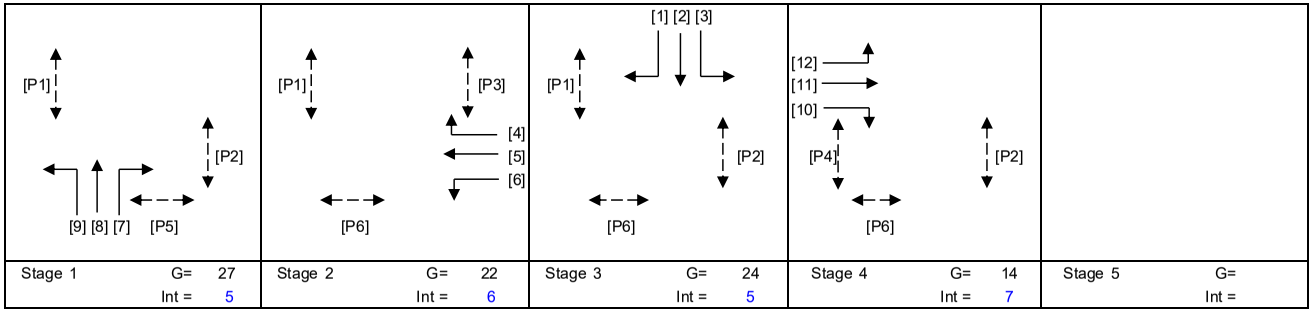
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Reference PM	FILENAME : J9_CWKS_SLYR.xlsx	Checked By:	SLN	Sep-26
J9 Chap Wai Kon Street/ Siu Lek Yuen Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.351
Loss time		L =	22 sec
Total Flow		=	1784 pcu
Co	= (1.5*L+5)/(1-Y)	=	58.5 sec
Cm	= L/(1-Y)	=	33.9 sec
Yult		=	0.735
R.C.ult	= (Yult-Y)/Y*100%	=	109.6 %
Cp	= 0.9*L/(0.9-Y)	=	36.0 sec
Ymax	= 1-L/C	=	0.800
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**105 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	9	0	80	9
P2	1,3,4	5	10	0	72	10
P3	2	5	9	9	10	9
P4	4	5	8	8	5	8
P5	1	5	8	9	15	8
P6	1,2,3	5	12	2	75	12

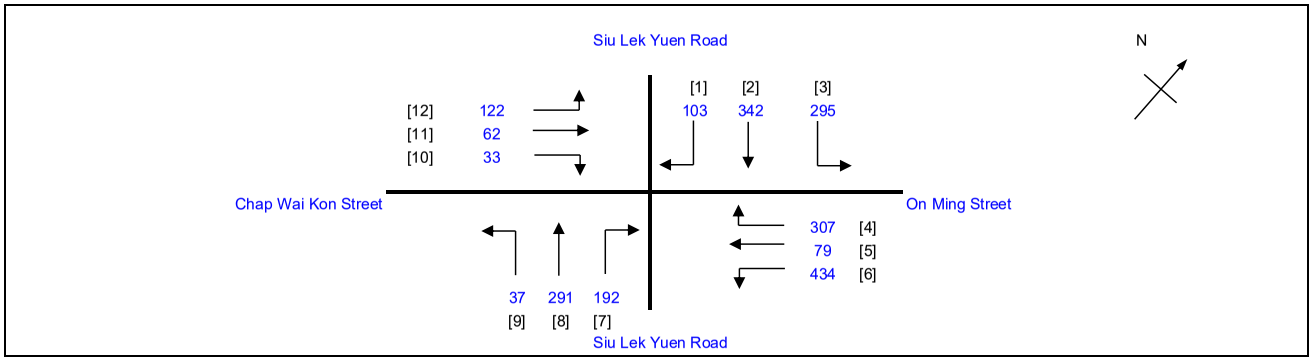
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
9	1	3.30	1	18		N	1945	43			43	1.00	1795							1795	0.024			6	28	0.438	6	58
8	1	3.30	2				4170		303		303	0.00	4170							4170	0.073			18	28	0.438	21	39
7	1	3.30	1	24			2085			210	210	1.00	1962							1962	0.107	0.107	1	27	28	0.438	24	34
6	2	3.50	1	15		N	1965	162			162	1.00	1786							1786	0.091	0.091		23	23	0.438	18	38
4,5,6	2	3.50	1	15			2105	74	85	21	180	0.53	1999							1999	0.090			23	23	0.438	24	37
4	2	3.50	1	18			2105			175	175	1.00	1943							1943	0.090			23	23	0.438	24	38
3	3	3.20	1	15		N	1935	178			178	1.00	1759							1759	0.101	0.101		25	25	0.438	24	36
2	3	3.20	2				4150		213		213	0.00	4150							4150	0.051			13	25	0.438	15	43
1	3	3.20	1	24			2075			101	101	1.00	1953							1953	0.052			13	25	0.438	12	46
11,12	4	3.20	1	17		N	1935	92	0		92	1.00	1778							1778	0.052	0.052	2	13	15	0.438	12	47
10,11	4	3.20	1	17			2075		61	5	66	0.08	2061							2061	0.032			8	15	0.438	6	52
10	4	3.20	1	24			2075			61	61	1.00	1953							1953	0.031			8	15	0.438	6	53

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

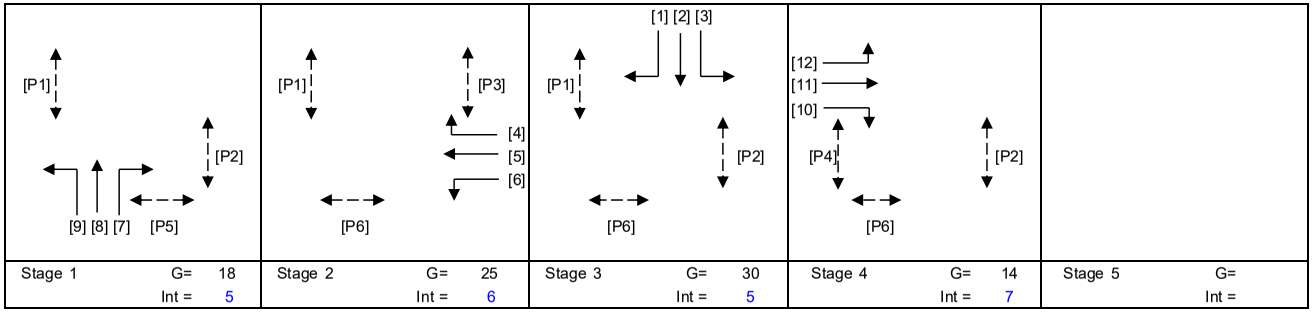
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Design AM	FILENAME : J9_CWKS_SLYR.xlsx	Checked By:	SLN	Sep-26
J9 Chap Wai Kon Street/ Siu Lek Yuen Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.478
Loss time		L =	23 sec
Total Flow		=	2297 pcu
Co	= (1.5*L+5)/(1-Y)	=	75.7 sec
Cm	= L/(1-Y)	=	44.1 sec
Yult		=	0.728
R.C.ult	= (Yult-Y)/Y*100%	=	52.1 %
Cp	= 0.9*L/(0.9-Y)	=	49.1 sec
Ymax	= 1-L/C	=	0.791
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**49 %**



Stage 1	G= 18	Int = 5
Stage 2	G= 25	Int = 6
Stage 3	G= 30	Int = 5
Stage 4	G= 14	Int = 7
Stage 5	G=	Int =

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	9	0	80	9
P2	1,3,4	5	10	0	69	10
P3	2	5	9	9	13	9
P4	4	5	8	8	5	8
P5	1	5	8	9	6	8
P6	1,2,3	5	12	2	75	12

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					
9	1	3.30	1	18		N	1945	37			37	1.00	1795							1795	0.021			4	19	0.605	6	88
8	1	3.30	2				4170		291		291	0.00	4170							4170	0.070			13	19	0.605	21	47
7	1	3.30	1	24			2085			192	192	1.00	1962							1962	0.098	0.098	1	18	19	0.605	24	46
6	2	3.50	1	15		N	1965	257			257	1.00	1786							1786	0.144			26	26	0.605	30	39
4,5,6	2	3.50	1	15			2105	177	79	27	283	0.72	1963							1963	0.144	0.144		26	26	0.605	36	39
4	2	3.50	1	18			2105			280	280	1.00	1943							1943	0.144			26	26	0.605	36	39
3	3	3.20	1	15		N	1935	295			295	1.00	1759							1759	0.168	0.168		31	31	0.605	36	36
2	3	3.20	2				4150		342		342	0.00	4150							4150	0.082			15	31	0.605	27	45
1	3	3.20	1	24			2075			103	103	1.00	1953							1953	0.053			10	31	0.605	18	58
11,12	4	3.20	1	17		N	1935	122	0		122	1.00	1778							1778	0.069	0.069	3	12	15	0.605	18	54
10,11	4	3.20	1	17			2075		62	0	62	0.00	2075							2075	0.030			5	15	0.605	12	70
10	4	3.20	1	24			2075			33	33	1.00	1953							1953	0.017			3	15	0.605	6	93

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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

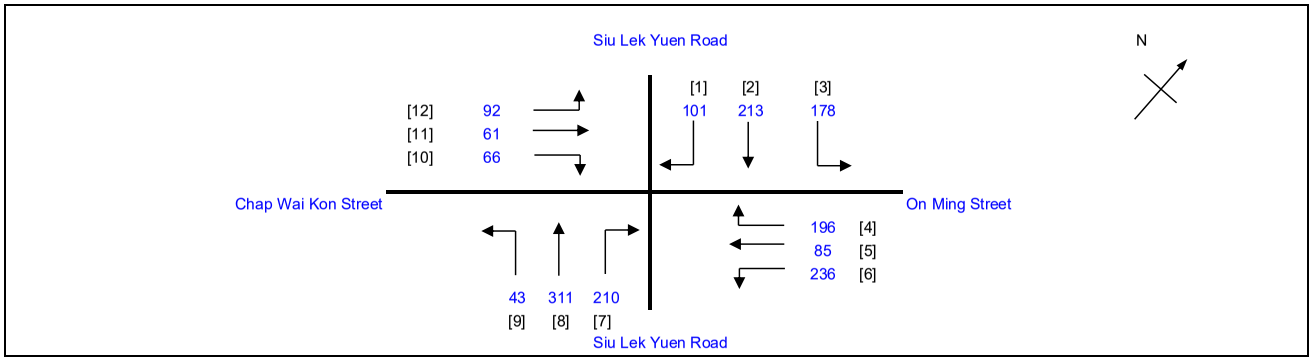
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J9 Chap Wai Kon Street/ Siu Lek Yuen Road

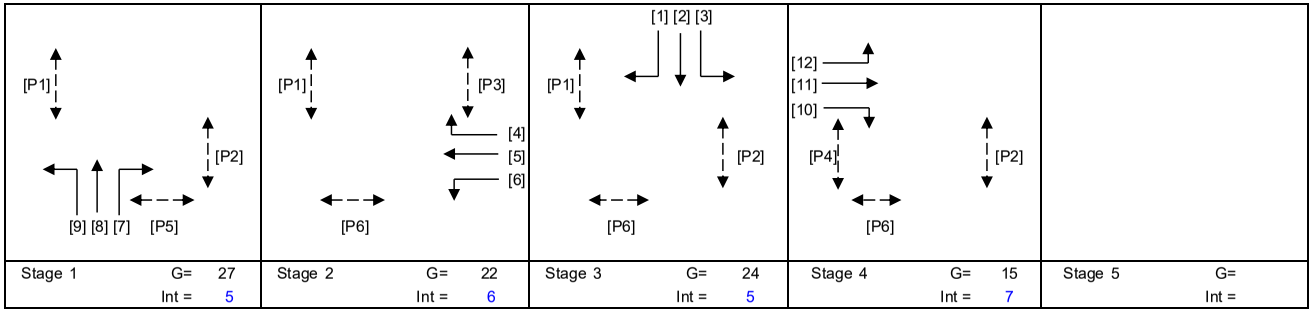
2036 Design PM

PROJECT NO.: 41010

FILENAME : J9_CWKS_SLYR.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.351
Loss time		L =	23 sec
Total Flow		=	1792 pcu
Co	= (1.5*L+5)/(1-Y)	=	60.8 sec
Cm	= L/(1-Y)	=	35.4 sec
Yult		=	0.728
R.C.ult	= (Yult-Y)/Y*100%	=	107.5 %
Cp	= 0.9*L/(0.9-Y)	=	37.7 sec
Ymax	= 1-L/C	=	0.791
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**103 %**



Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	9	0	79	9
P2	1,3,4	5	10	0	72	10
P3	2	5	9	9	10	9
P4	4	5	8	8	6	8
P5	1	5	8	9	15	8
P6	1,2,3	5	12	2	74	12

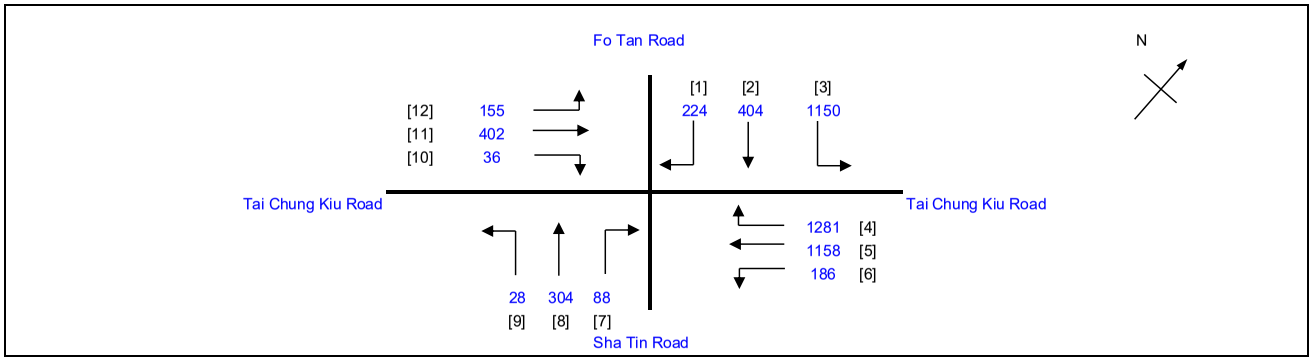
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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					
9	1	3.30	1	18		N	1945	43			43	1.00	1795							1795	0.024			6	28	0.443	6	59
8	1	3.30	2				4170		311		311	0.00	4170							4170	0.075			19	28	0.443	21	39
7	1	3.30	1	24			2085			210	210	1.00	1962							1962	0.107	0.107	1	27	28	0.443	24	35
6	2	3.50	1	15		N	1965	162			162	1.00	1786							1786	0.091	0.091		23	23	0.443	18	38
4,5,6	2	3.50	1	15			2105	74	85	21	180	0.53	1999							1999	0.090			22	23	0.443	24	38
4	2	3.50	1	18			2105			175	175	1.00	1943							1943	0.090			22	23	0.443	24	38
3	3	3.20	1	15		N	1935	178			178	1.00	1759							1759	0.101	0.101		25	25	0.443	24	36
2	3	3.20	2				4150		213		213	0.00	4150							4150	0.051			13	25	0.443	15	43
1	3	3.20	1	24			2075			101	101	1.00	1953							1953	0.052			13	25	0.443	12	46
11,12	4	3.20	1	17		N	1935	92	0		92	1.00	1778							1778	0.052	0.052	3	13	16	0.443	12	47
10,11	4	3.20	1	17			2075		61	5	66	0.08	2061							2061	0.032			8	16	0.443	6	53
10	4	3.20	1	24			2075			61	61	1.00	1953							1953	0.031			8	16	0.443	6	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

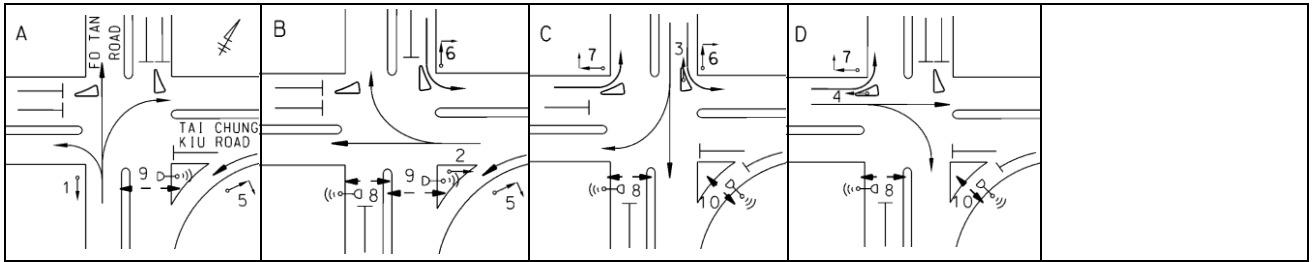
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Reference AM	FILENAME : J10_FTR_TCKR.xlsx	Checked By:	SLN	Sep-26
J10 Fo Tan Road / Tai Chung Kiu Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.654
Loss time		L =	21 sec
Total Flow		=	5416 pcu
Co	= (1.5*L+5)/(1-Y)	=	105.4 sec
Cm	= L/(1-Y)	=	60.7 sec
Yult		=	0.743
R.C.ult	= (Yult-Y)/Y*100%	=	13.6 %
Cp	= 0.9*L/(0.9-Y)	=	76.8 sec
Ymax	= 1-L/C	=	0.838
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**15 %**



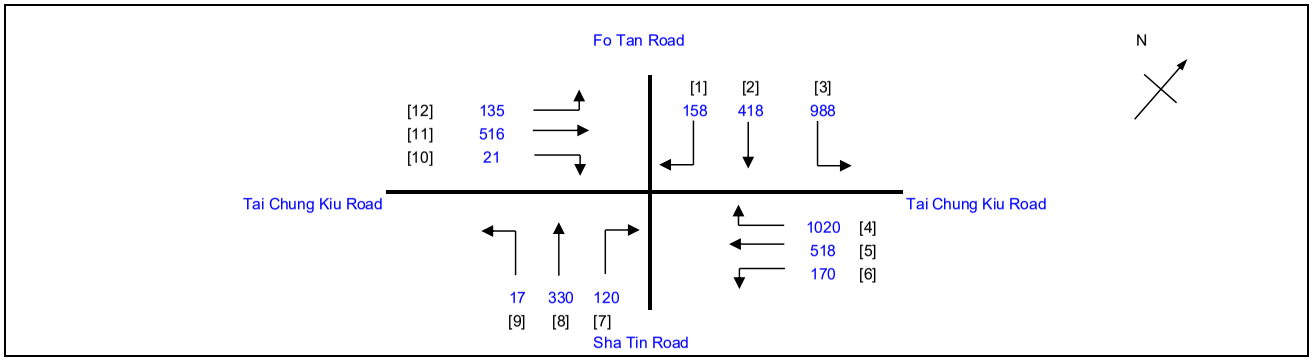
Stage 1	G= 17	Int = 7
Stage 2	G= 55	Int = 6
Stage 3	G= 18	Int = 7
Stage 4	G= 15	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	9	1	96	9
P2	1,2	5	8	8	69	8
P3	3,4	5	5	2	38	5

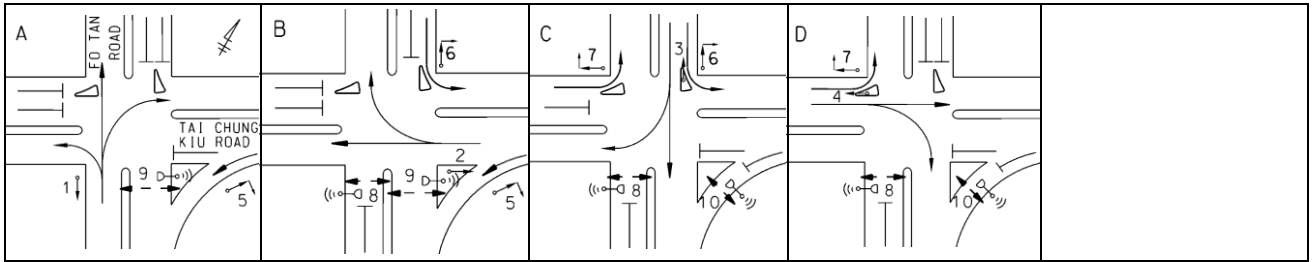
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
8,9	1	3.30	1	8		N	1945	28	175		203	0.14	1896							1896	0.107	0.107		18	18	0.780	42	71
7,8	1	3.30	1	23			2085		129	88	217	0.41	2031							2031	0.107			18	18	0.780	42	69
6	1,2	3.50	1	40		N	1965	186			186	1.00	1894							1894	0.098			16	74	0.780	36	74
5	2	3.00	2				4110		1158		1158	0.00	4110	28	300					4410	0.263			44	56	0.780	81	39
4	2	3.00	2	20			4110			1281	1281	1.00	3823							3823	0.335	0.335		56	56	0.780	78	32
3	2,3	3.20	2	12		N	4010	1150			1150	1.00	3564							3564	0.323			54	75	0.780	72	34
2	3	3.20	2				4150		404		404	0.00	4150							4150	0.097			16	19	0.780	39	61
1	3	3.60	1	20			2115			224	224	1.00	1967							1967	0.114	0.114		19	19	0.780	42	68
12	3,4	3.00	1	12		N	1915	155			155	1.00	1702							1702	0.091			15	35	0.780	30	79
11	4	3.00	1				2055		201		201	0.00	2055							2055	0.098	0.098		16	16	0.780	42	72
10,11	4	3.00	1	21			2055		201	0	201	0.00	2055							2055	0.098			16	16	0.780	42	72
10	4	3.00	1	21			2055			36	36	1.00	1918							1918	0.019			3	16	0.780	12	181

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J10 Fo Tan Road / Tai Chung Kiu Road		FILENAME : J10_FTR_TCKR.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.612
Loss time		L =	21 sec
Total Flow		=	4411 pcu
Co	= (1.5*L+5)/(1-Y)	=	94.1 sec
Cm	= L/(1-Y)	=	54.1 sec
Yult		=	0.743
R.C.ult	= (Yult-Y)/Y*100%	=	21.3 %
Cp	= 0.9*L/(0.9-Y)	=	65.6 sec
Ymax	= 1-L/C	=	0.838
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**23 %**



Stage 1	G= 20	Int = 7
Stage 2	G= 47	Int = 6
Stage 3	G= 17	Int = 7
Stage 4	G= 21	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	9	1	93	9
P2	1,2	5	8	8	64	8
P3	3,4	5	5	2	43	5

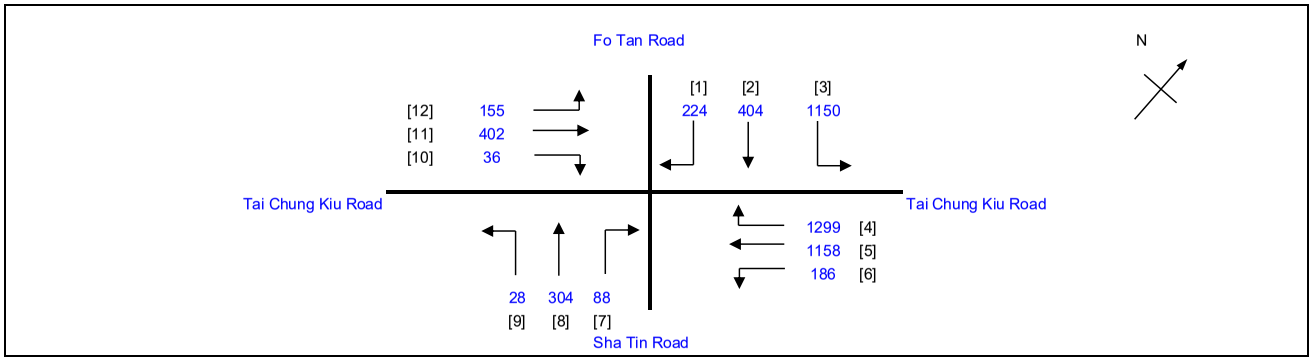
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
8,9	1	3.30	1	8		N	1945	17	211		228	0.07	1918							1918	0.119	0.119		21	21	0.730	42	61
7,8	1	3.30	1	23			2085		119	120	239	0.50	2019							2019	0.118			21	21	0.730	42	60
6	1,2	3.50	1	40		N	1965	170			170	1.00	1894							1894	0.090			16	69	0.730	30	68
5	2	3.00	2				4110		518		518	0.00	4110	28	350					4460	0.116			21	48	0.730	45	53
4	2	3.00	2	20			4110			1020	1020	1.00	3823							3823	0.267	0.267		48	48	0.730	69	35
3	2,3	3.20	2	12		N	4010	988			988	1.00	3564							3564	0.277			49	65	0.730	66	34
2	3	3.20	2				4150		418		418	0.00	4150							4150	0.101	0.101		18	18	0.730	39	56
1	3	3.60	1	20			2115			158	158	1.00	1967							1967	0.080			14	18	0.730	30	71
12	3,4	3.00	1	12		N	1915	135			135	1.00	1702							1702	0.079			14	40	0.730	24	74
11	4	3.00	1				2055		258		258	0.00	2055							2055	0.126	0.126		22	22	0.730	48	58
10,11	4	3.00	1	21			2055		258	0	258	0.00	2055							2055	0.126			22	22	0.730	48	58
10	4	3.00	1	21			2055			21	21	1.00	1918							1918	0.011			2	22	0.730	6	209

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

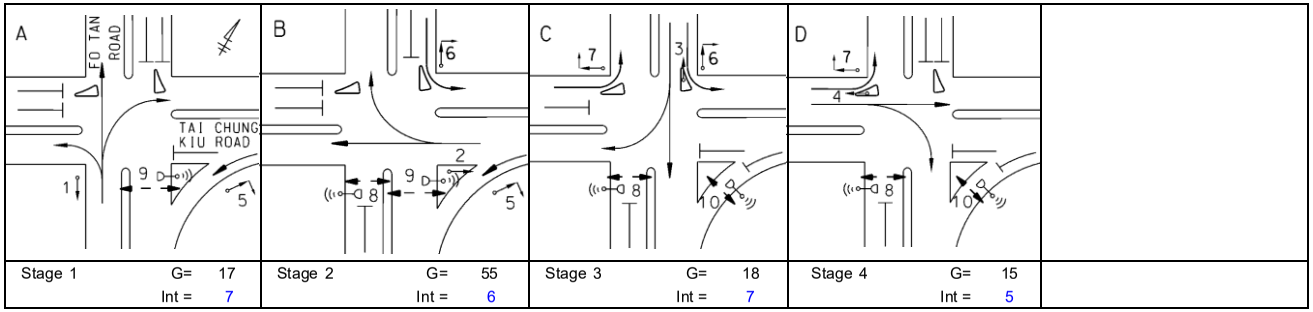
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Design AM	FILENAME : J10_FTR_TCKR.xlsx	Checked By:	SLN	Sep-26
J10 Fo Tan Road / Tai Chung Kiu Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.658
Loss time		L =	21 sec
Total Flow		=	5434 pcu
Co	= (1.5*L+5)/(1-Y)	=	106.9 sec
Cm	= L/(1-Y)	=	61.5 sec
Yult		=	0.743
R.C.ult	= (Yult-Y)/Y*100%	=	12.8 %
Cp	= 0.9*L/(0.9-Y)	=	78.3 sec
Ymax	= 1-L/C	=	0.838
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**15 %**



Stage 1	G= 17	Int = 7
Stage 2	G= 55	Int = 6
Stage 3	G= 18	Int = 7
Stage 4	G= 15	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	9	1	96	9
P2	1,2	5	8	8	69	8
P3	3,4	5	5	2	38	5

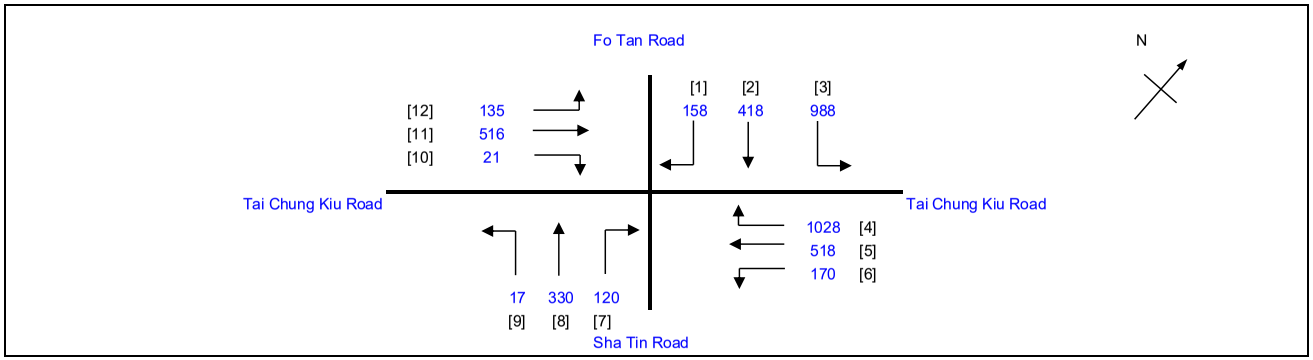
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
8,9	1	3.30	1	8		N	1945	28	175		203	0.14	1896							1896	0.107	0.107		18	18	0.785	42	72
7,8	1	3.30	1	23			2085		129	88	217	0.41	2031							2031	0.107			18	18	0.785	42	70
6	1,2	3.50	1	40		N	1965	186			186	1.00	1894							1894	0.098			16	74	0.785	36	75
5	2	3.00	2				4110		1158		1158	0.00	4110	28	300					4410	0.263			43	56	0.785	81	39
4	2	3.00	2	20			4110			1299	1299	1.00	3823							3823	0.340	0.340		56	56	0.785	78	32
3	2,3	3.20	2	12		N	4010	1150			1150	1.00	3564							3564	0.323			53	75	0.785	72	34
2	3	3.20	2				4150		404		404	0.00	4150							4150	0.097			16	19	0.785	39	61
1	3	3.60	1	20			2115			224	224	1.00	1967							1967	0.114	0.114		19	19	0.785	42	69
12	3,4	3.00	1	12		N	1915	155			155	1.00	1702							1702	0.091			15	35	0.785	30	80
11	4	3.00	1				2055		201		201	0.00	2055							2055	0.098	0.098		16	16	0.785	42	73
10,11	4	3.00	1	21			2055		201	0	201	0.00	2055							2055	0.098			16	16	0.785	42	73
10	4	3.00	1	21			2055			36	36	1.00	1918							1918	0.019			3	16	0.785	12	186

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

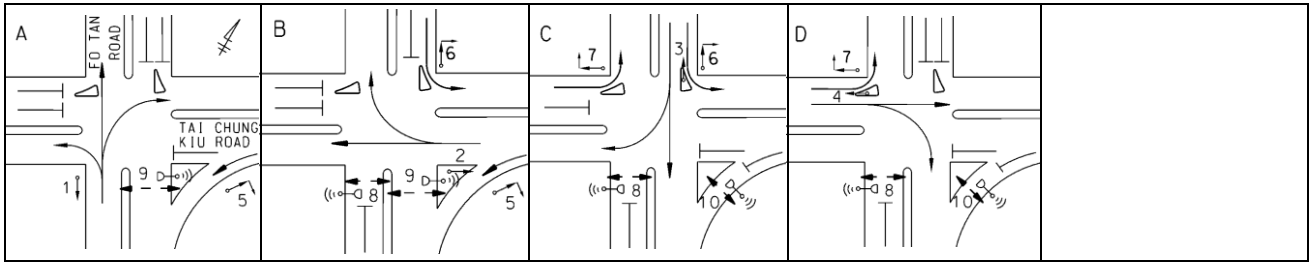
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Design PM	FILENAME : J10_FTR_TCKR.xlsx	Checked By:	SLN	Sep-26
J10 Fo Tan Road / Tai Chung Kiu Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.614
Loss time		L =	21 sec
Total Flow		=	4419 pcu
Co	= (1.5*L+5)/(1-Y)	=	94.6 sec
Cm	= L/(1-Y)	=	54.4 sec
Yult		=	0.743
R.C.ult	= (Yult-Y)/Y*100%	=	20.9 %
Cp	= 0.9*L/(0.9-Y)	=	66.1 sec
Ymax	= 1-L/C	=	0.838
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**23 %**



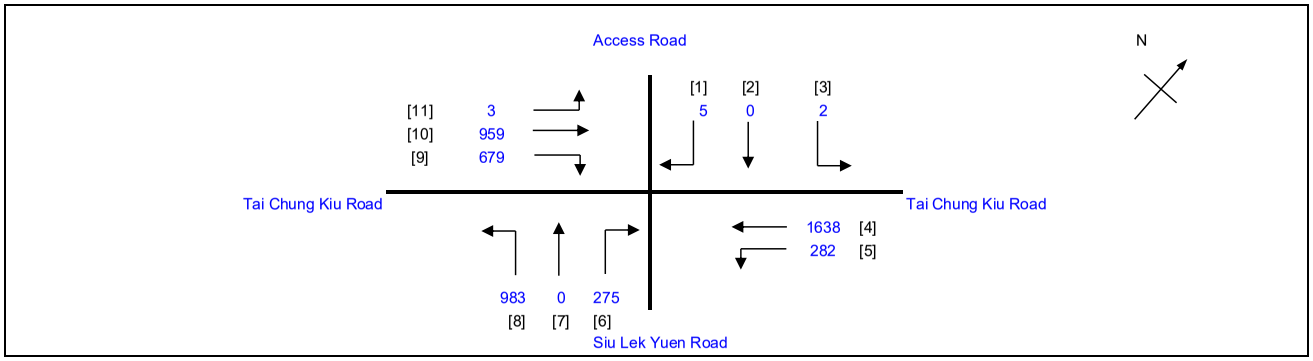
Stage 1	G= 20	Int = 7
Stage 2	G= 47	Int = 6
Stage 3	G= 17	Int = 7
Stage 4	G= 21	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	9	1	93	9
P2	1,2	5	8	8	64	8
P3	3,4	5	5	2	43	5

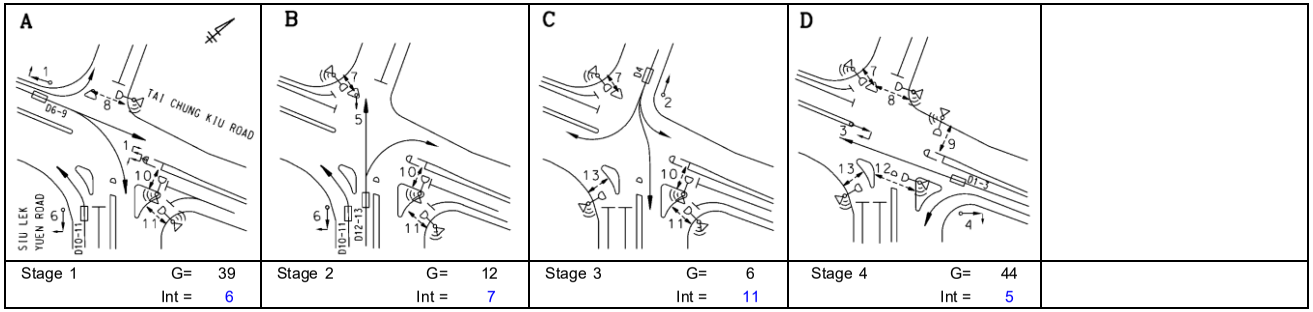
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							21					
8,9	1	3.30	1	8		N	1945	17	211		228	0.07	1918							1918	0.119	0.119		21	21	0.732	42	61
7,8	1	3.30	1	23			2085		119	120	239	0.50	2019							2019	0.118			21	21	0.732	42	60
6	1,2	3.50	1	40		N	1965	170			170	1.00	1894							1894	0.090			16	69	0.732	30	69
5	2	3.00	2				4110		518		518	0.00	4110	28	350					4460	0.116			21	48	0.732	45	53
4	2	3.00	2	20			4110			1028	1028	1.00	3823							3823	0.269	0.269		48	48	0.732	69	35
3	2,3	3.20	2	12		N	4010	988			988	1.00	3564							3564	0.277			49	66	0.732	66	35
2	3	3.20	2				4150		418		418	0.00	4150							4150	0.101	0.101		18	18	0.732	39	56
1	3	3.60	1	20			2115			158	158	1.00	1967							1967	0.080			14	18	0.732	30	71
12	3,4	3.00	1	12		N	1915	135			135	1.00	1702							1702	0.079			14	40	0.732	24	75
11	4	3.00	1				2055		258		258	0.00	2055							2055	0.126	0.126		22	22	0.732	48	59
10,11	4	3.00	1	21			2055		258	0	258	0.00	2055							2055	0.126			22	22	0.732	48	59
10	4	3.00	1	21			2055			21	21	1.00	1918							1918	0.011			2	22	0.732	6	212

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J11 Tai Chung Kiu Road / Siu Lek Yuen Road		FILENAME : J11_TCKR_SLYR.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.567
Loss time		L =	31 sec
Total Flow		=	4826 pcu
Co	= (1.5*L+5)/(1-Y)	=	118.9 sec
Cm	= L/(1-Y)	=	71.6 sec
Yult		=	0.668
R.C.ult	= (Yult-Y)/Y*100%	=	17.7 %
Cp	= 0.9*L/(0.9-Y)	=	83.8 sec
Ymax	= 1-L/C	=	0.762
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**21 %**



Stage 1	G= 39	Int = 6
Stage 2	G= 12	Int = 7
Stage 3	G= 6	Int = 11
Stage 4	G= 44	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	7	3	75	7
P2	1,4	6	9	6	79	9
P3	4	6	10	9	30	10
P4	1,2,3	5	7	7	67	7
P5	1,2,3	5	5	7	69	5
P6	4	10	8	9	32	8
P7	3,4	5	8	5	53	8

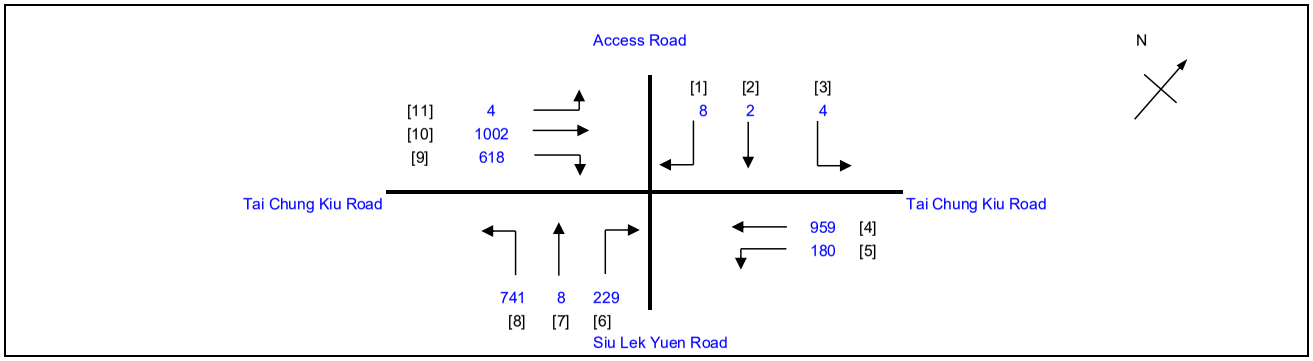
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
11	1	3.20	1	15		N	1935	3			3	1.00	1759							1759	0.002			0	40	0.744	6	1230
10	1	3.20	2				4150		959		959	0.00	4150							4150	0.231	0.231		40	40	0.744	69	40
9	1	3.20	2	27			4150			679	679	1.00	3932							3932	0.173			30	40	0.744	54	47
8	1,2	3.10	2	41		N	3990	983			983	1.00	3849							3849	0.255			45	53	0.744	69	37
6,7	2	3.10	1	13			2065		0	137	137	1.00	1851							1851	0.074			13	13	0.744	30	77
6	2	3.10	1	13			2065			138	138	1.00	1851							1851	0.075	0.075		13	13	0.744	30	77
1,2,3	3	5.50	1	9		N	2165	2	0	5	7	1.00	1856							1856	0.004	0.004	6	1	7	0.744	6	560
5	4	3.65	1	12		N	1980	282			282	1.00	1760							1760	0.160			28	45	0.744	48	55
4	4	3.65	3				6360		1638		1638	0.00	6360							6360	0.258	0.258		45	45	0.744	76	36

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

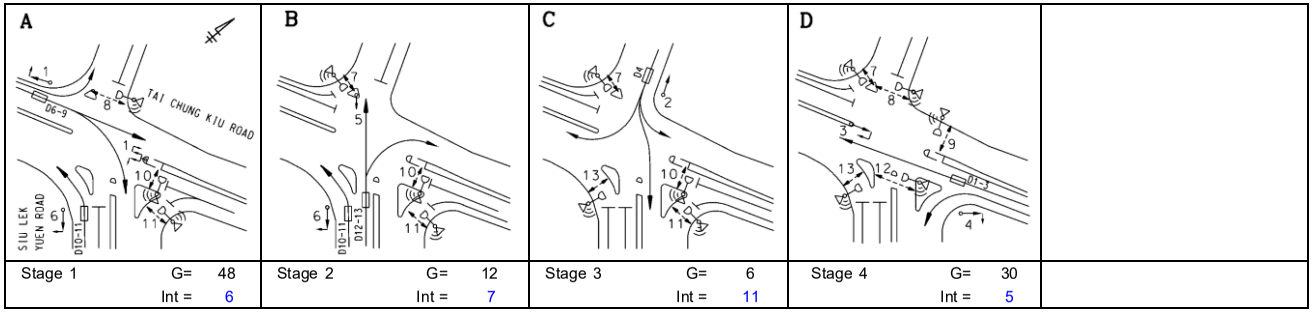
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Reference PM	FILENAME : J11_TCKR_SLYR.xlsx	Checked By:	SLN	Sep-26
J11 Tai Chung Kiu Road / Siu Lek Yuen Road		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	125 sec
Sum(y)		Y =	0.463
Loss time		L =	30 sec
Total Flow		=	3755 pcu
Co	= (1.5*L+5)/(1-Y)	=	93.2 sec
Cm	= L/(1-Y)	=	55.9 sec
Yult		=	0.675
R.C.ult	= (Yult-Y)/Y*100%	=	45.6 %
Cp	= 0.9*L/(0.9-Y)	=	61.8 sec
Ymax	= 1-L/C	=	0.760
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**48 %**



Stage 1	G= 48	Int = 6
Stage 2	G= 12	Int = 7
Stage 3	G= 6	Int = 11
Stage 4	G= 30	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	7	3	61	7
P2	1,4	6	9	6	74	9
P3	4	6	10	9	16	10
P4	1,2,3	5	7	7	76	7
P5	1,2,3	5	5	7	78	5
P6	4	10	8	9	18	8
P7	3,4	5	8	5	38	8

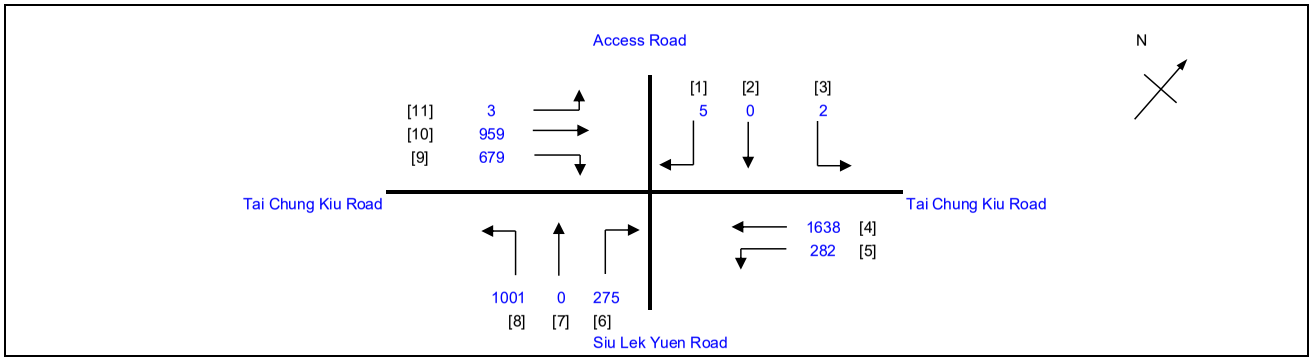
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
11	1	3.20	1	15		N	1935	4			4	1.00	1759							1759	0.002			0	49	0.610	0	442
10	1	3.20	2				4150		1002		1002	0.00	4150							4150	0.241	0.241		49	49	0.610	63	29
9	1	3.20	2	27			4150			618	618	1.00	3932							3932	0.157			32	49	0.610	45	39
8	1,2	3.10	2	41		N	3990	741			741	1.00	3849							3849	0.193			39	63	0.610	51	35
6,7	2	3.10	1	13			2065		8	111	119	0.93	1864							1864	0.064	0.064		13	13	0.610	18	61
6	2	3.10	1	13			2065			118	118	1.00	1851							1851	0.064			13	13	0.610	18	61
1,2,3	3	5.50	1	9		N	2165	4	2	8	14	0.86	1894							1894	0.007	0.007	5	2	7	0.610	0	166
5	4	3.65	1	12		N	1980	180			180	1.00	1760							1760	0.102			21	31	0.610	30	52
4	4	3.65	3				6360		959		959	0.00	6360							6360	0.151	0.151		31	31	0.610	50	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

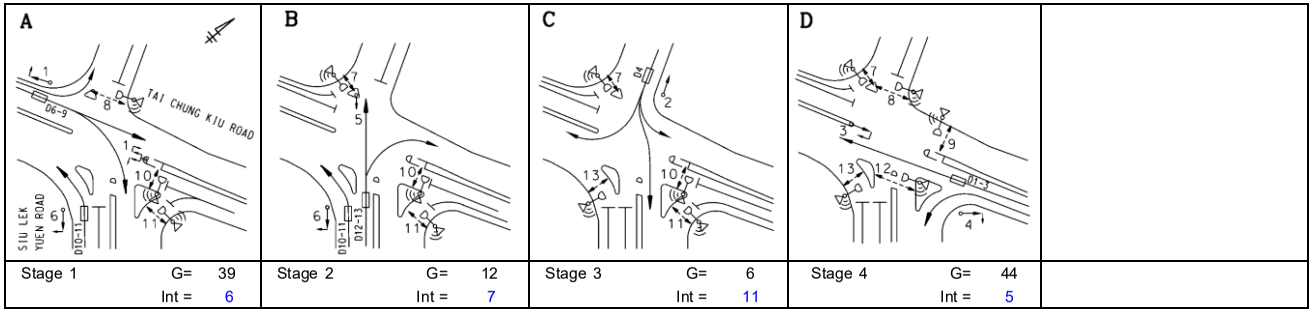
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	Prepared By:	SKL	Sep-26
J11 Tai Chung Kiu Road / Siu Lek Yuen Road	PROJECT NO.: 41010	Checked By:	SLN	Sep-26
	FILENAME : J11_TCKR_SLYR.xlsx	Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.567
Loss time		L =	31 sec
Total Flow		=	4844 pcu
Co	= (1.5*L+5)/(1-Y)	=	118.9 sec
Cm	= L/(1-Y)	=	71.6 sec
Yult		=	0.668
R.C.ult	= (Yult-Y)/Y*100%	=	17.7 %
Cp	= 0.9*L/(0.9-Y)	=	83.8 sec
Ymax	= 1-L/C	=	0.762
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**21 %**



Stage 1	G= 39	Int = 6
Stage 2	G= 12	Int = 7
Stage 3	G= 6	Int = 11
Stage 4	G= 44	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	7	3	75	7
P2	1,4	6	9	6	79	9
P3	4	6	10	9	30	10
P4	1,2,3	5	7	7	67	7
P5	1,2,3	5	5	7	69	5
P6	4	10	8	9	32	8
P7	3,4	5	8	5	53	8

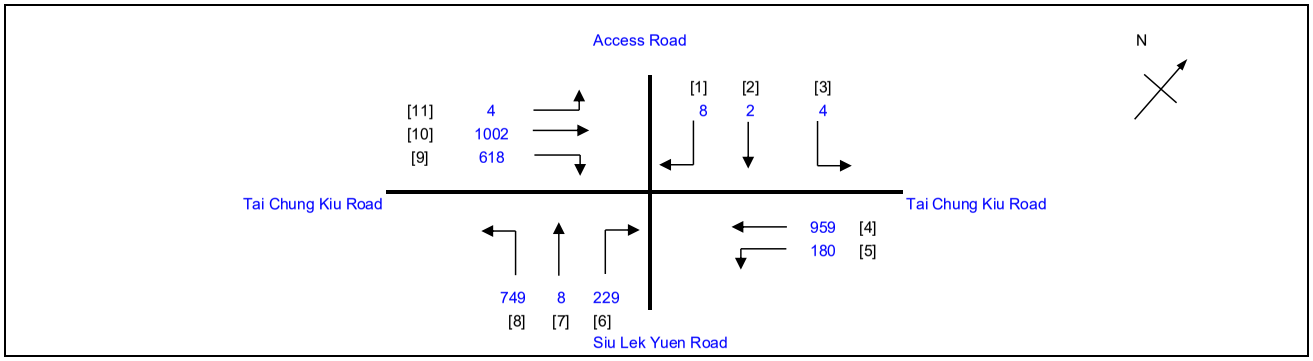
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
11	1	3.20	1	15		N	1935	3			3	1.00	1759							1759	0.002			0	40	0.744	6	1230
10	1	3.20	2				4150		959		959	0.00	4150							4150	0.231	0.231		40	40	0.744	69	40
9	1	3.20	2	27			4150			679	679	1.00	3932							3932	0.173			30	40	0.744	54	47
8	1,2	3.10	2	41		N	3990	1001			1001	1.00	3849							3849	0.260			45	53	0.744	69	37
6,7	2	3.10	1	13			2065		0	137	137	1.00	1851							1851	0.074			13	13	0.744	30	77
6	2	3.10	1	13			2065			138	138	1.00	1851							1851	0.075	0.075		13	13	0.744	30	77
1,2,3	3	5.50	1	9		N	2165	2	0	5	7	1.00	1856							1856	0.004	0.004	6	1	7	0.744	6	560
5	4	3.65	1	12		N	1980	282			282	1.00	1760							1760	0.160			28	45	0.744	48	55
4	4	3.65	3				6360		1638		1638	0.00	6360							6360	0.258	0.258		45	45	0.744	76	36

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

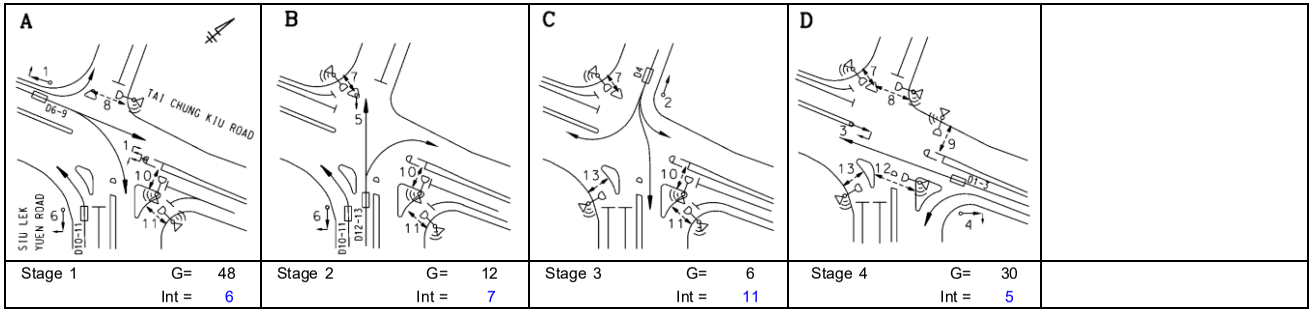
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)			
J11 Tai Chung Kiu Road / Siu Lek Yuen Road	**2036 Design PM**	PROJECT NO.: 41010	Prepared By: SKL Sep-26
		FILENAME : J11_TCKR_SLYR.xlsx	Checked By: SLN Sep-26
			Reviewed By: SLN Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	125 sec
Sum(y)		Y =	0.463
Loss time		L =	30 sec
Total Flow		=	3763 pcu
Co	= (1.5*L+5)/(1-Y)	=	93.2 sec
Cm	= L/(1-Y)	=	55.9 sec
Yult		=	0.675
R.C.ult	= (Yult-Y)/Y*100%	=	45.6 %
Cp	= 0.9*L/(0.9-Y)	=	61.8 sec
Ymax	= 1-L/C	=	0.760
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**48 %**



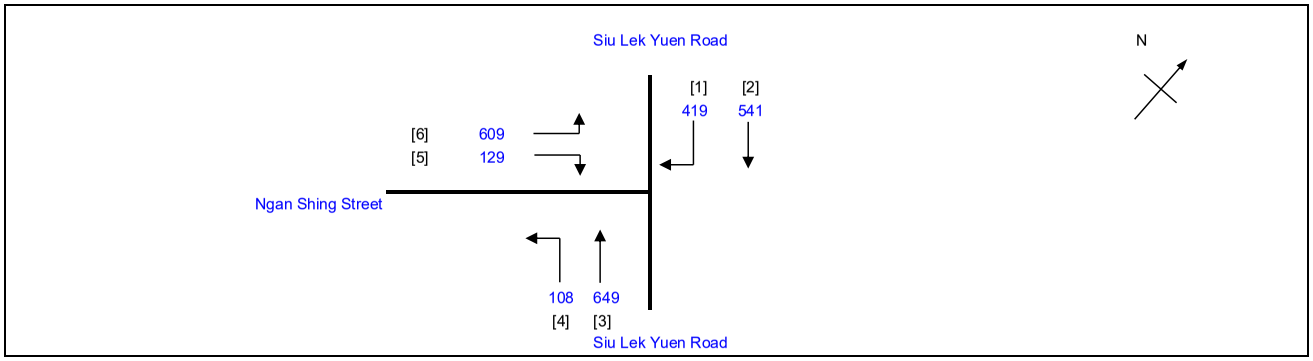
Stage 1	G= 48	Int = 6	Stage 2	G= 12	Int = 7	Stage 3	G= 6	Int = 11	Stage 4	G= 30	Int = 5

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	2,3,4	5	7	3	61	7
P2	1,4	6	9	6	74	9
P3	4	6	10	9	16	10
P4	1,2,3	5	7	7	76	7
P5	1,2,3	5	5	7	78	5
P6	4	10	8	9	18	8
P7	3,4	5	8	5	38	8

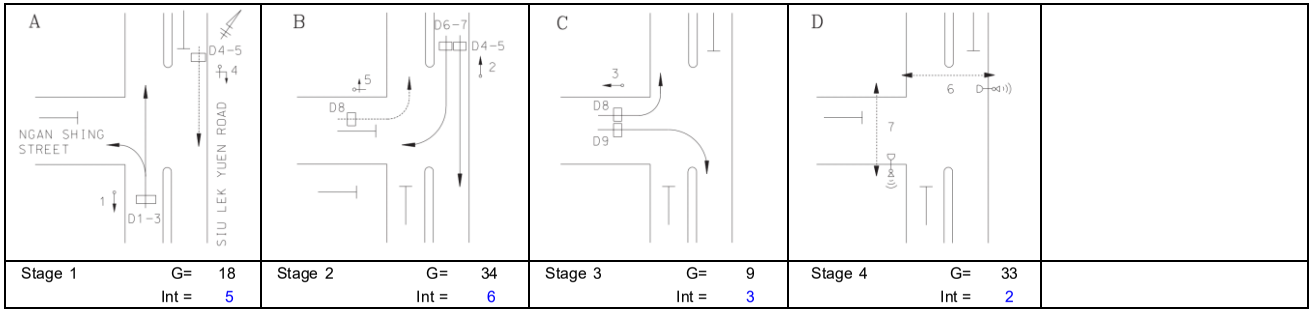
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							25					
11	1	3.20	1	15		N	1935	4			4	1.00	1759							1759	0.002			0	49	0.610	0	442
10	1	3.20	2				4150		1002		1002	0.00	4150							4150	0.241	0.241		49	49	0.610	63	29
9	1	3.20	2	27			4150			618	618	1.00	3932							3932	0.157			32	49	0.610	45	39
8	1,2	3.10	2	41		N	3990	749			749	1.00	3849							3849	0.195			40	63	0.610	51	34
6,7	2	3.10	1	13			2065		8	111	119	0.93	1864							1864	0.064	0.064		13	13	0.610	18	61
6	2	3.10	1	13			2065			118	118	1.00	1851							1851	0.064			13	13	0.610	18	61
1,2,3	3	5.50	1	9		N	2165	4	2	8	14	0.86	1894							1894	0.007	0.007	5	2	7	0.610	0	166
5	4	3.65	1	12		N	1980	180			180	1.00	1760							1760	0.102			21	31	0.610	30	52
4	4	3.65	3				6360		959		959	0.00	6360							6360	0.151	0.151		31	31	0.610	50	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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J12 Siu Lek Yuen Road /Ngan Shing Street		FILENAME : J12_SLYR_NSS.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.431
Loss time		L =	46 sec
Total Flow		=	2455 pcu
Co	= (1.5*L+5)/(1-Y)	=	129.9 sec
Cm	= L/(1-Y)	=	80.8 sec
Yult		=	0.555
R.C.ult	= (Yult-Y)/Y*100%	=	28.9 %
Cp	= 0.9*L/(0.9-Y)	=	88.2 sec
Ymax	= 1-L/C	=	0.582
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**22 %**



Stage 1	G= 18	Int = 5	Stage 2	G= 34	Int = 6	Stage 3	G= 9	Int = 3	Stage 4	G= 33	Int = 2

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	15	13	5	17	13
P2	4	11	10	2	23	10

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)
																							13					
3,4	1	3.30	1	18		N	1945	108	127		235	0.46	1873							1873	0.125	0.125		19	19	0.740	36	54
3	1	3.30	2				4170		522		522	0.00	4170							4170	0.125			19	19	0.740	39	46
2	2	3.80	1			N	1995		541		541	0.00	1995	18	309					2304	0.235	0.235		35	35	0.740	66	36
1	2	3.80	2	17			4270			419	419	1.00	3924							3924	0.107			16	35	0.740	33	49
6	2,3	3.60	1	16			2115	609			609	1.00	1934							1934	0.315			47	45	0.740	60	29
5	3	3.60	1	20		N	1975			129	129	1.00	1837							1837	0.070	0.070		10	10	0.740	24	70
PED	4																						33					

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

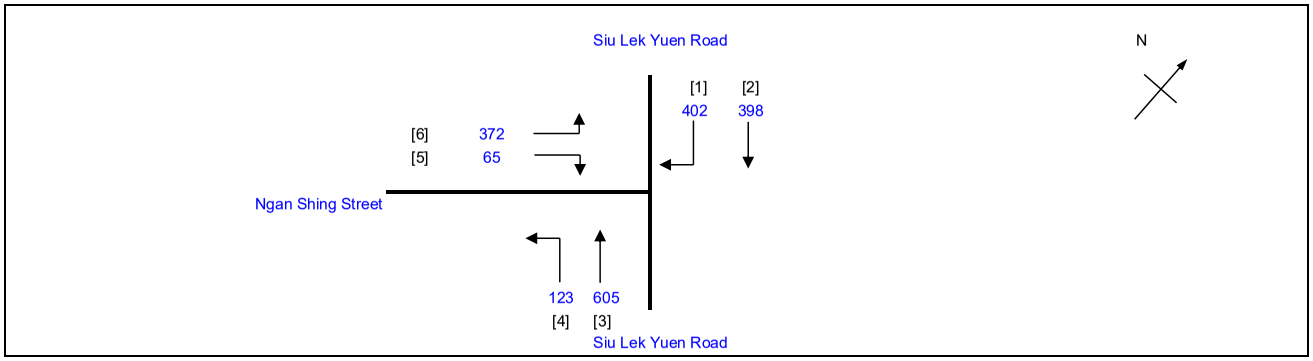
	INITIALS	DATE
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

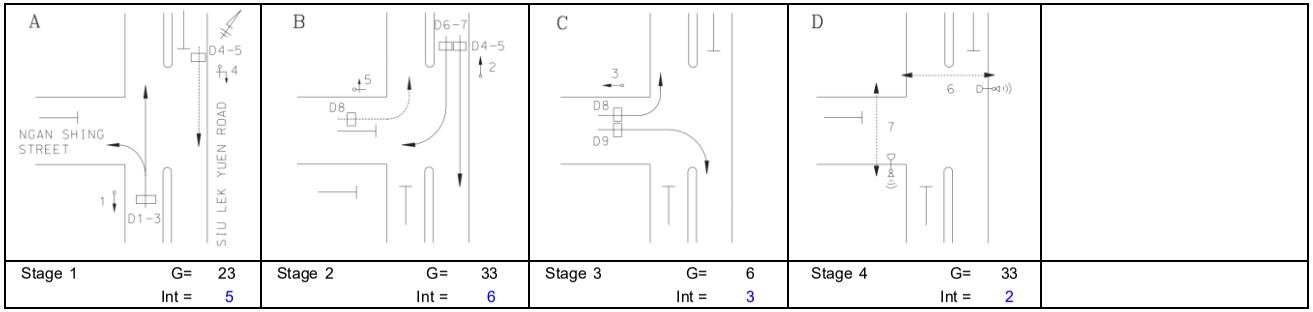
J12 Siu Lek Yuen Road /Ngan Shing Street

2036 Reference PM

PROJECT NO.: 41010
FILENAME : J12_SLYR_NSS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.328
Loss time		L =	46 sec
Total Flow		=	1965 pcu
Co	= (1.5*L+5)/(1-Y)	=	110.2 sec
Cm	= L/(1-Y)	=	68.5 sec
Yult		=	0.555
R.C.ult	= (Yult-Y)/Y*100%	=	69.0 %
Cp	= 0.9*L/(0.9-Y)	=	72.4 sec
Ymax	= 1-L/C	=	0.582
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**59 %**



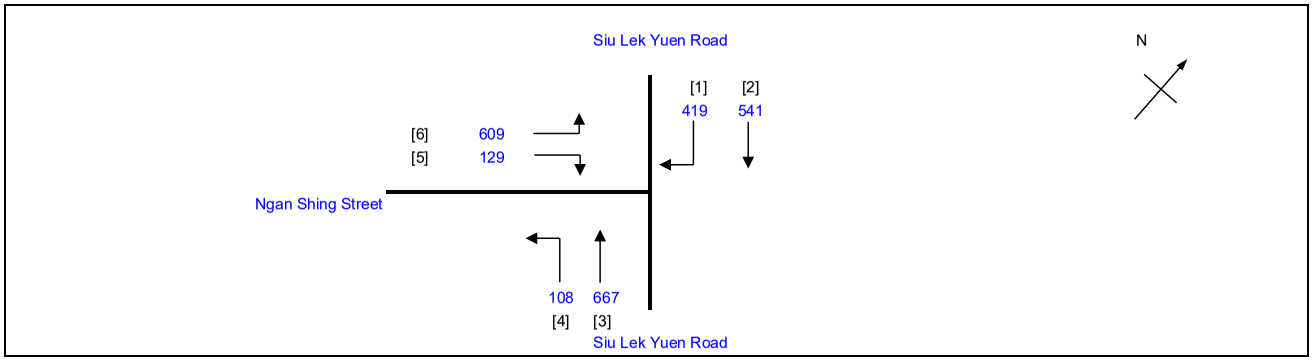
Stage 1	G=	23	Stage 2	G=	33	Stage 3	G= 6
	Int =	5		Int =	6		Int = 3
Stage 4	G=	33					
	Int =	2					

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	15	13	5	17	13
P2	4	11	10	2	23	10

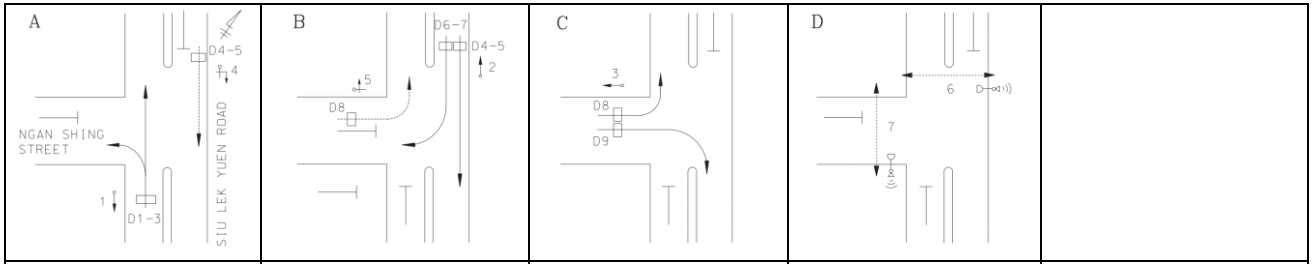
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							13					
3,4	1	3.30	1	18		N	1945	123	102		225	0.55	1860							1860	0.121	0.121		24	24	0.564	30	40
3	1	3.30	2				4170		503		503	0.00	4170							4170	0.121			24	24	0.564	36	37
2	2	3.80	1			N	1995		398		398	0.00	1995	18	318					2313	0.172	0.172		34	34	0.564	48	32
1	2	3.80	2	17			4270			402	402	1.00	3924							3924	0.102			20	34	0.564	30	40
6	2,3	3.60	1	16			2115	372			372	1.00	1934							1934	0.192			37	40	0.564	42	30
5	3	3.60	1	20		N	1975			65	65	1.00	1837							1837	0.035	0.035		7	7	0.564	12	63
PED	4																						33					

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J12 Siu Lek Yuen Road /Ngan Shing Street		FILENAME : J12_SLYR_NSS.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	110 sec
Sum(y)	Y =	0.433
Loss time	L =	46 sec
Total Flow	=	2473 pcu
Co = (1.5*L+5)/(1-Y)	=	130.6 sec
Cm = L/(1-Y)	=	81.2 sec
Yult	=	0.555
R.C.ult = (Yult-Y)/Y*100%	=	28.1 %
Cp = 0.9*L/(0.9-Y)	=	88.7 sec
Ymax = 1-L/C	=	0.582
R.C.(C) = (0.9*Ymax-Y)/Y*100%	**=**	**21 %**



Stage 1	G=	18	Stage 2	G=	34	Stage 3	G= 9
	Int =	5		Int =	6		Int = 3

Stage 4	G=	33
	Int =	2

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	15	13	5	17	13
P2	4	11	10	2	23	10

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)
																							13					
3,4	1	3.30	1	18		N	1945	108	132		240	0.45	1875							1875	0.128			19	19	0.745	36	54
3	1	3.30	2				4170		535		535	0.00	4170							4170	0.128	0.128		19	19	0.745	39	45
2	2	3.80	1			N	1995		541		541	0.00	1995	18	309					2304	0.235	0.235		35	35	0.745	66	37
1	2	3.80	2	17			4270			419	419	1.00	3924							3924	0.107			16	35	0.745	33	49
6	2,3	3.60	1	16			2115	609			609	1.00	1934							1934	0.315			47	45	0.745	60	30
5	3	3.60	1	20		N	1975			129	129	1.00	1837							1837	0.070	0.070		10	10	0.745	24	71
PED	4																						33					

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

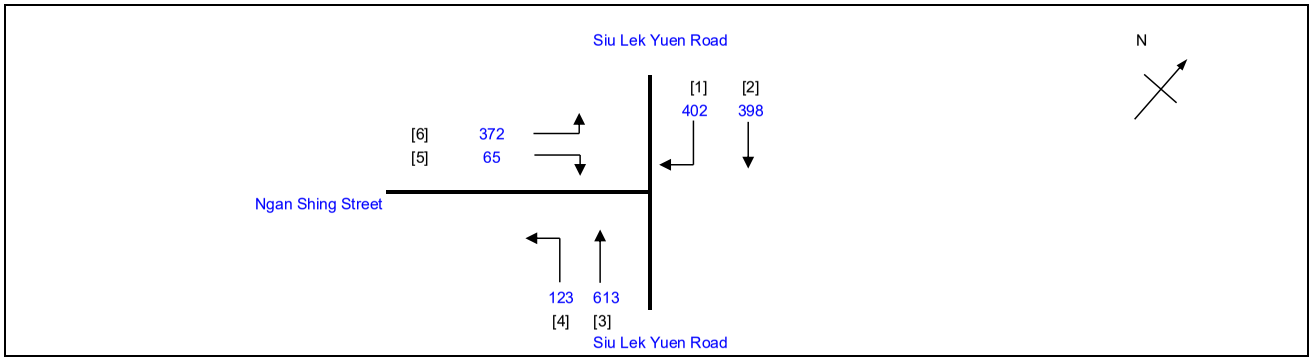
	INITIALS	DATE
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

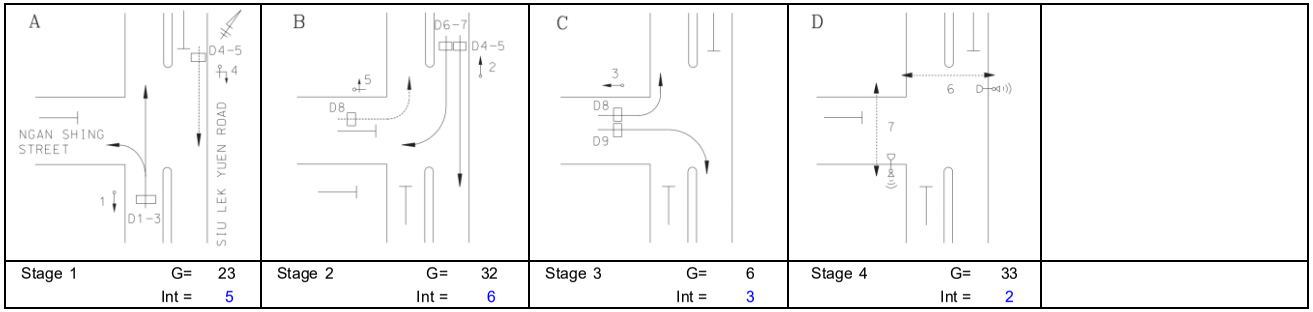
J12 Siu Lek Yuen Road /Ngan Shing Street

2036 Design PM

PROJECT NO.: 41010
FILENAME : J12_SLYR_NSS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	110 sec
Sum(y)		Y =	0.329
Loss time		L =	46 sec
Total Flow		=	1973 pcu
Co	= (1.5*L+5)/(1-Y)	=	110.3 sec
Cm	= L/(1-Y)	=	68.6 sec
Yult		=	0.555
R.C.ult	= (Yult-Y)/Y*100%	=	68.6 %
Cp	= 0.9*L/(0.9-Y)	=	72.5 sec
Ymax	= 1-L/C	=	0.582
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**59 %**



Stage 1	G=	23	Stage 2	G=	32	Stage 3	G= 6
	Int =	5		Int =	6		Int = 3

Stage 4	G=	33
	Int =	2

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	15	13	5	17	13
P2	4	11	10	2	23	10

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)
																							13					
3,4	1	3.30	1	18		N	1945	123	105		228	0.54	1861							1861	0.122	0.122		24	24	0.566	30	40
3	1	3.30	2				4170		508		508	0.00	4170							4170	0.122			24	24	0.566	36	37
2	2	3.80	1			N	1995		398		398	0.00	1995	18	327					2322	0.171	0.171		33	33	0.566	48	32
1	2	3.80	2	17			4270			402	402	1.00	3924							3924	0.102			20	33	0.566	30	40
6	2,3	3.60	1	16			2115	372			372	1.00	1934							1934	0.192			37	40	0.566	42	30
5	3	3.60	1	20		N	1975			65	65	1.00	1837							1837	0.035	0.035		7	7	0.566	12	63
PED	4																						33					

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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

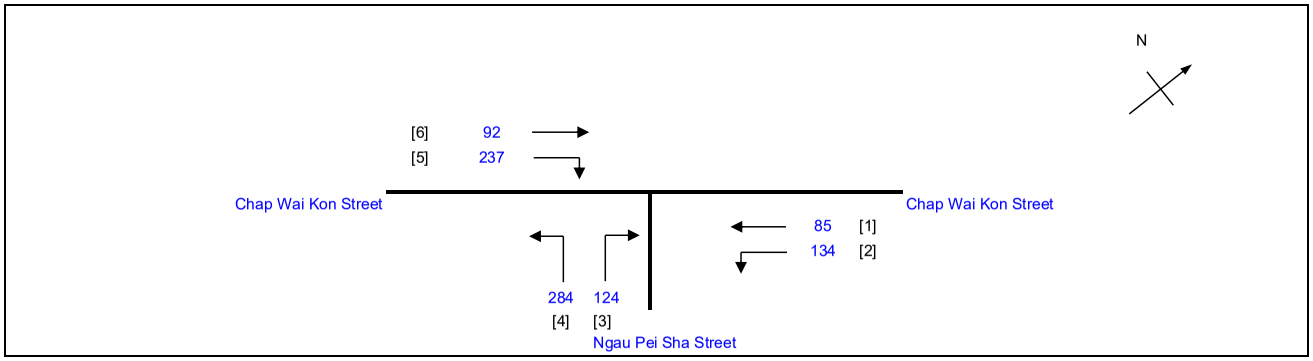
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J13 Chap Wai Kon Street / Ngau Pei Sha Street

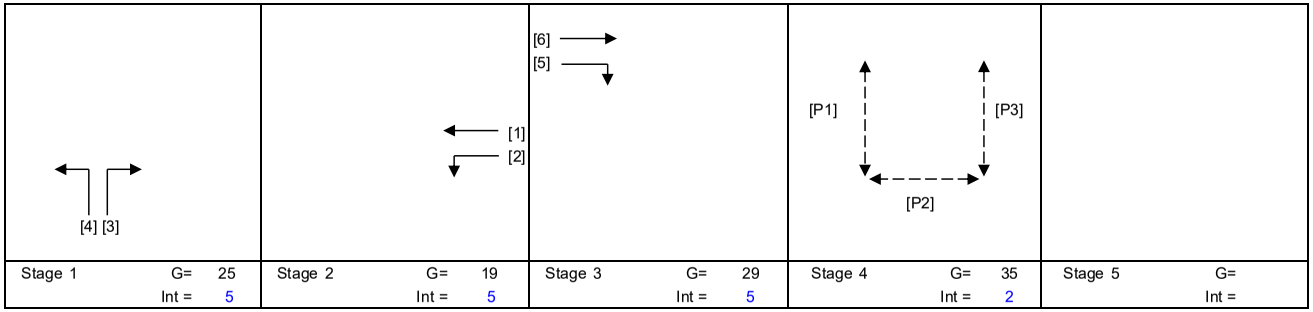
2036 Reference AM

PROJECT NO.: 41010

FILENAME : J13_CWKS_NPSS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	125 sec
Sum(y)		Y =	0.224
Loss time		L =	49 sec
Total Flow		=	956 pcu
Co	= (1.5*L+5)/(1-Y)	=	101.1 sec
Cm	= L/(1-Y)	=	63.1 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	138.0 %
Cp	= 0.9*L/(0.9-Y)	=	65.2 sec
Ymax	= 1-L/C	=	0.608
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**145 %**



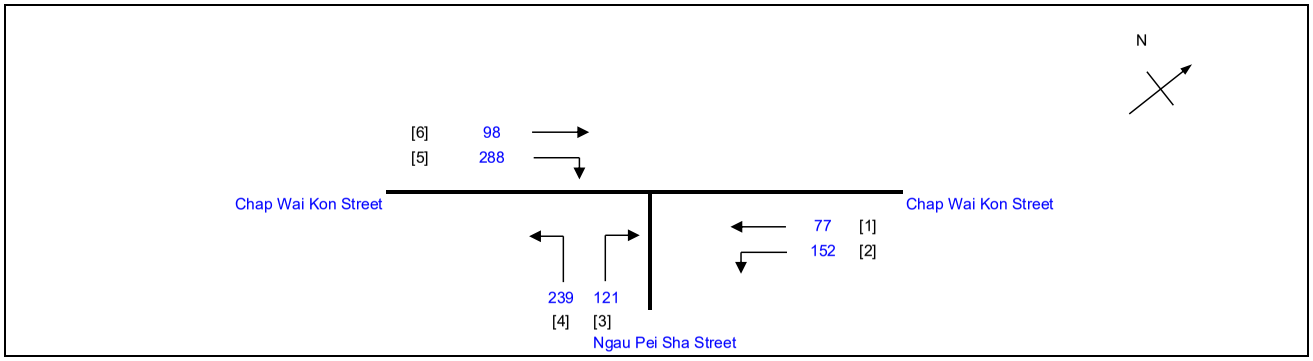
Stage 1	G= 25	Int = 5
Stage 2	G= 19	Int = 5
Stage 3	G= 29	Int = 5
Stage 4	G= 35	Int = 2
Stage 5	G=	Int =

Pedestrian Phase	Stage	Width (m)	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	16	10	8	0	29	8
P2	4	22	13	12	8	17	12
P3	4	16	8	7	4	26	7

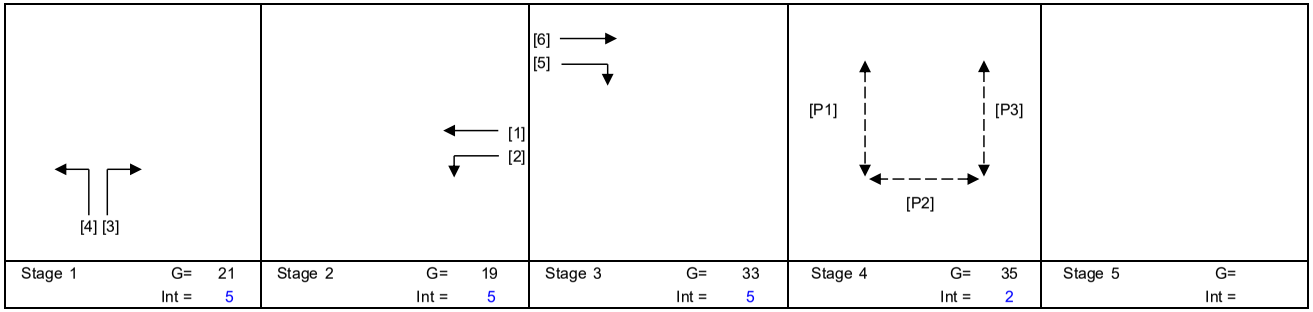
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							14					
4	1	3.20	1	15		N	1935	137			137	1.00	1759							1759	0.078			26	26	0.368	18	40
3,4	1	3.20	1	15			2075	147		0	147	1.00	1886							1886	0.078	0.078		26	26	0.368	24	40
3	1	3.20	1	22			2075			124	124	1.00	1943							1943	0.064			22	26	0.368	18	44
2	2	3.50	1	12		N	1965	101			101	1.00	1747							1747	0.058	0.058		20	20	0.368	12	46
1,2	2	3.50	1	12			2105	33	85		118	0.28	2034							2034	0.058			20	20	0.368	18	45
5,6	3	3.30	1	15		N	1945		92	72	164	0.44	1863							1863	0.088	0.088		30	30	0.368	24	38
5	3	3.30	1	15			2085			165	165	1.00	1895							1895	0.087			30	30	0.368	24	38
PED	4																						35					

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Reference PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J13 Chap Wai Kon Street / Ngau Pei Sha Street		FILENAME : J13_CWKS_NPSS.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	125 sec
Sum(y)		Y =	0.230
Loss time		L =	49 sec
Total Flow		=	975 pcu
Co	= (1.5*L+5)/(1-Y)	=	102.0 sec
Cm	= L/(1-Y)	=	63.7 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	131.3 %
Cp	= 0.9*L/(0.9-Y)	=	65.8 sec
Ymax	= 1-L/C	=	0.608
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**138 %**



Stage 1	G= 21	Int = 5	Stage 2	G= 19	Int = 5	Stage 3	G= 33	Int = 5	Stage 4	G= 35	Int = 2	Stage 5	G=	Int =

Pedestrian Phase	Stage	Width (m)	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	16	10	8	0	29	8
P2	4	22	13	12	8	17	12
P3	4	16	8	7	4	26	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)
																							14					
4	1	3.20	1	15		N	1935	116			116	1.00	1759							1759	0.066	0.066		22	22	0.379	18	44
3,4	1	3.20	1	15			2075	123		0	123	1.00	1886							1886	0.065			22	22	0.379	18	44
3	1	3.20	1	22			2075			121	121	1.00	1943							1943	0.062			21	22	0.379	18	45
2	2	3.50	1	12		N	1965	107			107	1.00	1747							1747	0.061	0.061		20	20	0.379	18	46
1,2	2	3.50	1	12			2105	45	77		122	0.37	2012							2012	0.061			20	20	0.379	18	45
5,6	3	3.30	1	15		N	1945		98	93	191	0.49	1855							1855	0.103	0.103		34	34	0.379	24	35
5	3	3.30	1	15			2085			195	195	1.00	1895							1895	0.103			34	34	0.379	24	35
PED	4																						35					

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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

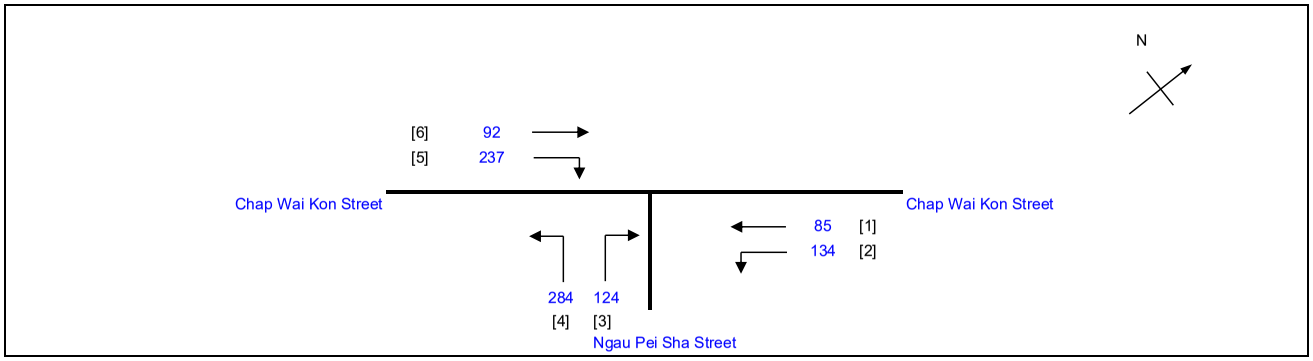
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J13 Chap Wai Kon Street / Ngau Pei Sha Street

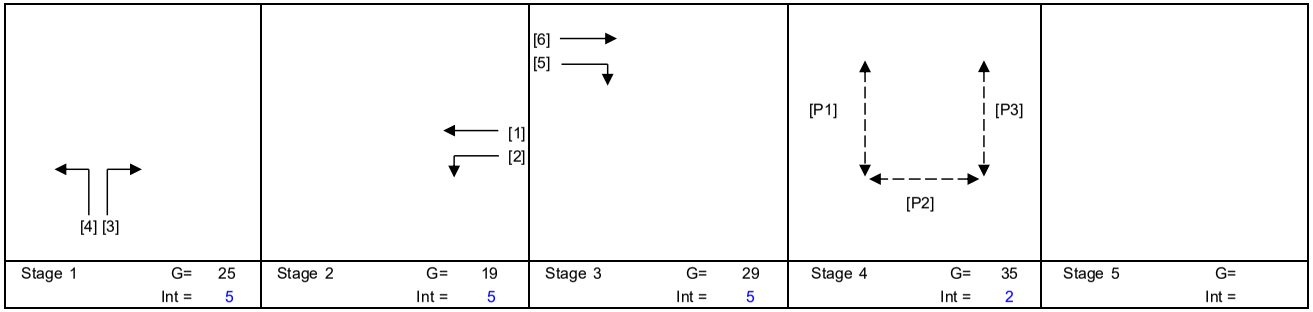
2036 Design AM

PROJECT NO.: 41010

FILENAME : J13_CWKS_NPSS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	125 sec
Sum(y)		Y =	0.224
Loss time		L =	49 sec
Total Flow		=	956 pcu
Co	= (1.5*L+5)/(1-Y)	=	101.1 sec
Cm	= L/(1-Y)	=	63.1 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	138.0 %
Cp	= 0.9*L/(0.9-Y)	=	65.2 sec
Ymax	= 1-L/C	=	0.608
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**145 %**



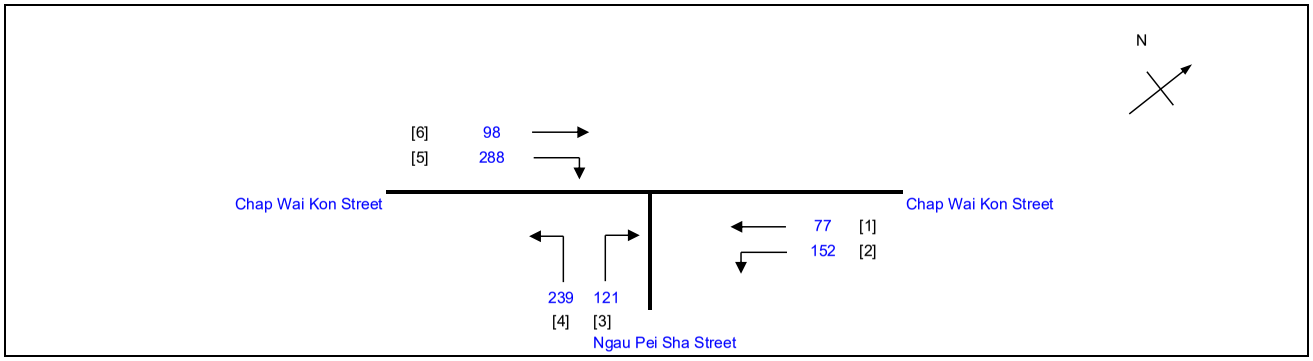
Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
G= 25	G= 19	G= 29	G= 35	G=
Int = 5	Int = 5	Int = 5	Int = 2	Int =

Pedestrian Phase	Stage	Width (m)	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	16	10	8	0	29	8
P2	4	22	13	12	8	17	12
P3	4	16	8	7	4	26	7

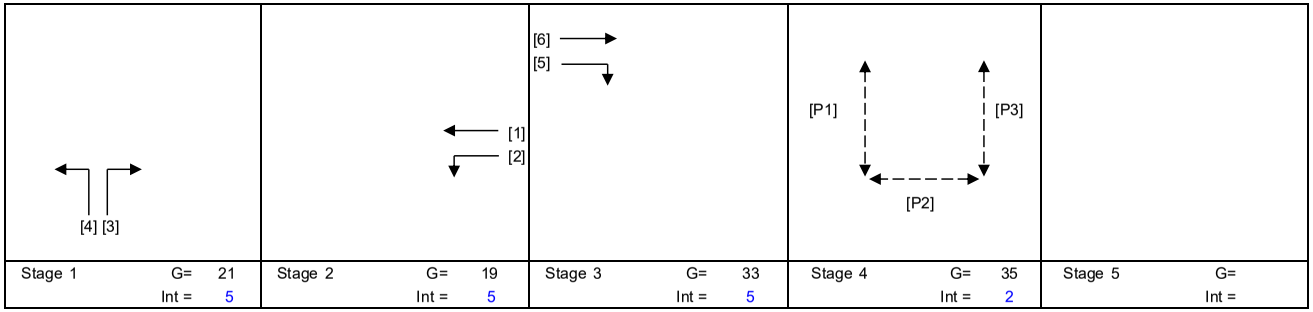
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							14					
4	1	3.20	1	15		N	1935	137			137	1.00	1759							1759	0.078			26	26	0.368	18	40
3,4	1	3.20	1	15			2075	147		0	147	1.00	1886							1886	0.078	0.078		26	26	0.368	24	40
3	1	3.20	1	22			2075			124	124	1.00	1943							1943	0.064			22	26	0.368	18	44
2	2	3.50	1	12		N	1965	101			101	1.00	1747							1747	0.058	0.058		20	20	0.368	12	46
1,2	2	3.50	1	12			2105	33	85		118	0.28	2034							2034	0.058			20	20	0.368	18	45
5,6	3	3.30	1	15		N	1945		92	72	164	0.44	1863							1863	0.088	0.088		30	30	0.368	24	38
5	3	3.30	1	15			2085			165	165	1.00	1895							1895	0.087			30	30	0.368	24	38
PED	4																						35					

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
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design PM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
		FILENAME : J13_CWKS_NPSS.xlsx	Checked By:	SLN	Sep-26
J13 Chap Wai Kon Street / Ngau Pei Sha Street			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	125 sec
Sum(y)		Y =	0.230
Loss time		L =	49 sec
Total Flow		=	975 pcu
Co	= (1.5*L+5)/(1-Y)	=	102.0 sec
Cm	= L/(1-Y)	=	63.7 sec
Yult		=	0.533
R.C.ult	= (Yult-Y)/Y*100%	=	131.3 %
Cp	= 0.9*L/(0.9-Y)	=	65.8 sec
Ymax	= 1-L/C	=	0.608
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**138 %**



Stage 1	G= 21	Int = 5	Stage 2	G= 19	Int = 5	Stage 3	G= 33	Int = 5	Stage 4	G= 35	Int = 2	Stage 5	G=	Int =

Pedestrian Phase	Stage	Width (m)	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	4	16	10	8	0	29	8
P2	4	22	13	12	8	17	12
P3	4	16	8	7	4	26	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)
																							14					
4	1	3.20	1	15		N	1935	116			116	1.00	1759							1759	0.066	0.066		22	22	0.379	18	44
3,4	1	3.20	1	15			2075	123		0	123	1.00	1886							1886	0.065			22	22	0.379	18	44
3	1	3.20	1	22			2075			121	121	1.00	1943							1943	0.062			21	22	0.379	18	45
2	2	3.50	1	12		N	1965	107			107	1.00	1747							1747	0.061	0.061		20	20	0.379	18	46
1,2	2	3.50	1	12			2105	45	77		122	0.37	2012							2012	0.061			20	20	0.379	18	45
5,6	3	3.30	1	15		N	1945		98	93	191	0.49	1855							1855	0.103	0.103		34	34	0.379	24	35
5	3	3.30	1	15			2085			195	195	1.00	1895							1895	0.103			34	34	0.379	24	35
PED	4																						35					

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

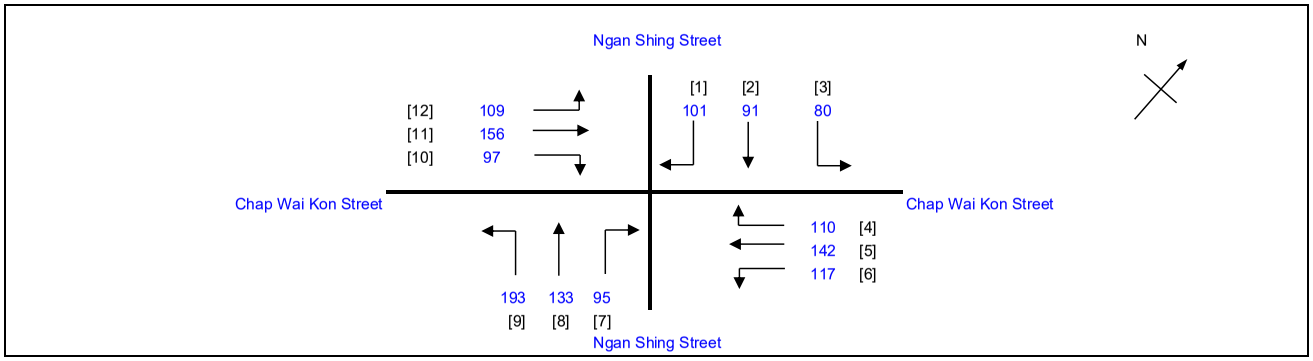
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

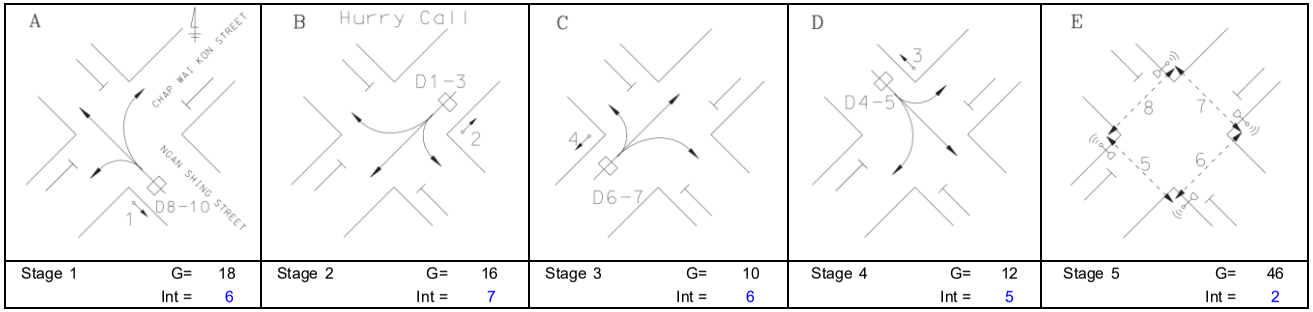
	INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)		
J14 Chap Wai Kon Street / Ngan Shing Street		

2036 Reference AM

PROJECT NO.:	41010	Prepared By:	SKL	Sep-26
FILENAME :	J14_CWKS_NSS.xlsx	Checked By:	SLN	Sep-26
		Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	128 sec
Sum(y)	Y =	0.342
Loss time	L =	68 sec
Total Flow	=	1424 pcu
Co = (1.5*L+5)/(1-Y)	=	162.5 sec
Cm = L/(1-Y)	=	103.3 sec
Yult	=	0.390
R.C.ult = (Yult-Y)/Y*100%	=	14.2 %
Cp = 0.9*L/(0.9-Y)	=	109.6 sec
Ymax = 1-L/C	=	0.469
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**23 %**



Stage 1	G= 18	Int = 6
Stage 2	G= 16	Int = 7
Stage 3	G= 10	Int = 6
Stage 4	G= 12	Int = 5
Stage 5	G= 46	Int = 2

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	5	12	11	6	31	11
P2	5	13	12	4	32	12
P3	5	13	12	4	32	12
P4	5	11	9	0	39	9

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)
																							22					
9	1	3.30	1	14		N	1945	193			193	1.00	1757							1757	0.110	0.110		19	19	0.729	36	63
8	1	3.30	1				2085		118		118	0.00	2085							2085	0.057			10	19	0.729	24	79
7,8	1	3.30	1	19			2085		15	95	110	0.86	1952							1952	0.056			10	19	0.729	24	81
5,6	2	3.40	1	12		N	1955	117	58		175	0.67	1804							1804	0.097			17	17	0.729	30	66
4,5	2	3.40	1	17			2095		84	110	194	0.57	1995							1995	0.097	0.097		17	17	0.729	36	64
11,12	3	3.40	1	14		N	1955	109	1		110	0.99	1767							1767	0.062	0.062		11	11	0.729	24	80
10,11	3	3.40	2	18			4190		155	97	252	0.38	4060							4060	0.062			11	11	0.729	24	64
2,3	4	3.40	1	11		N	1955	80	49		129	0.62	1803							1803	0.072			13	13	0.729	24	75
1,2	4	3.40	1	18			2095		42	101	143	0.71	1979							1979	0.072	0.072		13	13	0.729	30	73
PED	5																						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

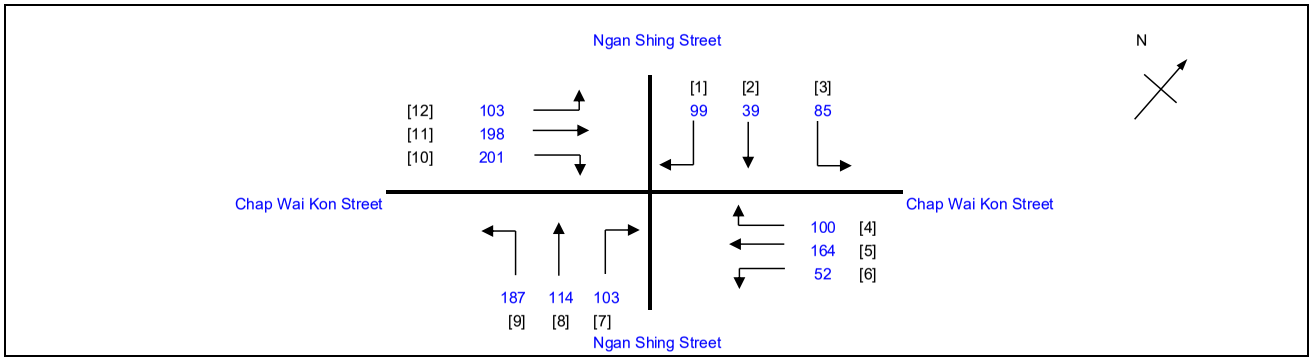
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

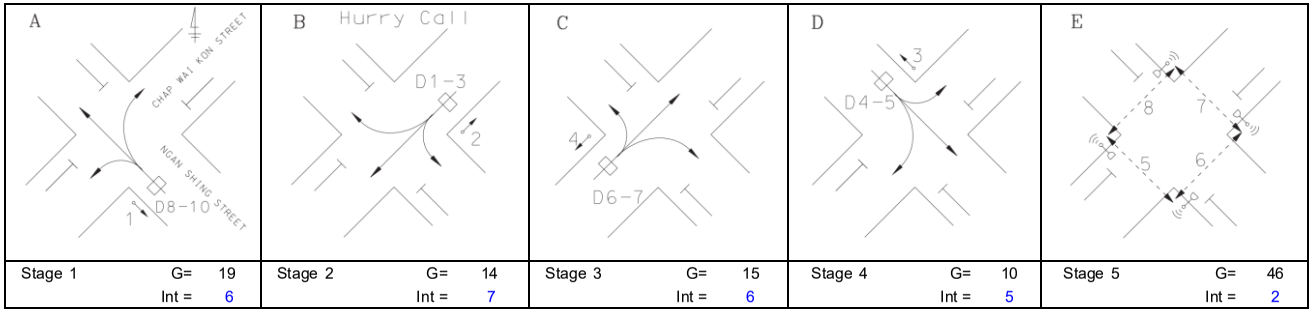
	INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)		
J14 Chap Wai Kon Street / Ngan Shing Street		

2036 Reference PM

PROJECT NO.:	41010	Prepared By:	SKL	Sep-26
FILENAME :	J14_CWKS_NSS.xlsx	Checked By:	SLN	Sep-26
		Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	130 sec
Sum(y)	Y =	0.335
Loss time	L =	68 sec
Total Flow	=	1445 pcu
Co = (1.5*L+5)/(1-Y)	=	160.8 sec
Cm = L/(1-Y)	=	102.2 sec
Yult	=	0.390
R.C.ult = (Yult-Y)/Y*100%	=	16.6 %
Cp = 0.9*L/(0.9-Y)	=	108.2 sec
Ymax = 1-L/C	=	0.477
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**28 %**



Stage 1	G= 19	Int = 6
Stage 2	G= 14	Int = 7
Stage 3	G= 15	Int = 6
Stage 4	G= 10	Int = 5
Stage 5	G= 46	Int = 2

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	5	12	11	6	31	11
P2	5	13	12	4	32	12
P3	5	13	12	4	32	12
P4	5	11	9	0	39	9

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)
																							22					
9	1	3.30	1	14		N	1945	187			187	1.00	1757							1757	0.106	0.106		20	20	0.702	36	61
8	1	3.30	1				2085		112		112	0.00	2085							2085	0.054			10	20	0.702	24	77
7,8	1	3.30	1	19			2085		2	103	105	0.98	1935							1935	0.054			10	20	0.702	24	78
5,6	2	3.40	1	12		N	1955	52	101		153	0.34	1875							1875	0.082			15	15	0.702	30	67
4,5	2	3.40	1	17			2095		63	100	163	0.61	1987							1987	0.082	0.082		15	15	0.702	30	66
11,12	3	3.40	1	14		N	1955	103	54		157	0.66	1827							1827	0.086			16	16	0.702	30	66
10,11	3	3.40	2	18			4190		144	201	345	0.58	3996							3996	0.086	0.086		16	16	0.702	30	57
2,3	4	3.40	1	11		N	1955	85	21		106	0.80	1762							1762	0.060			11	11	0.702	24	77
1,2	4	3.40	1	18			2095		18	99	117	0.85	1957							1957	0.060	0.060		11	11	0.702	24	75
PED	5																						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

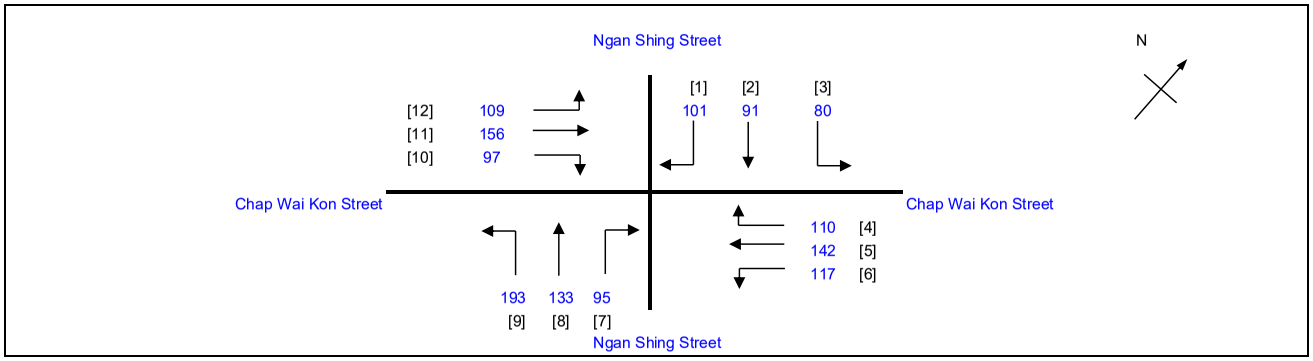
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

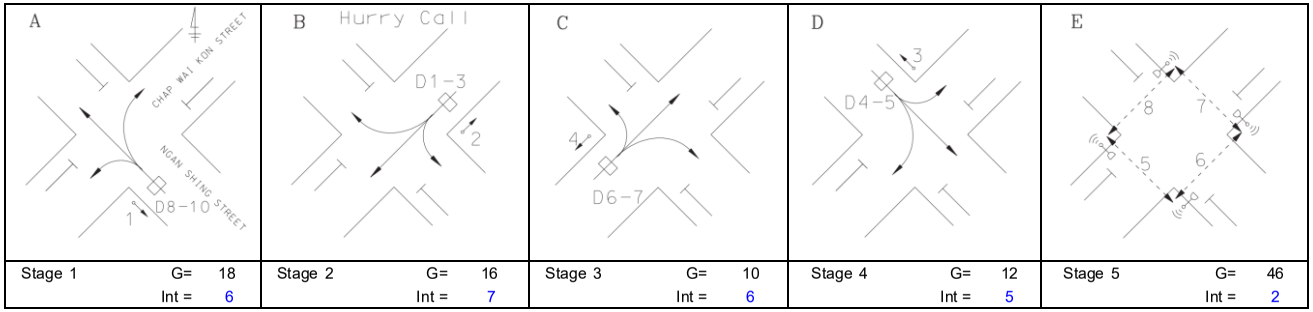
	INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)		
J14 Chap Wai Kon Street / Ngan Shing Street		

2036 Design AM

PROJECT NO.:	41010	Prepared By:	SKL	Sep-26
FILENAME :	J14_CWKS_NSS.xlsx	Checked By:	SLN	Sep-26
		Reviewed By:	SLN	Sep-26



No. of stages per cycle	N =	4
Cycle time	C =	128 sec
Sum(y)	Y =	0.342
Loss time	L =	68 sec
Total Flow	=	1424 pcu
Co = (1.5*L+5)/(1-Y)	=	162.5 sec
Cm = L/(1-Y)	=	103.3 sec
Yult	=	0.390
R.C.ult = (Yult-Y)/Y*100%	=	14.2 %
Cp = 0.9*L/(0.9-Y)	=	109.6 sec
Ymax = 1-L/C	=	0.469
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	**23 %**



Stage 1	G=	18	Stage 2	G=	16	Stage 3	G=	10
	Int =	6		Int =	7		Int =	6
Stage 4	G=	12	Stage 5	G=	46			
	Int =	5		Int =	2			

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	5	12	11	6	31	11
P2	5	13	12	4	32	12
P3	5	13	12	4	32	12
P4	5	11	9	0	39	9

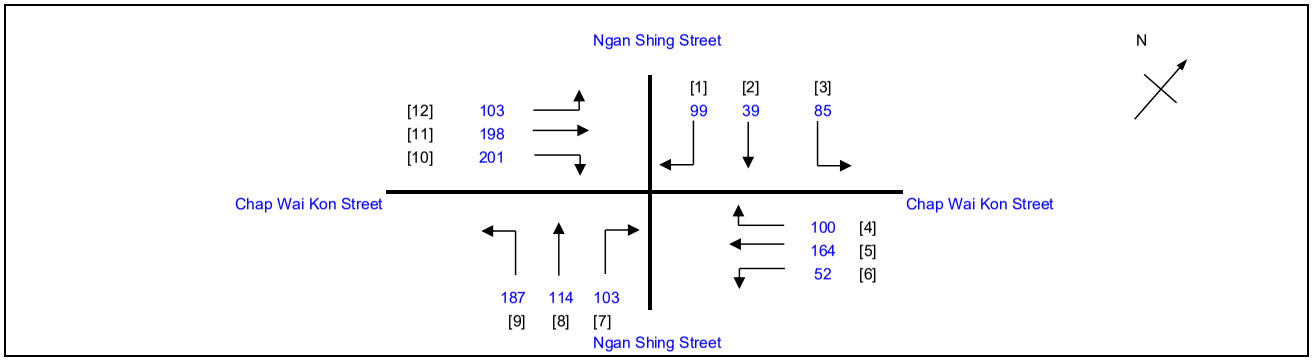
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							22					
9	1	3.30	1	14		N	1945	193			193	1.00	1757							1757	0.110	0.110		19	19	0.729	36	63
8	1	3.30	1				2085		118		118	0.00	2085							2085	0.057			10	19	0.729	24	79
7,8	1	3.30	1	19			2085		15	95	110	0.86	1952							1952	0.056			10	19	0.729	24	81
5,6	2	3.40	1	12		N	1955	117	58		175	0.67	1804							1804	0.097			17	17	0.729	30	66
4,5	2	3.40	1	17			2095		84	110	194	0.57	1995							1995	0.097	0.097		17	17	0.729	36	64
11,12	3	3.40	1	14		N	1955	109	1		110	0.99	1767							1767	0.062	0.062		11	11	0.729	24	80
10,11	3	3.40	2	18			4190		155	97	252	0.38	4060							4060	0.062			11	11	0.729	24	64
2,3	4	3.40	1	11		N	1955	80	49		129	0.62	1803							1803	0.072			13	13	0.729	24	75
1,2	4	3.40	1	18			2095		42	101	143	0.71	1979							1979	0.072	0.072		13	13	0.729	30	73
PED	5																						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

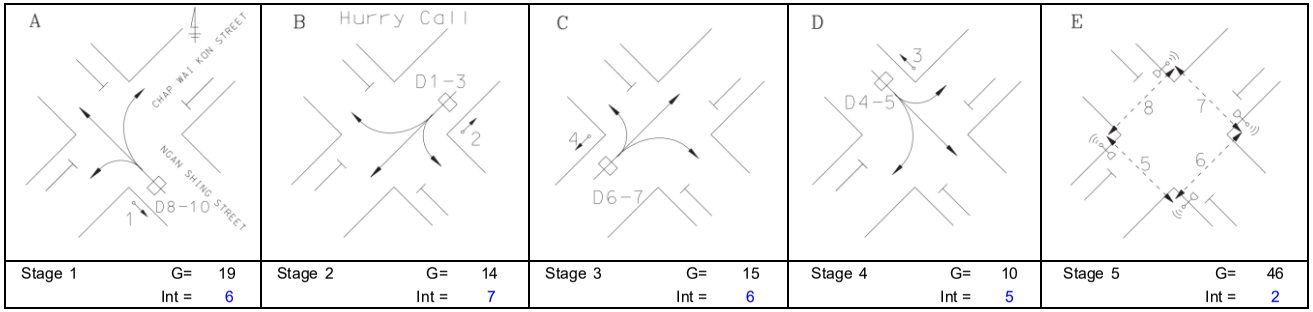
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Design PM	FILENAME : J14_CWKS_NSS.xlsx	Checked By:	SLN	Sep-26
J14 Chap Wai Kon Street / Ngan Shing Street		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	130 sec
Sum(y)		Y =	0.335
Loss time		L =	68 sec
Total Flow		=	1445 pcu
Co	= (1.5*L+5)/(1-Y)	=	160.8 sec
Cm	= L/(1-Y)	=	102.2 sec
Yult		=	0.390
R.C.ult	= (Yult-Y)/Y*100%	=	16.6 %
Cp	= 0.9*L/(0.9-Y)	=	108.2 sec
Ymax	= 1-L/C	=	0.477
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**28 %**



Stage 1	G= 19	Int = 6	Stage 2	G= 14	Int = 7	Stage 3	G= 15	Int = 6	Stage 4	G= 10	Int = 5	Stage 5	G= 46	Int = 2

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	5	12	11	6	31	11
P2	5	13	12	4	32	12
P3	5	13	12	4	32	12
P4	5	11	9	0	39	9

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)
																							22					
9	1	3.30	1	14		N	1945	187			187	1.00	1757							1757	0.106	0.106		20	20	0.702	36	61
8	1	3.30	1				2085		112		112	0.00	2085							2085	0.054			10	20	0.702	24	77
7,8	1	3.30	1	19			2085		2	103	105	0.98	1935							1935	0.054			10	20	0.702	24	78
5,6	2	3.40	1	12		N	1955	52	101		153	0.34	1875							1875	0.082			15	15	0.702	30	67
4,5	2	3.40	1	17			2095		63	100	163	0.61	1987							1987	0.082	0.082		15	15	0.702	30	66
11,12	3	3.40	1	14		N	1955	103	54		157	0.66	1827							1827	0.086			16	16	0.702	30	66
10,11	3	3.40	2	18			4190		144	201	345	0.58	3996							3996	0.086	0.086		16	16	0.702	30	57
2,3	4	3.40	1	11		N	1955	85	21		106	0.80	1762							1762	0.060			11	11	0.702	24	77
1,2	4	3.40	1	18			2095		18	99	117	0.85	1957							1957	0.060	0.060		11	11	0.702	24	75
PED	5																						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

		INITIALS	DATE
Prepared By:		SKL	Sep-26
Checked By:		SLN	Sep-26
Reviewed By:		SLN	Sep-26

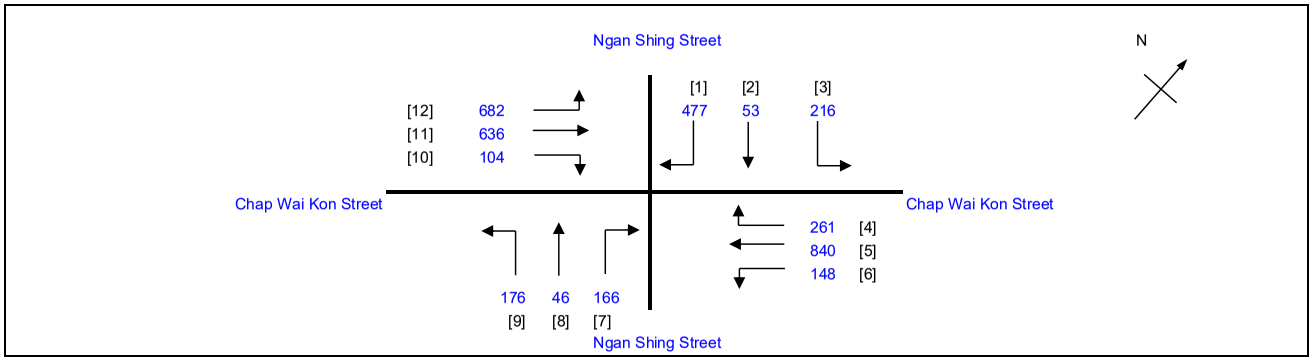
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J15 Ngan Shing Street / Sha Tin Wai Street

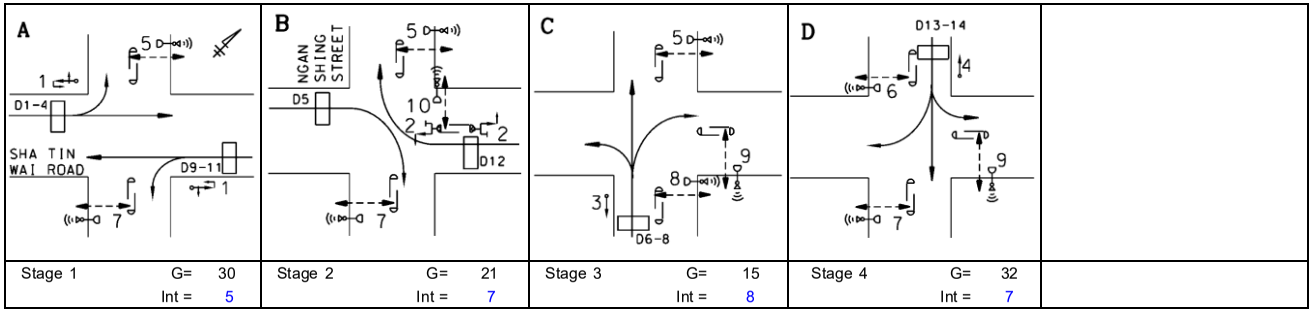
2036 Reference AM

PROJECT NO.: 41010

FILENAME : J15_NSS_STWS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	124 sec
Sum(y)		Y =	0.596
Loss time		L =	27 sec
Total Flow		=	3805 pcu
Co	= (1.5*L+5)/(1-Y)	=	112.7 sec
Cm	= L/(1-Y)	=	66.9 sec
Yult		=	0.698
R.C.ult	= (Yult-Y)/Y*100%	=	17.0 %
Cp	= 0.9*L/(0.9-Y)	=	80.0 sec
Ymax	= 1-L/C	=	0.782
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**18 %**



Stage 1	G=	30	Stage 2	G=	21	Stage 3	G= 15
	Int =	5		Int =	7		Int = 8
Stage 4	G=	32					
	Int =	7					

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	7	1	77	7
P2	4	5	15	6	18	15
P3	1,2,4	5	11	1	89	11
P4	3	5	11	6	6	11
P5	3,4	5	16	2	43	16
P6	1,2	5	9	6	48	9

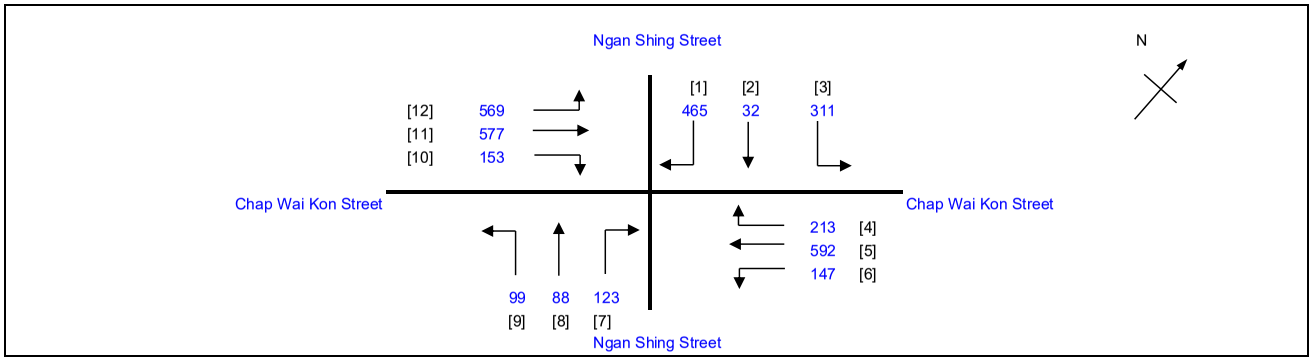
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							23					
12	1	3.20	2	12		N	4010	682			682	1.00	3564							3564	0.191	0.191		31	31	0.762	51	45
11	1	3.20	2				4150		636		636	0.00	4150							4150	0.153			25	31	0.762	51	48
5,6	1	3.40	1	7		N	1955	148	144		292	0.51	1763							1763	0.166			27	31	0.762	48	55
5	1	3.40	2				4190		696		696	0.00	4190							4190	0.166			27	31	0.762	54	47
10	2	3.20	1	20			2075			104	104	1.00	1930							1930	0.054			9	22	0.762	24	89
4	2	3.40	1	20			2095			261	261	1.00	1949							1949	0.134	0.134		22	22	0.762	42	59
9	3	3.10	1	10		N	1925	119			119	1.00	1674							1674	0.071	0.071	4	12	16	0.762	24	83
7,8,9	3	3.10	1	10			2065	57	46	30	133	0.65	1880							1880	0.071			12	16	0.762	30	79
7	3	3.10	1	20			2065			136	136	1.00	1921							1921	0.071			12	16	0.762	30	79
1,2,3	4	3.40	1	14		N	1955	216	53	89	358	0.85	1791							1791	0.200	0.200		33	33	0.762	54	49
1	4	3.40	1	20			2095			388	388	1.00	1949							1949	0.199			32	33	0.762	60	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

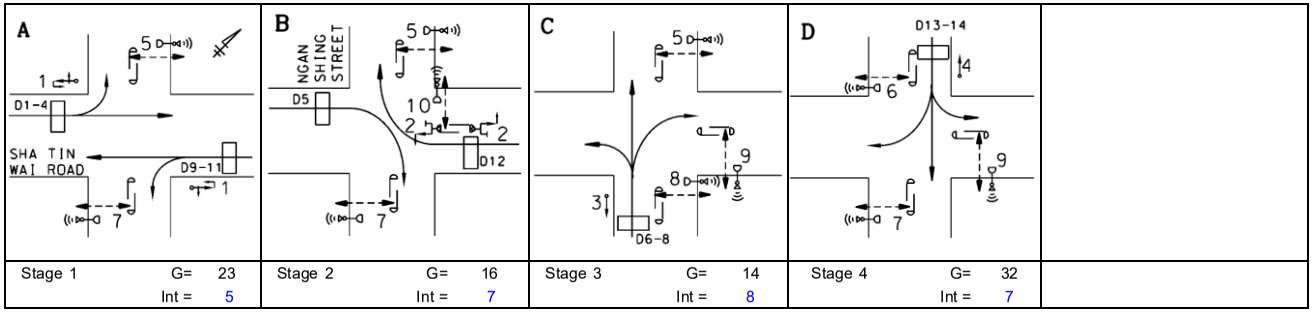
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

		INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
2036 Reference PM	FILENAME : J15_NSS_STWS.xlsx	Checked By:	SLN	Sep-26
J15 Ngan Shing Street / Sha Tin Wai Street		Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	112 sec
Sum(y)		Y =	0.541
Loss time		L =	30 sec
Total Flow		=	3369 pcu
Co	= (1.5*L+5)/(1-Y)	=	109.0 sec
Cm	= L/(1-Y)	=	65.4 sec
Yult		=	0.675
R.C.ult	= (Yult-Y)/Y*100%	=	24.7 %
Cp	= 0.9*L/(0.9-Y)	=	75.3 sec
Ymax	= 1-L/C	=	0.732
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**22 %**



Stage 1	G= 23	Int = 5
Stage 2	G= 16	Int = 7
Stage 3	G= 14	Int = 8
Stage 4	G= 32	Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	7	1	65	7
P2	4	5	15	6	18	15
P3	1,2,4	5	11	1	78	11
P4	3	5	11	6	5	11
P5	3,4	5	16	2	43	16
P6	1,2	5	9	6	36	9

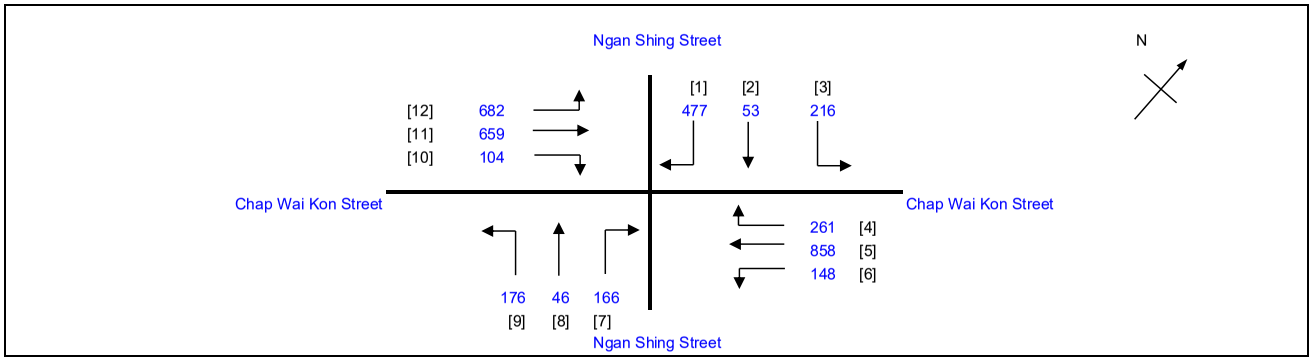
Move-ment	Stage	Lane Width m.	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare Lane m.	Flare Effect pcu/hr	Site Factor	Site Effect pcu/hr	Gradient %	Gradient Effect pcu/hr	Revised Sat. 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)
																							23					
12	1	3.20	2	12		N	4010	569			569	1.00	3564							3564	0.160	0.160		24	24	0.740	39	43
11	1	3.20	2				4150		577		577	0.00	4150							4150	0.139			21	24	0.740	42	44
5,6	1	3.40	1	7		N	1955	147	67		214	0.69	1704							1704	0.126			19	24	0.740	36	56
5	1	3.40	2				4190		525		525	0.00	4190							4190	0.125			19	24	0.740	39	46
10	2	3.20	1	20			2075			153	153	1.00	1930							1930	0.079			12	17	0.740	24	66
4	2	3.40	1	20			2095			213	213	1.00	1949							1949	0.109	0.109		17	17	0.740	36	57
9	3	3.10	1	10		N	1925	92			92	1.00	1674							1674	0.055			8	15	0.740	18	83
7,8,9	3	3.10	1	10			2065	7	88	16	111	0.21	2003							2003	0.055			8	15	0.740	18	76
7	3	3.10	1	20			2065			107	107	1.00	1921							1921	0.056	0.056	7	8	15	0.740	18	77
1,2,3	4	3.40	1	14		N	1955	311	32	43	386	0.92	1780							1780	0.217	0.217		33	33	0.740	48	41
1	4	3.40	1	20			2095			422	422	1.00	1949							1949	0.217			33	33	0.740	54	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

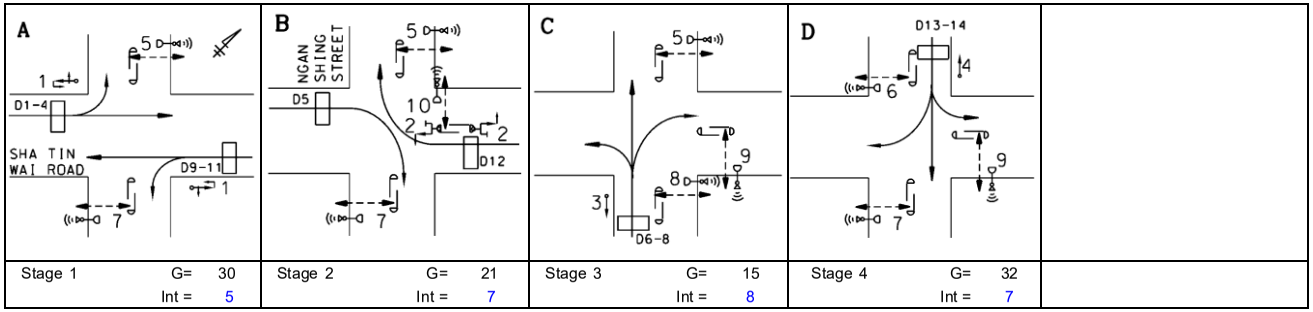
LLA CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

			INITIALS	DATE
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)	**2036 Design AM**	PROJECT NO.: 41010	Prepared By:	SKL	Sep-26
J15 Ngan Shing Street / Sha Tin Wai Street		FILENAME : J15_NSS_STWS.xlsx	Checked By:	SLN	Sep-26
			Reviewed By:	SLN	Sep-26



No. of stages per cycle		N =	4
Cycle time		C =	124 sec
Sum(y)		Y =	0.596
Loss time		L =	27 sec
Total Flow		=	3846 pcu
Co	= (1.5*L+5)/(1-Y)	=	112.7 sec
Cm	= L/(1-Y)	=	66.9 sec
Yult		=	0.698
R.C.ult	= (Yult-Y)/Y*100%	=	17.0 %
Cp	= 0.9*L/(0.9-Y)	=	80.0 sec
Ymax	= 1-L/C	=	0.782
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**18 %**



Stage 1	G= 30	Int = 5
Stage 2	G= 21	Int = 7
Stage 3	G= 15	Int = 8
Stage 4	G= 32	Int = 7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	7	1	77	7
P2	4	5	15	6	18	15
P3	1,2,4	5	11	1	89	11
P4	3	5	11	6	6	11
P5	3,4	5	16	2	43	16
P6	1,2	5	9	6	48	9

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)
																							23					
12	1	3.20	2	12		N	4010	682			682	1.00	3564							3564	0.191	0.191		31	31	0.762	51	45
11	1	3.20	2				4150		659		659	0.00	4150							4150	0.159			26	31	0.762	51	48
5,6	1	3.40	1	7		N	1955	148	150		298	0.50	1767							1767	0.169			27	31	0.762	48	54
5	1	3.40	2				4190		708		708	0.00	4190							4190	0.169			27	31	0.762	54	46
10	2	3.20	1	20			2075			104	104	1.00	1930							1930	0.054			9	22	0.762	24	89
4	2	3.40	1	20			2095			261	261	1.00	1949							1949	0.134	0.134		22	22	0.762	42	59
9	3	3.10	1	10		N	1925	119			119	1.00	1674							1674	0.071	0.071	4	12	16	0.762	24	83
7,8,9	3	3.10	1	10			2065	57	46	30	133	0.65	1880							1880	0.071			12	16	0.762	30	79
7	3	3.10	1	20			2065			136	136	1.00	1921							1921	0.071			12	16	0.762	30	79
1,2,3	4	3.40	1	14		N	1955	216	53	89	358	0.85	1791							1791	0.200	0.200		33	33	0.762	54	49
1	4	3.40	1	20			2095			388	388	1.00	1949							1949	0.199			32	33	0.762	60	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
Prepared By:	SKL	Sep-26
Checked By:	SLN	Sep-26
Reviewed By:	SLN	Sep-26

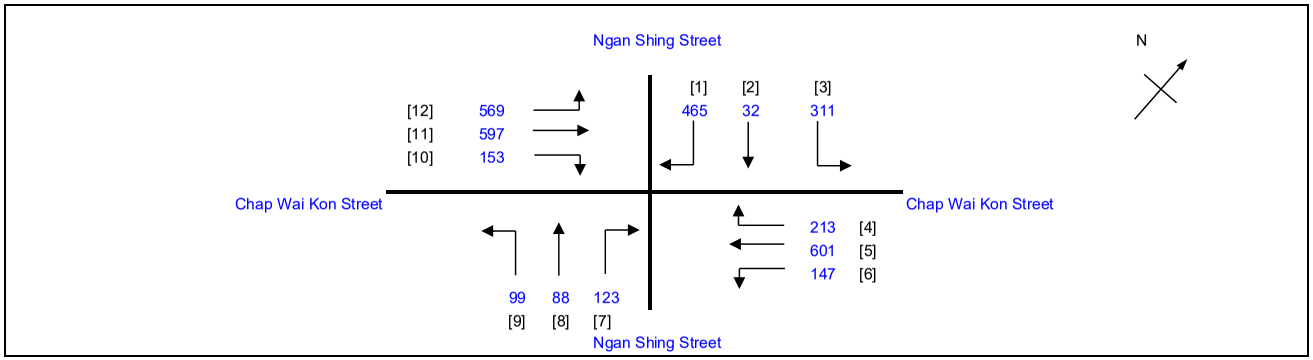
Proposed Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/40 from "Industrial (1)" zone to "Residential (Group A)10" zone at Nos.8-14 Siu Lek Yuen Road, Sha Tin, New Territories (STTL Nos. 196 and 276)

J15 Ngan Shing Street / Sha Tin Wai Street

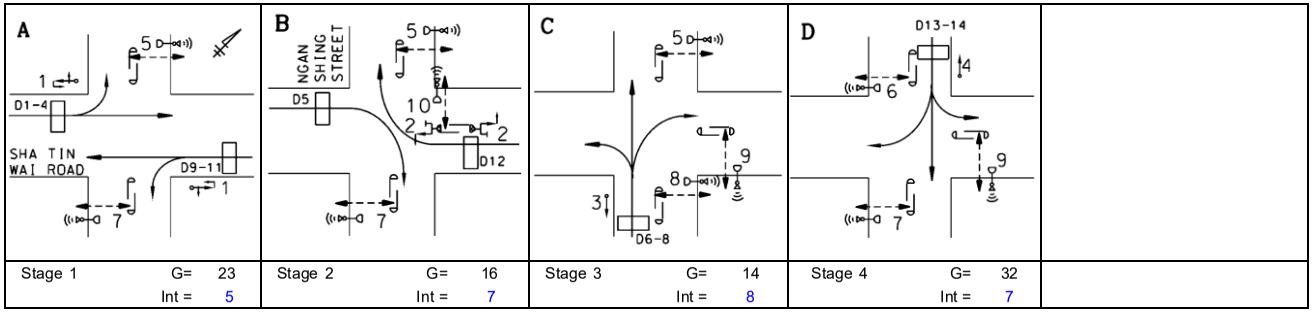
2036 Design PM

PROJECT NO.: 41010

FILENAME : J15_NSS_STWS.xlsx



No. of stages per cycle		N =	4
Cycle time		C =	112 sec
Sum(y)		Y =	0.541
Loss time		L =	30 sec
Total Flow		=	3398 pcu
Co	= (1.5*L+5)/(1-Y)	=	109.0 sec
Cm	= L/(1-Y)	=	65.4 sec
Yult		=	0.675
R.C.ult	= (Yult-Y)/Y*100%	=	24.7 %
Cp	= 0.9*L/(0.9-Y)	=	75.3 sec
Ymax	= 1-L/C	=	0.732
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**22 %**



Stage 1	G=	23	Stage 2	G=	16	Stage 3	G= 14
	Int =	5		Int =	7		Int = 8

Stage 4	G=	32
	Int =	7

Pedestrian Phase	Stage	Green Time Required SG	FG	Delay	Green Time Provided SG	FG
P1	1,2,3	5	7	1	65	7
P2	4	5	15	6	18	15
P3	1,2,4	5	11	1	78	11
P4	3	5	11	6	5	11
P5	3,4	5	16	2	43	16
P6	1,2	5	9	6	36	9

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)
																							23					
12	1	3.20	2	12		N	4010	569			569	1.00	3564							3564	0.160	0.160		24	24	0.740	39	43
11	1	3.20	2				4150		597		597	0.00	4150							4150	0.144			22	24	0.740	42	44
5,6	1	3.40	1	7		N	1955	147	70		217	0.68	1707							1707	0.127			19	24	0.740	36	55
5	1	3.40	2				4190		531		531	0.00	4190							4190	0.127			19	24	0.740	39	46
10	2	3.20	1	20			2075			153	153	1.00	1930							1930	0.079			12	17	0.740	24	66
4	2	3.40	1	20			2095			213	213	1.00	1949							1949	0.109	0.109		17	17	0.740	36	57
9	3	3.10	1	10		N	1925	92			92	1.00	1674							1674	0.055			8	15	0.740	18	83
7,8,9	3	3.10	1	10			2065	7	88	16	111	0.21	2003							2003	0.055			8	15	0.740	18	76
7	3	3.10	1	20			2065			107	107	1.00	1921							1921	0.056	0.056	7	8	15	0.740	18	77
1,2,3	4	3.40	1	14		N	1955	311	32	43	386	0.92	1780							1780	0.217	0.217		33	33	0.740	48	41
1	4	3.40	1	20			2095			422	422	1.00	1949							1949	0.217			33	33	0.740	54	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

Appendix C

Junction Improvement Scheme To Be Implemented by Others

ISO A1 594mm x 841mm

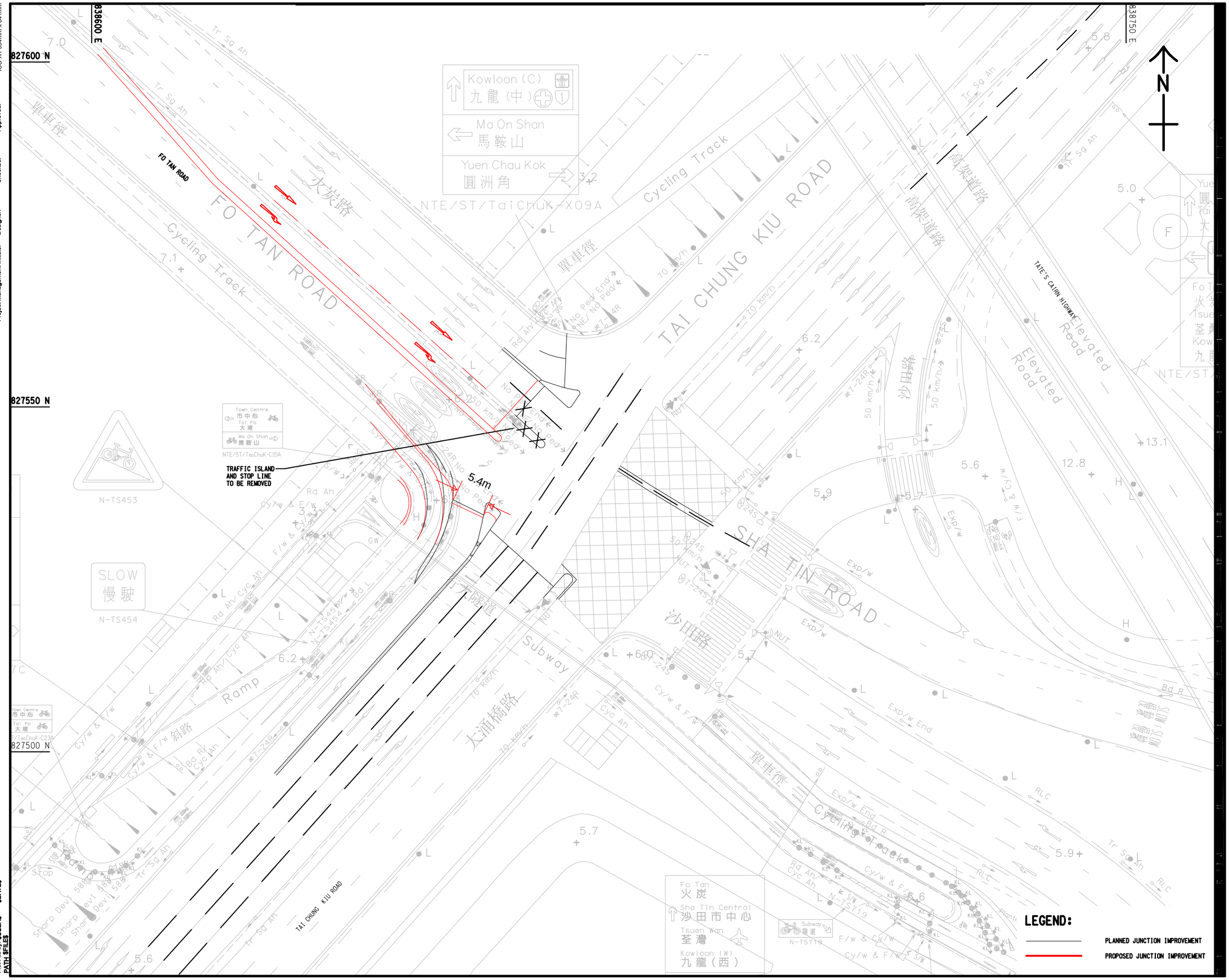
Approved:

Checked:

Designer:

Project Management Initials:

Plot File by: $USER$ $DATE$
PATH: $FILE$



AECOM

PROJECT

TRAFFIC IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENTS IN SIU LEK YUEN AND SHEK MUN, SHATIN

CLIENT

TRANSPORT DEPARTMENT

AGREEMENT NO.

TD 73/2017

SCALE DIMENSION UNIT

A3 1 : 500

DRAWING TITLE

PROPOSED IMPROVEMENT AT FO TAN ROAD / TAI CHUNG KIU ROAD (SLY-J2) (OPTION 2)

DRAWING NO.

60563890/TIAAS/FIGURE 5.22