Tai Wah Development Consultants Limited

Our Ref.: DD78 Lot 1366 RP & VL
Your Ref.: TPB/A/NE-TKLN/86

The Secretary,
Town Planning Board,
15/F, North Point Government Offices,
333 Java Road,
North Point, Hong Kong

By Email

15 July 2024

Dear Sir,

Supplementary Information

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years in "Recreation" Zone, Various Lots in D.D. 78 and Adjoining Government Land, Ta Kwu Ling North, Lin Ma Hang Road, New Territories

(S16 Planning Application No. A/NE-TKLN/86)

We are writing to submit supplementary information (i.e. a traffic impact assessment) to support the subject application please (**Appendix I**).

Should you require more information regarding the application, please contact the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

Matthew NG
Tai Wah Development Consultants Limited

cc DPO/STN, PlanD (Attn.: Mr. William WONG email: wstwong@pland.gov.hk)
(Attn.: Ms. Katie LEUNG email: kyyleung@pland.gov.hk)

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years

Various Lots in D.D. 78 and Adjoining Government Land, Lin Ma Hang, New Territories

Final TIA Report
July 2024

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Section 16 Planning Application

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years

Various Lots in D.D. 78 and Adjoining Government Land, Lin Ma Hang, New Territories

Final TIA Report
July 2024

Contents Amendment Record

This report has been issued and amended as follows:

Revision	Description	Prepared / Date	Checked / Date	Approved / Date
R0a	Final TIA	10/07/2024 TC	12/07/2024 DP	12/07/2024 SC

Content

Page

1 INTRODUCTION 1
1.1 General 1
1.2 Project Descriptions 1
1.3 Study Objectives 1
1.4 Report Structure 1
2 DESCRIPTONS OF THE APPLICATION SITE 2
2.1 Site Location 2
2.2 Development Parameters for the Application Site 2
2.3 Parking and Loading/Unloading Facilities 2
2.4 Vehicular Access Arrangement and Proposed Access Road 3
3 EXISTING TRAFFIC AND TRANSPORT CONDITIONS 4
3.1 Existing Road Network 4
3.2 Traffic Surveys 4
3.3 Existing Vehicle Traffic Conditions 4
4 TRAFFIC FORCAST 7
4.1 Design Year 7
4.2 Methodology 7
4.3 Future Year Traffic Flows 8
4.4 Future Year Junction Capacity Assessments 9
4.5 Future Year Link Capacity Assessments 10
5 CONSTRUCTION TRAFFIC IMPACT ASSESSMENT 11
5.1 Design Year Peak Hour Construction Traffic 11
5.2 Construction Traffic Impact Assessment 11
6 SUMMARY AND CONCLUSION 13
6.1 Summary 13
6.2 Conclusion 13

List of Table

		Page
Table 2-1	Development Traffic	2
Table 2-2	Ancillary Transport Facilities Based on User's Requirement	3
Table 3-1	Critical Junctions and Links	4
Table 3-2	Passenger Car Unit Conversion Factors	5
Table 3-3	2024 Peak Hour Junction Capacity Assessment	5
Table 3-4	2024 Peak Hour Road Link Capacity Assessment	6
Table 4-1	Traffic Data from ATC in the vicinity of the site	8
Table 4-2	Planned / Committed Developments in the Site Vicinity	8
Table 4-3	2029 Peak Hour Junction Capacity Assessment	9
Table 4-4	2029 Peak Hour Road Link Capacity Assessment	10
Table 5-1	2026 Peak Hour Junction Capacity Assessment	11
Table 5-2	2026 Peak Hour Road Link Capacity Assessment	12

List of Figures

Figure 2-1 Major Ingress / Egress Route

Figure 2-2 Proposed Access Road

Figure 3-1 Survey Locations

Figure 3-2 2024 Observed Peak Hour Traffic Flows

Figure 4-1 2029 Reference Peak Hour Traffic Flows

Figure 4-2 2029 Design Peak Hour Traffic Flows

Figure 5-1 2026 Reference Peak Hour Traffic Flows

Figure 5-2 2026 Design Peak Hour Traffic Flows

Appendices

Appendix A Layout Plan and Swept Path Analysis

Appendix B 2024 Junction Calculation Sheets

Appendix C 2029 Junction Calculation Sheets

Appendix D 2026 Junction Calculation Sheets

1 INTRODUCTION

1.1 General

1.1.1 Ozzo Technology (HK) Limited was commissioned to undertake a Traffic Impact Assessment (TIA) Study in support of the S16 planning application for the Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years ("Application Site").

1.2 Project Descriptions

1.2.1 The Application Site is located at Lin Ma Hang, abutting Lin Ma Hang Road which can be accessed via Heung Yuen Wai Highway.

1.3 Study Objectives

1.3.1 The main objectives of this Traffic Impact Assessment ("TIA") Study are to:

(i) evaluate the existing vehicular traffic and transport conditions of the project site and to assess the traffic and transport implications of the development to the adjacent road network and pedestrian facilities for the operation of the Application Site;

(ii) identify any existing and potential traffic and transport problems and to recommend possible mitigation measures and advise any necessary traffic arrangement;

(iii) recommend traffic improvement measures for the Application Site, as necessary.

1.4 Report Structure

1.4.1 Following this introductory chapter, this report is arranged as follow:

- Chapter 2 describes the Application Site;
- Chapter 3 outlines the existing traffic conditions;
- Chapter 4 presents the finding of traffic forecast;
- Chapter 5 illustrates the result of Construction TIA;
- Chapter 6 provides the conclusion of the TIA.

2 DESCRIPTONS OF THE APPLICATION SITE

2.1 Site Location

2.1.1 The site is located in Lin Ma Hang and can be accessed via Lin Ma Hang Road which serve as the ingress / egress route of site as shown in **Figure 2-1**.

2.2 Development Parameters for the Application Site

2.2.1 The Application Site consisting of various Lots in D.D. 78 in Lin Ma Hang, with a Site area of 24,446m^2.

2.2.2 The Site involves a temporary warehouse with ancillary facilities excluding dangerous goods.The current application is intended to facilitate the relocation of the applicant's affected business premises in Ngau Tam Mei to the Application Site.

2.2.3 The operation hours of the proposed development are Monday to Saturday from 07:00 to 20:00. No operations on Sunday and public holiday. It is anticipated to accommodate not more than 30 staff. Visitor is not anticipated at the Site.

2.3 Parking and Loading/Unloading Facilities

2.3.1 As franchised bus (KMB route no. 79K) would be the main mode of transport for staffs travelling to the warehouse, private car generation/ attraction is expected to be minimal. **Table 2-1** presents the traffic induced by the operation of the warehouse.

Table 2-1 Development Traffic

Time Period	Trip Generation and Attraction (veh/hr)					
	PC		MGV		CV	
	In	Out	In	Out	In	Out
Trip at AM Peak hour	10	1	2	1	2	1
Trip at PM Peak hour	0	6	1	2	2	2
Trip at Non-peak per hour (average)	2	2	1	1	1	1

2.3.2 **Table 2-2** summarizes the internal transport facilities to be provided in the Application Site. As there are no specific parking and loading/unloading requirements for temporary warehouse development in accordance to HKPSG, ancillary transport facilities are provided based on users' requirements to meet operational needs.

Table 2-2 Ancillary Transport Facilities Based on User's Requirement

Type of Ancillary Transport Facilities	Size	Provision based on User's Requirement
Private Car Parking Space	2.5m (W) x 5m (L)	12
Container Vehicle Parking Space	3.5m (W) x 16m (L)	4
Total Parking Facilities	**-**	**16**
L/UL Spaces for MGV	3.5m (W) x 11m (L)	4
L/UL Spaces for Container Vechicle	3.5m (W) x 16m (L)	7
Total L/UL Facilities	**-**	**11**

2.3.3 The conceptual layout plan of the Project Site is included in **Appendix A** for easy reference.

2.4 Vehicular Access Arrangement and Proposed Access Road

2.4.1 The Application Site consist of two vehicular accesses which are located at the north of the site and at the east of the site (hereinafter named as "North Gate" and "East Gate") as shown in **Figure 2.2**. Vehicles can access the site via both gates and pedestrian can only access the site via the East Gate. The East Gate can be accessed by Lin Ma Hang Road while the North Gate is currently inaccessible by vehicles.

2.4.2 To facilitate the vehicular access of the North Gate, a 4.5m wide single track access road with a 12m long passing bay is proposed. Layout of the proposed access road is also presented in **Figure 2-2**. The 12m long passing bay is able to accommodate two light vehicles (or a MGV), as overhead traffic of two 16m long container vehicles is very unlikely, a 12m long passing bay is considered to be adequate.

2.4.3 Swept path analysis is also conducted for the vehicular accesses and the proposed access road, indicating sufficient turning spaces for goods vehicles. **Appendix A** presents the swept path analysis for the vehicular access of the Application Site, as well as internal circulation to/from the parking spaces/ L/UL spaces within the site.

2.4.4 Staffs will be deployed to conduct traffic management/ control measures at the accesses of the site to ensure smooth maneuvering of vehicles entering/ exiting the site and to ensure no queueing of vehicles outside the site. In case there are overlapping traffic (e.g. vehicles entering/ exiting thar site at the same time, which should be very unlikely), traffic entering the site will have priority over the leaving traffic in order to minimize the impact to public road.

2.4.5 To ensure pedestrian safety, staffs would also alert nearby pedestrians by blowing whistle when vehicles approaching/ exiting the Application Site.

3 EXISTING TRAFFIC AND TRANSPORT CONDITIONS

3.1 Existing Road Network

3.1.1 The Site is bounded by Lin Ma Hang Road as shown in **Figure 2-1** which is a single 2-lanes carriageway and can be accessed via Heung Yuen Wai Highway.

3.2 Traffic Surveys

3.2.1 Vehicular count survey was conducted on a typical weekday in January 2024 at the critical junctions and links shown in **Figure 3.1** during the period of 0730-1000 for AM peak and 1700-1930 for PM peak. The details of the critical junction are listed in **Table 3-1** below.

Table 3-1 Critical Junctions and Links

Index	Location	Type
J1	Lin Ma Hang Road/ Slip road of Heung Yuen Wai Highway	Roundabout
J2	Lin Ma Hang Road/ Lin Chuk Road	Priority
L1	Lin Ma Hang Road (section between application site and Heung Yuen Wai Hwy Slip Road NB)	Road Link
L2	Heung Yuen Wai Hwy Slip Road NB	Road Link
L3	Lin Ma Hang Road (section between Lin Chuk Road and Heung Yuen Wai Hwy Slip Road SB)	Road Link

3.3 Existing Vehicle Traffic Conditions

All vehicle flows recorded during the traffic surveys have been converted to passenger car unit (PCU) based on the PCU factors as indicated in Table 2.3.1.1 of Volume 2 of Transport Planning and Design Manual (TPDM) as illustrated in **Table 3-2**.

Table 3-2 Passenger Car Unit Conversion Factors

Vehicle Type	PCU Conversion Factor(1)
	Priority junction/ Roundabout
Car / Taxi	1.00
Public Light Bus / Minibus / Light Goods Vehicle	1.50
Medium Goods Vehicle	2.00
Heavy Goods Vehicle	2.50
Bus / Coach	2.50

Notes: (1) Table 2.3.1.1, Chapter 2.3, Volume 2, TPDM-2023

3.3.1 By applying the above PCU factors, vehicular traffic flows in PCUs are calculated and the AM and PM peak hour is identified to occur at 08:45-09:45 and 16:30-17:30 for AM peak and PM peak respectively. **Figure 3-2** presents the 2024 observed Weekday AM and PM peak hour traffic flows on the road network in the vicinity of the Application Site.

3.3.2 Based on the existing traffic flows, the peak hour performances of the key junctions are assessed. The assessment results are indicated in **Table 3-3** and detailed junction calculation sheets are given in **Appendix B**.

Table 3-3 2024 Peak Hour Junction Capacity Assessment

Jn. ID.	Location(1)	Type	Capacity Index(2)	2024 Weekday	
				AM Peak	PM Peak
J1	Lin Ma Hang Road/ Slip road of Heung Yuen Wai Highway	Roundabout	DFC	0.20	0.18
J2	Lin Ma Hang Road/ Lin Chuk Road	Priority	DFC	0.07	0.07

Notes:
(1) Refer to Figure 3-1 for junction locations
(2) DFC = Design Flow to Capacity for priority junction and roundabout

3.3.3 The results reveal that all the assessed key junctions are operated satisfactorily during the peak hours.

3.3.4 Based on the existing traffic flows, the peak hour performances of the key road links in the vicinity of the Application Site are also assessed and the results are indicated in **Table 3-4**.

Table 3-4 2024 Peak Hour Road Link Capacity Assessment

No.	Location[1]	Direction	Design[2] Capacity (veh/hr)	Weekday AM Peak		Weekday PM Peak	
				Flows (veh/hr)	P/Df[3]	Flows (veh/hr)	P/Df[3]
L1	Lin Ma Hang Road (section between application site and Heung Yuen Wai Hwy Slip Road NB)	EB	400	167	0.42	159	0.4
		WB	400	142	0.36	132	0.33
L2	Heung Yuen Wai Hwy Slip Road	NB	1500	127	0.08	101	0.07
L3	Lin Ma Hang Road (section between Lin Chuk Road and Heung Yuen Wai Hwy Slip Road SB)	NB	400	69	0.17	77	0.19
		SB	400	166	0.42	156	0.39

Notes: (1) Refer to Figure 3-1 for road link locations
(2) TPDM Vol 2 Chapter 2.4.1.1
(3) P/Df = Peak Hourly Flows/Design Flow Ratios (P/Df) for road links

3.3.5 The results reveal that all the key road links in the vicinity of the Project Site operate within capacity during the peak hours.

4 TRAFFIC FORCAST

4.1 Design Year

4.1.1 According to current programme, the proposed warehouse development will commission in the year of 2026 and last for 3 years, the design year for traffic forecast is therefore set to be 2029.

4.2 Methodology

4.2.1 In forecasting the future traffic flows on the road network in the Study Area, due considerations are given to the following information and factors:

- Historical traffic data from Annual Traffic Census (ATC) published by Transport Department;
- The forecasted population and employment from the 2019-based Territorial Population and Employment Data Matrices (TPEDM) planning data published by Planning Department;
- Committed and planned developments in the Study Area.

4.2.2 The following steps are undertaken to derive the 2029 Peak Hour Reference Flows (i.e. without the Project Site) and Design Flows (i.e. with the Application Site).

2029 Background Flows = 2024 Flows x annual growth factors

2029 Reference Flows = 2029 Background Flows + additional traffic by planned and committed developments

2029 Design Flows = 2029 Reference Flows + development traffic

4.2.3 The traffic impact to be induced by the Development is assessed by comparing the Peak Hour Reference Traffic Flows against the Peak Hour Design Traffic Flows for the Design Year.

4.3 Future Year Traffic Flows

Historical Traffic Growth

4.3.1 The TPEDM data in NENT(others) covers larger scale of the North East area. Considering the application site is located in the rural area (close to boundary area) and is not in the proximity to town centre or other planned NDA, the TPEDM data in NENT(others) is deemed to be less relevant to reflect the population and employment situations of the vicinity of the Application Site.

4.3.2 To obtain a more relevant growth rate, reference is also made to the historical traffic data from Annual Traffic Census (ATC) published by Transport Department. The historical trend of traffic growth on the nearby road network over the 5-year period of 2018 to 2022 are extracted from the Annual Traffic Census (ATC) Reports for the ATC stations in the vicinity of the site. **Table 4-1** describes the locations of the nearby ATC stations and provides the corresponding traffic data.

Table 4-1 Traffic Data from ATC in the vicinity of the site

Station	Road	Between		2018	2019	2020	2021	2022	Average Annual Growth 2018-2022
6653	Ping Che Rd	Sha Tau Kok Rd	Lin Ma Hang Rd	11,430	11,820	11,030	11,870	11,510	0.17%
5041	Lung Shan Tunnel (1)	Fanling Highway	Sha Tau Kok Road – Wo Hang	-	13,540	13,840	16,870	16,400	6.60%
Total				11,430	25,360	24,870	28,740	27,910	**3.25%**

Note: (1) Station 5041 started to record since year 2019 when the Heung Yuen Wai Highway commissioned

4.3.3 As indicated in **Table 4-1**, the traffic on the road network in the vicinity of the Application Site is increased by 3.25% p.a. on average over the period from 2019 – 2022. This will be adopted as annual growth rate to project future traffic flow.

Planned and Committed Developments

4.3.4 By referring to the TPB website, it is known that there would be other planned developments commissioned in the vicinity of the application site, as listed in **Table 4-2**.

Table 4-2 Planned / Committed Developments in the Site Vicinity

Application No.	Location	Land Use	Site Area (m^2)
A/NE-TKLN/85	Lots 1364 S.B RP and 1364 S.B ss.1 RP in D.D. 78, Ta Kwu Ling North, Lin Ma Hang Road, New Territories	Proposed Temporary Warehouse (Storage of Building Materials and Metal)	1,105

A/NE-TKLN/77	Various Lots in D.D. 78 and 82 and Adjoining Government Land, Ta Kwu Ling North, Lin Ma Hang Road, New Territories	Proposed Temporary Logistic Centre, Warehouse (Excluding Dangerous Goods Godown) and Container Vehicle Park	122,819
A/NE-TKLN/63	Lots 1309 S.B ss.3 and 1313 RP in D.D. 78 and Adjoining Government Land, Ta Kwu Ling North, New Territories	Proposed Temporary Private Club	451.5

2029 Reference Flows

4.3.5 By incorporating the planned development traffic and annual growth mentioned in **Section 4.3.4** and **Section 4.3.2** respectively, the 2029 Reference Traffic Flow are presented in **Figure 4-1**.

2029 Design Flows

4.3.6 The additional development traffic mentioned in **Section 2.3** is then assigned onto the nearby road network in addition to the Reference Traffic Flow presented in **Figure 4-1**. The resulting 2029 Design Traffic Flow are shown in **Figure 4-2.**

4.4 Future Year Junction Capacity Assessments

4.4.1 The critical road junction as identified in **Section 3.2** are assessed in the light of traffic forecast for the design year 2029 defined in **Section 4.1**. The results are shown in in **Table 4-3** with detailed junction calculation sheets provided in **Appendix C**.

Table 4-3 2029 Peak Hour Junction Capacity Assessment

Jn. ID.	Location(1)	Type	Capacity Index(2)	2029 Reference Scenario		2029 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
J1	Lin Ma Hang Road/ Slip road of Heung Yuen Wai Highway	Roundabout	DFC	0.33	0.31	0.34	0.32
J2	Lin Ma Hang Road/ Lin Chuk Road	Priority	DFC	0.09	0.08	0.09	0.08

Notes:
(1) Refer to Figure 3-1 for junction locations
(2) DFC = Design Flow to Capacity for priority junction and roundabout

4.4.2 It is indicated in the above **Table 4-3** that the identified critical junctions would operate satisfactorily during peak hours in the design years of 2029 without and with the Development in place, taking account of the known planned/ committed major developments in the vicinity of the Application Site.

4.5 Future Year Link Capacity Assessments

4.5.1 The critical road links as identified in **Section 3.2** are also assessed based on the future year traffic flow derived in **Section 4.3** and the results are presented in **Table 4-4**.

Table 4-4 2029 Peak Hour Road Link Capacity Assessment

No.	Location[1]	Dir.	Design[2] Capacity (veh/hr)	2029 Reference Scenario (AM Peak)		2029 Reference Scenario (PM Peak)		2029 Design Scenario (AM Peak)		2029 Design Scenario (PM Peak)	
				Flows (veh/hr)	P/Df[3]	Flows (veh/hr)	P/Df[3]	Flows (veh/hr)	P/Df[3]	Flows (veh/hr)	P/Df[3]
L1	Lin Ma Hang Road (section between application site and Heung Yuen Wai Hwy Slip Road NB)	EB	400	219	0.55	244	0.61	222	0.56	254	0.64
		WB	400	223	0.56	178	0.45	237	0.59	181	0.45
L2	Heung Yuen Wai Hwy Slip Road	NB	1500	172	0.11	176	0.12	175	0.12	186	0.12
L3	Lin Ma Hang Road (section between Lin Chuk Road and Heung Yuen Wai Hwy Slip Road SB)	NB	400	81	0.2	91	0.23	81	0.20	91	0.23
		SB	400	251	0.63	207	0.52	265	0.66	210	0.53

Notes: (1) Refer to Figure 3-1 for road link locations
(2) TPDM Vol 2 Chapter 2.4.1.1 and
(3) P/Df = Peak Hourly Flows/Design Flow Ratios (P/Df) for road links

4.5.2 The results in the above **Table 4-4** indicate that all the key road links would be operating within their capacity in the design year of 2029.

5 CONSTRUCTION TRAFFIC IMPACT ASSESSMENT

5.1 Design Year Peak Hour Construction Traffic

5.1.1 Under current programme, the construction works will be completed in the year of 2026. Thus 2026 is adopted as the design year for construction traffic impact assessment.

5.1.2 The construction traffic mainly consists of concrete delivery and dump trucks. A conservative estimation of 8 veh/hr, which is equivalent to 16 pcu/hr is adopted in this Construction Traffic Impact Assessment.

5.1.3 The same approach in forecasting the 2029 Design Peak Hour Traffic (refers to Chapter 4) is adopted to forecast the 2026 Design Peak Hour Traffic as summarized below:

2026 Background Flows = 2024 Flows x annual growth factors

2026 Reference Flows = 2026 Background Flows + additional traffic by planned and committed developments

2026 Design Flows = 2026 Reference Flows + construction traffic

5.2 Construction Traffic Impact Assessment

5.2.1 The 2026 Peak Hour Traffic Flows during construction period are shown in **Figure 5-1** and **Figure 5-2** respectively. Based on the traffic forecasts, results of the junctions and links capacity assessments during the construction year are presented in **Table 5-1** and **Table 5-2** respectively. Detailed calculation sheets of the junction assessments are provided in **Appendix D**.

Table 5-1 2026 Peak Hour Junction Capacity Assessment

Jn. ID.	Location(1)	Type	Capacity Index(2)	2026 Reference Scenario		2026 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
J1	Lin Ma Hang Road/ Slip road of Heung Yuen Wai Highway	Roundabout	DFC	0.31	0.29	0.32	0.30
J2	Lin Ma Hang Road/ Lin Chuk Road	Priority	DFC	0.08	0.07	0.08	0.07

Notes:
(1) Refer to Figure 3-1 for junction locations
(2) DFC = Design Flow to Capacity for priority junction and roundabout

Table 5-2 2026 Peak Hour Road Link Capacity Assessment

No.	Location[1]	Dir.	Design[2] Capacity (veh/hr)	2026 Reference Scenario (AM Peak)		2026 Reference Scenario (PM Peak)		2026 Design Scenario (AM Peak)		2026 Design Scenario (PM Peak)	
				Flows (veh/hr)	P/Df[3]	Flows (veh/hr)	P/Df[3]	Flows (veh/hr)	P/Df[3]	Flows (veh/hr)	P/Df[3]
L1	Lin Ma Hang Road (section between application site and Heung Yuen Wai Hwy Slip Road NB)	EB	400	201	0.50	226	0.57	209	0.52	234	0.59
		WB	400	207	0.52	164	0.41	215	0.54	172	0.43
L2	Heung Yuen Wai Hwy Slip Road	NB	1500	158	0.11	165	0.11	166	0.11	173	0.12
L3	Lin Ma Hang Road (section between Lin Chuk Road and Heung Yuen Wai Hwy Slip Road SB)	NB	400	74	0.19	82	0.21	74	0.19	82	0.21
		SB	400	233	0.58	189	0.47	241	0.60	197	0.49

Notes: (1) Refer to Figure 3-1 for road link locations
(2) TPDM Vol 2 Chapter 2.4.1.1
(3) P/Df = Peak Hourly Flows/Design Flow Ratios (P/Df) for road links

5.2.2 The results indicate that the key junctions and road links in the vicinity of the application site would operate at an acceptable level during the weekday AM and PM peak hours even with the construction traffic to be generated during the construction period.

6 SUMMARY AND CONCLUSION

6.1 Summary

6.1.1 Ozzo Technology (HK) Limited is commissioned to undertake this Traffic Impact Assessment (TIA) Study to assess the traffic impact to be induced by the Application Site on the nearby road network.

6.1.2 Capacity assessments are undertaken to reveal the AM and PM peak hour traffic conditions for year 2024 and 2029 in the vicinity of the Application Site. The assessment results indicate that all the key junctions and road links perform satisfactorily during the AM and PM peak hours on a normal weekday for both the Reference and Design scenarios.

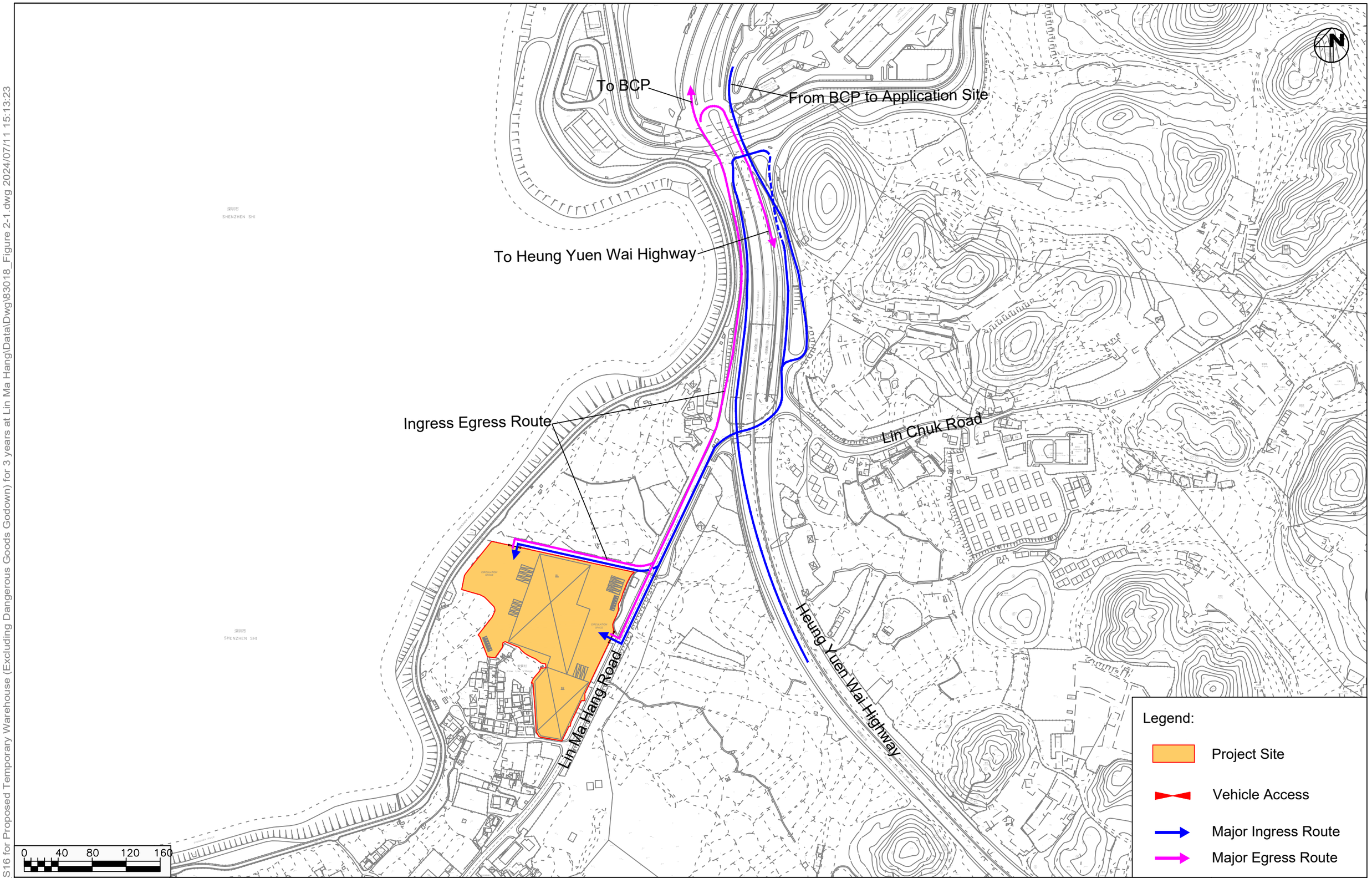
6.1.3 To facilitate the vehicular access of the North Gate, a single track access road with a 12m long passing bay is proposed.

6.1.4 Construction traffic impact assessment is also conducted and indicates that the key junctions and road links in the vicinity of the project site would operate at an acceptable level during the weekday AM and PM peak hours even with the construction traffic to be generated during the construction period.

6.2 Conclusion

6.2.1 The impact assessment results indicate that the Application Site would not induce significant traffic impacts and considered acceptable from traffic engineering viewpoint.

Figures



OZZO TECHNOLOGY

Date	Scale
11/07/2024	1:4000

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

Major Ingress / Egress Route

Project No.	83018	Rev.
Dwg No.	Figure 2-1	-

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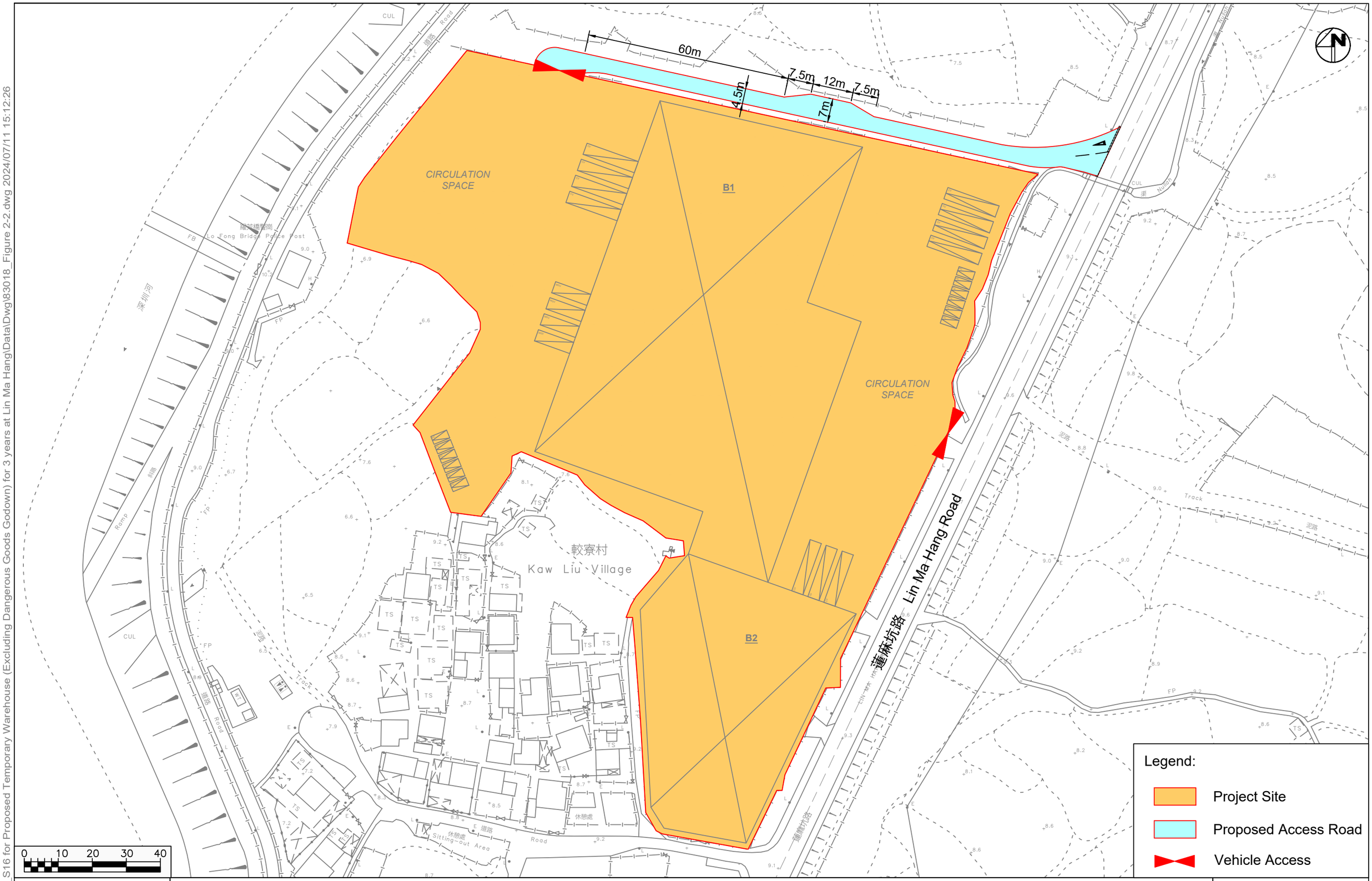

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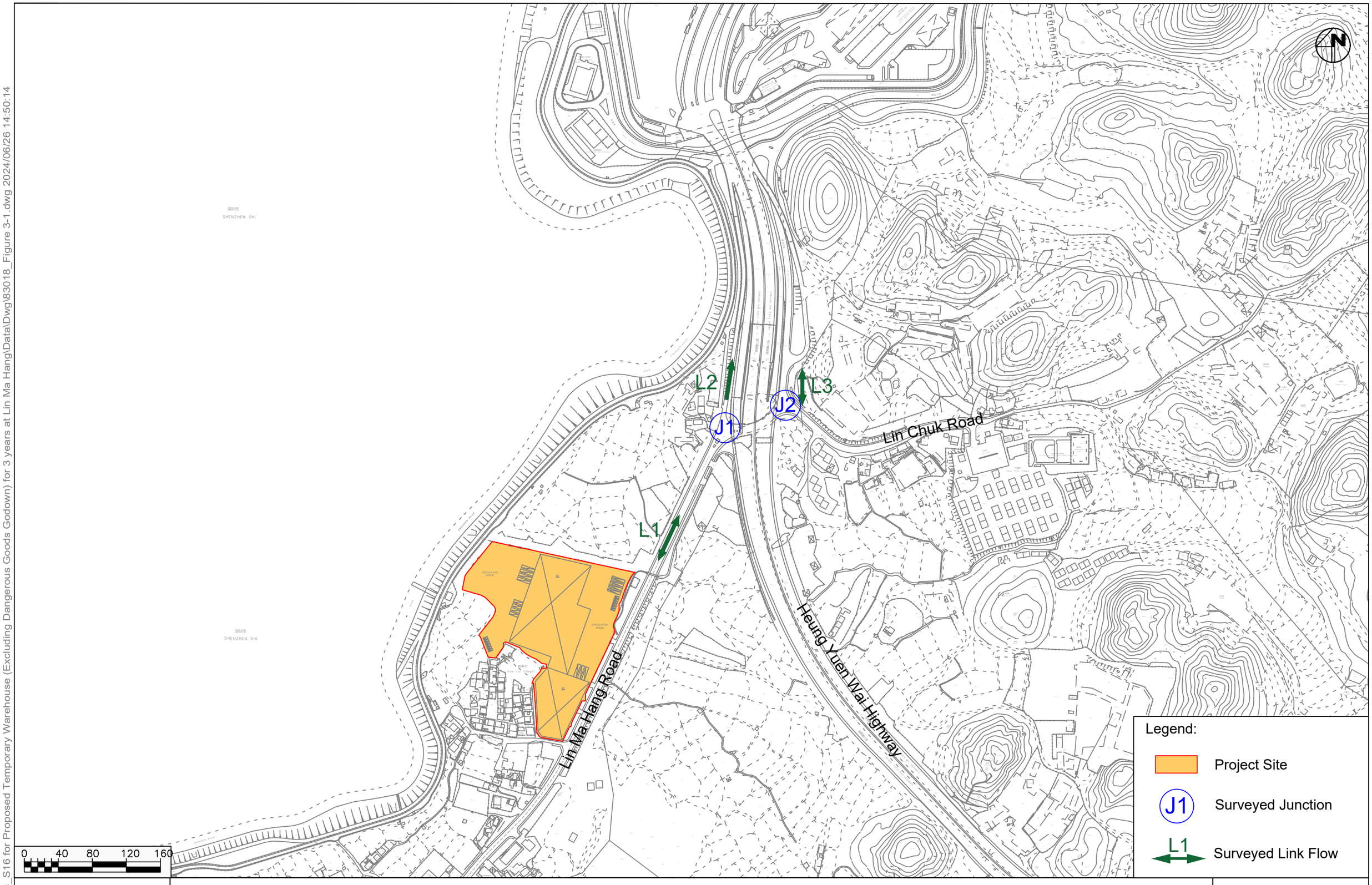
OZZO TECHNOLOGY

Date	Scale
11/07/2024	1:1000

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

Proposed Access Road

Project No. 83018	Rev.
Dwg No. Figure 2-2	-



OZZO TECHNOLOGY

Date 26/06/2024

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S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

Survey Locations

Project No. 83018

Dwg No. Figure 3-1

Rev. -

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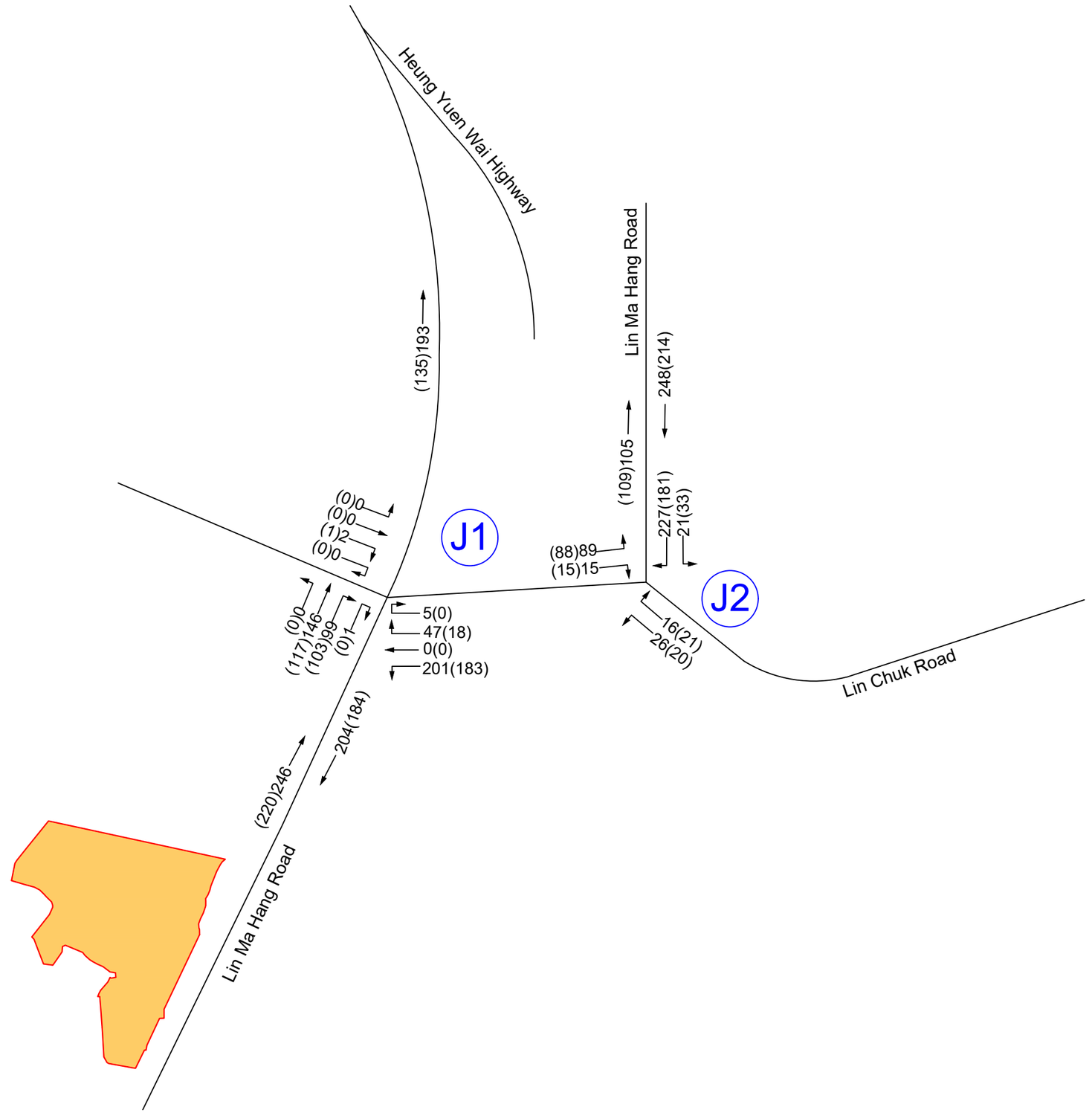


Legend:

- Application Site
- J1 Surveyed Junction
- 123(123) Weekday AM Peak Hour Traffic Flow / Weekday PM Peak Hour Traffic Flow

Note: Traffic Flows at Junction in PCU values
Minor Road not shown for Clarity

OZZO TECHNOLOGY

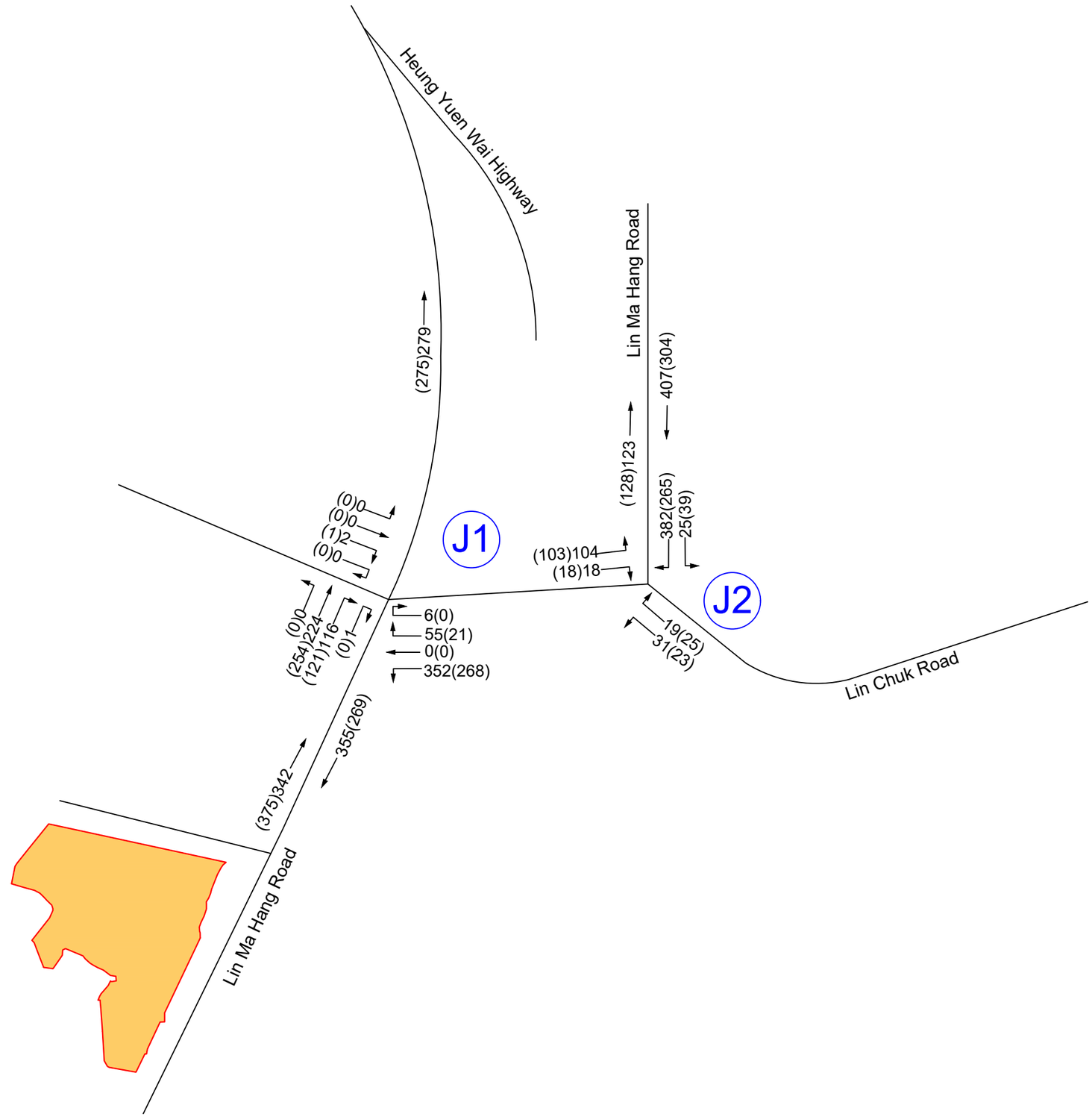
S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

2024 Existing Peak Hour Traffic Flows

Date	Scale
10/07/2024	N.T.S

Project No.	Rev.
83018	-
Dwg No. Figure 3-2	

X:\Ozzo\83018_S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang\Data\Dwg\83018_Figure 3-2.dwg 2024/07/11 11:25:35



Legend:

- Application Site
- J1 Surveyed Junction
- Weekday AM Peak Hour Traffic Flow
- 123(123) Weekday PM Peak Hour Traffic Flow

Note: Traffic Flows at Junction in PCU values
Minor Road not shown for Clarity

OZZO TECHNOLOGY

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

2029 Reference Peak Hour Traffic Flows

Date	Scale
10/07/2024	N.T.S

Project No.	83018	Rev.
Dwg No.	Figure 4-1	-

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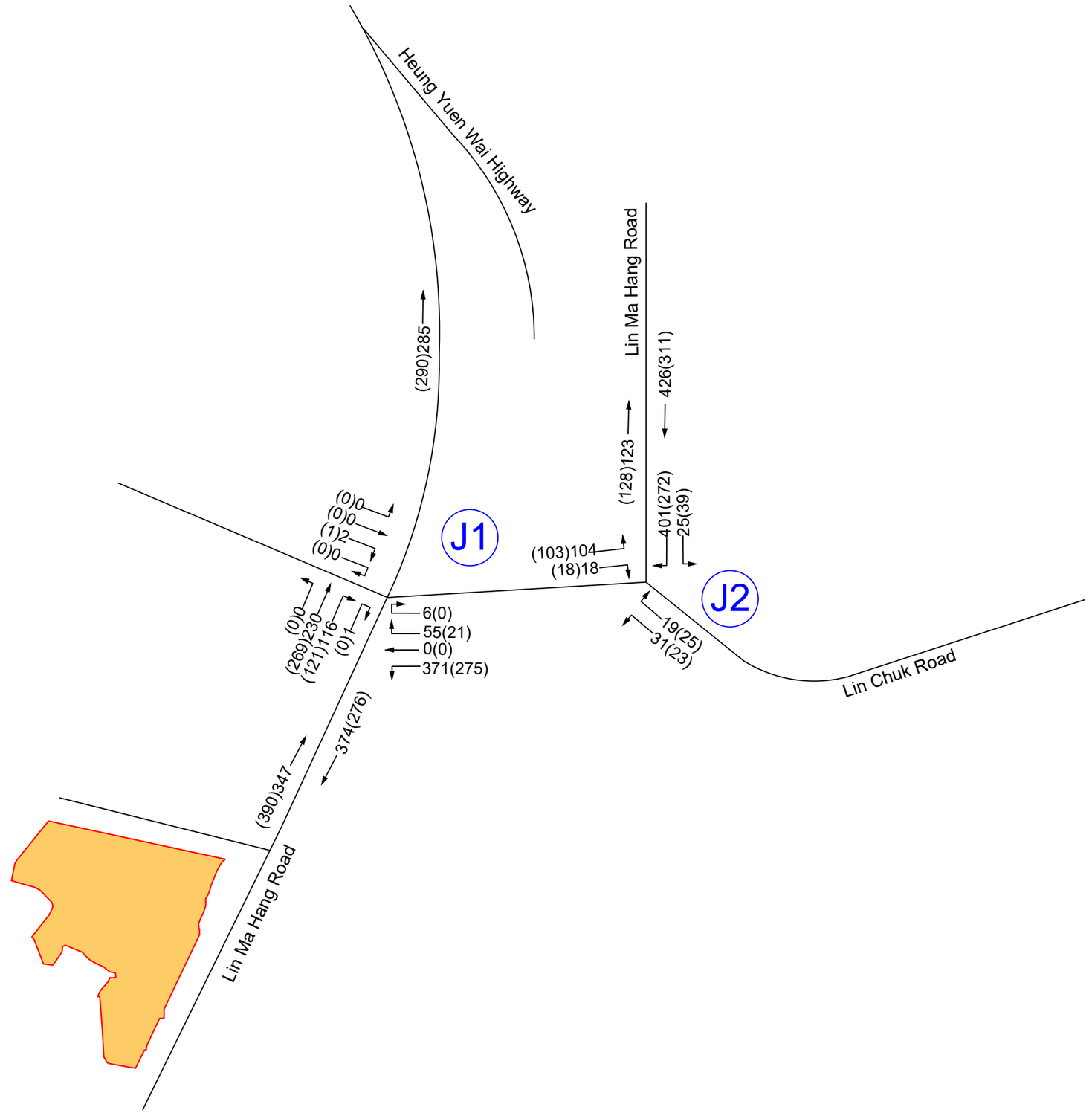

Legend:

- Application Site
- J1 Surveyed Junction
- Weekday AM Peak Hour Traffic Flow
- 123(123) Weekday PM Peak Hour Traffic Flow

Note: Traffic Flows at Junction in PCU values
Minor Road not shown for Clarity

OZZO TECHNOLOGY

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

2029 Design Peak Hour Traffic Flows

Date	Scale
10/07/2024	N.T.S

Project No.	83018	Rev.
Dwg No.	Figure 4-2	-

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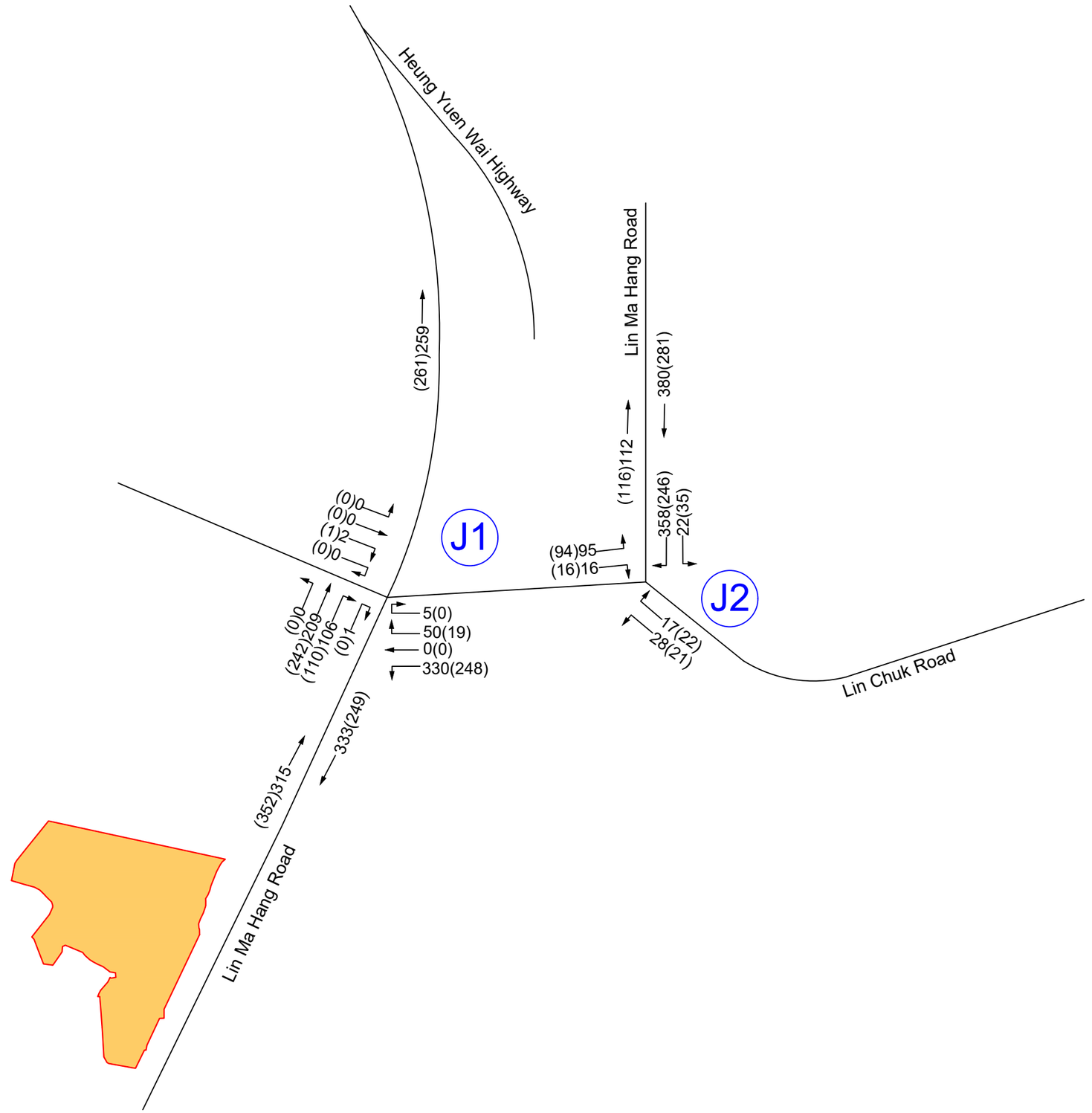

Legend:

- Application Site
- J1 Surveyed Junction
- Weekday AM Peak Hour Traffic Flow
- 123(123) Weekday PM Peak Hour Traffic Flow

Note: Traffic Flows at Junction in PCU values
Minor Road not shown for Clarity

OZZO TECHNOLOGY

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

2026 Reference Peak Hour Traffic Flows

Date	Scale
10/07/2024	N.T.S

Project No.	Rev.
83018	-
Dwg No. Figure 5-1	

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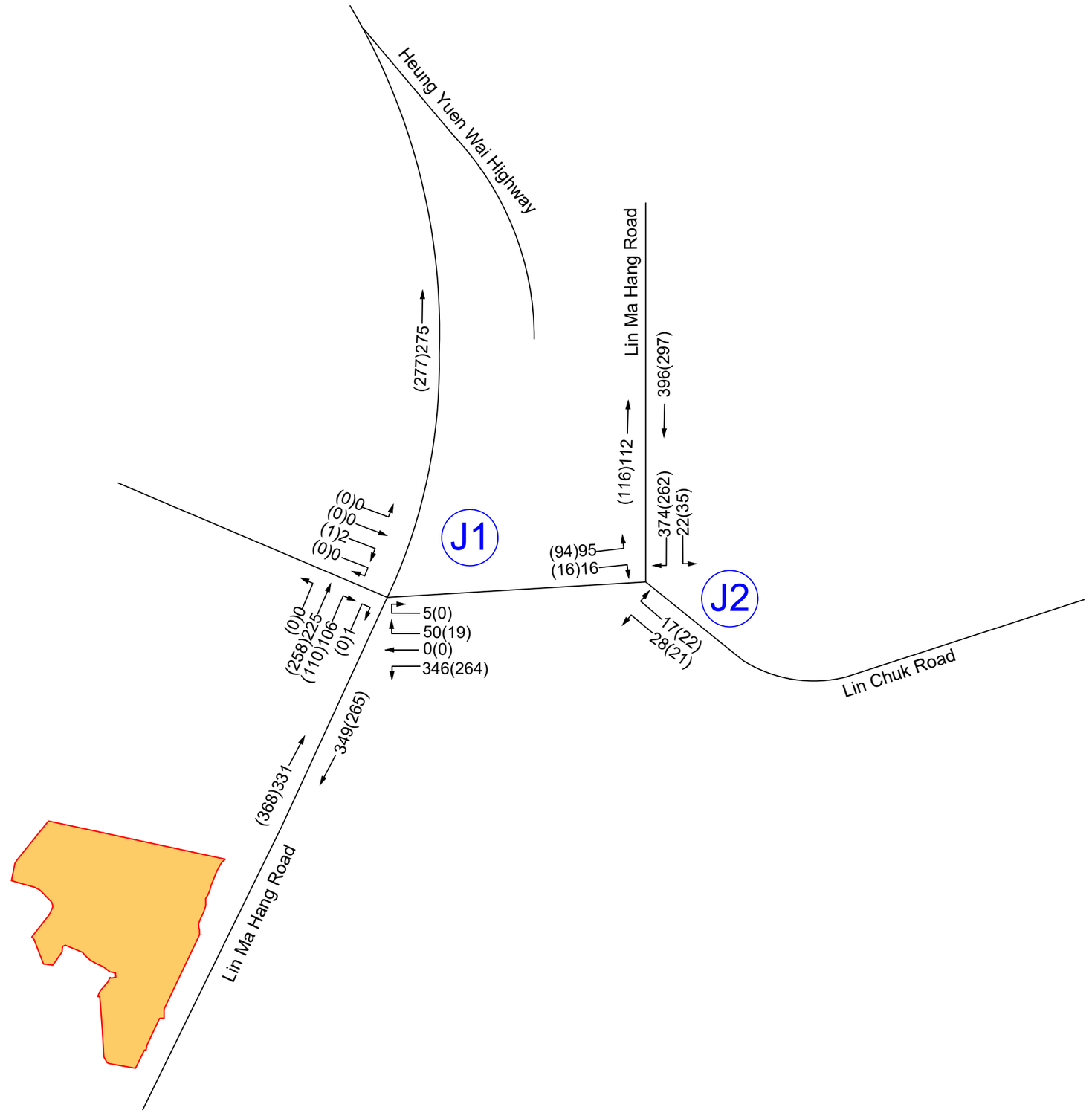

OZZO TECHNOLOGY

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

2026 Design Peak Hour Traffic Flows

Date	Scale
10/07/2024	N.T.S

Project No.	83018	Rev.
Dwg No.	Figure 5-2	-

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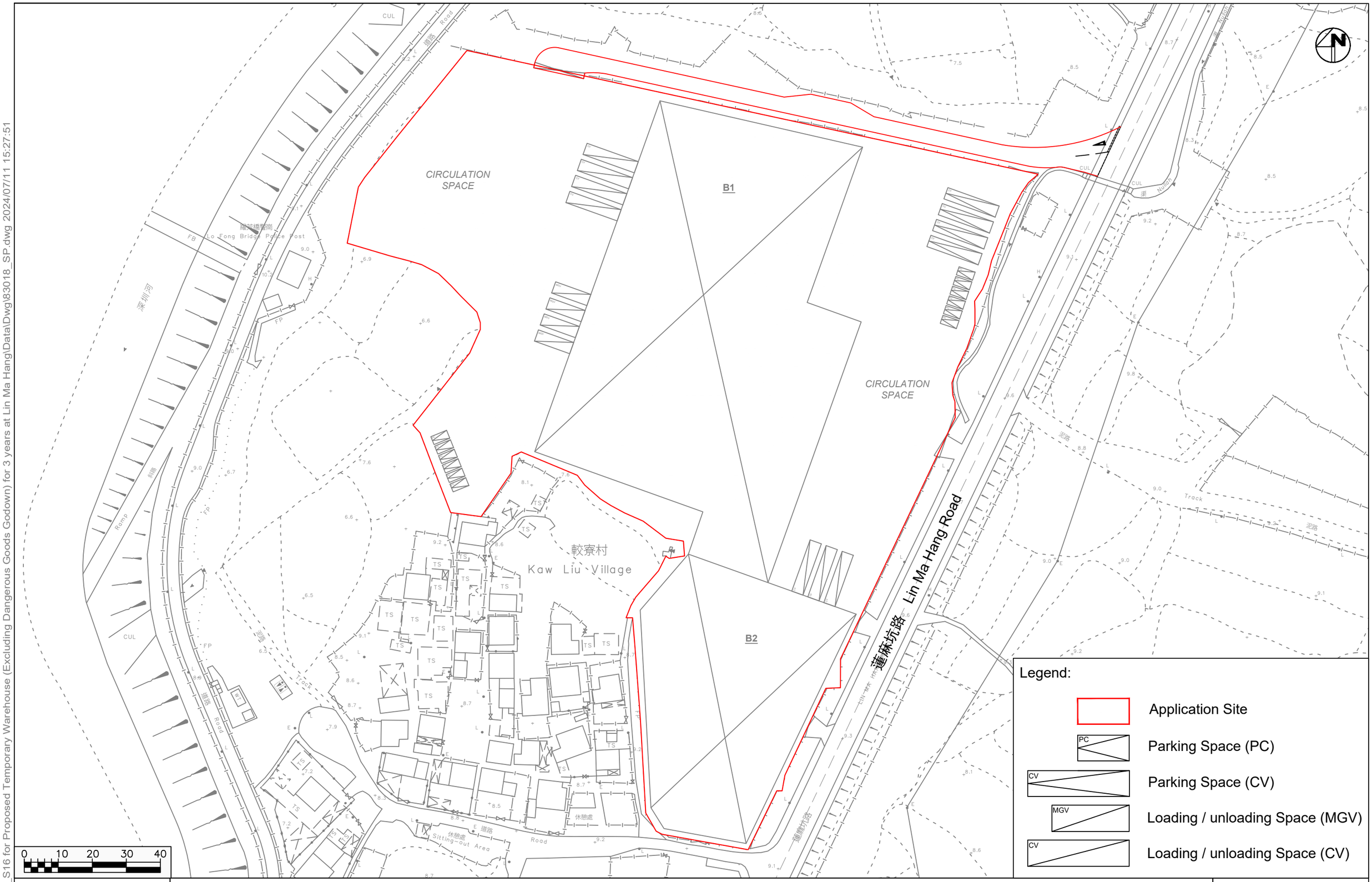
Appendix A

Conceptual Layout Plan and Swept Path Analysis



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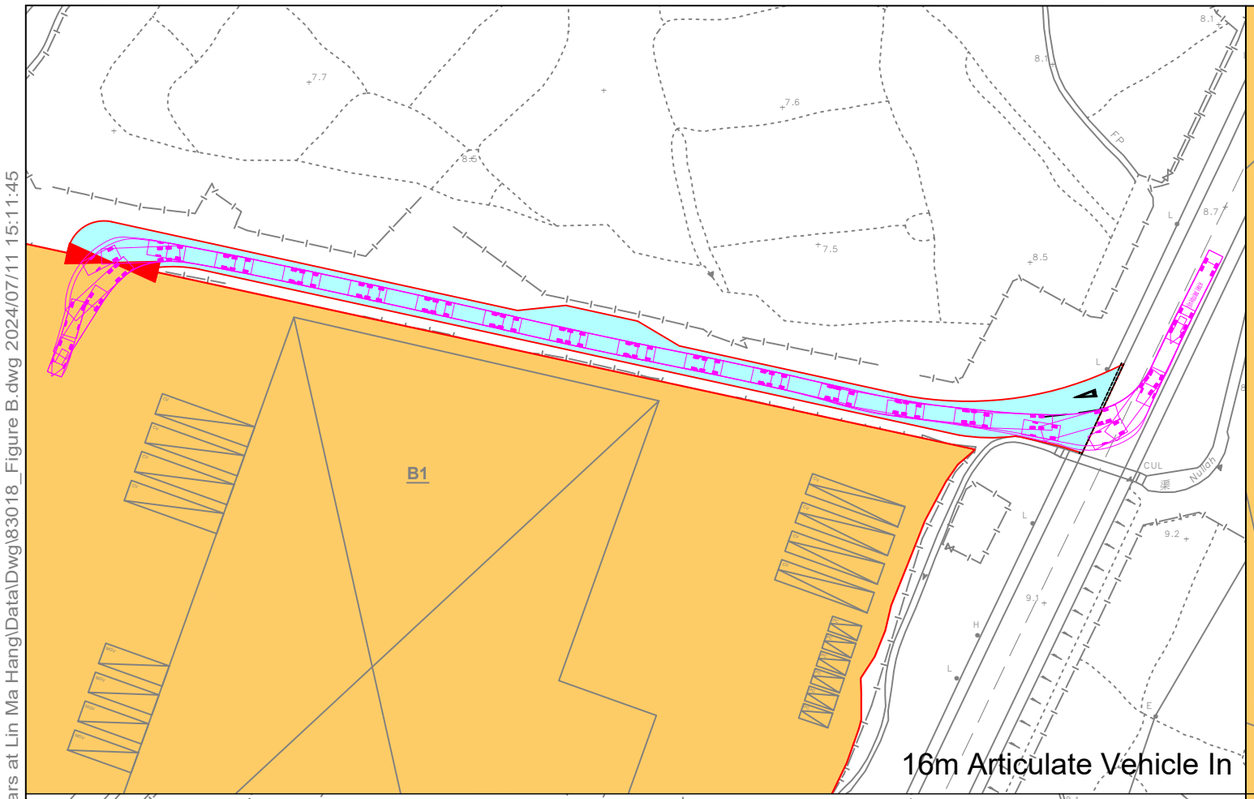
OZZO TECHNOLOGY

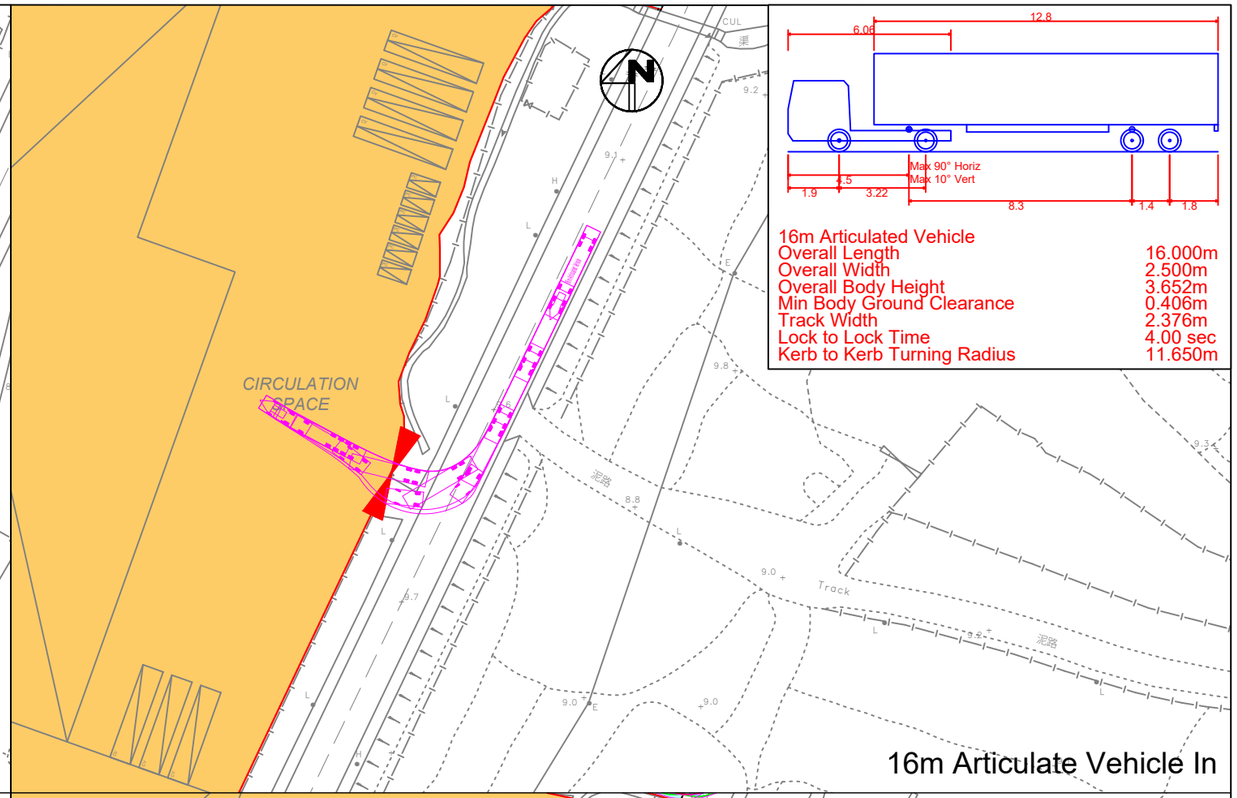
Date	Scale
11/07/2024	1:1000

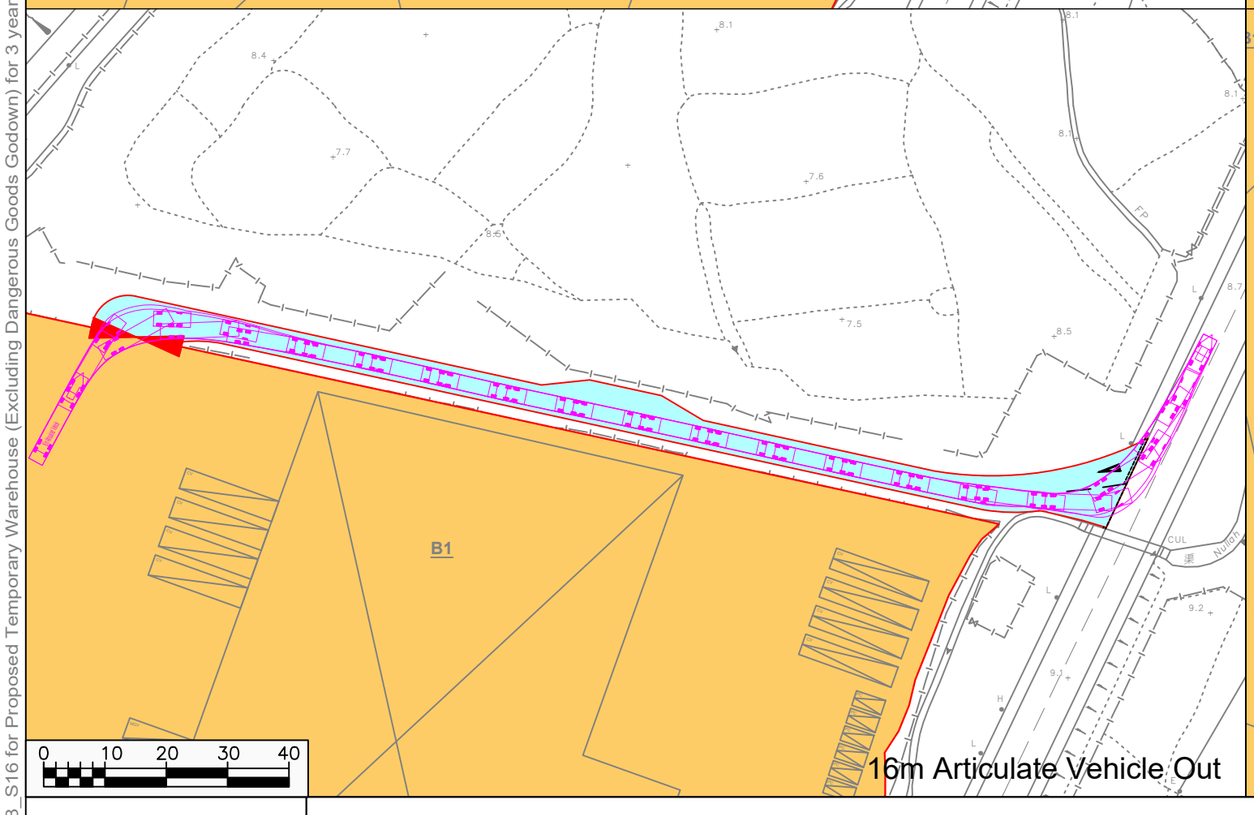
S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

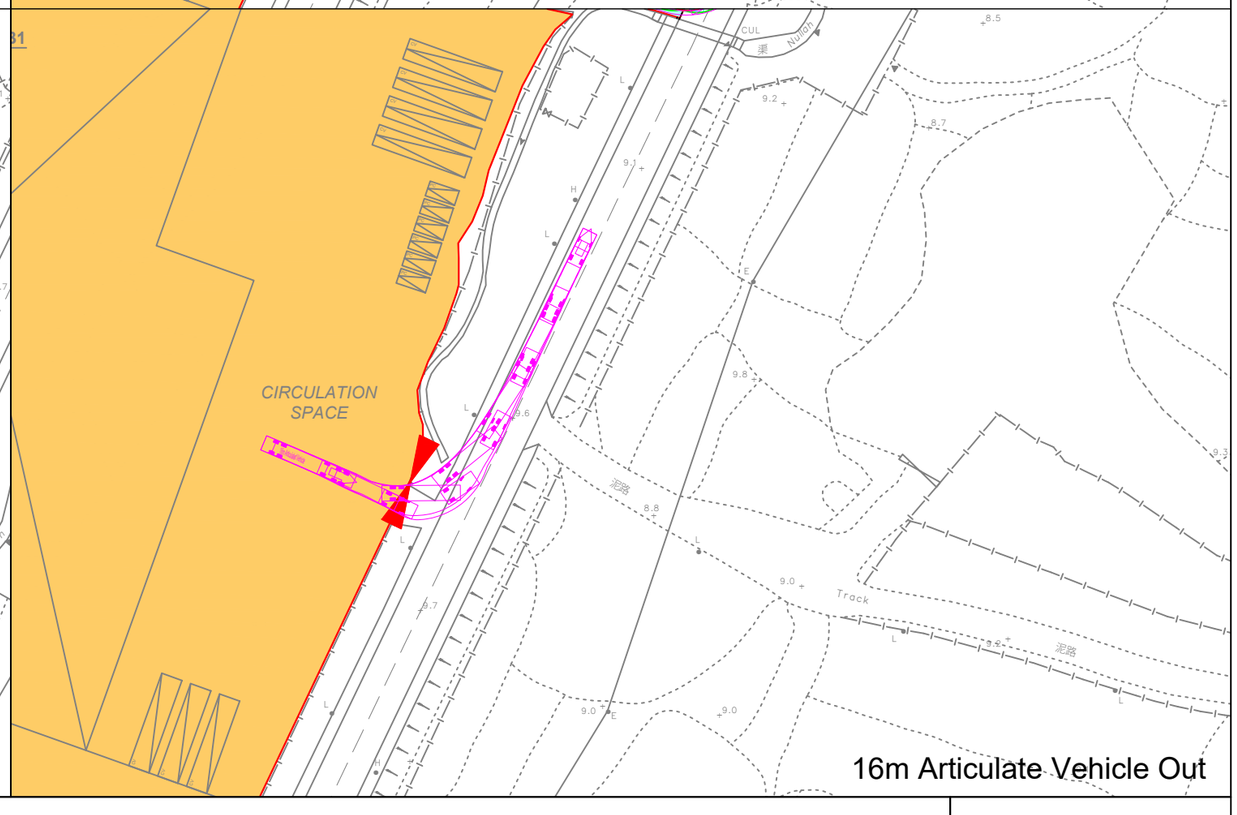
Layout Plan

Project No. 83018	Rev.
Dwg No. Figure A	-









0 10 20 30 40

OZZO TECHNOLOGY

Date	Scale
11/07/2024	1:1000

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

Proposed Access Road and 16m Articulate Vehicle Swept Path

Project No. 83018	Rev.
Dwg No. Figure B	-

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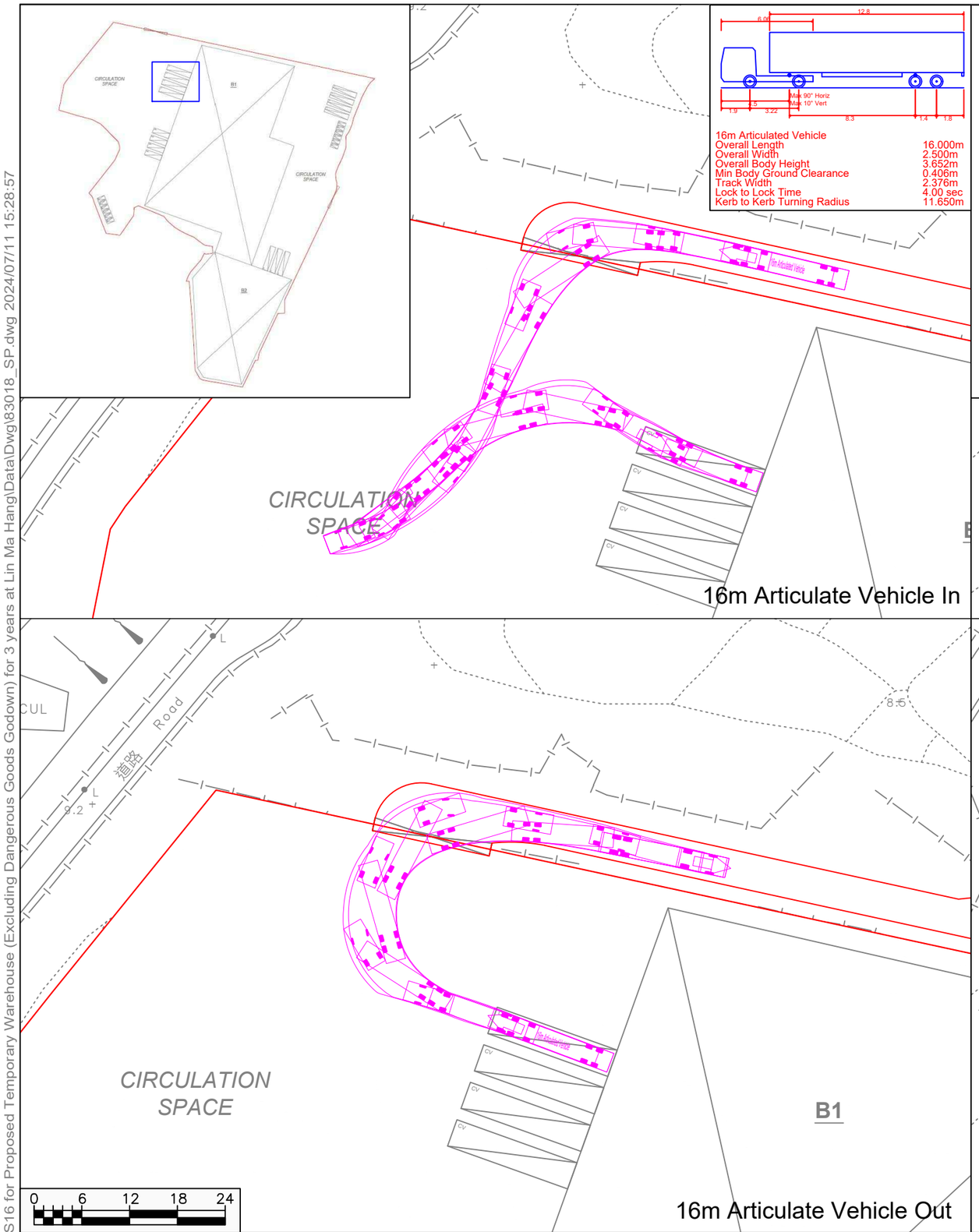

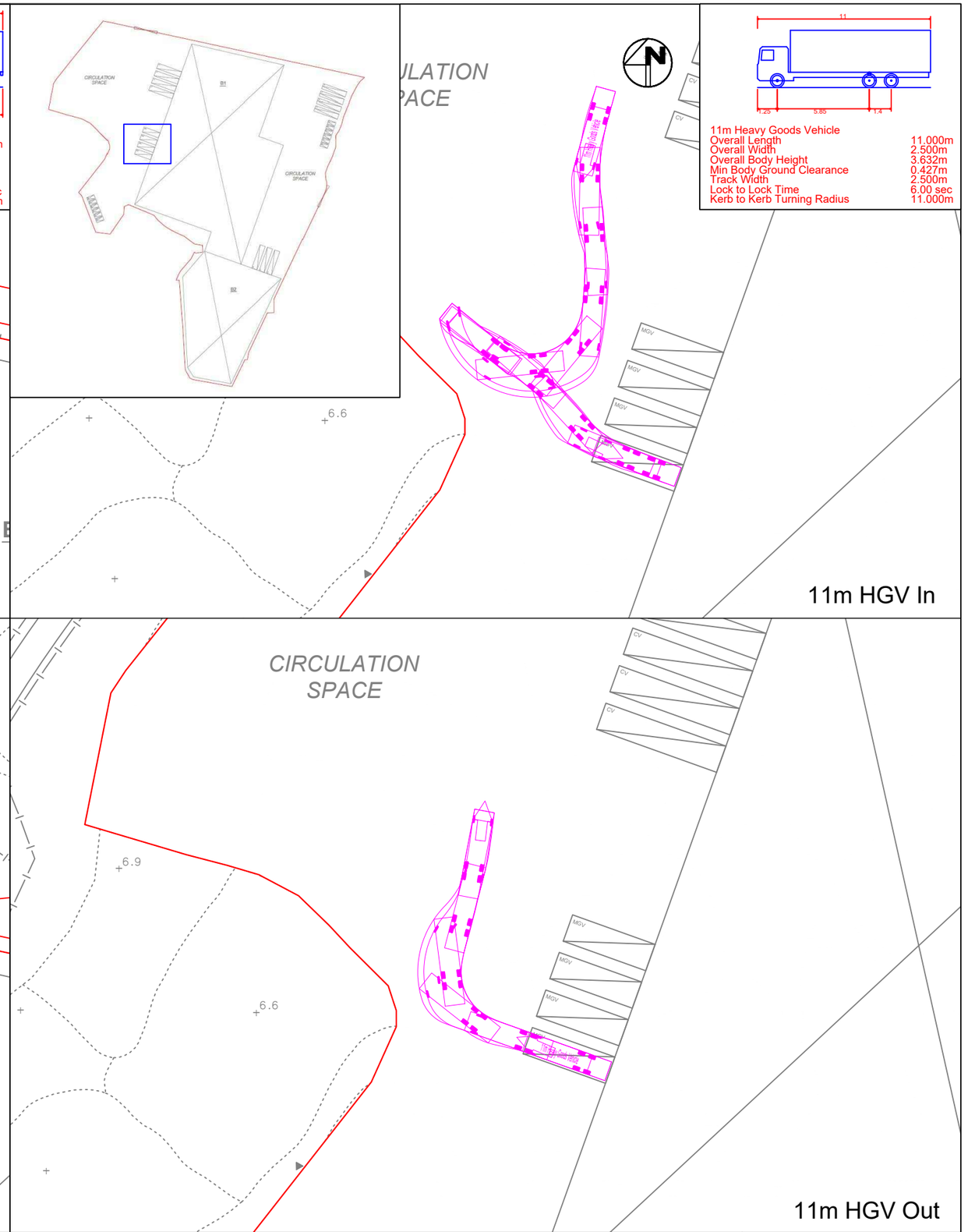

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OZZO TECHNOLOGY

Date 11/07/2024 | Scale 1:600

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

Swept Path Assessments 16m Articulate Vehicle and 11m Heavy Goods Vehicle

Project No. 83018 | Dwg No. Figure C | Rev. -

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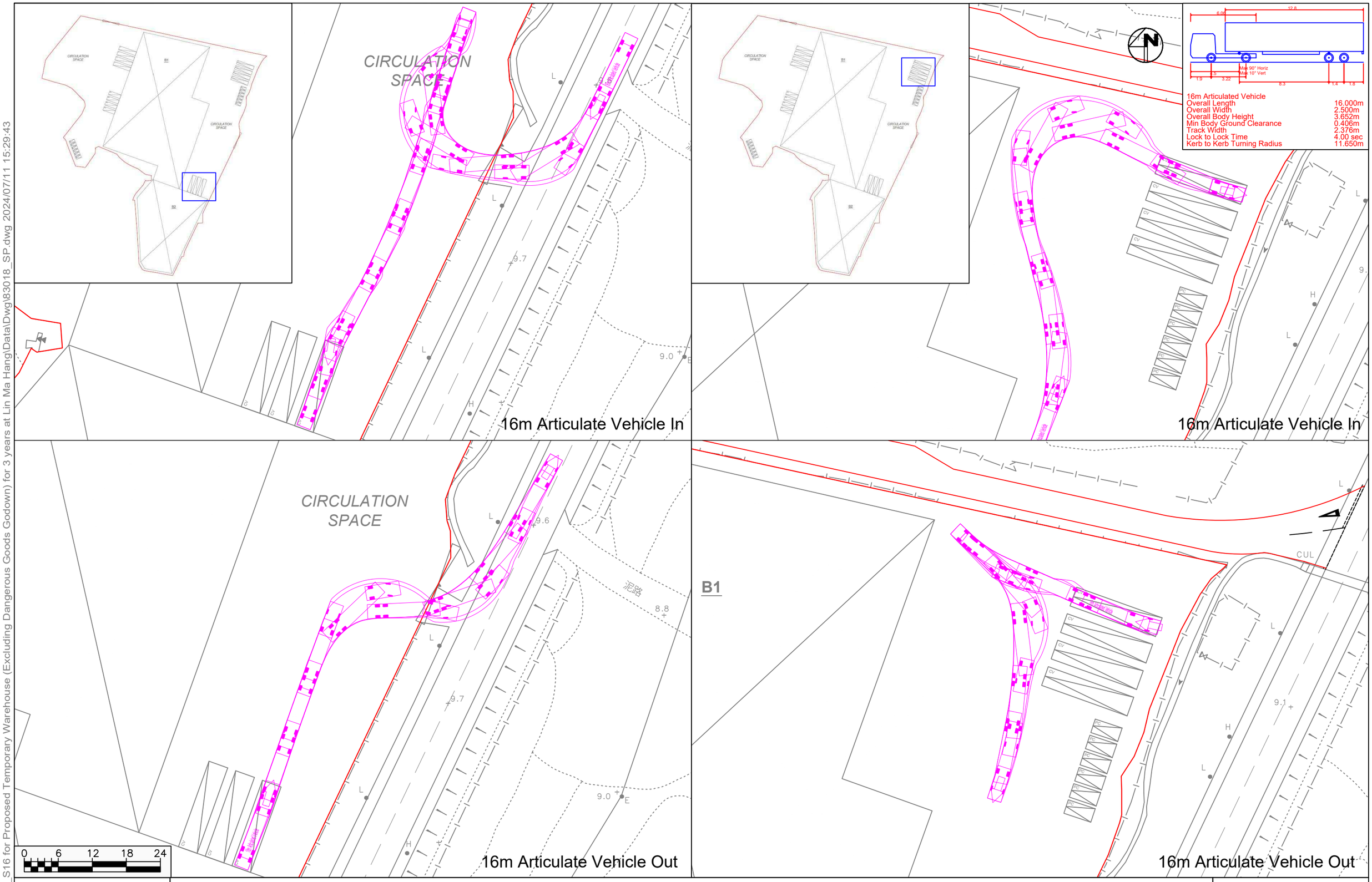

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OZZO TECHNOLOGY

Date	Scale
11/07/2024	1:600

S16 for Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) for 3 years at Lin Ma Hang

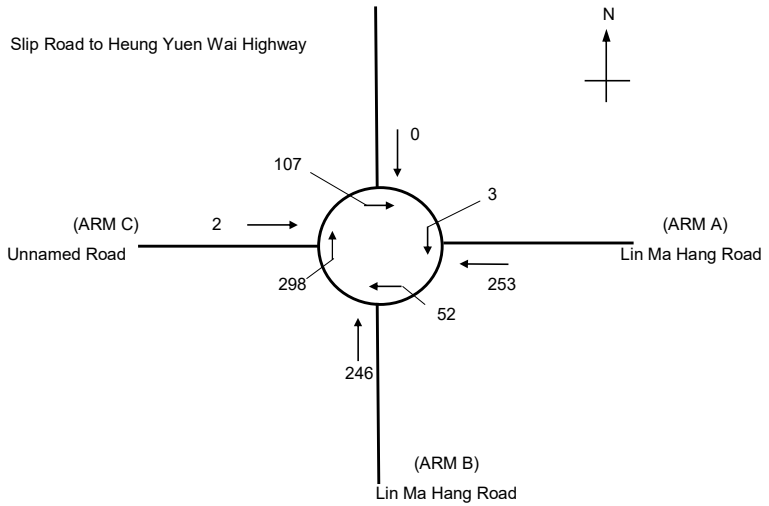
Swept Path Assessments 16m Articulate Vehicle

Project No. 83018	Rev. -
Dwg No. Figure D	

Appendix B

2024 Junction Calculations

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	2024_AM	FILENAME :	CHECKED BY:	DP	Jul-24
2024 Observed AM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24

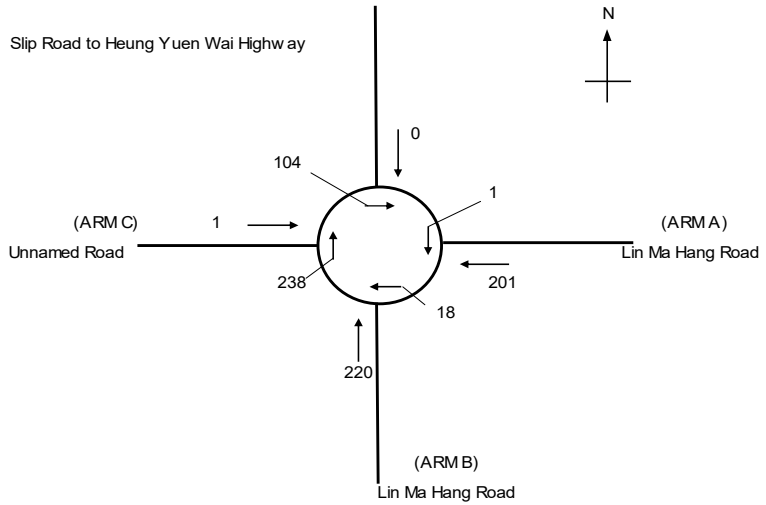


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.6	3.8	3.6
E	=	Entry width (m)	4.1	3.9	3.9
L	=	Effective length of flare (m)	4.3	2.6	4.0
R	=	Entry radius (m)	46.0	100.0	20.0
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0
A	=	Entry angle (degree)	23.0	28.0	31.0
Q	=	Entry flow (pcu/h)	253	246	2
Qc	=	Circulating flow across entry (pcu/h)	3	52	298
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84
M	=	EXP((D-60)/10)	0.01	0.01	0.01
F	=	303*X2	1201	1178	1164
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56
Qe	=	K(F-Fc*Qc)	1262	1202	995
DFC	=	Design flow/Capacity = Q/Qe	0.20	0.20	0.00

Total In Sum = 501 PCU

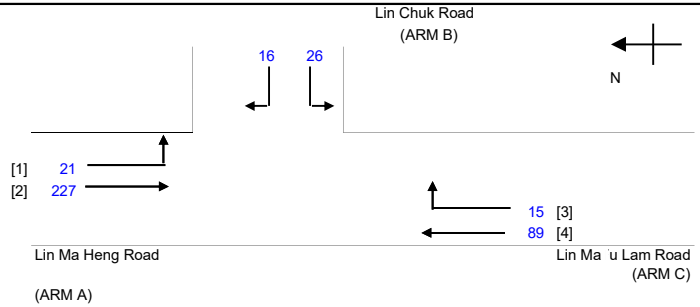
DFC of Critical Approach = **0.20**

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2024_PM**	FILENAME :	CHECKED BY:	DP	Jul-24
2024 Observed PM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24



ARM			A	B	C		
INPUT PARAMETERS:							
V	=	Approach half width (m)	3.6	3.8	3.6		
E	=	Entry width (m)	4.1	3.9	3.9		
L	=	Effective length of flare (m)	4.3	2.6	4.0		
R	=	Entry radius (m)	46.0	100.0	20.0		
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0		
A	=	Entry angle (degree)	23.0	28.0	31.0		
Q	=	Entry flow (pcu/h)	201	220	1		
Qc	=	Circulating flow across entry (pcu/h)	1	18	238		
OUTPUT PARAMETERS:							
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12		
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00		
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84		
M	=	EXP((D-60)/10)	0.01	0.01	0.01		
F	=	303*X2	1201	1178	1164		
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49		
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56		
Qe	=	K(F-Fc*Qc)	1263	1222	1028	Total In Sum =	422 PCU
DFC	=	Design flow/Capacity = Q/Qe	0.16	0.18	0.00	DFC of Critical Approach =	**0.18**

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2024 AM**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2024 Observed AM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	21	(pcu/hr)
q a-c	=	227	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	89	(pcu/hr)
q c-b	=	15	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	16	(pcu/hr)
q b-c	=	26	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.6190476

THE CAPACITY OF MOVEMENT :

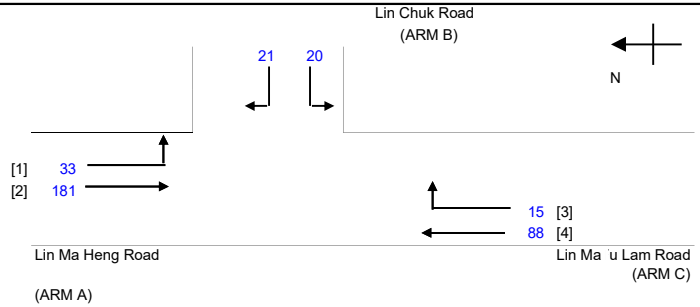
Q b-a	=	542			
Q b-c	=	702	Q b-c (O) =	696.8	
Q c-b	=	679			
Q b-ac	=	631			
TOTAL FLOW	=	394	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0295
DFC b-c	=	0.0370
DFC c-b	=	0.0221
DFC b-ac	=	0.0666

CRITICAL DFC = 0.07

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2024 PM**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2024 Observed PM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	33	(pcu/hr)
q a-c	=	181	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	88	(pcu/hr)
q c-b	=	15	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	21	(pcu/hr)
q b-c	=	20	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.4878049

THE CAPACITY OF MOVEMENT :

Q b-a	=	554		
Q b-c	=	714	Q b-c (O) =	707.2
Q c-b	=	689		
Q b-ac	=	622		
TOTAL FLOW	=	358	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

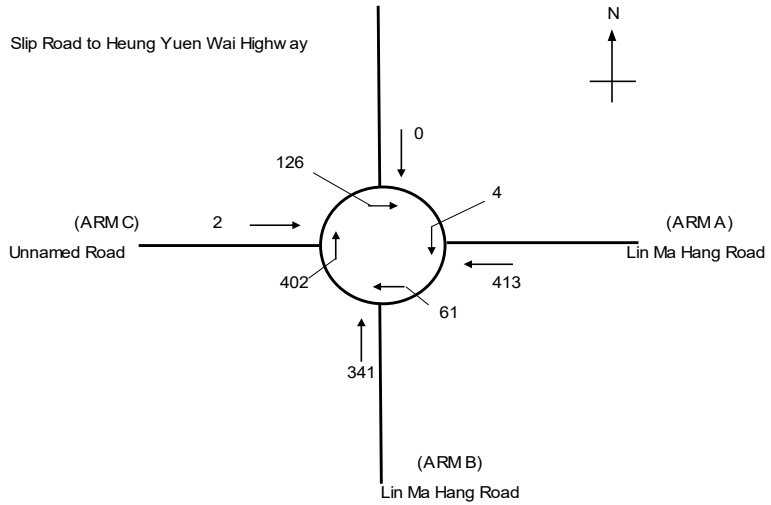
DFC b-a	=	0.0379
DFC b-c	=	0.0280
DFC c-b	=	0.0218
DFC b-ac	=	0.0659

CRITICAL DFC = 0.07

Appendix C

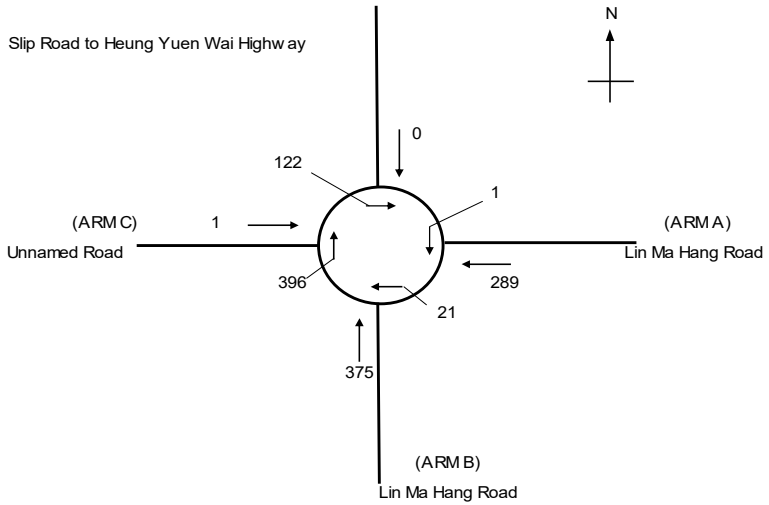
2029 Junction Calculations

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2029_AM_Ref**	FILENAME :	CHECKED BY:	DP	Jul-24
2029 Reference AM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.6	3.8	3.6			
E	=	Entry width (m)	4.1	3.9	3.9			
L	=	Effective length of flare (m)	4.3	2.6	4.0			
R	=	Entry radius (m)	46.0	100.0	20.0			
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0			
A	=	Entry angle (degree)	23.0	28.0	31.0			
Q	=	Entry flow (pcu/h)	413	341	2			
Qc	=	Circulating flow across entry (pcu/h)	4	61	402			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00			
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84			
M	=	EXP((D-60)/10)	0.01	0.01	0.01			
F	=	303*X2	1201	1178	1164			
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49			
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56			
Qe	=	K(F-Fc*Qc)	1261	1197	938	Total In Sum =	756	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.33	0.28	0.00	DFC of Critical Approach =	**0.33**	

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2029_PM_Ref**	FILENAME :	CHECKED BY:	DP	Jul-24
2029 Reference PM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24

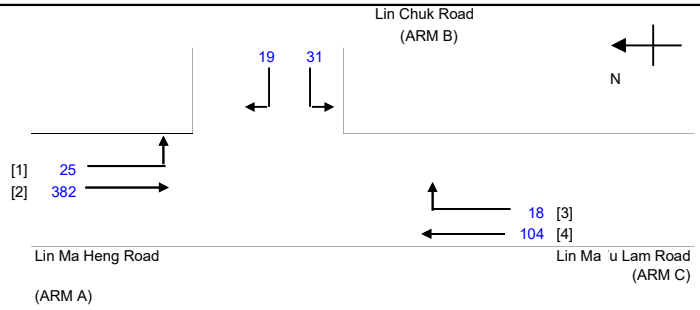


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.6	3.8	3.6
E	=	Entry width (m)	4.1	3.9	3.9
L	=	Effective length of flare (m)	4.3	2.6	4.0
R	=	Entry radius (m)	46.0	100.0	20.0
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0
A	=	Entry angle (degree)	23.0	28.0	31.0
Q	=	Entry flow (pcu/h)	289	375	1
Qc	=	Circulating flow across entry (pcu/h)	1	21	396
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84
M	=	EXP((D-60)/10)	0.01	0.01	0.01
F	=	303*X2	1201	1178	1164
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56
Qe	=	K(F-Fc*Qc)	1263	1220	941
DFC	=	Design flow/Capacity = Q/Qe	0.23	0.31	0.00

Total In Sum = 665 PCU

DFC of Critical Approach = **0.31**

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2029 AM_Ref**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2029 Reference AM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	25	(pcu/hr)
q a-c	=	382	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	104	(pcu/hr)
q c-b	=	18	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	19	(pcu/hr)
q b-c	=	31	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.62

THE CAPACITY OF MOVEMENT :

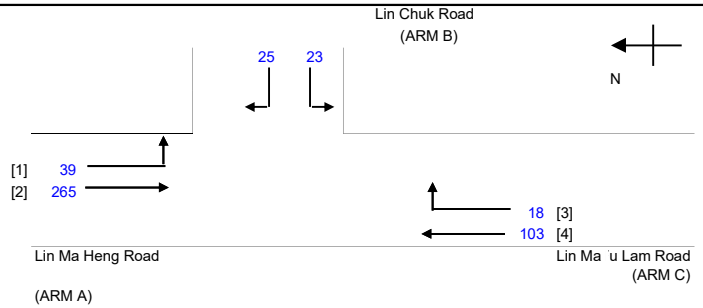
Q b-a	=	496		
Q b-c	=	659	Q b-c (O) =	652.7
Q c-b	=	636		
Q b-ac	=	585.8		
TOTAL FLOW	=	579	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0383
DFC b-c	=	0.0470
DFC c-b	=	0.0283
DFC b-ac	=	0.0853

CRITICAL DFC = 0.09

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2029 PM_Ref**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2029 Referenced PM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	39	(pcu/hr)
q a-c	=	265	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	103	(pcu/hr)
q c-b	=	18	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	25	(pcu/hr)
q b-c	=	23	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.4791667

THE CAPACITY OF MOVEMENT :

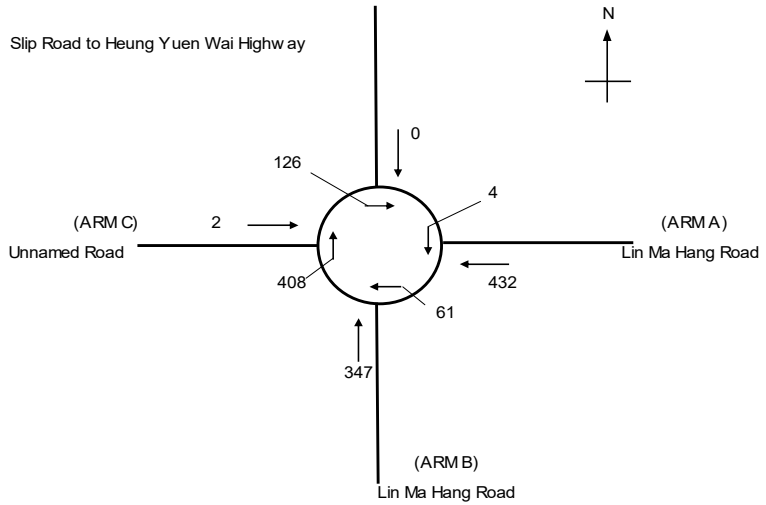
Q b-a	=	527			
Q b-c	=	690	Q b-c (O) =	681.8	
Q c-b	=	664			
Q b-ac	=	594.3			
TOTAL FLOW	=	473	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0474
DFC b-c	=	0.0333
DFC c-b	=	0.0271
DFC b-ac	=	0.0808

CRITICAL DFC = 0.08

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2029_AM_Des**	FILENAME :	CHECKED BY:	DP	Jul-24
2029 Design AM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24

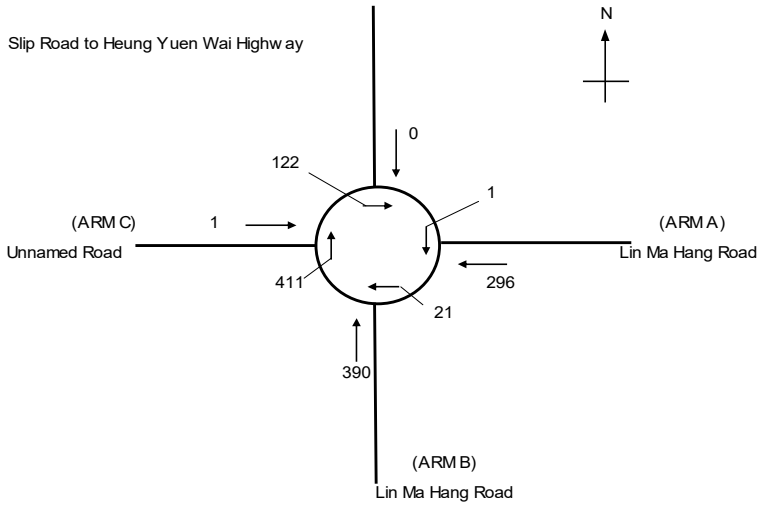


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.6	3.8	3.6
E	=	Entry width (m)	4.1	3.9	3.9
L	=	Effective length of flare (m)	4.3	2.6	4.0
R	=	Entry radius (m)	46.0	100.0	20.0
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0
A	=	Entry angle (degree)	23.0	28.0	31.0
Q	=	Entry flow (pcu/h)	432	347	2
Qc	=	Circulating flow across entry (pcu/h)	4	61	408
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84
M	=	EXP((D-60)/10)	0.01	0.01	0.01
F	=	303*X2	1201	1178	1164
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56
Qe	=	K(F-Fc*Qc)	1261	1197	934
DFC	=	Design flow/Capacity = Q/Qe	0.34	0.29	0.00

Total In Sum = 781 PCU

DFC of Critical Approach = **0.34**

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2029_PM_Des**	FILENAME :	CHECKED BY:	DP	Jul-24
2029 Design PM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24

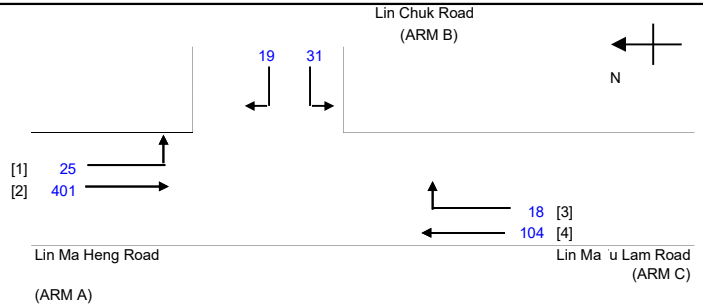


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.6	3.8	3.6
E	=	Entry width (m)	4.1	3.9	3.9
L	=	Effective length of flare (m)	4.3	2.6	4.0
R	=	Entry radius (m)	46.0	100.0	20.0
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0
A	=	Entry angle (degree)	23.0	28.0	31.0
Q	=	Entry flow (pcu/h)	296	390	1
Qc	=	Circulating flow across entry (pcu/h)	1	21	411
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84
M	=	EXP((D-60)/10)	0.01	0.01	0.01
F	=	303*X2	1201	1178	1164
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56
Qe	=	K(F-Fc*Qc)	1263	1220	933
DFC	=	Design flow/Capacity = Q/Qe	0.23	0.32	0.00

Total In Sum = 687 PCU

DFC of Critical Approach = **0.32**

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2029 AM_Des**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2029 Design AM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	25	(pcu/hr)
q a-c	=	401	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	104	(pcu/hr)
q c-b	=	18	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	19	(pcu/hr)
q b-c	=	31	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.62

THE CAPACITY OF MOVEMENT :

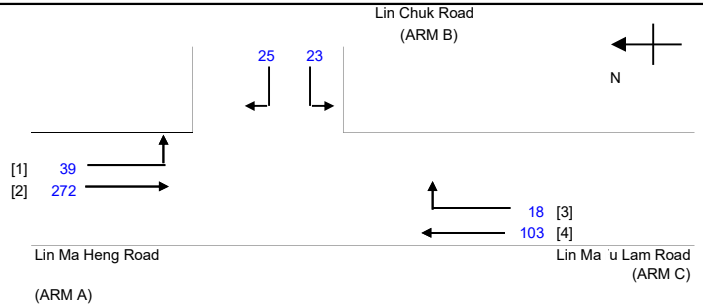
Q b-a	=	491		
Q b-c	=	653	Q b-c (O) =	646.7
Q c-b	=	631		
Q b-ac	=	580.3		
TOTAL FLOW	=	598	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0387
DFC b-c	=	0.0475
DFC c-b	=	0.0285
DFC b-ac	=	0.0862

CRITICAL DFC = 0.09

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2029 PM_Des**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2029 Design PM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	39	(pcu/hr)
q a-c	=	272	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	103	(pcu/hr)
q c-b	=	18	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	25	(pcu/hr)
q b-c	=	23	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.4791667

THE CAPACITY OF MOVEMENT :

Q b-a	=	525		
Q b-c	=	688	Q b-c (O) =	679.8
Q c-b	=	662		
Q b-ac	=	592.2		
TOTAL FLOW	=	480	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

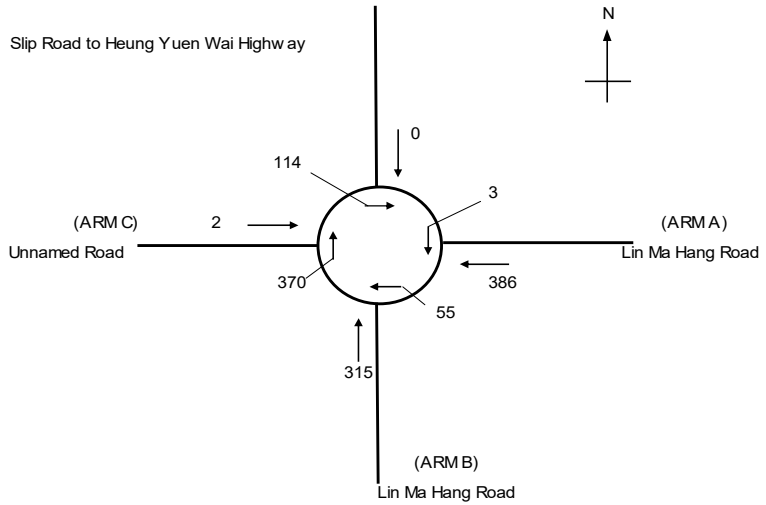
DFC b-a	=	0.0476
DFC b-c	=	0.0334
DFC c-b	=	0.0272
DFC b-ac	=	0.0810

CRITICAL DFC = 0.08

Appendix D

2026 Junction Calculations

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2026_AM_Ref**	FILENAME :	CHECKED BY:	DP	Jul-24
2026 Reference AM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24

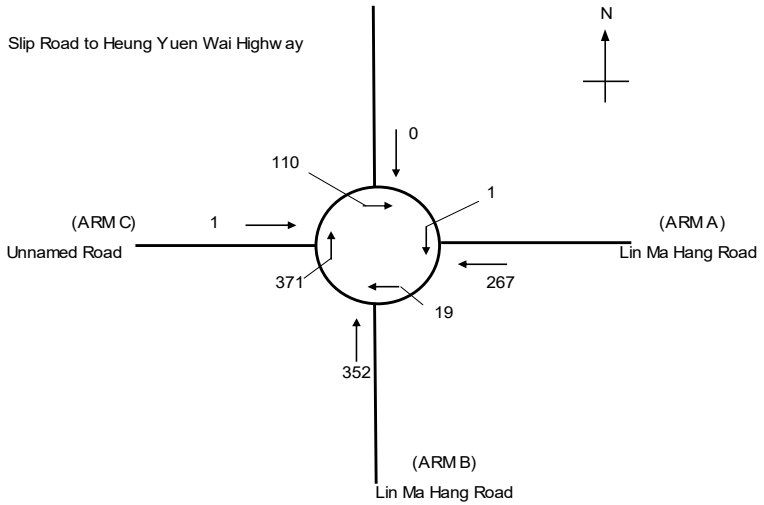


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.6	3.8	3.6
E	=	Entry width (m)	4.1	3.9	3.9
L	=	Effective length of flare (m)	4.3	2.6	4.0
R	=	Entry radius (m)	46.0	100.0	20.0
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0
A	=	Entry angle (degree)	23.0	28.0	31.0
Q	=	Entry flow (pcu/h)	386	315	2
Qc	=	Circulating flow across entry (pcu/h)	3	55	370
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84
M	=	EXP((D-60)/10)	0.01	0.01	0.01
F	=	303*X2	1201	1178	1164
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56
Qe	=	K(F-Fc*Qc)	1262	1201	955
DFC	=	Design flow/Capacity = Q/Qe	0.31	0.26	0.00

Total In Sum = 703 PCU

DFC of Critical Approach = **0.31**

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2026_PM_Ref**	FILENAME :	CHECKED BY:	DP	Jul-24
2026 Reference PM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24

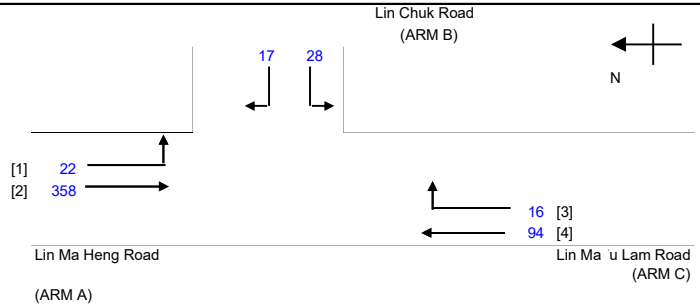


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.6	3.8	3.6
E	=	Entry width (m)	4.1	3.9	3.9
L	=	Effective length of flare (m)	4.3	2.6	4.0
R	=	Entry radius (m)	46.0	100.0	20.0
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0
A	=	Entry angle (degree)	23.0	28.0	31.0
Q	=	Entry flow (pcu/h)	267	352	1
Qc	=	Circulating flow across entry (pcu/h)	1	19	371
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84
M	=	EXP((D-60)/10)	0.01	0.01	0.01
F	=	303*X2	1201	1178	1164
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56
Qe	=	K(F-Fc*Qc)	1263	1222	955
DFC	=	Design flow/Capacity = Q/Qe	0.21	0.29	0.00

Total In Sum = 620 PCU

DFC of Critical Approach = **0.29**

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2026 AM_Ref**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2026 Reference AM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	22	(pcu/hr)
q a-c	=	358	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	94	(pcu/hr)
q c-b	=	16	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	17	(pcu/hr)
q b-c	=	28	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.6222222

THE CAPACITY OF MOVEMENT :

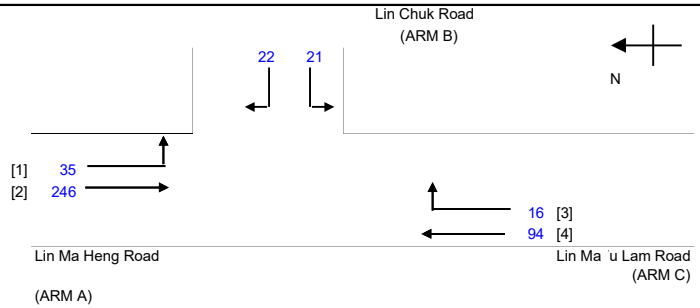
Q b-a	=	505		
Q b-c	=	666	Q b-c (O) =	660.4
Q c-b	=	643		
Q b-ac	=	594.4		
TOTAL FLOW	=	535	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0337
DFC b-c	=	0.0420
DFC c-b	=	0.0249
DFC b-ac	=	0.0757

CRITICAL DFC = 0.08

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2026 PM_Ref**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2026 Referenced PM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	35	(pcu/hr)
q a-c	=	246	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	94	(pcu/hr)
q c-b	=	16	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	22	(pcu/hr)
q b-c	=	21	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.4883721

THE CAPACITY OF MOVEMENT :

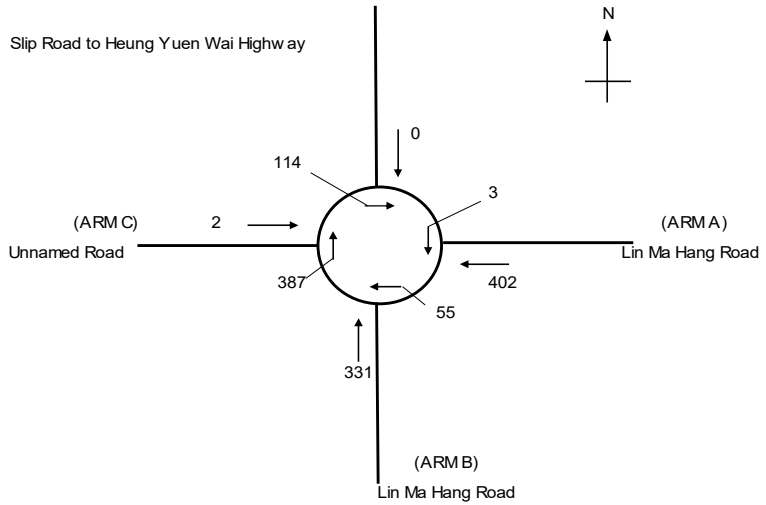
Q b-a	=	534		
Q b-c	=	696	Q b-c (O) =	688.8
Q c-b	=	670		
Q b-ac	=	602.5		
TOTAL FLOW	=	434	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0412
DFC b-c	=	0.0302
DFC c-b	=	0.0239
DFC b-ac	=	0.0714

CRITICAL DFC = 0.07

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2026_AM_Des**	FILENAME :	CHECKED BY:	DP	Jul-24
2026 Design AM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24

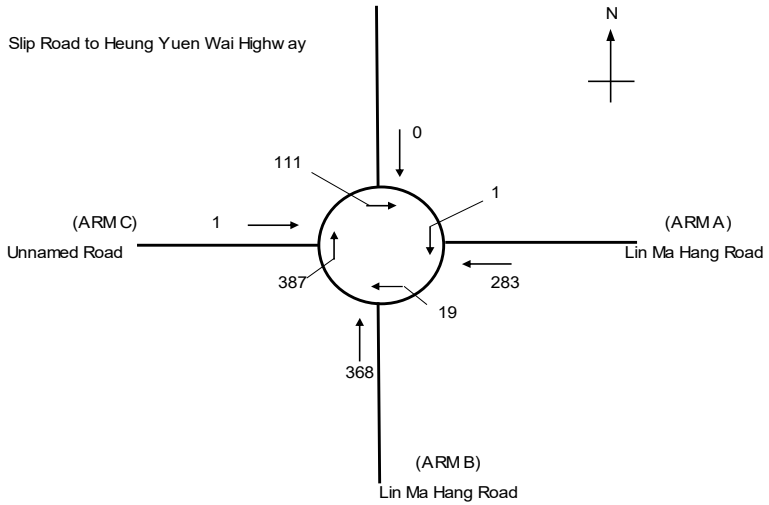


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.6	3.8	3.6
E	=	Entry width (m)	4.1	3.9	3.9
L	=	Effective length of flare (m)	4.3	2.6	4.0
R	=	Entry radius (m)	46.0	100.0	20.0
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0
A	=	Entry angle (degree)	23.0	28.0	31.0
Q	=	Entry flow (pcu/h)	402	331	2
Qc	=	Circulating flow across entry (pcu/h)	3	55	387
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84
M	=	EXP((D-60)/10)	0.01	0.01	0.01
F	=	303*X2	1201	1178	1164
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56
Qe	=	K(F-Fc*Qc)	1262	1201	946
DFC	=	Design flow/Capacity = Q/Qe	0.32	0.28	0.00

Total In Sum = 735 PCU

DFC of Critical Approach = **0.32**

OZZO TECHNOLOGY (HK) LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG		PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J1 Lin Ma Hang Road/Slip road of Heung Yuen Wai Highway	**2026_PM_Des**	FILENAME :	CHECKED BY:	DP	Jul-24
2026 Design PM Peak Hour Traffic Flows		ad of Heung Yuen Wai Highway_R_R1.xls	REVIEWED BY:	SC	Jul-24

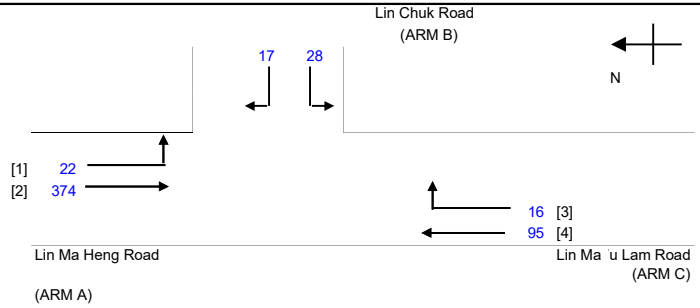


ARM			A	B	C
INPUT PARAMETERS:					
V	=	Approach half width (m)	3.6	3.8	3.6
E	=	Entry width (m)	4.1	3.9	3.9
L	=	Effective length of flare (m)	4.3	2.6	4.0
R	=	Entry radius (m)	46.0	100.0	20.0
D	=	Inscribed circle diameter (m)	15.0	15.0	15.0
A	=	Entry angle (degree)	23.0	28.0	31.0
Q	=	Entry flow (pcu/h)	283	368	1
Qc	=	Circulating flow across entry (pcu/h)	1	19	387
OUTPUT PARAMETERS:					
S	=	Sharpness of flare = 1.6(E-V)/L	0.19	0.06	0.12
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.05	1.05	1.00
X2	=	V + ((E-V)/(1+2S))	3.96	3.89	3.84
M	=	EXP((D-60)/10)	0.01	0.01	0.01
F	=	303*X2	1201	1178	1164
Td	=	1+(0.5/(1+M))	1.49	1.49	1.49
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.56	0.56
Qe	=	K(F-Fc*Qc)	1263	1222	946
DFC	=	Design flow/Capacity = Q/Qe	0.22	0.30	0.00

Total In Sum = 652 PCU

DFC of Critical Approach = **0.30**

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2026 AM_Des**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2026 Design AM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	22	(pcu/hr)
q a-c	=	374	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	95	(pcu/hr)
q c-b	=	16	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	17	(pcu/hr)
q b-c	=	28	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.6222222

THE CAPACITY OF MOVEMENT :

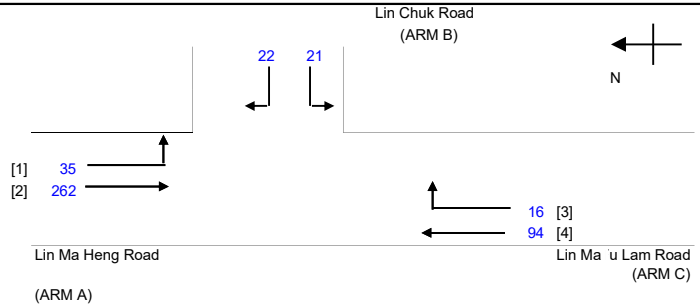
Q b-a	=	501			
Q b-c	=	661	Q b-c (O) =	655.4	
Q c-b	=	639			
Q b-ac	=	589.8			
TOTAL FLOW	=	552	(PCU/HR)		

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0339
DFC b-c	=	0.0424
DFC c-b	=	0.0250
DFC b-ac	=	0.0763

CRITICAL DFC = 0.08

OZZO TECHNOLOGY (HK) LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) In LIN MA HANG	**2026 PM_Des**	PROJECT NO.: 83018	PREPARED BY:	TC	Jul-24
J2 Lin Ma Hang Road/Lin Chuk Road		FILENAME :	CHECKED BY:	DP	Jul-24
2026 Design PM Peak Hour Traffic Flows		J2_Lin Ma Hang Road_Lin Chuk Road.xls	REVIEWED BY:	SC	Jul-24



NOTES : (GEOMETRIC INPUT DATA)

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

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	7.40	(metres)
W cr	=	0	(metres)
q a-b	=	35	(pcu/hr)
q a-c	=	262	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.90	(metres)
Vr c-b	=	97	(metres)
q c-a	=	94	(pcu/hr)
q c-b	=	16	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.60	(metres)
W b-c	=	3.60	(metres)
Vl b-a	=	100	(metres)
Vr b-a	=	160	(metres)
Vr b-c	=	160	(metres)
q b-a	=	22	(pcu/hr)
q b-c	=	21	(pcu/hr)

GEOMETRIC FACTORS :

D	=	1.0001969
E	=	1.0311308
F	=	1.0023136
Y	=	0.7447
F for (Qb-ac)	=	0.4883721

THE CAPACITY OF MOVEMENT :

Q b-a	=	530		
Q b-c	=	691	Q b-c (O) =	683.8
Q c-b	=	666		
Q b-ac	=	598.1		
TOTAL FLOW	=	450	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0415
DFC b-c	=	0.0304
DFC c-b	=	0.0240
DFC b-ac	=	0.0719

CRITICAL DFC = 0.07