S16 PLANNING APPLICATION
APPROVED NAM SANG WAI OZP NO. S/YL-NSW/8

Renewal of Planning Approval for HKSM Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long

SUPPORTING PLANNING STATEMENT

March 2024

Applicant:
HKSM Yuen Long Driving School Limited

Submitting Agent:
KTA Planning Limited.

S3093_PS_V04

PLANNING LIMITED
規劃顧問有限公司

Executive Summary

This S.16 application is submitted on behalf of HKSM Yuen Long Driving School Limited, the owner of Lot 1347RP in DD115, Yuen Long (the "Application Site"), to seek renewal of planning approval for the existing HKSM Yuen Long Driving School ("YLDS") for a period of further three years till September 2028.

YLDS has encountered great difficulties in identifying a suitable replacement site for the YLDS. The renewal of the planning permission for YLDS is considered to be an acceptable interim solution before a suitable replacement site for YLDS is available. YLDS is the only Designated Driving School offering full range of driver training (i.e. private car, light goods vehicle, medium goods vehicle, bus, articulated vehicle, motorcycle) in North West New Territories. The Driving Test Centre in YLDS is the only driving test centre of Transport Depart in North West New territories, and the waiting time for a driving test in YLDS is about 11 months. Its continuous operation is crucial to avoid causing disruption to the driving test arrangement for the public in the sub-region and to continue to provide the much needed driver training in North West New territories as an interim solution. YLDS is also the major and the only driving training school in North West New Territories supporting Government's policy on Labour Importation Scheme for Transport Sector.

Despite its temporary land use basis, YLDS has been operating on the Application Site for about 30 years and has become a tolerated use on the local environment. There has been no changes in the physical layout of the driving school and its operation. YLDS has complied with all planning approval conditions as attached in the previous applications. YLDS provides a safe and controlled environment for learner drivers and job opportunities for about 110 driving instructors and ancillary staff.

YLDS falls within the northern end of the "Other Specified Uses" annotated "Comprehensive Development to include Wetland Restoration Area" ("OU(CDWRA") zone at the confluence of Kam Tin River and Shan Pui River on the Approved Nam Sang Wai OZP No. S/YL-NSW/8. There is no approved comprehensive residential development with wetland restoration proposal in the subject "OU(CDWA)" zone. The overriding obstacle to future residential development within the zone is the low development intensity and the great difficulty for landowners to comply with the planning intention for residential development to incorporate wetland conservation within their sites. Hence the extension of a further three-year period for Driving School use till September 2028 would not jeopardise the planning intention for permanent land use within the zone.

Furthermore, although the residential developments in the "R(E)1" zone at the periphery of Tung Tau Industrial Area have already been occupied since 2017, there is no relevant complaints from the residents on the operation of YLDS. It is proven that the prevailing operation restrictions to YLDS, including no training vehicles are allowed on public roads during peak hours from 7:30am to 9:30am in the morning of Mondays to Saturdays, and 4:30pm to 7:30pm in the afternoon on weekdays, only private car and light goods vehicle (i.e. no heavy vehicles and articulated vehicles) are allowed to be trained in the Tung Tau training zone, only one articulated vehicle and one bus having on-street training from 7:30pm to 9:30pm and no training of drivers on heavy vehicles and articulated vehicles outside the Application Site after 9:30pm, are effective to address the potential interface problem between residents, including those in the planned residential developments, and YLDS. Hence it is considered that the planning approval for the driving school for a period of further three years from September 2025 to September 2028 is tolerable.

Under this very special circumstance and the above justifications, YLDS sincerely requests the Town Planning Board to grant planning approval for a period of further three years to avoid disruption of the driving courses and driving test appointments and to continue to provide the much needed driver training in North West New territories as an interim solution.

申請摘要
（內文如有差異，應以英文版本為準）

是項規劃申請由香港駕駛學院元朗分校有限公司 "HKSM Yuen Long Driving School Limited" (申請人) 提出，建議城規會准許香港駕駛學院元朗分校可在原址延續多營運三年直至 2028 年 9 月。香港駕駛學院元朗分校位於丈量約份第 115 段地段 1347 號餘段，該地段業權由申請人持有。

香港駕駛學院元朗分校有限公司 (下稱 "元朗駕駛學院" (YLDS)) 在尋找合適地皮作搬遷元朗駕駛學院時遇上極大困難。在還未找到合適地皮之前，容許元朗駕駛學院在原址延續多營運三年為一個可接受的過渡性方案。元朗駕駛學院是新界西北地區唯一提供全車種 (包括私家車、輕型貨車、中型貨車、巴士、掛接車、電單車) 駕駛訓練的政府指定駕駛學校。香港駕駛學院元朗分校內的駕駛考試中心，是運輸署在新界西北地區唯一的駕駛考試中心。現時元朗駕駛學院排期等待駕駛考試的時間約為 11 個月，學院的繼續營運可避免對排期等待駕駛考試的市民造成影響，以及作為繼續為新界西北地區提供極需要的駕駛訓練的暫時性安排。元朗駕駛學院亦是在新界西北地區主要及唯一支持運輸業輸入勞工計劃的駕駛訓練學校。

申請人於上址以臨時用途形式營運元朗駕駛學院逾三十年，已成為當區被認受的機構和用途。駕駛學院內的佈局和營運方式一直沒有任何更改。申請人亦完全履行所有規劃許可的附帶條件。元朗駕駛學院為學車人士提供一個安全的學習環境，避免在道路造成滋擾。此外，駕駛學院亦提供了約壹百壹拾個駕駛導師和支援員工職位。

元朗駕駛學院位於錦田河和山貝河的交滙處，根據元朗南生圍分區計劃大綱核准圖編號 S/YL-NSW/8，該地段已劃作「其他指定用途」註明「綜合發展及濕地改善區」用途，不過至今未有任何已獲批的綜合住宅及改善濕地發展計劃。主要原因是發展密度低，要達致這個土地用途的規劃意向亦十分困難，業主除了要提交住宅發展佈局外，還要提交一套完善的濕地改善計劃和長遠運作模式，令業主卻步。因此，如城規會容許元朗駕駛學院在原址多營運三年至 2028 月 9 月，不會對長遠落實該地段的規劃意向造成影響。

另方面，位於東頭工業區西北面的「住宅(戊類)1」的部份住宅項目雖然已於 2017 年落成及入伙，不過元朗駕駛學院並沒有收到居民對駕駛學院營運的投訴。這印證了現時各種對元朗駕駛學院的營運限制，包括訓練車輛不能在繁忙時間（即星期一至六早上七點半至九點半，平日下午四點半至七點半）在路面行駛，只准許私家車及輕型貨車在東頭駕駛訓練區於指定時間行駛，以及晚上九時半後掛接車及巴士不能在駕駛學院外練習，而晚上七點半至九點半期間只能同時有一輛掛接車及一輛巴士在路面學習，能有效減低對居民，包括已規劃的住宅發展的潛在影響。因此如城規會容許元朗駕駛學院在原址多營運三年，由 2025 年 9 月開始計算至 2028 年 9 月，應可被容忍和接受。

鑑於這項特殊情況和其他上述規劃理據，申請人懇請城規會批准元朗駕駛學院可於原址繼續營運多三年，避免對排期等待駕駛考試的市民造成影響，以及作為繼續為新界西北地區提供極需要的駕駛訓練的暫時性安排。

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Supporting Planning Statement

1. INTRODUCTION

1.1 Purpose

1.1.1 A planning permission for temporary driving school for a period of 3 years till 5.9.2025 was granted to HKSM Yuen Long Driving School Limited at Lot 1347RP in DD115 (the "Application Site") on 23.7.2021 under planning application No. A/YL-NSW/287. HKSM Yuen Long Driving School ("YLDS") has spent tremendous efforts on identifying potential replacement site to relocate the temporary driving school in the Yuen Long area over the past years. In fact, YLDS has previously submitted S16 Planning Application No. A/YL-PS/519 in relocating the temporary driving school to a "Green Belt" site near Wing Ning Tsuen. The S16 Application and the associated S17 Review were unfortunately rejected by the Rural and New Town Planning Committee ("RNTP") of Town Planning Board ("TPB") on 23 June 2017 and 3 November 2017 respectively. Subsequently, YLDS has submitted a S12A Application no. Y/YL-NSW/5 in aiming to enable a driving school cum wetland restoration proposal at the subject site, which was also disagreed by the TPB on 26 March 2021.

1.1.2 Despite that, genuine efforts have been made to continue to identify potential replacement sites to address the Board's concern over the long-term use of the Site as a driving school. However, identifying potential replacement sites for the temporary driving school would involve many considerations such as technical assessments (i.e. Traffic Impact Assessment) to assess its suitability to serve as a driving school and driving test centre. Given that there is no concrete plan for the replacement site for accommodating YLDS at this stage, it is crucial to ensure the continuous provision of driving test services at the HKSM Yuen Long Driving School Test Centre, which is currently the only Government Driving Test Centre in Yuen Long and Tuen Mun District. Hence, a further renewal of the planning approval is considered to be to an acceptable interim solution before a suitable site is identified for relocation.

1.1.3 Normally applications for renewal of a planning approval should be submitted to the TPB two to four months before such planning approvals are due to expire, in accordance with the Town Planning Board Guidelines on Renewal of Planning Approval and Extension of Time for Compliance with Planning Conditions for Temporary Use or Development (TPB PG-No. 34D). However, due to the nature and unique operational requirements of the driving school serving a public need in that the waiting time for a driving test in YLDS is about 11 months, early decision on whether renewal of planning approval would be granted is essential for the Government and YLDS to make arrangements for the driving test appointments. This early application is supported by the Transport Department to avoid causing any disruption to the driving test services. Hence this early application should be accepted by the Board due to the exceptional circumstances.

1.2 Structure of Report

1.2.1 Following this introductory section, the background of HKSM Yuen Long Driving School and its planning context will be discussed in Section 2. The operation of the existing driving school and the search for a replacement site will be discussed in Section 3, followed by justifications for this planning application in Section 4. Section 5 concludes and summarizes the Supporting Planning Statement.

2. PLANNING CONSIDERATIONS

2.1 Background of HKSM Yuen Long Driving School

2.1.1 HKSM Yuen Long Driving School ("YLDS") has been operating on the Application Site with temporary planning approval for about 30 years. 14 previous applications had been submitted to the Board for permission to allow a driving school on the Application Site. The first approval was granted on 11.9.1992 under a Development Permission Area Plan (i.e. TPB Ref: A/DPA/YL-NSW/7) and as a result, YLDS was opened in March 1994. The Application Site is currently zoned "Other Specified Uses" annotated "Comprehensive Development to include Wetland Restoration Area" ("OU(CDWRA)") on the Approved Nam Sang Wai Outline Zoning Plan (the "Approved OZP") No. S/YL-NSW/8.

Last Planning Approval No. A/YL-NSW/287

2.1.2 The last application (i.e. TPB Ref: A/YL-NSW/287) was approved by the Rural and New Town Planning Committee ("RNTPC") on 23.7.2021 for renewal of planning approval for temporary driving school and ancillary uses for a period of three years till 5.9.2025. The planning considerations for approving the application no. A/YL-NSW/287 are briefly summarised/extracted as follows:

- There was no known programme for any development in the part of the "OU(CDWRA)" zone where the Application Site is located and the approval of the application on temporary basis for 3 years would not frustrate the long term planning intention of the "OU(CDWRA) zone;
- The identification of a suitable site for relocation was still in progress. Transport Department strongly supported the renewal application so as to allow continuous use of the Site for a Designated Driving School cum Driving Test Centre until a replacement site could be secured, which is essential to avoid disruption to the test appointment service and conduct of driving tests to the general public in Yuen Long and Tuen Mun districts;
- YLDS had made considerable efforts and actively worked towards the relocation of driving school and the development of a permanent driving school;
- The Site had been hard paved, fenced off with trees planted on the peripheries to avoid/minimize adverse environmental impacts on the adjacent village. The use was considered not entirely incompatible with the surrounding uses.
- Traffic impact assessment had demonstrated that the extension of planning approval for the driving school up to 2025 will not induce additional traffic impact on the adjacent road network;

- Transport Department and Environmental Protection Department had not received any complaints on noise nuisance arising from the operation of the YLDS in the past 5 years;
- The application complied with TPB PG-No. 34B for 'Renewal of Planning Approval and Extension of Time for Compliance with Planning Conditions for Temporary Uses or Development';

2.1.3 Considering the need for provision of essential services which was still unable to be relocated elsewhere and all of the above, sympathetic consideration had been given to tolerate the continuous operation of the driving school at the Site.

2.1.4 YLDS has complied with all planning approval conditions attached to the last application No. A/YL-NSW/287, including but not limited to no training of drivers of heavy vehicles or articulated vehicles is allowed outside the application site after 9:30pm; and only one articulated vehicle and one bus are allowed for training of drivers outside the application site from 7:30pm to 9:30pm; etc.

2.1.5 There has been no complaint from the public about the operation of the driving school since the planning approval of the previous planning application no. A/YL-NSW/287 in 2021.

2.2 Planning Context

"OU(CDWRA)"

2.2.1 The Application Site is located at the north-western end of a large parcel of land zoned "Other Specified Uses" annotated "Comprehensive Development to include Wetland Restoration Area" ("OU(CDWRA)") on the Approved Nam Sang Wai Outline Zoning Plan (OZP) No. S/YL-NSW/8 (see **Figure 2.1**). According to the Notes of the OZP, "Driving School" is neither a Column 1 nor Column 2 use within the "OU(CDWRA)" zone. In accordance with the covering Notes of the OZP, notwithstanding that the use or development is not provided for in terms of the OZP, the Board may grant permission, with or with without conditions, for a maximum period of three years.

2.2.2 On the other hand, "OU(CDWRA)" zone is a very stringent zoning intended to provide incentive for the restoration of degraded wetlands adjoining existing fish ponds through comprehensive residential and/or recreational development to include wetland restoration area. It is also intended to phase out existing sporadic open storage and port back-up uses on degraded wetlands. Applications submitted to the Board shall be in the form of a comprehensive development scheme to include a wetland restoration proposal, a long-term maintenance and management plan. The maximum plot ratio (PR) within this zoning is 0.4 and the maximum building height (BH) is 6 storeys including carpark.

2.2.3 As at January 2024, there is no approved comprehensive residential development plan or application submitted for residential development to the Board within the "OU(CDWRA)" zone covering the Application Site. Nevertheless, the TPB has approved planning application no. A/YL-NSW/281 and no. A/YL-NSW/321 for a temporary transitional housing project named United Court, Tung Tau, Yuen Long (元朗東頭過渡性房屋項目 - 同心村) on Chung Yip Road at the central portion of the "OU(CDWRA)" zone until 23 October 2026.

S12A Application No. Y/YL-NSW/5

2.2.4 In view of the fact that a suitable relocation site for YLDS could not be made available shortly, YLDS had tried to explore possible ways to enhance the compatibility of YLDS to the surrounding context until a suitable relocation site could be identified. YLDS therefore proposed restoring 20% of the site area as wetland and introducing "Driving School" as a Column 2 use in a subzone of the prevailing "OU(CDWRA)" so that a longer period of planning permission could be granted by the TPB for the temporary "driving school" to facilitate the enrolment of learner drivers and arrangement for driving tests. Despite the TPB acknowledged the need for a driving school in New Territories West and a longer approval period, say three years, could be considered, the Board did not support the application as some residential developments had been completed in the vicinity of the Site in recent years and the long-term planning intention of the Site for residential development should be retained. Members of the TPB also expressed that the relevant Government Policy Bureau could consider giving policy support for Planning Department to conduct a site research to identify a suitable relocation site for the driving school. It is to our understanding that the site search by the Government is still in progress and there is no further update as in March 2024.

Other Recent Developments in/near Tung Tau Industrial Area

2.2.5 Immediate south-west of YLDS is a "R(D)1" zone with some village houses and low-rise housing. On 18.12.2020, TPB approved an application for minor relaxation of plot ratio and building height restrictions for a land sales site in "R(D)1" zone and the approved development is under construction. Further south-west is Tung Tau Industrial Area (TTIA) zoned "OU(Business)" and some residential developments including Wang Fu Court, After the Rain, The Spectra and the Twin Regency in "R(E)1" and "R(A)5" zones at the periphery of TTIA developed recently after 2017.

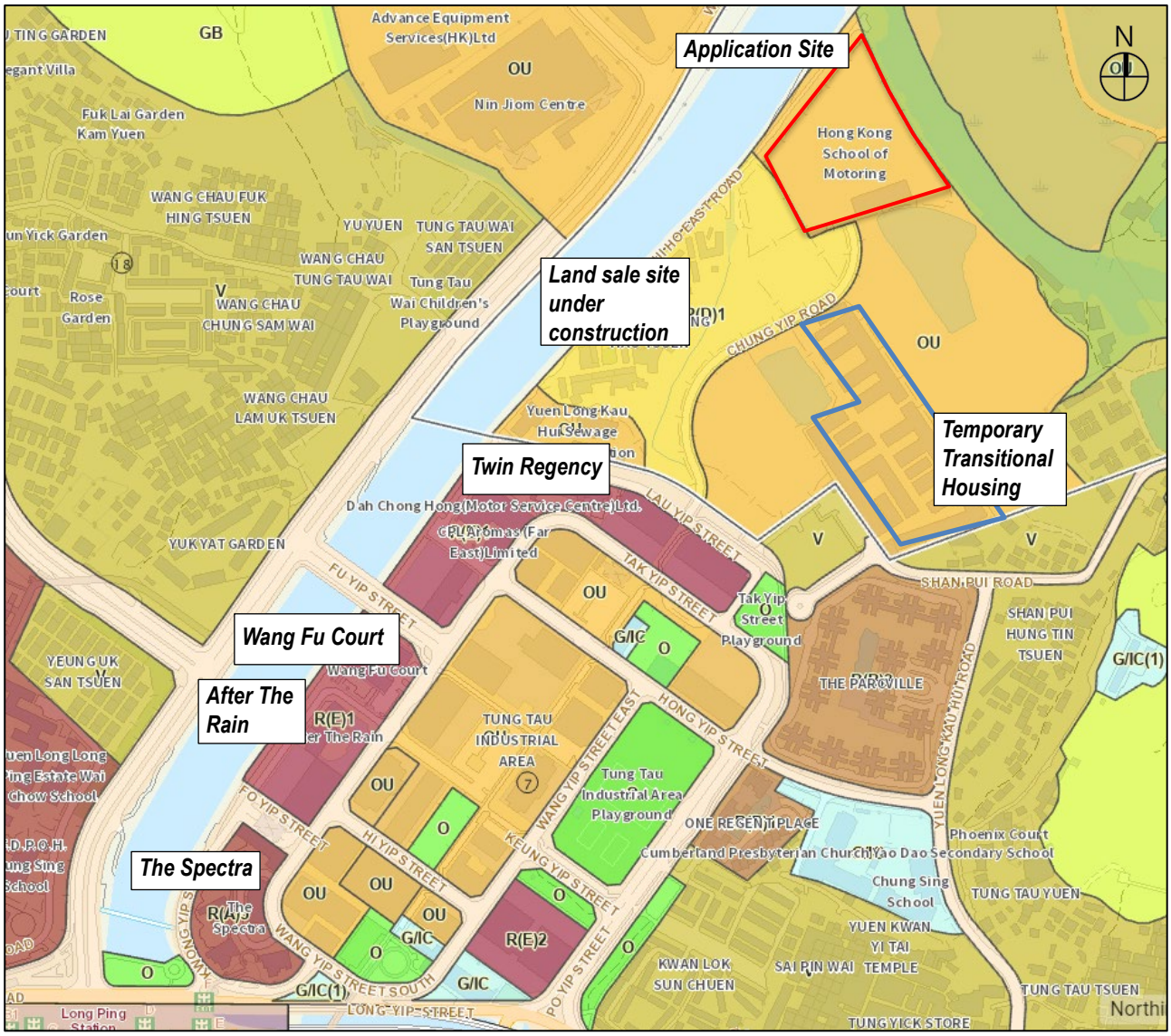


Figure 2.1: The Application Site and its planning context

2.3 Site Context

2.3.1 The Application Site is located northeast of Shan Pui Chung Hau Tsuen, which is zoned "R(D)1" on the OZP, at the confluence of Kam Tin River and Shan Pui River in a Wetland Buffer Area (WBA) (refer to **Figure 2.1**). Currently being used as a temporary Driving School with ancillary facilities, the Application Site is flat and paved. To the south and southwest, the Application Site adjoins temporary open car parks, fish ponds and unused/vacant land in the "OU(CDWRA)" zone. The Application Site is accessible via Chung Yip Road leading to Tung Tau Industrial Area about 450m away to its further southwest. Chung Yip Road was constructed and, since its construction, has been managed by YLDS. A strip of land along the nullah at the western and northern edges of Tung Tau Industrial Area was rezoned "R(E)1" in 2011.

2.3.2 With a site area of about 17,320m^2, YLDS has been operating for about 30 years on the same site. It consists of an area for driver training, the Government's only Driving Test Centre in Yuen Long and Tuen Mun District, an administration building, a small car repairing area and a fuel-filling pit at the northern end of the site. The peripheries of the site are planted with trees, which provide effective screening.

2.4 Land Status and Ownership

2.4.1 The Application Site is known as Lot 1347RP in DD115 in Yuen Long. The site is situated on New Grant Agricultural Lot restricted for fishpond purposes only, upon which no structure is allowed to be erected without approval from the Lands Department. Despite that, Short Term Waiver (STW) No. 1781 was granted in 1993 with an Agreement Supplementary to the same in 1999 to YLDS for coverage of structures (with maximum built-over area of 1,485m^2 and maximum building height of 4.8m (one-storey)) erected on the lot for the purpose of an administration building, office of the Transport Department's Driving Test Centre and other facilities including a car repairing area (5.6m high) in connection with a driving school.

2.4.2 The Application Site is owned by HKSM Yuen Long Driving School Limited, the applicant of this planning application.

3. DRIVING SCHOOL OPERATIONS AND THE RELOCATION PLAN

3.1 HKSM Yuen Long Driving School Facilities

3.1.1 HKSM Yuen Long Driving School ("YLDS") is the only Government Designated Driving School under section 88(K)1 of the Road Traffic Ordinance (RTO) (Cap 374) serving the North West New Territories and the only Driving Test Centre operated by Transport Department in the sub-region. Despite being on temporary land use basis, the school is now a tolerated use within the local area.

3.1.2 The driving school facilities mainly comprise an area for driver training, the only Driving Test Centre operated by Transport Department in Yuen Long and Tuen Mun District, and a single storey administration building (4.8m high), having a total floor area of about 1,485m^2. The building accommodates lecture rooms, offices, rest rooms, office of the Transport Department's Driving Test Centre and toilets. A car repairing area (5.6m high) of about 160m^2 is located at the southern corner and a fuel-filling pit at the northern end of the site. There has been no change in buildings on site from the last planning approval. The layout plan of the existing YLDS is shown in **Figure 3.1**.

3.1.3 The access road to the site, Chung Yip Road, was constructed by YLDS in 1994 in fulfilment of a planning condition attached to the 1993 planning approval. It has been managed by YLDS since its construction. There has been no change in drainage characteristics and sewage collection/disposal arrangements for the site since the school commenced its operation. Surface runoff from the Driving School and the access road is collected and diverted by surface channels, and discharged via grease traps to the adjoining rivers. Such drainage arrangements were approved by the Buildings Department in 1994. A culvert was also constructed under Chung Yip Road to allow continuation of the stream course adjacent to Shan Pui Chung Hau Tsuen. Sewage waste is collected by an underground sump pit at the entrance YLDS and pumped into a public manhole in Tung Tau Industrial Area. The boundaries of the Application Site were planted with trees and palms, which today have matured considerably to provide an effective visual and landscape screen to surrounding uses.

3.1.4 In order to minimise potential glare impact to the surroundings, the traditional street lights in the training area have been replaced by lightings facing downward and inward in 2023.

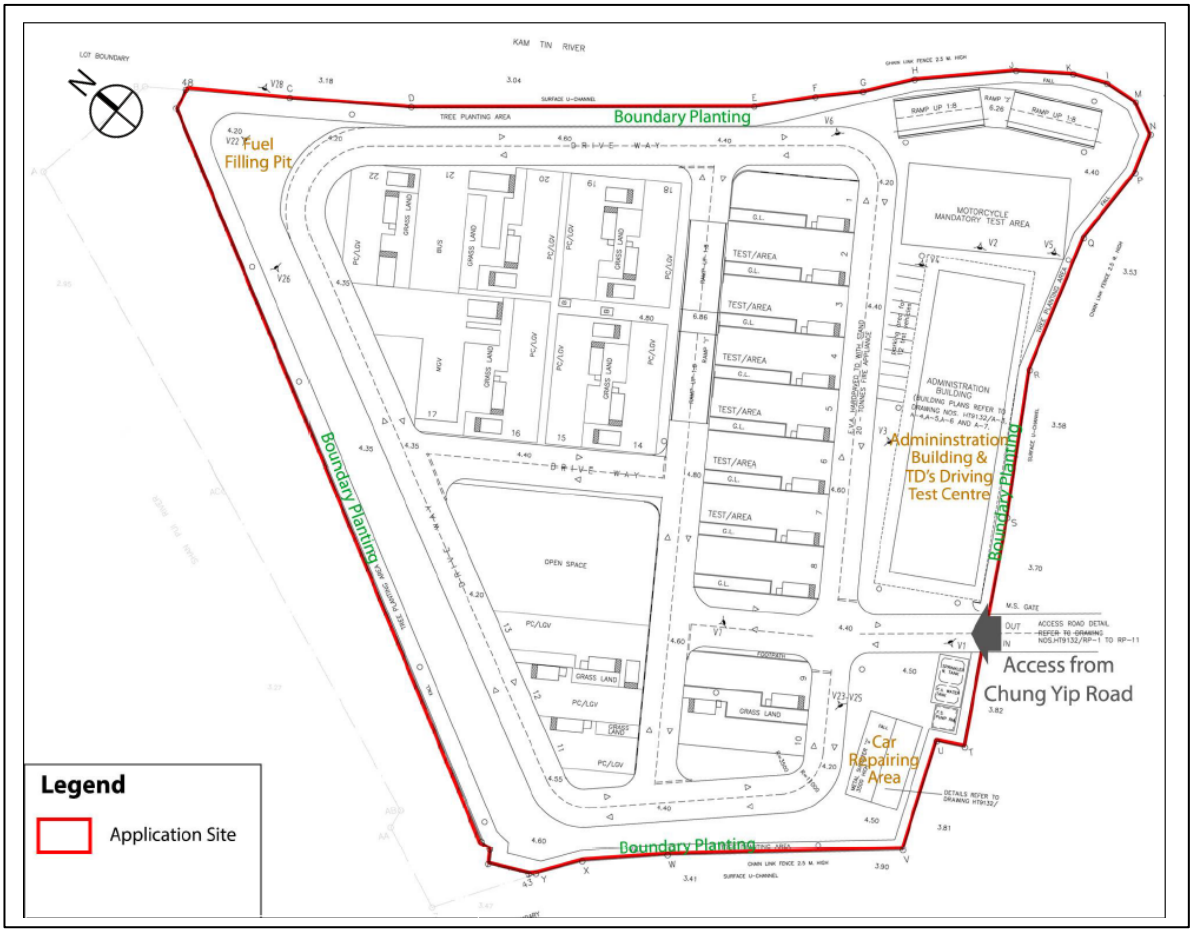


Figure 3.1: Layout of Yuen Long Driving School

3.2 Driver Training Operations

3.2.1 The daily operation hours of YLDS (i.e. Monday to Sunday & Public Holidays) are from 8:30am to 11:30pm, so that learner drivers can take driving lessons after work. To minimize disturbance in the area at night time, there is no training of drivers on heavy vehicles and articulated vehicles ("ATV") outside the Application Site after 9:30pm and only one ATV and one bus are allowed to have on-street training from 7:30pm to 9:30pm, in accordance with the planning approval conditions (a) and (b) agreed in previous approved applications. It should also be noted that in accordance with Transport Department's requirements, no training vehicles are allowed on public roads during peak hours from 7:30am to 9:30am in the morning of Mondays to Saturdays, and 4:30pm to 7:30pm in the afternoon on weekdays.

3.2.2 There is basically no change to the daily operation of the driving school. The number of training vehicles on the road at any one time is spread out such that the driving training will not overload the road network. During the most popular training hours, there are about 35

training vehicles on the road simultaneously. On average, the number of training vehicles on the road is just about 18 only. This situation is similar to that since 2011.

Training Routes

3.2.3 The on-road training of drivers covers private cars, goods vehicles, motorcycles and buses. There has been no material change in operational/training arrangements offered by YLDS since 2011. An early part of driving training is conducted in the training area within the driving school. Training is also given outside YLDS in three training zones, i.e. Yuen Long Industrial Estate, Tung Tau Industrial Area and Tin Shui Wai area. The training zones are reviewed and approved by the Transport Department and Yuen Long District Council and are subject to change upon change of local traffic conditions. Commercial vehicles such as heavy vehicles and articulated vehicles are mainly trained in the Yuen Long Industrial Estate zone. In the Tung Tau Industrial Area zone, only private cars and light goods vehicles are trained there. Commercial vehicles (i.e. heavy vehicles and articulated vehicles) and motorcycles are not allowed to train within this zone.

Student Enrolment

3.2.4 The local demand for driving school is strong as reflected from the long waiting time of the driving test. On average, learner drivers of private cars and light goods vehicles will receive 25 training hours in about three months' time to prepare for the driving test. The driving school provides a safe and controlled environment for the training of learner drivers before they practise driving on public roads.

No Complaints

3.2.5 YLDS has been operating on the site for about 30 years and there is a general acceptance in the community that it does not cause any nuisance. Indeed no significant complaints has been received by the Transport Department or the driving school in the past years.

3.3 Difficulty in Securing a Replacement Site

3.3.1 The identification of a replacement site suitable for the temporary driving school is not easy as it shall meet the following criteria:

i. The new driving school site must be located in proximity of the existing test routes and training zones in order to make use of the existing established on-street driving training facilities as far as practicable.
ii. It shall be conveniently located to serve the North West New Territories as it will be the only Transport Department Driving Test Centre in the sub-region;

iii. The replacement site has to be largely flat and the size of the school needs to be sufficient to accommodate on-site driving training facilities; and

iv. The replacement site has to be acceptable (e.g. should not involve ecologically sensitive area, pond filling and extensive tree felling) by the local community.

3.3.2 Despite the previous development proposals have been rejected/disagreed by the TPB, YLDS has continued to spend his maximum effort in examining sites for temporary driving school since the approval of the last Planning Application No. A/YL-NSW/287. YLDS has commenced a comprehensive site search exercise in 2022/2023, covering both private lots and Government Land around the existing training zone, to identify possible sites for relocating the driving school. Though four potential areas in Ping Shan and Tin Shui Wai area (**Figure 3.2** refers), were considered having potential for relocating YLDS, they were currently occupied by other temporary uses and would not be available for relocation of YLDS in the coming years. The application for renewal of planning permission for the current site is considered to be an acceptable interim solution before a suitable site is identified for relocation.

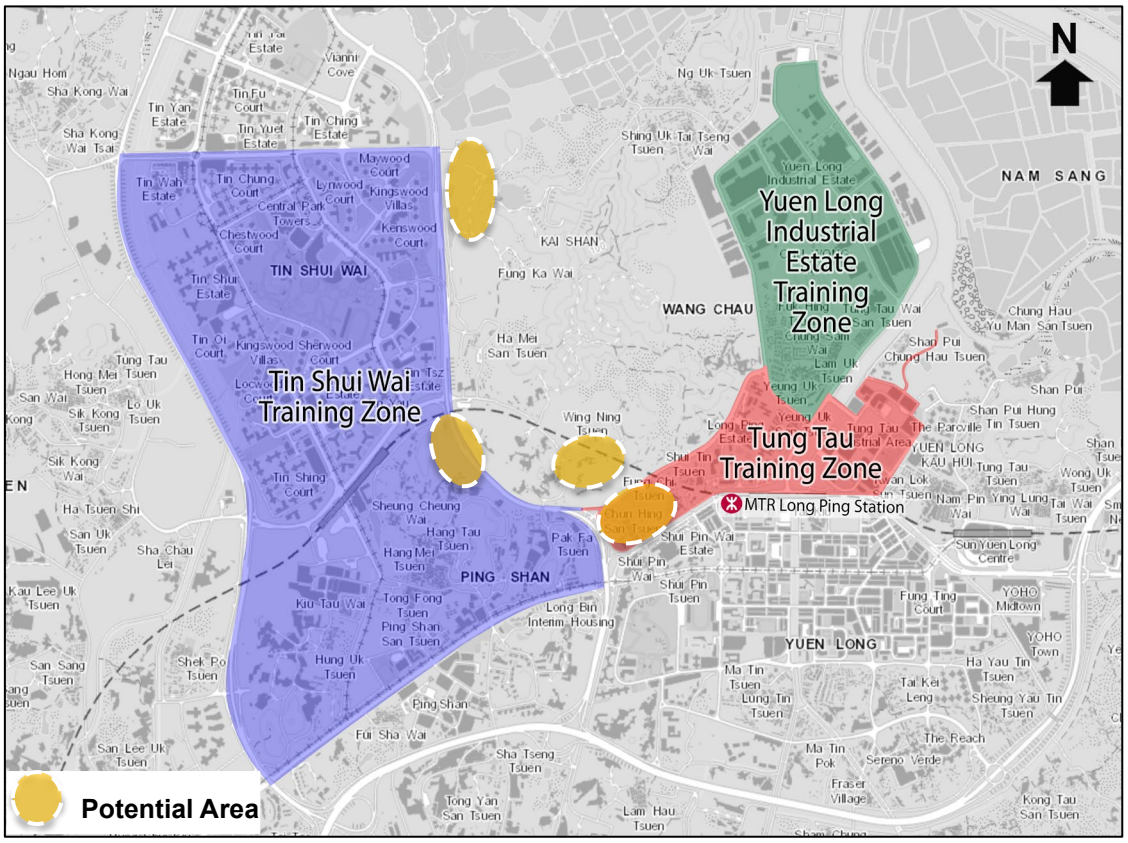


Figure 3.2: Potential Areas Identified under the Site Search Exercise

4. PLANNING JUSTIFICATIONS

4.1 No Readily Available Replacement Site for HKSM Yuen Long Driving School

4.1.1 HKSM Yuen Long Driving School ("YLDS") has spent tremendous efforts to relocate the driving school, despite the previous S16 planning application no. A/YL-PS/519 in relocating the temporary driving school near Wing Ning Tsuen and the S12A Amendment of Plan application no. Y/YL-NSW/5 in aiming to enable a driving school cum wetland restoration proposal were turned down by the Town Planning Board in June 2017 and March 2021 respectively. Genuine efforts have continued be made by YLDS in searching suitable sites for relocation since the approval of the planning permission for YLDS in 2021. Based on the results from the site searching exercise, 4 potential area were initially identified and would require further negotiation to check the site availability and investigation on the technical feasibility of such use in the area. The relocation of the driving school would also subject to the further agreement and liaison with relevant government department(s). YLDS genuinely wish to address the previous concerns/advices from TPB member and reach an acceptable solution for the driving school.

4.1.2 Before a suitable replacement site or alternative arrangement for YLDS is available, the renewal of the planning permission for YLDS at the current site is considered to be an acceptable interim solution.

4.2 There is Strong Demand for Designated Driving School in the NWNT

4.2.1 YLDS has two important functions to serve the public transport policy, namely it is the only Government Designated Driving School to meet the much needed demands of the residents living and working in the North West New Territories for driver training and it also serves as the only Transport Department Driving Test Centre in the sub-region. The long driving test waiting time demonstrates the facility is no doubt in demand and YLDS continues to serve a public need, which is to train drivers to drive safely on the road. Though the TPB recently approved the planning application no. A/YL-TYST/1237 for a temporary driving school near Shan Ha Road at its meeting on 13 October 2023, that temporary driving school only provides driver training for motorcycle, private car and light goods vehicles and it could only accommodate limited number of training vehicles due to its small scale. The Application Site will continue to be the only Designated Driving School in NWNT providing driver training for all types of vehicles including heavy vehicles and articulated vehicles.

4.2.2 The location of YLDS is a major contributor to satisfying the public demand for driver training. This driving school is the largest privately owned training facility in the NWNT with over 1 million population. Abrupt closure of the school would affect the provision of a much needed

public services. YLDS is also the major and the only driving training school supporting Government's policy on Labour Importation Scheme for Transport Sector.

4.3 HKSM Yuen Long Driving School Provides a Controlled Environment for Learner Drivers

4.3.1 Compared to other unregulated driver training operated by licensed private driving instructors, YLDS offers wider training facilities, in particular the driving simulation training, and an off-street training environment which enables leaner drivers to be trained for basic driving skills within the driving school before they are able to drive safely on designated training routes outside the driving school. Such intensive on-site driver training has reduced traffic disruptions due to learner drivers on the designated driving routes, which is part and partial of the regulated driver training under the Government's Designated Driving School policy.

4.3.2 If the YLDS were to shut down before a new driving school site could be operational, learner drivers from NWNT would need to have a driver training unregulated on all public roads in the district, which would give rise to traffic congestion causing nuisance and even safety hazard to other road users and local communities. It is in the interests of road safety that any alternative driving school site be operational before closure of the present facilities, including closure of the only Transport Department's Driving Test Centre in NWNT.

4.4 Transport Department Supports the Continuous Operation of HKSM Yuen Long Driving School

4.4.1 Transport Department ("TD") fully understands the complexity in relocating the existing YLDS and the Government Driving Test Centre as it requires planning approval for the site itself and the community's support for the off-site training routes. Given the long waiting time for a driving test in YLDS, the continuous operation of YLDS could enable the scheduling of test appointments without causing disruption to the driving test arrangement. An early renewal of the application could also allow sufficient buffer time to deal with any unforeseen circumstance.

4.5 No Adverse Traffic Impacts to the Surrounding Area

4.5.1 The operation of the YLDS will remain the same as in past few years since the approval of A/YL-NSW/287 in 2021. A traffic assessment (**Appendix 1** refers) has been conducted to evaluate the traffic situation taken into account the existing and approved developments in recently years, including the temporary transitional housing development, the land sale site on the east of Chung Yip Road, and residential developments in Tung Tau Industrial Area. It is confirmed that the continuous operation of the driving school till 2028 will be acceptable.

4.6 Possible Interface Problems with Residential Developments is Tolerable

4.6.1 According to TD's regulations, no training vehicles is allowed on public roads during peak hours from 7:30am to 9:30am in the morning of Mondays to Saturdays, and 4:30pm to 7:30pm in the afternoon on weekdays. Secondly, learner drivers have to complete their training in on-site training area before they can practise off-site driving to ensure they would not cause nuisances or safety concerns on public streets. As committed by YLDS since planning approval no. A/YL-NSW/247, there will only be one ATV and one bus having off-site training from 7:30pm to 9:30pm and there will be no training of heavy vehicles and ATV off-site after 9:30pm as stipulated in the planning approval condition.

4.6.2 Furthermore, in the Tung Tau Industrial Area training zone where the "R(E)1" sites are located, only private cars and light goods vehicles are trained there. Commercial vehicles (i.e. heavy vehicles and articulated vehicles) and motorcycles are not allowed to train within this zone. Last but not least, as in other residential areas, there is no apparent conflict between resident and driving training vehicles.

4.6.3 Against these circumstances, the impact from the driving school is minimized and tolerable.

4.7 Minimise Potential Glare Impact to the Surroundings

4.7.1 YLDS is fully committed to minimise any potential impact to the surroundings wherever possible. Noting that there may be firefly in the wetland in close proximity to the Application Site, YLDS has replaced the existing street lights by lightings facing downward and inward in 2023.

4.8 No Implementation Plan for the "OU(CDWRA)" Zone

4.8.1 The "OU(CDWRA)" zone covering the Application Site is a difficult land use zone to provide housing supply because the wetland conservation and management requirements and lengthy planning approval process associated with housing development in such sensitive environments are real obstacles to implementation of the zoning intent. As at January 2024, no S16 planning application had been submitted to the Town Planning Board for proposed housing development with wetland restoration proposal within the OU(CDWRA) zone where the driving school is located. The latest approved planning application no. A/YL-NSW/321 is for a temporary transitional housing for 3 years only.

4.8.2 Hence there is no evidence that extension of the present planning approval to YLDS for a further three-year will prejudice the planned housing development in the local area.

4.9 A Hundred Job Loss if HKSM Yuen Long Driving School Closes Down Abruptly

4.9.1 Besides affecting the learner drivers, YLDS currently employs about 110 driving instructors and ancillary staff. Since no suitable replacement site for YLDS could be identified at the moment, if this planning application to extend the life of the present driving school for a further three-years is not agreed, most jobs in the driving school would need to be terminated.

4.10 HKSM Yuen Long Driving School Fulfills All Planning Approval Conditions

4.10.1 The following conditions were attached when the Board approved the last planning application No. A/YL-NSW/287 on the Application Site and all conditions have been fully complied with by YLDS.

Approval Planning Conditions	Fulfillment by Applicant
(a) no training of drivers of heavy vehicles or articulated vehicles is allowed outside the site after 9:30pm, as proposed by the applicant, during the planning approval period;	**YES**
(b) only one articulated vehicle and one bus are allowed for training of drivers outside the site from 7:30pm to 9:30pm, as proposed by the applicant, during the planning approval period;	**YES**
(c) the existing fire services installations (FSIs) implemented on the site shall be maintained in efficient working order at all times during the planning approval period;	**YES**
(d) the existing drainage facilities implemented on the site shall be maintained at all times during the planning approval period;	**YES**
(e) the submission of condition record of the existing drainage facilities on the site within 3 months from the date of commencement of the renewed planning approval to the satisfaction of the Director of Drainage Services or of the TPB by 6.12.2022;	**YES**
(f) if any of the above planning conditions (a), (b), (c) and (d) is not complied with during the planning approval period, the approval hereby given shall cease to have effect and shall be revoked immediately without further notice; and	**N/A**
(g) if any of the above planning conditions (e) is not complied with by the specified date, the approval hereby given shall cease to have effect and shall on the same date be revoked without further notice.	**N/A**

4.10.2 As there has been no significant change in the physical conditions of YLDS since the last application and all planning conditions have been fulfilled, there is no change in the drainage characteristics of the site or environmental impact on the surrounding areas. The driving school's operation continues to be carefully monitored by YLDS and Transport Department. Hence continuation of YLDS will not cause any environmental and drainage impacts.

4.11 Fulfills TPB Guidelines No. 34D for Renewal of Planning Approval

4.11.1 TPB Guidelines No. 34D sets out the criteria for assessing applications for renewal of planning approval previously granted, which are applied on and generally fulfilled in the

current application as shown below.

(a) Whether there has been any material change in planning circumstances since the previous temporary approval was granted (such as a change in the planning policy/land use zoning for the area) or a change in the land uses of the surrounding areas.

4.11.2 There has been no material change in land use in the vicinity of the Application Site area since the last planning approval in 2021. There was no comprehensive residential development and wetland restoration proposal approved by the TPB in the subject "OU(CDWRA)" zone in which the Application Site is located. Though there was an approved application no. A/YL-NSW/321 for the renewal of the temporary transitional housing project named United Court (元朗東頭過渡性房屋項目 - 同心村) on Chung Yip Road at the central portion of the "OU(CDWRA)" zone, it did not alter the land uses in the surrounding area.

(b) Whether there are any adverse planning implications arising from the renewal of the planning approval (such as pre-emption of planned permanent development).

4.11.3 There is no adverse planning implications associated with renewal of planning permission for YLDS, as the school has been in operation on the site for about thirty years. The driving school does not affect implementation of the OZP's planning intention for the "OU(CDWRA)" zone. There is no known programme for any development of the "OU(CDWRA)" zone concerned and YLDS has no intention to redevelop the Site into residential development. Hence there is no adverse implications if the present approval is extended for another temporary period of further three years.

(c) Whether the planning conditions under previous approval have been complied with to the satisfaction of relevant Government department within the specified time limits.

4.11.4 All previous planning approval conditions have been fulfilled by YLDS as discussed in Section 4.10 above.

(d) Whether the approval period sought is reasonable.

4.11.5 Renewal of the present planning approval for further three years is justified and reasonable, given all of the above considerations. This could allow more time to YLDS to explore other suitable replacement site or other appropriate alternatives for YLDS.

(e) Any other relevant considerations.

4.11.6 YLDS is a special land use serving a public interest. The long driving test waiting time has fully demonstrated that there is strong demand for the driving courses provided by the driving school. Unlike other temporary car parks in the area which can be more easily relocated, the setting up a new driving school involves many complicated technical issues and a lengthy statutory planning and lands procedures. More time is required for setting up a new driving school.

5 CONCLUSION

5.1 This Application is submitted by HKSM Yuen Long Driving School Limited, the owner of the Application Site at Lot 1347RP in DD 115, Yuen Long, to seek planning approval for further three years for the existing driving school and ancillary uses.

5.2 HKSM Yuen Long Driving School ("YLDS") comprises an existing driving training area, the only Driving Test Centre operated by the Government in Yuen Long and Tuen Mun District, an administration building including an office of the Transport Department's Driving Test Centre, a car repairing area and a fuel-filling pit. The designated driver training routes are located on local roads outside the Application Site. The site lies in the "OU(CDRWA)" zone on the Approved Nam Sang Wai Outline Zoning Plan ("OZP") No. S/YL-NSW/8.

5.3 There are sound justifications for granting further planning approval for the continuous operation of the driving school, as summarised below:-

- YLDS is currently the only Government Designated Driving School with Transport Department's Driving Test Centre offering full range of driver training in the NWNT. It provides a safe and controlled environment for learner drivers to commence their training within the driving school before driving on public roads, thereby minimising traffic congestion and disturbances to other road users if learner drivers can only be trained on public roads. The driving school provides about 110 jobs to driving instructors and ancillary staff.

- YLDS has encountered great difficulties in identifying a suitable replacement site for the driving school. The renewal of the planning permission for YLDS at the current site is considered to be an acceptable interim solution before a suitable replacement site for YLDS is available.

- There has been no material change in planning circumstances in the local area. There is no comprehensive residential development with wetland restoration proposal in the "OU(CDWRA)" zone in which the Application Site is located and its location in the top corner of that zone means it has not and will not prejudice the planning intention for permanent land use within the zone. The overriding obstacle to future residential development within the zone is the difficulty for landowners to comply with the planning intention to incorporate wetland conservation into their development proposals. Furthermore, due to the low development intensity of the zone, only about 50 high end housing units will be provided if the Application Site is redeveloped into residential use,

which is not much help to boost the mass residential housing supply. Therefore, renewal approval for another three years will not prejudice the long term planning intention of the zone.

- The operation of YLDS will not bring adverse impacts to the existing, committed and planned residential developments in the vicinity. Furthermore, only private car and light goods vehicle training are allowed in the Tung Tau Industrial Area training zone in restricted hours warrant extension of planning approval tolerable. A traffic assessment (**Appendix 1** refers) has been conducted to evaluate the traffic situation taken into account the existing and approved residential developments in Tung Tau Industrial Area. It is confirmed that the continuous operation of the driving school till 2028 will be acceptable.

- The driving school fulfils all planning approval conditions as attached in the previous applications.

- The Application complies with all the relevant TPB Guidelines.

5.4 Given the above justifications, the Town Planning Board is requested to favourably consider granting further planning approval for the continued operation of YLDS on the Application Site.

Appendix 1

Traffic Technical Note

S.16 Application for Renewal of Planning Approval for
Hong Kong School of Motoring Yuen Long Driving School
at Lot 1347RP in DD115, Yuen Long

Traffic Technical Note

1. HKSM Yuen Long Driving School Limited, the owner of Lot 1347RP in DD115, Yuen Long (the "Application Site") submitted a S.16 application to seek renewal of planning approval for a driving school and ancillary uses for a period of three years till September 2028 on the existing driving school site in Yuen Long (see **Figure 1**). From 2017 onwards, few residential developments in the "R(E)1" zone at the periphery of Tung Tau Industrial Area was completed with population intake and few planning applications was approved. Therefore, a traffic review is considered necessary to assess the potential traffic impact of the driving school for each renewal of planning application.

2. For the driving school operation, only private car and light goods vehicle (i.e. no heavy vehicles and articulated vehicles) are allowed to train in the Tung Tau Industrial Area training zone under restrictive hours. No training vehicles are allowed on public roads during peak hours from 7:30am to 9:30am in the morning of Mondays to Saturdays, and 4:30pm to 7:30pm in the afternoon on weekdays. Only one articulated vehicle and one bus are having on-street training from 7:30pm to 9:30pm and no training of drivers on heavy vehicles and articulated vehicles outside the Application Site after 9:30pm. Therefore, the traffic generated from the driving school will not affect the normal highway peak hour traffic.

3. In order to appraise the existing traffic conditions, vehicle count survey was carried out during the time period from 9:30am to 11:30am and 2:30pm to 4:30pm on 11 January 2024 (Thursday) at the key junctions in the vicinity of the Site. The locations of the surveyed junctions are listed below and presented in **Figure 2**.

    - J/O Chung Yip Road / Local Road
    - J/O Wang Yip Street West / Hong Yip Street
    - J/O Wang Yip Street West / Fu Yip Street;
    - J/O Tak Yip Street / Hong Yip Street;
    - J/O Long Yip Street / Yuen Long On Lok Road / Po Yip Street;
    - J/O Long Yip Street / Yuen Long On Lok Road / Wang Lok Street;

4. The identified peak hours in the surveyed time period are 9:30am to 10:30am and 4:30pm to 5:30pm for the AM and PM periods, respectively and the 2024 observed traffic flows are presented in **Figure 3**.

5. As the application year will be until 2028, a future traffic forecast is carried out for the design year 2028 based on the existing traffic data, the traffic generated from the adjacent planned and approved developments, and the Annual Traffic Census historical data. The adjacent planned and approved developments are summarized in **Table 2** and shown in **Figure 4**.

Table 2 Planned and Approved Development

Site	Location	Development Content
A	Tai Kiu Village Redevelopment	Residential 827 flats
B	Residential Development at 21 Wang Yip Street West	Residential 335 flats 410m^2 Retail GFA 23 Public Car Parking Spaces
C	Commercial Development at 16 Hi Yip Street	5,560m^2 Office GFA 1,977m^2 Retail GFA 317 Public Private Car Parking Spaces 30 Public Motorcycle Parking Spaces 12 Public HGV L/UL Spaces
D	Redevelopment of Lai Sun Yuen Long Centre, 21 – 35 Wang Yip Street East, Yuen Long (Planning Application No. A/YL/304)	Residential 1,019 flats 1,600m^2 Retail GFA 1,779.3m^2 Retail GFA
E	Residential Development at Chung Yip Road, Nam Sang Wai (Planning Application No. A/YL-NSW/282)	Residential 112 flats

6. Based on the latest information, the traffic generated from the planned and approved developments are summarized in **Table 3**.

Table 3 Traffic Generated by the Planned and Approved Developments

Type		Unit /Development Content	AM Peak Hour		PM Peak Hour	
			Gen.	Att.	Gen.	Att.
Trip Rates(1)						
Office		pcu/hr/100m^2 GFA	0.1703	0.2452	0.1573	0.1175
Residential (60m^2)		pcu/hr/flat	0.0718	0.0425	0.0286	0.0370
Residential (70m^2)		pcu/hr/flat	0.0888	0.0515	0.0356	0.0480
Residential (100m^2)		pcu/hr/flat	0.1887	0.0942	0.0862	0.1214
Retail / Shopping Complex		pcu/hr/100m^2 GFA	0.2296	0.2434	0.3100	0.3563
Public Carpark(2)		pcu/hr/space	0.30	0.15	0.15	0.30
Welfare Facilities		pcu/hr/100m^2 GFA	0.2350	0.2350	0.1150	0.1150
Development Traffic						
Site A	Residential Use	827 flats @ 100m^2	157	78	72	101
Site B	Residential Use	335 flats @ 60m^2	25	15	40	10
	Retail Use	410m^2 GFA	1	1	2	2
	Carpark Use	23 spaces	7	4	11	4
Site C	Office Use	5,560m^2 GFA	10	14	24	9
	Retail Use	1,977m^2 GFA	5	5	10	7
	Carpark Use	359 spaces	108	54	162	54
Site D	Residential Use	1,019 flats @ 60m^2	74	44	30	38

Type		Unit /Development Content	AM Peak Hour		PM Peak Hour	
			Gen.	Att.	Gen.	Att.
	Retail Use	1,600m^2 GFA	4	4	5	6
	Welfare Facilities	1,779.3m^2 GFA	5	5	3	3
Site E	Residential Use	112 flats @ 70m^2	10	6	4	6
Total			**406**	**230**	**200**	**299**

Notes: Gen. – Generation; Att. - Attraction
(1) Latest mean trip rates are adopted from TPDM, Transport Department
(2) Public carpark trip rates based on in-house data.

ATC Historical Data

7. Reference was made to the 2018 to 2022 Annual Traffic Census Reports. The traffic data recorded at counting stations in the vicinity of thes Application Site are shown in **Table 4**. In the past five years, an average annual growth rate of +1.9% is recorded.

Table 4 Annual Traffic Census Data

Stn. No.	Road Section			AADT(1)					Average Growth%
	Road	From	To	2018	2019	2020	2021	2022	
5011	Wang Tat Rd, Ma Wang Rd, Long Yip Rd & Yuen Long On Lok Rd	Wang Lok St	Ma Miu Rd	16,620	17,280 (4%)	19,150 (10.8%)	20,760 (8.4%)	19,840 (-4.4%)	4.5%
6008	Long Yip St & Yuen Long On Lok Rd	Wang Chau Rd	Tai Cheung St	32,160	33,440 (4%)	31,830 (-4.8%)	33,380 (4.9%)	32,480 (-2.7%)	0.2%
6628	Long Yip St & Yuen Long On Lok Rd	Wang Lok St	Tai Kiu Rd	22,050	22,920 (3.9%)	21,820 (-4.8%)	22,890 (4.9%)	24,180 (5.6%)	2.3%
6628	Wang Lok St	Wang Tat Rd	Wang Lee St	15,220	16,720 (9.9%)	15,430 (-7.7%)	16,410 (6.4%)	16,460 (0.3%)	2.0%
Total				**86,050**	**90,360 (5%)**	**88,230 (-2.4%)**	**93,440 (5.9%)**	**92,960 (-0.5%)**	**+1.9%**

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

Territorial Population and Employment Data Matrix (TPEDM) Projection Data

8. Reference was also made to the 2019–based TPEDM published by the Planning Department. The population and employment data of year 2026 and 2031 in the Yuen Long District are summarized in **Table 5**.

Table 5 Population and Employment Data in Yuen Long District

Year	Population	Employment	Total
2026	172,350	70,700	243,050
2031	159,850	70,250	230,100
		Average Annual Growth Rate	**-1.1%**

9. As shown in **Table 5**, the projected average annual growth rate of the population and employment total number under the TPEDM in Yuen Long district is -1.1% between the years 2026 to 2031. To be conservative, the larger growth rate of +1.9% is adopted for the subsequent traffic forecast.

10. Taking into the consideration of the above, the design year 2028 traffic flows is projected as follows:

2028 Design Flows **(Figure 5)** = 2024 Existing Flows x $(1 + 1.9\%)^4$ + Additional Traffic Flows Generated by the Adjacent Planned and Approved Developments

11. The junction capacity analysis was carried out for the Year 2028 and the results are summarized in **Table 6**. The detailed junction calculation sheets are attached in **Appendix A**.

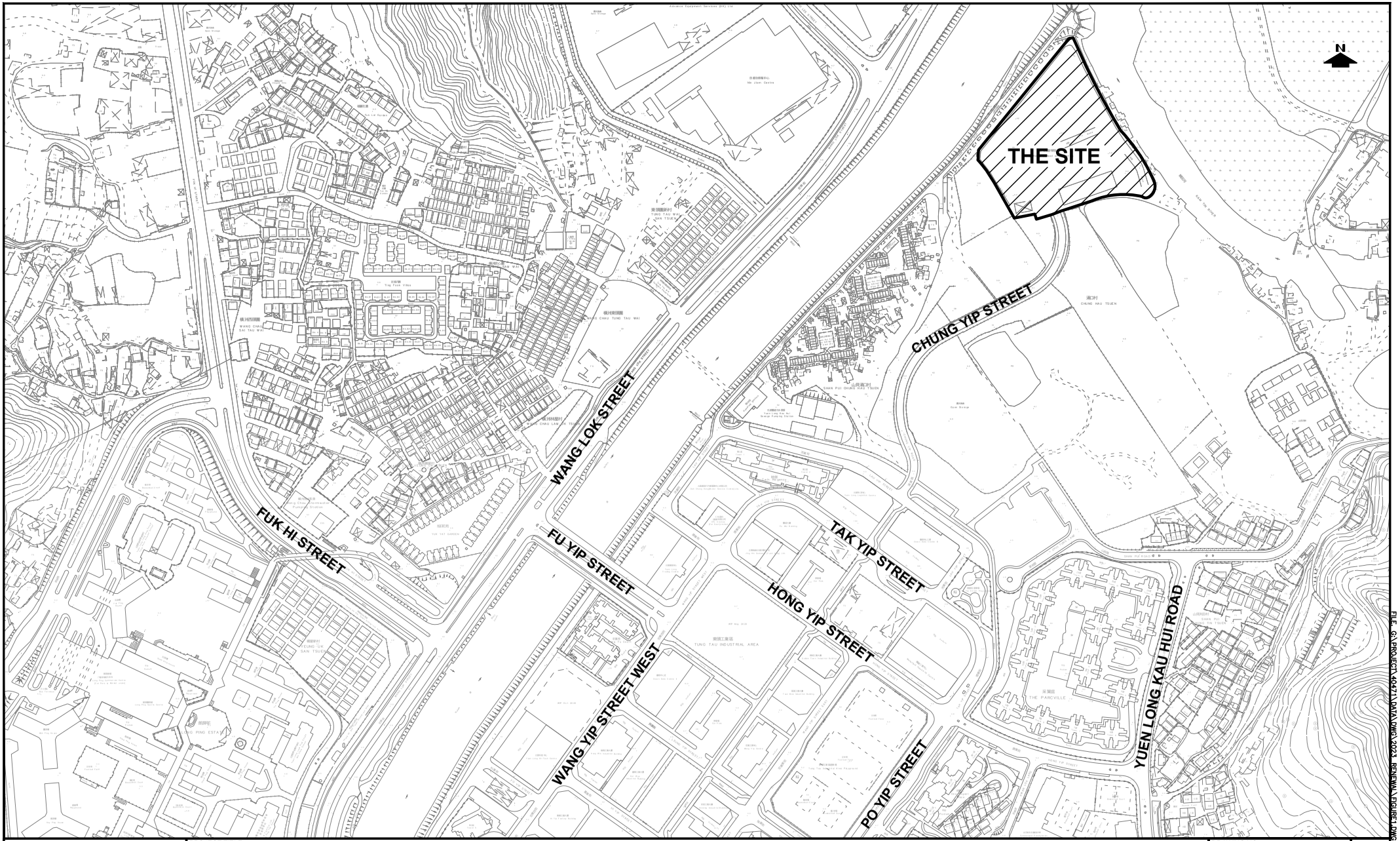
Table 6 Junction Capacity Assessment

Jun. No.	Junction	Type/ Capacity Index(1)	2024 Existing		2028 Design	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Chung Yip Street / Local Road	Priority/DFC	0.08	0.03	0.10	0.04
J2	Wang Yip Street West / Hong Yip Street	Priority/DFC	0.27	0.41	0.38	0.58
J3	Wang Yip Street West / Fu Yip Street	Priority/DFC	0.42	0.42	0.42	0.43
J4	Tak Yip Street / Hong Yip Street	Priority/DFC	0.16	0.37	0.35	0.51
J5	Long Yip Street / Yuen Long On Lok Road / Po Yip Street	Signalized/RC	71%	56%	32%	26%
J6	Long Yip Street / Yuen Long On Lok Road / Wang Lok Street	Signalized/RC	108%	74%	72%	51%

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

12. The assessment results indicated that most junctions in the vicinity will operate satisfactory in the Year 2028 and the future peak hour traffic conditions is acceptable in Tung Tau area. It is anticipated that the traffic conditions during the non-peak hours, in which the training vehicles are only allowed, will be also acceptable.

13. In view of the above, it can be concluded that the extension of the driving school until 2028 will not induce additional traffic impact onto the adjacent road network and it is acceptable in traffic viewpoint.



PROJECT NO. 40471-2	PROJECT TITLE S.16 APPLICATION FOR RENEWAL OF PLANNING APPROVAL FOR HONG KONG SCHOOL OF MOTORING YUEN LONG DRIVING SCHOOL AT LOT 1347RP IN DD115, YUEN LONG	DRAWING NO. FIGURE 1	REV. ·
DESIGNED SKL / DATE DEC 2023	DRAWING TITLE		
DRAWN CLL / SCALE 1:5000	**LOCATION PLAN**	LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

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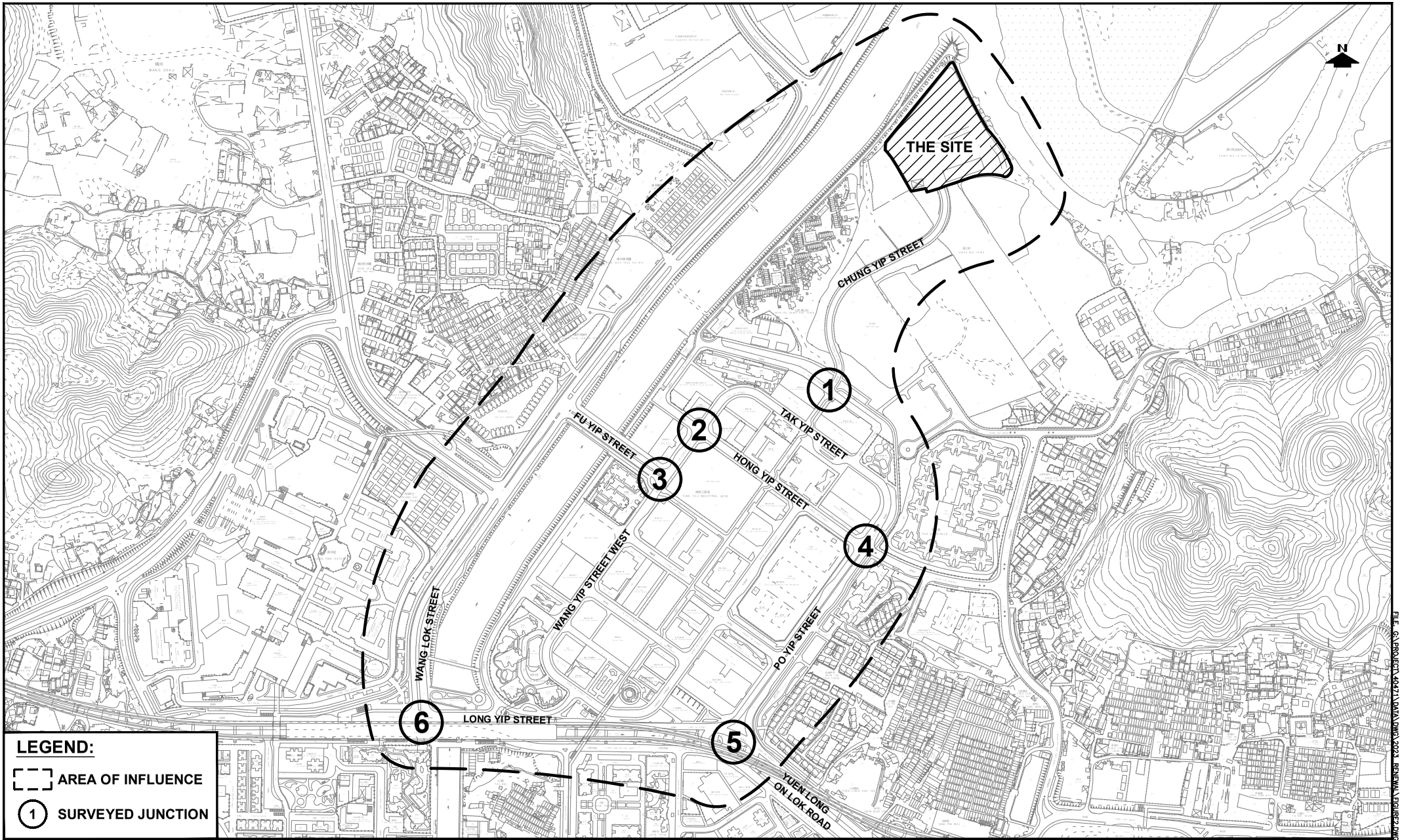

LEGEND:

- AREA OF INFLUENCE
- (1) SURVEYED JUNCTION

PROJECT NO. 40471-3	PROJECT TITLE S.16 APPLICATION FOR RENEWAL OF PLANNING APPROVAL FOR HONG KONG SCHOOL OF MOTORING YUEN LONG DRIVING SCHOOL AT LOT 1347RP IN DD115, YUEN LONG	DRAWING NO. FIGURE 2	REV. ·
DESIGNED SLN / DATE DEC 2023	DRAWING TITLE AREA OF INFLUENCE AND SURVEYED JUNCTIONS	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:7000			
CHECKED SLN			

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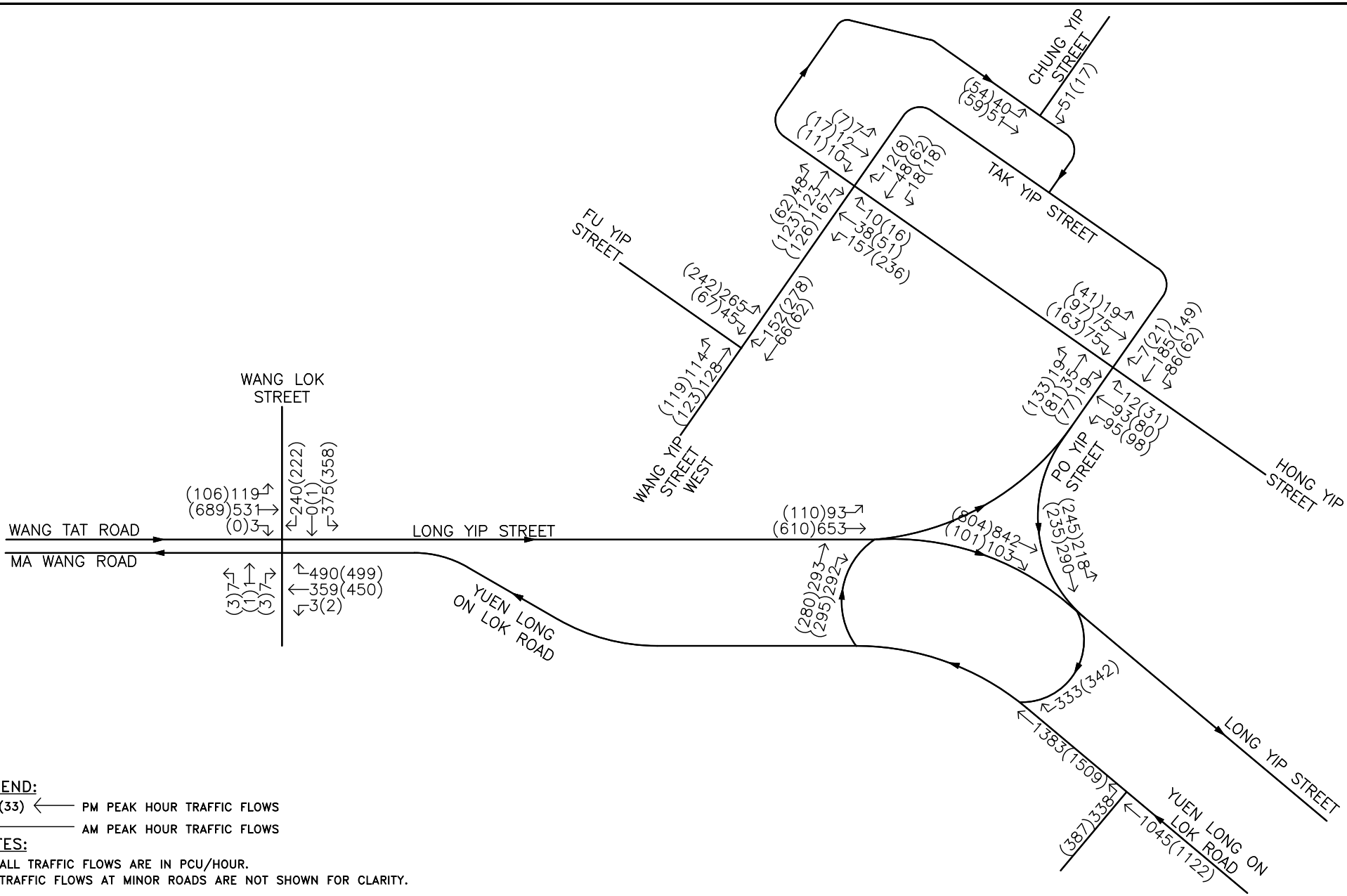

LEGEND:

33 (33) ← PM PEAK HOUR TRAFFIC FLOWS

↑ AM PEAK HOUR TRAFFIC FLOWS

NOTES:

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

PROJECT NO. 40471-3	PROJECT TITLE S.16 APPLICATION FOR RENEWAL OF PLANNING APPROVAL FOR HONG KONG SCHOOL OF MOTORING YUEN LONG DRIVING SCHOOL AT LOT 1347RP IN DD115, YUEN LONG	DRAWING NO. FIGURE 3	REV. ·
DESIGNED SLN / DATE JAN 2024	DRAWING TITLE		
DRAWN CLL / SCALE N.T.S.	**2024 OBSERVED TRAFFIC FLOWS**	LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

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PLANNED/APPROVED DEVELOPMENTS

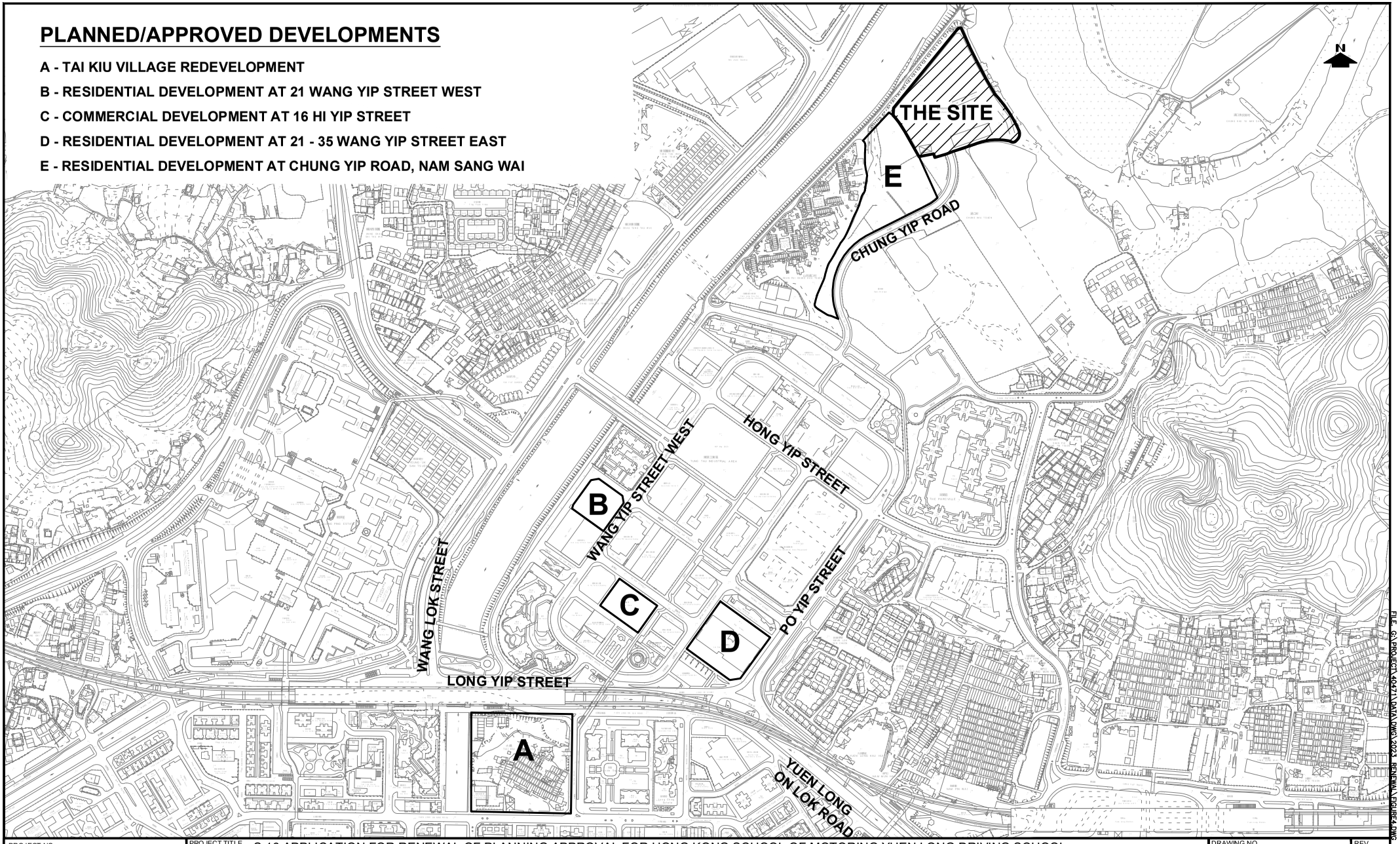
A - TAI KIU VILLAGE REDEVELOPMENT

B - RESIDENTIAL DEVELOPMENT AT 21 WANG YIP STREET WEST

C - COMMERCIAL DEVELOPMENT AT 16 HI YIP STREET

D - RESIDENTIAL DEVELOPMENT AT 21 - 35 WANG YIP STREET EAST

E - RESIDENTIAL DEVELOPMENT AT CHUNG YIP ROAD, NAM SANG WAI



PROJECT NO. 40471-3	PROJECT TITLE S.16 APPLICATION FOR RENEWAL OF PLANNING APPROVAL FOR HONG KONG SCHOOL OF MOTORING YUEN LONG DRIVING SCHOOL AT LOT 1347RP IN DD115, YUEN LONG	DRAWING NO. FIGURE 4	REV. ·
DESIGNED SLN / DATE DEC 2023	DRAWING TITLE PLANNED/APPROVED DEVELOPMENTS IN THE VICINITY	LLA 顧問有限公司 Consultancy Limited	
DRAWN CLL / SCALE 1:7000			
CHECKED SLN			

FILE: G:\PROJECT\40471\DATA\DWG\2023_RENEWAL\FIGURE4.DWG PLOT SCALE : 1 = 1

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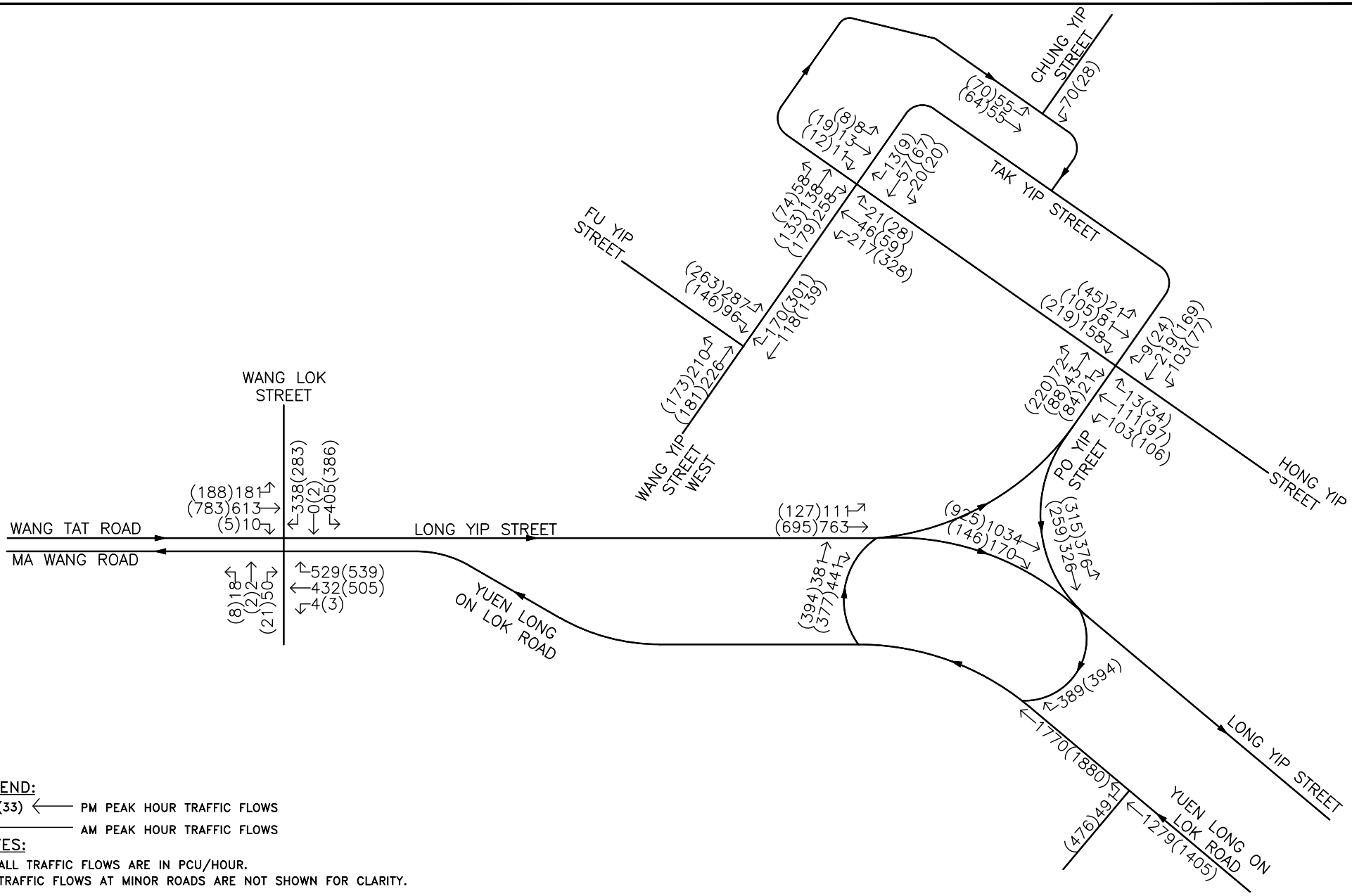


LEGEND:

33 (33) ← PM PEAK HOUR TRAFFIC FLOWS

↑ AM PEAK HOUR TRAFFIC FLOWS

NOTES:

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

PROJECT NO. 40471-3	PROJECT TITLE S.16 APPLICATION FOR RENEWAL OF PLANNING APPROVAL FOR HONG KONG SCHOOL OF MOTORING YUEN LONG DRIVING SCHOOL AT LOT 1347RP IN DD115, YUEN LONG	DRAWING NO. FIGURE 5	REV. ·
DESIGNED SLN / DATE JAN 2024	DRAWING TITLE		
DRAWN CLL / SCALE N.T.S.	2028 DESIGN TRAFFIC FLOWS	LLA 顧問有限公司 Consultancy Limited	
CHECKED SLN			

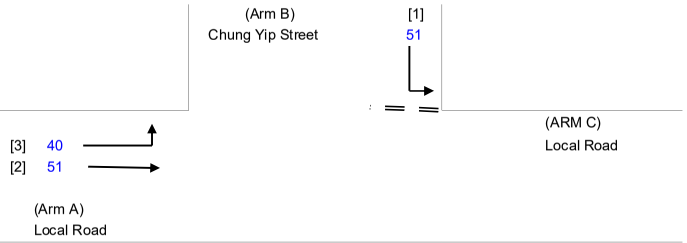
FILE: G:\PROJECT\40471\DATA\DWG\2023_RENEWAL\FIGURE5.DWG PLOT SCALE : 1 = 1

FILE: G:\PROJECT\40471\DATA\DWG\2023_RENEWAL\FIGURE5.DWG PLOT SCALE : 1 = 1

Appendix A

Junction Capacity Assessments

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2024 Existing AM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J1_CYS_LR.x	CHECKED BY:	SLN	Jan-24
J1 Chung Yip Street / Local Road		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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	=	9.50	(metres)
W cr	=	0	(metres)
q a-b	=	40	(pcu/hr)
q a-c	=	51	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	3.50	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	60	(metres)
q b-c	=	51	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.58787
E	=	0.93266
F	=	0.58595
Y	=	0.67225
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

Q b-a	=	359			
Q b-c	=	680	Q b-c (O) =	680	
Q c-b	=	423			
Q b-ac	=	680			
TOTAL FLOW	=	142	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0750
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.0750

CRITICAL DFC = 0.08

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
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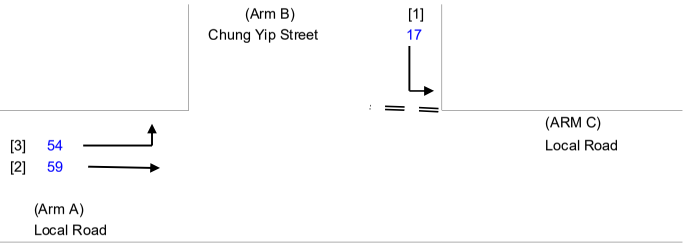
		FILENAME : J1_CYS_LR.x	CHECKED BY:	SLN	Jan-24
J1 Chung Yip Street / Local Road		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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	=	9.50	(metres)
W cr	=	0	(metres)
q a-b	=	54	(pcu/hr)
q a-c	=	59	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	3.50	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	60	(metres)
q b-c	=	17	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.58787
E	=	0.93266
F	=	0.58595
Y	=	0.67225
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

Q b-a	=	357			
Q b-c	=	676	Q b-c (O) =	676	
Q c-b	=	420			
Q b-ac	=	676			
TOTAL FLOW	=	130	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0251
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.0251

CRITICAL DFC = 0.03

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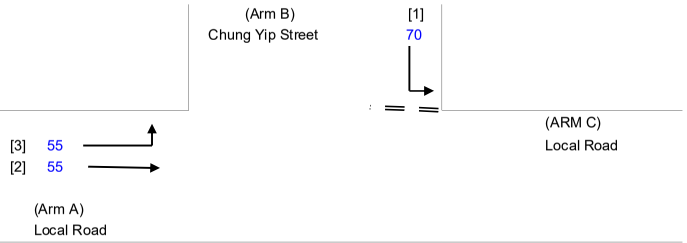
		FILENAME : J1_CYS_LR.x	CHECKED BY:	SLN	Jan-24
J1 Chung Yip Street / Local Road		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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	=	9.50	(metres)
W cr	=	0	(metres)
q a-b	=	55	(pcu/hr)
q a-c	=	55	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	3.50	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	60	(metres)
q b-c	=	70	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.58787
E	=	0.93266
F	=	0.58595
Y	=	0.67225
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

Q b-a	=	358			
Q b-c	=	677	Q b-c (O) =	677	
Q c-b	=	421			
Q b-ac	=	677			
TOTAL FLOW	=	180	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.1034
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.1034

CRITICAL DFC = 0.10

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
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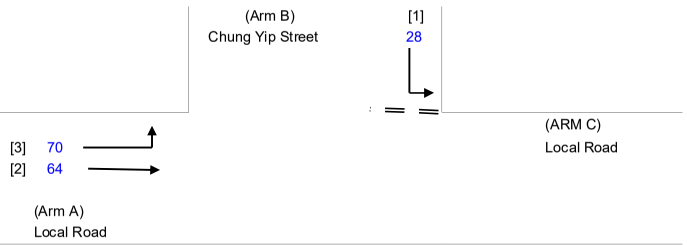
		FILENAME : J1_CYS_LR.x	CHECKED BY:	SLN	Jan-24
J1 Chung Yip Street / Local Road		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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	=	9.50	(metres)
W cr	=	0	(metres)
q a-b	=	70	(pcu/hr)
q a-c	=	64	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	0.00	(metres)
W b-c	=	3.50	(metres)
Vl b-a	=	60	(metres)
Vr b-a	=	60	(metres)
Vr b-c	=	60	(metres)
q b-c	=	28	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.58787
E	=	0.93266
F	=	0.58595
Y	=	0.67225
F for (Qb-ac)	=	1

THE CAPACITY OF MOVEMENT :

Q b-a	=	355			
Q b-c	=	674	Q b-c (O) =	674	
Q c-b	=	417			
Q b-ac	=	674			
TOTAL FLOW	=	162	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0000
DFC b-c	=	0.0415
DFC c-b	=	0.0000
DFC b-c (share lane)	=	0.0415

CRITICAL DFC = 0.04

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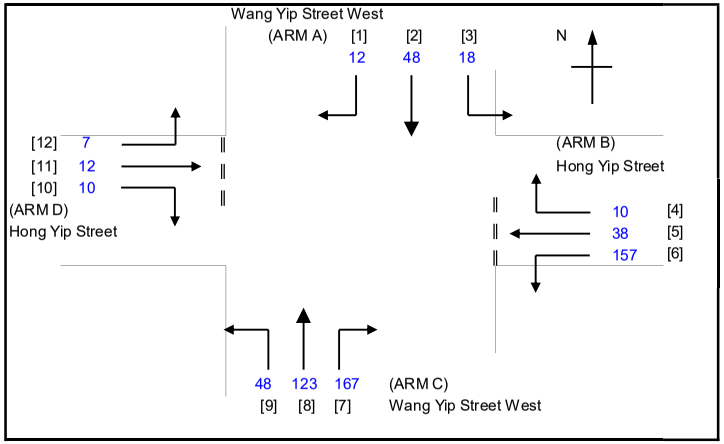
		FILENAME : J2_WYSW_HYS.xlsx	CHECKED BY:	SLN	Jan-24
J2 Wang Yip Street West / Hong Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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
X a	=	STREAM-SPECIFIC (RIGHT TURN FROM A)
X b	=	STREAM-SPECIFIC (RIGHT TURN FROM B)
Z b	=	STREAM-SPECIFIC (LEFT TURN FROM B)
M b	=	STREAM-SPECIFIC (STRAIGHT AHEAD FROM B - LEFT LANE)
Y	=	(1-0.0345W)
r b-a	=	RATIO OF FLOW TO CAPACITY IN STREAM b-a

GEOMETRIC DETAILS:

GENERAL

W	=	10.3	(metres)		
W cr	=	0	(metres)	Y =	0.645

MAJOR ROAD (ARM A)				MAJOR ROAD (ARM C)			
W a-d	=	5.00	(metres)	W c-b =	5.00	(metres)	
Vr a-d	=	60	(metres)	Vr c-b =	60	(metres)	
q a-b	=	18	(pcu/hr)	q c-a =	123	(pcu/hr)	
q a-c	=	48	(pcu/hr)	q c-b =	167	(pcu/hr)	
q a-d	=	12	(pcu/hr)	q c-d =	48	(pcu/hr)	

MINOR ROAD (ARM B)				MINOR ROAD (ARM D)			
W b-a	=	2.00	(metres)	W d-c =	2.00	(metres)	
W b-c	=	2.00	(metres)	W d-a =	2.00	(metres)	
Vl b-a	=	40	(metres)	Vl d-c =	40	(metres)	
Vr b-a	=	50	(metres)	Vr d-c =	50	(metres)	
Vr b-c	=	50	(metres)	Vr d-a =	50	(metres)	
q b-a	=	10	(pcu/hr)	q d-c =	10	(pcu/hr)	
q b-c	=	157	(pcu/hr)	q d-a =	7	(pcu/hr)	
q b-d	=	38	(pcu/hr)	q d-b =	12	(pcu/hr)	

GEOMETRIC FACTORS :

X b	=	0.739	X a	=	1.066
X c	=	1.066	X d	=	0.739
Z b	=	0.792	Z d	=	0.792
M b	=	0.739	M d	=	0.739

PROPORTION OF MINOR STRAIGHT AHEAD TRAFFIC :

r b-a	=	0.0272		r d-c	=	0.027	
ql b-d	=	19.518	(pcu/hr)	ql d-b	=	6.16349	(pcu/hr)
qr b-d	=	18.482	(pcu/hr)	qr d-b	=	5.83651	(pcu/hr)

CAPACITY OF MOVEMENT :

Q b-a	=	393	(pcu/hr)	Q d-c	=	367	(pcu/hr)
Q b-c	=	576	(pcu/hr)	Q d-a	=	560	(pcu/hr)
Q c-b	=	773	(pcu/hr)	Q a-d	=	692	(pcu/hr)
Ql b-d	=	392	(pcu/hr)	Ql d-b	=	400	(pcu/hr)
Qr b-d	=	392	(pcu/hr)	Qr d-b	=	400	(pcu/hr)

TOTAL FLOW = 650 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0254
DFC b-c	=	0.2726
DFC c-b	=	0.2160
DFCl b-d	=	0.0498
DFCr b-d	=	0.0471
DFC d-c	=	0.0272
DFC d-a	=	0.0125
DFC a-d	=	0.0173
DFCl d-b	=	0.0154
DFCr d-b	=	0.0146

CRITICAL DFC = 0.27

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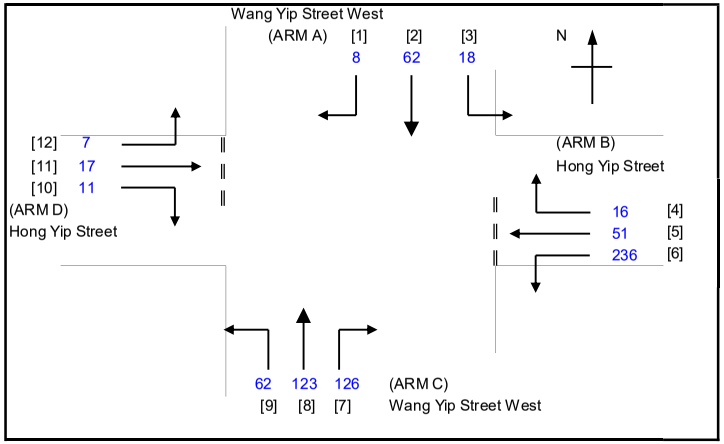
		FILENAME : J2_WYSW_HYS.xlsx	CHECKED BY:	SLN	Jan-24
J2 Wang Yip Street West / Hong Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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
X a	=	STREAM-SPECIFIC (RIGHT TURN FROM A)
X b	=	STREAM-SPECIFIC (RIGHT TURN FROM B)
Z b	=	STREAM-SPECIFIC (LEFT TURN FROM B)
M b	=	STREAM-SPECIFIC (STRAIGHT AHEAD FROM B - LEFT LANE)
Y	=	(1-0.0345W)
r b-a	=	RATIO OF FLOW TO CAPACITY IN STREAM b-a

GEOMETRIC DETAILS:

GENERAL

W	=	10.3	(metres)		
W cr	=	0	(metres)	Y =	0.645

MAJOR ROAD (ARM A)				MAJOR ROAD (ARM C)			
W a-d	=	5.00	(metres)	W c-b =	5.00	(metres)	
Vr a-d	=	60	(metres)	Vr c-b =	60	(metres)	
q a-b	=	18	(pcu/hr)	q c-a =	123	(pcu/hr)	
q a-c	=	62	(pcu/hr)	q c-b =	126	(pcu/hr)	
q a-d	=	8	(pcu/hr)	q c-d =	62	(pcu/hr)	

MINOR ROAD (ARM B)				MINOR ROAD (ARM D)			
W b-a	=	2.00	(metres)	W d-c =	2.00	(metres)	
W b-c	=	2.00	(metres)	W d-a =	2.00	(metres)	
Vl b-a	=	40	(metres)	Vl d-c =	40	(metres)	
Vr b-a	=	50	(metres)	Vr d-c =	50	(metres)	
Vr b-c	=	50	(metres)	Vr d-a =	50	(metres)	
q b-a	=	16	(pcu/hr)	q d-c =	11	(pcu/hr)	
q b-c	=	236	(pcu/hr)	q d-a =	7	(pcu/hr)	
q b-d	=	51	(pcu/hr)	q d-b =	17	(pcu/hr)	

GEOMETRIC FACTORS :

X b	=	0.739	X a	=	1.066
X c	=	1.066	X d	=	0.739
Z b	=	0.792	Z d	=	0.792
M b	=	0.739	M d	=	0.739

PROPORTION OF MINOR STRAIGHT AHEAD TRAFFIC :

r b-a	=	0.0449		r d-c	=	0.031	
ql b-d	=	26.646	(pcu/hr)	ql d-b	=	8.76264	(pcu/hr)
qr b-d	=	24.354	(pcu/hr)	qr d-b	=	8.23736	(pcu/hr)

CAPACITY OF MOVEMENT :

Q b-a	=	400	(pcu/hr)	Q d-c	=	356	(pcu/hr)
Q b-c	=	570	(pcu/hr)	Q d-a	=	558	(pcu/hr)
Q c-b	=	771	(pcu/hr)	Q a-d	=	703	(pcu/hr)
Ql b-d	=	399	(pcu/hr)	Ql d-b	=	405	(pcu/hr)
Qr b-d	=	399	(pcu/hr)	Qr d-b	=	405	(pcu/hr)

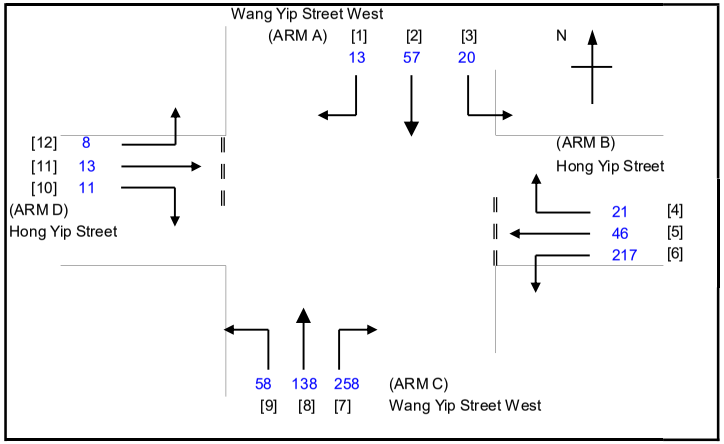
TOTAL FLOW = 737 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0400
DFC b-c	=	0.4140
DFC c-b	=	0.1634
DFCl b-d	=	0.0668
DFCr b-d	=	0.0610
DFC d-c	=	0.0309
DFC d-a	=	0.0125
DFC a-d	=	0.0114
DFCl d-b	=	0.0216
DFCr d-b	=	0.0203

CRITICAL DFC = 0.41

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design AM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J2_WYSW_HYS.xlsx	CHECKED BY:	SLN	Jan-24
J2 Wang Yip Street West / Hong Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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
X a	=	STREAM-SPECIFIC (RIGHT TURN FROM A)
X b	=	STREAM-SPECIFIC (RIGHT TURN FROM B)
Z b	=	STREAM-SPECIFIC (LEFT TURN FROM B)
M b	=	STREAM-SPECIFIC (STRAIGHT AHEAD FROM B - LEFT LANE)
Y	=	(1-0.0345W)
r b-a	=	RATIO OF FLOW TO CAPACITY IN STREAM b-a

GEOMETRIC DETAILS:

GENERAL

W	=	10.3	(metres)		
W cr	=	0	(metres)	Y =	0.645

MAJOR ROAD (ARM A)				MAJOR ROAD (ARM C)			
W a-d	=	5.00	(metres)	W c-b =	5.00	(metres)	
Vr a-d	=	60	(metres)	Vr c-b =	60	(metres)	
q a-b	=	20	(pcu/hr)	q c-a =	138	(pcu/hr)	
q a-c	=	57	(pcu/hr)	q c-b =	258	(pcu/hr)	
q a-d	=	13	(pcu/hr)	q c-d =	58	(pcu/hr)	

MINOR ROAD (ARM B)				MINOR ROAD (ARM D)			
W b-a	=	2.00	(metres)	W d-c =	2.00	(metres)	
W b-c	=	2.00	(metres)	W d-a =	2.00	(metres)	
Vl b-a	=	40	(metres)	Vl d-c =	40	(metres)	
Vr b-a	=	50	(metres)	Vr d-c =	50	(metres)	
Vr b-c	=	50	(metres)	Vr d-a =	50	(metres)	
q b-a	=	21	(pcu/hr)	q d-c =	11	(pcu/hr)	
q b-c	=	217	(pcu/hr)	q d-a =	8	(pcu/hr)	
q b-d	=	46	(pcu/hr)	q d-b =	13	(pcu/hr)	

GEOMETRIC FACTORS :

X b	=	0.739	X a	=	1.066
X c	=	1.066	X d	=	0.739
Z b	=	0.792	Z d	=	0.792
M b	=	0.739	M d	=	0.739

PROPORTION OF MINOR STRAIGHT AHEAD TRAFFIC :

r b-a	=	0.0629		r d-c	=	0.033	
ql b-d	=	24.446	(pcu/hr)	ql d-b	=	6.71407	(pcu/hr)
qr b-d	=	21.554	(pcu/hr)	qr d-b	=	6.28593	(pcu/hr)

CAPACITY OF MOVEMENT :

Q b-a	=	366	(pcu/hr)	Q d-c	=	334	(pcu/hr)
Q b-c	=	569	(pcu/hr)	Q d-a	=	555	(pcu/hr)
Q c-b	=	770	(pcu/hr)	Q a-d	=	653	(pcu/hr)
Ql b-d	=	365	(pcu/hr)	Ql d-b	=	379	(pcu/hr)
Qr b-d	=	365	(pcu/hr)	Qr d-b	=	379	(pcu/hr)

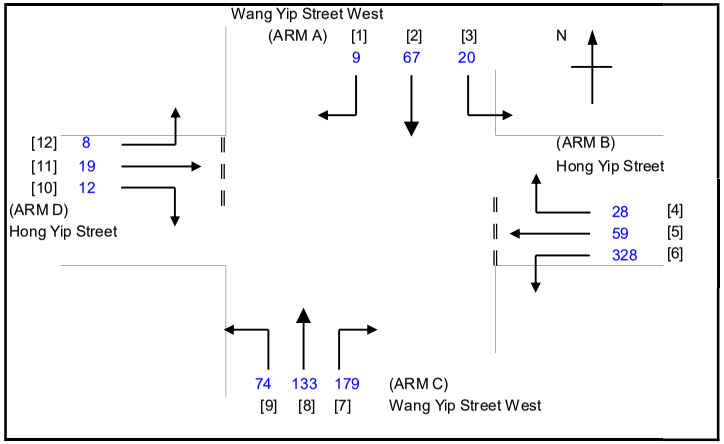
TOTAL FLOW = 860 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0574
DFC b-c	=	0.3814
DFC c-b	=	0.3351
DFCl b-d	=	0.0670
DFCr b-d	=	0.0591
DFC d-c	=	0.0329
DFC d-a	=	0.0144
DFC a-d	=	0.0199
DFCl d-b	=	0.0177
DFCr d-b	=	0.0166

CRITICAL DFC = 0.38

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design PM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J2_WYSW_HYS.xlsx	CHECKED BY:	SLN	Jan-24
J2 Wang Yip Street West / Hong Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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
X a	=	STREAM-SPECIFIC (RIGHT TURN FROM A)
X b	=	STREAM-SPECIFIC (RIGHT TURN FROM B)
Z b	=	STREAM-SPECIFIC (LEFT TURN FROM B)
M b	=	STREAM-SPECIFIC (STRAIGHT AHEAD FROM B - LEFT LANE)
Y	=	(1-0.0345W)
r b-a	=	RATIO OF FLOW TO CAPACITY IN STREAM b-a

GEOMETRIC DETAILS:

GENERAL

W	=	10.3	(metres)		
W cr	=	0	(metres)	Y =	0.645

MAJOR ROAD (ARM A)				MAJOR ROAD (ARM C)			
W a-d	=	5.00	(metres)	W c-b =	5.00	(metres)	
Vr a-d	=	60	(metres)	Vr c-b =	60	(metres)	
q a-b	=	20	(pcu/hr)	q c-a =	133	(pcu/hr)	
q a-c	=	67	(pcu/hr)	q c-b =	179	(pcu/hr)	
q a-d	=	9	(pcu/hr)	q c-d =	74	(pcu/hr)	

MINOR ROAD (ARM B)				MINOR ROAD (ARM D)			
W b-a	=	2.00	(metres)	W d-c =	2.00	(metres)	
W b-c	=	2.00	(metres)	W d-a =	2.00	(metres)	
Vl b-a	=	40	(metres)	Vl d-c =	40	(metres)	
Vr b-a	=	50	(metres)	Vr d-c =	50	(metres)	
Vr b-c	=	50	(metres)	Vr d-a =	50	(metres)	
q b-a	=	28	(pcu/hr)	q d-c =	12	(pcu/hr)	
q b-c	=	328	(pcu/hr)	q d-a =	8	(pcu/hr)	
q b-d	=	59	(pcu/hr)	q d-b =	19	(pcu/hr)	

GEOMETRIC FACTORS :

X b	=	0.739	X a	=	1.066
X c	=	1.066	X d	=	0.739
Z b	=	0.792	Z d	=	0.792
M b	=	0.739	M d	=	0.739

PROPORTION OF MINOR STRAIGHT AHEAD TRAFFIC :

r b-a	=	0.0862		r d-c	=	0.037	
ql b-d	=	32.042	(pcu/hr)	ql d-b	=	9.85077	(pcu/hr)
qr b-d	=	26.958	(pcu/hr)	qr d-b	=	9.14923	(pcu/hr)

CAPACITY OF MOVEMENT :

Q b-a	=	384	(pcu/hr)	Q d-c	=	325	(pcu/hr)
Q b-c	=	563	(pcu/hr)	Q d-a	=	554	(pcu/hr)
Q c-b	=	769	(pcu/hr)	Q a-d	=	678	(pcu/hr)
Ql b-d	=	382	(pcu/hr)	Ql d-b	=	393	(pcu/hr)
Qr b-d	=	382	(pcu/hr)	Qr d-b	=	393	(pcu/hr)

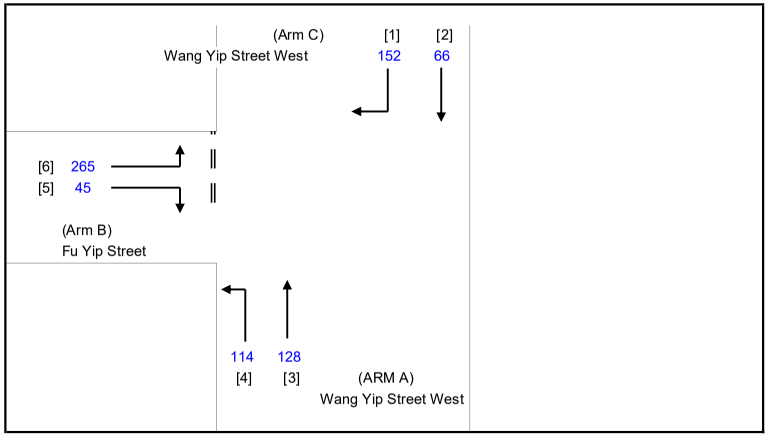
TOTAL FLOW = 936 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0729
DFC b-c	=	0.5826
DFC c-b	=	0.2328
DFCl b-d	=	0.0839
DFCr b-d	=	0.0706
DFC d-c	=	0.0369
DFC d-a	=	0.0144
DFC a-d	=	0.0133
DFCl d-b	=	0.0251
DFCr d-b	=	0.0233

CRITICAL DFC = 0.58

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2024 Existing AM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J3_WYSW_F	CHECKED BY:	SLN	Jan-24
J3 Wang Yip Street West / Fu Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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	=	10.00	(metres)
W cr	=	0	(metres)
q a-b	=	114	(pcu/hr)
q a-c	=	128	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.10	(metres)
Vr c-b	=	80	(metres)
q c-a	=	66	(pcu/hr)
q c-b	=	152	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.70	(metres)
W b-c	=	3.70	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	70	(metres)
q b-a	=	45	(pcu/hr)
q b-c	=	265	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.91343
E	=	0.95949
F	=	1.09539
Y	=	0.65500
F for (Qb-ac)	=	0.85483871

THE CAPACITY OF MOVEMENT :

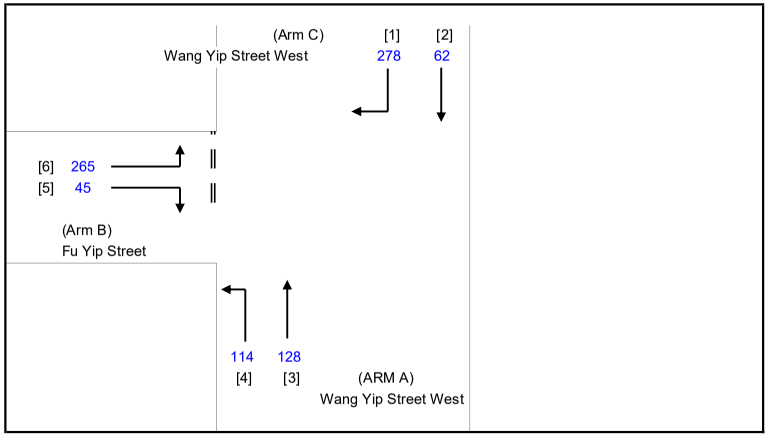
Q b-a	=	479			
Q b-c	=	675	Q b-c (O) =	659.1	
Q c-b	=	753			
Q b-ac	=	637			
TOTAL FLOW	=	770	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0939
DFC b-c	=	0.3926
DFC c-b	=	0.2019
DFC b-c (share lane)	=	0.4159

CRITICAL DFC = 0.42

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2024 Existing PM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J3_WYSW_F	CHECKED BY:	SLN	Jan-24
J3 Wang Yip Street West / Fu Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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	=	10.00	(metres)
W cr	=	0	(metres)
q a-b	=	114	(pcu/hr)
q a-c	=	128	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.10	(metres)
Vr c-b	=	80	(metres)
q c-a	=	62	(pcu/hr)
q c-b	=	278	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.70	(metres)
W b-c	=	3.70	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	70	(metres)
q b-a	=	45	(pcu/hr)
q b-c	=	265	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.91343
E	=	0.95949
F	=	1.09539
Y	=	0.65500
F for (Qb-ac)	=	0.85483871

THE CAPACITY OF MOVEMENT :

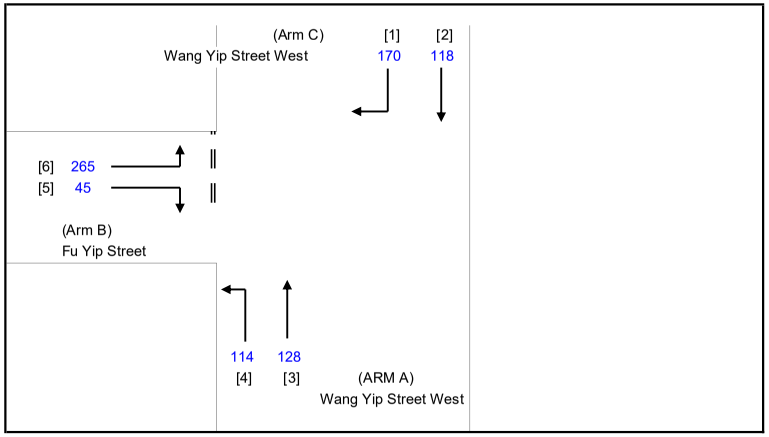
Q b-a	=	440		
Q b-c	=	675	Q b-c (O) =	657.7
Q c-b	=	753		
Q b-ac	=	626		
TOTAL FLOW	=	892	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1023
DFC b-c	=	0.3926
DFC c-b	=	0.3692
DFC b-c (share lane)	=	0.4230

CRITICAL DFC = 0.42

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design AM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J3_WYSW_F	CHECKED BY:	SLN	Jan-24
J3 Wang Yip Street West / Fu Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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	=	10.00	(metres)
W cr	=	0	(metres)
q a-b	=	114	(pcu/hr)
q a-c	=	128	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.10	(metres)
Vr c-b	=	80	(metres)
q c-a	=	118	(pcu/hr)
q c-b	=	170	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.70	(metres)
W b-c	=	3.70	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	70	(metres)
q b-a	=	45	(pcu/hr)
q b-c	=	265	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.91343
E	=	0.95949
F	=	1.09539
Y	=	0.65500
F for (Qb-ac)	=	0.85483871

THE CAPACITY OF MOVEMENT :

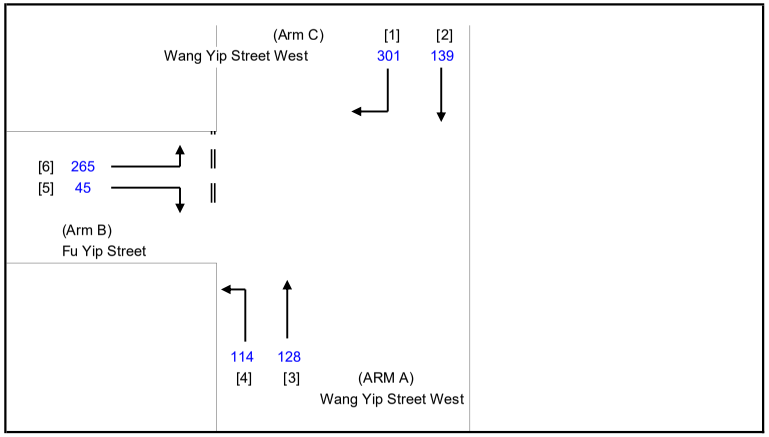
Q b-a	=	466			
Q b-c	=	675	Q b-c (O) =	658.7	
Q c-b	=	753			
Q b-ac	=	634			
TOTAL FLOW	=	840	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0966
DFC b-c	=	0.3926
DFC c-b	=	0.2258
DFC b-c (share lane)	=	0.4182

CRITICAL DFC = 0.42

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design PM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J3_WYSW_F	CHECKED BY:	SLN	Jan-24
J3 Wang Yip Street West / Fu Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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	=	10.00	(metres)
W cr	=	0	(metres)
q a-b	=	114	(pcu/hr)
q a-c	=	128	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	5.10	(metres)
Vr c-b	=	80	(metres)
q c-a	=	139	(pcu/hr)
q c-b	=	301	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.70	(metres)
W b-c	=	3.70	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	70	(metres)
q b-a	=	45	(pcu/hr)
q b-c	=	265	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.91343
E	=	0.95949
F	=	1.09539
Y	=	0.65500
F for (Qb-ac)	=	0.85483871

THE CAPACITY OF MOVEMENT :

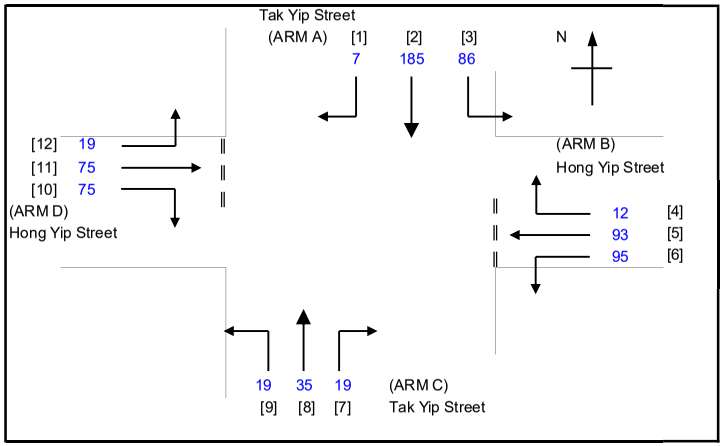
Q b-a	=	422			
Q b-c	=	675	Q b-c (O) =	657	
Q c-b	=	753			
Q b-ac	=	621			
TOTAL FLOW	=	992	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1066
DFC b-c	=	0.3926
DFC c-b	=	0.3997
DFC b-c (share lane)	=	0.4268

CRITICAL DFC = 0.43

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2024 Existing AM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J4_TYS_HYS.xlsx	CHECKED BY:	SLN	Jan-24
J4 Tak Yip Street / Hong Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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
X a	=	STREAM-SPECIFIC (RIGHT TURN FROM A)
X b	=	STREAM-SPECIFIC (RIGHT TURN FROM B)
Z b	=	STREAM-SPECIFIC (LEFT TURN FROM B)
M b	=	STREAM-SPECIFIC (STRAIGHT AHEAD FROM B - LEFT LANE)
Y	=	(1-0.0345W)
r b-a	=	RATIO OF FLOW TO CAPACITY IN STREAM b-a

GEOMETRIC DETAILS:

GENERAL

W	=	16.4	(metres)		
W cr	=	1.5	(metres)	Y =	0.434

MAJOR ROAD (ARM A)				MAJOR ROAD (ARM C)			
W a-d	=	6.30	(metres)	W c-b =	4.00	(metres)	
Vr a-d	=	60	(metres)	Vr c-b =	60	(metres)	
q a-b	=	86	(pcu/hr)	q c-a =	35	(pcu/hr)	
q a-c	=	185	(pcu/hr)	q c-b =	19	(pcu/hr)	
q a-d	=	7	(pcu/hr)	q c-d =	19	(pcu/hr)	

MINOR ROAD (ARM B)				MINOR ROAD (ARM D)			
W b-a	=	2.60	(metres)	W d-c =	2.50	(metres)	
W b-c	=	2.60	(metres)	W d-a =	2.50	(metres)	
Vl b-a	=	50	(metres)	Vl d-c =	50	(metres)	
Vr b-a	=	50	(metres)	Vr d-c =	50	(metres)	
Vr b-c	=	50	(metres)	Vr d-a =	50	(metres)	
q b-a	=	12	(pcu/hr)	q d-c =	75	(pcu/hr)	
q b-c	=	95	(pcu/hr)	q d-a =	19	(pcu/hr)	
q b-d	=	93	(pcu/hr)	q d-b =	75	(pcu/hr)	

GEOMETRIC FACTORS :

X b	=	0.794	X a	=	1.182
X c	=	0.977	X d	=	0.786
Z b	=	0.845	Z d	=	0.836
M b	=	0.794	M d	=	0.786

PROPORTION OF MINOR STRAIGHT AHEAD TRAFFIC :

r b-a	=	0.026		r d-c	=	0.162	
ql b-d	=	47.708	(pcu/hr)	ql d-b	=	43.5877	(pcu/hr)
qr b-d	=	45.292	(pcu/hr)	qr d-b	=	31.4123	(pcu/hr)

CAPACITY OF MOVEMENT :

Q b-a	=	463	(pcu/hr)	Q d-c	=	462	(pcu/hr)
Q b-c	=	596	(pcu/hr)	Q d-a	=	592	(pcu/hr)
Q c-b	=	685	(pcu/hr)	Q a-d	=	865	(pcu/hr)
Ql b-d	=	478	(pcu/hr)	Ql d-b	=	479	(pcu/hr)
Qr b-d	=	478	(pcu/hr)	Qr d-b	=	479	(pcu/hr)

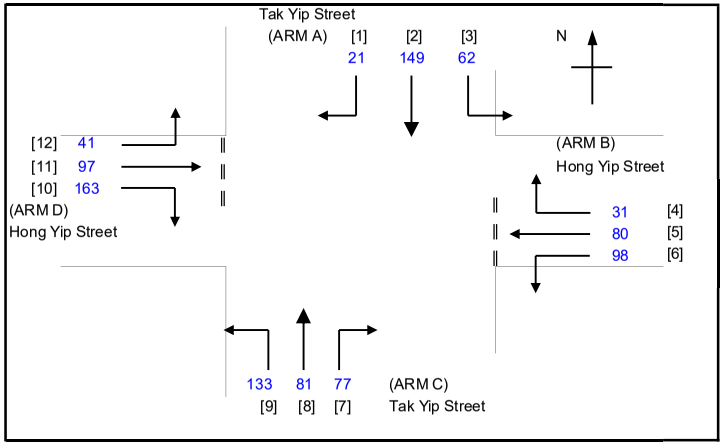
TOTAL FLOW = 720 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0259
DFC b-c	=	0.1594
DFC c-b	=	0.0277
DFCl b-d	=	0.0998
DFCr b-d	=	0.0948
DFC d-c	=	0.1623
DFC d-a	=	0.0321
DFC a-d	=	0.0081
DFCl d-b	=	0.0910
DFCr d-b	=	0.0656

CRITICAL DFC = 0.16

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2024 Existing PM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J4_TYS_HYS.xlsx	CHECKED BY:	SLN	Jan-24
J4 Tak Yip Street / Hong Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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
X a	=	STREAM-SPECIFIC (RIGHT TURN FROM A)
X b	=	STREAM-SPECIFIC (RIGHT TURN FROM B)
Z b	=	STREAM-SPECIFIC (LEFT TURN FROM B)
M b	=	STREAM-SPECIFIC (STRAIGHT AHEAD FROM B - LEFT LANE)
Y	=	(1-0.0345W)
r b-a	=	RATIO OF FLOW TO CAPACITY IN STREAM b-a

GEOMETRIC DETAILS:

GENERAL

W	=	16.4	(metres)		
W cr	=	1.5	(metres)	Y =	0.434

MAJOR ROAD (ARM A)				MAJOR ROAD (ARM C)			
W a-d	=	6.30	(metres)	W c-b =	4.00	(metres)	
Vr a-d	=	60	(metres)	Vr c-b =	60	(metres)	
q a-b	=	62	(pcu/hr)	q c-a =	81	(pcu/hr)	
q a-c	=	149	(pcu/hr)	q c-b =	77	(pcu/hr)	
q a-d	=	21	(pcu/hr)	q c-d =	133	(pcu/hr)	

MINOR ROAD (ARM B)				MINOR ROAD (ARM D)			
W b-a	=	2.60	(metres)	W d-c =	2.50	(metres)	
W b-c	=	2.60	(metres)	W d-a =	2.50	(metres)	
Vl b-a	=	50	(metres)	Vl d-c =	50	(metres)	
Vr b-a	=	50	(metres)	Vr d-c =	50	(metres)	
Vr b-c	=	50	(metres)	Vr d-a =	50	(metres)	
q b-a	=	31	(pcu/hr)	q d-c =	163	(pcu/hr)	
q b-c	=	98	(pcu/hr)	q d-a =	41	(pcu/hr)	
q b-d	=	80	(pcu/hr)	q d-b =	97	(pcu/hr)	

GEOMETRIC FACTORS :

X b	=	0.794	X a	=	1.182
X c	=	0.977	X d	=	0.786
Z b	=	0.845	Z d	=	0.836
M b	=	0.794	M d	=	0.786

PROPORTION OF MINOR STRAIGHT AHEAD TRAFFIC :

r b-a	=	0.0698		r d-c	=	0.367	
ql b-d	=	42.793	(pcu/hr)	ql d-b	=	66.3052	(pcu/hr)
qr b-d	=	37.207	(pcu/hr)	qr d-b	=	30.6948	(pcu/hr)

CAPACITY OF MOVEMENT :

Q b-a	=	442	(pcu/hr)	Q d-c	=	444	(pcu/hr)
Q b-c	=	595	(pcu/hr)	Q d-a	=	549	(pcu/hr)
Q c-b	=	691	(pcu/hr)	Q a-d	=	820	(pcu/hr)
Ql b-d	=	459	(pcu/hr)	Ql d-b	=	463	(pcu/hr)
Qr b-d	=	459	(pcu/hr)	Qr d-b	=	463	(pcu/hr)

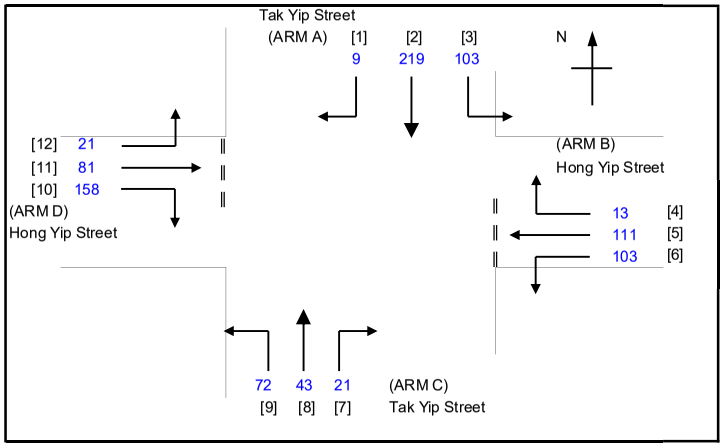
TOTAL FLOW = 1033 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0701
DFC b-c	=	0.1647
DFC c-b	=	0.1114
DFCl b-d	=	0.0932
DFCr b-d	=	0.0811
DFC d-c	=	0.3671
DFC d-a	=	0.0747
DFC a-d	=	0.0256
DFCl d-b	=	0.1432
DFCr d-b	=	0.0663

CRITICAL DFC = 0.37

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design AM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J4_TYS_HYS.xlsx	CHECKED BY:	SLN	Jan-24
J4 Tak Yip Street / Hong Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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
X a	=	STREAM-SPECIFIC (RIGHT TURN FROM A)
X b	=	STREAM-SPECIFIC (RIGHT TURN FROM B)
Z b	=	STREAM-SPECIFIC (LEFT TURN FROM B)
M b	=	STREAM-SPECIFIC (STRAIGHT AHEAD FROM B - LEFT LANE)
Y	=	(1-0.0345W)
r b-a	=	RATIO OF FLOW TO CAPACITY IN STREAM b-a

GEOMETRIC DETAILS:

GENERAL

W	=	16.4	(metres)		
W cr	=	1.5	(metres)	Y =	0.434

MAJOR ROAD (ARM A)				MAJOR ROAD (ARM C)			
W a-d	=	6.30	(metres)	W c-b =	4.00	(metres)	
Vr a-d	=	60	(metres)	Vr c-b =	60	(metres)	
q a-b	=	103	(pcu/hr)	q c-a =	43	(pcu/hr)	
q a-c	=	219	(pcu/hr)	q c-b =	21	(pcu/hr)	
q a-d	=	9	(pcu/hr)	q c-d =	72	(pcu/hr)	

MINOR ROAD (ARM B)				MINOR ROAD (ARM D)			
W b-a	=	2.60	(metres)	W d-c =	2.50	(metres)	
W b-c	=	2.60	(metres)	W d-a =	2.50	(metres)	
Vl b-a	=	50	(metres)	Vl d-c =	50	(metres)	
Vr b-a	=	50	(metres)	Vr d-c =	50	(metres)	
Vr b-c	=	50	(metres)	Vr d-a =	50	(metres)	
q b-a	=	13	(pcu/hr)	q d-c =	158	(pcu/hr)	
q b-c	=	103	(pcu/hr)	q d-a =	21	(pcu/hr)	
q b-d	=	111	(pcu/hr)	q d-b =	81	(pcu/hr)	

GEOMETRIC FACTORS :

X b	=	0.794	X a	=	1.182
X c	=	0.977	X d	=	0.786
Z b	=	0.845	Z d	=	0.836
M b	=	0.794	M d	=	0.786

PROPORTION OF MINOR STRAIGHT AHEAD TRAFFIC :

r b-a	=	0.0288		r d-c	=	0.350	
ql b-d	=	57.1	(pcu/hr)	ql d-b	=	54.6885	(pcu/hr)
qr b-d	=	53.9	(pcu/hr)	qr d-b	=	26.3115	(pcu/hr)

CAPACITY OF MOVEMENT :

Q b-a	=	451	(pcu/hr)	Q d-c	=	451	(pcu/hr)
Q b-c	=	590	(pcu/hr)	Q d-a	=	559	(pcu/hr)
Q c-b	=	676	(pcu/hr)	Q a-d	=	853	(pcu/hr)
Ql b-d	=	468	(pcu/hr)	Ql d-b	=	471	(pcu/hr)
Qr b-d	=	468	(pcu/hr)	Qr d-b	=	471	(pcu/hr)

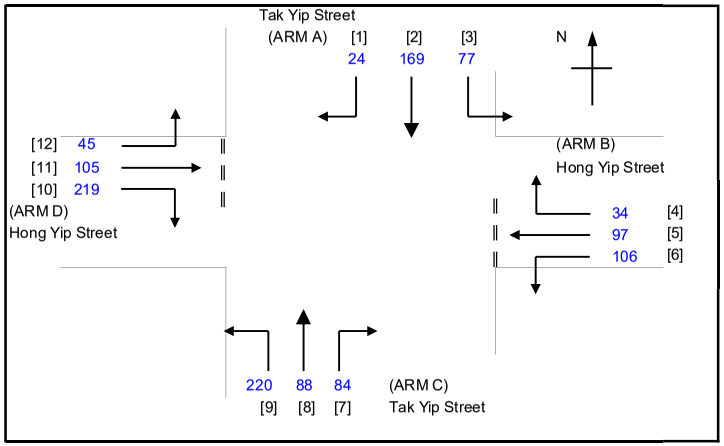
TOTAL FLOW = 954 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0288
DFC b-c	=	0.1746
DFC c-b	=	0.0311
DFCl b-d	=	0.1220
DFCr b-d	=	0.1152
DFC d-c	=	0.3503
DFC d-a	=	0.0376
DFC a-d	=	0.0106
DFCl d-b	=	0.1161
DFCr d-b	=	0.0559

CRITICAL DFC = 0.35

LLA CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design PM**	PROJECT NO.: 40471-3	PREPARED BY:	SKL	Jan-24
		FILENAME : J4_TYS_HYS.xlsx	CHECKED BY:	SLN	Jan-24
J4 Tak Yip Street / Hong Yip Street		REFERENCE NO.:	REVIEWED BY:	SLN	Jan-24



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
X a	=	STREAM-SPECIFIC (RIGHT TURN FROM A)
X b	=	STREAM-SPECIFIC (RIGHT TURN FROM B)
Z b	=	STREAM-SPECIFIC (LEFT TURN FROM B)
M b	=	STREAM-SPECIFIC (STRAIGHT AHEAD FROM B - LEFT LANE)
Y	=	(1-0.0345W)
r b-a	=	RATIO OF FLOW TO CAPACITY IN STREAM b-a

GEOMETRIC DETAILS:

GENERAL

W	=	16.4	(metres)		
W cr	=	1.5	(metres)	Y =	0.434

MAJOR ROAD (ARM A)				MAJOR ROAD (ARM C)			
W a-d	=	6.30	(metres)	W c-b =	4.00	(metres)	
Vr a-d	=	60	(metres)	Vr c-b =	60	(metres)	
q a-b	=	77	(pcu/hr)	q c-a =	88	(pcu/hr)	
q a-c	=	169	(pcu/hr)	q c-b =	84	(pcu/hr)	
q a-d	=	24	(pcu/hr)	q c-d =	220	(pcu/hr)	

MINOR ROAD (ARM B)				MINOR ROAD (ARM D)			
W b-a	=	2.60	(metres)	W d-c =	2.50	(metres)	
W b-c	=	2.60	(metres)	W d-a =	2.50	(metres)	
Vl b-a	=	50	(metres)	Vl d-c =	50	(metres)	
Vr b-a	=	50	(metres)	Vr d-c =	50	(metres)	
Vr b-c	=	50	(metres)	Vr d-a =	50	(metres)	
q b-a	=	34	(pcu/hr)	q d-c =	219	(pcu/hr)	
q b-c	=	106	(pcu/hr)	q d-a =	45	(pcu/hr)	
q b-d	=	97	(pcu/hr)	q d-b =	105	(pcu/hr)	

GEOMETRIC FACTORS :

X b	=	0.794	X a	=	1.182
X c	=	0.977	X d	=	0.786
Z b	=	0.845	Z d	=	0.836
M b	=	0.794	M d	=	0.786

PROPORTION OF MINOR STRAIGHT AHEAD TRAFFIC :

r b-a	=	0.0787		r d-c	=	0.507	
ql b-d	=	52.317	(pcu/hr)	ql d-b	=	79.1146	(pcu/hr)
qr b-d	=	44.683	(pcu/hr)	qr d-b	=	25.8854	(pcu/hr)

CAPACITY OF MOVEMENT :

Q b-a	=	432	(pcu/hr)	Q d-c	=	432	(pcu/hr)
Q b-c	=	591	(pcu/hr)	Q d-a	=	524	(pcu/hr)
Q c-b	=	685	(pcu/hr)	Q a-d	=	800	(pcu/hr)
Ql b-d	=	447	(pcu/hr)	Ql d-b	=	453	(pcu/hr)
Qr b-d	=	447	(pcu/hr)	Qr d-b	=	453	(pcu/hr)

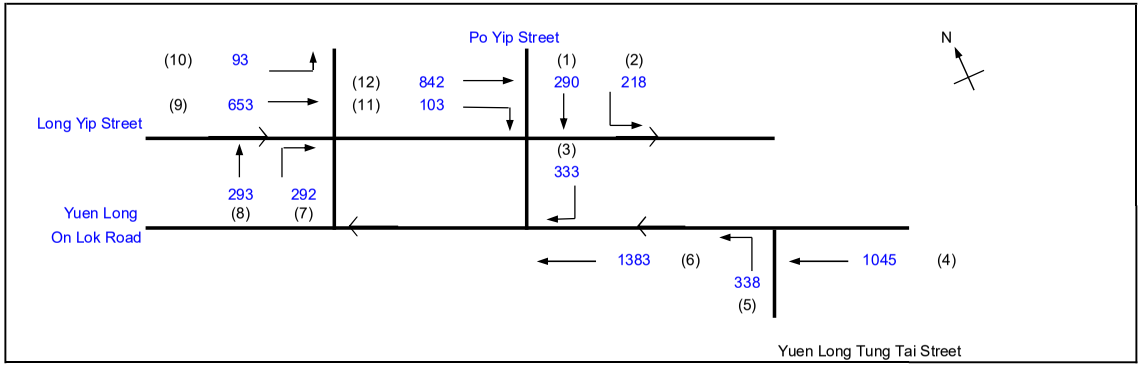
TOTAL FLOW = 1268 (PCU/HR)

COMPARISION OF DESIGN FLOW TO CAPACITY:

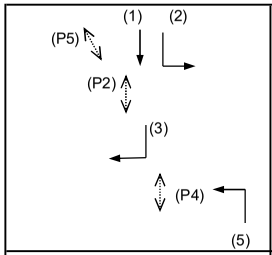
DFC b-a	=	0.0787
DFC b-c	=	0.1794
DFC c-b	=	0.1226
DFCl b-d	=	0.1170
DFCr b-d	=	0.1000
DFC d-c	=	0.5069
DFC d-a	=	0.0859
DFC a-d	=	0.0300
DFCl d-b	=	0.1746
DFCr d-b	=	0.0571

CRITICAL DFC = 0.51

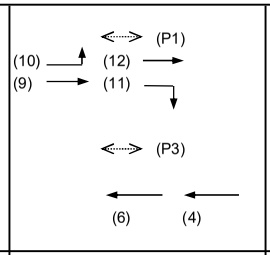
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2024 Existing AM**	PROJECT NO.: 40471-3	Prepared By:	SKL	Jan-24
		FILENAME : J5_LYS_YLOLR_PYR.xlsx	Checked By:	SLN	Jan-24
J5 Long Yip Street / Yuen Long On Lok Road / Po Yip Street		REFERENCE NO.:	Reviewed By:	SLN	Jan-24



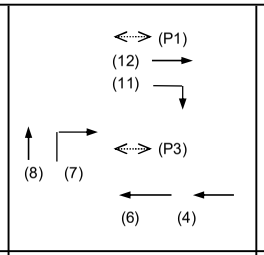
			Existing Cycle Time	
No. of stages per cycle		N =	4	
Cycle time		C =	120	sec
Sum(y)		Y =	0.461	
Loss time		L =	15	sec
Total Flow		=	5883	pcu
Co	= (1.5*L+5)/(1-Y)	=	51.0	sec
Cm	= L/(1-Y)	=	27.8	sec
Yult		=	0.788	
R.C.ult	= (Yult-Y)/Y*100%	=	70.9	%
Cp	= 0.9*L/(0.9-Y)	=	30.7	sec
Ymax	= 1-L/C	=	0.875	
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**71**	**%**



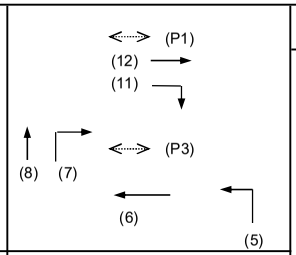
Stage 1 Int = 7



Stage 2 Int = 7



Stage 3 Int = 6



Stage 4 Int = 10

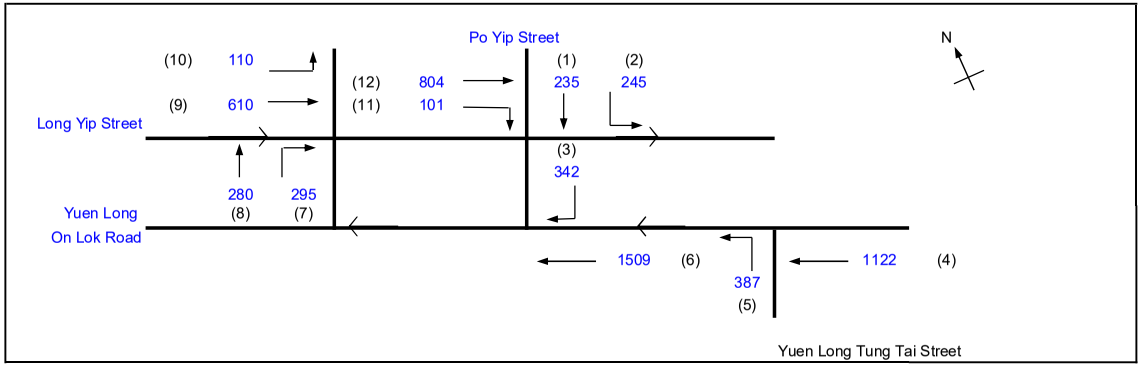
Stage	Green
1	**19**
2	**28**
3	**29**
4	**15**

Pedestrian Phase	Stage	Width (m)	Green Time Required (s) SG	FG	Delay	Green Time Provided (s) SG	FG
P1	2,3,4	11	9	10	2	80	10
P2	1	10	8	9	2	15	9
P3	2,3,4	11	10	12	2	78	12
P4	1	11	8	9	2	15	9
P5	1	8	8	9	7	10	9

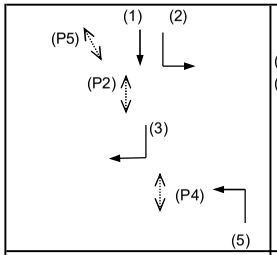
Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Site Factor	Site Factor Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
																				15					
1	1	3.5		1			N	1965		169		169	0.00	1965			1965	0.086	0.086		20	20	0.527	24	47
2	1	3.5		1	50			2105	173			173	1.00	2044			2044	0.085			19	20	0.518	24	47
1,2	1	3.5		1	50		N	1965	45	121		166	0.27	1949			1949	0.085			19	20	0.522	24	47
3	1	5.7		2	20		N	4510			333	333	1.00	4195			4195	0.079			18	20	0.486	27	43
9,10	2	3.0		1	60		N	1915	93	148		241	0.39	1897			1897	0.127			29	29	0.526	36	40
9	2	3.0		2			N	3970		505		505	0.00	3970			3970	0.127			29	29	0.527	36	37
6	2,3,4	3.2		2	18		N	4010		1383		1383	0.00	4010	0.9	-321	3689	0.375	0.375		85	85	0.527	39	8
11	2,3	3.5		1	30		N	1965			103	103	1.00	1871			1871	0.055			13	85	0.077	0	5
12	2,3	3.0		2			N	3970		842		842	0.00	3970			3970	0.212			48	85	0.298	24	6
8	3,4	5.90		1				2345		293		293	0.00	2345			2345	0.125			28	30	0.492	42	37
7,8	3,4	5.90		1	20			2345		0	292	292	1.00	2181			2181	0.134			30	30	0.527	42	38
5	1,4	4.50		2	10		N	4270		338		338	0.00	4270			4270	0.079			18	30	0.311	24	33
4	2,3	3.20		3			N	6085		1045		1045	0.00	6085			6085	0.172			39	39	0.527	46	31

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

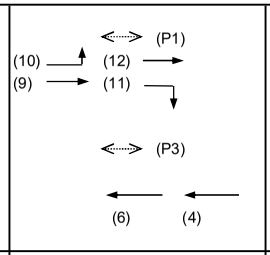
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2024 Existing PM**	PROJECT NO.: 40471-3	Prepared By:	SKL	Jan-24
		FILENAME : J5_LYS_YLOLR_PYR.xlsx	Checked By:	SLN	Jan-24
J5 Long Yip Street / Yuen Long On Lok Road / Po Yip Street		REFERENCE NO.:	Reviewed By:	SLN	Jan-24



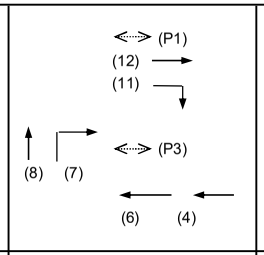
			Existing Cycle Time	
No. of stages per cycle		N =	4	
Cycle time		C =	120	sec
Sum(y)		Y =	0.489	
Loss time		L =	18	sec
Total Flow		=	6040	pcu
Co	= (1.5*L+5)/(1-Y)	=	62.6	sec
Cm	= L/(1-Y)	=	35.2	sec
Yult		=	0.765	
R.C.ult	= (Yult-Y)/Y*100%	=	56.5	%
Cp	= 0.9*L/(0.9-Y)	=	39.4	sec
Ymax	= 1-L/C	=	0.850	
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**56**	**%**



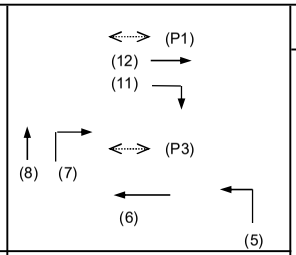
Stage 1 Int = 7



Stage 2 Int = 7



Stage 3 Int = 6



Stage 4 Int = 10

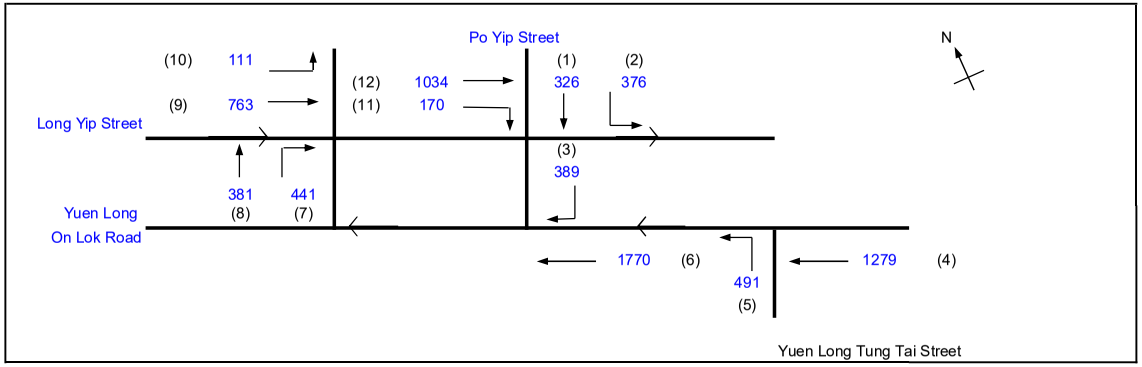
Stage	Green
1	**18**
2	**25**
3	**25**
4	**23**

Pedestrian Phase	Stage	Width (m)	Green Time Required (s) SG	FG	Delay	Green Time Provided (s) SG	FG
P1	2,3,4	11	9	10	2	80	10
P2	1	10	8	9	2	14	9
P3	2,3,4	11	10	12	2	78	12
P4	1	11	8	9	2	14	9
P5	1	8	8	9	7	9	9

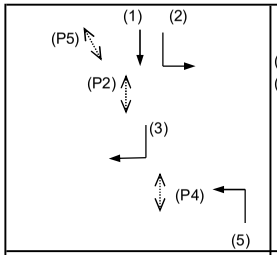
Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Site Factor	Site Factor Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
																				15					
1	1	3.5		1			N	1965		157		157	0.00	1965			1965	0.080	0.080		17	19	0.509	24	47
2	1	3.5		1	50			2105	167			167	1.00	2105			2105	0.079			17	19	0.506	24	47
1,2	1	3.5		1	50		N	1965	78	78		156	0.50	1965			1965	0.079			17	19	0.506	24	47
3	1	5.7		2	20		N	4510			342	342	1.00	4510			4510	0.076		3	16	19	0.484	27	44
9,10	2	3.0		1	60		N	1915	110	124		234	0.47	1915			1915	0.122			25	26	0.574	36	43
9	2	3.0		2			N	3970		486		486	0.00	3970			3970	0.122			26	26	0.575	36	41
6	2,3,4	3.2		2	18		N	4010		1509		1509	0.00	4010	0.9	-321	3689	0.409	0.409		85	85	0.575	42	8
11	2,3	3.5		1	30		N	1965			101	101	1.00	1965			1965	0.051			11	85	0.072	0	5
12	2,3	3.0		2			N	3970		804		804	0.00	3970			3970	0.203			42	85	0.285	21	6
8	3,4	5.90		1				2345		280		280	0.00	2345			2345	0.119			25	26	0.546	42	41
7,8	3,4	5.90		1	20			2345		0	295	295	1.00	2345			2345	0.126			26	26	0.575	42	42
5	1,4	4.50		2	10		N	4270		387		387	0.00	4270			4270	0.091			19	26	0.414	30	37
4	2,3	3.20		3			N	6085		1122		1122	0.00	6085			6085	0.184			38	38	0.575	50	32

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

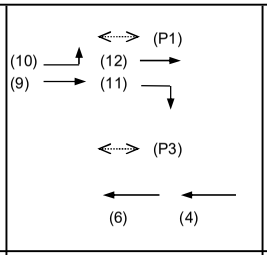
LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design AM**	PROJECT NO.: 40471-3	Prepared By:	SKL	Jan-24
		FILENAME : J5_LYS_YLOLR_PYR.xlsx	Checked By:	SLN	Jan-24
J5 Long Yip Street / Yuen Long On Lok Road / Po Yip Street		REFERENCE NO.:	Reviewed By:	SLN	Jan-24



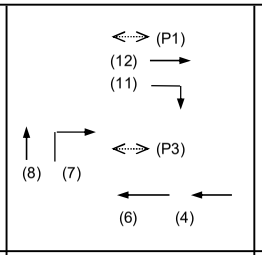
			Existing Cycle Time	
No. of stages per cycle		N =	4	
Cycle time		C =	120	sec
Sum(y)		Y =	0.597	
Loss time		L =	15	sec
Total Flow		=	7531	pcu
Co	= (1.5*L+5)/(1-Y)	=	68.2	sec
Cm	= L/(1-Y)	=	37.2	sec
Yult		=	0.788	
R.C.ult	= (Yult-Y)/Y*100%	=	32.0	%
Cp	= 0.9*L/(0.9-Y)	=	44.5	sec
Ymax	= 1-L/C	=	0.875	
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**32**	**%**



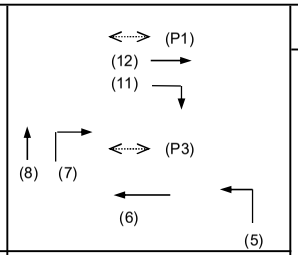
Stage 1 Int = 7



Stage 2 Int = 7



Stage 3 Int = 6



Stage 4 Int = 10

Stage	Green
1	**20**
2	**25**
3	**32**
4	**14**

Pedestrian Phase	Stage	Width (m)	Green Time Required (s) SG	FG	Delay	Green Time Provided (s) SG	FG
P1	2,3,4	11	9	10	2	79	10
P2	1	10	8	9	2	16	9
P3	2,3,4	11	10	12	2	77	12
P4	1	11	8	9	2	16	9
P5	1	8	8	9	7	11	9

Move-ment	Stage	Lane Width m.	Phase	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	Site Factor	Site Factor 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)
																				15					
1	1	3.5		1			N	1965		227		227	0.00	1965			1965	0.116			20	21	0.674	36	52
2	1	3.5		1	50			2105	246			246	1.00	2105			2105	0.117	0.117		21	21	0.682	36	52
1,2	1	3.5		1	50		N	1965	130	99		229	0.57	1965			1965	0.117			21	21	0.680	36	52
3	1	5.7		2	20		N	4510			389	389	1.00	4510			4510	0.086			15	21	0.503	30	43
9,10	2	3.0		1	60		N	1915	111	174		285	0.39	1915			1915	0.149			26	26	0.682	42	47
9	2	3.0		2			N	3970		589		589	0.00	3970			3970	0.148			26	26	0.680	45	43
6	2,3,4	3.2		2	18		N	4010		1770		1770	0.00	4010	0.9	-321	3689	0.480	0.480		84	84	0.682	51	10
11	2,3	3.5		1	30		N	1965			170	170	1.00	1965			1965	0.087			15	84	0.123	6	5
12	2,3	3.0		2			N	3970		1034		1034	0.00	3970			3970	0.260			46	84	0.370	30	7
8	3,4	5.9		1				2345		381		381	0.00	2345			2345	0.162			29	33	0.589	54	37
7,8	3,4	5.9		1	20			2345		0	441	441	1.00	2345			2345	0.188			33	33	0.682	60	40
5	1,4	4.5		2	10		N	4270		491		491	0.00	4270			4270	0.115			20	33	0.417	33	33
4	2,3	3.2		3			N	6085		1279		1279	0.00	6085			6085	0.210			37	37	0.682	58	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
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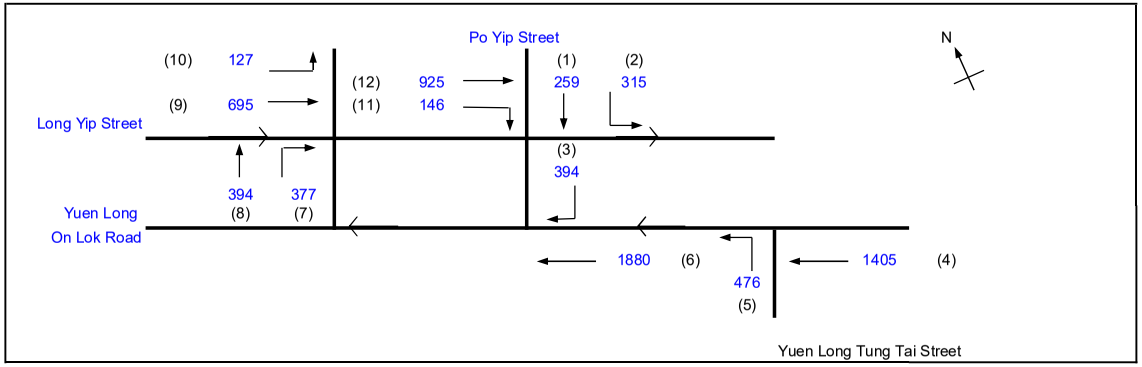
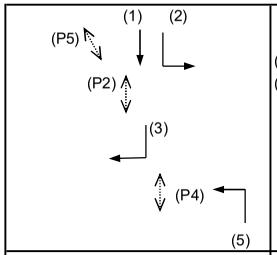
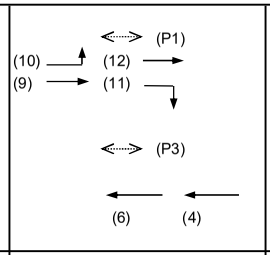
		FILENAME : J5_LYS_YLOLR_PYR.xlsx	Checked By:	SLN	Jan-24
J5 Long Yip Street / Yuen Long On Lok Road / Po Yip Street		REFERENCE NO.:	Reviewed By:	SLN	Jan-24



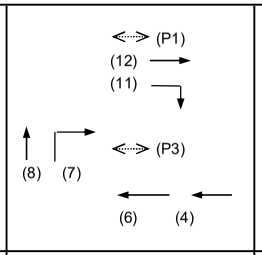
			Existing Cycle Time	
No. of stages per cycle		N =	4	
Cycle time		C =	120	sec
Sum(y)		Y =	0.605	
Loss time		L =	18	sec
Total Flow		=	7393	pcu
Co	= (1.5*L+5)/(1-Y)	=	81.0	sec
Cm	= L/(1-Y)	=	45.5	sec
Yult		=	0.765	
R.C.ult	= (Yult-Y)/Y*100%	=	26.5	%
Cp	= 0.9*L/(0.9-Y)	=	54.9	sec
Ymax	= 1-L/C	=	0.850	
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**26**	**%**



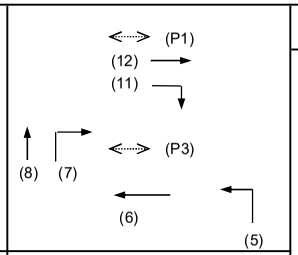
Stage 1 Int = 7



Stage 2 Int = 7



Stage 3 Int = 6



Stage 4 Int = 10

Stage	Green
1	**18**
2	**23**
3	**27**
4	**24**

Pedestrian Phase	Stage	Width (m)	Green Time Required (s) SG	FG	Delay	Green Time Provided (s) SG	FG
P1	2,3,4	11	9	10	2	81	10
P2	1	10	8	9	2	14	9
P3	2,3,4	11	10	12	2	79	12
P4	1	11	8	9	2	14	9
P5	1	8	8	9	7	9	9

Move-ment	Stage	Lane Width m.	Phase	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	Site Factor	Site Factor 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)
																				15					
1	1	3.5		1			N	1965		187		187	0.00	1965			1965	0.095	0.095	3	16	19	0.599	30	50
2	1	3.5		1	50			2105	200			200	1.00	2105			2105	0.095			16	19	0.598	30	49
1,2	1	3.5		1	50		N	1965	115	72		187	0.61	1965			1965	0.095			16	19	0.599	30	50
3	1	5.7		2	20		N	4510			394	394	1.00	4510			4510	0.087			15	19	0.550	33	45
9,10	2	3.0		1	60		N	1915	127	141		268	0.47	1915			1915	0.140			24	24	0.712	42	51
9	2	3.0		2			N	3970		554		554	0.00	3970			3970	0.140			24	24	0.709	42	46
6	2,3,4	3.2		2	18		N	4010		1880		1880	0.00	4010	0.9	-321	3689	0.510	0.510		86	86	0.712	51	10
11	2,3	3.5		1	30		N	1965			146	146	1.00	1965			1965	0.074			13	86	0.104	6	5
12	2,3	3.0		2			N	3970		925		925	0.00	3970			3970	0.233			39	86	0.325	24	6
8	3,4	5.90		1				2345		386		386	0.00	2345			2345	0.165			28	28	0.712	54	46
7,8	3,4	5.90		1	20			2345		8	377	385	0.98	2345			2345	0.164			28	28	0.710	54	45
5	1,4	4.50		2	10		N	4270		476		476	0.00	4270			4270	0.111			19	28	0.483	36	38
4	2,3	3.20		3			N	6085		1405		1405	0.00	6085			6085	0.231			39	39	0.712	62	34

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

LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
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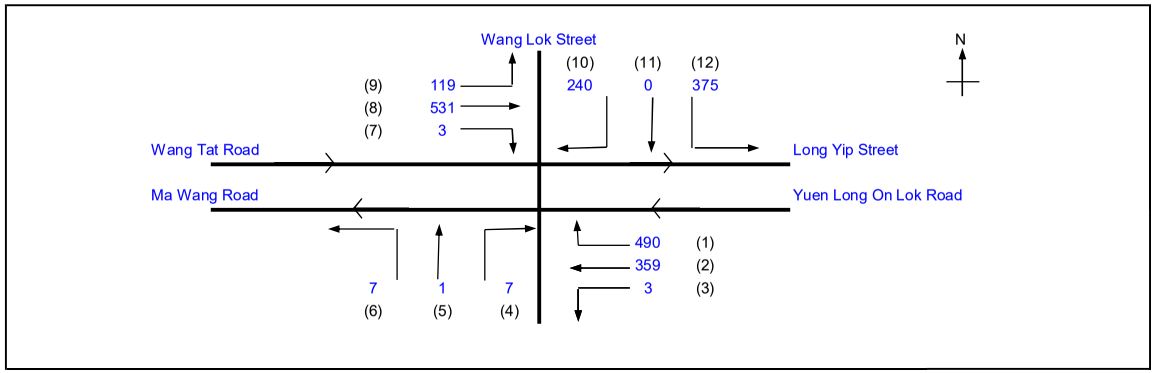
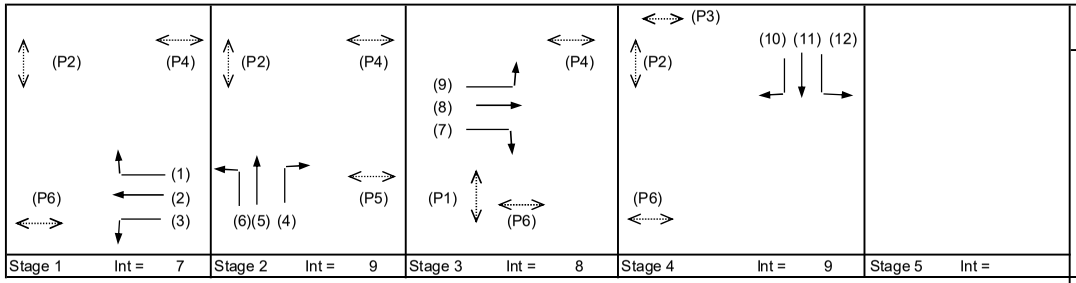
		FILENAME : J6_LYS_YLOLR_WLS.xlsx	Checked By:	SLN	Jan-24
J6 Long Yip Street / Yuen Long On Lok Road / Wang Lok Street		REFERENCE NO.:	Reviewed By:	SLN	Jan-24



			Existing Cycle Time	
No. of stages per cycle		N =	4	
Cycle time		C =	125	sec
Sum(y)		Y =	0.332	
Loss time		L =	29	sec
Total Flow		=	2135	pcu
Co	= (1.5*L+5)/(1-Y)	=	72.6	sec
Cm	= L/(1-Y)	=	43.4	sec
Yult		=	0.683	
R.C.ult	= (Yult-Y)/Y*100%	=	105.7	%
Cp	= 0.9*L/(0.9-Y)	=	45.9	sec
Ymax	= 1-L/C	=	0.768	
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**108**	**%**



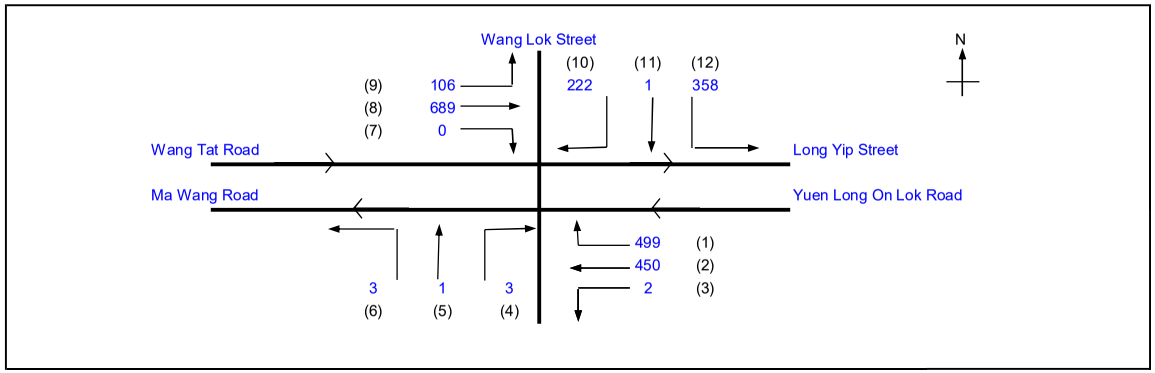
Stage	Green
1	**36**
2	**18**
3	**24**
4	**31**

Pedestrian Phase	Stage	Width (m)	Green Time Required (s) SG	FG	Delay	Green Time Provided (s) SG	FG
P1	3	12.5	6	12	6	14	12
P2	1,2,4	16	10	15	2	94	15
P3	4	12	7	11	5	24	5
P4	1,2,3	10.5	8	10	2	91	10
P5	2	7.5	7	7	4	16	7
P6	1,3,4	6.5	5	6	2	108	6

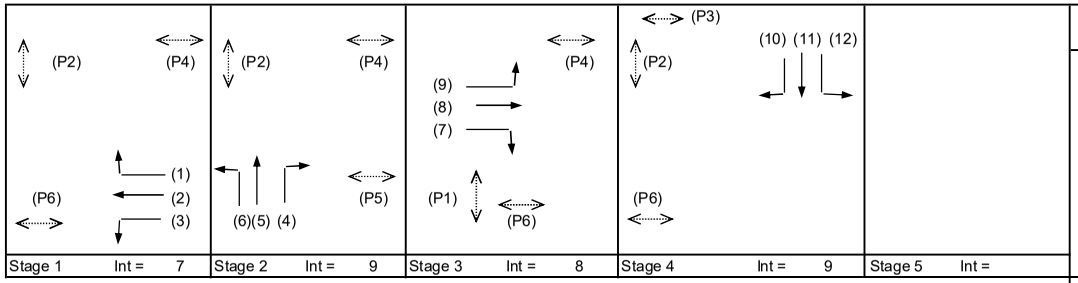
Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
																				29					
3	1	3.00		1	6		N	1915	3			3	1.00	1532			1532	0.002			1	37	0.007	0	28
2	1	3.00		2				4110		359		359	0.00	4110			4110	0.087			25	37	0.292	24	31
1	1	3.00		2	18			4110			490	490	1.00	3794			3794	0.129	0.129		37	37	0.432	33	33
5,6	2	3.30		1	6		N	1945	7	1		8	0.88	1596			1596	0.005	0.005		1	37	0.017	0	28
4	2	3.30		1	15			2085			7	7	1.00	1895			1895	0.004			1	19	0.024	0	40
9	3	3.30		1	15		N	1945	119			119	1.00	1768			1768	0.067			19	25	0.339	18	41
8,9	3	3.30		1	15			2085	0	179		179	0.00	2085			2085	0.086	0.086		25	25	0.432	24	42
8	3	3.30		1				2085		178		178	0.00	2085			2085	0.085			25	25	0.430	24	42
7,8	3	3.30		1	20			2085		174	3	177	0.02	2082			2082	0.085			25	32	0.329	24	35
12	4	3.50		1	12		N	1965	195			195	1.00	1747			1747	0.112			32	32	0.432	30	38
10,11,12	4	3.50		1	12			2105	180	0	29	209	1.00	1871			1871	0.112	0.112		32	32	0.432	30	37
10	4	3.50		1	14			2105			211	211	1.00	1901			1901	0.111			32	32	0.429	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

LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2024 Existing PM**	PROJECT NO.: 40471-3	Prepared By:	SKL	Jan-24
		FILENAME : J6_LYS_YLOLR_WLS.xlsx	Checked By:	SLN	Jan-24
J6 Long Yip Street / Yuen Long On Lok Road / Wang Lok Street		REFERENCE NO.:	Reviewed By:	SLN	Jan-24



			Existing Cycle Time	
No. of stages per cycle		N =	4	
Cycle time		C =	120	sec
Sum(y)		Y =	0.350	
Loss time		L =	39	sec
Total Flow		=	2334	pcu
Co	= (1.5*L+5)/(1-Y)	=	97.6	sec
Cm	= L/(1-Y)	=	60.0	sec
Yult		=	0.608	
R.C.ult	= (Yult-Y)/Y*100%	=	73.8	%
Cp	= 0.9*L/(0.9-Y)	=	63.8	sec
Ymax	= 1-L/C	=	0.675	
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	=	**74**	**%**



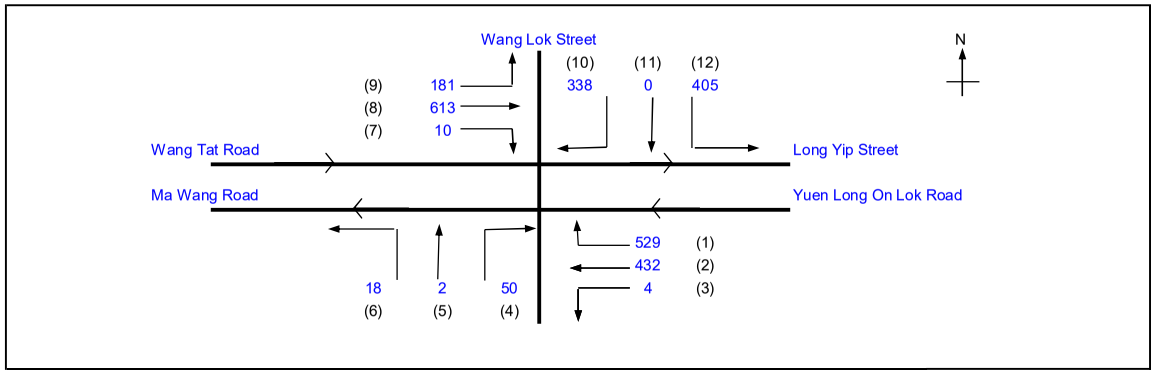
Stage	Green
1	**29**
2	**10**
3	**25**
4	**23**

Pedestrian Phase	Stage	Width (m)	Green Time Required (s) SG	FG	Delay	Green Time Provided (s) SG	FG
P1	3	12.5	6	12	6	15	12
P2	1,2,4	16	10	15	2	70	15
P3	4	12	7	11	5	16	5
P4	1,2,3	10.5	8	10	2	76	10
P5	2	7.5	7	7	4	8	7
P6	1,3,4	6.5	5	6	2	93	6

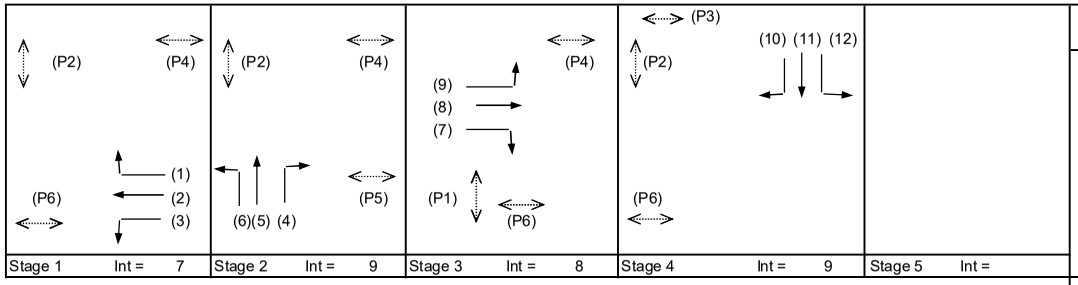
Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
																				29					
3	1	3.00		1	6		N	1915	2			2	1.00	1532			1532	0.001			0	30	0.005	0	30
2	1	3.00		2				4110		450		450	0.00	4110			4110	0.109			25	30	0.431	33	35
1	1	3.00		2	18			4110			499	499	1.00	3794			3794	0.132	0.132		30	30	0.518	36	36
5,6	2	3.30		1	6		N	1945	3	1		4	0.75	1638			1638	0.002	0.002	10	1	11	0.028	0	45
4	2	3.30		1	15			2085			3	3	1.00	1895			1895	0.002			0	11	0.018	0	45
9	3	3.30		1	15		N	1945	106			106	1.00	1768			1768	0.060			14	26	0.281	12	37
8,9	3	3.30		1	15			2085	0	230		230	0.00	2085			2085	0.110	0.110		26	26	0.518	36	42
8	3	3.30		1				2085		230		230	0.00	2085			2085	0.110			26	26	0.518	36	42
7,8	3	3.30		1	20			2085		229	0	229	0.00	2085			2085	0.110			25	26	0.516	36	41
12	4	3.50		1	12		N	1965	184			184	1.00	1747			1747	0.105	0.105		24	24	0.518	24	43
10,11,12	4	3.50		1	12			2105	174	1	22	197	0.99	1872			1872	0.105			24	24	0.517	30	43
10	4	3.50		1	14			2105			200	200	1.00	1901			1901	0.105			24	24	0.517	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
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design AM**	PROJECT NO.: 40471-3	Prepared By:	SKL	Jan-24
		FILENAME : J6_LYS_YLOLR_WLS.xlsx	Checked By:	SLN	Jan-24
J6 Long Yip Street / Yuen Long On Lok Road / Wang Lok Street		REFERENCE NO.:	Reviewed By:	SLN	Jan-24



			Existing Cycle Time	
No. of stages per cycle		N =	4	
Cycle time		C =	125	sec
Sum(y)		Y =	0.401	
Loss time		L =	29	sec
Total Flow		=	2582	pcu
Co	= (1.5*L+5)/(1-Y)	=	81.0	sec
Cm	= L/(1-Y)	=	48.4	sec
Yult		=	0.683	
R.C.ult	= (Yult-Y)/Y*100%	=	70.1	%
Cp	= 0.9*L/(0.9-Y)	=	52.3	sec
Ymax	= 1-L/C	=	0.768	
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**72**	**%**



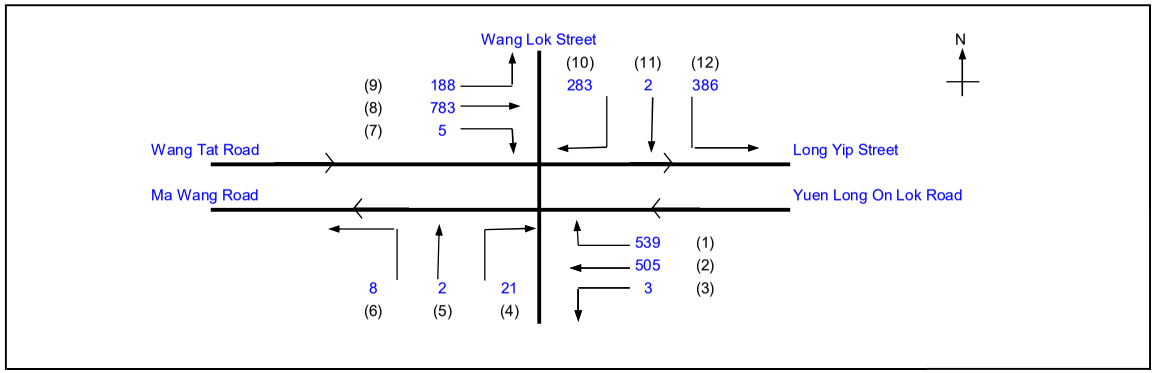
Stage	Green
1	32
2	23
3	23
4	31

Pedestrian Phase	Stage	Width (m)	Green Time Required (s) SG	FG	Delay	Green Time Provided (s) SG	FG
P1	3	12.5	6	12	6	13	12
P2	1,2,4	16	10	15	2	95	15
P3	4	12	7	11	5	24	5
P4	1,2,3	10.5	8	10	2	91	10
P5	2	7.5	7	7	4	21	7
P6	1,3,4	6.5	5	6	2	103	6

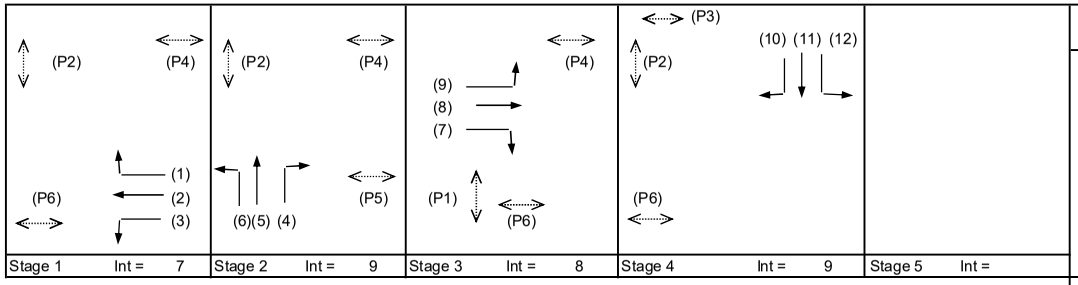
Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Movement Left pcu/h	Straight pcu/h	Right pcu/h	Total FLow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
																				29					
3	1	3.00		1	6		N	1915	4			4	1.00	1532			1532	0.003			1	33	0.010	0	30
2	1	3.00		2				4110		432		432	0.00	4110			4110	0.105			25	33	0.394	30	35
1	1	3.00		2	18			4110			529	529	1.00	3794			3794	0.139	0.139		33	33	0.522	39	37
5,6	2	3.30		1	6		N	1945	18	2		20	0.90	1588			1588	0.013			3	33	0.047	0	31
4	2	3.30		1	15			2085			50	50	1.00	1895			1895	0.026	0.026		6	24	0.137	6	38
9	3	3.30		1	15		N	1945	178			178	1.00	1768			1768	0.101	0.101		24	24	0.522	24	46
8,9	3	3.30		1	15			2085	3	206		209	0.01	2082			2082	0.100			24	24	0.521	30	45
8	3	3.30		1				2085		209		209	0.00	2085			2085	0.100			24	24	0.522	30	45
7,8	3	3.30		1	20			2085		198	10	208	0.05	2078			2078	0.100			24	32	0.389	30	36
12	4	3.50		1	12		N	1965	235			235	1.00	1747			1747	0.135			32	32	0.522	36	40
10,11,12	4	3.50		1	12			2105	170	0	82	252	1.00	1871			1871	0.135	0.135		32	32	0.522	36	39
10	4	3.50		1	14			2105			256	256	1.00	1901			1901	0.135			32	32	0.522	36	39

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

LLA CONSULTANCY LIMITED	**TRAFFIC SIGNAL CALCULATION**			INITIALS	DATE
S.16 Application for Renewal of Planning Approval for Hong Kong School of Motoring Yuen Long Driving School at Lot 1347RP in DD115, Yuen Long	**2028 Design PM**	PROJECT NO.: 40471-3	Prepared By:	SKL	Jan-24
		FILENAME : J6_LYS_YLOLR_WLS.xlsx	Checked By:	SLN	Jan-24
J6 Long Yip Street / Yuen Long On Lok Road / Wang Lok Street		REFERENCE NO.:	Reviewed By:	SLN	Jan-24



			Existing Cycle Time	
No. of stages per cycle		N =	4	
Cycle time		C =	120	sec
Sum(y)		Y =	0.401	
Loss time		L =	39	sec
Total Flow		=	2725	pcu
Co	= (1.5*L+5)/(1-Y)	=	106.1	sec
Cm	= L/(1-Y)	=	65.2	sec
Yult		=	0.608	
R.C.ult	= (Yult-Y)/Y*100%	=	51.3	%
Cp	= 0.9*L/(0.9-Y)	=	70.4	sec
Ymax	= 1-L/C	=	0.675	
R.C.(C)	**= (0.9*Ymax-Y)/Y*100%**	**=**	**51**	**%**



Stage	Green
1	28
2	11
3	24
4	24

Pedestrian Phase	Stage	Width (m)	Green Time Required (s) SG	FG	Delay	Green Time Provided (s) SG	FG
P1	3	12.5	6	12	6	14	12
P2	1,2,4	16	10	15	2	71	15
P3	4	12	7	11	5	17	5
P4	1,2,3	10.5	8	10	2	75	10
P5	2	7.5	7	7	4	9	7
P6	1,3,4	6.5	5	6	2	92	6

Move-ment	Stage	Lane Width m.	Phase	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 Length m.	Share Effect pcu/hr	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required) sec	g (input) sec	Degree of Saturation X	Queue Length (m / lane)	Average Delay (seconds)
																				29					
3	1	3.00		1	6		N	1915	3			3	1.00	1532			1532	0.002			0	29	0.008	0	31
2	1	3.00		2				4110		505		505	0.00	4110			4110	0.123			25	29	0.514	36	37
1	1	3.00		2	18			4110			539	539	1.00	3794			3794	0.142	0.142		29	29	0.595	39	39
5,6	2	3.30		1	6		N	1945	8	2		10	0.80	1621			1621	0.006			1	12	0.061	0	44
4	2	3.30		1	15			2085			21	21	1.00	1895			1895	0.011	0.011	10	2	12	0.109	0	45
9	3	3.30		1	15		N	1945	188			188	1.00	1768			1768	0.106			21	25	0.501	24	42
8,9	3	3.30		1	15			2085	0	263		263	0.00	2085			2085	0.126			25	25	0.594	36	44
8	3	3.30		1				2085		262		262	0.00	2085			2085	0.126			25	25	0.592	36	44
7,8	3	3.30		1	20			2085		258	5	263	0.02	2082			2082	0.126	0.126		25	25	0.595	36	44
12	4	3.50		1	12		N	1965	213			213	1.00	1747			1747	0.122	0.122		25	25	0.595	30	46
10,11,12	4	3.50		1	12			2105	173	2	52	227	0.99	1873			1873	0.121			24	25	0.591	36	45
10	4	3.50		1	14			2105			231	231	1.00	1901			1901	0.121			25	25	0.592	36	45

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