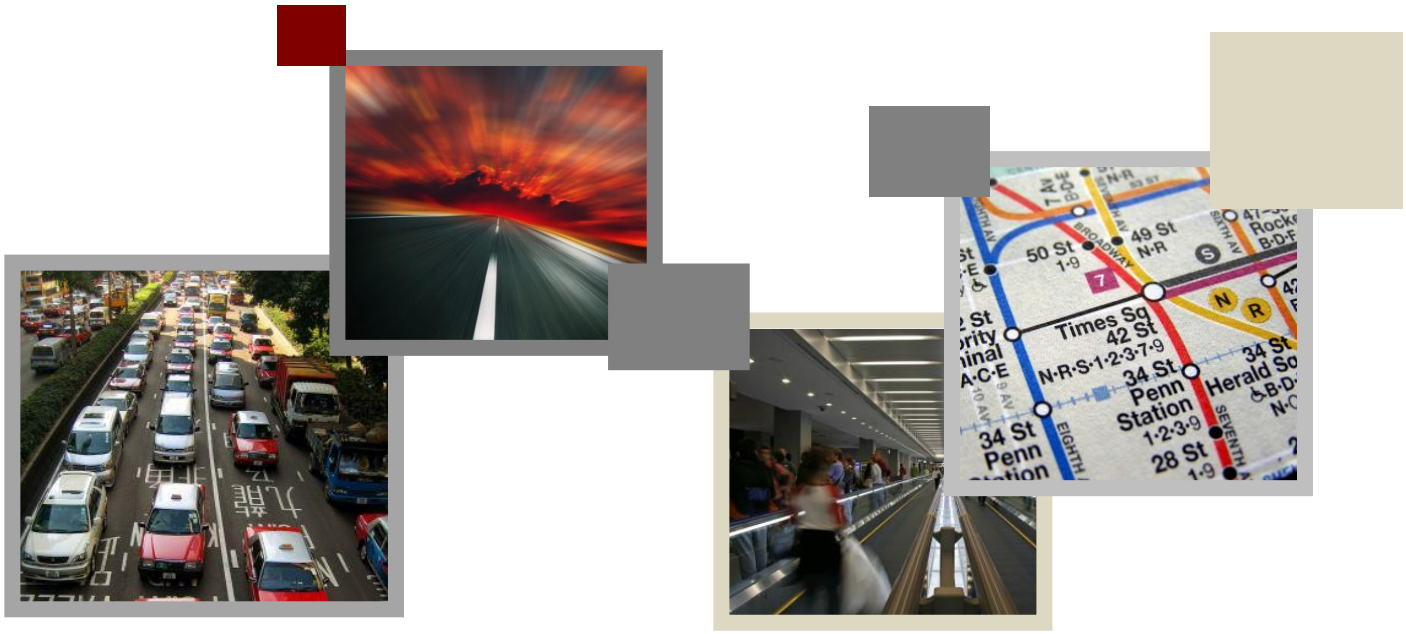
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120, Shan Ha Road, Yuen Long, New Territories



TRAFFIC IMPACT ASSESSMENT REPORT

Reference: 31073-R01-01c
Date: March 2026

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1 Introduction

1.1 Background

Ankor Driving School Limited (the "Applicant") operates a Designated Driving School ("the School") at Lot 2620 RP (Part) in D.D. 120, No. 69 Shan Ha Road, Yuen Long (the "Site"). The School was originally approved under Planning Application Nos. A/YL-TYST/1084 and A/YL-TYST/1237 and has since been operating as a temporary use for a fixed period.

In connection with the Yuen Long South (YLS) Development land resumption programme, the Site has been refined to an area of approximately 2,945.3 m². Notwithstanding the boundary refinement, the approved access arrangement, internal circulation and parking provisions, and total training fleet size have been maintained in accordance with the previous planning approvals.

The School has been in full operation at the refined Site since Q4 2025. Operational records and on-site observations indicate that the surrounding traffic conditions along Shan Ha Road and the associated training routes have remained generally stable, and motorists have adapted to the traffic environment during the construction of nearby road works.

The Applicant now seeks renewal of the planning approval and regularization of the operating regime, including an extension of the permitted on-street training hours for learner drivers. No change is proposed to the site access, internal transport facilities, shuttle bus service, training routes. The proposal is limited to adjustments to the external operating hours and formalization of associated operational controls.

AXON Consultancy Limited has been commissioned by the Applicant to prepare this Traffic Impact Assessment (TIA) to support the renewal application and to demonstrate that the continued operation of the School, with the proposed operating hours and commitments, is acceptable from the traffic engineering point of view.

1.2 Objectives

The objectives of this TIA are focused on ensuring compliance and verifying that the continued operation remains sustainable within the current road network:

- Document the existing operation of the School, including site access, internal transport facilities, shuttle bus arrangements and approved on-street training routes.
- Describe the existing traffic conditions of the surrounding road network and identify the relevant assessment periods having regard to statutory restrictions on learner driver operation.
- Assess the future traffic conditions for the design year, taking into account natural traffic growth and major planned/committed developments in the area.

- Quantify the additional traffic associated with the proposed extension of on-street training hours, based on defined fleet caps and operational controls, and superimpose this on the reference traffic flows.
- Evaluate the performance of key junctions and road links under the future reference and design scenarios in accordance with the Transport Planning and Design Manual (TPDM) and relevant Transport Department criteria.
- Demonstrate that the renewed and extended operation of the School will not cause any unacceptable or adverse traffic impact on the surrounding road network.

2 The Existing Driving School

2.1 The Application Site

The Application Site is located at No. 69 Shan Ha Road, Yuen Long, within Lot 2620 RP (Part) in D.D. 120. It is situated immediately east of the Tong Yan San Tsuen Interchange of Yuen Long Highway, as shown in **Figure 2.1**. The refined site area is approximately 2,945.3 m² following the implementation of the Yuen Long South (YLS) Development land resumption programme.

The Site is currently occupied by the existing Designated Driving School, including internal training areas, parking spaces for the training fleet and shuttle light buses, and associated office/administrative facilities. No change in land use or site boundary is proposed under this renewal application.

2.2 Access Arrangement

The School is served by a single vehicular access on Shan Ha Road, which functions as the sole ingress and egress for all vehicles associated with the Site. The access has a clear width of approximately 8 m and operates as a two-way connection to Shan Ha Road, allowing safe entry and exit for private cars, light goods vehicles, motorcycles, and light buses.

The existing access arrangement, including geometric layout and connection to Shan Ha Road, was previously accepted under the earlier planning applications. No modification to the location, width or traffic control of the access is proposed as part of the present renewal; all access operations will remain unchanged. All vehicle queuing and vehicle forming-up for lessons are contained within the Site, and no on-street waiting or loading is permitted along Shan Ha Road as shown in **Appendix A**.

2.3 Internal Transport Facilities

The Hong Kong Planning Standards and Guidelines (HKPSG) do not prescribe specific parking standards for driving schools or driving test centres. In this context, the internal transport facilities for the School are based on, and will continue to follow, the provisions previously approved under Planning Application No. A/YL-TYST/1237.

Although certain parking spaces have been repositioned within the Site in response to the refined lot boundary, the total number and type of parking spaces remain identical to the previously approved scheme and are used exclusively for the operation of the School. The existing provision is summarised in **Table 2.1.**

Table 2.1 Existing Provision of Internal Transport Facilities

Types of Parking Space	Approved Provision and Dimensions of Parking Space *
Private Car Parking Spaces	24 nos., including (i) 23 nos. @ 5.0m (L) x 2.5m (W) x 2.4m (H), and (ii) 1 no. accessible @ 5.0m (L) x 3.5m (W) x 2.4m (H)
Motorcycle Parking Spaces	22 nos. @ 2.4m (L) x 1.0m (W) x 2.4m (H)
Light bus Parking Spaces	2 nos. @ 8.0m (L) x 3.0m (W) x 3.3m (H)

Note: L = Length, W = Width & H = Minimum Headroom;
** The dimensions of the proposed parking provisions are in accordance with HKPSG CH.*8.

2.4 Approved Routes for Driving Learning, Training and Testing

The external on-street training routes remain strictly identical to those approved under previous planning applications. Learner drivers will continue to utilize the established testing circuits covering local distributors, including Shan Ha Road, Town Park Road North and South, Lam Hau Tsuen Road, Ma Tin Road, Yuen Long Tai Yuk Road, and Shap Pat Heung Road. Learner drivers are required to follow the regular training routings detailed in **Table 2.2** and illustrated in **Figure 2.2.**

i. Shan Ha Road;
ii. Town Park Road North;
iii. Town Park Road South;
iv. Lam Hau Tsuen Road;
v. Shap Pat Heung Road;
vi. Yuen Long Tai Yuk Road;
vii. Ma Tin Road.

Table 2.2 Approved Regular Training Route of Learning Vehicles

Section of Training Route	Proposed Regular Training Routing
Route 1 Section	Driving School → Jn A → Jn E → Jn D → Jn C → Jn B → Jn C → Jn D → Jn A;
Route 2 Section	End of Route 3 Section → Jn D → Jn C → Jn B → Jn C → Jn D → Jn E → Jn A → Driving School
Route 3 Section	End of Route 1 Section → Jn E → Jn D → Jn C → Jn G → Jn F → Jn E → Jn A;

Note: Jn: Junction depicted in ***Figure 2.3***

2.5 Proposed Operating Hours Extension and Operational Commitments

To better utilize the existing facilities and meet sustained demand for driving training, the Applicant proposes to extend and formalize the operating hours of the School to 08:30–23:00 daily (Mondays to Sundays and Public Holidays). Within these hours, learner drivers may conduct on-street training only during periods that are outside the statutory peak hours stipulated under the Road Traffic Ordinance (Cap. 374) and the conditions of Learner's Driving Licenses (**refer to Appendix B).**

No on-street training will be carried out during the following statutory restricted periods, when all training activities will be confined within the School compound:

- Weekdays (Monday to Friday): 07:30–09:30 and 16:30–19:30
- Saturdays: 07:30–09:30

To ensure strict compliance, the School's proposed operational schedule incorporates a 30-minute buffer around these statutory peak hours (e.g., concluding external training at 16:00 before the 16:30 restriction, and resuming at 20:00 after the 19:30 restriction). This guarantees all learning vehicles have ample time to return to the compound without overlapping with restricted periods. For the remaining allowable periods within 08:00–23:00, on-street training will be subject to a strict operational cap on the number of learning vehicles dispatched to the public road network, as summarized in **Table 2.3.**

Table 2.3 Proposed Operational Schedule of the Driving School

Activities		***Operation Period**	
Office / Administrative		Monday - Friday	08:30 – 23:00 hours
		Saturday, Sunday, and Public Holidays	08:30 – 23:00 hours
Driving Learning / Training Session	Internal within the Proposed Driving School	Monday - Friday	08:30 – 23:00 hours
		Saturday, Sunday, and Public Holidays	08:30 – 23:00 hours
	External on Public Road	Monday – Friday	10:00 – 16:00 hours and 20:00 – 23:00 hours *(Statutory peak hours 07:30-09:30 hours and 16:30-1:930 hours strictly avoided)*
		Saturday	10:00 – 2300 hours *(Statutory peak hours 07:30-09:30 hours strictly avoided)*
		Sunday, and Public Holidays	09:00 – 23:00 hours
Driving Test (to be conducted by Transport Department)		Schedule to be arranged by Transport Department	

(Note: All external training is capped at a maximum of 22 vehicles/hour.) Learner drivers will train in the on-site areas first and will only be permitted to practise on-street driving after satisfactory completion of internal training, to minimise potential disturbance or safety concerns on public roads.

To safeguard the surrounding road network, the Applicant commits to the following key operational controls:

- A maximum of 22 learning vehicles per hour (all vehicle classes combined) will be allowed on public roads for training and testing during permitted off-peak periods.
- The 22-vehicle cap will be enforced through internal scheduling and booking controls to ensure that the maximum number of vehicles on the road network at any given hour does not exceed this limit.
- All learner drivers will first complete on-site training before being permitted to conduct on-street practice.

For traffic assessment purposes, and to provide a consistent and conservative representation of the School's operation, all legally allowable on-street training periods in the renewed regime are modelled with a uniform cap of 22 learning vehicles per hour, irrespective of whether the existing approval currently permits lower hourly caps in certain periods.

2.6 Existing Shuttle Service

To reduce reliance on private cars by students, staff and visitors, the School operates an internal shuttle bus service between the Site and Tin Shui Wai MTR Station. The shuttle service has been previously agreed with the Transport Department, and the relevant approval documents are enclosed in **Appendix C**.

The shuttle operates daily with regular departures in both directions, with a maximum of approximately 2 departures per hour in most periods and up to 4 departures during the busiest hour in the evening (19:00-20:00). The service details, including origin and destination, pick-up/drop-off locations, service hours and headways, are summarised in **Table 2.4.**

All shuttle buses enter and exit the Site via the same vehicular access on Shan Ha Road and load/unload entirely within the School compound. By providing this shuttle service, the Applicant effectively suppresses additional private car trips to the Site and supports a higher use of public transport in accessing the School.

Table 2.4 Details of the Existing Shuttle Services

Item	Description
Origin - Destination	Tin Shui Wai MTR Station ↔ Ankor Driving School (Yuen Long Shan Ha Road)
Pick-up / Drop-off Point	Tin Shui Wai Side: Tin Shui Wai MTR Station Exit A near Ping Ha Road Shan Ha Road Side: Ankor Driving School Car Park
Service Period	From Tin Shui Wai Side: Monday – Sunday (18 departures between 08:30 and 22:00) *(depart at 08:30, 09:10, 09:55, 10:40, 11:30, 12:15, 13:00, 14:00, 14:55, 16:00, 17:05, 17:55, 18:35, 19:15, 19:55, 20:35, 21:15 & 22:00)* From Shan Ha Road Side: Monday – Sunday (19 departures between 08:55 and 23:10) *(depart at 08:55, 09:35, 10:20, 11:10, 11:50, 12:45, 13:30, 14:30, 15:20, 16:45, 17:30, 18:20, 19:00, 19:40, 20:20, 21:00, 21:40, 22:30 & 23:10)*
Headway:	Tin Shui Wai Side: 40 - 65 minutes Shan Ha Road Side: 40 - 50 minutes

3 Existing Traffic Conditions

3.1 Existing Road Networks

Shan Ha Road (the section between Town Park Road South to the north and Shan Ha Tsuen to the south) is a local single-two carriageway. It intersects with Tong Yan San Tsuen Interchange of Yuen Long Highway and provides regional access to and from the Driving School.

Tong Yan San Tsuen Interchange connects to Yuen Long Highway, a key road that links to the town center of Yuen Long and provides access to other districts in Hong Kong. It also integrates with Castle Peak Road – Ping Shan, which is a crucial route for motorists traveling within the Yuen Long District. Additionally, its connection with Long Tin Road offers convenient access to Tin Shui Wai.

Town Park Road North, Town Park Road South, Lam Hau Tsuen Road, Shap Pat Heung Road, Yuen Long Tai Yuk Road, and Ma Tin Road are single-two carriageways. **Lam Yu Road (eastern section),** which is connected **to Lam Hau Tsuen Road** at a roundabout, is a single-track access road, while its western section is a one-lane, one-way street. These road networks serve as the approved routes for learner drivers to practice driving skills, particularly simulating real-world driving conditions. These roads offer a suitable environment for beginners to learn basic driving maneuvers, such as turning, lane changing and understanding traffic flow, within a relatively low-traffic setting before progressing to busier roads or highways.

3.2 Public Transport

Shan Ha Road is served by one Green Minibus ("GMB") route, as indicated in **Table 3.1**.

Table 3.1 Public Transport Services in the vicinity

Route No.	Origin – Destination	Headway (min)
GMB 604	Shan Ha Tsuen – Yuen Long (Fung Cheung Street)	10 - 20

3.3 Traffic Count Surveys

In order to appraise the existing traffic conditions and capture the full operational profile of the surrounding road network, classified traffic count surveys were conducted at the key junctions and road links within the study area (as depicted in **Figure 2.3**).

To support the Applicant's proposed extension of operating hours, the surveys were undertaken continuously from 07:30 to 23:30 hours on a typical Weekday, Saturday, and Sunday in January 2026, thereby capturing:

- The statutory restricted hours during which learner drivers are not allowed to operate on public roads.
- The periods when on-street training is currently allowed and proposed to be extended.
- The full range of daily traffic variations, including morning, noon and evening peaks on both the junction network and Shan Ha Road.

Traffic volumes were recorded in 15-minute intervals by vehicle class and subsequently converted into Passenger Car Units (pcu) using the factors in the Transport Planning and Design Manual (TPDM). The highest consecutive 60-minute flows were used to identify local peak hours for assessment.

3.4 Identifications of Assessment Periods

Due to the statutory prohibition of learner drivers during certain peak periods and the School's proposed operating schedule, a two-tier assessment approach has been adopted:

Junction Capacity Assessment (Network Peak Off-Peak Hours)
To examine potential impacts at key junctions (J1–J8) during the highest background traffic periods when learner drivers are legally permitted to operate.

Based on the 2026 survey data, the following "local off-peak network peak" hours (i.e. highest flows outside statutory restricted hours) were identified for junction assessment:

Table 3.2 Local Network Off Peak Hours for Junction Assessment

Day Type	Local AM Off-Peak (Within Allowable Training Hours)	Local PM Off-Peak (Within Allowable Training Hours)
Weekday	**10:30 – 11:30**	**19:30 – 20:30**
Saturday	**-**	**17:00 – 18:00**
Sunday	**-**	**17:00 – 18:00**

Link Capacity Assessment (Shan Ha Road Critical hours)
To examine the utilization of Shan Ha Road, which is the sole access link to the Site, during its own maximum flow periods within allowed training hours.

For Shan Ha Road, the survey showed that its highest flows within allowable training hours do not fully coincide with the above junction hours. The following "critical link peak" hours were therefore adopted for link assessment:

Table 3.3 Critical Peak Hours for Shan Ha Road Link Assessment

Day Type	Local Noon Peak (Within Allowable Training Hours)	Local Afternoon / PM Peak (Within Allowable Training Hours)
Weekday	**12:30 – 13:30**	**15:00 – 16:00**
Saturday	**-**	**18:00 – 19:00**
Sunday	**-**	**18:00 – 19:00**

During the statutory restricted periods (Weekday 07:30–09:30 and 16:30–19:30; Saturday 07:30–09:30), the School's learning vehicles are not allowed on public roads. Development traffic in these hours therefore comprises only the shuttle service and other ancillary trips, which are already embedded in the observed base flows.

3.5 Existing Assessment

Junction Capacity Assessment

Junction capacity assessments have been conducted at major junctions along the learning vehicular ingress/egress route, following the guidelines set out in the Transport Planning and Design Manual ("TPDM") Volumes 2 and 4. The results of these assessments are summarized in **Table 3.4 and 3.5**, while the detailed junction calculation sheets can be found in **Appendix E**.

The performance of a traffic signalised junction is indicated by its reserve capacity ("RC"). A RC value of 15% or above is considered within acceptable level without causing undue delay to motorists passing through the concerned junctions.

The performance of a priority junction or roundabout is indicated by its Design Flow / Capacity Ratio ("DFC"). A DFC value of 0.85 or below is considered within an acceptable level without causing undue delay to motorists passing through the concerned junctions.

Table 3.4 Existing Junction Performance on Weekday

No.	Key Junction	Type / Capacity Index*	AM Off Peak (10:30 – 11:30)	PM Off Peak (19:30 - 20:30)
A	Town Park Road South/ Town Park Road North	Priority/DFC	0.14	0.10
B	Lam Hau Tsuen Road / Lam Yu Road	Roundabout/ DFC	0.07	0.09
C	Lam Hau Tsuen Road / Shap Pat Heung Road	Roundabout/ DFC	0.11	0.10
D	Town Park Road South / Lam Hau Tsuen Road	Signal/RC	67.7%	92.7%
E	Town Park Road South / Ma Tin Road / Town Park Road North	Priority/DFC	0.16	0.10
F	Ma Tin Road / Yuen Long Tai Yuk Road	Signal/RC	79.6%	>100%
G	Shap Pat Heung Road / Yuen Long Tai Yuk Road	Priority/DFC	0.44	0.32

*Notes: * DFC - Design Flow / Capacity Ratio & RC – Reserved Capacity*

Table 3.5 Existing Junction Performance on Saturday and Sunday

No.	Key Junction	Type / Capacity Index*	Sat PM Peak (17:00 – 18:00)	Sun PM Peak (17:00 – 18:00)
A	Town Park Road South/ Town Park Road North	Priority/DFC	0.10	0.13
B	Lam Hau Tsuen Road / Lam Yu Road	Roundabout/ DFC	0.04	0.04
C	Lam Hau Tsuen Road / Shap Pat Heung Road	Roundabout/ DFC	0.11	0.09
D	Town Park Road South / Lam Hau Tsuen Road	Signal/RC	63.2%	>100%
E	Town Park Road South / Ma Tin Road / Town Park Road North	Priority/DFC	0.10	0.09
F	Ma Tin Road / Yuen Long Tai Yuk Road	Signal/RC	55.8%	>100%
G	Shap Pat Heung Road / Yuen Long Tai Yuk Road	Priority/DFC	0.42	0.34

*Notes: * DFC - Design Flow / Capacity Ratio & RC – Reserved Capacity*

Under the existing 2026 traffic conditions as shown in **Table 3.4** and **Table 3.5**, all assessed junctions operate within these TPDM threshold values during the identified assessment hours on weekdays, Saturdays and Sundays. While some junctions experience higher degrees of saturation during the busier evening periods, no junction currently exceeds its practical capacity or exhibits unacceptable levels of congestion in the base year.

Link Capacity Analysis

Link capacity assessment was carried out for the section of Shan Ha Road between Town Park Road South and the slip road from Tong Yan San Tsuen Interchange, which is the critical access link to the School. The analysis followed TPDM Volume 2, using the Peak Hour Flow/Design Flow Ratio (P/Df) as the performance indicator.

The design flow per direction for Shan Ha Road was derived from the standard capacity of a two-lane two-way carriageway as given in TPDM. In numerical terms, the base capacity of 1,400 vehicles per hour for a two-lane two-way carriageway was divided by two to obtain a per-direction value and multiplied by a passenger car unit (pcu) conversion factor of 1.2, taking into account that the heavy goods vehicle proportion in the survey was below 15%. This gives a design flow per direction of 840 pcu/hour.

The observed peak-hour flows (in pcu) during the identified critical link peak hours were then compared directly against this design flow to derive the Peak Hour Flow/Design Flow Ratio (P/Df) for each direction.

Table 3.6 Existing Link Performance of Shan Ha Road between Town Park Road on Weekday

No.	Key Road Link	Direction	Carriageway Capacity (pcu/hr)	Observed Peak Hourly Flows (pcu/hr)		P/Df Ratio	
				NOON Peak (12:30 – 13:30)	PM Peak (15:00 – 16:00)	NOON Peak (12:30 – 13:30)	PM Peak (15:00 – 16:00)
L1	Shan Ha Road between Town Park Road South and Slip Road from Tong Yan San Tsuen Interchange	N/B	840	500	560	0.60	0.67
		S/B	840	265	280	0.32	0.33

Table 3.7 Existing Link Performance of Shan Ha Road between Town Park Road on Saturday and Sunday

No.	Key Road Link	Direction	Carriageway Capacity (pcu/hr)	Observed Peak Hourly Flows (pcu/hr)		P/Df Ratio	
				Sat Peak (18:00 – 19:00)	Sun Peak (18:00 – 19:00)	Sat Peak (18:00 – 19:00)	Sun Peak (18:00 – 19:00)
L1	Shan Ha Road between Town Park Road South and Slip Road from Tong Yan San Tsuen Interchange	N/B	840	574	483	0.68	0.58
		S/B	840	235	198	0.28	0.24

Under existing 2026 conditions, the calculated P/Df ratios for Shan Ha Road in both directions on weekday, Saturday and Sunday are below 0.85 as shown in **Table 3.6** and **Table 3.7**, indicating that the link is currently operating within acceptable capacity limits with available spare capacity. No systematic queuing or blocking-back affecting the Site access was observed during the survey.

4 Future Traffic Conditions

4.1 Design Year

The application year is 2026. A short-term design horizon of three years has been adopted, and the year 2029 is therefore taken as the design year for this study.

For 2029, the Growth Factor Method is used to forecast traffic flows. This method combines historical traffic data from the Annual Traffic Census (ATC) with population and employment forecasts from the "2021-based Territorial Population and Employment Data Matrix" (TPEDM). The higher of the growth rates derived from ATC and TPEDM is adopted to provide a conservative estimate of background traffic growth.

Local infrastructure proposals, including the CEDD road improvement scheme at Tong Yan San Tsuen Interchange **(refer to Appendix D)**, have been reviewed qualitatively. As these works are still at schematic stage and the School's training routes are largely separate from the primary junction modifications, the use of growth factors based on the existing network configuration represents a conservative approach.

4.2 Regional Traffic Growth

To estimate traffic flows for the design year 2029, it is proposed to adjust the existing traffic flows to reflect anticipated natural traffic growth.

Annual Traffic Census (ATC)

Reference has been made to the 2018 to 2024 Annual Traffic Census Reports, published by the Transport Department. The traffic data recorded at counting stations adjacent to the Application Site are shown in **Table 4.1**.

Table 4.1 Annual Traffic Census Data

No.	Link	Between	Road Type *	2018	2019	2020	2021	2022	2023	2024	Growth Rate p.a.
5008	Kau Yuk Rd	Yuen Long Tai Yuk Rd and Yuen Long Hong Lok Rd	DD	12,470	12,740	12,770	12,660	12,070	11,730	11,560	-1.25%
5894	Yuen Long Hwy	Shap Pat Heung Int and Tong Yan San Tsuen Int	EX	83,230	86,540	82,380	86,740	90,880	96,570	97,120	+2.61%
Total				95,700	99,280	95,150	99,400	102,950	108,300	108,680	+2.14%

*Note: * EX= Expressway & DD = District Distributor*

Table 4.1 presents traffic flow data spanning seven years. The data indicates variable annual growth rates across different road links, with one link experiencing a decline and another link showing an increase in traffic volume. When considering all the links collectively, the compounded annual growth rate averages out to an increase of **+2.14%**.

Projected Population Data

According to the report "2021 – based Territorial Population and Employment Data Matrix" ("TPEDM") published by the Planning Department, the population and employment growth data from year 2026 to 2031 in Yuen Long District Council District are presented in **Table 4.2**.

Table 4.2 2021-Based TPEDM Data

District Council District	Population		Employment		Population & Employment		Avg. Annual Growth
	2026	2031	2026	2031	2026	2031	
Yuen Long	685,000	760,600	238,500	258,200	923,500	1,018,800	**+1.98%**

The data indicate the growth in population and employment in Yuen Long District at an annual rate of **+1.98%** from 2026 to 2031.

By comparing the historical traffic data and future planning data, an annual growth rate of **+2.14%** has been adopted for conservative forecasting purposes. This growth factor will be applied to the traffic flows observed in 2026.

4.3 Major Planned/ Committed Developments

In addition to natural traffic growth, forecast traffic conditions in 2029 must reflect major planned or committed developments in the vicinity of the Site. The key developments considered in this TIA are summarised in **Table 4.3.**

Table 4.3 Major Planning Applications/ Committed Developments

Location	Development Parameters	Type of Development	Completion Year^
Long Tin Court by HKHA Planning Brief Proposed Public Housing Development at Long Bin, Yuen Long - Phase 1	About 3,080 units	Residential Development	2026
Planning Application No. A/YL-TYST/1331 Proposed 'Social Welfare Facility' (Residential Care Home for Persons with Disabilities) ("RCHD") and Proposed Excavation of Land associated with the Proposed RCHD in "Village Type Development" Zone, at portion of Former Wa Fung School (華封學校) and adjoining Government Land, Lam Hau Tsuen, Yuen Long, New Territories	90 bed spaces	Social Welfare Facility'	2027

Location	Development Parameters	Type of Development	Completion Year^
Planning Application No. A/YL/316 Proposed Minor Relaxation of Plot Ratio and Building Height Restrictions for Permitted Public Housing Development and Social Welfare Facility Uses at Government Land along Shap Pat Heung Road, Yuen Long	About 944 units	Residential Development	2028
Planning Application No. A/YL/18 To rezone the application site from "Other Specified Uses" annotated "Art Storage and Public Open Space" to "Other Specified Uses" annotated "Private Subsidized Housing and Art Storage with Public Open Space" at Lots No. 2281 S.A, 2282 RP, 2283 RP, 2960 RP, 2964 S.B in D.D. 120 and adjoining Government Land at Lam Hi Road, Area 13, Yuen Long, New Territories	About 312 units	Residential Development	2028
Planning Application No. Y/YL/19 To rezone the application site from "Village Type Development" to "Residential (Group A) 9" and to amend the Notes of the zone applicable to the site at Various Lots in D.D. 120 and Adjoining Government Land, Shap Pat Heung Road, Yuen Long, New Territories	About 1,116 units	Residential Development	2030
Planning Application No. Y/YL/20 To rezone the application site from "Government, Institution or Community" to "Residential (Group A) 9" and to amend the Notes of the zone applicable to the site at Various Lots in D.D. 120 and Adjoining Government Land, Shap Pat Heung Road, Yuen Long, New Territories	About 943 units	Residential Development	2030
Long Tin Phase 2 by HKHA Planning Brief Proposed Public Housing Development at Long Bin, Yuen Long - Phase 2	About 8,860 units	Residential Development	2031

**Note: Developments with completion dates beyond the 2029 design year are reviewed for context; only those expected to be substantially completed by 2029 are explicitly reflected in the forecast traffic flows.*

4.4 Traffic Generation of the Operation Schedule

As the Proposed Driving School is a specialized facility governed by strict fleet caps, the traffic generation is derived directly from operational parameters and statutory constraints.

Existing Ancillary and Shuttle Traffic (Baseline Retention)

The School's administrative office, shuttle bus service, visitor trips, and goods deliveries operate throughout the day and were fully captured in the 2026 traffic surveys. The shuttle service typically provides about 2 departures per hour in each direction for most of the day, with up to 4 departures per hour during the busiest evening hour.

To reflect real-world conditions and avoid double-counting, this ancillary and shuttle traffic is treated as part of the 2026 base flows and carried forward into the 2029 forecasts via the growth factor and committed development traffic. No increase in ancillary or shuttle traffic is proposed as part of the renewal. Accordingly, no separate "new" ancillary trips are added in the Design Scenario; only the incremental on-street training traffic is superimposed.

Learning Vehicle Quota and PCU Equivalency

During permitted off-peak operational hours, the Applicant commits to a strict operational cap of 22 learning vehicles per hour dispatched onto the public road network. In accordance with the TPDM, the PCU factors for the learning fleet are as follows:

- Motorcycle: 0.75 PCU
- Private Car: 1.0 PCU
- Light Goods Vehicle (Van Type): 1.1 PCU

For a conservative “worst-case” capacity assessment, it is assumed that all 22 learning vehicles in any hour are van-type light goods vehicles. This yields a maximum design training generation of 24.2 pcu/hour attributable to the learning fleet. To accurately reflect a practical mixed fleet profile (which will include motorcycles at 0.75 PCU and private cars at 1.0 PCU) while remaining highly conservative, a generation rate of 24 pcu/hour has been formally adopted for the junction and link modelling.

The 2026 observed flows already include varying levels of learning-vehicle traffic (0, 11 or 22 vehicles per hour) under the existing approval. For forecast purposes, and to provide a consistent and conservative representation of the renewed regime, all legally allowable on-street training periods in the 2029 Design Scenario are modelled with a uniform cap of 22 learning vehicles per hour (24 pcu/hour), irrespective of the different hourly caps that applied in 2026.

The net training traffic used in the capacity assessment is summarised in **Table 4.4.**

Table 4.4 Trip Generation for Design Scenario Assessment

Assessment Hour Type (as per Section 3.4)	On-Street Training Allowed?	Net Training Traffic Added to Forecast Flows
Statutory restricted periods	No	0 pcu/hour
Junction off-peak peak hours	Yes	24 pcu/hour
Shan Ha Road link critical hours	Yes	24 pcu/hour

Note: During statutory restricted peaks (e.g. weekday AM 07:30–09:30 and PM 16:30–19:30; Saturday 07:30–09:30), no DDS learning vehicles are allowed on public roads, and the only School-related traffic present is ancillary, and shuttle traffic already embedded in the forecast flows. The 24 pcu/hour value represents the absolute maximum hourly net training traffic applied only in permitted off-peak assessment hours.

4.5 Reference and Design Flows

The 2026 traffic surveys were undertaken while the School was already operating under its existing approval. The observed 2026 flows therefore comprise:

- General background traffic on the road network.
- Ancillary traffic associated with the School (shuttle, staff, deliveries, visitors).
- Existing learning-vehicle traffic on public roads during the currently permitted operating hours.

To isolate the impact of the renewed regime, which applies a uniform cap of 22 learning vehicles per hour to all legally allowable periods, the following approach is used.

2026 Observed without Learning Vehicles

For each assessment period, the learning-vehicle component in the 2026 observed flows is removed, while retaining the general background traffic and ancillary / shuttle traffic. The learning-vehicle component is identified using the School's booking records and observed on-street training during the surveys. The resulting flows form the 2026 base without learning vehicles.

2029 Reference Flows (without Learning Vehicles) and 2029 Design Flow (with Uniform 22-Vehicle Cap)

2029 Reference Flows (without Learning Vehicles) = 2026 Observed without Learning Vehicles Flows x $(1+2.14\%)^3$ + Planned/ Committed Development Traffic

2029 Design Flows = 2029 Reference Flows (without Learning Vehicles)+ Learning-Vehicle Traffic (22 veh/hour cap)

Figures 4.1 through 4.4 illustrate these forecast traffic conditions. Specifically, **Figures 4.1 and 4.2** detail the 2029 Reference Traffic Flows for the respective AM/PM and Noon/Afternoon peak hours. Building upon this, **Figures 4.3 and 4.4** superimpose the proposed net training traffic generation to present the 2029 Design Traffic Flows.

4.6 Future Assessment

Junction Capacity Analysis

The results of junction capacity analysis under year 2029 reference and design scenarios on weekday, Saturday and Sunday are summarised in **Table 4.5 and Table 4.6**, and the detailed calculation sheets are enclosed in **Appendix E.**

Table 4.5 Future Junction Performance on Weekday

No.	Key Junction	Type / Capacity Index*	Reference Scenario		Design Scenario	
			AM Off Peak (10:30 – 11:30)	PM Off Peak (19:30 - 20:30)	AM Off Peak (10:30 – 11:30)	PM Off Peak (19:30 - 20:30)
A	Town Park Road South/ Town Park Road North	Priority/DFC	0.15	0.11	0.27	0.23
B	Lam Hau Tsuen Road / Lam Yu Road	Roundabout/ DFC	0.08	0.10	0.14	0.16
C	Lam Hau Tsuen Road / Shap Pat Heung Road	Roundabout/ DFC	0.12	0.11	0.18	0.17
D	Town Park Road South / Lam Hau Tsuen Road	Signal/RC	57.3%	80.8%	22.8%	36.7%
E	Town Park Road South / Ma Tin Road / Town Park Road North	Priority/DFC	0.17	0.11	0.36	0.29
F	Ma Tin Road / Yuen Long Tai Yuk Road	Signal/RC	66.5%	95.6%	60.4%	87.3%
G	Shap Pat Heung Road / Yuen Long Tai Yuk Road	Priority/DFC	0.48	0.36	0.48	0.37

*Notes: * DFC - Design Flow / Capacity Ratio & RC – Reserved Capacity*

Table 4.6 Future Junction Performance on Saturday and Sunday

No.	Key Junction	Type / Capacity Index*	Reference Scenario		Design Scenario	
			Sat PM Peak (17:00 – 18:00)	Sun PM Peak (17:00 – 18:00)	Sat PM Peak (17:00 – 18:00)	Sun PM Peak (17:00 – 18:00)
A	Town Park Road South/ Town Park Road North	Priority/DFC	0.11	0.15	0.26	0.30
B	Lam Hau Tsuen Road / Lam Yu Road	Roundabout/ DFC	0.05	0.04	0.11	0.10
C	Lam Hau Tsuen Road / Shap Pat Heung Road	Roundabout/ DFC	0.12	0.09	0.19	0.16
D	Town Park Road South / Lam Hau Tsuen Road	Signal/RC	53.2%	87.9%	19.3%	39.3%
E	Town Park Road South / Ma Tin Road / Town Park Road North	Priority/DFC	0.11	0.10	0.31	0.29
F	Ma Tin Road / Yuen Long Tai Yuk Road	Signal/RC	46.3%	96.3%	41.6%	87.9%
G	Shap Pat Heung Road / Yuen Long Tai Yuk Road	Priority/DFC	0.46	0.37	0.46	0.37

*Notes: * DFC - Design Flow / Capacity Ratio & RC – Reserved Capacity*

.

As shown in **Table 4.5, 4.6,** all key junctions will operate below their maximum capacities during the identified peaks in both reference and design scenarios.

Link Capacity Analysis

The results of link capacity analysis under future reference and design scenarios on weekday, Saturday and Sunday are summarised in **Table 4.7** and **4.8**.

Table 4.7 Future Link Performance of Shan Ha Road between Town Park Road on Weekday

No.	Key Road Link	Direc-tion	Design Flow (pcu/hr)	Reference Scenario				Design Scenario			
				Peak Hourly Flows (pcu/hr)		P/Df Ratio		Peak Hourly Flows (pcu/hr)		P/Df Ratio	
				NOON Peak (12:30 – 13:30)	PM Peak (15:00 – 16:00)	NOON Peak (12:30 – 13:30)	PM Peak (15:00 – 16:00)	NOON Peak (12:30 – 13:30)	PM Peak (15:00 – 16:00)	NOON Peak (12:30 – 13:30)	PM Peak (15:00 – 16:00)
L1	Shan Ha Road between Town Park Road South and Slip Road from Tong Yan San Tsuen Interchange	N/B	840	533	597	0.63	0.71	557	621	0.66	0.74
		S/B	840	282	299	0.34	0.36	306	323	0.36	0.38

Table 4.8 Future Link Performance on Shan Ha Road between Town Park Road on Saturday and Sunday

No.	Key Road Link	Direc-tion	Design Flow (pcu/hr)	Reference Scenario				Design Scenario			
				Peak Hourly Flows (pcu/hr)		P/Df Ratio		Peak Hourly Flows (pcu/hr)		P/Df Ratio	
				Sat Peak (18:00 – 19:00)	Sun Peak (18:00 – 19:00)	Sat Peak (18:00 – 19:00)	Sun Peak (18:00 – 19:00)	Sat Peak (18:00 – 19:00)	Sun Peak (18:00 – 19:00)	Sat Peak (18:00 – 19:00)	Sun Peak (18:00 – 19:00)
L1	Shan Ha Road between Town Park Road South and Slip Road from Tong Yan San Tsuen Interchange	N/B	840	599	502	0.71	0.60	623	526	0.74	0.63
		S/B	840	246	206	0.29	0.25	270	230	0.32	0.27

As shown in **Table 4.7** and **Table 4.8**, the Shan Ha Road link will operate within acceptable capacity limits (P/Df ≤ 0.85) in both directions during all assessed peak periods under both the reference and design scenarios on weekdays, Saturdays, and Sundays.

5 Conclusion

5.1 Summary of Findings

The Applicant seeks to renew the planning approval for the Designated Driving School at Lot 2620 RP (Part) in D.D. 120 at Shan Ha Road, Yuen Long, for an initial period of 3 years, alongside an extension of the permitted on-street learner driving hours.

To accurately assess the traffic impact, comprehensive traffic count surveys were conducted continuously from 07:30 to 23:30 on a typical weekday, Saturday, and Sunday in January 2026. Using a conservative annual growth rate of +2.14%, background traffic was projected to the 2029 Design Year.

To support the extended operating hours, the Applicant has committed to a strict operational cap of a maximum of 22 learning vehicles dispatched per hour during permitted off-peak periods. Utilizing a conservative PCU factor, this generates a maximum net training traffic addition of 24 pcu/hour to the network.

Under the 2029 Design Scenario, capacity assessments demonstrate the following:

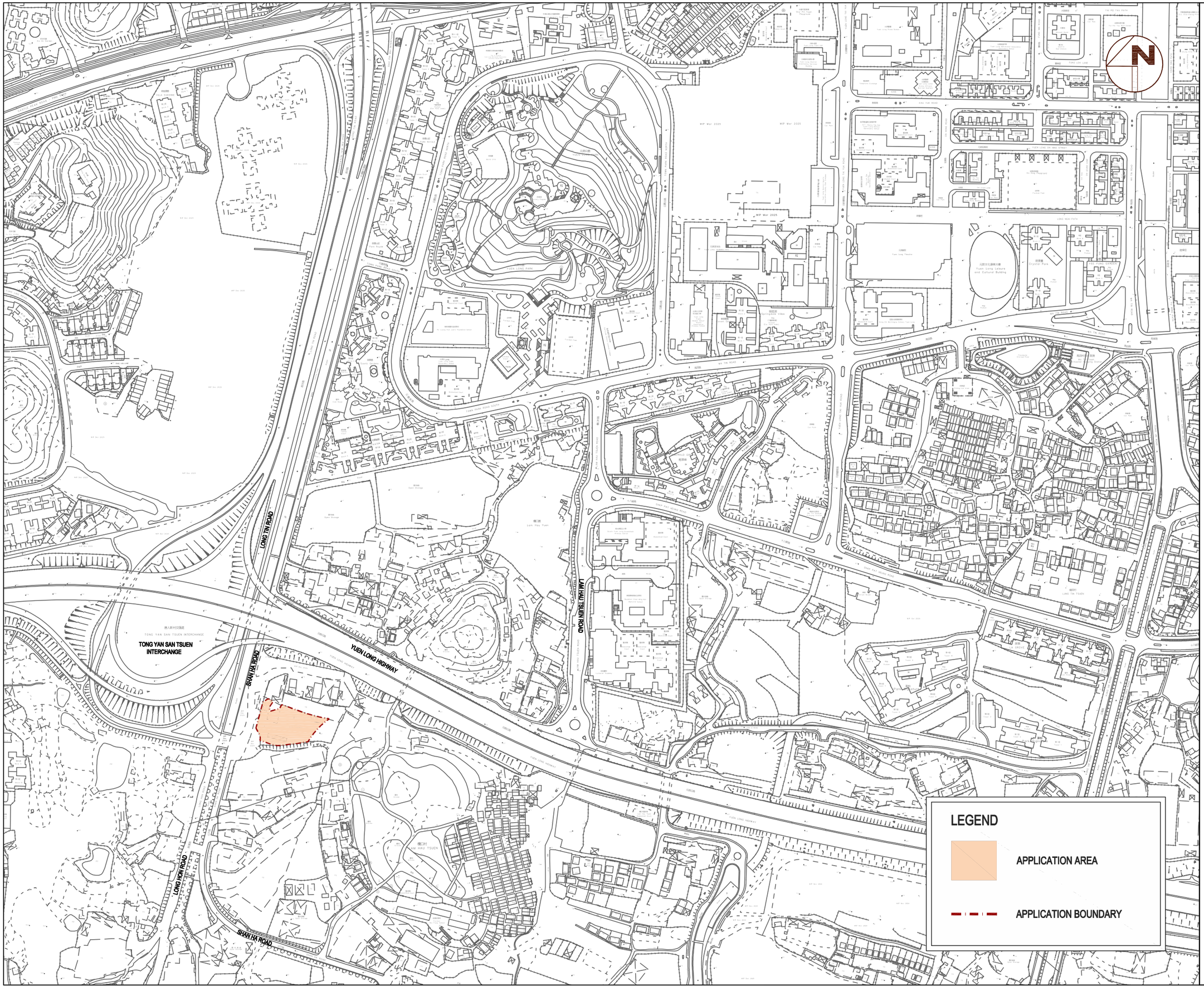
- Junction Capacity: All seven key junctions (A through G) are expected to perform satisfactorily with ample reserve capacity during all assessed peak periods.
- Link Capacity: The critical Shan Ha Road link operates well within acceptable limits (P/Df ≤ 0.85). During the Weekday PM peak (15:00-16:00), the northbound P/Df reaches a maximum of 0.74, demonstrating that the uniform 22-vehicle hourly cap ensures operational resilience with ample spare capacity.
- Public Transport & Parking: The existing provision of 23 private car, 1 accessible, 22 motorcycle, and 2 light bus parking spaces remains sufficient. The continued operation of the dedicated shuttle service between the Site and Tin Shui Wai MTR Station will effectively manage student and staff travel demand.

5.2 Conclusion

The findings of this Traffic Impact Assessment indicate that the continued operation of the Ankor Driving School, with the proposed extension of permitted learner driving hours (Weekdays: 10:00–16:00 and 20:00–23:00; Saturdays: 10:00–23:00; Sundays/Public Holidays: 09:00–23:00), will have no adverse traffic impact on the surrounding road networks.

By strictly adhering to statutory peak-hour restrictions (avoiding 07:30–09:30 and 16:30–19:30 on weekdays) and implementing the 22-vehicle hourly cap, the proposal is sustainable and acceptable from a traffic engineering point of view.

Figures



Traffic Impact Assessment For Section 16 Planning Application For Proposed Temporary Driving School For A Period Of 3 years At Lot 2620 RP (Part) in D.D. 120, Shan Ha Road, Yuen Long, New Territories

SITE LOCATION

FIGURE 2.1

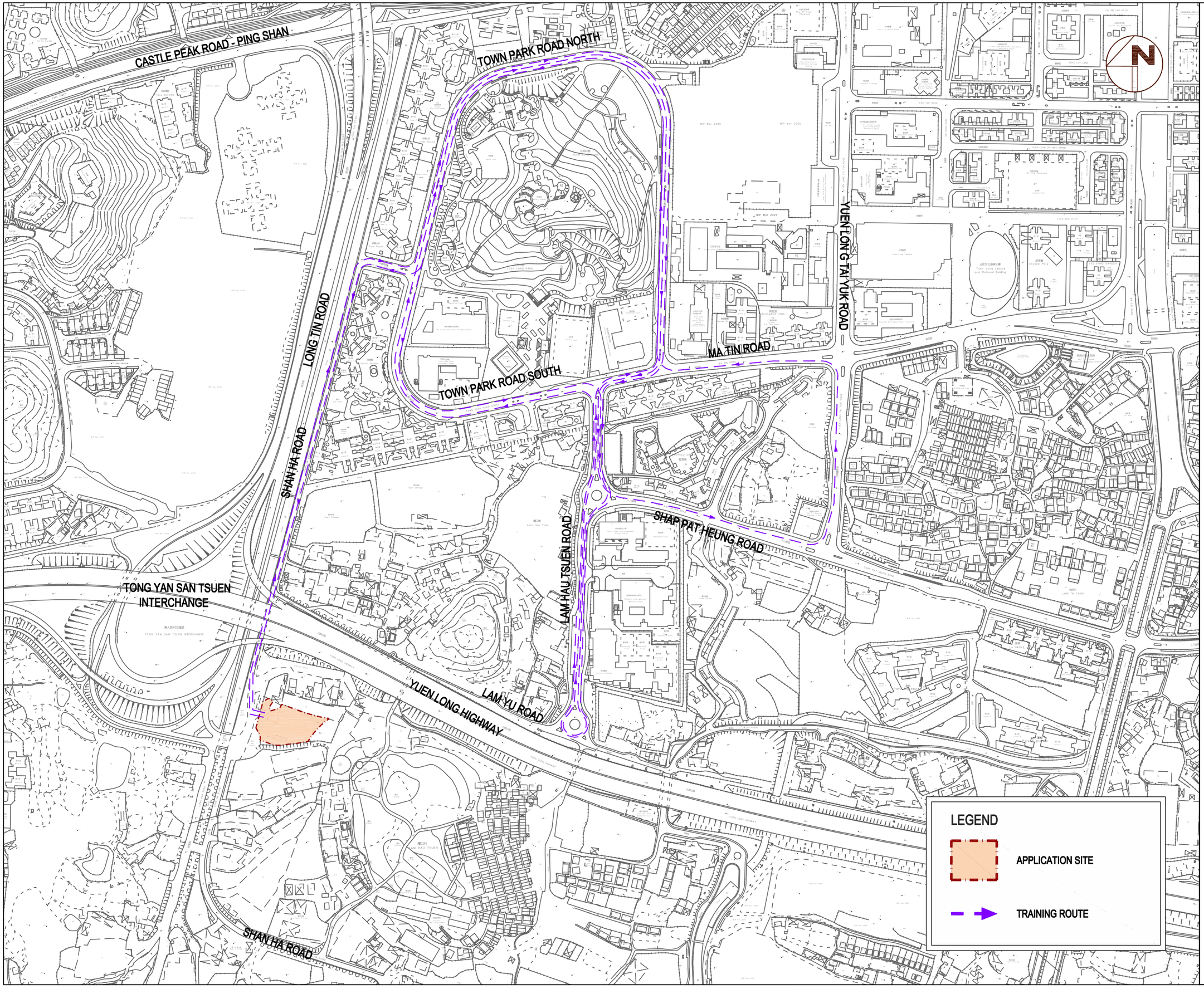
Scale : 1:4000 (A3)

Date : FEB 2026

Rev. :

AXON CONSULTANCY
http://www.axonhk.com

C:\USERS\USER\DESKTOP\31073\DATA\DRAWING\FIGURE 2.1.DWG



Traffic Impact Assessment For Section 16 Planning Application For Proposed Temporary Driving School For A Period Of 3 years At Lot 2620 RP (Part) in D.D. 120, Shan Ha Road, Yuen Long, New Territories

REGULAR TRAINING ROUTE OF LEARNING VEHICLES

FIGURE 2.2

Scale : 1:4000 (A3)

Date : FEB 2026

Rev. :

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C:\USERS\USER\DESKTOP\3107\3\DATA\DRAWING\FIGURE 2.2.DWG

Traffic Impact Assessment For Section 16 Planning Application For Proposed Temporary Driving School For A Period Of 3 years At Lot 2620 RP (Part) in D.D. 120, Shan Ha Road, Yuen Long, New Territories

KEY LINKS AND KEY JUNCTIONS

FIGURE 2.3

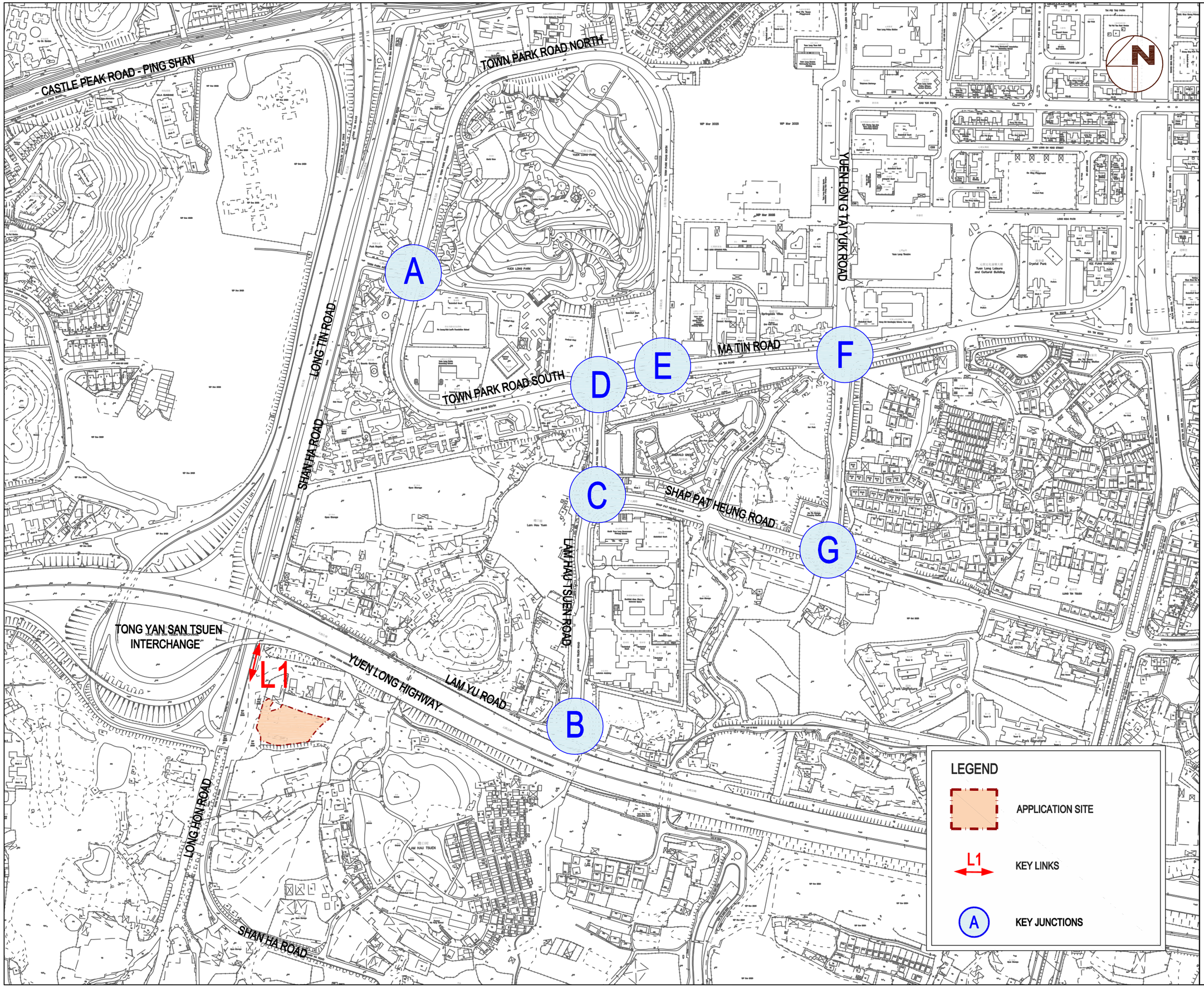
Scale : 1:4000 (A3)

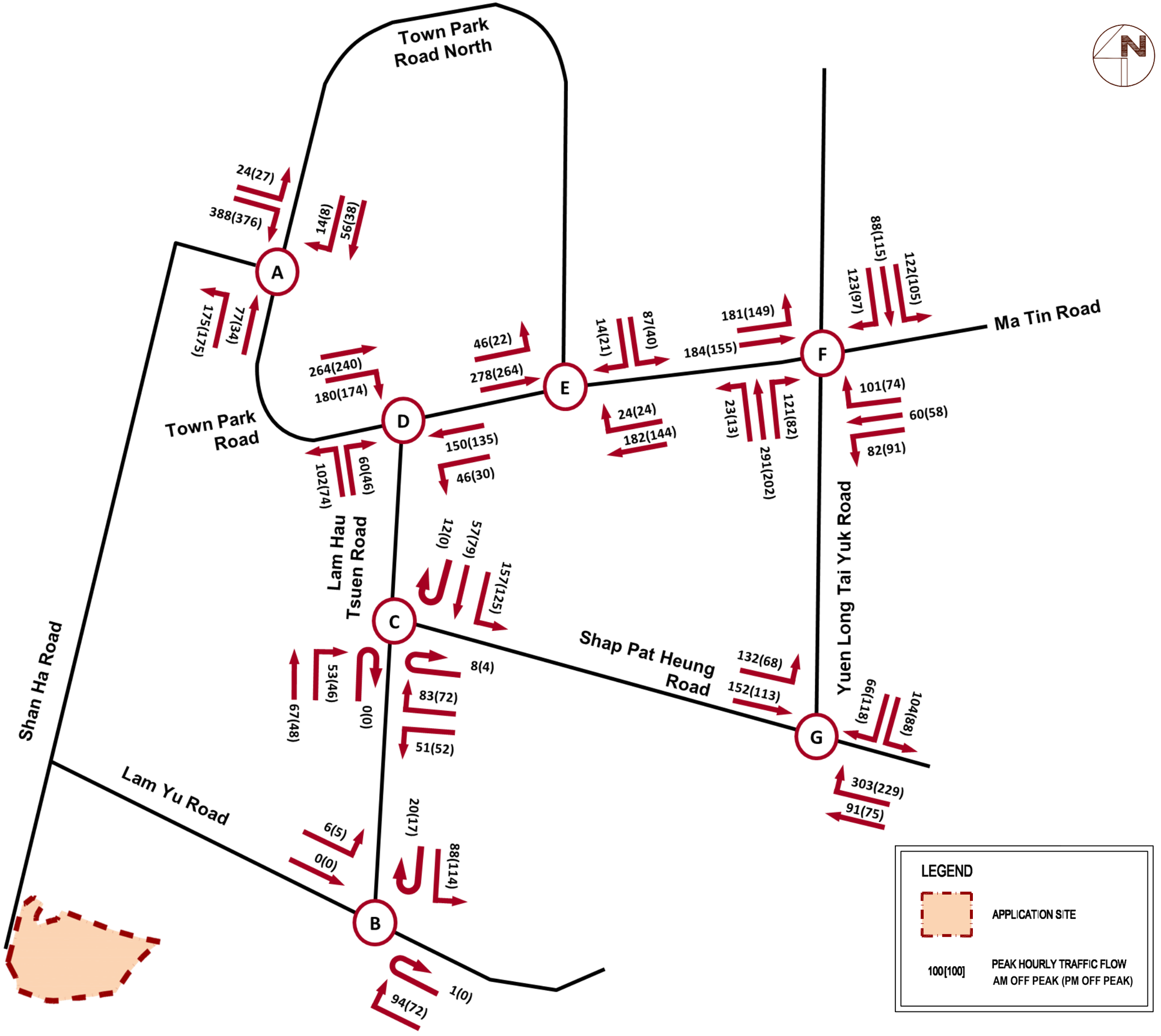
Date : FEB 2026

Rev. :

AXON CONSULTANCY
http://www.axonhk.com

X:\PROJECT\31073 ANKOR DRIVING SCHOOL, SHAN HA ROAD\DATA\DRAWING\FIGURE 2.3.DWG





Traffic Impact Assessment For Section 16 Planning Application For Proposed Temporary Driving School For A Period Of 3 Years At Lot 2620 RP (Part) In D.D. 120, Shan Ha Road, Yuen Long, New Territories

2026 OBSERVED WEEKDAY HOULY TRAFFIC FLOW
(AM-OFF PEAK – 10:30-11:30 & PM-OFF PEAK 19:30-20:30

FIGURE 3.1

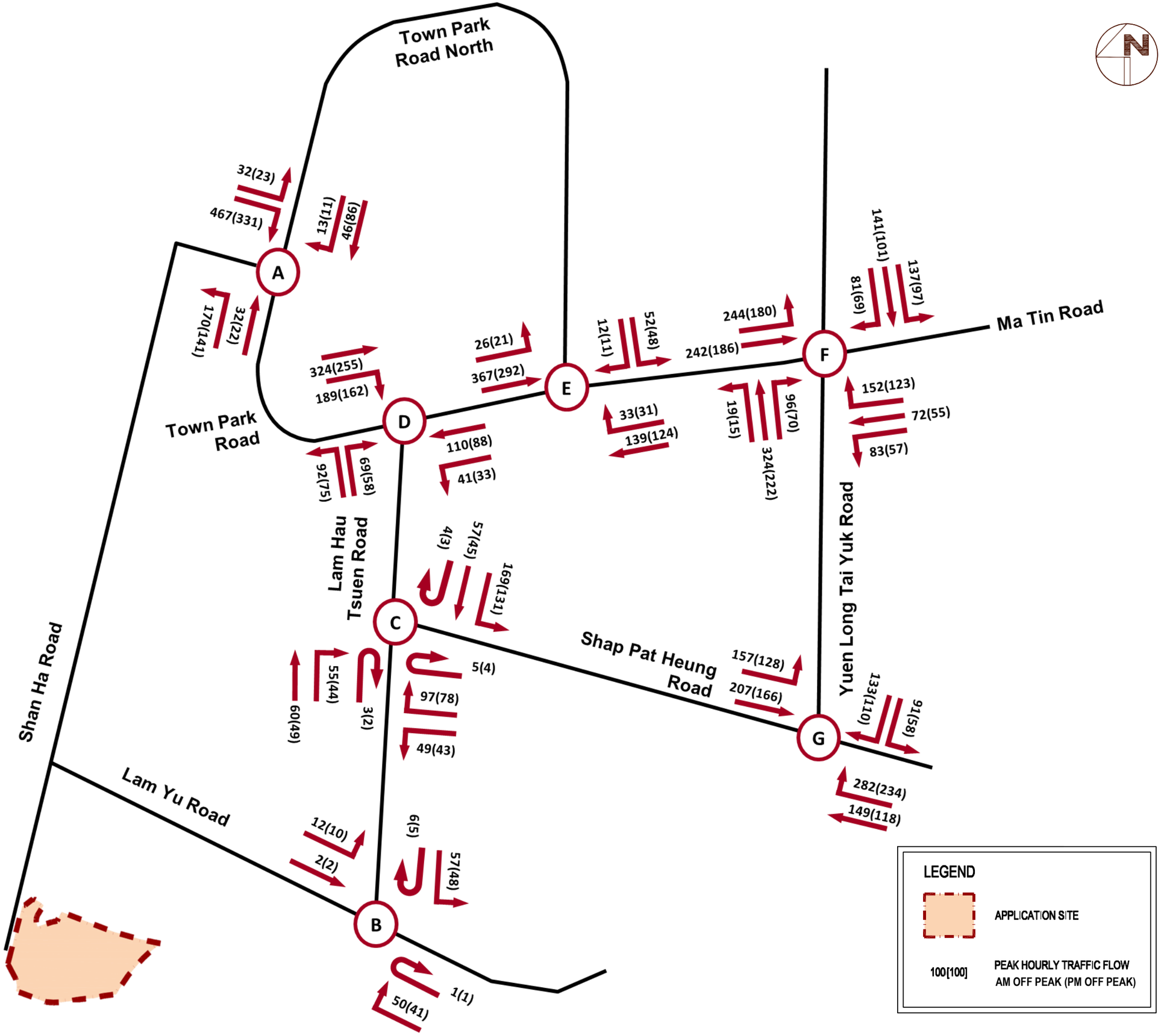
Scale : N.T.S.

Date : MAR 2026

Rev. :

AXON CONSULTANCY
http://www.axonhk.com

C:\USERS\USER\DESKTOP\31048\DAT\ADRAW\NGFIGURE 3.3.DWG



Traffic Impact Assessment For Section 16 Planning Application For Proposed Temporary Driving School For A Period Of 3 Years At Lot 2620 RP (Part) In D.D. 120, Shan Ha Road, Yuen Long, New Territories

2026 OBSERVED WEEKEND HOULY TRAFFIC FLOW
(SATURDAY PEAK – 17:00-18:00 & SUNDAY PEAK 17:00-18:00

FIGURE 3.2

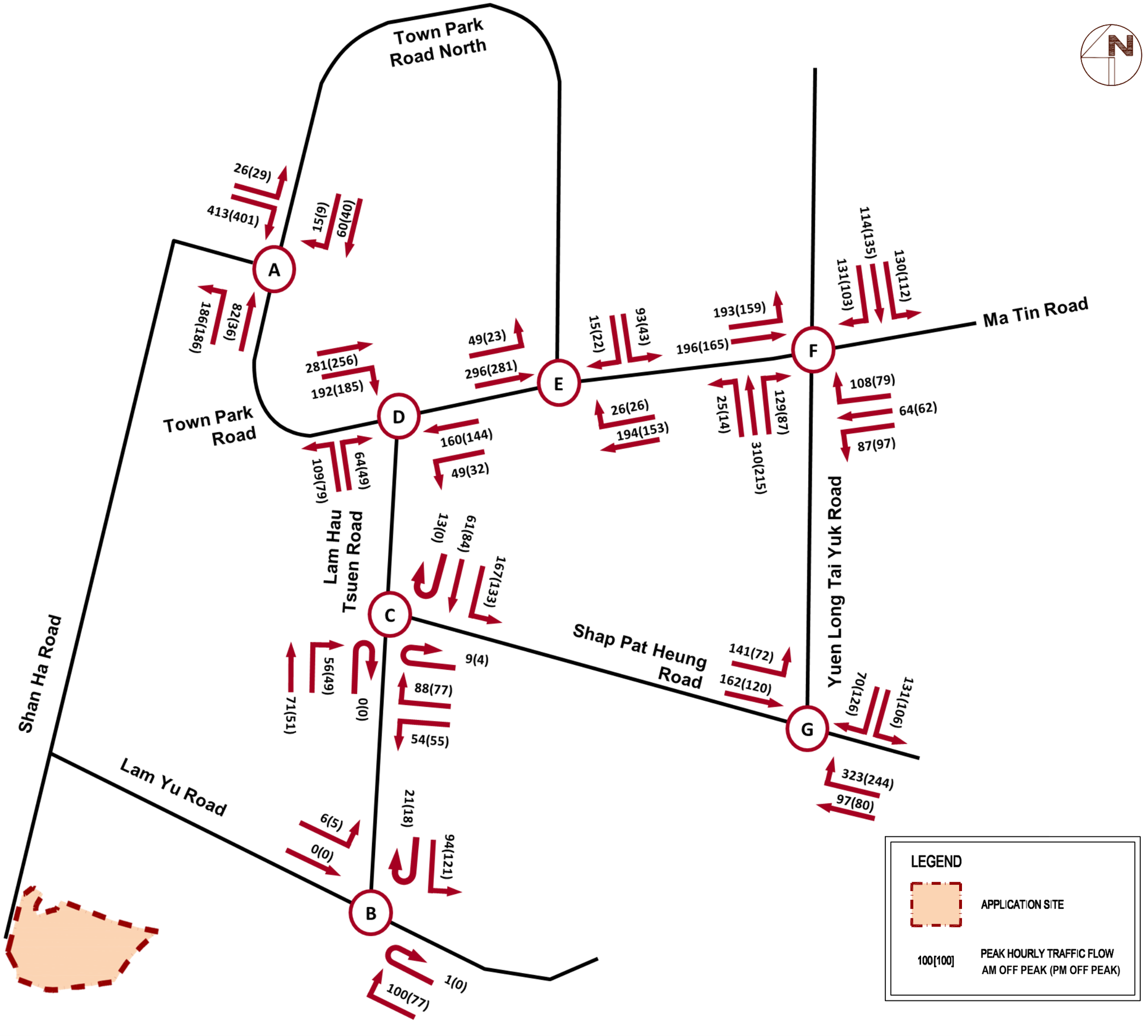
Scale : N.T.S.

Date : MAR 2026

Rev. :

AXON CONSULTANCY
http://www.axonhk.com

C:\USERS\USER\DESKTOP\9104\DATA\DRAWING\FIGURE 3.3.DWG



Traffic Impact Assessment For Section 16 Planning Application For Proposed Temporary Driving School For A Period Of 3 Years At Lot 2620 RP (Part) In D.D. 120, Shan Ha Road, Yuen Long, New Territories

2029 ANTICIPATED REFERENCE WEEKDAY HOULY TRAFFIC FLOW
(AM-OFF PEAK – 10:30-11:30 & PM-OFF PEAK 19:30-20:30

FIGURE 4.1

Scale : N.T.S.

Date : MAR 2026

Rev. :

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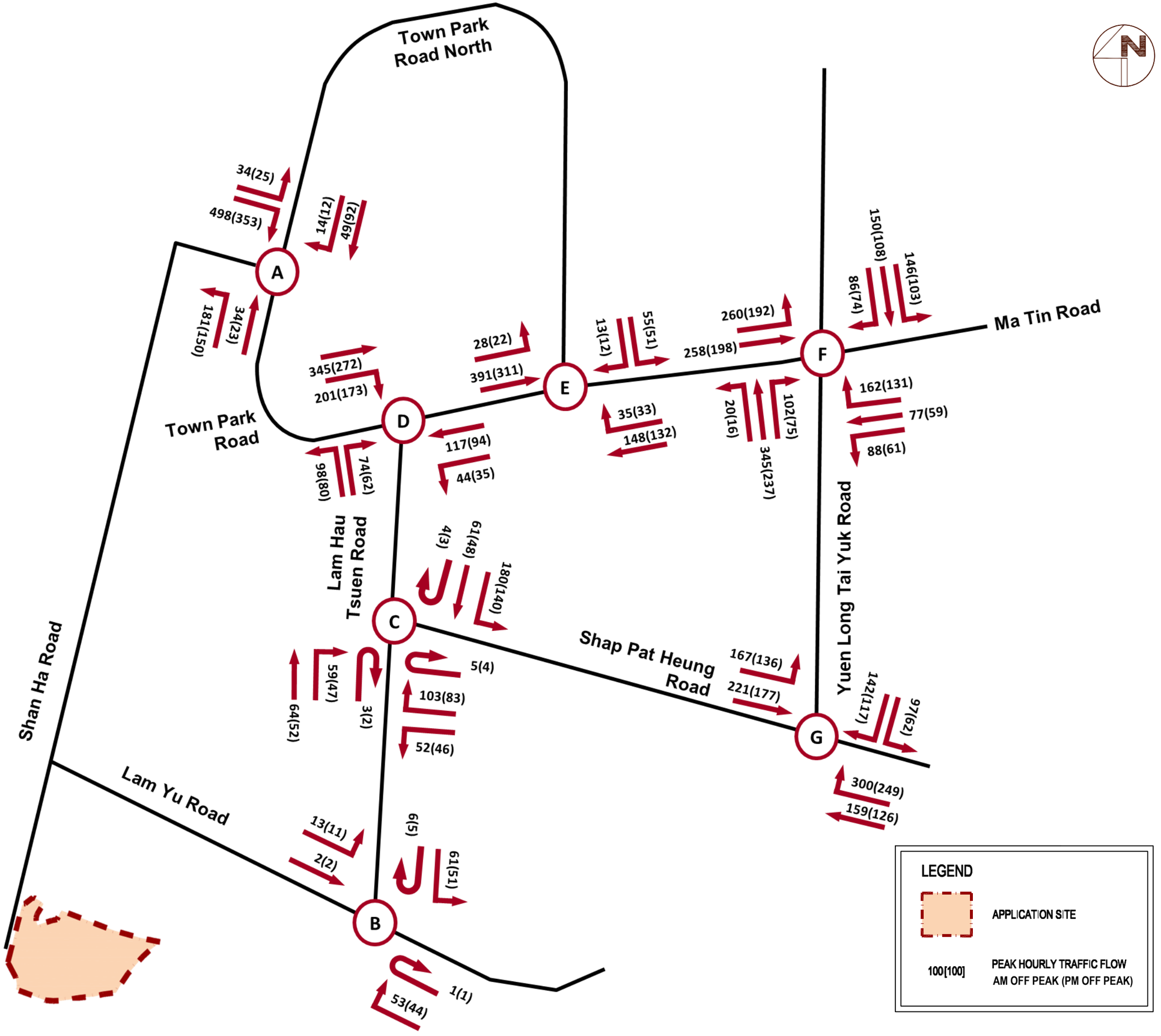
http://www.axonhk.com

C:\USERS\USER\DESKTOP\31048\DAT\ADRAWING\FIGURE 3.3.DWG



Traffic Impact Assessment For Section 16 Planning Application For Proposed Temporary Driving School For A Period Of 3 Years At Lot 2620 RP (Part) In D.D. 120, Shan Ha Road, Yuen Long, New Territories

2029 ANTICIPATED REFERENCE WEEKEND HOULY TRAFFIC FLOW
(SATURDAY PEAK – 17:00-18:00 & SUNDAY PEAK 17:00-18:00

FIGURE 4.2

Scale : N.T.S.

Date : MAR 2026

Rev. :

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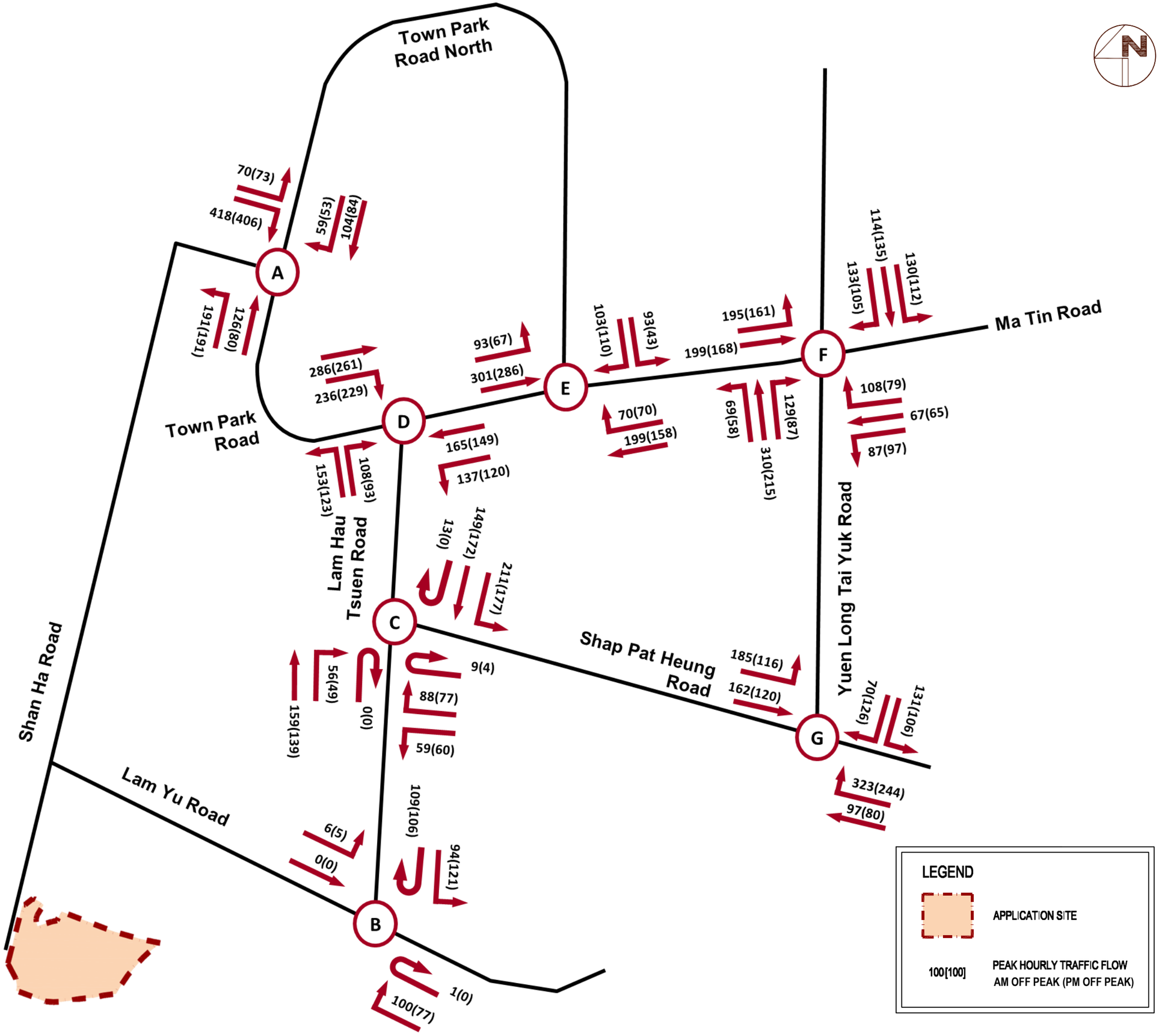

Traffic Impact Assessment For Section 16 Planning Application For Proposed Temporary Driving School For A Period Of 3 Years At Lot 2620 RP (Part) In D.D. 120, Shan Ha Road, Yuen Long, New Territories

2029 ANTICIPATED DESIGN WEEKDAY HOULY TRAFFIC FLOW

(AM-OFF PEAK – 10:30-11:30 & PM-OFF PEAK 19:30-20:30

FIGURE 4.3

Scale : N.T.S.

Date : MAR 2026

Rev. :

AXON CONSULTANCY
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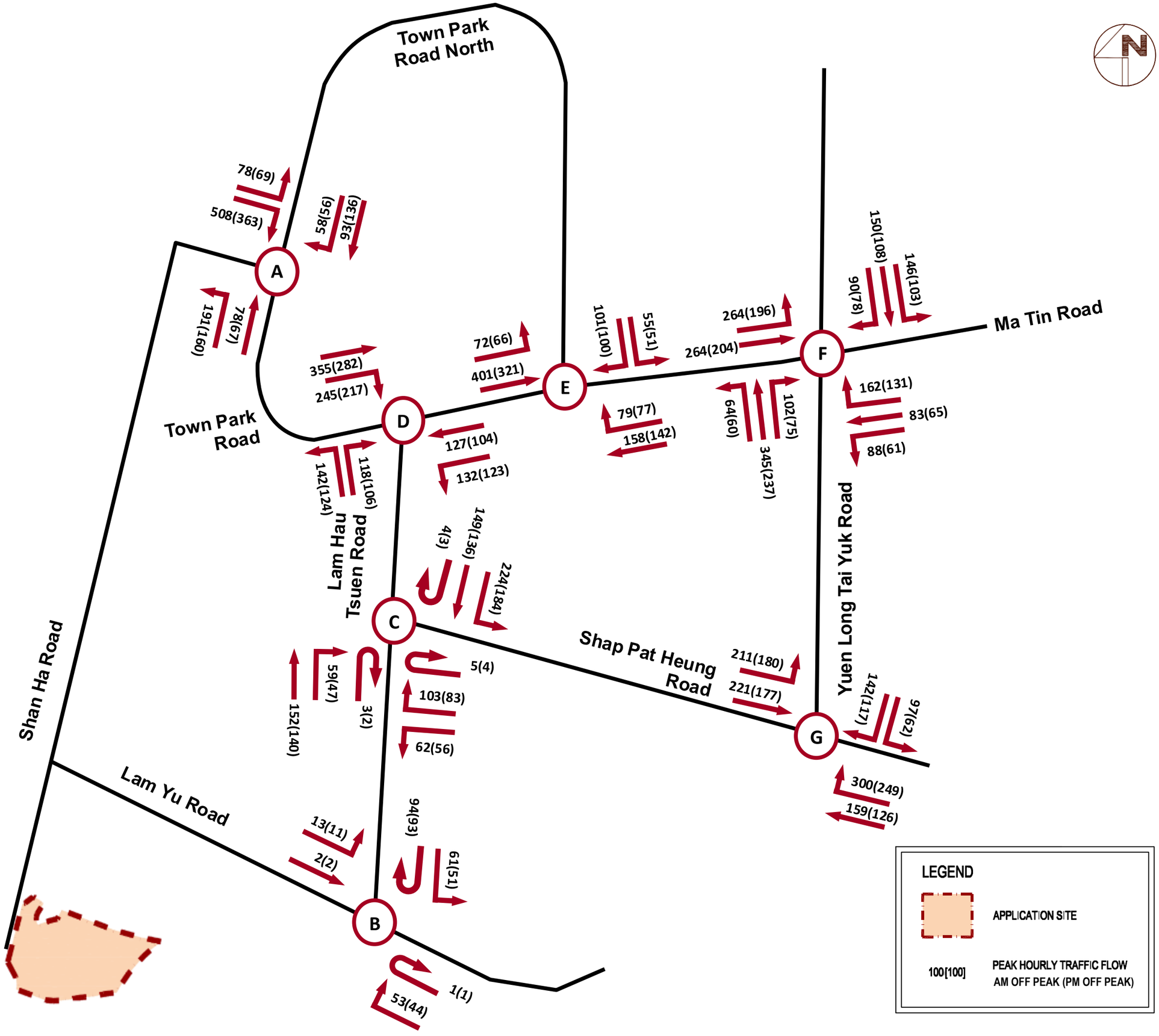
C:\USERS\USER\DESKTOP\9104\DATA\DRAWING\FIGURE 3.3.DWG

Traffic Impact Assessment
For Section 16 Planning
Application For Proposed
Temporary Driving School
For A Period Of 3 Years
At Lot 2620 RP (Part) In
D.D. 120, Shan Ha Road,
Yuen Long, New Territories



2029 ANTICIPATED DESIGN WEEKEND HOULY TRAFFIC FLOW
(SATURDAY PEAK – 17:00-18:00 & SUNDAY PEAK 17:00-18:00

FIGURE 4.4

Scale : N.T.S.

Date : MAR 2026

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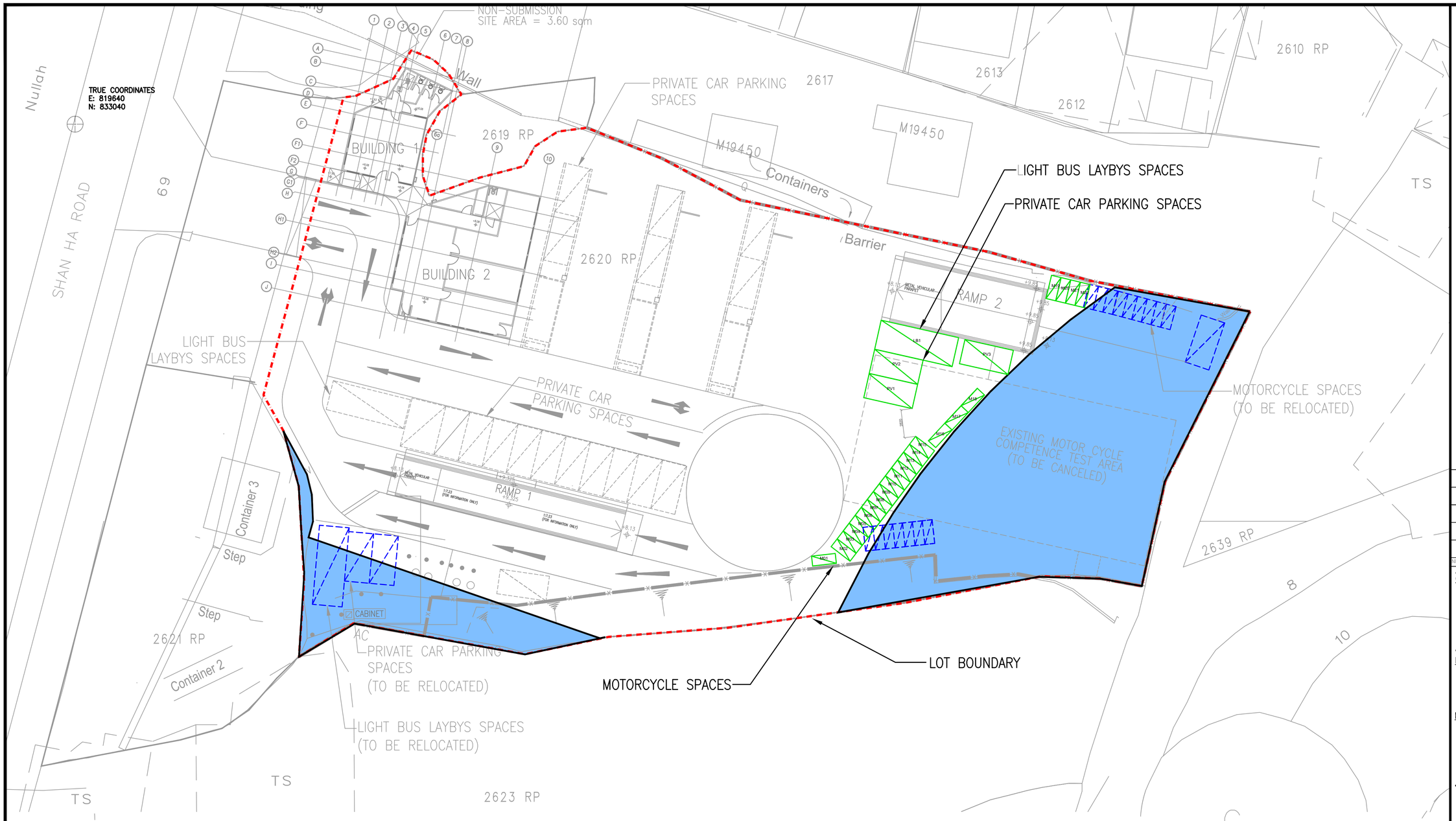
C:\USERS\USER\DESKTOP\9104\DATA\DRAWING\FIGURE 3.3.DWG

Appendix A

Layout of Proposed Development



LEGEND

PARKING SPACE TO BE CANCELED

NEW PROPOSED PARKING SPACE

THE LANDS AS HATCHED ARE THE PROPOSED LAND RESUMPTION. FOR DETAILS, PLEASE REFER TO G.N. NOS. 3284 AND 3285 BOTH OF 2023 RESPECTIVELY.

0 2.5 5 10 20 50 METERS

SCALE 1:200 ON A1

NUMBER / 編號	DATE / 日期	AMENDMENT / 修訂

CLIENT

安佳駕駛學院
ANKOR DRIVING SCHOOL

LEAD CONSULTANT & ARCHITECT

E. CHUNG DESIGN
歷中設計

MEP CONSULTANT

LEE & CHUNG ENGINEERS

PROJECT / 工程項目

ANKOR DRIVING SCHOOL
AT LOT 2620RP IN
DD 120

DRAWING / 圖名

LAYOUT PLAN FOR
MOTORCYCLE PARKING AREA

SCALE / 比例	JOB NUMBER / 工程編號
1:200 ON A1	ECLC2502
DATE / 日期	DRAWING NUMBER / 圖號
30-9-2025	2502-1-101

DESIGNED / 設計	CHECKED / 審核	APPROVED / 審定
EL	EC	EC

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED
除特別註明外, 所有尺寸是以毫米制
- DO NOT SCALE DRAWING
圖中以所有標注尺寸為準, 不應量度
- ALL MEASUREMENTS SHOULD BE VERIFIED ON SITE
最終尺寸須在現場核對準確

Appendix B

Conditions Imposed with Issue of Learner's Driver License

運輸署
Transport Department

Conditions Imposed with Issue of Learner's Driving Licence

1. Except when undergoing a driving test or driving in the premises of a driving school within the meaning of Section 88J of the Road Traffic Ordinance (Cap. 374) while following a driving instruction course and for the purpose of the course, a learner driver shall not drive a motor vehicle unless he is accompanied by a holder of a valid driving instructor's licence in respect of the class of vehicle specified in the learner's driving licence.

2 Unless authorized in writing by the Commissioner, a learner driver when driving a motor vehicle shall not carry any person in or on the vehicle other than a driving instructor, one other learner driver for the purpose of receiving driving instruction and one or more authorized examiners.

3. A learner driver shall not drive a motor vehicle unless the vehicle has:
   (a) a handbrake easily accessible to the driving instructor (vehicle which as an effective system of remote braking control which is under the driving instructor's manual control can be used for the purpose of driving instruction course in the premises of a driving school within the meaning of Section 88J of the Road Traffic Ordinance (Cap. 374)).
   (b) securely fixed, at the front and rear, a white plate 250mm by 250mm on which shall appear in red the letter "L" with arms 200mm long and 25mm in width and within the arms and occupying an area 125mm shall also appear in red the Chinese character "學".

4. A learner driver may drive on any public road except those which by traffic signs of other legal provisions are prohibited to learner drivers, and only during such times as are specified hereunder-

Mondays to Fridays-	6:00a.m. to 7:30 a.m. 9:30 a.m. to 4:30 p.m. 7:30 p.m. to 11:30 p.m.
Saturdays-	6:00 a.m. to 7:30 a.m. 9:30 a.m. to 11:30 p.m.
Sundays and Public Holidays-	6:00 a.m. to 11:30 p.m.

5. Paras. (1), (2) and (3)(a) shall not apply to a learner driver when driving a motor cycle, an invalid carriage , or a motor vehicle designed to carry only a driver.

6. No variation shall be made to a learner's driving licence except by order of a court or by the Commissioner.

Commissioner for Transport

Appendix C

Approved Shuttle Service

運輸署
Transport Department

本署檔號：(17) in TD PV 41/150/2-668
電　　話：2804 2533
傳　　真：2865 1227

安佳駕駛學院有限公司
[redacted]

掛號郵件

執事先生/女士：

申請客運營業證及客運營業證證明書 — 私家巴士服務及
登記兩部私家巴士以提供僱員服務(B02)及其他服務(B04)

多謝貴公司的上述申請。

本署原則上批准貴公司可獲發為期一年的客運營業證，及**登記兩部全新的 28 座位的私家巴士**（下稱「有關車輛」），同時「有關車輛」會獲發客運營業證證明書以提供僱員服務(B02)及其他服務(B04)，惟貴公司必須完全遵照下列條件：

(i) **「有關車輛」只可在運輸署署長根據香港法例第 374 章《道路交通條例》第 88K 條，指定元朗山下路 69 號為駕駛學校或得到運輸署署長書面同意後，才可提供獲批准的私家巴士服務。**

(ii) **「有關車輛」車身必須在當眼位置展示貴公司的名字及標誌，並根據香港法例第 374A 章《道路交通（車輛構造及保養）規例》第 54(1)(b)條，向本署提出申請「有關車輛」車身展示有關標記。貴公司日後為「有關車輛」續領客運營業證證明書時，必須附上「有關車輛」的彩色照片，照片必須清楚顯示「有關車輛」上述的標記及「有關車輛」前方或後方的車牌登記號碼；**

(iii) 私家巴士服務客運營業證條件（副本備閱）；

(iv) 非專利巴士的發牌條件（副本備閱）；

(v) 「有關車輛」只可登記為私家巴士，並且不會獲批准過戶或更改車輛登記類別為公共巴士

(vi) **「有關車輛」只可提供獲批准的非專營私家巴士僱員服務(B02)及其他服務(B04)，運載貴公司的僱員及學生往返位於山下路 69 號的駕駛學校及天福路（天水圍港鐵站 D 出口）。除特殊情況下，本署不會再批准「有關車輛」提供其他非專營巴士服務；**

(vii) 「有關車輛」不應阻塞交通，或阻礙公共交通服務、行人路或其他道路使用者；

(viii) 「有關車輛」提供的私家巴士服務上落客活動必須於限制區、禁區、巴士站、巴士線、的士站及專線小巴站以外的位置進行，並且不應對交通構成影響。「有關車輛」如欲於禁區/限制區進行上落客活動，貴公司必須向有關部門另行提出申請。另外，貴公司必須先取得有關管理處同意，方可於私人路段上落客；

(ix) 在客運營業證有效期內，如欲更改「有關車輛」獲准提供的非專營巴士服務，貴公司必須另行提出申請，而本署將根據有關審批條件考慮是項申請；及

(x) 於客運營業證及客運營業證證明書屆滿前四個月內及不少於十四日前，貴公司須提出客運營業證及客運營業證證明書續期申請，並遞交有關支持文件，其中包括(i)項所述的「有關車輛」的彩色照片。本署將根據有關審批條件及提交文件，考慮是否批准該客運營業證續期。

「有關車輛」的車身必須按照本署所核准的圖則建造，而「有關車輛」在獲登記及發牌前，其車身構造必須經本署檢驗合格；送檢前，你必須確保「有關車輛」車身構造符合相關法例規定。如果「有關車輛」是新型號，而其車輛類型圖則尚未經本署批核，貴公司便要向本署位於新界青衣西草灣路 18 號的運輸署車輛檢驗綜合大樓二樓（電話：3961 0324）遞交圖則，以待審核。有關圖則在經本署核准後，貴公司便可前往上述驗車中心預約驗車。

根據香港法例第 374 章《道路交通條例》第 25 條，運輸署署長可拒絕為某一車輛發牌或註銷該車輛的牌照。該條例第 33 條又列明，當事人可申請由交通審裁處覆核運輸署署長的決定。而按照該條例第 79 條，當局可要求當事人把巴士送往驗車中心檢驗。

請貴公司於本函件發出日期起計兩星期內以書面回覆是否接納上述條件，並於本函件發出日期起計六個月內為「有關車輛」辦理登記及領牌手續，**否則，在此函件中批准的事項，將告無效**。貴公司為「有關車輛」辦理登記及領牌手續時，請帶備下列文件及費用：

(1) 本信正本；

(2) 確認接納本信條件的聲明書（隨函夾附）；

(3) 客運營業證申請書 - 私家巴士服務（運輸署表格 T.D.246B）；

(4) 「有關車輛」的「車輛登記及牌照申請書」（運輸署表格 T.D.22）；

(5) 由本署驗車中心所簽發的，「有關車輛」的檢驗汽車機械合格證書；

(6) 「有關車輛」的有效第三者意外保險單/證書；

(7) 「有關車輛」有效的保養文件（正本）；

(9) 貴公司的公司註冊證及有效的商業登記證；

(10) 「有關車輛」的應繳登記稅款及牌照費用；及

(11) 客運營業證及客運營業證證明書指定費用（分別為每證每年 396 元及每證每年 160 元）。

請注意，根據香港法例第 374 章《道路交通條例》第 52 條的規定，營辦未經批准的私家巴士服務即屬違法。此外，按照客運營業證的條件，除客運營業證所批准的巴士服務外，持證人不得營辦其他巴士服務。如營辦任何未經批准的巴士服務，即屬違反客運營業證所訂的條件。根據香港法例第 374 章《道路交通條例》第 30 和 31 條的規定，運輸署署長可委派一名公職人員主持研訊，並取消該客運營業證。

本署並同時提醒貴公司，營辦未經批准的私家巴士服務，可導致提供有關服務的巴士的第三者風險保險計劃失效。如無有效的第三者風險保險計劃，一旦發生意外，使用有關巴士服務的乘客將可能不會獲得保障，而貴公司可能被要求全部承擔有關乘客保險責任，並面對刑事檢控。

根據本署於 2021 年 10 月發出的通告，在 2022 年 7 月 1 日或之後首次登記的非專營巴士必須備有安全帶，而安全帶及其固定點須符合《道路交通（安全設備）條例》第 374F 章（附副本）。

如有任何疑問，請致電 2804 2450 與布女士或與下方簽署人聯絡。

運輸署署長

（林錦玲 林錦玲 代行）

連附件

2024 年 8 月 22 日

運輸署
Transport Department

本署檔號：(5) in 030-020-421-PV-002-001-210
電　　話：2804 2533
傳　　真：2865 1227

安佳駕駛學院有限公司
[redacted]

郵遞

執事先生／女士：

申請修訂兩部私家巴士的上落客點
以提供僱員服務(B02)及其他服務(B04)

多謝貴公司的上述申請。

本署不反對貴公司（客運營業證號碼：12965B）下兩部私家巴士（車輛登記號碼：ZW5455 及 ZW6188）（下稱「有關車輛」）修訂其上落客點，以提供僱員服務(B02)及其他服務(B04)，惟須完全遵從本署於 2024 年 8 月 22 日發出的信件（本署檔號：(17) in TD PV 41/150/2-68）所詳述的條款。**有關車輛的上落客點將修訂為屏廈路（天水圍港鐵站 A 出口）**。請注意，貴公司於屏廈路（天水圍港鐵站 A 出口）上下客必須事先取得有關管理處同意。

如有任何疑問，請致電 2804 2533 與下方簽署人聯絡。

運輸署署長

（林錦玲 錦玲林 代行）

2025 年 10 月 27 日

Appendix D

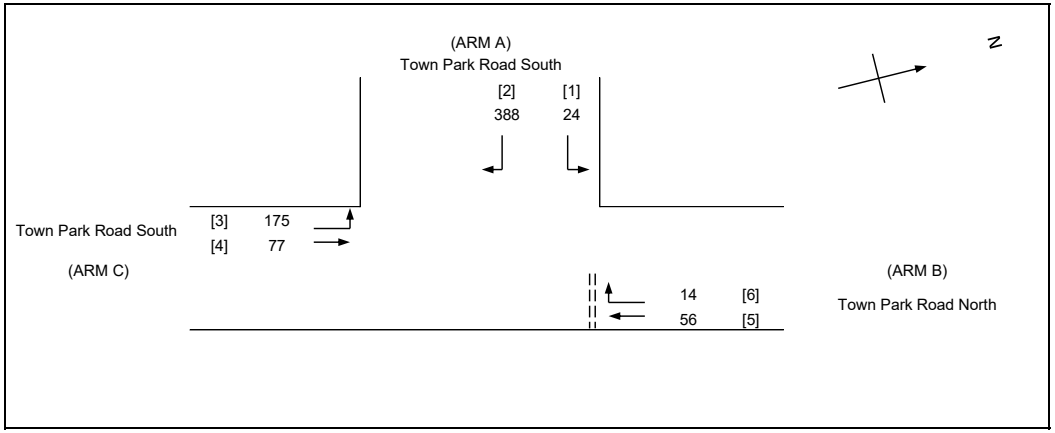
Improvement Scheme by CEDD

寶珊園
Curio Court
露天貨倉
柏麗豪園
Parkside Villa
露天貨倉
Open Storage
MA FUNG LING ROAD
瑋珊園
Jasper Court
唐人新村路
大廈
Hing
ding
鼓
Tank
NG HIGHWAY
唐人新村交匯處
TONG YAN SAN TSUEN
INTERCHANGE
LAM HAU TSUEN ROAD
LAM YU ROAD
沙井樹
Sha Tseng Tsuen
露天貨倉
Open Storage
唐人新村
Tong Yan San Tsuen
竹林明堂
塔
金碧花園
The Eldorado
啓欣軒
Kisland
Villa
黃三興
LONG HOR ROAD
施工中
露天貨倉
SHAN HA ROAD
墓地
Graves
欖口村
Lam Hau
Tsuen
康苑
Comfort
馬寶花園
N
CEDD
土木工程拓展署
Civil Engineering and
Development Department

Appendix E

Junction Calculation Sheets

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2026 Observed Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	24	(pcu/hr)
q a-c	=	388	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	175	(pcu/hr)
q c-b	=	77	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	14	(pcu/hr)
q b-c	=	56	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.8

THE CAPACITY OF MOVEMENT :

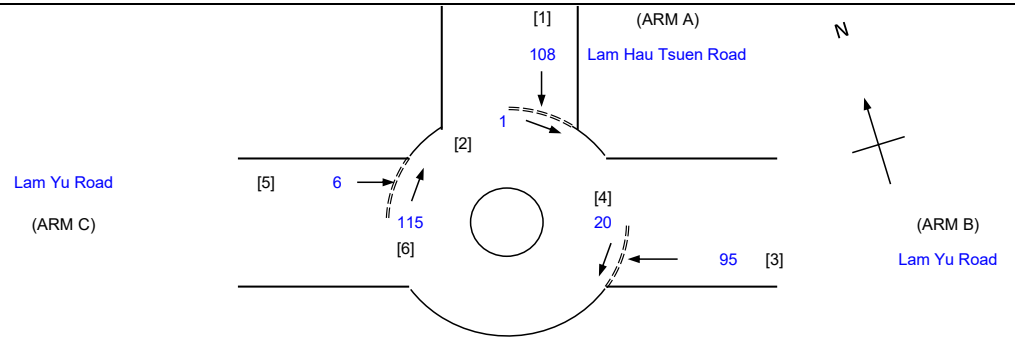
Q b-a	=	485	(pcu/hr)
Q b-c	=	740	(pcu/hr)
Q c-b	=	564	(pcu/hr)
Q b-ac	=	670	(pcu/hr)
Q c-a	=	1554	(pcu/hr)
TOTAL FLOW	=	734	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0289
DFC b-c	=	0.0757
DFC c-b	=	0.1365
DFC b-ac (Share Lane)	=	0.1045
DFC c-a	=	0.1126

CRITICAL DFC = 0.14

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2026 Observed Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

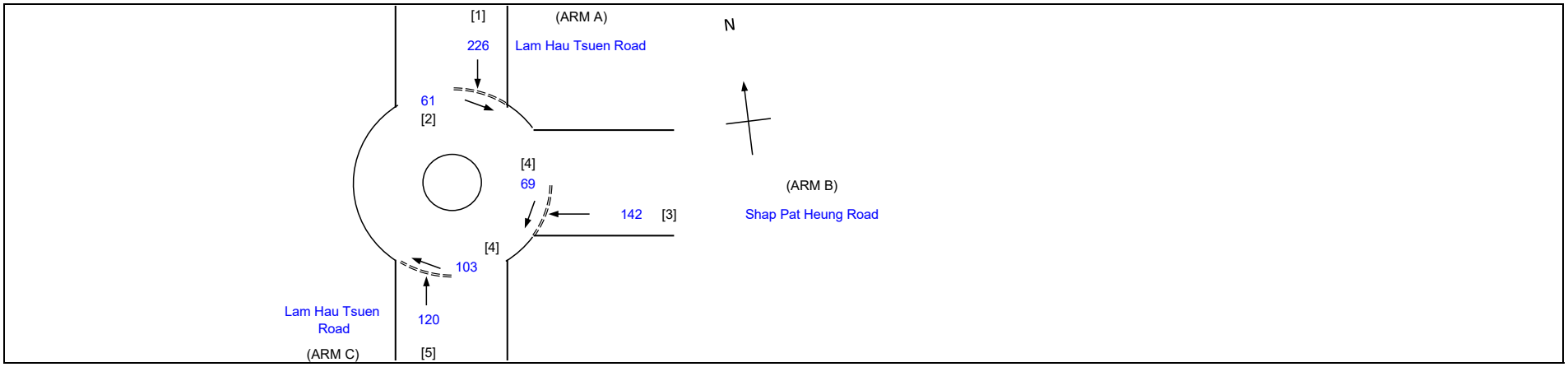


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		108	95	6
Qc	=	Circulating flow across entry (pcu/h)		1	20	115
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1456	1350	1841
DFC	=	Design flow/Capacity = Q/Qe		0.07	0.07	0.00

TOTAL FLOW = 345 (pcu/hr)

CRITICAL DFC = 0.07

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2026 Observed Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

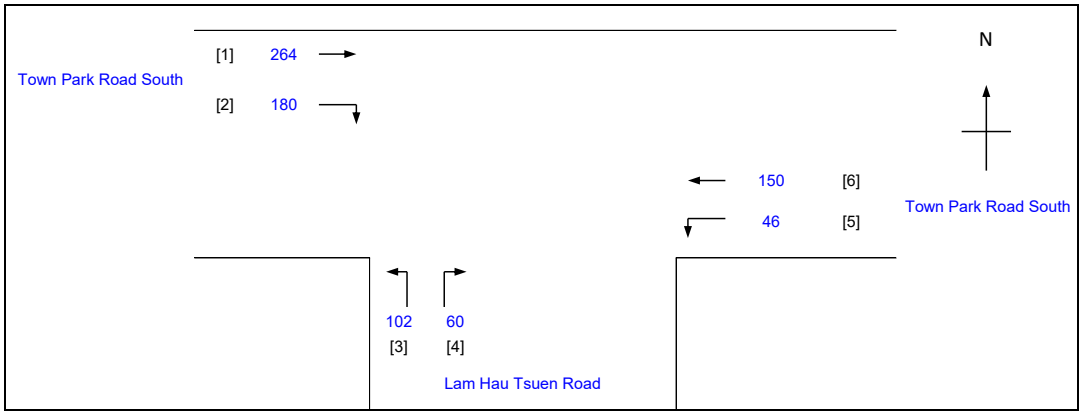


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		226	142	120
Qc	=	Circulating flow across entry (pcu/h)		61	69	103
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2037	1968	1774
DFC	=	Design flow/Capacity = Q/Qe		0.11	0.07	0.07

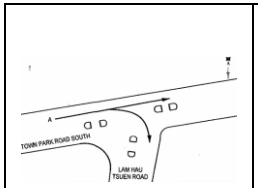
TOTAL FLOW = 721 (pcu/hr)

CRITICAL DFC = 0.11

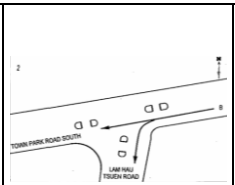
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2026 Observed Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



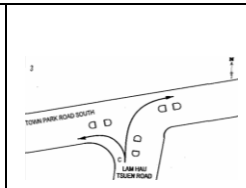
No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.394	
Loss time		L =	32	sec
Total Flow		=	802	pcu
Co	= (1.5*L+5)/(1-Y)	=	87.4	sec
Cm	= L/(1-Y)	=	52.8	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	67.7	%
Cp	= 0.9*L/(0.9-Y)	=	56.9	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	67.7	%



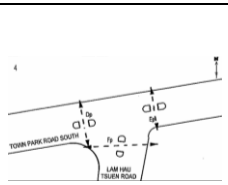
Stage 1



Stage 2



Stage 3



Stage 4

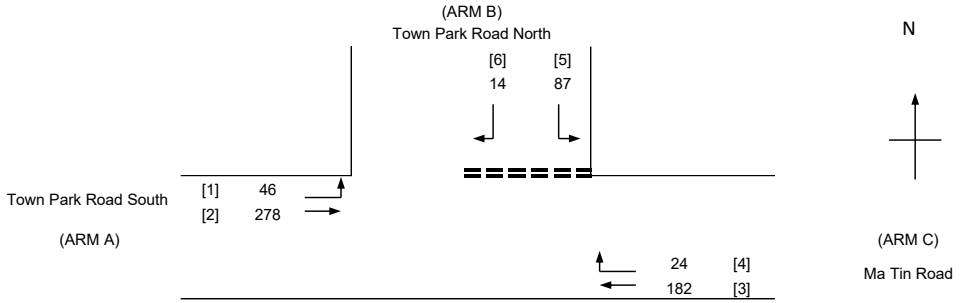
Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	FG	Green Time Provided (s) SG	FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
1,2	1	3.60	A	1	20			2115		264	180	444	0.41	2053			2053	0.216	0.216		48	48	0.541	44	29
5,6	2	4.80	B	1	15		N	2095	46	150		196	0.23	2047			2047	0.096	0.096		21	21	0.547	27	47
5,6	2	5.20	C	1	20		N	2135	102		60	162	1.00	1986			1986	0.082	0.082		18	18	0.544	23	50

X:\Project\31073 Ankor Driving School, Shan Ha Road\Data\Calculation\[31073_Junction_OBS_AM_OFF_PEAK_WEEKDAY.xls]D

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

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2026 Observed Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	46	(pcu/hr)
q a-c	=	278	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	182	(pcu/hr)
q c-b	=	24	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	14	(pcu/hr)
q b-c	=	87	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.861

THE CAPACITY OF MOVEMENT :

Q b-a	=	490	(pcu/hr)
Q b-c	=	685	(pcu/hr)
Q c-b	=	542	(pcu/hr)
Q b-ac	=	649	(pcu/hr)
Q c-a	=	1720	(pcu/hr)
TOTAL FLOW	=	631	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

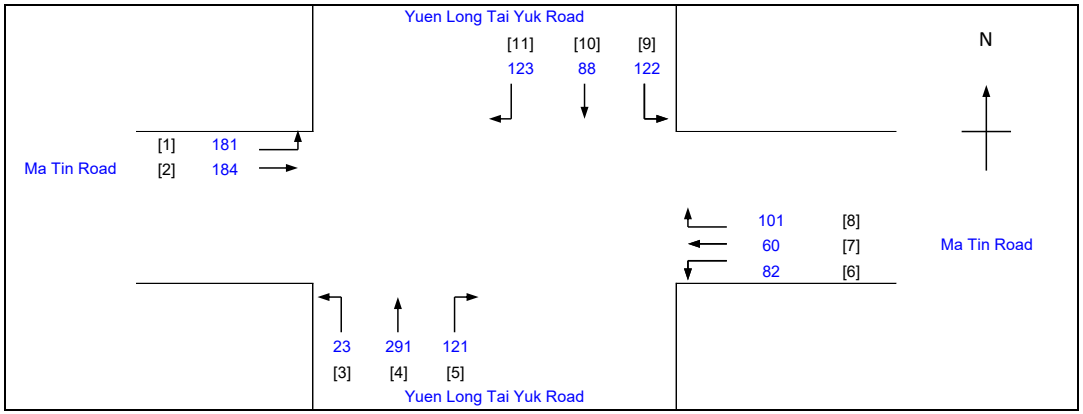
DFC b-a	=	0.0286
DFC b-c	=	0.1270
DFC c-b	=	0.0443
DFC b-ac	=	0.1556
(Share Lane)		
DFC c-a	=	0.1058

CRITICAL DFC = 0.16

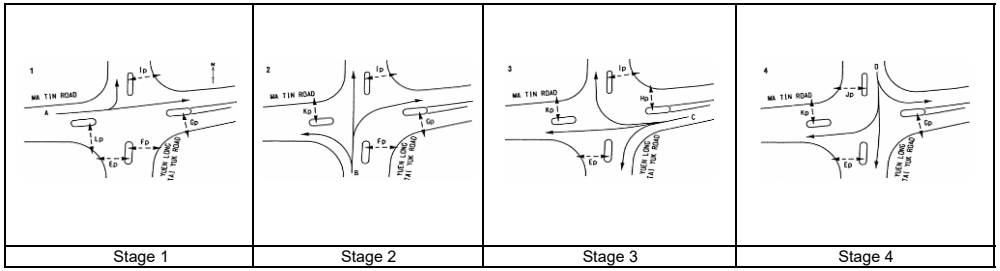
AXON CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,	Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories		Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2026 Observed Traffic Flow - AM Off Peak (Weekday)	Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.367	
Loss time		L =	32	sec
Total Flow		=	1376	pcu
Co	= (1.5*L+5)/(1-Y)	=	83.8	sec
Cm	= L/(1-Y)	=	50.6	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	79.6	%
Cp	= 0.9*L/(0.9-Y)	=	54.1	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	79.6	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	48	8	OK
Fp	7.6	1,2	5	7	54	7	OK
Gp	7.3	4,1,2	5	7	88	7	OK
Hp	8.3	3	5	8	14	8	OK
Ip	7.6	1,2,3	5	8	84	8	OK
Jp	7.4	4	5	7	20	7	OK
Kp	7.3	2,3,4	5	7	82	7	OK
Lp	9.7	1	5	11	14	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
	1	1	3.60	A	1	15		N	1975	181			181	1.00	1795			1795	0.101	0.101		24	24	0.504	24	45
	2	1	3.60	A	1				2115		184		184	0.00	2115			2115	0.087			21	24	0.435	25	43
	3,4	2	3.60	B	1	15		N	1975	23	190		213	0.11	1954			1954	0.109	0.109		26	26	0.504	28	43
	4,5	2	3.60	B	1	20			2115		101	121	222	0.55	2032			2032	0.109			26	26	0.504	29	43
	3,4	2	3.50	C	1	15		N	1965			101	101	1.00	1786			1786	0.057			14	17	0.399	14	49
	4,5	2	3.50	C	1	20			2105	82	60		142	0.58	2018			2018	0.070	0.070		17	17	0.497	20	50
	10,11	2	3.50	D	1	20			2105		51	123	174	0.71	1999			1999	0.087	0.087		21	21	0.498	24	47
	9,10	2	3.50	D	1	15		N	1965	122	37		159	0.77	1825			1825	0.087			21	21	0.498	22	47

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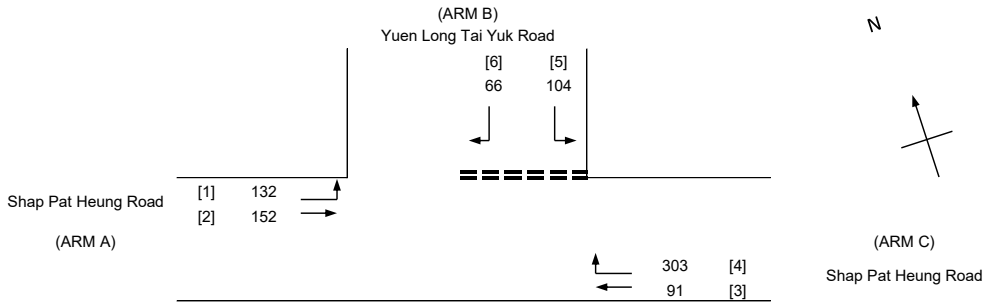
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2026 Observed Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	132	(pcu/hr)
q a-c	=	152	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	91	(pcu/hr)
q c-b	=	303	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	66	(pcu/hr)
q b-c	=	104	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.612

THE CAPACITY OF MOVEMENT :

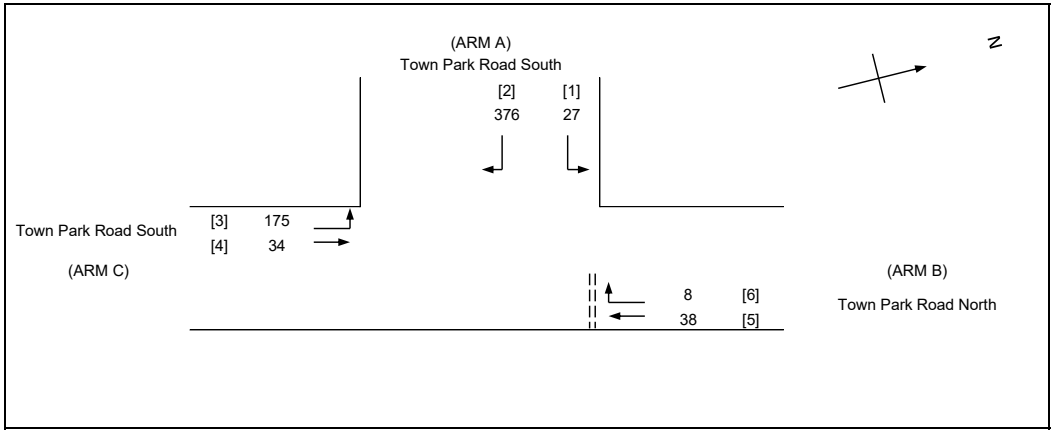
Q b-a	=	521	(pcu/hr)
Q b-c	=	756	(pcu/hr)
Q c-b	=	685	(pcu/hr)
Q b-ac	=	643	(pcu/hr)
TOTAL FLOW	=	848	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1267
DFC b-c	=	0.1376
DFC c-b	=	0.4423
DFC b-ac (Share Lane)	=	0.2642

CRITICAL DFC = 0.44

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2026 Observed Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	27	(pcu/hr)
q a-c	=	376	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	175	(pcu/hr)
q c-b	=	34	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	8	(pcu/hr)
q b-c	=	38	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.826

THE CAPACITY OF MOVEMENT :

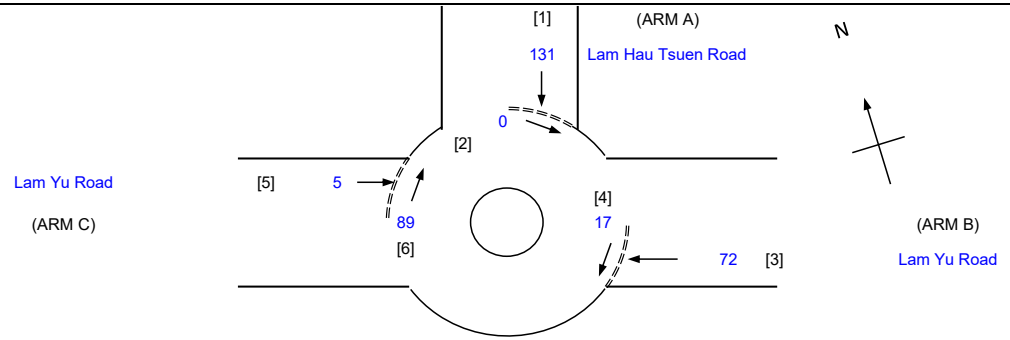
Q b-a	=	503	(pcu/hr)
Q b-c	=	743	(pcu/hr)
Q c-b	=	566	(pcu/hr)
Q b-ac	=	686	(pcu/hr)
Q c-a	=	1692	(pcu/hr)
TOTAL FLOW	=	658	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0159
DFC b-c	=	0.0511
DFC c-b	=	0.0601
DFC b-ac	=	0.0670
(Share Lane)		
DFC c-a	=	0.1034

CRITICAL DFC = 0.10

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2026 Observed Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

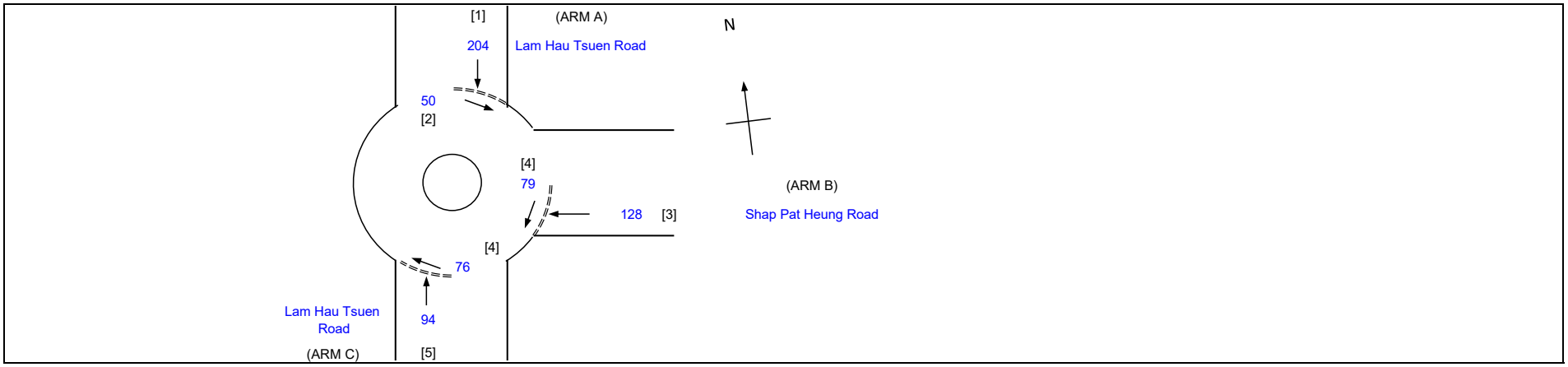


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		131	72	5
Qc	=	Circulating flow across entry (pcu/h)		0	17	89
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1457	1352	1859
DFC	=	Design flow/Capacity = Q/Qe		0.09	0.05	0.00

TOTAL FLOW = 314 (pcu/hr)

CRITICAL DFC = 0.09

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2026 Observed Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

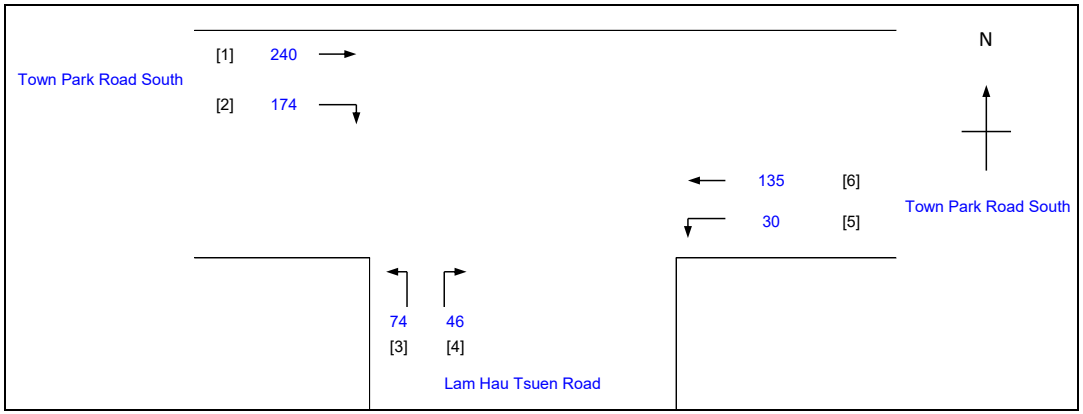


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		204	128	94
Qc	=	Circulating flow across entry (pcu/h)		50	79	76
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2046	1960	1793
DFC	=	Design flow/Capacity = Q/Qe		0.10	0.07	0.05

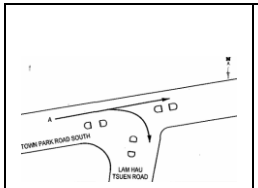
TOTAL FLOW = 631 (pcu/hr)

CRITICAL DFC = 0.10

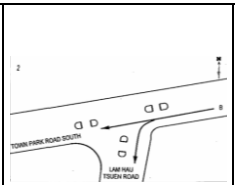
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2026 Observed Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



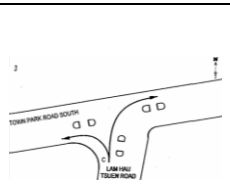
No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.343	
Loss time		L =	32	sec
Total Flow		=	699	pcu
Co	= (1.5*L+5)/(1-Y)	=	80.6	sec
Cm	= L/(1-Y)	=	48.7	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	92.7	%
Cp	= 0.9*L/(0.9-Y)	=	51.7	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	92.7	%



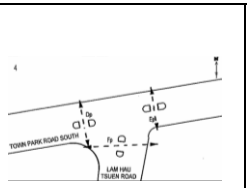
Stage 1



Stage 2



Stage 3



Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	FG	Green Time Provided (s) SG	FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
1,2	1	3.60	A	1	20			2115		240	174	414	0.42	2050			2050	0.202	0.202		52	52	0.466	39	25
5,6	2	4.80	B	1	15		N	2095	30	135		165	0.18	2058			2058	0.080	0.080		21	21	0.458	23	46
5,6	2	5.20	C	1	20		N	2135	74		46	120	1.00	1986			1986	0.060	0.060		16	16	0.453	17	50

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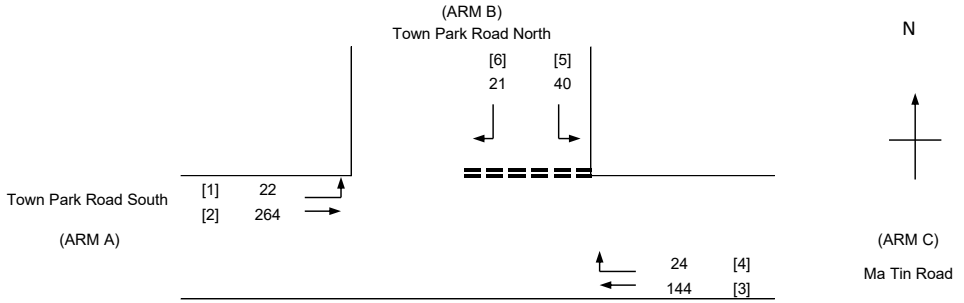
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2026 Observed Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	22	(pcu/hr)
q a-c	=	264	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	144	(pcu/hr)
q c-b	=	24	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	21	(pcu/hr)
q b-c	=	40	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.656

THE CAPACITY OF MOVEMENT :

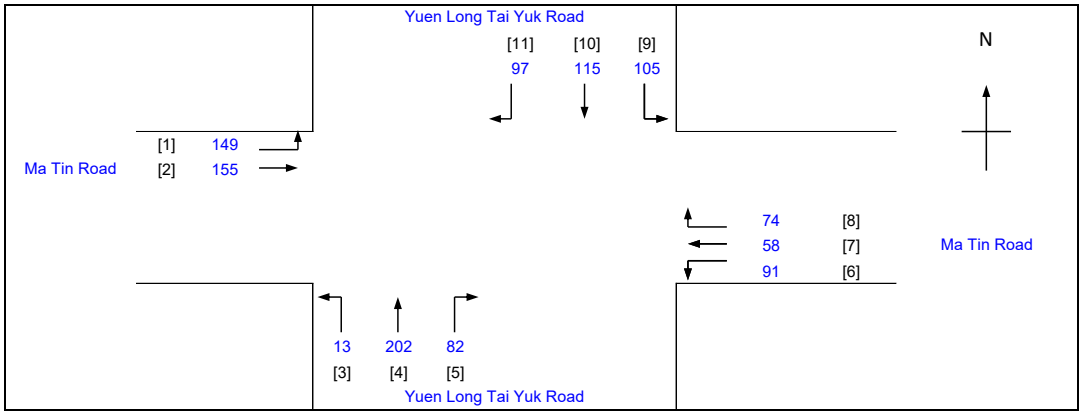
Q b-a	=	501	(pcu/hr)
Q b-c	=	691	(pcu/hr)
Q c-b	=	550	(pcu/hr)
Q b-ac	=	611	(pcu/hr)
Q c-a	=	1721	(pcu/hr)
TOTAL FLOW	=	515	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

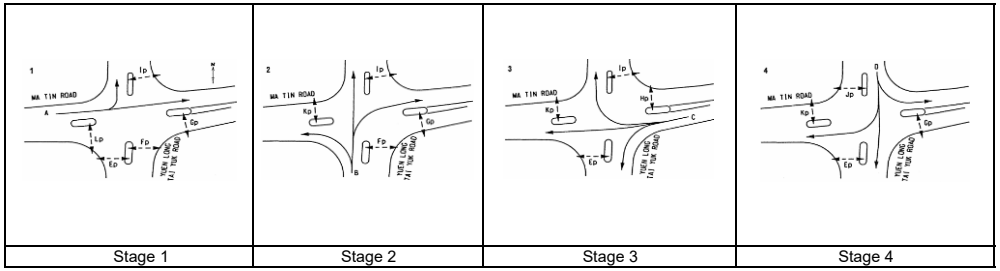
DFC b-a	=	0.0419
DFC b-c	=	0.0579
DFC c-b	=	0.0436
DFC b-ac	=	0.0998
(Share Lane)		
DFC c-a	=	0.0837

CRITICAL DFC = 0.10

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2026 Observed Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.314	
Loss time		L =	32	sec
Total Flow		=	1141	pcu
Co	= (1.5*L+5)/(1-Y)	=	77.2	sec
Cm	= L/(1-Y)	=	46.6	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	110.4	%
Cp	= 0.9*L/(0.9-Y)	=	49.1	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	110.4	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	51	8	OK
Fp	7.6	1,2	5	7	48	7	OK
Gp	7.3	4,1,2	5	7	84	7	OK
Hp	8.3	3	5	8	18	8	OK
Ip	7.6	1,2,3	5	8	82	8	OK
Jp	7.4	4	5	7	22	7	OK
Kp	7.3	2,3,4	5	7	83	7	OK
Lp	9.7	1	5	11	13	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↖	1	1	3.60	A	1	15		N	1975	149			149	1.00	1795			1795	0.083	0.083		23	23	0.433	20	44
→	2	1	3.60	A	1				2115		155		155	0.00	2115			2115	0.073			21	23	0.382	21	44
↰	3,4	2	3.60	B	1	15		N	1975	13	133		146	0.09	1958			1958	0.074	0.074		21	21	0.425	20	46
↑	4,5	2	3.60	B	1	20			2115		69	82	151	0.54	2032			2032	0.074			21	21	0.425	21	46
↰	3,4	2	3.50	C	1	15		N	1965			74	74	1.00	1786			1786	0.041			12	21	0.237	10	44
↓	4,5	2	3.50	C	1	20			2105	91	58		149	0.61	2013			2013	0.074	0.074		21	21	0.423	20	46
↓	10,11	2	3.50	D	1	20			2105		69	97	166	0.58	2017			2017	0.082	0.082		23	23	0.429	22	44
↓	9,10	2	3.50	D	1	15		N	1965	105	46		151	0.69	1837			1837	0.082			23	23	0.429	20	44

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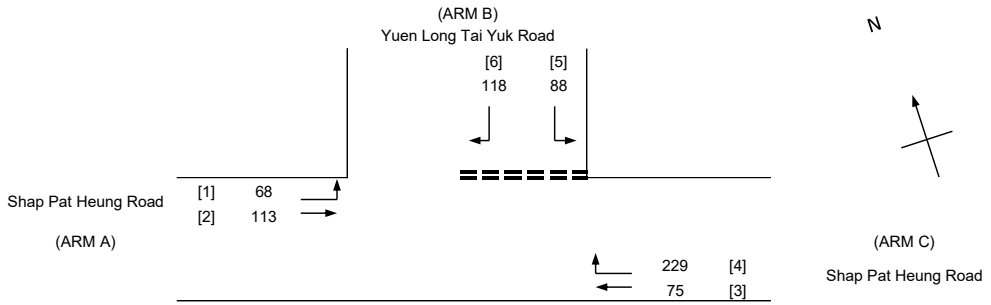
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2026 Observed Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	68	(pcu/hr)
q a-c	=	113	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	75	(pcu/hr)
q c-b	=	229	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	118	(pcu/hr)
q b-c	=	88	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.427

THE CAPACITY OF MOVEMENT :

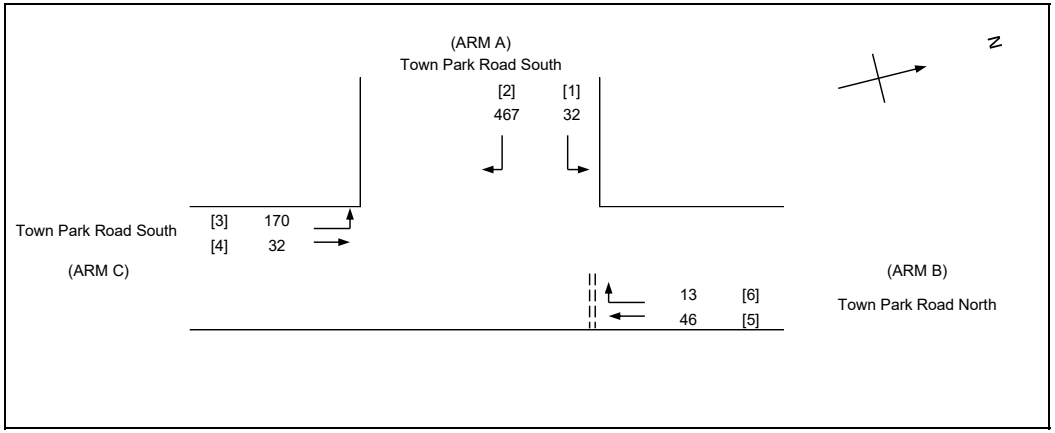
Q b-a	=	568	(pcu/hr)
Q b-c	=	774	(pcu/hr)
Q c-b	=	712	(pcu/hr)
Q b-ac	=	641	(pcu/hr)
TOTAL FLOW	=	691	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2077
DFC b-c	=	0.1137
DFC c-b	=	0.3216
DFC b-ac (Share Lane)	=	0.3214

CRITICAL DFC = 0.32

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2026 Observed Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	32	(pcu/hr)
q a-c	=	467	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	170	(pcu/hr)
q c-b	=	32	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	13	(pcu/hr)
q b-c	=	46	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.78

THE CAPACITY OF MOVEMENT :

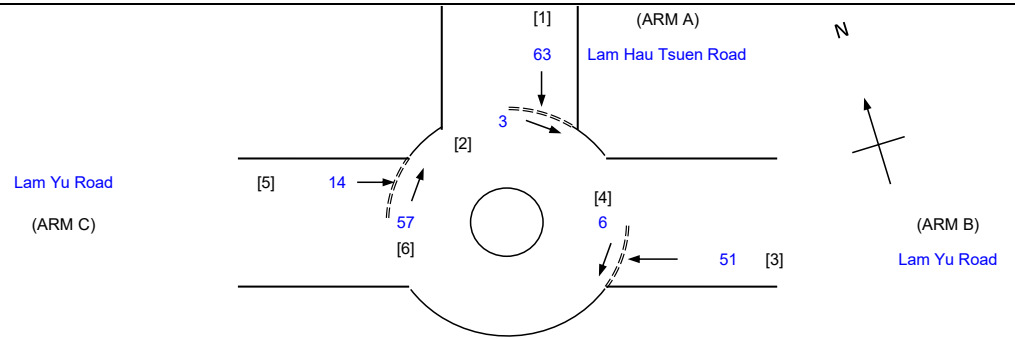
Q b-a	=	481	(pcu/hr)
Q b-c	=	716	(pcu/hr)
Q c-b	=	544	(pcu/hr)
Q b-ac	=	646	(pcu/hr)
Q c-a	=	1694	(pcu/hr)
TOTAL FLOW	=	760	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0270
DFC b-c	=	0.0642
DFC c-b	=	0.0588
DFC b-ac	=	0.0913
(Share Lane)		
DFC c-a	=	0.1003

CRITICAL DFC = 0.10

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2026 Observed Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27

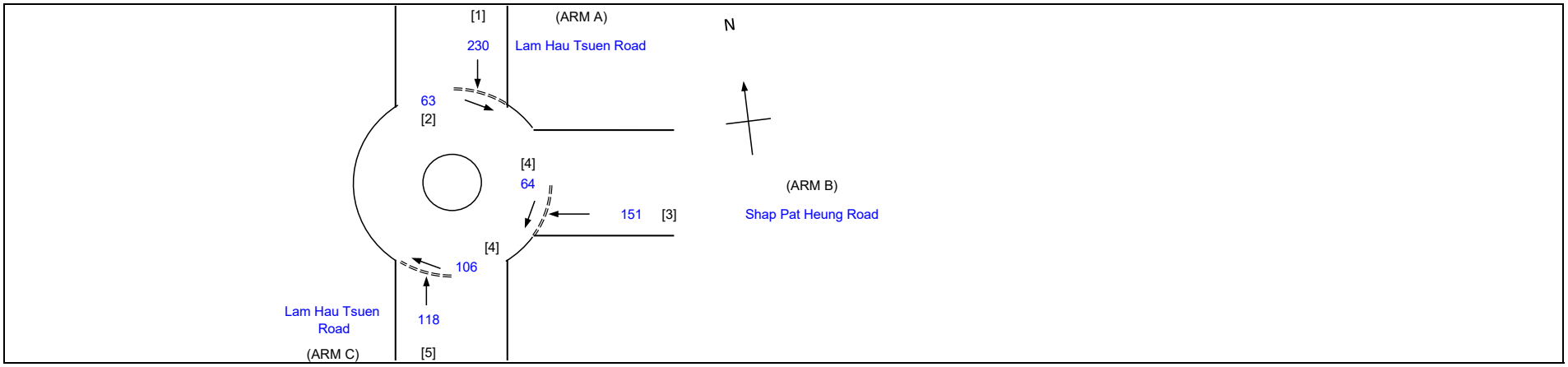


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		63	51	14
Qc	=	Circulating flow across entry (pcu/h)		3	6	57
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1455	1359	1882
DFC	=	Design flow/Capacity = Q/Qe		0.04	0.04	0.01

TOTAL FLOW = 194 (pcu/hr)

CRITICAL DFC = 0.04

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2026 Observed Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27

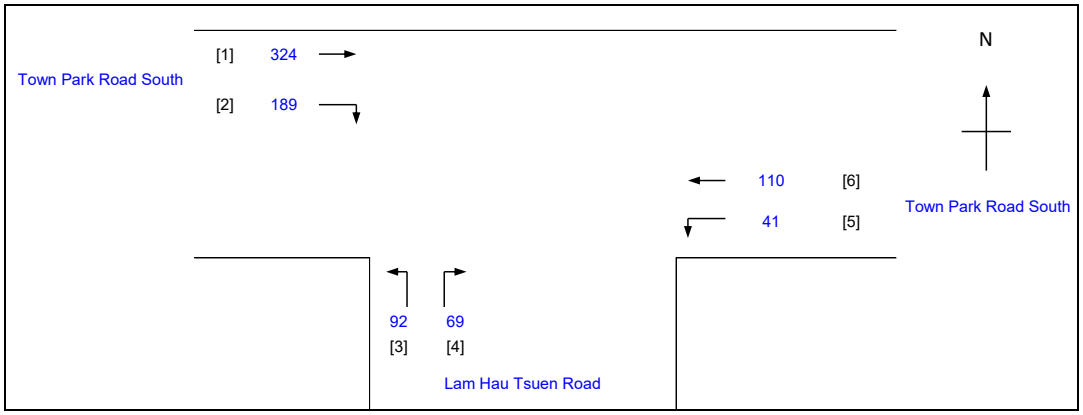


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		230	151	118
Qc	=	Circulating flow across entry (pcu/h)		63	64	106
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2036	1971	1772
DFC	=	Design flow/Capacity = Q/Qe		0.11	0.08	0.07

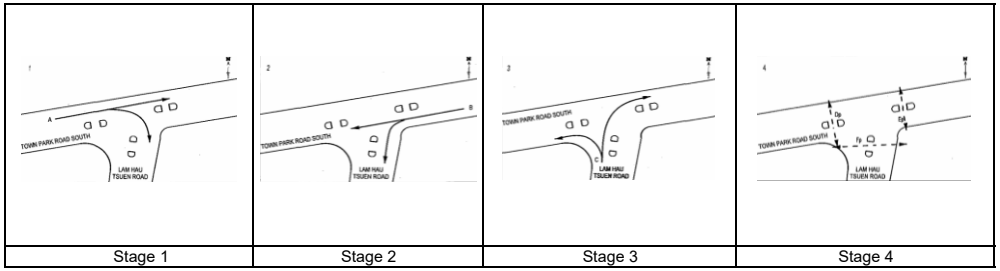
TOTAL FLOW = 732 (pcu/hr)

CRITICAL DFC = 0.11

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2026 Observed Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.404	
Loss time		L =	32	sec
Total Flow		=	825	pcu
Co	= (1.5*L+5)/(1-Y)	=	89.0	sec
Cm	= L/(1-Y)	=	53.7	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	63.2	%
Cp	= 0.9*L/(0.9-Y)	=	58.1	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	63.2	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↱	1,2	1	3.60	A	1	20			2115		324	189	513	0.37	2058			2058	0.249	0.249		54	54	0.554	47	26
↰	5,6	2	4.80	B	1	15		N	2095	41	110		151	0.27	2040			2040	0.074	0.074		16	16	0.555	22	51
↰↱	5,6	2	5.20	C	1	20		N	2135	92		69	161	1.00	1986			1986	0.081	0.081		18	18	0.540	23	50

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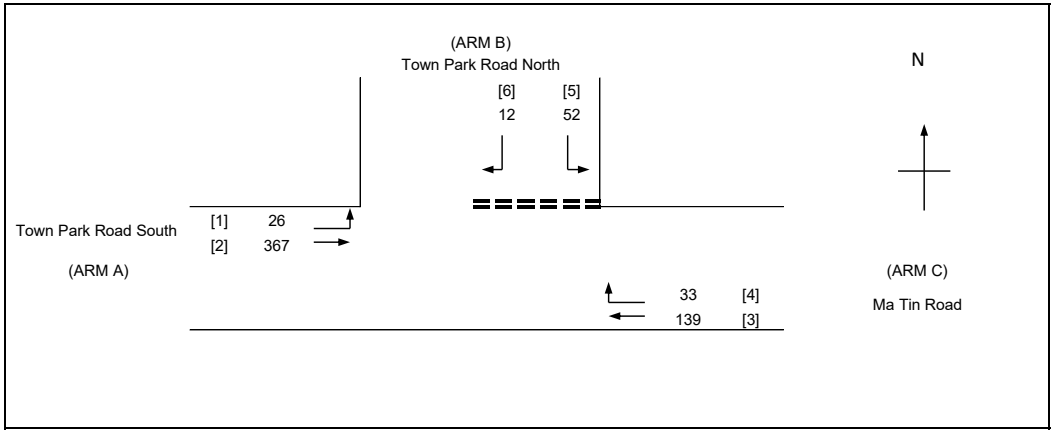
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2026 Observed Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	26	(pcu/hr)
q a-c	=	367	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	139	(pcu/hr)
q c-b	=	33	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	52	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.813

THE CAPACITY OF MOVEMENT :

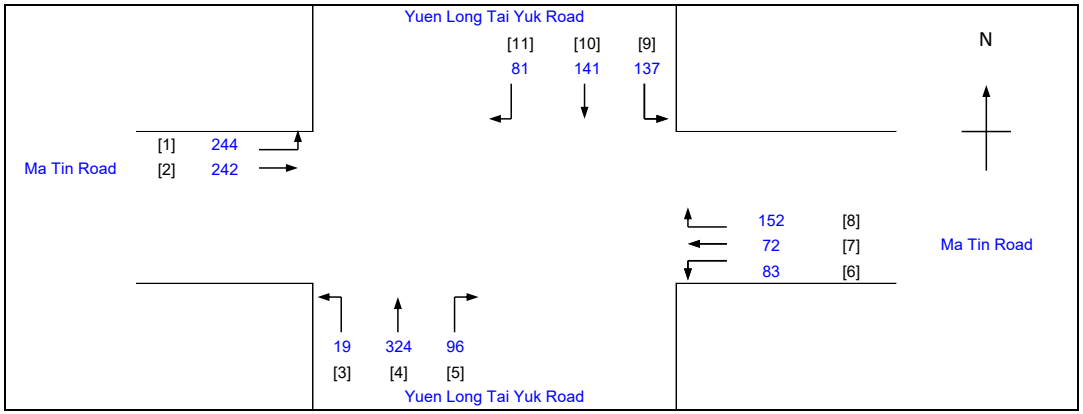
Q b-a	=	475	(pcu/hr)
Q b-c	=	665	(pcu/hr)
Q c-b	=	529	(pcu/hr)
Q b-ac	=	619	(pcu/hr)
Q c-a	=	1688	(pcu/hr)
TOTAL FLOW	=	629	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

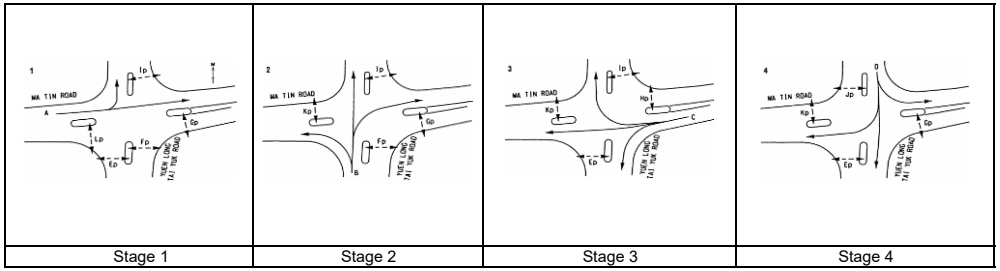
DFC b-a	=	0.0253
DFC b-c	=	0.0782
DFC c-b	=	0.0624
DFC b-ac (Share Lane)	=	0.1035
DFC c-a	=	0.0824

CRITICAL DFC = 0.10

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2026 Observed Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.424	
Loss time		L =	32	sec
Total Flow		=	1591	pcu
Co	= (1.5*L+5)/(1-Y)	=	92.0	sec
Cm	= L/(1-Y)	=	55.5	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	55.8	%
Cp	= 0.9*L/(0.9-Y)	=	60.5	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	55.8	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	53	8	OK
Fp	7.6	1,2	5	7	55	7	OK
Gp	7.3	4,1,2	5	7	87	7	OK
Hp	8.3	3	5	8	15	8	OK
Ip	7.6	1,2,3	5	8	86	8	OK
Jp	7.4	4	5	7	18	7	OK
Kp	7.3	2,3,4	5	7	78	7	OK
Lp	9.7	1	5	11	18	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↗	1	1	3.60	A	1	15		N	1975	244			244	1.00	1795			1795	0.136	0.136		28	28	0.582	31	43
→	2	1	3.60	A	1				2115		242		242	0.00	2115			2115	0.114			24	28	0.490	31	41
↰	3,4	2	3.60	B	1	15		N	1975	19	195		214	0.09	1958			1958	0.110	0.110		23	23	0.572	29	46
↱	4,5	2	3.60	B	1	20			2115		129	96	225	0.43	2049			2049	0.110			23	23	0.572	30	46
↰	3,4	2	3.50	C	1	15		N	1965			152	152	1.00	1786			1786	0.085			18	18	0.567	22	51
↲	4,5	2	3.50	C	1	20			2105	83	72		155	0.54	2024			2024	0.077	0.085		16	18	0.511	22	49
↲	10,11	2	3.50	D	1	20			2105		109	81	190	0.43	2040			2040	0.093	0.093		19	19	0.588	27	50
↳	9,10	2	3.50	D	1	15		N	1965	137	32		169	0.81	1818			1818	0.093			19	19	0.588	24	50

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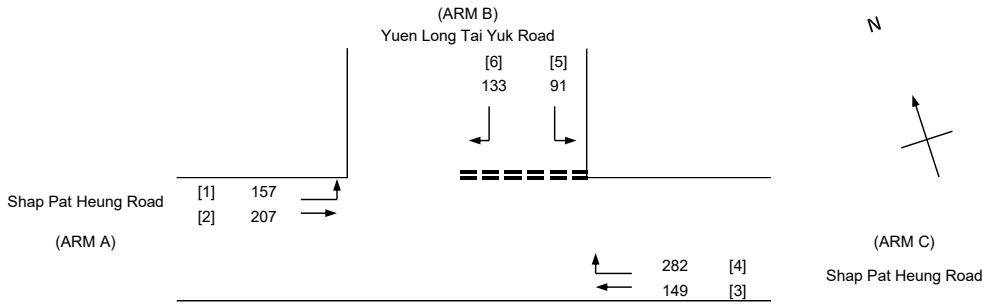
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2026 Observed Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	157	(pcu/hr)
q a-c	=	207	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	149	(pcu/hr)
q c-b	=	282	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	133	(pcu/hr)
q b-c	=	91	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.406

THE CAPACITY OF MOVEMENT :

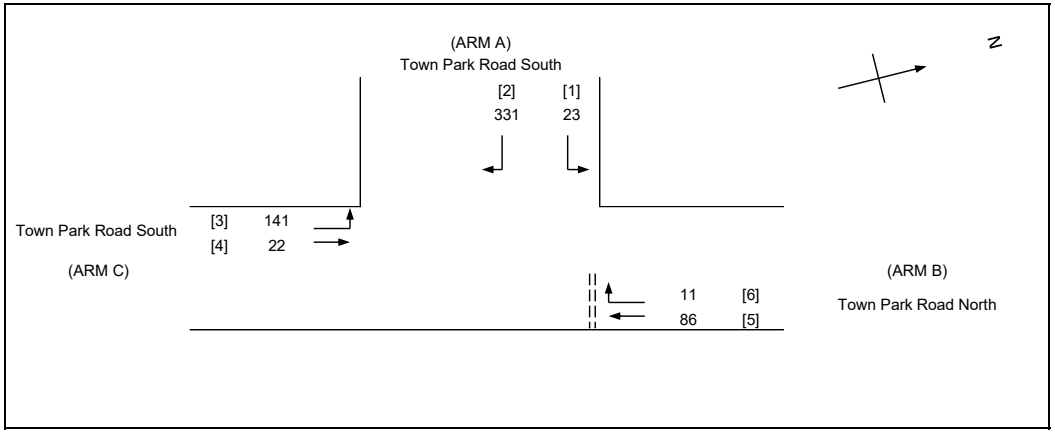
Q b-a	=	502	(pcu/hr)
Q b-c	=	738	(pcu/hr)
Q c-b	=	664	(pcu/hr)
Q b-ac	=	577	(pcu/hr)
TOTAL FLOW	=	1019	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2649
DFC b-c	=	0.1233
DFC c-b	=	0.4247
DFC b-ac (Share Lane)	=	0.3882

CRITICAL DFC = 0.42

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2026 Observed Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	23	(pcu/hr)
q a-c	=	331	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	141	(pcu/hr)
q c-b	=	22	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	11	(pcu/hr)
q b-c	=	86	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.887

THE CAPACITY OF MOVEMENT :

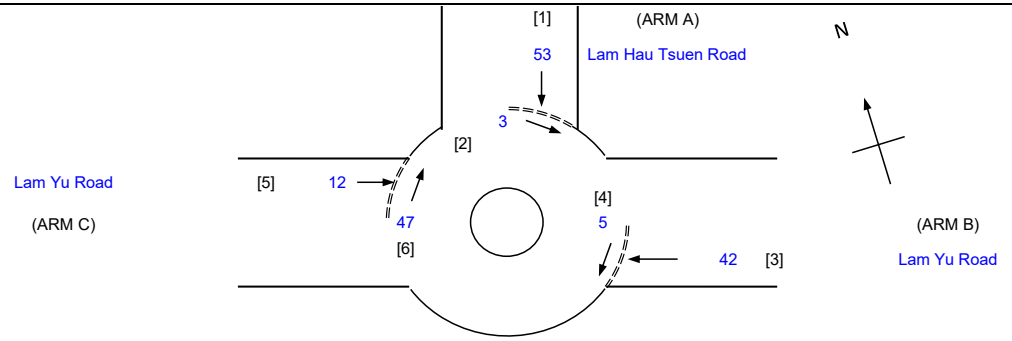
Q b-a	=	524	(pcu/hr)
Q b-c	=	756	(pcu/hr)
Q c-b	=	577	(pcu/hr)
Q b-ac	=	720	(pcu/hr)
Q c-a	=	1731	(pcu/hr)
TOTAL FLOW	=	614	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0210
DFC b-c	=	0.1138
DFC c-b	=	0.0381
DFC b-ac	=	0.1347
(Share Lane)		
DFC c-a	=	0.0814

CRITICAL DFC = 0.13

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2026 Observed Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27

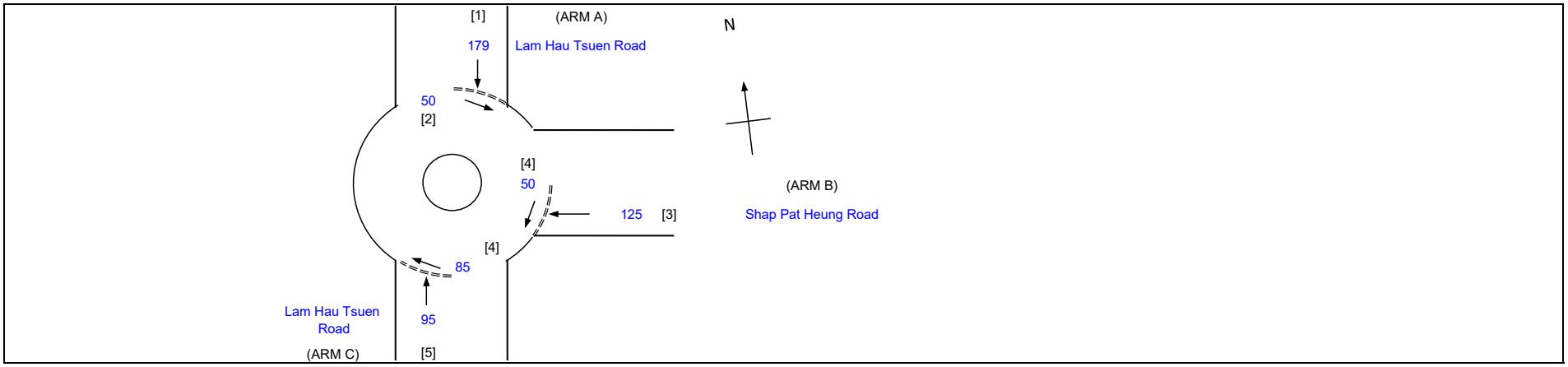


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		53	42	12
Qc	=	Circulating flow across entry (pcu/h)		3	5	47
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1455	1360	1889
DFC	=	Design flow/Capacity = Q/Qe		0.04	0.03	0.01

TOTAL FLOW = 162 (pcu/hr)

CRITICAL DFC = 0.04

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2026 Observed Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27

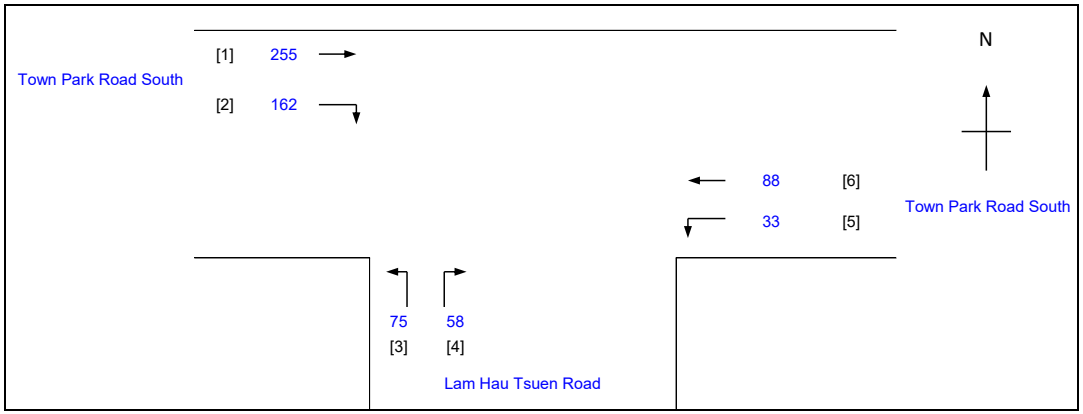


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		179	125	95
Qc	=	Circulating flow across entry (pcu/h)		50	50	85
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2046	1982	1787
DFC	=	Design flow/Capacity = Q/Qe		0.09	0.06	0.05

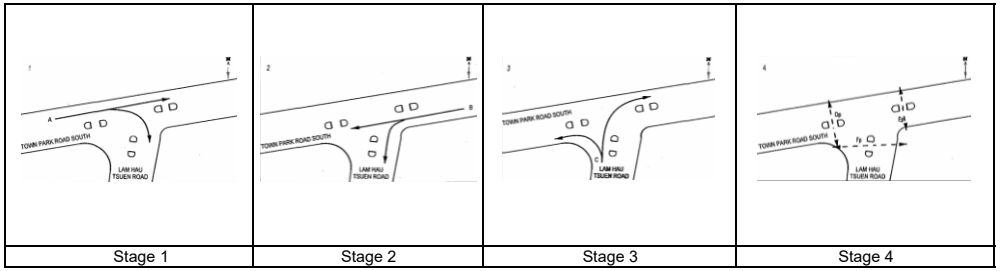
TOTAL FLOW = 584 (pcu/hr)

CRITICAL DFC = 0.09

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2026 Observed Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.329	
Loss time		L =	32	sec
Total Flow		=	671	pcu
Co	= (1.5*L+5)/(1-Y)	=	79.0	sec
Cm	= L/(1-Y)	=	47.7	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	100.5	%
Cp	= 0.9*L/(0.9-Y)	=	50.5	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	100.5	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↓	1,2	1	3.60	A	1	20			2115		255	162	417	0.39	2055			2055	0.203	0.203		54	54	0.451	38	24
↓	5,6	2	4.80	B	1	15		N	2095	33	88		121	0.27	2039			2039	0.059	0.059		16	16	0.445	17	50
↱	5,6	2	5.20	C	1	20		N	2135	75		58	133	1.00	1986			1986	0.067	0.067		18	18	0.446	19	48

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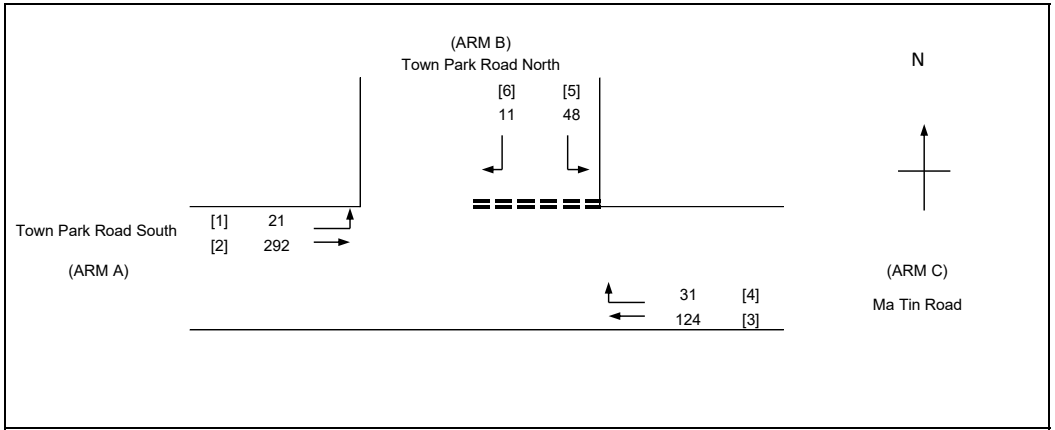
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2026 Observed Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	21	(pcu/hr)
q a-c	=	292	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	124	(pcu/hr)
q c-b	=	31	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	11	(pcu/hr)
q b-c	=	48	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.814

THE CAPACITY OF MOVEMENT :

Q b-a	=	496	(pcu/hr)
Q b-c	=	684	(pcu/hr)
Q c-b	=	544	(pcu/hr)
Q b-ac	=	639	(pcu/hr)
Q c-a	=	1697	(pcu/hr)
TOTAL FLOW	=	527	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

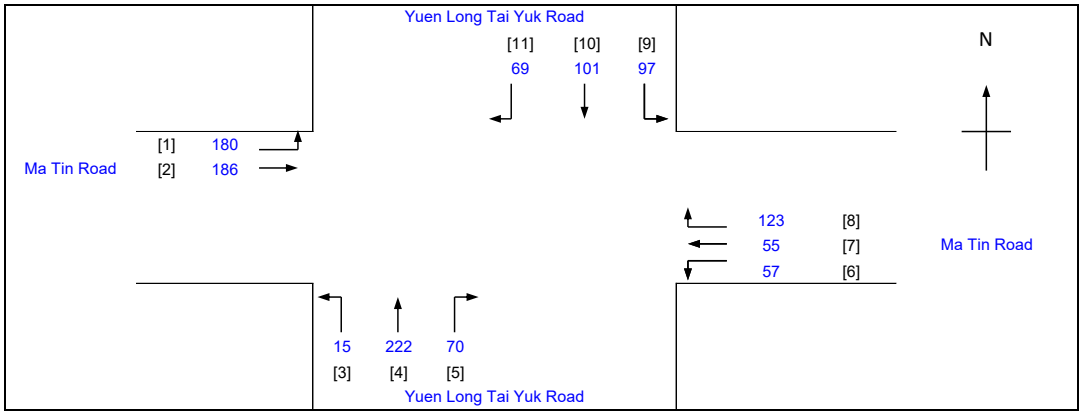
DFC b-a	=	0.0222
DFC b-c	=	0.0702
DFC c-b	=	0.0570
DFC b-ac	=	0.0924
(Share Lane)		
DFC c-a	=	0.0731

CRITICAL DFC = 0.09

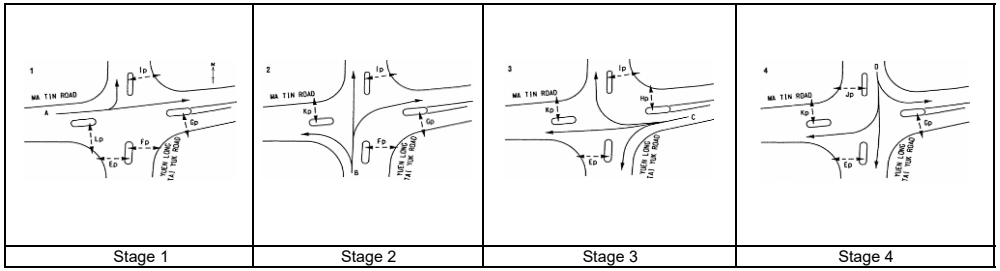
AXON CONSULTANCY LIMITED

TRAFFIC SIGNAL CALCULATION

			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,	Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories		Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2026 Observed Traffic Flow - Weekend Peak (Sunday)	Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.315	
Loss time		L =	32	sec
Total Flow		=	1175	pcu
Co	= (1.5*L+5)/(1-Y)	=	77.4	sec
Cm	= L/(1-Y)	=	46.7	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	109.5	%
Cp	= 0.9*L/(0.9-Y)	=	49.2	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	109.5	%



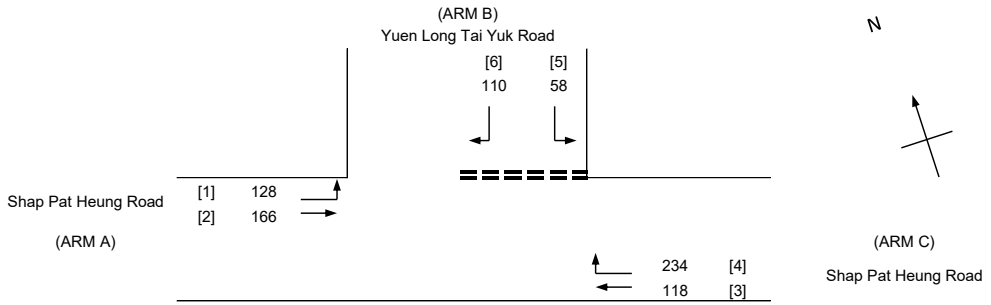
Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	54	8	OK
Fp	7.6	1,2	5	7	53	7	OK
Gp	7.3	4,1,2	5	7	85	7	OK
Hp	8.3	3	5	8	16	8	OK
Ip	7.6	1,2,3	5	8	85	8	OK
Jp	7.4	4	5	7	18	7	OK
Kp	7.3	2,3,4	5	7	77	7	OK
Lp	9.7	1	5	11	18	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↱	1	1	3.60	A	1	15		N	1975	180			180	1.00	1795			1795	0.100	0.100		28	28	0.430	23	41
→	2	1	3.60	A	1				2115		186		186	0.00	2115			2115	0.088			25	28	0.377	24	40
↰	3,4	2	3.60	B	1	15		N	1975	15	135		150	0.10	1955			1955	0.077	0.077		21	21	0.438	21	46
↑	4,5	2	3.60	B	1	20			2115		87	70	157	0.45	2047			2047	0.077			21	21	0.438	22	46
↰	3,4	2	3.50	C	1	15		N	1965			123	123	1.00	1786			1786	0.069			19	19	0.435	17	48
↓	4,5	2	3.50	C	1	20			2105	57	55		112	0.51	2028			2028	0.055	0.069		15	19	0.349	16	46
↓	10,11	2	3.50	D	1	20			2105		72	69	141	0.49	2030			2030	0.069	0.069		19	19	0.437	20	47
↳	9,10	2	3.50	D	1	15		N	1965	97	29		126	0.77	1825			1825	0.069			19	19	0.437	18	48

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

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2026 Observed Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	128	(pcu/hr)
q a-c	=	166	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	118	(pcu/hr)
q c-b	=	234	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	110	(pcu/hr)
q b-c	=	58	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.345

THE CAPACITY OF MOVEMENT :

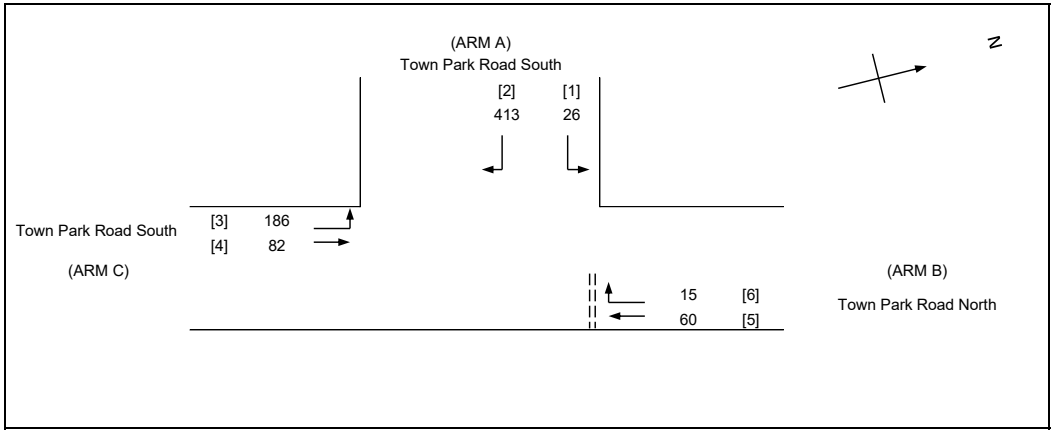
Q b-a	=	539	(pcu/hr)
Q b-c	=	753	(pcu/hr)
Q c-b	=	682	(pcu/hr)
Q b-ac	=	598	(pcu/hr)
TOTAL FLOW	=	814	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2041
DFC b-c	=	0.0770
DFC c-b	=	0.3431
DFC b-ac (Share Lane)	=	0.2811

CRITICAL DFC = 0.34

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2029 Reference Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	26	(pcu/hr)
q a-c	=	413	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	186	(pcu/hr)
q c-b	=	82	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	15	(pcu/hr)
q b-c	=	60	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.8

THE CAPACITY OF MOVEMENT :

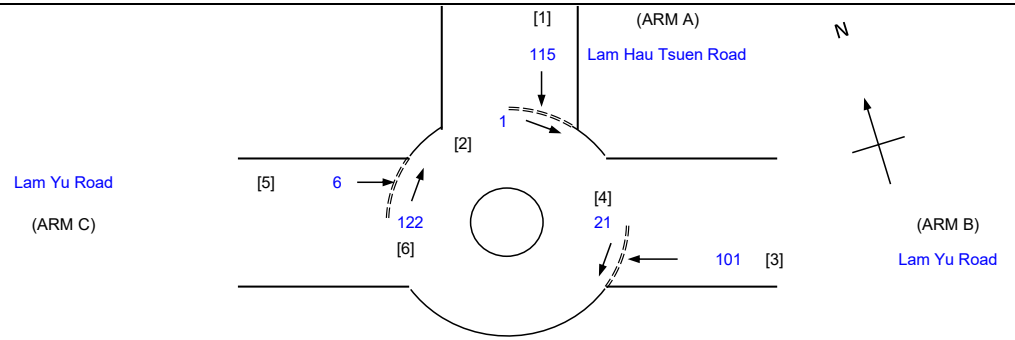
Q b-a	=	475	(pcu/hr)
Q b-c	=	732	(pcu/hr)
Q c-b	=	558	(pcu/hr)
Q b-ac	=	661	(pcu/hr)
Q c-a	=	1535	(pcu/hr)
TOTAL FLOW	=	782	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0316
DFC b-c	=	0.0820
DFC c-b	=	0.1470
DFC b-ac	=	0.1135
(Share Lane)		
DFC c-a	=	0.1211

CRITICAL DFC = 0.15

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2029 Reference Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

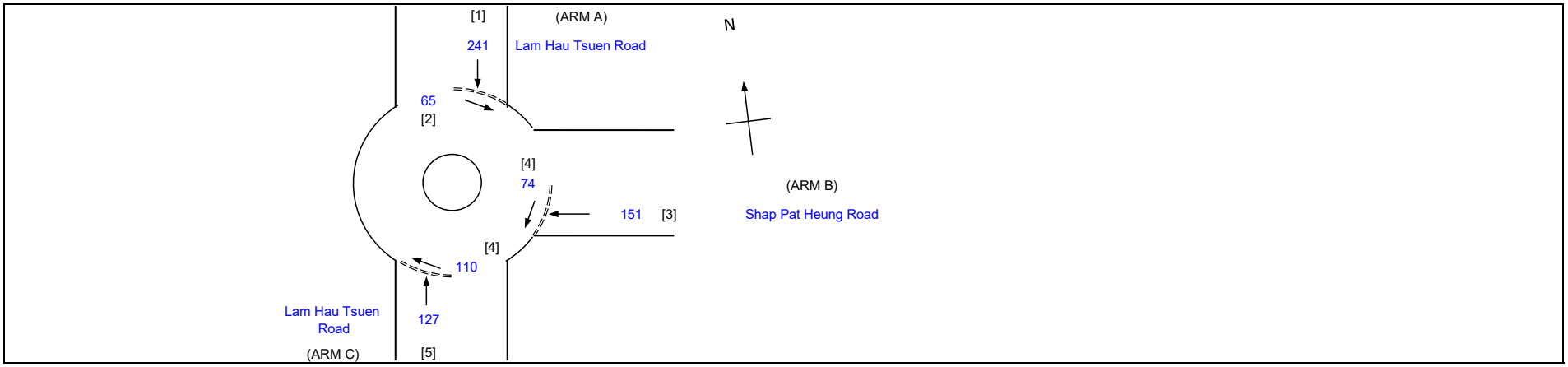


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		115	101	6
Qc	=	Circulating flow across entry (pcu/h)		1	21	122
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1456	1350	1836
DFC	=	Design flow/Capacity = Q/Qe		0.08	0.07	0.00

TOTAL FLOW = 366 (pcu/hr)

CRITICAL DFC = 0.08

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2029 Reference Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

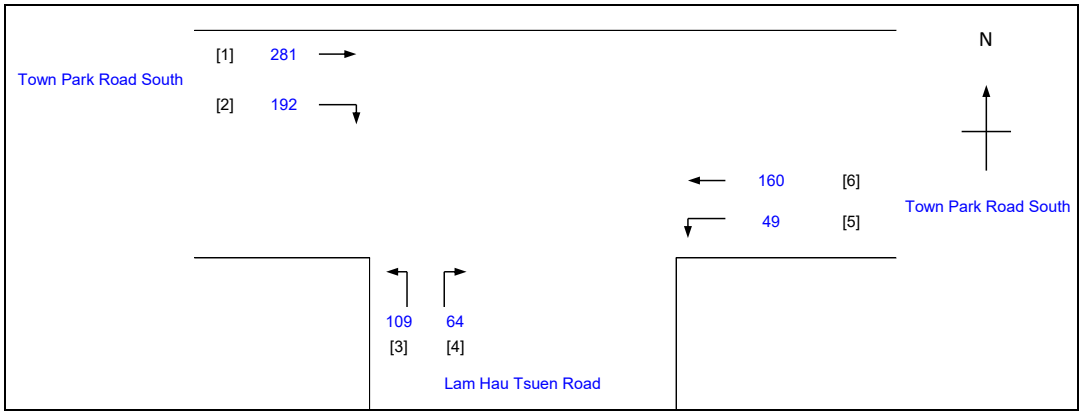


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		241	151	127
Qc	=	Circulating flow across entry (pcu/h)		65	74	110
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2034	1964	1769
DFC	=	Design flow/Capacity = Q/Qe		0.12	0.08	0.07

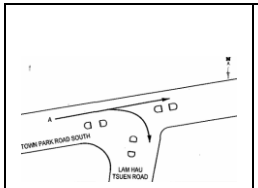
TOTAL FLOW = 768 (pcu/hr)

CRITICAL DFC = 0.12

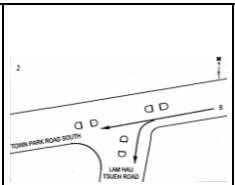
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2029 Reference Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



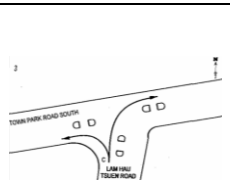
No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.420	
Loss time		L =	32	sec
Total Flow		=	855	pcu
Co	= (1.5*L+5)/(1-Y)	=	91.3	sec
Cm	= L/(1-Y)	=	55.1	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	57.3	%
Cp	= 0.9*L/(0.9-Y)	=	60.0	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	57.3	%



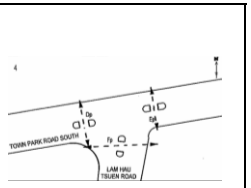
Stage 1



Stage 2



Stage 3



Stage 4

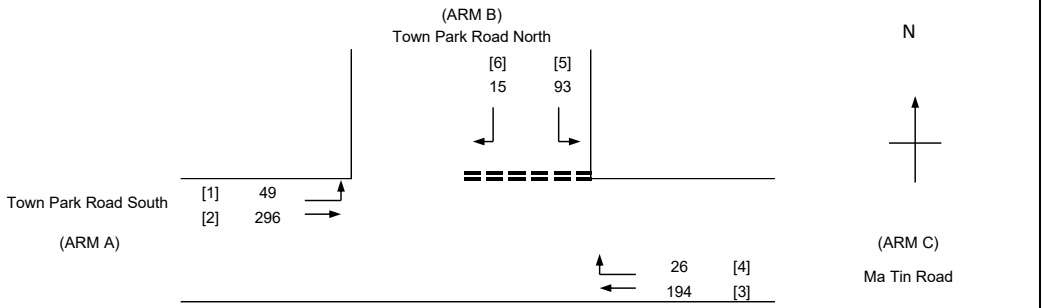
Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↱	1,2	1	3.60	A	1	20			2115		281	192	473	0.41	2053			2053	0.230	0.230		48	48	0.576	47	30
↰	5,6	2	4.80	B	1	15		N	2095	49	160		209	0.23	2047			2047	0.102	0.102		21	21	0.583	29	48
↰↱	5,6	2	5.20	C	1	20		N	2135	109		64	173	1.00	1986			1986	0.087	0.087		18	18	0.581	25	50

X:\Project\31073 Ankor Driving School, Shan Ha Road\Data\Calculation\[31073_Junction_REF_AM_OFF_PEAK_WEEKDAY.xls]D

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

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2029 Reference Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	49	(pcu/hr)
q a-c	=	296	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	194	(pcu/hr)
q c-b	=	26	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	15	(pcu/hr)
q b-c	=	93	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.861

THE CAPACITY OF MOVEMENT :

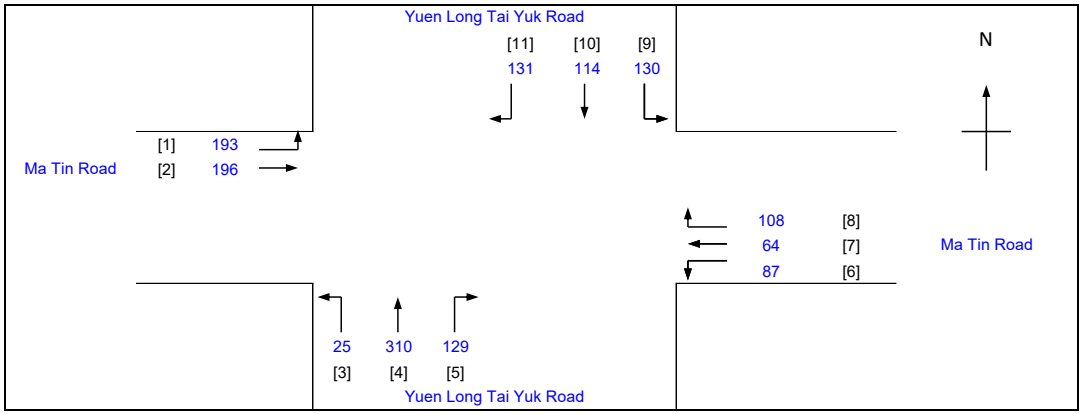
Q b-a	=	484	(pcu/hr)
Q b-c	=	680	(pcu/hr)
Q c-b	=	538	(pcu/hr)
Q b-ac	=	644	(pcu/hr)
Q c-a	=	1713	(pcu/hr)
TOTAL FLOW	=	673	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

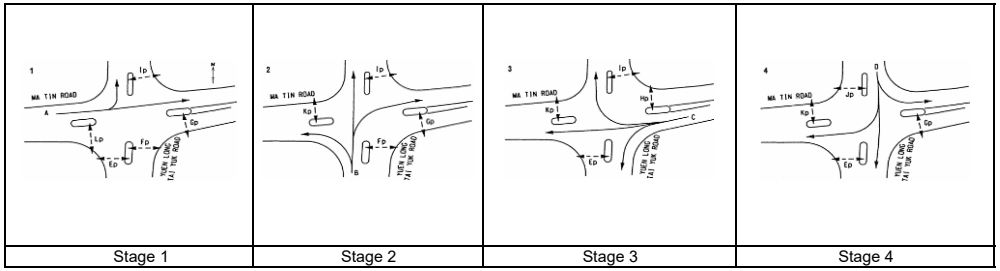
DFC b-a	=	0.0310
DFC b-c	=	0.1368
DFC c-b	=	0.0483
DFC b-ac	=	0.1678
(Share Lane)		
DFC c-a	=	0.1133

CRITICAL DFC = 0.17

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2029 Reference Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.396	
Loss time		L =	32	sec
Total Flow		=	1487	pcu
Co	= (1.5*L+5)/(1-Y)	=	87.8	sec
Cm	= L/(1-Y)	=	53.0	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	66.5	%
Cp	= 0.9*L/(0.9-Y)	=	57.2	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	66.5	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

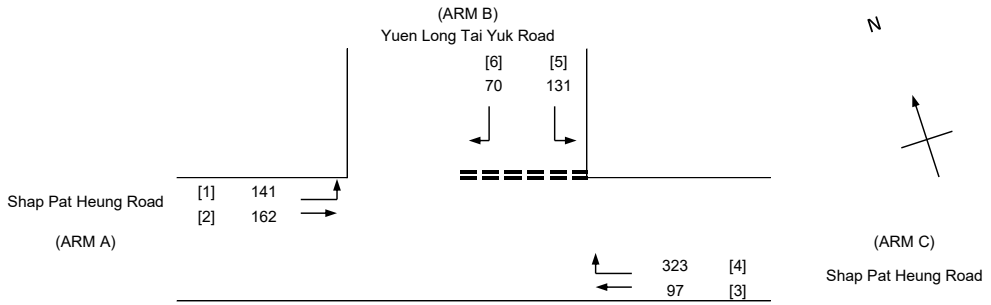
Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	48	8	OK
Fp	7.6	1,2	5	7	54	7	OK
Gp	7.3	4,1,2	5	7	89	7	OK
Hp	8.3	3	5	8	14	8	OK
Ip	7.6	1,2,3	5	8	84	8	OK
Jp	7.4	4	5	7	21	7	OK
Kp	7.3	2,3,4	5	7	83	7	OK
Lp	9.7	1	5	11	14	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↗	1	1	3.60	A	1	15		N	1975	193			193	1.00	1795			1795	0.107	0.107		24	24	0.537	26	45
→	2	1	3.60	A	1				2115		196		196	0.00	2115			2115	0.093			21	24	0.463	26	44
↰	3,4	2	3.60	B	1	15		N	1975	25	202		227	0.11	1954			1954	0.116	0.116		26	26	0.537	30	44
↱	4,5	2	3.60	B	1	20			2115		108	129	237	0.55	2032			2032	0.116			26	26	0.537	31	44
↰	3,4	2	3.50	C	1	15		N	1965			108	108	1.00	1786			1786	0.060			13	17	0.427	15	49
↰	4,5	2	3.50	C	1	20			2105	87	64		151	0.58	2018			2018	0.075	0.075		17	17	0.528	22	50
↰	10,11	2	3.50	D	1	20			2105		65	131	196	0.67	2004			2004	0.098	0.098		22	22	0.533	27	46
↱	9,10	2	3.50	D	1	15		N	1965	130	49		179	0.73	1832			1832	0.098			22	22	0.533	24	47

X:\Project\31073 Ankor Driving School, Shan Ha Road\Data\Calculation\[31073_Junction_REF_AM_OFF_PEAK_WEEKDAY.xls]F

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

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2029 Reference Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	141	(pcu/hr)
q a-c	=	162	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	97	(pcu/hr)
q c-b	=	323	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	70	(pcu/hr)
q b-c	=	131	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.652

THE CAPACITY OF MOVEMENT :

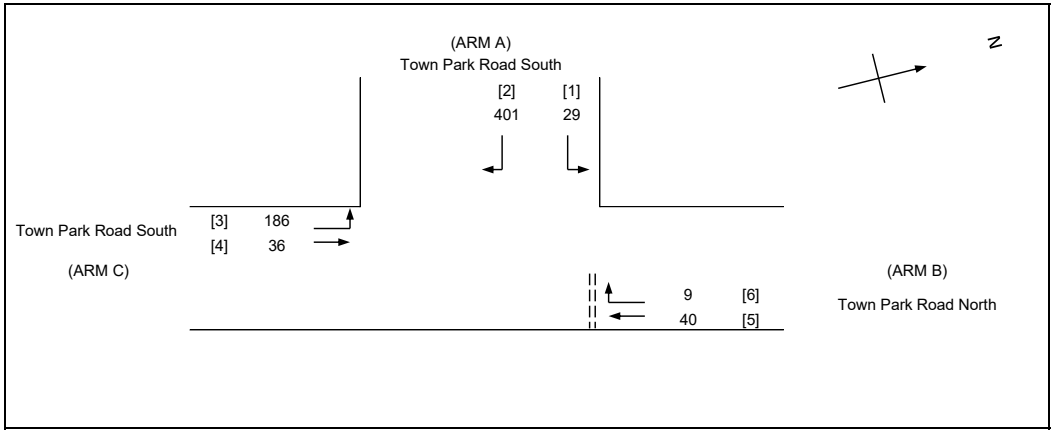
Q b-a	=	508	(pcu/hr)
Q b-c	=	752	(pcu/hr)
Q c-b	=	680	(pcu/hr)
Q b-ac	=	644	(pcu/hr)
TOTAL FLOW	=	924	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1378
DFC b-c	=	0.1742
DFC c-b	=	0.4750
DFC b-ac (Share Lane)	=	0.3120

CRITICAL DFC = 0.48

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2029 Reference Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	29	(pcu/hr)
q a-c	=	401	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	186	(pcu/hr)
q c-b	=	36	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	9	(pcu/hr)
q b-c	=	40	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.816

THE CAPACITY OF MOVEMENT :

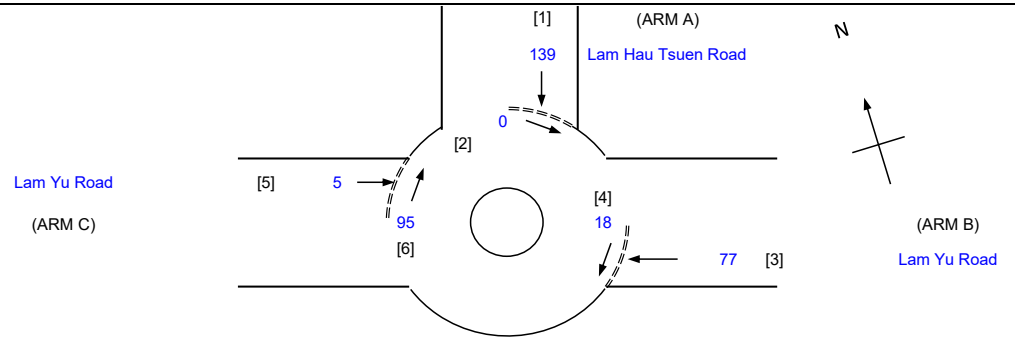
Q b-a	=	494	(pcu/hr)
Q b-c	=	735	(pcu/hr)
Q c-b	=	560	(pcu/hr)
Q b-ac	=	675	(pcu/hr)
Q c-a	=	1684	(pcu/hr)
TOTAL FLOW	=	701	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0182
DFC b-c	=	0.0544
DFC c-b	=	0.0643
DFC b-ac (Share Lane)	=	0.0726
DFC c-a	=	0.1104

CRITICAL DFC = 0.11

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2029 Reference Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

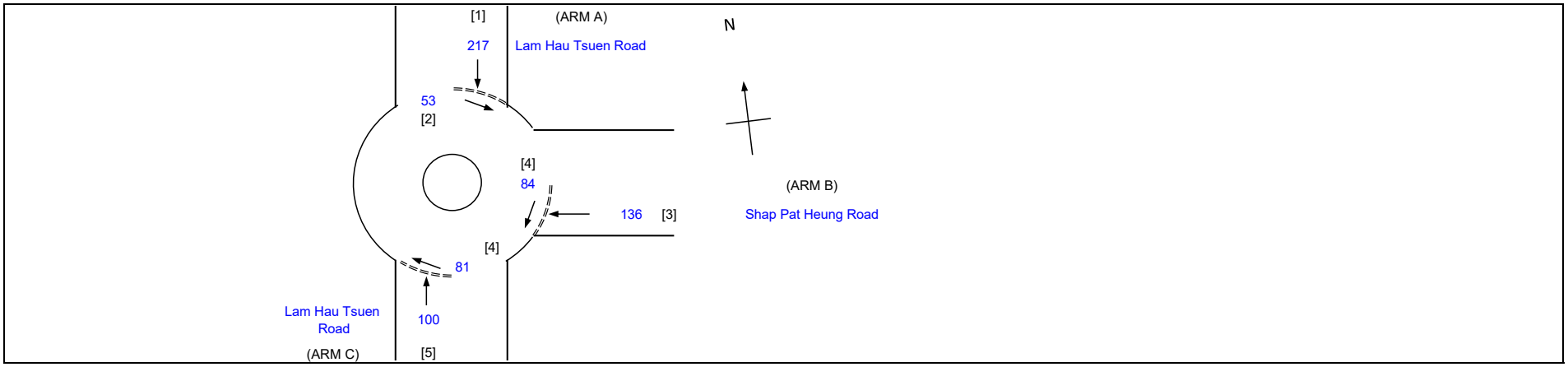


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		139	77	5
Qc	=	Circulating flow across entry (pcu/h)		0	18	95
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1457	1351	1855
DFC	=	Design flow/Capacity = Q/Qe		0.10	0.06	0.00

TOTAL FLOW = 334 (pcu/hr)

CRITICAL DFC = 0.10

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2029 Reference Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

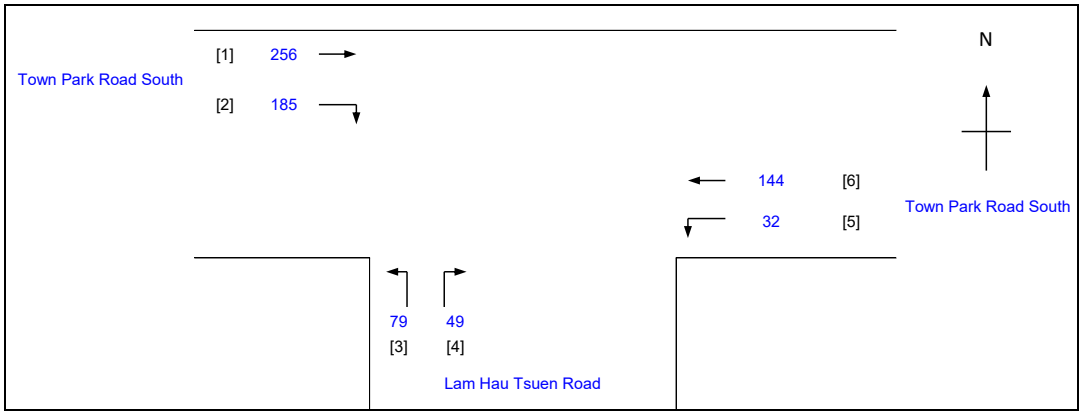


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		217	136	100
Qc	=	Circulating flow across entry (pcu/h)		53	84	81
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2043	1957	1790
DFC	=	Design flow/Capacity = Q/Qe		0.11	0.07	0.06

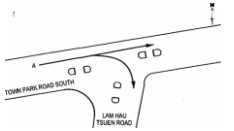
TOTAL FLOW = 671 (pcu/hr)

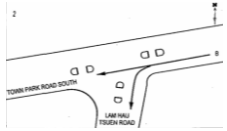
CRITICAL DFC = 0.11

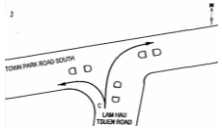
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2029 Reference Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

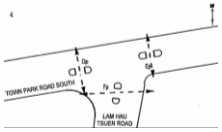


No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.365	
Loss time		L =	32	sec
Total Flow		=	745	pcu
Co	= (1.5*L+5)/(1-Y)	=	83.5	sec
Cm	= L/(1-Y)	=	50.4	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	80.8	%
Cp	= 0.9*L/(0.9-Y)	=	53.8	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	80.8	%


Stage 1


Stage 2


Stage 3


Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↱	1,2	1	3.60	A	1	20			2115		256	185	441	0.42	2050			2050	0.215	0.215		52	52	0.496	42	26
↰	5,6	2	4.80	B	1	15		N	2095	32	144		176	0.18	2058			2058	0.086	0.086		21	21	0.489	24	46
↰↱	5,6	2	5.20	C	1	20		N	2135	79		49	128	1.00	1986			1986	0.064	0.064		16	16	0.483	18	50

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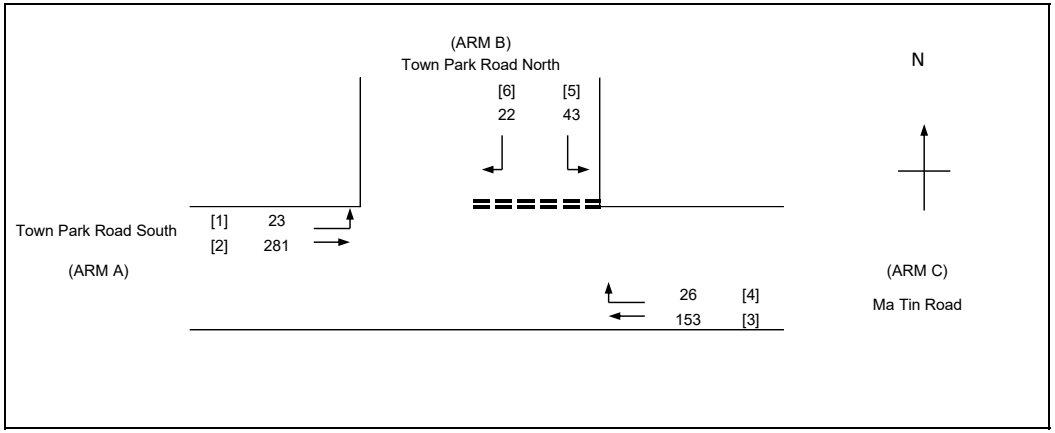
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2029 Reference Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	23	(pcu/hr)
q a-c	=	281	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	153	(pcu/hr)
q c-b	=	26	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	22	(pcu/hr)
q b-c	=	43	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.662

THE CAPACITY OF MOVEMENT :

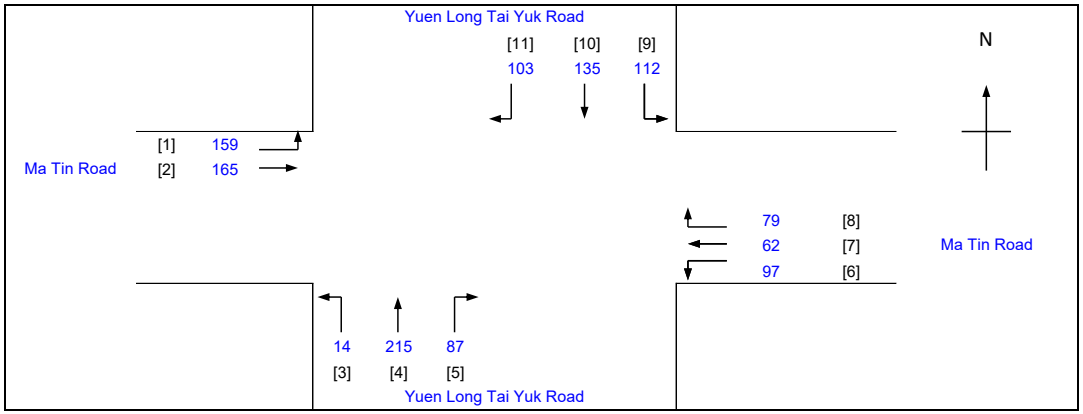
Q b-a	=	495	(pcu/hr)
Q b-c	=	686	(pcu/hr)
Q c-b	=	546	(pcu/hr)
Q b-ac	=	607	(pcu/hr)
Q c-a	=	1714	(pcu/hr)
TOTAL FLOW	=	548	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

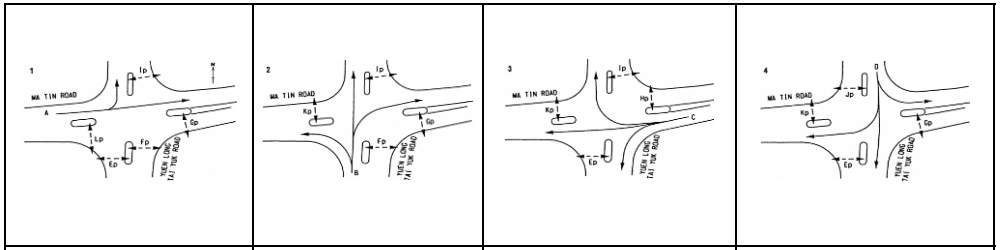
DFC b-a	=	0.0444
DFC b-c	=	0.0627
DFC c-b	=	0.0476
DFC b-ac	=	0.1071
(Share Lane)		
DFC c-a	=	0.0893

CRITICAL DFC = 0.11

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2029 Reference Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.337	
Loss time		L =	32	sec
Total Flow		=	1228	pcu
Co	= (1.5*L+5)/(1-Y)	=	80.0	sec
Cm	= L/(1-Y)	=	48.3	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	95.6	%
Cp	= 0.9*L/(0.9-Y)	=	51.2	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	95.6	%



Stage 1	Stage 2	Stage 3	Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	51	8	OK
Fp	7.6	1,2	5	7	48	7	OK
Gp	7.3	4,1,2	5	7	85	7	OK
Hp	8.3	3	5	8	18	8	OK
Ip	7.6	1,2,3	5	8	82	8	OK
Jp	7.4	4	5	7	23	7	OK
Kp	7.3	2,3,4	5	7	84	7	OK
Lp	9.7	1	5	11	13	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↗	1	1	3.60	A	1	15		N	1975	159			159	1.00	1795			1795	0.089	0.089		23	23	0.462	21	45
→	2	1	3.60	A	1				2115		165		165	0.00	2115			2115	0.078			20	23	0.407	22	44
↰	3,4	2	3.60	B	1	15		N	1975	14	141		155	0.09	1957			1957	0.079	0.079		21	21	0.453	21	46
↑	4,5	2	3.60	B	1	20			2115		74	87	161	0.54	2033			2033	0.079			21	21	0.453	22	46
↰	3,4	2	3.50	C	1	15		N	1965			79	79	1.00	1786			1786	0.044			12	21	0.253	11	44
↓	4,5	2	3.50	C	1	20			2105	97	62		159	0.61	2013			2013	0.079	0.079		21	21	0.451	22	46
↓	10,11	2	3.50	D	1	20			2105		80	103	183	0.56	2020			2020	0.091	0.091		24	24	0.453	24	44
↳	9,10	2	3.50	D	1	15		N	1965	112	55		167	0.67	1841			1841	0.091			24	24	0.453	22	44

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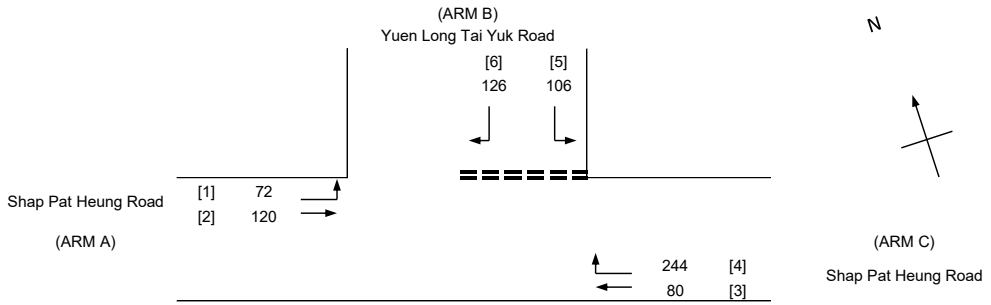
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2029 Reference Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	72	(pcu/hr)
q a-c	=	120	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	80	(pcu/hr)
q c-b	=	244	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	126	(pcu/hr)
q b-c	=	106	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.457

THE CAPACITY OF MOVEMENT :

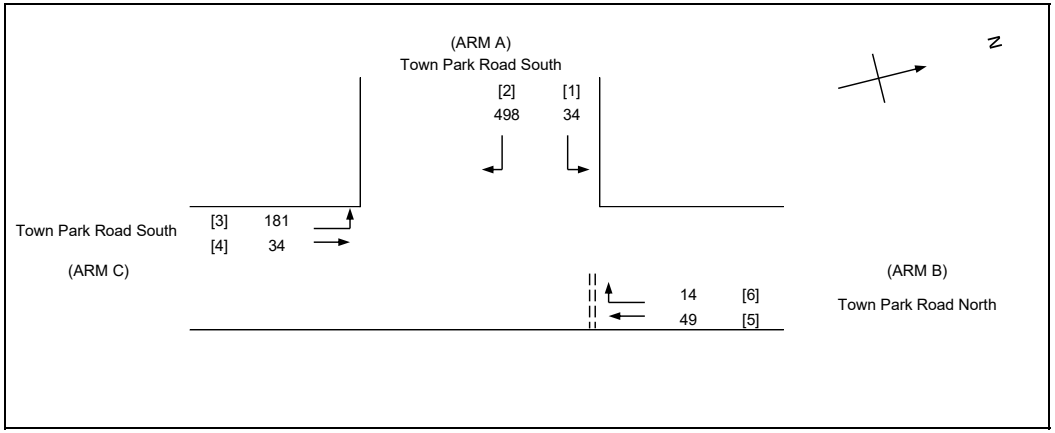
Q b-a	=	559	(pcu/hr)
Q b-c	=	772	(pcu/hr)
Q c-b	=	709	(pcu/hr)
Q b-ac	=	640	(pcu/hr)
TOTAL FLOW	=	748	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2254
DFC b-c	=	0.1373
DFC c-b	=	0.3441
DFC b-ac (Share Lane)	=	0.3627

CRITICAL DFC = 0.36

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2029 Reference Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	34	(pcu/hr)
q a-c	=	498	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	181	(pcu/hr)
q c-b	=	34	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	14	(pcu/hr)
q b-c	=	49	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.778

THE CAPACITY OF MOVEMENT :

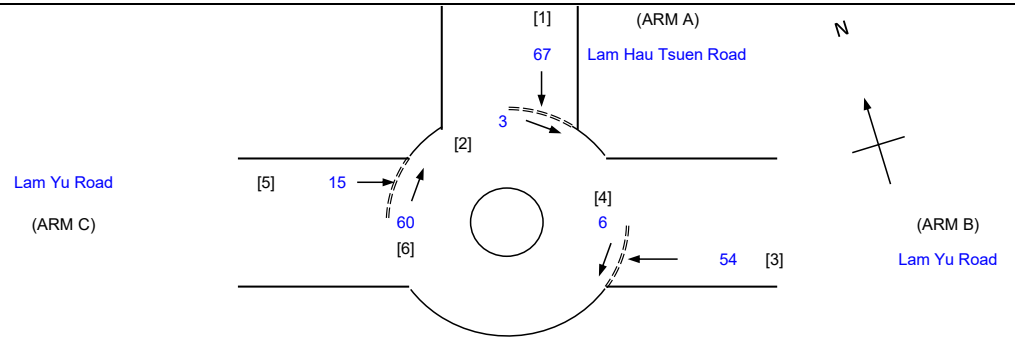
Q b-a	=	471	(pcu/hr)
Q b-c	=	707	(pcu/hr)
Q c-b	=	537	(pcu/hr)
Q b-ac	=	636	(pcu/hr)
Q c-a	=	1686	(pcu/hr)
TOTAL FLOW	=	810	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0297
DFC b-c	=	0.0693
DFC c-b	=	0.0633
DFC b-ac (Share Lane)	=	0.0990
DFC c-a	=	0.1074

CRITICAL DFC = 0.11

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2029 Reference Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27

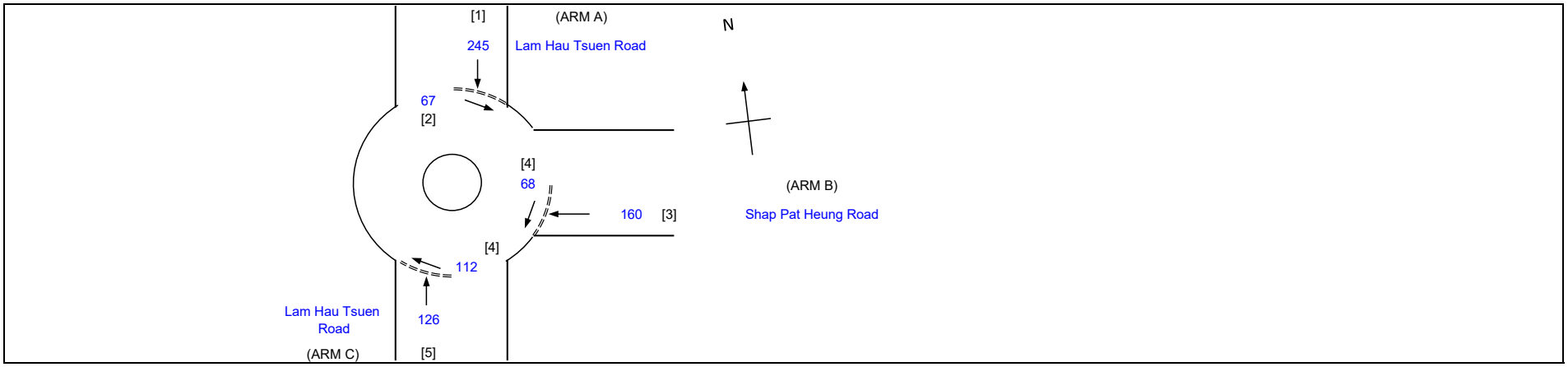


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		67	54	15
Qc	=	Circulating flow across entry (pcu/h)		3	6	60
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1455	1359	1880
DFC	=	Design flow/Capacity = Q/Qe		0.05	0.04	0.01

TOTAL FLOW = 205 (pcu/hr)

CRITICAL DFC = 0.05

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2029 Reference Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27

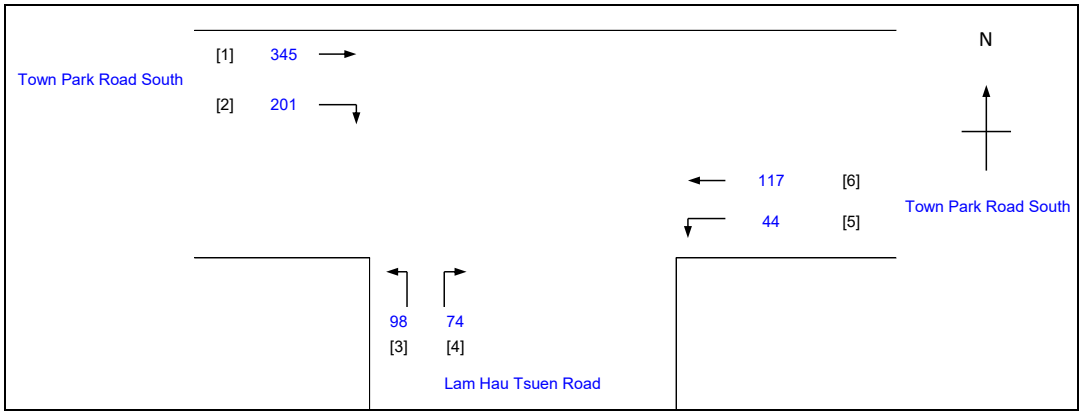


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		245	160	126
Qc	=	Circulating flow across entry (pcu/h)		67	68	112
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2033	1969	1768
DFC	=	Design flow/Capacity = Q/Qe		0.12	0.08	0.07

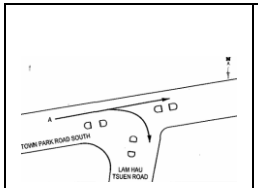
TOTAL FLOW = 778 (pcu/hr)

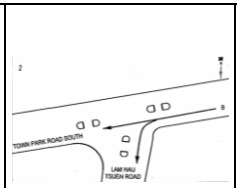
CRITICAL DFC = 0.12

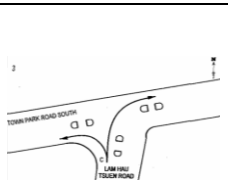
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2029 Reference Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27

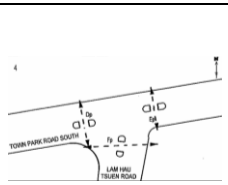


No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.431	
Loss time		L =	32	sec
Total Flow		=	879	pcu
Co	= (1.5*L+5)/(1-Y)	=	93.1	sec
Cm	= L/(1-Y)	=	56.2	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	53.2	%
Cp	= 0.9*L/(0.9-Y)	=	61.4	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	53.2	%


Stage 1


Stage 2


Stage 3


Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
	1,2	1	3.60	A	1	20			2115		345	201	546	0.37	2058			2058	0.265	0.265		54	54	0.590	50	26
	5,6	2	4.80	B	1	15		N	2095	44	117		161	0.27	2039			2039	0.079	0.079		16	16	0.592	23	52
	5,6	2	5.20	C	1	20		N	2135	98		74	172	1.00	1986			1986	0.087	0.087		18	18	0.577	24	50

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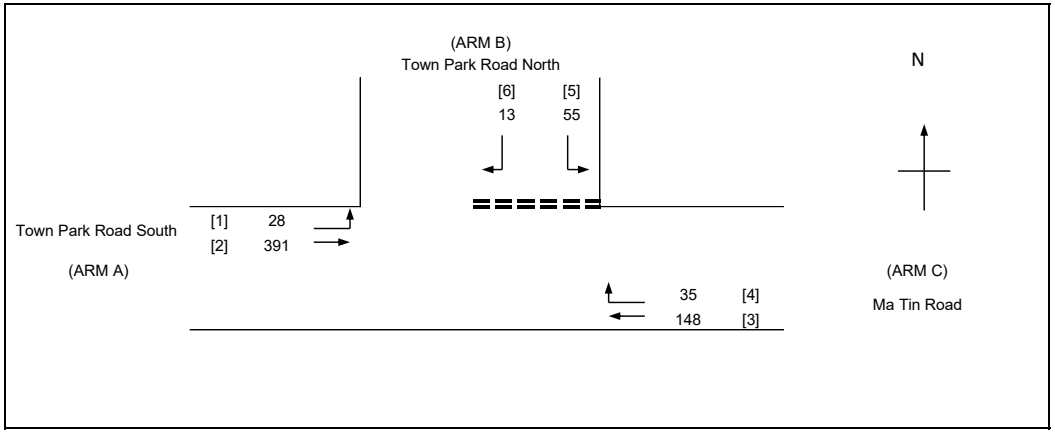
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2029 Reference Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	28	(pcu/hr)
q a-c	=	391	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	148	(pcu/hr)
q c-b	=	35	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	13	(pcu/hr)
q b-c	=	55	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.809

THE CAPACITY OF MOVEMENT :

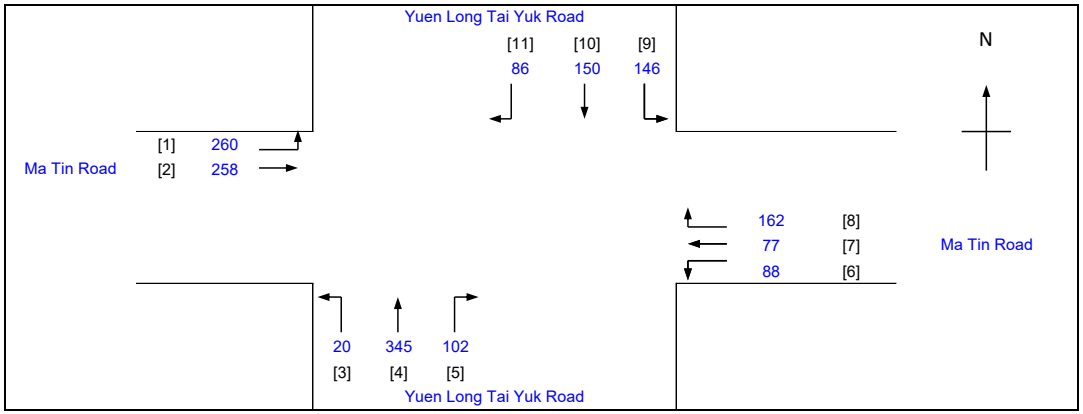
Q b-a	=	468	(pcu/hr)
Q b-c	=	659	(pcu/hr)
Q c-b	=	524	(pcu/hr)
Q b-ac	=	611	(pcu/hr)
Q c-a	=	1680	(pcu/hr)
TOTAL FLOW	=	670	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

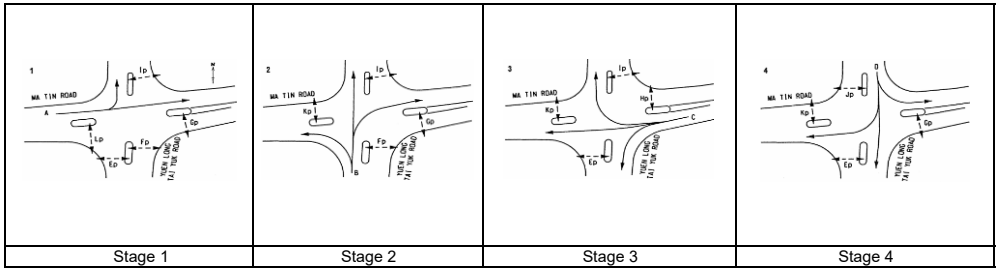
DFC b-a	=	0.0278
DFC b-c	=	0.0835
DFC c-b	=	0.0668
DFC b-ac	=	0.1112
(Share Lane)		
DFC c-a	=	0.0881

CRITICAL DFC = 0.11

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2029 Reference Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.451	
Loss time		L =	32	sec
Total Flow		=	1694	pcu
Co	= (1.5*L+5)/(1-Y)	=	96.6	sec
Cm	= L/(1-Y)	=	58.3	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	46.3	%
Cp	= 0.9*L/(0.9-Y)	=	64.2	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	46.3	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	53	8	OK
Fp	7.6	1,2	5	7	55	7	OK
Gp	7.3	4,1,2	5	7	87	7	OK
Hp	8.3	3	5	8	15	8	OK
Ip	7.6	1,2,3	5	8	86	8	OK
Jp	7.4	4	5	7	18	7	OK
Kp	7.3	2,3,4	5	7	78	7	OK
Lp	9.7	1	5	11	18	11	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
1	1	3.60	A	1	15		N	1975	260			260	1.00	1795			1795	0.145	0.145		28	28	0.621	33	44
2	1	3.60	A	1				2115		258		258	0.00	2115			2115	0.122			24	28	0.523	33	42
3,4	2	3.60	B	1	15		N	1975	20	208		228	0.09	1958			1958	0.117	0.117		23	23	0.608	31	47
4,5	2	3.60	B	1	20			2115		137	102	239	0.43	2049			2049	0.117			23	23	0.608	32	47
3,4	2	3.50	C	1	15		N	1965			162	162	1.00	1786			1786	0.091			18	18	0.605	23	52
4,5	2	3.50	C	1	20			2105	88	77		165	0.53	2024			2024	0.082	0.091		16	18	0.543	23	50
10,11	2	3.50	D	1	20			2105		116	86	202	0.43	2040			2040	0.099	0.099		19	19	0.625	28	51
9,10	2	3.50	D	1	15		N	1965	146	34		180	0.81	1818			1818	0.099			19	19	0.625	25	51

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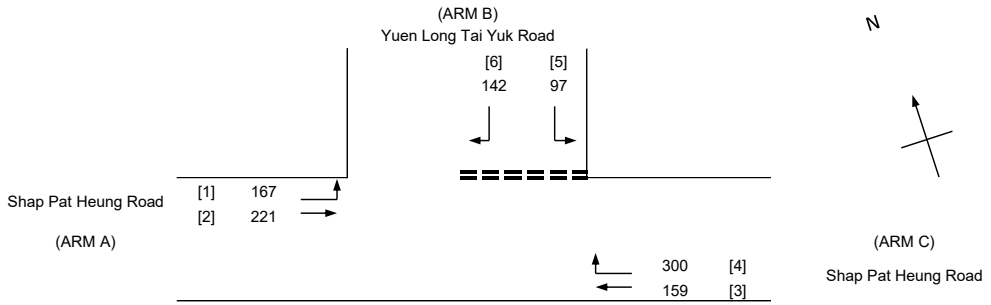
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2029 Reference Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	167	(pcu/hr)
q a-c	=	221	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	159	(pcu/hr)
q c-b	=	300	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	142	(pcu/hr)
q b-c	=	97	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.406

THE CAPACITY OF MOVEMENT :

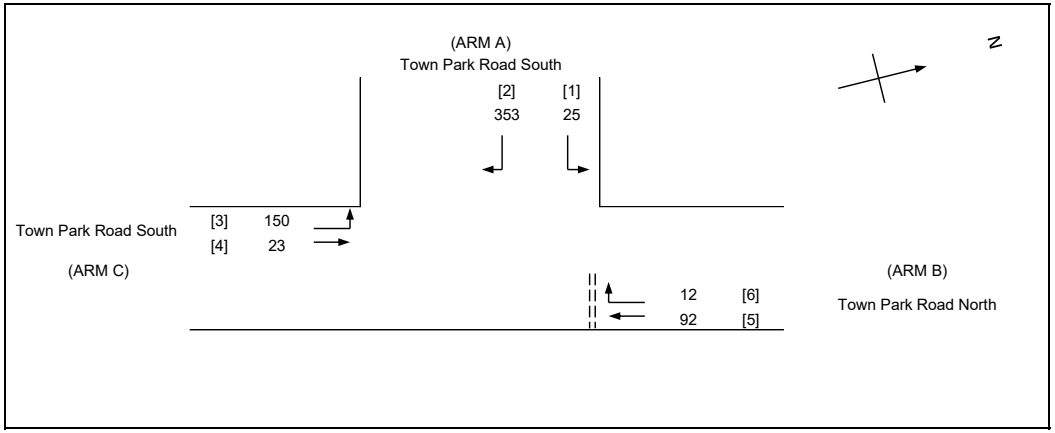
Q b-a	=	489	(pcu/hr)
Q b-c	=	733	(pcu/hr)
Q c-b	=	658	(pcu/hr)
Q b-ac	=	565	(pcu/hr)
TOTAL FLOW	=	1086	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2904
DFC b-c	=	0.1323
DFC c-b	=	0.4559
DFC b-ac (Share Lane)	=	0.4227

CRITICAL DFC = 0.46

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2029 Reference Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	25	(pcu/hr)
q a-c	=	353	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	150	(pcu/hr)
q c-b	=	23	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	92	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.885

THE CAPACITY OF MOVEMENT :

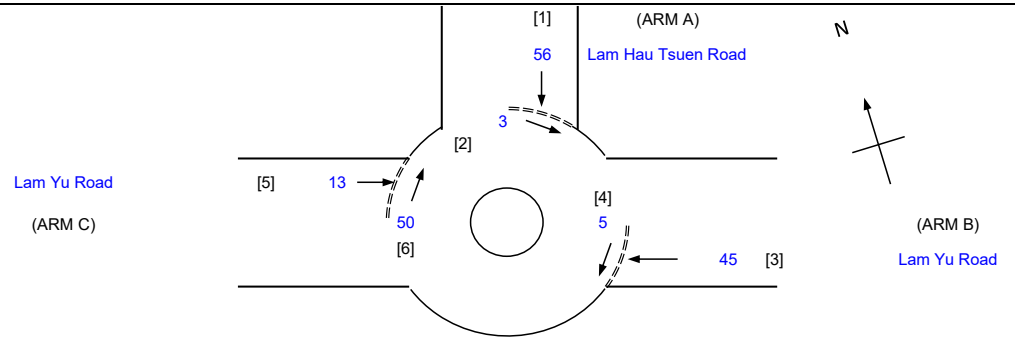
Q b-a	=	516	(pcu/hr)
Q b-c	=	750	(pcu/hr)
Q c-b	=	571	(pcu/hr)
Q b-ac	=	713	(pcu/hr)
Q c-a	=	1727	(pcu/hr)
TOTAL FLOW	=	655	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0233
DFC b-c	=	0.1227
DFC c-b	=	0.0403
DFC b-ac	=	0.1459
(Share Lane)		
DFC c-a	=	0.0868

CRITICAL DFC = 0.15

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2029 Reference Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27

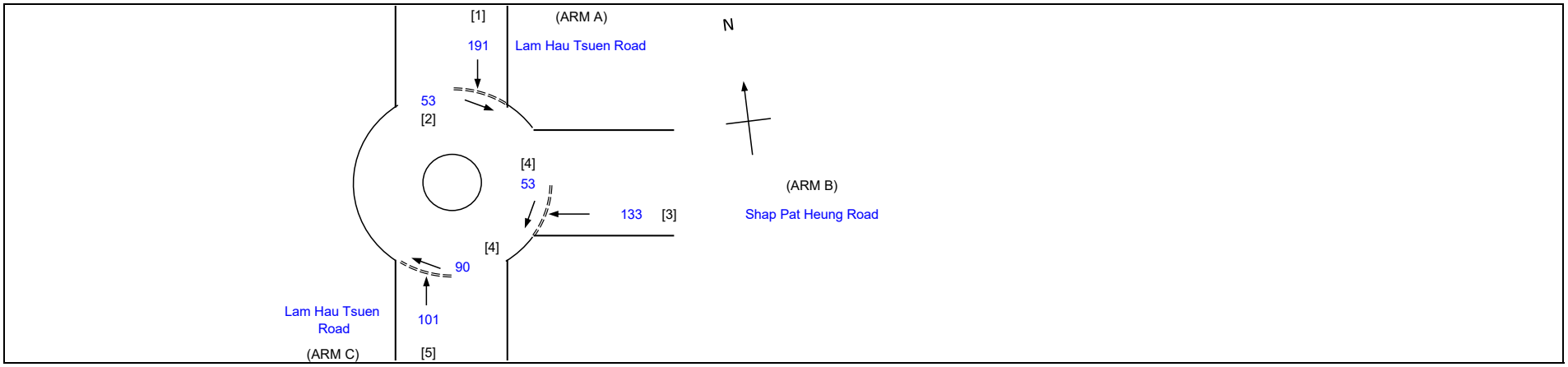


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		56	45	13
Qc	=	Circulating flow across entry (pcu/h)		3	5	50
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1455	1360	1887
DFC	=	Design flow/Capacity = Q/Qe		0.04	0.03	0.01

TOTAL FLOW = 172 (pcu/hr)

CRITICAL DFC = 0.04

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2029 Reference Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27

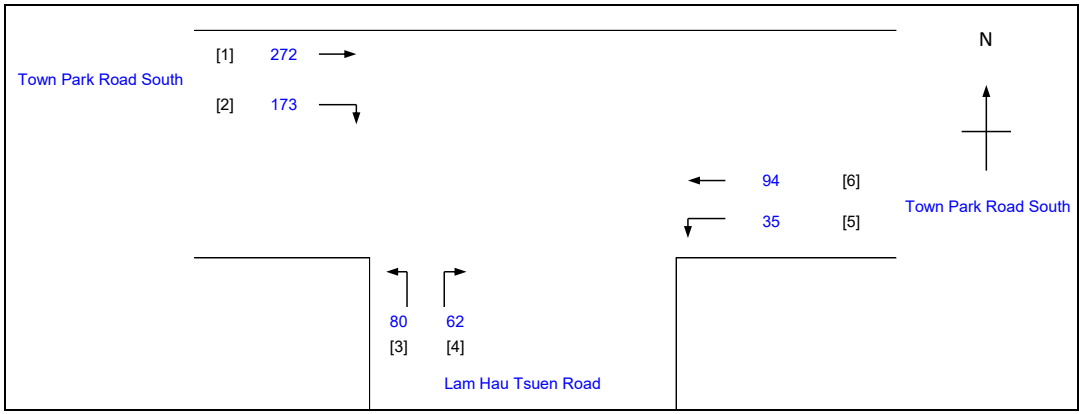


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		191	133	101
Qc	=	Circulating flow across entry (pcu/h)		53	53	90
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2043	1980	1783
DFC	=	Design flow/Capacity = Q/Qe		0.09	0.07	0.06

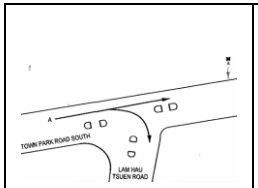
TOTAL FLOW = 621 (pcu/hr)

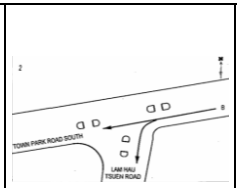
CRITICAL DFC = 0.09

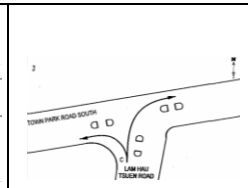
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2029 Reference Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27

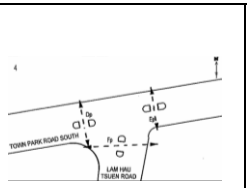


No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.351	
Loss time		L =	32	sec
Total Flow		=	716	pcu
Co	= (1.5*L+5)/(1-Y)	=	81.7	sec
Cm	= L/(1-Y)	=	49.3	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	87.9	%
Cp	= 0.9*L/(0.9-Y)	=	52.5	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	87.9	%


Stage 1


Stage 2


Stage 3


Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↱	1,2	1	3.60	A	1	20			2115		272	173	445	0.39	2055			2055	0.217	0.217		54	54	0.481	41	24
↰	5,6	2	4.80	B	1	15		N	2095	35	94		129	0.27	2040			2040	0.063	0.063		16	16	0.474	19	50
↰↱	5,6	2	5.20	C	1	20		N	2135	80		62	142	1.00	1986			1986	0.071	0.071		18	18	0.477	20	49

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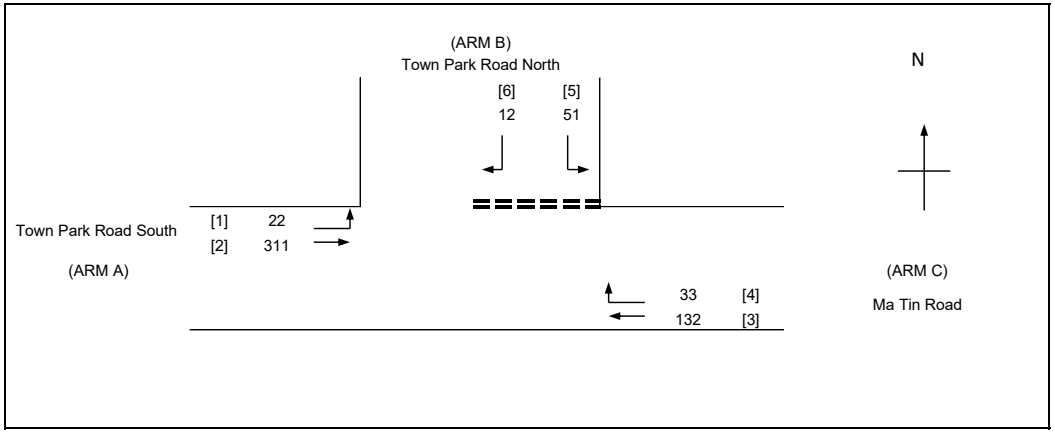
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2029 Reference Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	22	(pcu/hr)
q a-c	=	311	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	132	(pcu/hr)
q c-b	=	33	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	12	(pcu/hr)
q b-c	=	51	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.81

THE CAPACITY OF MOVEMENT :

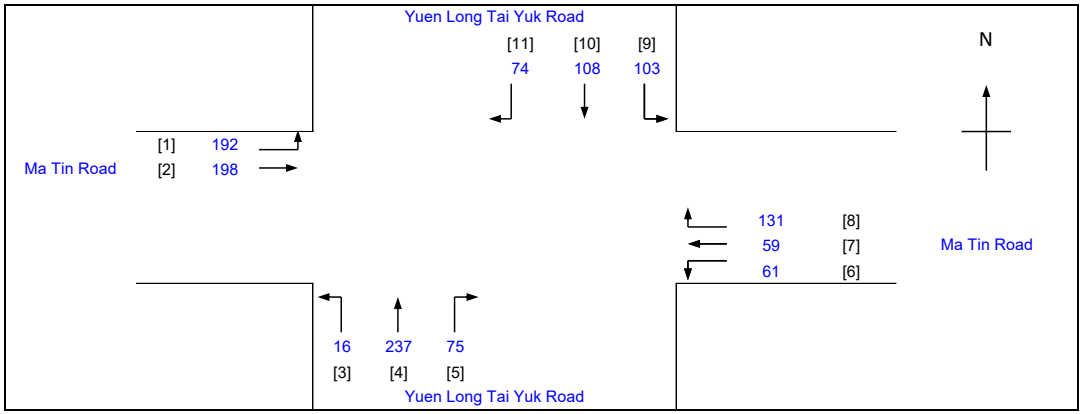
Q b-a	=	489	(pcu/hr)
Q b-c	=	679	(pcu/hr)
Q c-b	=	541	(pcu/hr)
Q b-ac	=	632	(pcu/hr)
Q c-a	=	1690	(pcu/hr)
TOTAL FLOW	=	561	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

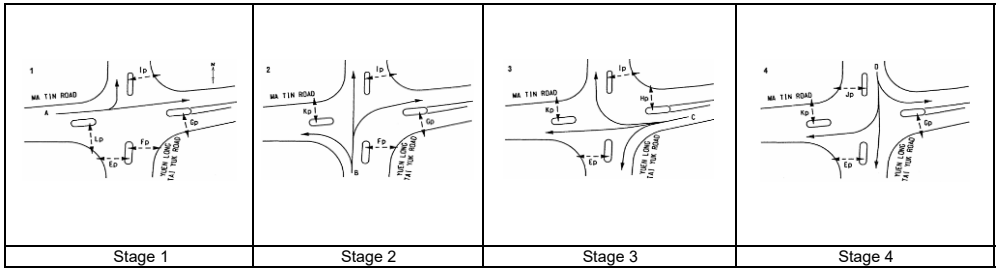
DFC b-a	=	0.0245
DFC b-c	=	0.0751
DFC c-b	=	0.0610
DFC b-ac	=	0.0997
(Share Lane)		
DFC c-a	=	0.0781

CRITICAL DFC = 0.10

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2029 Reference Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	10 sec
	Stage 3 - 4	I =	11 sec
	Stage 4 - 1	I =	10 sec
Cycle time		C =	120 sec
Sum(y)		Y =	0.336
Loss time		L =	32 sec
Total Flow		=	1254 pcu
Co	= (1.5*L+5)/(1-Y)	=	79.8 sec
Cm	= L/(1-Y)	=	48.2 sec
Yult	= 0.9-0.0075L	=	0.660
R.C.ult	= (Yult-Y)/Y*100%	=	96.3 %
Cp	= 0.9*L/(0.9-Y)	=	51.1 sec
Ymax	= 1-L/C	=	0.733
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	96.3 %



Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	54	8	OK
Fp	7.6	1,2	5	7	53	7	OK
Gp	7.3	4,1,2	5	7	85	7	OK
Hp	8.3	3	5	8	16	8	OK
Ip	7.6	1,2,3	5	8	85	8	OK
Jp	7.4	4	5	7	18	7	OK
Kp	7.3	2,3,4	5	7	77	7	OK
Lp	9.7	1	5	11	18	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↱	1	1	3.60	A	1	15		N	1975	192			192	1.00	1795			1795	0.107	0.107		28	28	0.458	25	41
→	2	1	3.60	A	1				2115		198		198	0.00	2115			2115	0.094			25	28	0.401	25	40
↰	3,4	2	3.60	B	1	15		N	1975	16	144		160	0.10	1955			1955	0.082	0.082		21	21	0.468	22	46
↑	4,5	2	3.60	B	1	20			2115		93	75	168	0.45	2046			2046	0.082			21	21	0.468	23	46
↰	3,4	2	3.50	C	1	15		N	1965			131	131	1.00	1786			1786	0.073			19	19	0.463	18	48
↓	4,5	2	3.50	C	1	20			2105	61	59		120	0.51	2028			2028	0.059	0.073		15	19	0.374	17	47
↓	10,11	2	3.50	D	1	20			2105		76	74	150	0.49	2030			2030	0.074	0.074		19	19	0.467	21	48
↳	9,10	2	3.50	D	1	15		N	1965	103	32		135	0.76	1826			1826	0.074			19	19	0.467	19	48

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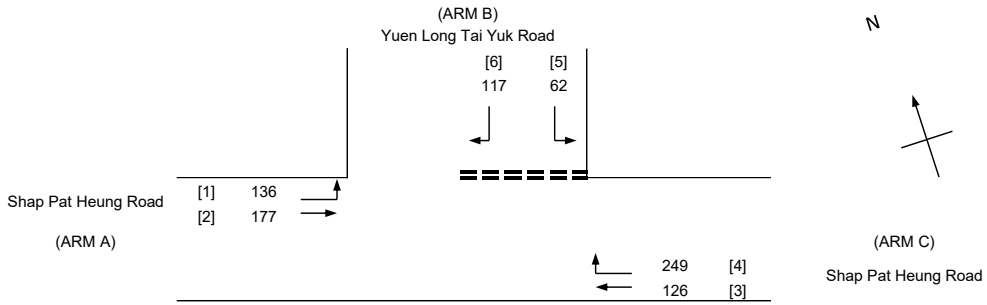
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2029 Reference Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	136	(pcu/hr)
q a-c	=	177	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	126	(pcu/hr)
q c-b	=	249	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	117	(pcu/hr)
q b-c	=	62	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.346

THE CAPACITY OF MOVEMENT :

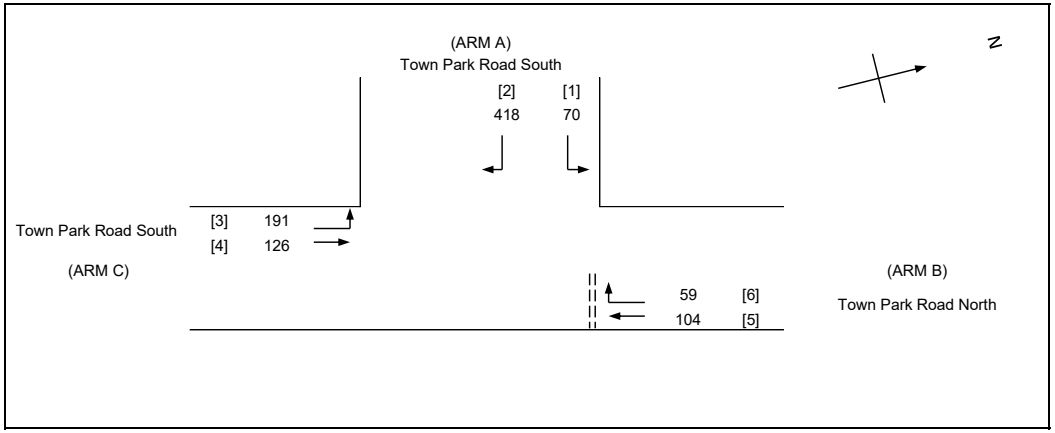
Q b-a	=	528	(pcu/hr)
Q b-c	=	749	(pcu/hr)
Q c-b	=	677	(pcu/hr)
Q b-ac	=	588	(pcu/hr)
TOTAL FLOW	=	867	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2216
DFC b-c	=	0.0828
DFC c-b	=	0.3678
DFC b-ac (Share Lane)	=	0.3044

CRITICAL DFC = 0.37

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2029 Design Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	70	(pcu/hr)
q a-c	=	418	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	191	(pcu/hr)
q c-b	=	126	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	59	(pcu/hr)
q b-c	=	104	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.638

THE CAPACITY OF MOVEMENT :

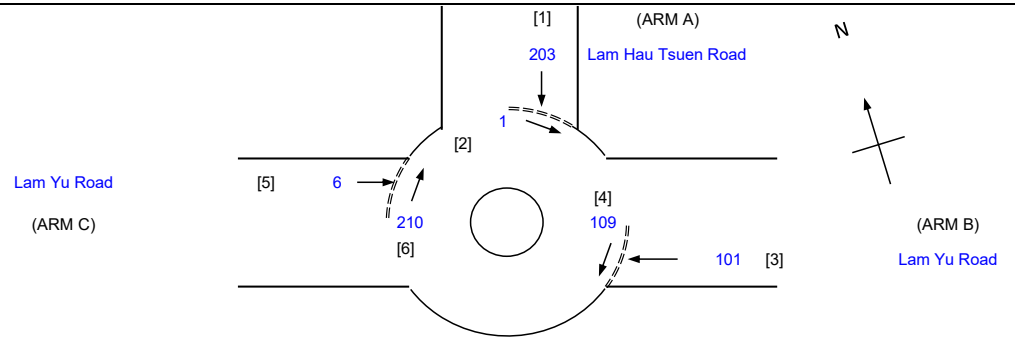
Q b-a	=	453	(pcu/hr)
Q b-c	=	726	(pcu/hr)
Q c-b	=	547	(pcu/hr)
Q b-ac	=	596	(pcu/hr)
Q c-a	=	1385	(pcu/hr)
TOTAL FLOW	=	968	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1302
DFC b-c	=	0.1433
DFC c-b	=	0.2303
DFC b-ac (Share Lane)	=	0.2735
DFC c-a	=	0.1379

CRITICAL DFC = 0.27

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2029 Design Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

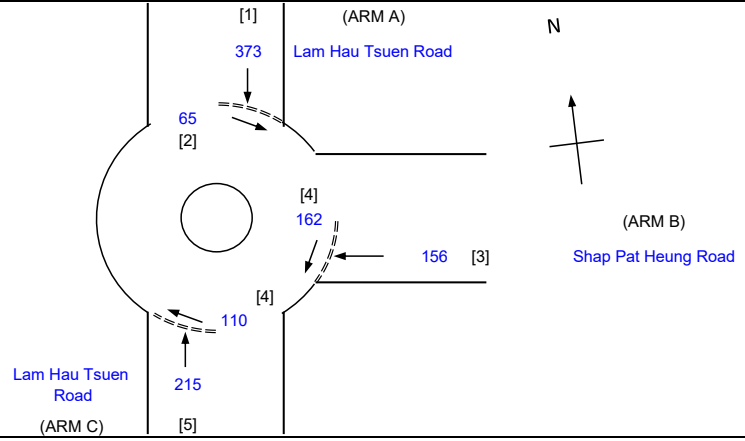


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		203	101	6
Qc	=	Circulating flow across entry (pcu/h)		1	109	210
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1456	1294	1774
DFC	=	Design flow/Capacity = Q/Qe		0.14	0.08	0.00

TOTAL FLOW = 630 (pcu/hr)

CRITICAL DFC = 0.14

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2029 Design Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

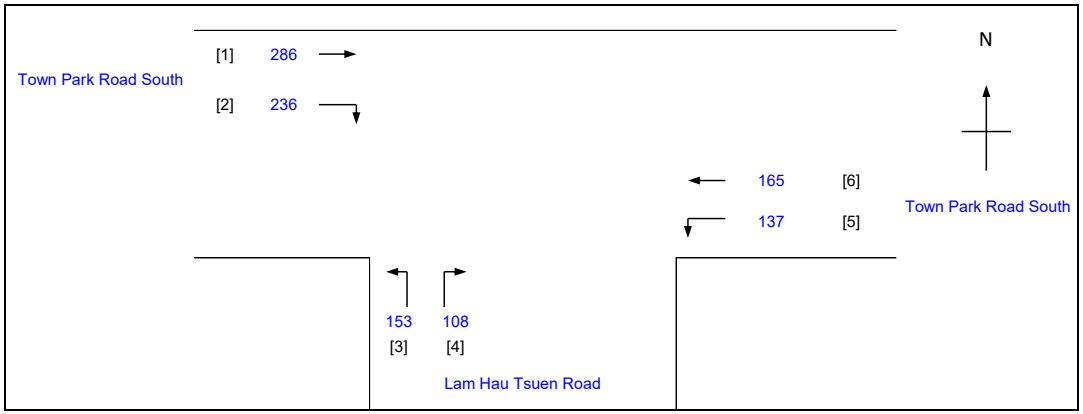


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		373	156	215
Qc	=	Circulating flow across entry (pcu/h)		65	162	110
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2034	1899	1769
DFC	=	Design flow/Capacity = Q/Qe		0.18	0.08	0.12

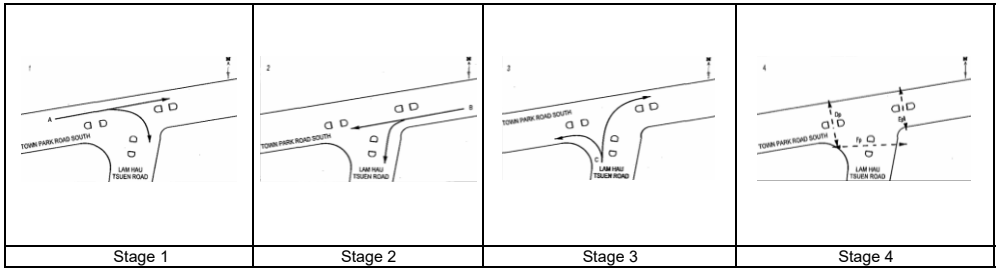
TOTAL FLOW = 1081 (pcu/hr)

CRITICAL DFC = 0.18

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2029 Design Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.537	
Loss time		L =	32	sec
Total Flow		=	1085	pcu
Co	= (1.5*L+5)/(1-Y)	=	114.5	sec
Cm	= L/(1-Y)	=	69.2	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	22.8	%
Cp	= 0.9*L/(0.9-Y)	=	79.4	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	22.8	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

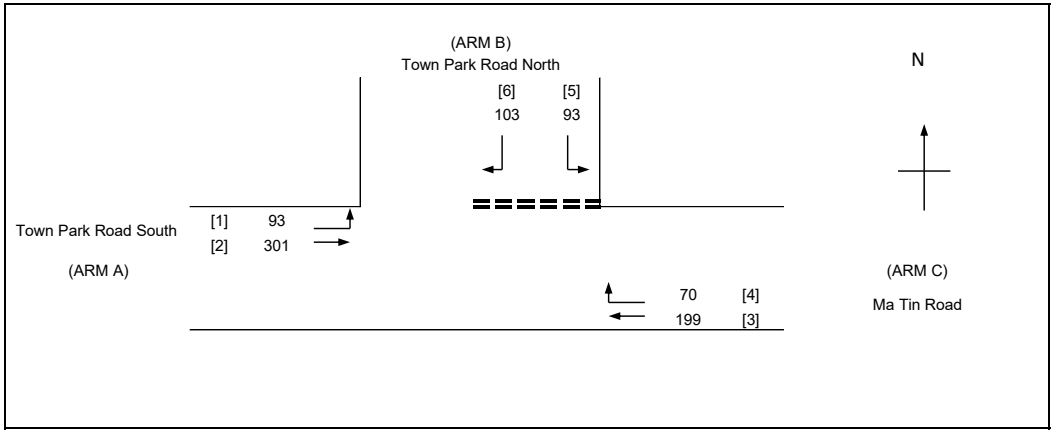
Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↱	1,2	1	3.60	A	1	20			2115		286	236	522	0.45	2046			2046	0.255	0.255		42	42	0.729	57	37
↰	5,6	2	4.80	B	1	15		N	2095	137	165		302	0.45	2004			2004	0.151	0.151		25	25	0.723	41	49
↱	5,6	2	5.20	C	1	20		N	2135	153		108	261	1.00	1986			1986	0.131	0.131		22	22	0.717	36	52

X:\Project\31073 Ankor Driving School, Shan Ha Road\Data\Calculation\[31073_Junction_DES_AM_OFF_PEAK_WEEKDAY.xls]D

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

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2029 Design Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	93	(pcu/hr)
q a-c	=	301	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	199	(pcu/hr)
q c-b	=	70	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	103	(pcu/hr)
q b-c	=	93	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.474

THE CAPACITY OF MOVEMENT :

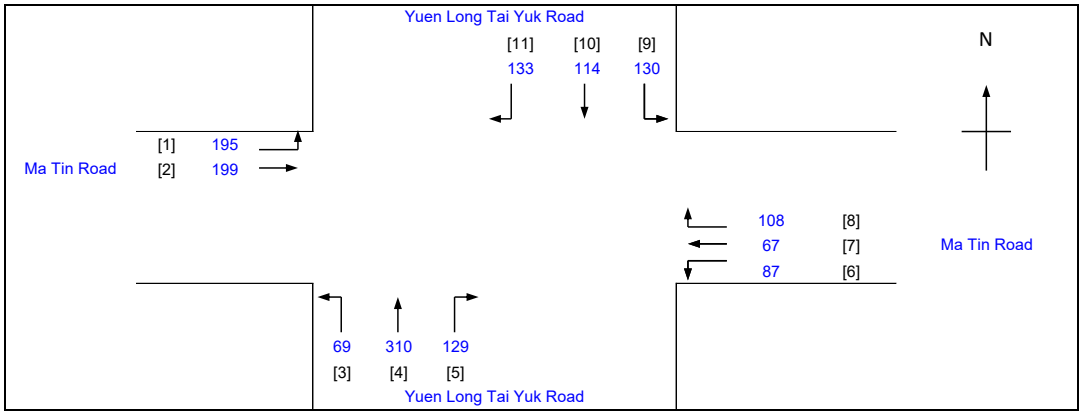
Q b-a	=	464	(pcu/hr)
Q b-c	=	675	(pcu/hr)
Q c-b	=	529	(pcu/hr)
Q b-ac	=	545	(pcu/hr)
Q c-a	=	1562	(pcu/hr)
TOTAL FLOW	=	859	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

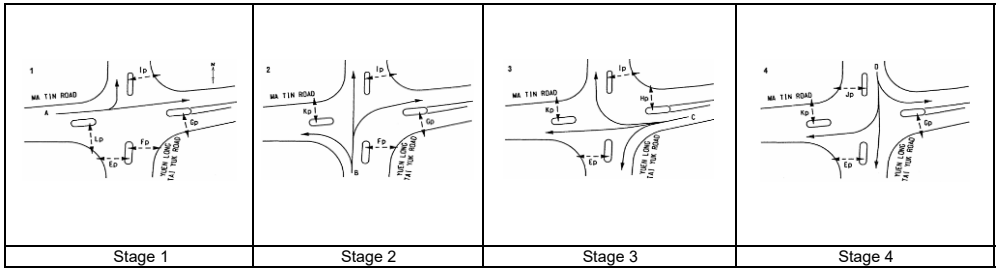
DFC b-a	=	0.2220
DFC b-c	=	0.1378
DFC c-b	=	0.1323
DFC b-ac (Share Lane)	=	0.3598
DFC c-a	=	0.1274

CRITICAL DFC = 0.36

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2029 Design Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.411	
Loss time		L =	32	sec
Total Flow		=	1541	pcu
Co	= (1.5*L+5)/(1-Y)	=	90.0	sec
Cm	= L/(1-Y)	=	54.4	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	60.4	%
Cp	= 0.9*L/(0.9-Y)	=	58.9	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	60.4	%



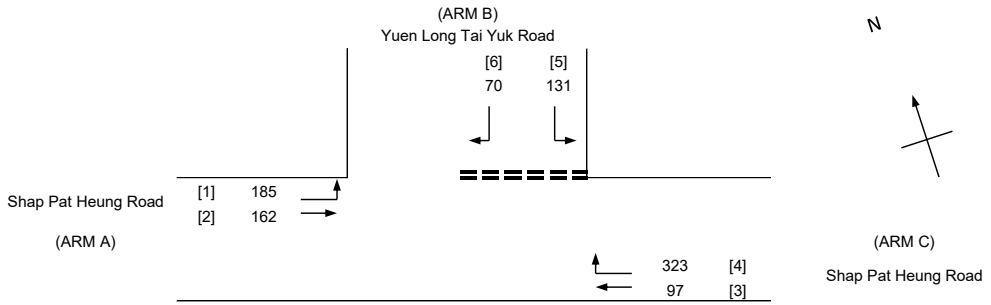
Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	46	8	OK
Fp	7.6	1,2	5	7	54	7	OK
Gp	7.3	4,1,2	5	7	88	7	OK
Hp	8.3	3	5	8	13	8	OK
Ip	7.6	1,2,3	5	8	83	8	OK
Jp	7.4	4	5	7	20	7	OK
Kp	7.3	2,3,4	5	7	82	7	OK
Lp	9.7	1	5	11	13	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↗	1	1	3.60	A	1	15		N	1975	195			195	1.00	1795			1795	0.109	0.109		23	23	0.567	26	47
→	2	1	3.60	A	1				2115		199		199	0.00	2115			2115	0.094			20	23	0.491	27	45
↰	3,4	2	3.60	B	1	15		N	1975	69	177		246	0.28	1921			1921	0.128	0.128		27	27	0.570	32	44
↱	4,5	2	3.60	B	1	20			2115		133	129	262	0.49	2040			2040	0.128			27	27	0.570	34	43
↰	3,4	2	3.50	C	1	15		N	1965			108	108	1.00	1786			1786	0.060			13	16	0.453	16	50
↙	4,5	2	3.50	C	1	20			2105	87	67		154	0.56	2019			2019	0.076	0.076		16	16	0.572	22	52
↙	10,11	2	3.50	D	1	20			2105		64	133	197	0.68	2003			2003	0.098	0.098		21	21	0.562	27	48
↓	9,10	2	3.50	D	1	15		N	1965	130	50		180	0.72	1833			1833	0.098			21	21	0.562	25	48

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

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2029 Design Traffic Flow - AM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	185	(pcu/hr)
q a-c	=	162	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	97	(pcu/hr)
q c-b	=	323	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	70	(pcu/hr)
q b-c	=	131	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.652

THE CAPACITY OF MOVEMENT :

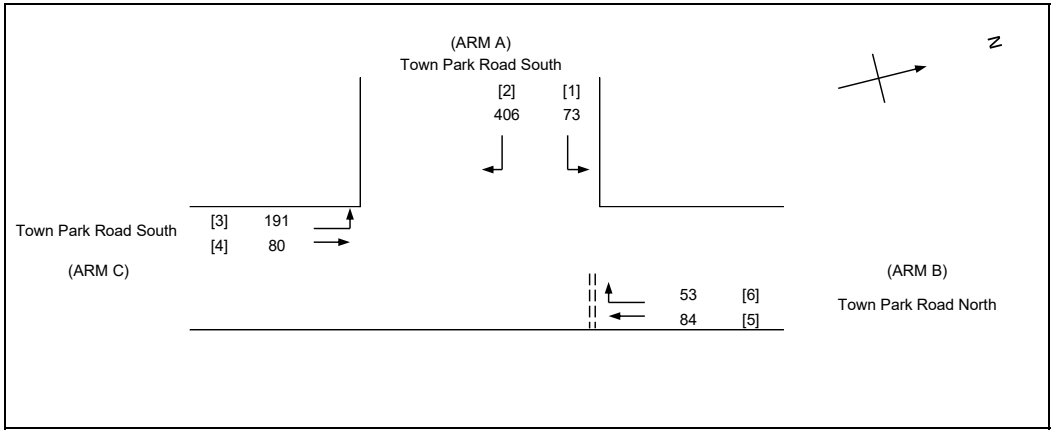
Q b-a	=	504	(pcu/hr)
Q b-c	=	747	(pcu/hr)
Q c-b	=	668	(pcu/hr)
Q b-ac	=	640	(pcu/hr)
TOTAL FLOW	=	968	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1389
DFC b-c	=	0.1754
DFC c-b	=	0.4835
DFC b-ac (Share Lane)	=	0.3143

CRITICAL DFC = 0.48

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2029 Design Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	73	(pcu/hr)
q a-c	=	406	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	191	(pcu/hr)
q c-b	=	80	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	53	(pcu/hr)
q b-c	=	84	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.613

THE CAPACITY OF MOVEMENT :

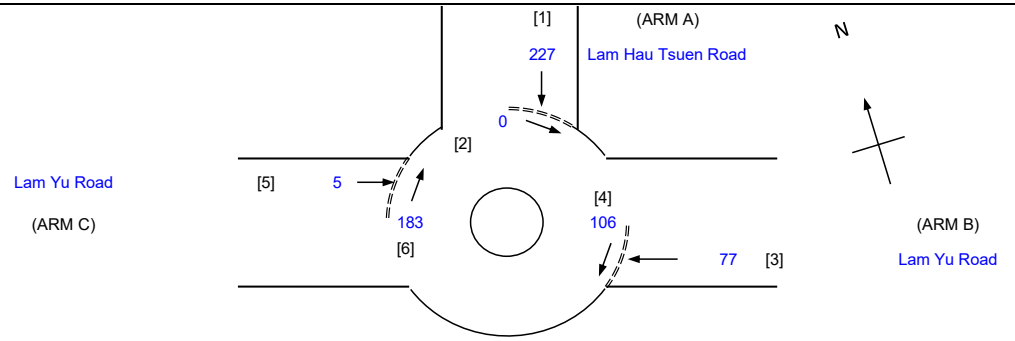
Q b-a	=	472	(pcu/hr)
Q b-c	=	729	(pcu/hr)
Q c-b	=	549	(pcu/hr)
Q b-ac	=	602	(pcu/hr)
Q c-a	=	1538	(pcu/hr)
TOTAL FLOW	=	887	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1123
DFC b-c	=	0.1152
DFC c-b	=	0.1457
DFC b-ac	=	0.2275
(Share Lane)		
DFC c-a	=	0.1242

CRITICAL DFC = 0.23

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2029 Design Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

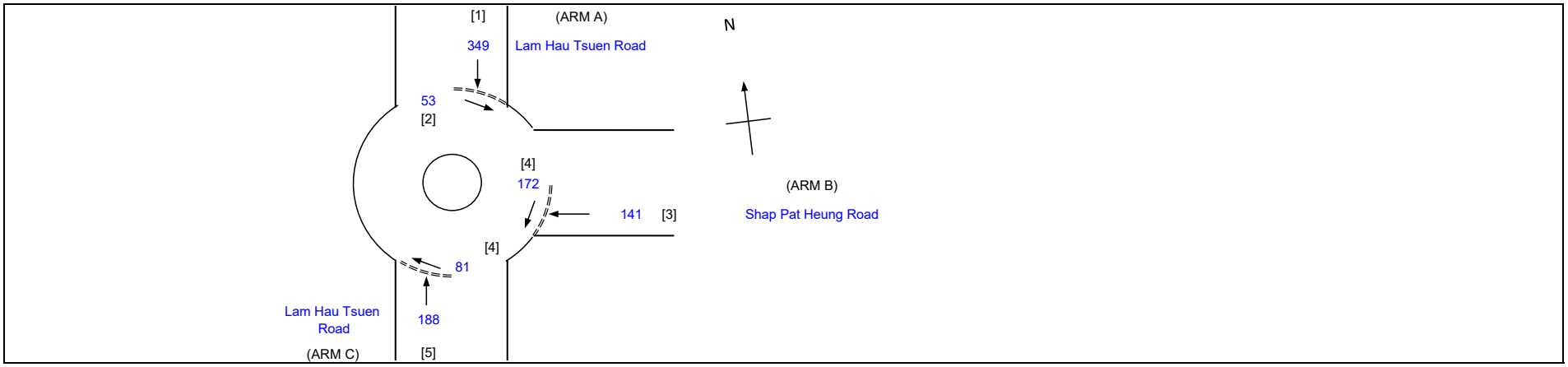


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		227	77	5
Qc	=	Circulating flow across entry (pcu/h)		0	106	183
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1457	1296	1793
DFC	=	Design flow/Capacity = Q/Qe		0.16	0.06	0.00

TOTAL FLOW = 598 (pcu/hr)

CRITICAL DFC = 0.16

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2029 Design Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

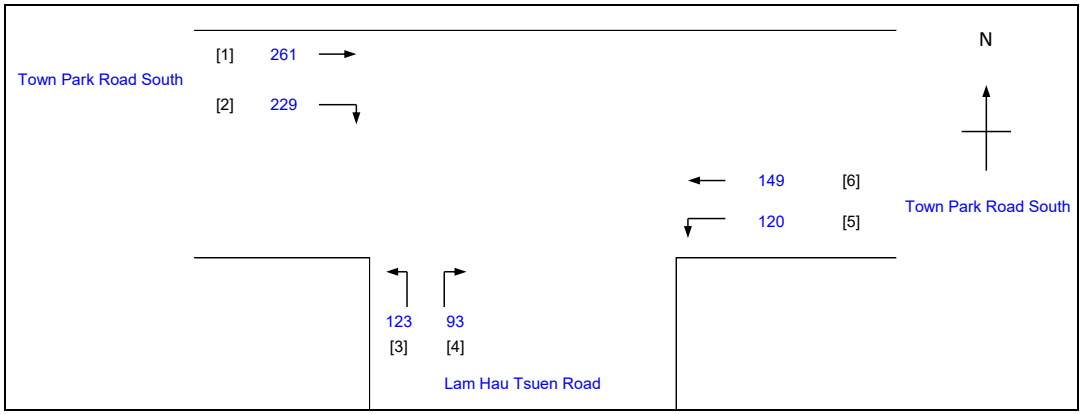


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		349	141	188
Qc	=	Circulating flow across entry (pcu/h)		53	172	81
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2043	1891	1790
DFC	=	Design flow/Capacity = Q/Qe		0.17	0.07	0.11

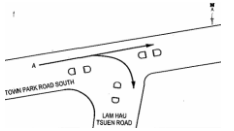
TOTAL FLOW = 984 (pcu/hr)

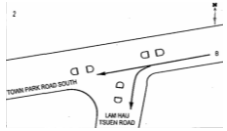
CRITICAL DFC = 0.17

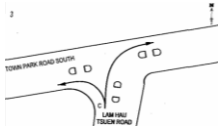
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2029 Design Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27

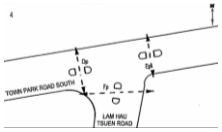


No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.483	
Loss time		L =	32	sec
Total Flow		=	975	pcu
Co	= (1.5*L+5)/(1-Y)	=	102.5	sec
Cm	= L/(1-Y)	=	61.9	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	36.7	%
Cp	= 0.9*L/(0.9-Y)	=	69.0	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	36.7	%


Stage 1


Stage 2


Stage 3


Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
1,2	1	3.60	A	1	20			2115		261	229	490	0.47	2043			2043	0.240	0.240		44	44	0.654	52	34
5,6	2	4.80	B	1	15		N	2095	120	149		269	0.45	2006			2006	0.134	0.134		24	24	0.671	36	48
5,6	2	5.20	C	1	20		N	2135	123		93	216	1.00	1986			1986	0.109	0.109		20	20	0.653	30	51

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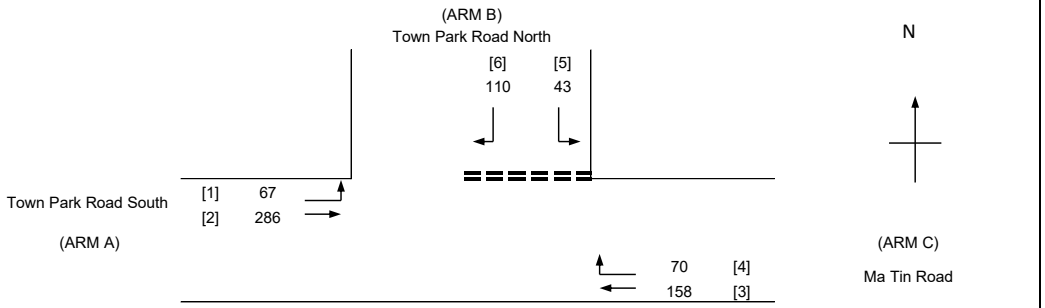
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2029 Design Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	67	(pcu/hr)
q a-c	=	286	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	158	(pcu/hr)
q c-b	=	70	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	110	(pcu/hr)
q b-c	=	43	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.281

THE CAPACITY OF MOVEMENT :

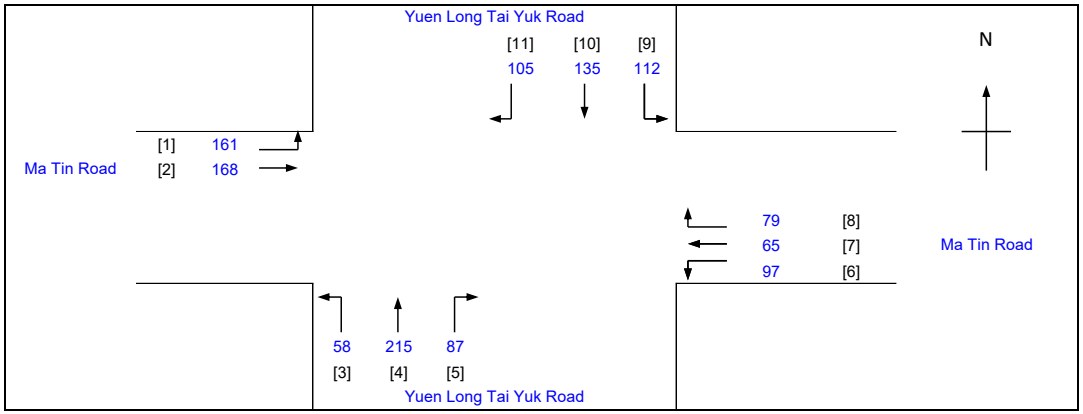
Q b-a	=	475	(pcu/hr)
Q b-c	=	681	(pcu/hr)
Q c-b	=	537	(pcu/hr)
Q b-ac	=	519	(pcu/hr)
Q c-a	=	1565	(pcu/hr)
TOTAL FLOW	=	734	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

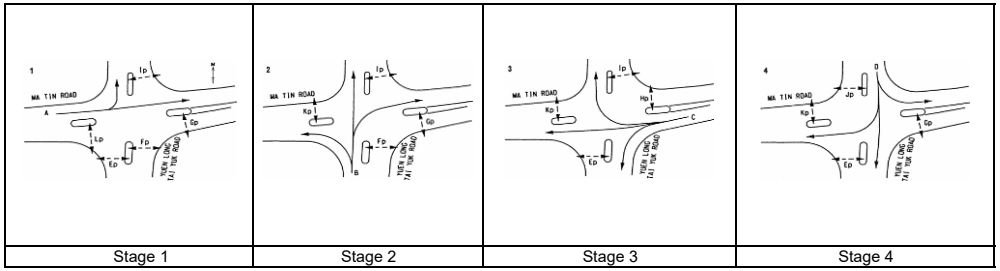
DFC b-a	=	0.2316
DFC b-c	=	0.0631
DFC c-b	=	0.1304
DFC b-ac	=	0.2947
(Share Lane)		
DFC c-a	=	0.1009

CRITICAL DFC = 0.29

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2029 Design Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.352	
Loss time		L =	32	sec
Total Flow		=	1282	pcu
Co	= (1.5*L+5)/(1-Y)	=	81.8	sec
Cm	= L/(1-Y)	=	49.4	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	87.3	%
Cp	= 0.9*L/(0.9-Y)	=	52.6	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	87.3	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	49	8	OK
Fp	7.6	1,2	5	7	49	7	OK
Gp	7.3	4,1,2	5	7	85	7	OK
Hp	8.3	3	5	8	17	8	OK
Ip	7.6	1,2,3	5	8	82	8	OK
Jp	7.4	4	5	7	22	7	OK
Kp	7.3	2,3,4	5	7	84	7	OK
Lp	9.7	1	5	11	12	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↖	1	1	3.60	A	1	15		N	1975	161			161	1.00	1795			1795	0.090	0.090		22	22	0.489	22	46
→	2	1	3.60	A	1				2115		168		168	0.00	2115			2115	0.079			20	22	0.433	23	45
↖↑	3,4	2	3.60	B	1	15		N	1975	58	116		174	0.33	1911			1911	0.091	0.091		23	23	0.475	23	45
↑→	4,5	2	3.60	B	1	20			2115		99	87	186	0.47	2043			2043	0.091			23	23	0.475	25	45
↖↓	3,4	2	3.50	C	1	15		N	1965			79	79	1.00	1786			1786	0.044			11	20	0.265	11	45
↓←	4,5	2	3.50	C	1	20			2105	97	65		162	0.60	2015			2015	0.080	0.080		20	20	0.482	23	47
↓↓	10,11	2	3.50	D	1	20			2105		79	105	184	0.57	2019			2019	0.091	0.091		23	23	0.476	25	45
↓→	9,10	2	3.50	D	1	15		N	1965	112	56		168	0.67	1842			1842	0.091			23	23	0.476	23	45

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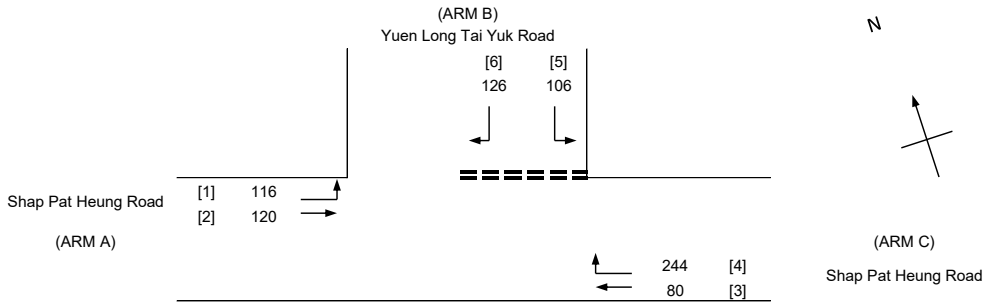
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2029 Design Traffic Flow - PM Off Peak (Weekday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	116	(pcu/hr)
q a-c	=	120	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	80	(pcu/hr)
q c-b	=	244	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	126	(pcu/hr)
q b-c	=	106	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.457

THE CAPACITY OF MOVEMENT :

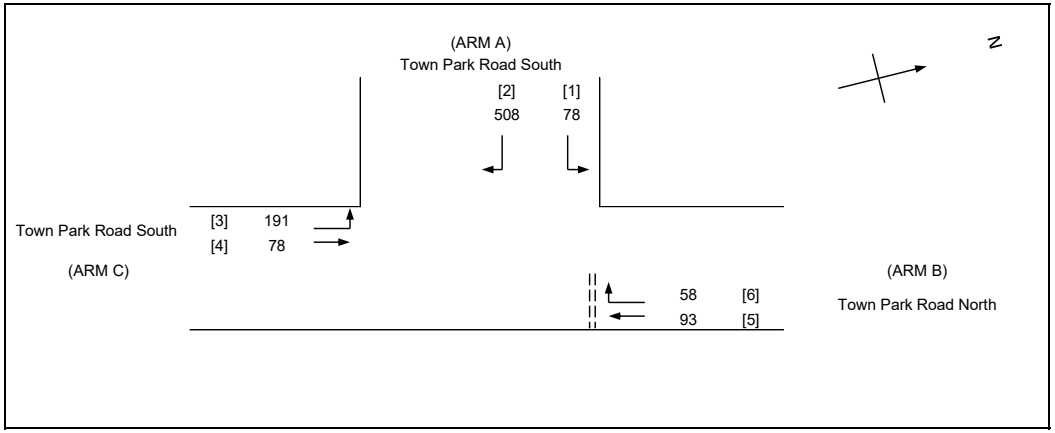
Q b-a	=	554	(pcu/hr)
Q b-c	=	767	(pcu/hr)
Q c-b	=	697	(pcu/hr)
Q b-ac	=	635	(pcu/hr)
TOTAL FLOW	=	792	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2274
DFC b-c	=	0.1382
DFC c-b	=	0.3501
DFC b-ac (Share Lane)	=	0.3656

CRITICAL DFC = 0.37

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2029 Design Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	78	(pcu/hr)
q a-c	=	508	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	191	(pcu/hr)
q c-b	=	78	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	58	(pcu/hr)
q b-c	=	93	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.616

THE CAPACITY OF MOVEMENT :

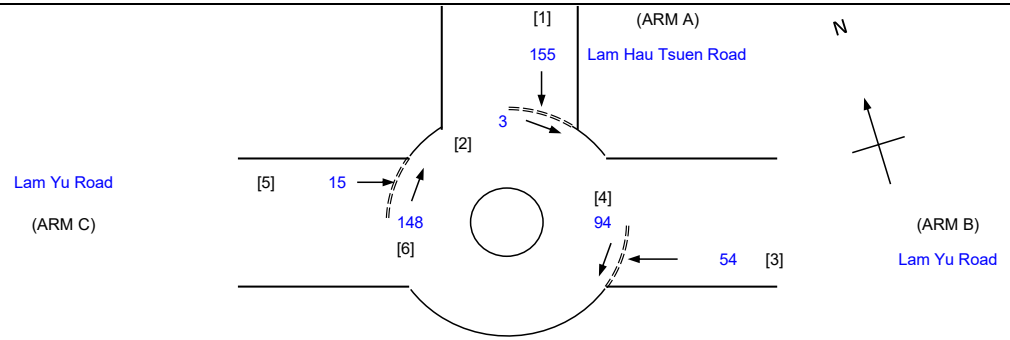
Q b-a	=	447	(pcu/hr)
Q b-c	=	699	(pcu/hr)
Q c-b	=	525	(pcu/hr)
Q b-ac	=	575	(pcu/hr)
Q c-a	=	1533	(pcu/hr)
TOTAL FLOW	=	1006	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1298
DFC b-c	=	0.1330
DFC c-b	=	0.1486
DFC b-ac (Share Lane)	=	0.2628
DFC c-a	=	0.1246

CRITICAL DFC = 0.26

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2029 Design Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27

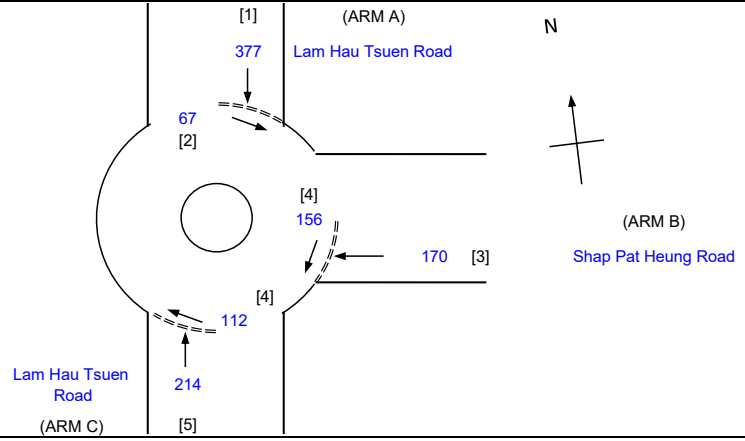


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		155	54	15
Qc	=	Circulating flow across entry (pcu/h)		3	94	148
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1455	1304	1818
DFC	=	Design flow/Capacity = Q/Qe		0.11	0.04	0.01

TOTAL FLOW = 469 (pcu/hr)

CRITICAL DFC = 0.11

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2029 Design Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27

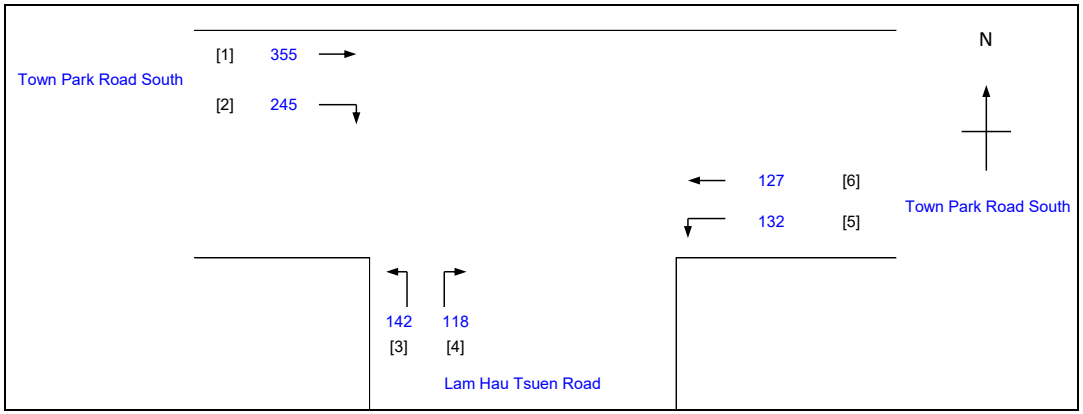


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		377	170	214
Qc	=	Circulating flow across entry (pcu/h)		67	156	112
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2033	1903	1768
DFC	=	Design flow/Capacity = Q/Qe		0.19	0.09	0.12

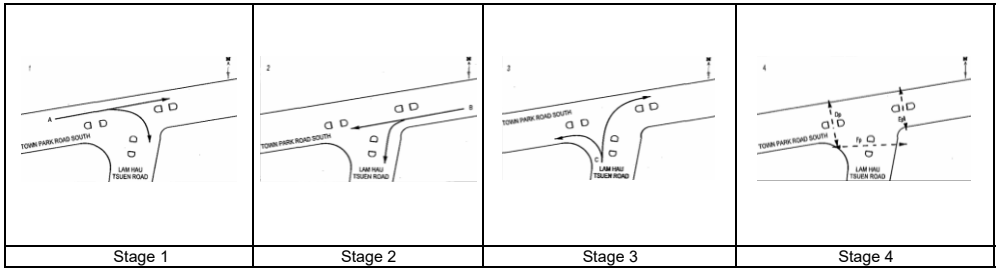
TOTAL FLOW = 1096 (pcu/hr)

CRITICAL DFC = 0.19

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2029 Design Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.553	
Loss time		L =	32	sec
Total Flow		=	1119	pcu
Co	= (1.5*L+5)/(1-Y)	=	118.6	sec
Cm	= L/(1-Y)	=	71.6	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	19.3	%
Cp	= 0.9*L/(0.9-Y)	=	83.0	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	19.3	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↓	1,2	1	3.60	A	1	20			2115		355	245	600	0.41	2052			2052	0.292	0.292		47	47	0.746	62	35
↓	5,6	2	4.80	B	1	15		N	2095	132	127		259	0.51	1993			1993	0.130	0.130		21	21	0.742	37	54
↱	5,6	2	5.20	C	1	20		N	2135	142		118	260	1.00	1986			1986	0.131	0.131		21	21	0.748	37	54

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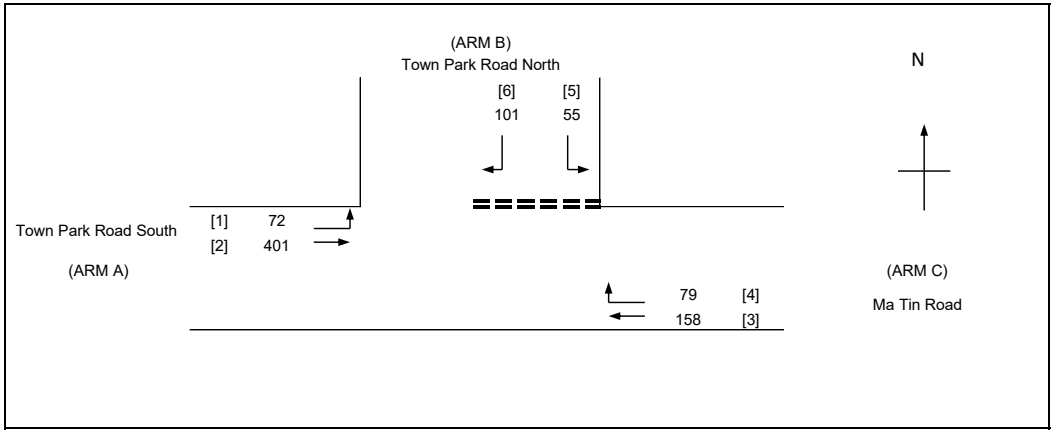
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2029 Design Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	72	(pcu/hr)
q a-c	=	401	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	158	(pcu/hr)
q c-b	=	79	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	101	(pcu/hr)
q b-c	=	55	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.353

THE CAPACITY OF MOVEMENT :

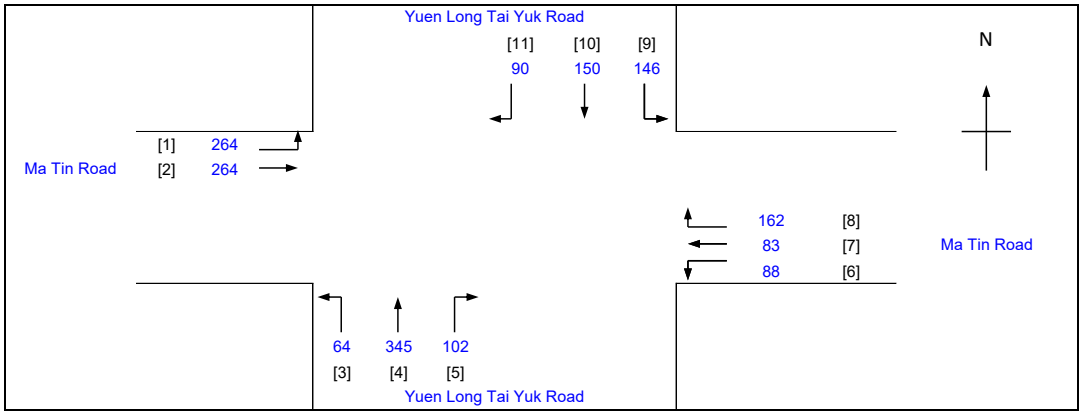
Q b-a	=	446	(pcu/hr)
Q b-c	=	652	(pcu/hr)
Q c-b	=	513	(pcu/hr)
Q b-ac	=	502	(pcu/hr)
Q c-a	=	1523	(pcu/hr)
TOTAL FLOW	=	866	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

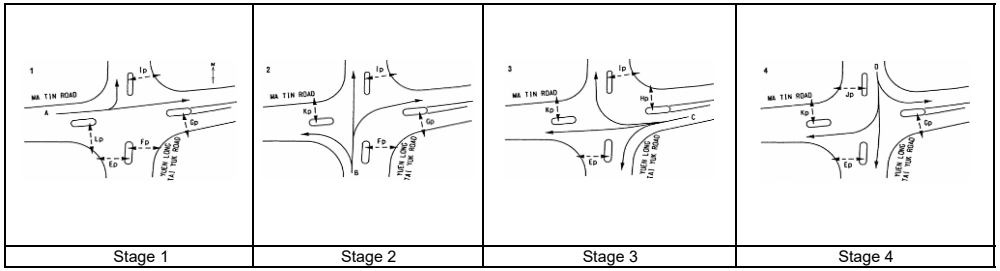
DFC b-a	=	0.2265
DFC b-c	=	0.0844
DFC c-b	=	0.1540
DFC b-ac	=	0.3108
(Share Lane)		
DFC c-a	=	0.1038

CRITICAL DFC = 0.31

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2029 Design Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.466	
Loss time		L =	32	sec
Total Flow		=	1758	pcu
Co	= (1.5*L+5)/(1-Y)	=	99.3	sec
Cm	= L/(1-Y)	=	59.9	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	41.6	%
Cp	= 0.9*L/(0.9-Y)	=	66.4	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	41.6	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	52	8	OK
Fp	7.6	1,2	5	7	56	7	OK
Gp	7.3	4,1,2	5	7	88	7	OK
Hp	8.3	3	5	8	14	8	OK
Ip	7.6	1,2,3	5	8	86	8	OK
Jp	7.4	4	5	7	18	7	OK
Kp	7.3	2,3,4	5	7	78	7	OK
Lp	9.7	1	5	11	18	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↗	1	1	3.60	A	1	15		N	1975	264			264	1.00	1795			1795	0.147	0.147		28	28	0.630	34	44
→	2	1	3.60	A	1				2115		264		264	0.00	2115			2115	0.125			24	28	0.535	34	42
↰	3,4	2	3.60	B	1	15		N	1975	64	183		247	0.26	1925			1925	0.128	0.128		24	24	0.642	33	47
↑	4,5	2	3.60	B	1	20			2115		162	102	264	0.39	2055			2055	0.128			24	24	0.642	35	47
↰	3,4	2	3.50	C	1	15		N	1965			162	162	1.00	1786			1786	0.091			17	17	0.640	24	54
↓	4,5	2	3.50	C	1	20			2105	88	83		171	0.51	2027			2027	0.084	0.091		16	17	0.596	24	52
↓	10,11	2	3.50	D	1	20			2105		114	90	204	0.44	2038			2038	0.100	0.100		19	19	0.632	29	51
↳	9,10	2	3.50	D	1	15		N	1965	146	36		182	0.80	1819			1819	0.100			19	19	0.632	26	51

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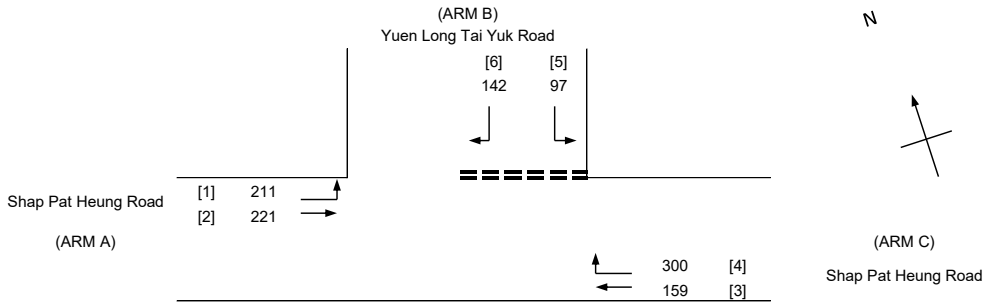
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2029 Design Traffic Flow - Weekend Peak (Saturday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	211	(pcu/hr)
q a-c	=	221	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	159	(pcu/hr)
q c-b	=	300	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	142	(pcu/hr)
q b-c	=	97	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.406

THE CAPACITY OF MOVEMENT :

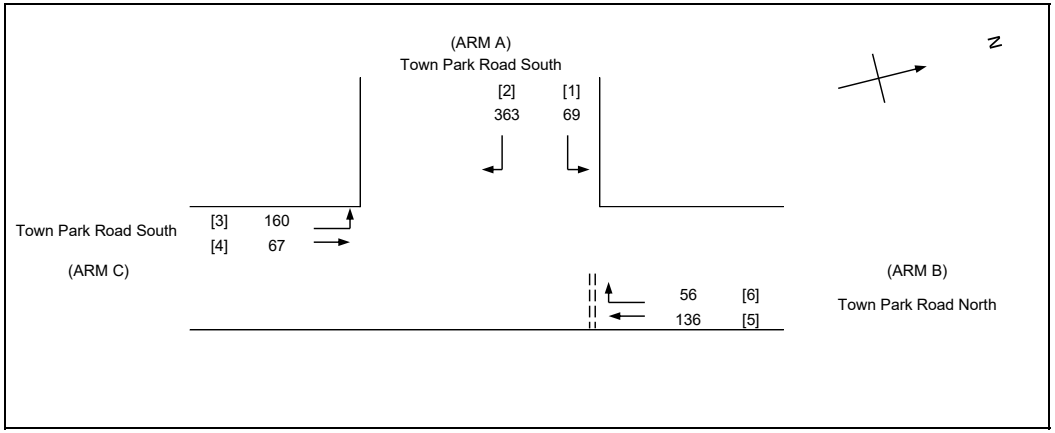
Q b-a	=	484	(pcu/hr)
Q b-c	=	728	(pcu/hr)
Q c-b	=	646	(pcu/hr)
Q b-ac	=	560	(pcu/hr)
TOTAL FLOW	=	1130	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2934
DFC b-c	=	0.1332
DFC c-b	=	0.4644
DFC b-ac (Share Lane)	=	0.4266

CRITICAL DFC = 0.46

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnA - Town Park Road South/ Town Park Road North (TPRN - Minor Arm)	2029 Design Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	8.9	(metres)
W cr	=	1.5	(metres)
q a-b	=	69	(pcu/hr)
q a-c	=	363	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	140	(metres)
q c-a	=	160	(pcu/hr)
q c-b	=	67	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	140	(metres)
q b-a	=	56	(pcu/hr)
q b-c	=	136	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.985
E	=	1.147
F	=	0.879
Y	=	0.693
F for (Qb-ac)	=	0.708

THE CAPACITY OF MOVEMENT :

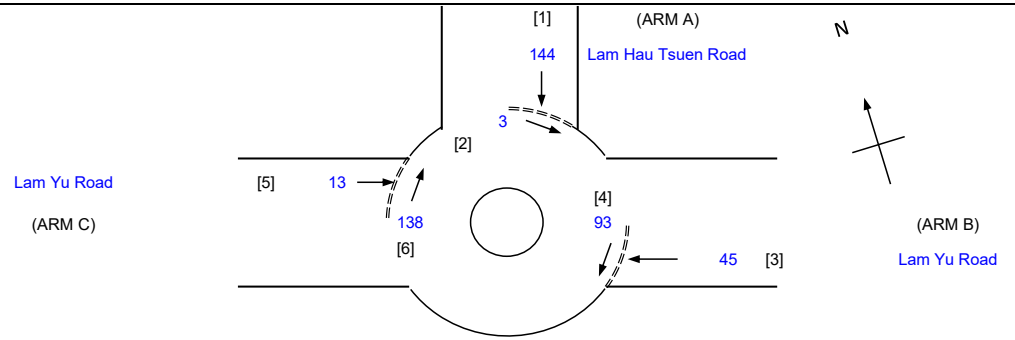
Q b-a	=	492	(pcu/hr)
Q b-c	=	742	(pcu/hr)
Q c-b	=	559	(pcu/hr)
Q b-ac	=	646	(pcu/hr)
Q c-a	=	1584	(pcu/hr)
TOTAL FLOW	=	851	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1138
DFC b-c	=	0.1833
DFC c-b	=	0.1199
DFC b-ac	=	0.2971
(Share Lane)		
DFC c-a	=	0.1010

CRITICAL DFC = 0.30

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnB - Lam Hau Tsuen Road / Lam Yu Road	2029 Design Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27

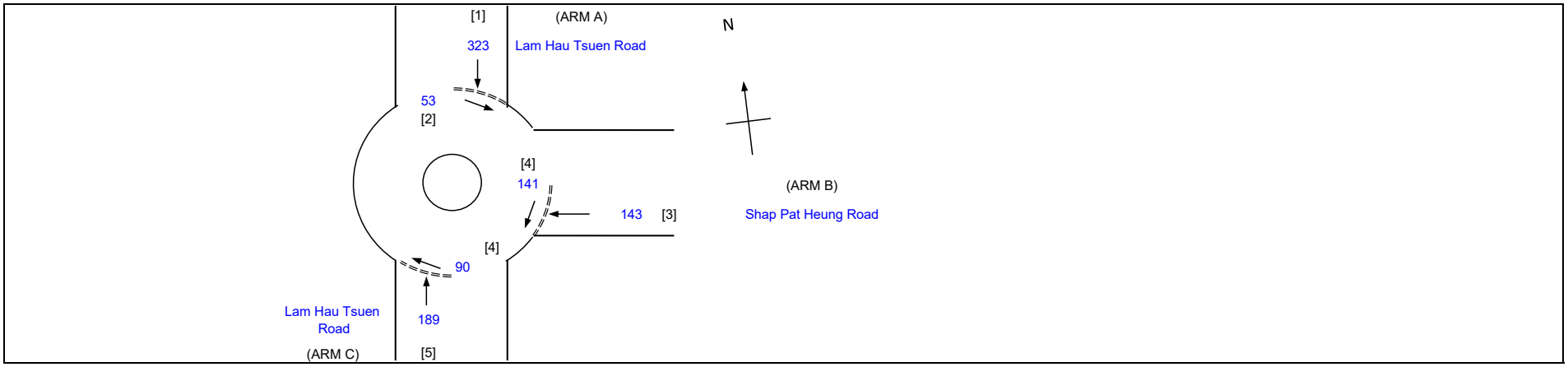


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		3.6	2.2	5.1
E	=	Entry width (m)		5.0	5.0	6.5
L	=	Effective length of flare (m)		5.3	14.8	14.3
R	=	Entry radius (m)		30.0	77.0	15.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		5.0	0.0	17.0
Q	=	Entry flow (pcu/h)		144	45	13
Qc	=	Circulating flow across entry (pcu/h)		3	93	138
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.42	0.30	0.16
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.10	1.14	1.03
X2	=	V + ((E-V)/(1+2S))		4.36	3.94	6.17
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1321	1195	1868
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.57	0.55	0.69
Qe	=	K(F-Fc*Qc)		1455	1304	1825
DFC	=	Design flow/Capacity = Q/Qe		0.10	0.03	0.01

TOTAL FLOW = 436 (pcu/hr)

CRITICAL DFC = 0.10

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnC - Lam Hau Tsuen Road / Shap Pat Heung Road	2029 Design Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27

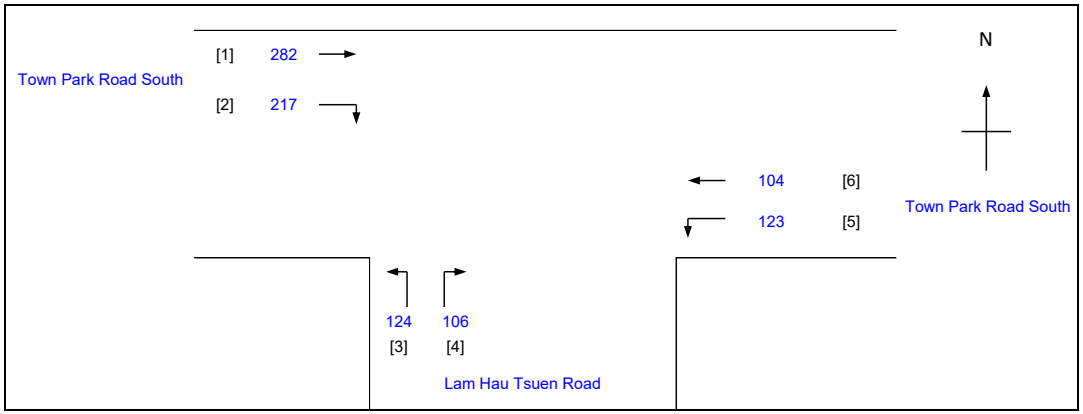


GEOMETRIC DETAILS:			ARM	A	B	C
V	=	Approach half width (m)		5.3	4.5	3.6
E	=	Entry width (m)		7.0	7.0	7.0
L	=	Effective length of flare (m)		14.2	15.0	14.0
R	=	Entry radius (m)		48.0	56.0	33.0
D	=	Inscribed circle diameter (m)		35.0	35.0	35.0
A	=	Entry angle (degree)		23.0	14.0	5.0
Q	=	Entry flow (pcu/h)		323	143	189
Qc	=	Circulating flow across entry (pcu/h)		53	141	90
OUTPUT PARAMETERS:						
S	=	Sharpness of flare = 1.6(E-V)/L		0.19	0.27	0.39
K	=	1-0.00347(A-30)-0.978(1/R-0.05)		1.05	1.09	1.11
X2	=	V + ((E-V)/(1+2S))		6.53	6.13	5.51
M	=	EXP((D-60)/10)		0.08	0.08	0.08
F	=	303*X2		1978	1858	1670
Td	=	1+(0.5/(1+M))		1.46	1.46	1.46
Fc	=	0.21*Td(1+0.2*X2)		0.71	0.68	0.65
Qe	=	K(F-Fc*Qc)		2043	1914	1783
DFC	=	Design flow/Capacity = Q/Qe		0.16	0.07	0.11

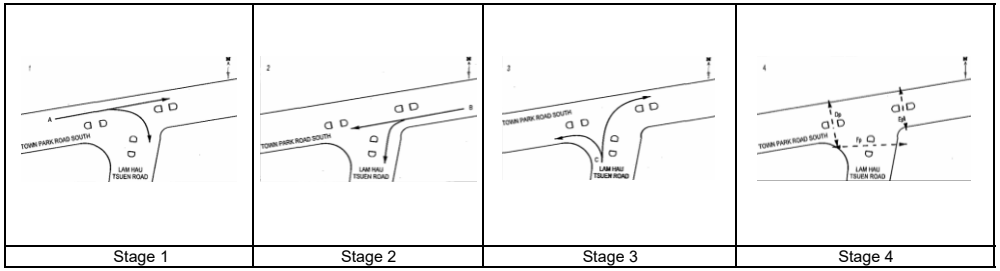
TOTAL FLOW = 939 (pcu/hr)

CRITICAL DFC = 0.16

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnD - Town Park Road South / Lam Hau Tsuen Road	2029 Design Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	3	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	8	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	2	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.474	
Loss time		L =	32	sec
Total Flow		=	956	pcu
Co	= (1.5*L+5)/(1-Y)	=	100.7	sec
Cm	= L/(1-Y)	=	60.8	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	39.3	%
Cp	= 0.9*L/(0.9-Y)	=	67.6	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	39.3	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Dp	10.5	4	5	4	9	4	OK
Ep	10.5	4	5	4	5	4	OK
Fp	19.3	4	5	8	8	8	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
↱	1,2	1	3.60	A	1	20			2115		282	217	499	0.43	2048			2048	0.244	0.244		45	45	0.650	52	33
↰	5,6	2	4.80	B	1	15		N	2095	123	104		227	0.54	1987			1987	0.114	0.114		21	21	0.653	31	50
↰↱	5,6	2	5.20	C	1	20		N	2135	124		106	230	1.00	1986			1986	0.116	0.116		22	22	0.632	31	48

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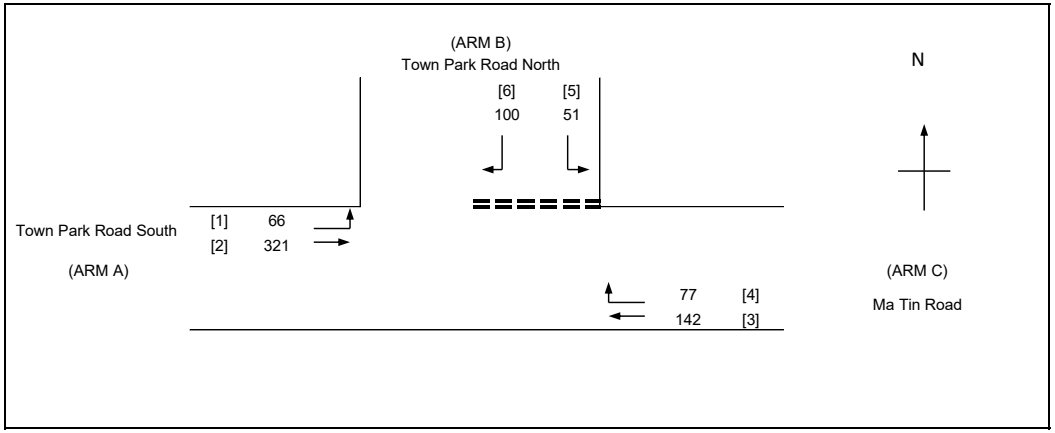
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnE - Town Park Road South / Ma Tin Road / Town Park Road North	2029 Design Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	9.8	(metres)
W cr	=	0	(metres)
q a-b	=	66	(pcu/hr)
q a-c	=	321	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.2	(metres)
Vr c-b	=	55	(metres)
q c-a	=	142	(pcu/hr)
q c-b	=	77	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	4.5	(metres)
W b-c	=	4.5	(metres)
Vl b-a	=	45	(metres)
Vr b-a	=	45	(metres)
Vr b-c	=	55	(metres)
q b-a	=	100	(pcu/hr)
q b-c	=	51	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.944
E	=	1.017
F	=	0.813
Y	=	0.662
F for (Qb-ac)	=	0.338

THE CAPACITY OF MOVEMENT :

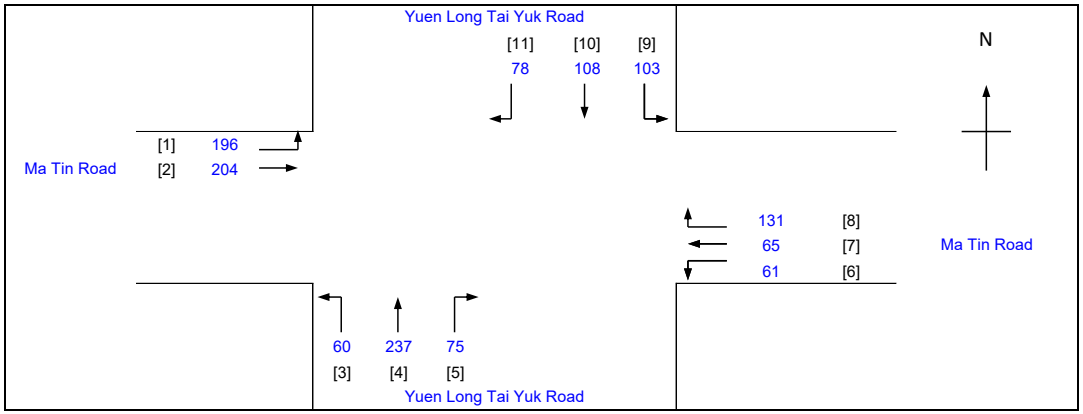
Q b-a	=	467	(pcu/hr)
Q b-c	=	672	(pcu/hr)
Q c-b	=	530	(pcu/hr)
Q b-ac	=	521	(pcu/hr)
Q c-a	=	1538	(pcu/hr)
TOTAL FLOW	=	757	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

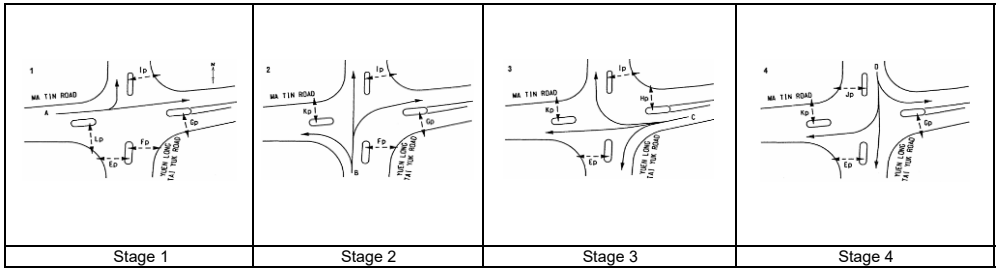
DFC b-a	=	0.2141
DFC b-c	=	0.0759
DFC c-b	=	0.1453
DFC b-ac (Share Lane)	=	0.2900
DFC c-a	=	0.0923

CRITICAL DFC = 0.29

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnF - Ma Tin Road / Yuen Long Tai Yuk Road	2029 Design Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



No. of critical vehicluar phase per cycle:		N =	4	
Intergreen Period	Stage 1 - 2	I =	5	sec
	Stage 2 - 3	I =	10	sec
	Stage 3 - 4	I =	11	sec
	Stage 4 - 1	I =	10	sec
Cycle time		C =	120	sec
Sum(y)		Y =	0.351	
Loss time		L =	32	sec
Total Flow		=	1318	pcu
Co	= (1.5*L+5)/(1-Y)	=	81.7	sec
Cm	= L/(1-Y)	=	49.3	sec
Yult	= 0.9-0.0075L	=	0.660	
R.C.ult	= (Yult-Y)/Y*100%	=	87.9	%
Cp	= 0.9*L/(0.9-Y)	=	52.5	sec
Ymax	= 1-L/C	=	0.733	
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	87.9	%



Stage 1 | Stage 2 | Stage 3 | Stage 4

Pedestrian Phase	Width (m)	Stage no.	Green Time Required (s) SG	Green Time Required (s) FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
Ep	7.9	3,4,1	5	8	52	8	OK
Fp	7.6	1,2	5	7	54	7	OK
Gp	7.3	4,1,2	5	7	86	7	OK
Hp	8.3	3	5	8	15	8	OK
Ip	7.6	1,2,3	5	8	85	8	OK
Jp	7.4	4	5	7	18	7	OK
Kp	7.3	2,3,4	5	7	78	7	OK
Lp	9.7	1	5	11	17	11	OK

	Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	Left Flow pcu/h	Straight Flow pcu/h	Right Flow pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	Flare lane Length m.	Flare lane Effect	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 (sec)
	1	1	3.60	A	1	15		N	1975	196			196	1.00	1795			1795	0.109	0.109		27	27	0.485	25	42
	2	1	3.60	A	1				2115		204		204	0.00	2115			2115	0.096			24	27	0.429	26	41
	3,4	2	3.60	B	1	15		N	1975	60	119		179	0.33	1911			1911	0.094	0.094		23	23	0.489	24	45
	4,5	2	3.60	B	1	20			2115		118	75	193	0.39	2055			2055	0.094			23	23	0.489	26	45
	3,4	2	3.50	C	1	15		N	1965			131	131	1.00	1786			1786	0.073			18	18	0.489	19	49
	4,5	2	3.50	C	1	20			2105	61	65		126	0.48	2031			2031	0.062	0.073		16	18	0.414	18	48
	10,11	2	3.50	D	1	20			2105		74	78	152	0.51	2027			2027	0.075	0.075		19	19	0.474	21	48
	9,10	2	3.50	D	1	15		N	1965	103	34		137	0.75	1828			1828	0.075			19	19	0.474	19	48

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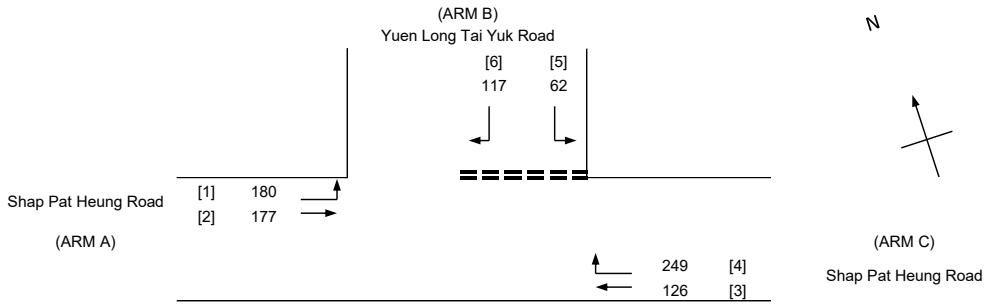
NOTE : O - OPPOSING TRAFFIC N - NEAR SIDE LANE SG - STEADY GREEN FG - FLASHING GREEN PEDESTRAIN WALKING SPEED = 1.2m/s QUEUING LENGTH = AVERAGE QUEUE * 6m

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Traffic Impact Assessment for Section 16 Planning Application for Proposed Temporary Driving School for a Period of 3 Years at Lot 2620 RP (Part) in D.D. 120,		Project No.: 31073	Prepared By:	JK	2026/3/27
Shan Ha Road, Yuen Long, New Territories			Checked By:	SY	2026/3/27
JnG - Shap Pat Heung Road / Yuen Long Tai Yuk Road	2029 Design Traffic Flow - Weekend Peak (Sunday)		Reviewed By:	AW	2026/3/27



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	=	8.6	(metres)
W cr	=	4.2	(metres)
q a-b	=	180	(pcu/hr)
q a-c	=	177	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	4.2	(metres)
Vr c-b	=	85	(metres)
q c-a	=	126	(pcu/hr)
q c-b	=	249	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	5.0	(metres)
W b-c	=	5.0	(metres)
Vl b-a	=	70	(metres)
Vr b-a	=	70	(metres)
Vr b-c	=	85	(metres)
q b-a	=	117	(pcu/hr)
q b-c	=	62	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.025
E	=	1.091
F	=	1.019
Y	=	0.703
F for (Qb-ac)	=	0.346

THE CAPACITY OF MOVEMENT :

Q b-a	=	523	(pcu/hr)
Q b-c	=	744	(pcu/hr)
Q c-b	=	666	(pcu/hr)
Q b-ac	=	583	(pcu/hr)
TOTAL FLOW	=	911	(pcu/hr)

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.2237
DFC b-c	=	0.0833
DFC c-b	=	0.3739
DFC b-ac (Share Lane)	=	0.3070

CRITICAL DFC = 0.37