Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) For a Period of 3 Years Various Lots in DD 244, Ho Chung, Sai Kung (Planning Application no. A/SK-HC/356)

Traffic Impact Assessment Final Report September 2024

Prepared by: CKM Asia Limited

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Proposed Temporary Public Vehicle Park (Excluding Container Vehicle) For a Period of 3 Years Various Lots in DD 244, Ho Chung, Sai Kung (Planning Application no. A/SK-HC/356)

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1.0 INTRODUCTION

Background

- 1.1 The Application Site is located at various lots in D.D. 244 at Ho Chung, Sai Kung. The location of the site is shown in **Figure 1.1**.
- 1.2 CKM Asia Limited, a traffic and transportation planning consultancy firm, was commissioned by the Applicant to prepare a traffic assessment in connection with the S16 application for a temporary public vehicle park (excluding container vehicle) with 100 car parking spaces for a period of 3 years (the "Proposed Development"). Access to the Proposed Development is via its existing vehicular access which is provided at the service road of Hiram's Highway northbound.
- 1.3 This report describes the traffic assessment undertaken for the Proposed Development.

Structure of the Report

1.4 The report is structured as follows:

Chapter One - Gives the background of the project;

Chapter Two - Describes the existing situation;

Chapter Three - Presents the Proposed Development;
Chapter Four - Describes the traffic impact analysis; and

Chapter Five - Gives the overall conclusion.

2.0 THE EXISTING SITUATION

The Subject Site

2.1 The subject site is at present unoccupied, and it fronts onto Hiram's Highway to the east and Nam Pin Wai Road to be south.

The Road Network

- 2.2 Hiram's Highway is classified as a rural road, which is of dual carriageway 2-lane standard. It connects with Clear Water Bay Road at its southern end and Po Tung Road to the north.
- 2.3 Nam Pin Wai Road, Ho Chung Road and Luk Mei Tsuen Road are classified as feeder road. These are of single carriageway 2-lane standard, and they connect with Hiram's Highway.

Manual Classified Traffic Counts

- 2.4 To quantify the traffic flows in the vicinity of the subject site, manual classified counts were conducted on Thursday, 15th August 2024 during the AM and PM peak periods at the following junctions:
 - J1: Hiram's Highway / New Hiram's Highway / Nam Pin Wai Road;
 - J2: Hiram's Highway / Access Road to Haven of Hope Ho Chung Day Activity Centre cum Hostel;
 - J3: Hiram's Highway / Ho Chung Road; and
 - J4: Hiram's Highway / Luk Mei Tsuen Road.
- 2.5 The locations of these junctions are shown in **Figure 2.1** and the layouts are shown in **Figures 2.2 2.5** respectively.
- 2.6 From the traffic survey conducted, the AM and PM peak hours are found between 0815 0915 hours and 1700 1800 hours respectively.

Comparison of 2021 and 2024 Hiram's Highway Traffic Flows

2.7 Due to the impact of the COVID-19 pandemic, a review of the 2024 Hiram's Highway traffic flows is compared with survey of Hiram's Highway conducted on Wednesday, 15th September 2021, and the comparison is found in **Table 2.1**.

TABLE 2.1 COMPARISON OF 2021 AND 2024 TRAFFIC FLOWS AT HIRAM'S HIGHWAY

Hiram's Highway	2021 Traffic Flows (pcu / hour) [a]			2024 Traffic Flows (pcu / hour) [b]		Comparison [c] = ([b] – [a])/ [a]	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	
Northbound	1,191	1,265	951	1,166	-20%	-8%	
Southbound	1,254	1,209	1,221	1,044	-3%	-14%	
Two-way	2,445	2,474	2,172	2,210	-11%	-11%	

- 2.8 **Table 2.1** shows that the 2021 traffic flows are generally higher than those obtained in 2024.
- 2.9 To ascertain if the 2021 traffic flows are higher than the previous years, reference is made to the Annual Average Daily Traffic ("AADT") of the Hiram's Highway

core station no. 6055 which is found in the Annual Traffic Census ("ATC"), published by Transport Department, and is presented in **Table 2.2**.

TABLE 2.2 HISTORICAL AADT OF CORE STATION NO. 6055

Station	6055
Road	Hiram's Highway
From	Clear Water Bay Rd
То	Po Tung Road
2017	24,050
2018	24,450
2019	24,280
2020	23,360
2021	24,460
2022	23,480

2.10 As shown **Table 2.2**, the traffic flow in year 2021 at Hiram's Highway is higher than those from 2017 to 2020, and also higher than 2022. To be conservative, the traffic flows obtained from the survey in 2021 are adopted as the existing traffic flow and these are presented in **Figure 2.6**.

Existing Junction Performance

2.11 The existing operating performance of the surveyed junctions is calculated based on the existing traffic flows, and the analysis was undertaken using the method found in the Transport Planning and Design Manual ("TPDM"). The results are summarised in **Table 2.3**, and detailed calculations are presented in the **Appendix A**.

TABLE 2.3 EXISTING JUNCTION PERFORMANCE

Ref	Junction	Type of Junction (Parameter)	AM Peak	PM Peak
J1	Hiram's Highway / New Hiram's Highway / Nam Pin Wai Road	RA (DFC)	0.59	0.57
J2	Hiram's Highway / Access Road to Haven of Hope Ho Chung Day Activity Centre cum Hostel	Priority (DFC)	0.02	0.02
J3	Hiram's Highway / Ho Chung Road	Signal (RC)	108%	119%
J4	Hiram's Highway / Luk Mei Tsuen Road	Priority (DFC)	0.06	0.04

Note: RA – roundabout DFC - design flow/capacity ratio RC – reserve capacity

2.12 **Table 2.3** shows that the junctions operate with capacities.

Public Transport Services

2.13 At present, 5 franchised bus and 6 green minibus ("GMB") routes operate in the vicinity of the Proposed Development. Details of public transport services are presented in **Table 2.4**.

TABLE 2.4 EXISTING PUBLIC TRANSPORT SERVICES OPERATING IN THE VICINITY OF THE PROPOSED DEVELOPMENT

Route	Routing	Headway (minutes)
KMB 92	Sai Kung – Diamond Hill Station	15 – 30
KMB 92R ⁽¹⁾	Sai Kung – Star Ferry	30 - 60
KMB 96R ⁽¹⁾	Wong Shek Pier – Diamond Hill Station	20 – 35
KMB 292P ⁽²⁾	Sai Kung → Kwun Tong	AM Peak
CTB 792M	Sai Kung – Tseung Kwan O Station	15 – 30
GMB 1	Sai Kung – Kowloon Bay	8 – 20
GMB 1A	Sai Kung – Choi Hung Road PTI	4 (AM Only)
	Sai Kung North PTI → Choi Hung Road PTI	
GMB 1S ⁽³⁾	Sai Kung – Choi Hung Road PTI	10 – 15
GMB 2	Sai Kung – Ho Chung	15 – 30
	Sai Kung (Yi Chun Street) – Kai Ham	15 – 30
GMB 12	Sai Kung – Po Lam Station	10 – 15
GMB 101M	Sai Kung – Hang Hau Station	3 – 30

Note:

KMB – Kowloon Motor Bus

CTB – Citybus

GMB - Green Minibus

⁽¹⁾ Saturday, Sunday and Public Holiday only

⁽²⁾ Monday to Friday (except Public Holiday)

⁽³⁾ Overnight

3.0 THE PROPOSED DEVELOPMENT

The Proposed Development

3.1 The Proposed Development provides 100 car parking spaces, and the ground floor layout plan is shown in **Figure 3.1**.

Swept Path Analysis

The CAD-based swept path analysis programme, **AUTODESK VEHICLE TRACKING**, was used to check the ease of manoeuvring of vehicles within the Proposed Development, and the swept path analysis drawings are found in **Appendix B**. Vehicles are found to have no manoeuvring problems.

4.0 TRAFFIC ANALYSIS

Design Year

4.1 The Proposed Development is scheduled to commence in 2024 and operate until 2027. Hence, the design year adopted for traffic analysis is 2027.

Traffic Forecasting

4.2 Year 2027 peak hour traffic flows for the junction capacity analysis is produced (i) with reference to existing traffic flows; (ii) estimated traffic growth rate from 2024 to 2027; (iii) expected traffic generation by the planned / committed developments in the vicinity; and (iv) expected traffic generation by the Proposed Development.

Estimated Traffic Growth Rate from 2024 to 2027

- 4.3 Reference is made to the (i) the AADT of core stations located in the vicinity, from the ATC, (ii) the population projection for 5 Tertiary Planning Units ("TPU"), i.e. 820, 823, 831, 824 & 829, which covers the broader near around the Proposed Development and are obtained from the "Projections of Population Distribution 2023 2031" produced by the Planning Department.
- 4.4 The above information is presented in **Tables 4.1 and 4.2** respectively.

TABLE 4.1 AADT OF THE CORE STATIONS LOCATED IN THE VICINITY OF THE SUBJECT SITE

	J DJECT SITE		i .	1
Station Road	6055 Hiram's	5017 Clear Water	5466 Clear Water	Overall
Koau	Highway	Bay Rd	Bay Rd	-
From	Clear Water Bay Rd	On Sau Rd	Hang Hau Rd	_
То	Po Tung Road	Hiram's Highway	Hiram's Highway	-
2010	23,090*	28,530	17,640	69,260
2011	22,930*	29,880	17520*	70,330
2012	24,140	29,900	17,520*	71,560
2013	25,220	30,070	17,770*	73,060
2014	24,880*	30,520	1 <i>7,7</i> 50	73,150
2015	25,330*	30,140	18,560	74,030
2016	25,610*	29,370	18,770*	73,750
2017	24,050	26,910	18,650*	69,610
2018	24,450	28,450	18,950*	71,850
2019#	24,280*	28,980	20,240	73,500
2020#	23,360*	28,900	19,110	71,370
2021#	24,460*	29,100	20,020*	73,580
2022#	23,480	27,720	19,140*	70,340
Average Annual Growth (2010-2018)	0.72%	-0.04%	0.90%	0.46%

Note: * Estimated by Growth Factor

[#] Excluded due to the impact of the public events in 2019 and COVID-19 pandemic in 2020 - 2022.

TABLE 4.2 POPULATION PROJECTIONS OF THE 5 TPU

Year		Total			
	820	824 & 829	831	823	
2024	7,100	3,700	25,100	4,100	40,000
2027	6,900	3,400	23,700	4,300	38,300
Average Annual Growth 2024 to 2027	-0.9%	-2.8%	-1.9%	1.6%	-1.4%

- 4.5 **Table 4.1** shows that the annual average traffic growth of 0.46%, between 2010 and 2018.
- 4.6 **Table 4.2** shows that the annual population growth between 2024 2027 is 1.4%. To be conservative, an annual average traffic growth of 1% is adopted for year 2024 2027.

Planned/ Committed Developments in the Vicinity

4.7 Planned/ committed developments found in the vicinity have been incorporated in the forecast. The planned / committed developments are listed in **Table 4.3** and the locations are presented in **Figure 4.1**.

TABLE 4.3 THE PLANNED / COMMITTED DEVELOPMENTS IN THE VICINITY OF THE PROPOSED DEVELOPMENT

Ref	Address	Use	GFA(m ²)
Α	Various lot in D.D. 210, Ho Chung	Residential	2,422
В	Lot 1003 in D.D. 214, Ho Chung	Residential	5,344
С	Phase 1 of CDA, Ho Chung ⁽¹⁾	Residential	5 <i>,7</i> 15
D	Lot 2189 in D.D. 244, Nam Pin Wai	Residential	8,320

⁽¹⁾ Approved Planning Application A/SK-HC/124-2

Traffic Generation of the Proposed Development

- 4.8 The TPDM has no trip rates for temporary car park. Hence, the traffic generation of the Proposed Development is calculated based on the trip rates derived from the traffic generation survey conducted at a temporary car park operated by Skye Parking at Ma Wo Road, Tai Po, on Wednesday, 19th June 2024. The survey results and the derived trip rate is presented in **Table 4.4**.
- 4.9 The derived trip rate is used to calculate the traffic generation of the Proposed Development, which is also presented in **Table 4.4**.

TABLE 4.4 DERIVED TRIP RATES AND TRAFFIC GENERATION FOR PROPOSED DEVELOPMENT

Items		AM	Peak PM Peak			
		Generation	Attraction	Generation	Attraction	
Skye Parking, Ma Wo	Traffic Generation (1)	16	15	10	30	
Road, Tai Po (246 spaces)	Derived Trip Rate (2)	0.0650	0.0610	0.0407	0.1220	
Proposed Development	Traffic Generation (1)	7	7	5	13	
(100 spaces)		14 (2-way)		18 (2-	·way)	

⁽¹⁾ traffic generation in pcu/hr, (2) trip rate in pcu/space/hr

4.10 **Table 4.4** shows that the Proposed Development is expected to generate 14 and 18 pcu (2-way) in AM and PM peak hours respectively.

Year 2027 Peak Hour Traffic Flows

4.11 Year 2027 peak hour traffic flows for the following cases are derived:

Year 2027 Without the = Existi Proposed Development [A] = 2024

 Existing Traffic Flow + estimated traffic growth between 2024 and 2027 + estimated traffic generation of the planned / committed developments

Year 2027 With the Proposed Development [B] = [A] + Traffic generated by the Proposed Development

4.12 Year 2027 peak hour traffic flows for the above two cases are shown in **Figures**4.2 and 4.3 respectively.

2027 Junction Capacity Analysis

4.13 Year 2027 junction capacity analysis for the case without and with the Proposed Development are summarised in **Table 4.5** and detailed calculations are found in the **Appendix A**.

TABLE 4.5 2027 JUNCTION PERFORMANCE

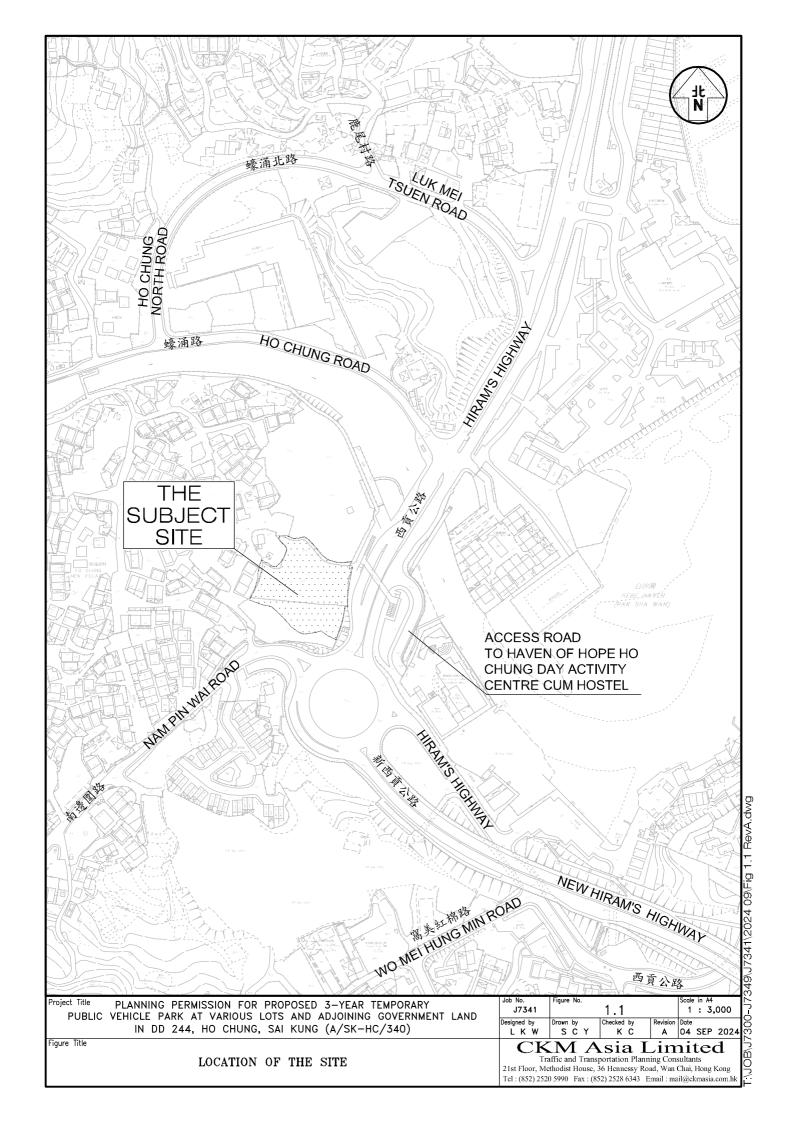
Ref	Junction	Type of Junction (Parameter)	Without Proposed Development			oposed opment
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Hiram's Highway / New Hiram's Highway / Nam Pin Wai Road	RA (DFC)	0.62	0.59	0.63	0.60
J2	Hiram's Highway / Access Road to Haven of Hope Ho Chung Day Activity Centre cum Hostel	Priority (DFC)	0.02	0.02	0.02	0.02
J3	Hiram's Highway / Ho Chung Road	Signal (RC)	98%	109%	96%	107%
J4	Hiram's Highway / Luk Mei Tsuen Road	Priority (DFC)	0.06	0.05	0.06	0.05

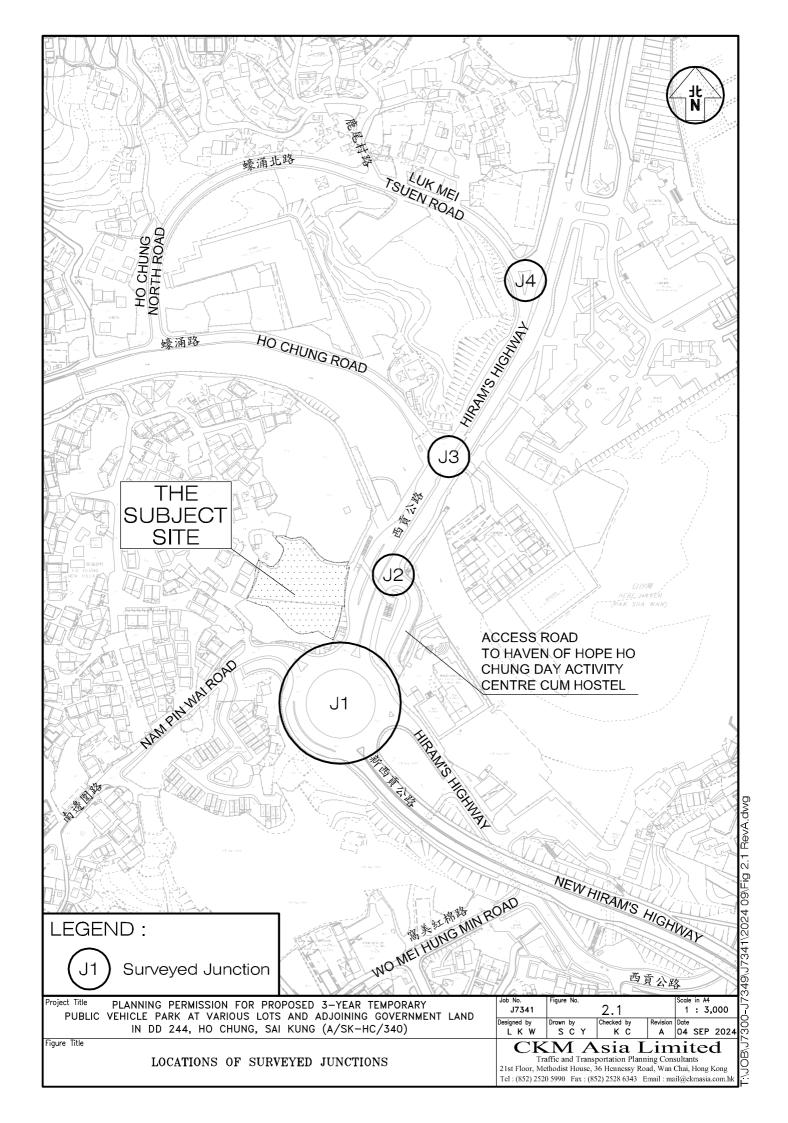
Note: RA – roundabout DFC - design flow/capacity ratio RC – reserve capacity

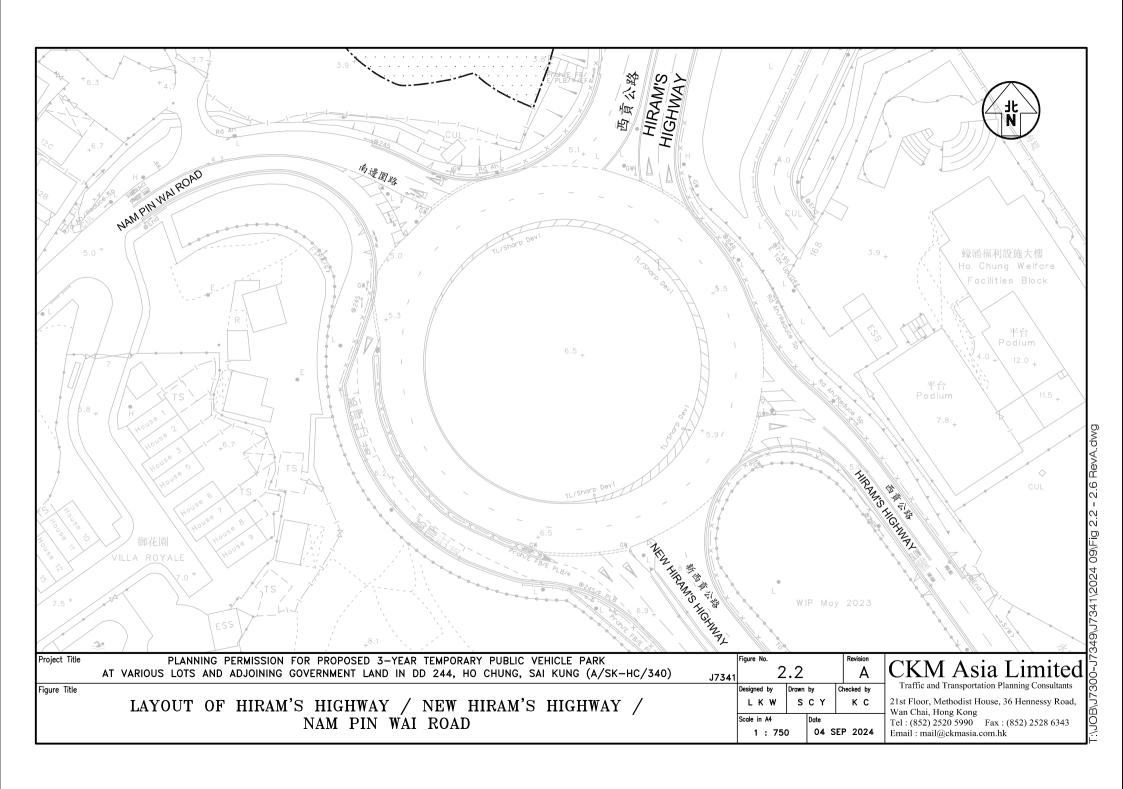
4.14 The results in **Table 4.5** indicate that the junctions analysed will operate with sufficient capacities in 2027, and the Proposed Development has no adverse traffic impact.

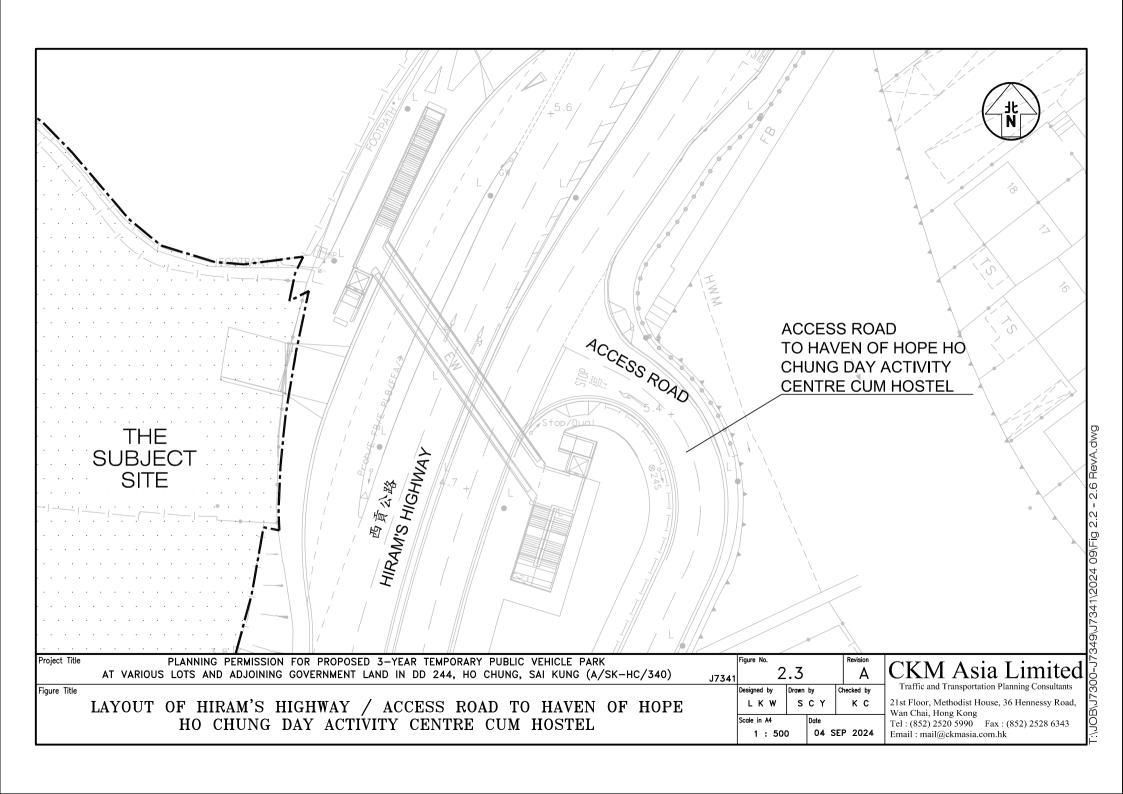
5.0 SUMMARY

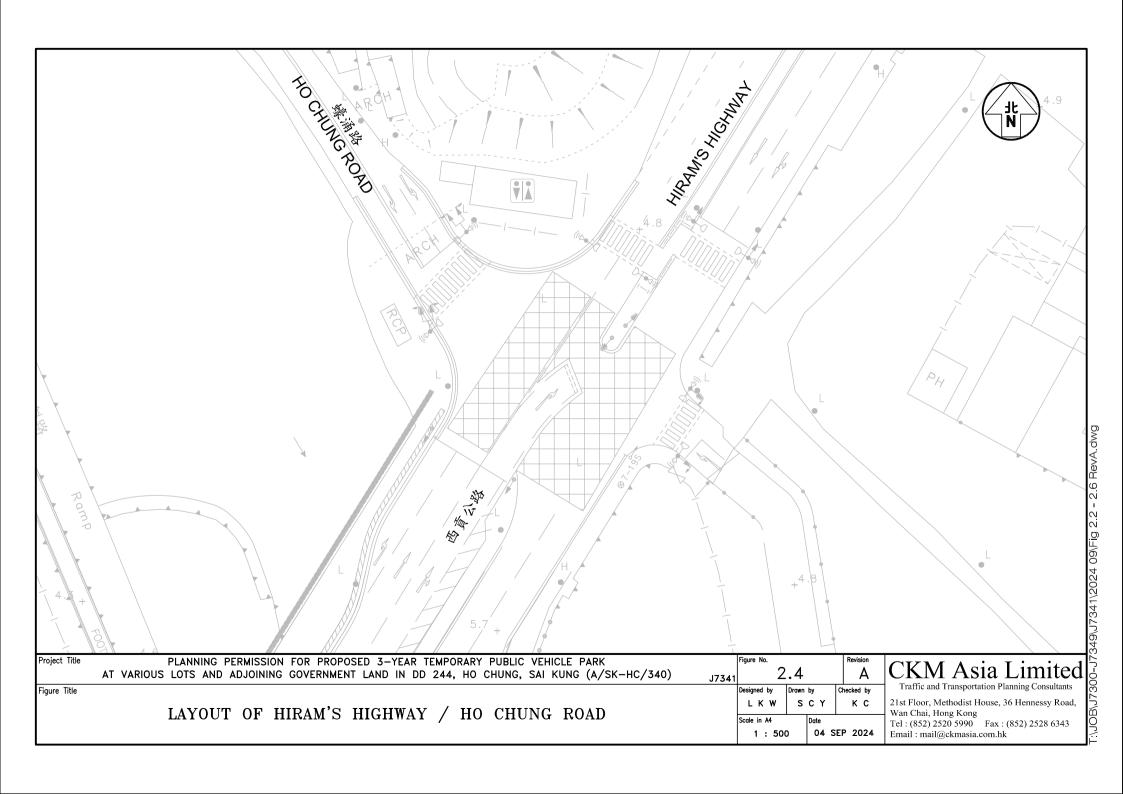
- 5.1 The Subject Site is located at various lots in D.D. 244 at Ho Chung, Sai Kung. Access to the Proposed Development is provided via its existing access, which is from the service road of Hiram's Highway.
- 5.2 The Proposed Development provides 100 car parking spaces for a period of 3 years.
- 5.3 Year 2027 peak hour traffic flows produced for the traffic analysis are derived based on (i) existing traffic flows; (ii) adopted traffic growth; (iii) traffic generated by other developments in the vicinity; and (iv) expected traffic generation by the Proposed Development.
- 5.4 A comparison is made of the performance of the junctions assessed for the cases without and with the Proposed Development. The traffic analysis concluded that the junctions analysed will operate with sufficient capacities in 2027, and the Proposed Development has no adverse traffic impact.

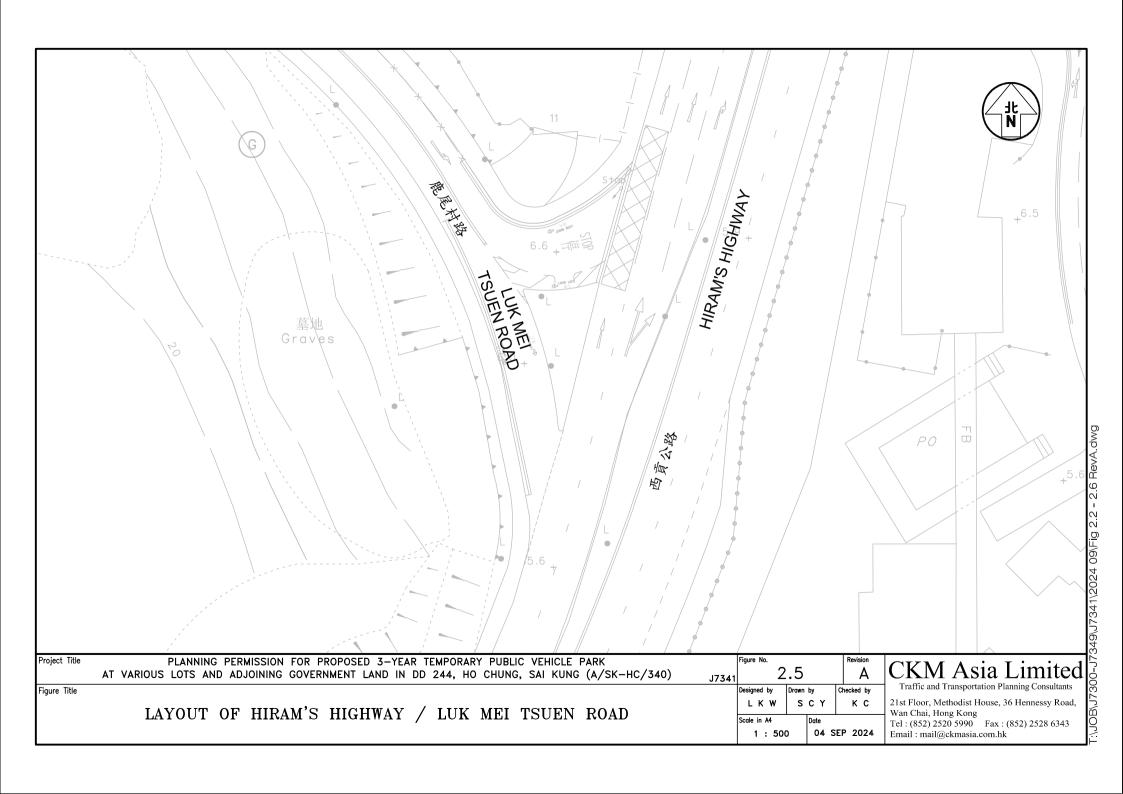


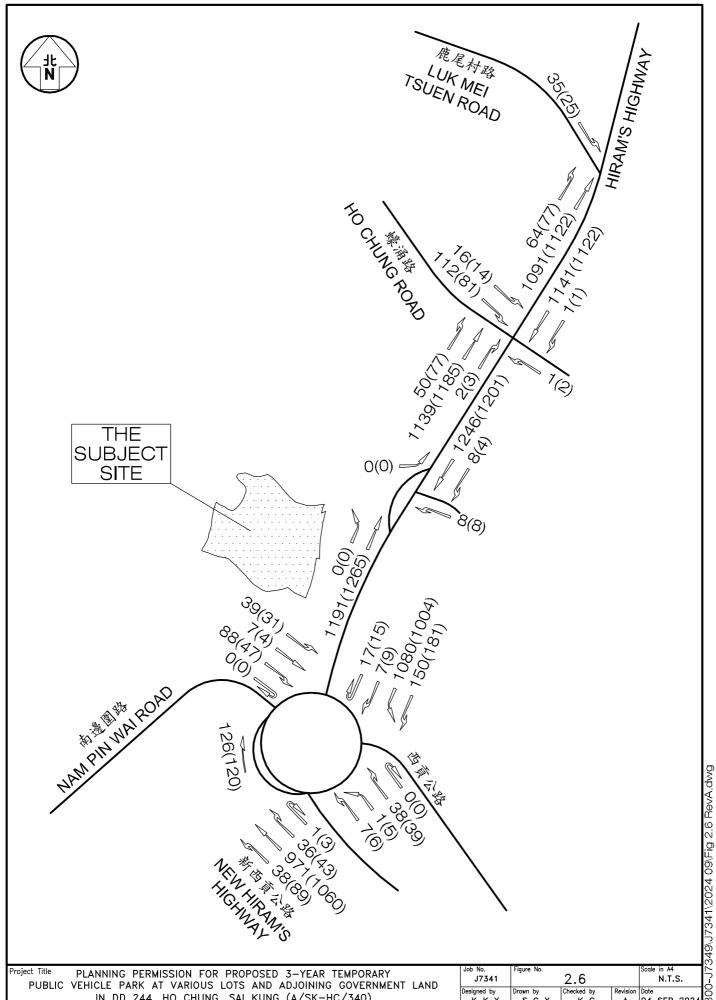












IN DD 244, HO CHUNG, SAI KUNG (A/SK-HC/340)

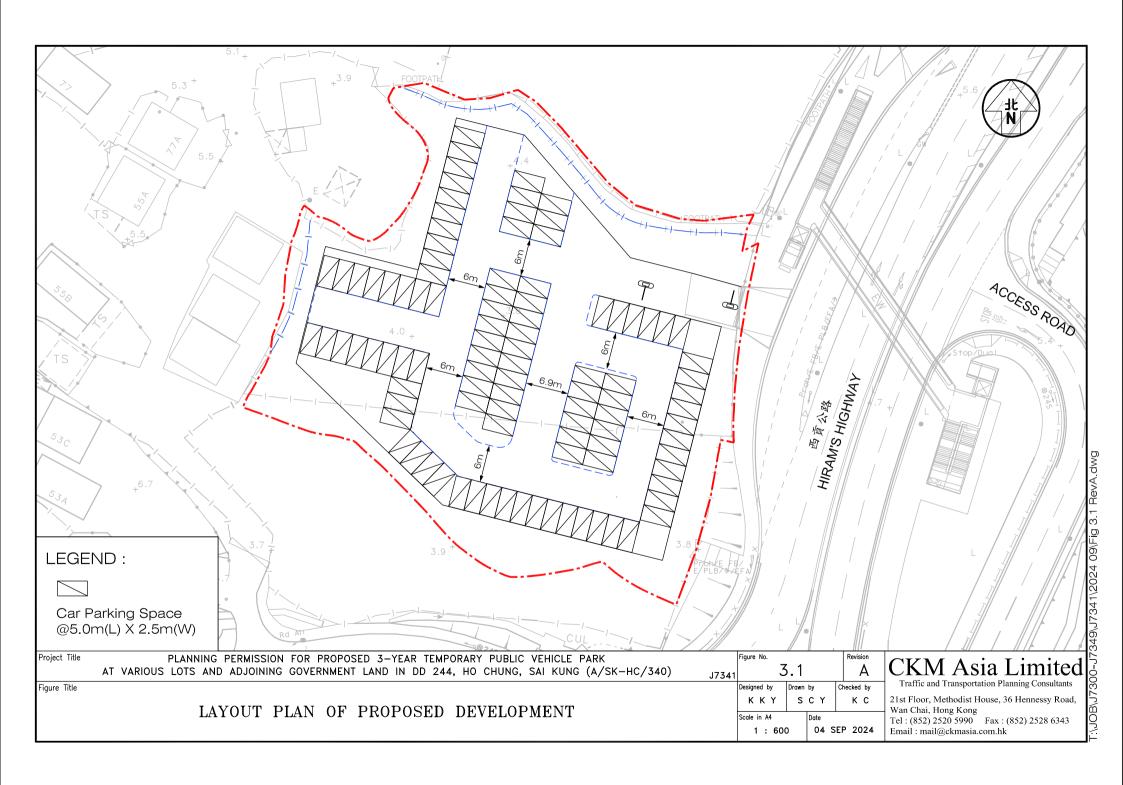
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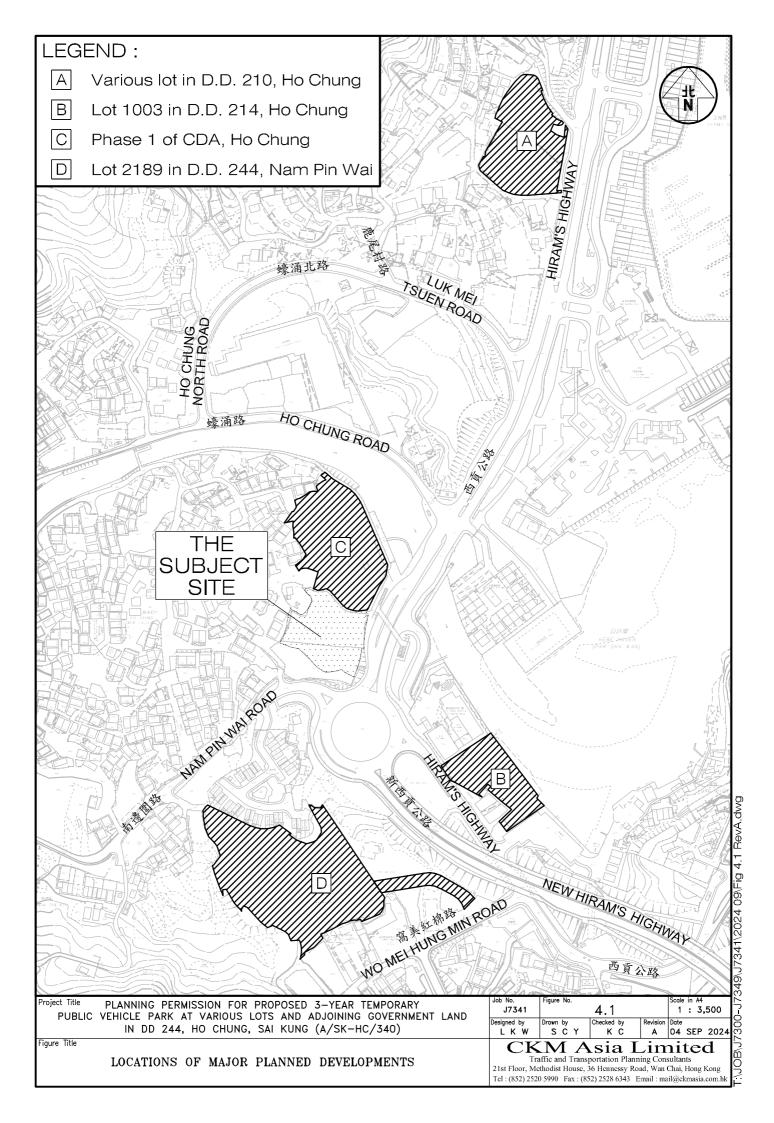
Figure Title

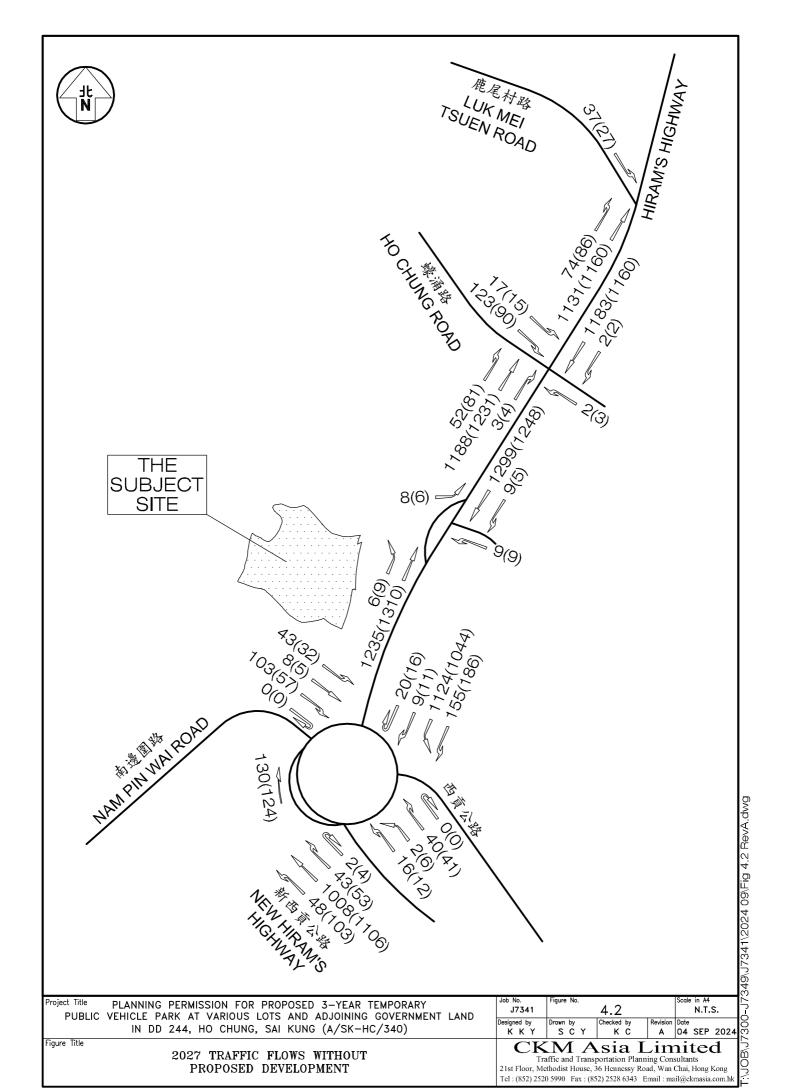
EXISTING PEAK HOUR FLOWS

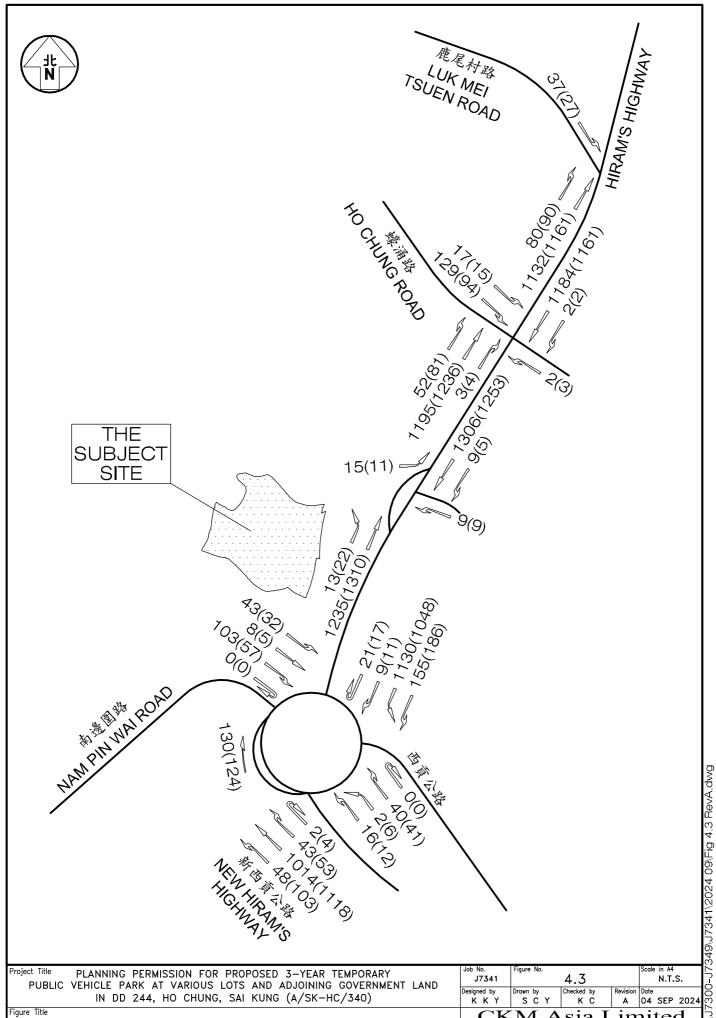
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2027 TRAFFIC FLOWS WITH PROPOSED DEVELOPMENT



Roundabout Analysis

AM Peak

Arm	To A	То В	To C	To D	Total	q_c
From A	17	150	1080	7	1254	132
From B	38	0	7	1	46	1193
From C	971	36	1	38	1046	63
From D	39	7	88	0	134	1189
Total	1065	193	1176	46	2480	

PM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A	15	181	1004	9	1209	97
From B	39	0	6	5	50	1078
From C	1060	43	3	89	1195	68
From D	31	4	47	0	82	1280
Total	1145	228	1060	103	2536	

Legend

Arm	Road (in clockwise order)
Α	Hiram's Highway SB
В	Hiram's Highway NB
С	New Hiram's Highway NB
D	Nam Pin Wai Road EB
Е	
F	
G	
Н	

Geometric Parameters

Ocometin	c i aramet	,, ,					
Arm	e (m)	v (m)	r (m)	L (m)	D (m)	Ø (°)	S
From A	7.5	7.5	18.8	1.0	80	41	0.0
From B	5.5	3.5	15.0	20.0	80	47	0.2
From C	9.0	7.0	18.8	10.0	80	48	0.3
From D	7.5	4.5	21.3	28.5	80	46	0.2
From E							
From F							
From G							
From H							

Predictive Equation $Q_E = K(F - f_cq_c)$

Q_E	Entry Capacity
q_{c}	Circulating Flow across the Entry
K	= 1-0.00347(Ø-30)-0.978[(1/r)-0.05]
F	$= 303x_2$
f _c	$= 0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
М	$= \exp[(D-60)/10]$
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

е	Entry Width	4.0 - 15.0 m
V	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
Ø	Entry Angle	10° - 60°
s	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_{E}		Entry Flow		RFC	
Arm	x_2	M	t_D	K	F	f _c	AM	PM	AM	PM	AM	PM
From A	7.50	7.39	1.06	0.96	2272.50	0.56	2108.27	2127	1254	1209	0.59	0.57
From B	5.02	7.39	1.06	0.92	1519.59	0.45	913.49	961	46	50	0.05	0.05
From C	8.22	7.39	1.06	0.93	2490.51	0.59	2292.55	2290	1046	1195	0.46	0.52
From D	6.74	7.39	1.06	0.95	2043.46	0.52	1347.32	1302	134	82	0.10	0.06
From E												
From F												
From G												
From H												

Roundabout Analysis

Junction:	Hiram's Hig	Job	Job Number: J7341		
Scenario:	Future Con		P. 2		
Design Year:	2027	Designed By:	Checked By:	Date:	9 Sep 2024

AM Peak

Arm	To A	To B	To C	To D	Total	q _c
From A	20	155	1124	9	1308	156
From B	40	0	16	2	58	1258
From C	1008	43	2	48	1101	71
From D	43	8	103	0	154	1243
Total	1111	206	1245	59	2621	

PM Peak

Arm	To A	To B	To C	To D	Total	q _c
From A	16	186	1044	11	1257	119
From B	41	0	12	6	59	1132
From C	1106	53	4	103	1266	74
From D	32	5	57	0	94	1344
Total	1195	244	1117	120	2676	

Legend

Arm	Road (in clockwise order)
Α	Hiram's Highway SB
В	Hiram's Highway NB
С	New Hiram's Highway NB
D	Nam Pin Wai Road EB
Е	
F	
G	
Н	

Geometric Parameters

Geometri	c Farainett	513					
Arm	e (m)	v (m)	r (m)	L (m)	D (m)	Ø (°)	S
From A	7.5	7.5	18.8	1.0	80	41	0.0
From B	5.5	3.5	15.0	20.0	80	47	0.2
From C	9.0	7.0	18.8	10.0	80	48	0.3
From D	7.5	4.5	21.3	28.5	80	46	0.2
From E							
From F							
From G							
From H							

Predictive Equation $Q_E = K(F - f_cq_c)$

Q_{E}	Entry Capacity
$q_{\rm c}$	Circulating Flow across the Entry
K	= 1-0.00347(Ø-30)-0.978[(1/r)-0.05]
F	$= 303x_2$
f _c	$= 0.210t_D(1+0.2x_2)$
t_{D}	= 1+0.5/(1+M)
М	$= \exp[(D-60)/10]$
\mathbf{x}_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

е	Entry Width	4.0 - 15.0 m
V	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
Ø	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_{E}		Entry Flow		RFC	
Arm	X ₂	М	t_D	K	F	f _c	AM	PM	AM	PM	AM	PM
From A	7.50	7.39	1.06	0.96	2272.50	0.56	2095	2115	1308	1257	0.62	0.59
From B	5.02	7.39	1.06	0.92	1519.59	0.45	887	939	58	59	0.07	0.06
From C	8.22	7.39	1.06	0.93	2490.51	0.59	2288	2287	1101	1266	0.48	0.55
From D	6.74	7.39	1.06	0.95	2043.46	0.52	1321	1271	154	94	0.12	0.07
From E												
From F												
From G												
From H												

Roundabout Analysis

Junction:	Job	Number: J7341			
Scenario:	Future Con	dition (With Proposed Develop	oment)		P. 3
Design Year:	2027	Designed By:	Checked By:	Date:	9 Sep 2024

AM Peak

Arm	To A	To B	To C	To D	Total	q _c
From A	21	155	1130	9	1315	156
From B	40	0	16	2	58	1265
From C	1014	43	2	48	1107	72
From D	43	8	103	0	154	1250
Total	1118	206	1251	59	 2634	

PM Peak

Arm	To A	To B	To C	To D	Total	q_c
From A	17	186	1048	11	1262	119
From B	41	0	12	6	59	1137
From C	1118	53	4	103	1278	75
From D	32	5	57	0	94	1357
Total	1208	244	1121	120	2693	

Legend

Arm	Road (in clockwise order)
Α	Hiram's Highway SB
В	Hiram's Highway NB
С	New Hiram's Highway NB
D	Nam Pin Wai Road EB
Е	
F	
G	
Н	

Geometric Parameters

Geometri	c raiaillett	513					
Arm	e (m)	v (m)	r (m)	L (m)	D (m)	Ø (°)	S
From A	7.5	7.5	18.8	1.0	80	41	0.0
From B	5.5	3.5	15.0	20.0	80	47	0.2
From C	9.0	7.0	18.8	10.0	80	48	0.3
From D	7.5	4.5	21.3	28.5	80	46	0.2
From E							
From F							
From G							
From H							

Predictive Equation $Q_E = K(F - f_cq_c)$

Q_E	Entry Capacity
q_{c}	Circulating Flow across the Entry
K	= 1-0.00347(Ø-30)-0.978[(1/r)-0.05]
F	$= 303x_2$
f _c	$= 0.210t_D(1+0.2x_2)$
t_D	= 1+0.5/(1+M)
М	$= \exp[(D-60)/10]$
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

е	Entry Width	4.0 - 15.0 m
V	Approach Half Width	2.0 - 7.3 m
r	Entry Radius	6.0 - 100.0 m
L	Effective Length of Flare	1.0 - 100.0 m
D	Inscribed Circle Diameter	15 - 100 m
Ø	Entry Angle	10° - 60°
S	Sharpness of Flare	0.0 - 3.0

Ratio-of-Flow to Capacity (RFC)

							Q_E		Entry Flow		RFC	
Arm	X ₂	М	t_D	K	F	f _c	AM	PM	AM	PM	AM	PM
From A	7.50	7.39	1.06	0.96	2272.50	0.56	2095	2115	1315	1262	0.63	0.60
From B	5.02	7.39	1.06	0.92	1519.59	0.45	884	937	58	59	0.07	0.06
From C	8.22	7.39	1.06	0.93	2490.51	0.59	2288	2286	1107	1278	0.48	0.56
From D	6.74	7.39	1.06	0.95	2043.46	0.52	1317	1264	154	94	0.12	0.07
From E												
From F												
From G												
From H												

		=		nalysis					
Junction:	Hiram's Highway								
Design Year:	2024	Job Numb	per: <u>J</u>	7341	Da	ate:	9	Sep 2024	
Scenario:	Existing Condition	1						Page	4
Hiram's	s Highway NB (Arm (C)			Hira	am's Hi	ghway SE	3 (Arm A)	
<u>1265</u>	1191								
					•	<u> </u>	1246	1201	
							8	4	
			====				0.04	DM	
X.		8 <u>8</u>					AM	<u>PM</u>	
	,		oad to Sai	Kung Ce	entral Prima	ry Scho	ool WB (A	rm B)	
The prodictive o	quations of capacity	of moveme	ont ara:						
	+ 14W-CR - Y(0.364			0.229a-	CA + 0.52a	-CB)1			
	- Y(0.364q-AC + 0.1			ooq	07.1.0.029	0-/1			
-	- 0.364Y(q-AC + q-A	/ -							
	arameters represent								
	.094(w-BA - 3.65)][1				0006(V-IBA	- 150)]			
	.094(w-BC - 3.65)][1 .094(w-CB - 3.65)][1								
	0.0345W	+ 0.0003(v	-100 - 120	/1					
		_							
a-AB (etc = the design flow	of moveme	ent AB etc.						
•	etc = the design flow aior road width	of moveme	ent AB, etc						
W = m	etc = the design flow ajor road width = central reserve wid		ent AB, etc						
W = m W-CR	ajor road width	dth	ent AB, etc						
W = m W-CR w-BA, v-rBA,	ajor road width = central reserve wid etc = lane width to ve etc = visibility to the	dth ehicle right for wa	uiting vehicl			c			
W = m W-CR w-BA, v-rBA,	ajor road width = central reserve wid etc = lane width to ve	dth ehicle right for wa	uiting vehicl			c			
W = m W-CR w-BA, v-rBA, v-IBA,	ajor road width = central reserve wid etc = lane width to ve etc = visibility to the etc = visibility to the l	dth ehicle right for wa eft for waiti	uiting vehicl	s in strea	am BA, etc		Calcu	ulated	
W = m W-CR w-BA, v-rBA, v-IBA,	ajor road width = central reserve wid etc = lane width to ve etc = visibility to the etc = visibility to the l	dth ehicle right for wa eft for waiti	uiting vehicl	s in strea	am BA, etc Input		Calcu D	ılated 0.5332	
W = m W-CR w-BA, v-rBA, v-IBA,	ajor road width = central reserve wid etc = lane width to ve etc = visibility to the etc = visibility to the I	dth ehicle right for wa eft for waiti put 16.00	uiting vehicl ing vehicles Inpu	s in strea t 0	am BA, etc Input	:			
W = m W-CR w-BA, v-rBA, v-IBA,	ajor road width = central reserve wid etc = lane width to ve etc = visibility to the etc = visibility to the l	dth ehicle right for wa eft for waiti put 16.00	uiting vehicl ing vehicles Inpu V-rBA	s in strea t 0	am BA, etc Input w-BA	0.00	D	0.5332	
W = m W-CR w-BA, v-rBA, v-IBA,	ajor road width = central reserve wid etc = lane width to ve etc = visibility to the etc = visibility to the l	dth ehicle right for wa eft for waiti put 16.00	uiting vehicl ing vehicles Inpu V-rBA V-IBA	s in streat t 0 0	am BA, etc Input w-BA w-BC	0.00 4.20	D E	0.5332 0.9712	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry:	ajor road width = central reserve widetc = lane width to veetc = visibility to the etc = visibility to the land W W-CR	dth ehicle right for wa eft for waiti put 16.00 1.50	iiting vehicl ing vehicles Inpu V-rBA V-IBA V-rBC	t 0 0 35 0	am BA, etc Input w-BA w-BC w-CB	0.00 4.20 0.00	D E F Y	0.5332 0.9712 0.5860 0.4480	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry :	ajor road width = central reserve wid etc = lane width to ve etc = visibility to the letc = V	olth ehicle right for wa eft for waiti put 16.00 1.50	iiting vehicl ing vehicles Inpu V-rBA V-IBA V-rBC	t 0 0 35 0 Cap	Input w-BA w-BC w-CB pacity, pcu/h	0.00 4.20 0.00	D E F Y	0.5332 0.9712 0.5860 0.4480	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry : Analysis : Traffic Flows q-CA	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	olth ehicle right for wa eft for waiti put 16.00 1.50	iiting vehicl ing vehicles Inpu V-rBA V-IBA V-rBC	t 0 0 35 0 Cap	Input w-BA w-BC w-CB pacity, pcu/r	0.00 4.20 0.00	D E F Y AM 172	0.5332 0.9712 0.5860 0.4480 PM 172	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry :	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	ethicle right for wa eft for waiti put 16.00 1.50 PM 1265	iiting vehicl ing vehicles Inpu V-rBA V-IBA V-rBC	t 0 0 35 0 Cap	Input w-BA w-BC w-CB pacity, pcu/h	0.00 4.20 0.00	D E F Y	0.5332 0.9712 0.5860 0.4480 PM 172	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry : Analysis : Traffic Flows q-CA q-CB	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	ethicle right for wa eft for waiti put 16.00 1.50 PM 1265 0 4	iiting vehicl ing vehicles Inpu V-rBA V-IBA V-rBC	t 0 0 35 0 Cap	Input w-BA w-BC w-CB pacity, pcu/h Q-BA Q-BC	0.00 4.20 0.00	D E F Y AM 172 526	0.5332 0.9712 0.5860 0.4480 PM 172 533	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry : Analysis : Traffic Flows q-CA q-CB q-AB	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	ethicle right for wa eft for waiti put 16.00 1.50 PM 1265 0 4 1201	iiting vehicl ing vehicles Inpu V-rBA V-IBA V-rBC	t 0 0 35 0 Cap	Input w-BA w-BC w-CB pacity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 172 526 317	0.5332 0.9712 0.5860 0.4480 PM 172 533 321	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	ethicle right for wa eft for waiti put 16.00 1.50 PM 1265 0 4 1201 0 8	iiting vehicl ing vehicles Inpu V-rBA V-IBA V-rBC	t 0 0 35 0 Cap	Input w-BA w-BC w-CB pacity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 172 526 317	0.5332 0.9712 0.5860 0.4480 PM 172 533 321	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	ethicle right for wa eft for waiti put 16.00 1.50 PM 1265 0 4 1201 0 8	iiting vehicl ing vehicles Inpu V-rBA V-IBA V-rBC	t 0 0 35 0 Cap	Input w-BA w-BC w-CB pacity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 172 526 317	0.5332 0.9712 0.5860 0.4480 PM 172 533 321	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	ehicle right for wa eft for waiti put 16.00 1.50 PM 1265 0 4 1201 0 8	uiting vehicle ing vehicles Inpu V-rBA V-IBA V-rBC V-rCB	t 0 0 35 0 Cap	Input w-BA w-BC w-CB pacity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 172 526 317	0.5332 0.9712 0.5860 0.4480 PM 172 533 321	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	ehicle right for wa eft for waiti put 16.00 1.50 PM 1265 0 4 1201 0 8 1.000	uiting vehicle ing vehicles Inpu V-rBA V-IBA V-rBC V-rCB	t 0 0 35 0 Cap	Input w-BA w-BC w-CB vacity, pcu/r Q-BA Q-BC Q-CB Q-BAC	0.00 4.20 0.00	D E F Y AM 172 526 317	0.5332 0.9712 0.5860 0.4480 PM 172 533 321	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	put 16.00 1.50 PM 1265 0 4 1201 0 8 1.000 of-flow to C B-A B-C	uiting vehicle ing vehicles Inpu V-rBA V-IBA V-rBC V-rCB	t 0 0 35 0 Cap	Input w-BA w-BC w-CB vacity, pcu/r Q-BA Q-BC Q-CB Q-BAC PM 0.000 0.015	0.00 4.20 0.00	D E F Y AM 172 526 317	0.5332 0.9712 0.5860 0.4480 PM 172 533 321	
W = m W-CR w-BA, v-rBA, v-lBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	ajor road width = central reserve widetc = lane width to verect = visibility to the letc = visi	put 16.00 1.50 PM 1265 0 4 1201 0 8 1.000 of-flow to C B-A	uiting vehicle ing vehicles Inpu V-rBA V-IBA V-rBC V-rCB	t 0 0 35 0 Cap	Input w-BA w-BC w-CB vacity, pcu/r Q-BA Q-BC Q-BA Q-BAC PM 0.000	0.00 4.20 0.00	D E F Y AM 172 526 317	0.5332 0.9712 0.5860 0.4480 PM 172 533 321	

Junction:	Hiram's High			oad to Haven		pe Ho Chui	ng Day			
Design Year:	2027		ob Numb				ate:	9	Sep 2024	
Scenario:	Future Cond	dition (W	ithout Pr	roposed Deve	elopme	ent)			Page	5
Hiram's	s Highway NB	(Arm C)				Hira	ım's Hi	ghway SE	3 (Arm A)	
<u>1310</u>	1235 -	\rightarrow								
			_			•	<u> </u>	1299	<u>1248</u>	
			===:	====		_4		9	<u>5</u>	
	\		9					AM	<u>PM</u>	
W.	,	A	9 ccess R	oad to Sai Ku	ıng Ce	entral Prima	ry Scho	ool WB (A	Arm B)	
E = [1 + 0.0] F = [1 + 0.0]		resented 65)][1 + (65)][1 + (D by D, E, 0.0009(V 0.0009(V	/-rBA - 120)][1 /-rBC - 120)]	1 + 0.0	0006(V-IBA	- 150)]			
q-AB, e W = ma W-CR = w-BA, e v-rBA, e	0.0345W etc = the designation road width = central reservetc = lane width etc = visibility tetc = visibility tetc	ve width h to vehi o the rig	icle ht for wa	ent AB, etc			:			
q-AB, e W = ma W-CR = w-BA, e v-rBA, e	0.0345W etc = the designajor road width = central reseretc = lane widtletc = visibility t	ve width h to vehi o the rig	icle ht for wa t for waiti	ent AB, etc				Calcu	ulated	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-IBA, e	0.0345W etc = the designajor road width = central reseretc = lane widtletc = visibility t	ve width h to vehi o the rig o the left	icle ht for wa t for waiti	ent AB, etc hiting vehicles ing vehicles ir		m BA, etc		Calcu D	ulated 0.5332	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e	0.0345W etc = the designajor road width = central reservetc = lane width etc = visibility tetc = visibility tetc	ve width h to vehi to the rig o the left	icle ht for wa t for waiti ut 16.00	ent AB, etc hiting vehicles ing vehicles ir Input	n strea	m BA, etc				
q-AB, e W = ma W-CR = w-BA, e v-rBA, e	0.0345W etc = the designajor road width = central reservetc = lane width etc = visibility tetc = visibility tetc	ve width h to vehi o the rig o the left Inpu W	icle ht for wa t for waiti ut 16.00	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 0 35	nm BA, etc Input w-BA	0.00	D E F	0.5332 0.9712 0.5860	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-IBA, e	0.0345W etc = the designajor road width = central reservetc = lane width etc = visibility tetc = visibility tetc	ve width h to vehi o the rig o the left Inpu W	icle ht for wa t for waiti ut 16.00	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA	n strea 0 0	nm BA, etc Input w-BA w-BC	0.00 4.20	D E	0.5332 0.9712	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-IBA, e	0.0345W etc = the designajor road width = central reser etc = lane width etc = visibility tetc = visibility te	ve width h to vehi o the rig o the left Inpu W V-CR	icle ht for wa t for waiti It 16.00 1.50	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 0 35 0	Im BA, etc Input w-BA w-BC w-CB	0.00 4.20 0.00	D E F Y	0.5332 0.9712 0.5860 0.4480	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-lBA, e Geometry : Analysis : Traffic Flows,	0.0345W etc = the designajor road width = central reser etc = lane width etc = visibility tetc = visibility te	ve width h to vehi to the rig o the left Inpu W V-CR	icle ht for wa t for waiti It 16.00 1.50	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 35 0	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h	0.00 4.20 0.00	D E F Y	0.5332 0.9712 0.5860 0.4480	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-lBA, e Geometry : Analysis : Traffic Flows, q-CA	0.0345W etc = the designajor road width = central reser etc = lane width etc = visibility tetc = visibility te	ve width h to vehi to the rig o the left Inpu W V-CR AM 1235	icle ht for wa t for waiti 16.00 1.50 PM 1310	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 0 35 0 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA	0.00 4.20 0.00	D E F Y AM 165	0.5332 0.9712 0.5860 0.4480 PM 165	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-lBA, e Traffic Flows, q-CA q-CB	0.0345W etc = the designajor road width = central reser etc = lane width etc = visibility tetc = visibility te	ve width h to vehi to the rig o the left Inpu W V-CR AM 1235 0	icle ht for wa t for waiti 16.00 1.50 PM 1310 0	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC	0.00 4.20 0.00	D E F Y AM 165 517	0.5332 0.9712 0.5860 0.4480 PM 165 526	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-lBA, e Traffic Flows, q-CA q-CB q-AB	0.0345W etc = the designajor road width = central reser etc = lane width etc = visibility tetc = visibility te	ve width h to vehi to the rig o the left Inpu W V-CR AM 1235 0 9	icle ht for waiti t 16.00 1.50 PM 1310 0 5	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 165 517 312	0.5332 0.9712 0.5860 0.4480 PM 165 526 317	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-lBA, e Traffic Flows, q-CA q-CB q-AB q-AC	0.0345W etc = the designajor road width = central reser etc = lane width etc = visibility tetc = visibility te	ve width h to vehi to the rig o the left Inpu W V-CR AM 1235 0 9 1299	icle ht for waiti t 16.00 1.50 PM 1310 0 5 1248	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC	0.00 4.20 0.00	D E F Y AM 165 517	0.5332 0.9712 0.5860 0.4480 PM 165 526 317	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-lBA, e Traffic Flows, q-CA q-CB q-AB q-AC q-BA	0.0345W etc = the designajor road width = central reser etc = lane width etc = visibility tetc = visibility te	ve width h to vehi to the rig o the left Inpu W V-CR AM 1235 0 9 1299 0	PM 1310 0 5 1248 0	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 165 517 312	0.5332 0.9712 0.5860 0.4480 PM 165 526 317	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-IBA, e Traffic Flows, q-CA q-CB q-AB q-AC	0.0345W etc = the designajor road width = central reseretc = lane width etc = visibility tetc = visibility tetc V	ve width h to vehi to the rig o the left Inpu W V-CR AM 1235 0 9 1299	icle ht for waiti t 16.00 1.50 PM 1310 0 5 1248	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 165 517 312	0.5332 0.9712 0.5860 0.4480 PM 165 526 317	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-IBA, e r-IBA, e r-IBA, e q-CA q-CB q-AB q-AC q-BA q-BC	0.0345W etc = the designajor road width = central reservetc = lane width etc = visibility to etc = visibility to V	ve width h to vehi to the rig to the left Inpu W V-CR AM 1235 0 9 1299 0 9 1.000	PM 1310 0 5 1248 0 9	ent AB, etc hiting vehicles ing vehicles ir Input V-rBA V-IBA V-rBC V-rCB	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 165 517 312	0.5332 0.9712 0.5860 0.4480 PM 165 526 317	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-lBA, e Traffic Flows, q-CA q-CB q-AB q-AC q-BA q-BC	0.0345W etc = the designajor road width = central reservetc = lane width etc = visibility to etc = visibility to V	ve width h to vehi o the rig o the left Inpu W V-CR AM 1235 0 9 1299 0 9 1.000	PM 1310 0 5 1248 0 9 1.000	ent AB, etc liting vehicles in linput V-rBA V-IBA V-rBC V-rCB	0 0 35 0 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC	0.00 4.20 0.00	D E F Y AM 165 517 312	0.5332 0.9712 0.5860 0.4480 PM 165 526 317	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-IBA, e r-IBA, e r-IBA, e q-CA q-CB q-AB q-AC q-BA q-BC	0.0345W etc = the designajor road width = central reservetc = lane width etc = visibility to etc = visibility to V	ve width h to vehi o the rig o the left Inpu W V-CR AM 1235 0 9 1299 0 9 1.000 Ratio-of-f	PM 1310 0 5 1248 0 9 1.000 flow to C	ent AB, etc iting vehicles in linput V-rBA V-IBA V-rBC V-rCB	0 0 35 0 Cap	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC	0.00 4.20 0.00	D E F Y AM 165 517 312	0.5332 0.9712 0.5860 0.4480 PM 165 526 317	
q-AB, e W = ma W-CR = w-BA, e v-rBA, e v-IBA, e r-IBA, e r-IBA, e q-CA q-CB q-AB q-AC q-BA q-BC	0.0345W etc = the designajor road width = central reservetc = lane width etc = visibility to etc = visibility to V	ve width h to vehi o the rig o the left Inpu W V-CR AM 1235 0 9 1299 0 9 1.000 Ratio-of-f B	picle th for waiting the forwaiting the following to the following to the following the following to the fol	ent AB, etc iting vehicles in linput V-rBA V-IBA V-rBC V-rCB	0 0 35 0 Cap (0	Im BA, etc Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC PM 0.000	0.00 4.20 0.00	D E F Y AM 165 517 312	0.5332 0.9712 0.5860 0.4480 PM 165 526 317	

Junction:				oad to Haver		pe Ho Chui	ng Day			
Design Year:	2027		ob Numb			Da	ite:	9	Sep 2024	
Scenario:	Future Co	ndition (W	ith Propo	osed Develop	oment)				Page	6
Hiram'	s Highway Ni	B (Arm C)				Hira	ım's Hi	ghway SB	3 (Arm A)	
<u>1310</u>	1235	\longrightarrow								
			_			•	<u> </u>	1306	<u>1253</u>	
		 =	<u> </u>	====		_4		9	<u>5</u>	
	`		9					AM	<u>PM</u>	
N.	•		9 ccess R	oad to Sai Kı	una Ce	entral Prima	rv Scho	ol WB (A	rm B)	
The predictive e					g • •		.,	, o (, .	- /	
E = [1 + 0] F = [1 + 0]	5 - Y(0.364q-A 5 - 0.364Y(q-A	AC + 0.144 AC + q-AB) epresented 3.65)][1 + 0 3.65)][1 + 0	lq-AB)] I by D, E, 0.0009(V 0.0009(V	, F are: /-rBA - 120)][/-rBC - 120)]						
q-AB, 0 W = m W-CR w-BA, v-rBA,	etc = the desi najor road wid = central res etc = lane wid etc = visibility etc = visibility	Ith erve width dth to vehi y to the rig	icle ht for wa	aiting vehicles			;			
q-AB, 0 W = m W-CR w-BA, v-rBA,	etc = the desi ajor road wid = central res etc = lane wid etc = visibility	Ith erve width dth to vehi y to the rig y to the left Inpu	icle ht for wa t for waiti	aiting vehicles ing vehicles i Input	n strea	am BA, etc Input		Calcu		
q-AB, v-IBA,	etc = the desi ajor road wid = central res etc = lane wid etc = visibility	Ith erve width dth to vehi y to the rig y to the left Inpu W	icle ht for wa t for waiti ut 16.00	aiting vehicles ing vehicles i Input V-rBA	n strea	am BA, etc Input w-BA	0.00	D	0.5332	
q-AB, v-rBA, W = m W-CR w-BA, v-rBA, v-IBA,	etc = the desi ajor road wid = central res etc = lane wid etc = visibility	Ith erve width dth to vehi y to the rig y to the left Inpu	icle ht for wa t for waiti ut 16.00	aiting vehicles ing vehicles i Input V-rBA V-IBA	n strea 0 0	am BA, etc Input w-BA w-BC	0.00 4.20	D E	0.5332 0.9712	
q-AB, w = m W-CR w-BA, v-rBA, v-IBA,	etc = the desi ajor road wid = central res etc = lane wid etc = visibility	Ith erve width dth to vehi y to the rig y to the left Inpu W	icle ht for wa t for waiti ut 16.00	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	n strea	am BA, etc Input w-BA	0.00	D	0.5332	
q-AB, we make we were well as	etc = the desi ajor road wid = central res etc = lane wid etc = visibility	Ith erve width dth to vehi y to the rig y to the left Inpu W	icle ht for wa t for waiti ut 16.00	aiting vehicles ing vehicles i Input V-rBA V-IBA	0 0 35	am BA, etc Input w-BA w-BC	0.00 4.20	D E F	0.5332 0.9712 0.5860	
q-AB, we make we were well as	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	Ith erve width dth to vehi y to the rig y to the left Inpu W W-CR AM	icle ht for wa t for waiti ut 16.00	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	0 0 35 0	am BA, etc Input w-BA w-BC	0.00 4.20 0.00	D E F	0.5332 0.9712 0.5860	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry:	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	Ith erve width dth to vehi y to the rig y to the left Inpu W W-CR	icle ht for wa t for waiti It 16.00 1.50	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA	0.00 4.20 0.00	D E F Y AM 164	0.5332 0.9712 0.5860 0.4480 PM 165	
q-AB, q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	tth erve width dth to vehi y to the rig y to the left Inpu W W-CR AM 1235 0	icle ht for wa t for waiti 16.00 1.50 PM 1310	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC	0.00 4.20 0.00	D E F Y AM 164 516	0.5332 0.9712 0.5860 0.4480 PM 165 525	
q-AB, q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	tth erve width dth to vehi y to the rig y to the left Inpu W W-CR AM 1235 0 9	icle ht for waiti t 16.00 1.50 PM 1310 0 5	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 164 516 311	0.5332 0.9712 0.5860 0.4480 PM 165 525 316	
q-AB, q-AB, q-AB, q-AB, q-AB, q-AC	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	th erve width dth to vehi y to the rig y to the left Inpu W W-CR AM 1235 0 9 1306	icle ht for waiti t 16.00 1.50 PM 1310 0 5 1253	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC	0.00 4.20 0.00	D E F Y AM 164 516	0.5332 0.9712 0.5860 0.4480 PM 165 525	
q-AB, q-AB, q-AB, q-AB, q-AB, q-AB, q-AB, q-AC, q-BA	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	erve width dth to vehi y to the rig y to the left Inpu W W-CR AM 1235 0 9 1306 0	PM 1310 0 1253 0	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 164 516 311	0.5332 0.9712 0.5860 0.4480 PM 165 525 316	
q-AB, q-AB, q-AB, q-AB, q-AB, q-AC	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	th erve width dth to vehi y to the rig y to the left Inpu W W-CR AM 1235 0 9 1306 0 9	PM 1310 0 5 1253 0 9	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 164 516 311	0.5332 0.9712 0.5860 0.4480 PM 165 525 316	
q-AB, q-AB, w = m W-CR w-BA, v-rBA, v-IBA, w-IBA; Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	erve width dth to vehi y to the rig y to the left Inpu W W-CR AM 1235 0 9 1306 0	PM 1310 0 1253 0	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 164 516 311	0.5332 0.9712 0.5860 0.4480 PM 165 525 316	
q-AB, q-AB, w = m W-CR w-BA, v-rBA, v-IBA, w-IBA, w-IBC	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	th erve width dth to vehi y to the rig y to the left Inpu W W-CR AM 1235 0 9 1306 0 9	PM 1310 0 5 1253 0 9 1.000	niting vehicles ing vehicles i Input V-rBA V-IBA V-rBC V-rCB	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB	0.00 4.20 0.00	D E F Y AM 164 516 311	0.5332 0.9712 0.5860 0.4480 PM 165 525 316	
q-AB, q-AB, q-AB, q-AB, q-BC, q-BA, q-BC, q-AB, q-BC, q-BA, q-BC, q-BA, q-BC, q-BA, q-BC, q-BA, q-BC, q-BA, q-BC,	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	AM 1235 0 9 1306 0 9 1.000 Ratio-of-f	PM 1310 0 5 1253 0 9 1.000	aiting vehicles ing vehicles i Input V-rBA V-IBA V-rBC V-rCB	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC	0.00 4.20 0.00	D E F Y AM 164 516 311	0.5332 0.9712 0.5860 0.4480 PM 165 525 316	
q-AB, q-AB, w = m W-CR w-BA, v-rBA, v-IBA, w-IBA, w-IBC	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	th erve width dth to vehi y to the rig y to the left Inpu W W-CR AM 1235 0 9 1306 0 9 1.000 Ratio-of-f B	PM 1310 0 5 1253 0 9 1.000 flow to C	aiting vehicles ing vehicles ing vehicles ing vehicles input V-rBA V-rBC V-rCB	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC	0.00 4.20 0.00	D E F Y AM 164 516 311	0.5332 0.9712 0.5860 0.4480 PM 165 525 316	
q-AB, q-AB, w = m W-CR w-BA, v-rBA, v-IBA, w-IBA, w-IBC	etc = the desinajor road wid = central resinetc = lane widetc = visibility etc = visibility	AM 1235 0 9 1306 0 9 1.000 Ratio-of-f	picle th for waiting the forwaiting the following to the following to the following the following to the fol	aiting vehicles ing vehicles ing vehicles ing vehicles input V-rBA V-rBC V-rCB	0 0 35 0 Cap	Input w-BA w-BC w-CB acity, pcu/h Q-BA Q-BC Q-CB Q-BAC	0.00 4.20 0.00	D E F Y AM 164 516 311	0.5332 0.9712 0.5860 0.4480 PM 165 525 316	

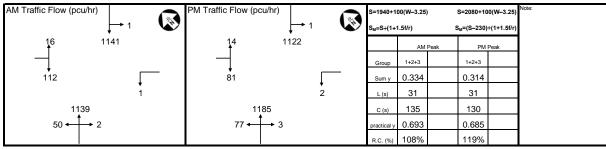
Signal Junction Analysis

 Junction:
 Hiram's Highway / Ho Chung Road
 Job Number:
 J7341

 Scenario:
 Existing Condition
 P. 7

 Design Year:
 2024
 Designed By:
 Checked By:
 Date:
 9 Sep 2024

Approach	Nearside	Phase	Stage	Width (m)	Radius (m)		Turning %	Sat. Flow	AM Peak Flow	y value	Critical y	Turning %	Sat. Flow	PM Peak Flow	y value	Critical y
						Gradient		(pcu/hr)	(pcu/hr)				(pcu/hr)	(pcu/hr)		
Hiram's Highway SB	LT+SA	A1	1	4.00	10.0		1	2012	551	0.274	0.274	1	2012	542	0.269	
	SA	A2	1	4.00				2155	591	0.274			2155	581	0.270	0.270
Ho Chung Road EB	LT	B1	2	3.00	14.0		100	1730	16	0.009		100	1730	14	0.008	
rio onang rioda 23	RT	B2	2	3.00	17.0		100	1888	112	0.059	0.059	100	1888	81	0.043	0.043
Hiram's Highway NB	LT	C1	1	3.50	10.0		100	1830	50	0.027		100	1830	77	0.042	
	SA	C2	1	3.50				2105	571	0.271			2105	594	0.282	
	SA+RT	C3	1	3.50	17.5		1	2103	570	0.271		1	2103	594	0.282	
Access Road to	LT	D1	3	4.50	10.0		100	1796	1	0.001	0.001	100	1796	2	0.001	0.001
Berkeley Bay Villa WB	LI	וט	3	4.50	10.0		100	1790	'	0.001	0.001	100	1790		0.001	0.001
Derkeley Bay Villa VVB																
pedestrian phase		P1	3		min c	rossing	time =	5	sec (GM +	7	sec F	GM =	12	sec	
		P2	2, 3		min c	rossing	time =	5	sec (GM +	7	sec F	GM =	12	sec	
		P3	2		min c	rossing	time =	5	sec (GM +	7	sec F	GM =	12	sec	
		P4	3		min c	rossing	time =	5	sec (GM +	10	sec F	GM =	15	sec	
					l											



1	A2 A1		2 B1 B2	∢P2 →		3 + P4;	<u> ₽1</u>	. P2.		4		5	
C1 C2	C3		+	† iF	3	·		D1	Ţ				
AM G =	I/G =	10	G =	I/G =	7	G =	11	I/G =	5	G =	I/G =	G =	I/G =
G =	I/G =	5	G =	I/G =	7	G =	11	I/G =	5	G =	I/G =	G =	I/G =
PM G = G =	I/G =	10 5	G = G =	I/G =			11 11	I/G = I/G =	5 5	G = G =	I/G = I/G =	G = G =	I/G =

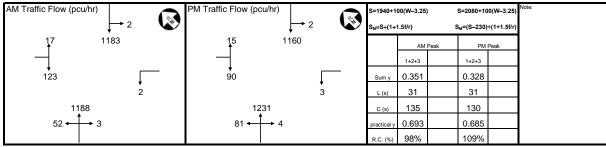
Signal Junction Analysis

 Junction:
 Hiram's Highway / Ho Chung Road
 Job Number:
 J7341

 Scenario:
 Future Condition (Without Proposed Development)
 P. 8

 Design Year:
 2027
 Designed By:
 Checked By:
 Date:
 9 Sep 2024

Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill	Turning %	Sat. Flow	AM Peak Flow	y value	Critical y	Turning %	Sat. Flow	PM Peak Flow	y value	Critical y
Арргоасп		Priase	Stage	width (m)	Radius (m)	Gradient	Turning %	(pcu/hr)	(pcu/hr)	y value	Chiicai y	Turning %	(pcu/hr)	(pcu/hr)	y value	Critical y
Hiram's Highway SB	LT+SA	A1	1	4.00	10.0		1	2012	572	0.284	0.284	1	2012	561	0.279	0.279
	SA	A2	1	4.00				2155	613	0.284			2155	601	0.279	
Ho Chung Road EB	LT	B1	2	3.00	14.0		100	1730	17	0.010		100	1730	15	0.009	
	RT	B2	2	3.00	17.0		100	1888	123	0.065	0.065	100	1888	90	0.048	0.048
Hiram's Highway NB	LT	C1	1	3.50	10.0		100	1830	52	0.028		100	1830	81	0.044	
	SA	C2	1	3.50				2105	596	0.283			2105	618	0.294	
	SA+RT	СЗ	1	3.50	17.5		1	2103	595	0.283		1	2103	617	0.293	
Access Road to	LT	D1	3	4.50	10.0		100	1796	2	0.001	0.001	100	1796	3	0.002	0.002
Berkeley Bay Villa WB																
pedestrian phase		P1	3		min c	rossing	time –	5	200	GM +	7	sec F	GM =	12	sec	
podeotrari pridoc		P2	2, 3			rossing		5		GM +	7		GM =	12	sec	
		P3	2			rossing		5		GM +	7		GM =	12	sec	
		P4	3			rossing		5		GM +	10		GM =	15	sec	
		14			11111111	iossiriy		3	360	OIVI T	10	3001	OIVI —	10	350	
			<u> </u>	i	L				L			L				



										11.0. (70)	, , , , ,	0,0	
1			2 † B1	4 P2 →	3	3	₽ 1→	4 P2 →		4		5	
C1 C2	A2 A1		B2	+		P4; ▼							
	-			ţF	23			D1	↓				
AM G =	I/G =	10	G =	I/G =	7	G =	11	I/G =	5	G =	I/G =	G =	I/G =
G =	I/G =	5	G =	I/G =	7	G =	11	I/G =	5	G =	I/G =	G =	I/G =
PM G =	I/G =	10	G =	I/G =	7	G =	11	I/G =	5	G =	I/G =	G =	I/G =
G =	I/G =	5	G =	I/G =	7	G =	11	I/G =	5	G =	I/G =	G =	I/G =

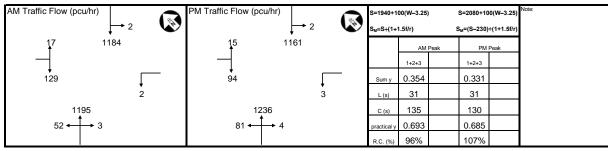
Signal Junction Analysis

 Junction:
 Hiram's Highway / Ho Chung Road
 Job Number:
 J7341

 Scenario:
 Future Condition (With Proposed Development)
 P. 9

 Design Year:
 2027
 Designed By:
 Checked By:
 Date:
 9 Sep 2024

Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	Turning %	Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	y value	Critical y	Turning %	Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	y value	Critical y
Hiram's Highway SB	LT+SA	A1	1	4.00	10.0	Orddion	1	2012	573	0.285	0.285	1	2012	562	0.279	0.279
	SA	A2	1	4.00				2155	613	0.284			2155	601	0.279	
Ho Chung Road EB	LT RT	B1 B2	2	3.00	14.0 17.0		100	1730 1888	17	0.010	0.068	100	1730 1888	15	0.009	0.050
	KI	BZ		3.00	17.0		100	1888	129	0.068	0.068	100	1888	94	0.050	0.050
Hiram's Highway NB	LT	C1	1	3.50	10.0		100	1830	52	0.028		100	1830	81	0.044	
	SA	C2	1	3.50				2105	599	0.285			2105	620	0.295	
	SA+RT	C3	1	3.50	17.5		1	2103	599	0.285		1	2103	620	0.295	
Access Road to	LT	D1	3	4.50	10.0		100	1796	2	0.001	0.001	100	1796	3	0.002	0.002
Berkeley Bay Villa WB										0.00					0.00	0.00
pedestrian phase		P1	3		min c	rossing	time =	5	sec	GM +	7	sec F	GM =	12	sec	
		P2	2, 3			rossing		5		GM +	7		GM =	12	sec	
		P3	2			rossing		5		GM +	7		GM =	12	sec	
		P4	3		min c	rossing	time =	5	sec	GM +	10	sec F	GM =	15	sec	



1	A2 A1	-	2 B1	∢P2→		3 ↑ P4;	<u> ₽1</u>	. P2.		4		5	
C1 C2 C3			B2	† i F	' 3	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		D1	└				
AM G =	I/G =	10	G =	I/G =	7	G =	11	I/G =	5	G =	I/G =	G =	I/G =
G =	I/G =	5	G =	I/G =	7	G =	11	I/G =	5	G =	I/G =	G =	I/G =
PM G = G =	I/G =	10 5	G = G =	I/G =			11 11	I/G =	5	G = G =	I/G =	G = G =	I/G =

			Priority .	Junction A	Analysis				
Junction:	Hiram's Hig	hway / L	uk Mei T	suen Road	t				
Design Year:	2024		Job Numb	oer: J	7341	D	ate:	9	Sep 2024
Scenario:	Existing Co	ndition							Page 1
Hiram'	s Highway NB	(Arm C)				Hir	am's Hic	hway SB	(Arm A)
1123		(, o)					2111 0 1 119	illiay 02	(7 7 .)
<u> </u>									
			L			•	-	1091	<u>1122</u>
			: = <u>1</u> = :	====		_		64	<u>77</u>
		F	35				Г	AM	PM
>N	À	-	<u>25</u>				L	/ (IVI	<u>1 1V1</u>
Ţ,	y	ī		suen Roa	d EB (Arı	mB)			
The predictive e									
	` '	oresented (65)][1 + (65)][1 + (65)][1 + In flow of In rive width In to veh to the rig	d by D, E, 0.0009(V 0.0009(V 0.0009(V f movement icle	/-rBA - 120 /-rBC - 120 /-rCB - 120 ent AB, etc))]))] ; les in str	eam BA, et			
Geometry:		Inpu	ut	Inpu	ıt	Input	İ	Calcu	lated
,		w		V-rBA	0	w-BA	0.00	D	0.5332
	1	W-CR	2.50	V-IBA		w-BC	4.50	E	1.0216
				V-rBC	60	w-CB	0.00	F	0.5860
				\ / •CD	^				0.2700
Analysis :				V-rCB	0			Y	0.3790
Analysis : Traffic Flows	s, pcu/hr	AM	PM	V-rCB		acity, pcu/h	nr		0.3790 PM
	s, pcu/hr	AM 1142	PM 1123	V-rCB	Сар	acity, pcu/b Q-BA	nr	Υ	
Traffic Flows	s, pcu/hr			V-rCB	Cap	Q-BA Q-BC	nr	Y AM 218 604	PM
Traffic Flows q-CA q-CB q-AB	s, pcu/hr	1142 0 64	1123 0 77	V-rCB	Cap	Q-BA Q-BC Q-CB	nr	Y AM 218 604 343	PM 216 599 340
Traffic Flows q-CA q-CB q-AB q-AC	s, pcu/hr	1142 0 64 1091	1123 0 77 1122	V-rCB	Cap	Q-BA Q-BC	nr	Y AM 218 604	PM 216 599
Traffic Flows q-CA q-CB q-AB q-AC q-BA	s, pcu/hr	1142 0 64 1091 0	1123 0 77 1122 0	V-rCB	Cap	Q-BA Q-BC Q-CB	ır	Y AM 218 604 343	PM 216 599 340
Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	s, pcu/hr	1142 0 64 1091 0 35	1123 0 77 1122 0 25	V-rCB	Cap	Q-BA Q-BC Q-CB	ır	Y AM 218 604 343	PM 216 599 340
Traffic Flows q-CA q-CB q-AB q-AC q-BA	s, pcu/hr	1142 0 64 1091 0	1123 0 77 1122 0	V-rCB	Cap	Q-BA Q-BC Q-CB	nr	Y AM 218 604 343	PM 216 599 340
Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC		1142 0 64 1091 0 35 1.000	1123 0 77 1122 0 25 1.000		Cap	Q-BA Q-BC Q-CB Q-BAC	ır	Y AM 218 604 343	PM 216 599 340
Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC		1142 0 64 1091 0 35 1.000	1123 0 77 1122 0 25 1.000		Cap	Q-BA Q-BC Q-CB Q-BAC	ır	Y AM 218 604 343	PM 216 599 340
Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC		1142 0 64 1091 0 35 1.000 Ratio-of-	1123 0 77 1122 0 25 1.000 flow to C		Cap AM 0.000	Q-BA Q-BC Q-CB Q-BAC PM 0.000	ır	Y AM 218 604 343	PM 216 599 340
Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC		1142 0 64 1091 0 35 1.000 Ratio-of-	1123 0 77 1122 0 25 1.000 flow to C 3-A 3-C		AM 0.000 0.058	Q-BA Q-BC Q-CB Q-BAC PM 0.000 0.042	ır	Y AM 218 604 343	PM 216 599 340
q-CA q-CB q-AB q-AC q-BA q-BC		1142 0 64 1091 0 35 1.000 Ratio-of-	1123 0 77 1122 0 25 1.000 flow to C		Cap AM 0.000	Q-BA Q-BC Q-CB Q-BAC PM 0.000	ır	Y AM 218 604 343	PM 216 599 340

Junction:	Hiram's Highv	vay / Luk Mei	Tsuen Road				
Design Year:	2027	Job Num		Date:	9	Sep 2024	
Scenario:	Future Condit	ion (Without P	roposed Developme	ent)		Page	11
	s Highway NB (A	rm C)		Hiram's	Highway SE	3 (Arm A)	
<u>1162</u>	1185 —	→					
		_		—	1131	<u>1160</u>	
·		—= =j==	====	-	74	<u>86</u>	
		37			AM	PM	
1/2		<u>27</u>			<u> </u>	<u> </u>	
	,	Luk Mei	Tsuen Road EB (Arı	m B)			
Q-BC = $E[745]$ Q-CB = $F[745]$ The geometric p D = $[1+0]$ E = $[1+0]$ F = $[1+0]$	- Y(0.364q-AC + - 0.364Y(q-AC + parameters repres	- 0.144q-AB)] - q-AB)] sented by D, E (i)][1 + 0.0009(\(^i)][1 + 0.0009(\(^i))]	V-rBA - 120)][1 + 0.0 V-rBC - 120)]				
W = m W-CR w-BA, v-rBA,	etc = the design to ajor road width = central reserved etc = lane width to etc = visibility to	e width to vehicle the right for wa	ent AB, etc aiting vehicles in streating vehicles in streat				
W = m W-CR w-BA, v-rBA, v-IBA,	etc = the design of ajor road width = central reserved etc = lane width etc = visibility to etc = visibility to	e width to vehicle the right for wai the left for wai	aiting vehicles in streating vehicles in strea	am BA, etc Input		ulated	
W = m W-CR w-BA, v-rBA, v-IBA,	etc = the design of a jor road width = central reserve etc = lane width etc = visibility to etc = visibility to	e width to vehicle the right for wai the left for wai Input V 18.00	aiting vehicles in streating vehicles in streating Vehicles in streating to the version of the v	am BA, etc Input w-BA 0.0	00 D	0.5332	
W = m W-CR w-BA, v-rBA, v-IBA,	etc = the design of a jor road width = central reserve etc = lane width etc = visibility to etc = visibility to	e width to vehicle the right for wai the left for wai	aiting vehicles in streating vehicles in streat Input V-rBA 0 V-IBA 0	Input w-BA 0.0 w-BC 4.5	00 D 50 E	0.5332 1.0216	
W = m W-CR w-BA, v-rBA, v-IBA,	etc = the design of a jor road width = central reserve etc = lane width etc = visibility to etc = visibility to	e width to vehicle the right for wai the left for wai Input V 18.00	aiting vehicles in strating vehicles in streat Input V-rBA 0 V-IBA 0 V-rBC 60	am BA, etc Input w-BA 0.0	00 D 60 E 00 F	0.5332 1.0216 0.5860	
W = m W-CR w-BA, v-rBA, v-IBA,	etc = the design of a jor road width = central reserve etc = lane width etc = visibility to etc = visibility to	e width to vehicle the right for wai the left for wai Input V 18.00	aiting vehicles in streating vehicles in streat Input V-rBA 0 V-IBA 0	Input w-BA 0.0 w-BC 4.5	00 D 50 E	0.5332 1.0216	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry :	etc = the design of ajor road width = central reserve etc = lane width etc = visibility to etc = visibility to etc = visibility to whetc = visibility to etc = visibility to whetc = visibility to whe	e width to vehicle the right for waithe left for waithe Input V 18.00 CR 2.50	aiting vehicles in streating vehicles vehicles in streating vehicles vehicl	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr	00 D 50 E 00 F Y	0.5332 1.0216 0.5860 0.3790	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry : Analysis : Traffic Flows q-CA	etc = the design of ajor road width = central reserve etc = lane width etc = visibility to etc = visibility to etc = visibility to whetc = visibility to etc = visibility to whetc = visibility to whe	e width to vehicle the right for waithe left for waithe Input V 18.00 CR 2.50 M PM 1185 1162	aiting vehicles in streating vehicles vehicles in streating vehicles vehicl	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr Q-BA	00 D 50 E 00 F Y AM 213	0.5332 1.0216 0.5860 0.3790 PM 211	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry : Analysis : Traffic Flows q-CA q-CB	etc = the design of ajor road width = central reserve etc = lane width etc = visibility to etc = visibility to etc = visibility to whetc = visibility to etc = visibility to whetc = visibility to whe	e width to vehicle the right for waithe left for waithe Input V 18.00 CR 2.50 M PM 1185 1162 0 0	aiting vehicles in streating vehicles vehi	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr Q-BA Q-BC	00 D 60 E 00 F Y AM 213 598	0.5332 1.0216 0.5860 0.3790 PM 211 593	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry : Analysis : Traffic Flows q-CA q-CB q-AB	etc = the design of ajor road width = central reserve etc = lane width etc = visibility to etc = visibilit	e width to vehicle the right for waithe left for waithe N 18.00 CR 2.50 M PM 1185 1162 0 0 74 86	aiting vehicles in streating vehicles vehi	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr Q-BA Q-BC Q-CB	00 D 60 E 00 F Y AM 213 598 339	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC	etc = the design of ajor road width = central reserve etc = lane width etc = visibility to etc = visibilit	e width to vehicle the right for waithe left for waithe V 18.00 CR 2.50 M PM 1185 1162 0 0 74 86 1131 1160	aiting vehicles in streating vehicles vehi	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr Q-BA Q-BC	00 D 60 E 00 F Y AM 213 598	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA	etc = the design of ajor road width = central reserve etc = lane width etc = visibility to etc = visibilit	e width to vehicle the right for waithe left for waithe V 18.00 CR 2.50 M PM 1185 1162 0 0 74 86 1131 1160 0 0	aiting vehicles in streating vehicles vehi	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr Q-BA Q-BC Q-CB	00 D 60 E 00 F Y AM 213 598 339	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	etc = the design of a jor road width = central reserved etc = lane width etc = visibility to etc = visibil	e width to vehicle the right for waithe left for waithe Input V 18.00 CR 2.50 M PM I185 1162 0 0 74 86 I131 1160 0 0 37 27	aiting vehicles in streating vehicles vehi	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr Q-BA Q-BC Q-CB	00 D 60 E 00 F Y AM 213 598 339	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA	etc = the design of a jor road width = central reserved etc = lane width etc = visibility to etc = visibil	e width to vehicle the right for waithe left for waithe V 18.00 CR 2.50 M PM 1185 1162 0 0 74 86 1131 1160 0 0	aiting vehicles in streating vehicles vehi	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr Q-BA Q-BC Q-CB	00 D 60 E 00 F Y AM 213 598 339	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	etc = the design of ajor road width = central reserved etc = lane width etc = visibility to etc = visibili	e width to vehicle the right for waithe left for waithe Input V 18.00 CR 2.50 M PM I185 1162 0 0 74 86 I131 1160 0 0 37 27	aiting vehicles in streating vehicles of the veh	Input w-BA 0.0 w-BC 4.5 w-CB 0.0 acity, pcu/hr Q-BA Q-BC Q-CB	00 D 60 E 00 F Y AM 213 598 339	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	
W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	etc = the design of ajor road width = central reserved etc = lane width etc = visibility to etc = visibili	e width to vehicle the right for waithe left f	aiting vehicles in streating vehicles of the veh	Input W-BA 0.0 W-BC 4.5 W-CB 0.0 acity, pcu/hr Q-BA Q-BC Q-CB Q-BAC	00 D 60 E 00 F Y AM 213 598 339	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	
W = m W-CR w-BA, v-rBA, v-lBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	etc = the design of ajor road width = central reserved etc = lane width etc = visibility to etc = visibili	width to vehicle the right for wa the left for wai Input V 18.00 CR 2.50 M PM 1185 1162 0 0 74 86 1131 1160 0 0 37 27 .000 1.000 atio-of-flow to C B-A B-C	aiting vehicles in strating vehicles	Input W-BA 0.0 W-BC 4.5 W-CB 0.0 acity, pcu/hr Q-BA Q-BC Q-CB Q-BAC	00 D 60 E 00 F Y AM 213 598 339	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	
W = m W-CR w-BA, v-rBA, v-lBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	etc = the design of ajor road width = central reserved etc = lane width etc = visibility to etc = visibili	width to vehicle the right for wa the left for wai Input V 18.00 CR 2.50 M PM 1185 1162 0 0 74 86 1131 1160 0 0 37 27 .000 1.000 atio-of-flow to C B-A	aiting vehicles in streating vehicles veh	Input W-BA 0.0 W-BC 4.5 W-CB 0.0 acity, pcu/hr Q-BA Q-BC Q-CB Q-BAC PM 0.000	00 D 60 E 00 F Y AM 213 598 339	0.5332 1.0216 0.5860 0.3790 PM 211 593 336	

		=	Junction Analysis				
Junction:	Hiram's Highway	/ Luk Mei T	suen Road				
Design Year:	2027	Job Numb	oer: J7341	Date:		9 Sep 2024	
Scenario:	Future Condition	(With Propo	osed Development			Page	12
	s Highway NB (Arm	C)		Hiram'	s Highway S	B (Arm A)	
<u>1163</u>	<u>3</u> 1186 →						
				←	— 1132	1161	
		<u> </u>		<u> </u>	- 80	90	
		37			AM	PM	
1		27			Alvi	<u>1 1V1</u>	
	•	Luk Mei T	suen Road EB (Ar	m B)			
Q-BA = D[627 Q-BC = E[745 Q-CB = F[745 The geometric p D = [1 + 0 E = [1 + 0	equations of capacity 4 + 14W-CR - Y(0.36 5 - Y(0.364q-AC + 0. - 0.364Y(q-AC + q-oparameters represer .094(w-BA - 3.65)][1 .094(w-BC - 3.65)][1 - 0.0345W	64q-AC + 0.1 144q-AB)] AB)] hted by D, E, + 0.0009(V I + 0.0009(V	144q-AB + 0.229q- , F are: /-rBA - 120)][1 + 0.0 /-rBC - 120)]				
q-AB, W = m W-CR w-BA, v-rBA,	etc = the design flow lajor road width = central reserve width to vect = lane width to vect = visibility to the etc = visibility to the	idth vehicle right for wa left for waiti	aiting vehicles in str	am BA, etc Input	Calc 0.00 D	culated 0.5332	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA,	etc = the design flow lajor road width = central reserve width to wetc = lane width to wetc = visibility to the etc = visibility to the	idth vehicle right for wa left for waiti nput 18.00	aiting vehicles in streating vehicles vehicl	am BA, etc Input w-BA 0 w-BC 4	0.00 D 4.50 E	0.5332 1.0216	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA,	etc = the design flow lajor road width = central reserve width to we etc = lane width to we etc = visibility to the etc = visibility to the	idth vehicle right for wa left for waiti nput 18.00	aiting vehicles in stre ing vehicles in strea Input V-rBA 0	am BA, etc Input w-BA 0 w-BC 4	0.00 D	0.5332	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry :	etc = the design flow rajor road width = central reserve wietc = lane width to vetc = visibility to the etc = visibility to the	idth vehicle e right for wa left for waiti nput 18.00 2.50	initing vehicles in streeting vehicles	Input w-BA 0 w-BC 4 w-CB 0	0.00 D 4.50 E 0.00 F Y	0.5332 1.0216 0.5860 0.3790	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry:	etc = the design flow rajor road width = central reserve wietc = lane width to vetc = visibility to the etc = visibility to the WW-CR	idth vehicle e right for wa left for waiti nput 18.00 2 2.50	iting vehicles in streing vehicles vehicles in streing vehicles vehi	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr	0.00 D 0.50 E 0.00 F Y	0.5332 1.0216 0.5860 0.3790 PM	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry:	etc = the design flow rajor road width = central reserve wietc = lane width to vetc = visibility to the etc = visibility to the Web. W-CR	idth vehicle right for wa left for waiti nput 18.00 2.50 PM 6 1163	iting vehicles in streing vehicles vehicles in streing vehicles veh	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA	0.00 D 0.50 E 0.00 F Y AM 213	0.5332 1.0216 0.5860 0.3790 PM 3 211	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB	etc = the design flow rajor road width = central reserve wietc = lane width to vetc = visibility to the etc = visibility to the Web. W-CR	idth vehicle right for wa left for waiti nput 18.00 2.50 PM 6 1163 0 0	liting vehicles in streing vehicles vehicles in streing vehicles vehicle	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA Q-BC	0.00 D 0.50 E 0.00 F Y AM 213 597	0.5332 1.0216 0.5860 0.3790 PM 3 211 7 592	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB	etc = the design flow rajor road width = central reserve width etc = lane width to we etc = visibility to the etc = visibility to the Web. W-CR	idth vehicle right for wa left for waiti nput 18.00 2.50 PM 6 1163 0 0 0 90	liting vehicles in streing vehicles vehicles in streing vehicles	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA Q-BC Q-CB	D.00 D D.50 E D.00 F Y AM 213 597 339	0.5332 1.0216 0.5860 0.3790 PM 3 211 7 592 9 335	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC	etc = the design flow rajor road width = central reserve width etc = lane width to we etc = visibility to the etc = visibility to the Web. W-CR	idth vehicle right for wa left for waiti nput 18.00 2.50 PM 6 1163 0 0 0 90 2 1161	liting vehicles in streing vehicles vehicles in streing vehicles vehicle	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA Q-BC	0.00 D 0.50 E 0.00 F Y AM 213 597	0.5332 1.0216 0.5860 0.3790 PM 3 211 7 592 9 335	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA	etc = the design flow rajor road width = central reserve width to vece = lane width to vece = visibility to the etc = visibility to the Web. W-CR	idth vehicle right for wa left for waiti nput 18.00 2.50 PM 6 1163 0 0 0 90 2 1161 0 0	liting vehicles in streing vehicles vehicles in streing vehicles vehicle	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA Q-BC Q-CB	D.00 D D.50 E D.00 F Y AM 213 597 339	0.5332 1.0216 0.5860 0.3790 PM 3 211 7 592 9 335	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC	etc = the design flow rajor road width = central reserve width to vece = lane width to vece = visibility to the etc = visibility to the Web. W-CR	period th vehicle right for was left for waiting the result of the right for waiting the	liting vehicles in streing vehicles vehicles in streing vehicles vehicle	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA Q-BC Q-CB	D.00 D D.50 E D.00 F Y AM 213 597 339	0.5332 1.0216 0.5860 0.3790 PM 3 211 7 592 9 335	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	etc = the design flow rajor road width = central reserve width to vece = lane width to vece = visibility to the etc = visibility to the www. W-CR s, pcu/hr AM 118 8 113 3 1.00	period th vehicle right for was left for waiting the result of the right for waiting the	aiting vehicles in streaming vehicles in str	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA Q-BC Q-CB Q-BAC	D.00 D D.50 E D.00 F Y AM 213 597 339	0.5332 1.0216 0.5860 0.3790 PM 3 211 7 592 9 335	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	etc = the design flow rajor road width = central reserve width to vece = lane width to vece = visibility to the etc = visibility to the www. W-CR s, pcu/hr AM 118 8 113 3 1.00	idth vehicle right for waiti nput 18.00 2.50 PM 6 1163 0 0 90 2 1161 0 0 7 27 0 1.000 of-flow to Care	alting vehicles in streaming vehicles in str	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA Q-BC Q-CB Q-BAC PM 0.000	D.00 D D.50 E D.00 F Y AM 213 597 339	0.5332 1.0216 0.5860 0.3790 PM 3 211 7 592 9 335	
q-AB, W = m W-CR w-BA, v-rBA, v-IBA, Geometry: Analysis: Traffic Flows q-CA q-CB q-AB q-AC q-BA q-BC	etc = the design flow rajor road width = central reserve width to vece = lane width to vece = visibility to the etc = visibility to the www. W-CR s, pcu/hr AM 118 8 113 3 1.00	idth vehicle right for waiti nput 18.00 2.50 PM 6 1163 0 0 90 2 1161 0 0 7 27 0 1.000	aiting vehicles in streaming vehicles in str	Input w-BA 0 w-BC 4 w-CB 0 pacity, pcu/hr Q-BA Q-BC Q-CB Q-BAC	D.00 D D.50 E D.00 F Y AM 213 597 339	0.5332 1.0216 0.5860 0.3790 PM 3 211 7 592 9 335	



