

**Annex 5: Revised Traffic Impact Assessment**  
(Appendix 4 of Planning Statement)

**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE “OTHER SPECIFIED USES” ZONE ANNOTATED “CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES”**

**INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY**

**TRAFFIC IMPACT ASSESSMENT REPORT**



**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE “OTHER SPECIFIED USES” ZONE ANNOTATED “CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES” INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY**

**TRAFFIC IMPACT ASSESSMENT REPORT**

IDENTIFICATION TABLE	
<b>Client/Project owner</b>	Marine Riches III
<b>Project</b>	Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the “Other Specified Uses” zone annotated “Cultural and/or Commercial Leisure and Tourism Related Uses” Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay
<b>Study</b>	Traffic Impact Assessment Report
<b>Type of document</b>	Final Report
<b>Date</b>	24/04/2026
<b>File name</b>	S12A HYS_Final TIA (20260324).docx
<b>Reference number</b>	CHK50793710

**LIST OF CONTENTS**

**1. INTRODUCTION ..... 4**

1.1 Background ..... 4

1.2 Objectives ..... 5

1.3 Structure of Report ..... 6

**2. PROPOSED DEVELOPMENT ..... 7**

2.1 Overview ..... 7

2.2 Proposed Development Access and Internal Transport Facilities Provision ..... 8

2.3 Future Pedestrian Connection ..... 10

2.4 The Planned Elevated Walkway ..... 10

**3. EXISTING TRAFFIC CONDITION ..... 12**

3.1 Existing Road Network ..... 12

3.2 Existing Public Transport Services ..... 12

3.3 Existing Vehicular Traffic Condition ..... 13

3.4 Existing Pedestrian Traffic Condition ..... 14

**4. TRAFFIC FORECAST ..... 18**

4.1 Design Year ..... 18

4.2 Future Local Road Network and Pedestrian Linkage ..... 18

4.3 Adopted Traffic Growth ..... 18

4.4 Traffic Generations of Nearby Planned and Committed Developments ..... 20

4.5 Traffic Generations of Proposed Development ..... 22

**5. TRAFFIC IMPACT ASSESSMENT ..... 27**

5.1 Junction Performance Assessment ..... 27

5.2 Proposed Junction Improvement Measure ..... 28

5.3 Pedestrian Assessment ..... 29

**6. SUMMARY AND CONCLUSION ..... 34**

6.1 Summary ..... 34

6.2 Conclusion ..... 37

**APPENDICES**

- Appendix A – Junction Performance Calculation**
  - Appendix A2 – Pedestrian Crossing Performance Calculation**
  - Appendix B – Swept Path Analysis**
- LIST OF TABLES**

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the “Other Specified Uses” zone annotated “Cultural and/or Commercial Leisure and Tourism Related Uses”  
 Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

<b>Table No.</b>	<b>Title</b>	<b>Page No.</b>
Table 2.1	Key Development Parameters .....	7
Table 2.2	Required and Proposed Internal Transport Facilities Provision under the Latest HKPSG Requirement .....	8
Table 2.3	Summary Table of Proposed Parking Provision .....	8
Table 3.1	Identified Critical Junctions.....	13
Table 3.2	Existing Performances of Identified Critical Sections of Footpaths / Cautionary Crossing.....	14
Table 3.3	Existing Performances of Identified Critical Sections of Crossing.....	16
Table 4.1	Annual Traffic Census (ATC) Traffic Counts Between Year 2017 to 2022.....	19
Table 4.2	2019-based Territorial Population and Employment Data Matrix .....	19
Table 4.3	Major Planned and Committed Developments Nearby.....	23
Table 4.4	Adopted Traffic Trips of the Boardwalk underneath Island Eastern Corridor .....	23
Table 4.5	Adopted Traffic Trips of the Proposed residential development at 16-94 Pan Hoi Street and 983-987A King's Road, Quarry Bay.....	23
Table 4.6	Adopted Traffic Trips of the Proposed Residential Development at No. 10-12 & 14-16 Mount Parker Road.....	23
Table 4.7	Adopted Traffic Trips of the Proposed Residential Development at 56-76 Kai Yuen Street.....	23
Table 4.8	Anticipated Traffic Generation by the Cultural Venue/ Digital Museum .....	23
Table 4.9	Anticipated Traffic Generation of the Proposed Development.....	24
Table 4.10	Adopted Pedestrian Generation Rates .....	25
Table 4.11	Anticipated Pedestrian Generation of Proposed Development .....	25
Table 5.1	Junction Performance of Critical Junctions in Year 2033.....	27
Table 5.2	Junction Performance of J1 and J2 Under Proposed Improvement Scheme .....	28
Table 5.3	Year 2033 Performances of Identified Critical Sections of Footpaths/Cautionary Crossing.....	29
Table 5.4	Year 2033 Performances of Identified Critical Sections of Crossing.....	31

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the “Other Specified Uses” zone annotated “Cultural and/or Commercial Leisure and Tourism Related Uses”  
 Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

## LIST OF FIGURES

### Figure

Figure No.	Title
Figure 2.1	Site Location
Figure 2.2	Proposed Master Layout Plan on Ground Floor
Figure 2.3	Layout of Basement Level 1
Figure 2.4	Layout of Basement Level 2
Figure 2.5	Layout of Basement Level 3
Figure 2.6	Existing and Future Pedestrian Route
Figure 2.7	Planned Elevated Walkway Under OZP
Figure 3.1	Existing Public Transport Services
Figure 3.2	Identified Critical Junctions and Key Vehicular Traffic Routes
Figure 3.3	Existing Junction Layout of Hoi Yu Street/ Hoi Chak Street (J1)
Figure 3.4	Existing Junction Layout of Java Road/ Hoi Yu Street (J2)
Figure 3.5	Existing Junction Layout of King's Road/ Java Road (J3)
Figure 3.6	Existing Junction Layout of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street (J4)
Figure 3.7	Existing Junction Layout of King's Road/ Finnie Street (J5)
Figure 3.8	Existing Junction Layout of King's Road/ Model Lane (J6)
Figure 3.9	Existing Junction Layout of Java Road/ Man Hong Street (J7)
Figure 3.10	Existing Junction Layout of King's Road/ Healthy Street West/ Man Hong Street (J8)
Figure 3.11	Existing Junction Layout of Tsat Tsz Mui Road/ Healthy Street West (J9)
Figure 3.12	Existing Junction Layout of Tsat Tsz Mui Road/ Tin Chiu West (J10)
Figure 3.13	Existing Junction Layout of King's Road/ Tin Chiu Street (J11)
Figure 3.14	2025 Observed Traffic Flows
Figure 3.15	Identified Critical Footpath / Crossing
Figure 3.16	Pedestrian Flow and Performance of Identified Critical Sections of Footpaths/Crossing
Figure 4.1	Nearby Major Planned and Committed Developments
Figure 4.2	2033 Reference Traffic Flows
Figure 4.3	2033 Design Traffic Flows
Figure 4.4	Distribution of Development Traffic Trips
Figure 5.1	Proposed Junction Improvement Scheme of Java Road/ Hoi Yu Street/ Hoi Chak Street
Figure 5.2	Proposed Improvement Scheme of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street

# 1. INTRODUCTION

## 1.1 Background

- 1.1.1 The application site is situated at the land on north of Hoi Yu Street and the Island East Corridor (“IEC”) along the Quarry Bay Waterfront Promenade. It consists of the part of land lot IL8590 R.P. and IL 8723 R.P., and the adjoining government land (which currently used as a temporary open space car parking) (“the Land” or “the Application Site”).
- 1.1.2 In 2001, General Building Plans (“GBPs”) were approved in compliance with the “Industrial” zone in effect at the time for an Industrial Building (“the approved industrial building”) for the lot IL8590 R.P. and IL8723 R.P.. Construction of the industrial building commenced with work on foundations in 2017 and were suspended when the Development Bureau approached to owner to see if they would consider a scheme which was more appropriate to the up-to-date planning intention and public aspirations for a more vibrant waterfront. The incomplete foundation works remain on the private lots are currently largely vacant.
- 1.1.3 Following the Hong Kong Island East Harbour-front Study (“HKIEHS”) commenced by the Planning Department, which aims to improve the connectivity and pedestrian accessibility of the harbour-front, it was proposed to construct an about 2km long pedestrian Boardwalk underneath the Island Eastern Corridor from Oil Street to Hoi Yu Street (“the Boardwalk”) to enhance the connectivity along the North Point promenade in 2012. An investigation study for the Boardwalk was then commenced in March 2015 by the Civil Engineering and Development Department (“CEDD”) to review the feasibility. Subsequently, the contract for design and construction of the Boardwalk was awarded in December 2021 and the works **has been** completed in end 2025.
- 1.1.4 Under the latest Approved Quarry Bay Outline Zoning Plan (No. S/H21/28, September 2010), main portion of the Application site is currently zoned as “Other Specified Uses (“OU(1)”) annotated “Cultural and/ or Commercial, Leisure and Tourism Related Uses” with the uses of “Eating Place, Exhibition or Convention Hall, Place of Entertainment, Place of Recreation, Sports or Culture, Hotel, Office and Shop and Services” and etc. all under Column 2.
- 1.1.5 In order to provide a better waterfront to the public and to tally with the above-mentioned enhancement proposal/ the Boardwalk, the previous owner of the Land (“the previous owner”) was invited by the Government to revisit the land use of the approved industrial building.
- 1.1.6 The previous owner was willing to partly surrender the original site (i.e. the approved industrial building) in exchange for the land (including part IL 8590 R.P., part IL 8723 R.P. and adjoining Government land) zoned OU(1) to form a new site for a combined waterfront development comprising of 4 hotel blocks, an office building, some retails and food & beverage facilities, which would have a more compatible land use to the waterfront than the approved industrial building, and the adjoining area zoned as “Other Specified Uses (OU)” annotated “Elevated Walkway” (“the elevated walkway”).

- 1.1.7 Therefore, a section 16 planning application for the aforesaid waterfront development had been submitted to the Town Planning Board (TPB) for consideration in 2018 and it was approved with conditions in 2019. Hereafters refer to as the “previously approved scheme”.
- 1.1.8 However, with reference to the Planning Statement, the implementation of the Approved Scheme was not possible, nor was the sale of the Approved Scheme. A stalemate has therefore been reached with the Approved Scheme. As the economic outlook has significantly changed since the scheme was approved in 2019 and both office and hotels are facing a difficult time with oversupply in the areas, the new owner, Marine Riches III (“the Applicant”), would like to revisit the use of the Land.
- 1.1.9 With the use of “Flat” under Column 2 of the latest OZP, the applicant intends to provide a space for specific cultural and tourism features with residential units. A Section 12A planning application is therefore required to be submitted for TPB’s consideration.
- 1.1.10 MVA Hong Kong Limited (MVA) was commissioned as the Traffic Consultant to provide traffic engineering input and prepare a Traffic Impact Assessment (TIA) Study in support of the Section 12A planning application for the proposed development.

1.1.11 This version of the TIA has been amended in response to Transport Departments comments received in March 2026 on the previous version.

## 1.2 Objectives

1.2.1 The main objectives of this study are as follows:

- to review the existing traffic conditions in the vicinity of the application site;
- to review the traffic arrangement and internal transport facilities provision of the proposed development;
- to estimate the additional traffic generations and attractions due to the proposed development;
- to forecast the pedestrian and vehicular traffic demands on the adjacent road network in the design year 2033 (i.e. 3 years after completion, i.e. 2030 + 3 years);
- to assess the possible traffic impacts due to the proposed development on the adjacent road network; and
- to recommend any traffic improvement measures to mitigate the potential traffic problems on the road network, if required.

### 1.3 Structure of Report

1.3.1 Following this introductory chapter, there are **FIVE** further chapters:

- **Chapter 2 – PROPOSED DEVELOPMENT**, which presents the site location, development schedules, traffic arrangements and provisions of internal transport facilities for the proposed development;
- **Chapter 3 – EXISTING TRAFFIC CONDITION**, which describes the existing local road network in the vicinity of the proposed development; presents details of the traffic count survey and assess the existing traffic conditions;
- **Chapter 4 – FUTURE TRAFFIC CONDITION**, which assesses the annual growth rate to be adopted, estimates the potential traffic generations and attractions from the proposed development and future traffic flows on the surrounding road network;
- **Chapter 5 – TRAFFIC IMPACT ASSESSMENT**, which presents the findings of the traffic impact assessment for the reference and design scenarios, and recommends improvement measures, if necessary;
- **Chapter 6 – SUMMARY AND CONCLUSION**, which summarizes the findings of this study and presents the conclusions regarding the traffic issues associated with the proposed development.

## 2. PROPOSED DEVELOPMENT

### 2.1 Overview

- 2.1.1 The application site is situated at the land on north of Hoi Yu Street and the Island East Corridor ("IEC") along the Quarry Bay Waterfront Promenade. It consists of the part of land lot IL8590 R.P. and IL 8723, and the adjoining government land (which currently used as a temporary open space car parking). Location of the application site is shown in **Figure 2.1**.
- 2.1.2 The "OU(1)" portion of the site has a total area of about 8,532m<sup>2</sup>. A combined waterfront development comprising of 3 domestic blocks with maximum 225 residential units, 1 non-domestic block for cultural, leisure and entertainment uses, and some retails and Food & Beverage facilities will be provided. The development parameters of the previously approved scheme versus the current scheme are summarised in **Table 2.1** below.

**Table 2.1 Key Development Parameters**

	Previously Approved Scheme	Current Scheme
<b>Site Area</b>	About 8,532 m <sup>2</sup>	About 8,532 m <sup>2</sup>
<b>Uses</b>	Hotel & Office & Shop and Services, Eating Place, and Place of Recreation, Sport, or Culture	Cultural, Leisure and Entertainment uses, Eating Place, Shops and Services, and Flat
<b>Plot Ratio (PR)</b>	Approx. 4.4	Approx. 4.63
<b>Building Height</b>	About +34.0 mPD, +39.0 mPD and +41.0 mPD	About +26.3mPD, +40.7mPD and +44mPD
<b>No. of Storeys</b>	10 to 13 storeys including 1-storey of podium and 2 basement levels for car park	8, 13, 14 Including 1 storey of podium (i.e. eating place and shop and services at ground floor level) and 3 basement levels
<b>Gross Floor Area (GFA)</b>	<b>Total – 37,155m<sup>2</sup></b> Incl. Retail – 11,537m <sup>2</sup> Office – 8,070m <sup>2</sup> Hotel – 17,548m <sup>2</sup> (with 400 guest rooms)	<b>Total – about 39,480m<sup>2</sup></b> Domestic – about 26,545m <sup>2</sup> <b>(maximum 225 units)</b> Non-domestic – about 12,935m <sup>2</sup> (Including about 7,703m <sup>2</sup> for cultural facilities & about 4,617m <sup>2</sup> for retail/ F&B & about 615 m <sup>2</sup> for covered public open space)

- 2.1.3 A new waterfront cultural venue for exhibitions or multi-function events will be provided. Although no specify events is planned for the time being, such events would be some cultural digital museum or art related exhibitions, etc. with target visitor trips of about 5,000 guests per day.
- 2.1.4 Besides, approximately over 30% area on the ground plane of the proposed development will be given over to the public with aim to provide a potential spaces and environments for leisure or opportunity to engage with some special events like concerts, performances, etc.

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the "Other Specified Uses" zone annotated "Cultural and/or Commercial Leisure and Tourism Related Uses"

Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

2.1.5 The proposed development is planned to be completed by 2030 tentatively.

## 2.2 Proposed Development Access and Internal Transport Facilities Provision

2.2.1 The existing vehicular access of the approved industrial building is located at the local street connects perpendicularly to Hoi Yu Street. A separated vehicular access is provided at Hoi Yu Street for the existing temporary parking area. With the proposed development, a combined vehicular access at Hoi Yu Street will be provided on the east side of the site for access to its basement car park.

2.2.2 The required car parking and servicing provisions as stipulated under the latest Hong Kong Planning Standards and Guidelines (HKPSG) and the proposed provision are summarised in Table 2.2 below.

**Table 2.2 Required and Proposed Internal Transport Facilities Provision under the Latest HKPSG Requirement**

	Parameters	HKPSG Requirements	Required Provision (nos.)	Proposed Provision (nos.)
<b>• Residential</b>				
Car Parking	3 Blocks, 225 flats (GFA – about 26,545 sqm)	Global Parking Standard (GPS) x R1 x R2 x R3 <sup>(1)</sup>	99 to 173	173
Visitor parking		Additional 5 spaces per block	15	15
Motorcycle		1 space per 100-150 flats	2 to 3	3
Loading/ Unloading (L/UL)		Min 1 bay for every 800 flats or Min 1 bay for each block	Min. 3	3
<b>• Retail and F&amp;B Facilities</b>				
Car Parking	GFA – about 4,617m <sup>2</sup>	1 space per 150 - 300m <sup>2</sup>	16 to 31	31
Motorcycle		5% to 10% of total car parking	1 to 4	4
Loading/ Unloading		1 bay per 800-1,200m <sup>2</sup>	4 to 6	6
<b>• Cultural Facilities</b>				
Car Parking	GFA – about 7,703m <sup>2</sup>	(No requirement)	N/A	50
Loading/ Unloading		(No requirement)	N/A	3
Coach Parking		No requirement)	N/A	5
<b>• Total</b>				
Car Parking		-	115 to 204	204
Car parking for cultural		-	-	50
Visitor parking		-	15	15
<b>Total Car Parking</b>		-	-	<b>269 <sup>(2)</sup></b>
Motorcycle		-	3 to 7	<u>7</u>
L/UL		-	7 to 9	9 (6 in LGV, 3 in HGV)
L/UL for cultural		-	-	3 (in HGV)
<b>Total L/UL</b>		-	-	<b><u>12</u></b>
Coach Parking		-	-	<u>5</u>

Remarks: (1) GPS = 1 space per 4-7 flats; Demand Adjustment Ratio (R1) = 4.1 (average flat size between 100m<sup>2</sup> and 130m<sup>2</sup>); Accessibility Adjustment Ratio (R2) = 0.75 (within 500m-radius of rail station); Development Intensity Adjustment Ratio (R3) = 1.0 (Domestic Plot Ratio between 2 and 5).

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the “Other Specified Uses” zone annotated “Cultural and/or Commercial Leisure and Tourism Related Uses”  
Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

(2) Including 4 nos. accessible parking spaces.

- 2.2.3 A total of about 50m to 55m long laybys will be provided at ground floor on Hoi Yu Street. Car parking spaces and loading/ unloading bays will be provided at the basement levels. The traffic arrangement on G/F, B1, B2 and B3 under the Master Layout Plan (MLP) is shown in **Figure 2.2 to 2.5**.
- 2.2.4 The car parking and servicing provision for residential and retail (with F&B facilities) portions will be provided in accordance with the upper-end of the HKPSG requirement.
- 2.2.5 Owing that there is no specific requirement on transport facilities provision for “cultural” use under the latest HKPSG, additional 50 private car parking spaces and 5 bays for coaches will be provided for the cultural venue based on the estimated traffic trips by the cultural venue (with a design capacity of about 5,000 guests per day) and making reference to the “Public Transport Strategy Study, June 2017” as published by the Transport and Housing Bureau. Detail please refer to the later **Section 4.5**.
- 2.2.6 In addition, it is understood that the loading/ unloading demand for the cultural venue is generally low, hence 3 nos. loading/ unloading bays is expecting sufficient to cope with the operational needs of the cultural venue based on the past experiences of the potential operator (i.e. the digital museum). Besides, loading/ unloading activities for the cultural venue are usually carried out during the off-peak hours. The loading/ unloading bays could be share used with the residential and retail portions to increase the efficiency.
- 2.2.7 In summary, the car parking and servicing provision will be provided in accordance with the upper-end of the HKPSG requirement, even more for car parking, as listed in the following to provide a sustainable parking supply for the proposed development as well as its neighbourhood area.

**Table 2.3 Summary Table of Proposed Internal Transport Provision**

Internal Transport Provision	Dimension (L) x (W) x (H)	Residential	Retail and F&B Facilities	Cultural Facilities	Total
Car parking	5m x 2.5m x 2.4m	173	31	50	269
Visitor parking		15	-	-	
Motorcycle parking	2.4m x 1m x 2.4m	3	4		7
Loading/ LGV	7m x 3.5m x 3.6m	2	4	-	6
Unloading/ MGV/HGV	11m x 3.5m x 4.7m	1	2	3	6
Coach Parking	12m x 3.5m x 3.8m	-	-	5	5

Remarks: (1) Including 4 nos. accessible parking spaces in size of 5m x 3.5m x 2.4m.

## 2.3 Pedestrian Connection

- 2.3.1 Since Hoi Yu Street is ended with a cul-de-sac at its east-end, pedestrians access the Application Site from the nearest MTR Station (i.e. Quarry Bay Exit C) or the nearby public transport services mainly via King’s Road, Java Road and Hoi Yu Street at present. **Previously**, there **was** no crossing point or footpath provided on the southern part of Hoi Yu Street. Hence, all pedestrians accessing the area **relied** on the northern footpath of Hoi Yu Street, which the width is about 3.6m at the west-end (i.e. outside the North Point Police Station) but eventually reduced to about 1.6m near the Quarry Bay Salt Water Pumping Station and in front of the Application Site at present.
- 2.3.2 The pedestrian network in the area **has undergone** a major change with the Boardwalk project **completed in end 2025 (the main section, and the remaining supporting facilities is expecting to be completed in 2026)**. An integrated walkway system, accommodating a walkway and cycle track, running along the waterfront from the new reclamation area north (or Oil Street at the western end) to Hoi Yu Street at the eastern end **has been** constructed. The area adjacent to the Quarry Bay Salt Water Pumping Station will be reformed as open space and walkway to provide a continuous pedestrian connection along the waterfront promenade. In particular, the existing footpath near the Quarry Bay Salt Water Pumping Station and in front of the Application Site **has been** widened to minimum 3.5m by realigning the carriageway of Hoi Yu Street under the Boardwalk project.
- 2.3.3 **Meanwhile**, the piece of land underneath the IEC and adjoining the North Point Offtake Station will be converted into some Boardwalk facilities such as management office, public toilet, bike racks, open space and etc.. A new pedestrian crossing will also be provided near the Quarry Bay Salt Water Pumping Station. It is anticipated that a new route will be created for pedestrian accessing Hoi Yu Street and the pedestrians no longer rely on the northern footpath of Hoi Yu Street only **upon opening of the Boardwalk in end 2025**.
- 2.3.4 Besides, the access road from Hoi Chak Street to the Food and Environmental Hygiene Department (FEHD) Quarry Bay Depot GLA-THK-1038 (“the FEHD Depot”) runs parallel to the IEC could be retained as a pedestrian access for those pedestrians coming from the south direction or Quarry Bay MTR Exit A & B.
- 2.3.5 In view of the above-mentioned, it revealed that the pedestrian connectivity and accessibility in the area will be improved significantly in the future with the Boardwalk. The existing (assuming as the condition before opening of Boardwalk since it is yet fully completed) and future pedestrian routes to/ from the Application Site are showed in **Figure 2.6**.

## 2.4 The Planned Elevated Walkway

- 2.4.1 The elevated walkway across the IEC as has been planned as an indicative alignment under the latest Approved Quarry Bay Outline Zoning Plan (No. S/H21/28, September 2010), shown in **Figure 2.7**, and was agreed to be implemented under the S16 Approved Scheme by the previous owner at the time the aforesaid pedestrian improvement works was yet proposed by the Boardwalk project.

- 2.4.2 However, given the enhanced at-grade pedestrian facilities in the future, in particular the creation of new pedestrian routes by the Boardwalk and connections to Quarry Bay Park, a more direct and shorter pedestrian route will be provided which reduces the need for the elevated walkway from the application site to the hinterland. There is no justification for an elevated walkway above Quarry Bay Park to be implemented as part of this application.
- 2.4.3 A shorter footbridge over the IEC from the access road/ pedestrian entrance near the Quarry Bay Park Office, crossing Hoi Yu Street to the proposed development is therefore proposed and the proposed elevated walkway will be maintained and managed by the relevant Government department.
- 2.4.4 The elevated walkway over the IEC will be constructed by the developer and will connect directly into the development at the landscape deck level (Level 2). It will be available for public use at the time the development is to be occupied.

### 3. EXISTING TRAFFIC CONDITION

#### 3.1 Existing Road Network

- 3.1.1 The proposed development is situated at the land on north of Hoi Yu Street and the Island East Corridor (“IEC”) along the Quarry Bay Waterfront Promenade. It is mainly served by King’s Road, Java Road, Hoi Chak Street and Hoi Yu Street.
- 3.1.2 King’s Road is an east-west primary distributor connecting to Causeway Road to the west, and Shau Kei Wan Road to the east. It is the key distributor providing access for traffic between Quarry Bay and other area such as Causeway Bay, Chai Wan and the rest of Hong Kong Island and beyond.
- 3.1.3 Java Road is a one-way eastbound district distributor connecting Electric Road to the west and King’s Road to the east. It is essentially parallel to King’s Road. It connects with Hoi Yu Street adjacent to its junction with King’s Road and provides the main ingress and egress traffic route to the proposed development.
- 3.1.4 Hoi Chak Street is currently one of the key local access routes serving the Quarry Bay area. It is a two-way single four-lane carriageway connecting Hoi Yu Street to the north and Hoi Tai Street to the south.
- 3.1.5 Hoi Yu Street is a single 2 lanes local distributor which operates in two-way direction and ended with a cul-de-sac at its east-end. It connects with Java Road to the West and ended at the temporary open space car park near the entrance of the Eastern Harbour Crossing to the East. It is the only vehicular access serving the Quarry Bay Waterfront area and the application site.

#### 3.2 Existing Public Transport Services

- 3.2.1 The Quarry Bay MTR Station is located at the south-west of the proposed development with about 8 minutes walking journey from the Exit C and about 12 minutes walking journey from the Exit A/B. The alternative access from rail transport is from the Taikoo MTR Station which can be accessed from the Tai Koo Shing area via the existing footbridge network with about 20 minutes walking journey.
- 3.2.2 Currently, numerous road-based public transport services are operating within 500m catchment area of the proposed development. These include up to 54 routes for Franchised Buses, 5 routes for Green Mini-Buses (GMB) and numerous routes for Public Light Buses (PLB). Tram services are also provided on King’s Road. **Figure 3.1** showed the existing public transport facilities in the vicinity of the proposed development.
- 3.2.3 The proposed development is considered well served by the comprehensive public transport services within its 500m catchment area.

### 3.3 Existing Vehicular Traffic Condition

- 3.3.1 The key vehicular ingress and egress routes to/ from the proposed development are shown in **Figure 3.2**.
- 3.3.2 Eleven nearby road junctions, as listed in **Table 3.1**, were identified to be critical in this traffic impact assessment. Locations of these critical junctions are also indicated in **Figure 3.2**, whilst their existing junction arrangements and Method of Control (MOC) are shown in **Figures 3.3** to **3.13** respectively.
- 3.3.3 Manual classified traffic count survey was carried out at the identified critical junctions during the morning peak (07:30 to 09:30), noon (12:00-14:00) peak and evening (17:00 to 19:00) peak hours on a typical weekday in June 2025 (i.e. 26 June 2025) to obtain the up-to-date vehicular traffic pattern in the vicinity of the proposed development. Based on the observed traffic flows, it revealed that the AM peak, Noon peak and PM peak hours occurred from 08:30AM to 09:30AM, 12:00PM to 13:00 PM and 17:30PM to 18:30PM respectively.
- 3.3.4 The 2025 observed peak hour traffic flows are presented in **Figure 3.14**. Detailed calculation of the assessed existing operational performance of the identified junctions are attached in **Appendix A** and the results are summarized in **Table 3.1** below.

**Table 3.1 Identified Critical Junctions**

Ref. No.	Fig No.	Junctions	Type of Junction	Year 2025 RC/ RFC <sup>(1)(2)</sup>		
				AM Peak	Noon Peak	PM Peak
J1	<b>3.3</b>	Hoi Yu Street/ Hoi Chak Street	Priority	0.026	0.035	0.026
J2	<b>3.4</b>	Java Road/ Hoi Yu Street	Signalised	23%	82%	88%
J3	<b>3.5</b>	King's Road/ Java Road	Signalised	>100%	>100%	>100%
J4	<b>3.6</b>	Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street	Signalised	68%	>100%	82%
J5	<b>3.7</b>	King's Road/ Finnie Street	Signalised	>100%	>100%	93%
J6	<b>3.8</b>	King's Road/ Model Lane	Signalised	>100%	>100%	>100%
J7	<b>3.9</b>	Java Road/ Man Hong Street	Signalised	>100%	>100%	>100%
J8	<b>3.10</b>	King's Road/ Healthy Street West/ Man Hong Street	Signalised	>100%	>100%	>100%
J9	<b>3.11</b>	Tsat Tsz Mui Road/ Healthy Street West	Signalised	>100%	>100%	>100%
J10	<b>3.12</b>	Tsat Tsz Mui Road/ Tin Chiu West	Signalised	>100%	>100%	>100%
J11	<b>3.13</b>	King's Road/ Tin Chiu Street	Signalised	>100%	>100%	>100%

- Notes: (1) Zero Reserve Capacity (RC) represents signalised junction operating at capacity. Positive RC represents signalised junction operating with spare capacity. Negative RC means signalised junction is overloaded.
- (2) Ratio of Flow to Capacity (RFC) = 1.0 represents priority junction/roundabout operating at capacity. RFC < 1.0 represents priority junction/roundabout operating with spare capacity. RFC > 1.0 means priority junction/roundabout is overloaded.

3.3.5 As indicated in above **Table 3.1**, all the identified critical junctions are currently operating within their capacities during the peak hours.

### 3.4 Existing Pedestrian Traffic Condition

3.4.1 Pedestrian count survey was also carried out at the identified critical footpaths/crossing along Hoi Yu Street, Java Road, **Model Lane** and Hoi Chak Street/ Finnie Street/ Hoi Tai Street (based on the pedestrian route to/from the proposed development as shown in **Figure 2.6**) to obtain the up-to-date pedestrian traffic pattern in the vicinity of the proposed development in June 2025 (i.e. 25 June 2025 and 28 Jun 2025) during the time periods below:

- During the morning peak (07:30AM to 09:30AM), noon peak (12:00-14:00) and evening peak (17:30PM to 19:30PM) periods on a typical weekday; and
- During the morning peak (07:30AM to 09:30AM), noon peak (12:00-14:00) and evening peak (17:30PM to 19:30PM) periods on a typical weekend.

3.4.2 It was observed that the AM, noon and PM peak 15-min pedestrian flows occurred from 08:45AM to 09:00AM, 12:25PM to 12:40PM and 18:00PM to 18:15PM respectively on weekday; and 09:00AM to 09:15AM, 12:40PM to 12:55PM and 17:05PM to 17:20PM respectively on weekend. The 2025 observed peak pedestrian flows are presented in **Figure 3.16**.

3.4.3 Currently, pedestrians accessing Quarry Bay waterfront promenade and the application site are mainly via Hoi Yu Street and some via Hoi Chak Street/ Finnie Street/ Hoi Tai Street. A Level-Of-Service (LOS) assessment was therefore carried out to assess the existing performance of the identified critical sections of footpaths and crossings based on the observed peak 15-min pedestrian flows. Locations of these footpaths and crossing are shown in **Figure 3.15** and the summarised in **Table 3.2** and **Table 3.3** below:

**Table 3.2 Existing Performances of Identified Critical Sections of Footpaths/Cautionary Crossing**

Critical Footpath/ Cautionary Crossing <sup>(1)</sup>	Clear Width (m)	Eff. Width (m) <sup>(2)</sup>	Period		2-way Pedestrian Peak Flow (ped/15-min) <sup>(4)</sup>	Flow Rate (ped/min/m) <sup>(4)</sup>	LOS <sup>(5)</sup>
<b>Location A</b> Hoi Yu St.	1.05	0.8 <sup>(3)</sup>	Weekday	AM Peak	30	2.5	A
				Noon Peak	25	2.1	A
				PM Peak	60	5.0	A
			Weekend	AM Peak	60	5.0	A
				Noon Peak	35	2.9	A
				PM Peak	70	5.8	A
<b>Location B</b> Hoi Yu St.	3.5	2.5	Weekday	AM Peak	30	0.8	A
				Noon Peak	25	0.7	A
				PM Peak	60	1.6	A
			Weekend	AM Peak	60	1.6	A
				Noon Peak	35	0.9	A
				PM Peak	70	1.9	A
<b>Location C</b>	2.8	1.8	Weekday	AM Peak	165	6.1	A

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the “Other Specified Uses” zone annotated “Cultural and/or Commercial Leisure and Tourism Related Uses”

Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

Critical Footpath/ Cautionary Crossing <sup>(1)</sup>	Clear Width (m)	Eff. Width (m) <sup>(2)</sup>	Period		2-way Pedestrian Peak Flow (ped/15-min) <sup>(4)</sup>	Flow Rate (ped/min/m) <sup>(4)</sup>	LOS <sup>(5)</sup>
Java Road			Weekday	Noon Peak	315	11.7	A
				PM Peak	125	4.6	A
			Weekend	AM Peak	95	3.5	A
				Noon Peak	45	1.7	A
				PM Peak	60	2.2	A
<u>Location D</u> Java Road	3	2	Weekday	AM Peak	55	1.8	A
				Noon Peak	35	1.2	A
				PM Peak	85	2.8	A
			Weekend	AM Peak	15	0.5	A
				Noon Peak	25	0.8	A
<u>Location E</u> Java Road	2.8	1.8	Weekday	AM Peak	30	1.1	A
				Noon Peak	85	3.1	A
				PM Peak	45	1.7	A
			Weekend	AM Peak	10	0.4	A
				Noon Peak	10	0.4	A
<u>Location F</u> Hoi Yu St.	2.8	1.8	Weekday	AM Peak	120	4.4	A
				Noon Peak	305	11.3	A
				PM Peak	115	4.3	A
			Weekend	AM Peak	15	0.6	A
				Noon Peak	20	0.7	A
<u>Location H</u> Hoi Chak St.	4	3	Weekday	AM Peak	10	0.2	A
				Noon Peak	20	0.4	A
				PM Peak	20	0.4	A
			Weekend	AM Peak	10	0.2	A
				Noon Peak	10	0.2	A
<u>Location I</u> Model Lane	2	1	Weekday	AM Peak	635	42.3	D
				Noon Peak	145	9.7	A
				PM Peak	435	29.0	C
			Weekend	AM Peak	65	4.3	A
				Noon Peak	50	3.3	A
<u>Location J</u> Model Lane	2.6	1.6	Weekday	AM Peak	190	7.9	A
				Noon Peak	50	2.1	A
				PM Peak	535	22.3	B
			Weekend	AM Peak	20	0.8	A
				Noon Peak	30	1.3	A
				PM Peak	50	2.1	A

Notes: (1) Refer to Figure 3.15.

(2) Effective width is clear width deducting the horizontal clearance, generally 0.5m (i.e. Dead Width) on each side.

(3) Min. 0.8m clear width shall be adopted according to HCM 2000.

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the "Other Specified Uses" zone annotated "Cultural and/or Commercial Leisure and Tourism Related Uses"

Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

- (4) Observed 2-way Ped. Peak Flow rounded to the nearest 5; Flow Rate rounded to the nearest 0.1.  
 (5) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS “A” (best) to LOS “F” (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.

3.4.4 The result in the above **Table 3.2** indicated that all the identified critical sections of footpaths/cautionary crossing are currently operating with a LOS level of **“A” or above except the Model Lane.**

**Table 3.3 Existing Performances of Identified Critical Sections of Crossing**

Critical Crossing <sup>(1)</sup>	Period		Eff. Crosswalk Width (m)	2-way Pedestrian Peak Flow (ped/15-min) <sup>(2)</sup>	LOS of Cross walk <sup>(3)</sup>	Area of Waiting Space (m)	LOS of Waiting Space <sup>(3)</sup>
<b>Location G</b> <b>Java Road</b>	Weekday	AM Peak	4	25	A	North:18 South:16.8	A
		Noon Peak		30	A		A
		PM Peak		85	A		A
	Weekend	AM Peak		15	A		A
		Noon Peak		10	A		A
		PM Peak		15	A		A
<b>Location K</b> <b>Hoi Tai Street</b>	Weekday	AM Peak	3.1	20	A	North:11 South:15.6	A
		Noon Peak		70	A		B
		PM Peak		20	A		A
	Weekend	AM Peak		25	A		A
		Noon Peak		25	A		A
		PM Peak		10	A		A
<b>Location L</b> <b>Hoi Kwong Street</b>	Weekday	AM Peak	4.2	280	B	North:12.8 South:31.5	A
		Noon Peak		425	C		B
		PM Peak		280	B		A
	Weekend	AM Peak		45	A		A
		Noon Peak		150	A		A
		PM Peak		120	A		A
<b>Location M</b> <b>Finnie Street</b>	Weekday	AM Peak	2.5	80	B	North:14.3 South:16.2	A
		Noon Peak		525	F		C
		PM Peak		185	E		A
	Weekend	AM Peak		60	A		A
		Noon Peak		160	D		A
		PM Peak		135	C		A
<b>Location N</b> <b>Finnie Street</b>	Weekday	AM Peak	2.5	70	A	North:16.2 South:9.5	A
		Noon Peak		505	D		C
		PM Peak		180	A		A
	Weekend	AM Peak		30	A		A
		Noon Peak		100	A		A
		PM Peak		85	A		A
<b>Location O</b> <b>Hoi Tai Street</b>	Weekday	AM Peak	2	15	A	North:16.2 South:11.6	A
		Noon Peak		30	A		A
		PM Peak		25	A		A
	Weekend	AM Peak		55	A		A
		Noon Peak		85	B		A
		PM Peak		75	B		A

- Notes: (1) Refer to **Figure 3.15**.  
 (2) Observed 2-way Ped. Peak Flow rounded to the nearest 5; Flow Rate rounded to the nearest 0.1.  
 (3) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS “A” (best) to LOS “F” (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.  
 (4) Detailed calculations of the identified critical sections of crossing are attached in **Appendix A2**.

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the “Other Specified Uses” zone annotated “Cultural and/or Commercial Leisure and Tourism Related Uses”  
 Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

3.4.5 The result in the above **Table 3.3** indicated that the identified critical crossings at Java Road and Hoi Tai Street are currently operating with a LOS level of “B” or above. However, the identified critical crossings at Hoi Kwong Street and Finnie Street are currently operating at their capacities.

## 4. FUTURE TRAFFIC CONDITION

### 4.1 Design Year

4.1.1 The proposed development is planned to be completed with full intended operation by 2030 tentatively. In order to assess the possible traffic impacts to the local road network due to the proposed development, Year 2033 (3 years after completion, i.e. 2030 + 3 years) was adopted as the design year for this study.

### 4.2 Future Local Road Network and Pedestrian Linkage

4.2.1 It is anticipated no major road works and infrastructure to be constructed within the study area. Hence, it is considered that the traffic pattern in the local area is expecting to be similar as existing. The existing junction layouts were therefore adopted for the traffic impact assessment in the reference and design scenarios.

4.2.2 According to the project webpage of “Boardwalk underneath Island Eastern Corridor”, the Boardwalk has been fully completed by end 2025. Hence, the future pedestrian connection with the Boardwalk and its associated pedestrian trips were considered in the traffic impact assessment.

4.2.3 Meanwhile, an elevated walkway connects between the waterfront area at Hoi Yu Street and Quarry Bay Park was planned to be constructed under the latest Approved Quarry Bay OZP as mentioned in **Section 2**. Subject to future agreement between the applicant and government as to cover the cost of the bridge, it is assumed that the elevated walkway will be in placed in the reference and design scenarios.

### 4.3 Adopted Traffic Growth

4.3.1 In order to conduct the traffic forecast of Year 2033, a traffic growth factor was determined for the study area based on the following approaches.

#### Historical Traffic Growth and Planning Data

4.3.2 There are Annual Traffic Census (ATC) traffic count stations available in the vicinity of the proposed development. The annual traffic counts at these stations over the period between Year 2019 to Year 2024 reported in the latest ATC report are summarized in the following **Table 4.1**.

**Table 4.1 Annual Traffic Census (ATC) Traffic Counts Between Year 2019 to 2024**

Road Name	Stn. No.	Annual Average Daily Traffic (AADT)						Average Annual Growth Rate
		2019	2020	2021	2022	2023	2024	
Man Hong Street (Java Road - King's Road)	1613	21,340	23,780	25,860	24,680	25,390	25,450	3.59%
Java Road (Island Eastern Corridor - King's Road)	1635	20,820	18,770	20,600	19,410	19,830	19,650	-1.15%
King's Road (Healthy St W - Java Road)	2020	19,500	18,600	19,440	19,120	18,640	18,680	-0.86%
Java Road (Tong Shui Road - Tin Chiu Street)	2040	16,830	16,000	16,320	15,920	15,520	15,380	-1.79%
<b>Total</b>		<b>78,490</b>	<b>77,150</b>	<b>82,220</b>	<b>79,130</b>	<b>79,380</b>	<b>79,160</b>	<b>-0.05%</b>

4.3.3 As indicated in **Table 4.1** above, the average annual traffic growth pattern in the vicinity of the proposed development is in a declining trend of **-0.05%** per annum over the past 6 years.

**Traffic Growth Rate by Population Data**

4.3.4 The 2019-based Territorial Population and Employment Data Matrix (TPEDM) planning data for the Eastern District published by the Planning Department has also been considered. The population and employment planning data in Year 2019, Year 2026 and Year 2031 in Eastern District is summarized in **Table 4.2**.

**Table 4.2 2019-based Territorial Population and Employment Data Matrix**

	Population	Employment	Total
• Eastern District			
Year 2019	568,150	331,300	899,450
Year 2026	533,100	324,900	858,000
Year 2031	506,050	317,250	823,300
<b>Average Annual</b>	<b>-0.96%</b>	<b>+0.36%</b>	<b>-0.73%</b>

Note: (1) Source from webpage of Planning Department  
([https://www.pland.gov.hk/pland\\_en/info\\_serv/statistic/tpedm19/2019\\_based\\_Open\\_TPEDM\\_\(Data\).pdf](https://www.pland.gov.hk/pland_en/info_serv/statistic/tpedm19/2019_based_Open_TPEDM_(Data).pdf))

4.3.5 As indicated in the above **Table 4.2**, Eastern District has a negative average annual growth rate of -0.73% on the population and employment for the next few years.

4.3.6 As a conservative approach, a +0.50% annual growth rate is adopted to develop the 2033 reference traffic flows for the assessment. It is deemed sufficient to allow for any unexpected future growth as a result of some changes in land use or new developments in the study area.

#### 4.4 Traffic Generations of Nearby Planned and Committed Developments

4.4.1 In addition to the annual traffic growth rate, the major planned and committed developments in the vicinity of the proposed redevelopment as listed in **Tables 4.3** below have also been considered in the reference traffic forecast. Locations of the aforesaid developments are shown in **Figure 4.1**.

**Table 4.3 Major Planned and Committed Developments Nearby**

Major Planned and Committed Development	Anticipated Completion Year
The Boardwalk underneath Island Eastern Corridor	End 2025
Proposed Redevelopment of AIA Tower at No. 734 King's Road	Uncertain
Proposed Residential Development at 16-94 Pan Hoi Street and 983-987A King's Road, Quarry Bay, Hong Kong [A/H21/151]	Uncertain
Proposed Residential Development at No. 10-12 & 14-16 Mount Parker Road [A/H21/157]	Uncertain
Proposed Residential Development at 56-76 Kai Yuen Street [A/H8/435]	Uncertain

4.4.2 It is noted that the existing AIA Tower at No. 734 King's Road is planned to be redeveloped as a comprehensive building with office and retails uses. Based on the information obtained from Bravo, i.e. the online building records by Buildings Department (BD), a General Building Plan (GBP) has been submitted to BD and approved in 2022. It is assumed that the proposed redevelopment will be in place in Year 2033 and its traffic generations were considered in the traffic impact assessment although the existing building is yet demolished today.

4.4.3 A planning application proposing a commercial development in the existing "Residential (Group A)" Zone and an area shown as "Road" at 16-94 Pan Hoi Street and 983-987A King's Road, Quarry Bay [A/H21/151A] was submitted to Town Planning Board (TPB) in 2020. Although the aforesaid application has been rejected by TPB, the site is always permitted to be redeveloped as residential use under the current OZP. Therefore, traffic generations for residential development have been adopted into the assessment.

4.4.4 Another planning application proposing a minor relaxation of building height from +120mPD to +139.75mPD for the proposed residential development at 992-998 King's Road and 2-16 Mount Parker Road, Quarry Bay was submitted to TPB and approved with conditions in December 2022. It is observed that construction works have been commenced on-site. Hence, the development is anticipated will be in place in Year 2033 and its traffic generations were considered in the assessment.

4.4.5 Also, a Section 16 application proposing a minor relaxation of Plot Ratio and Building Height Restrictions at Land falling within "Comprehensive Development Area (2)" zone and an area

shown as 'Road' at Kai Yuen Street, North Point was submitted to TPB and approved with conditions in February 2023. It is observed that construction works have been commenced on-site. Hence, the development is anticipated will be in place in Year 2033 and its traffic generations were considered in the assessment also.

4.4.6 Traffic generations and attractions of the nearby planned/ committed developments are listed in **Table 4.4** to **Table 4.8** below.

**Table 4.4 Adopted Traffic Trips of the Boardwalk underneath Island Eastern Corridor**

	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Expected Two-way Volumes at Hoi Yu Street	309		134	

Remarks: (1) Source from Agreement No. CE 41/2014(HY) Boardwalk underneath Island Eastern Corridor – Investigation Assessment on Pedestrian and Cyclist Demand for Proposed Boardwalk

**Table 4.5 Adopted Traffic Trips of the Proposed Redevelopment of AIA Tower at No. 734 King's Road**

	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Land Use	Office with portion of retail			
Key Parameters	About 27,870m <sup>2</sup>			
Office Trip Rates (pcu/hr/100m <sup>2</sup> GFA, mean) <sup>(1)</sup>	0.1703	0.2452	0.1573	0.1175
Total Traffic Trips (pcu/hr)	48	69	44	33

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.  
(2) Source from Bravo – online building records.

**Table 4.6 Adopted Traffic Trips of the Proposed Residential Development at 16-94 Pan Hoi Street and 983-987A King's Road, Quarry Bay**

	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Land Use	Residential			
Key Parameters	900 flats, average flat size about 60m <sup>2</sup>			
Residential Trip Rates (pcu/hr/flat, Private Housing: High Density/R(A) & Avg. flat size 60m <sup>2</sup> , mean) <sup>(1)</sup>	0.0718	0.0425	0.0286	0.037
Total Traffic Trips (pcu/hr)	65	39	26	34

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.  
(2) Source from Town Planning Board Statutory Planning Portal. Planning Application No. A/H21/151A refers.

**Table 4.7 Adopted Traffic Trips of the Proposed Residential Development at No. 10-12 & 14-16 Mount Parker Road**

	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Land Use	Residential			
Key Parameters	592 flats, average flat size about 67m <sup>2</sup>			
Residential Trip Rates (pcu/hr/flat, Private Housing: High Density/R(A) & Avg. flat size 67m <sup>2</sup> , mean) <sup>(1)</sup>	0.0888	0.0515	0.0356	0.048
Total Traffic Trips (pcu/hr)	53	31	22	29

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.

(2) Source extracted from Monthly Digest, Building Department.

**Table 4.8 Adopted Traffic Trips of the Proposed Residential Development at 56-76 Kai Yuen Street**

	AM Peak		PM Peak	
	Generation	Attraction	Generation	Attraction
Land Use	Residential			
Key Parameters	1461 flats, average flat size about 85m <sup>2</sup>			
Residential Trip Rates (pcu/hr/flat, Private Housing: High Density/R(A) & Avg. flat size 85m <sup>2</sup> , mean) <sup>(1)</sup>	0.1887	0.0942	0.0862	0.1214
Total Traffic Trips (pcu/hr)	276	138	126	178

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.

(2) Source from Town Planning Board Statutory Planning Portal. Planning Application No. A/H8/432 refers

4.4.7 The 2033 reference traffic flows were therefore developed based on the 2025 observed traffic flow with the aforesaid growth rate and traffic generations of the nearby planned and committed developments adopted as shown in **Figure 4.2**.

## 4.5 Traffic Generations of Proposed Development

4.5.1 As mentioned in **Section 1**, the lot IL8590 R.P. and IL8723 R.P. could either be developed as an industrial building or the previously approved scheme (i.e. hotel + office + retails) together with the government lot (which is currently used as a temporary open space car parking). The traffic trips by the temporary open space car parking were therefore deducted in the calculation of the traffic forecast.

- 4.5.2 The cultural venue/ digital museum is planned to have a servicing capacity of about 5,000 guests per day. Visitors would flow through the space with an expected stay of about 45-60 mins, subject to future operation, for each immersive experience (i.e. “show”). Hence, visitors would come and go constantly within the opening hours between 10:00AM to 19:00PM. Therefore, it was assumed that about 11.1% of the visitors would come during the PM peak hours (i.e. average of the 9 hours and nil during the AM peak as it is anticipated yet opened) and the estimated traffic generations by the cultural venue/ digital museum were superimposed onto the reference traffic flows to assess the potential traffic impact due to the proposed development.
- 4.5.3 The traffic trips to be generated by the cultural venue/ digital museum were estimated by making reference to the traffic modal split mentioned in Chapter 3 of the “Public Transport Strategy Study, June 2017” as published by Transport and Housing Bureau. The result is summarized in **Table 4.9** below.

**Table 4.9 Anticipated Traffic Generation by the Cultural Venue/ Digital Museum**

Transport Mode	Distribution <sup>(1)</sup> (%)	No. of Guest (people)	Additional Vehicular Traffic Trips (pcu) <sup>(4)</sup>
Rail	38.7%	0 (215)	-
Ferry	0.9%	0 (5)	-
Franchised Bus	27%	0 (150)	-
PLB	13.5%	0 (75)	-
Tram	0.9%	0 (5)	-
Private Vehicle	10%	0 (56) <sup>(2)</sup>	0 (28)
SPB	1.8%	0 (10) <sup>(3)</sup>	0 (1)
Taxi	7.2%	0 (40) <sup>(2)</sup>	0 (20)
<b>Total</b>	<b>100%</b>	<b>0 (556)</b>	<b>0 (49)</b>

Remarks: (1) According to Paragraph 3.12 in Chapter 3 of the “Public Transport Strategy Study, June 2017”;  
(2) Assuming 2 passengers per private vehicle and 2 passengers per taxi;  
(3) Assuming 24 passengers per SPB;  
(4) Adopted pcu factor: 1 for private vehicle and 1.5 for SPB.

### Vehicular Traffic

- 4.5.4 The estimated vehicular traffic trips to be generated by the proposed development during the peak hours are summarized in **Table 4.10** below.

**Table 4.10 Anticipated Traffic Generation of the Proposed Development**

Traffic Trips	AM Peak		Noon Peak		PM Peak	
	Gen.	Att.	Gen.	Att.	Gen.	Att.
<b>Proposed Development ..... (A)</b>						
Residential Units & Size	Not more than 225 flats					
Residential Trip Rates (pcu/hr/flat, Private Housing/ Medium-Density R(B), mean) <sup>(1)</sup>	0.1887	0.0942	0.0862	0.1214	0.0862	0.1214
Traffic Trips (pcu/hr)	43	22	20	28	20	28
Retail and F&B Facilities GFA (m <sup>2</sup> )	4,617m <sup>2</sup>					
Retail Trip Rates (pcu/hr/100m <sup>2</sup> GFA, mean) <sup>(1)</sup>	0.2296	0.2434	0.3100	0.3563	0.3100	0.3563
Traffic Trips (pcu/hr)	11	12	15	17	15	17
<b>Total Traffic Trips (pcu/hr)</b>	<b>54</b>	<b>34</b>	<b>35</b>	<b>45</b>	<b>35</b>	<b>45</b>
<b>Traffic Generation by the Cultural Venue/ Digital Museum ..... (B)</b>						
Traffic Trips (pcu/hr)	0	0	49	49	49	49
<b>Existing temporary open space car park at the Adjoining Government Land ..... (C)</b>						
Observed Trips (pcu/hr)	20	0	0	15	0	15
<b>Different in Traffic Trips ..... (A + B – C)</b>						
Net Traffic Trips (pcu/hr)	34	34	84	79	84	79
<b>2-way Vehicular Trips (pcu/hr)</b>	<b>68</b>		<b>163</b>		<b>163</b>	

Remarks: (1) Refer to TPDM Volume 1 Chapter 3 Appendix 1 Table 1.

(2) As no information is provide in TPDM for noon peak, trip rate of PM peak was therefore adopted for Noon peak as a conservative approach.

- 4.5.5 As indicated in **Table 4.10** above, it is anticipated that the proposed development would generate an additional two-way traffic trips of some 68 pcu/hr in the AM peak, some 163 pcu/hr in Noon peak, and some 163 pcu/hr during the PM peak.
- 4.5.6 Based on the anticipated traffic generations and key vehicular ingress and egress routes to/ from the proposed development as showed in **Figure 3.2**, the estimated traffic generations were then superimposed onto the year 2033 reference traffic flows to derive the year 2033 design traffic flows as shown in **Figure 4.3**. The distribution of development traffic trips is shown in **Figure 4.4**.

Pedestrian Traffic

4.5.7 Pedestrian traffic generations of the proposed development were also estimated. In-house data, as summarized in **Table 4.11**, was adopted to estimate the traffic trips by the residential and retail portions and the anticipated traffic generations by the cultural venue/ digital museum were also considered.

**Table 4.11 Adopted Pedestrian Generation Rates**

	AM Peak		Noon Peak		PM Peak	
	Generation	Attraction	Generation	Attraction	Generation	Attraction
Residential Trip Rates (Private Housing) (ped/hr/flat) <sup>(1)</sup>	0.7230	0.4400	0.3660	0.2640	0.3660	0.2640
Retail Trip Rates (ped/15 mins/100m <sup>2</sup> GFA)	0.1005	0.1417	0.2936	0.273	0.2936	0.273

Remarks: (1) Based on in-house data.

(2) Trip rate of PM peak was adopted for Noon peak as a conservative approach.

4.5.8 The estimated pedestrian traffic trips to be generated by the proposed development during the peak hours are summarized in **Table 4.12** below.

**Table 4.12 Anticipated Pedestrian Generation of Proposed Development**

Traffic Trips	AM Peak		Noon Peak		PM Peak	
	Gen.	Att.	Gen.	Att.	Gen.	Att.
<b>Proposed Development ..... (A)</b>						
Residential Units & Size	Not more than 225 flats					
Residential Trip Rates (ped/15 mins/flat)	0.7230	0.4400	0.3660	0.2640	0.3660	0.2640
Pedestrian Peak Flows (ped/ 15 mins)	41	25	21	15	21	15
Retail and F&B Facilities GFA (m <sup>2</sup> )	4,617m <sup>2</sup>					
Retail Trip Rates (ped/15 mins/100m <sup>2</sup> GFA)	0.1005	0.1417	0.2936	0.273	0.2936	0.273
Pedestrian Peak Flows (ped/ 15 mins)	1	2	4	3	4	3
Total Pedestrian Trips (ped/ 15 mins)	42	27	25	18	25	18
<b>Total 2-way Pedestrian Trips (ped/15 mins)</b>	69		43		43	
<b>Traffic Generation by the Cultural Venue/ Digital Museum ..... (B)</b>						
<b>Pedestrian Trips (ped/15 mins)<sup>(2)</sup></b>	0		113		113	
<b>Total Pedestrian Trips ..... (A + B)</b>						
<b>Total 2-way Pedestrian Trips (ped/15 mins)</b>	<b>69</b>		<b>156</b>		<b>156</b>	

Remarks: (1) Trip rate of PM peak was adopted for Noon peak as a conservative approach.

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the "Other Specified Uses" zone annotated "Cultural and/or Commercial Leisure and Tourism Related Uses"

Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

(2) As mentioned in Section 4.5.2, the serving capacity of the Cultural Venue/ Digital Museum is about 5000 guests per day with 0%, 11.1% & 11.1% visitor distribution during AM, Noon & PM peak hour respectively. Therefore, the peak 15-min pedestrian trips are 0, 113 & 113 during AM, Noon & PM peak hour respectively.

- 4.5.9 It is anticipated that the proposed development would generate a 2-way pedestrian trips of 69 pedestrians per peak 15 minutes during the AM peak, 156 pedestrians per peak 15 minutes during the Noon peak, and 156 pedestrians per peak 15 minutes during the PM peak.
- 4.5.10 With the cultural venue/ digital museum, the proposed development is expecting to become one of the attractions of the Quarry Bay Waterfront Promenade. Although majority of the trips by the cultural venue/ digital museum are anticipated coming from/ travelling to the Boardwalk, it was assumed that half of the pedestrian trips would access from Hoi Yu Street/ Java Road and the other half would access via the elevated walkway as a conservative approach.
- 4.5.11 Similar to the vehicular traffic forecast, the estimated pedestrian traffic generations were then superimposed onto the year 2033 reference traffic flows to derive the year 2033 design traffic flows based on the anticipated pedestrian traffic generations as showed in **Figure 3.16**.

## 5. TRAFFIC IMPACT ASSESSMENT

### 5.1 Junction Performance Assessment

5.1.1 In order to investigate the potential traffic impacts to the local road network upon completion of the proposed development, operational performances assessment for the identified critical junctions were conducted, for both the reference and design scenarios in Year 2033. The assessment results are summarised in **Table 5.1** below.

**Table 5.1 Junction Performance of Critical Junctions in Year 2033**

Ref. No.	Junctions	Type of Junction	RC/ RFC <sup>(1)(2)</sup>					
			Reference Year 2033			Design Year 2033		
			AM Peak	Noon Peak	PM Peak	AM Peak	Noon Peak	PM Peak
J1	Hoi Yu Street/ Hoi Chak Street	Priority	0.052	0.059	0.039	0.175	0.303	0.275
J2	Java Road/ Hoi Yu Street	Signalised	18%	74%	80%	14%	57%	72%
J3	King's Road/ Java Road	Signalised	>100%	>100%	>100%	>100%	>100%	>100%
J4	Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street	Signalised	61%	>100%	72%	60%	>100%	72%
J5	King's Road/ Finnie Street	Signalised	92%	96%	40%	92%	96%	40%
J6	King's Road/ Model Lane	Signalised	>100%	>100%	93%	>100%	>100%	84%
J7	Java Road/ Man Hong Street	Signalised	76%	85%	82%	74%	81%	77%
J8	King's Road/ Healthy Street West/ Man Hong Street	Signalised	95%	87%	97%	93%	84%	93%
J9	Tsat Tsz Mui Road/ Healthy Street West	Signalised	>100%	>100%	>100%	>100%	>100%	>100%
J10	Tsat Tsz Mui Road/ Tin Chiu West	Signalised	58%	75%	83%	57%	73%	81%
J11	King's Road/ Tin Chiu Street	Signalised	>100%	>100%	>100%	>100%	>100%	>100%

Notes: (1) Zero Reserve Capacity (RC) represents signalised junction operating at capacity. Positive RC represents signalised junction operating with spare capacity. Negative RC means signalised junction is overloaded.

(2) Ratio of Flow to Capacity (RFC) = 1.0 represents priority junction/roundabout operating at capacity. RFC < 1.0 represents priority junction/roundabout operating with spare capacity. RFC > 1.0 means priority junction/roundabout is overloaded.

5.1.2 As indicated in **Table 5.1** above, all the identified critical junctions would still be operating within their capacities in both the reference and design scenarios in Year 2033. However, the junction performance of J2 would drop from 18% to 14% (i.e. less than 15% which is the preferable benchmark). In addition to the traffic flows to be generated by the new developments in Taikoo Place area (the newly opened Taikoo Place 2 building which is expected not yet fully occupied and the potential Pan Hoi Street redevelopment), it is anticipated that the left turn traffic of Java Road (eastbound) at the junction of Java Road/ Hoi Yu Street would become busier. In this regard, junction improvement to the Java Road/ Hoi Yu Street, in particular the left turn movement, is suggested. Details of the proposed junction improvement works are shown in **Figure 5.1**.

## 5.2 Proposed Junction Improvement Measure

5.2.1 Under the proposed junction improvement scheme, additional traffic lane (i.e. two lanes in total) would be provided for the left turn traffic of Java Road (eastbound). Alignment of the existing kerbline outside the police station is proposed to be modified slightly to provide more manoeuvring space for the traffic turning to Hoi Yu Street. With due consideration the site constraint of the existing high mast lighting at J2, it is proposed to convert the section of Hoi Yu Street (westbound) from existing 2-lane to a 1-lane carriageway. Hence the disturbance and nuisance during the construction could also be minimised.

5.2.2 Besides, the footpath at Hoi Yu Street outside the police station and the existing cautionary pedestrian crossing at Hoi Chak Street would also be widened under the proposed junction improvement scheme.

5.2.3 On the other hand, improvement to the junction of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street, i.e. J4, is also proposed to cope with the pedestrian walking environment. Details please refer to **Section 5.4**.

5.2.4 Operational performances of J1 (i.e. Junction Hoi Yu Street/ Hoi Chak Street), J2 (i.e. Java Road/ Hoi Yu Street) and J4 (i.e. Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street) under the proposed improvement scheme were assessed and the result is summarized in **Table 5.2** below.

**Table 5.2 Junction Performance of J1, J2 and J4 Under Proposed Improvement Schemes**

Ref. No.	Junctions	Type of Junction	Year 2033 RC/ RFC <sup>(1)(2)</sup>					
			Existing Layout			With Improvement		
			AM Peak	Noon Peak	PM Peak	AM Peak	Noon Peak	PM Peak
J1	Hoi Yu Street/ Hoi Chak Street	Priority	0.175	0.303	0.275	0.175	0.303	0.275
J2	Java Road/ Hoi Yu Street <sup>(4)</sup>	Signalised	14%	57%	72%	44%	25%	57%
J4 <sup>(3)</sup>	Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street	Signalised	60%	>100%	72%	27%	50%	43%

Notes: (1) Zero Reserve Capacity (RC) represents signalised junction operating at capacity. Positive RC represents signalised junction operating with spare capacity. Negative RC means signalised junction is overloaded.

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the "Other Specified Uses" zone annotated "Cultural and/or Commercial Leisure and Tourism Related Uses"

Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

- (2) Ratio of Flow to Capacity (RFC) = 1.0 represents priority junction/roundabout operating at capacity. RFC < 1.0 represents priority junction/roundabout operating with spare capacity. RFC > 1.0 means priority junction/roundabout is overloaded.
- (3) The junction of J4 will be modified to improve the pedestrian situation as shown in **Figure 5.2**.
- (4) It is understood that TD has planned to convert the existing cautionary crossing at Java Road/ Hoi Yu Street to a signalised crossing . It has been adopted into our proposed improvement scheme.

5.2.5 Swept path analysis of long vehicles accessing the junctions under the proposed arrangement have also been conducted and the drawings are attached in **Appendix B** for reference.

### 5.3 Pedestrian Assessment

5.3.1 Based on the estimated pedestrian generations by the proposed development as summarised in **Table 4.12** and the key pedestrian routes accessing the proposed development as showed in **Figure 2.6.**, performance of the identified critical sections of footpath in Year 2033 were assessed and the result is shown in **Figure 3.16** summarized in **Table 5.3** below.

**Table 5.3 Year 2033 Performances of Identified Critical Sections of Footpaths/Cautionary Crossing**

Critical Footpath/ Cautionary Crossing <sup>(1)</sup>	Clear Width (m)	Eff. Width (m) <sup>(2)</sup>	Peak Period	Reference Year 2033			Design Year 2033			
				2-way Pedestrian Peak Flow (ped/15-min) <sup>(4)</sup>	Flow Rate (ped/min/m) <sup>(4)</sup>	LOS <sup>(5)</sup>	2-way Pedestrian Peak Flow (ped/15-min) <sup>(4)</sup>	Flow Rate (ped/min/m) <sup>(4)</sup>	LOS <sup>(5)</sup>	
Location A Hoi Yu St.	3.5	2.5	Weekday	AM	70	1.9	A	105	2.8	A
				Noon	65	1.7	A	145	3.9	A
				PM	105	2.8	A	180	4.8	A
			Weekend	AM	95	2.5	A	130	3.5	A
				Noon	70	1.9	A	150	4.0	A
				PM	105	2.8	A	185	4.9	A
Location B Hoi Yu St.	3.5	2.5	Weekday	AM	70	1.9	A	100	2.7	A
				Noon	65	1.7	A	130	3.5	A
				PM	105	2.8	A	170	4.5	A
			Weekend	AM	95	2.5	A	125	3.3	A
				Noon	70	1.9	A	135	3.6	A
				PM	105	2.8	A	170	4.5	A
Location C Java Road	2.8	1.8	Weekday	AM	205	7.6	A	230	8.5	A
				Noon	365	13.5	A	410	15.2	A
				PM	160	5.9	A	205	7.6	A
			Weekend	AM	130	4.8	A	155	5.7	A
				Noon	75	2.8	A	125	4.6	A
				PM	90	3.3	A	135	5.0	A
Location D	3	2	Weekday	AM	65	2.2	A	70	2.3	A

Java Road				Noon	50	1.7	A	70	2.3	A	
				PM	100	3.3	A	120	4.0	A	
				Weekend	AM	25	0.8	A	25	0.8	A
					Noon	35	1.2	A	55	1.8	A
				PM	50	1.7	A	65	2.2	A	
Location E Java Road	2.8	1.8	Weekday	AM	35	1.3	A	35	1.3	A	
				Noon	90	3.3	A	95	3.5	A	
				PM	50	1.9	A	55	2.0	A	
				Weekend	AM	15	0.6	A	15	0.6	A
					Noon	15	0.6	A	20	0.7	A
PM	20	0.7	A	25	0.9	A					
Location F Hoi Yu St.	2.8	1.8	Weekday	AM	125	4.6	A	125	4.6	A	
				Noon	320	11.9	A	320	11.9	A	
				PM	120	4.4	A	120	4.4	A	
				Weekend	AM	20	0.7	A	20	0.7	A
					Noon	25	0.9	A	25	0.9	A
PM	30	1.1	A	30	1.1	A					
Location H Hoi Chak St.	4	3	Weekday	AM	15	0.3	A	20	0.4	A	
				Noon	25	0.6	A	35	0.8	A	
				PM	25	0.6	A	35	0.8	A	
				Weekend	AM	15	0.3	A	20	0.4	A
					Noon	15	0.3	A	25	0.6	A
PM	20	0.4	A	30	0.7	A					
Location I Model Lane	2	1	Weekday	AM	700	46.7	D	730	48.7	D	
				Noon	190	12.7	A	265	17.7	B	
				PM	495	33.0	D	565	37.7	D	
				Weekend	AM	100	6.7	A	135	9.0	A
					Noon	85	5.7	A	155	10.3	A
PM	185	12.3	A	255	17.0	B					
Location J Model Lane	2.6	1.6	Weekday	AM	200	8.3	A	200	8.3	A	
				Noon	55	2.3	A	55	2.3	A	
				PM	560	23.3	C	560	23.3	C	
				Weekend	AM	25	1.0	A	25	1.0	A
					Noon	35	1.5	A	35	1.5	A
PM	55	2.3	A	55	2.3	A					

- Notes: (1) Refer to **Figure 3.15**.  
(2) Effective width is clear width deducting the horizontal clearance, generally 0.5m (i.e. Dead Width) on each side.  
(3) Min. 0.8m clear width shall be adopted according to HCM 2000.  
(4) Observed 2-way Ped. Peak Flow rounded to the nearest 5; Flow Rate rounded to the nearest 0.1.  
(5) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS "A" (best) to LOS "F" (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.

5.3.2 The result in the above **Table 5.3** indicated that all the identified critical sections of footpaths/cautionary crossing would be operating with a LOS level of "A" or above except the **Model Lane**.

5.3.3 As indicated in **Table 5.3** above, it is revealed that the footpaths of Model Lane (Location I and J) are currently operating at their capacity even without the proposed development. Meanwhile, the assessment result showed that insignificant traffic impact to the footpaths of Model Lane would be induced by the proposed development. Also, it is anticipated that the proposed elevated footbridge over IEC would diverge some pedestrians from Model Lane to Finnie Street hence the performance of footpaths of Model Lane would be improved in the

future. In this regard, no improvement scheme for the footpaths of Model Lane would be proposed under this study.

**Table 5.4 Year 2033 Performances of Identified Critical Sections of Crossing**

Critical Crossing <sup>(1)</sup>	Peak Period		Eff. Crosswalk Width (m)	LOS of Crosswalk <sup>(3)</sup>	Reference Year 2033			Design Year 2033		
					2-way Pedestrian Peak Flow (ped/15-min) <sup>(2)</sup>	LOS of Crosswalk <sup>(3)</sup>	LOS of Waiting Space <sup>(3)</sup>	2-way Pedestrian Peak Flow (ped/15-min) <sup>(2)</sup>	LOS of Crosswalk <sup>(3)</sup>	LOS of Waiting Space <sup>(3)</sup>
Location G Java Road	Weekday	AM	4	North:18 South:16.8	35	A	A	40	A	A
		Noon			45	A	A	65	A	A
		PM			100	A	A	120	A	A
	Weekend	AM			25	A	A	30	A	A
		Noon			25	A	A	40	A	A
		PM			30	A	A	45	A	A
Location K Hoi Tai Street	Weekday	AM	3.1	North:11 South:15.6	25	A	A	25	A	A
		Noon			75	A	B	75	A	B
		PM			25	A	A	25	A	A
	Weekend	AM			30	A	A	30	A	A
		Noon			30	A	A	30	A	A
		PM			15	A	A	15	A	A
Location L Hoi Kwong Street	Weekday	AM	4.2	North:12.8 South:31.5	295	B	A	295	B	A
		Noon			445	C	B	445	C	C
		PM			295	B	A	295	B	A
	Weekend	AM			50	A	A	50	A	A
		Noon			160	A	A	160	A	A
		PM			130	A	A	130	A	A
Location M Finnie Street	Weekday	AM	2.5	North:14.3 South:16.2	85	B	A	85	B	A
		Noon			550	F	C	550	F	C
		PM			195	E	A	195	E	A
	Weekend	AM			65	A	A	65	A	A
		Noon			170	D	A	170	D	A
		PM			145	C	A	145	C	A
Location N Finnie Street	Weekday	AM	2.5	North:16.2 South:9.5	115	A	A	150	A	A
		Noon			570	D	C	645	D	C
		PM			230	B	A	305	C	A
	Weekend	AM			65	A	A	100	A	A
		Noon			140	A	A	215	B	A
		PM			125	A	A	200	B	A
Location O Hoi Tai Street	Weekday	AM	2	North:16.2 South:11.6	55	A	A	90	B	A
		Noon			75	B	A	150	C	B
		PM			65	B	A	145	C	A
	Weekend	AM			90	B	A	125	C	A
		Noon			125	C	A	200	D	A
		PM			115	C	A	190	D	A

- Notes: (1) Refer to Figure 3.15.  
(2) Observed 2-way Ped. Peak Flow rounded to the nearest 5; Flow Rate rounded to the nearest 0.1.  
(3) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS "A" (best) to LOS "F" (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.  
(4) Detailed calculations of the identified critical sections of crossing are attached in Appendix A2.

5.3.4 The result in the above Table 5.4 indicated that the identified critical crossings at Java Road would be operating with a LOS level of "B" or above. However, the identified critical crossings at Hoi Kwong Street, Finnie Street and Hoi Tai Street would be operating at their capacities.

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the "Other Specified Uses" zone annotated "Cultural and/or Commercial Leisure and Tourism Related Uses"

Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

## 5.4 Proposed Pedestrian Improvement Measure

5.4.1 It is proposed to realign and re-arrange the pedestrian crossings at the junction of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street as shown in **Figure 5.2** to improve the pedestrian walking environment. It is understood that TD has planned to convert the existing cautionary crossing at Java Road/ Hoi Yu Street to a signalised crossing. It has been adopted into our proposed improvement scheme as shown in **Figure 5.1**.

5.4.2 Operational performances of the crossings at the junction of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street under the proposed improvement scheme were assessed and the result is summarized in **Table.5** below.

**Table 5.5 Performances of Identified Crossing Under Proposed Improvement Scheme**

Critical Crossing (1)	Peak Period		Existing Layout				With Improvement					
			Eff. Crosswalk Width (m)	Reference Year 2033		Design Year 2033		Eff. Crosswalk Width (m)	Reference Year 2033		Design Year 2033	
				LOS of Crosswalk (2)	LOS of Waiting Space(2)	LOS of Crosswalk (2)	LOS of Waiting Space(2)		LOS of Crosswalk (2)	LOS of Waiting Space(2)	LOS of Crosswalk (2)	LOS of Waiting Space(2)
Location G' Java Road	Weekday	AM	4	A	A	A	A	5	A	A	A	A
		Noon		A	A	A	A		A	A	A	
	PM	A		A	A	A	A		A	A		
	Weekend	AM		A	A	A	A		A	A	A	
		Noon		A	A	A	A		A	A	A	
	PM	A		A	A	A	A		A	A		
Location F1'(3) Hoi Yu Street	Weekday	AM	/	/	/	/	/	5	A	A	A	A
		Noon		/	/	/	/		C	A	C	A
	PM	/		/	/	/	A		A	A	A	
	Weekend	AM		/	/	/	/		A	A	A	A
		Noon		/	/	/	/		A	A	A	A
	PM	/		/	/	/	A		A	A	A	
Location F2'(3) Hoi Yu Street	Weekday	AM	/	/	/	/	/	5	B	A	B	A
		Noon		/	/	/	/		C	A	C	A
	PM	/		/	/	/	A		A	A	A	
	Weekend	AM		/	/	/	/		A	A	A	A
		Noon		/	/	/	/		A	A	A	A
	PM	/		/	/	/	A		A	A	A	
Location M' Hoi Tai Street	Weekday	AM	2.5	B	A	B	A	6	A	A	A	A
		Noon		F	C	F	C		C	B	C	B
	PM	E		A	E	A	B		A	B	A	
	Weekend	AM		A	A	A	A		A	A	A	A
		Noon		D	A	D	A		B	A	B	A
	PM	C		A	C	A	A		A	A	A	
Location N' Hoi Tai Street	Weekday	AM	2.5	A	A	A	A	5.5	A	A	A	A
		Noon		D	C	D	C		C	B	C	B
	PM	B		A	C	A	A		A	A	A	
	Weekend	AM		A	A	A	A		A	A	A	A
		Noon		A	A	B	A		A	A	A	A
	PM	A		A	B	A	A		A	A	A	
Location O' Hoi Tai Street	Weekday	AM	2	A	A	B	A	5	A	A	A	A
		Noon		B	A	C	B		A	A	A	A
	PM	B		A	C	A	A		A	A	A	
	Weekend	AM		B	A	C	A		A	A	A	A
		Noon		C	A	D	A		B	A	B	A
	PM	C		A	D	A	B		A	B	A	

Notes: (1) Refer to **Figure 5.2**.

Proposed Amendment to the Notes of the Approved Quarry Bay OZP relating to the "Other Specified Uses" zone annotated "Cultural and/or Commercial Leisure and Tourism Related Uses"

Inland Lots 8590 RP (Part) and 8723 RP (Part) and Adjoining Government Land, Hoi Yu Street, Quarry Bay

- (2) According to the Highway Capacity Manual 2000 (HCM 2000), the criteria range from LOS "A" (best) to LOS "F" (worst). In general, LOS C is considered as an optimal level of service and is preferable for all new walkways.
- (3) It is understood that TD has planned to convert the existing cautionary crossing at Java Road/ Hoi Yu Street to a signalised crossing . It has been adopted into our proposed improvement scheme.

5.4.3 As shown in **Table 5.5** above, the performance of the critical crossings would be improved under the proposed improvement schemes although some of their performance still could not reach a level of "C" or above (i.e. Location F1' & F2' on Hoi Yu Street and Location M' on Hoi Tai Street) owing to the constraints of limited space at the well-developed urban area.

## 6. SUMMARY AND CONCLUSION

### 6.1 Summary

- 6.1.1 The application site is situated at the land on north of Hoi Yu Street and the Island East Corridor (“IEC”) along the Quarry Bay Waterfront Promenade. It consists of the part of land lot IL8590 R.P. and IL 8723 R.P., and the adjoining government land (which currently used as a temporary open space car parking) (“the Land” or “the Application Site”). Location of the application site is shown in **Figure 2.1**.
- 6.1.2 In 2001, General Building Plans (“GBPs”) were approved in compliance with the “Industrial” zone in effect at the time for an Industrial Building (“the approved industrial building”) for the lot IL8590 R.P. and IL8723 R.P.. However, construction works of the approved industrial building was not commenced **over a decade**. In order to provide a better waterfront to the public and to tally with the harbourfront enhancement proposal/ the Boardwalk by the Development Bureau and relevant parties, the previous owner of the Land (“the previous owner”) thus willing to partly surrender the Original Site in exchange for the government land zoned OU(1) to form a new Site with an area of 8,532m<sup>2</sup> for a proposed waterfront development comprising of 4 hotel blocks, an office building, and some retail and Food & Beverage facilities and OU for elevated walkway. A section 16 planning application for the aforesaid waterfront development had been submitted to the Town Planning Board (TPB) for consideration in 2018 and it was approved with conditions in 2019 (“the S16 Approved Scheme”).
- 6.1.3 However, with reference to the Planning Statement, the implementation of the Approved Scheme was not possible, nor was the sale of the Approved Scheme. A stalemate has therefore been reached with the Approved Scheme. As the economic outlook has significantly changed since the scheme was approved in 2019 and both office and hotels are facing a difficult time with oversupply in the areas, the new owner, Marine Riches III (“the Applicant”), would like to revisit the use of the Land.
- 6.1.4 With the use of “Flat” under Column 2 of the latest OZP, the applicant intends to provide a space for specific cultural and tourism features with residential units. A Section 12A planning application is therefore required to be submitted for TPB’s consideration.
- 6.1.5 It is proposed to provide a combined waterfront development comprising of 3 domestic blocks with **maximum 225** residential units, 1 non-domestic block for cultural, leisure and entertainment uses, and some retails and Food & Beverage facilities. A new waterfront cultural venue for exhibitions or multi-function events will be provided. Although no specific events is planned for the time being, such events would be some cultural digital museum or art related exhibitions, etc. with target visitor trips of about 5,000 guests per day.
- 6.1.6 The proposed development is planned to be completed by **2030** tentatively.

**Development Access and Internal Transport Facilities Provision**

- 6.1.7 The existing vehicular access of the approved industrial building is located at the local street connects perpendicularly to Hoi Yu Street. A separated vehicular access is provided at Hoi Yu Street for the existing temporary parking area. With the proposed development, a combined vehicular access at Hoi Yu Street will be provided on the east side of the site for access to its basement car park.
- 6.1.8 All the car parking and servicing provision will be provided in accordance with the upper-end of the HKPSG requirement in order to provide more parking supply to the neighbourhood area. Additional 50 private car parking spaces, 5 bays for coaches and 3 nos. loading/ unloading bays will be provided for the cultural venue based on the estimated traffic trips by the cultural venue.
- 6.1.9 In summary, the proposed car parking and servicing provision are summarised below:

Internal Transport Provision		Dimension (L) x (W) x (H)	Residential	Retail and F&B Facilities	Cultural Facilities	Total
Car parking		5m x 2.5m x 2.4m	173	31	50	269
Visitor parking			15	-	-	
Motorcycle parking		2.4m x 1m x 2.4m	3	4		7
Loading/	LGV	7m x 3.5m x 3.6m	2	4	-	6
Unloading	MGV/HGV	11m x 3.5m x 4.7m	1	2	3	6
Coach Parking		12m x 3.5m x 3.8m	-	-	5	5

Remarks: (1) Including 4 nos. accessible parking spaces in size of 5m x 3.5m x 2.4m.

**Future Pedestrian Connection & The Planned Elevated Walkway**

- 6.1.10 Hoi Yu Street is ended with a cul-de-sac at its east-end. At present, pedestrians accessing the Application Site from the nearest MTR Station (i.e. Quarry Bay Exit C) or the nearby public transport services mainly travel from King’s Road, Java Road to Hoi Yu Street. There is no crossing point or footpath provided on the southern part of Hoi Yu Street. Hence, all pedestrians accessing the area rely on the northern footpath of Hoi Yu Street, which the width is about 3.6m at the west-end (i.e. outside the North Point Police Station) but eventually reduced to about 1.6m near the Quarry Bay Salt Water Pumping Station and in front of the Application Site.
- 6.1.11 The pedestrian network in the area has undergone a major change with the Boardwalk project to be completed in end 2025. The existing footpath near the Quarry Bay Salt Water Pumping Station and in front of the Application Site has been widened to minimum 3.5m. A new pedestrian crossing will also be provided upon full completion of the Boardwalk project, including the supporting facilities. As such, a new route is expected to be created for pedestrian accessing Hoi Yu Street. There is also an alternative pedestrian access for pedestrians coming from the south direction or Quarry Bay MTR Exit A & B via the access road from Hoi Chak Street to the FEHD Depot which runs parallel to the IEC.
- 6.1.12 Given the enhanced at-grade pedestrian facilities in the future, in particular the creation of new pedestrian routes by the Boardwalk, there is no justification for an elevated walkway

above Quarry Bay Park to be implemented as part of this application. Instead, a short elevated footbridge walkway over IEC is proposed subject to future agreement between the Applicant and the Government. The proposed elevated walkway will be **constructed by the developer and it is proposed to be** maintained and managed by the relevant Government department.

**Vehicular Traffic Impact Assessment**

- 6.1.13 To appraise the existing traffic conditions in the study area, classified traffic counting surveys were conducted to cover the surrounding road network affected by the proposed development. The operational performances of the identified critical junctions were assessed with the observed traffic flows collected in 2025. The result of the assessment indicated that all critical junctions identified in the study are operating within their capacities.
- 6.1.14 The year 2033 reference traffic flows were derived from the observed 2025 traffic flows adopting a conservative growth rate +0.5% per annum. The reference traffic forecast has also taken into account the major planned and committed developments in the vicinity of the proposed development.
- 6.1.15 The traffic generations and attractions of the proposed development were estimated according to the trip generation rates given from the latest TPDM. Also, the traffic trips to be generated by the cultural venue/ digital museum were estimated by making reference to the traffic modal split mentioned in Chapter 3 of the “Public Transport Strategy Study, June 2017” as published by Transport and Housing Bureau. It is anticipated that the proposed development would generate an additional two-way traffic trips of some 68 pcu/hr in the AM peak, some 163 pcu/hr in Noon peak, and some 163 pcu/hr during the PM peak.
- 6.1.16 With the proposed development, the estimated traffic flows in design year 2033 were estimated by superimposing the traffic generations from the proposed development over the year 2033 reference traffic flows on the road network covered within the study area.
- 6.1.17 The performance of those critical junctions identified in the study area would all be operating within their capacities in both the reference and design scenarios in year 2033. It revealed that the proposed development would not induce significant traffic impacts on the adjacent road network.
- 6.1.18 Hoi Yu Street is the only carriageway connects to the application site. Together with the traffic flows to be generated by the new developments in Taikoo Place area (the newly opened Taikoo Place 2 building which is expected yet fully occupied and the potential Pan Hoi Street redevelopment), it is anticipated that the left turn traffic of Java Road (eastbound) at the junction of Java Road/ Hoi Yu Street would become busier. Junction improvement measure to the Java Road/ Hoi Yu Street, in particular the left turn movement, is suggested.
- 6.1.19 Under the proposed junction improvement scheme, additional traffic lane (i.e. two lanes in total) would be provided for the left turn traffic of Java Road (eastbound). Alignment of the existing kerblines outside the police station would be modified slightly to provide more manoeuvring space for the traffic turning to Hoi Yu Street. Section of Hoi Yu Street

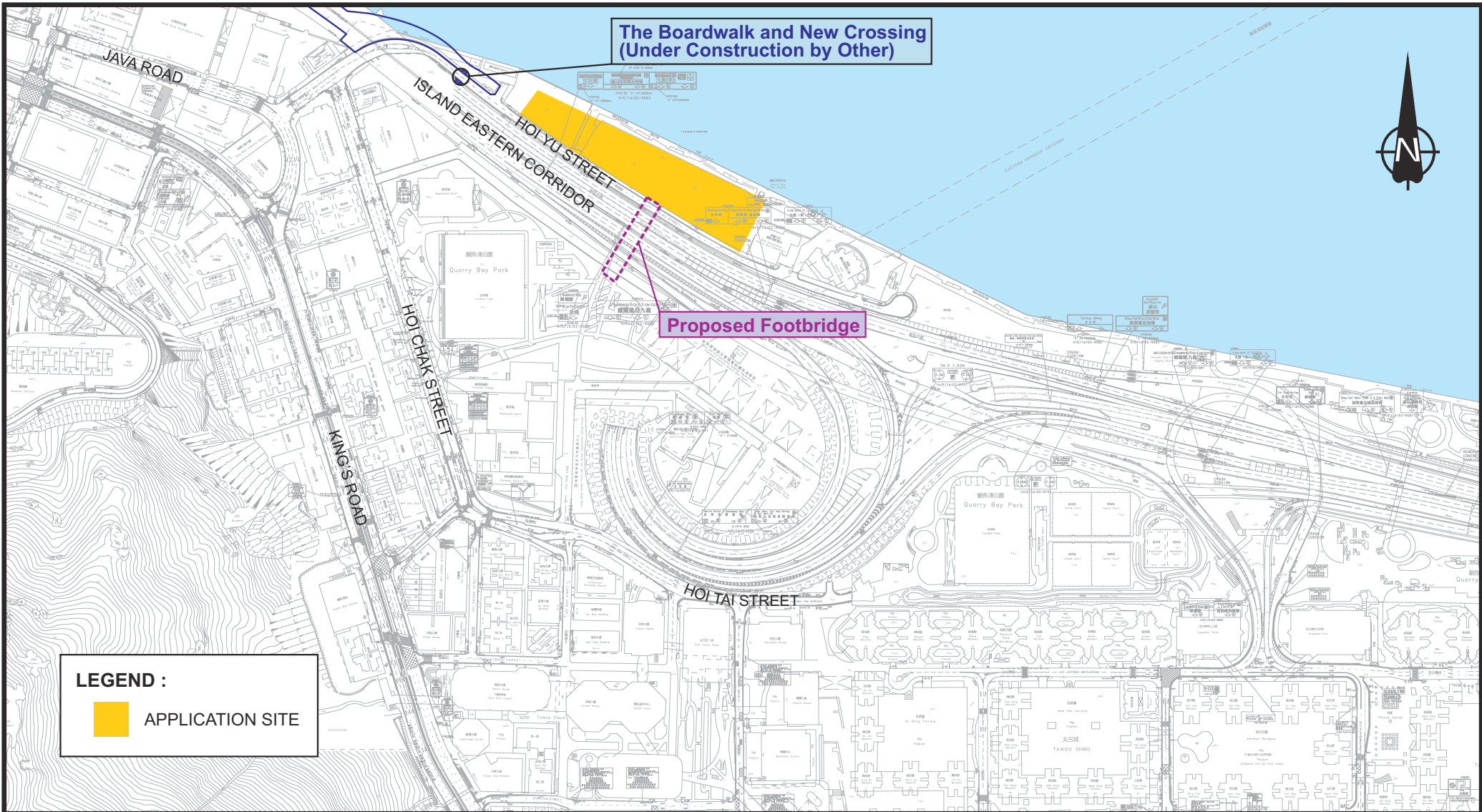
(westbound) would also be converted from existing 2-lane to a 1-lane carriageway to maximize the overall junction capacity.


**Pedestrian Traffic Impact Assessment**

- 6.1.20 Capacities of the identified critical sections of footpaths and crossing at Hoi Yu Street, Java Road, **Model Lane** and Hoi Chak Street/ Finnie Street/ Hoi Tai Street were assessed. The performance assessment indicated that all the identified critical sections of footpaths/cautionary crossing and the identified critical crossings at Java Road would be operating with a LOS of not less than C during peak hours with the proposed development. However, the identified critical crossings at Hoi Kwong Street, Finnie Street and Hoi Tai Street would be operating at their capacities.
- 6.1.21 **It is understood that TD has planned to convert the existing cautionary crossing at Java Road/ Hoi Yu Street to a signalised crossing. It has been adopted into our proposed improvement scheme.** Besides, improvement measure to the crossings at Hoi Chak Street/ Finnie Street/ Hoi Tai Street was therefore proposed. By converting the staggered crossings to straight crossing at the junction of Hoi Tai Street/ Hoi Chak Street/ Finnie Street/ Hoi Kwong Street, the performance of the crossings at Hoi Tai Street could be improved but still could not reach a level of C or above.

**6.2 Conclusion**

- 6.2.1 Based on the above-mentioned, it is concluded that the proposed development would not induce significant traffic impacts on the adjacent road network and is therefore supported from traffic engineering point of view.



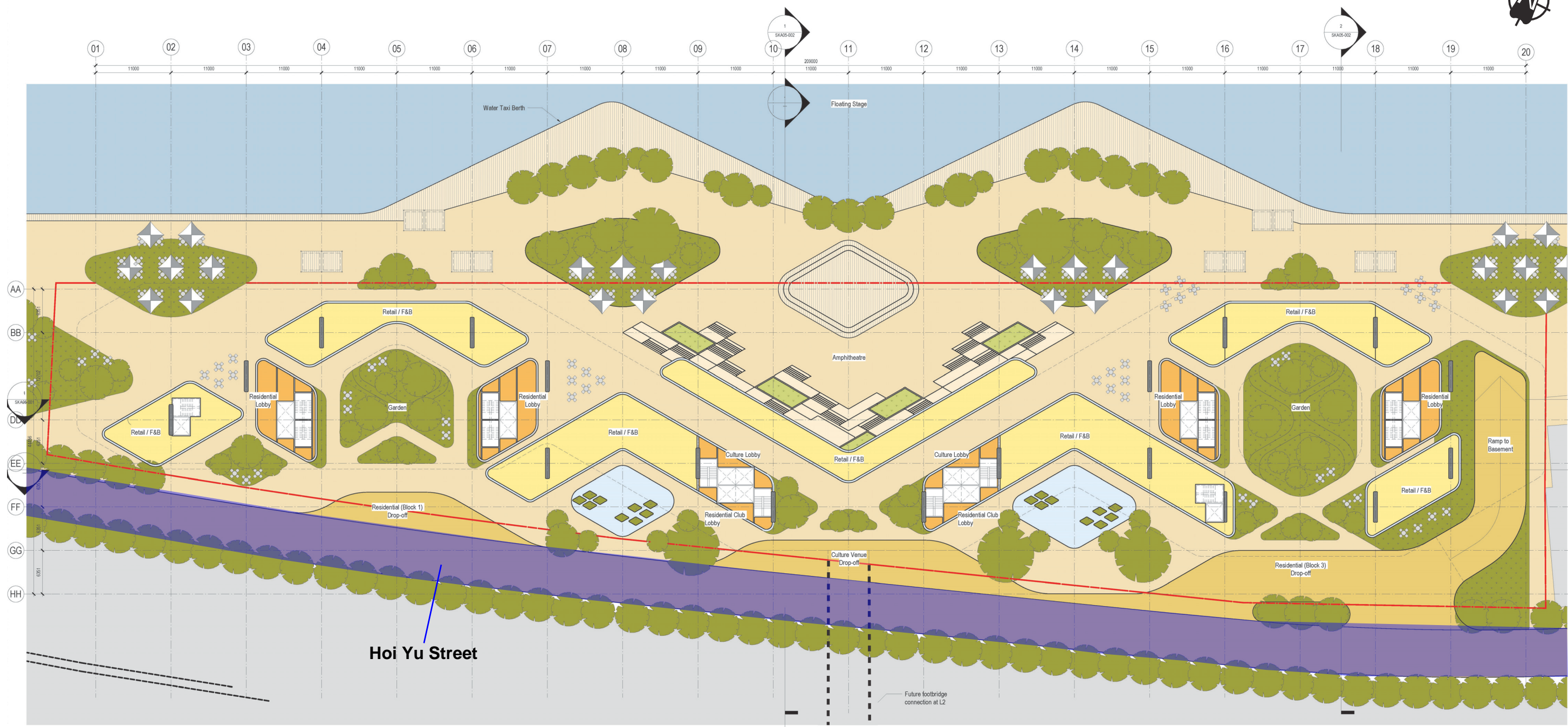
**LEGEND :**  
 APPLICATION SITE

The Boardwalk and New Crossing  
(Under Construction by Other)

Proposed Footbridge

A	MINOR AMENDMENT	WCY	9JAN26	-	-	-	-	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
Project Title				Drawing Title				<b>SITE LOCATION</b>			
PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY				Designed NLY    Checked WCY    Scale NTS    Date SEP 2025    Drawing No. <b>2.1</b> Rev. A							





Note:- Please refer to landscape architect drawings for all landscape design and details

- Retail
- Cultural/ Leisure
- Residential
- Residential Clubhouse
- Green Deck
- Carpark

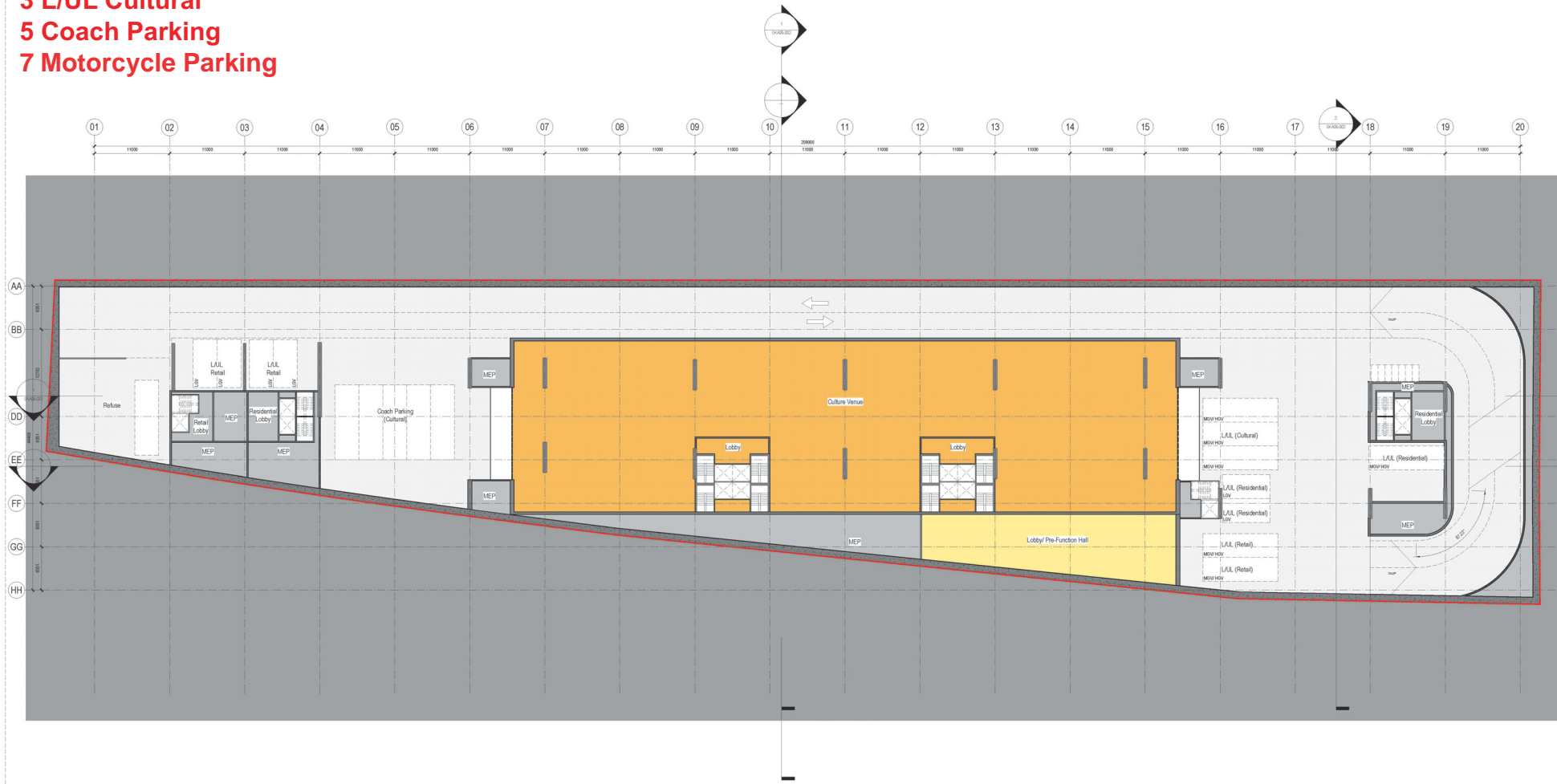
-	-	-	-
-	-	-	-
-	-	-	-
A	MINOR AMENDMENT	WCY	9JAN26
Rev.	Description	Checked	Date


**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

<b>Drawing Title</b>							
<b>PROPOSED MASTER LAYOUT PLAN ON GROUND FLOOR</b>							
Designed	NLY	Checked	WCY	Scale	NTS	Date	SEP 2025
Drawing No.	2.2		Rev.	A			

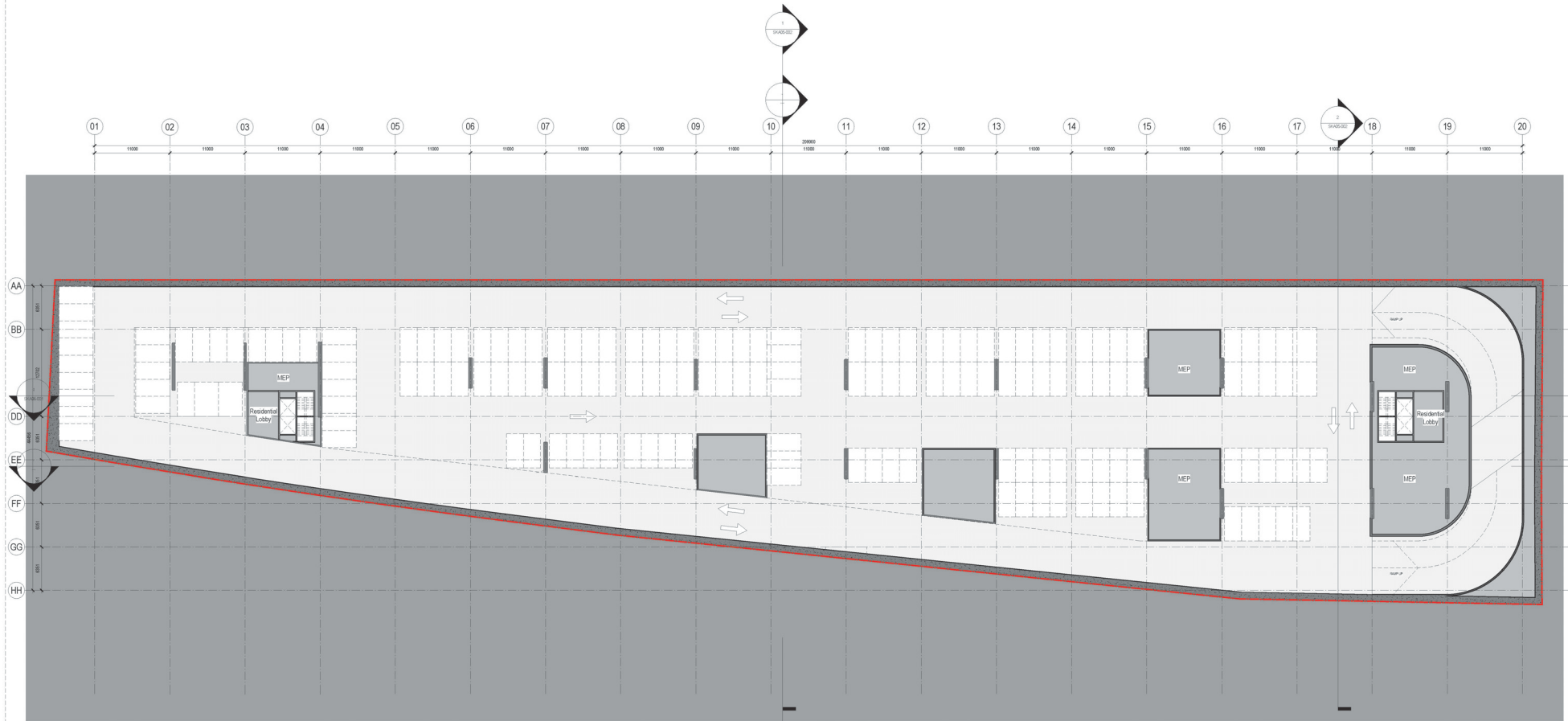



**B1 :-**  
**9 L/UL**  
**3 L/UL Cultural**  
**5 Coach Parking**  
**7 Motorcycle Parking**



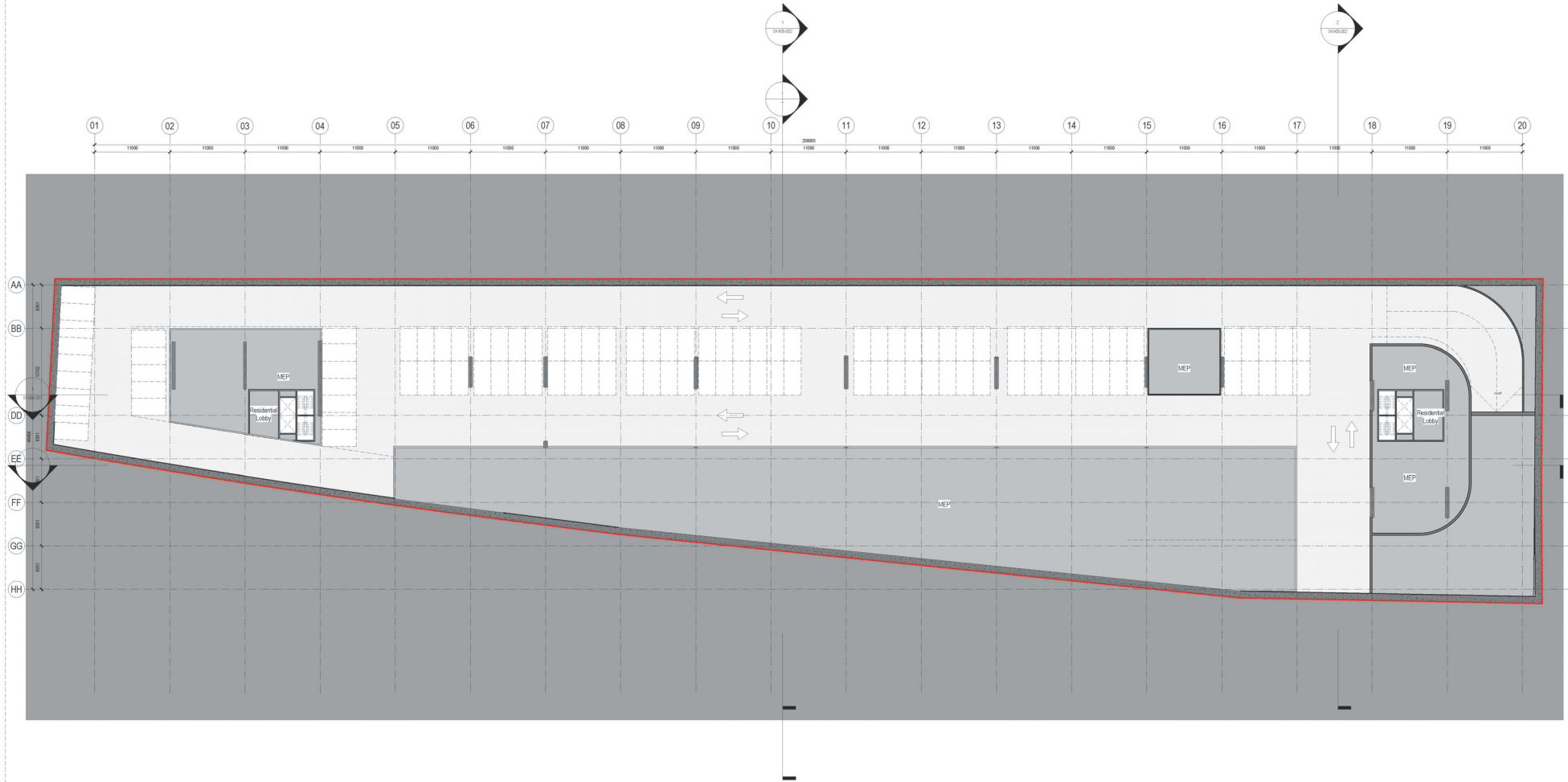
A	MINOR AMENDMENT	WCY	9JAN26	-	-	-	-	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
<b>Project Title</b> PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY				<b>Drawing Title</b> <h2 style="text-align: center;">LAYOUT OF BASEMENT LEVEL 1</h2>							
Designed	NLY	Checked	WCY	Scale	NTS	Date	SEP 2025				

**B2 :-  
162 Car parking spaces**



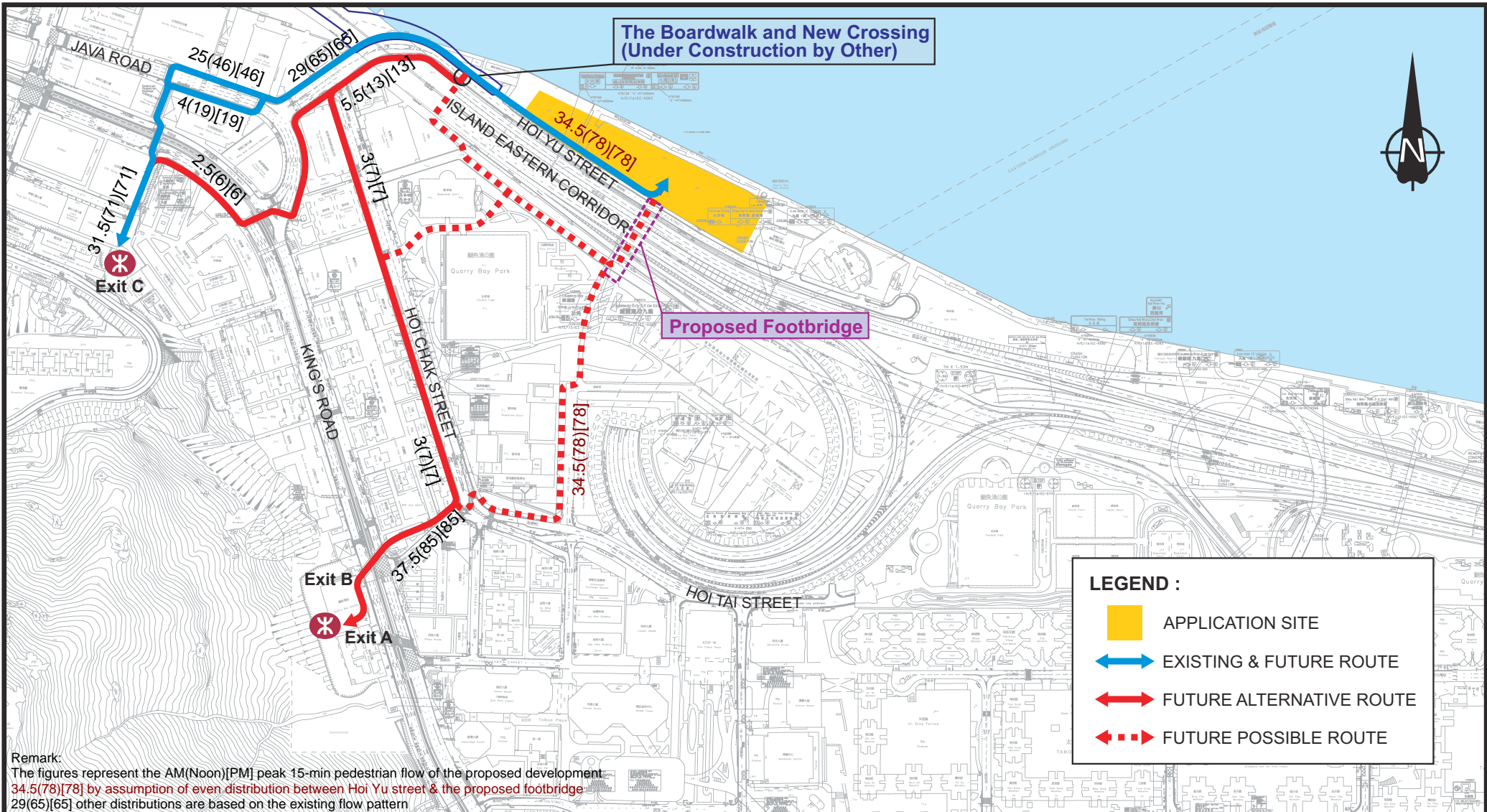
A	MINOR AMENDMENT	WCY	9JAN26	-	-	-	-	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
Project Title				Drawing Title							
PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY				<b>LAYOUT OF BASEMENT LEVEL 2</b>							
Designed	NLY	Checked	WCY	Scale	NTS	Date	SEP 2025	Drawing No.	2.4	Rev.	A

**B3 :-  
107 Car parking spaces**



A	MINOR AMENDMENT	WCY	9JAN26	-	-	-	-	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
Project Title				Drawing Title				<div style="text-align: center;"> <h2>LAYOUT OF BASEMENT LEVEL 3</h2> </div>			
PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY				Designed NLY    Checked WCY    Scale NTS    Date MAR 2025    Drawing No. 2.5    Rev. A							





**LEGEND :**

- APPLICATION SITE
- EXISTING & FUTURE ROUTE
- FUTURE ALTERNATIVE ROUTE
- FUTURE POSSIBLE ROUTE

A	TD'S COMMENT	WCY	17SEP25	B	MINOR AMENDMENT	WCY	9JAN26	C	TD'S COMMENT	NLY	27MAR26
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

**Project Title**

PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**

**EXISTING AND FUTURE PEDESTRIAN ROUTE**

Designed	NLY	Checked	WCY	Scale	NTS	Date	NOV 2024	Drawing No.	<b>2.6</b>	Rev.	C
----------	-----	---------	-----	-------	-----	------	----------	-------------	------------	------	---



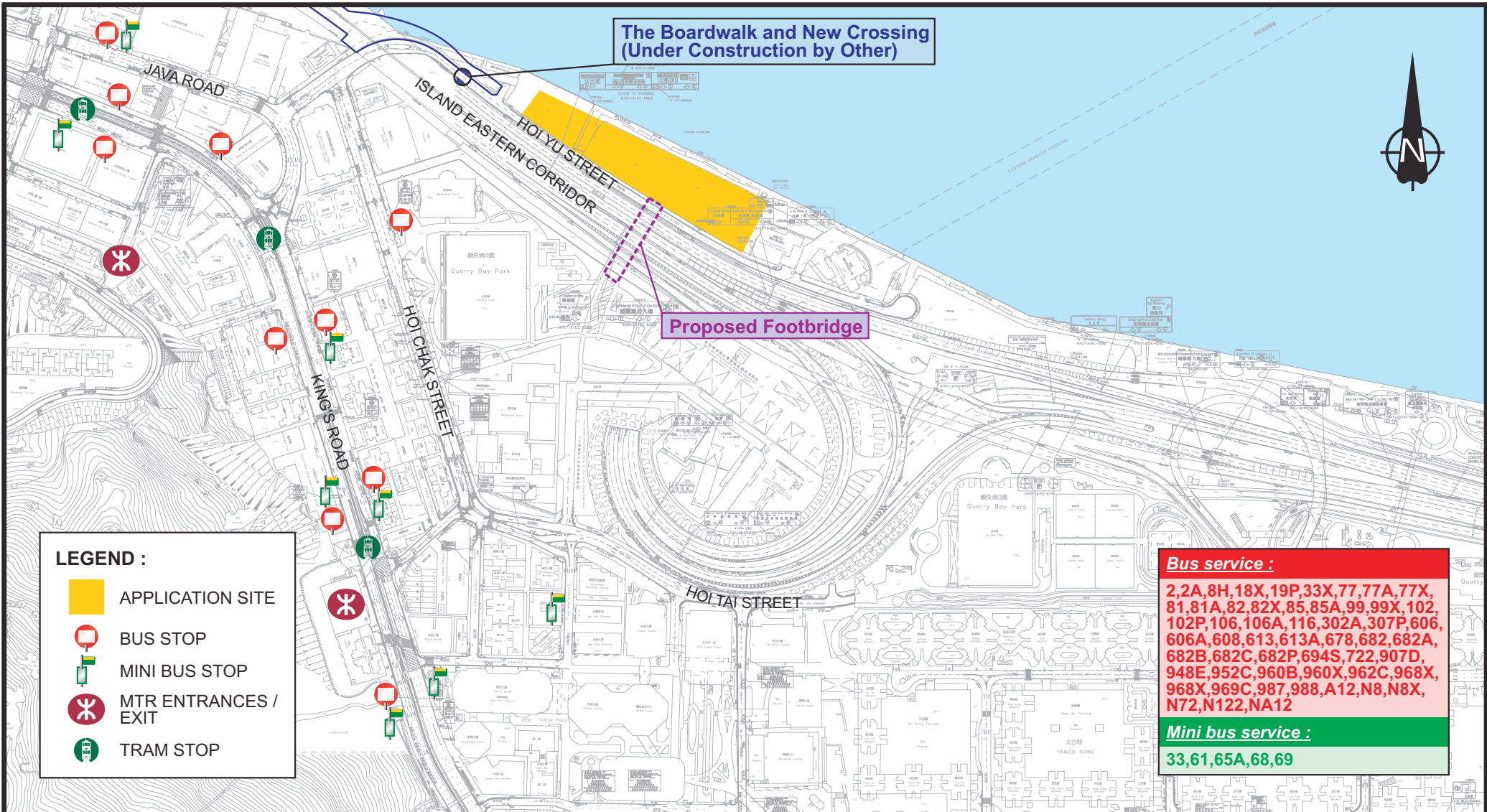


-	-	-	-
-	-	-	-
-	-	-	-
A	MINOR AMENDMENT	WCY	9JAN26
Rev.	Description	Checked	Date

Project Title  
**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY**

Drawing Title <b>PLANNED ELEVATED WALKWAY UNDER OZP</b>							
Designed	NLY	Checked	WCY	Scale	NTS	Date	NOV 2024
Drawing No.	<b>2.7</b>			Rev.	A		





**LEGEND :**

- APPLICATION SITE
- BUS STOP
- MINI BUS STOP
- M MTR ENTRANCES / EXIT
- T TRAM STOP

**Bus service :**

2,2A,8H,18X,19P,33X,77,77A,77X,81,81A,82,82X,85,85A,99,99X,102,102P,106,106A,116,302A,307P,606,606A,608,613,613A,678,682,682A,682B,682C,682P,694S,722,907D,948E,952C,960B,960X,962C,968X,968X,969C,987,988,A12,N8,N8X,N72,N122,NA12

**Mini bus service :**

33,61,65A,68,69

A	TD'S COMMENT	WCY	17SEP25	B	MINOR AMENDMENT	WCY	9JAN26	-	-	-	-
Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date

**Project Title**

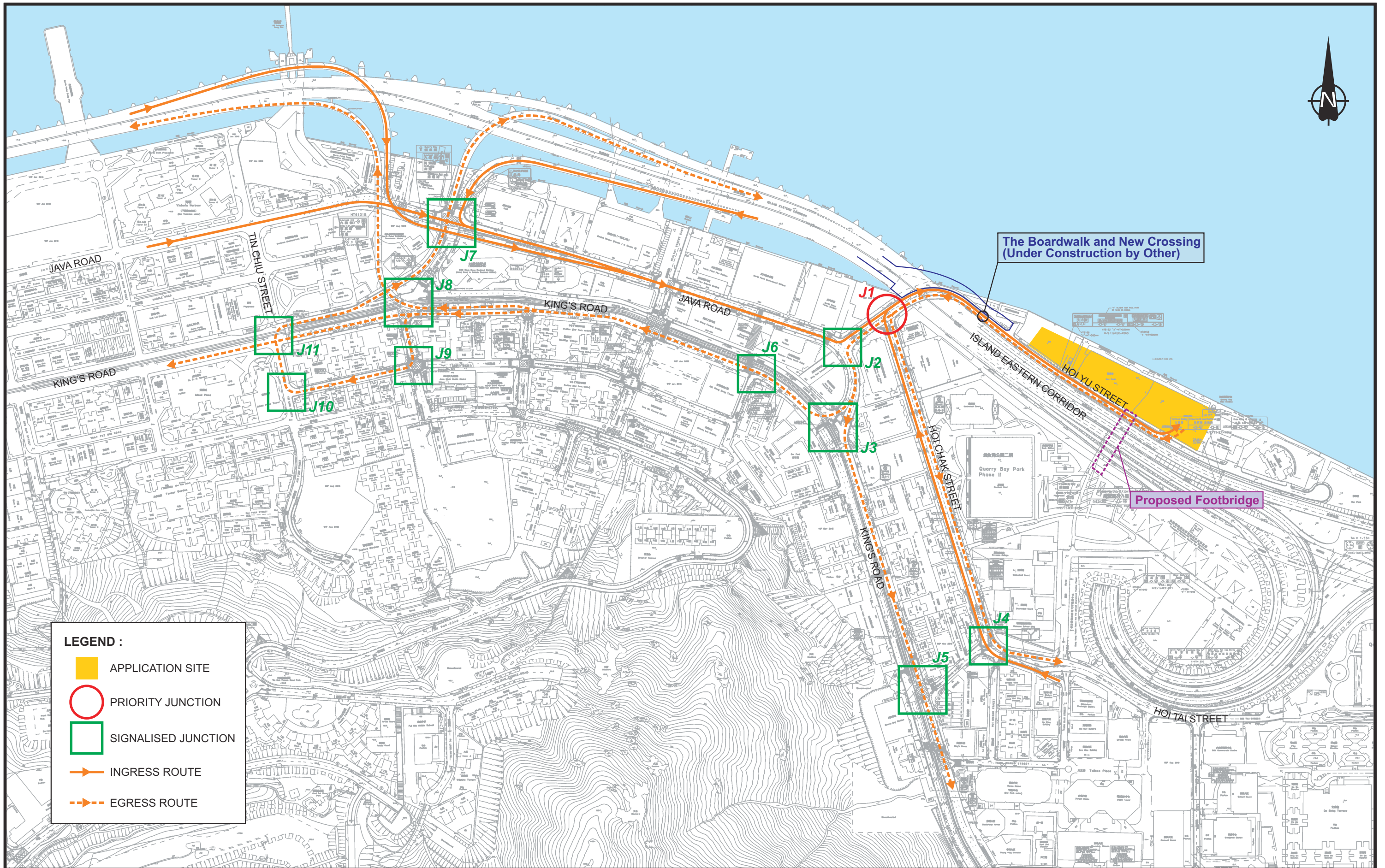
PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**

EXISTING PUBLIC TRANSPORT SERVICES

Designed	NLY	Checked	WCY	Scale	NTS	Date	NOV 2024	Drawing No.	3.1	Rev.	B
----------	-----	---------	-----	-------	-----	------	----------	-------------	-----	------	---



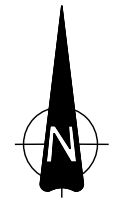
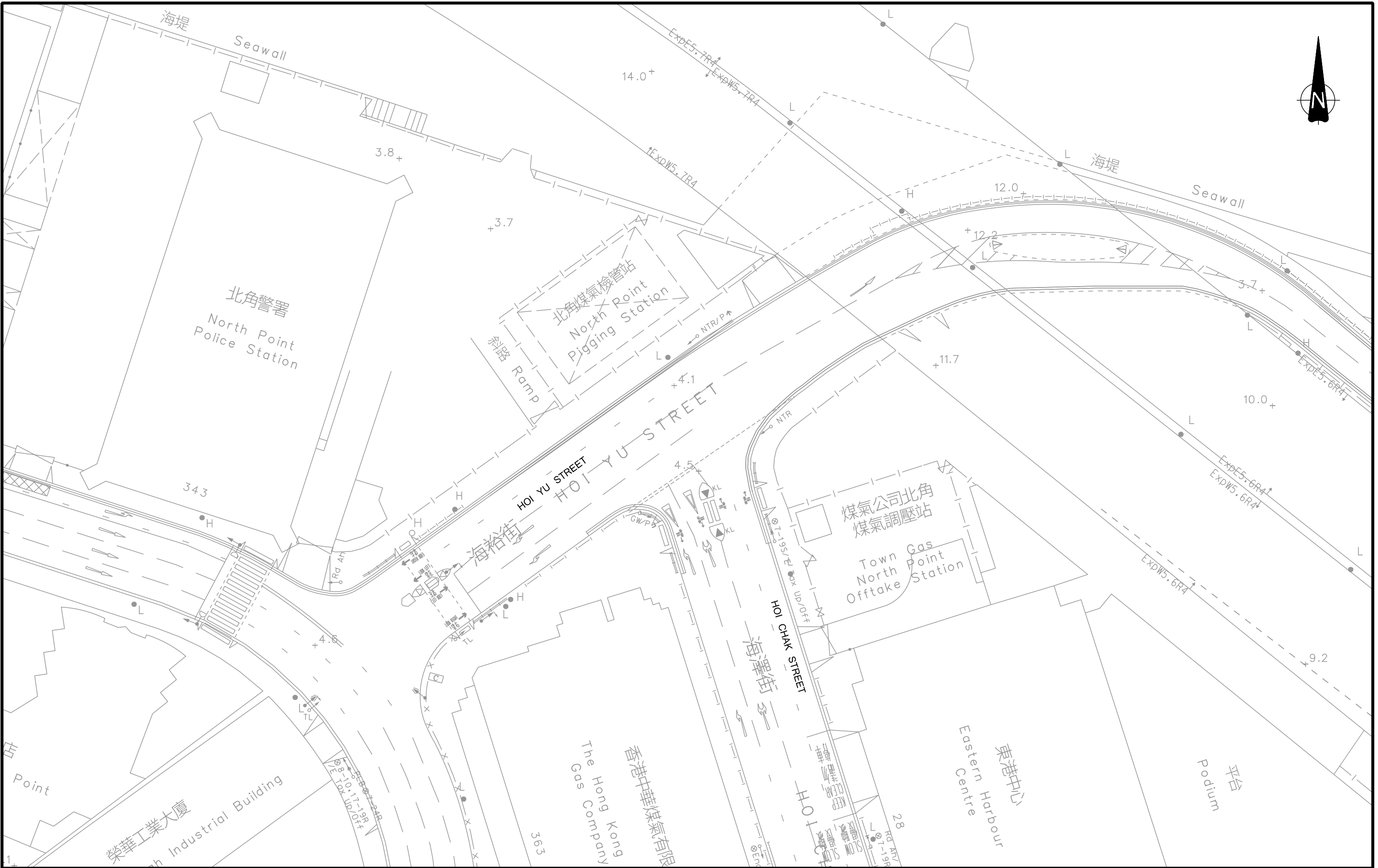


Rev.	Description	Checked	Date
B	MINOR AMENDMENT	WCY	9/JAN/26
A	TD'S COMMENT	NLY	17/SEP/25

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

<b>Drawing Title</b>			
<b>IDENTIFIED CRITICAL JUNCTIONS AND KEY VEHICULAR TRAFFIC ROUTES</b>			
Designed	Checked	Scale	Date
NLY	WCY	NTS	JUN 2024
Drawing No.		Rev.	
3.2		A	





FILENAME: D:\OneDrive - SysTraGroup\JOBS(NEW)\CHK50793710\TIA\F33.dgn  
 PRINTED BY: cchan  
 DATE: 10/31/2024  
 TIME: 5:53:18 PM

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title

**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"**

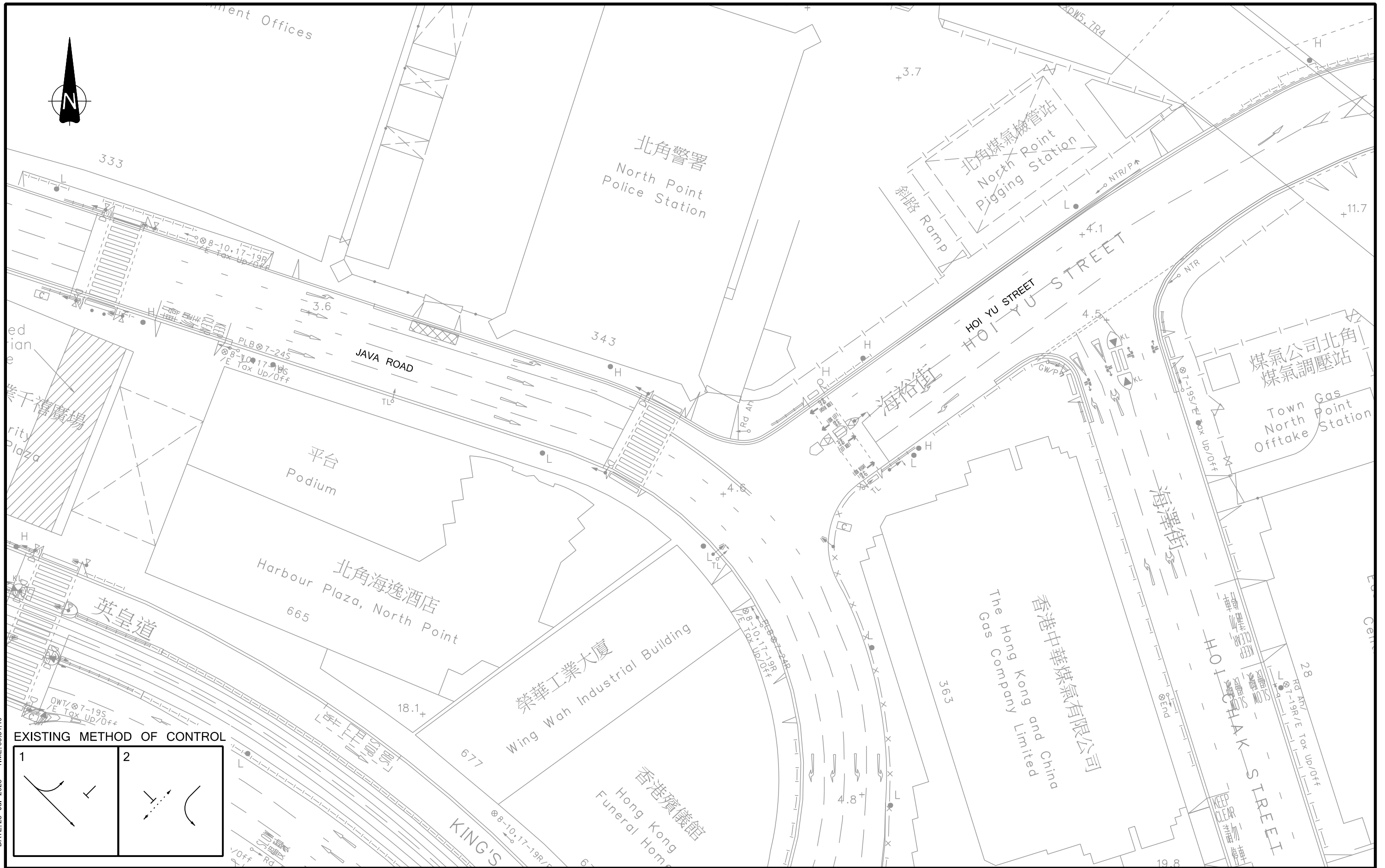
**INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY**

Drawing Title

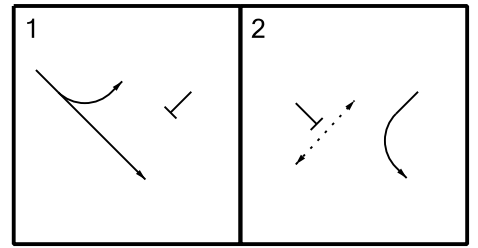
**EXISTING JUNCTION LAYOUT OF HOI YU STREET / HOI CHAK STREET (J1)**

Designed	NLY	Checked	WCY	Scale	1:500(A3)	Date	OCT 2024	Drawing No.	<b>3.3</b>	Rev.	-
----------	-----	---------	-----	-------	-----------	------	----------	-------------	------------	------	---





EXISTING METHOD OF CONTROL



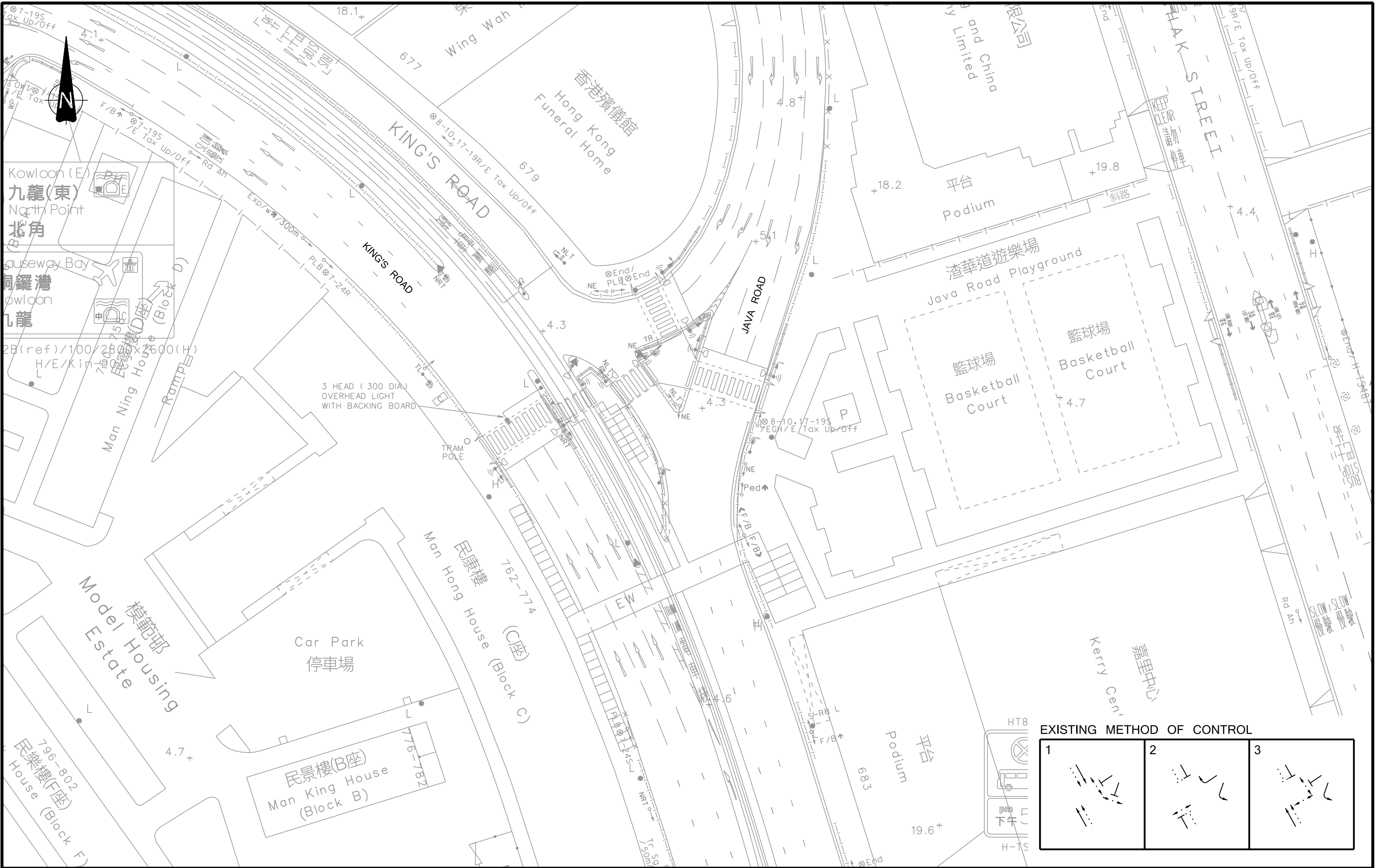
Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title  
**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"**  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

Drawing Title  
**EXISTING JUNCTION LAYOUT OF JAVA ROAD / HOI YU STREET (J2)**

Designed NLY    Checked WCY    Scale 1:500(A3)    Date OCT 2024    Drawing No. **3.4**    Rev. -





FILENAME: D:\OneDrive - SysTraGroup\JOBS\NEW\CHK50793710\TIA\F35.dgn  
 PRINTED BY: cchan  
 DATE: 10/31/2024  
 TIME: 5:53:51 PM

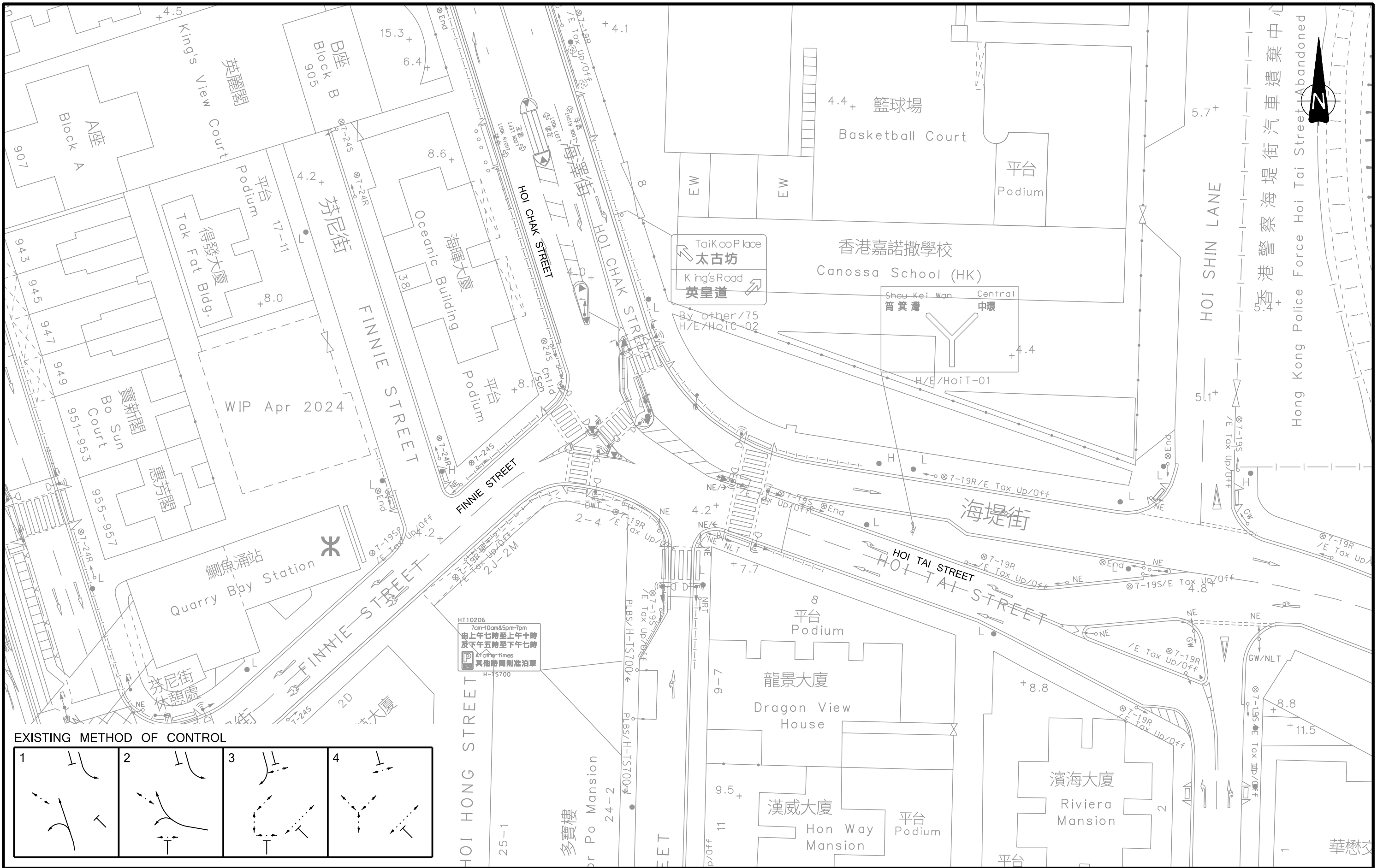
Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**  
**EXISTING JUNCTION LAYOUT OF KING'S ROAD / JAVA ROAD (J3)**

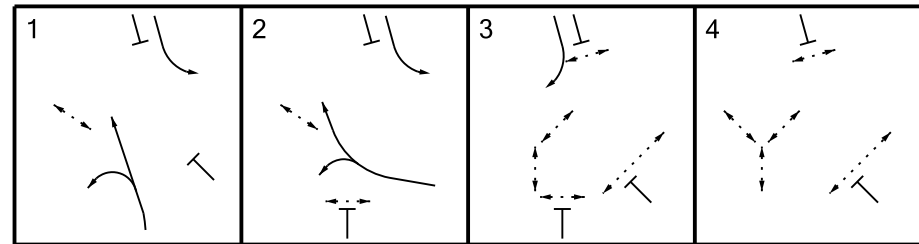
Designed: NLY    Checked: WCY    Scale: 1:500(A3)    Date: OCT 2024    Drawing No. **3.5**    Rev. -





HT10206  
 7am-10am & 5pm-7pm  
 由上午七時至上午十時  
 及下午五時至下午七時  
 其他時間則准泊車  
 H-T5700

EXISTING METHOD OF CONTROL



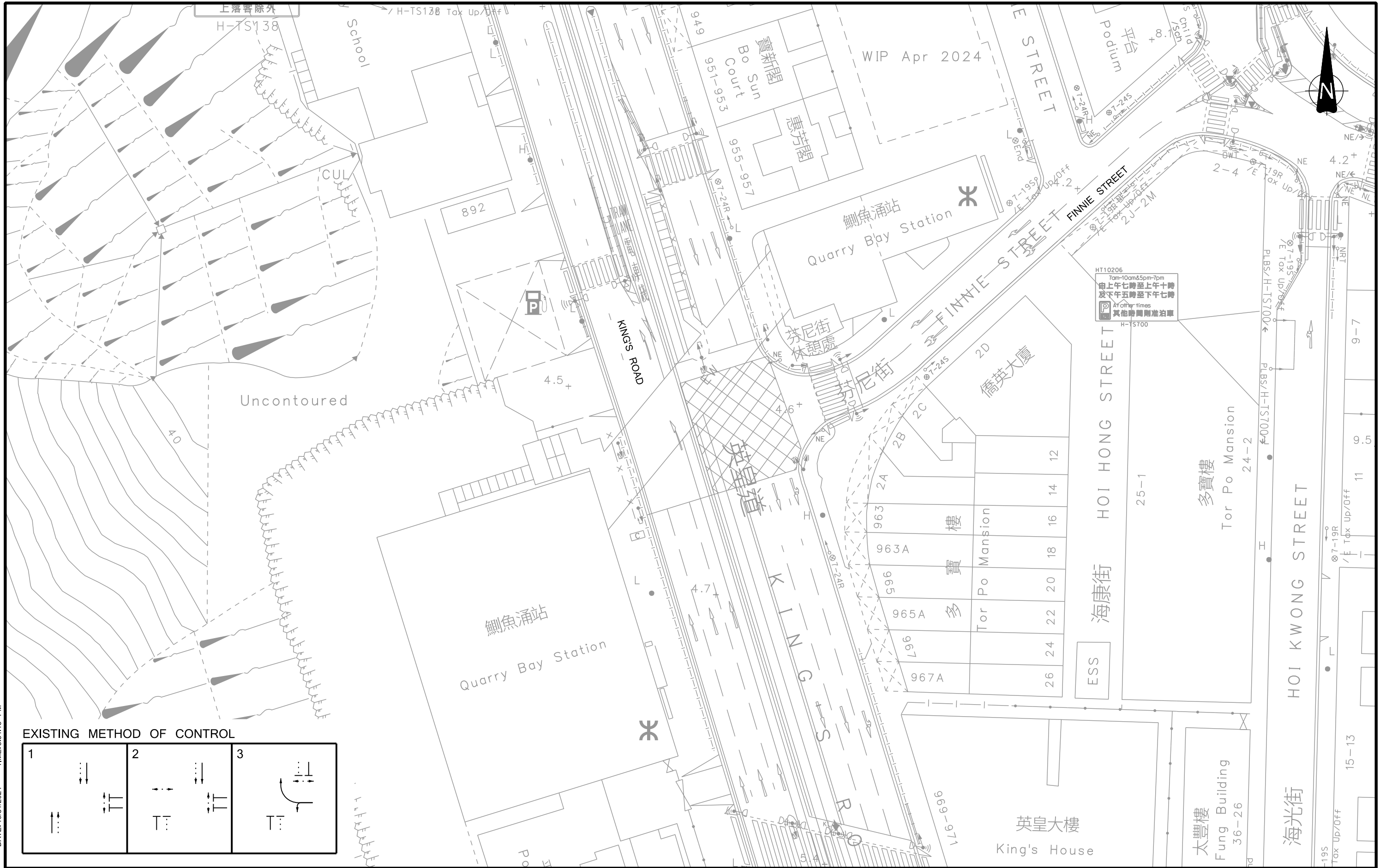
Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

Drawing Title  
**EXISTING JUNCTION LAYOUT OF HOI TAI STREET / HOI CHAK STREET / FINNIE STREET / HOI KWONG STREET (J4)**

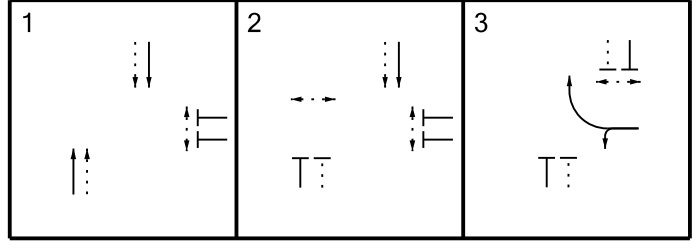
Designed NLY    Checked WCY    Scale 1:500(A3)    Date OCT 2024    Drawing No. **3.6**    Rev. -





HT10206  
 7am-10am & 5pm-7pm  
 由上午七時至上午十時  
 及下午五時至下午七時  
 At other times  
 其他時間則准泊車  
 H-TS700

EXISTING METHOD OF CONTROL



FILENAME: D:\OneDrive - SysTraGroup\JOBS(NEW)\CHK507937\01\TIA\F37.dgn  
 PRINTED BY: cchan  
 DATE: 10/31/2024  
 TIME: 5:54:15 PM

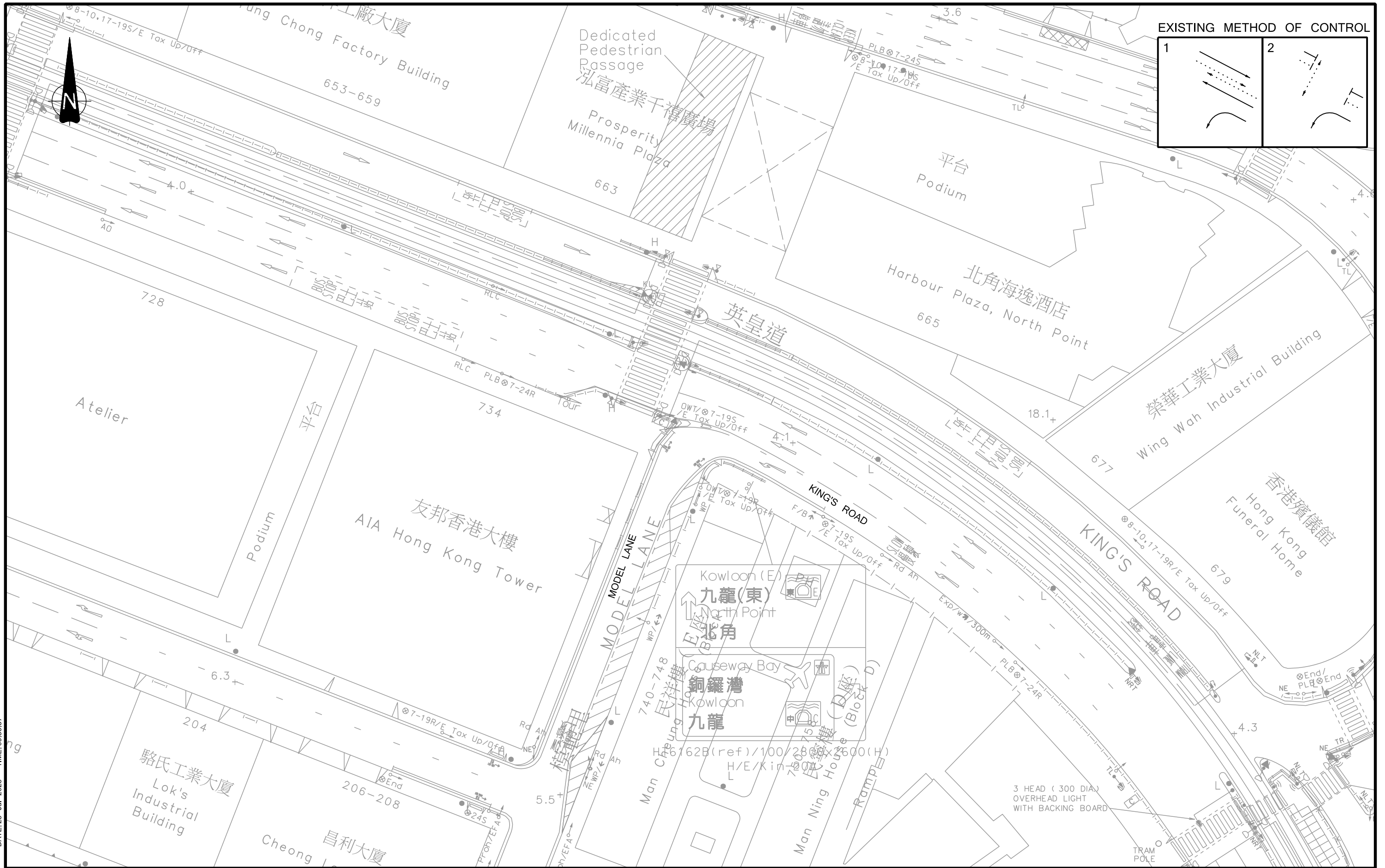
Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title  
**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"**  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

Drawing Title  
**EXISTING JUNCTION LAYOUT OF KING'S ROAD / FINNIE STREET (J5)**

Designed NLY  
 Checked WCY  
 Scale 1:500(A3)  
 Date OCT 2024  
 Drawing No. **3.7**  
 Rev. -





FILENAME: E:\OneDrive - SysTraGroup\hlocat\ch50793710\via\F38.dgn  
 PRINTED BY: jho1  
 DATE: 25 Jul 2025  
 TIME: 09:36:37

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

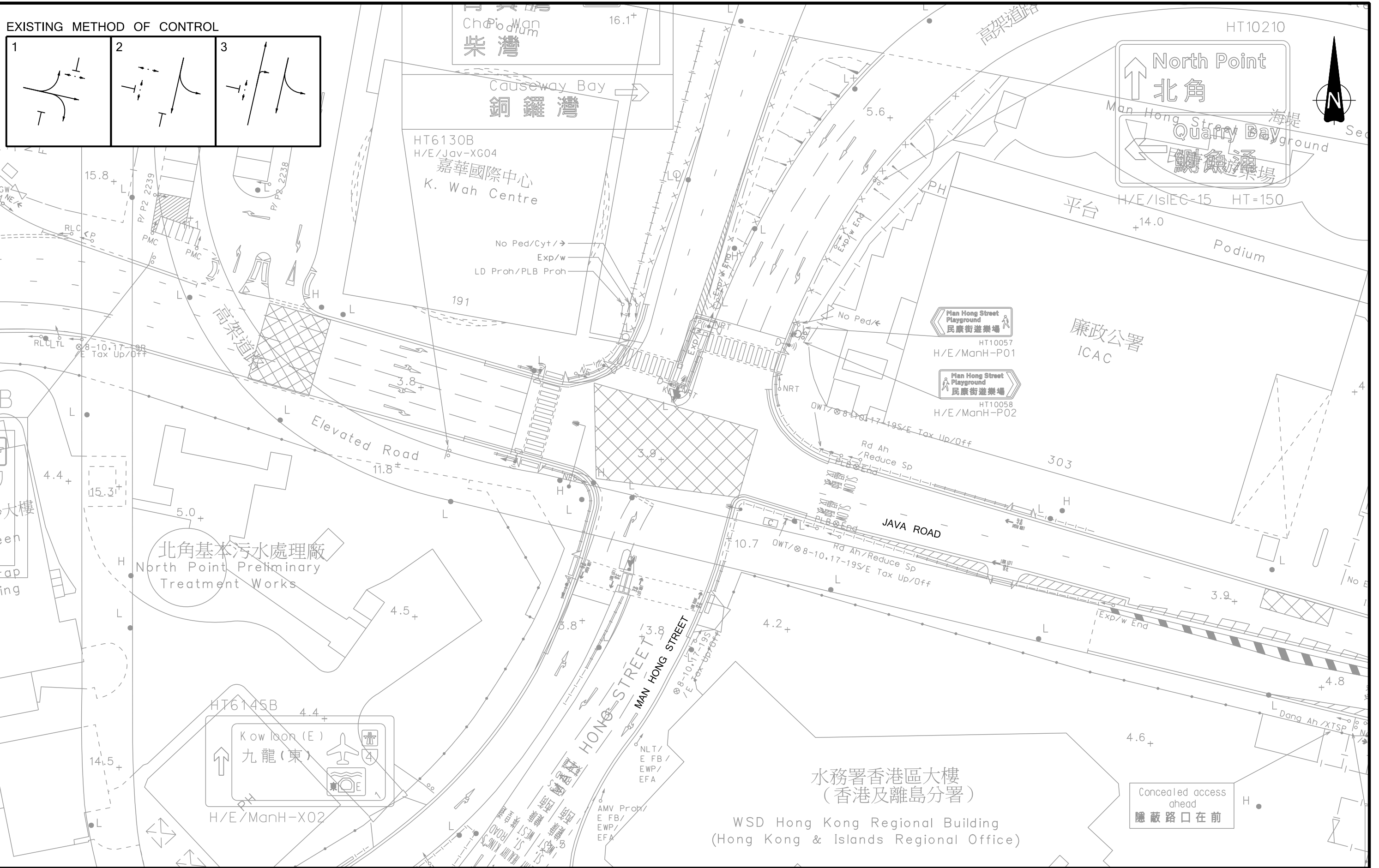
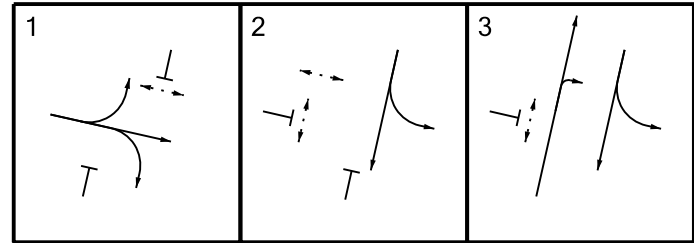
**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**  
**EXISTING JUNCTION LAYOUT OF KING'S ROAD / MODEL LANE (J6)**

Designed: NLY  
 Checked: WCY  
 Scale: 1:500(A3)  
 Date: JUL 2025  
 Drawing No.: 3.8  
 Rev.: -



EXISTING METHOD OF CONTROL



FILENAME: E:\OneDrive - SystraGroup\hlocat\ch50793710\via\F39.dgn  
 PRINTED BY: jho1  
 DATE: 25 Jul 2025  
 TIME: 09:39:24

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

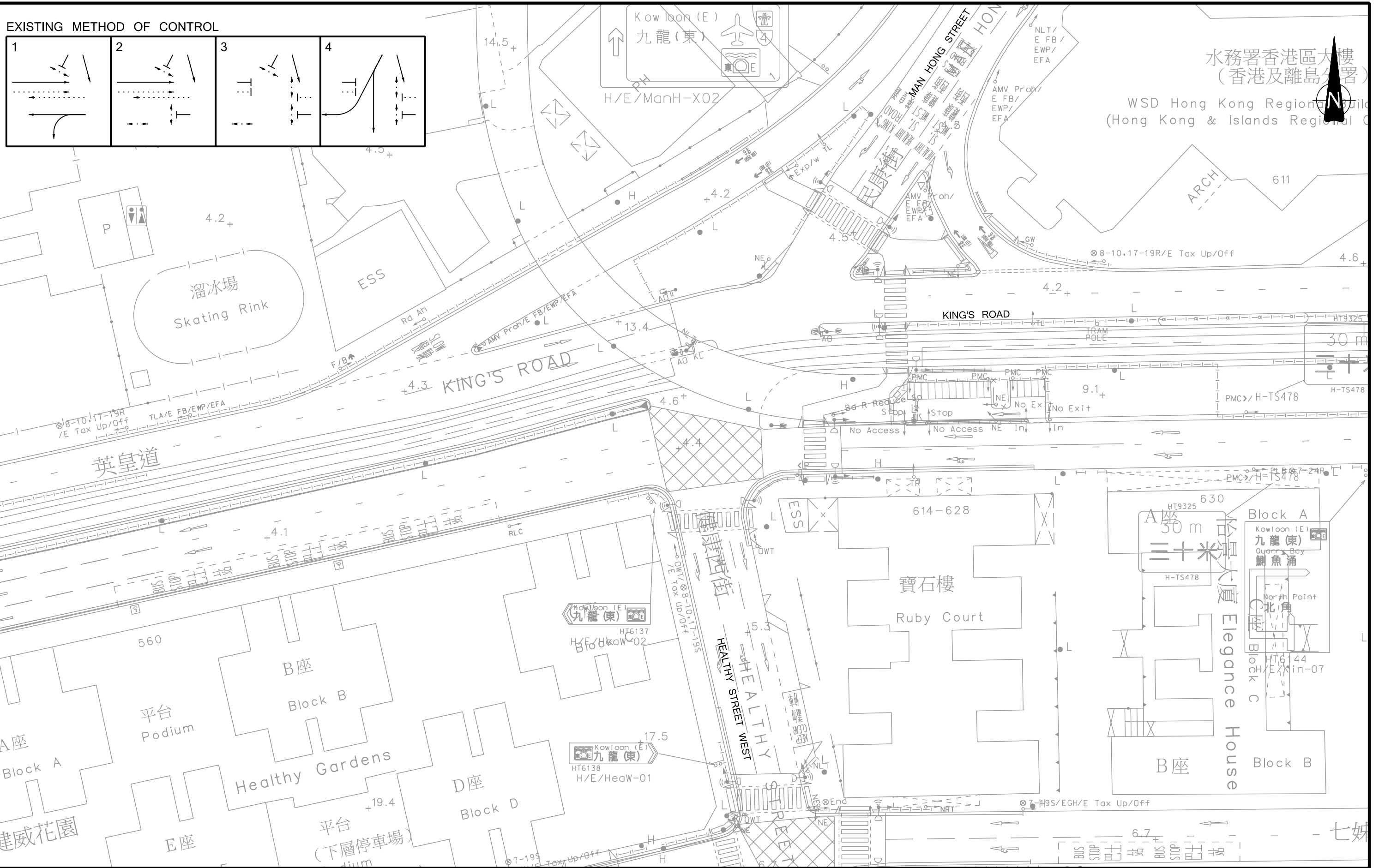
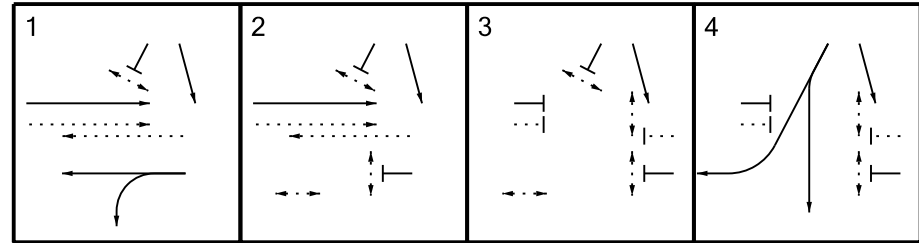
**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**  
**EXISTING JUNCTION LAYOUT OF JAVA ROAD / MAN HONG STREET (J7)**

Designed: NLY  
 Checked: WCY  
 Scale: 1:500(A3)  
 Date: JUL 2025  
 Drawing No.: 3.9  
 Rev.: -



EXISTING METHOD OF CONTROL



FILENAME: E:\OneDrive - SysTraGroup\local\ch50793710\ia\F310.dgn  
 PRINTED BY: jho1  
 DATE: 25 Jul 2025  
 TIME: 09:42:15

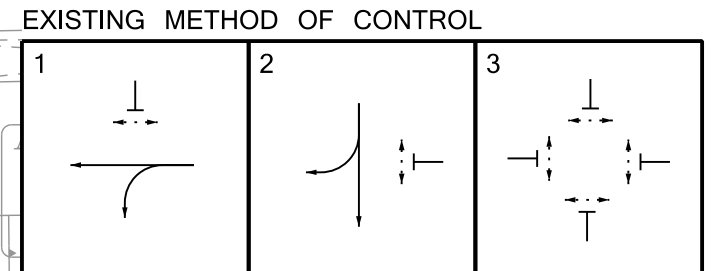
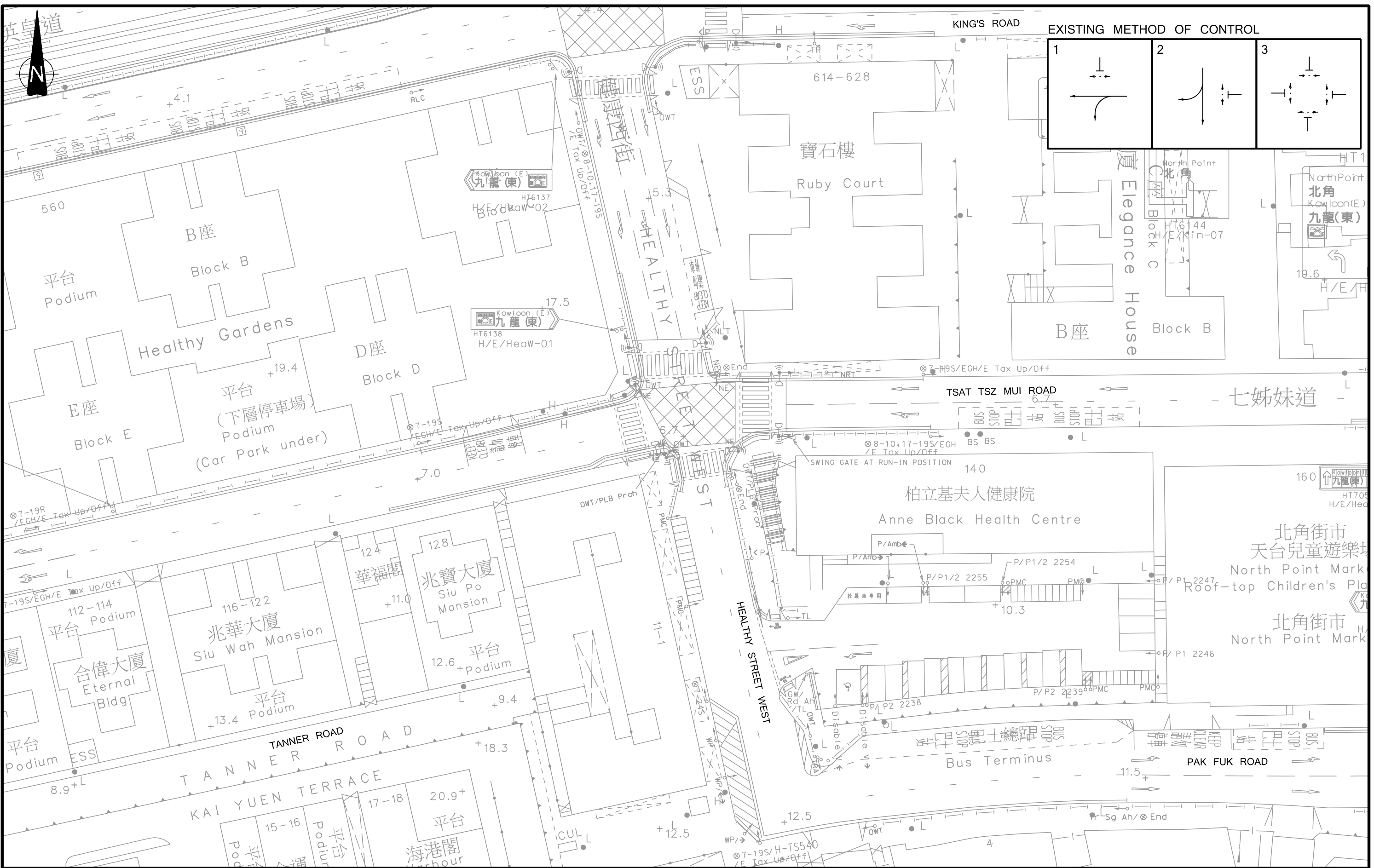
Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title  
**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"**  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

Drawing Title  
**EXISTING JUNCTION LAYOUT OF KING'S ROAD / HEALTHY STREET WEST / MAN HONG STREET (J8)**

Designed NLY    Checked WCY    Scale 1:500(A3)    Date JUL 2025    Drawing No. **3.10**    Rev. -





FILENAME: E:\OneDrive - SysTraGroup\hollolca\h50793710\h311.dgn  
 PRINTED BY: jho1  
 DATE: 25 Jul 2025  
 TIME: 09:43:06

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

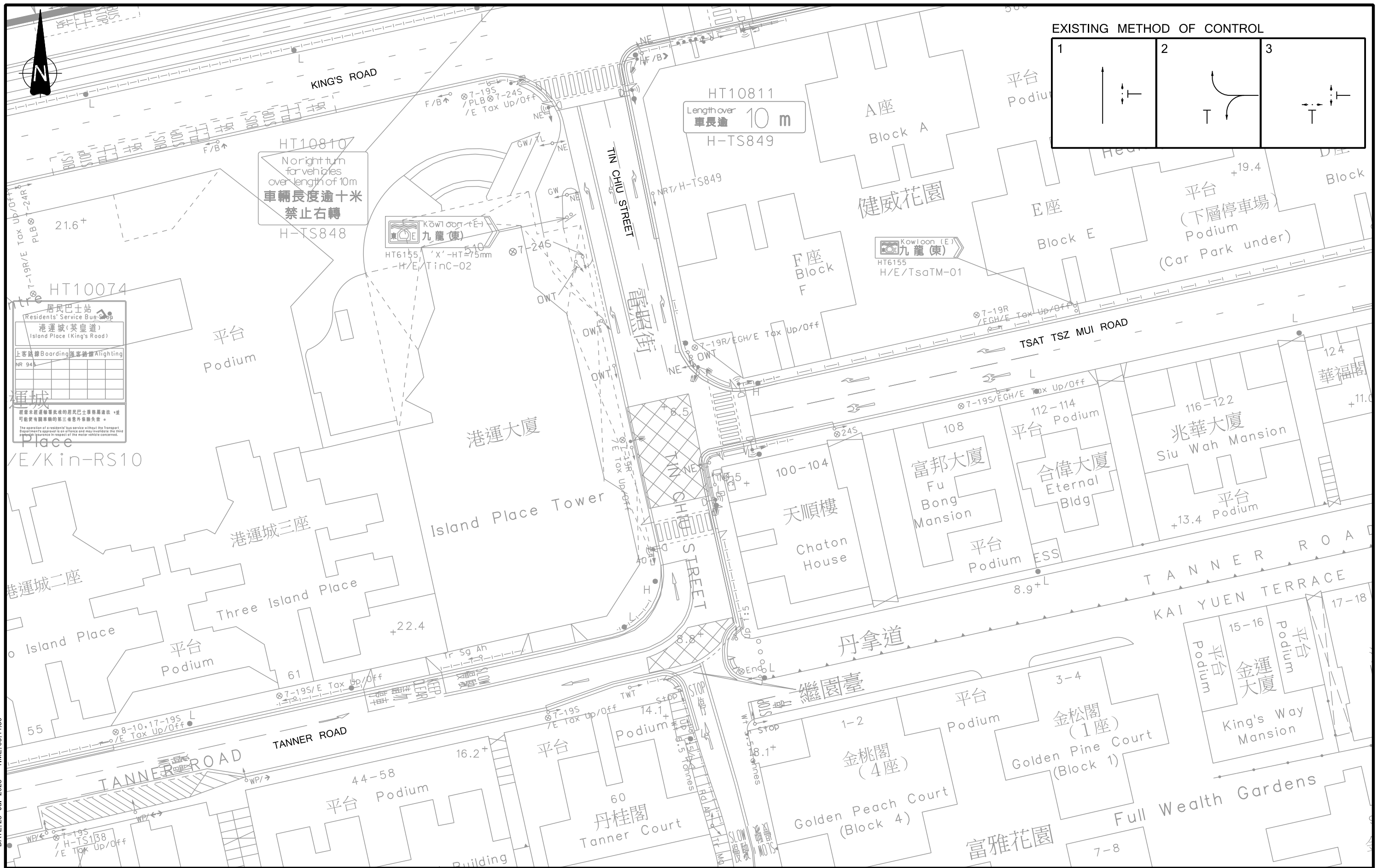
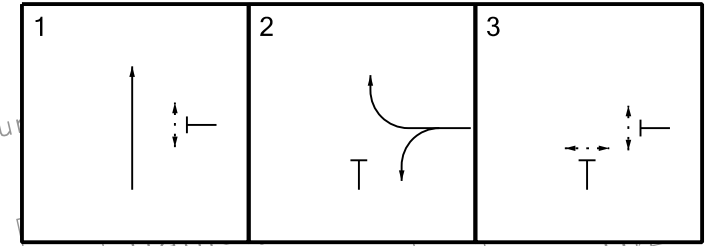
**Drawing Title**  
**EXISTING JUNCTION LAYOUT OF TSAT TSZ MUI ROAD / HEALTHY STREET WEST (J9)**

Designed	NLY	Checked	WCY	Scale	1:500(A3)	Date	JUL 2025	Drawing No.	<b>3.11</b>	Rev.	-
----------	-----	---------	-----	-------	-----------	------	----------	-------------	-------------	------	---





EXISTING METHOD OF CONTROL



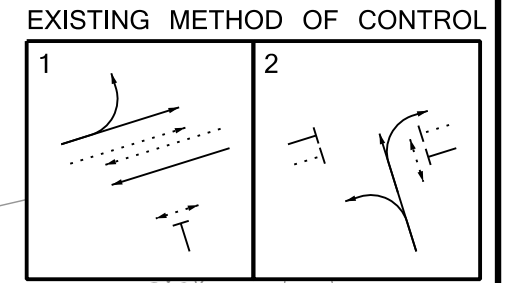
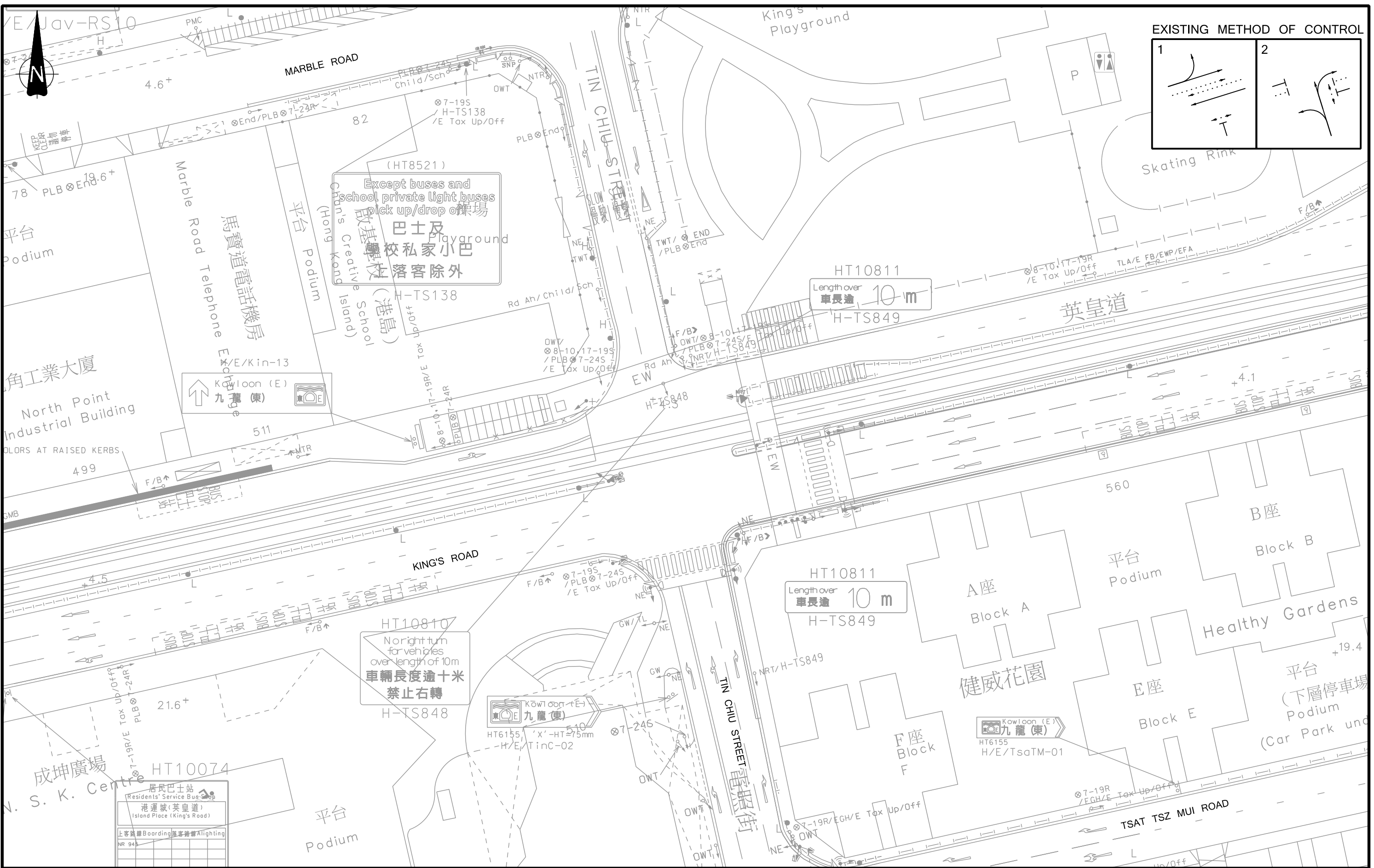
FILENAME: E:\OneDrive - SysTraGroup\hlocat\ch\50793710\A\F312.dgn  
 PRINTED BY: jho1  
 DATE: 25 Jul 2025  
 TIME: 09:44:30

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Project Title			
PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"			
INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY			

Drawing Title			
<b>EXISTING JUNCTION LAYOUT OF TSAT TSZ MUI ROAD / TIN CHIU STREET (J10)</b>			
Designed	Checked	Scale	Date
NLY	WCY	1:500(A3)	JUL 2025
Drawing No.		Rev.	
3.12		-	





FILENAME: E:\OneDrive - SysTraGroup\hloc\ch\50793710\10\10\F313.dgn  
 PRINTED BY: jho1  
 DATE: 25 Jul 2025  
 TIME: 09:52:28

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

**Project Title**

PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"

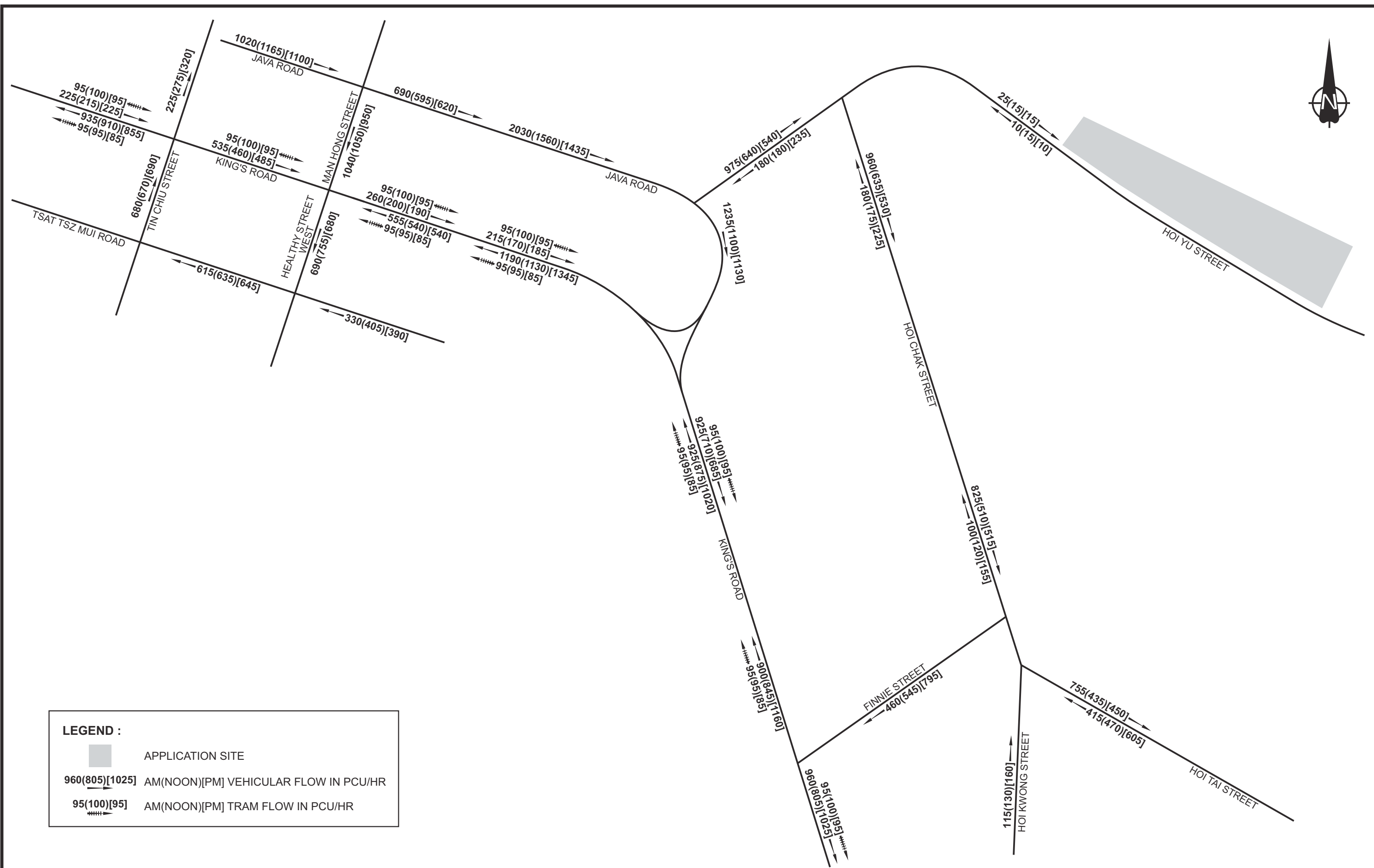
INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**

**EXISTING JUNCTION LAYOUT OF KING'S ROAD / TIN CHIU STREET (J11)**

Designed: NLY  
 Checked: WCY  
 Scale: 1:500(A3)  
 Date: JUL 2025  
 Drawing No.: 3.13  
 Rev.: -





**LEGEND :**

■ APPLICATION SITE

960(805)[1025] AM(NOON)[PM] VEHICULAR FLOW IN PCU/HR

95(100)[95] AM(NOON)[PM] TRAM FLOW IN PCU/HR

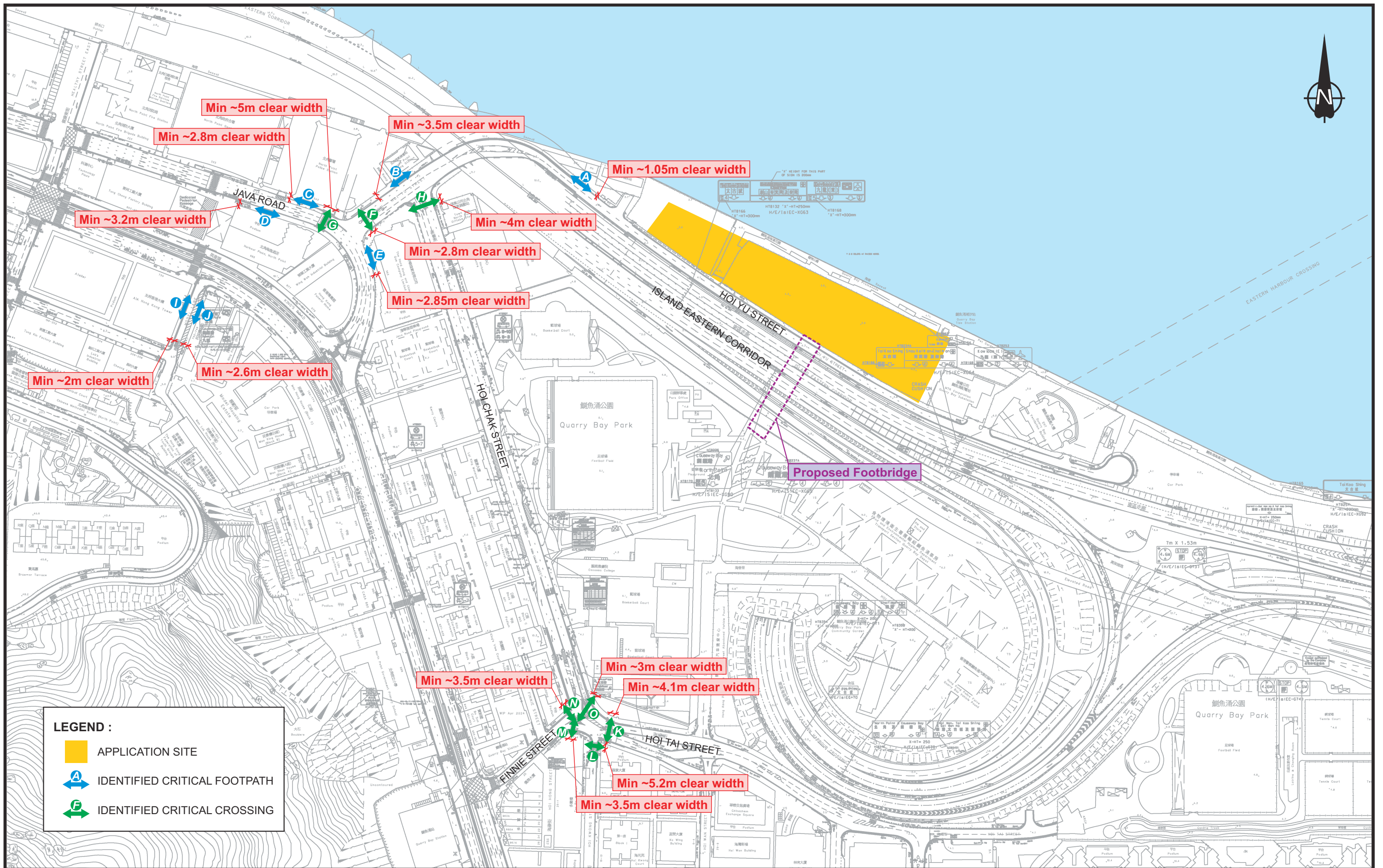
-	-	-	-
-	-	-	-
-	-	-	-
A	MINOR AMENDMENT	WCY	9JAN26
Rev.	Description	Checked	Date

**Project Title**

PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

<b>Drawing Title</b>				
<b>2025 OBSERVED TRAFFIC FLOWS</b>				
Designed	Checked	Scale	Date	Drawing No.
CHE	NLY	NTS	SEP 2025	3.14
				Rev. A



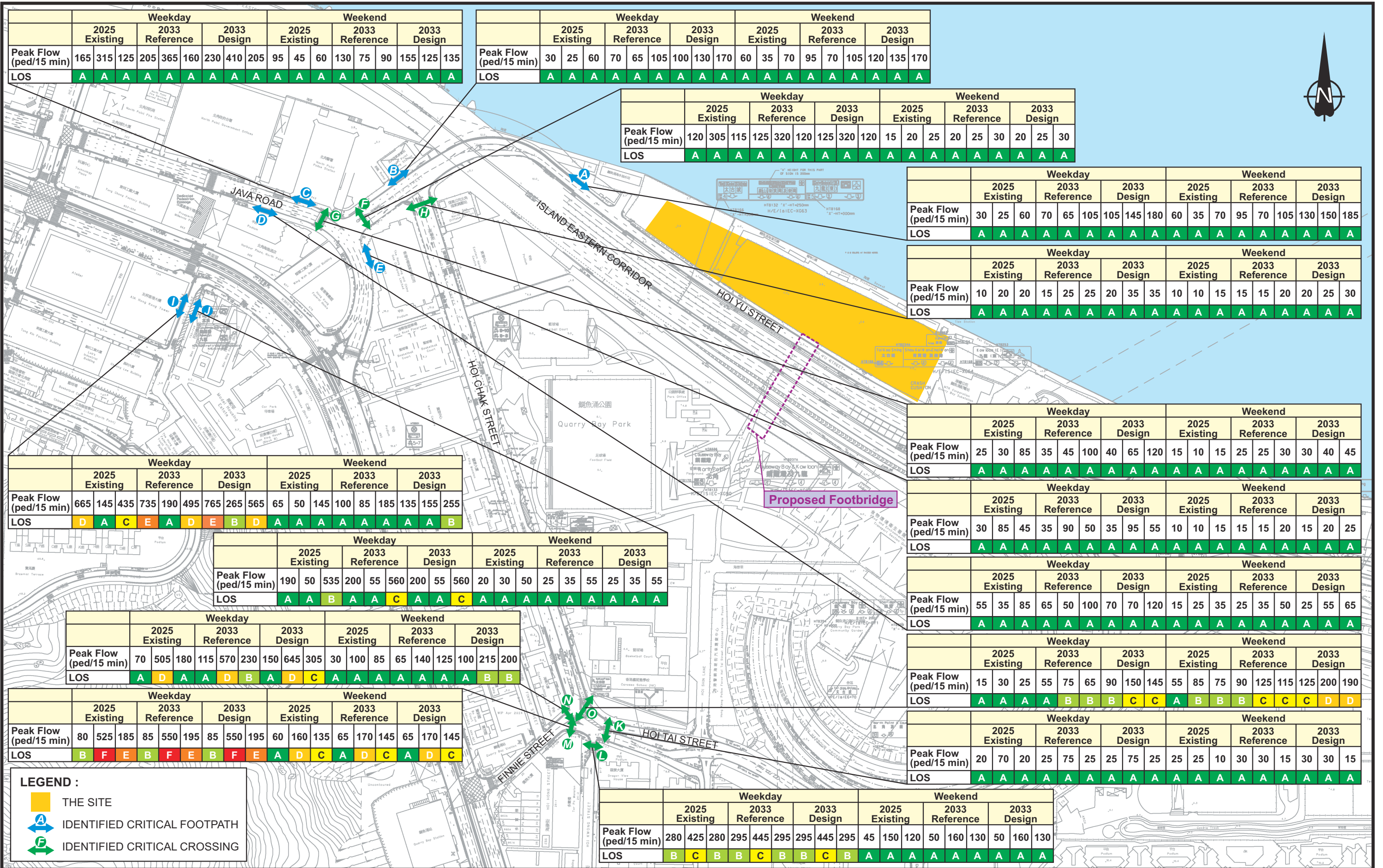


Rev.	Description	Checked	Date
A	TD'S COMMENT	WCY	9JAN26

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

<b>Drawing Title</b>			
<b>IDENTIFIED CRITICAL FOOTPATHS / CROSSINGS</b>			
Designed	Checked	Scale	Date
NLY	WCY	NTS	SEP 2025
Drawing No.	3.15	Rev.	A





**LEGEND :**

- THE SITE
- IDENTIFIED CRITICAL FOOTPATH
- IDENTIFIED CRITICAL CROSSING

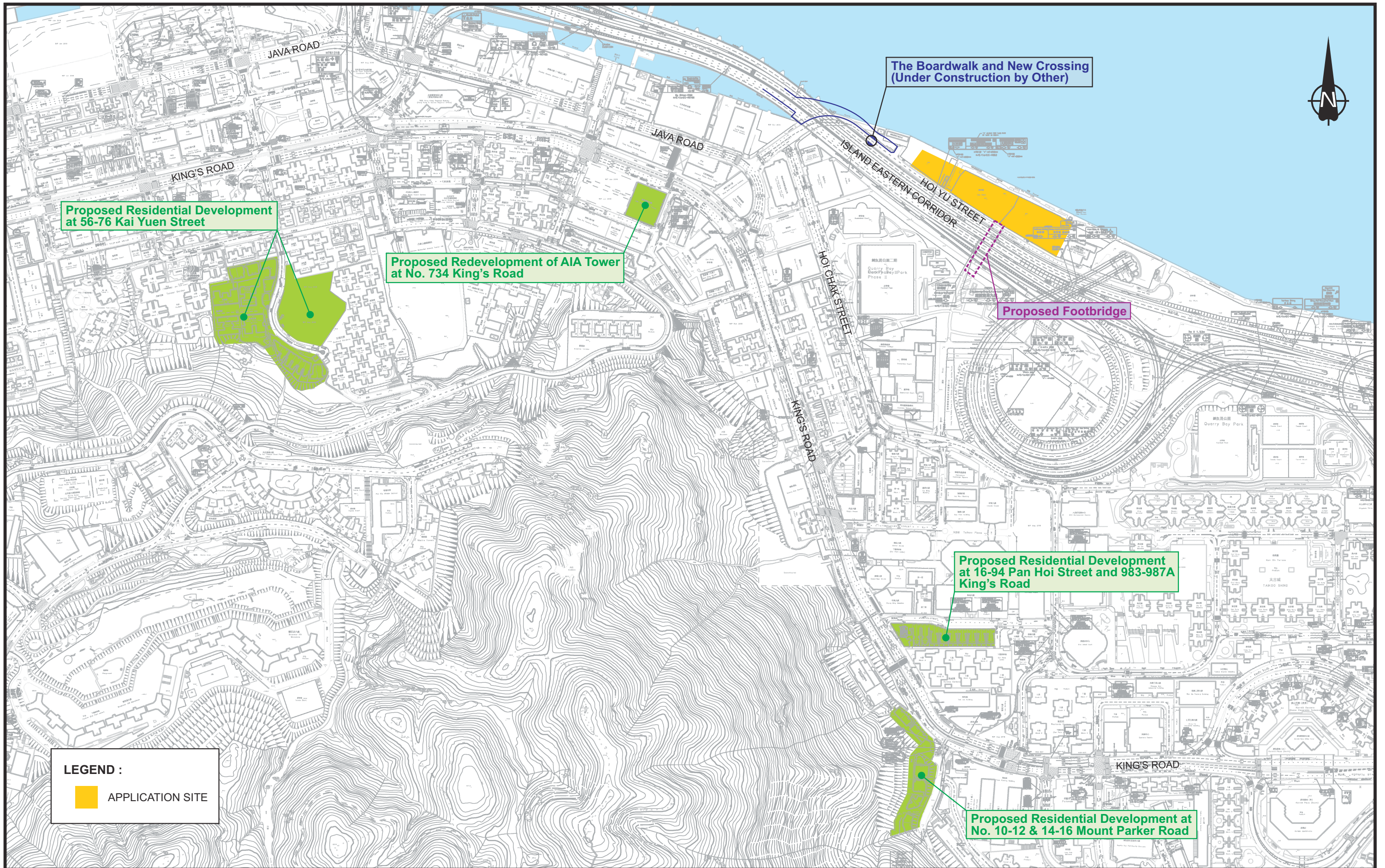
-	-	-	-
B	TD'S COMMENT	WCY	24APR26
A	TD'S COMMENT	WCY	20JAN26
Rev.	Description	Checked	Date

Project Title  
**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY**

Drawing Title  
**PEDESTRIAN FLOW AND PERFORMANCE OF IDENTIFIED CRITICAL SECTIONS OF FOOTPATHS**

Designed	NLY	Checked	WCY	Scale	NTS	Date	AUG 2025	Drawing No.	<b>3.16</b>	Rev.	B
----------	-----	---------	-----	-------	-----	------	----------	-------------	-------------	------	---





Proposed Residential Development at 56-76 Kai Yuen Street

Proposed Redevelopment of AIA Tower at No. 734 King's Road

The Boardwalk and New Crossing (Under Construction by Other)

Proposed Footbridge

Proposed Residential Development at 16-94 Pan Hoi Street and 983-987A King's Road

Proposed Residential Development at No. 10-12 & 14-16 Mount Parker Road

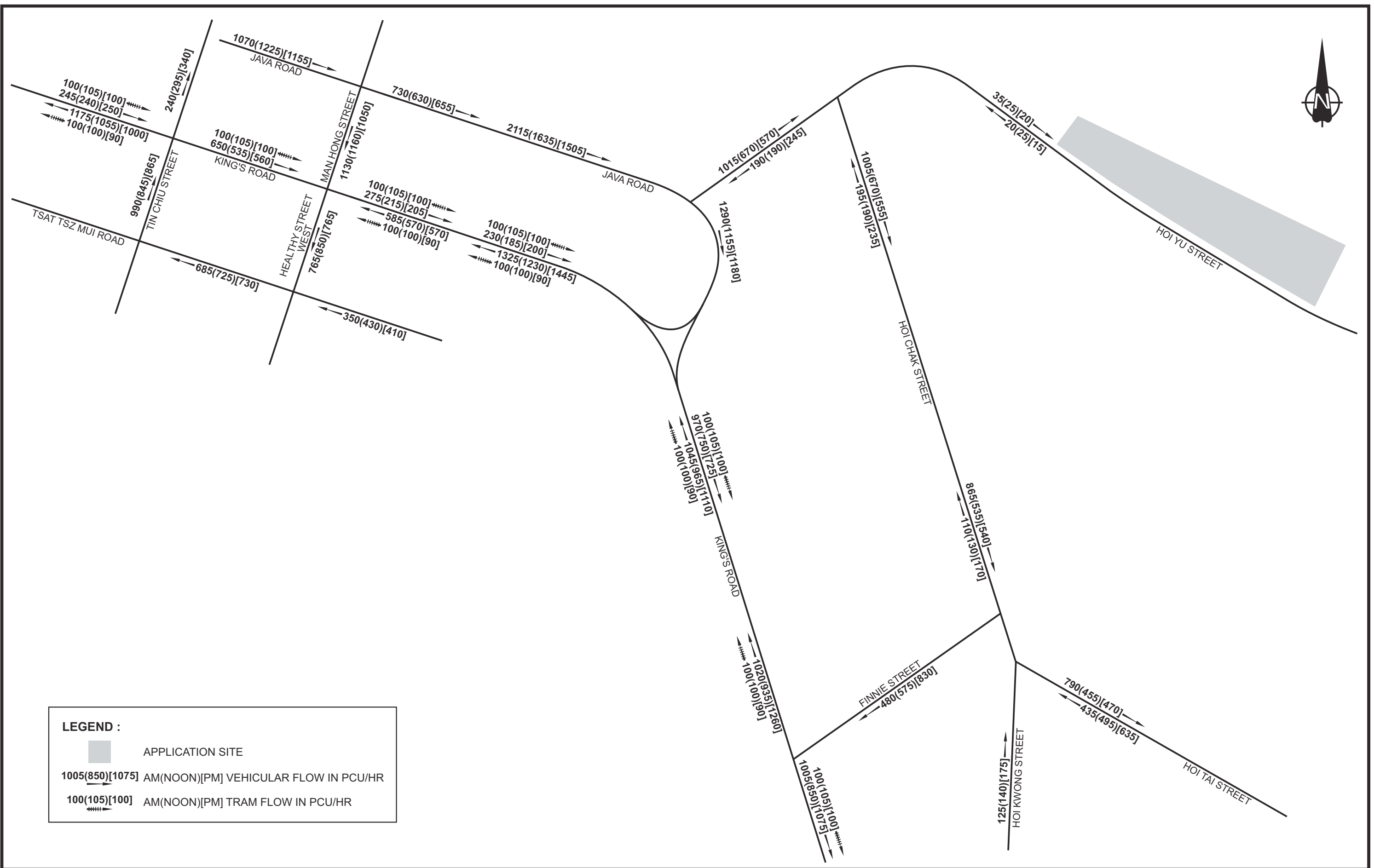
**LEGEND :**  
 APPLICATION SITE

-	-	-	-
B	MINOR AMENDMENT	WCY	9/JAN/26
A	TD'S COMMENT	NLY	17/SEP/25
Rev.	Description	Checked	Date

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

<b>Drawing Title</b>			
<b>NEARBY MAJOR PLANNED AND COMMITTED DEVELOPMENT</b>			
Designed	NLY	Checked	WCY
Scale	NTS	Date	OCT 2024
Drawing No.	<b>4.1</b>		Rev. B





**LEGEND :**

■ APPLICATION SITE

1005(850)[1075] AM(NOON)[PM] VEHICULAR FLOW IN PCU/HR

100(105)[100] AM(NOON)[PM] TRAM FLOW IN PCU/HR

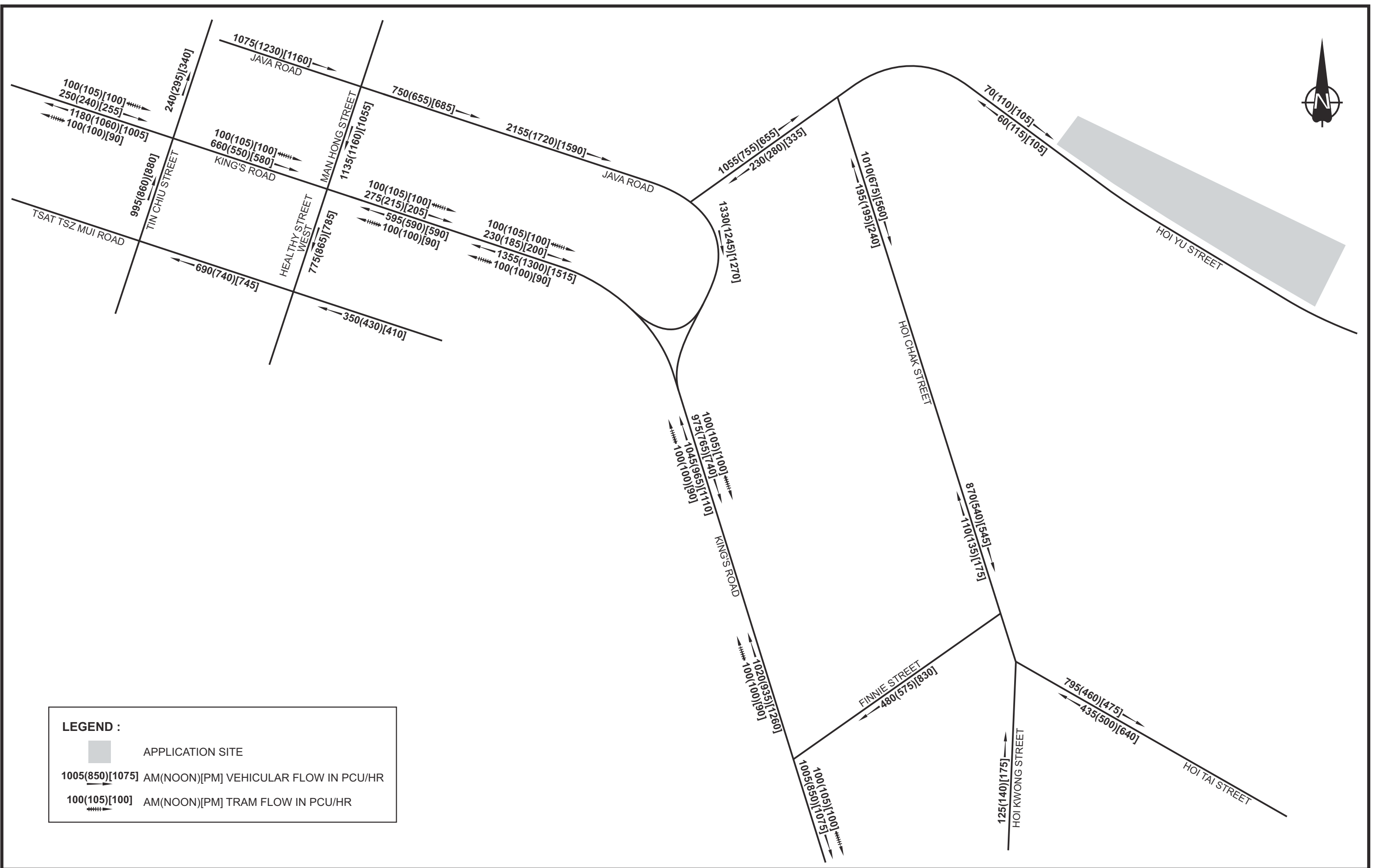
-	-	-	-
B	MINOR AMENDMENT	WCY	9JAN26
A	TD'S COMMENT	NLY	17SEP25
Rev.	Description	Checked	Date

Project Title

PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

Drawing Title			
<b>2033 REFERENCE TRAFFIC FLOWS</b>			
Designed	Checked	Scale	Date
NLY	WCY	NTS	NOV 2024
Drawing No.		4.2	Rev. B





**LEGEND :**

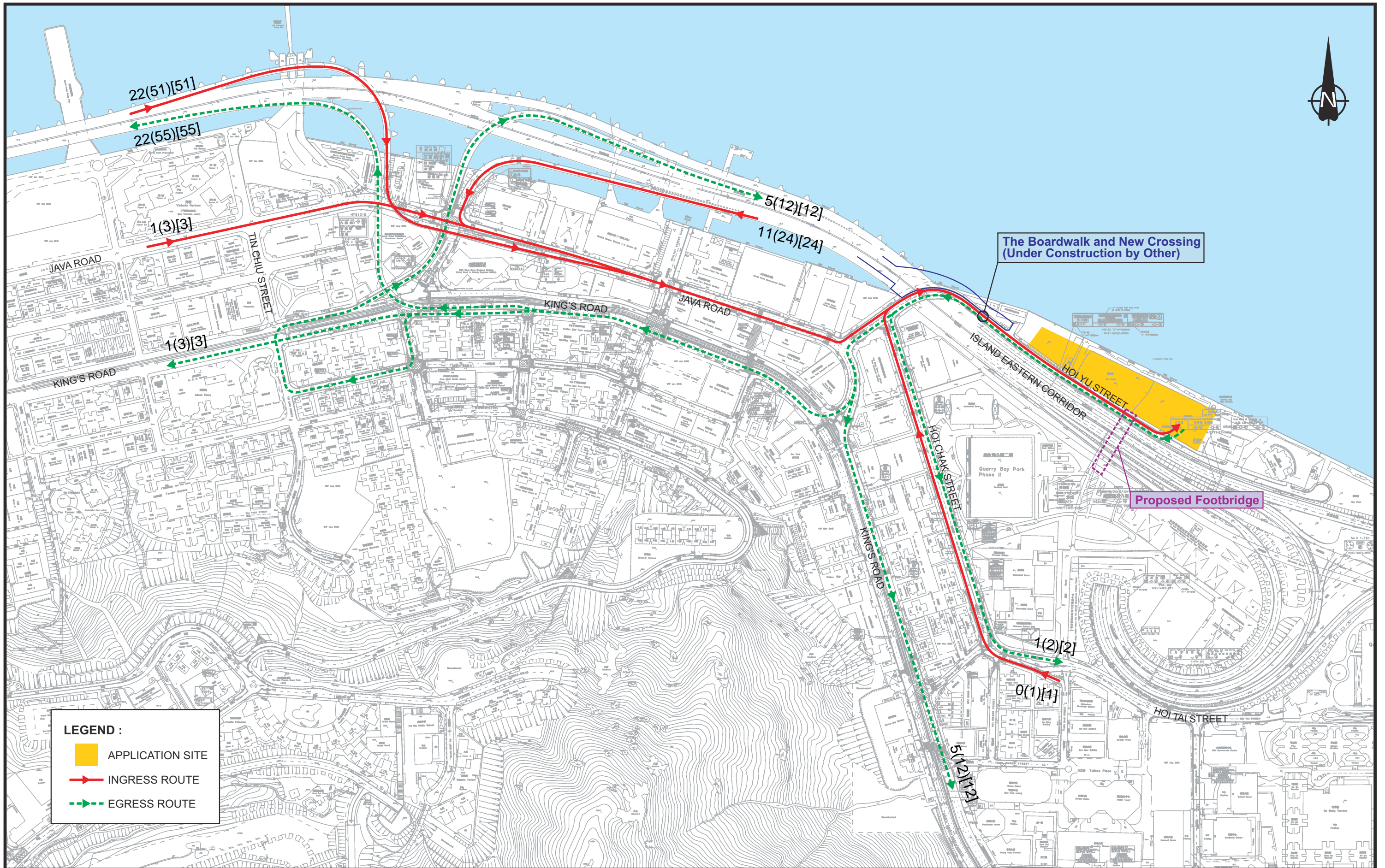
- APPLICATION SITE
- 1005(850)[1075] AM(NONN)[PM] VEHICULAR FLOW IN PCU/HR
- 100(105)[100] AM(NONN)[PM] TRAM FLOW IN PCU/HR

-	-	-	-
B	MINOR AMENDMENT	WCY	9JAN26
A	TD'S COMMENT	NLY	17SEP25
Rev.	Description	Checked	Date

Project Title  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

Drawing Title			
<b>2033 DESIGN TRAFFIC FLOWS</b>			
Designed	Checked	Scale	Date
NLY	WCY	NTS	NOV 2024
Drawing No. <b>4.3</b>			Rev. B





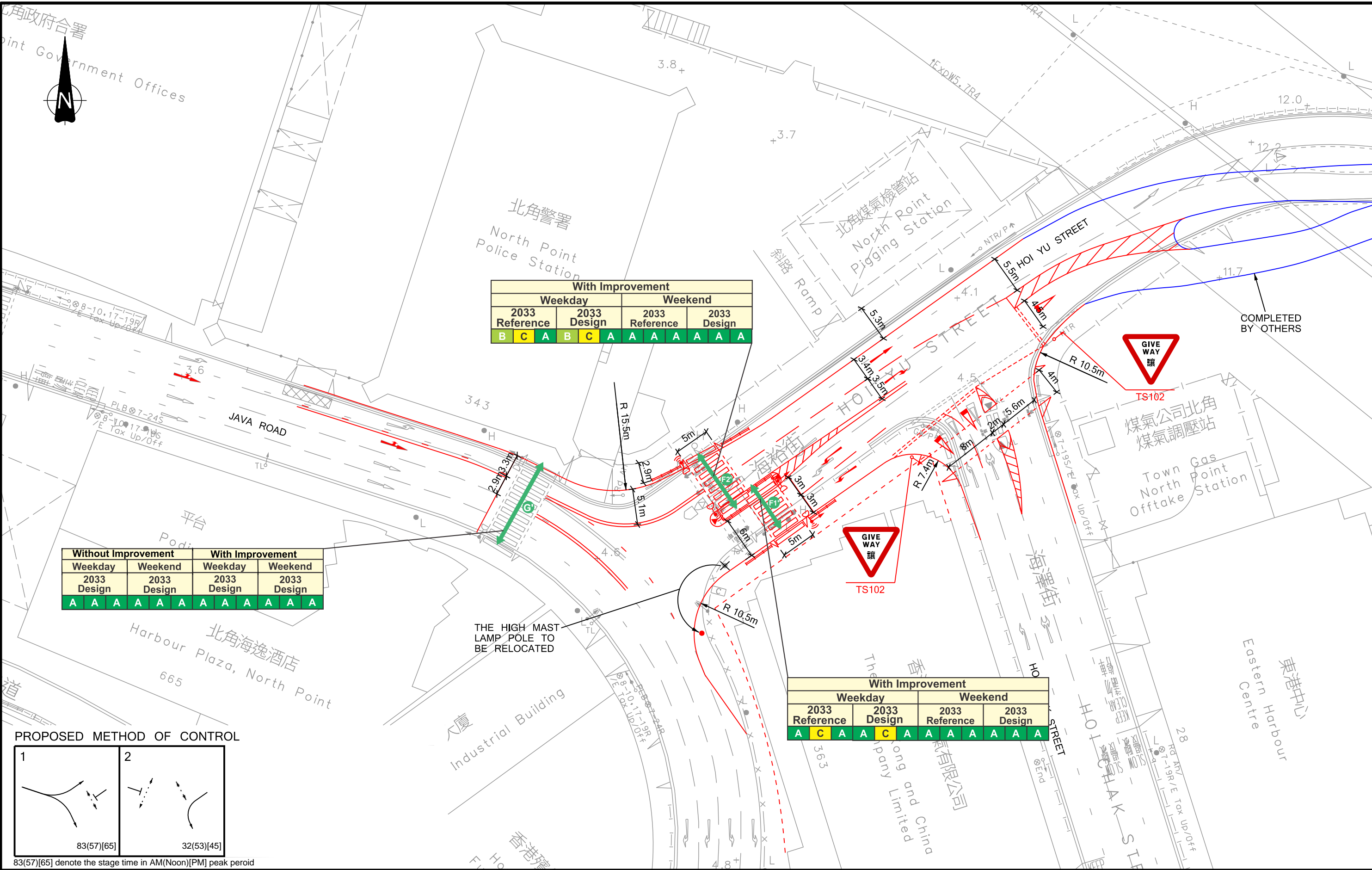
**LEGEND :**

- APPLICATION SITE
- INGRESS ROUTE
- EGRESS ROUTE

-	-	-	-
-	-	-	-
-	-	-	-
A	MINOR AMENDMENT	WCY	9JAN26
Rev.	Description	Checked	Date

Project Title  
**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND / OR COMMERCIAL LEISURE AND TOURISM RELATED USES" INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY**

Drawing Title <b>KEY VEHICULAR TRAFFIC ROUTES</b>			
Designed	Checked	Scale	Date
NLY	WCY	NTS	SEP 2025
Drawing No.		Rev.	
<b>4.4</b>		A	

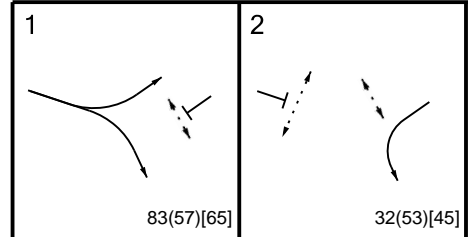


With Improvement			
Weekday		Weekend	
2033 Reference	2033 Design	2033 Reference	2033 Design
B	C	A	A

Without Improvement		With Improvement	
Weekday	Weekend	Weekday	Weekend
2033 Design	2033 Design	2033 Design	2033 Design
A	A	A	A

With Improvement			
Weekday		Weekend	
2033 Reference	2033 Design	2033 Reference	2033 Design
A	C	A	A

PROPOSED METHOD OF CONTROL



83(57)[65] denote the stage time in AM(Noon)[PM] peak period

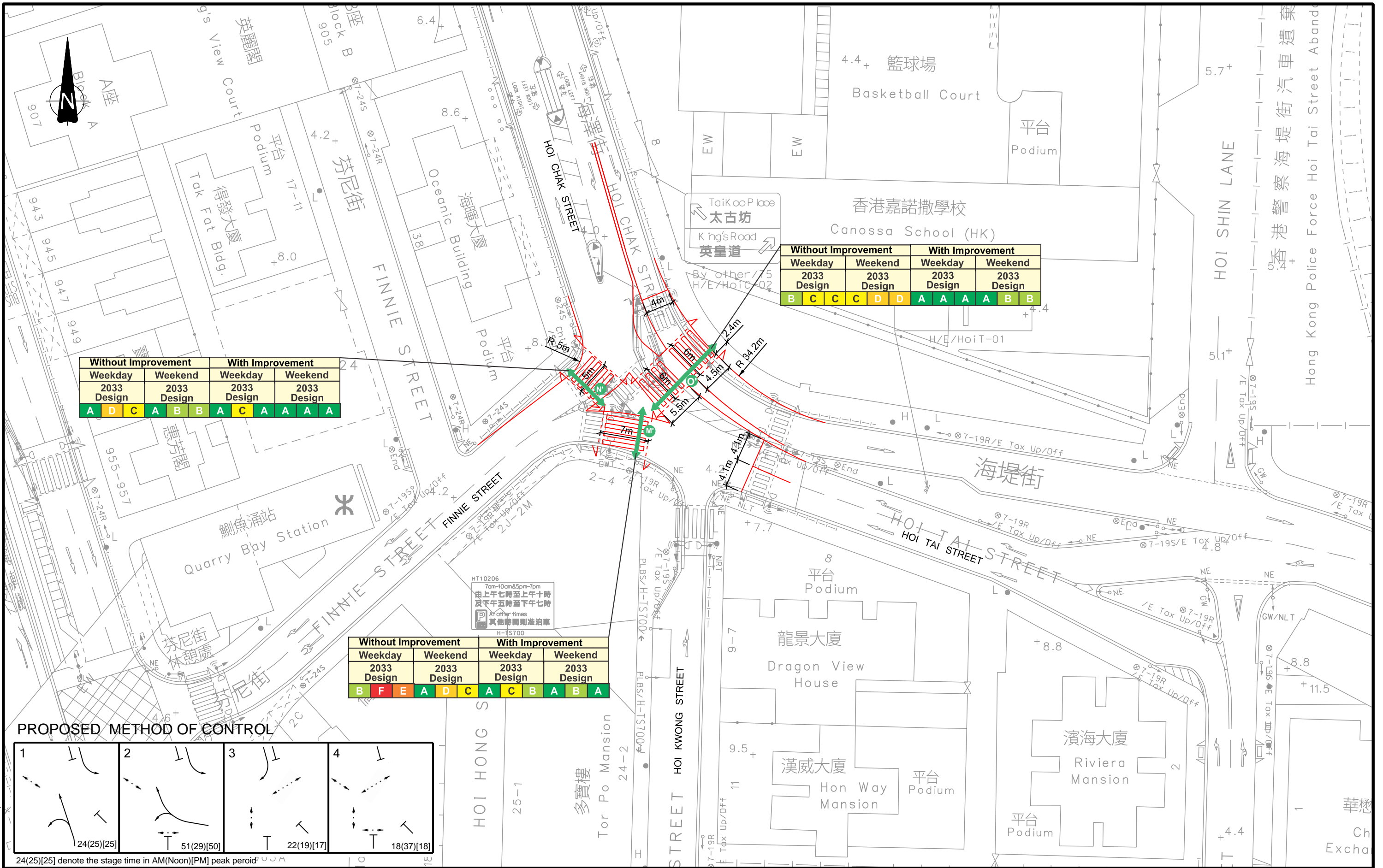
FILENAME: D:\OneDrive - SysstraGroup\JOBS(NEW)\CHK507937\01\TIA\F51-C.dgn  
 PRINTED BY: cchan  
 DATE: 24-Apr-26  
 TIME: 1:55:02 PM

Rev.	Description	Checked	Date
-	-	-	-
C	TD'S COMMENT	WCY	24APR26
B	TD'S COMMENT	WCY	20JAN26
A	INCORPORATED CEDD'S SCHEME	WCY	09SEP25

Project Title  
**PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"**  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

Drawing Title			
PLANNED JUNCTION IMPROVEMENT SCHEME OF JAVA ROAD / HOI YU STREET / HOI CHAK STREET			
Designed	Checked	Scale	Date
NLY	WCY	1:500(A3)	NOV 2024
Drawing No.	Rev.		
5.1	C		



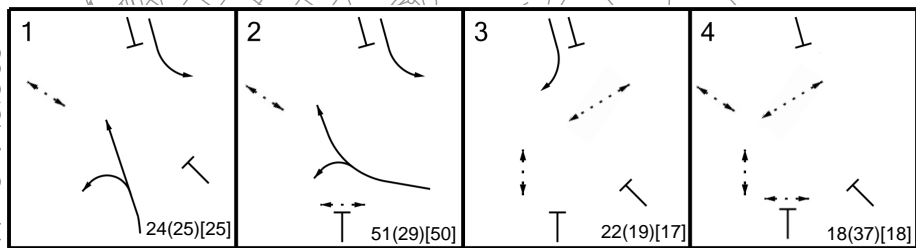


Without Improvement		With Improvement	
Weekday	Weekend	Weekday	Weekend
2033 Design	2033 Design	2033 Design	2033 Design
A	D	C	A
B	A	B	B
A	C	A	A
A	A	A	A

Without Improvement		With Improvement	
Weekday	Weekend	Weekday	Weekend
2033 Design	2033 Design	2033 Design	2033 Design
B	C	C	D
D	D	A	A
A	A	A	A
A	B	B	B

Without Improvement		With Improvement	
Weekday	Weekend	Weekday	Weekend
2033 Design	2033 Design	2033 Design	2033 Design
B	F	E	A
D	C	A	C
B	A	B	A
B	A	B	A

**PROPOSED METHOD OF CONTROL**



24(25)[25] denote the stage time in AM(Noon)[PM] peak period

Rev.	Description	Checked	Date
-	-	-	-
C	TD'S COMMENT	WCY	24APR26
B	TD'S COMMENT	WCY	20JAN26
A	TD'S COMMENT	WCY	09SEP25

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

Drawing Title			
<b>PROPOSED JUNCTION IMPROVEMENT SCHEME OF HOI TAI STREET / HOI CHAK STREET / FINNIE STREET / HOI KWONG STREET</b>			
Designed	NLY	Checked	WCY
Scale	1:500(A3)	Date	SEP 2025
Drawing No.	<b>5.2</b>	Rev.	C



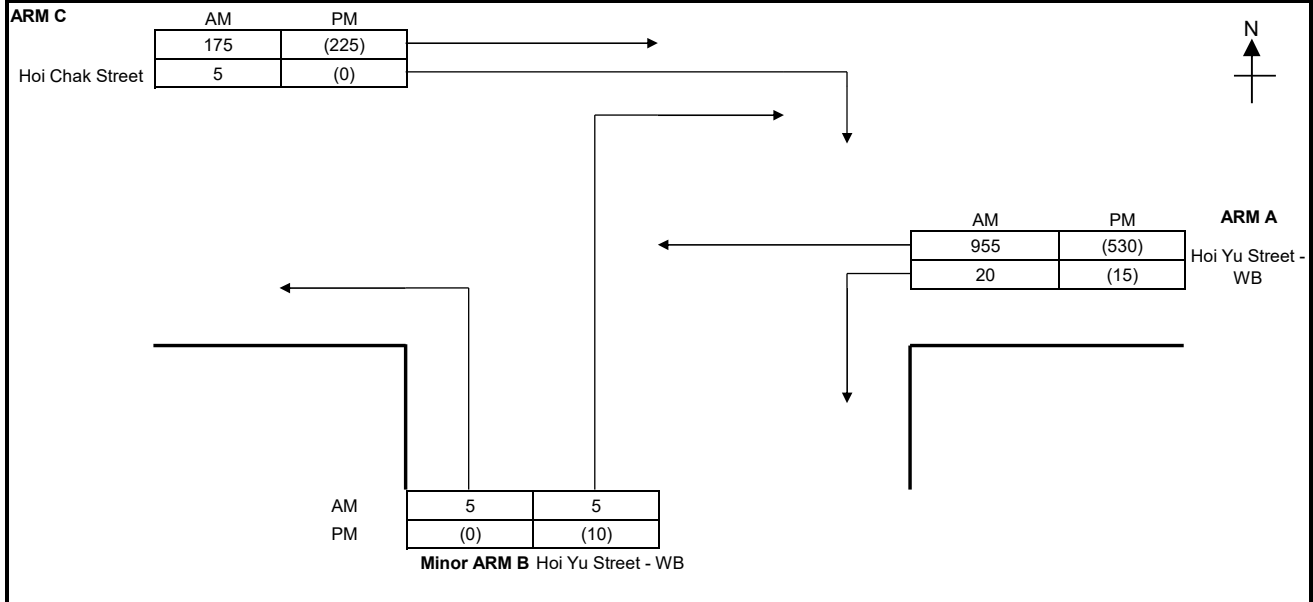
## Appendix A - Junction Performance calculation

## Calculation Sheets - 2025 Existing

# Simplified priority Junction Capacity Calculation



Job Title:	Hoi Yu Street TIA	Ref. No.:	J1_pic
Junction:	Hoi Yu Street/Hoi Chak Street	Designed by:	NLY
Description:	2025 Observed	Checked by:	WCY
Design Year:	2025	Job No.:	CHK50793710
ARM A:	Hoi Yu Street - EB	Date:	九月 2025
ARM B:	Hoi Yu Street - WB		
ARM C:	Hoi Chak Street		



GEOMETRY			
Major road width	W	13.50	Lane widths
Central Reserve width	Wcr	0.00	w(b-a)
2 Lane Minor Arm (Y/N)		N	w(b-c)
			w(c-b)

PARAMETER			
Visibilities	Vr(b-a)	50	Calculated
	VI(b-a)	50	D
	Vr(b-c)	50	E
	Vr(c-b)	50	F
			Y

ANALYSIS		AM Peak	PM Peak
TRAFFIC FLOWS	q(c-a)	175	225
	q(c-b)	5	0
	q(a-b)	20	15
	q(a-c)	955	530
	q(b-a)	5	10
	q(b-c)	5	0
	f	0.50	0.00
CAPACITIES	Q(b-a)	323	388
	Q(b-c)	499	577
	Q(c-b)	501	581
	Q(b-ac)	392	388
RFC's	b-a	0.015	0.026
	b-c	0.010	0.000
	c-b	0.010	0.000
	b-ac	0.026	0.026
RFC		<b>0.026</b>	<b>0.026</b>

Where VI and Vr are visibility distances to the left or right of the respective streams

$$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$$

$$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$$

$$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$$

$$Y = 1-0.0345W$$

f = proportion of minor traffic turning left

$$Q(b-ac) = Q(b-c)Q(b-a)/(1-f)Q(b-c)+fQ(b-a)$$

Capacity of combined streams

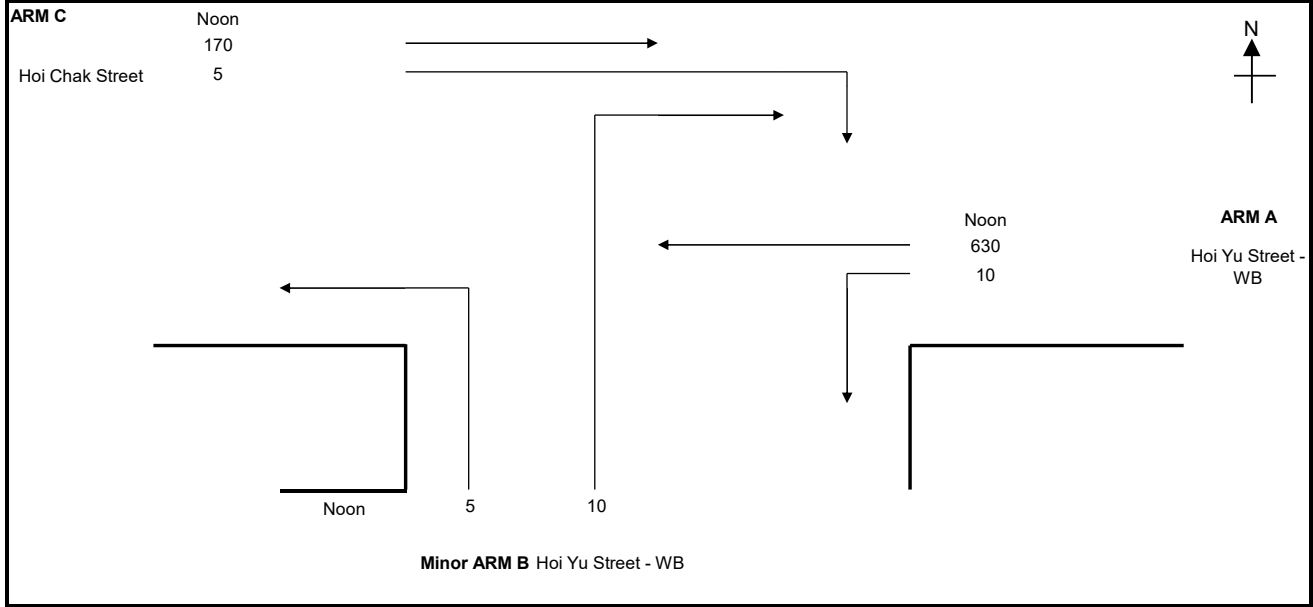
All the above formulas are in accordance to T.P.D.M. Vol.2 Chapter 4 Appendix 1

# Simplified priority Junction Capacity Calculation



Job Title:	Hoi Yu Street TIA	Ref. No.:	J1_pic
Junction:	Hoi Yu Street/Hoi Chak Street	Designed by:	NLY
Description:	2025 Observed	Checked by:	WCY
Design Year:	2025	Job No.:	CHK50793710
		Date:	九月 2025

ARM A:	Hoi Yu Street - EB
ARM B:	Hoi Yu Street - WB
ARM C:	Hoi Chak Street



GEOMETRY				
Major road width	W	13.50	Lane widths	
Central Reserve width	Wcr	0.00	w(b-a)	3.25
2 Lane Minor Arm (Y/N)		N	w(b-c)	3.25
			w(c-b)	2.60

PARAMETER					
Visibilities	Vr(b-a)	50	Calculated	D	0.79
	VI(b-a)	50		E	0.91
	Vr(b-c)	50		F	0.91
	Vr(c-b)	50		Y	0.56

ANALYSIS		Noon Peak	
TRAFFIC FLOWS	q(c-a)		170
	q(c-b)		5
	q(a-b)		10
	q(a-c)		630
	q(b-a)		10
	q(b-c)		5
	f		0.33
CAPACITIES	Q(b-a)	Factor	377
	Q(b-c)	1	560
	Q(c-b)	1	563
	Q(b-ac)	1	423
RFC's	b-a		0.027
	b-c		0.009
	c-b		0.009
	b-ac		0.035
RFC			<b>0.035</b>

Where VI and Vr are visibility distances to the left or right of the respective streams  
 $D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$   
 $E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$   
 $F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$   
 $Y = 1-0.0345W$   
 f = proportion of minor traffic turning left  
 $Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$  Capacity of combined streams

All the above formulas are in accordance to T.P.D.M. Vol.2 Chapter 4 Appendix 1

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Hoi Yu Street

Design Year: 2025

Description: 2025 Observed

Designed By: NLY

Checked By: WCY

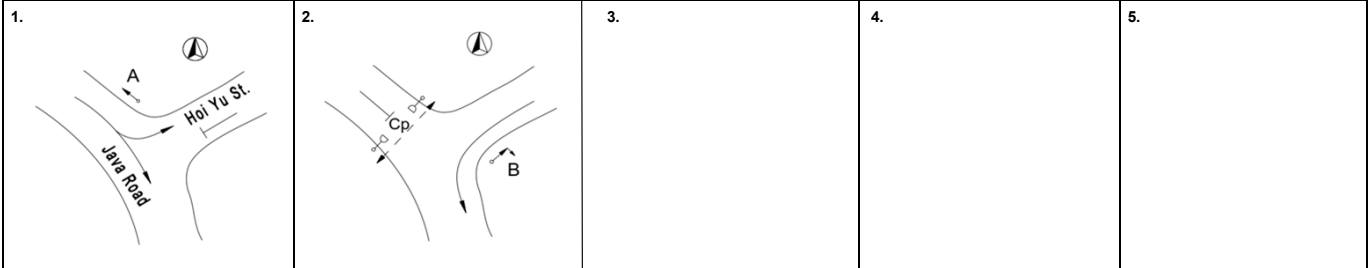
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak			
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Java Road	↖	A	1	2.4	20						1725	1725	975	0.565	0.565	545	0.316	
	→	A	1	3.2							1040	1040	449	0.432		381	0.366	0.366
	→	A	1	3.1							825	825	356	0.432		302	0.366	
	→	A	1	3.1							580	580	250	0.431		212	0.366	
Hoi Yu Street	↙	B	2	3.4	15						1905	1905	94	0.049		123	0.065	
	↘	B	2	3.4	12.5						1745	1745	86	0.049		112	0.064	
Pedestrian Crossing		Cp	2	MIN GREEN + FLASH =		8	+	10	=	18					*			*

**Notes:**  
 1. Site factor 0.5, 0.4 and 0.3 are adopted for Java Road's second, third and fourth lane respectively due to downstream blocking and illegal parking along kerbside observed.



Group	A,B	A,Cp	Group	A,B	A,Cp
<b>y</b>	0.615	0.565	<b>y</b>	0.431	0.366
<b>L (sec)</b>	10	26	<b>L (sec)</b>	10	26
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.822	0.697	<b>y pract.</b>	0.818	0.687
<b>R.C. (%)</b>	34%	23%	<b>R.C. (%)</b>	90%	88%

**Stage / Phase Diagrams**



I/G= 4	I/G= 5	18	I/G=	I/G=	I/G=
I/G= 4	I/G= 5	18	I/G=	I/G=	I/G=

Date: 九月, 2025 Junction: Java Road/ Hoi Yu Street J2

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Hoi Yu Street

Design Year: 2025

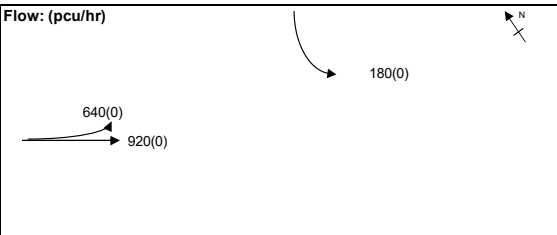
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

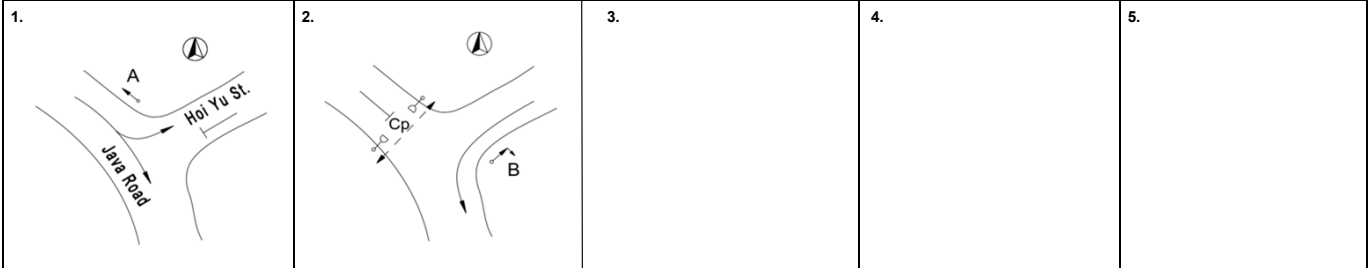
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road	↖	A	1	2.4	20					1725		640	0.371	0.377			*
	→	A	1	3.2					1040		391	0.376					
	→	A	1	3.1					825		311	0.377					
	→	A	1	3.1					580		218	0.376					
Hoi Yu Street	↙	B	2	3.4	15					1905		94	0.049				*
	↘	B	2	3.4	12.5					1745		86	0.049				
Pedestrian Crossing		Cp	2	MIN GREEN + FLASH =		8	+	10	=	18							*

**Notes:**  
1. Site factor 0.5, 0.4 and 0.3 are adopted for Java Road's second, third and fourth lane respectively due to downstream blocking and illegal parking along kerbside observed.



Group	A,B	A,Cp	Group		
<b>y</b>	0.426	0.377	<b>y</b>		
<b>L (sec)</b>	10	26	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.818	0.687	<b>y pract.</b>		
<b>R.C. (%)</b>	92%	82%	<b>R.C. (%)</b>		

**Stage / Phase Diagrams**



I/G= 4	I/G= 5	18	I/G=	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=	I/G=

Date: 九月, 2025 Junction: Java Road/ Hoi Yu Street J2

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Java Road

Design Year: 2025

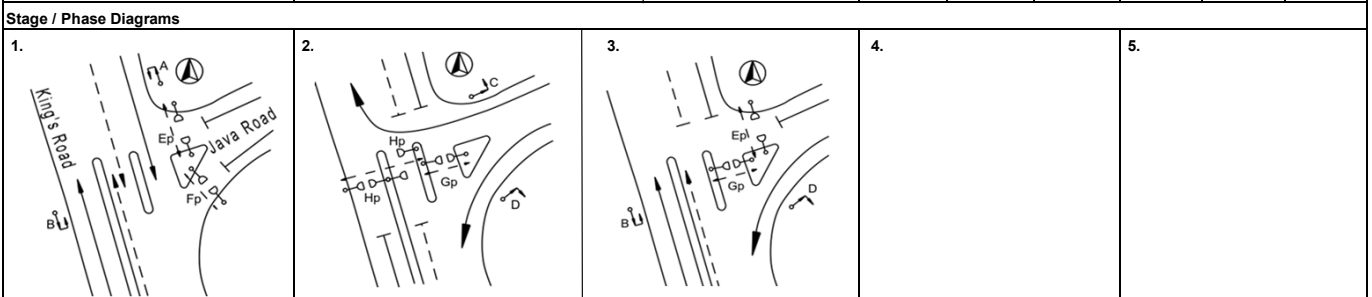
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.3						2145	2145	215	0.100	0.100	185	0.086	
King's Road EB (Tram)	→	A	1	2.7						2025	2025	95	0.047		95	0.047	
Java Road	↖	C	2	3.5		30				1870	1870	242	0.129		285	0.152	0.152
	↗	C	2	4.1		32.5				2070	2070	268	0.129		315	0.152	
	↘	D	2,3	3.3	52.5					2025	2025	367	0.181		259	0.128	
	↙	D	2,3	3.3	50					1890	1890	343	0.181	0.181	241	0.128	
King's Road WB	↑	B	1,3	3.2						1935	1935	300	0.155		330	0.171	
	↑	B	1,3	3.2						2075	2075	321	0.155		355	0.171	0.171
	↑	B	1,3	3.5						1965	1965	304	0.155		335	0.170	
King's Road WB (Tram)	↑	B	1,3	2.3						1845	1845	95	0.051		85	0.046	
Pedestrian Crossing																	
	Ep	1,3			MIN GREEN + FLASH =	5	+	7	=	12							
	Fp	1			MIN GREEN + FLASH =	5	+	9	=	14							
	Gp	2,3			MIN GREEN + FLASH =	5	+	5	=	10							
	Hp	2			MIN GREEN + FLASH =	5	+	13	=	18							

Notes:	Flow: (pcu/hr)		<b>Group</b>	B,C	A,D	<b>Group</b>	A,D	B,C
			<b>y</b>	0.285	0.282	<b>y</b>	0.214	0.323
			<b>L (sec)</b>	10	12	<b>L (sec)</b>	12	10
			<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
			<b>y pract.</b>	0.822	0.806	<b>y pract.</b>	0.802	0.818
			<b>R.C. (%)</b>	189%	186%	<b>R.C. (%)</b>	274%	153%



I/G= 5	I/G= 9	I/G=	I/G=
I/G=	I/G= 5	I/G= 7	I/G=

Date: 九月, 2025 Junction: King's Road/ Java Road J3

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: King's Road/ Java Road

Design Year: 2025

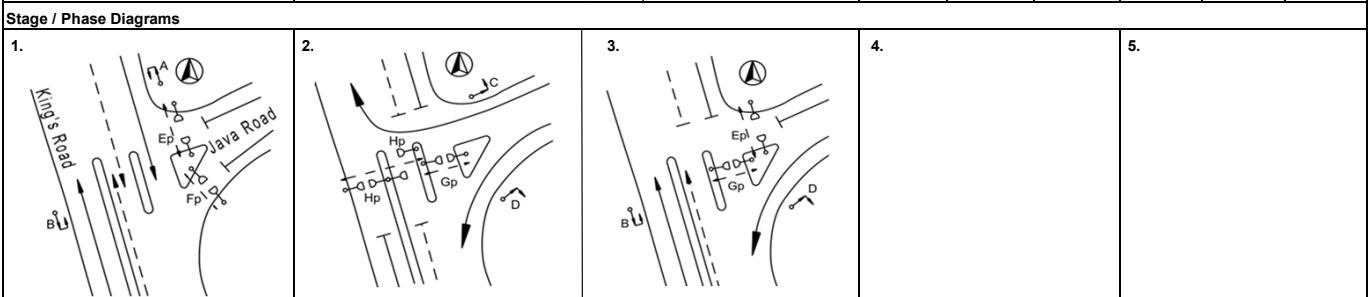
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.3						2145		170	0.079				*
King's Road EB (Tram)	→	A	1	2.7						2025		100	0.049				
Java Road	↕	C	2	3.5		30				1870		249	0.133	0.133			*
	↕	C	2	4.1		32.5			2070		276	0.133					
	↙	D	2,3	3.3	52.5				2025		279	0.138					
	↘	D	2,3	3.3	50				1890		261	0.138					
King's Road WB	↑	B	1,3	3.2						1935		283	0.146	0.147			
	↑	B	1,3	3.2					2075		304	0.147					
	↑	B	1,3	3.5					1965		288	0.147					
King's Road WB (Tram)	↑	B	1,3	2.3					1845		95	0.051					
Pedestrian Crossing																	
	Ep	1,3		MIN GREEN + FLASH =	5	+	7	=	12								
	Fp	1		MIN GREEN + FLASH =	5	+	9	=	14								
	Gp	2,3		MIN GREEN + FLASH =	5	+	5	=	10								
	Hp	2		MIN GREEN + FLASH =	5	+	13	=	18								

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	A,D	B,C	<b>Group</b>		
				<b>y</b>	0.217	0.280	<b>y</b>		
				<b>L (sec)</b>	12	10	<b>L (sec)</b>		
				<b>C (sec)</b>	110	110	<b>C (sec)</b>		
				<b>y pract.</b>	0.802	0.818	<b>y pract.</b>		
				<b>R.C. (%)</b>	269%	192%	<b>R.C. (%)</b>		



I/G=	I/G= 5	I/G= 7	I/G=	I/G=
I/G= #N/A	#N/A	#N/A	I/G=	I/G=

Date: 九月, 2025 Junction: King's Road/ Java Road J3

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie Street/ Hoi Chak Street

Design Year: 2025

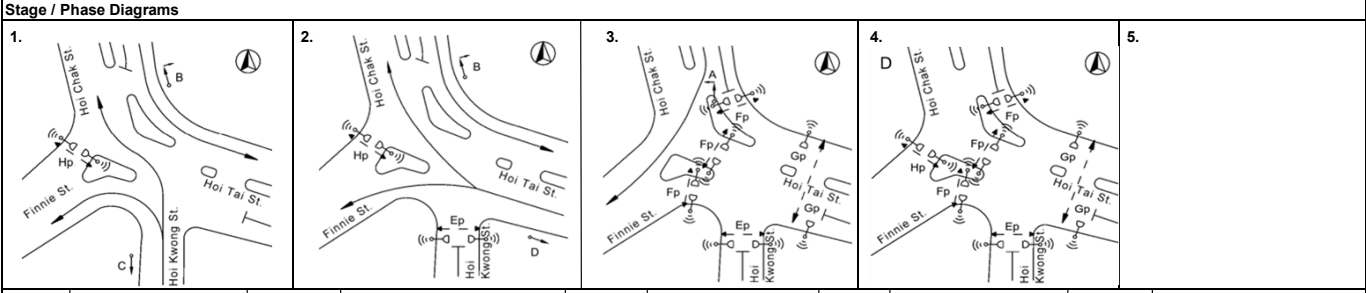
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Hoi Tai Street	↑	D	2	3.5		40				2030	2030	80	0.039		140	0.069	
	↓	D	2	3.6	20					1835	1835	335	0.183		465	0.253	0.253
Hoi Kwong Street	↔	C	1	3.6	15			83%	91%	1825	1810	115	0.063		160	0.088	0.088
Hoi Chak Street	↘	B	1,2	3.1	35					1845	1845	755	0.409	0.409	450	0.244	
	↙	A	3	3.5		30				2005	2005	70	0.035		65	0.032	
Pedestrian Crossing		Ep	2,3,4	MIN GREEN + FLASH =		8	+	5	=	13							
	Fp	3,4	MIN GREEN + FLASH =		9	+	7	=	16								
	Gp	3,4	MIN GREEN + FLASH =		8	+	10	=	18				*				*
	Hp	1,2,4	MIN GREEN + FLASH =		5	+	7	=	12								

Notes:	Flow: (pcu/hr)	Group	B.Fp	B.Gp	Group	C.D.Fp	C.D.Gp
		<b>y</b>	0.409	0.409	<b>y</b>	0.342	0.342
		<b>L (sec)</b>	26	27	<b>L (sec)</b>	33	34
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.697	0.689	<b>y pract.</b>	0.630	0.622
		<b>R.C. (%)</b>	70%	68%	<b>R.C. (%)</b>	84%	82%



I/G= 2	I/G= 6	I/G= 8	18	I/G=	I/G=
I/G= 2	I/G= 6	I/G= 10	18	I/G=	I/G=

Date: 九月, 2025 Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie J4

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie Street/ Hoi Chak Street

Design Year: 2025

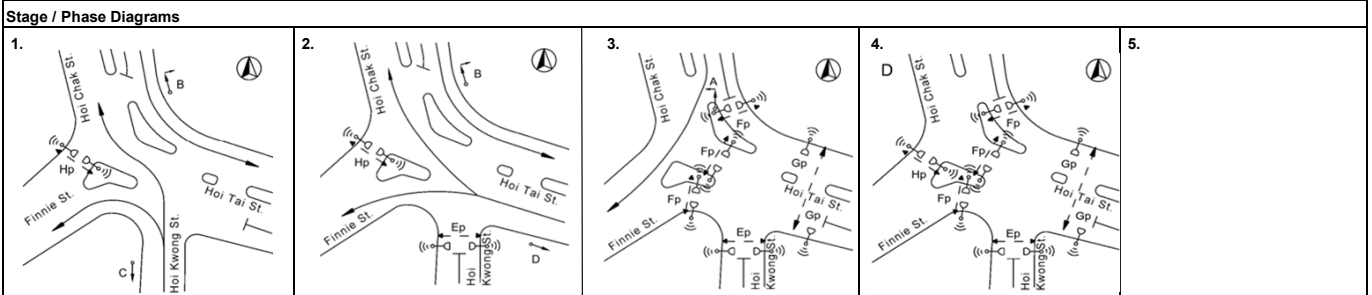
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Hoi Tai Street	↑	D	2	3.5							2030	90	0.044				
	↓	D	2	3.6	20						1835	380	0.207	0.207			
Hoi Kwong Street	↔	C	1	3.6	15			77%			1835	130	0.071	0.071			
Hoi Chak Street	↘	B	1,2	3.1	35						1845	435	0.236				*
	↙	A	3	3.5		30					2005	75	0.037				
Pedestrian Crossing		Ep	2,3,4	MIN GREEN + FLASH =		8	+	5	=	13							
		Fp	3,4	MIN GREEN + FLASH =		9	+	7	=	16							*
		Gp	3,4	MIN GREEN + FLASH =		8	+	10	=	18				*			
		Hp	1,2,4	MIN GREEN + FLASH =		5	+	7	=	12							

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	C.D.Fp	C.D.Gp	<b>Group</b>		
	<b>y</b>	0.278	0.278	<b>y</b>					
	<b>L (sec)</b>	33	34	<b>L (sec)</b>					
	<b>C (sec)</b>	110	110	<b>C (sec)</b>					
	<b>y pract.</b>	0.630	0.622	<b>y pract.</b>					
	<b>R.C. (%)</b>	127%	124%	<b>R.C. (%)</b>					



I/G= 2	I/G= 6	I/G= 10	18	I/G=	I/G=
I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G= #N/A	#N/A

Date: 九月, 2025 Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie J4

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: King's Road/ Finnie Street

Design Year: 2025

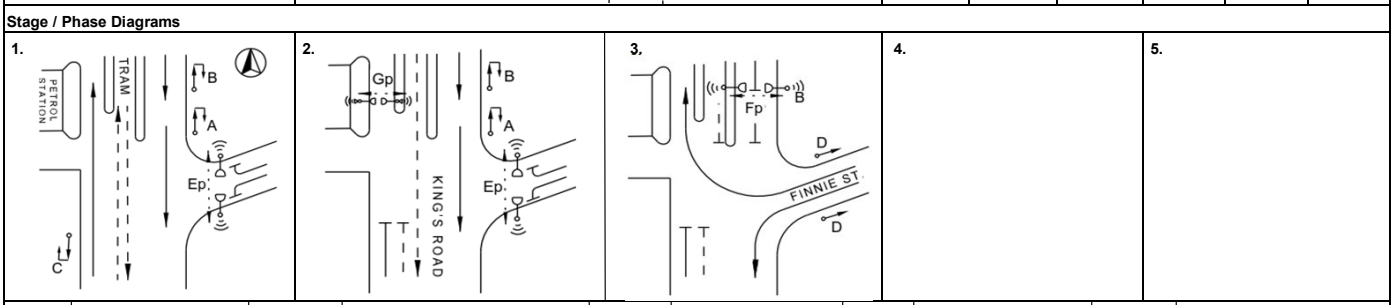
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road NB (with Tram)	↑	C	1	3.0						1915	1915	204	0.107		202	0.105	
	↑	C	1	3.3						2085	2085	222	0.106		221	0.106	
	↑	C	1	3.5						2105	2105	224	0.106		222	0.105	
Finnie Street	↑	D	3	3.5	10	20		51% / 49%	50% / 50%	1765	1765	225	0.127		389	0.220	
	↑	D	3	3.5		22.5				1840	1840	235	0.128	0.128	406	0.221	0.221
King's Road SB	↓	A	1,2	3.7						1985	1985	412	0.208		405	0.204	0.204
	↓	A	1,2	3.3						2085	2085	433	0.208	0.208	425	0.204	
King's Road SB (Tram)	↓	A	1,2	2.6						2015	2015	95	0.047		85	0.042	
Pedestrian Crossing																	
	Ep	1,2	MIN GREEN + FLASH =			5	+	7	=	12							
	Fp	3	MIN GREEN + FLASH =			5	+	6	=	11							
	Gp	2	MIN GREEN + FLASH =			5	+	6	=	11							

Notes:	Flow: (pcu/hr)	Group	C,Gp,D	A,D	Group	C,Gp,D	A,D
		<b>y</b>	0.234	0.335	<b>y</b>	0.327	0.425
		<b>L (sec)</b>	27	10	<b>L (sec)</b>	27	10
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.689	0.822	<b>y pract.</b>	0.679	0.818
		<b>R.C. (%)</b>	194%	145%	<b>R.C. (%)</b>	108%	93%



I/G= 7	I/G=	I/G= 5	I/G=	I/G=
I/G= 7	I/G=	I/G= 5	I/G=	I/G=

Date: 九月, 2025      Junction: King's Road/ Finnie Street      J5

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: King's Road/ Finnie Street

Design Year: 2025

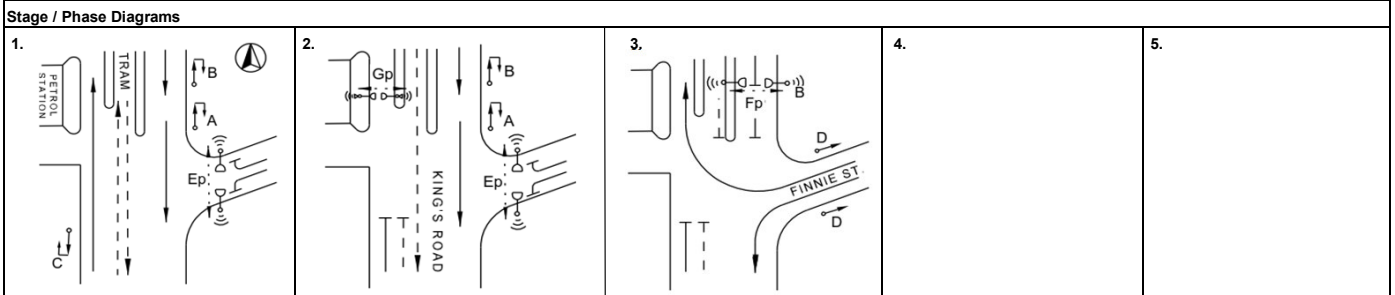
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road NB (with Tram)	↑	C	1	3.0						1915		169	0.088				
	↑	C	1	3.3						2085		185	0.089				
	↑	C	1	3.5						2105		186	0.088				
Finnie Street	↑	D	3	3.5	10	20		54% / 46%		1760		267	0.152	0.152			*
	↑	D	3	3.5		22.5				1840		278	0.151				
King's Road SB	↓	A	1,2	3.7						1985		322	0.162	0.162			*
	↓	A	1,2	3.3						2085		338	0.162				
King's Road SB (Tram)	↓	A	1,2	2.6						2015		95	0.047				
Pedestrian Crossing																	
	Ep	1,2	MIN GREEN + FLASH =				5	+	7	=	12						
	Fp	3	MIN GREEN + FLASH =				5	+	6	=	11						
	Gp	2	MIN GREEN + FLASH =				5	+	6	=	11						

Notes:	Flow: (pcu/hr)				<b>Group</b>	C,Gp,D	A,D	<b>Group</b>		
	<b>y</b>	0.240	0.314		<b>y</b>					
	<b>L (sec)</b>	27	10		<b>L (sec)</b>					
	<b>C (sec)</b>	110	110		<b>C (sec)</b>					
	<b>y pract.</b>	0.679	0.818		<b>y pract.</b>					
	<b>R.C. (%)</b>	183%	161%		<b>R.C. (%)</b>					



I/G= 7	I/G=	I/G= 5	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G=

Date: 九月, 2025      Junction: King's Road/ Finnie Street      (J5)

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: King's Road/ Model Lane

Design Year: 2025

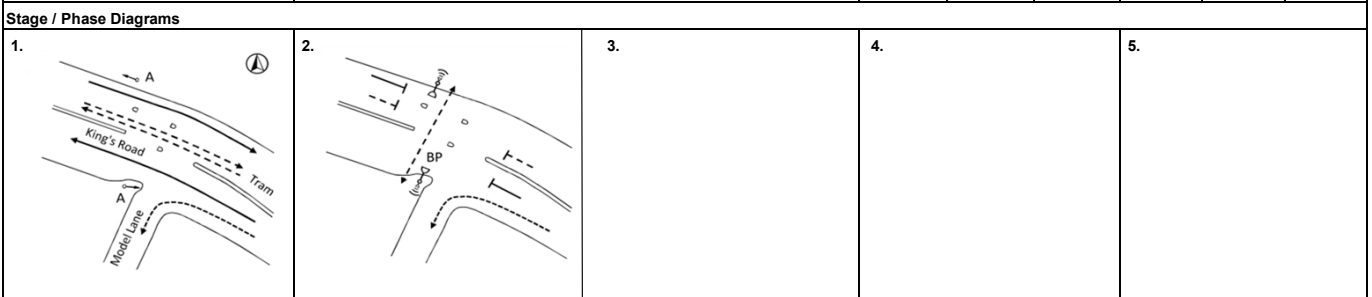
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.500						2165	2165	215	0.099		185	0.085	
King's Road EB(Tram)	→	A	1	2.200						1975	1975	95	0.048		95	0.048	
King's Road WB	←	A	1	3.200						2075	2075	594	0.286	0.286	671	0.323	0.323
King's Road WB	←	A	1	3.300						2085	2085	596	0.286		674	0.323	
free flow	↙			3.300	8					1640	1640	245	0.149		275	0.168	
King's Road WB(Tram)	←	A	1	3.200						2075	2075	95	0.046		85	0.041	
Pedestrian Crossing				Bp	2	MIN GREEN + FLASH =		13	+	7	=	20			*		*

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>		A,Bp	<b>Group</b>		A,Bp
		<b>y</b>		0.286	<b>y</b>		0.323		
		<b>L (sec)</b>		28	<b>L (sec)</b>		28		
		<b>C (sec)</b>		115	<b>C (sec)</b>		110		
		<b>y pract.</b>		0.681	<b>y pract.</b>		0.671		
		<b>R.C. (%)</b>		138%	<b>R.C. (%)</b>		107%		



I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=
I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=

Date: 九月, 2025      Junction: King's Road/ Model Lane      J6

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Model Lane

Design Year: 2025

Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.500						2165		170	0.079				*
King's Road EB(Tram)	→	A	1	2.200						1975		100	0.051				
King's Road WB	←	A	1	3.200						2075		564	0.272	0.272			
King's Road WB	←	A	1	3.300						2085		566	0.271				
free flow	↙			3.300	8					1640		270	0.165				
King's Road WB(Tram)	←	A	1	3.200						2075		95	0.046				
Pedestrian Crossing				Bp	2	MIN GREEN + FLASH =		13	+	7	=	20				*	*

Notes:	Flow: (pcu/hr)			Group		A,Bp	Group	
		y		0.272	y			
		L (sec)		28	L (sec)			
		C (sec)		110	C (sec)			
		y pract.		0.671	y pract.			
R.C. (%)		147%	R.C. (%)					

Stage / Phase Diagrams				
1.	2.	3.	4.	5.

I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=	I/G=

Date: 九月, 2025 Junction: King's Road/ Model Lane J6

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Man Hong Street

Design Year: 2025

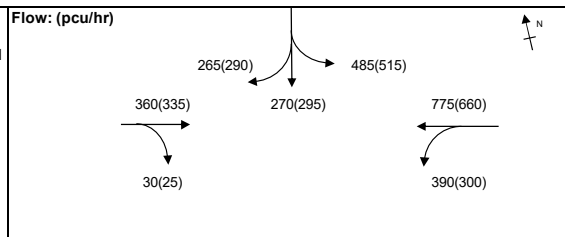
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

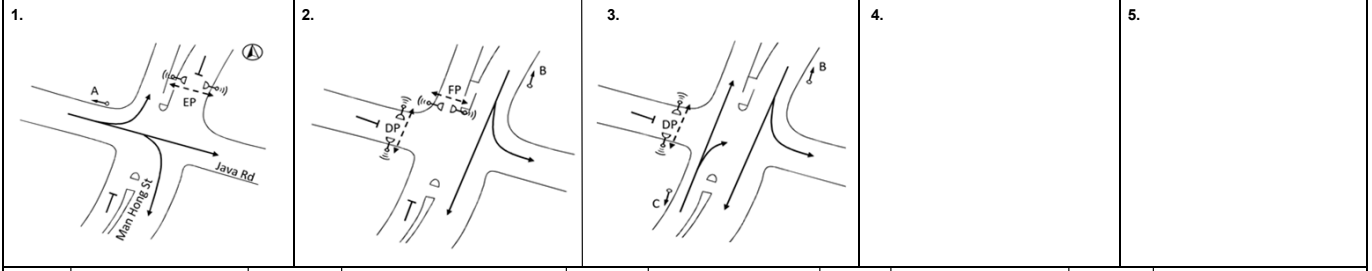
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road EB	↔	A	1	3.000	12					1700	1700	231	0.136	0.136	257	0.151	0.151
	↔	A	1	3.000	15			100%	95%	1870	1875	254	0.136		271	0.144	
	↔	A	1	3.000				3%	4%	2050	2045	278	0.136		295	0.144	
	↔	A	1	3.000						1890	1890	257	0.136		277	0.146	
Man Hong Street SB	↓	B	2,3	3.200						2075	2075	386	0.186		328	0.158	
	↓	B	2,3	3.400						2095	2095	389	0.186		332	0.158	
	↙	B	2,3	3.800	12					1775	1775	390	0.220		300	0.169	
Man Hong Street NB	↗	C	3	6.300				8%	7%	2105	2110	390	0.185	0.185	360	0.171	0.171
Pedestrian Crossing	Dp	2,3					MIN GREEN + FLASH =	5	+	12	=	17					
	Ep	1					MIN GREEN + FLASH =	6	+	10	=	16					
	Fp	2					MIN GREEN + FLASH =	5	+	8	=	13		*			*

**Notes:**  
Opposing factor of 0.5 has been adopted on Man Hong Street NB due to the presence of opposite movement on right turn



Group	A,B	A,Fp,C	Group	A,B	A,Fp,C
<b>y</b>	0.356	0.321	<b>y</b>	0.320	0.322
<b>L (sec)</b>	16	30	<b>L (sec)</b>	16	30
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.775	0.665	<b>y pract.</b>	0.769	0.655
<b>R.C. (%)</b>	118%	107%	<b>R.C. (%)</b>	140%	103%

**Stage / Phase Diagrams**



I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=
I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=

Date: 九月, 2025 Junction: Java Road/ Man Hong Street (J7)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Man Hong Street

Design Year: 2025

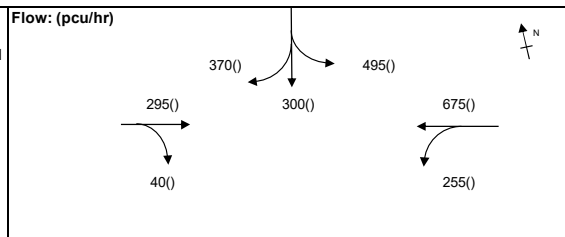
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

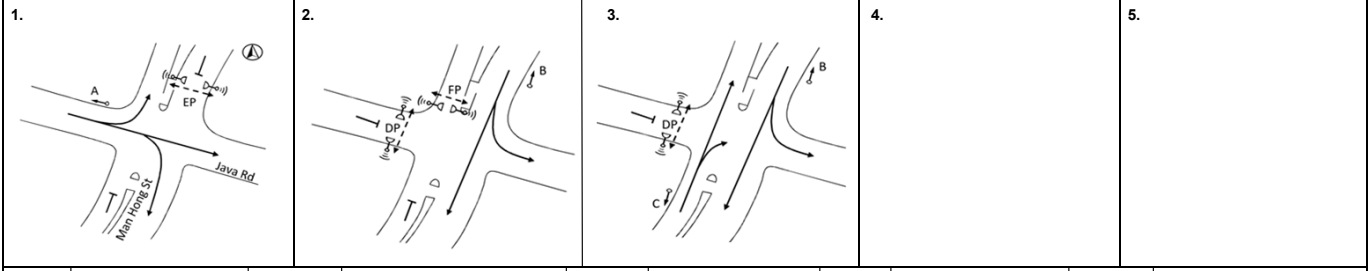
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road EB	↔	A	1	3.000	12					1700		264	0.155				*
	↔	A	1	3.000	15		78%		1905		296	0.155	0.155				
	↔	A	1	3.000		18	25%		2015		312	0.155					
	↔	A	1	3.000		17			1890		293	0.155					
Man Hong Street SB	↓	B	2,3	3.200					2075		336	0.162					*
	↓	B	2,3	3.400					2095		339	0.162					
	↘	B	2,3	3.800	12				1775		255	0.144					
Man Hong Street NB	↔	C	3	6.300		10	12%		2095		335	0.160	0.160				
Pedestrian Crossing	Dp	2,3					MIN GREEN + FLASH =	5	+	12	=	17					
	Ep	1					MIN GREEN + FLASH =	6	+	10	=	16					
	Fp	2					MIN GREEN + FLASH =	5	+	8	=	13			*		

**Notes:**  
Opposing factor of 0.5 has been adopted on Man Hong Street NB due to the presence of opposite movement on right turn



Group	A,B	A,Fp,C	Group		
<b>y</b>	0.317	0.315	<b>y</b>		
<b>L (sec)</b>	16	30	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.769	0.655	<b>y pract.</b>		
<b>R.C. (%)</b>	143%	108%	<b>R.C. (%)</b>		

**Stage / Phase Diagrams**



I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G=

Date: 九月, 2025 Junction: Java Road/ Man Hong Street (J7)

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: King's Road/ Healthy Street West/ Man Hong Street

Design Year: 2025

Description: 2025 Observed

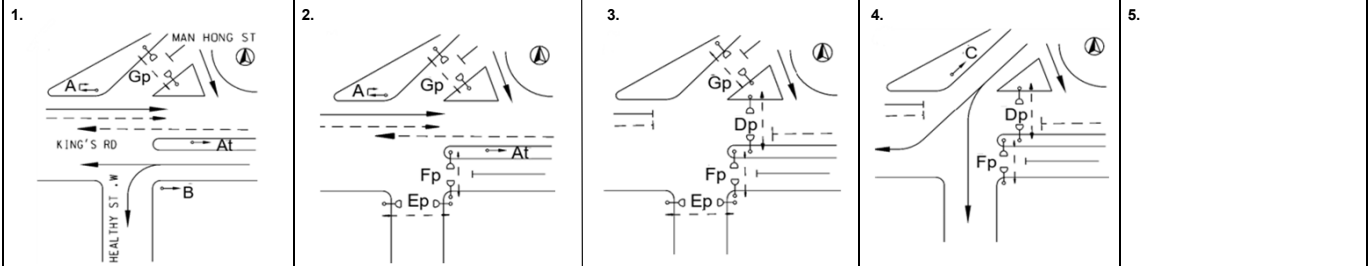
Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1,2	3.300						1945	1945	70	0.036		60	0.031	
King's Road EB(Tram)	→	A	1,2	3.500						2105	2105	75	0.036		65	0.031	
King's Road WB	←	B	1	3.500	8			80%	72%	1710	1730	249	0.146		244	0.141	
King's Road WB(Tram)	←	B	1	3.400						2095	2095	306	0.146	0.146	296	0.141	0.141
Man Hong Street SB	↓	At	1,2	2.700						2025	2025	95	0.047		85	0.042	
Pedestrian Crossing	Ep		3,4														
	Fp		2,3														
	Gp		2,3,4														
	Hp		1,2,3														

Notes:	Flow: (pcu/hr)	Group	Hp,D	B,Fp,D	Group	Hp,D	B,Fp,D
		<b>y</b>	0.153	0.299	<b>y</b>	0.147	0.288
		<b>L (sec)</b>	24	35	<b>L (sec)</b>	24	35
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.712	0.626	<b>y pract.</b>	0.704	0.614
		<b>R.C. (%)</b>	365%	109%	<b>R.C. (%)</b>	380%	113%

**Stage / Phase Diagrams**



I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=
I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=

Date: 九月, 2025 Junction: King's Road/ Healthy Street West/ Man Hong Street JB

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: King's Road/ Healthy Street West/ Man Hong Street

Design Year: 2025

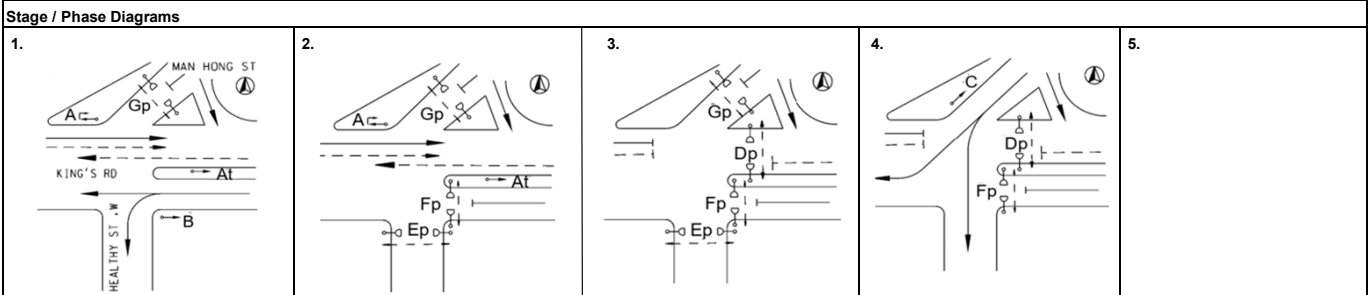
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1,2	3.300						1945		60	0.031				*
King's Road EB(Tram)	→	A	1,2	3.500						2105		65	0.031				
King's Road WB	←	B	1	3.500	8			74%		1725		244	0.141	0.141			
King's Road WB(Tram)	←	B	1	3.400						2095		296	0.141				
Man Hong Street SB	↓	At	1,2	2.700						2025		95	0.047				
Pedestrian Crossing	Ep		3,4														
	Fp		2,3														*
	Gp		2,3,4														
	Hp		1,2,3														

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<table border="1"> <tr> <th>Group</th> <th>Hp,D</th> <th>B,Fp,D</th> <th>Group</th> <th></th> <th></th> </tr> <tr> <td><b>y</b></td> <td>0.161</td> <td>0.303</td> <td><b>y</b></td> <td></td> <td></td> </tr> <tr> <td><b>L (sec)</b></td> <td>24</td> <td>35</td> <td><b>L (sec)</b></td> <td></td> <td></td> </tr> <tr> <td><b>C (sec)</b></td> <td>110</td> <td>110</td> <td><b>C (sec)</b></td> <td></td> <td></td> </tr> <tr> <td><b>y pract.</b></td> <td>0.704</td> <td>0.614</td> <td><b>y pract.</b></td> <td></td> <td></td> </tr> <tr> <td><b>R.C. (%)</b></td> <td>336%</td> <td>103%</td> <td><b>R.C. (%)</b></td> <td></td> <td></td> </tr> </table>	Group	Hp,D	B,Fp,D	Group			<b>y</b>	0.161	0.303	<b>y</b>			<b>L (sec)</b>	24	35	<b>L (sec)</b>			<b>C (sec)</b>	110	110	<b>C (sec)</b>			<b>y pract.</b>	0.704	0.614	<b>y pract.</b>			<b>R.C. (%)</b>	336%	103%	<b>R.C. (%)</b>		
	Group	Hp,D			B,Fp,D	Group																																		
	<b>y</b>	0.161			0.303	<b>y</b>																																		
	<b>L (sec)</b>	24			35	<b>L (sec)</b>																																		
	<b>C (sec)</b>	110			110	<b>C (sec)</b>																																		
	<b>y pract.</b>	0.704			0.614	<b>y pract.</b>																																		
<b>R.C. (%)</b>	336%	103%	<b>R.C. (%)</b>																																					



I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A

Date: 九月, 2025 Junction: King's Road/ Healthy Street West/ Man Hong Street JB

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Healthy Street West

Design Year: 2025

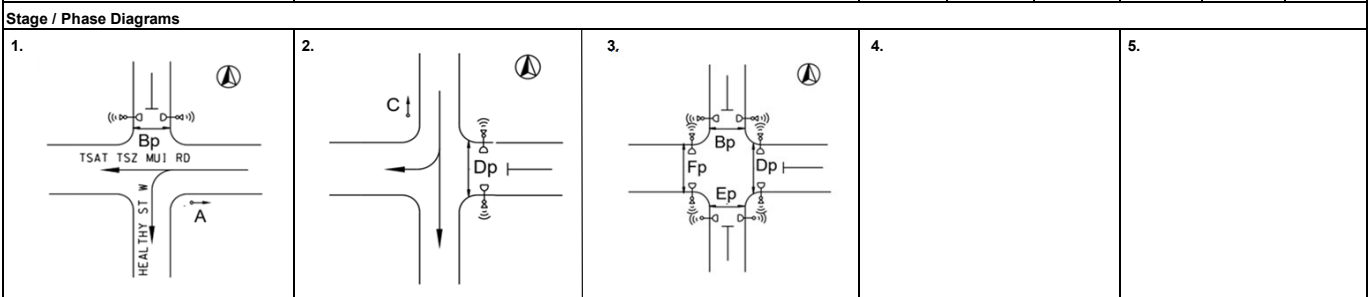
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tsat Tsz Mui Road WB	↖ ←	A	1	3.800	10			26%	33%	1920	1900	156	0.081		184	0.097	0.097
		A	1	3.800				2135	2135	174	0.081	0.081	206	0.096			
Healthy Street West SB	↓ ↘ ↙	C	2	2.500						1865	1865	227	0.122		223	0.120	
		C	2	3.300	13			51%	46%	1970	1980	239	0.121		237	0.120	0.120
		C	2	3.600	10					1840	1840	224	0.122	0.122	220	0.120	
Pedestrian Crossing		Bp	1,3	MIN GREEN + FLASH =		5	+	9	=	14							
		Dp	2,3	MIN GREEN + FLASH =		5	+	8	=	13							
		Ep	3	MIN GREEN + FLASH =		5	+	9	=	14		*					*
		Fp	3	MIN GREEN + FLASH =		5	+	8	=	13							

Notes:	Flow: (pcu/hr)	Group	A,C,Fp	A,C,Ep	Group	A,C,Fp	A,C,Ep
		<b>y</b>	0.203	0.203	<b>y</b>	0.217	0.217
		<b>L (sec)</b>	28	29	<b>L (sec)</b>	28	29
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.681	0.673	<b>y pract.</b>	0.671	0.663
		<b>R.C. (%)</b>	235%	231%	<b>R.C. (%)</b>	210%	206%



I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=
I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=

Date: 九月, 2025 Junction: Tsat Tsz Mui Road/ Healthy Street West J9

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Healthy Street West

Design Year: 2025

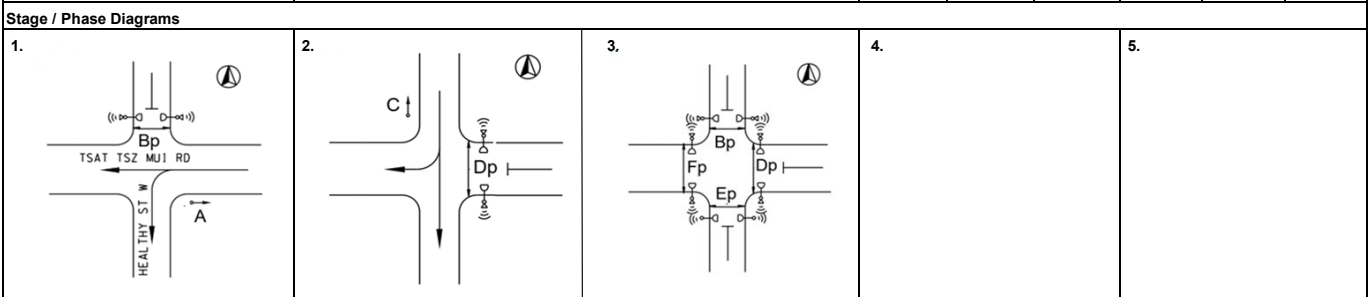
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tsat Tsz Mui Road WB	↖	A	1	3.800	10			34%		1900		191	0.101	0.101			*
	←	A	1	3.800						2135		214	0.100				
Healthy Street West SB	↓	C	2	2.500						1865		246	0.132	0.132			*
	↘	C	2	3.300	13			24%		2030		267	0.132				
	↙	C	2	3.600	10					1840		242	0.132				
Pedestrian Crossing	Bp	1,3	MIN GREEN + FLASH =		5	+	9	=	14								
	Dp	2,3	MIN GREEN + FLASH =		5	+	8	=	13								
	Ep	3	MIN GREEN + FLASH =		5	+	9	=	14					*			*
	Fp	3	MIN GREEN + FLASH =		5	+	8	=	13								

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	A,C,Fp	A,C,Ep	<b>Group</b>						
		<b>y</b>	0.232							0.232	<b>y</b>		
		<b>L (sec)</b>	28							29	<b>L (sec)</b>		
		<b>C (sec)</b>	110							110	<b>C (sec)</b>		
		<b>y pract.</b>	0.671							0.663	<b>y pract.</b>		
		<b>R.C. (%)</b>	189%							185%	<b>R.C. (%)</b>		



I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=

Date: 九月, 2025 Junction: Tsat Tsz Mui Road/ Healthy Street West (J9)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Tin Chiu Street

Design Year: 2025

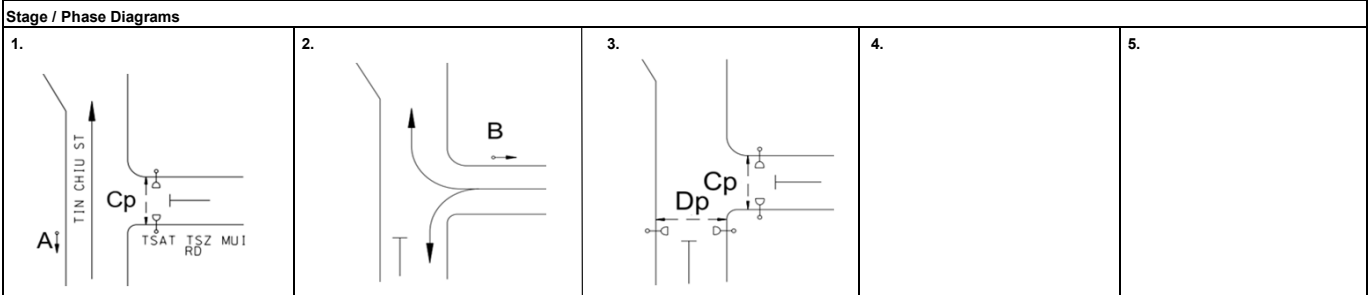
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turnings (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Chiu Street NB	↓	A	1	3.900						2005	2005	165	0.082	0.082	150	0.075	0.075
Tsat Tsz Mui Road WB	↔	B	2	4.100	6	13		34% / 66%	34% / 66%	1745	1745	291	0.167		305	0.175	
Tsat Tsz Mui Road NB	↑	B	2	4.100		13				1940	1940	324	0.167	0.167	340	0.175	0.175
Pedestrian Crossing		Cp	1,3	MIN GREEN + FLASH =	10			+	9	=	19						
		Dp	3	MIN GREEN + FLASH =	7			+	9	=	16			*			*

Notes:	Flow: (pcu/hr)	Group	Cp,B	A,B,Dp	Group	Cp,B	A,B,Dp																								
									<table border="1"> <tr> <td>y</td> <td>0.167</td> <td>0.249</td> <td>y</td> <td>0.175</td> <td>0.250</td> </tr> <tr> <td>L (sec)</td> <td>27</td> <td>32</td> <td>L (sec)</td> <td>27</td> <td>32</td> </tr> <tr> <td>C (sec)</td> <td>115</td> <td>115</td> <td>C (sec)</td> <td>110</td> <td>110</td> </tr> <tr> <td>y pract.</td> <td>0.689</td> <td>0.650</td> <td>y pract.</td> <td>0.679</td> <td>0.638</td> </tr> <tr> <td>R.C. (%)</td> <td>312%</td> <td>161%</td> <td>R.C. (%)</td> <td>287%</td> <td>155%</td> </tr> </table>	y	0.167	0.249	y	0.175	0.250	L (sec)	27	32	L (sec)	27	32	C (sec)	115	115	C (sec)	110	110	y pract.	0.689	0.650	y pract.
y	0.167	0.249	y	0.175	0.250																										
L (sec)	27	32	L (sec)	27	32																										
C (sec)	115	115	C (sec)	110	110																										
y pract.	0.689	0.650	y pract.	0.679	0.638																										
R.C. (%)	312%	161%	R.C. (%)	287%	155%																										



I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=
I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=

Date: 九月, 2025 Junction: Tsat Tsz Mui Road/ Tin Chiu Street (J10)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Tin Chiu West

Design Year: 2025

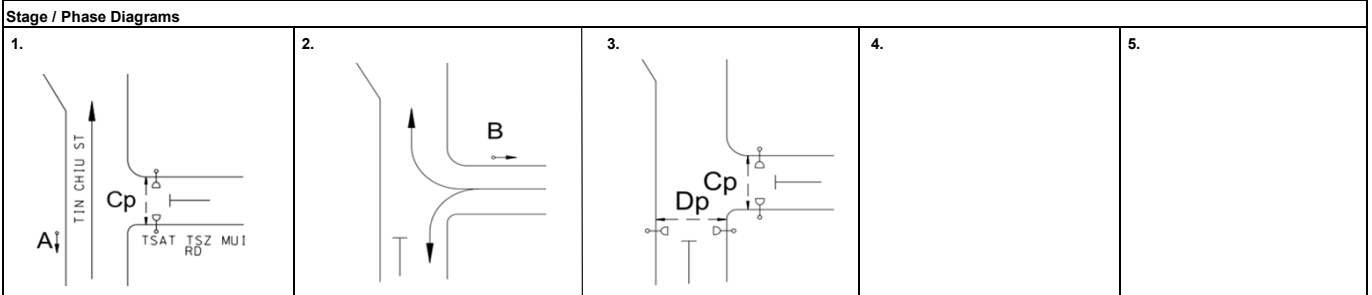
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turnings (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Chiu Street NB	↓	A	1	3.900							2005	180	0.090	0.090			*
Tsat Tsz Mui Road WB	↔	B	2	4.100	6	13		49% / 51%			1715	298	0.174	0.174			*
	↕	B	2	4.100		13					1940	337	0.174				
Pedestrian Crossing		Cp	1,3	MIN GREEN + FLASH =	10		+	9	=	19							*
		Dp	3	MIN GREEN + FLASH =	7		+	9	=	16							*

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	Cp,B	A,B,Dp	<b>Group</b>		
				<b>y</b>	0.174	0.264	<b>y</b>		
				<b>L (sec)</b>	27	32	<b>L (sec)</b>		
				<b>C (sec)</b>	110	110	<b>C (sec)</b>		
				<b>y pract.</b>	0.679	0.638	<b>y pract.</b>		
				<b>R.C. (%)</b>	291%	142%	<b>R.C. (%)</b>		



I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=

Date: 九月, 2025 Junction: Tsat Tsz Mui Road/ Tin Chiu West J10

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Tin Chiu Street

Design Year: 2025

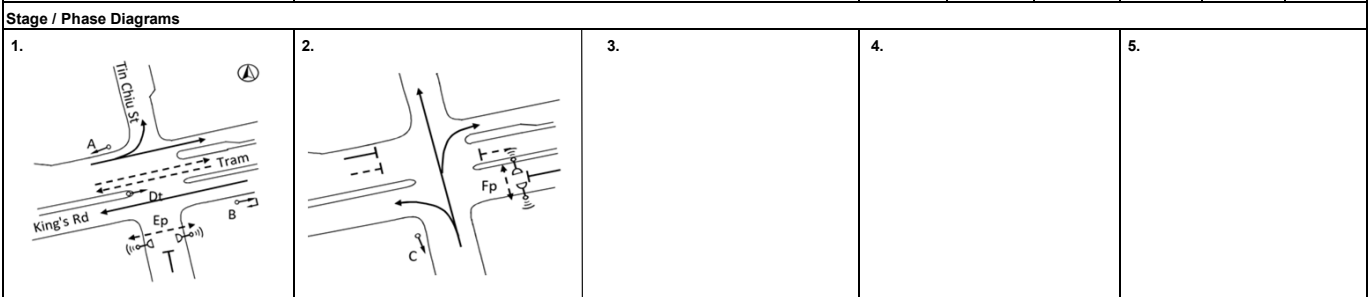
Description: 2025 Observed

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	↔	A	1	3.200	12			13%	11%	1905	1910	225	0.118		225	0.118	
King's Road EB(Tram)	→	A	1	2.700						2025	2025	95	0.047		95	0.047	
King's Road WB	←	B	1	3.300						1945	1945	250	0.129	0.129	235	0.121	
	←	B	1	3.500						2105	2105	270	0.128		255	0.121	0.121
	←	B	1	3.500						2105	2105	270	0.128		255	0.121	
King's Road WB(Tram)	←	Dt	1	2.400						1995	1995	95	0.048		85	0.043	
Tin Chiu Street NB	↕	C	2	3.300	12					1730	1730	145	0.084		110	0.064	
	↕	C	2	3.500	12			57%	51%	1965	1980	195	0.099		295	0.149	
	↕	C	2	3.500		12				1870	1870	340	0.182	0.182	285	0.152	0.152
Pedestrian Crossing		Ep	1	MIN GREEN + FLASH =		6	+	12	=	18							
		Fp	2	MIN GREEN + FLASH =		5	+	9	=	14							

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>		<b>Group</b>	A.C	B.C	<b>Group</b>	A.C	B.C
			<b>y</b>	0.300	0.310	<b>y</b>	0.270	0.274
			<b>L (sec)</b>	10	11	<b>L (sec)</b>	10	11
			<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
			<b>y pract.</b>	0.822	0.814	<b>y pract.</b>	0.818	0.810
			<b>R.C. (%)</b>	174%	162%	<b>R.C. (%)</b>	203%	196%



I/G= 6	I/G= 7	I/G=	I/G=	I/G=
I/G= 6	I/G= 7	I/G=	I/G=	I/G=

Date: 九月, 2025      Junction: King's Road/ Tin Chiu Street      (J11)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Tin Chiu Street

Design Year: 2025

Description: 2025 Observed

Designed By: NLY

Checked By: WCY

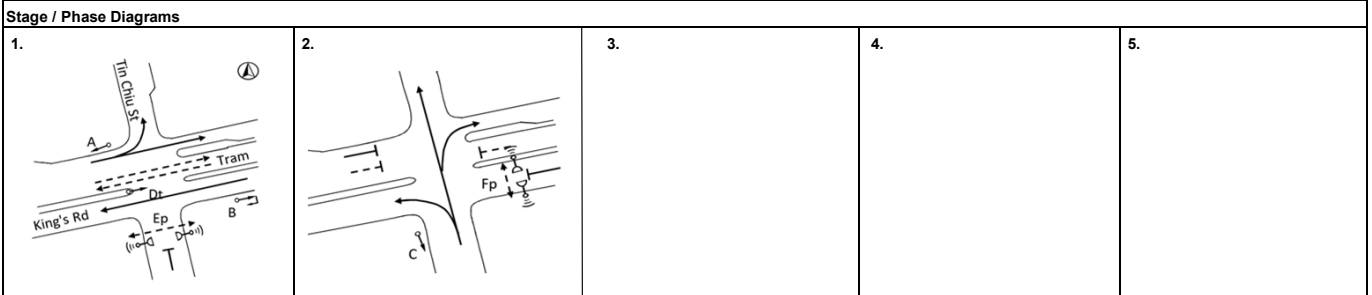
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	↔	A	1	3.200	12			12%		1905		215	0.113				*
King's Road EB(Tram)	→	A	1	2.700						2025		100	0.049				
King's Road WB	←	B	1	3.300						1945		240	0.123				
	←	B	1	3.500						2105		260	0.124	0.124			
	←	B	1	3.500						2105		260	0.124				
King's Road WB(Tram)	←	Dt	1	2.400						1995		95	0.048				
Tin Chiu Street NB	↕	C	2	3.300	12					1730		150	0.087				*
	↕	C	2	3.500	12			63%		1950		250	0.128				
	↕	C	2	3.500		12				1870		270	0.144	0.144			
Pedestrian Crossing		Ep	1	MIN GREEN + FLASH =		6	+	12	=	18							
		Fp	2	MIN GREEN + FLASH =		5	+	9	=	14							

**Notes:**

**Flow: (pcu/hr)**

↑ N

Group	A,C	B,C	Group		
<b>y</b>	0.257	0.268	<b>y</b>		
<b>L (sec)</b>	10	11	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.818	0.810	<b>y pract.</b>		
<b>R.C. (%)</b>	218%	202%	<b>R.C. (%)</b>		



I/G= 6	I/G= 7	I/G=	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G=	I/G=	I/G=

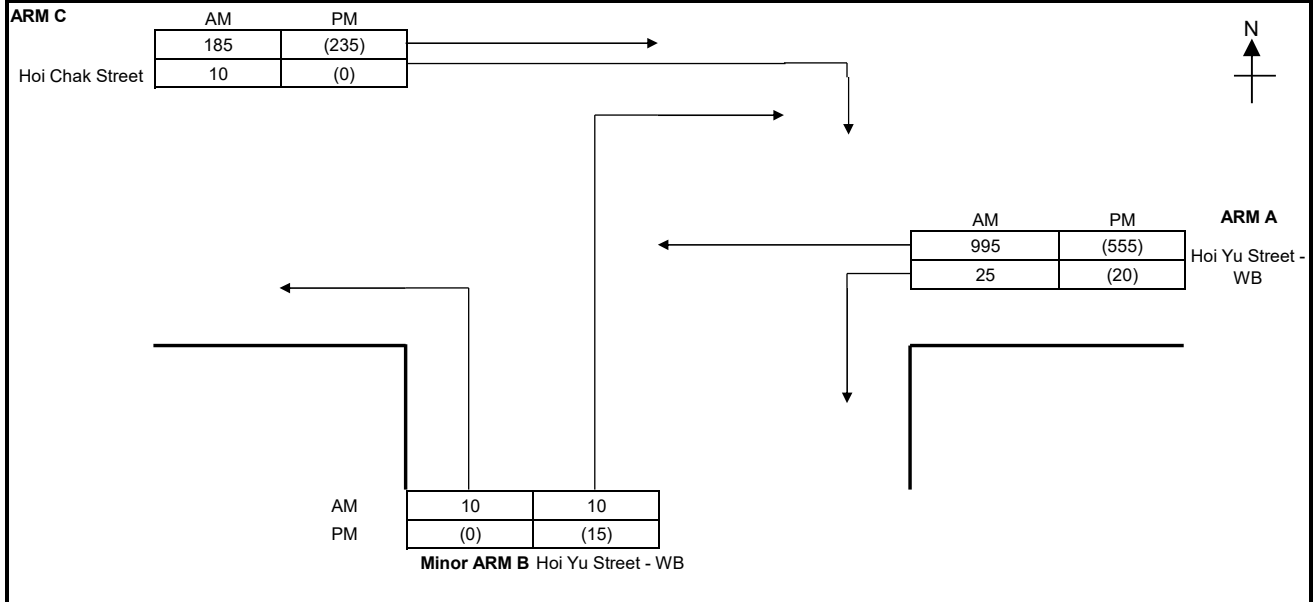
Date: 九月, 2025 Junction: King's Road/ Tin Chiu Street (J11)

## Calculation Sheets - 2033 Reference Year

# Simplified priority Junction Capacity Calculation



Job Title:	Hoi Yu Street TIA	Ref. No.:	J1_pic
Junction:	Hoi Yu Street/Hoi Chak Street	Designed by:	NLY
Description:	2033 Reference	Checked by:	WCY
Design Year:	2025	Job No.:	CHK50793710
		Date:	九月 2025
ARM A:	Hoi Yu Street - EB		
ARM B:	Hoi Yu Street - WB		
ARM C:	Hoi Chak Street		



GEOMETRY			
Major road width	W	13.50	Lane widths
Central Reserve width	Wcr	0.00	w(b-a)
2 Lane Minor Arm (Y/N)		N	w(b-c)
			w(c-b)

PARAMETER			
Visibilities	Vr(b-a)	50	Calculated
	VI(b-a)	50	D
	Vr(b-c)	50	E
	Vr(c-b)	50	F
			Y

ANALYSIS		AM Peak	PM Peak
TRAFFIC FLOWS	q(c-a)	185	235
	q(c-b)	10	0
	q(a-b)	25	20
	q(a-c)	995	555
	q(b-a)	10	15
	q(b-c)	10	0
	f	0.50	0.00
CAPACITIES	Q(b-a)	315	382
	Q(b-c)	492	573
	Q(c-b)	493	575
	Q(b-ac)	384	382
	Factor	1	1
RFC's	b-a	0.032	0.039
	b-c	0.020	0.000
	c-b	0.020	0.000
	b-ac	0.052	0.039
RFC		<b>0.052</b>	<b>0.039</b>

Where VI and Vr are visibility distances to the left or right of the respective streams

$$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$$

$$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$$

$$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$$

$$Y = 1-0.0345W$$

f = proportion of minor traffic turning left

$$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$$

Capacity of combined streams

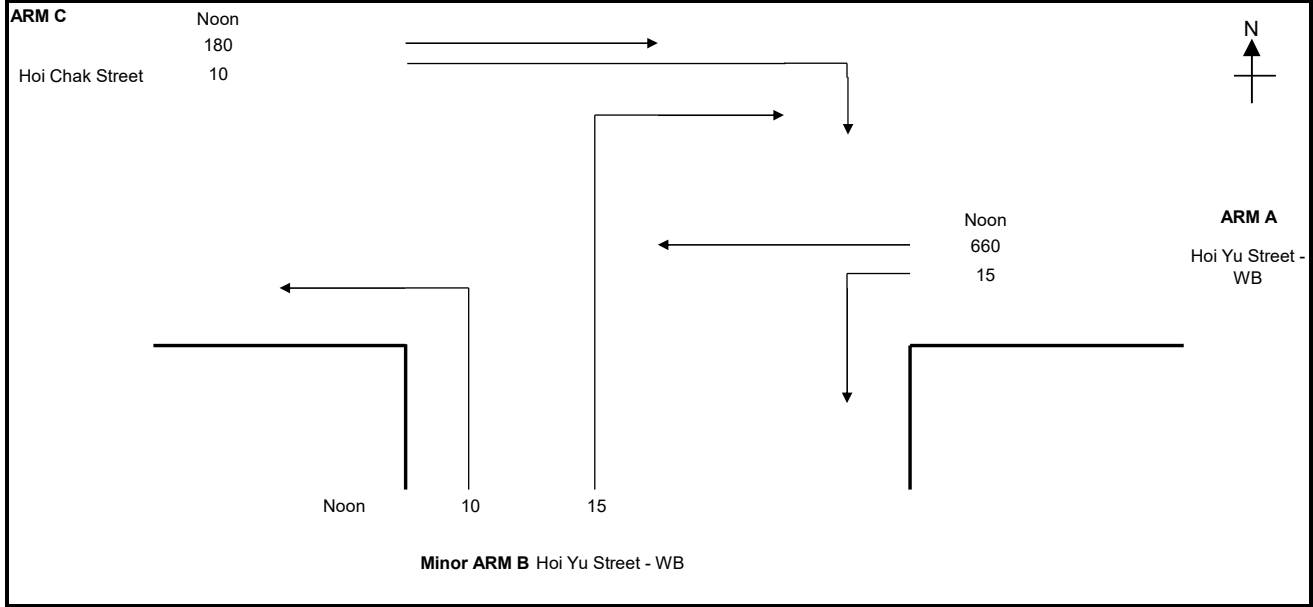
All the above formulas are in accordance to T.P.D.M. Vol.2 Chapter 4 Appendix 1

# Simplified priority Junction Capacity Calculation



Job Title:	Hoi Yu Street TIA	Ref. No.:	J1_pic
Junction:	Hoi Yu Street/Hoi Chak Street	Designed by:	NLY
Description:	2033 Reference	Checked by:	WCY
Design Year:	2025	Job No.:	CHK50793710
		Date:	九月 2025

ARM A:	Hoi Yu Street - EB
ARM B:	Hoi Yu Street - WB
ARM C:	Hoi Chak Street



GEOMETRY			
Major road width	W	13.50	Lane widths
Central Reserve width	Wcr	0.00	w(b-a)
2 Lane Minor Arm (Y/N)		N	w(b-c)
			w(c-b)

PARNoonETER			
Visibilities	Vr(b-a)	50	Calculated
	VI(b-a)	50	D
	Vr(b-c)	50	E
	Vr(c-b)	50	F
			Y

ANALYSIS		Noon Peak	
TRAFFIC FLOWS	q(c-a)		180
	q(c-b)		10
	q(a-b)		15
	q(a-c)		660
	q(b-a)		15
	q(b-c)		10
	f		0.40
CAPACITIES	Q(b-a)	Factor	369
	Q(b-c)	1	554
	Q(c-b)	1	557
	Q(b-ac)	1	426
RFC's	b-a		0.041
	b-c		0.018
	c-b		0.018
	b-ac		0.059
RFC			<b>0.059</b>

Where VI and Vr are visibility distances to the left or right of the respective streNoons

$$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$$

$$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$$

$$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$$

$$Y = 1-0.0345W$$

f = proportion of minor traffic turning left

$$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$$

Capacity of combined streNoons

**All the above formulas are in accordance to T.P.D.M. Vol.2 Chapter 4 Appendix 1**

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Hoi Yu Street (Existing)

Design Year: 2025

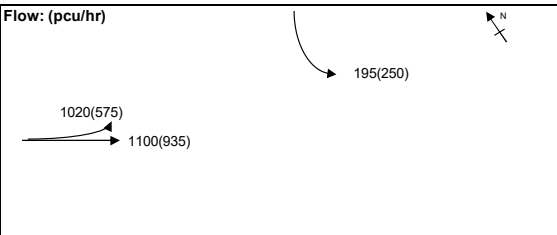
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

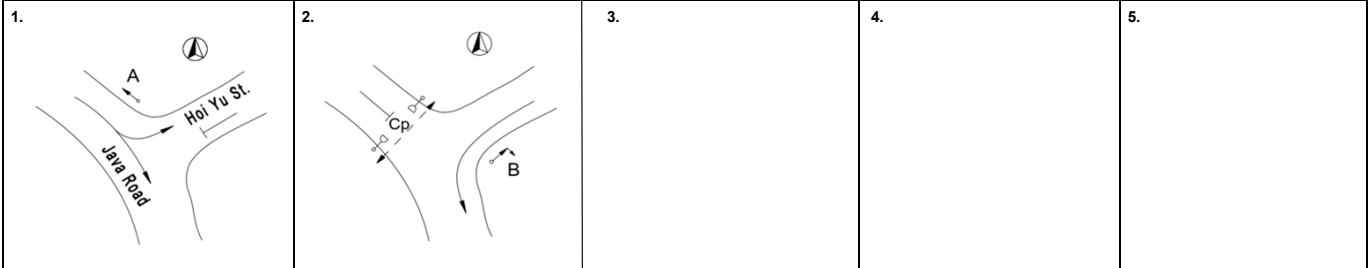
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road	↖	A	1	2.4	20					1725	1725	1020	0.591	0.591	575	0.333	
	→	A	1	3.2						1040	1040	468	0.450		398	0.383	
	→	A	1	3.1						825	825	371	0.450		315	0.382	
	→	A	1	3.1						580	580	261	0.450		222	0.383	0.383
Hoi Yu Street	↙	B	2	3.4	15					1905	1905	102	0.054		130	0.068	
	↘	B	2	3.4	12.5					1745	1745	93	0.053		120	0.069	
Pedestrian Crossing		Cp	2	MIN GREEN + FLASH =		8	+	10	=	18				*			*

**Notes:**  
 1. Site factor 0.5, 0.4 and 0.3 are adopted for Java Road's second, third and fourth lane respectively due to downstream blocking and illegal parking along kerbside observed.



Group	A,B	A,Cp	Group	A,B	A,Cp
<b>y</b>	0.645	0.591	<b>y</b>	0.452	0.383
<b>L (sec)</b>	10	26	<b>L (sec)</b>	10	26
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.822	0.697	<b>y pract.</b>	0.818	0.687
<b>R.C. (%)</b>	27%	18%	<b>R.C. (%)</b>	81%	80%

**Stage / Phase Diagrams**



I/G= 4	I/G= 5	18	I/G=	I/G=	I/G=
I/G= 4	I/G= 5	18	I/G=	I/G=	I/G=

Date: 九月, 2025 Junction: Java Road/ Hoi Yu Street (Existing) J2

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: Java Road/ Hoi Yu Street (Existing)

Design Year: 2025

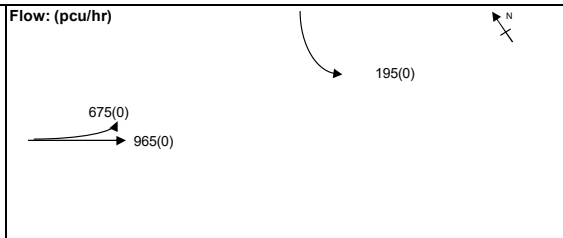
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

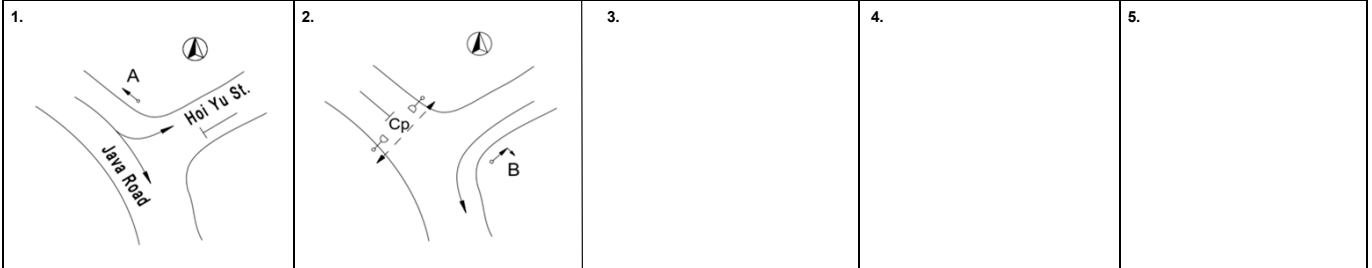
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A			
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y				
Java Road	↖	A	1	2.4	20						1725		675	0.391				*
	→	A	1	3.2							1040		410	0.394				
	→	A	1	3.1							825		326	0.395	0.395			
	→	A	1	3.1							580		229	0.395				
Hoi Yu Street	↙	B	2	3.4	15						1905		102	0.054				*
	↘	B	2	3.4	12.5						1745		93	0.053				
Pedestrian Crossing		Cp	2	MIN GREEN + FLASH =		8	+	10	=	18								*

**Notes:**  
 1. Site factor 0.5, 0.4 and 0.3 are adopted for Java Road's second, third and fourth lane respectively due to downstream blocking and illegal parking along kerbside observed.



Group	A,B	A,Cp	Group		
<b>y</b>	0.449	0.395	<b>y</b>		
<b>L (sec)</b>	10	26	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.818	0.687	<b>y pract.</b>		
<b>R.C. (%)</b>	82%	74%	<b>R.C. (%)</b>		

**Stage / Phase Diagrams**



I/G= 4		I/G= 5	18	I/G=		I/G=		I/G=	
I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G=		I/G=		I/G=	

Date: 九月, 2025      Junction: Java Road/ Hoi Yu Street (Existing)      J2

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Java Road

Design Year: 2025

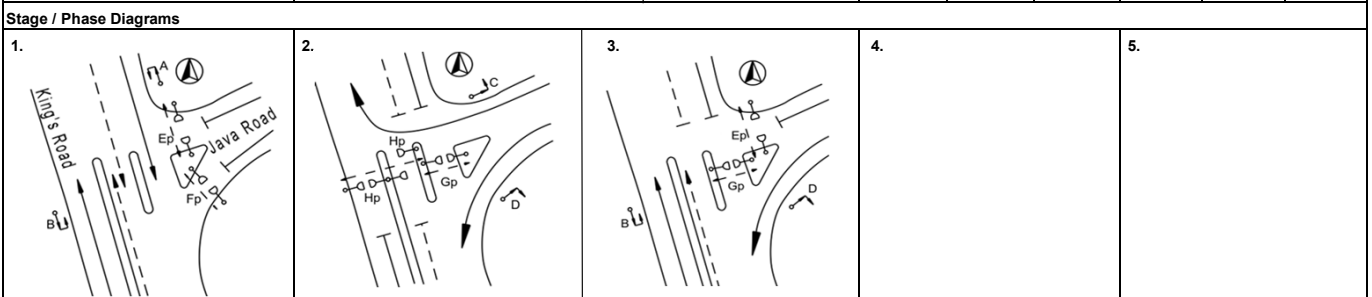
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.3						2145	2145	230	0.107		200	0.093	
King's Road EB (Tram)	→	A	1	2.7						2025	2025	100	0.049		100	0.049	
Java Road	↖	C	2	3.5		30				1870	1870	254	0.136	0.136	297	0.159	0.159
	↗	C	2	4.1		32.5				2070	2070	281	0.136		328	0.158	
	↘	D	2,3	3.3	52.5					2025	2025	383	0.189		272	0.134	
	↙	D	2,3	3.3	50					1890	1890	357	0.189		253	0.134	
King's Road WB	↑	B	1,3	3.2						1935	1935	338	0.175		359	0.186	
	↑	B	1,3	3.2						2075	2075	363	0.175		386	0.186	0.186
	↑	B	1,3	3.5						1965	1965	344	0.175	0.175	365	0.186	
King's Road WB (Tram)	↑	B	1,3	2.3						1845	1845	100	0.054		90	0.049	
Pedestrian Crossing																	
	Ep	1,3		MIN GREEN + FLASH =	5	+	7	=	12								
	Fp	1		MIN GREEN + FLASH =	5	+	9	=	14								
	Gp	2,3		MIN GREEN + FLASH =	5	+	5	=	10								
	Hp	2		MIN GREEN + FLASH =	5	+	13	=	18								

Notes:	Flow: (pcu/hr)			<table border="1"> <tr> <th>Group</th> <th>A,D</th> <th>B,C</th> <th>Group</th> <th>A,D</th> <th>B,C</th> </tr> <tr> <td><b>y</b></td> <td>0.296</td> <td>0.311</td> <td><b>y</b></td> <td>0.228</td> <td>0.345</td> </tr> <tr> <td><b>L (sec)</b></td> <td>12</td> <td>10</td> <td><b>L (sec)</b></td> <td>12</td> <td>10</td> </tr> <tr> <td><b>C (sec)</b></td> <td>115</td> <td>115</td> <td><b>C (sec)</b></td> <td>110</td> <td>110</td> </tr> <tr> <td><b>y pract.</b></td> <td>0.806</td> <td>0.822</td> <td><b>y pract.</b></td> <td>0.802</td> <td>0.818</td> </tr> <tr> <td><b>R.C. (%)</b></td> <td>172%</td> <td>164%</td> <td><b>R.C. (%)</b></td> <td>252%</td> <td>137%</td> </tr> </table>	Group	A,D	B,C	Group	A,D	B,C	<b>y</b>	0.296	0.311	<b>y</b>	0.228	0.345	<b>L (sec)</b>	12	10	<b>L (sec)</b>	12	10	<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110	<b>y pract.</b>	0.806	0.822	<b>y pract.</b>	0.802	0.818	<b>R.C. (%)</b>	172%	164%	<b>R.C. (%)</b>	252%	137%
		Group	A,D		B,C	Group	A,D	B,C																																
		<b>y</b>	0.296		0.311	<b>y</b>	0.228	0.345																																
		<b>L (sec)</b>	12		10	<b>L (sec)</b>	12	10																																
		<b>C (sec)</b>	115		115	<b>C (sec)</b>	110	110																																
		<b>y pract.</b>	0.806		0.822	<b>y pract.</b>	0.802	0.818																																
<b>R.C. (%)</b>	172%	164%	<b>R.C. (%)</b>	252%	137%																																			



I/G=	I/G= 5	I/G= 7	I/G=	I/G=
I/G=	I/G= 5	I/G= 7	I/G=	I/G=

Date: 九月, 2025 Junction: King's Road/ Java Road J3

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: King's Road/ Java Road

Design Year: 2025

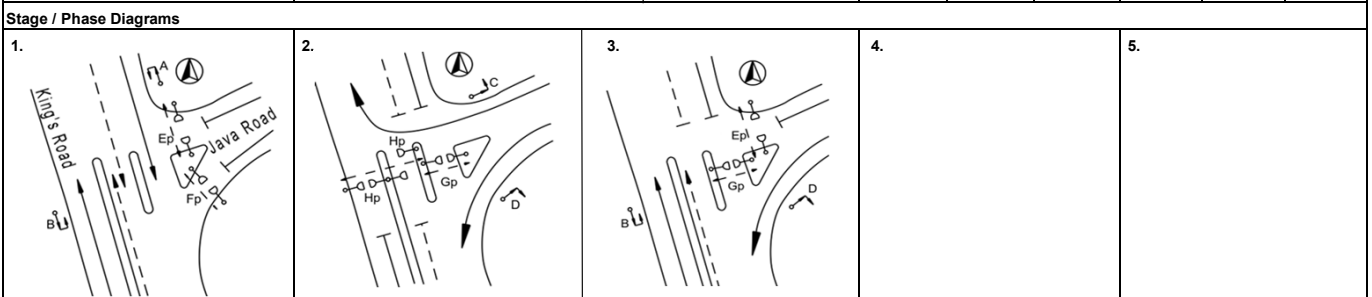
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
King's Road EB	→	A	1	5.3							2145	185	0.086				*
King's Road EB (Tram)	→	A	1	2.7							2025	105	0.052				
Java Road	↕	C	2	3.5		30					1870	261	0.140	0.140			*
	↕	C	2	4.1		32.5					2070	289	0.140				
	↙	D	2,3	3.3	52.5						2025	292	0.144				
	↘	D	2,3	3.3	50						1890	273	0.144				
King's Road WB	↑	B	1,3	3.2							1935	313	0.162	0.162			
	↑	B	1,3	3.2							2075	335	0.161				
	↑	B	1,3	3.5							1965	317	0.161				
King's Road WB (Tram)	↑	B	1,3	2.3							1845	100	0.054				
Pedestrian Crossing																	
	Ep	1,3					MIN GREEN + FLASH =	5	+	7	=	12					
	Fp	1					MIN GREEN + FLASH =	5	+	9	=	14					
	Gp	2,3					MIN GREEN + FLASH =	5	+	5	=	10					
	Hp	2					MIN GREEN + FLASH =	5	+	13	=	18					

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	A,D	B,C	<b>Group</b>		
				<b>y</b>	0.231	0.301	<b>y</b>		
				<b>L (sec)</b>	12	10	<b>L (sec)</b>		
				<b>C (sec)</b>	110	110	<b>C (sec)</b>		
				<b>y pract.</b>	0.802	0.818	<b>y pract.</b>		
				<b>R.C. (%)</b>	248%	171%	<b>R.C. (%)</b>		



I/G=	I/G= 5	I/G= 7	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G=	I/G=

Date: 九月, 2025 Junction: King's Road/ Java Road J3

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie Street/ Hoi Chak Street

Design Year: 2025

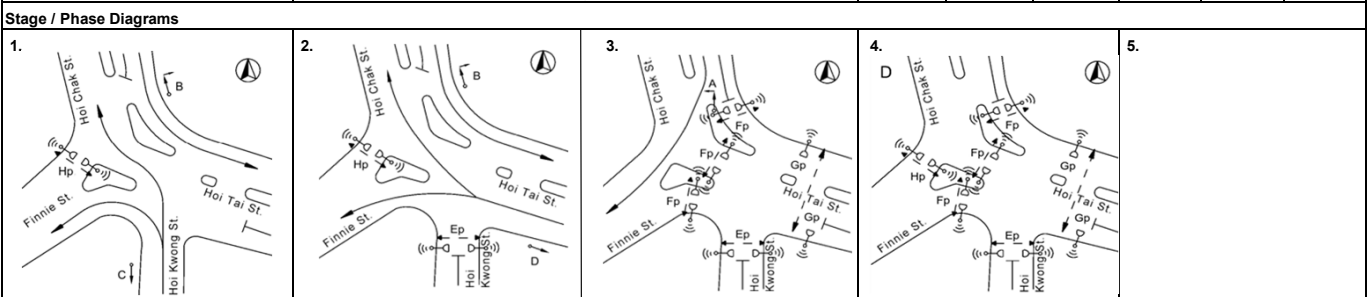
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Hoi Tai Street	↑	D	2	3.5		40				2030	2030	85	0.042		150	0.074	
	↓	D	2	3.6	20					1835	1835	350	0.191		485	0.264	0.264
Hoi Kwong Street	↔	C	1	3.6	15			80%	89%	1830	1815	125	0.068		175	0.096	0.096
Hoi Chak Street	↘	B	1,2	3.1	35					1845	1845	790	0.428	0.428	470	0.255	
	↙	A	3	3.5		30				2005	2005	75	0.037		70	0.035	
Pedestrian Crossing		Ep	2,3,4	MIN GREEN + FLASH =		8	+	5	=	13							
		Fp	3,4	MIN GREEN + FLASH =		9	+	7	=	16							
		Gp	3,4	MIN GREEN + FLASH =		8	+	10	=	18			*				*
		Hp	1,2,4	MIN GREEN + FLASH =		5	+	7	=	12							

Notes:	Flow: (pcu/hr)	Group	B.Fp	B.Gp	Group	C.D.Fp	C.D.Gp
		<b>y</b>	0.428	0.428	<b>y</b>	0.361	0.361
		<b>L (sec)</b>	26	27	<b>L (sec)</b>	33	34
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.697	0.689	<b>y pract.</b>	0.630	0.622
		<b>R.C. (%)</b>	63%	61%	<b>R.C. (%)</b>	75%	72%



I/G= 2	I/G=	I/G= 8	18	I/G=	I/G=
I/G= 2	I/G= 6	I/G= 10	18	I/G=	I/G=

Date: 九月, 2025 Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie J4

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie Street/ Hoi Chak Street

Design Year: 2025

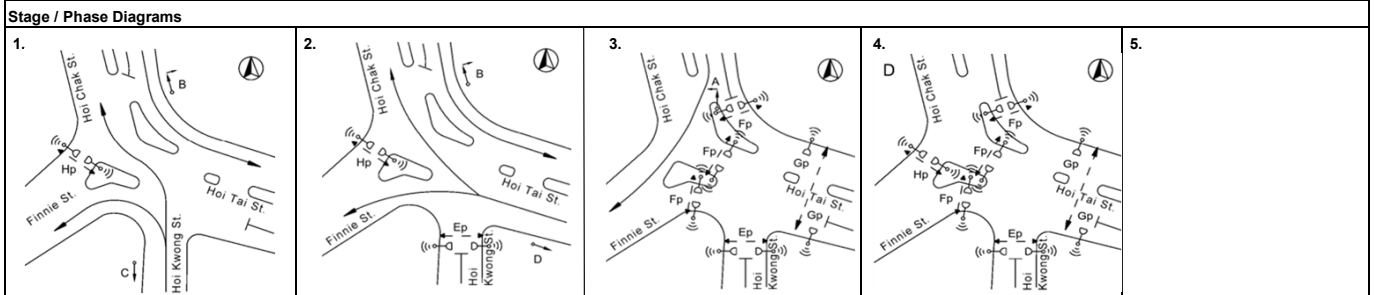
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
Hoi Tai Street	↑	D	2	3.5		40				2030		95	0.047				
	↓	D	2	3.6	20					1835		400	0.218	0.218			
Hoi Kwong Street	↔	C	1	3.6	15			75%		1835		140	0.076	0.076			
Hoi Chak Street	↘	B	1,2	3.1	35					1845		455	0.247				*
	↙	A	3	3.5		30				2005		80	0.040				
Pedestrian Crossing		Ep	2,3,4	MIN GREEN + FLASH =		8	+	5	=	13							
		Fp	3,4	MIN GREEN + FLASH =		9	+	7	=	16							*
		Gp	3,4	MIN GREEN + FLASH =		8	+	10	=	18				*			
		Hp	1,2,4	MIN GREEN + FLASH =		5	+	7	=	12							

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<table border="1"> <tr> <td><b>Group</b></td> <td>C.D.Fp</td> <td>C.D.Gp</td> <td><b>Group</b></td> <td></td> <td></td> </tr> <tr> <td><b>y</b></td> <td>0.294</td> <td>0.294</td> <td><b>y</b></td> <td></td> <td></td> </tr> <tr> <td><b>L (sec)</b></td> <td>33</td> <td>34</td> <td><b>L (sec)</b></td> <td></td> <td></td> </tr> <tr> <td><b>C (sec)</b></td> <td>110</td> <td>110</td> <td><b>C (sec)</b></td> <td></td> <td></td> </tr> <tr> <td><b>y pract.</b></td> <td>0.630</td> <td>0.622</td> <td><b>y pract.</b></td> <td></td> <td></td> </tr> <tr> <td><b>R.C. (%)</b></td> <td>114%</td> <td>111%</td> <td><b>R.C. (%)</b></td> <td></td> <td></td> </tr> </table>	<b>Group</b>	C.D.Fp	C.D.Gp	<b>Group</b>			<b>y</b>	0.294	0.294	<b>y</b>			<b>L (sec)</b>	33	34	<b>L (sec)</b>			<b>C (sec)</b>	110	110	<b>C (sec)</b>			<b>y pract.</b>	0.630	0.622	<b>y pract.</b>			<b>R.C. (%)</b>	114%	111%	<b>R.C. (%)</b>		
	<b>Group</b>	C.D.Fp			C.D.Gp	<b>Group</b>																																		
	<b>y</b>	0.294			0.294	<b>y</b>																																		
	<b>L (sec)</b>	33			34	<b>L (sec)</b>																																		
	<b>C (sec)</b>	110			110	<b>C (sec)</b>																																		
	<b>y pract.</b>	0.630			0.622	<b>y pract.</b>																																		
<b>R.C. (%)</b>	114%	111%	<b>R.C. (%)</b>																																					



I/G= 2	I/G= 6	I/G= 10	18	I/G=	I/G=
I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G= #N/A	#N/A

Date: 九月, 2025 Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie J4

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Finnie Street

Design Year: 2025

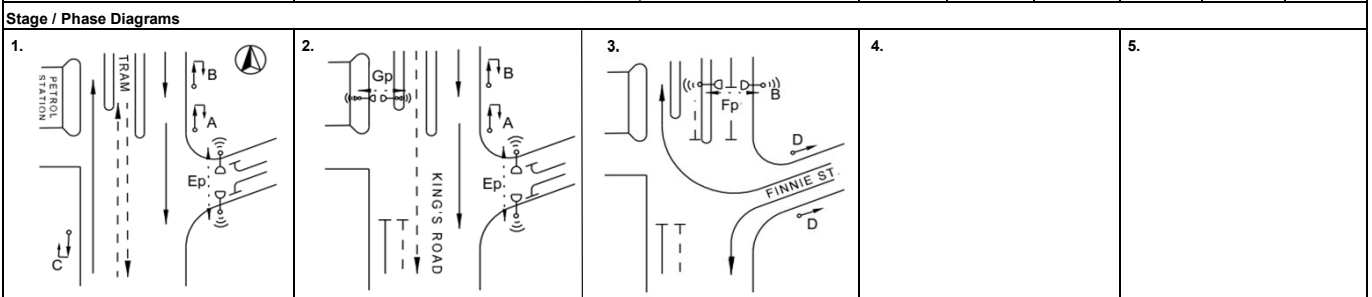
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road NB (with Tram)	↑	C	1	3.0						1915	1915	238	0.124		231	0.121	
	↑	C	1	3.3						2085	2085	260	0.125		251	0.120	0.120
	↑	C	1	3.5						2105	2105	262	0.124		253	0.120	
Finnie Street	←	D	3	3.5	10	20		100% / 0%	100% / 0%	1710	1710	360	0.211	0.211	625	0.365	0.365
	→	D	3	3.5		22.5				1840	1840	120	0.065		205	0.111	
King's Road SB	↓	A	1,2	3.7						1985	1985	432	0.218	0.218	424	0.214	
	↓	A	1,2	3.3						2085	2085	453	0.217		446	0.214	
King's Road SB (Tram)	↓	A	1,2	2.6						1875	1875	100	0.053		100	0.053	
Pedestrian Crossing																	
	Ep	1,2					MIN GREEN + FLASH =	5	+	7	=	12					
	Fp	3					MIN GREEN + FLASH =	5	+	6	=	11					
	Gp	2					MIN GREEN + FLASH =	5	+	6	=	11					*

Notes:	Flow: (pcu/hr)	Group	C.Gp.D	A.D	Group	A.D	C.Gp.D
		<b>y</b>	0.335	0.428	<b>y</b>	0.579	0.486
		<b>L (sec)</b>	27	10	<b>L (sec)</b>	10	27
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.689	0.822	<b>y pract.</b>	0.818	0.679
		<b>R.C. (%)</b>	105%	92%	<b>R.C. (%)</b>	41%	40%



I/G= 7	I/G=	I/G= 5	I/G=	I/G=	I/G=
I/G= 7	I/G= 9	11	I/G= 2		I/G=

Date: 九月, 2025 Junction: King's Road/ Finnie Street J5

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Finnie Street

Design Year: 2025

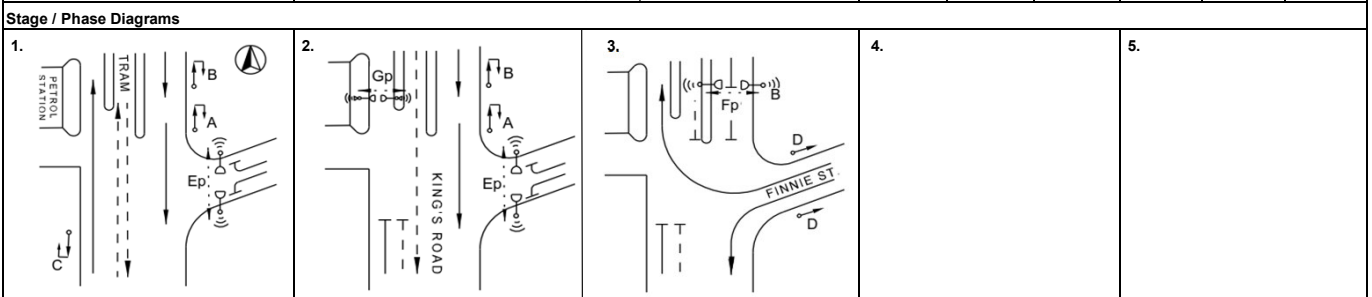
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
King's Road NB (with Tram)	↑	C	1	3.0						1915		194	0.101				
	↑	C	1	3.3						2085		212	0.102	0.102			
	↑	C	1	3.5						2105		214	0.102				
Finnie Street	↑	D	3	3.5	10	20		100% / 0%		1710		420	0.246	0.246			*
	↑	D	3	3.5		22.5				1840		155	0.084				
King's Road SB	↓	A	1,2	3.7						1985		339	0.171				*
	↓	A	1,2	3.3						2085		356	0.171				
King's Road SB (Tram)	↓	A	1,2	2.6						1875		105	0.056				
Pedestrian Crossing																	
	Ep	1,2		MIN GREEN + FLASH =		5	+	7	=	12							
	Fp	3		MIN GREEN + FLASH =		5	+	6	=	11							
	Gp	2		MIN GREEN + FLASH =		5	+	6	=	11					*		

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	A,D	C,Gp,D	<b>Group</b>		
		<b>y</b>	0.416	0.347	<b>y</b>				
		<b>L (sec)</b>	10	27	<b>L (sec)</b>				
		<b>C (sec)</b>	110	110	<b>C (sec)</b>				
		<b>y pract.</b>	0.818	0.679	<b>y pract.</b>				
			<b>R.C. (%)</b>	96%	96%	<b>R.C. (%)</b>			



I/G= 7	I/G= 9	11	I/G= 2	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G=

Date: 九月, 2025 Junction: King's Road/ Finnie Street J5

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: King's Road/ Model Lane

Design Year: 2025

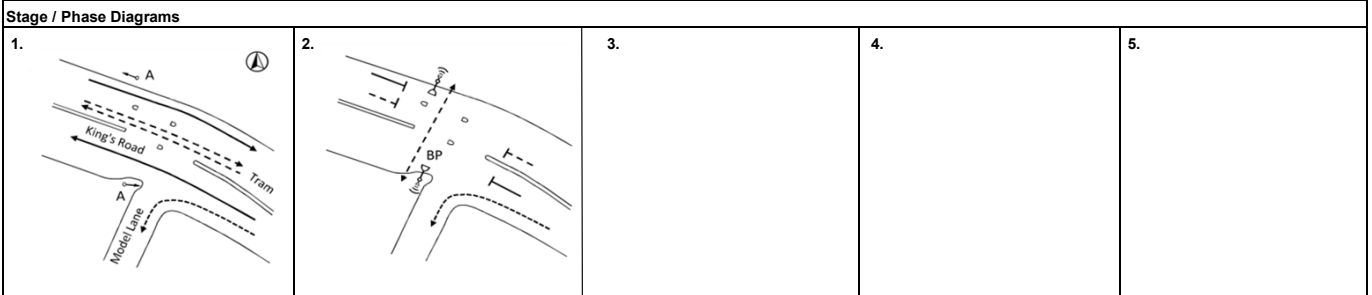
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.500						2165	2165	230	0.106		200	0.092	
King's Road EB(Tram)	→	A	1	2.200						1975	1975	100	0.051		100	0.051	
King's Road WB	←	A	1	3.200						2075	2075	661	0.319	0.319	721	0.347	0.347
King's Road WB free flow	←	A	1	3.300						2085	2085	664	0.318		724	0.347	
King's Road WB(Tram)	←	A	1	3.300	8					1640	1640	255	0.155		290	0.177	
King's Road WB(Tram)	←	A	1	3.200						2075	2075	100	0.048		90	0.043	
Pedestrian Crossing		Bp	2	MIN GREEN + FLASH =		13	+	7	=	20				*			*

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>		A,Bp	<b>Group</b>		A,Bp
		<b>y</b>		0.319	<b>y</b>		0.347		
		<b>L (sec)</b>		28	<b>L (sec)</b>		28		
		<b>C (sec)</b>		115	<b>C (sec)</b>		110		
		<b>y pract.</b>		0.681	<b>y pract.</b>		0.671		
		<b>R.C. (%)</b>		114%	<b>R.C. (%)</b>		93%		



I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=	I/G=
I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=	I/G=

Date: 九月, 2025 Junction: King's Road/ Model Lane J6

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Model Lane

Design Year: 2025

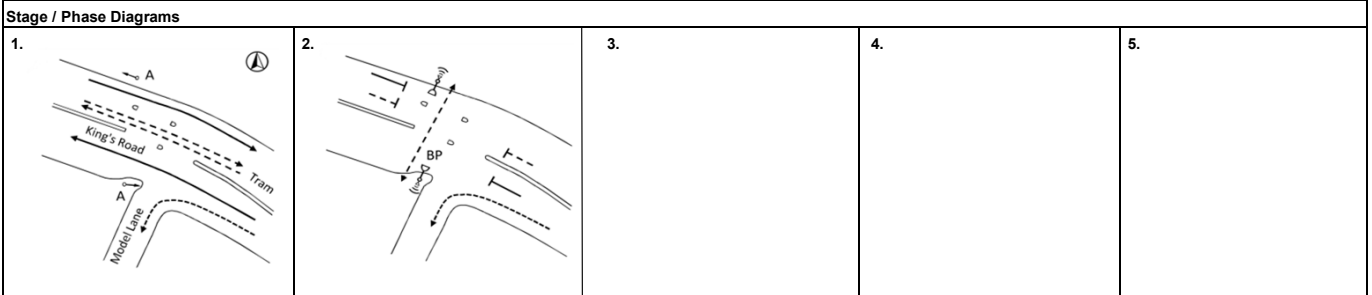
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
King's Road EB	→	A	1	5.500						2165		185	0.085				*
King's Road EB(Tram)	→	A	1	2.200						1975		105	0.053				
King's Road WB	←	A	1	3.200						2075		614	0.296	0.296			
King's Road WB	←	A	1	3.300						2085		616	0.295				
free flow	↙			3.300	8					1640		285	0.174				
King's Road WB(Tram)	←	A	1	3.200						2075		100	0.048				
Pedestrian Crossing				Bp	2	MIN GREEN + FLASH =		13	+	7	=	20				*	*

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>				<b>Group</b>		A,Bp	<b>Group</b>		
	<b>y</b>			0.296	<b>y</b>					
	<b>L (sec)</b>			28	<b>L (sec)</b>					
	<b>C (sec)</b>			110	<b>C (sec)</b>					
	<b>y pract.</b>			0.671	<b>y pract.</b>					
			127%	<b>R.C. (%)</b>						



I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=	I/G=

Date: 九月, 2025 Junction: King's Road/ Model Lane J6

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Man Hong Street

Design Year: 2025

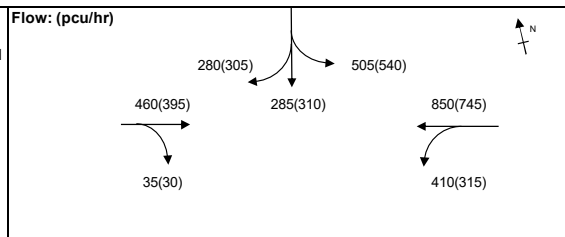
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

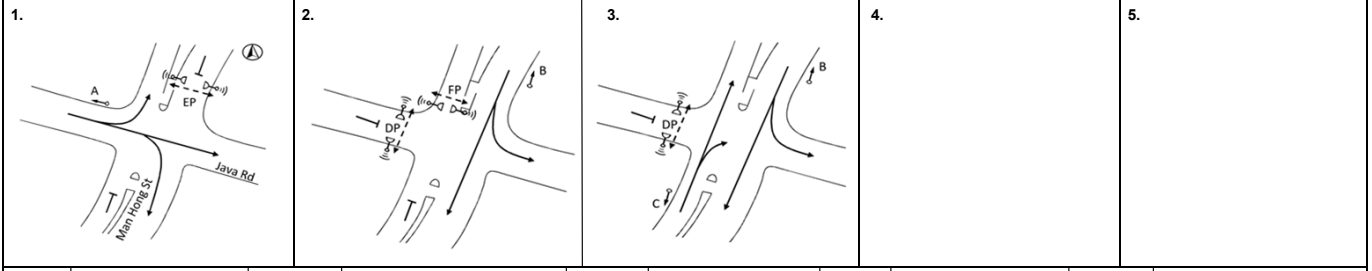
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road EB	↔	A	1	3.000	12					1700	1700	242	0.142		270	0.159	0.159
	↔	A	1	3.000	15			99%	95%	1870	1875	267	0.143	0.143	284	0.152	
	↔	A	1	3.000		18		4%	5%	2050	2045	292	0.142		310	0.152	
	↔	A	1	3.000		17				1890	1890	269	0.142		291	0.154	
Man Hong Street SB	↓	B	2,3	3.200						2075	2075	423	0.204		371	0.179	
	↓	B	2,3	3.400						2095	2095	427	0.204		374	0.179	
	↙	B	2,3	3.800	12					1775	1775	410	0.231		315	0.177	
Man Hong Street NB	↔	C	3	6.300		10		7%	7%	2110	2110	495	0.235	0.235	425	0.201	0.201
Pedestrian Crossing	Dp	2,3					MIN GREEN + FLASH =	5	+	12	=	17					
	Ep	1					MIN GREEN + FLASH =	6	+	10	=	16					
	Fp	2					MIN GREEN + FLASH =	5	+	8	=	13		*			*

**Notes:**  
Opposing factor of 0.5 has been adopted on Man Hong Street NB due to the presence of opposite movement on right turn



Group	A,B	A,Fp,C	Group	A,B	A,Fp,C
<b>y</b>	0.374	0.377	<b>y</b>	0.338	0.360
<b>L (sec)</b>	16	30	<b>L (sec)</b>	16	30
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.775	0.665	<b>y pract.</b>	0.769	0.655
<b>R.C. (%)</b>	107%	76%	<b>R.C. (%)</b>	128%	82%

**Stage / Phase Diagrams**



I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=
I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=

Date: 九月, 2025 Junction: Java Road/ Man Hong Street (J7)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Man Hong Street

Design Year: 2025

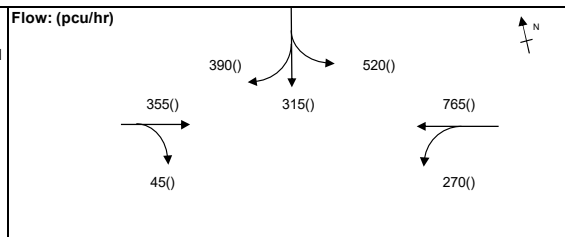
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

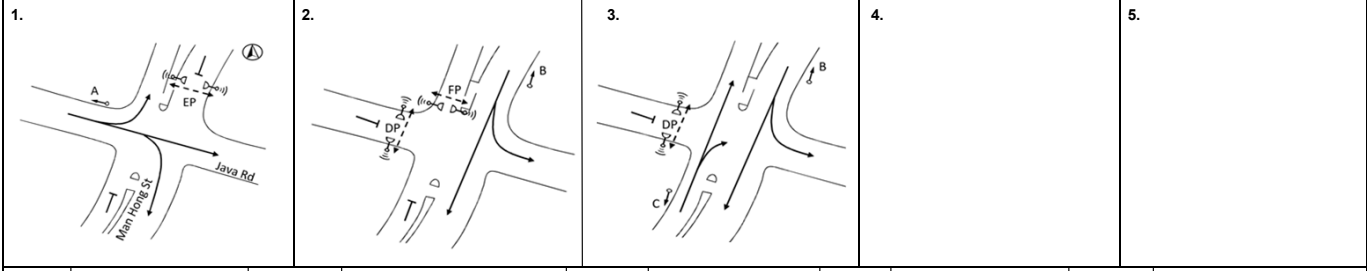
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
Java Road EB	↔	A	1	3.000	12					1700		277	0.163				*
	↔	A	1	3.000	15		78%		1905		311	0.163	0.163				
	↔	A	1	3.000		18	25%		2015		328	0.163					
	↔	A	1	3.000		17			1890		308	0.163					
Man Hong Street SB	↓	B	2,3	3.200					2075		381	0.184					*
	↓	B	2,3	3.400					2095		384	0.183					
	↘	B	2,3	3.800	12				1775		270	0.152					
Man Hong Street NB	↔	C	3	6.300		10	11%		2095		400	0.191	0.191				
Pedestrian Crossing	Dp	2,3					MIN GREEN + FLASH =	5	+	12	=	17					
	Ep	1					MIN GREEN + FLASH =	6	+	10	=	16					
	Fp	2					MIN GREEN + FLASH =	5	+	8	=	13			*		

**Notes:**  
Opposing factor of 0.5 has been adopted on Man Hong Street NB due to the presence of opposite movement on right turn



Group	A,B	A,Fp,C	Group		
<b>y</b>	0.347	0.354	<b>y</b>		
<b>L (sec)</b>	16	30	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.769	0.655	<b>y pract.</b>		
<b>R.C. (%)</b>	122%	85%	<b>R.C. (%)</b>		

**Stage / Phase Diagrams**



I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G=

Date: 九月, 2025 Junction: Java Road/ Man Hong Street (J7)

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: King's Road/ Healthy Street West/ Man Hong Street

Design Year: 2025

Description: 2033 Reference

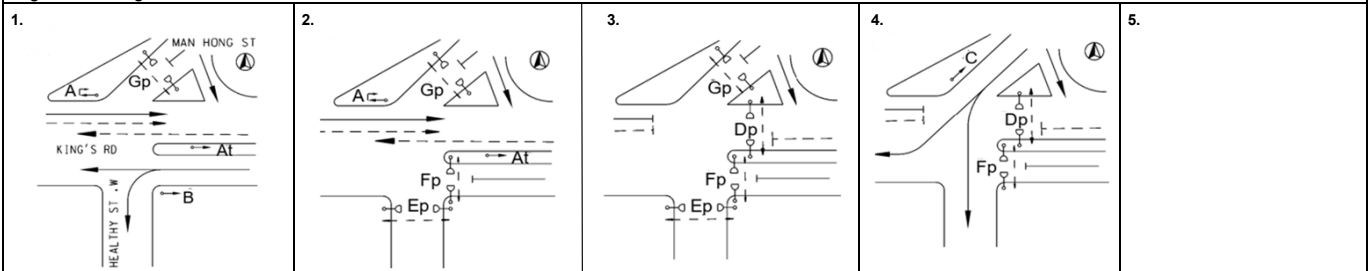
Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1,2	3.300						1945	1945	74	0.038		65	0.033	
King's Road EB(Tram)	→	A	1,2	3.500						2105	2105	81	0.038		70	0.033	
King's Road WB	←	B	1	3.500	8			80%	72%	1710	1730	263	0.154	0.154	258	0.149	0.149
King's Road WB(Tram)	←	B	1	3.400						2095	2095	322	0.154		312	0.149	
Man Hong Street SB	↓	At	1,2	2.700						2025	2025	100	0.049		90	0.044	
Pedestrian Crossing	Ep	3,4															
	Fp	2,3															
	Gp	2,3,4															
	Hp	1,2,3															

Notes:	Flow: (pcu/hr)	Group	Hp.D	B.Fp,D	Group	Hp.D	B.Fp,D
		<b>y</b>	0.167	0.321	<b>y</b>	0.162	0.311
		<b>L (sec)</b>	24	35	<b>L (sec)</b>	24	35
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.712	0.626	<b>y pract.</b>	0.704	0.614
		<b>R.C. (%)</b>	326%	95%	<b>R.C. (%)</b>	334%	97%

**Stage / Phase Diagrams**



I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=
I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=

Date: 九月, 2025 Junction: King's Road/ Healthy Street West/ Man Hong Street **JB**

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Healthy Street West/ Man Hong Street

Design Year: 2025

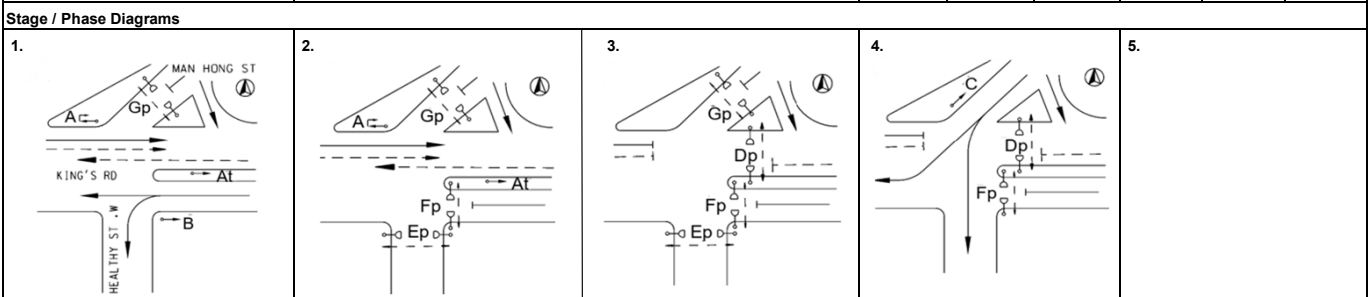
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
King's Road EB	→	A	1,2	3.300						1945		65	0.033				*
King's Road EB(Tram)	→	A	1,2	3.500						2105		70	0.033				
King's Road WB	←	B	1	3.500	8			74%		1725		257	0.149				
King's Road WB(Tram)	←	B	1	3.400						2095		313	0.149	0.149			
King's Road WB(Tram)	←	At	1,2	2.700						2025		100	0.049				
Man Hong Street SB	↓	D	4	3.300						1945		347	0.178				
	↓	D	4	3.500		40		16%		2090		373	0.178	0.178			
	↓	D	4	3.500		35				2020		360	0.178				
Pedestrian Crossing		Ep	3,4	MIN GREEN + FLASH =		7	+	6	=	13							*
		Fp	2,3	MIN GREEN + FLASH =		5	+	10	=	15							
		Gp	2,3,4	MIN GREEN + FLASH =		5	+	6	=	11							
		Hp	1,2,3	MIN GREEN + FLASH =		5	+	9	=	14							

Notes:	Flow: (pcu/hr)			Group	Hp.D	B.Fp.D	Group		
				y	0.178	0.328	y		
				L (sec)	24	35	L (sec)		
				C (sec)	110	110	C (sec)		
				y pract.	0.704	0.614	y pract.		
			R.C. (%)	294%	87%	R.C. (%)			



I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A

Date: 九月, 2025 Junction: King's Road/ Healthy Street West/ Man Hong Street JB

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Healthy Street West

Design Year: 2025

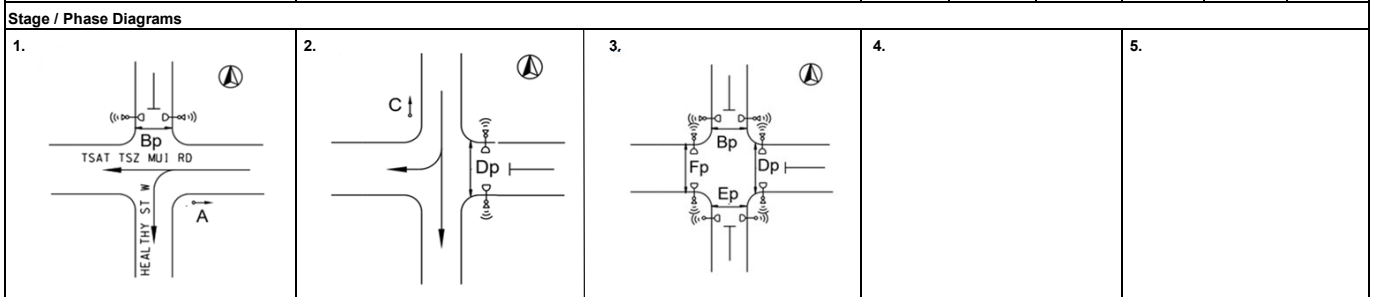
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tsat Tsz Mui Road WB	↔	A	1	3.800	10			27%	34%	1915	1900	166	0.087	0.087	193	0.102	
		A	1	3.800				2135	2135	184	0.086		217	0.102	0.102		
Healthy Street West SB	↓	C	2	2.500						1865	1865	252	0.135		252	0.135	
		C	2	3.300	13			59%	57%	1950	1955	264	0.135	0.135	264	0.135	
		C	2	3.600	10					1840	1840	249	0.135		249	0.135	0.135
Pedestrian Crossing		Bp	1,3	MIN GREEN + FLASH =		5	+	9	=	14							
		Dp	2,3	MIN GREEN + FLASH =		5	+	8	=	13							
		Ep	3	MIN GREEN + FLASH =		5	+	9	=	14		*				*	
		Fp	3	MIN GREEN + FLASH =		5	+	8	=	13							

Notes:	Flow: (pcu/hr)	Group	A,C,Fp	A,C,Ep	Group	A,C,Fp	A,C,Ep
		<b>y</b>	0.222	0.222	<b>y</b>	0.237	0.237
		<b>L (sec)</b>	28	29	<b>L (sec)</b>	28	29
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.681	0.673	<b>y pract.</b>	0.671	0.663
		<b>R.C. (%)</b>	207%	203%	<b>R.C. (%)</b>	183%	180%



I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=
I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=

Date: 九月, 2025 Junction: Tsat Tsz Mui Road/ Healthy Street West J9

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Healthy Street West

Design Year: 2025

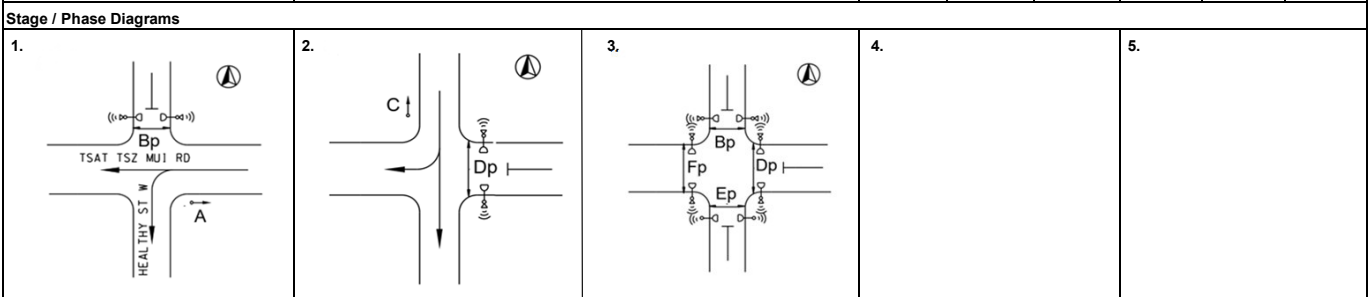
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
Tsat Tsz Mui Road WB	↖	A	1	3.800	10		35%			1895		202	0.107				
	←	A	1	3.800								2135	228				
Healthy Street West SB	↓	C	2	2.500			34%			2005		278	0.149	0.149			
	↘	C	2	3.300	13							1865	298	0.149			
	↙	C	2	3.600	10							1840	274	0.149			
Pedestrian Crossing		Bp	1,3	MIN GREEN + FLASH =			5	+	9	=	14						
		Dp	2,3	MIN GREEN + FLASH =			5	+	8	=	13						
		Ep	3	MIN GREEN + FLASH =			5	+	9	=	14			*			*
		Fp	3	MIN GREEN + FLASH =			5	+	8	=	13						

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	A,C,Fp	A,C,Ep	<b>Group</b>		
		<b>y</b>	0.256	0.256	<b>y</b>				
		<b>L (sec)</b>	28	29	<b>L (sec)</b>				
		<b>C (sec)</b>	110	110	<b>C (sec)</b>				
		<b>y pract.</b>	0.671	0.663	<b>y pract.</b>				
		<b>R.C. (%)</b>	162%	159%	<b>R.C. (%)</b>				



I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=

**Date:** 九月, 2025      **Junction:** Tsat Tsz Mui Road/ Healthy Street West (J9)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Tin Chiu West

Design Year: 2025

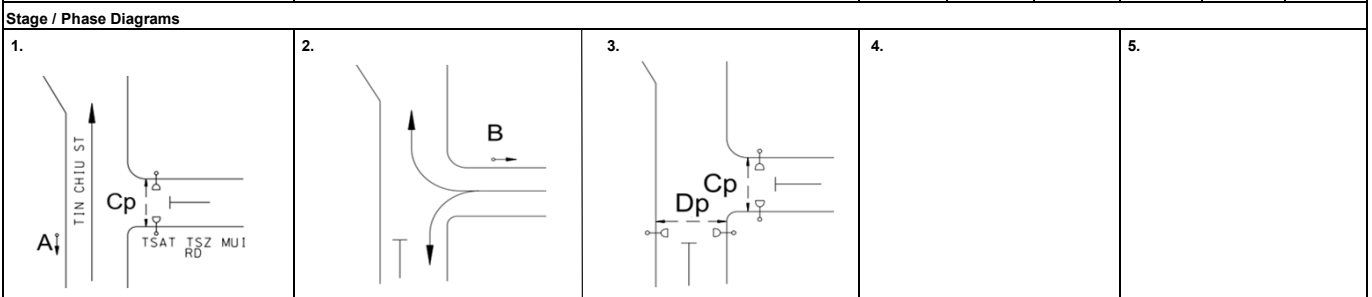
Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Chiu Street NB	↓	A	1	3.900						2005	2005	450	0.224	0.224	300	0.150	0.150
Tsat Tsz Mui Road WB	↔	B	2	4.100	6	13		45% / 55%	48% / 52%	1720	1715	322	0.187	0.187	343	0.200	0.200
	↑	B	2	4.100						1940	1940	363	0.187		387	0.199	
Pedestrian Crossing		Cp	1,3	MIN GREEN + FLASH =	10	+	9	=	19								*
		Dp	3	MIN GREEN + FLASH =	7	+	9	=	16								*

Notes:	Flow: (pcu/hr)	Group	Cp,B	A,B,Dp	Group	Cp,B	A,B,Dp
		y	0.187	0.412	y	0.200	0.350
		L (sec)	27	32	L (sec)	27	32
		C (sec)	115	115	C (sec)	110	110
		y pract.	0.689	0.650	y pract.	0.679	0.638
		R.C. (%)	268%	58%	R.C. (%)	240%	83%



I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=
I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=

Date: 九月, 2025 Junction: Tsat Tsz Mui Road/ Tin Chiu West J10

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Tin Chiu West

Design Year: 2025

Description: 2033 Reference

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
Tin Chiu Street NB	↓	A	1	3.900							2005	330	0.165	0.165			*
Tsat Tsz Mui Road WB	↕	B	2	4.100	6	13	62% / 38%				1690	337	0.199				*
Tsat Tsz Mui Road NB	↑	B	2	4.100		13					1940	388	0.200	0.200			
Pedestrian Crossing		Cp	1,3	MIN GREEN + FLASH =	10	+	9	=	19								*
		Dp	3	MIN GREEN + FLASH =	7	+	9	=	16						*		*

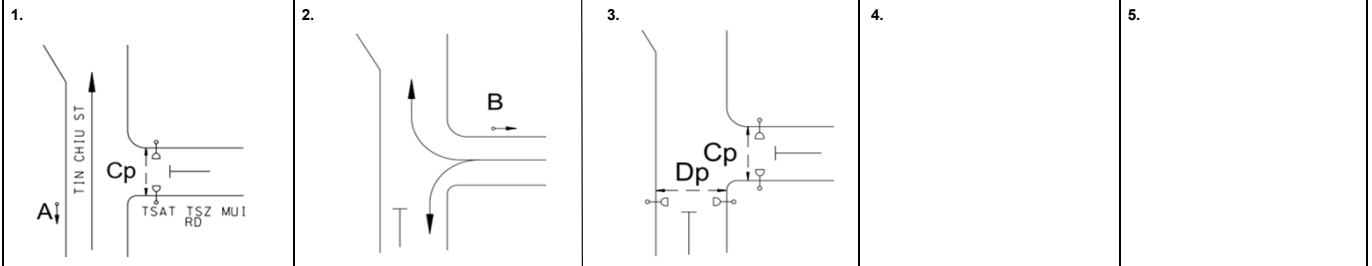
**Notes:**

**Flow: (pcu/hr)**

↑ N

Group	Cp,B	A,B,Dp	Group		
<b>y</b>	0.200	0.365	<b>y</b>		
<b>L (sec)</b>	27	32	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.679	0.638	<b>y pract.</b>		
<b>R.C. (%)</b>	240%	75%	<b>R.C. (%)</b>		

**Stage / Phase Diagrams**



I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=

Date: 九月, 2025 Junction: Tsat Tsz Mui Road/ Tin Chiu West (J10)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Tin Chiu Street

Design Year: 2025

Description: 2033 Reference

Designed By: NLY

Checked By: WCY

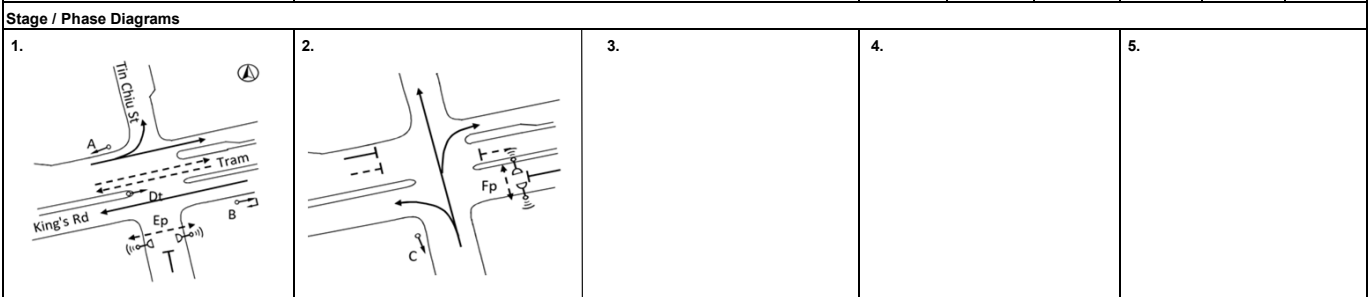
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	↔	A	1	3.200	12			14%	12%	1900	1905	245	0.129		250	0.131	0.131
King's Road EB(Tram)	→	A	1	2.700						2025	2025	100	0.049		100	0.049	
King's Road WB	←	B	1	3.300						1945	1945	262	0.135		248	0.128	
	←	B	1	3.500						2105	2105	284	0.135	0.135	269	0.128	
	←	B	1	3.500						2105	2105	284	0.135		268	0.127	
King's Road WB(Tram)	←	Dt	1	2.400						1995	1995	100	0.050		90	0.045	
Tin Chiu Street NB	↕	C	2	3.300	12					1730	1730	345	0.199		215	0.124	
	↕	C	2	3.500	12			37%	48%	2010	1985	205	0.102		310	0.156	
	↕	C	2	3.500		12				1870	1870	440	0.235	0.235	340	0.182	0.182
Pedestrian Crossing		Ep	1	MIN GREEN + FLASH =		6	+	12	=	18							
		Fp	2	MIN GREEN + FLASH =		5	+	9	=	14							

**Notes:**

**Flow: (pcu/hr)**

↑ N

Group	A,C	B,C	Group	B,C	A,C
<b>y</b>	0.364	0.370	<b>y</b>	0.310	0.313
<b>L (sec)</b>	10	11	<b>L (sec)</b>	11	10
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.822	0.814	<b>y pract.</b>	0.810	0.818
<b>R.C. (%)</b>	126%	120%	<b>R.C. (%)</b>	162%	161%



I/G= 6	I/G= 7	I/G=	I/G=	I/G=
I/G= 7	I/G= 5	I/G=	I/G=	I/G=

Date: 九月, 2025 Junction: King's Road/ Tin Chiu Street (J11)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Tin Chiu Street

Design Year: 2025

Description: 2033 Reference

Designed By: NLY

Checked By: WCY

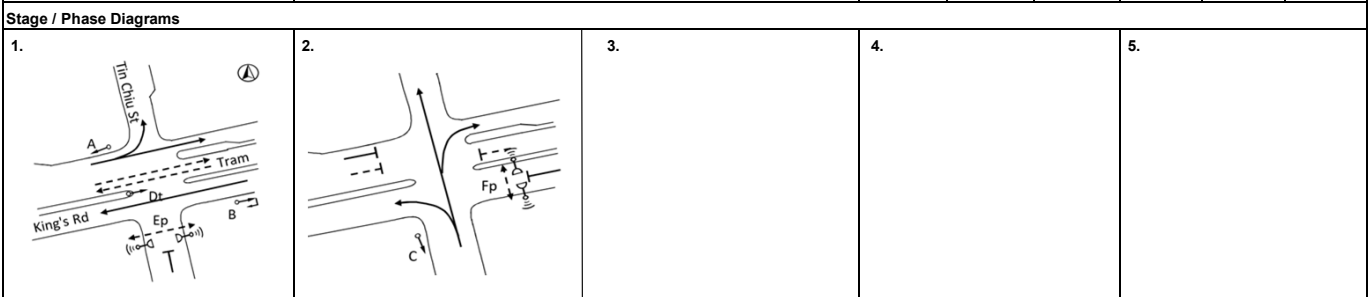
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y			
King's Road EB	↔	A	1	3.200	12			13%		1905		240	0.126				*
King's Road EB(Tram)	→	A	1	2.700						2025		105	0.052				
King's Road WB	←	B	1	3.300						1945		253	0.130				
	←	B	1	3.500						2105		273	0.130				
	←	B	1	3.500						2105		274	0.130	0.130			
King's Road WB(Tram)	←	Dt	1	2.400						1995		100	0.050				
Tin Chiu Street NB	↕	C	2	3.300	12					1730		255	0.147				*
	↕	C	2	3.500	12			51%		1980		265	0.134				
	↕	C	2	3.500		12				1870		325	0.174	0.174			
Pedestrian Crossing		Ep	1	MIN GREEN + FLASH =		6	+	12	=	18							
		Fp	2	MIN GREEN + FLASH =		5	+	9	=	14							

**Notes:**

**Flow: (pcu/hr)**

↑ N

Group	A,C	B,C	Group		
<b>y</b>	0.300	0.304	<b>y</b>		
<b>L (sec)</b>	10	11	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.818	0.810	<b>y pract.</b>		
<b>R.C. (%)</b>	173%	166%	<b>R.C. (%)</b>		



I/G= 6	I/G= 7	I/G=	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G=	I/G=	I/G=

Date: 九月, 2025      Junction: King's Road/ Tin Chiu Street      (J11)

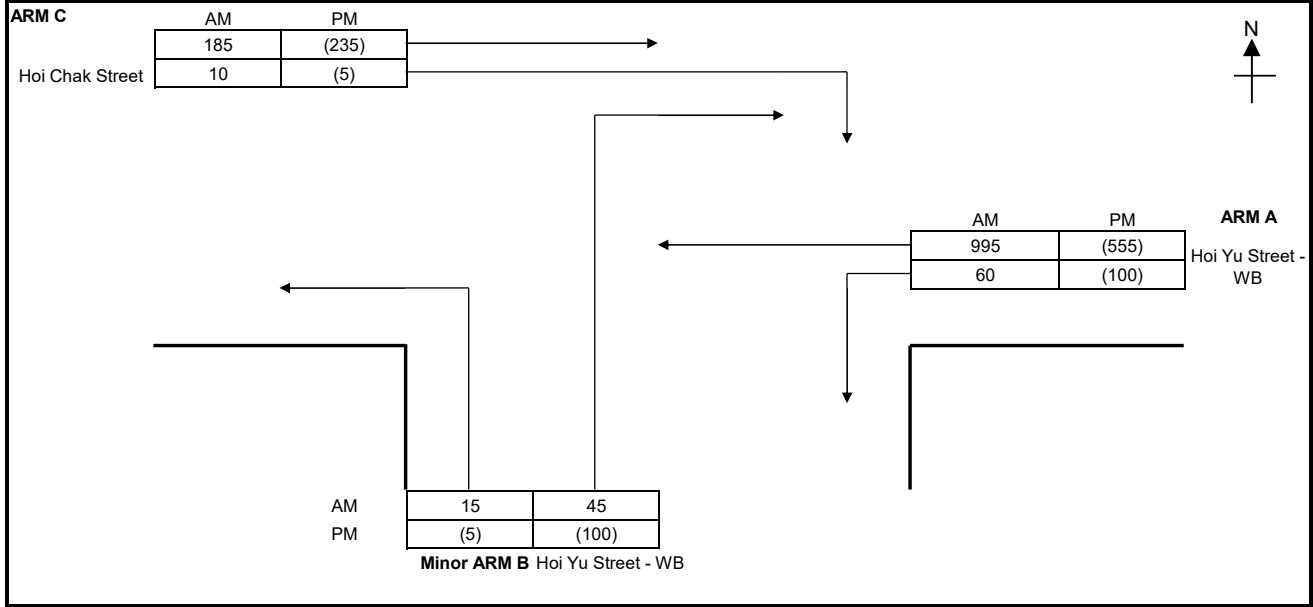
## Calculation Sheets - 2033 Design Year

# Simplified priority Junction Capacity Calculation



Job Title:	Hoi Yu Street TIA	Ref. No.:	J1_pic
Junction:	Hoi Yu Street/Hoi Chak Street	Designed by:	NLY
Description:	2033 Design	Checked by:	WCY
Design Year:	2025	Job No.:	CHK50793710
		Date:	四月 2026

ARM A:	Hoi Yu Street - EB
ARM B:	Hoi Yu Street - WB
ARM C:	Hoi Chak Street



GEOMETRY			
Major road width	W	13.50	Lane widths
Central Reserve width	Wcr	0.00	w(b-a)
2 Lane Minor Arm (Y/N)		N	w(b-c)
			w(c-b)

PARAMETER			
Visibilities	Vr(b-a)	50	Calculated
	VI(b-a)	50	D
	Vr(b-c)	50	E
	Vr(c-b)	50	F
			Y

ANALYSIS		AM Peak	PM Peak
TRAFFIC FLOWS	q(c-a)	185	235
	q(c-b)	10	5
	q(a-b)	60	100
	q(a-c)	995	555
	q(b-a)	45	100
	q(b-c)	15	5
	f	0.25	0.05
CAPACITIES	Q(b-a)	312	376
	Q(b-c)	489	567
	Q(c-b)	487	561
	Q(b-ac)	343	382
RFC's	b-a	0.144	0.266
	b-c	0.031	0.009
	c-b	0.021	0.009
	b-ac	0.175	0.275
RFC		<b>0.175</b>	<b>0.275</b>

Where VI and Vr are visibility distances to the left or right of the respective streams

$$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$$

$$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$$

$$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$$

$$Y = 1-0.0345W$$

f = proportion of minor traffic turning left

$$Q(b-ac) = Q(b-c)Q(b-a)/(1-f)Q(b-c)+fQ(b-a)$$

Capacity of combined streams

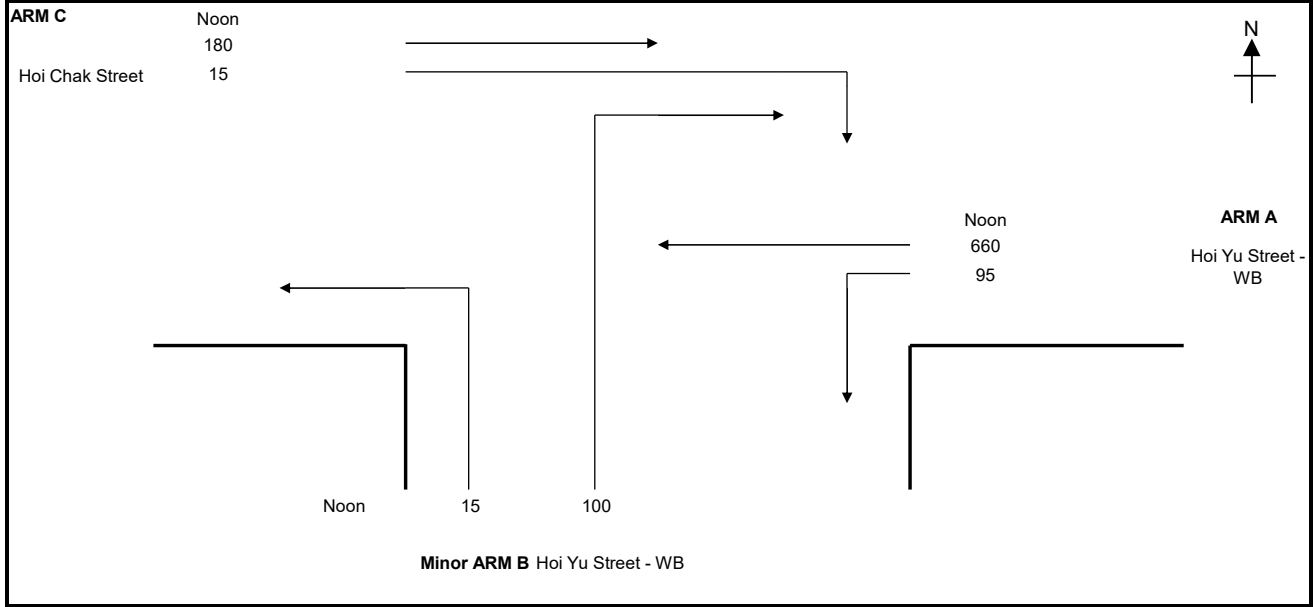
**All the above formulas are in accordance to T.P.D.M. Vol.2 Chapter 4 Appendix 1**

# Simplified priority Junction Capacity Calculation



Job Title: Hoi Yu Street TIA	Ref. No.: J1_pic
Junction: Hoi Yu Street/Hoi Chak Street	Designed by: NLY
Description: 2033 Design	Checked by: WCY
Design Year: 2025	Job No.:CHK50793710
	Date: 四月 2026

ARM A: Hoi Yu Street - EB
ARM B: Hoi Yu Street - WB
ARM C: Hoi Chak Street



GEOMETRY			
Major road width	W	13.50	Lane widths
Central Reserve width	Wcr	0.00	w(b-a)
2 Lane Minor Arm (Y/N)		N	w(b-c)
			w(c-b)

PARAMETER			
Visibilities	Vr(b-a)	50	Calculated
	VI(b-a)	50	D
	Vr(b-c)	50	E
	Vr(c-b)	50	F
			Y

ANALYSIS		Noon Peak	
TRAFFIC FLOWS	q(c-a)		180
	q(c-b)		15
	q(a-b)		95
	q(a-c)		660
	q(b-a)		100
	q(b-c)		15
	f		0.13
CAPACITIES	Q(b-a)	Factor	363
	Q(b-c)	1	548
	Q(c-b)	1	542
	Q(b-ac)	1	380
RFC's	b-a		0.275
	b-c		0.027
	c-b		0.028
	b-ac		0.303
RFC			<b>0.303</b>

Where VI and Vr are visibility distances to the left or right of the respective streams

$$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$$

$$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$$

$$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$$

$$Y = 1-0.0345W$$

f = proportion of minor traffic turning left

$$Q(b-ac) = Q(b-c)Q(b-a)/(1-f)Q(b-c)+fQ(b-a)$$

Capacity of combined streams

**All the above formulas are in accordance to T.P.D.M. Vol.2 Chapter 4 Appendix 1**

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Hoi Yu Street

Design Year: 2025

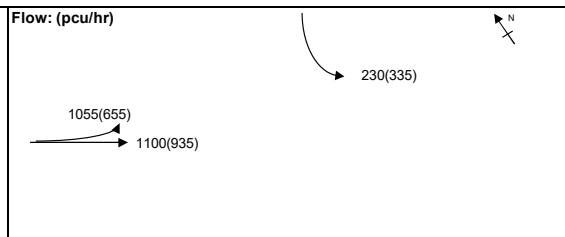
Description: 2033 Design

Designed By: NLY

Checked By: WCY

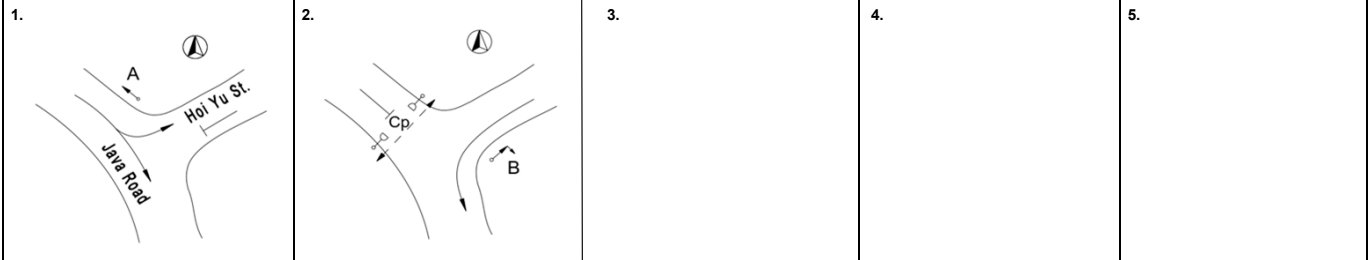
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road	↖	A	1	2.4	20					1725	1725	1055	0.612	0.612	655	0.380	
	→	A	1	3.2						1040	1040	468	0.450		398	0.383	
	→	A	1	3.1						825	825	371	0.450		315	0.382	
	→	A	1	3.1						580	580	261	0.450		222	0.383	0.383
Hoi Yu Street	↘	B	2	3.4	15					1905	1905	120	0.063		175	0.092	0.092
	↙	B	2	3.4	12.5					1745	1745	110	0.063		160	0.092	
Pedestrian Crossing		Cp	2	MIN GREEN + FLASH =		8	+	10	=	18				*			

**Notes:**  
 1. Site factor 0.5, 0.4 and 0.3 are adopted for Java Road's second, third and fourth lane respectively due to downstream blocking and illegal parking along kerbside observed.



Group	A,B	A,Cp	Group	A,Cp	A,B
<b>y</b>	0.675	0.612	<b>y</b>	0.383	0.475
<b>L (sec)</b>	10	26	<b>L (sec)</b>	26	10
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.822	0.697	<b>y pract.</b>	0.687	0.818
<b>R.C. (%)</b>	22%	14%	<b>R.C. (%)</b>	80%	72%

**Stage / Phase Diagrams**



I/G= 4	I/G= 5	18	I/G=	I/G=	I/G=
I/G= 5	I/G= 7		I/G=		I/G=

Date: 四月, 2026 Junction: Java Road/ Hoi Yu Street J2

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Hoi Yu Street

Design Year: 2025

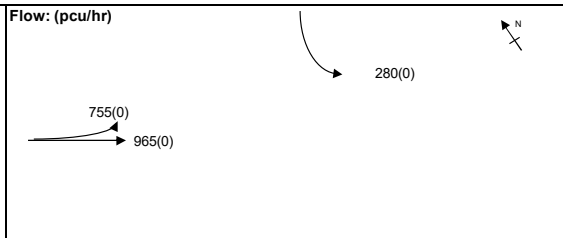
Description: 2033 Design

Designed By: NLY

Checked By: WCY

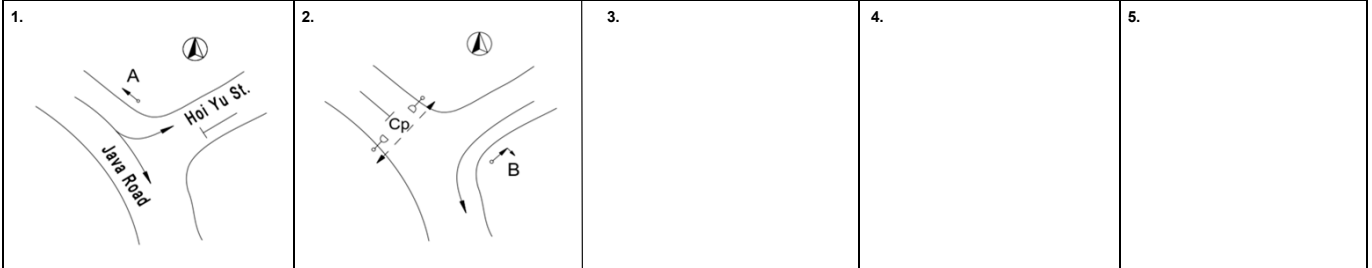
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A			
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Java Road	↖	A	1	2.4	20						1725		755	0.438	0.438			*
	→	A	1	3.2							1040		410	0.394				
	↗	A	1	3.1							825		326	0.395				
	↘	A	1	3.1							580		229	0.395				
Hoi Yu Street	↖	B	2	3.4	15						1905		146	0.077				*
	↘	B	2	3.4	12.5						1745		134	0.077				
Pedestrian Crossing		Cp	2	MIN GREEN + FLASH =		8	+	10	=	18								*

**Notes:**  
 1. Site factor 0.5, 0.4 and 0.3 are adopted for Java Road's second, third and fourth lane respectively due to downstream blocking and illegal parking along kerbside observed.



Group	A,B	A,Cp	Group		
<b>y</b>	0.514	0.438	<b>y</b>		
<b>L (sec)</b>	10	26	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.818	0.687	<b>y pract.</b>		
<b>R.C. (%)</b>	59%	57%	<b>R.C. (%)</b>		

**Stage / Phase Diagrams**



I/G= 4		I/G= 5	18	I/G=		I/G=		I/G=	
I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G=		I/G=		I/G=	

Date: 四月, 2026 Junction: Java Road/ Hoi Yu Street J2

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Java Road

Design Year: 2025

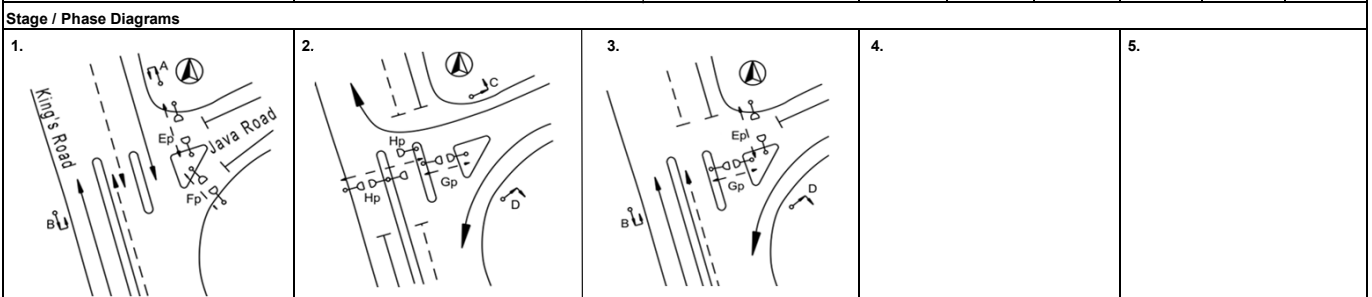
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.3						2145	2145	230	0.107		200	0.093	
King's Road EB (Tram)	→	A	1	2.7						2025	2025	100	0.049		100	0.049	
Java Road	↖	C	2	3.5		30				1870	1870	268	0.143	0.143	330	0.176	0.176
	↗	C	2	4.1		32.5			2070	2070	297	0.143	365		0.176		
	↘	D	2,3	3.3	52.5				2025	2025	385	0.190	279		0.138		
	↙	D	2,3	3.3	50				1890	1890	360	0.190	261		0.138		
King's Road WB	↑	B	1,3	3.2						1935	1935	338	0.175	0.175	359	0.186	0.186
	↑	B	1,3	3.2					2075	2075	363	0.175	386		0.186		
	↑	B	1,3	3.5					1965	1965	344	0.175	365		0.186		
King's Road WB (Tram)	↑	B	1,3	2.3						1845	1845	100	0.054		90	0.049	
Pedestrian Crossing																	
	Ep	1,3			MIN GREEN + FLASH =	5	+	7	=	12							
	Fp	1			MIN GREEN + FLASH =	5	+	9	=	14							
	Gp	2,3			MIN GREEN + FLASH =	5	+	5	=	10							
	Hp	2			MIN GREEN + FLASH =	5	+	13	=	18							

Notes:	Flow: (pcu/hr)				<table border="1"> <tr> <th>Group</th> <th>A,D</th> <th>B,C</th> <th>Group</th> <th>A,D</th> <th>B,C</th> </tr> <tr> <td><b>y</b></td> <td>0.298</td> <td>0.319</td> <td><b>y</b></td> <td>0.231</td> <td>0.362</td> </tr> <tr> <td><b>L (sec)</b></td> <td>12</td> <td>10</td> <td><b>L (sec)</b></td> <td>12</td> <td>10</td> </tr> <tr> <td><b>C (sec)</b></td> <td>115</td> <td>115</td> <td><b>C (sec)</b></td> <td>110</td> <td>110</td> </tr> <tr> <td><b>y pract.</b></td> <td>0.806</td> <td>0.822</td> <td><b>y pract.</b></td> <td>0.802</td> <td>0.818</td> </tr> <tr> <td><b>R.C. (%)</b></td> <td>171%</td> <td>158%</td> <td><b>R.C. (%)</b></td> <td>247%</td> <td>126%</td> </tr> </table>	Group	A,D	B,C	Group	A,D	B,C	<b>y</b>	0.298	0.319	<b>y</b>	0.231	0.362	<b>L (sec)</b>	12	10	<b>L (sec)</b>	12	10	<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110	<b>y pract.</b>	0.806	0.822	<b>y pract.</b>	0.802	0.818	<b>R.C. (%)</b>	171%	158%	<b>R.C. (%)</b>	247%	126%
		Group	A,D			B,C	Group	A,D	B,C																																
		<b>y</b>	0.298			0.319	<b>y</b>	0.231	0.362																																
		<b>L (sec)</b>	12			10	<b>L (sec)</b>	12	10																																
		<b>C (sec)</b>	115			115	<b>C (sec)</b>	110	110																																
		<b>y pract.</b>	0.806			0.822	<b>y pract.</b>	0.802	0.818																																
		<b>R.C. (%)</b>	171%			158%	<b>R.C. (%)</b>	247%	126%																																



I/G=	I/G= 5	I/G= 7	I/G=	I/G=
I/G=	I/G= 5	I/G= 7	I/G=	I/G=

Date: 四月, 2026 Junction: King's Road/ Java Road J3

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: King's Road/ Java Road

Design Year: 2025

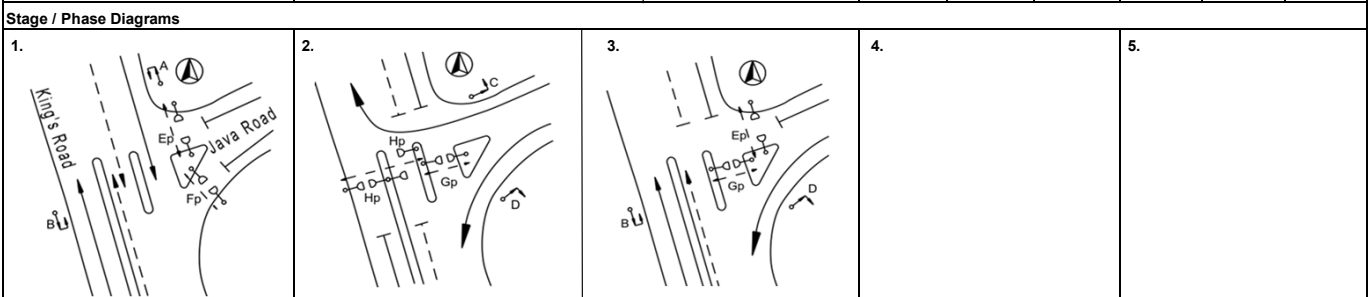
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.3						2145		185	0.086				*
King's Road EB (Tram)	→	A	1	2.7						2025		105	0.052				
Java Road	↕	C	2	3.5		30				1870		294	0.157	0.157			
	↕	C	2	4.1		32.5			2070		326	0.157					
	↕	D	2,3	3.3	52.5				2025		300	0.148					
	↕	D	2,3	3.3	50				1890		280	0.148					
King's Road WB	↑	B	1,3	3.2						1935		313	0.162	0.162			
	↑	B	1,3	3.2					2075		335	0.161					
	↑	B	1,3	3.5					1965		317	0.161					
King's Road WB (Tram)	↑	B	1,3	2.3					1845		100	0.054					
Pedestrian Crossing																	
	Ep	1,3		MIN GREEN + FLASH =	5	+	7	=	12								
	Fp	1		MIN GREEN + FLASH =	5	+	9	=	14								
	Gp	2,3		MIN GREEN + FLASH =	5	+	5	=	10								
	Hp	2		MIN GREEN + FLASH =	5	+	13	=	18								

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	A,D	B,C	<b>Group</b>		
		<b>y</b>	0.234	0.319	<b>y</b>				
		<b>L (sec)</b>	12	10	<b>L (sec)</b>				
		<b>C (sec)</b>	110	110	<b>C (sec)</b>				
		<b>y pract.</b>	0.802	0.818	<b>y pract.</b>				
		<b>R.C. (%)</b>	242%	156%	<b>R.C. (%)</b>				



I/G=	I/G= 5	I/G= 7	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G=	I/G=

Date: 四月, 2026 Junction: King's Road/ Java Road J3

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie Street/ Hoi Chak Street

Design Year: 2025

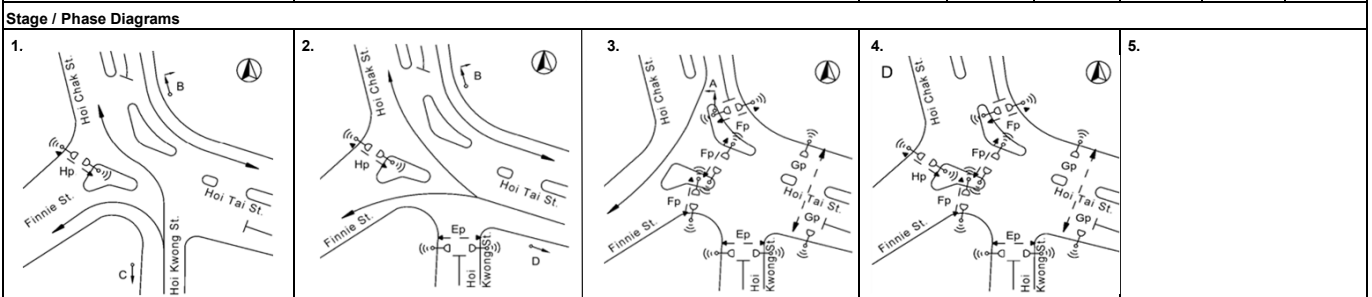
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Hoi Tai Street	↑	D	2	3.5		40				2030	2030	85	0.042		155	0.076	
	↓	D	2	3.6	20					1835	1835	350	0.191		485	0.264	0.264
Hoi Kwong Street	↔	C	1	3.6	15			80%	89%	1830	1815	125	0.068		175	0.096	0.096
Hoi Chak Street	↘	B	1,2	3.1	35					1845	1845	795	0.431	0.431	475	0.257	
	↙	A	3	3.5		30				2005	2005	75	0.037		70	0.035	
Pedestrian Crossing		Ep	2,3,4	MIN GREEN + FLASH =		8	+	5	=	13							
	Fp	3,4	MIN GREEN + FLASH =		9	+	7	=	16								
	Gp	3,4	MIN GREEN + FLASH =		8	+	10	=	18				*				*
	Hp	1,2,4	MIN GREEN + FLASH =		5	+	7	=	12								

Notes:	Flow: (pcu/hr)	Group	B.Fp	B.Gp	Group	C.D.Fp	C.D.Gp
		<b>y</b>	0.431	0.431	<b>y</b>	0.361	0.361
		<b>L (sec)</b>	26	27	<b>L (sec)</b>	33	34
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.697	0.689	<b>y pract.</b>	0.630	0.622
		<b>R.C. (%)</b>	62%	60%	<b>R.C. (%)</b>	75%	72%



I/G= 2	I/G=	I/G= 8	18	I/G=	I/G=
I/G= 2	I/G= 6	I/G= 10	18	I/G=	I/G=

Date: 四月, 2026 Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie J4

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie Street/ Hoi Chak Street

Design Year: 2025

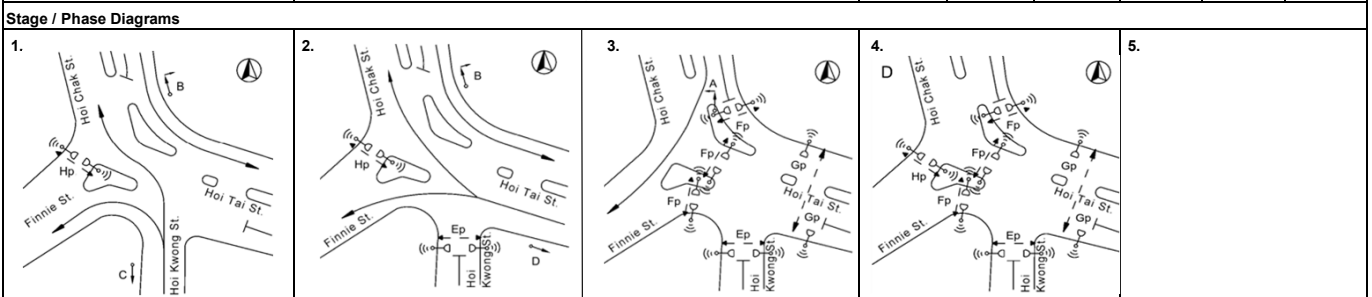
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Hoi Tai Street	↑	D	2	3.5		40				2030		100	0.049				
	↓	D	2	3.6	20					1835		400	0.218	0.218			
Hoi Kwong Street	↔	C	1	3.6	15			75%		1835		140	0.076	0.076			
Hoi Chak Street	↘	B	1,2	3.1	35					1845		460	0.249				*
	↙	A	3	3.5		30				2005		80	0.040				
Pedestrian Crossing		Ep	2,3,4	MIN GREEN + FLASH =		8	+	5	=	13							
		Fp	3,4	MIN GREEN + FLASH =		9	+	7	=	16							*
		Gp	3,4	MIN GREEN + FLASH =		8	+	10	=	18				*			
		Hp	1,2,4	MIN GREEN + FLASH =		5	+	7	=	12							

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	C.D.Fp	C.D.Gp	<b>Group</b>		
		<b>y</b>	0.294	0.294	<b>y</b>				
		<b>L (sec)</b>	33	34	<b>L (sec)</b>				
		<b>C (sec)</b>	110	110	<b>C (sec)</b>				
		<b>y pract.</b>	0.630	0.622	<b>y pract.</b>				
		<b>R.C. (%)</b>	114%	111%	<b>R.C. (%)</b>				



I/G= 2	I/G= 6	I/G= 10	18	I/G=	I/G=
I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G= #N/A	#N/A

Date: 四月, 2026 Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie J4

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Finnie Street

Design Year: 2025

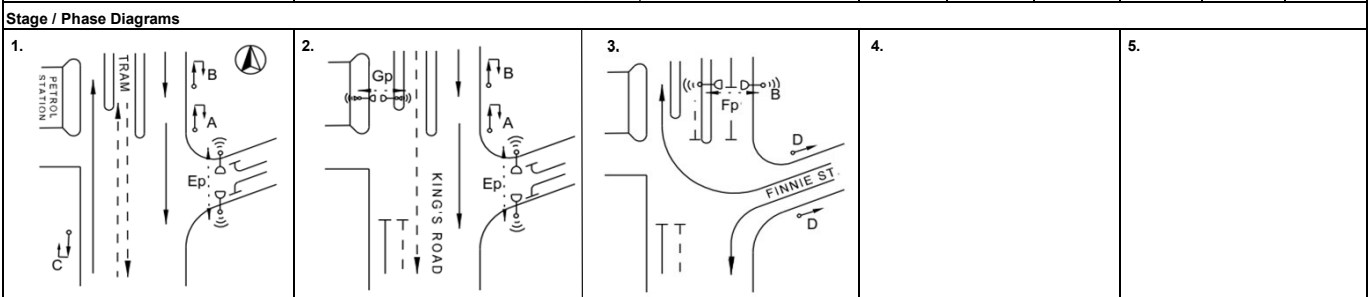
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road NB (with Tram)	↑	C	1	3.0						1915	1915	238	0.124		231	0.121	0.121
	↑	C	1	3.3						2085	2085	260	0.125		251	0.120	
	↑	C	1	3.5						2105	2105	262	0.124		253	0.120	
Finnie Street	↔	D	3	3.5	10	20		100% / 0%	100% / 0%	1710	1710	360	0.211	0.211	625	0.365	0.365
	↔	D	3	3.5		22.5				1840	1840	120	0.065		205	0.111	
King's Road SB	↓	A	1,2	3.7						1985	1985	432	0.218	0.218	424	0.214	
	↓	A	1,2	3.3						2085	2085	453	0.217		446	0.214	
King's Road SB (Tram)	↓	A	1,2	2.6						1875	1875	100	0.053		100	0.053	
Pedestrian Crossing																	
	Ep	1,2					MIN GREEN + FLASH =	5	+	7	=	12					
	Fp	3					MIN GREEN + FLASH =	5	+	6	=	11					
	Gp	2					MIN GREEN + FLASH =	5	+	6	=	11					*

Notes:	Flow: (pcu/hr)	Group	C.Gp.D	A.D	Group	A.D	C.Gp.D
		<b>y</b>	0.335	0.428	<b>y</b>	0.579	0.486
		<b>L (sec)</b>	27	10	<b>L (sec)</b>	10	27
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.689	0.822	<b>y pract.</b>	0.818	0.679
		<b>R.C. (%)</b>	105%	92%	<b>R.C. (%)</b>	41%	40%



I/G= 7	I/G=	I/G= 5	I/G=	I/G=	I/G=
I/G= 7	I/G= 9	11	I/G= 2	I/G=	I/G=

Date: 四月, 2026 Junction: King's Road/ Finnie Street J5

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Finnie Street

Design Year: 2025

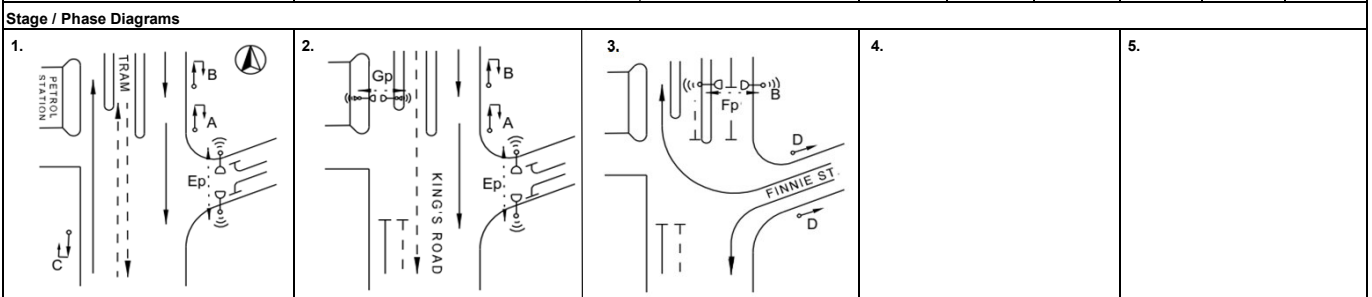
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road NB (with Tram)	↑	C	1	3.0						1915		194	0.101				
	↑	C	1	3.3						2085		212	0.102	0.102			
	↑	C	1	3.5						2105		214	0.102				
Finnie Street	↑	D	3	3.5	10	20		100% / 0%		1710		420	0.246	0.246			*
	↑	D	3	3.5		22.5				1840		155	0.084				
King's Road SB	↓	A	1,2	3.7						1985		339	0.171				*
	↓	A	1,2	3.3						2085		356	0.171				
King's Road SB (Tram)	↓	A	1,2	2.6						1875		105	0.056				
Pedestrian Crossing																	
	Ep	1,2		MIN GREEN + FLASH =		5	+	7	=	12							
	Fp	3		MIN GREEN + FLASH =		5	+	6	=	11							
	Gp	2		MIN GREEN + FLASH =		5	+	6	=	11				*			

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	A,D	C,Gp,D	<b>Group</b>		
		<b>y</b>	0.416	0.347	<b>y</b>				
		<b>L (sec)</b>	10	27	<b>L (sec)</b>				
		<b>C (sec)</b>	110	110	<b>C (sec)</b>				
		<b>y pract.</b>	0.818	0.679	<b>y pract.</b>				
		<b>R.C. (%)</b>	96%	96%	<b>R.C. (%)</b>				



I/G= 7	I/G= 9	11	I/G= 2	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G=

Date: 四月, 2026 Junction: King's Road/ Finnie Street J5

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Model Lane

Design Year: 2025

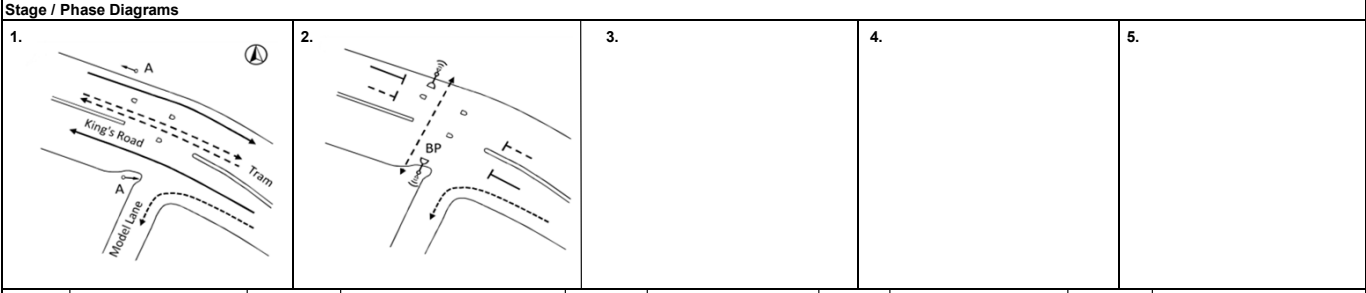
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.500						2165	2165	230	0.106		200	0.092	
King's Road EB(Tram)	→	A	1	2.200						1975	1975	100	0.051		100	0.051	
King's Road WB	←	A	1	3.200						2075	2075	676	0.326	0.326	756	0.364	0.364
King's Road WB free flow	←	A	1	3.300						2085	2085	679	0.326		759	0.364	
King's Road WB(Tram)	←	A	1	3.200						1640	1640	255	0.155		290	0.177	
King's Road WB(Tram)	←	A	1	3.200						2075	2075	100	0.048		90	0.043	
Pedestrian Crossing		Bp	2	MIN GREEN + FLASH =		13	+	7	=	20				*			*

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>		A,Bp	<b>Group</b>		A,Bp
		<b>y</b>		0.326	<b>y</b>		0.364		
		<b>L (sec)</b>		28	<b>L (sec)</b>		28		
		<b>C (sec)</b>		115	<b>C (sec)</b>		110		
		<b>y pract.</b>		0.681	<b>y pract.</b>		0.671		
		<b>R.C. (%)</b>		109%	<b>R.C. (%)</b>		84%		



I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=	I/G=
I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=	I/G=

Date: 四月, 2026 Junction: King's Road/ Model Lane J6

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Model Lane

Design Year: 2025

Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1	5.500						2165		185	0.085				*
King's Road EB(Tram)	→	A	1	2.200						1975		105	0.053				
King's Road WB	←	A	1	3.200						2075		648	0.312				
King's Road WB	←	A	1	3.300						2085		652	0.313	0.313			
free flow	↙			3.300	8					1640		285	0.174				
King's Road WB(Tram)	←	A	1	3.200						2075		100	0.048				
Pedestrian Crossing				Bp	2	MIN GREEN + FLASH =		13	+	7	=	20					*

Notes:	Flow: (pcu/hr)			Group		A,Bp	Group	
		y		0.313	y			
		L (sec)		28	L (sec)			
		C (sec)		110	C (sec)			
		y pract.		0.671	y pract.			
R.C. (%)		115%	R.C. (%)					

Stage / Phase Diagrams				
1.	2.	3.	4.	5.

I/G= 4	I/G= 5	20	I/G=	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=	I/G=

Date: 四月, 2026 Junction: King's Road/ Model Lane J6

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Man Hong Street

Design Year: 2025

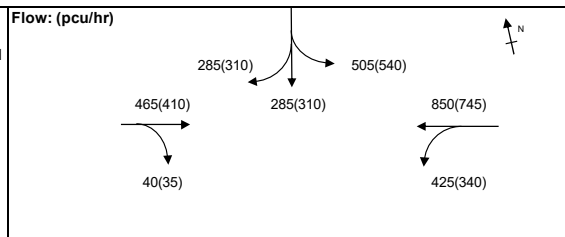
Description: 2033 Design

Designed By: NLY

Checked By: WCY

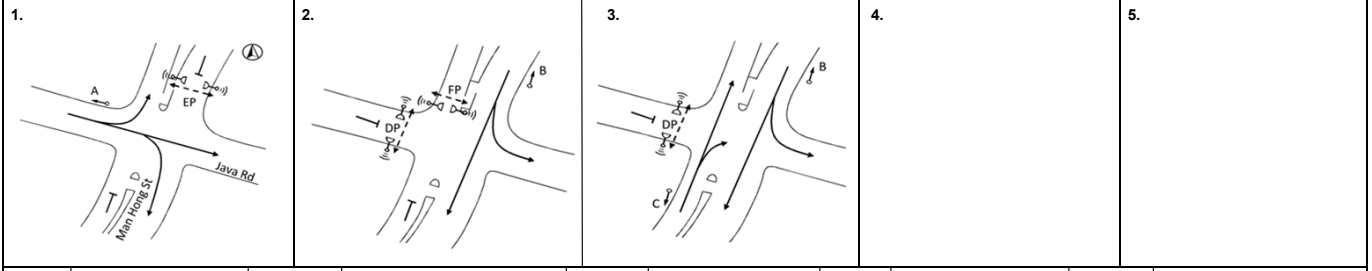
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road EB	↔	A	1	3.000	12					1700	1700	243	0.143		270	0.159	0.159
	↔	A	1	3.000	15			98%	94%	1870	1880	268	0.143	0.143	286	0.152	
	↔	A	1	3.000				5%	6%	2045	2045	293	0.143		312	0.153	
	↔	A	1	3.000						1890	1890	271	0.143		292	0.154	
Man Hong Street SB	↓	B	2,3	3.200						2075	2075	423	0.204		371	0.179	
	↓	B	2,3	3.400						2095	2095	427	0.204		374	0.179	
	↙	B	2,3	3.800	12					1775	1775	425	0.239		340	0.192	
Man Hong Street NB	↗	C	3	6.300				8%	8%	2105	2105	505	0.240	0.240	445	0.211	0.211
Pedestrian Crossing	Dp	2,3					MIN GREEN + FLASH =	5	+	12	=	17					
	Ep	1					MIN GREEN + FLASH =	6	+	10	=	16					
	Fp	2					MIN GREEN + FLASH =	5	+	8	=	13		*			*

**Notes:**  
Opposing factor of 0.5 has been adopted on Man Hong Street NB due to the presence of opposite movement on right turn



Group	A,B	A,Fp,C	Group	A,B	A,Fp,C
<b>y</b>	0.383	0.383	<b>y</b>	0.350	0.370
<b>L (sec)</b>	16	30	<b>L (sec)</b>	16	30
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.775	0.665	<b>y pract.</b>	0.769	0.655
<b>R.C. (%)</b>	102%	74%	<b>R.C. (%)</b>	120%	77%

**Stage / Phase Diagrams**



I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=
I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=

Date: 四月, 2026 Junction: Java Road/ Man Hong Street J7

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Man Hong Street

Design Year: 2025

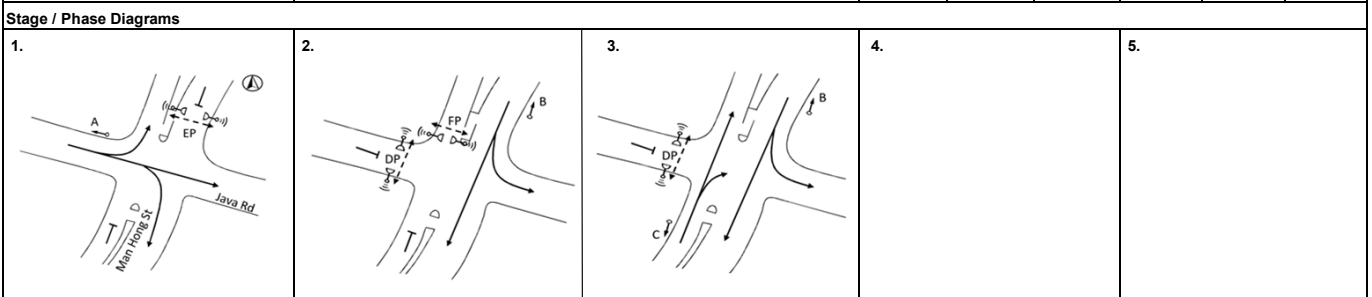
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road EB	↔	A	1	3.000	12					1700		278	0.164				*
	↔	A	1	3.000	15		77%		1910		312	0.164					
	↔	A	1	3.000		18	26%		2010		329	0.164	0.164				
	↔	A	1	3.000		17			1890		310	0.164					
Man Hong Street SB	↓	B	2,3	3.200					2075		381	0.184					*
	↓	B	2,3	3.400					2095		384	0.183					
	↘	B	2,3	3.800	12				1775		295	0.166					
Man Hong Street NB	↔	C	3	6.300		10	11%		2095		415	0.198	0.198				
Pedestrian Crossing	Dp	2,3					MIN GREEN + FLASH =	5	+	12	=	17					
	Ep	1					MIN GREEN + FLASH =	6	+	10	=	16					
	Fp	2					MIN GREEN + FLASH =	5	+	8	=	13			*		

<b>Notes:</b> Opposing factor of 0.5 has been adopted on Man Hong Street NB due to the presence of opposite movement on right turn	<b>Flow: (pcu/hr)</b> 		<b>Group</b> A,B	A,Fp,C	<b>Group</b> y
	<b>y</b>	0.348	0.362	<b>y</b>	
	<b>L (sec)</b>	16	30	<b>L (sec)</b>	
	<b>C (sec)</b>	110	110	<b>C (sec)</b>	
	<b>y pract.</b>	0.769	0.655	<b>y pract.</b>	
	<b>R.C. (%)</b>	121%	81%	<b>R.C. (%)</b>	



I/G= 7	I/G= 8	13	I/G= 4	I/G=	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G=

Date: 四月, 2026 Junction: Java Road/ Man Hong Street (J7)

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Healthy Street West/ Man Hong Street

Design Year: 2025

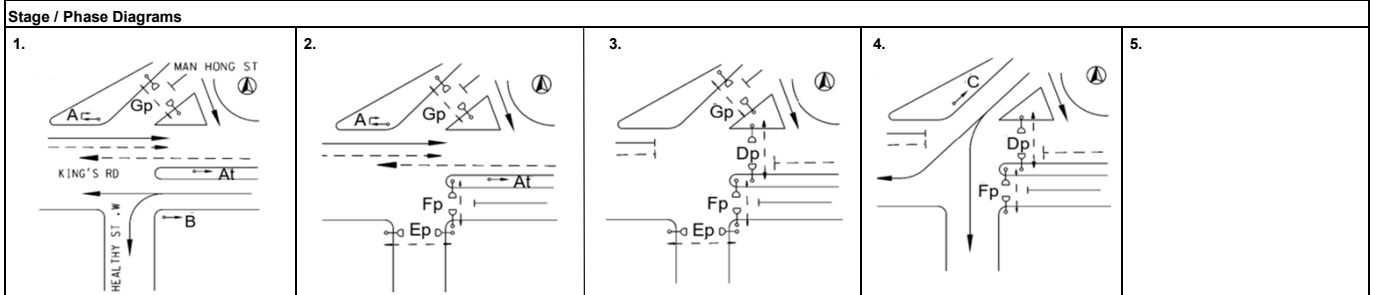
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1,2	3.300						1945	1945	74	0.038		65	0.033	
King's Road EB(Tram)	→	A	1,2	3.500						2105	2105	81	0.038		70	0.033	
King's Road WB	←	B	1	3.500	8			81%	75%	1705	1720	267	0.157	0.157	266	0.155	
King's Road WB(Tram)	←	B	1	3.400						2095	2095	328	0.157		324	0.155	0.155
King's Road WB(Tram)	←	At	1,2	2.700						2025	2025	100	0.049		90	0.044	
Man Hong Street SB	↓	D	4	3.300						1945	1945	327	0.168	0.168	316	0.162	
	↙	D	4	3.500		40		33%	21%	2080	2090	349	0.168		340	0.163	
	↘	D	4	3.500		35				2020	2020	339	0.168		329	0.163	0.163
Pedestrian Crossing	Ep	3,4	MIN GREEN + FLASH =	7	+	6	=	13									
	Fp	2,3	MIN GREEN + FLASH =	5	+	10	=	15						*			*
	Gp	2,3,4	MIN GREEN + FLASH =	5	+	6	=	11									
	Hp	1,2,3	MIN GREEN + FLASH =	5	+	9	=	14									

Notes:	Flow: (pcu/hr)	Group	Hp.D	B.Fp.D	Group	Hp.D	B.Fp.D
		<b>y</b>	0.168	0.325	<b>y</b>	0.163	0.318
		<b>L (sec)</b>	24	35	<b>L (sec)</b>	24	35
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.712	0.626	<b>y pract.</b>	0.704	0.614
		<b>R.C. (%)</b>	324%	93%	<b>R.C. (%)</b>	332%	93%



I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=
I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=

Date: 四月, 2026 Junction: King's Road/ Healthy Street West/ Man Hong Street JB

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: King's Road/ Healthy Street West/ Man Hong Street

Design Year: 2025

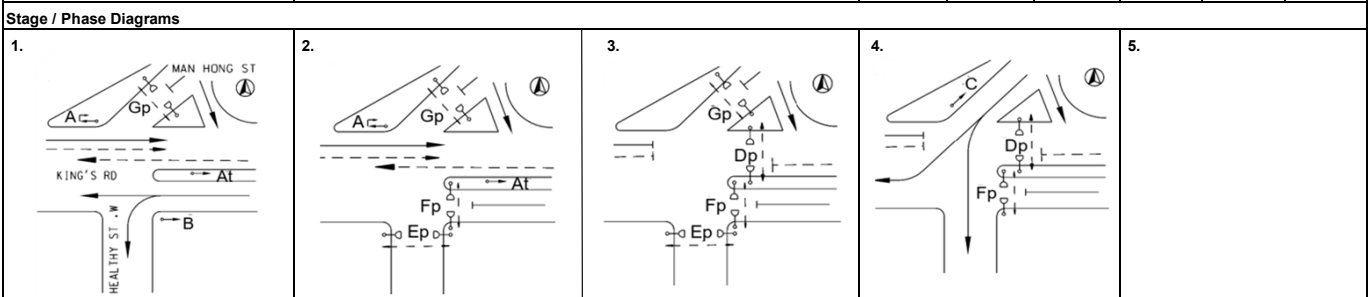
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	→	A	1,2	3.300						1945		65	0.033				*
King's Road EB(Tram)	→	A	1,2	3.500						2105		70	0.033				
King's Road WB	←	B	1	3.500	8			77%		1715		266	0.155	0.155			
King's Road WB(Tram)	←	B	1	3.400						2095		324	0.155				
Man Hong Street SB	↓	At	1,2	2.700						2025		100	0.049				
Pedestrian Crossing	Ep		3,4														
	Fp		2,3														*
	Gp		2,3,4														
	Hp		1,2,3														

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>		<table border="1"> <tr> <td><b>Group</b></td> <td>Hp,D</td> <td>B,Fp,D</td> <td><b>Group</b></td> <td></td> <td></td> </tr> <tr> <td><b>y</b></td> <td>0.178</td> <td>0.334</td> <td><b>y</b></td> <td></td> <td></td> </tr> <tr> <td><b>L (sec)</b></td> <td>24</td> <td>35</td> <td><b>L (sec)</b></td> <td></td> <td></td> </tr> <tr> <td><b>C (sec)</b></td> <td>110</td> <td>110</td> <td><b>C (sec)</b></td> <td></td> <td></td> </tr> <tr> <td><b>y pract.</b></td> <td>0.704</td> <td>0.614</td> <td><b>y pract.</b></td> <td></td> <td></td> </tr> <tr> <td><b>R.C. (%)</b></td> <td>294%</td> <td>84%</td> <td><b>R.C. (%)</b></td> <td></td> <td></td> </tr> </table>	<b>Group</b>	Hp,D	B,Fp,D	<b>Group</b>			<b>y</b>	0.178	0.334	<b>y</b>			<b>L (sec)</b>	24	35	<b>L (sec)</b>			<b>C (sec)</b>	110	110	<b>C (sec)</b>			<b>y pract.</b>	0.704	0.614	<b>y pract.</b>			<b>R.C. (%)</b>	294%	84%	<b>R.C. (%)</b>		
	<b>Group</b>			Hp,D	B,Fp,D	<b>Group</b>																																	
	<b>y</b>			0.178	0.334	<b>y</b>																																	
	<b>L (sec)</b>			24	35	<b>L (sec)</b>																																	
	<b>C (sec)</b>			110	110	<b>C (sec)</b>																																	
<b>y pract.</b>	0.704	0.614	<b>y pract.</b>																																				
<b>R.C. (%)</b>	294%	84%	<b>R.C. (%)</b>																																				



I/G= 11	I/G= 9	15	I/G=	I/G= 2	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A	I/G= #N/A

Date: 四月, 2026 Junction: King's Road/ Healthy Street West/ Man Hong Street JB

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Healthy Street West

Design Year: 2025

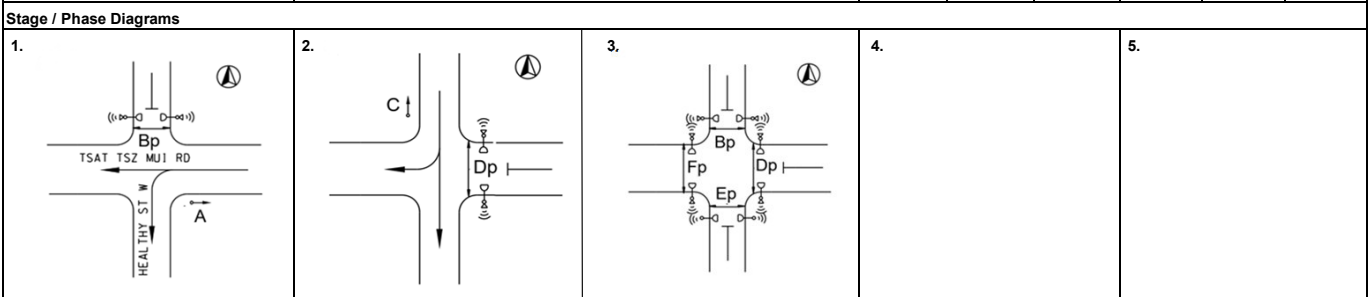
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tsat Tsz Mui Road WB	↖	A	1	3.800	10			27%	34%	1915	1900	166	0.087	0.087	193	0.102	
	←	A	1	3.800						2135	2135	184	0.086		217	0.102	0.102
Healthy Street West SB	↓	C	2	2.500						1865	1865	256	0.137	0.137	259	0.139	
	↙	C	2	3.300	13			61%	61%	1950	1950	267	0.137		271	0.139	0.139
	↘	C	2	3.600	10					1840	1840	252	0.137		255	0.139	
Pedestrian Crossing		Bp	1,3	MIN GREEN + FLASH =		5	+	9	=	14							
		Dp	2,3	MIN GREEN + FLASH =		5	+	8	=	13							
		Ep	3	MIN GREEN + FLASH =		5	+	9	=	14				*			*
		Fp	3	MIN GREEN + FLASH =		5	+	8	=	13							

Notes:	Flow: (pcu/hr)	Group	A,C,Fp	A,C,Ep	Group	A,C,Fp	A,C,Ep
		<b>y</b>	0.224	0.224	<b>y</b>	0.241	0.241
		<b>L (sec)</b>	28	29	<b>L (sec)</b>	28	29
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.681	0.673	<b>y pract.</b>	0.671	0.663
		<b>R.C. (%)</b>	204%	201%	<b>R.C. (%)</b>	179%	175%



I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=
I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=

Date: 四月, 2026 Junction: Tsat Tsz Mui Road/ Healthy Street West J9

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Healthy Street West

Design Year: 2025

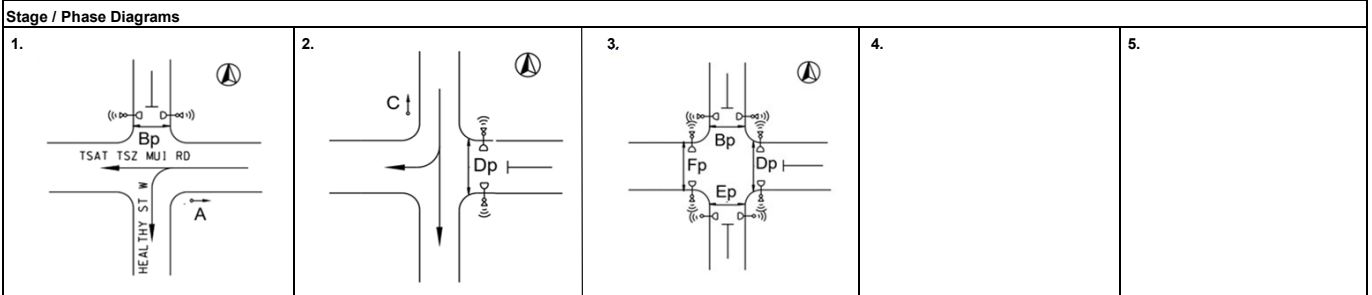
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tsat Tsz Mui Road WB	↖	A	1	3.800	10		35%	35%		1895		202	0.107	0.107			*
	←	A	1	3.800						2135		228	0.107				
Healthy Street West SB	↓	C	2	2.500			37%			1865		283	0.152	0.152			*
	↘	C	2	3.300	13			37%		2000		303	0.152				
	↙	C	2	3.600	10					1840		279	0.152				
Pedestrian Crossing		Bp	1,3	MIN GREEN + FLASH =		5	+	9	=	14							
		Dp	2,3	MIN GREEN + FLASH =		5	+	8	=	13							
		Ep	3	MIN GREEN + FLASH =		5	+	9	=	14			*				*
		Fp	3	MIN GREEN + FLASH =		5	+	8	=	13							

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	A,C,Fp	A,C,Ep	<b>Group</b>						
		<b>y</b>	0.259							0.259	<b>y</b>		
		<b>L (sec)</b>	28							29	<b>L (sec)</b>		
		<b>C (sec)</b>	110							110	<b>C (sec)</b>		
		<b>y pract.</b>	0.671							0.663	<b>y pract.</b>		
		<b>R.C. (%)</b>	160%							156%	<b>R.C. (%)</b>		



I/G= 4	I/G= 6	I/G= 7	14	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=

**Date:** 四月, 2026 **Junction:** Tsat Tsz Mui Road/ Healthy Street West J9

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Tin Chiu West

Design Year: 2025

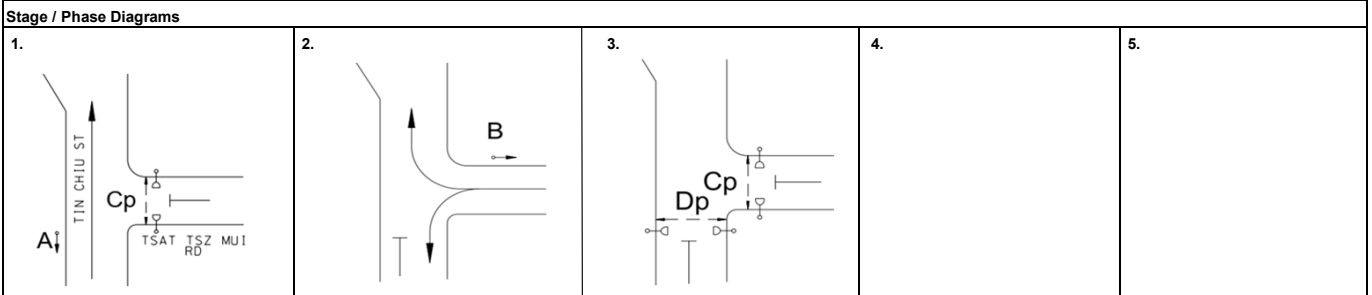
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Chiu Street NB	↓	A	1	3.900						2005	2005	450	0.224	0.224	300	0.150	0.150
Tsat Tsz Mui Road WB	↔	B	2	4.100	6	13		45% / 55%	47% / 53%	1725	1720	325	0.188	0.188	350	0.203	
	↕	B	2	4.100		13				1940	1940	365	0.188		395	0.204	0.204
Pedestrian Crossing		Cp	1,3	MIN GREEN + FLASH =	10	+	9	=	19								*
		Dp	3	MIN GREEN + FLASH =	7	+	9	=	16								*

Notes:	Flow: (pcu/hr)	Group	Cp,B	A,B,Dp	Group	Cp,B	A,B,Dp																								
									<table border="1"> <tr> <td>y</td> <td>0.188</td> <td>0.413</td> <td>y</td> <td>0.204</td> <td>0.353</td> </tr> <tr> <td>L (sec)</td> <td>27</td> <td>32</td> <td>L (sec)</td> <td>27</td> <td>32</td> </tr> <tr> <td>C (sec)</td> <td>115</td> <td>115</td> <td>C (sec)</td> <td>110</td> <td>110</td> </tr> <tr> <td>y pract.</td> <td>0.689</td> <td>0.650</td> <td>y pract.</td> <td>0.679</td> <td>0.638</td> </tr> <tr> <td>R.C. (%)</td> <td>266%</td> <td>57%</td> <td>R.C. (%)</td> <td>234%</td> <td>81%</td> </tr> </table>	y	0.188	0.413	y	0.204	0.353	L (sec)	27	32	L (sec)	27	32	C (sec)	115	115	C (sec)	110	110	y pract.	0.689	0.650	y pract.
y	0.188	0.413	y	0.204	0.353																										
L (sec)	27	32	L (sec)	27	32																										
C (sec)	115	115	C (sec)	110	110																										
y pract.	0.689	0.650	y pract.	0.679	0.638																										
R.C. (%)	266%	57%	R.C. (%)	234%	81%																										



I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=
I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=

Date: 四月, 2026 Junction: Tsat Tsz Mui Road/ Tin Chiu West J10

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Tsat Tsz Mui Road/ Tin Chiu West

Design Year: 2025

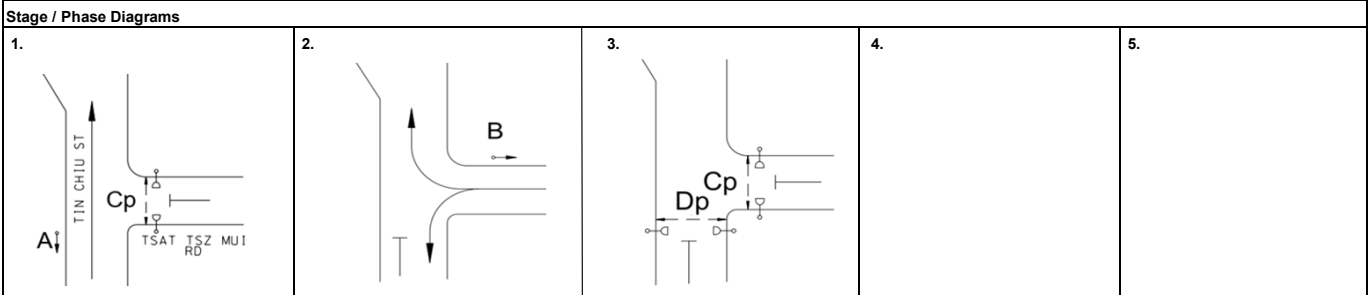
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Tin Chiu Street NB	↓	A	1	3.900							2005	330	0.165	0.165			*
Tsat Tsz Mui Road WB	↔	B	2	4.100	6	13		61% / 39%			1690	345	0.204	0.204			*
	↕	B	2	4.100		13					1940	395	0.204				
Pedestrian Crossing		Cp	1,3	MIN GREEN + FLASH =	10		+	9	=	19							*
		Dp	3	MIN GREEN + FLASH =	7		+	9	=	16				*			*

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>		<b>Group</b>	Cp,B	A,B,Dp	<b>Group</b>		
			<b>y</b>	0.204	0.369	<b>y</b>		
			<b>L (sec)</b>	27	32	<b>L (sec)</b>		
			<b>C (sec)</b>	110	110	<b>C (sec)</b>		
			<b>y pract.</b>	0.679	0.638	<b>y pract.</b>		
			<b>R.C. (%)</b>	233%	73%	<b>R.C. (%)</b>		



I/G= 4	I/G= 6	I/G= 8	16	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G= #N/A	#N/A	I/G=	I/G=

Date: 四月, 2026 Junction: Tsat Tsz Mui Road/ Tin Chiu West J10

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Tin Chiu Street

Design Year: 2025

Description: 2033 Design

Designed By: NLY

Checked By: WCY

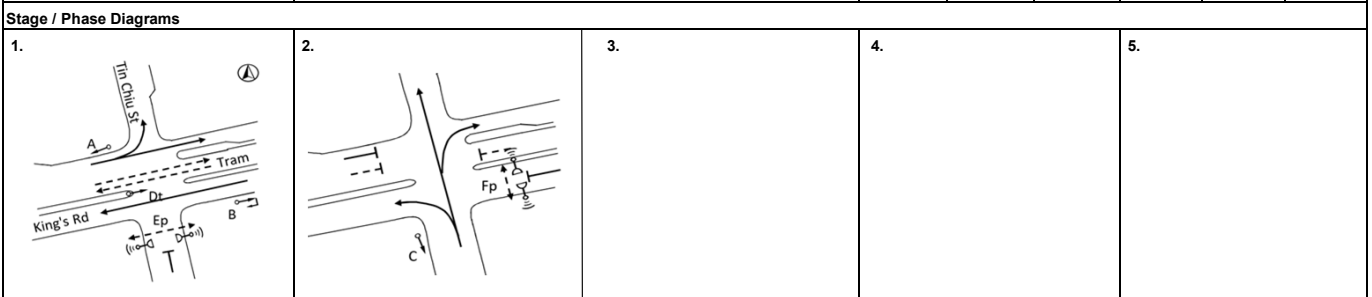
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	↔	A	1	3.200	12			14%	12%	1900	1905	250	0.132		255	0.134	0.134
King's Road EB(Tram)	→	A	1	2.700						2025	2025	100	0.049		100	0.049	
King's Road WB	←	B	1	3.300						1945	1945	264	0.136		250	0.129	
	←	B	1	3.500						2105	2105	285	0.135		270	0.128	
	←	B	1	3.500						2105	2105	286	0.136	0.136	270	0.128	
King's Road WB(Tram)	←	Dt	1	2.400						1995	1995	100	0.050		90	0.045	
Tin Chiu Street NB	↑	C	2	3.300	12					1730	1730	345	0.199		215	0.124	
	↑	C	2	3.500	12			37%	47%	2010	1990	205	0.102		310	0.156	
	↗	C	2	3.500		12				1870	1870	445	0.238	0.238	355	0.190	0.190
Pedestrian Crossing	Ep	1		MIN GREEN + FLASH =		6	+	12	=	18							
	Fp	2		MIN GREEN + FLASH =		5	+	9	=	14							

**Notes:**

**Flow: (pcu/hr)**

↑ N

Group	A,C	B,C	Group	B,C	A,C
<b>y</b>	0.370	0.374	<b>y</b>	0.318	0.324
<b>L (sec)</b>	10	11	<b>L (sec)</b>	11	10
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.822	0.814	<b>y pract.</b>	0.810	0.818
<b>R.C. (%)</b>	122%	118%	<b>R.C. (%)</b>	154%	153%



I/G= 6	I/G= 7	I/G=	I/G=
I/G= 7	I/G= 5	I/G=	I/G=

**Date:** 四月, 2026 **Junction:** King's Road/ Tin Chiu Street J11

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: King's Road/ Tin Chiu Street

Design Year: 2025

Description: 2033 Design

Designed By: NLY

Checked By: WCY

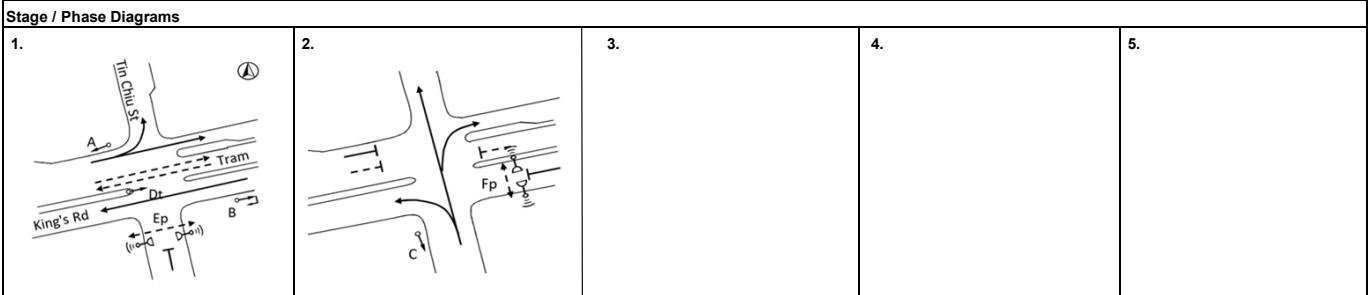
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
King's Road EB	↔	A	1	3.200	12			13%		1905		240	0.126				*
King's Road EB(Tram)	→	A	1	2.700						2025		105	0.052				
King's Road WB	←	B	1	3.300						1945		254	0.131				
King's Road WB	←	B	1	3.500						2105		276	0.131	0.131			
	←	B	1	3.500						2105		275	0.131				
King's Road WB(Tram)	←	Dt	1	2.400						1995		100	0.050				
Tin Chiu Street NB	↕	C	2	3.300	12					1730		255	0.147				*
	↕	C	2	3.500	12		51%			1980		265	0.134				
	↕	C	2	3.500		12				1870		340	0.182	0.182			
Pedestrian Crossing	Ep	1		MIN GREEN + FLASH =		6	+	12	=	18							
	Fp	2		MIN GREEN + FLASH =		5	+	9	=	14							

**Notes:**

**Flow: (pcu/hr)**

↑ N

Group	A,C	B,C	Group		
<b>y</b>	0.308	0.313	<b>y</b>		
<b>L (sec)</b>	10	11	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.818	0.810	<b>y pract.</b>		
<b>R.C. (%)</b>	166%	159%	<b>R.C. (%)</b>		



I/G= 6	I/G= 7	I/G=	I/G=	I/G=
I/G= #N/A	I/G= #N/A	I/G=	I/G=	I/G=

**Date:** 四月, 2026 **Junction:** King's Road/ Tin Chiu Street J11

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road / Healthy Street East

Design Year: 2025

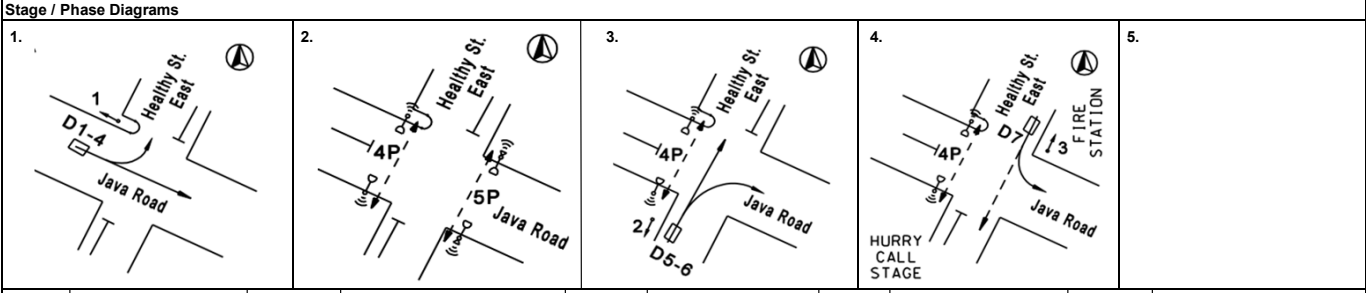
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road EB	↕	A	1	3.100	10			9%	23%	1900	1860	373	0.196		301	0.162	
	↔	A	1	3.000						2055	2055	404	0.197		333	0.162	0.162
	→	A	1	3.300						2085	2085	410	0.197		337	0.162	
	↘	A	1	3.400						2095	2095	413	0.197	0.197	339	0.162	
Healthy St East NB	↕	B	3	3.600	12			81%	0%	1795	1975	107	0.060	0.060	15	0.008	
	↘	B	3	3.300	10					1815	1815	108	0.060		-175	-0.096	
Healthy St East SB	↕	C	4	4.800	10			100%	100%	1820	1820	60	0.033	0.033	75	0.041	0.041
Pedestrian Crossing	Dp	2,3,4	MIN GREEN + FLASH =		6	+	11	=	17								
	Ep	2	MIN GREEN + FLASH =		6	+	11	=	17					*			*

Notes:	Flow: (pcu/hr)	Group	A.Dp	A.Ep,B,C	Group	A.Dp	A.Ep,B,C
		<b>y</b>	0.197	0.290	<b>y</b>	0.162	0.203
		<b>L (sec)</b>	26	35	<b>L (sec)</b>	26	41
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.697	0.626	<b>y pract.</b>	0.687	0.565
		<b>R.C. (%)</b>	253%	116%	<b>R.C. (%)</b>	324%	178%



I/G= 5	I/G= 8	17	I/G= 2		I/G= 6	I/G=
I/G= 5	I/G= 8	17	I/G= 2	5	I/G= 6	I/G=

Date: 四月, 2026 Junction: Java Road / Healthy Street East

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road / Healthy Street East

Design Year: 2025

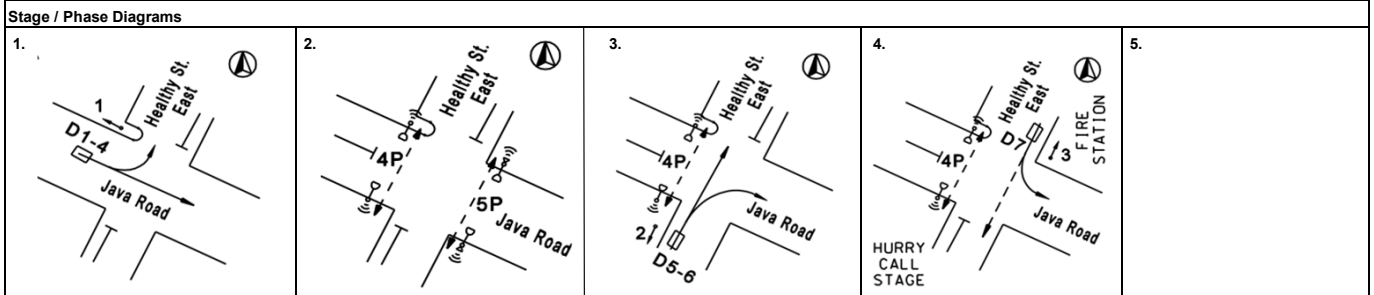
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road EB	↕	A	1	3.100	10		11%	11%		1890		348	0.184	0.184			
	↔	A	1	3.000				2055		378	0.184						
	↔	A	1	3.300				2085		384	0.184						
	↔	A	1	3.400				2095		385	0.184						
Healthy St East NB	↕	B	3	3.600	12		63%	63%		1830		40	0.022	0.022			
	↕	B	3	3.300	10			1815		40	0.022						
Healthy St East SB	↕	C	4	4.800	10		100%	100%		1820		45	0.025	0.025			
Pedestrian Crossing	Dp	2,3,4	MIN GREEN + FLASH =		6	+	11	=	17								
	Ep	2	MIN GREEN + FLASH =		6	+	11	=	17								

<b>Notes:</b>	<b>Flow: (pcu/hr)</b> 	<b>Group</b>	A.Dp	A.Ep.B.C	<b>Group</b>		
		<b>y</b>	0.184	0.231	<b>y</b>		
		<b>L (sec)</b>	26	35	<b>L (sec)</b>		
		<b>C (sec)</b>	115	115	<b>C (sec)</b>		
		<b>y pract.</b>	0.697	0.626	<b>y pract.</b>		
		<b>R.C. (%)</b>	278%	171%	<b>R.C. (%)</b>		



I/G= 5	I/G= 8	17	I/G= 2	I/G= 6	I/G=
I/G= #N/A	I/G= #N/A	#N/A	I/G= #N/A	I/G= #N/A	I/G=

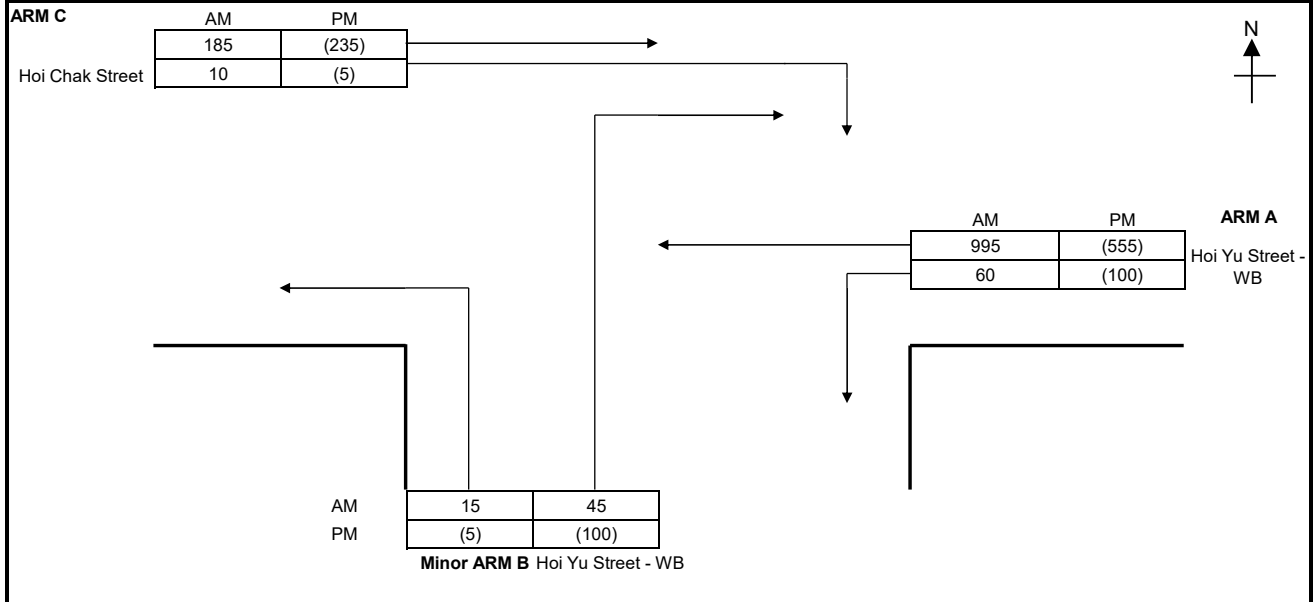
Date: 四月, 2026 Junction: Java Road / Healthy Street East

## Calculation Sheets - 2033 Design Year (Junction Improvement)

# Simplified priority Junction Capacity Calculation



Job Title:	Hoi Yu Street TIA	Ref. No.:	J1_pic-imp
Junction:	Hoi Yu Street/Hoi Chak Street	Designed by:	NLY
Description:	2033 Design	Checked by:	WCY
Design Year:	2025	Job No.:	CHK50793710
		Date:	四月 2026
ARM A:	Hoi Yu Street - EB		
ARM B:	Hoi Yu Street - WB		
ARM C:	Hoi Chak Street		



GEOMETRY			
Major road width	W	13.30	Lane widths
Central Reserve width	Wcr	0.00	w(b-a)
2 Lane Minor Arm (Y/N)		N	w(b-c)
			w(c-b)

PARAMETER			
Visibilities	Vr(b-a)	50	Calculated
	VI(b-a)	50	D
	Vr(b-c)	50	E
	Vr(c-b)	50	F
			Y

ANALYSIS		AM Peak	PM Peak
TRAFFIC FLOWS	q(c-a)	185	235
	q(c-b)	10	5
	q(a-b)	60	100
	q(a-c)	995	555
	q(b-a)	45	100
	q(b-c)	15	5
	f	0.25	0.05
CAPACITIES	Q(b-a)	312	376
	Q(b-c)	489	567
	Q(c-b)	487	561
	Q(b-ac)	343	382
RFC's	b-a	0.144	0.266
	b-c	0.031	0.009
	c-b	0.021	0.009
	b-ac	0.175	0.275
RFC		<b>0.175</b>	<b>0.275</b>

Where VI and Vr are visibility distances to the left or right of the respective streams

$$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$$

$$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$$

$$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$$

$$Y = 1-0.0345W$$

f = proportion of minor traffic turning left

$$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$$

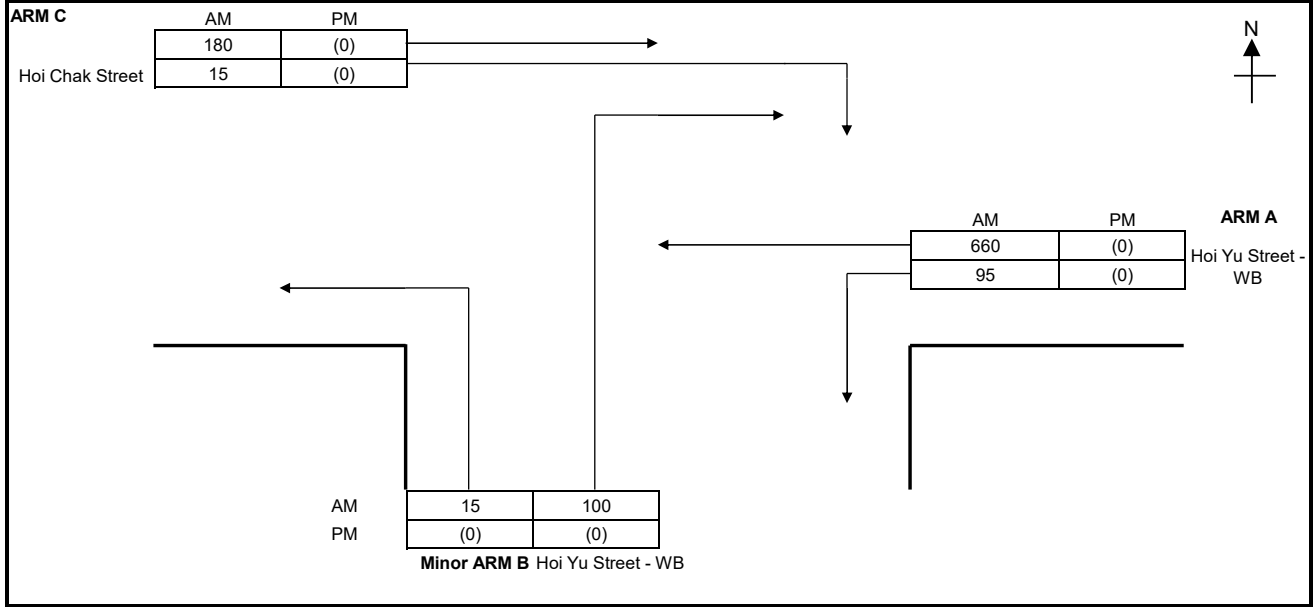
Capacity of combined streams

All the above formulas are in accordance to T.P.D.M. Vol.2 Chapter 4 Appendix 1

# Simplified priority Junction Capacity Calculation



Job Title:	Hoi Yu Street TIA	Ref. No.:	J1_pic-imp
Junction:	Hoi Yu Street/Hoi Chak Street	Designed by:	NLY
Description:	2033 Design	Checked by:	WCY
Design Year:	2025	Job No.:	CHK50793710
		Date:	四月 2026
ARM A:	Hoi Yu Street - EB		
ARM B:	Hoi Yu Street - WB		
ARM C:	Hoi Chak Street		



GEOMETRY			
Major road width	W	13.30	Lane widths
Central Reserve width	Wcr	0.00	w(b-a)
2 Lane Minor Arm (Y/N)		N	w(b-c)
			w(c-b)

PARAMETER			
Visibilities	Vr(b-a)	50	Calculated
	VI(b-a)	50	D
	Vr(b-c)	50	E
	Vr(c-b)	50	F
			Y

ANALYSIS		Noon Peak	
TRAFFIC FLOWS	q(c-a)		180
	q(c-b)		15
	q(a-b)		95
	q(a-c)		660
	q(b-a)		100
	q(b-c)		15
	f		0.13
CAPACITIES	Q(b-a)	Factor	363
	Q(b-c)	1	548
	Q(c-b)	1	542
	Q(b-ac)	1	380
RFC's	b-a		0.275
	b-c		0.027
	c-b		0.028
	b-ac		0.303
RFC			<b>0.303</b>

Where VI and Vr are visibility distances to the left or right of the respective streams

$$D = (1+0.094(w(b-a)-3.65))(1+0.0009(Vr(b-a)-120))(1+0.0006(VI(b-a)-150))$$

$$E = (1+0.094(w(b-c)-3.65))(1+0.0009(Vr(b-c)-120))$$

$$F = (1+0.094(w(c-b)-3.65))(1+0.0009(Vr(c-b)-120))$$

$$Y = 1-0.0345W$$

f = proportion of minor traffic turning left

$$Q(b-ac) = Q(b-c)*Q(b-a)/(1-f)*Q(b-c)+f*Q(b-a)$$

Capacity of combined streams

**All the above formulas are in accordance to T.P.D.M. Vol.2 Chapter 4 Appendix 1**

**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Hoi Yu Street

Design Year: 2025

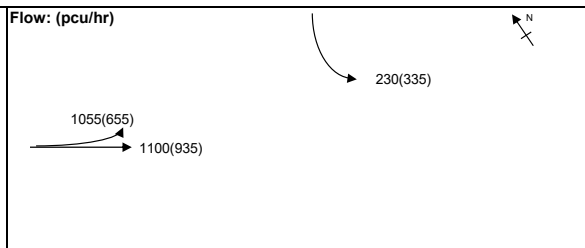
Description: 2033 Design (With Junction Improvement)

Designed By: NLY

Checked By: WCY

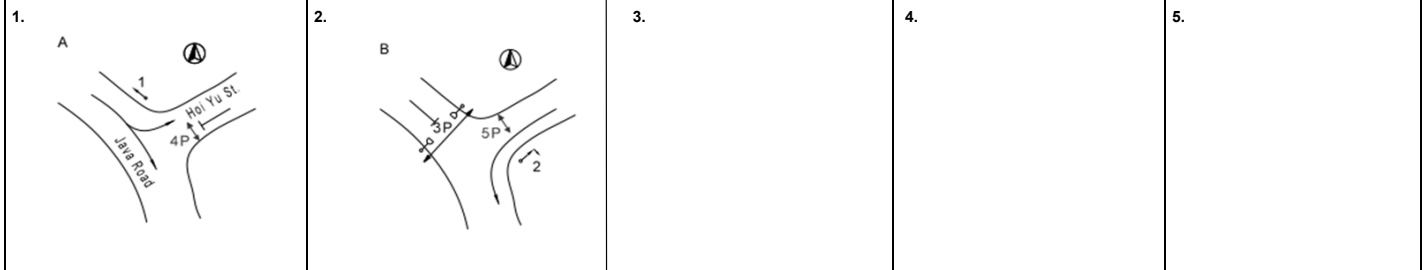
Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road	↔	A	1	3.30	15.0					1770	1770	739	0.418		542	0.306	
	↗	A	1	2.90	20.0		38%	18%	1990	2015	829	0.417		617	0.306		
	→	A	1	3.10					825	825	345	0.418	0.418	253	0.307		
	↘	A	1	3.10					580	580	242	0.417		178	0.307	0.307	
Hoi Yu Street	↔	B	2	3.600	10					1715	1715	230	0.134		335	0.195	
Pedestrian Crossing		Cp	2	MIN GREEN + FLASH =		10	+	10	=	20			*				*
		Dp	1	MIN GREEN + FLASH =		5	+	7	=	12							
		Ep	2	MIN GREEN + FLASH =		8	+	10	=	18							

**Notes:**  
1. Site factor of second lane of Java Road has been taken out due to proposed road widening and permitted left turn.



Group	Dp,B	A,Cp	Group	Dp,B	A,Cp
<b>y</b>	0.134	0.418	<b>y</b>	0.195	0.307
<b>L (sec)</b>	90	38	<b>L (sec)</b>	72	51
<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
<b>y pract.</b>	0.196	0.603	<b>y pract.</b>	0.311	0.483
<b>R.C. (%)</b>	46%	44%	<b>R.C. (%)</b>	59%	57%

**Stage / Phase Diagrams**



I/G= 14	I/G= 5	20	I/G=	I/G=	I/G=	I/G=
I/G= 27	I/G= 5	20	I/G=	I/G=	I/G=	I/G=
Date: 四月, 2026					Junction: Java Road/ Hoi Yu Street	



**TRAFFIC SIGNALS CALCULATION**

Job No.: CHK50793710

MVA HONG KONG LIMITED

Junction: Java Road/ Hoi Yu Street

Design Year: 2025

Description: 2033 Design (With Junction Improvement)

Designed By: NLY

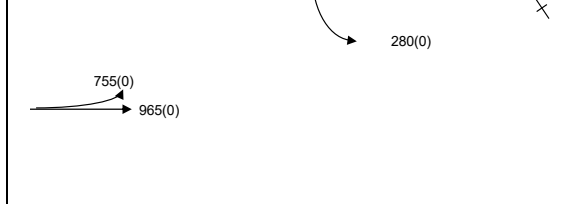
Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A		
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Java Road	↖	A	1	3.30	15.0					1770	1770	587	0.332				*
	↗	A	1	2.90	20.0			25%		2005	2045	666	0.332				
	→	A	1	3.10						825	825	274	0.332				
	→	A	1	3.10						580	580	193	0.333	0.333			
Hoi Yu Street	↖	B	2	3.600	10					1715	1715	280	0.163				*
Pedestrian Crossing		Cp	2	MIN GREEN + FLASH =		10	+	10	=	20							*
		Dp	1	MIN GREEN + FLASH =		5	+	7	=	12							
		Ep	2	MIN GREEN + FLASH =		8	+	10	=	18							

**Notes:**

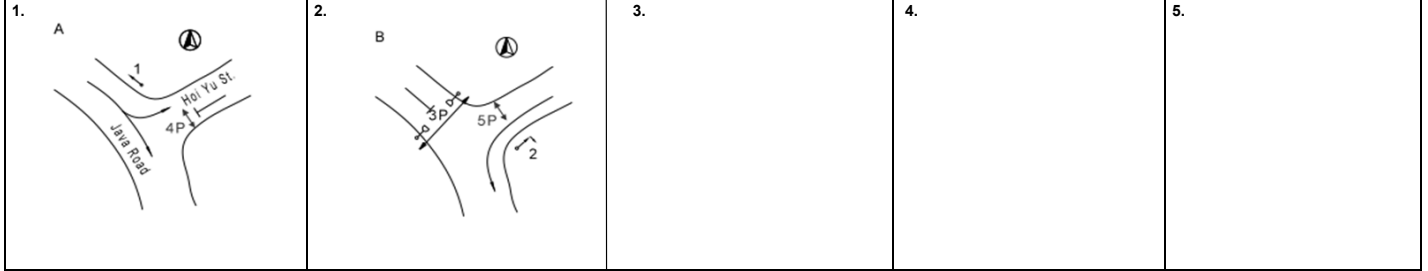
1. Site factor of second lane of Java Road has been taken out due to proposed road widening and permitted left turn.

**Flow: (pcu/hr)**



Group	A,B	A,Cp	Group		
<b>y</b>	0.496	0.333	<b>y</b>		
<b>L (sec)</b>	10	59	<b>L (sec)</b>		
<b>C (sec)</b>	110	110	<b>C (sec)</b>		
<b>y pract.</b>	0.818	0.417	<b>y pract.</b>		
<b>R.C. (%)</b>	65%	25%	<b>R.C. (%)</b>		

**Stage / Phase Diagrams**



I/G= 35		I/G= 5	20	I/G=		I/G=		I/G=	
I/G= #N/A	#N/A	I/G= #N/A	#N/A	I/G=		I/G=		I/G=	
Date: 四月, 2026								Junction: Java Road/ Hoi Yu Street	



**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

MVA HONG KONG LIMITED

Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie Street/ Hoi Chak Street

Design Year: 2025

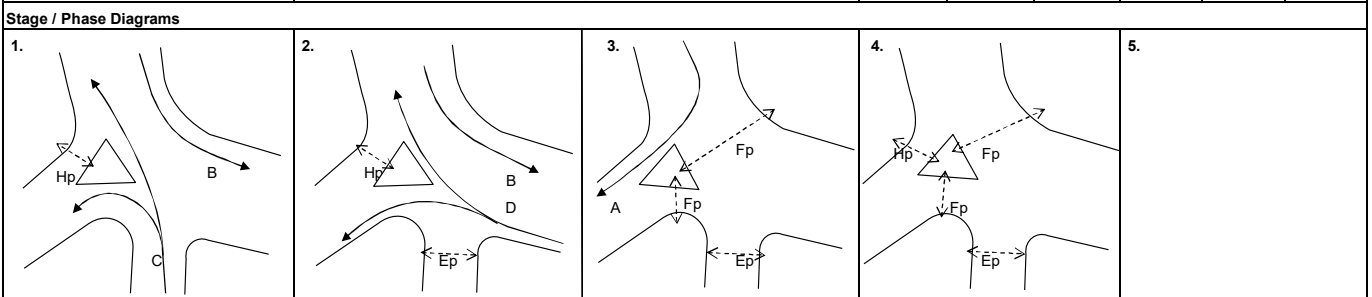
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		AM Peak			PM Peak		
					Left	Right		AM	PM	AM	PM	Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y
Hoi Tai Street	↕	D	2	3.5						2030	2030	85	0.042		155	0.076	
	↕	D	2	3.6	20					1835	1835	350	0.191		485	0.264	0.264
Hoi Kwong Street	↔	C	1	3.6	15			80%	89%	1830	1815	125	0.068		175	0.096	0.096
Hoi Chak Street	↕	B	1,2	3.1	35					1845	1845	795	0.431	0.431	475	0.257	
	↕	A	3	3.5		30				2005	2005	75	0.037		70	0.035	
Pedestrian Crossing																	
	Ep	2,3,4		MIN GREEN + FLASH =		8	+	5	=	13							
	Fp	3,4		MIN GREEN + FLASH =		9	+	7	=	16				*			*
	Hp	1,2,4		MIN GREEN + FLASH =		5	+	7	=	12							

Notes:	Flow: (pcu/hr)	Group	C.D.Fp	B.Fp	Group	C.Ep	C.D.Fp
		<b>y</b>	0.259	0.431	<b>y</b>	0.096	0.361
		<b>L (sec)</b>	52	45	<b>L (sec)</b>	92	47
		<b>C (sec)</b>	115	115	<b>C (sec)</b>	110	110
		<b>y pract.</b>	0.493	0.548	<b>y pract.</b>	0.147	0.515
		<b>R.C. (%)</b>	90%	27%	<b>R.C. (%)</b>	53%	43%



I/G= 4	I/G= 6	I/G= 26	16	I/G=	I/G=
I/G= 4	I/G= 6	I/G= 23	16	I/G=	I/G=

Date: 四月, 2026 Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie J4

**TRAFFIC SIGNALS CALCULATION**

Job No.: **CHK50793710**

**MVA HONG KONG LIMITED**

Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie Street/ Hoi Chak Street

Design Year: 2025

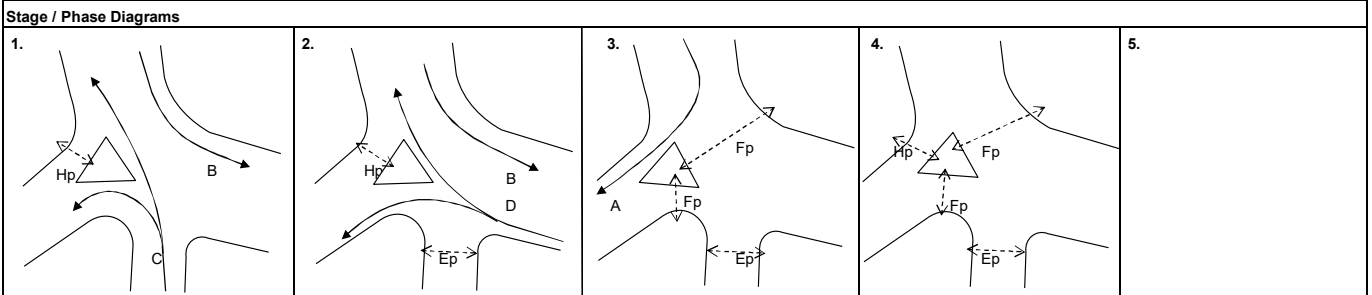
Description: 2033 Design

Designed By: NLY

Checked By: WCY

Approach	Movements	Phase	Stage	Width (m)	Radius (m)		Gradient (%)	Pro. Turning (%)		Revised Saturation Flow (pcu/hr)		Noon Peak			N/A			
					Left	Right		Noon		Noon		Flow (pcu/hr)	y Value	Critical y	Flow (pcu/hr)	y Value	Critical y	
Hoi Tai Street	↑	D	2	3.5		40				2030		100	0.049					
	↓	D	2	3.6	20					1835		400	0.218	0.218				
Hoi Kwong Street	↔	C	1	3.6	15			75%		1835		140	0.076	0.076				
Hoi Chak Street	↘	B	1,2	3.1	35					1845		460	0.249					*
	↙	A	3	3.5		30				2005		80	0.040					
Pedestrian Crossing																		
	Ep	2,3,4		MIN GREEN + FLASH =		8	+	5	=	13								*
	Fp	3,4		MIN GREEN + FLASH =		9	+	7	=	16					*			*
	Hp	1,2,4		MIN GREEN + FLASH =		5	+	7	=	12								

<b>Notes:</b>	<b>Flow: (pcu/hr)</b>			<b>Group</b>	B.Fp	C.D.Fp	<b>Group</b>		
	<b>y</b>			0.249	0.294	<b>y</b>			
	<b>L (sec)</b>			57	56	<b>L (sec)</b>			
	<b>C (sec)</b>			110	110	<b>C (sec)</b>			
	<b>y pract.</b>			0.434	0.442	<b>y pract.</b>			
	<b>R.C. (%)</b>			74%	50%	<b>R.C. (%)</b>			



I/G=	#N/A	#N/A	I/G=	#N/A	#N/A	I/G=	#N/A	#N/A	I/G=	#N/A	#N/A
I/G=	#N/A	#N/A	I/G=	42	16	I/G=	#N/A	#N/A	I/G=	#N/A	#N/A

Date: 四月, 2026 Junction: Hoi Tai Street/ Hoi Kwong Street/ Finnie J4

## Appendix A2 - Crossing Performance calculation

## Calculation Sheets - 2025 Existing

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G Java Road				Design Year:	Existing
Description:	Weekday AM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	24		
Vcn	=	Pedestrian Count from Northern kerbside	=	60	p/h	
	=	$(60 / 60) \times (115 / 60)$	=	1.9	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	40	p/h	
	=	$(40 / 60) \times (115 / 60)$	=	1.3	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	660	p/h	
	=	$(660 / 60) \times (115 / 60)$	=	21.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	20	p/h	
	=	$(20 / 60) \times (115 / 60)$	=	0.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.9 + 1.3 + 21.1	=	24.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.9 + 1.3 + 0.6	=	3.8	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (24 - 12 / (2 \times 1.2))$	=	912	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (115 - 24) / 115$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 14$	=	43	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$912 / 43$	=	21.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.9 \times (115 - 24)^2 / (2 \times 115)$	=	69	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 115 - (0.5 \times 69)$	=	2035	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2035 / (4 \times 24.3)$	=	21.0	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.3 \times (115 - 24)^2 / (2 \times 115)$	=	46	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 115 - (0.5 \times 46)$	=	1909	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1909 / (4 \times 3.8)$	=	124.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K. Hoi Tai Street				Design Year:	Existing
Description:	Weekday AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115 36	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	20	p/h	
	=	$(20 / 60) \times (115 / 60)$	=	0.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	60	p/h	
	=	$(60 / 60) \times (115 / 60)$	=	1.9	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	100	p/h	
	=	$(100 / 60) \times (115 / 60)$	=	3.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	860	p/h	
	=	$(860 / 60) \times (115 / 60)$	=	27.5	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	0.6 + 1.9 + 3.2	=	5.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	0.6 + 1.9 + 27.5	=	30.0	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (115 - 36) / 115$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 2) \times 15$	=	38	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1271.19 / 38$	=	33.6	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$0.6 \times (115 - 36)^2 / (2 \times 115)$	=	17	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 115 - (0.5 \times 17)$	=	1785	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1785 / (4 \times 5.8)$	=	77.6	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.9 \times (115 - 36)^2 / (2 \times 115)$	=	52	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 115 - (0.5 \times 52)$	=	1239	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1239 / (4 \times 30)$	=	10.3	m <sup>2</sup> /p	
LOS	=	A				

<b>DESIGN SHEET</b>				<b>Job No.: CHK50793710</b>				<b>MVA ASIA LIMITED</b>			
Junction: Location L Hoi Kwong Street				Design Year: Existing							
Description: Weekday AM Peak				Designed By: NLY				Checked By: WCY			
C	=	Cycle Time	=	115 88	sec						
Vcn	=	Pedestrian Count from Western kerbside	=	960	p/h						
	=	$(960 / 60) \times (115 / 60)$	=	30.7	p/cycle						
Vcs	=	Pedestrian Count from Eastern kerbside	=	160	p/h						
	=	$(160 / 60) \times (115 / 60)$	=	5.1	p/cycle						
Vsn	=	Sidewalk Flow at Western Kerbside	=	240	p/h						
	=	$(240 / 60) \times (115 / 60)$	=	7.7	p/cycle						
Vss	=	Sidewalk Flow at Eastern Kerbside	=	420	p/h						
	=	$(420 / 60) \times (115 / 60)$	=	13.4	p/cycle						
Vtotn	=	Total circulating pedestrian flow at western kerbside									
	=	30.7 + 5.1 + 7.7	=	43.4	p/cycle						
Vtots	=	Total circulating pedestrian flow at eastern kerbside									
	=	30.7 + 5.1 + 13.4	=	49.2	p/cycle						
L	=	Crosswalk Length	=	3.6	metres						
We	=	Effective Crosswalk Width	=	4.2	metres						
Sp	=	Average speed of Pedestrians	=	1.2	m/s						
TSc	=	Time-space of the crosswalk									
	=	$3.6 \times 4.2 \times (88 - 3.6 / (2 \times 1.2))$	=	1307.88	m <sup>2</sup> -s						
Nped	=	Number of pedestrians during a cycle									
	=	$31 \times (115 - 88) / 115$	=	7	p/cycle						
t	=	Total Crossing Time									
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 7 / 4.2)$	=	8	sec						
T	=	Total crosswalk occupancy time									
	=	$(31 + 5) \times 8$	=	272	p-s						
Mc	=	Space per pedestrian Crossing									
	=	$1307.88 / 272$	=	4.8	m <sup>2</sup> /p						
LOS	=	<b>B</b>									
<b>Compute the circulation space</b>											
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside									
	=	$30.7 \times (115 - 88)^2 / (2 \times 115)$	=	97	p-s						
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>						
TSn	=	Total time -space available for circulating pedestrians at Western kerbside									
	=	$31.5 \times 115 - (0.5 \times 97)$	=	3574	m <sup>2</sup> -s						
Mn	=	Circulation Area per pedestrian at Western kerbside									
	=	$3574 / (4 \times 43.4)$	=	20.6	m <sup>2</sup> /p						
LOS	=	<b>A</b>									
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside									
	=	$5.1 \times (115 - 88)^2 / (2 \times 115)$	=	16	p-s						
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>						
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside									
	=	$12.8 \times 115 - (0.5 \times 16)$	=	1464	m <sup>2</sup> -s						
Ms	=	Circulation Area per pedestrian at Eastern kerbside									
	=	$1464 / (4 \times 49.2)$	=	7.4	m <sup>2</sup> /p						
LOS	=	<b>A</b>									

<b>DESIGN SHEET</b>				<b>Job No.: CHK50793710</b>				<b>MVA ASIA LIMITED</b>			
Junction:		Location M. Finnie Street						Design Year:		Existing	
Description:		Weekday AM Peak						Designed By:		NLY	
								Checked By:		WCY	
C	=	Cycle Time				=	115	sec			
							35				
Vcn	=	Pedestrian Count from Northern kerbside				=	120	p/h			
	=	$(120 / 60) \times (115 / 60)$				=	3.8	p/cycle			
Vcs	=	Pedestrian Count from Southern kerbside				=	200	p/h			
	=	$(200 / 60) \times (115 / 60)$				=	6.4	p/cycle			
Vsn	=	Sidewalk Flow at Northern Kerbside				=	20	p/h			
	=	$(20 / 60) \times (115 / 60)$				=	0.6	p/cycle			
Vss	=	Sidewalk Flow at Southern Kerbside				=	1180	p/h			
	=	$(1180 / 60) \times (115 / 60)$				=	37.7	p/cycle			
Vtotn	=	Total circulating pedestrian flow at western kerbside									
	=	3.8	+	6.4	+	0.6	=	10.9	p/cycle		
Vtots	=	Total circulating pedestrian flow at eastern kerbside									
	=	3.8	+	6.4	+	37.7	=	47.9	p/cycle		
L	=	Crosswalk Length				=	4.6	metres			
We	=	Effective Crosswalk Width				=	2.5	metres			
Sp	=	Average speed of Pedestrians				=	1.2	m/s			
TSc	=	Time-space of the crosswalk									
	=	$4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$				=	380.458	m <sup>2</sup> -s			
Nped	=	Number of pedestrians during a cycle									
	=	$6 \times (115 - 35) / 115$				=	4	p/cycle			
t	=	Total Crossing Time									
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 4)$				=	8	sec			
T	=	Total crosswalk occupancy time									
	=	$(4 + 6) \times 8$				=	84	p-s			
Mc	=	Space per pedestrian Crossing									
	=	380.458	/	84	=	4.5	m <sup>2</sup> /p				
LOS	=	<b>B</b>									
<b>Compute the circulation space</b>											
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside									
	=	$3.8 \times (115 - 35)^2 / (2 \times 115)$				=	107	p-s			
An	=	Available Area at northern kerbside				=	16.2	m <sup>2</sup>			
TSn	=	Total time -space available for circulating pedestrians at northern kerbside									
	=	$16.2 \times 115 - (0.5 \times 107)$				=	1810	m <sup>2</sup> -s			
Mn	=	Circulation Area per pedestrian at northern kerbside									
	=	$1810 / (4 \times 10.9)$				=	41.7	m <sup>2</sup> /p			
LOS	=	<b>A</b>									
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside									
	=	$6.4 \times (115 - 35)^2 / (2 \times 115)$				=	178	p-s			
As	=	Available Area at southern kerbside				=	14.3	m <sup>2</sup>			
TSs	=	Total time -space available for circulating pedestrians at southern kerbside									
	=	$14.3 \times 115 - (0.5 \times 178)$				=	1556	m <sup>2</sup> -s			
Ms	=	Circulation Area per pedestrian at southern kerbside									
	=	$1556 / (4 \times 47.9)$				=	8.1	m <sup>2</sup> /p			
LOS	=	<b>A</b>									

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N, Finnie Street				Design Year:	Existing
Description:	Weekday AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115 88	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	100	p/h	
	=	$(100 / 60) \times (115 / 60)$	=	3.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	180	p/h	
	=	$(180 / 60) \times (115 / 60)$	=	5.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	200	p/h	
	=	$(200 / 60) \times (115 / 60)$	=	6.4	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	60	p/h	
	=	$(60 / 60) \times (115 / 60)$	=	1.9	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	3.2 + 5.8 + 6.4	=	15.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.2 + 5.8 + 1.9	=	10.9	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$6 \times (115 - 88) / 115$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 1)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(3 + 6) \times 8$	=	74	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1220.16 / 74$	=	16.4	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.2 \times (115 - 88)^2 / (2 \times 115)$	=	10	p-s	
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 115 - (0.5 \times 10)$	=	1087	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1087 / (4 \times 15.3)$	=	17.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$5.8 \times (115 - 88)^2 / (2 \times 115)$	=	18	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 115 - (0.5 \times 18)$	=	1854	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1854 / (4 \times 10.9)$	=	42.7	m <sup>2</sup> /p	
LOS	=	A				

<b>DESIGN SHEET</b>				<b>Job No.: CHK50793710</b>				<b>MVA ASIA LIMITED</b>			
Junction:		Location O Hoi Tai Street						Design Year:		Existing	
Description:		Weekday AM Peak						Designed By:		NLY	
								Checked By:		WCY	
C	=	Cycle Time				=	115	sec			
							35				
Vcn	=	Pedestrian Count from Northern kerbside				=	20	p/h			
	=	$(20 / 60) \times (115 / 60)$				=	0.6	p/cycle			
Vcs	=	Pedestrian Count from Southern kerbside				=	40	p/h			
	=	$(40 / 60) \times (115 / 60)$				=	1.3	p/cycle			
Vsn	=	Sidewalk Flow at Northern Kerbside				=	140	p/h			
	=	$(140 / 60) \times (115 / 60)$				=	4.5	p/cycle			
Vss	=	Sidewalk Flow at Southern Kerbside				=	260	p/h			
	=	$(260 / 60) \times (115 / 60)$				=	8.3	p/cycle			
Vtotn	=	Total circulating pedestrian flow at western kerbside									
	=	0.6	+	1.3	+	4.5	=	6.4	p/cycle		
Vtots	=	Total circulating pedestrian flow at eastern kerbside									
	=	0.6	+	1.3	+	8.3	=	10.2	p/cycle		
L	=	Crosswalk Length				=	17	metres			
We	=	Effective Crosswalk Width				=	2	metres			
Sp	=	Average speed of Pedestrians				=	1.2	m/s			
TSc	=	Time-space of the crosswalk									
	=	$17 \times 2 \times (35 - 17 / (2 \times 1.2))$				=	949.167	m <sup>2</sup> -s			
Nped	=	Number of pedestrians during a cycle									
t	=	Total Crossing Time									
	=	$3.2 + 17 / 1.2 + (0.27 \times 0)$				=	17	sec			
T	=	Total crosswalk occupancy time									
	=	$(1 + 1) \times 17$				=	33	p-s			
Mc	=	Space per pedestrian Crossing									
	=	949.167	/	33	=	28.5	m <sup>2</sup> /p				
LOS	=	A									
<b>Compute the circulation space</b>											
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside									
	=	$0.6 \times (115 - 35)^2 / (2 \times 115)$				=	18	p-s			
An	=	Available Area at northern kerbside				=	11.6	m <sup>2</sup>			
TSn	=	Total time -space available for circulating pedestrians at northern kerbside									
	=	$11.6 \times 115 - (0.5 \times 18)$				=	1325	m <sup>2</sup> -s			
Mn	=	Circulation Area per pedestrian at northern kerbside									
	=	$1325 / (4 \times 6.4)$				=	51.9	m <sup>2</sup> /p			
LOS	=	A									
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside									
	=	$1.3 \times (115 - 35)^2 / (2 \times 115)$				=	36	p-s			
As	=	Available Area at southern kerbside				=	16.2	m <sup>2</sup>			
TSs	=	Total time -space available for circulating pedestrians at southern kerbside									
	=	$16.2 \times 115 - (0.5 \times 36)$				=	1845	m <sup>2</sup> -s			
Ms	=	Circulation Area per pedestrian at southern kerbside									
	=	$1845 / (4 \times 10.2)$				=	45.1	m <sup>2</sup> /p			
LOS	=	A									

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G Java Road				Design Year:	Existing
Description:	Weekday Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	60	p/h	
	=	$(60 / 60) \times (110 / 60)$	=	1.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	60	p/h	
	=	$(60 / 60) \times (110 / 60)$	=	1.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	1260	p/h	
	=	$(1260 / 60) \times (110 / 60)$	=	38.5	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	20	p/h	
	=	$(20 / 60) \times (110 / 60)$	=	0.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.8 + 1.8 + 38.5	=	42.2	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.8 + 1.8 + 0.6	=	4.3	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 32) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 1 / 4)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 2) \times 13$	=	49	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 49$	=	26.3	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.8 \times (110 - 32)^2 / (2 \times 110)$	=	51	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 51)$	=	1955	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1955 / (4 \times 42.2)$	=	11.6	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.8 \times (110 - 32)^2 / (2 \times 110)$	=	51	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 51)$	=	1823	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1823 / (4 \times 4.3)$	=	106.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K. Hoi Tai Street				Design Year:	Existing
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	33	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	160	pph	
	=	$(160 / 60) \times (110 / 60)$	=	4.9	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	120	pph	
	=	$(120 / 60) \times (110 / 60)$	=	3.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	180	pph	
	=	$(180 / 60) \times (110 / 60)$	=	5.5	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	2040	pph	
	=	$(2040 / 60) \times (110 / 60)$	=	62.3	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	4.9 + 3.7 + 5.5	=	14.1	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	4.9 + 3.7 + 62.3	=	70.9	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (33 - 13.5 / (2 \times 1.2))$	=	1145.64	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$5 \times (110 - 33) / 110$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 3 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(5 + 4) \times 15$	=	131	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1145.64 / 131$	=	8.7	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$4.9 \times (110 - 33)^2 / (2 \times 110)$	=	132	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 110 - (0.5 \times 132)$	=	1650	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1650 / (4 \times 14.1)$	=	29.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$3.7 \times (110 - 33)^2 / (2 \times 110)$	=	99	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 110 - (0.5 \times 99)$	=	1161	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1161 / (4 \times 70.9)$	=	4.1	m <sup>2</sup> /p	
LOS	=	B				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L Hoi Kwong Street				Design Year:	Existing
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	82	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	600	p/h	
	=	$(600 / 60) \times (110 / 60)$	=	18.3	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	1100	p/h	
	=	$(1100 / 60) \times (110 / 60)$	=	33.6	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	880	p/h	
	=	$(880 / 60) \times (110 / 60)$	=	26.9	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	420	p/h	
	=	$(420 / 60) \times (110 / 60)$	=	12.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	18.3 + 33.6 + 26.9	=	78.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	18.3 + 33.6 + 12.8	=	64.8	p/cycle	
L	=	Crosswalk Length	=	3.6	metres	
We	=	Effective Crosswalk Width	=	4.2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$34 \times (110 - 82) / 110$	=	9	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 9 / 4.2)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(18 + 34) \times 8$	=	408	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1217.16 / 408$	=	3.0	m <sup>2</sup> /p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$18.3 \times (110 - 82)^2 / (2 \times 110)$	=	65	p-s	
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$31.5 \times 110 - (0.5 \times 65)$	=	3432	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$3432 / (4 \times 78.8)$	=	10.9	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$33.6 \times (110 - 82)^2 / (2 \times 110)$	=	120	p-s	
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$12.8 \times 110 - (0.5 \times 120)$	=	1348	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1348 / (4 \times 64.8)$	=	5.2	m <sup>2</sup> /p	
LOS	=	B				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street				Design Year:	Existing
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	1020	pph	
	=	$(1020 / 60) \times (110 / 60)$	=	31.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	1080	pph	
	=	$(1080 / 60) \times (110 / 60)$	=	33.0	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	0	pph	
	=	$(0 / 60) \times (110 / 60)$	=	0.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	1180	pph	
	=	$(1180 / 60) \times (110 / 60)$	=	36.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	31.2 + 33.0 + 0.0	=	64.2	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	31.2 + 33.0 + 36.1	=	100.2	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (32 - 4.6 / (2 \times 1.2))$	=	345.958	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$33 \times (110 - 32) / 110$	=	23	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 23)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(31 + 33) \times 13$	=	857	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$345.958 / 857$	=	0.4	m <sup>2</sup> /p	
LOS	=	<b>F</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$31.2 \times (110 - 32)^2 / (2 \times 110)$	=	862	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 110 - (0.5 \times 862)$	=	1351	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1351 / (4 \times 64.2)$	=	5.3	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$33 \times (110 - 32)^2 / (2 \times 110)$	=	913	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 110 - (0.5 \times 913)$	=	1117	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1117 / (4 \times 100.2)$	=	2.8	m <sup>2</sup> /p	
LOS	=	<b>C</b>				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N, Finnie Street				Design Year:	Existing
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	86	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	960	p/h	
	=	$(960 / 60) \times (110 / 60)$	=	29.3	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	1060	p/h	
	=	$(1060 / 60) \times (110 / 60)$	=	32.4	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	560	p/h	
	=	$(560 / 60) \times (110 / 60)$	=	17.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	100	p/h	
	=	$(100 / 60) \times (110 / 60)$	=	3.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	29.3 + 32.4 + 17.1	=	78.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	29.3 + 32.4 + 3.1	=	64.8	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (86 - 5.7 / (2 \times 1.2))$	=	1191.66	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$32 \times (110 - 86) / 110$	=	7	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 7)$	=	10	sec	
T	=	Total crosswalk occupancy time				
	=	$(29 + 32) \times 10$	=	608	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1191.66 / 608$	=	2.0	m <sup>2</sup> /p	
LOS	=	D				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$29.3 \times (110 - 86)^2 / (2 \times 110)$	=	77	p-s	
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 110 - (0.5 \times 77)$	=	1007	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1007 / (4 \times 78.8)$	=	3.2	m <sup>2</sup> /p	
LOS	=	C				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$32.4 \times (110 - 86)^2 / (2 \times 110)$	=	85	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 85)$	=	1740	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1740 / (4 \times 64.8)$	=	6.7	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O Hoi Tai Street				Design Year:	Existing
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	80	p/h	
	=	$(80 / 60) \times (110 / 60)$	=	2.4	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	40	p/h	
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	240	p/h	
	=	$(240 / 60) \times (110 / 60)$	=	7.3	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	2000	p/h	
	=	$(2000 / 60) \times (110 / 60)$	=	61.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	2.4 + 1.2 + 7.3	=	11.0	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.4 + 1.2 + 61.1	=	64.8	p/cycle	
L	=	Crosswalk Length	=	17	metres	
We	=	Effective Crosswalk Width	=	2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$17 \times 2 \times (32 - 17 / (2 \times 1.2))$	=	847.167	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 32) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 17 / 1.2 + (0.27 \times 2)$	=	18	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 18$	=	65	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$847.167 / 65$	=	13.0	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2.4 \times (110 - 32)^2 / (2 \times 110)$	=	68	p-s	
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$11.6 \times 110 - (0.5 \times 68)$	=	1242	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1242 / (4 \times 11)$	=	28.2	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.2 \times (110 - 32)^2 / (2 \times 110)$	=	34	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 34)$	=	1765	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1765 / (4 \times 64.8)$	=	6.8	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G Java Road				Design Year:	Existing
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	33	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	40	pph	
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	300	pph	
	=	$(300 / 60) \times (110 / 60)$	=	9.2	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	500	pph	
	=	$(500 / 60) \times (110 / 60)$	=	15.3	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	20	pph	
	=	$(20 / 60) \times (110 / 60)$	=	0.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.2 + 9.2 + 15.3	=	25.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.2 + 9.2 + 0.6	=	11.0	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (33 - 12 / (2 \times 1.2))$	=	1344	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$9 \times (110 - 33) / 110$	=	6	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 6 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 9) \times 14$	=	151	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1344 / 151$	=	8.9	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.2 \times (110 - 33)^2 / (2 \times 110)$	=	33	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 33)$	=	1964	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1964 / (4 \times 25.7)$	=	19.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$9.2 \times (110 - 33)^2 / (2 \times 110)$	=	247	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 247)$	=	1724	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1724 / (4 \times 11)$	=	39.2	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K. Hoi Tai Street				Design Year:	Existing
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	31	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	60	p/h	
	=	$(60 / 60) \times (110 / 60)$	=	1.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	20	p/h	
	=	$(20 / 60) \times (110 / 60)$	=	0.6	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	200	p/h	
	=	$(200 / 60) \times (110 / 60)$	=	6.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	1020	p/h	
	=	$(1020 / 60) \times (110 / 60)$	=	31.2	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.8 + 0.6 + 6.1	=	8.6	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.8 + 0.6 + 31.2	=	33.6	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (31 - 13.5 / (2 \times 1.2))$	=	1061.94	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 31) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 15$	=	36	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1061.94 / 36$	=	29.4	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.8 \times (110 - 31)^2 / (2 \times 110)$	=	52	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 110 - (0.5 \times 52)$	=	1690	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1690 / (4 \times 8.6)$	=	49.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$0.6 \times (110 - 31)^2 / (2 \times 110)$	=	17	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 110 - (0.5 \times 17)$	=	1201	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1201 / (4 \times 33.6)$	=	8.9	m <sup>2</sup> /p	
LOS	=	A				

<b>DESIGN SHEET</b>				<b>Job No.: CHK50793710</b>				<b>MVA ASIA LIMITED</b>			
Junction:		Location L Hoi Kwong Street						Design Year:		Existing	
Description:		Weekday PM Peak						Designed By:		NLY	
								Checked By:		WCY	
C	=	Cycle Time	=	110	sec						
G	=	Effective Green Time for Pedestrians	=	82	sec						
Vcn	=	Pedestrian Count from Western kerbside	=	340	p/h						
	=	$(340 / 60) \times (110 / 60)$	=	10.4	p/cycle						
Vcs	=	Pedestrian Count from Eastern kerbside	=	780	p/h						
	=	$(780 / 60) \times (110 / 60)$	=	23.8	p/cycle						
Vsn	=	Sidewalk Flow at Western Kerbside	=	320	p/h						
	=	$(320 / 60) \times (110 / 60)$	=	9.8	p/cycle						
Vss	=	Sidewalk Flow at Eastern Kerbside	=	100	p/h						
	=	$(100 / 60) \times (110 / 60)$	=	3.1	p/cycle						
Vtotn	=	Total circulating pedestrian flow at western kerbside									
	=	10.4 + 23.8 + 9.8	=	44.0	p/cycle						
Vtots	=	Total circulating pedestrian flow at eastern kerbside									
	=	10.4 + 23.8 + 3.1	=	37.3	p/cycle						
L	=	Crosswalk Length	=	3.6	metres						
We	=	Effective Crosswalk Width	=	4.2	metres						
Sp	=	Average speed of Pedestrians	=	1.2	m/s						
TSc	=	Time-space of the crosswalk									
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16	m <sup>2</sup> -s						
Nped	=	Number of pedestrians during a cycle									
	=	$24 \times (110 - 82) / 110$	=	6	p/cycle						
t	=	Total Crossing Time									
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 6 / 4.2)$	=	7	sec						
T	=	Total crosswalk occupancy time									
	=	$(10 + 24) \times 7$	=	252	p-s						
Mc	=	Space per pedestrian Crossing									
	=	$1217.16 / 252$	=	4.8	m <sup>2</sup> /p						
LOS	=	<b>B</b>									
<b>Compute the circulation space</b>											
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside									
	=	$10.4 \times (110 - 82)^2 / (2 \times 110)$	=	37	p-s						
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>						
TSn	=	Total time -space available for circulating pedestrians at Western kerbside									
	=	$31.5 \times 110 - (0.5 \times 37)$	=	3446	m <sup>2</sup> -s						
Mn	=	Circulation Area per pedestrian at Western kerbside									
	=	$3446 / (4 \times 44)$	=	19.6	m <sup>2</sup> /p						
LOS	=	<b>A</b>									
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside									
	=	$23.8 \times (110 - 82)^2 / (2 \times 110)$	=	85	p-s						
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>						
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside									
	=	$12.8 \times 110 - (0.5 \times 85)$	=	1366	m <sup>2</sup> -s						
Ms	=	Circulation Area per pedestrian at Eastern kerbside									
	=	$1366 / (4 \times 37.3)$	=	9.2	m <sup>2</sup> /p						
LOS	=	<b>A</b>									

<b>DESIGN SHEET</b>				Job No.:	<b>CHK50793710</b>	<b>MVA ASIA LIMITED</b>					
Junction:		Location M. Finnie Street				Design Year:		Existing			
Description:		Weekday PM Peak				Designed By:		NLY			
						Checked By:		WCY			
C	=	Cycle Time	=	110	sec						
G	=	Effective Green Time for Pedestrians	=	30	sec						
Vcn	=	Pedestrian Count from Northern kerbside	=	160	p/h						
	=	$(160 / 60) \times (110 / 60)$	=	4.9	p/cycle						
Vcs	=	Pedestrian Count from Southern kerbside	=	580	p/h						
	=	$(580 / 60) \times (110 / 60)$	=	17.7	p/cycle						
Vsn	=	Sidewalk Flow at Northern Kerbside	=	40	p/h						
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle						
Vss	=	Sidewalk Flow at Southern Kerbside	=	440	p/h						
	=	$(440 / 60) \times (110 / 60)$	=	13.4	p/cycle						
Vtotn	=	Total circulating pedestrian flow at western kerbside									
	=	4.9 + 17.7 + 1.2	=	23.8	p/cycle						
Vtots	=	Total circulating pedestrian flow at eastern kerbside									
	=	4.9 + 17.7 + 13.4	=	36.1	p/cycle						
L	=	Crosswalk Length	=	4.6	metres						
We	=	Effective Crosswalk Width	=	2.5	metres						
Sp	=	Average speed of Pedestrians	=	1.2	m/s						
TSc	=	Time-space of the crosswalk									
	=	$4.6 \times 2.5 \times (30 - 4.6 / (2 \times 1.2))$	=	322.958	m <sup>2</sup> -s						
Nped	=	Number of pedestrians during a cycle									
	=	$18 \times (110 - 30) / 110$	=	13	p/cycle						
t	=	Total Crossing Time									
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 13)$	=	11	sec						
T	=	Total crosswalk occupancy time									
	=	$(5 + 18) \times 11$	=	238	p-s						
Mc	=	Space per pedestrian Crossing									
	=	$322.958 / 238$	=	1.4	m <sup>2</sup> /p						
LOS	=	<b>E</b>									
<b>Compute the circulation space</b>											
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside									
	=	$4.9 \times (110 - 30)^2 / (2 \times 110)$	=	142	p-s						
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>						
TSn	=	Total time -space available for circulating pedestrians at northern kerbside									
	=	$16.2 \times 110 - (0.5 \times 142)$	=	1711	m <sup>2</sup> -s						
Mn	=	Circulation Area per pedestrian at northern kerbside									
	=	$1711 / (4 \times 23.8)$	=	17.9	m <sup>2</sup> /p						
LOS	=	<b>A</b>									
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside									
	=	$17.7 \times (110 - 30)^2 / (2 \times 110)$	=	516	p-s						
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>						
TSs	=	Total time -space available for circulating pedestrians at southern kerbside									
	=	$14.3 \times 110 - (0.5 \times 516)$	=	1315	m <sup>2</sup> -s						
Ms	=	Circulation Area per pedestrian at southern kerbside									
	=	$1315 / (4 \times 36.1)$	=	9.1	m <sup>2</sup> /p						
LOS	=	<b>A</b>									

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N, Finnie Street				Design Year:	Existing
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	88	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	140	p/h	
	=	$(140 / 60) \times (110 / 60)$	=	4.3	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	580	p/h	
	=	$(580 / 60) \times (110 / 60)$	=	17.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	220	p/h	
	=	$(220 / 60) \times (110 / 60)$	=	6.7	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	60	p/h	
	=	$(60 / 60) \times (110 / 60)$	=	1.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	4.3 + 17.7 + 6.7	=	28.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	4.3 + 17.7 + 1.8	=	23.8	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$18 \times (110 - 88) / 110$	=	4	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 4)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(4 + 18) \times 9$	=	196	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1220.16 / 196$	=	6.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$4.3 \times (110 - 88)^2 / (2 \times 110)$	=	9	p-s	
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 110 - (0.5 \times 9)$	=	1040	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1040 / (4 \times 28.7)$	=	9.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$17.7 \times (110 - 88)^2 / (2 \times 110)$	=	39	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 39)$	=	1763	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1763 / (4 \times 23.8)$	=	18.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O Hoi Tai Street				Design Year:	Existing
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	30	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	60	p/h	
	=	$(60 / 60) \times (110 / 60)$	=	1.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	40	p/h	
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	180	p/h	
	=	$(180 / 60) \times (110 / 60)$	=	5.5	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	680	p/h	
	=	$(680 / 60) \times (110 / 60)$	=	20.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.8 + 1.2 + 5.5	=	8.6	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.8 + 1.2 + 20.8	=	23.8	p/cycle	
L	=	Crosswalk Length	=	17	metres	
We	=	Effective Crosswalk Width	=	2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$17 \times 2 \times (30 - 17 / (2 \times 1.2))$	=	779.167	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 30) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 17 / 1.2 + (0.27 \times 1)$	=	18	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 18$	=	54	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$779.167 / 54$	=	14.4	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.8 \times (110 - 30)^2 / (2 \times 110)$	=	53	p-s	
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$11.6 \times 110 - (0.5 \times 53)$	=	1249	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1249 / (4 \times 8.6)$	=	36.5	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.2 \times (110 - 30)^2 / (2 \times 110)$	=	36	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 36)$	=	1764	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1764 / (4 \times 23.8)$	=	18.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road				Design Year:	Existing
Description:	Weekend AM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	24	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	40	p/h	
	=	$(40 / 60) \times (115 / 60)$	=	1.3	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	20	p/h	
	=	$(20 / 60) \times (115 / 60)$	=	0.6	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	380	p/h	
	=	$(380 / 60) \times (115 / 60)$	=	12.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	20	p/h	
	=	$(20 / 60) \times (115 / 60)$	=	0.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.3 + 0.6 + 12.1	=	14.1	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.3 + 0.6 + 0.6	=	2.6	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (24 - 12 / (2 \times 1.2))$	=	912	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (115 - 24) / 115$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 1 / 4)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 13$	=	26	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$912 / 26$	=	35.5	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.3 \times (115 - 24)^2 / (2 \times 115)$	=	46	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 115 - (0.5 \times 46)$	=	2047	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2047 / (4 \times 14.1)$	=	36.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$0.6 \times (115 - 24)^2 / (2 \times 115)$	=	23	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 115 - (0.5 \times 23)$	=	1920	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1920 / (4 \times 2.6)$	=	187.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street				Design Year:	Existing
Description:	Weekend AM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	36	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	40	p/h	
	=	$(40 / 60) \times (115 / 60)$	=	1.3	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	60	p/h	
	=	$(60 / 60) \times (115 / 60)$	=	1.9	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	20	p/h	
	=	$(20 / 60) \times (115 / 60)$	=	0.6	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	120	p/h	
	=	$(120 / 60) \times (115 / 60)$	=	3.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.3 + 1.9 + 0.6	=	3.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.3 + 1.9 + 3.8	=	7.0	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (115 - 36) / 115$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 2) \times 15$	=	47	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1271.19 / 47$	=	26.9	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.3 \times (115 - 36)^2 / (2 \times 115)$	=	35	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 115 - (0.5 \times 35)$	=	1777	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1777 / (4 \times 3.8)$	=	115.9	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.9 \times (115 - 36)^2 / (2 \times 115)$	=	52	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 115 - (0.5 \times 52)$	=	1239	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1239 / (4 \times 7)$	=	44.1	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street			Design Year: Existing
Description:	Weekend AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	88 sec
Vcn	=	Pedestrian Count from Western kerbside	=	100 pph
	=	$(100 / 60) \times (115 / 60)$	=	3.2 p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	80 pph
	=	$(80 / 60) \times (115 / 60)$	=	2.6 p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	120 pph
	=	$(120 / 60) \times (115 / 60)$	=	3.8 p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	60 pph
	=	$(60 / 60) \times (115 / 60)$	=	1.9 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	3.2 + 2.6 + 3.8	=	9.6 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	3.2 + 2.6 + 1.9	=	7.7 p/cycle
L	=	Crosswalk Length	=	3.6 metres
We	=	Effective Crosswalk Width	=	4.2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$3.6 \times 4.2 \times (88 - 3.6 / (2 \times 1.2))$	=	1307.88 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$3 \times (115 - 88) / 115$	=	1 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 1 / 4.2)$	=	6 sec
T	=	Total crosswalk occupancy time		
	=	$(3 + 3) \times 6$	=	36 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1307.88 / 36$	=	35.9 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside		
	=	$3.2 \times (115 - 88)^2 / (2 \times 115)$	=	10 p-s
An	=	Available Area at Western kerbside	=	31.5 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at Western kerbside		
	=	$31.5 \times 115 - (0.5 \times 10)$	=	3617 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at Western kerbside		
	=	$3617 / (4 \times 9.6)$	=	94.4 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside		
	=	$2.6 \times (115 - 88)^2 / (2 \times 115)$	=	8 p-s
As	=	Available Area at Eastern kerbside	=	12.8 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside		
	=	$12.8 \times 115 - (0.5 \times 8)$	=	1468 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at Eastern kerbside		
	=	$1468 / (4 \times 7.7)$	=	47.9 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street				Design Year:	Existing
Description:	Weekend AM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	100	p/h	
	=	$(100 / 60) \times (115 / 60)$	=	3.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	140	p/h	
	=	$(140 / 60) \times (115 / 60)$	=	4.5	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	60	p/h	
	=	$(60 / 60) \times (115 / 60)$	=	1.9	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	220	p/h	
	=	$(220 / 60) \times (115 / 60)$	=	7.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	3.2 + 4.5 + 1.9	=	9.6	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.2 + 4.5 + 7.0	=	14.7	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$	=	380.458	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$4 \times (115 - 35) / 115$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 3)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(3 + 4) \times 8$	=	60	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$380.458 / 60$	=	6.3	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.2 \times (115 - 35)^2 / (2 \times 115)$	=	89	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 115 - (0.5 \times 89)$	=	1819	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1819 / (4 \times 9.6)$	=	47.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$4.5 \times (115 - 35)^2 / (2 \times 115)$	=	124	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 115 - (0.5 \times 124)$	=	1582	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1582 / (4 \times 14.7)$	=	26.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N_Finnie Street			Design Year:	Existing	
Description:	Weekend AM Peak			Designed By:	NLY	
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	88	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	60	p/h	
	=	$(60 / 60) \times (115 / 60)$	=	1.9	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	60	p/h	
	=	$(60 / 60) \times (115 / 60)$	=	1.9	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	120	p/h	
	=	$(120 / 60) \times (115 / 60)$	=	3.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	160	p/h	
	=	$(160 / 60) \times (115 / 60)$	=	5.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.9 + 1.9 + 3.8	=	7.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.9 + 1.9 + 5.1	=	8.9	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (115 - 88) / 115$	=	0	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 0)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 2) \times 8$	=	31	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1220.16 / 31$	=	39.4	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.9 \times (115 - 88)^2 / (2 \times 115)$	=	6	p-s	
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 115 - (0.5 \times 6)$	=	1089	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1089 / (4 \times 7.7)$	=	35.5	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.9 \times (115 - 88)^2 / (2 \times 115)$	=	6	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 115 - (0.5 \times 6)$	=	1860	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1860 / (4 \times 8.9)$	=	52.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street			Design Year: Existing
Description:	Weekend AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	35 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	100 pph
	=	$(100 / 60) \times (115 / 60)$	=	3.2 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	120 pph
	=	$(120 / 60) \times (115 / 60)$	=	3.8 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	100 pph
	=	$(100 / 60) \times (115 / 60)$	=	3.2 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	60 pph
	=	$(60 / 60) \times (115 / 60)$	=	1.9 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	3.2 + 3.8	=	10.2 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	3.2 + 3.8 + 1.9	=	8.9 p/cycle
L	=	Crosswalk Length	=	17 metres
We	=	Effective Crosswalk Width	=	2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$17 \times 2 \times (35 - 17 / (2 \times 1.2))$	=	949.167 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$4 \times (115 - 35) / 115$	=	3 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 17 / 1.2 + (0.27 \times 3)$	=	18 sec
T	=	Total crosswalk occupancy time		
	=	$(3 + 4) \times 18$	=	127 p-s
Mc	=	Space per pedestrian Crossing		
	=	$949.167 / 127$	=	7.5 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$3.2 \times (115 - 35)^2 / (2 \times 115)$	=	89 p-s
An	=	Available Area at northern kerbside	=	11.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$11.6 \times 115 - (0.5 \times 89)$	=	1290 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1290 / (4 \times 10.2)$	=	31.5 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$3.8 \times (115 - 35)^2 / (2 \times 115)$	=	107 p-s
As	=	Available Area at southern kerbside	=	16.2 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.2 \times 115 - (0.5 \times 107)$	=	1810 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1810 / (4 \times 8.9)$	=	50.6 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road			Design Year:	Existing	
Description:	Weekend Noon Peak			Designed By:	NLY	
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	20	p/h	
	=	$(20 / 60) \times (110 / 60)$	=	0.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	20	p/h	
	=	$(20 / 60) \times (110 / 60)$	=	0.6	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	180	p/h	
	=	$(180 / 60) \times (110 / 60)$	=	5.5	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	60	p/h	
	=	$(60 / 60) \times (110 / 60)$	=	1.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	0.6 + 0.6 + 5.5	=	6.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	0.6 + 0.6 + 1.8	=	3.1	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (110 - 32) / 110$	=	0	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 0 / 4)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 13$	=	16	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 16$	=	79.8	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$0.6 \times (110 - 32)^2 / (2 \times 110)$	=	17	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 17)$	=	1972	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1972 / (4 \times 6.7)$	=	73.3	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$0.6 \times (110 - 32)^2 / (2 \times 110)$	=	17	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 17)$	=	1840	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1840 / (4 \times 3.1)$	=	150.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K_Hoi Tai Street			Design Year: Existing
Description:	Weekend Noon Peak			Designed By: NLY Checked By: WCY
C	= Cycle Time	=	110	sec
G	= Effective Green Time for Pedestrians	=	33	sec
Vcn	= Pedestrian Count from Northern kerbside	=	60	p/h
	= $(60 / 60) \times (110 / 60)$	=	1.8	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	40	p/h
	= $(40 / 60) \times (110 / 60)$	=	1.2	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	60	p/h
	= $(60 / 60) \times (110 / 60)$	=	1.8	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	400	p/h
	= $(400 / 60) \times (110 / 60)$	=	12.2	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 1.8 + 1.2 + 1.8	=	4.9	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 1.8 + 1.2 + 12.2	=	15.3	p/cycle
L	= Crosswalk Length	=	13.5	metres
We	= Effective Crosswalk Width	=	3.1	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $13.5 \times 3.1 \times (33 - 13.5 / (2 \times 1.2))$	=	1145.64	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $2 \times (110 - 33) / 110$	=	1	p/cycle
t	= Total Crossing Time			
	= $3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec
T	= Total crosswalk occupancy time			
	= $(2 + 1) \times 15$	=	45	p-s
Mc	= Space per pedestrian Crossing			
	= $1145.64 / 45$	=	25.4	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $1.8 \times (110 - 33)^2 / (2 \times 110)$	=	49	p-s
An	= Available Area at northern kerbside	=	15.6	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $15.6 \times 110 - (0.5 \times 49)$	=	1691	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1691 / (4 \times 4.9)$	=	86.5	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $1.2 \times (110 - 33)^2 / (2 \times 110)$	=	33	p-s
As	= Available Area at southern kerbside	=	11	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside			
	= $11 \times 110 - (0.5 \times 33)$	=	1194	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1194 / (4 \times 15.3)$	=	19.5	m <sup>2</sup> /p
LOS	= A			

<b>DESIGN SHEET</b>		<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location L_Hoi Kwong Street			Design Year:	Existing
Description:	Weekend Noon Peak			Designed By:	NLY
				Checked By:	WCY
C	=	Cycle Time	=	110	sec
G	=	Effective Green Time for Pedestrians	=	82	sec
Vcn	=	Pedestrian Count from Western kerbside	=	300	p/h
	=	$(300 / 60) \times (110 / 60)$	=	9.2	p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	300	p/h
	=	$(300 / 60) \times (110 / 60)$	=	9.2	p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	220	p/h
	=	$(220 / 60) \times (110 / 60)$	=	6.7	p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	120	p/h
	=	$(120 / 60) \times (110 / 60)$	=	3.7	p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside			
	=	9.2 + 9.2 + 6.7	=	25.1	p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside			
	=	9.2 + 9.2 + 3.7	=	22.0	p/cycle
L	=	Crosswalk Length	=	3.6	metres
We	=	Effective Crosswalk Width	=	4.2	metres
Sp	=	Average speed of Pedestrians	=	1.2	m/s
TSc	=	Time-space of the crosswalk			
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16	m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle			
	=	$9 \times (110 - 82) / 110$	=	2	p/cycle
t	=	Total Crossing Time			
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 2 / 4.2)$	=	7	sec
T	=	Total crosswalk occupancy time			
	=	$(9 + 9) \times 7$	=	122	p-s
Mc	=	Space per pedestrian Crossing			
	=	$1217.16 / 122$	=	10.0	m <sup>2</sup> /p
LOS	=	A			
<b>Compute the circulation space</b>					
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside			
	=	$9.2 \times (110 - 82)^2 / (2 \times 110)$	=	33	p-s
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at Western kerbside			
	=	$31.5 \times 110 - (0.5 \times 33)$	=	3449	m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at Western kerbside			
	=	$3449 / (4 \times 25.1)$	=	34.4	m <sup>2</sup> /p
LOS	=	A			
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside			
	=	$9.2 \times (110 - 82)^2 / (2 \times 110)$	=	33	p-s
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside			
	=	$12.8 \times 110 - (0.5 \times 33)$	=	1392	m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at Eastern kerbside			
	=	$1392 / (4 \times 22)$	=	15.8	m <sup>2</sup> /p
LOS	=	A			

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street				Design Year:	Existing
Description:	Weekend Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	240	p/h	
	=	$(240 / 60) \times (110 / 60)$	=	7.3	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	400	p/h	
	=	$(400 / 60) \times (110 / 60)$	=	12.2	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	40	p/h	
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	420	p/h	
	=	$(420 / 60) \times (110 / 60)$	=	12.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.3 + 12.2 + 1.2	=	20.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.3 + 12.2 + 12.8	=	32.4	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (32 - 4.6 / (2 \times 1.2))$	=	345.958	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$12 \times (110 - 32) / 110$	=	9	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 9)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(7 + 12) \times 9$	=	183	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$345.958 / 183$	=	1.9	m <sup>2</sup> /p	
LOS	=	D				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$7.3 \times (110 - 32)^2 / (2 \times 110)$	=	203	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 110 - (0.5 \times 203)$	=	1681	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1681 / (4 \times 20.8)$	=	20.2	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$12.2 \times (110 - 32)^2 / (2 \times 110)$	=	338	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 110 - (0.5 \times 338)$	=	1404	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1404 / (4 \times 32.4)$	=	10.8	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N. Finnie Street	Design Year:	Existing	
Description:	Weekend Noon Peak	Designed By:	NLY	Checked By: WCY
C	= Cycle Time	=	110	sec
G	= Effective Green Time for Pedestrians	=	86	sec
Vcn	= Pedestrian Count from Northern kerbside	=	180	p/h
	= $(180 / 60) \times (110 / 60)$	=	5.5	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	220	p/h
	= $(220 / 60) \times (110 / 60)$	=	6.7	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	240	p/h
	= $(240 / 60) \times (110 / 60)$	=	7.3	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	300	p/h
	= $(300 / 60) \times (110 / 60)$	=	9.2	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 5.5 + 6.7 + 7.3	=	19.6	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 5.5 + 6.7 + 9.2	=	21.4	p/cycle
L	= Crosswalk Length	=	5.7	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $5.7 \times 2.5 \times (86 - 5.7 / (2 \times 1.2))$	=	1191.66	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $7 \times (110 - 86) / 110$	=	1	p/cycle
t	= Total Crossing Time			
	= $3.2 + 5.7 / 1.2 + (0.27 \times 1)$	=	8	sec
T	= Total crosswalk occupancy time			
	= $(6 + 7) \times 8$	=	102	p-s
Mc	= Space per pedestrian Crossing			
	= $1191.66 / 102$	=	11.7	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $5.5 \times (110 - 86)^2 / (2 \times 110)$	=	14	p-s
An	= Available Area at northern kerbside	=	9.5	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $9.5 \times 110 - (0.5 \times 14)$	=	1038	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1038 / (4 \times 19.6)$	=	13.3	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $6.7 \times (110 - 86)^2 / (2 \times 110)$	=	18	p-s
As	= Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside			
	= $16.2 \times 110 - (0.5 \times 18)$	=	1773	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1773 / (4 \times 21.4)$	=	20.7	m <sup>2</sup> /p
LOS	= A			

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street				Design Year:	Existing
Description:	Weekend Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	120	p/h	
	=	$(120 / 60) \times (110 / 60)$	=	3.7	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	220	p/h	
	=	$(220 / 60) \times (110 / 60)$	=	6.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	80	p/h	
	=	$(80 / 60) \times (110 / 60)$	=	2.4	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	360	p/h	
	=	$(360 / 60) \times (110 / 60)$	=	11.0	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	3.7 + 6.7 + 2.4	=	12.8	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.7 + 6.7 + 11.0	=	21.4	p/cycle	
L	=	Crosswalk Length	=	17	metres	
We	=	Effective Crosswalk Width	=	2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$17 \times 2 \times (32 - 17 / (2 \times 1.2))$	=	847.167	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$7 \times (110 - 32) / 110$	=	5	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 17 / 1.2 + (0.27 \times 5)$	=	19	sec	
T	=	Total crosswalk occupancy time				
	=	$(4 + 7) \times 19$	=	194	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$847.167 / 194$	=	4.4	m <sup>2</sup> /p	
LOS	=	B				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.7 \times (110 - 32)^2 / (2 \times 110)$	=	101	p-s	
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$11.6 \times 110 - (0.5 \times 101)$	=	1225	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1225 / (4 \times 12.8)$	=	23.9	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$6.7 \times (110 - 32)^2 / (2 \times 110)$	=	186	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 186)$	=	1689	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1689 / (4 \times 21.4)$	=	19.7	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road			Design Year:	Existing	
Description:	Weekend PM Peak			Designed By:	NLY	Checked By: WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	20	p/h	
	=	$(20 / 60) \times (110 / 60)$	=	0.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	40	p/h	
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	240	p/h	
	=	$(240 / 60) \times (110 / 60)$	=	7.3	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	100	p/h	
	=	$(100 / 60) \times (110 / 60)$	=	3.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	0.6 + 1.2 + 7.3	=	9.2	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	0.6 + 1.2 + 3.1	=	4.9	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (110 - 32) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 1 / 4)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 13$	=	25	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 25$	=	52.9	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$0.6 \times (110 - 32)^2 / (2 \times 110)$	=	17	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 17)$	=	1972	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1972 / (4 \times 9.2)$	=	53.8	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.2 \times (110 - 32)^2 / (2 \times 110)$	=	34	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 34)$	=	1831	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1831 / (4 \times 4.9)$	=	93.6	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street			Design Year: Existing
Description:	Weekend PM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	36 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	20 pph
	=	$(20 / 60) \times (110 / 60)$	=	0.6 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	20 pph
	=	$(20 / 60) \times (110 / 60)$	=	0.6 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	60 pph
	=	$(60 / 60) \times (110 / 60)$	=	1.8 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	400 pph
	=	$(400 / 60) \times (110 / 60)$	=	12.2 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	0.6 + 0.6 + 1.8	=	3.1 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	0.6 + 0.6 + 12.2	=	13.4 p/cycle
L	=	Crosswalk Length	=	13.5 metres
We	=	Effective Crosswalk Width	=	3.1 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$1 \times (110 - 36) / 110$	=	0 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 0 / 3.1)$	=	15 sec
T	=	Total crosswalk occupancy time		
	=	$(1 + 1) \times 15$	=	18 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1271.19 / 18$	=	71.4 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$0.6 \times (110 - 36)^2 / (2 \times 110)$	=	15 p-s
An	=	Available Area at northern kerbside	=	15.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$15.6 \times 110 - (0.5 \times 15)$	=	1708 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1708 / (4 \times 3.1)$	=	139.8 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$0.6 \times (110 - 36)^2 / (2 \times 110)$	=	15 p-s
As	=	Available Area at southern kerbside	=	11 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$11 \times 110 - (0.5 \times 15)$	=	1202 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1202 / (4 \times 13.4)$	=	22.4 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street				Design Year:	Existing
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	83	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	220	p/h	
	=	$(220 / 60) \times (110 / 60)$	=	6.7	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	260	p/h	
	=	$(260 / 60) \times (110 / 60)$	=	7.9	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	200	p/h	
	=	$(200 / 60) \times (110 / 60)$	=	6.1	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	120	p/h	
	=	$(120 / 60) \times (110 / 60)$	=	3.7	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	6.7 + 7.9 + 6.1	=	20.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	6.7 + 7.9 + 3.7	=	18.3	p/cycle	
L	=	Crosswalk Length	=	3.6	metres	
We	=	Effective Crosswalk Width	=	4.2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$3.6 \times 4.2 \times (83 - 3.6 / (2 \times 1.2))$	=	1232.28	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$8 \times (110 - 83) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 2 / 4.2)$	=	7	sec	
T	=	Total crosswalk occupancy time				
	=	$(7 + 8) \times 7$	=	96	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1232.28 / 96$	=	12.8	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$6.7 \times (110 - 83)^2 / (2 \times 110)$	=	22	p-s	
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$31.5 \times 110 - (0.5 \times 22)$	=	3454	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$3454 / (4 \times 20.8)$	=	41.6	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$7.9 \times (110 - 83)^2 / (2 \times 110)$	=	26	p-s	
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$12.8 \times 110 - (0.5 \times 26)$	=	1395	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1395 / (4 \times 18.3)$	=	19.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street	Design Year:	Existing	
Description:	Weekend PM Peak	Designed By:	NLY	Checked By: WCY
C	= Cycle Time	=	110	sec
G	= Effective Green Time for Pedestrians	=	35	sec
Vcn	= Pedestrian Count from Northern kerbside	=	180	p/h
	= $(180 / 60) \times (110 / 60)$	=	5.5	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	360	p/h
	= $(360 / 60) \times (110 / 60)$	=	11.0	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	60	p/h
	= $(60 / 60) \times (110 / 60)$	=	1.8	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	360	p/h
	= $(360 / 60) \times (110 / 60)$	=	11.0	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 5.5 + 11.0 + 1.8	=	18.3	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 5.5 + 11.0 + 11.0	=	27.5	p/cycle
L	= Crosswalk Length	=	4.6	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$	=	380.458	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $11 \times (110 - 35) / 110$	=	8	p/cycle
t	= Total Crossing Time			
	= $3.2 + 4.6 / 1.2 + (0.27 \times 8)$	=	9	sec
T	= Total crosswalk occupancy time			
	= $(6 + 11) \times 9$	=	149	p-s
Mc	= Space per pedestrian Crossing			
	= $380.458 / 149$	=	2.5	m <sup>2</sup> /p
LOS	= C			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $5.5 \times (110 - 35)^2 / (2 \times 110)$	=	141	p-s
An	= Available Area at northern kerbside	=	16.2	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $16.2 \times 110 - (0.5 \times 141)$	=	1712	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1712 / (4 \times 18.3)$	=	23.3	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $11 \times (110 - 35)^2 / (2 \times 110)$	=	281	p-s
As	= Available Area at southern kerbside	=	14.3	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside			
	= $14.3 \times 110 - (0.5 \times 281)$	=	1432	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1432 / (4 \times 27.5)$	=	13.0	m <sup>2</sup> /p
LOS	= A			

<b>DESIGN SHEET</b>		<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location N_Finnie Street			Design Year:	Existing
Description:	Weekend PM Peak			Designed By:	NLY
				Checked By:	WCY
C	=	Cycle Time	=	110	sec
G	=	Effective Green Time for Pedestrians	=	83	sec
Vcn	=	Pedestrian Count from Northern kerbside	=	160	p/h
	=	$(160 / 60) \times (110 / 60)$	=	4.9	p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	180	p/h
	=	$(180 / 60) \times (110 / 60)$	=	5.5	p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	40	p/h
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	240	p/h
	=	$(240 / 60) \times (110 / 60)$	=	7.3	p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside			
	=	4.9 + 5.5 + 1.2	=	11.6	p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside			
	=	4.9 + 5.5 + 7.3	=	17.7	p/cycle
L	=	Crosswalk Length	=	5.7	metres
We	=	Effective Crosswalk Width	=	2.5	metres
Sp	=	Average speed of Pedestrians	=	1.2	m/s
TSc	=	Time-space of the crosswalk			
	=	$5.7 \times 2.5 \times (83 - 5.7 / (2 \times 1.2))$	=	1148.91	m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle			
	=	$6 \times (110 - 83) / 110$	=	1	p/cycle
t	=	Total Crossing Time			
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 1)$	=	8	sec
T	=	Total crosswalk occupancy time			
	=	$(5 + 6) \times 8$	=	86	p-s
Mc	=	Space per pedestrian Crossing			
	=	$1148.91 / 86$	=	13.3	m <sup>2</sup> /p
LOS	=	A			
<b>Compute the circulation space</b>					
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	=	$4.9 \times (110 - 83)^2 / (2 \times 110)$	=	16	p-s
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside			
	=	$9.5 \times 110 - (0.5 \times 16)$	=	1037	m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside			
	=	$1037 / (4 \times 11.6)$	=	22.3	m <sup>2</sup> /p
LOS	=	A			
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	=	$5.5 \times (110 - 83)^2 / (2 \times 110)$	=	18	p-s
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside			
	=	$16.2 \times 110 - (0.5 \times 18)$	=	1773	m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside			
	=	$1773 / (4 \times 17.7)$	=	25.0	m <sup>2</sup> /p
LOS	=	A			

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street				Design Year:	Existing
Description:	Weekend PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	80	p/h	
	=	$(80 / 60) \times (110 / 60)$	=	2.4	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	220	p/h	
	=	$(220 / 60) \times (110 / 60)$	=	6.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	100	p/h	
	=	$(100 / 60) \times (110 / 60)$	=	3.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	300	p/h	
	=	$(300 / 60) \times (110 / 60)$	=	9.2	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	2.4 + 6.7 + 3.1	=	12.2	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.4 + 6.7 + 9.2	=	18.3	p/cycle	
L	=	Crosswalk Length	=	17	metres	
We	=	Effective Crosswalk Width	=	2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$17 \times 2 \times (35 - 17) / (2 \times 1.2)$	=	949.167	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$7 \times (110 - 35) / 110$	=	5	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 17 / 1.2 + (0.27 \times 5)$	=	19	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 7) \times 19$	=	171	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$949.167 / 171$	=	5.6	m <sup>2</sup> /p	
LOS	=	B				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2.4 \times (110 - 35)^2 / (2 \times 110)$	=	63	p-s	
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$11.6 \times 110 - (0.5 \times 63)$	=	1245	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1245 / (4 \times 12.2)$	=	25.5	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$6.7 \times (110 - 35)^2 / (2 \times 110)$	=	172	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 172)$	=	1696	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1696 / (4 \times 18.3)$	=	23.1	m <sup>2</sup> /p	
LOS	=	A				

## Calculation Sheets - 2033 Reference Year

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road			Design Year: 2033 Ref
Description:	Weekday AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	24 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	75 pph
	=	$(75 / 60) \times (115 / 60)$	=	2.4 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	55 pph
	=	$(55 / 60) \times (115 / 60)$	=	1.8 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	820 pph
	=	$(820 / 60) \times (115 / 60)$	=	26.2 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	25 pph
	=	$(25 / 60) \times (115 / 60)$	=	0.8 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	2.4 + 1.8 + 26.2	=	30.3 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	2.4 + 1.8 + 0.8	=	5.0 p/cycle
L	=	Crosswalk Length	=	12 metres
We	=	Effective Crosswalk Width	=	4 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$12 \times 4 \times (24 - 12 / (2 \times 1.2))$	=	912 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$2 \times (115 - 24) / 115$	=	2 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14 sec
T	=	Total crosswalk occupancy time		
	=	$(2 + 2) \times 14$	=	56 p-s
Mc	=	Space per pedestrian Crossing		
	=	$912 / 56$	=	16.2 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$2.4 \times (115 - 24)^2 / (2 \times 115)$	=	86 p-s
An	=	Available Area at northern kerbside	=	18 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$18 \times 115 - (0.5 \times 86)$	=	2027 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$2027 / (4 \times 30.3)$	=	16.7 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$1.8 \times (115 - 24)^2 / (2 \times 115)$	=	63 p-s
As	=	Available Area at southern kerbside	=	16.8 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.8 \times 115 - (0.5 \times 63)$	=	1900 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1900 / (4 \times 5)$	=	96.0 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street				Design Year:	2033 Ref
Description:	Weekday AM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	36	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	25	p/h	
	=	$(25 / 60) \times (115 / 60)$	=	0.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	65	p/h	
	=	$(65 / 60) \times (115 / 60)$	=	2.1	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	105	p/h	
	=	$(105 / 60) \times (115 / 60)$	=	3.4	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	900	p/h	
	=	$(900 / 60) \times (115 / 60)$	=	28.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	0.8 + 2.1 + 3.4	=	6.2	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	0.8 + 2.1 + 28.8	=	31.6	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (115 - 36) / 115$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 2) \times 15$	=	43	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1271.19 / 43$	=	29.8	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$0.8 \times (115 - 36)^2 / (2 \times 115)$	=	22	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 115 - (0.5 \times 22)$	=	1783	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1783 / (4 \times 6.2)$	=	71.6	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$2.1 \times (115 - 36)^2 / (2 \times 115)$	=	56	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 115 - (0.5 \times 56)$	=	1237	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1237 / (4 \times 31.6)$	=	9.8	m <sup>2</sup> /p	
LOS	=	A				

<b>DESIGN SHEET</b>				Job No.:	<b>CHK50793710</b>	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street				Design Year:	2033 Ref
Description:	Weekday AM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	88	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	1000	pph	
	=	$(1000 / 60) \times (115 / 60)$	=	31.9	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	170	pph	
	=	$(170 / 60) \times (115 / 60)$	=	5.4	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	250	pph	
	=	$(250 / 60) \times (115 / 60)$	=	8.0	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	440	pph	
	=	$(440 / 60) \times (115 / 60)$	=	14.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	31.9 + 5.4 + 8.0	=	45.4	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	31.9 + 5.4 + 14.1	=	51.4	p/cycle	
L	=	Crosswalk Length	=	3.6	metres	
We	=	Effective Crosswalk Width	=	4.2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$3.6 \times 4.2 \times (88 - 3.6 / (2 \times 1.2))$	=	1307.88	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$32 \times (115 - 88) / 115$	=	8	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 8 / 4.2)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(32 + 5) \times 8$	=	286	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1307.88 / 286$	=	4.6	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$31.9 \times (115 - 88)^2 / (2 \times 115)$	=	101	p-s	
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$31.5 \times 115 - (0.5 \times 101)$	=	3572	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$3572 / (4 \times 45.4)$	=	19.7	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$5.4 \times (115 - 88)^2 / (2 \times 115)$	=	17	p-s	
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$12.8 \times 115 - (0.5 \times 17)$	=	1463	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1463 / (4 \times 51.4)$	=	7.1	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M_Finnie Street			Design Year:	2033 Ref	
Description:	Weekday AM Peak			Designed By:	NLY	
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	125	p/h	
	=	$(125 / 60) \times (115 / 60)$	=	4.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	210	p/h	
	=	$(210 / 60) \times (115 / 60)$	=	6.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	180	p/h	
	=	$(180 / 60) \times (115 / 60)$	=	5.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	1230	p/h	
	=	$(1230 / 60) \times (115 / 60)$	=	39.3	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	4.0 + 6.7 + 5.8	=	16.5	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	4.0 + 6.7 + 39.3	=	50.0	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$	=	380.458	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$7 \times (115 - 35) / 115$	=	5	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 5)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(4 + 7) \times 8$	=	89	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$380.458 / 89$	=	4.3	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$4 \times (115 - 35)^2 / (2 \times 115)$	=	111	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 115 - (0.5 \times 111)$	=	1807	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1807 / (4 \times 16.5)$	=	27.5	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$6.7 \times (115 - 35)^2 / (2 \times 115)$	=	187	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 115 - (0.5 \times 187)$	=	1551	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1551 / (4 \times 50)$	=	7.8	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N_Finnie Street			Design Year: 2033 Ref
Description:	Weekday AM Peak			Designed By: NLY Checked By: WCY
C	= Cycle Time	=	115	sec
G	= Effective Green Time for Pedestrians	=	88	sec
Vcn	= Pedestrian Count from Northern kerbside	=	185	p/h
	= $(185 / 60) \times (115 / 60)$	=	5.9	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	265	p/h
	= $(265 / 60) \times (115 / 60)$	=	8.5	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	210	p/h
	= $(210 / 60) \times (115 / 60)$	=	6.7	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	65	p/h
	= $(65 / 60) \times (115 / 60)$	=	2.1	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 5.9 + 8.5 + 6.7	=	21.1	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 5.9 + 8.5 + 2.1	=	16.5	p/cycle
L	= Crosswalk Length	=	5.7	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $8 \times (115 - 88) / 115$	=	2	p/cycle
t	= Total Crossing Time			
	= $3.2 + 5.7 / 1.2 + (0.27 \times 2)$	=	8	sec
T	= Total crosswalk occupancy time			
	= $(6 + 8) \times 8$	=	122	p-s
Mc	= Space per pedestrian Crossing			
	= $1220.16 / 122$	=	10.0	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $5.9 \times (115 - 88)^2 / (2 \times 115)$	=	19	p-s
An	= Available Area at northern kerbside	=	9.5	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $9.5 \times 115 - (0.5 \times 19)$	=	1083	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1083 / (4 \times 21.1)$	=	12.8	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $8.5 \times (115 - 88)^2 / (2 \times 115)$	=	27	p-s
As	= Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSS	= Total time -space available for circulating pedestrians at southern kerbside			
	= $16.2 \times 115 - (0.5 \times 27)$	=	1850	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1850 / (4 \times 16.5)$	=	28.1	m <sup>2</sup> /p
LOS	= A			

<b>DESIGN SHEET</b>				Job No.:	<b>CHK50793710</b>	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street				Design Year:	2033 Ref
Description:	Weekday AM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	100	p/h	
	=	$(100 / 60) \times (115 / 60)$	=	3.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	120	p/h	
	=	$(120 / 60) \times (115 / 60)$	=	3.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	150	p/h	
	=	$(150 / 60) \times (115 / 60)$	=	4.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	275	p/h	
	=	$(275 / 60) \times (115 / 60)$	=	8.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	3.2 + 3.8 + 4.8	=	11.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.2 + 3.8 + 8.8	=	15.8	p/cycle	
L	=	Crosswalk Length	=	17	metres	
We	=	Effective Crosswalk Width	=	2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$17 \times 2 \times (35 - 17) / (2 \times 1.2)$	=	949.167	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$4 \times (115 - 35) / 115$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 17 / 1.2 + (0.27 \times 3)$	=	18	sec	
T	=	Total crosswalk occupancy time				
	=	$(3 + 4) \times 18$	=	127	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$949.167 / 127$	=	7.5	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.2 \times (115 - 35)^2 / (2 \times 115)$	=	89	p-s	
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$11.6 \times 115 - (0.5 \times 89)$	=	1290	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1290 / (4 \times 11.8)$	=	27.3	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$3.8 \times (115 - 35)^2 / (2 \times 115)$	=	107	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 115 - (0.5 \times 107)$	=	1810	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1810 / (4 \times 15.8)$	=	28.6	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road				Design Year:	2033 Ref
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	100	p/h	
	=	$(100 / 60) \times (110 / 60)$	=	3.1	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	75	p/h	
	=	$(75 / 60) \times (110 / 60)$	=	2.3	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	1445	p/h	
	=	$(1445 / 60) \times (110 / 60)$	=	44.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	3.1 + 2.3 + 44.2	=	49.5	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.1 + 2.3 + 0.8	=	6.1	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$3 \times (110 - 32) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(3 + 2) \times 14$	=	73	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 73$	=	17.8	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.1 \times (110 - 32)^2 / (2 \times 110)$	=	85	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 85)$	=	1938	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1938 / (4 \times 49.5)$	=	9.8	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$2.3 \times (110 - 32)^2 / (2 \times 110)$	=	63	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 63)$	=	1816	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1816 / (4 \times 6.1)$	=	74.3	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street				Design Year:	2033 Ref
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	33	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	170	p/h	
	=	$(170 / 60) \times (110 / 60)$	=	5.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	125	p/h	
	=	$(125 / 60) \times (110 / 60)$	=	3.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	190	p/h	
	=	$(190 / 60) \times (110 / 60)$	=	5.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	2125	p/h	
	=	$(2125 / 60) \times (110 / 60)$	=	64.9	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	5.2 + 3.8 + 5.8	=	14.8	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.2 + 3.8 + 64.9	=	73.9	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (33 - 13.5 / (2 \times 1.2))$	=	1145.64	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$5 \times (110 - 33) / 110$	=	4	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 4 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(5 + 4) \times 15$	=	139	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1145.64 / 139$	=	8.3	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.2 \times (110 - 33)^2 / (2 \times 110)$	=	140	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 110 - (0.5 \times 140)$	=	1646	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1646 / (4 \times 14.8)$	=	27.8	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$3.8 \times (110 - 33)^2 / (2 \times 110)$	=	103	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 110 - (0.5 \times 103)$	=	1159	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1159 / (4 \times 73.9)$	=	3.9	m <sup>2</sup> /p	
LOS	=	B				

<b>DESIGN SHEET</b>				Job No.:	<b>CHK50793710</b>	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street				Design Year:	2033 Ref
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	82	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	625	pph	
	=	$(625 / 60) \times (110 / 60)$	=	19.1	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	1145	pph	
	=	$(1145 / 60) \times (110 / 60)$	=	35.0	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	920	pph	
	=	$(920 / 60) \times (110 / 60)$	=	28.1	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	440	pph	
	=	$(440 / 60) \times (110 / 60)$	=	13.4	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	19.1 + 35.0 + 28.1	=	82.2	p/cycle	
Vtos	=	Total circulating pedestrian flow at eastern kerbside				
	=	19.1 + 35.0 + 13.4	=	67.5	p/cycle	
L	=	Crosswalk Length	=	3.6	metres	
We	=	Effective Crosswalk Width	=	4.2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$35 \times (110 - 82) / 110$	=	9	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 9 / 4.2)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(19 + 35) \times 8$	=	428	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1217.16 / 428$	=	2.8	m <sup>2</sup> /p	
LOS	=	<b>C</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$19.1 \times (110 - 82)^2 / (2 \times 110)$	=	68	p-s	
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$31.5 \times 110 - (0.5 \times 68)$	=	3431	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$3431 / (4 \times 82.2)$	=	10.4	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$35 \times (110 - 82)^2 / (2 \times 110)$	=	125	p-s	
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$12.8 \times 110 - (0.5 \times 125)$	=	1346	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1346 / (4 \times 67.5)$	=	5.0	m <sup>2</sup> /p	
LOS	=	<b>B</b>				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street				Design Year:	2033 Ref
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	1065	pph	
	=	$(1065 / 60) \times (110 / 60)$	=	32.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	1125	pph	
	=	$(1125 / 60) \times (110 / 60)$	=	34.4	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	155	pph	
	=	$(155 / 60) \times (110 / 60)$	=	4.7	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	1230	pph	
	=	$(1230 / 60) \times (110 / 60)$	=	37.6	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	32.5 + 34.4 + 4.7	=	71.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	32.5 + 34.4 + 37.6	=	104.5	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (32 - 4.6 / (2 \times 1.2))$	=	345.958	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$34 \times (110 - 32) / 110$	=	24	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 24)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(33 + 34) \times 14$	=	911	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$345.958 / 911$	=	0.4	m <sup>2</sup> /p	
LOS	=	<b>F</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$32.5 \times (110 - 32)^2 / (2 \times 110)$	=	900	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 110 - (0.5 \times 900)$	=	1332	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1332 / (4 \times 71.7)$	=	4.6	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$34.4 \times (110 - 32)^2 / (2 \times 110)$	=	951	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 110 - (0.5 \times 951)$	=	1098	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1098 / (4 \times 104.5)$	=	2.6	m <sup>2</sup> /p	
LOS	=	<b>C</b>				

<b>DESIGN SHEET</b>				<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location N_Finnie Street					Design Year: 2033 Ref	
Description:	Weekday Noon Peak			Designed By: NLY		Checked By: WCY	
C	=	Cycle Time	=	110	sec		
G	=	Effective Green Time for Pedestrians	=	86	sec		
Vcn	=	Pedestrian Count from Northern kerbside	=	1080	p/h		
	=	$(1080 / 60) \times (110 / 60)$	=	33.0	p/cycle		
Vcs	=	Pedestrian Count from Southern kerbside	=	1185	p/h		
	=	$(1185 / 60) \times (110 / 60)$	=	36.2	p/cycle		
Vsn	=	Sidewalk Flow at Northern Kerbside	=	585	p/h		
	=	$(585 / 60) \times (110 / 60)$	=	17.9	p/cycle		
Vss	=	Sidewalk Flow at Southern Kerbside	=	105	p/h		
	=	$(105 / 60) \times (110 / 60)$	=	3.2	p/cycle		
Vtotn	=	Total circulating pedestrian flow at western kerbside					
	=	33.0 + 36.2 + 17.9	=	87.1	p/cycle		
Vtots	=	Total circulating pedestrian flow at eastern kerbside					
	=	33.0 + 36.2 + 3.2	=	72.4	p/cycle		
L	=	Crosswalk Length	=	5.7	metres		
We	=	Effective Crosswalk Width	=	2.5	metres		
Sp	=	Average speed of Pedestrians	=	1.2	m/s		
TSc	=	Time-space of the crosswalk					
	=	$5.7 \times 2.5 \times (86 - 5.7 / (2 \times 1.2))$	=	1191.66	m <sup>2</sup> -s		
Nped	=	Number of pedestrians during a cycle					
	=	$36 \times (110 - 86) / 110$	=	8	p/cycle		
t	=	Total Crossing Time					
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 8)$	=	10	sec		
T	=	Total crosswalk occupancy time					
	=	$(33 + 36) \times 10$	=	698	p-s		
Mc	=	Space per pedestrian Crossing					
	=	$1191.66 / 698$	=	1.7	m <sup>2</sup> /p		
LOS	=	<b>D</b>					
<b>Compute the circulation space</b>							
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside					
	=	$33 \times (110 - 86)^2 / (2 \times 110)$	=	86	p-s		
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>		
TSn	=	Total time -space available for circulating pedestrians at northern kerbside					
	=	$9.5 \times 110 - (0.5 \times 86)$	=	1002	m <sup>2</sup> -s		
Mn	=	Circulation Area per pedestrian at northern kerbside					
	=	$1002 / (4 \times 87.1)$	=	2.9	m <sup>2</sup> /p		
LOS	=	<b>C</b>					
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside					
	=	$36.2 \times (110 - 86)^2 / (2 \times 110)$	=	95	p-s		
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>		
TSs	=	Total time -space available for circulating pedestrians at southern kerbside					
	=	$16.2 \times 110 - (0.5 \times 95)$	=	1735	m <sup>2</sup> -s		
Ms	=	Circulation Area per pedestrian at southern kerbside					
	=	$1735 / (4 \times 72.4)$	=	6.0	m <sup>2</sup> /p		
LOS	=	<b>A</b>					

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street			Design Year: 2033 Ref
Description:	Weekday Noon Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	32 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	165 pph
	=	$(165 / 60) \times (110 / 60)$	=	5.0 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	120 pph
	=	$(120 / 60) \times (110 / 60)$	=	3.7 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	250 pph
	=	$(250 / 60) \times (110 / 60)$	=	7.6 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	2085 pph
	=	$(2085 / 60) \times (110 / 60)$	=	63.7 p/cycle
Vtn	=	Total circulating pedestrian flow at western kerbside		
	=	5.0 + 3.7 + 7.6	=	16.3 p/cycle
Vts	=	Total circulating pedestrian flow at eastern kerbside		
	=	5.0 + 3.7 + 63.7	=	72.4 p/cycle
L	=	Crosswalk Length	=	17 metres
We	=	Effective Crosswalk Width	=	2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$17 \times 2 \times (32 - 17 / (2 \times 1.2))$	=	847.167 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$5 \times (110 - 32) / 110$	=	4 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 17 / 1.2 + (0.27 \times 4)$	=	18 sec
T	=	Total crosswalk occupancy time		
	=	$(5 + 4) \times 18$	=	160 p-s
Mc	=	Space per pedestrian Crossing		
	=	$847.167 / 160$	=	5.3 m <sup>2</sup> /p
LOS	=	<b>B</b>		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$5 \times (110 - 32)^2 / (2 \times 110)$	=	139 p-s
An	=	Available Area at northern kerbside	=	11.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$11.6 \times 110 - (0.5 \times 139)$	=	1206 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1206 / (4 \times 16.3)$	=	18.4 m <sup>2</sup> /p
LOS	=	<b>A</b>		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$3.7 \times (110 - 32)^2 / (2 \times 110)$	=	101 p-s
As	=	Available Area at southern kerbside	=	16.2 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.2 \times 110 - (0.5 \times 101)$	=	1731 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1731 / (4 \times 72.4)$	=	6.0 m <sup>2</sup> /p
LOS	=	<b>A</b>		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road			Design Year:	2033 Ref	
Description:	Weekday PM Peak			Designed By:	NLY	
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	33	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	80	p/h	
	=	$(80 / 60) \times (110 / 60)$	=	2.4	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	320	p/h	
	=	$(320 / 60) \times (110 / 60)$	=	9.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	635	p/h	
	=	$(635 / 60) \times (110 / 60)$	=	19.4	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	2.4 + 9.8 + 19.4	=	31.6	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.4 + 9.8 + 0.8	=	13.0	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (33 - 12 / (2 \times 1.2))$	=	1344	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$10 \times (110 - 33) / 110$	=	7	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 7 / 4)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 10) \times 15$	=	178	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1344 / 178$	=	7.5	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2.4 \times (110 - 33)^2 / (2 \times 110)$	=	66	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 66)$	=	1947	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1947 / (4 \times 31.6)$	=	15.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$9.8 \times (110 - 33)^2 / (2 \times 110)$	=	264	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 264)$	=	1716	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1716 / (4 \times 13)$	=	33.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street				Design Year:	2033 Ref
Description:	Weekday PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	31	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	65	p/h	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	210	p/h	
	=	$(210 / 60) \times (110 / 60)$	=	6.4	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	1065	p/h	
	=	$(1065 / 60) \times (110 / 60)$	=	32.5	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	2.0 + 0.8 + 6.4	=	9.2	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.0 + 0.8 + 32.5	=	35.3	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (31 - 13.5 / (2 \times 1.2))$	=	1061.94	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 31) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 15$	=	41	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1061.94 / 41$	=	26.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2 \times (110 - 31)^2 / (2 \times 110)$	=	56	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 110 - (0.5 \times 56)$	=	1688	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1688 / (4 \times 9.2)$	=	46.0	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$0.8 \times (110 - 31)^2 / (2 \times 110)$	=	22	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 110 - (0.5 \times 22)$	=	1199	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1199 / (4 \times 35.3)$	=	8.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street			Design Year: 2033 Ref
Description:	Weekday PM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	82 sec
Vcn	=	Pedestrian Count from Western kerbside	=	355 pph
	=	$(355 / 60) \times (110 / 60)$	=	10.8 p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	815 pph
	=	$(815 / 60) \times (110 / 60)$	=	24.9 p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	335 pph
	=	$(335 / 60) \times (110 / 60)$	=	10.2 p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	105 pph
	=	$(105 / 60) \times (110 / 60)$	=	3.2 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	10.8 + 24.9 + 10.2	=	46.0 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	10.8 + 24.9 + 3.2	=	39.0 p/cycle
L	=	Crosswalk Length	=	3.6 metres
We	=	Effective Crosswalk Width	=	4.2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$25 \times (110 - 82) / 110$	=	6 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 6 / 4.2)$	=	7 sec
T	=	Total crosswalk occupancy time		
	=	$(11 + 25) \times 7$	=	265 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1217.16 / 265$	=	4.6 m <sup>2</sup> /p
LOS	=	<b>B</b>		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside		
	=	$10.8 \times (110 - 82)^2 / (2 \times 110)$	=	39 p-s
An	=	Available Area at Western kerbside	=	31.5 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at Western kerbside		
	=	$31.5 \times 110 - (0.5 \times 39)$	=	3446 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at Western kerbside		
	=	$3446 / (4 \times 46)$	=	18.7 m <sup>2</sup> /p
LOS	=	<b>A</b>		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside		
	=	$24.9 \times (110 - 82)^2 / (2 \times 110)$	=	89 p-s
As	=	Available Area at Eastern kerbside	=	12.8 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside		
	=	$12.8 \times 110 - (0.5 \times 89)$	=	1364 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at Eastern kerbside		
	=	$1364 / (4 \times 39)$	=	8.8 m <sup>2</sup> /p
LOS	=	<b>A</b>		

<b>DESIGN SHEET</b>				Job No.:	<b>CHK50793710</b>	MVA ASIA LIMITED
Junction:	Location M. Finnie Street			Design Year:	2033 Ref	
Description:	Weekday PM Peak			Designed By:	NLY	
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	30	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	170	p/h	
	=	$(170 / 60) \times (110 / 60)$	=	5.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	605	p/h	
	=	$(605 / 60) \times (110 / 60)$	=	18.5	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	200	p/h	
	=	$(200 / 60) \times (110 / 60)$	=	6.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	460	p/h	
	=	$(460 / 60) \times (110 / 60)$	=	14.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	5.2 + 18.5 + 6.1	=	29.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.2 + 18.5 + 14.1	=	37.7	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (30 - 4.6 / (2 \times 1.2))$	=	322.958	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$18 \times (110 - 30) / 110$	=	13	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 13)$	=	11	sec	
T	=	Total crosswalk occupancy time				
	=	$(5 + 18) \times 11$	=	253	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$322.958 / 253$	=	1.3	m <sup>2</sup> /p	
LOS	=	<b>E</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.2 \times (110 - 30)^2 / (2 \times 110)$	=	151	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 110 - (0.5 \times 151)$	=	1706	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1706 / (4 \times 29.8)$	=	14.3	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$18.5 \times (110 - 30)^2 / (2 \times 110)$	=	538	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 110 - (0.5 \times 538)$	=	1304	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1304 / (4 \times 37.7)$	=	8.6	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

<b>DESIGN SHEET</b>				<b>Job No.: CHK50793710</b>				<b>MVA ASIA LIMITED</b>			
Junction:		Location N_Finnie Street						Design Year:		2033 Ref	
Description:		Weekday PM Peak						Designed By:		NLY	
								Checked By:		WCY	
C	=	Cycle Time	=	110	sec						
G	=	Effective Green Time for Pedestrians	=	88	sec						
Vcn	=	Pedestrian Count from Northern kerbside	=	225	p/h						
	=	$(225 / 60) \times (110 / 60)$	=	6.9	p/cycle						
Vcs	=	Pedestrian Count from Southern kerbside	=	685	p/h						
	=	$(685 / 60) \times (110 / 60)$	=	20.9	p/cycle						
Vsn	=	Sidewalk Flow at Northern Kerbside	=	230	p/h						
	=	$(230 / 60) \times (110 / 60)$	=	7.0	p/cycle						
Vss	=	Sidewalk Flow at Southern Kerbside	=	65	p/h						
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle						
Vtotn	=	Total circulating pedestrian flow at western kerbside									
	=	6.9 + 20.9 + 7.0	=	34.8	p/cycle						
Vtots	=	Total circulating pedestrian flow at eastern kerbside									
	=	6.9 + 20.9 + 2.0	=	29.8	p/cycle						
L	=	Crosswalk Length	=	5.7	metres						
We	=	Effective Crosswalk Width	=	2.5	metres						
Sp	=	Average speed of Pedestrians	=	1.2	m/s						
TSc	=	Time-space of the crosswalk									
	=	$5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s						
Nped	=	Number of pedestrians during a cycle									
	=	$21 \times (110 - 88) / 110$	=	4	p/cycle						
t	=	Total Crossing Time									
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 4)$	=	9	sec						
T	=	Total crosswalk occupancy time									
	=	$(7 + 21) \times 9$	=	252	p-s						
Mc	=	Space per pedestrian Crossing									
	=	$1220.16 / 252$	=	4.8	m <sup>2</sup> /p						
LOS	=	<b>B</b>									
<b>Compute the circulation space</b>											
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside									
	=	$6.9 \times (110 - 88)^2 / (2 \times 110)$	=	15	p-s						
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>						
TSn	=	Total time -space available for circulating pedestrians at northern kerbside									
	=	$9.5 \times 110 - (0.5 \times 15)$	=	1037	m <sup>2</sup> -s						
Mn	=	Circulation Area per pedestrian at northern kerbside									
	=	$1037 / (4 \times 34.8)$	=	7.4	m <sup>2</sup> /p						
LOS	=	<b>A</b>									
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside									
	=	$20.9 \times (110 - 88)^2 / (2 \times 110)$	=	46	p-s						
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>						
TSs	=	Total time -space available for circulating pedestrians at southern kerbside									
	=	$16.2 \times 110 - (0.5 \times 46)$	=	1759	m <sup>2</sup> -s						
Ms	=	Circulation Area per pedestrian at southern kerbside									
	=	$1759 / (4 \times 29.8)$	=	14.8	m <sup>2</sup> /p						
LOS	=	<b>A</b>									

<b>DESIGN SHEET</b>		<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location O_Hoi Tai Street			Design Year:	2033 Ref
Description:	Weekday PM Peak			Designed By:	NLY
				Checked By:	WCY
C	=	Cycle Time	=	110	sec
G	=	Effective Green Time for Pedestrians	=	30	sec
Vcn	=	Pedestrian Count from Northern kerbside	=	140	p/h
	=	$(140 / 60) \times (110 / 60)$	=	4.3	p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	120	p/h
	=	$(120 / 60) \times (110 / 60)$	=	3.7	p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	190	p/h
	=	$(190 / 60) \times (110 / 60)$	=	5.8	p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	710	p/h
	=	$(710 / 60) \times (110 / 60)$	=	21.7	p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside			
	=	4.3 + 3.7 + 5.8	=	13.8	p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside			
	=	4.3 + 3.7 + 21.7	=	29.6	p/cycle
L	=	Crosswalk Length	=	17	metres
We	=	Effective Crosswalk Width	=	2	metres
Sp	=	Average speed of Pedestrians	=	1.2	m/s
TSc	=	Time-space of the crosswalk			
	=	$17 \times 2 \times (30 - 17 / (2 \times 1.2))$	=	779.167	m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle			
	=	$4 \times (110 - 30) / 110$	=	3	p/cycle
t	=	Total Crossing Time			
	=	$3.2 + 17 / 1.2 + (0.27 \times 3)$	=	18	sec
T	=	Total crosswalk occupancy time			
	=	$(4 + 4) \times 18$	=	145	p-s
Mc	=	Space per pedestrian Crossing			
	=	$779.167 / 145$	=	5.4	m <sup>2</sup> /p
LOS	=	<b>B</b>			
<b>Compute the circulation space</b>					
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	=	$4.3 \times (110 - 30)^2 / (2 \times 110)$	=	124	p-s
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside			
	=	$11.6 \times 110 - (0.5 \times 124)$	=	1214	m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside			
	=	$1214 / (4 \times 13.8)$	=	22.1	m <sup>2</sup> /p
LOS	=	<b>A</b>			
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	=	$3.7 \times (110 - 30)^2 / (2 \times 110)$	=	107	p-s
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside			
	=	$16.2 \times 110 - (0.5 \times 107)$	=	1729	m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside			
	=	$1729 / (4 \times 29.6)$	=	14.6	m <sup>2</sup> /p
LOS	=	<b>A</b>			

<b>DESIGN SHEET</b>		<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location G_Java Road			Design Year:	2033 Ref
Description:	Weekend AM Peak			Designed By:	NLY
				Checked By:	WCY
C	=	Cycle Time	=	115	sec
G	=	Effective Green Time for Pedestrians	=	24	sec
Vcn	=	Pedestrian Count from Northern kerbside	=	55	pph
	=	$(55 / 60) \times (115 / 60)$	=	1.8	p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	35	pph
	=	$(35 / 60) \times (115 / 60)$	=	1.1	p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	505	pph
	=	$(505 / 60) \times (115 / 60)$	=	16.1	p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	pph
	=	$(25 / 60) \times (115 / 60)$	=	0.8	p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside			
	=	1.8 + 1.1 + 16.1	=	19.0	p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside			
	=	1.8 + 1.1 + 0.8	=	3.7	p/cycle
L	=	Crosswalk Length	=	12	metres
We	=	Effective Crosswalk Width	=	4	metres
Sp	=	Average speed of Pedestrians	=	1.2	m/s
TSc	=	Time-space of the crosswalk			
	=	$12 \times 4 \times (24 - 12 / (2 \times 1.2))$	=	912	m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle			
	=	$2 \times (115 - 24) / 115$	=	1	p/cycle
t	=	Total Crossing Time			
	=	$3.2 + 12 / 1.2 + (0.81 \times 1 / 4)$	=	13	sec
T	=	Total crosswalk occupancy time			
	=	$(2 + 1) \times 13$	=	39	p-s
Mc	=	Space per pedestrian Crossing			
	=	$912 / 39$	=	23.5	m <sup>2</sup> /p
LOS	=	A			
<b>Compute the circulation space</b>					
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	=	$1.8 \times (115 - 24)^2 / (2 \times 115)$	=	63	p-s
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside			
	=	$18 \times 115 - (0.5 \times 63)$	=	2038	m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside			
	=	$2038 / (4 \times 19)$	=	26.8	m <sup>2</sup> /p
LOS	=	A			
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	=	$1.1 \times (115 - 24)^2 / (2 \times 115)$	=	40	p-s
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside			
	=	$16.8 \times 115 - (0.5 \times 40)$	=	1912	m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside			
	=	$1912 / (4 \times 3.7)$	=	130.1	m <sup>2</sup> /p
LOS	=	A			

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street			Design Year: 2033 Ref
Description:	Weekend AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	36 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	45 pph
	=	$(45 / 60) \times (115 / 60)$	=	1.4 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	65 pph
	=	$(65 / 60) \times (115 / 60)$	=	2.1 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	25 pph
	=	$(25 / 60) \times (115 / 60)$	=	0.8 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	125 pph
	=	$(125 / 60) \times (115 / 60)$	=	4.0 p/cycle
Vtn	=	Total circulating pedestrian flow at western kerbside		
	=	1.4 + 2.1 + 0.8	=	4.3 p/cycle
Vtos	=	Total circulating pedestrian flow at eastern kerbside		
	=	1.4 + 2.1 + 4.0	=	7.5 p/cycle
L	=	Crosswalk Length	=	13.5 metres
We	=	Effective Crosswalk Width	=	3.1 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$2 \times (115 - 36) / 115$	=	1 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15 sec
T	=	Total crosswalk occupancy time		
	=	$(1 + 2) \times 15$	=	52 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1271.19 / 52$	=	24.4 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$1.4 \times (115 - 36)^2 / (2 \times 115)$	=	39 p-s
An	=	Available Area at northern kerbside	=	15.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$15.6 \times 115 - (0.5 \times 39)$	=	1774 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1774 / (4 \times 4.3)$	=	102.9 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$2.1 \times (115 - 36)^2 / (2 \times 115)$	=	56 p-s
As	=	Available Area at southern kerbside	=	11 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$11 \times 115 - (0.5 \times 56)$	=	1237 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1237 / (4 \times 7.5)$	=	41.2 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street			Design Year: 2033 Ref
Description:	Weekend AM Peak			Designed By: NLY Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	88 sec
Vcn	=	Pedestrian Count from Western kerbside	=	105 pph
	=	$(105 / 60) \times (115 / 60)$	=	3.4 p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	85 pph
	=	$(85 / 60) \times (115 / 60)$	=	2.7 p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	125 pph
	=	$(125 / 60) \times (115 / 60)$	=	4.0 p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	65 pph
	=	$(65 / 60) \times (115 / 60)$	=	2.1 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	3.4 + 2.7 + 4.0	=	10.1 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	3.4 + 2.7 + 2.1	=	8.1 p/cycle
L	=	Crosswalk Length	=	3.6 metres
We	=	Effective Crosswalk Width	=	4.2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$3.6 \times 4.2 \times (88 - 3.6 / (2 \times 1.2))$	=	1307.88 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$3 \times (115 - 88) / 115$	=	1 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 1 / 4.2)$	=	6 sec
T	=	Total crosswalk occupancy time		
	=	$(3 + 3) \times 6$	=	39 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1307.88 / 39$	=	33.9 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside		
	=	$3.4 \times (115 - 88)^2 / (2 \times 115)$	=	11 p-s
An	=	Available Area at Western kerbside	=	31.5 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at Western kerbside		
	=	$31.5 \times 115 - (0.5 \times 11)$	=	3617 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at Western kerbside		
	=	$3617 / (4 \times 10.1)$	=	89.9 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside		
	=	$2.7 \times (115 - 88)^2 / (2 \times 115)$	=	9 p-s
As	=	Available Area at Eastern kerbside	=	12.8 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside		
	=	$12.8 \times 115 - (0.5 \times 9)$	=	1468 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at Eastern kerbside		
	=	$1468 / (4 \times 8.1)$	=	45.0 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street			Design Year: 2033 Ref
Description:	Weekend AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	35 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	105 pph
	=	$(105 / 60) \times (115 / 60)$	=	3.4 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	150 pph
	=	$(150 / 60) \times (115 / 60)$	=	4.8 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	190 pph
	=	$(190 / 60) \times (115 / 60)$	=	6.1 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	230 pph
	=	$(230 / 60) \times (115 / 60)$	=	7.3 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	3.4 + 4.8 + 6.1	=	14.2 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	3.4 + 4.8 + 7.3	=	15.5 p/cycle
L	=	Crosswalk Length	=	4.6 metres
We	=	Effective Crosswalk Width	=	2.5 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$	=	380.458 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$5 \times (115 - 35) / 115$	=	3 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 3)$	=	8 sec
T	=	Total crosswalk occupancy time		
	=	$(3 + 5) \times 8$	=	65 p-s
Mc	=	Space per pedestrian Crossing		
	=	$380.458 / 65$	=	5.9 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$3.4 \times (115 - 35)^2 / (2 \times 115)$	=	93 p-s
An	=	Available Area at northern kerbside	=	16.2 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$16.2 \times 115 - (0.5 \times 93)$	=	1816 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1816 / (4 \times 14.2)$	=	31.9 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$4.8 \times (115 - 35)^2 / (2 \times 115)$	=	133 p-s
As	=	Available Area at southern kerbside	=	14.3 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$14.3 \times 115 - (0.5 \times 133)$	=	1578 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1578 / (4 \times 15.5)$	=	25.5 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N_Finnie Street			Design Year: 2033 Ref
Description:	Weekend AM Peak			Designed By: NLY Checked By: WCY
C	= Cycle Time	=	115	sec
G	= Effective Green Time for Pedestrians	=	88	sec
Vcn	= Pedestrian Count from Northern kerbside	=	130	p/h
	= $(130 / 60) \times (115 / 60)$	=	4.2	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	130	p/h
	= $(130 / 60) \times (115 / 60)$	=	4.2	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	140	p/h
	= $(140 / 60) \times (115 / 60)$	=	4.5	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	170	p/h
	= $(170 / 60) \times (115 / 60)$	=	5.4	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 4.2 + 4.2 + 4.5	=	12.8	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 4.2 + 4.2 + 5.4	=	13.7	p/cycle
L	= Crosswalk Length	=	5.7	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $4 \times (115 - 88) / 115$	=	1	p/cycle
t	= Total Crossing Time			
	= $3.2 + 5.7 / 1.2 + (0.27 \times 1)$	=	8	sec
T	= Total crosswalk occupancy time			
	= $(4 + 4) \times 8$	=	68	p-s
Mc	= Space per pedestrian Crossing			
	= $1220.16 / 68$	=	17.9	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $4.2 \times (115 - 88)^2 / (2 \times 115)$	=	13	p-s
An	= Available Area at northern kerbside	=	9.5	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $9.5 \times 115 - (0.5 \times 13)$	=	1086	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1086 / (4 \times 12.8)$	=	21.2	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $4.2 \times (115 - 88)^2 / (2 \times 115)$	=	13	p-s
As	= Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside			
	= $16.2 \times 115 - (0.5 \times 13)$	=	1856	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1856 / (4 \times 13.7)$	=	33.8	m <sup>2</sup> /p
LOS	= A			

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street			Design Year: 2033 Ref
Description:	Weekend AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	35 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	170 pph
	=	$(170 / 60) \times (115 / 60)$	=	5.4 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	190 pph
	=	$(190 / 60) \times (115 / 60)$	=	6.1 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	105 pph
	=	$(105 / 60) \times (115 / 60)$	=	3.4 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	65 pph
	=	$(65 / 60) \times (115 / 60)$	=	2.1 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	5.4 + 6.1 + 3.4	=	14.9 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	5.4 + 6.1 + 2.1	=	13.6 p/cycle
L	=	Crosswalk Length	=	17 metres
We	=	Effective Crosswalk Width	=	2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$17 \times 2 \times (35 - 17 / (2 \times 1.2))$	=	949.167 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$6 \times (115 - 35) / 115$	=	4 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 17 / 1.2 + (0.27 \times 4)$	=	19 sec
T	=	Total crosswalk occupancy time		
	=	$(5 + 6) \times 19$	=	213 p-s
Mc	=	Space per pedestrian Crossing		
	=	$949.167 / 213$	=	4.5 m <sup>2</sup> /p
LOS	=	<b>B</b>		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$5.4 \times (115 - 35)^2 / (2 \times 115)$	=	151 p-s
An	=	Available Area at northern kerbside	=	11.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$11.6 \times 115 - (0.5 \times 151)$	=	1258 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1258 / (4 \times 14.9)$	=	21.2 m <sup>2</sup> /p
LOS	=	<b>A</b>		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$6.1 \times (115 - 35)^2 / (2 \times 115)$	=	169 p-s
As	=	Available Area at southern kerbside	=	16.2 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.2 \times 115 - (0.5 \times 169)$	=	1779 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1779 / (4 \times 13.6)$	=	32.8 m <sup>2</sup> /p
LOS	=	<b>A</b>		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road			Design Year:	2033 Ref	
Description:	Weekend Noon Peak			Designed By:	NLY	Checked By: WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	55	p/h	
	=	$(55 / 60) \times (110 / 60)$	=	1.7	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	35	p/h	
	=	$(35 / 60) \times (110 / 60)$	=	1.1	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	300	p/h	
	=	$(300 / 60) \times (110 / 60)$	=	9.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	65	p/h	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.7 + 1.1 + 9.2	=	11.9	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.7 + 1.1 + 2.0	=	4.7	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 32) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 1 / 4)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 13$	=	37	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 37$	=	35.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.7 \times (110 - 32)^2 / (2 \times 110)$	=	46	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 46)$	=	1957	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1957 / (4 \times 11.9)$	=	41.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.1 \times (110 - 32)^2 / (2 \times 110)$	=	30	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 30)$	=	1833	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1833 / (4 \times 4.7)$	=	96.8	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street			Design Year: 2033 Ref
Description:	Weekend Noon Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	33 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	65 pph
	=	$(65 / 60) \times (110 / 60)$	=	2.0 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	45 pph
	=	$(45 / 60) \times (110 / 60)$	=	1.4 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	65 pph
	=	$(65 / 60) \times (110 / 60)$	=	2.0 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	420 pph
	=	$(420 / 60) \times (110 / 60)$	=	12.8 p/cycle
Vtn	=	Total circulating pedestrian flow at western kerbside		
	=	2.0 + 1.4 + 2.0	=	5.3 p/cycle
Vts	=	Total circulating pedestrian flow at eastern kerbside		
	=	2.0 + 1.4 + 12.8	=	16.2 p/cycle
L	=	Crosswalk Length	=	13.5 metres
We	=	Effective Crosswalk Width	=	3.1 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$13.5 \times 3.1 \times (33 - 13.5 / (2 \times 1.2))$	=	1145.64 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$2 \times (110 - 33) / 110$	=	1 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15 sec
T	=	Total crosswalk occupancy time		
	=	$(2 + 1) \times 15$	=	50 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1145.64 / 50$	=	23.0 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$2 \times (110 - 33)^2 / (2 \times 110)$	=	54 p-s
An	=	Available Area at northern kerbside	=	15.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$15.6 \times 110 - (0.5 \times 54)$	=	1689 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1689 / (4 \times 5.3)$	=	79.0 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$1.4 \times (110 - 33)^2 / (2 \times 110)$	=	37 p-s
As	=	Available Area at southern kerbside	=	11 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$11 \times 110 - (0.5 \times 37)$	=	1191 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1191 / (4 \times 16.2)$	=	18.4 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street				Design Year:	2033 Ref
Description:	Weekend Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	82	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	315	p/h	
	=	$(315 / 60) \times (110 / 60)$	=	9.6	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	315	p/h	
	=	$(315 / 60) \times (110 / 60)$	=	9.6	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	230	p/h	
	=	$(230 / 60) \times (110 / 60)$	=	7.0	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	125	p/h	
	=	$(125 / 60) \times (110 / 60)$	=	3.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	9.6 + 9.6 + 7.0	=	26.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	9.6 + 9.6 + 3.8	=	23.1	p/cycle	
L	=	Crosswalk Length	=	3.6	metres	
We	=	Effective Crosswalk Width	=	4.2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$10 \times (110 - 82) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 2 / 4.2)$	=	7	sec	
T	=	Total crosswalk occupancy time				
	=	$(10 + 10) \times 7$	=	128	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1217.16 / 128$	=	9.5	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$9.6 \times (110 - 82)^2 / (2 \times 110)$	=	34	p-s	
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$31.5 \times 110 - (0.5 \times 34)$	=	3448	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$3448 / (4 \times 26.3)$	=	32.8	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$9.6 \times (110 - 82)^2 / (2 \times 110)$	=	34	p-s	
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$12.8 \times 110 - (0.5 \times 34)$	=	1391	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1391 / (4 \times 23.1)$	=	15.1	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M_Finnie Street			Design Year: 2033 Ref
Description:	Weekend Noon Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	32 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	250 pph
	=	$(250 / 60) \times (110 / 60)$	=	7.6 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	420 pph
	=	$(420 / 60) \times (110 / 60)$	=	12.8 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	170 pph
	=	$(170 / 60) \times (110 / 60)$	=	5.2 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	440 pph
	=	$(440 / 60) \times (110 / 60)$	=	13.4 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	7.6 + 12.8 + 5.2	=	25.7 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	7.6 + 12.8 + 13.4	=	33.9 p/cycle
L	=	Crosswalk Length	=	4.6 metres
We	=	Effective Crosswalk Width	=	2.5 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$4.6 \times 2.5 \times (32 - 4.6 / (2 \times 1.2))$	=	345.958 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$13 \times (110 - 32) / 110$	=	9 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 9)$	=	9 sec
T	=	Total crosswalk occupancy time		
	=	$(8 + 13) \times 9$	=	194 p-s
Mc	=	Space per pedestrian Crossing		
	=	$345.958 / 194$	=	1.8 m <sup>2</sup> /p
LOS	=	<b>D</b>		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$7.6 \times (110 - 32)^2 / (2 \times 110)$	=	211 p-s
An	=	Available Area at northern kerbside	=	16.2 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$16.2 \times 110 - (0.5 \times 211)$	=	1676 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1676 / (4 \times 25.7)$	=	16.3 m <sup>2</sup> /p
LOS	=	<b>A</b>		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$12.8 \times (110 - 32)^2 / (2 \times 110)$	=	355 p-s
As	=	Available Area at southern kerbside	=	14.3 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$14.3 \times 110 - (0.5 \times 355)$	=	1396 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1396 / (4 \times 33.9)$	=	10.3 m <sup>2</sup> /p
LOS	=	<b>A</b>		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N_Finnie Street	Design Year:	2033 Ref	
Description:	Weekend Noon Peak	Designed By:	NLY	Checked By: WCY
C	= Cycle Time	=	110	sec
G	= Effective Green Time for Pedestrians	=	86	sec
Vcn	= Pedestrian Count from Northern kerbside	=	255	p/h
	= $(255 / 60) \times (110 / 60)$	=	7.8	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	295	p/h
	= $(295 / 60) \times (110 / 60)$	=	9.0	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	280	p/h
	= $(280 / 60) \times (110 / 60)$	=	8.6	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	315	p/h
	= $(315 / 60) \times (110 / 60)$	=	9.6	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 7.8 + 9.0 + 8.6	=	25.4	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 7.8 + 9.0 + 9.6	=	26.4	p/cycle
L	= Crosswalk Length	=	5.7	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $5.7 \times 2.5 \times (86 - 5.7 / (2 \times 1.2))$	=	1191.66	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $9 \times (110 - 86) / 110$	=	2	p/cycle
t	= Total Crossing Time			
	= $3.2 + 5.7 / 1.2 + (0.27 \times 2)$	=	8	sec
T	= Total crosswalk occupancy time			
	= $(8 + 9) \times 8$	=	143	p-s
Mc	= Space per pedestrian Crossing			
	= $1191.66 / 143$	=	8.4	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $7.8 \times (110 - 86)^2 / (2 \times 110)$	=	20	p-s
An	= Available Area at northern kerbside	=	9.5	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $9.5 \times 110 - (0.5 \times 20)$	=	1035	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1035 / (4 \times 25.4)$	=	10.2	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $9 \times (110 - 86)^2 / (2 \times 110)$	=	24	p-s
As	= Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside			
	= $16.2 \times 110 - (0.5 \times 24)$	=	1770	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1770 / (4 \times 26.4)$	=	16.7	m <sup>2</sup> /p
LOS	= A			

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street				Design Year:	2033 Ref
Description:	Weekend Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	190	p/h	
	=	$(190 / 60) \times (110 / 60)$	=	5.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	295	p/h	
	=	$(295 / 60) \times (110 / 60)$	=	9.0	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	85	p/h	
	=	$(85 / 60) \times (110 / 60)$	=	2.6	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	375	p/h	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	5.8 + 9.0 + 2.6	=	17.4	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.8 + 9.0 + 11.5	=	26.3	p/cycle	
L	=	Crosswalk Length	=	17	metres	
We	=	Effective Crosswalk Width	=	2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$17 \times 2 \times (32 - 17 / (2 \times 1.2))$	=	847.167	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$9 \times (110 - 32) / 110$	=	6	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 17 / 1.2 + (0.27 \times 6)$	=	19	sec	
T	=	Total crosswalk occupancy time				
	=	$(6 + 9) \times 19$	=	283	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$847.167 / 283$	=	3.0	m <sup>2</sup> /p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.8 \times (110 - 32)^2 / (2 \times 110)$	=	161	p-s	
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$11.6 \times 110 - (0.5 \times 161)$	=	1196	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1196 / (4 \times 17.4)$	=	17.2	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$9 \times (110 - 32)^2 / (2 \times 110)$	=	249	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 249)$	=	1657	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1657 / (4 \times 26.3)$	=	15.8	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road			Design Year: 2033 Ref
Description:	Weekend PM Peak			Designed By: NLY Checked By: WCY
C	= Cycle Time	=	110	sec
G	= Effective Green Time for Pedestrians	=	32	sec
Vcn	= Pedestrian Count from Northern kerbside	=	55	p/h
	= $(55 / 60) \times (110 / 60)$	=	1.7	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	50	p/h
	= $(50 / 60) \times (110 / 60)$	=	1.5	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	345	p/h
	= $(345 / 60) \times (110 / 60)$	=	10.5	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	105	p/h
	= $(105 / 60) \times (110 / 60)$	=	3.2	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 1.7 + 1.5 + 10.5	=	13.8	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 1.7 + 1.5 + 3.2	=	6.4	p/cycle
L	= Crosswalk Length	=	12	metres
We	= Effective Crosswalk Width	=	4	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $2 \times (110 - 32) / 110$	=	1	p/cycle
t	= Total Crossing Time			
	= $3.2 + 12 / 1.2 + (0.81 \times 1 / 4)$	=	13	sec
T	= Total crosswalk occupancy time			
	= $(2 + 2) \times 13$	=	43	p-s
Mc	= Space per pedestrian Crossing			
	= $1296 / 43$	=	30.1	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $1.7 \times (110 - 32)^2 / (2 \times 110)$	=	46	p-s
An	= Available Area at northern kerbside	=	18	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $18 \times 110 - (0.5 \times 46)$	=	1957	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1957 / (4 \times 13.8)$	=	35.6	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $1.5 \times (110 - 32)^2 / (2 \times 110)$	=	42	p-s
As	= Available Area at southern kerbside	=	16.8	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside			
	= $16.8 \times 110 - (0.5 \times 42)$	=	1827	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1827 / (4 \times 6.4)$	=	71.2	m <sup>2</sup> /p
LOS	= A			

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street				Design Year:	2033 Ref
Description:	Weekend PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	36	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	65	p/h	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	420	p/h	
	=	$(420 / 60) \times (110 / 60)$	=	12.8	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	0.8 + 0.8 + 2.0	=	3.5	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	0.8 + 0.8 + 12.8	=	14.4	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (110 - 36) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 15$	=	22	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1271.19 / 22$	=	57.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$0.8 \times (110 - 36)^2 / (2 \times 110)$	=	19	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 110 - (0.5 \times 19)$	=	1706	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1706 / (4 \times 3.5)$	=	121.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$0.8 \times (110 - 36)^2 / (2 \times 110)$	=	19	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 110 - (0.5 \times 19)$	=	1200	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1200 / (4 \times 14.4)$	=	20.9	m <sup>2</sup> /p	
LOS	=	A				

<b>DESIGN SHEET</b>				Job No.:	<b>CHK50793710</b>	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street				Design Year:	2033 Ref
Description:	Weekend PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	83	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	230	p/h	
	=	$(230 / 60) \times (110 / 60)$	=	7.0	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	275	p/h	
	=	$(275 / 60) \times (110 / 60)$	=	8.4	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	210	p/h	
	=	$(210 / 60) \times (110 / 60)$	=	6.4	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	125	p/h	
	=	$(125 / 60) \times (110 / 60)$	=	3.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.0 + 8.4 + 6.4	=	21.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.0 + 8.4 + 3.8	=	19.3	p/cycle	
L	=	Crosswalk Length	=	3.6	metres	
We	=	Effective Crosswalk Width	=	4.2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$3.6 \times 4.2 \times (83 - 3.6 / (2 \times 1.2))$	=	1232.28	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$8 \times (110 - 83) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 2 / 4.2)$	=	7	sec	
T	=	Total crosswalk occupancy time				
	=	$(7 + 8) \times 7$	=	102	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1232.28 / 102$	=	12.1	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$7 \times (110 - 83)^2 / (2 \times 110)$	=	23	p-s	
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$31.5 \times 110 - (0.5 \times 23)$	=	3453	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$3453 / (4 \times 21.8)$	=	39.5	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$8.4 \times (110 - 83)^2 / (2 \times 110)$	=	28	p-s	
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$12.8 \times 110 - (0.5 \times 28)$	=	1394	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1394 / (4 \times 19.3)$	=	18.1	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street				Design Year:	2033 Ref
Description:	Weekend PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	190	p/h	
	=	$(190 / 60) \times (110 / 60)$	=	5.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	375	p/h	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	190	p/h	
	=	$(190 / 60) \times (110 / 60)$	=	5.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	375	p/h	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	5.8 + 11.5	=	23.1	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.8 + 11.5	=	28.7	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$	=	380.458	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$11 \times (110 - 35) / 110$	=	8	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 8)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(6 + 11) \times 9$	=	158	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$380.458 / 158$	=	2.4	m <sup>2</sup> /p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.8 \times (110 - 35)^2 / (2 \times 110)$	=	148	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 110 - (0.5 \times 148)$	=	1708	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1708 / (4 \times 23.1)$	=	18.5	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$11.5 \times (110 - 35)^2 / (2 \times 110)$	=	293	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 110 - (0.5 \times 293)$	=	1427	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1427 / (4 \times 28.7)$	=	12.4	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N_Finnie Street			Design Year:	2033 Ref	
Description:	Weekend PM Peak			Designed By:	NLY	Checked By: WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	83	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	235	p/h	
	=	$(235 / 60) \times (110 / 60)$	=	7.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	255	p/h	
	=	$(255 / 60) \times (110 / 60)$	=	7.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	70	p/h	
	=	$(70 / 60) \times (110 / 60)$	=	2.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	250	p/h	
	=	$(250 / 60) \times (110 / 60)$	=	7.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.2 + 7.8 + 2.1	=	17.1	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.2 + 7.8 + 7.6	=	22.6	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (83 - 5.7 / (2 \times 1.2))$	=	1148.91	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$8 \times (110 - 83) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 2)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(7 + 8) \times 8$	=	127	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1148.91 / 127$	=	9.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$7.2 \times (110 - 83)^2 / (2 \times 110)$	=	24	p-s	
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 110 - (0.5 \times 24)$	=	1033	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1033 / (4 \times 17.1)$	=	15.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$7.8 \times (110 - 83)^2 / (2 \times 110)$	=	26	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 26)$	=	1769	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1769 / (4 \times 22.6)$	=	19.6	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street				Design Year:	2033 Ref
Description:	Weekend PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	150	p/h	
	=	$(150 / 60) \times (110 / 60)$	=	4.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	295	p/h	
	=	$(295 / 60) \times (110 / 60)$	=	9.0	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	105	p/h	
	=	$(105 / 60) \times (110 / 60)$	=	3.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	315	p/h	
	=	$(315 / 60) \times (110 / 60)$	=	9.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	4.6 + 9.0 + 3.2	=	16.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	4.6 + 9.0 + 9.6	=	23.2	p/cycle	
L	=	Crosswalk Length	=	17	metres	
We	=	Effective Crosswalk Width	=	2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$17 \times 2 \times (35 - 17 / (2 \times 1.2))$	=	949.167	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$9 \times (110 - 35) / 110$	=	6	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 17 / 1.2 + (0.27 \times 6)$	=	19	sec	
T	=	Total crosswalk occupancy time				
	=	$(5 + 9) \times 19$	=	259	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$949.167 / 259$	=	3.7	m <sup>2</sup> /p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$4.6 \times (110 - 35)^2 / (2 \times 110)$	=	117	p-s	
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$11.6 \times 110 - (0.5 \times 117)$	=	1217	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1217 / (4 \times 16.8)$	=	18.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$9 \times (110 - 35)^2 / (2 \times 110)$	=	230	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 230)$	=	1667	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1667 / (4 \times 23.2)$	=	17.9	m <sup>2</sup> /p	
LOS	=	A				

## Calculation Sheets - 2033 Design Year

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road			Design Year: 2033 Des
Description:	Weekday AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	24 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	85 pph
	=	$(85 / 60) \times (115 / 60)$	=	2.7 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	65 pph
	=	$(65 / 60) \times (115 / 60)$	=	2.1 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	920 pph
	=	$(920 / 60) \times (115 / 60)$	=	29.4 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	25 pph
	=	$(25 / 60) \times (115 / 60)$	=	0.8 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	2.7 + 2.1 + 29.4	=	34.2 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	2.7 + 2.1 + 0.8	=	5.6 p/cycle
L	=	Crosswalk Length	=	12 metres
We	=	Effective Crosswalk Width	=	4 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$12 \times 4 \times (24 - 12 / (2 \times 1.2))$	=	912 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$3 \times (115 - 24) / 115$	=	2 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14 sec
T	=	Total crosswalk occupancy time		
	=	$(3 + 2) \times 14$	=	65 p-s
Mc	=	Space per pedestrian Crossing		
	=	$912 / 65$	=	14.0 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$2.7 \times (115 - 24)^2 / (2 \times 115)$	=	98 p-s
An	=	Available Area at northern kerbside	=	18 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$18 \times 115 - (0.5 \times 98)$	=	2021 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$2021 / (4 \times 34.2)$	=	14.8 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$2.1 \times (115 - 24)^2 / (2 \times 115)$	=	75 p-s
As	=	Available Area at southern kerbside	=	16.8 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.8 \times 115 - (0.5 \times 75)$	=	1895 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1895 / (4 \times 5.6)$	=	84.7 m <sup>2</sup> /p
LOS	=	A		

<b>DESIGN SHEET</b>		<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location K Hoi Tai Street			Design Year:	2033 Des
Description:	Weekday AM Peak			Designed By:	NLY
				Checked By:	WCY
C	=	Cycle Time	=	115	sec
G	=	Effective Green Time for Pedestrians	=	36	sec
Vcn	=	Pedestrian Count from Northern kerbside	=	25	p/h
	=	$(25 / 60) \times (115 / 60)$	=	0.8	p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	65	p/h
	=	$(65 / 60) \times (115 / 60)$	=	2.1	p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	105	p/h
	=	$(105 / 60) \times (115 / 60)$	=	3.4	p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	900	p/h
	=	$(900 / 60) \times (115 / 60)$	=	28.8	p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside			
	=	0.8 + 2.1 + 3.4	=	6.2	p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside			
	=	0.8 + 2.1 + 28.8	=	31.6	p/cycle
L	=	Crosswalk Length	=	13.5	metres
We	=	Effective Crosswalk Width	=	3.1	metres
Sp	=	Average speed of Pedestrians	=	1.2	m/s
TSc	=	Time-space of the crosswalk			
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19	m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle			
	=	$2 \times (115 - 36) / 115$	=	1	p/cycle
t	=	Total Crossing Time			
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec
T	=	Total crosswalk occupancy time			
	=	$(1 + 2) \times 15$	=	43	p-s
Mc	=	Space per pedestrian Crossing			
	=	$1271.19 / 43$	=	29.8	m <sup>2</sup> /p
LOS	=	A			
<b>Compute the circulation space</b>					
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	=	$0.8 \times (115 - 36)^2 / (2 \times 115)$	=	22	p-s
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside			
	=	$15.6 \times 115 - (0.5 \times 22)$	=	1783	m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside			
	=	$1783 / (4 \times 6.2)$	=	71.6	m <sup>2</sup> /p
LOS	=	A			
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	=	$2.1 \times (115 - 36)^2 / (2 \times 115)$	=	56	p-s
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside			
	=	$11 \times 115 - (0.5 \times 56)$	=	1237	m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside			
	=	$1237 / (4 \times 31.6)$	=	9.8	m <sup>2</sup> /p
LOS	=	A			

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street			Design Year: 2033 Des
Description:	Weekday AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	88 sec
Vcn	=	Pedestrian Count from Western kerbside	=	1000 pph
	=	$(1000 / 60) \times (115 / 60)$	=	31.9 p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	170 pph
	=	$(170 / 60) \times (115 / 60)$	=	5.4 p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	250 pph
	=	$(250 / 60) \times (115 / 60)$	=	8.0 p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	440 pph
	=	$(440 / 60) \times (115 / 60)$	=	14.1 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	31.9 + 5.4 + 8.0	=	45.4 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	31.9 + 5.4 + 14.1	=	51.4 p/cycle
L	=	Crosswalk Length	=	3.6 metres
We	=	Effective Crosswalk Width	=	4.2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$3.6 \times 4.2 \times (88 - 3.6 / (2 \times 1.2))$	=	1307.88 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$32 \times (115 - 88) / 115$	=	8 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 8 / 4.2)$	=	8 sec
T	=	Total crosswalk occupancy time		
	=	$(32 + 5) \times 8$	=	286 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1307.88 / 286$	=	4.6 m <sup>2</sup> /p
LOS	=	<b>B</b>		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside		
	=	$31.9 \times (115 - 88)^2 / (2 \times 115)$	=	101 p-s
An	=	Available Area at Western kerbside	=	31.5 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at Western kerbside		
	=	$31.5 \times 115 - (0.5 \times 101)$	=	3572 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at Western kerbside		
	=	$3572 / (4 \times 45.4)$	=	19.7 m <sup>2</sup> /p
LOS	=	<b>A</b>		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside		
	=	$5.4 \times (115 - 88)^2 / (2 \times 115)$	=	17 p-s
As	=	Available Area at Eastern kerbside	=	12.8 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside		
	=	$12.8 \times 115 - (0.5 \times 17)$	=	1463 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at Eastern kerbside		
	=	$1463 / (4 \times 51.4)$	=	7.1 m <sup>2</sup> /p
LOS	=	<b>A</b>		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street	Design Year:	2033 Des	
Description:	Weekday AM Peak	Designed By:	NLY	Checked By: WCY
C	= Cycle Time	=	115	sec
G	= Effective Green Time for Pedestrians	=	35	sec
Vcn	= Pedestrian Count from Northern kerbside	=	125	p/h
	= $(125 / 60) \times (115 / 60)$	=	4.0	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	210	p/h
	= $(210 / 60) \times (115 / 60)$	=	6.7	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	315	p/h
	= $(315 / 60) \times (115 / 60)$	=	10.1	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	1230	p/h
	= $(1230 / 60) \times (115 / 60)$	=	39.3	p/cycle
Vtn	= Total circulating pedestrian flow at western kerbside			
	= 4.0 + 6.7 + 10.1	=	20.8	p/cycle
Vts	= Total circulating pedestrian flow at eastern kerbside			
	= 4.0 + 6.7 + 39.3	=	50.0	p/cycle
L	= Crosswalk Length	=	4.6	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$	=	380.458	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $7 \times (115 - 35) / 115$	=	5	p/cycle
t	= Total Crossing Time			
	= $3.2 + 4.6 / 1.2 + (0.27 \times 5)$	=	8	sec
T	= Total crosswalk occupancy time			
	= $(4 + 7) \times 8$	=	89	p-s
Mc	= Space per pedestrian Crossing			
	= $380.458 / 89$	=	4.3	m <sup>2</sup> /p
LOS	= <b>B</b>			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $4 \times (115 - 35)^2 / (2 \times 115)$	=	111	p-s
An	= Available Area at northern kerbside	=	16.2	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $16.2 \times 115 - (0.5 \times 111)$	=	1807	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1807 / (4 \times 20.8)$	=	21.8	m <sup>2</sup> /p
LOS	= <b>A</b>			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $6.7 \times (115 - 35)^2 / (2 \times 115)$	=	187	p-s
As	= Available Area at southern kerbside	=	14.3	m <sup>2</sup>
TSS	= Total time -space available for circulating pedestrians at southern kerbside			
	= $14.3 \times 115 - (0.5 \times 187)$	=	1551	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1551 / (4 \times 50)$	=	7.8	m <sup>2</sup> /p
LOS	= <b>A</b>			

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N_Finnie Street			Design Year:	2033 Des	
Description:	Weekday AM Peak			Designed By:	NLY	Checked By: WCY
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	88	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	235	p/h	
	=	$(235 / 60) \times (115 / 60)$	=	7.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	350	p/h	
	=	$(350 / 60) \times (115 / 60)$	=	11.2	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	225	p/h	
	=	$(225 / 60) \times (115 / 60)$	=	7.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	65	p/h	
	=	$(65 / 60) \times (115 / 60)$	=	2.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.5 + 11.2 + 7.2	=	25.9	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.5 + 11.2 + 2.1	=	20.8	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$11 \times (115 - 88) / 115$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 3)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(8 + 11) \times 9$	=	162	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1220.16 / 162$	=	7.5	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$7.5 \times (115 - 88)^2 / (2 \times 115)$	=	24	p-s	
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 115 - (0.5 \times 24)$	=	1081	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1081 / (4 \times 25.9)$	=	10.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$11.2 \times (115 - 88)^2 / (2 \times 115)$	=	35	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 115 - (0.5 \times 35)$	=	1845	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1845 / (4 \times 20.8)$	=	22.2	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street			Design Year: 2033 Des
Description:	Weekday AM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	35 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	185 pph
	=	$(185 / 60) \times (115 / 60)$	=	5.9 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	175 pph
	=	$(175 / 60) \times (115 / 60)$	=	5.6 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	150 pph
	=	$(150 / 60) \times (115 / 60)$	=	4.8 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	275 pph
	=	$(275 / 60) \times (115 / 60)$	=	8.8 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	5.9 + 5.6 + 4.8	=	16.3 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	5.9 + 5.6 + 8.8	=	20.3 p/cycle
L	=	Crosswalk Length	=	17 metres
We	=	Effective Crosswalk Width	=	2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$17 \times 2 \times (35 - 17 / (2 \times 1.2))$	=	949.167 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$6 \times (115 - 35) / 115$	=	4 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 17 / 1.2 + (0.27 \times 4)$	=	18 sec
T	=	Total crosswalk occupancy time		
	=	$(6 + 6) \times 18$	=	212 p-s
Mc	=	Space per pedestrian Crossing		
	=	$949.167 / 212$	=	4.5 m <sup>2</sup> /p
LOS	=	<b>B</b>		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$5.9 \times (115 - 35)^2 / (2 \times 115)$	=	164 p-s
An	=	Available Area at northern kerbside	=	11.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$11.6 \times 115 - (0.5 \times 164)$	=	1252 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1252 / (4 \times 16.3)$	=	19.2 m <sup>2</sup> /p
LOS	=	<b>A</b>		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$5.6 \times (115 - 35)^2 / (2 \times 115)$	=	156 p-s
As	=	Available Area at southern kerbside	=	16.2 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.2 \times 115 - (0.5 \times 156)$	=	1785 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1785 / (4 \times 20.3)$	=	22.0 m <sup>2</sup> /p
LOS	=	<b>A</b>		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road				Design Year:	2033 Des
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	115	p/h	
	=	$(115 / 60) \times (110 / 60)$	=	3.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	140	p/h	
	=	$(140 / 60) \times (110 / 60)$	=	4.3	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	1630	p/h	
	=	$(1630 / 60) \times (110 / 60)$	=	49.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	3.5 + 4.3 + 49.8	=	57.6	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.5 + 4.3 + 0.8	=	8.6	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$4 \times (110 - 32) / 110$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 3 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(4 + 4) \times 14$	=	108	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 108$	=	12.0	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.5 \times (110 - 32)^2 / (2 \times 110)$	=	97	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 97)$	=	1931	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1931 / (4 \times 57.6)$	=	8.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$4.3 \times (110 - 32)^2 / (2 \times 110)$	=	118	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 118)$	=	1789	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1789 / (4 \times 8.6)$	=	52.3	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street			Design Year: 2033 Des
Description:	Weekday Noon Peak		Designed By: NLY	Checked By: WCY
C	= Cycle Time	=	110	sec
G	= Effective Green Time for Pedestrians	=	33	sec
Vcn	= Pedestrian Count from Northern kerbside = $(170 / 60) \times (110 / 60)$	=	170	p/cycle
Vcs	= Pedestrian Count from Southern kerbside = $(125 / 60) \times (110 / 60)$	=	125	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside = $(190 / 60) \times (110 / 60)$	=	190	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside = $(2125 / 60) \times (110 / 60)$	=	2125	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside = 5.2 + 3.8 + 5.8	=	14.8	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside = 5.2 + 3.8 + 64.9	=	73.9	p/cycle
L	= Crosswalk Length	=	13.5	metres
We	= Effective Crosswalk Width	=	3.1	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk = $13.5 \times 3.1 \times (33 - 13.5 / (2 \times 1.2))$	=	1145.64	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle = $5 \times (110 - 33) / 110$	=	4	p/cycle
t	= Total Crossing Time = $3.2 + 13.5 / 1.2 + (0.81 \times 4 / 3.1)$	=	15	sec
T	= Total crosswalk occupancy time = $(5 + 4) \times 15$	=	139	p-s
Mc	= Space per pedestrian Crossing = $1145.64 / 139$	=	8.3	m <sup>2</sup> /p
LOS	=		A	
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside = $5.2 \times (110 - 33)^2 / (2 \times 110)$	=	140	p-s
An	= Available Area at northern kerbside	=	15.6	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside = $15.6 \times 110 - (0.5 \times 140)$	=	1646	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside = $1646 / (4 \times 14.8)$	=	27.8	m <sup>2</sup> /p
LOS	=		A	
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside = $3.8 \times (110 - 33)^2 / (2 \times 110)$	=	103	p-s
As	= Available Area at southern kerbside	=	11	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside = $11 \times 110 - (0.5 \times 103)$	=	1159	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside = $1159 / (4 \times 73.9)$	=	3.9	m <sup>2</sup> /p
LOS	=		B	

<b>DESIGN SHEET</b>		<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location L. Hoi Kwong Street			Design Year:	2033 Des
Description:	Weekday Noon Peak			Designed By:	NLY
				Checked By:	WCY
C	=	Cycle Time	=	110	sec
G	=	Effective Green Time for Pedestrians	=	82	sec
Vcn	=	Pedestrian Count from Western kerbside	=	625	pph
	=	$(625 / 60) \times (110 / 60)$	=	19.1	p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	1145	pph
	=	$(1145 / 60) \times (110 / 60)$	=	35.0	p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	920	pph
	=	$(920 / 60) \times (110 / 60)$	=	28.1	p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	440	pph
	=	$(440 / 60) \times (110 / 60)$	=	13.4	p/cycle
Vtn	=	Total circulating pedestrian flow at western kerbside			
	=	19.1 + 35.0 + 28.1	=	82.2	p/cycle
Vtos	=	Total circulating pedestrian flow at eastern kerbside			
	=	19.1 + 35.0 + 13.4	=	67.5	p/cycle
L	=	Crosswalk Length	=	3.6	metres
We	=	Effective Crosswalk Width	=	4.2	metres
Sp	=	Average speed of Pedestrians	=	1.2	m/s
TSc	=	Time-space of the crosswalk			
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16	m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle			
	=	$35 \times (110 - 82) / 110$	=	9	p/cycle
t	=	Total Crossing Time			
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 9 / 4.2)$	=	8	sec
T	=	Total crosswalk occupancy time			
	=	$(19 + 35) \times 8$	=	428	p-s
Mc	=	Space per pedestrian Crossing			
	=	$1217.16 / 428$	=	2.8	m <sup>2</sup> /p
LOS	=	<b>C</b>			
<b>Compute the circulation space</b>					
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside			
	=	$19.1 \times (110 - 82)^2 / (2 \times 110)$	=	68	p-s
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at Western kerbside			
	=	$31.5 \times 110 - (0.5 \times 68)$	=	3431	m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at Western kerbside			
	=	$3431 / (4 \times 82.2)$	=	10.4	m <sup>2</sup> /p
LOS	=	<b>A</b>			
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside			
	=	$35 \times (110 - 82)^2 / (2 \times 110)$	=	125	p-s
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside			
	=	$12.8 \times 110 - (0.5 \times 125)$	=	1346	m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at Eastern kerbside			
	=	$1346 / (4 \times 67.5)$	=	5.0	m <sup>2</sup> /p
LOS	=	<b>B</b>			

<b>DESIGN SHEET</b>		<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location M_Finnie Street			Design Year:	2033 Des
Description:	Weekday Noon Peak			Designed By:	NLY
				Checked By:	WCY
C	=	Cycle Time	=	110	sec
G	=	Effective Green Time for Pedestrians	=	32	sec
Vcn	=	Pedestrian Count from Northern kerbside	=	1065	pph
	=	$(1065 / 60) \times (110 / 60)$	=	32.5	p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	1125	pph
	=	$(1125 / 60) \times (110 / 60)$	=	34.4	p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	465	pph
	=	$(465 / 60) \times (110 / 60)$	=	14.2	p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	1230	pph
	=	$(1230 / 60) \times (110 / 60)$	=	37.6	p/cycle
Vtn	=	Total circulating pedestrian flow at western kerbside			
	=	32.5 + 34.4 + 14.2	=	81.1	p/cycle
Vtos	=	Total circulating pedestrian flow at eastern kerbside			
	=	32.5 + 34.4 + 37.6	=	104.5	p/cycle
L	=	Crosswalk Length	=	4.6	metres
We	=	Effective Crosswalk Width	=	2.5	metres
Sp	=	Average speed of Pedestrians	=	1.2	m/s
TSc	=	Time-space of the crosswalk			
	=	$4.6 \times 2.5 \times (32 - 4.6 / (2 \times 1.2))$	=	345.958	m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle			
	=	$34 \times (110 - 32) / 110$	=	24	p/cycle
t	=	Total Crossing Time			
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 24)$	=	14	sec
T	=	Total crosswalk occupancy time			
	=	$(33 + 34) \times 14$	=	911	p-s
Mc	=	Space per pedestrian Crossing			
	=	$345.958 / 911$	=	0.4	m <sup>2</sup> /p
LOS	=	<b>F</b>			
<b>Compute the circulation space</b>					
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	=	$32.5 \times (110 - 32)^2 / (2 \times 110)$	=	900	p-s
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside			
	=	$16.2 \times 110 - (0.5 \times 900)$	=	1332	m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside			
	=	$1332 / (4 \times 81.1)$	=	4.1	m <sup>2</sup> /p
LOS	=	<b>B</b>			
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	=	$34.4 \times (110 - 32)^2 / (2 \times 110)$	=	951	p-s
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside			
	=	$14.3 \times 110 - (0.5 \times 951)$	=	1098	m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside			
	=	$1098 / (4 \times 104.5)$	=	2.6	m <sup>2</sup> /p
LOS	=	<b>C</b>			

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N. Finnie Street			Design Year:	2033 Des	
Description:	Weekday Noon Peak			Designed By:	NLY	Checked By: WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	86	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	1230	p/h	
	=	$(1230 / 60) \times (110 / 60)$	=	37.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	1345	p/h	
	=	$(1345 / 60) \times (110 / 60)$	=	41.1	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	615	p/h	
	=	$(615 / 60) \times (110 / 60)$	=	18.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	105	p/h	
	=	$(105 / 60) \times (110 / 60)$	=	3.2	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	37.6 + 41.1 + 18.8	=	97.5	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	37.6 + 41.1 + 3.2	=	81.9	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (86 - 5.7 / (2 \times 1.2))$	=	1191.66	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$41 \times (110 - 86) / 110$	=	9	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 9)$	=	10	sec	
T	=	Total crosswalk occupancy time				
	=	$(38 + 41) \times 10$	=	816	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1191.66 / 816$	=	1.5	m <sup>2</sup> /p	
LOS	=	<b>D</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$37.6 \times (110 - 86)^2 / (2 \times 110)$	=	98	p-s	
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 110 - (0.5 \times 98)$	=	996	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$996 / (4 \times 97.5)$	=	2.6	m <sup>2</sup> /p	
LOS	=	<b>C</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$41.1 \times (110 - 86)^2 / (2 \times 110)$	=	108	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 108)$	=	1728	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1728 / (4 \times 81.9)$	=	5.3	m <sup>2</sup> /p	
LOS	=	<b>B</b>				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street			Design Year: 2033 Des
Description:	Weekday Noon Peak			Designed By: NLY Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	32 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	325 pph
	=	$(325 / 60) \times (110 / 60)$	=	9.9 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	270 pph
	=	$(270 / 60) \times (110 / 60)$	=	8.3 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	250 pph
	=	$(250 / 60) \times (110 / 60)$	=	7.6 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	2085 pph
	=	$(2085 / 60) \times (110 / 60)$	=	63.7 p/cycle
Vtn	=	Total circulating pedestrian flow at western kerbside		
	=	9.9 + 8.3 + 7.6	=	25.8 p/cycle
Vtos	=	Total circulating pedestrian flow at eastern kerbside		
	=	9.9 + 8.3 + 63.7	=	81.9 p/cycle
L	=	Crosswalk Length	=	17 metres
We	=	Effective Crosswalk Width	=	2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$17 \times 2 \times (32 - 17 / (2 \times 1.2))$	=	847.167 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$10 \times (110 - 32) / 110$	=	7 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 17 / 1.2 + (0.27 \times 7)$	=	19 sec
T	=	Total crosswalk occupancy time		
	=	$(10 + 8) \times 19$	=	350 p-s
Mc	=	Space per pedestrian Crossing		
	=	$847.167 / 350$	=	2.4 m <sup>2</sup> /p
LOS	=	C		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$9.9 \times (110 - 32)^2 / (2 \times 110)$	=	275 p-s
An	=	Available Area at northern kerbside	=	11.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$11.6 \times 110 - (0.5 \times 275)$	=	1139 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1139 / (4 \times 25.8)$	=	11.0 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$8.3 \times (110 - 32)^2 / (2 \times 110)$	=	228 p-s
As	=	Available Area at southern kerbside	=	16.2 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.2 \times 110 - (0.5 \times 228)$	=	1668 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1668 / (4 \times 81.9)$	=	5.1 m <sup>2</sup> /p
LOS	=	B		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road				Design Year:	2033 Des
Description:	Weekday PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	33	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	90	p/h	
	=	$(90 / 60) \times (110 / 60)$	=	2.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	385	p/h	
	=	$(385 / 60) \times (110 / 60)$	=	11.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	820	p/h	
	=	$(820 / 60) \times (110 / 60)$	=	25.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	2.8 + 11.8 + 25.1	=	39.6	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.8 + 11.8 + 0.8	=	15.3	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (33 - 12 / (2 \times 1.2))$	=	1344	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$12 \times (110 - 33) / 110$	=	8	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 8 / 4)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(3 + 12) \times 15$	=	216	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1344 / 216$	=	6.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2.8 \times (110 - 33)^2 / (2 \times 110)$	=	74	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 74)$	=	1943	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1943 / (4 \times 39.6)$	=	12.3	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$11.8 \times (110 - 33)^2 / (2 \times 110)$	=	317	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 317)$	=	1689	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1689 / (4 \times 15.3)$	=	27.6	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street				Design Year:	2033 Des
Description:	Weekday PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	31	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	65	p/h	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	210	p/h	
	=	$(210 / 60) \times (110 / 60)$	=	6.4	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	1065	p/h	
	=	$(1065 / 60) \times (110 / 60)$	=	32.5	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	2.0 + 0.8 + 6.4	=	9.2	p/cycle	
Vtos	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.0 + 0.8 + 32.5	=	35.3	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (31 - 13.5 / (2 \times 1.2))$	=	1061.94	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 31) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 15$	=	41	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1061.94 / 41$	=	26.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2 \times (110 - 31)^2 / (2 \times 110)$	=	56	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 110 - (0.5 \times 56)$	=	1688	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1688 / (4 \times 9.2)$	=	46.0	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$0.8 \times (110 - 31)^2 / (2 \times 110)$	=	22	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 110 - (0.5 \times 22)$	=	1199	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1199 / (4 \times 35.3)$	=	8.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street				Design Year:	2033 Des
Description:	Weekday PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	82	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	355	p/h	
	=	$(355 / 60) \times (110 / 60)$	=	10.8	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	815	p/h	
	=	$(815 / 60) \times (110 / 60)$	=	24.9	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	335	p/h	
	=	$(335 / 60) \times (110 / 60)$	=	10.2	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	105	p/h	
	=	$(105 / 60) \times (110 / 60)$	=	3.2	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	10.8 + 24.9 + 10.2	=	46.0	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	10.8 + 24.9 + 3.2	=	39.0	p/cycle	
L	=	Crosswalk Length	=	3.6	metres	
We	=	Effective Crosswalk Width	=	4.2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$25 \times (110 - 82) / 110$	=	6	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 6 / 4.2)$	=	7	sec	
T	=	Total crosswalk occupancy time				
	=	$(11 + 25) \times 7$	=	265	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1217.16 / 265$	=	4.6	m <sup>2</sup> /p	
LOS	=	B				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$10.8 \times (110 - 82)^2 / (2 \times 110)$	=	39	p-s	
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$31.5 \times 110 - (0.5 \times 39)$	=	3446	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$3446 / (4 \times 46)$	=	18.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$24.9 \times (110 - 82)^2 / (2 \times 110)$	=	89	p-s	
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$12.8 \times 110 - (0.5 \times 89)$	=	1364	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1364 / (4 \times 39)$	=	8.8	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street				Design Year:	2033 Des
Description:	Weekday PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	30	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	170	pph	
	=	$(170 / 60) \times (110 / 60)$	=	5.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	605	pph	
	=	$(605 / 60) \times (110 / 60)$	=	18.5	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	510	pph	
	=	$(510 / 60) \times (110 / 60)$	=	15.6	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	460	pph	
	=	$(460 / 60) \times (110 / 60)$	=	14.1	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	5.2 + 18.5 + 15.6	=	39.3	p/cycle	
Vtos	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.2 + 18.5 + 14.1	=	37.7	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (30 - 4.6 / (2 \times 1.2))$	=	322.958	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$18 \times (110 - 30) / 110$	=	13	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 13)$	=	11	sec	
T	=	Total crosswalk occupancy time				
	=	$(5 + 18) \times 11$	=	253	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$322.958 / 253$	=	1.3	m <sup>2</sup> /p	
LOS	=	E				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.2 \times (110 - 30)^2 / (2 \times 110)$	=	151	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 110 - (0.5 \times 151)$	=	1706	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1706 / (4 \times 39.3)$	=	10.9	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$18.5 \times (110 - 30)^2 / (2 \times 110)$	=	538	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 110 - (0.5 \times 538)$	=	1304	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1304 / (4 \times 37.7)$	=	8.6	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N_Finnie Street	Design Year:	2033 Des	
Description:	Weekday PM Peak	Designed By:	NLY	Checked By: WCY
C	= Cycle Time	=	110	sec
G	= Effective Green Time for Pedestrians	=	88	sec
Vcn	= Pedestrian Count from Northern kerbside	=	375	pph
	= $(375 / 60) \times (110 / 60)$	=	11.5	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	845	pph
	= $(845 / 60) \times (110 / 60)$	=	25.8	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	260	pph
	= $(260 / 60) \times (110 / 60)$	=	7.9	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	65	pph
	= $(65 / 60) \times (110 / 60)$	=	2.0	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 11.5 + 25.8 + 7.9	=	45.2	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 11.5 + 25.8 + 2.0	=	39.3	p/cycle
L	= Crosswalk Length	=	5.7	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $26 \times (110 - 88) / 110$	=	5	p/cycle
t	= Total Crossing Time			
	= $3.2 + 5.7 / 1.2 + (0.27 \times 5)$	=	9	sec
T	= Total crosswalk occupancy time			
	= $(11 + 26) \times 9$	=	348	p-s
Mc	= Space per pedestrian Crossing			
	= $1220.16 / 348$	=	3.5	m <sup>2</sup> /p
LOS	= C			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $11.5 \times (110 - 88)^2 / (2 \times 110)$	=	25	p-s
An	= Available Area at northern kerbside	=	9.5	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $9.5 \times 110 - (0.5 \times 25)$	=	1032	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1032 / (4 \times 45.2)$	=	5.7	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $25.8 \times (110 - 88)^2 / (2 \times 110)$	=	57	p-s
As	= Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSS	= Total time -space available for circulating pedestrians at southern kerbside			
	= $16.2 \times 110 - (0.5 \times 57)$	=	1754	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1754 / (4 \times 39.3)$	=	11.2	m <sup>2</sup> /p
LOS	= A			

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street			Design Year: 2033 Des
Description:	Weekday PM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	30 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	305 pph
	=	$(305 / 60) \times (110 / 60)$	=	9.3 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	270 pph
	=	$(270 / 60) \times (110 / 60)$	=	8.3 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	190 pph
	=	$(190 / 60) \times (110 / 60)$	=	5.8 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	710 pph
	=	$(710 / 60) \times (110 / 60)$	=	21.7 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	9.3 + 8.3 + 5.8	=	23.4 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	9.3 + 8.3 + 21.7	=	39.3 p/cycle
L	=	Crosswalk Length	=	17 metres
We	=	Effective Crosswalk Width	=	2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$17 \times 2 \times (30 - 17 / (2 \times 1.2))$	=	779.167 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$9 \times (110 - 30) / 110$	=	7 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 17 / 1.2 + (0.27 \times 7)$	=	19 sec
T	=	Total crosswalk occupancy time		
	=	$(9 + 8) \times 19$	=	337 p-s
Mc	=	Space per pedestrian Crossing		
	=	$779.167 / 337$	=	2.3 m <sup>2</sup> /p
LOS	=	C		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$9.3 \times (110 - 30)^2 / (2 \times 110)$	=	271 p-s
An	=	Available Area at northern kerbside	=	11.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$11.6 \times 110 - (0.5 \times 271)$	=	1140 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1140 / (4 \times 23.4)$	=	12.2 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$8.3 \times (110 - 30)^2 / (2 \times 110)$	=	240 p-s
As	=	Available Area at southern kerbside	=	16.2 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.2 \times 110 - (0.5 \times 240)$	=	1662 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1662 / (4 \times 39.3)$	=	10.6 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road			Design Year: 2033 Des
Description:	Weekend AM Peak			Designed By: NLY Checked By: WCY
C	= Cycle Time	=	115	sec
G	= Effective Green Time for Pedestrians	=	24	sec
Vcn	= Pedestrian Count from Northern kerbside	=	60	p/h
	= $(60 / 60) \times (115 / 60)$	=	1.9	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	45	p/h
	= $(45 / 60) \times (115 / 60)$	=	1.4	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	605	p/h
	= $(605 / 60) \times (115 / 60)$	=	19.3	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	25	p/h
	= $(25 / 60) \times (115 / 60)$	=	0.8	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 1.9 + 1.4 + 19.3	=	22.7	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 1.9 + 1.4 + 0.8	=	4.2	p/cycle
L	= Crosswalk Length	=	12	metres
We	= Effective Crosswalk Width	=	4	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $12 \times 4 \times (24 - 12 / (2 \times 1.2))$	=	912	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $2 \times (115 - 24) / 115$	=	2	p/cycle
t	= Total Crossing Time			
	= $3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec
T	= Total crosswalk occupancy time			
	= $(2 + 1) \times 14$	=	45	p-s
Mc	= Space per pedestrian Crossing			
	= $912 / 45$	=	20.1	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $1.9 \times (115 - 24)^2 / (2 \times 115)$	=	69	p-s
An	= Available Area at northern kerbside	=	18	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $18 \times 115 - (0.5 \times 69)$	=	2035	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $2035 / (4 \times 22.7)$	=	22.4	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $1.4 \times (115 - 24)^2 / (2 \times 115)$	=	52	p-s
As	= Available Area at southern kerbside	=	16.8	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside			
	= $16.8 \times 115 - (0.5 \times 52)$	=	1906	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1906 / (4 \times 4.2)$	=	114.7	m <sup>2</sup> /p
LOS	= A			

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street			Design Year: 2033 Des
Description:	Weekend AM Peak			Designed By: NLY Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	36 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	45 pph
	=	$(45 / 60) \times (115 / 60)$	=	1.4 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	65 pph
	=	$(65 / 60) \times (115 / 60)$	=	2.1 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	25 pph
	=	$(25 / 60) \times (115 / 60)$	=	0.8 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	125 pph
	=	$(125 / 60) \times (115 / 60)$	=	4.0 p/cycle
Vtn	=	Total circulating pedestrian flow at western kerbside		
	=	1.4 + 2.1 + 0.8	=	4.3 p/cycle
Vts	=	Total circulating pedestrian flow at eastern kerbside		
	=	1.4 + 2.1 + 4.0	=	7.5 p/cycle
L	=	Crosswalk Length	=	13.5 metres
We	=	Effective Crosswalk Width	=	3.1 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$2 \times (115 - 36) / 115$	=	1 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15 sec
T	=	Total crosswalk occupancy time		
	=	$(1 + 2) \times 15$	=	52 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1271.19 / 52$	=	24.4 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$1.4 \times (115 - 36)^2 / (2 \times 115)$	=	39 p-s
An	=	Available Area at northern kerbside	=	15.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$15.6 \times 115 - (0.5 \times 39)$	=	1774 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1774 / (4 \times 4.3)$	=	102.9 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$2.1 \times (115 - 36)^2 / (2 \times 115)$	=	56 p-s
As	=	Available Area at southern kerbside	=	11 m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$11 \times 115 - (0.5 \times 56)$	=	1237 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1237 / (4 \times 7.5)$	=	41.2 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street			Design Year: 2033 Des
Description:	Weekend AM Peak			Designed By: NLY Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	88 sec
Vcn	=	Pedestrian Count from Western kerbside	=	105 pph
	=	$(105 / 60) \times (115 / 60)$	=	3.4 p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	85 pph
	=	$(85 / 60) \times (115 / 60)$	=	2.7 p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	125 pph
	=	$(125 / 60) \times (115 / 60)$	=	4.0 p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	65 pph
	=	$(65 / 60) \times (115 / 60)$	=	2.1 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	3.4 + 2.7 + 4.0	=	10.1 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	3.4 + 2.7 + 2.1	=	8.1 p/cycle
L	=	Crosswalk Length	=	3.6 metres
We	=	Effective Crosswalk Width	=	4.2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$3.6 \times 4.2 \times (88 - 3.6 / (2 \times 1.2))$	=	1307.88 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$3 \times (115 - 88) / 115$	=	1 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 1 / 4.2)$	=	6 sec
T	=	Total crosswalk occupancy time		
	=	$(3 + 3) \times 6$	=	39 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1307.88 / 39$	=	33.9 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside		
	=	$3.4 \times (115 - 88)^2 / (2 \times 115)$	=	11 p-s
An	=	Available Area at Western kerbside	=	31.5 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at Western kerbside		
	=	$31.5 \times 115 - (0.5 \times 11)$	=	3617 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at Western kerbside		
	=	$3617 / (4 \times 10.1)$	=	89.9 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside		
	=	$2.7 \times (115 - 88)^2 / (2 \times 115)$	=	9 p-s
As	=	Available Area at Eastern kerbside	=	12.8 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside		
	=	$12.8 \times 115 - (0.5 \times 9)$	=	1468 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at Eastern kerbside		
	=	$1468 / (4 \times 8.1)$	=	45.0 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street	Design Year:	2033 Des	
Description:	Weekend AM Peak	Designed By:	NLY	Checked By: WCY
C	= Cycle Time	=	115	sec
G	= Effective Green Time for Pedestrians	=	35	sec
Vcn	= Pedestrian Count from Northern kerbside	=	105	p/h
	= $(105 / 60) \times (115 / 60)$	=	3.4	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	150	p/h
	= $(150 / 60) \times (115 / 60)$	=	4.8	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	330	p/h
	= $(330 / 60) \times (115 / 60)$	=	10.5	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	230	p/h
	= $(230 / 60) \times (115 / 60)$	=	7.3	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 3.4 + 4.8 + 10.5	=	18.7	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 3.4 + 4.8 + 7.3	=	15.5	p/cycle
L	= Crosswalk Length	=	4.6	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$	=	380.458	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $5 \times (115 - 35) / 115$	=	3	p/cycle
t	= Total Crossing Time			
	= $3.2 + 4.6 / 1.2 + (0.27 \times 3)$	=	8	sec
T	= Total crosswalk occupancy time			
	= $(3 + 5) \times 8$	=	65	p-s
Mc	= Space per pedestrian Crossing			
	= $380.458 / 65$	=	5.9	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $3.4 \times (115 - 35)^2 / (2 \times 115)$	=	93	p-s
An	= Available Area at northern kerbside	=	16.2	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $16.2 \times 115 - (0.5 \times 93)$	=	1816	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1816 / (4 \times 18.7)$	=	24.3	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $4.8 \times (115 - 35)^2 / (2 \times 115)$	=	133	p-s
As	= Available Area at southern kerbside	=	14.3	m <sup>2</sup>
TSS	= Total time -space available for circulating pedestrians at southern kerbside			
	= $14.3 \times 115 - (0.5 \times 133)$	=	1578	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1578 / (4 \times 15.5)$	=	25.5	m <sup>2</sup> /p
LOS	= A			

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N_Finnie Street			Design Year: 2033 Des
Description:	Weekend AM Peak			Designed By: NLY Checked By: WCY
C	= Cycle Time	=	115	sec
G	= Effective Green Time for Pedestrians	=	88	sec
Vcn	= Pedestrian Count from Northern kerbside	=	180	p/h
	= $(180 / 60) \times (115 / 60)$	=	5.8	p/cycle
Vcs	= Pedestrian Count from Southern kerbside	=	210	p/h
	= $(210 / 60) \times (115 / 60)$	=	6.7	p/cycle
Vsn	= Sidewalk Flow at Northern Kerbside	=	140	p/h
	= $(140 / 60) \times (115 / 60)$	=	4.5	p/cycle
Vss	= Sidewalk Flow at Southern Kerbside	=	170	p/h
	= $(170 / 60) \times (115 / 60)$	=	5.4	p/cycle
Vtotn	= Total circulating pedestrian flow at western kerbside			
	= 5.8 + 6.7 + 4.5	=	16.9	p/cycle
Vtots	= Total circulating pedestrian flow at eastern kerbside			
	= 5.8 + 6.7 + 5.4	=	17.9	p/cycle
L	= Crosswalk Length	=	5.7	metres
We	= Effective Crosswalk Width	=	2.5	metres
Sp	= Average speed of Pedestrians	=	1.2	m/s
TSc	= Time-space of the crosswalk			
	= $5.7 \times 2.5 \times (88 - 5.7 / (2 \times 1.2))$	=	1220.16	m <sup>2</sup> -s
Nped	= Number of pedestrians during a cycle			
	= $7 \times (115 - 88) / 115$	=	2	p/cycle
t	= Total Crossing Time			
	= $3.2 + 5.7 / 1.2 + (0.27 \times 2)$	=	8	sec
T	= Total crosswalk occupancy time			
	= $(6 + 7) \times 8$	=	104	p-s
Mc	= Space per pedestrian Crossing			
	= $1220.16 / 104$	=	11.7	m <sup>2</sup> /p
LOS	= A			
<b>Compute the circulation space</b>				
Qtno	= Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	= $5.8 \times (115 - 88)^2 / (2 \times 115)$	=	18	p-s
An	= Available Area at northern kerbside	=	9.5	m <sup>2</sup>
TSn	= Total time -space available for circulating pedestrians at northern kerbside			
	= $9.5 \times 115 - (0.5 \times 18)$	=	1083	m <sup>2</sup> -s
Mn	= Circulation Area per pedestrian at northern kerbside			
	= $1083 / (4 \times 16.9)$	=	16.0	m <sup>2</sup> /p
LOS	= A			
Qtso	= Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	= $6.7 \times (115 - 88)^2 / (2 \times 115)$	=	21	p-s
As	= Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSs	= Total time -space available for circulating pedestrians at southern kerbside			
	= $16.2 \times 115 - (0.5 \times 21)$	=	1852	m <sup>2</sup> -s
Ms	= Circulation Area per pedestrian at southern kerbside			
	= $1852 / (4 \times 17.9)$	=	25.9	m <sup>2</sup> /p
LOS	= A			

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O_Hoi Tai Street			Design Year: 2033 Des
Description:	Weekend AM Peak			Designed By: NLY Checked By: WCY
C	=	Cycle Time	=	115 sec
G	=	Effective Green Time for Pedestrians	=	35 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	255 pph
	=	$(255 / 60) \times (115 / 60)$	=	8.1 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	245 pph
	=	$(245 / 60) \times (115 / 60)$	=	7.8 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	105 pph
	=	$(105 / 60) \times (115 / 60)$	=	3.4 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	65 pph
	=	$(65 / 60) \times (115 / 60)$	=	2.1 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	8.1 + 7.8 + 3.4	=	19.3 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	8.1 + 7.8 + 2.1	=	18.0 p/cycle
L	=	Crosswalk Length	=	17 metres
We	=	Effective Crosswalk Width	=	2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$17 \times 2 \times (35 - 17 / (2 \times 1.2))$	=	949.167 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$8 \times (115 - 35) / 115$	=	6 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 17 / 1.2 + (0.27 \times 6)$	=	19 sec
T	=	Total crosswalk occupancy time		
	=	$(8 + 8) \times 19$	=	302 p-s
Mc	=	Space per pedestrian Crossing		
	=	$949.167 / 302$	=	3.1 m <sup>2</sup> /p
LOS	=	C		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$8.1 \times (115 - 35)^2 / (2 \times 115)$	=	227 p-s
An	=	Available Area at northern kerbside	=	11.6 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$11.6 \times 115 - (0.5 \times 227)$	=	1221 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1221 / (4 \times 19.3)$	=	15.8 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$7.8 \times (115 - 35)^2 / (2 \times 115)$	=	218 p-s
As	=	Available Area at southern kerbside	=	16.2 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.2 \times 115 - (0.5 \times 218)$	=	1754 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1754 / (4 \times 18)$	=	24.3 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G_Java Road				Design Year:	2033 Des
Description:	Weekend Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	65	p/h	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	95	p/h	
	=	$(95 / 60) \times (110 / 60)$	=	2.9	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	485	p/h	
	=	$(485 / 60) \times (110 / 60)$	=	14.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	65	p/h	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	2.0 + 2.9 + 14.8	=	19.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.0 + 2.9 + 2.0	=	6.9	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$3 \times (110 - 32) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 3) \times 14$	=	67	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 67$	=	19.5	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2 \times (110 - 32)^2 / (2 \times 110)$	=	55	p-s	
An	=	Available Area at northern kerbside	=	18	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 55)$	=	1953	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1953 / (4 \times 19.7)$	=	24.8	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$2.9 \times (110 - 32)^2 / (2 \times 110)$	=	80	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 80)$	=	1808	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1808 / (4 \times 6.9)$	=	65.7	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K_Hoi Tai Street				Design Year:	2033 Des
Description:	Weekend Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	33	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	65	pph	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	45	pph	
	=	$(45 / 60) \times (110 / 60)$	=	1.4	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	65	pph	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	420	pph	
	=	$(420 / 60) \times (110 / 60)$	=	12.8	p/cycle	
Vtn	=	Total circulating pedestrian flow at western kerbside				
	=	2.0 + 1.4 + 2.0	=	5.3	p/cycle	
Vts	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.0 + 1.4 + 12.8	=	16.2	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (33 - 13.5 / (2 \times 1.2))$	=	1145.64	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 33) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 15$	=	50	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1145.64 / 50$	=	23.0	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2 \times (110 - 33)^2 / (2 \times 110)$	=	54	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 110 - (0.5 \times 54)$	=	1689	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1689 / (4 \times 5.3)$	=	79.0	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.4 \times (110 - 33)^2 / (2 \times 110)$	=	37	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSS	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 110 - (0.5 \times 37)$	=	1191	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1191 / (4 \times 16.2)$	=	18.4	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L. Hoi Kwong Street			Design Year: 2033 Des
Description:	Weekend Noon Peak			Designed By: NLY Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	82 sec
Vcn	=	Pedestrian Count from Western kerbside	=	315 pph
	=	$(315 / 60) \times (110 / 60)$	=	9.6 p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	315 pph
	=	$(315 / 60) \times (110 / 60)$	=	9.6 p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	230 pph
	=	$(230 / 60) \times (110 / 60)$	=	7.0 p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	125 pph
	=	$(125 / 60) \times (110 / 60)$	=	3.8 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	9.6 + 9.6 + 7.0	=	26.3 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	9.6 + 9.6 + 3.8	=	23.1 p/cycle
L	=	Crosswalk Length	=	3.6 metres
We	=	Effective Crosswalk Width	=	4.2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$3.6 \times 4.2 \times (82 - 3.6 / (2 \times 1.2))$	=	1217.16 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$10 \times (110 - 82) / 110$	=	2 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 2 / 4.2)$	=	7 sec
T	=	Total crosswalk occupancy time		
	=	$(10 + 10) \times 7$	=	128 p-s
Mc	=	Space per pedestrian Crossing		
	=	$1217.16 / 128$	=	9.5 m <sup>2</sup> /p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside		
	=	$9.6 \times (110 - 82)^2 / (2 \times 110)$	=	34 p-s
An	=	Available Area at Western kerbside	=	31.5 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at Western kerbside		
	=	$31.5 \times 110 - (0.5 \times 34)$	=	3448 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at Western kerbside		
	=	$3448 / (4 \times 26.3)$	=	32.8 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside		
	=	$9.6 \times (110 - 82)^2 / (2 \times 110)$	=	34 p-s
As	=	Available Area at Eastern kerbside	=	12.8 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside		
	=	$12.8 \times 110 - (0.5 \times 34)$	=	1391 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at Eastern kerbside		
	=	$1391 / (4 \times 23.1)$	=	15.1 m <sup>2</sup> /p
LOS	=	A		

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M. Finnie Street			Design Year: 2033 Des
Description:	Weekend Noon Peak			Designed By: NLY Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	32 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	250 pph
	=	$(250 / 60) \times (110 / 60)$	=	7.6 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	420 pph
	=	$(420 / 60) \times (110 / 60)$	=	12.8 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	480 pph
	=	$(480 / 60) \times (110 / 60)$	=	14.7 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	440 pph
	=	$(440 / 60) \times (110 / 60)$	=	13.4 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	7.6 + 12.8 + 14.7	=	35.1 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	7.6 + 12.8 + 13.4	=	33.9 p/cycle
L	=	Crosswalk Length	=	4.6 metres
We	=	Effective Crosswalk Width	=	2.5 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$4.6 \times 2.5 \times (32 - 4.6 / (2 \times 1.2))$	=	345.958 m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle		
	=	$13 \times (110 - 32) / 110$	=	9 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 9)$	=	9 sec
T	=	Total crosswalk occupancy time		
	=	$(8 + 13) \times 9$	=	194 p-s
Mc	=	Space per pedestrian Crossing		
	=	$345.958 / 194$	=	1.8 m <sup>2</sup> /p
LOS	=	D		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$7.6 \times (110 - 32)^2 / (2 \times 110)$	=	211 p-s
An	=	Available Area at northern kerbside	=	16.2 m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$16.2 \times 110 - (0.5 \times 211)$	=	1676 m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1676 / (4 \times 35.1)$	=	11.9 m <sup>2</sup> /p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$12.8 \times (110 - 32)^2 / (2 \times 110)$	=	355 p-s
As	=	Available Area at southern kerbside	=	14.3 m <sup>2</sup>
TSs	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$14.3 \times 110 - (0.5 \times 355)$	=	1396 m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1396 / (4 \times 33.9)$	=	10.3 m <sup>2</sup> /p
LOS	=	A		

<b>DESIGN SHEET</b>				Job No.:	<b>CHK50793710</b>	MVA ASIA LIMITED
Junction:	Location N_Finnie Street			Design Year:	2033 Des	
Description:	Weekend Noon Peak			Designed By:	NLY	
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	86	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	400	p/h	
	=	$(400 / 60) \times (110 / 60)$	=	12.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	455	p/h	
	=	$(455 / 60) \times (110 / 60)$	=	13.9	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	280	p/h	
	=	$(280 / 60) \times (110 / 60)$	=	8.6	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	315	p/h	
	=	$(315 / 60) \times (110 / 60)$	=	9.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	12.2 + 13.9 + 8.6	=	34.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	12.2 + 13.9 + 9.6	=	35.8	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (86 - 5.7 / (2 \times 1.2))$	=	1191.66	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$14 \times (110 - 86) / 110$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 3)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(12 + 14) \times 9$	=	229	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1191.66 / 229$	=	5.2	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$12.2 \times (110 - 86)^2 / (2 \times 110)$	=	32	p-s	
An	=	Available Area at northern kerbside	=	9.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 110 - (0.5 \times 32)$	=	1029	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1029 / (4 \times 34.7)$	=	7.4	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$13.9 \times (110 - 86)^2 / (2 \times 110)$	=	36	p-s	
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 36)$	=	1764	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1764 / (4 \times 35.8)$	=	12.3	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

<b>DESIGN SHEET</b>		<b>Job No.: CHK50793710</b>		<b>MVA ASIA LIMITED</b>	
Junction:	Location O_Hoi Tai Street			Design Year:	2033 Des
Description:	Weekend Noon Peak			Designed By:	NLY
				Checked By:	WCY
C	=	Cycle Time	=	110	sec
G	=	Effective Green Time for Pedestrians	=	32	sec
Vcn	=	Pedestrian Count from Northern kerbside	=	350	p/h
	=	$(350 / 60) \times (110 / 60)$	=	10.7	p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	445	p/h
	=	$(445 / 60) \times (110 / 60)$	=	13.6	p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	85	p/h
	=	$(85 / 60) \times (110 / 60)$	=	2.6	p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	375	p/h
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside			
	=	10.7 + 13.6 + 2.6	=	26.9	p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside			
	=	10.7 + 13.6 + 11.5	=	35.8	p/cycle
L	=	Crosswalk Length	=	17	metres
We	=	Effective Crosswalk Width	=	2	metres
Sp	=	Average speed of Pedestrians	=	1.2	m/s
TSc	=	Time-space of the crosswalk			
	=	$17 \times 2 \times (32 - 17 / (2 \times 1.2))$	=	847.167	m <sup>2</sup> -s
Nped	=	Number of pedestrians during a cycle			
	=	$14 \times (110 - 32) / 110$	=	10	p/cycle
t	=	Total Crossing Time			
	=	$3.2 + 17 / 1.2 + (0.27 \times 10)$	=	20	sec
T	=	Total crosswalk occupancy time			
	=	$(11 + 14) \times 20$	=	485	p-s
Mc	=	Space per pedestrian Crossing			
	=	$847.167 / 485$	=	1.7	m <sup>2</sup> /p
LOS	=	<b>D</b>			
<b>Compute the circulation space</b>					
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside			
	=	$10.7 \times (110 - 32)^2 / (2 \times 110)$	=	296	p-s
An	=	Available Area at northern kerbside	=	11.6	m <sup>2</sup>
TSn	=	Total time -space available for circulating pedestrians at northern kerbside			
	=	$11.6 \times 110 - (0.5 \times 296)$	=	1128	m <sup>2</sup> -s
Mn	=	Circulation Area per pedestrian at northern kerbside			
	=	$1128 / (4 \times 26.9)$	=	10.5	m <sup>2</sup> /p
LOS	=	<b>A</b>			
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside			
	=	$13.6 \times (110 - 32)^2 / (2 \times 110)$	=	376	p-s
As	=	Available Area at southern kerbside	=	16.2	m <sup>2</sup>
TSS	=	Total time -space available for circulating pedestrians at southern kerbside			
	=	$16.2 \times 110 - (0.5 \times 376)$	=	1594	m <sup>2</sup> -s
Ms	=	Circulation Area per pedestrian at southern kerbside			
	=	$1594 / (4 \times 35.8)$	=	11.1	m <sup>2</sup> /p
LOS	=	<b>A</b>			

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G Java Road				Design Year:	2033 Des
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	65	pph	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	115	pph	
	=	$(115 / 60) \times (110 / 60)$	=	3.5	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	530	pph	
	=	$(530 / 60) \times (110 / 60)$	=	16.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	105	pph	
	=	$(105 / 60) \times (110 / 60)$	=	3.2	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	2.0 + 3.5 + 16.2	=	21.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.0 + 3.5 + 3.2	=	8.7	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m2-s	
Nped	=	Number of pedestrians during a cycle				
	=	$4 \times (110 - 32) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 4) \times 14$	=	75	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 75$	=	17.2	m2/p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2 \times (110 - 32)^2 / (2 \times 110)$	=	55	p-s	
An	=	Available Area at northern kerbside	=	18	m2	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$18 \times 110 - (0.5 \times 55)$	=	1953	m2-s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1953 / (4 \times 21.7)$	=	22.5	m2/p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$3.5 \times (110 - 32)^2 / (2 \times 110)$	=	97	p-s	
As	=	Available Area at southern kerbside	=	16.8	m2	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 97)$	=	1799	m2-s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1799 / (4 \times 8.7)$	=	51.7	m2/p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location K Hoi Tai Street				Design Year:	2033 Des
Description:	Weekend PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	36	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	25	p/h	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	65	p/h	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	420	p/h	
	=	$(420 / 60) \times (110 / 60)$	=	12.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	0.8 + 0.8 + 2.0	=	3.5	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	0.8 + 0.8 + 12.8	=	14.4	p/cycle	
L	=	Crosswalk Length	=	13.5	metres	
We	=	Effective Crosswalk Width	=	3.1	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$13.5 \times 3.1 \times (36 - 13.5 / (2 \times 1.2))$	=	1271.19	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (110 - 36) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 13.5 / 1.2 + (0.81 \times 1 / 3.1)$	=	15	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 15$	=	22	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1271.19 / 22$	=	57.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$0.8 \times (110 - 36)^2 / (2 \times 110)$	=	19	p-s	
An	=	Available Area at northern kerbside	=	15.6	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$15.6 \times 110 - (0.5 \times 19)$	=	1706	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1706 / (4 \times 3.5)$	=	121.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$0.8 \times (110 - 36)^2 / (2 \times 110)$	=	19	p-s	
As	=	Available Area at southern kerbside	=	11	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$11 \times 110 - (0.5 \times 19)$	=	1200	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1200 / (4 \times 14.4)$	=	20.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location L Hoi Kwong Street				Design Year:	2033 Des
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	83	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	230	p/h	
	=	$(230 / 60) \times (110 / 60)$	=	7.0	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	275	p/h	
	=	$(275 / 60) \times (110 / 60)$	=	8.4	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	210	p/h	
	=	$(210 / 60) \times (110 / 60)$	=	6.4	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	125	p/h	
	=	$(125 / 60) \times (110 / 60)$	=	3.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.0 + 8.4 + 6.4	=	21.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.0 + 8.4 + 3.8	=	19.3	p/cycle	
L	=	Crosswalk Length	=	3.6	metres	
We	=	Effective Crosswalk Width	=	4.2	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$3.6 \times 4.2 \times (83 - 3.6 / (2 \times 1.2))$	=	1232.28	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$8 \times (110 - 83) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 3.6 / 1.2 + (0.81 \times 2 / 4.2)$	=	7	sec	
T	=	Total crosswalk occupancy time				
	=	$(7 + 8) \times 7$	=	102	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1232.28 / 102$	=	12.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$7 \times (110 - 83)^2 / (2 \times 110)$	=	23	p-s	
An	=	Available Area at Western kerbside	=	31.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$31.5 \times 110 - (0.5 \times 23)$	=	3453	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$3453 / (4 \times 21.8)$	=	39.5	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$8.4 \times (110 - 83)^2 / (2 \times 110)$	=	28	p-s	
As	=	Available Area at Eastern kerbside	=	12.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$12.8 \times 110 - (0.5 \times 28)$	=	1394	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1394 / (4 \times 19.3)$	=	18.1	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M Finnie Street				Design Year:	2033 Des
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	190	p/h	
	=	$(190 / 60) \times (110 / 60)$	=	5.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	375	p/h	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	500	p/h	
	=	$(500 / 60) \times (110 / 60)$	=	15.3	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	375	p/h	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	5.8 + 11.5 + 15.3	=	32.5	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.8 + 11.5 + 11.5	=	28.7	p/cycle	
L	=	Crosswalk Length	=	4.6	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$4.6 \times 2.5 \times (35 - 4.6 / (2 \times 1.2))$	=	380.458	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$11 \times (110 - 35) / 110$	=	8	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 4.6 / 1.2 + (0.27 \times 8)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(6 + 11) \times 9$	=	158	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$380.458 / 158$	=	2.4	m <sup>2</sup> /p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.8 \times (110 - 35)^2 / (2 \times 110)$	=	148	p-s	
An	=	Available Area at northern kerbside	=	16.2	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$16.2 \times 110 - (0.5 \times 148)$	=	1708	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1708 / (4 \times 32.5)$	=	13.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$11.5 \times (110 - 35)^2 / (2 \times 110)$	=	293	p-s	
As	=	Available Area at southern kerbside	=	14.3	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$14.3 \times 110 - (0.5 \times 293)$	=	1427	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1427 / (4 \times 28.7)$	=	12.4	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N Finnie Street				Design Year:	2033 Des
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	83	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	380	pph	
	=	$(380 / 60) \times (110 / 60)$	=	11.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	415	pph	
	=	$(415 / 60) \times (110 / 60)$	=	12.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	70	pph	
	=	$(70 / 60) \times (110 / 60)$	=	2.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	250	pph	
	=	$(250 / 60) \times (110 / 60)$	=	7.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	11.6 + 12.7 + 2.1	=	26.4	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	11.6 + 12.7 + 7.6	=	31.9	p/cycle	
L	=	Crosswalk Length	=	5.7	metres	
We	=	Effective Crosswalk Width	=	2.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.7 \times 2.5 \times (83 - 5.7 / (2 \times 1.2))$	=	1148.91	m2-s	
Nped	=	Number of pedestrians during a cycle				
	=	$13 \times (110 - 83) / 110$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.7 / 1.2 + (0.27 \times 3)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(12 + 13) \times 9$	=	214	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1148.91 / 214$	=	5.4	m2/p	
LOS	=	<b>B</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$11.6 \times (110 - 83)^2 / (2 \times 110)$	=	38	p-s	
An	=	Available Area at northern kerbside	=	9.5	m2	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$9.5 \times 110 - (0.5 \times 38)$	=	1026	m2-s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1026 / (4 \times 26.4)$	=	9.7	m2/p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$12.7 \times (110 - 83)^2 / (2 \times 110)$	=	42	p-s	
As	=	Available Area at southern kerbside	=	16.2	m2	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.2 \times 110 - (0.5 \times 42)$	=	1761	m2-s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1761 / (4 \times 31.9)$	=	13.8	m2/p	
LOS	=	<b>A</b>				

DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O Hoi Tai Street			Design Year: 2033 Des
Description:	Weekend PM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	35 sec
Vcn	=	Pedestrian Count from Northern kerbside	=	310 pph
	=	$(310 / 60) \times (110 / 60)$	=	9.5 p/cycle
Vcs	=	Pedestrian Count from Southern kerbside	=	445 pph
	=	$(445 / 60) \times (110 / 60)$	=	13.6 p/cycle
Vsn	=	Sidewalk Flow at Northern Kerbside	=	105 pph
	=	$(105 / 60) \times (110 / 60)$	=	3.2 p/cycle
Vss	=	Sidewalk Flow at Southern Kerbside	=	315 pph
	=	$(315 / 60) \times (110 / 60)$	=	9.6 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	9.5 + 13.6 + 3.2	=	26.3 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	9.5 + 13.6 + 9.6	=	32.7 p/cycle
L	=	Crosswalk Length	=	17 metres
We	=	Effective Crosswalk Width	=	2 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$17 \times 2 \times (35 - 17 / (2 \times 1.2))$	=	949.167 m2-s
Nped	=	Number of pedestrians during a cycle		
	=	$14 \times (110 - 35) / 110$	=	9 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 17 / 1.2 + (0.27 \times 9)$	=	20 sec
T	=	Total crosswalk occupancy time		
	=	$(9 + 14) \times 20$	=	458 p-s
Mc	=	Space per pedestrian Crossing		
	=	$949.167 / 458$	=	2.1 m2/p
LOS	=	D		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside		
	=	$9.5 \times (110 - 35)^2 / (2 \times 110)$	=	242 p-s
An	=	Available Area at northern kerbside	=	11.6 m2
TSn	=	Total time -space available for circulating pedestrians at northern kerbside		
	=	$11.6 \times 110 - (0.5 \times 242)$	=	1155 m2-s
Mn	=	Circulation Area per pedestrian at northern kerbside		
	=	$1155 / (4 \times 26.3)$	=	11.0 m2/p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside		
	=	$13.6 \times (110 - 35)^2 / (2 \times 110)$	=	348 p-s
As	=	Available Area at southern kerbside	=	16.2 m2
TSs	=	Total time -space available for circulating pedestrians at southern kerbside		
	=	$16.2 \times 110 - (0.5 \times 348)$	=	1608 m2-s
Ms	=	Circulation Area per pedestrian at southern kerbside		
	=	$1608 / (4 \times 32.7)$	=	12.3 m2/p
LOS	=	A		

## Calculation Sheets - 2033 Design Year (Improvement)

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G' Java Road				Design Year:	2033 Des(imp)
Description:	Weekday AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	30	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	85	p/h	
	=	$(85 / 60) \times (115 / 60)$	=	2.7	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	65	p/h	
	=	$(65 / 60) \times (115 / 60)$	=	2.1	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	920	p/h	
	=	$(920 / 60) \times (115 / 60)$	=	29.4	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	p/h	
	=	$(25 / 60) \times (115 / 60)$	=	0.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	2.7 + 2.1 + 29.4	=	34.2	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.7 + 2.1 + 0.8	=	5.6	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (30 - 12 / (2 \times 1.2))$	=	1200	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$3 \times (115 - 30) / 115$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(3 + 2) \times 14$	=	65	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1200 / 65$	=	18.4	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2.7 \times (115 - 30)^2 / (2 \times 115)$	=	85	p-s	
An	=	Available Area at northern kerbside	=	17.3	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$17.3 \times 115 - (0.5 \times 85)$	=	1947	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1947 / (4 \times 34.2)$	=	14.2	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$2.1 \times (115 - 30)^2 / (2 \times 115)$	=	65	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 115 - (0.5 \times 65)$	=	1899	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1899 / (4 \times 5.6)$	=	84.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F1' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekday AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	81	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	225	pph	
	=	$(225 / 60) \times (115 / 60)$	=	7.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	275	pph	
	=	$(275 / 60) \times (115 / 60)$	=	8.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	0	pph	
	=	$(0 / 60) \times (115 / 60)$	=	0.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	35	pph	
	=	$(35 / 60) \times (115 / 60)$	=	1.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.2 + 8.8 + 0.0	=	16.0	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.2 + 8.8 + 1.1	=	17.1	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4 \times (81 - 6 / (2 \times 1.2))$	=	1884	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$9 \times (115 - 81) / 115$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 3 / 4)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(7 + 9) \times 9$	=	139	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1884 / 139$	=	13.5	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$7.2 \times (115 - 81)^2 / (2 \times 115)$	=	36	p-s	
An	=	Available Area at northern kerbside	=	10.8	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$10.8333333333333 \times 115 - (0.5 \times 36)$	=	1228	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1228 / (4 \times 16)$	=	19.2	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$8.8 \times (115 - 81)^2 / (2 \times 115)$	=	44	p-s	
As	=	Available Area at southern kerbside	=	25.0	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$25 \times 115 - (0.5 \times 44)$	=	2853	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2853 / (4 \times 17.1)$	=	41.7	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F2' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekday AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	30	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	275	pph	
	=	$(275 / 60) \times (115 / 60)$	=	8.8	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	225	pph	
	=	$(225 / 60) \times (115 / 60)$	=	7.2	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	500	pph	
	=	$(500 / 60) \times (115 / 60)$	=	16.0	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	0	pph	
	=	$(0 / 60) \times (115 / 60)$	=	0.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	8.8 + 7.2 + 16.0	=	31.9	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	8.8 + 7.2 + 0.0	=	16.0	p/cycle	
L	=	Crosswalk Length	=	7.5	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$7.5 \times 4 \times (30 - 7.5 / (2 \times 1.2))$	=	806.25	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$9 \times (115 - 30) / 115$	=	6	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 7.5 / 1.2 + (0.81 \times 6 / 4)$	=	11	sec	
T	=	Total crosswalk occupancy time				
	=	$(9 + 7) \times 11$	=	172	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$806.25 / 172$	=	4.7	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$8.8 \times (115 - 30)^2 / (2 \times 115)$	=	276	p-s	
An	=	Available Area at Western kerbside	=	16.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$16.5 \times 115 - (0.5 \times 276)$	=	1760	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$1760 / (4 \times 31.9)$	=	13.8	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$7.2 \times (115 - 30)^2 / (2 \times 115)$	=	226	p-s	
As	=	Available Area at Eastern kerbside	=	10.9	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$10.8833333333333 \times 115 - (0.5 \times 226)$	=	1139	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1139 / (4 \times 16)$	=	17.8	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekday AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	125	p/h	
	=	$(125 / 60) \times (115 / 60)$	=	4.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	210	p/h	
	=	$(210 / 60) \times (115 / 60)$	=	6.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	315	p/h	
	=	$(315 / 60) \times (115 / 60)$	=	10.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	1230	p/h	
	=	$(1230 / 60) \times (115 / 60)$	=	39.3	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	4.0 + 6.7 + 10.1	=	20.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	4.0 + 6.7 + 39.3	=	50.0	p/cycle	
L	=	Crosswalk Length	=	5.8	metres	
We	=	Effective Crosswalk Width	=	6.0	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.8 \times 6 \times (35 - 5.8 / (2 \times 1.2))$	=	1133.9	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$7 \times (115 - 35) / 115$	=	5	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.8 / 1.2 + (0.81 \times 5 / 6)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(4 + 7) \times 9$	=	93	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1133.9 / 93$	=	12.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$4 \times (115 - 35)^2 / (2 \times 115)$	=	111	p-s	
An	=	Available Area at northern kerbside	=	27.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$27.5 \times 115 - (0.5 \times 111)$	=	3107	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$3107 / (4 \times 20.8)$	=	37.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$6.7 \times (115 - 35)^2 / (2 \times 115)$	=	187	p-s	
As	=	Available Area at southern kerbside	=	17.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$17.5 \times 115 - (0.5 \times 187)$	=	1919	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1919 / (4 \times 50)$	=	9.6	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekday AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	88	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	235	pph	
	=	$(235 / 60) \times (115 / 60)$	=	7.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	350	pph	
	=	$(350 / 60) \times (115 / 60)$	=	11.2	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	225	pph	
	=	$(225 / 60) \times (115 / 60)$	=	7.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	65	pph	
	=	$(65 / 60) \times (115 / 60)$	=	2.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.5 + 11.2 + 7.2	=	25.9	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.5 + 11.2 + 2.1	=	20.8	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4.5 \times (88 - 6 / (2 \times 1.2))$	=	2308.5	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$11 \times (115 - 88) / 115$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 3 / 4.5)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(8 + 11) \times 9$	=	162	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$2308.5 / 162$	=	14.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$7.5 \times (115 - 88)^2 / (2 \times 115)$	=	24	p-s	
An	=	Available Area at northern kerbside	=	20	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$20 \times 115 - (0.5 \times 24)$	=	2288	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2288 / (4 \times 25.9)$	=	22.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$11.2 \times (115 - 88)^2 / (2 \times 115)$	=	35	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 115 - (0.5 \times 35)$	=	3145	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$3145 / (4 \times 20.8)$	=	37.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O' Hoi Tai Street				Design Year:	2033 Des(imp)
Description:	Weekday AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	185	p/h	
	=	$(185 / 60) \times (115 / 60)$	=	5.9	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	175	p/h	
	=	$(175 / 60) \times (115 / 60)$	=	5.6	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	150	p/h	
	=	$(150 / 60) \times (115 / 60)$	=	4.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	275	p/h	
	=	$(275 / 60) \times (115 / 60)$	=	8.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	5.9 + 5.6 + 4.8	=	16.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.9 + 5.6 + 8.8	=	20.3	p/cycle	
L	=	Crosswalk Length	=	11	metres	
We	=	Effective Crosswalk Width	=	5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$11 \times 5 \times (35 - 11 / (2 \times 1.2))$	=	1672.92	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$6 \times (115 - 35) / 115$	=	4	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 11 / 1.2 + (0.81 \times 4 / 5)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(6 + 6) \times 13$	=	150	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1672.92 / 150$	=	11.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.9 \times (115 - 35)^2 / (2 \times 115)$	=	164	p-s	
An	=	Available Area at northern kerbside	=	22	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$22 \times 115 - (0.5 \times 164)$	=	2448	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2448 / (4 \times 16.3)$	=	37.6	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$5.6 \times (115 - 35)^2 / (2 \times 115)$	=	156	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 115 - (0.5 \times 156)$	=	3085	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$3085 / (4 \times 20.3)$	=	38.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G' Java Road				Design Year:	2033 Des(imp)
Description:	Weekday Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	51	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	165	pph	
	=	$(165 / 60) \times (110 / 60)$	=	5.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	90	pph	
	=	$(90 / 60) \times (110 / 60)$	=	2.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	1630	pph	
	=	$(1630 / 60) \times (110 / 60)$	=	49.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	pph	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	5.0 + 2.8 + 49.8	=	57.6	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.0 + 2.8 + 0.8	=	8.6	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (51 - 12 / (2 \times 1.2))$	=	2208	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$5 \times (110 - 51) / 110$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 3 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(5 + 3) \times 14$	=	107	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$2208 / 107$	=	20.6	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5 \times (110 - 51)^2 / (2 \times 110)$	=	80	p-s	
An	=	Available Area at northern kerbside	=	17.3	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$17.3 \times 110 - (0.5 \times 80)$	=	1863	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1863 / (4 \times 57.6)$	=	8.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$2.8 \times (110 - 51)^2 / (2 \times 110)$	=	44	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 44)$	=	1826	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1826 / (4 \times 8.6)$	=	53.4	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F1' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekday Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	55	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	995	p/h	
	=	$(995 / 60) \times (110 / 60)$	=	30.4	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	260	p/h	
	=	$(260 / 60) \times (110 / 60)$	=	7.9	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	0	p/h	
	=	$(0 / 60) \times (110 / 60)$	=	0.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	45	p/h	
	=	$(45 / 60) \times (110 / 60)$	=	1.4	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	30.4 + 7.9 + 0.0	=	38.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	30.4 + 7.9 + 1.4	=	39.7	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4 \times (55 - 6 / (2 \times 1.2))$	=	1260	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$30 \times (110 - 55) / 110$	=	15	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 15 / 4)$	=	11	sec	
T	=	Total crosswalk occupancy time				
	=	$(30 + 8) \times 11$	=	432	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1260 / 432$	=	2.9	m <sup>2</sup> /p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$30.4 \times (110 - 55)^2 / (2 \times 110)$	=	418	p-s	
An	=	Available Area at northern kerbside	=	10.8	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$10.8333333333333 \times 110 - (0.5 \times 418)$	=	983	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$983 / (4 \times 38.3)$	=	6.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$7.9 \times (110 - 55)^2 / (2 \times 110)$	=	109	p-s	
As	=	Available Area at southern kerbside	=	25	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$25 \times 110 - (0.5 \times 109)$	=	2695	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2695 / (4 \times 39.7)$	=	17.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F2' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekday Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	51	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	260	pph	
	=	$(260 / 60) \times (110 / 60)$	=	7.9	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	995	pph	
	=	$(995 / 60) \times (110 / 60)$	=	30.4	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	545	pph	
	=	$(545 / 60) \times (110 / 60)$	=	16.7	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	0	pph	
	=	$(0 / 60) \times (110 / 60)$	=	0.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.9 + 30.4 + 16.7	=	55.0	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.9 + 30.4 + 0.0	=	38.3	p/cycle	
L	=	Crosswalk Length	=	7.5	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$7.5 \times 4 \times (51 - 7.5 / (2 \times 1.2))$	=	1436.25	m2-s	
Nped	=	Number of pedestrians during a cycle				
	=	$30 \times (110 - 51) / 110$	=	16	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 7.5 / 1.2 + (0.81 \times 16 / 4)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(8 + 30) \times 13$	=	489	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1436.25 / 489$	=	2.9	m2/p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$7.9 \times (110 - 51)^2 / (2 \times 110)$	=	126	p-s	
An	=	Available Area at Western kerbside	=	16.5	m2	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$16.5 \times 110 - (0.5 \times 126)$	=	1752	m2-s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$1752 / (4 \times 55)$	=	8.0	m2/p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$30.4 \times (110 - 51)^2 / (2 \times 110)$	=	481	p-s	
As	=	Available Area at Eastern kerbside	=	10.9	m2	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$10.8833333333333 \times 110 - (0.5 \times 481)$	=	957	m2-s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$957 / (4 \times 38.3)$	=	6.2	m2/p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekday Noon Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	51	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	1065	p/h	
	=	$(1065 / 60) \times (110 / 60)$	=	32.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	1125	p/h	
	=	$(1125 / 60) \times (110 / 60)$	=	34.4	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	465	p/h	
	=	$(465 / 60) \times (110 / 60)$	=	14.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	1230	p/h	
	=	$(1230 / 60) \times (110 / 60)$	=	37.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	32.5 + 34.4 + 14.2	=	81.1	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	32.5 + 34.4 + 37.6	=	104.5	p/cycle	
L	=	Crosswalk Length	=	5.8	metres	
We	=	Effective Crosswalk Width	=	6	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.8 \times 6 \times (51 - 5.8 / (2 \times 1.2))$	=	1690.7	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$34 \times (110 - 51) / 110$	=	18	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.8 / 1.2 + (0.81 \times 18 / 6)$	=	11	sec	
T	=	Total crosswalk occupancy time				
	=	$(33 + 34) \times 11$	=	704	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1690.7 / 704$	=	2.4	m <sup>2</sup> /p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$32.5 \times (110 - 51)^2 / (2 \times 110)$	=	515	p-s	
An	=	Available Area at northern kerbside	=	27.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$27.5 \times 110 - (0.5 \times 515)$	=	2768	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2768 / (4 \times 81.1)$	=	8.5	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$34.4 \times (110 - 51)^2 / (2 \times 110)$	=	544	p-s	
As	=	Available Area at southern kerbside	=	17.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$17.5 \times 110 - (0.5 \times 544)$	=	1653	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1653 / (4 \times 104.5)$	=	4.0	m <sup>2</sup> /p	
LOS	=	B				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekday Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	86	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	1230	pph	
	=	$(1230 / 60) \times (110 / 60)$	=	37.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	1345	pph	
	=	$(1345 / 60) \times (110 / 60)$	=	41.1	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	615	pph	
	=	$(615 / 60) \times (110 / 60)$	=	18.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	105	pph	
	=	$(105 / 60) \times (110 / 60)$	=	3.2	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	37.6 + 41.1 + 18.8	=	97.5	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	37.6 + 41.1 + 3.2	=	81.9	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4.5 \times (86 - 6 / (2 \times 1.2))$	=	2254.5	m2-s	
Nped	=	Number of pedestrians during a cycle				
	=	$41 \times (110 - 86) / 110$	=	9	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 9 / 4.5)$	=	10	sec	
T	=	Total crosswalk occupancy time				
	=	$(38 + 41) \times 10$	=	772	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$2254.5 / 772$	=	2.9	m2/p	
LOS	=	C				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$37.6 \times (110 - 86)^2 / (2 \times 110)$	=	98	p-s	
An	=	Available Area at northern kerbside	=	20	m2	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$20 \times 110 - (0.5 \times 98)$	=	2151	m2-s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2151 / (4 \times 97.5)$	=	5.5	m2/p	
LOS	=	B				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$41.1 \times (110 - 86)^2 / (2 \times 110)$	=	108	p-s	
As	=	Available Area at southern kerbside	=	27.5	m2	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 110 - (0.5 \times 108)$	=	2971	m2-s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2971 / (4 \times 81.9)$	=	9.1	m2/p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O' Hoi Tai Street				Design Year:	2033 Des(imp)
Description:	Weekday Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	51	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	325	pph	
	=	$(325 / 60) \times (110 / 60)$	=	9.9	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	270	pph	
	=	$(270 / 60) \times (110 / 60)$	=	8.3	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	250	pph	
	=	$(250 / 60) \times (110 / 60)$	=	7.6	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	2085	pph	
	=	$(2085 / 60) \times (110 / 60)$	=	63.7	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	9.9 + 8.3 + 7.6	=	25.8	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	9.9 + 8.3 + 63.7	=	81.9	p/cycle	
L	=	Crosswalk Length	=	11	metres	
We	=	Effective Crosswalk Width	=	5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$11 \times 5 \times (51 - 11 / (2 \times 1.2))$	=	2552.92	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$10 \times (110 - 51) / 110$	=	5	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 11 / 1.2 + (0.81 \times 5 / 5)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(10 + 8) \times 13$	=	241	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$2552.92 / 241$	=	10.6	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$9.9 \times (110 - 51)^2 / (2 \times 110)$	=	157	p-s	
An	=	Available Area at northern kerbside	=	22	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$22 \times 110 - (0.5 \times 157)$	=	2341	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2341 / (4 \times 25.8)$	=	22.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$8.3 \times (110 - 51)^2 / (2 \times 110)$	=	131	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 110 - (0.5 \times 131)$	=	2960	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2960 / (4 \times 81.9)$	=	9.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G' Java Road				Design Year:	2033 Des(imp)
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	43	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	140	pph	
	=	$(140 / 60) \times (110 / 60)$	=	4.3	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	335	pph	
	=	$(335 / 60) \times (110 / 60)$	=	10.2	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	820	pph	
	=	$(820 / 60) \times (110 / 60)$	=	25.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	pph	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	4.3 + 10.2 + 25.1	=	39.6	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	4.3 + 10.2 + 0.8	=	15.3	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (43 - 12 / (2 \times 1.2))$	=	1824	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$10 \times (110 - 43) / 110$	=	6	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 6 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(4 + 10) \times 14$	=	210	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1824 / 210$	=	8.7	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$4.3 \times (110 - 43)^2 / (2 \times 110)$	=	87	p-s	
An	=	Available Area at northern kerbside	=	17.3	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$17.3 \times 110 - (0.5 \times 87)$	=	1859	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1859 / (4 \times 39.6)$	=	11.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$10.2 \times (110 - 43)^2 / (2 \times 110)$	=	209	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 209)$	=	1744	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1744 / (4 \times 15.3)$	=	28.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F1' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	63	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	230	pph	
	=	$(230 / 60) \times (110 / 60)$	=	7.0	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	250	pph	
	=	$(250 / 60) \times (110 / 60)$	=	7.6	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	0	pph	
	=	$(0 / 60) \times (110 / 60)$	=	0.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	pph	
	=	$(25 / 60) \times (110 / 60)$	=	0.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.0 + 7.6 + 0.0	=	14.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.0 + 7.6 + 0.8	=	15.4	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4 \times (63 - 6 / (2 \times 1.2))$	=	1452	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$8 \times (110 - 63) / 110$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 3 / 4)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(7 + 8) \times 9$	=	130	p-s	
Mc	=	Space per pedestrian Crossing				
	=	1452 / 130	=	11.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$7 \times (110 - 63)^2 / (2 \times 110)$	=	71	p-s	
An	=	Available Area at northern kerbside	=	10.8	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$10.8333333333333 \times 110 - (0.5 \times 71)$	=	1156	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1156 / (4 \times 14.7)$	=	19.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$7.6 \times (110 - 63)^2 / (2 \times 110)$	=	77	p-s	
As	=	Available Area at southern kerbside	=	25.0	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$25 \times 110 - (0.5 \times 77)$	=	2712	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2712 / (4 \times 15.4)$	=	43.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F2' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	43	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	250	pph	
	=	$(250 / 60) \times (110 / 60)$	=	7.6	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	230	pph	
	=	$(230 / 60) \times (110 / 60)$	=	7.0	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	750	pph	
	=	$(750 / 60) \times (110 / 60)$	=	22.9	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	0	pph	
	=	$(0 / 60) \times (110 / 60)$	=	0.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.6 + 7.0 + 22.9	=	37.6	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.6 + 7.0 + 0.0	=	14.7	p/cycle	
L	=	Crosswalk Length	=	7.5	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$7.5 \times 4 \times (43 - 7.5 / (2 \times 1.2))$	=	1196.25	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$8 \times (110 - 43) / 110$	=	5	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 7.5 / 1.2 + (0.81 \times 5 / 4)$	=	10	sec	
T	=	Total crosswalk occupancy time				
	=	$(8 + 7) \times 10$	=	152	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1196.25 / 152$	=	7.8	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$7.6 \times (110 - 43)^2 / (2 \times 110)$	=	156	p-s	
An	=	Available Area at Western kerbside	=	16.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$16.5 \times 110 - (0.5 \times 156)$	=	1737	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$1737 / (4 \times 37.6)$	=	11.6	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$7 \times (110 - 43)^2 / (2 \times 110)$	=	143	p-s	
As	=	Available Area at Eastern kerbside	=	10.9	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$10.8833333333333 \times 110 - (0.5 \times 143)$	=	1125	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1125 / (4 \times 14.7)$	=	19.2	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	30	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	170	pph	
	=	$(170 / 60) \times (110 / 60)$	=	5.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	605	pph	
	=	$(605 / 60) \times (110 / 60)$	=	18.5	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	510	pph	
	=	$(510 / 60) \times (110 / 60)$	=	15.6	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	460	pph	
	=	$(460 / 60) \times (110 / 60)$	=	14.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	5.2 + 18.5 + 15.6	=	39.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.2 + 18.5 + 14.1	=	37.7	p/cycle	
L	=	Crosswalk Length	=	5.8	metres	
We	=	Effective Crosswalk Width	=	6	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.8 \times 6 \times (30 - 5.8 / (2 \times 1.2))$	=	959.9	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$18 \times (110 - 30) / 110$	=	13	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.8 / 1.2 + (0.81 \times 13 / 6)$	=	10	sec	
T	=	Total crosswalk occupancy time				
	=	$(5 + 18) \times 10$	=	233	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$959.9 / 233$	=	4.1	m <sup>2</sup> /p	
LOS	=	B				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.2 \times (110 - 30)^2 / (2 \times 110)$	=	151	p-s	
An	=	Available Area at northern kerbside	=	27.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$27.5 \times 110 - (0.5 \times 151)$	=	2949	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2949 / (4 \times 39.3)$	=	18.8	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$18.5 \times (110 - 30)^2 / (2 \times 110)$	=	538	p-s	
As	=	Available Area at southern kerbside	=	17.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$17.5 \times 110 - (0.5 \times 538)$	=	1656	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1656 / (4 \times 37.7)$	=	11.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	88	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	375	pph	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	845	pph	
	=	$(845 / 60) \times (110 / 60)$	=	25.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	260	pph	
	=	$(260 / 60) \times (110 / 60)$	=	7.9	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	65	pph	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	11.5 + 25.8 + 7.9	=	45.2	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	11.5 + 25.8 + 2.0	=	39.3	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4.5 \times (88 - 6 / (2 \times 1.2))$	=	2308.5	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$26 \times (110 - 88) / 110$	=	5	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 5 / 4.5)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(11 + 26) \times 9$	=	340	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$2308.5 / 340$	=	6.8	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$11.5 \times (110 - 88)^2 / (2 \times 110)$	=	25	p-s	
An	=	Available Area at northern kerbside	=	20	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$20 \times 110 - (0.5 \times 25)$	=	2187	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2187 / (4 \times 45.2)$	=	12.1	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$25.8 \times (110 - 88)^2 / (2 \times 110)$	=	57	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 110 - (0.5 \times 57)$	=	2997	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2997 / (4 \times 39.3)$	=	19.1	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O' Hoi Tai Street				Design Year:	2033 Des(imp)
Description:	Weekday PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	30	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	305	pph	
	=	$(305 / 60) \times (110 / 60)$	=	9.3	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	270	pph	
	=	$(270 / 60) \times (110 / 60)$	=	8.3	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	190	pph	
	=	$(190 / 60) \times (110 / 60)$	=	5.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	710	pph	
	=	$(710 / 60) \times (110 / 60)$	=	21.7	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	9.3 + 8.3 + 5.8	=	23.4	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	9.3 + 8.3 + 21.7	=	39.3	p/cycle	
L	=	Crosswalk Length	=	11	metres	
We	=	Effective Crosswalk Width	=	5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$11 \times 5 \times (30 - 11 / (2 \times 1.2))$	=	1397.92	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$9 \times (110 - 30) / 110$	=	7	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 11 / 1.2 + (0.81 \times 7 / 5)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(9 + 8) \times 13$	=	237	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1397.92 / 237$	=	5.9	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$9.3 \times (110 - 30)^2 / (2 \times 110)$	=	271	p-s	
An	=	Available Area at northern kerbside	=	22	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$22 \times 110 - (0.5 \times 271)$	=	2284	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2284 / (4 \times 23.4)$	=	24.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$8.3 \times (110 - 30)^2 / (2 \times 110)$	=	240	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 110 - (0.5 \times 240)$	=	2905	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2905 / (4 \times 39.3)$	=	18.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G' Java Road				Design Year:	2033 Des(imp)
Description:	Weekend AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	24	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	65	pph	
	=	$(65 / 60) \times (115 / 60)$	=	2.1	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	40	pph	
	=	$(40 / 60) \times (115 / 60)$	=	1.3	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	605	pph	
	=	$(605 / 60) \times (115 / 60)$	=	19.3	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	25	pph	
	=	$(25 / 60) \times (115 / 60)$	=	0.8	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	2.1 + 1.3 + 19.3	=	22.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	2.1 + 1.3 + 0.8	=	4.2	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4.0	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (24 - 12 / (2 \times 1.2))$	=	912	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (115 - 24) / 115$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(2 + 1) \times 14$	=	45	p-s	
Mc	=	Space per pedestrian Crossing				
	=	912 / 45	=	20.1	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$2.1 \times (115 - 24)^2 / (2 \times 115)$	=	75	p-s	
An	=	Available Area at northern kerbside	=	17.3	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$17.3 \times 115 - (0.5 \times 75)$	=	1952	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1952 / (4 \times 22.7)$	=	21.5	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.3 \times (115 - 24)^2 / (2 \times 115)$	=	46	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 115 - (0.5 \times 46)$	=	1909	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1909 / (4 \times 4.2)$	=	114.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F1' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekend AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	87	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	40	p/h	
	=	$(40 / 60) \times (115 / 60)$	=	1.3	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	25	p/h	
	=	$(25 / 60) \times (115 / 60)$	=	0.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	0	p/h	
	=	$(0 / 60) \times (115 / 60)$	=	0.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	35	p/h	
	=	$(35 / 60) \times (115 / 60)$	=	1.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.3 + 0.8 + 0.0	=	2.1	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.3 + 0.8 + 1.1	=	3.2	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4 \times (87 - 6 / (2 \times 1.2))$	=	2028	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (115 - 87) / 115$	=	0	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 0 / 4)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 8$	=	17	p-s	
Mc	=	Space per pedestrian Crossing				
	=	2028 / 17	=	118.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.3 \times (115 - 87)^2 / (2 \times 115)$	=	4	p-s	
An	=	Available Area at northern kerbside	=	10.8	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$10.8333333333333 \times 115 - (0.5 \times 4)$	=	1244	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1244 / (4 \times 2.1)$	=	149.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$0.8 \times (115 - 87)^2 / (2 \times 115)$	=	3	p-s	
As	=	Available Area at southern kerbside	=	25.0	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$25 \times 115 - (0.5 \times 3)$	=	2874	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2874 / (4 \times 3.2)$	=	224.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F2' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekend AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	24	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	25	pph	
	=	$(25 / 60) \times (115 / 60)$	=	0.8	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	40	pph	
	=	$(40 / 60) \times (115 / 60)$	=	1.3	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	535	pph	
	=	$(535 / 60) \times (115 / 60)$	=	17.1	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	0	pph	
	=	$(0 / 60) \times (115 / 60)$	=	0.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	0.8 + 1.3 + 17.1	=	19.2	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	0.8 + 1.3 + 0.0	=	2.1	p/cycle	
L	=	Crosswalk Length	=	7.5	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$7.5 \times 4 \times (24 - 7.5 / (2 \times 1.2))$	=	626.25	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (115 - 24) / 115$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 7.5 / 1.2 + (0.81 \times 1 / 4)$	=	10	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 10$	=	20	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$626.25 / 20$	=	31.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$0.8 \times (115 - 24)^2 / (2 \times 115)$	=	29	p-s	
An	=	Available Area at Western kerbside	=	16.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$16.5 \times 115 - (0.5 \times 29)$	=	1883	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$1883 / (4 \times 19.2)$	=	24.6	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$1.3 \times (115 - 24)^2 / (2 \times 115)$	=	46	p-s	
As	=	Available Area at Eastern kerbside	=	10.9	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$10.8833333333333 \times 115 - (0.5 \times 46)$	=	1229	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1229 / (4 \times 2.1)$	=	147.9	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekend AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	105	p/h	
	=	$(105 / 60) \times (115 / 60)$	=	3.4	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	150	p/h	
	=	$(150 / 60) \times (115 / 60)$	=	4.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	330	p/h	
	=	$(330 / 60) \times (115 / 60)$	=	10.5	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	230	p/h	
	=	$(230 / 60) \times (115 / 60)$	=	7.3	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	3.4 + 4.8 + 10.5	=	18.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.4 + 4.8 + 7.3	=	15.5	p/cycle	
L	=	Crosswalk Length	=	5.8	metres	
We	=	Effective Crosswalk Width	=	6	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.8 \times 6 \times (35 - 5.8 / (2 \times 1.2))$	=	1133.9	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$5 \times (115 - 35) / 115$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.8 / 1.2 + (0.81 \times 3 / 6)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(3 + 5) \times 8$	=	69	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1133.9 / 69$	=	16.4	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.4 \times (115 - 35)^2 / (2 \times 115)$	=	93	p-s	
An	=	Available Area at northern kerbside	=	27.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$27.5 \times 115 - (0.5 \times 93)$	=	3116	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$3116 / (4 \times 18.7)$	=	41.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$4.8 \times (115 - 35)^2 / (2 \times 115)$	=	133	p-s	
As	=	Available Area at southern kerbside	=	17.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$17.5 \times 115 - (0.5 \times 133)$	=	1946	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1946 / (4 \times 15.5)$	=	31.4	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekend AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	88	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	180	pph	
	=	$(180 / 60) \times (115 / 60)$	=	5.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	210	pph	
	=	$(210 / 60) \times (115 / 60)$	=	6.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	140	pph	
	=	$(140 / 60) \times (115 / 60)$	=	4.5	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	170	pph	
	=	$(170 / 60) \times (115 / 60)$	=	5.4	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	5.8 + 6.7 + 4.5	=	16.9	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.8 + 6.7 + 5.4	=	17.9	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4.5 \times (88 - 6 / (2 \times 1.2))$	=	2308.5	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$7 \times (115 - 88) / 115$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 2 / 4.5)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(6 + 7) \times 8$	=	106	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$2308.5 / 106$	=	21.8	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.8 \times (115 - 88)^2 / (2 \times 115)$	=	18	p-s	
An	=	Available Area at northern kerbside	=	20	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$20 \times 115 - (0.5 \times 18)$	=	2291	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2291 / (4 \times 16.9)$	=	33.8	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$6.7 \times (115 - 88)^2 / (2 \times 115)$	=	21	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 115 - (0.5 \times 21)$	=	3152	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$3152 / (4 \times 17.9)$	=	44.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O' Hoi Tai Street				Design Year:	2033 Des(imp)
Description:	Weekend AM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	115	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	255	p/h	
	=	$(255 / 60) \times (115 / 60)$	=	8.1	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	245	p/h	
	=	$(245 / 60) \times (115 / 60)$	=	7.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	105	p/h	
	=	$(105 / 60) \times (115 / 60)$	=	3.4	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	65	p/h	
	=	$(65 / 60) \times (115 / 60)$	=	2.1	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	8.1 + 7.8 + 3.4	=	19.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	8.1 + 7.8 + 2.1	=	18.0	p/cycle	
L	=	Crosswalk Length	=	11	metres	
We	=	Effective Crosswalk Width	=	5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$11 \times 5 \times (35 - 11 / (2 \times 1.2))$	=	1672.92	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$8 \times (115 - 35) / 115$	=	6	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 11 / 1.2 + (0.81 \times 6 / 5)$	=	13	sec	
T	=	Total crosswalk occupancy time				
	=	$(8 + 8) \times 13$	=	212	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1672.92 / 212$	=	7.9	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$8.1 \times (115 - 35)^2 / (2 \times 115)$	=	227	p-s	
An	=	Available Area at northern kerbside	=	22	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$22 \times 115 - (0.5 \times 227)$	=	2417	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2417 / (4 \times 19.3)$	=	31.3	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$7.8 \times (115 - 35)^2 / (2 \times 115)$	=	218	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 115 - (0.5 \times 218)$	=	3054	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$3054 / (4 \times 18)$	=	42.3	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G' Java Road				Design Year:	2033 Des(imp)
Description:	Weekend Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	115	pph	
	=	$(115 / 60) \times (110 / 60)$	=	3.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	45	pph	
	=	$(45 / 60) \times (110 / 60)$	=	1.4	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	485	pph	
	=	$(485 / 60) \times (110 / 60)$	=	14.8	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	65	pph	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	3.5 + 1.4 + 14.8	=	19.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.5 + 1.4 + 2.0	=	6.9	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4.0	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$4 \times (110 - 32) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(4 + 1) \times 14$	=	67	p-s	
Mc	=	Space per pedestrian Crossing				
	=	1296 / 67	=	19.3	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.5 \times (110 - 32)^2 / (2 \times 110)$	=	97	p-s	
An	=	Available Area at northern kerbside	=	17.3	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$17.3 \times 110 - (0.5 \times 97)$	=	1854	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1854 / (4 \times 19.7)$	=	23.5	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.4 \times (110 - 32)^2 / (2 \times 110)$	=	38	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 38)$	=	1829	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1829 / (4 \times 6.9)$	=	66.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F1' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekend Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	74	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	40	p/h	
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	45	p/h	
	=	$(45 / 60) \times (110 / 60)$	=	1.4	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	0	p/h	
	=	$(0 / 60) \times (110 / 60)$	=	0.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	45	p/h	
	=	$(45 / 60) \times (110 / 60)$	=	1.4	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.2 + 1.4 + 0.0	=	2.6	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.2 + 1.4 + 1.4	=	4.0	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4 \times (74 - 6 / (2 \times 1.2))$	=	1716	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (110 - 74) / 110$	=	0	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 0 / 4)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 8$	=	22	p-s	
Mc	=	Space per pedestrian Crossing				
	=	1716 / 22	=	79.7	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.2 \times (110 - 74)^2 / (2 \times 110)$	=	7	p-s	
An	=	Available Area at northern kerbside	=	10.8	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$10.8333333333333 \times 110 - (0.5 \times 7)$	=	1188	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1188 / (4 \times 2.6)$	=	114.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.4 \times (110 - 74)^2 / (2 \times 110)$	=	8	p-s	
As	=	Available Area at southern kerbside	=	25.0	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$25 \times 110 - (0.5 \times 8)$	=	2746	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2746 / (4 \times 4)$	=	172.8	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F2' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekend Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Western kerbside	=	45	pph	
	=	$(45 / 60) \times (110 / 60)$	=	1.4	p/cycle	
Vcs	=	Pedestrian Count from Eastern kerbside	=	40	pph	
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle	
Vsn	=	Sidewalk Flow at Western Kerbside	=	535	pph	
	=	$(535 / 60) \times (110 / 60)$	=	16.3	p/cycle	
Vss	=	Sidewalk Flow at Eastern Kerbside	=	0	pph	
	=	$(0 / 60) \times (110 / 60)$	=	0.0	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.4 + 1.2 + 16.3	=	18.9	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.4 + 1.2 + 0.0	=	2.6	p/cycle	
L	=	Crosswalk Length	=	7.5	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$7.5 \times 4 \times (32 - 7.5 / (2 \times 1.2))$	=	866.25	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$1 \times (110 - 32) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 7.5 / 1.2 + (0.81 \times 1 / 4)$	=	10	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 1) \times 10$	=	25	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$866.25 / 25$	=	34.6	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside				
	=	$1.4 \times (110 - 32)^2 / (2 \times 110)$	=	38	p-s	
An	=	Available Area at Western kerbside	=	16.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at Western kerbside				
	=	$16.5 \times 110 - (0.5 \times 38)$	=	1796	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at Western kerbside				
	=	$1796 / (4 \times 18.9)$	=	23.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside				
	=	$1.2 \times (110 - 32)^2 / (2 \times 110)$	=	34	p-s	
As	=	Available Area at Eastern kerbside	=	10.9	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside				
	=	$10.8833333333333 \times 110 - (0.5 \times 34)$	=	1180	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at Eastern kerbside				
	=	$1180 / (4 \times 2.6)$	=	113.6	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekend Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	250	pph	
	=	$(250 / 60) \times (110 / 60)$	=	7.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	420	pph	
	=	$(420 / 60) \times (110 / 60)$	=	12.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	480	pph	
	=	$(480 / 60) \times (110 / 60)$	=	14.7	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	440	pph	
	=	$(440 / 60) \times (110 / 60)$	=	13.4	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	7.6 + 12.8 + 14.7	=	35.1	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	7.6 + 12.8 + 13.4	=	33.9	p/cycle	
L	=	Crosswalk Length	=	5.8	metres	
We	=	Effective Crosswalk Width	=	6	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.8 \times 6 \times (32 - 5.8 / (2 \times 1.2))$	=	1029.5	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$13 \times (110 - 32) / 110$	=	9	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.8 / 1.2 + (0.81 \times 9 / 6)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(8 + 13) \times 9$	=	190	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1029.5 / 190$	=	5.4	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$7.6 \times (110 - 32)^2 / (2 \times 110)$	=	211	p-s	
An	=	Available Area at northern kerbside	=	27.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$27.5 \times 110 - (0.5 \times 211)$	=	2919	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2919 / (4 \times 35.1)$	=	20.8	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$12.8 \times (110 - 32)^2 / (2 \times 110)$	=	355	p-s	
As	=	Available Area at southern kerbside	=	17.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$17.5 \times 110 - (0.5 \times 355)$	=	1748	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1748 / (4 \times 33.9)$	=	12.9	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekend Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	86	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	400	pph	
	=	$(400 / 60) \times (110 / 60)$	=	12.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	455	pph	
	=	$(455 / 60) \times (110 / 60)$	=	13.9	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	280	pph	
	=	$(280 / 60) \times (110 / 60)$	=	8.6	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	315	pph	
	=	$(315 / 60) \times (110 / 60)$	=	9.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	12.2 + 13.9 + 8.6	=	34.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	12.2 + 13.9 + 9.6	=	35.8	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4.5 \times (86 - 6 / (2 \times 1.2))$	=	2254.5	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$14 \times (110 - 86) / 110$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 3 / 4.5)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(12 + 14) \times 9$	=	228	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$2254.5 / 228$	=	9.9	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$12.2 \times (110 - 86)^2 / (2 \times 110)$	=	32	p-s	
An	=	Available Area at northern kerbside	=	20	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$20 \times 110 - (0.5 \times 32)$	=	2184	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2184 / (4 \times 34.7)$	=	15.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$13.9 \times (110 - 86)^2 / (2 \times 110)$	=	36	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 110 - (0.5 \times 36)$	=	3007	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$3007 / (4 \times 35.8)$	=	21.0	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O' Hoi Tai Street				Design Year:	2033 Des(imp)
Description:	Weekend Noon Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	350	pph	
	=	$(350 / 60) \times (110 / 60)$	=	10.7	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	445	pph	
	=	$(445 / 60) \times (110 / 60)$	=	13.6	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	85	pph	
	=	$(85 / 60) \times (110 / 60)$	=	2.6	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	375	pph	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	10.7 + 13.6 + 2.6	=	26.9	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	10.7 + 13.6 + 11.5	=	35.8	p/cycle	
L	=	Crosswalk Length	=	11	metres	
We	=	Effective Crosswalk Width	=	5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$11 \times 5 \times (32 - 11 / (2 \times 1.2))$	=	1507.92	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$14 \times (110 - 32) / 110$	=	10	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 11 / 1.2 + (0.81 \times 10 / 5)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(11 + 14) \times 14$	=	338	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1507.92 / 338$	=	4.5	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$10.7 \times (110 - 32)^2 / (2 \times 110)$	=	296	p-s	
An	=	Available Area at northern kerbside	=	22	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$22 \times 110 - (0.5 \times 296)$	=	2272	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2272 / (4 \times 26.9)$	=	21.1	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$13.6 \times (110 - 32)^2 / (2 \times 110)$	=	376	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 110 - (0.5 \times 376)$	=	2837	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2837 / (4 \times 35.8)$	=	19.8	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location G' Java Road				Design Year:	2033 Des(imp)
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	32	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	115	p/h	
	=	$(115 / 60) \times (110 / 60)$	=	3.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	65	p/h	
	=	$(65 / 60) \times (110 / 60)$	=	2.0	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	530	p/h	
	=	$(530 / 60) \times (110 / 60)$	=	16.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	105	p/h	
	=	$(105 / 60) \times (110 / 60)$	=	3.2	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	3.5 + 2.0 + 16.2	=	21.7	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	3.5 + 2.0 + 3.2	=	8.7	p/cycle	
L	=	Crosswalk Length	=	12	metres	
We	=	Effective Crosswalk Width	=	4.0	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$12 \times 4 \times (32 - 12 / (2 \times 1.2))$	=	1296	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$4 \times (110 - 32) / 110$	=	2	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 12 / 1.2 + (0.81 \times 2 / 4)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(4 + 2) \times 14$	=	75	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1296 / 75$	=	17.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$3.5 \times (110 - 32)^2 / (2 \times 110)$	=	97	p-s	
An	=	Available Area at northern kerbside	=	17.3	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$17.3 \times 110 - (0.5 \times 97)$	=	1854	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1854 / (4 \times 21.7)$	=	21.4	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$2 \times (110 - 32)^2 / (2 \times 110)$	=	55	p-s	
As	=	Available Area at southern kerbside	=	16.8	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$16.8 \times 110 - (0.5 \times 55)$	=	1821	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1821 / (4 \times 8.7)$	=	52.3	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F1' Hoi Yu Street				Design Year:	2033 Des(imp)
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	74	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	40	p/h	
	=	$(40 / 60) \times (110 / 60)$	=	1.2	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	60	p/h	
	=	$(60 / 60) \times (110 / 60)$	=	1.8	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	0	p/h	
	=	$(0 / 60) \times (110 / 60)$	=	0.0	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	45	p/h	
	=	$(45 / 60) \times (110 / 60)$	=	1.4	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	1.2 + 1.8 + 0.0	=	3.1	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	1.2 + 1.8 + 1.4	=	4.4	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4 \times (74 - 6 / (2 \times 1.2))$	=	1716	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$2 \times (110 - 74) / 110$	=	1	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 1 / 4)$	=	8	sec	
T	=	Total crosswalk occupancy time				
	=	$(1 + 2) \times 8$	=	25	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1716 / 25$	=	67.5	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$1.2 \times (110 - 74)^2 / (2 \times 110)$	=	7	p-s	
An	=	Available Area at northern kerbside	=	10.8	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$10.8333333333333 \times 110 - (0.5 \times 7)$	=	1188	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$1188 / (4 \times 3.1)$	=	97.2	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$1.8 \times (110 - 74)^2 / (2 \times 110)$	=	11	p-s	
As	=	Available Area at southern kerbside	=	25.0	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$25 \times 110 - (0.5 \times 11)$	=	2745	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2745 / (4 \times 4.4)$	=	154.9	m <sup>2</sup> /p	
LOS	=	A				

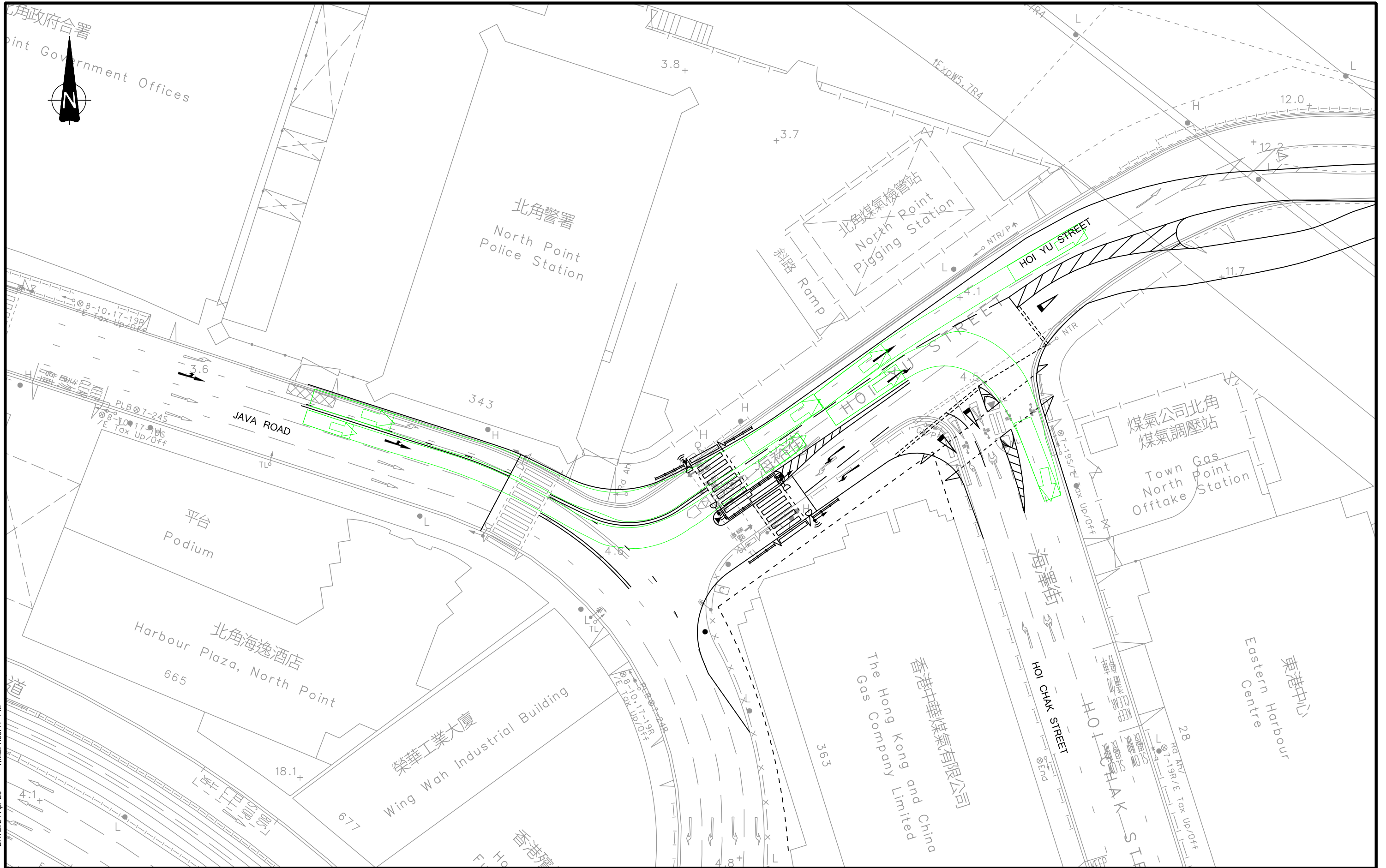
DESIGN SHEET		Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location F2' Hoi Yu Street			Design Year: 2033 Des(imp)
Description:	Weekend PM Peak		Designed By: NLY	Checked By: WCY
C	=	Cycle Time	=	110 sec
G	=	Effective Green Time for Pedestrians	=	32 sec
Vcn	=	Pedestrian Count from Western kerbside	=	60 pph
	=	$(60 / 60) \times (110 / 60)$	=	1.8 p/cycle
Vcs	=	Pedestrian Count from Eastern kerbside	=	40 pph
	=	$(40 / 60) \times (110 / 60)$	=	1.2 p/cycle
Vsn	=	Sidewalk Flow at Western Kerbside	=	620 pph
	=	$(620 / 60) \times (110 / 60)$	=	18.9 p/cycle
Vss	=	Sidewalk Flow at Eastern Kerbside	=	0 pph
	=	$(0 / 60) \times (110 / 60)$	=	0.0 p/cycle
Vtotn	=	Total circulating pedestrian flow at western kerbside		
	=	1.8 + 1.2 + 18.9	=	22.0 p/cycle
Vtots	=	Total circulating pedestrian flow at eastern kerbside		
	=	1.8 + 1.2 + 0.0	=	3.1 p/cycle
L	=	Crosswalk Length	=	7.5 metres
We	=	Effective Crosswalk Width	=	4 metres
Sp	=	Average speed of Pedestrians	=	1.2 m/s
TSc	=	Time-space of the crosswalk		
	=	$7.5 \times 4 \times (32 - 7.5 / (2 \times 1.2))$	=	866.25 m2-s
Nped	=	Number of pedestrians during a cycle		
	=	$2 \times (110 - 32) / 110$	=	1 p/cycle
t	=	Total Crossing Time		
	=	$3.2 + 7.5 / 1.2 + (0.81 \times 1 / 4)$	=	10 sec
T	=	Total crosswalk occupancy time		
	=	$(2 + 1) \times 10$	=	30 p-s
Mc	=	Space per pedestrian Crossing		
	=	$866.25 / 30$	=	29.2 m2/p
LOS	=	A		
<b>Compute the circulation space</b>				
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from Western kerbside		
	=	$1.8 \times (110 - 32)^2 / (2 \times 110)$	=	51 p-s
An	=	Available Area at Western kerbside	=	16.5 m2
TSn	=	Total time -space available for circulating pedestrians at Western kerbside		
	=	$16.5 \times 110 - (0.5 \times 51)$	=	1790 m2-s
Mn	=	Circulation Area per pedestrian at Western kerbside		
	=	$1790 / (4 \times 22)$	=	20.3 m2/p
LOS	=	A		
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from Eastern kerbside		
	=	$1.2 \times (110 - 32)^2 / (2 \times 110)$	=	34 p-s
As	=	Available Area at Eastern kerbside	=	10.9 m2
TSs	=	Total time -space available for circulating pedestrians at Eastern kerbside		
	=	$10.883333333333 \times 110 - (0.5 \times 34)$	=	1180 m2-s
Ms	=	Circulation Area per pedestrian at Eastern kerbside		
	=	$1180 / (4 \times 3.1)$	=	96.6 m2/p
LOS	=	A		

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location M' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekend PM Peak				Designed By:	NLY
					Checked By:	WCY
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	190	p/h	
	=	$(190 / 60) \times (110 / 60)$	=	5.8	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	375	p/h	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	500	p/h	
	=	$(500 / 60) \times (110 / 60)$	=	15.3	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	375	p/h	
	=	$(375 / 60) \times (110 / 60)$	=	11.5	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	5.8 + 11.5	=	15.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	5.8 + 11.5	=	11.5	p/cycle	
L	=	Crosswalk Length	=	5.8	metres	
We	=	Effective Crosswalk Width	=	6	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$5.8 \times 6 \times (35 - 5.8 / (2 \times 1.2))$	=	1133.9	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$11 \times (110 - 35) / 110$	=	8	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 5.8 / 1.2 + (0.81 \times 8 / 6)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(6 + 11) \times 9$	=	157	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1133.9 / 157$	=	7.2	m <sup>2</sup> /p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$5.8 \times (110 - 35)^2 / (2 \times 110)$	=	148	p-s	
An	=	Available Area at northern kerbside	=	27.5	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$27.5 \times 110 - (0.5 \times 148)$	=	2951	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2951 / (4 \times 32.5)$	=	22.7	m <sup>2</sup> /p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$11.5 \times (110 - 35)^2 / (2 \times 110)$	=	293	p-s	
As	=	Available Area at southern kerbside	=	17.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$17.5 \times 110 - (0.5 \times 293)$	=	1779	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$1779 / (4 \times 28.7)$	=	15.5	m <sup>2</sup> /p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location N' Finnie Street				Design Year:	2033 Des(imp)
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	83	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	380	pph	
	=	$(380 / 60) \times (110 / 60)$	=	11.6	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	415	pph	
	=	$(415 / 60) \times (110 / 60)$	=	12.7	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	70	pph	
	=	$(70 / 60) \times (110 / 60)$	=	2.1	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	250	pph	
	=	$(250 / 60) \times (110 / 60)$	=	7.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	11.6 + 12.7 + 2.1	=	26.4	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	11.6 + 12.7 + 7.6	=	31.9	p/cycle	
L	=	Crosswalk Length	=	6	metres	
We	=	Effective Crosswalk Width	=	4.5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$6 \times 4.5 \times (83 - 6 / (2 \times 1.2))$	=	2173.5	m2-s	
Nped	=	Number of pedestrians during a cycle				
	=	$13 \times (110 - 83) / 110$	=	3	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 6 / 1.2 + (0.81 \times 3 / 4.5)$	=	9	sec	
T	=	Total crosswalk occupancy time				
	=	$(12 + 13) \times 9$	=	213	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$2173.5 / 213$	=	10.2	m2/p	
LOS	=	A				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$11.6 \times (110 - 83)^2 / (2 \times 110)$	=	38	p-s	
An	=	Available Area at northern kerbside	=	20	m2	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$20 \times 110 - (0.5 \times 38)$	=	2181	m2-s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2181 / (4 \times 26.4)$	=	20.6	m2/p	
LOS	=	A				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$12.7 \times (110 - 83)^2 / (2 \times 110)$	=	42	p-s	
As	=	Available Area at southern kerbside	=	27.5	m2	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 110 - (0.5 \times 42)$	=	3004	m2-s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$3004 / (4 \times 31.9)$	=	23.5	m2/p	
LOS	=	A				

DESIGN SHEET				Job No.:	CHK50793710	MVA ASIA LIMITED
Junction:	Location O' Hoi Tai Street				Design Year:	2033 Des(imp)
Description:	Weekend PM Peak				Designed By:	NLY
				Checked By:	WCY	
C	=	Cycle Time	=	110	sec	
G	=	Effective Green Time for Pedestrians	=	35	sec	
Vcn	=	Pedestrian Count from Northern kerbside	=	310	p/h	
	=	$(310 / 60) \times (110 / 60)$	=	9.5	p/cycle	
Vcs	=	Pedestrian Count from Southern kerbside	=	445	p/h	
	=	$(445 / 60) \times (110 / 60)$	=	13.6	p/cycle	
Vsn	=	Sidewalk Flow at Northern Kerbside	=	105	p/h	
	=	$(105 / 60) \times (110 / 60)$	=	3.2	p/cycle	
Vss	=	Sidewalk Flow at Southern Kerbside	=	315	p/h	
	=	$(315 / 60) \times (110 / 60)$	=	9.6	p/cycle	
Vtotn	=	Total circulating pedestrian flow at western kerbside				
	=	9.5 + 13.6 + 3.2	=	26.3	p/cycle	
Vtots	=	Total circulating pedestrian flow at eastern kerbside				
	=	9.5 + 13.6 + 9.6	=	32.7	p/cycle	
L	=	Crosswalk Length	=	11	metres	
We	=	Effective Crosswalk Width	=	5	metres	
Sp	=	Average speed of Pedestrians	=	1.2	m/s	
TSc	=	Time-space of the crosswalk				
	=	$11 \times 5 \times (35 - 11 / (2 \times 1.2))$	=	1672.92	m <sup>2</sup> -s	
Nped	=	Number of pedestrians during a cycle				
	=	$14 \times (110 - 35) / 110$	=	9	p/cycle	
t	=	Total Crossing Time				
	=	$3.2 + 11 / 1.2 + (0.81 \times 9 / 5)$	=	14	sec	
T	=	Total crosswalk occupancy time				
	=	$(9 + 14) \times 14$	=	320	p-s	
Mc	=	Space per pedestrian Crossing				
	=	$1672.92 / 320$	=	5.2	m <sup>2</sup> /p	
LOS	=	<b>B</b>				
<b>Compute the circulation space</b>						
Qtno	=	Total time spent by pedestrians waiting to cross the crossing from northern kerbside				
	=	$9.5 \times (110 - 35)^2 / (2 \times 110)$	=	242	p-s	
An	=	Available Area at northern kerbside	=	22	m <sup>2</sup>	
TSn	=	Total time -space available for circulating pedestrians at northern kerbside				
	=	$22 \times 110 - (0.5 \times 242)$	=	2299	m <sup>2</sup> -s	
Mn	=	Circulation Area per pedestrian at northern kerbside				
	=	$2299 / (4 \times 26.3)$	=	21.9	m <sup>2</sup> /p	
LOS	=	<b>A</b>				
Qtso	=	Total time spent by pedestrians waiting to cross the crossing from southern kerbside				
	=	$13.6 \times (110 - 35)^2 / (2 \times 110)$	=	348	p-s	
As	=	Available Area at southern kerbside	=	27.5	m <sup>2</sup>	
TSs	=	Total time -space available for circulating pedestrians at southern kerbside				
	=	$27.5 \times 110 - (0.5 \times 348)$	=	2851	m <sup>2</sup> -s	
Ms	=	Circulation Area per pedestrian at southern kerbside				
	=	$2851 / (4 \times 32.7)$	=	21.8	m <sup>2</sup> /p	
LOS	=	<b>A</b>				

## Appendix B - Swept Path Analysis



FILENAME: D:\OneDrive - SysraGroup\JOBS(NEW)\CHK50793710\TIA\AP1-C.dgn  
 PRINTED BY: cchan  
 DATE: 24-Apr-26  
 TIME: 1:55:41 PM

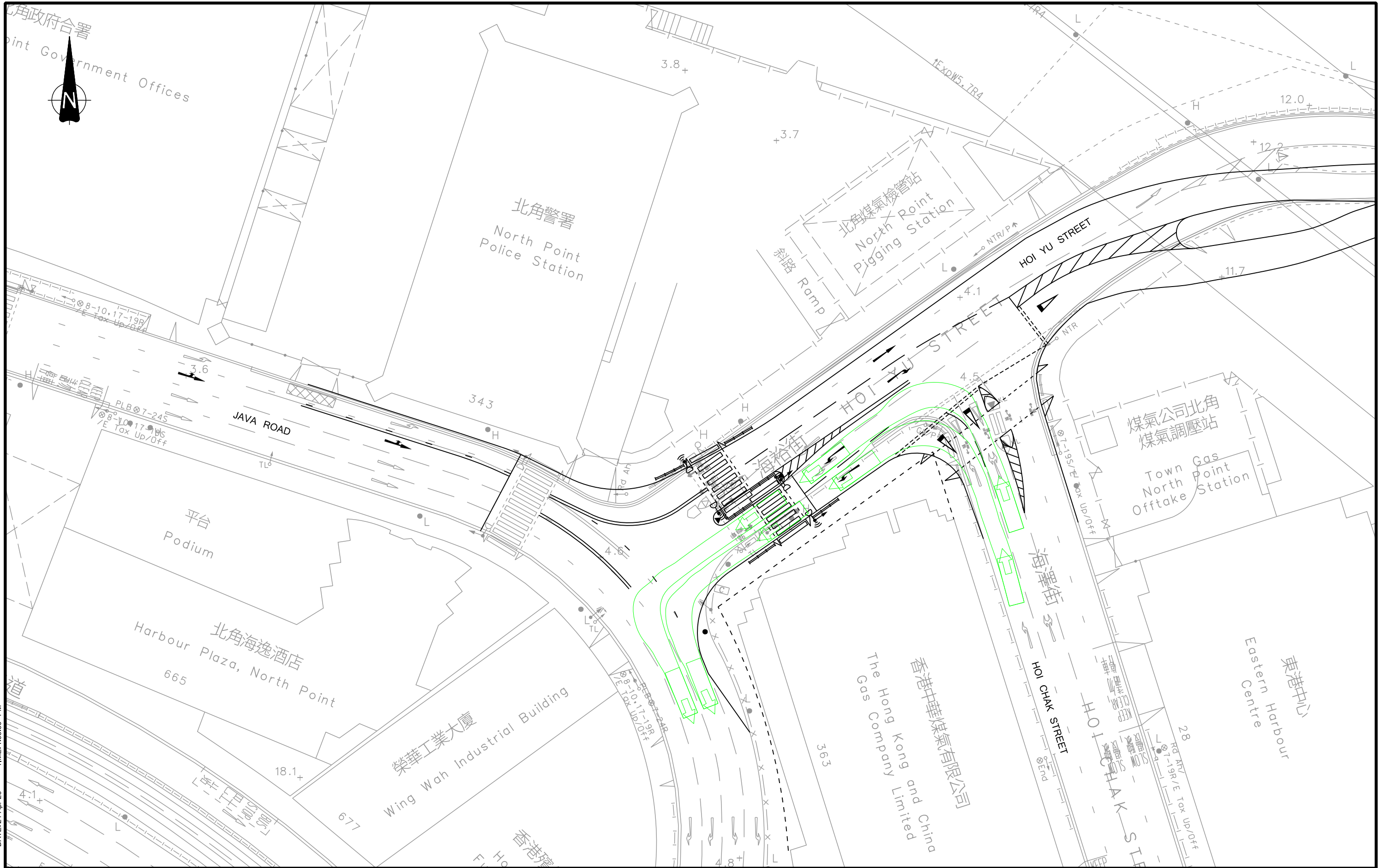
Rev.	Description	Checked	Date
-	-	-	-
C	TD'S COMMENT	WCY	23APR26
B	TD'S COMMENT	WCY	20JAN26
A	INCORPORATED CEDD'S SCHEME	WCY	09SEP25

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**  
**SWEPT PATH ANALYSIS OF PLANNED JUNCTION IMPROVEMENT SCHEME OF JAVA ROAD / HOI YU STREET / HOI CHAK STREET (1)**

Designed	NLY	Checked	WCY	Scale	1:500(A3)	Date	MAR 2025	Drawing No.	<b>AP1</b>	Rev.	C
----------	-----	---------	-----	-------	-----------	------	----------	-------------	------------	------	---





FILENAME: D:\OneDrive - SysraGroup\JOBS(NEW)\CHK50793710\TIA\AP2-C.dgn  
 PRINTED BY: cchan  
 DATE: 24-Apr-26  
 TIME: 1:55:59 PM

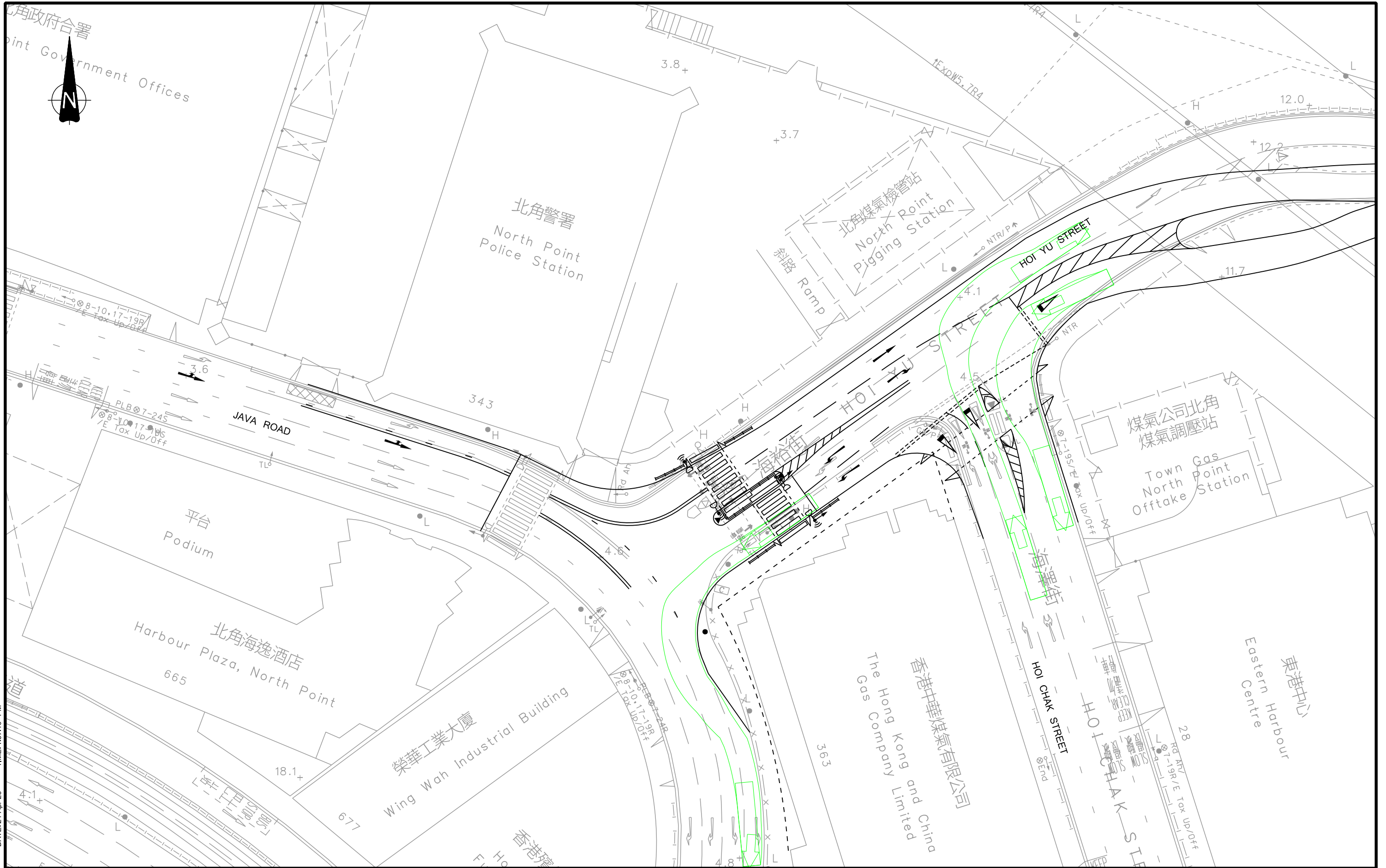
Rev.	Description	Checked	Date
-	-	-	-
C	TD'S COMMENT	WCY	23APR26
B	TD'S COMMENT	WCY	20JAN26
A	INCORPORATED CEDD'S SCHEME	WCY	09SEP25

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**  
**SWEPT PATH ANALYSIS OF PLANNED JUNCTION IMPROVEMENT SCHEME OF JAVA ROAD / HOI YU STREET / HOI CHAK STREET (2)**

Designed	NLY	Checked	WCY	Scale	1:500(A3)	Date	MAR 2025	Drawing No.	<b>AP2</b>	Rev.	C
----------	-----	---------	-----	-------	-----------	------	----------	-------------	------------	------	---





FILENAME: D:\OneDrive - SysraGroup\JOBS(NEW)\CHK50793710\TIA\AP3-C.dgn  
 PRINTED BY: cchan  
 DATE: 24-Apr-26  
 TIME: 1:57:10 PM

Rev.	Description	Checked	Date
-	-	-	-
C	TD'S COMMENT	WCY	23APR26
B	TD'S COMMENT	WCY	20JAN26
A	INCORPORATED CEDD'S SCHEME	WCY	09SEP25

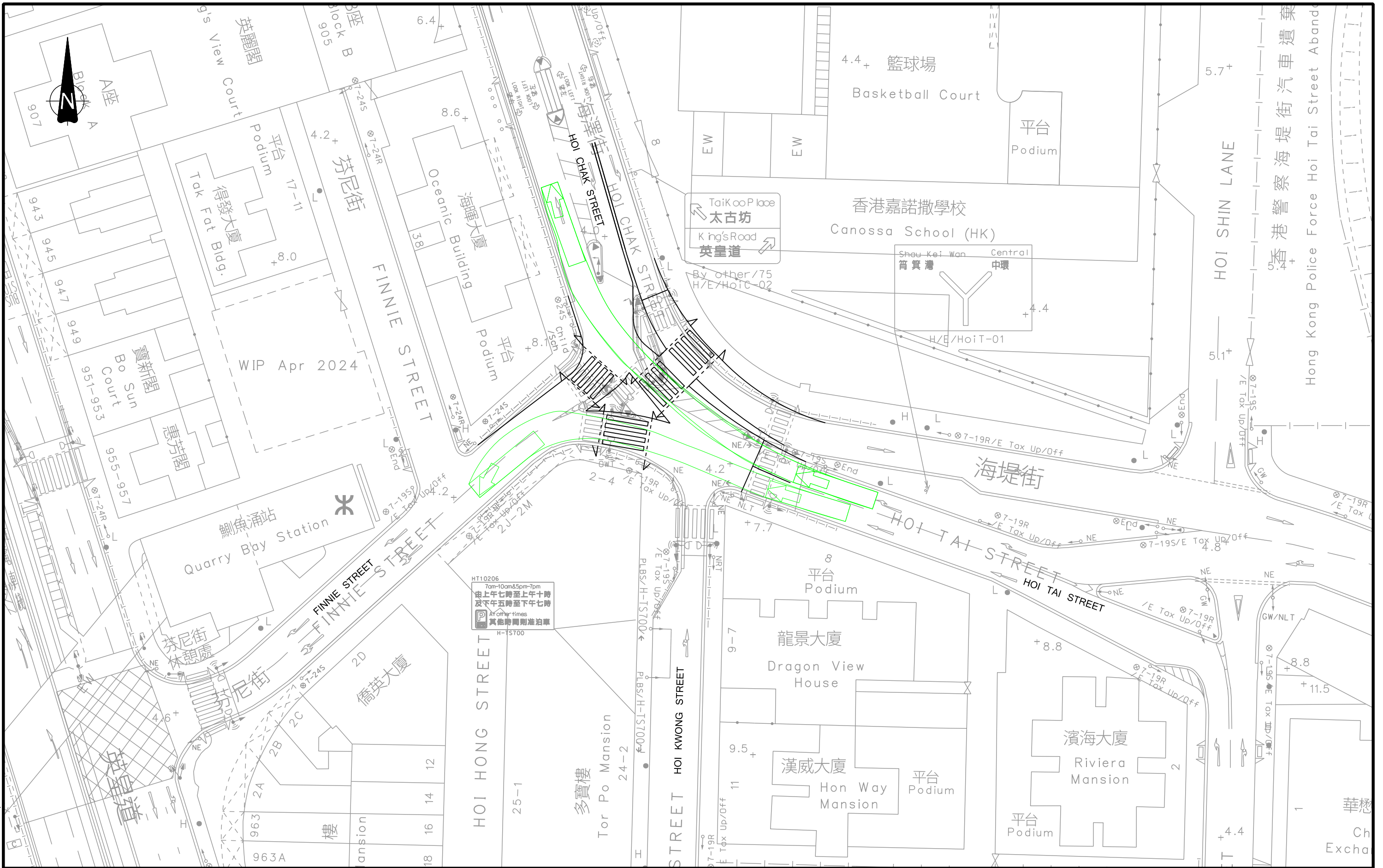
**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**  
**SWEPT PATH ANALYSIS OF PLANNED JUNCTION IMPROVEMENT SCHEME OF JAVA ROAD / HOI YU STREET / HOI CHAK STREET (3)**

Designed	NLY	Checked	WCY	Scale	1:500(A3)	Date	MAR 2025	Drawing No.	<b>AP3</b>	Rev.	C
----------	-----	---------	-----	-------	-----------	------	----------	-------------	------------	------	---



FILENAME: D:\OneDrive - SysTraGroup\JOBS(NEW)\CHK507937\01\TIA\AP4-A.dgn  
 PRINTED BY: cchan  
 DATE: 24-Apr-26  
 TIME: 2:32:30 PM



Rev.	Description	Checked	Date
A	TD'S COMMENT	WCY	23APR26

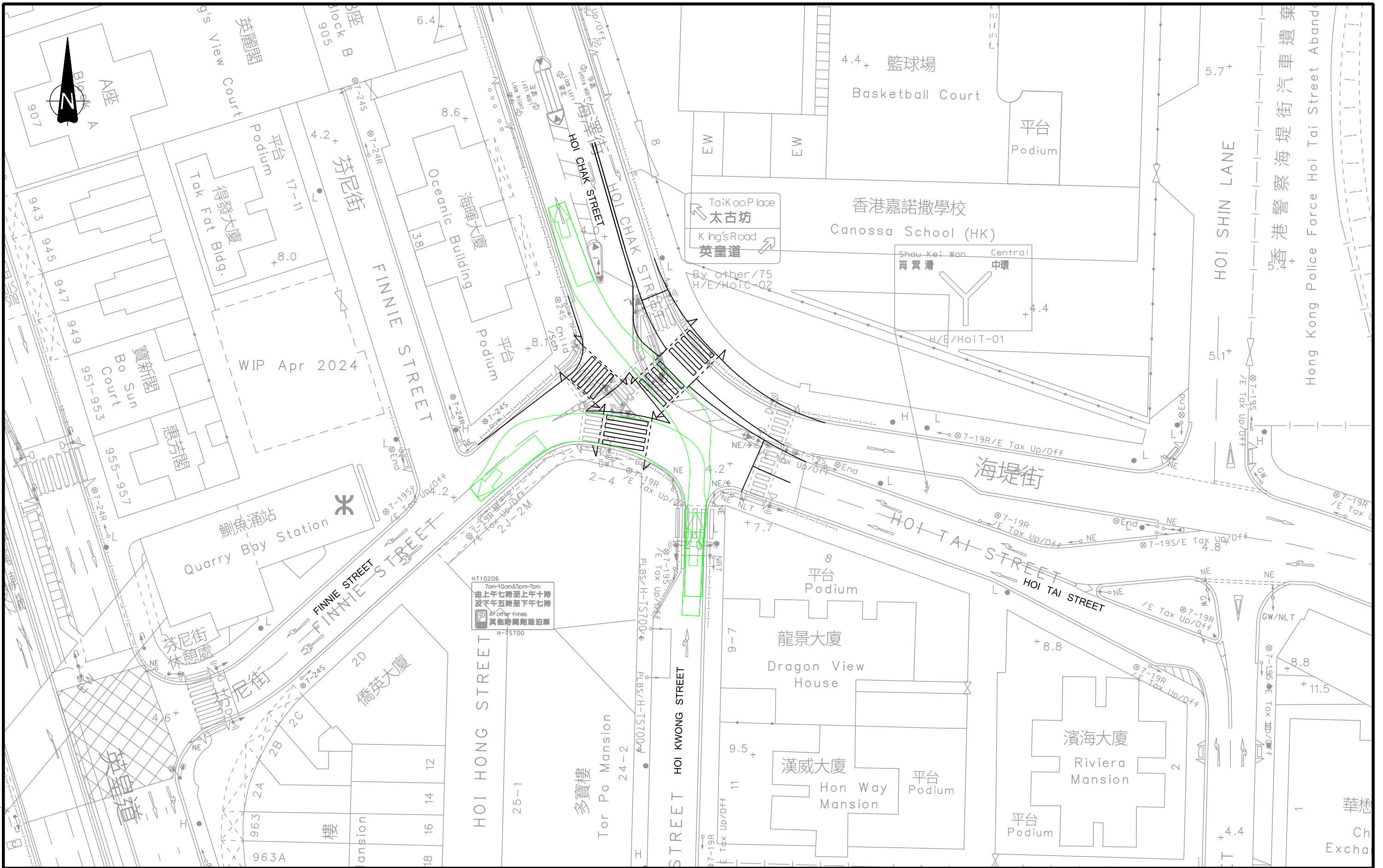
**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**  
**SWEPT PATH ANALYSIS OF PLANNED JUNCTION IMPROVEMENT SCHEME OF HOI TAI STREET / HOI CHAK STREET / FINNIE STREET / HOI KWONG STREET (1)**

Designed: NLY  
 Checked: WCY  
 Scale: 1:500(A3)  
 Date: SEP 2025  
 Drawing No.: **AP4**  
 Rev.: A



FILENAME: D:\OneDrive - SysTraGroup\JOBS(NEW)\CHK507937\01\TIA\AP5-A.dgn  
 PRINTED BY: cchan  
 DATE: 24-Apr-26  
 TIME: 2:32:47 PM



Rev.	Description	Checked	Date
A	TD'S COMMENT	WCY	23APR26

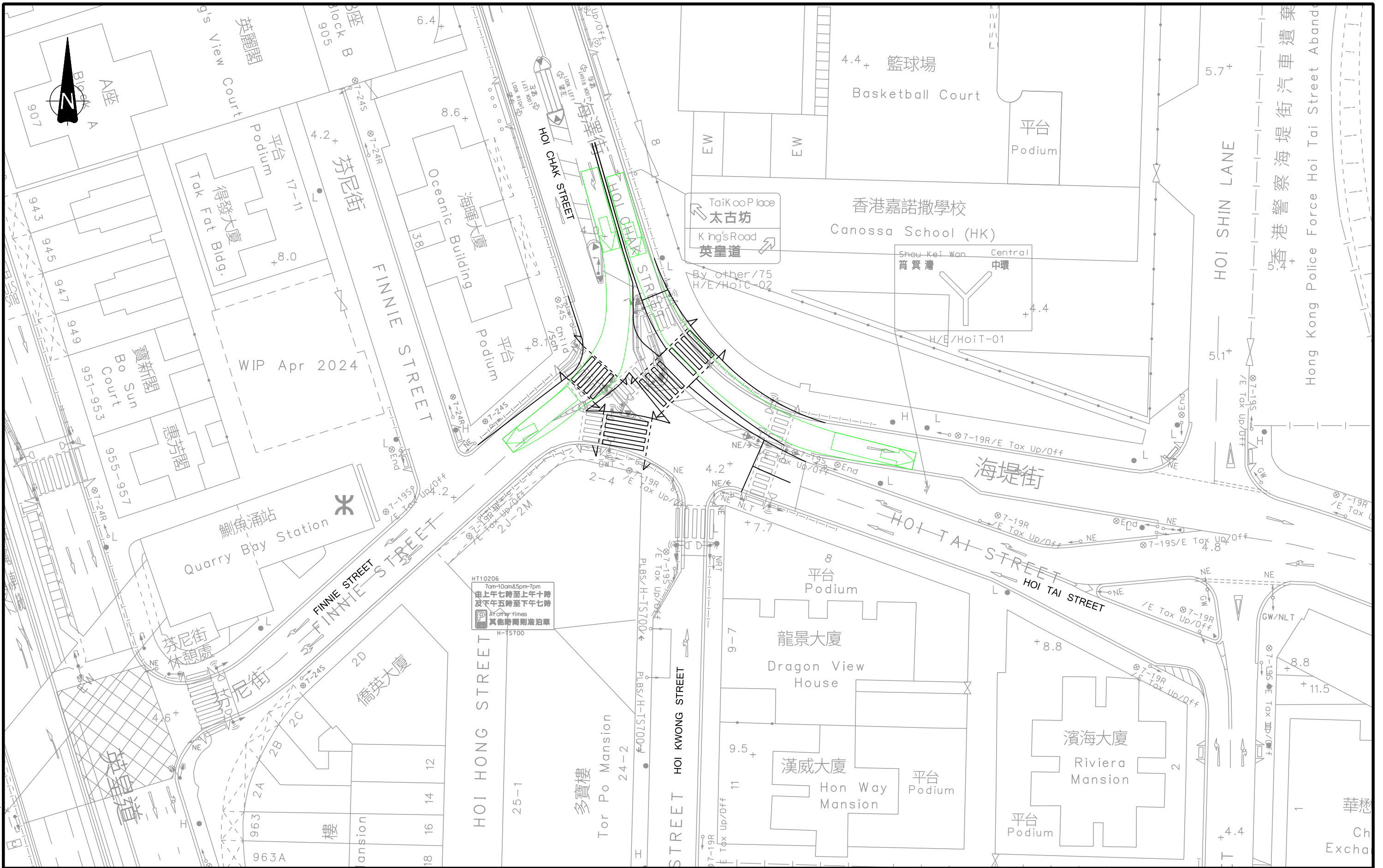
**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

**Drawing Title**  
**SWEPT PATH ANALYSIS OF PLANNED JUNCTION IMPROVEMENT SCHEME OF HOI TAI STREET / HOI CHAK STREET / FINNIE STREET / HOI KWONG STREET (2)**

Designed: NLY    Checked: WCY    Scale: 1:500(A3)    Date: SEP 2025    Drawing No.: AP5    Rev.: A



FILENAME: D:\OneDrive - SysTraGroup\JOBS(NEW)\CHK507937\01\TIA\AP6-A.dgn  
 PRINTED BY: cchan  
 DATE: 24-Apr-26  
 TIME: 2:33:01 PM



HT10206  
 7am-10am & 5pm-7pm  
 由上午七時至上午十時  
 及下午五時至下午七時  
 其他時間則准泊車  
 H-15700

Rev.	Description	Checked	Date
A	TD'S COMMENT	WCY	23APR26

**Project Title**  
 PROPOSED AMENDMENT TO THE NOTES OF THE APPROVED QUARRY BAY OZP RELATING TO THE "OTHER SPECIFIED USES" ZONE ANNOTATED "CULTURAL AND/OR COMMERCIAL LEISURE AND TOURISM RELATED USES"  
 INLAND LOTS 8590 RP (PART) AND 8723 RP (PART) AND ADJOINING GOVERNMENT LAND, HOI YU STREET, QUARRY BAY

<b>Drawing Title</b>			
<b>SWEPT PATH ANALYSIS OF PLANNED JUNCTION IMPROVEMENT SCHEME OF HOI TAI STREET / HOI CHAK STREET / FINNIE STREET / HOI KWONG STREET (3)</b>			
Designed	Checked	Scale	Date
NLY	WCY	1:500(A3)	JAN 2026
Drawing No.		Rev.	
AP6		A	

