Proposed Columbarium,
Koon Yam Tong, 13 Nim Wan Road
Lot No. 118 in D.D. 135, Ha Pak Nai
Yuen Long, New Territories

Traffic Impact Assessment
18th December, 2025

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1.0 INTRODUCTION

Background

1.1 The Subject Site, which is known as Koon Yam Tong, is located at 13 Nim Wan Road, Ha Pak Nai, Yuen Long, i.e. Lot No. 118 in D.D. 135. **Figure 1.1** shows the location of the Subject Site.

1.2 At present, the Subject Site is a 3-storey New Territories Exempted House ("NTEH") which was constructed in the early 1980s, and has been used for storage of cremated human bodies, i.e. columbarium, since 2010. (hereinafter the "Proposed Columbarium").

1.3 To comply with the Private Columbaria Ordinance (Cap. 630), the Applicant has submitted an Application for Private Columbarium License and an Application for Temporary Suspension of Liability for operation of the Proposed Columbarium, referred as Pre-Cut-Off Columbarium, to the Private Columbaria Licensing Board ("PCLB") of Food and Environmental Hygiene Department ("FEHD"). A prerequisite of the private columbarium license is to obtain approval of planning permission from the Town Planning Board; hence, a S12A Rezoning Application is being submitted. CKM Asia Limited, a traffic and transportation planning consultancy firm, is commissioned by the Applicant to carry out a Traffic Impact Assessment ("TIA") for the Proposed Columbarium as part of the S12A Rezoning Application.

1.4 To minimise potential traffic and pedestrian impact, the Applicant proposes to provide 967 niches within the Proposed Columbarium, and the following special traffic and pedestrian arrangements are proposed:

(i) During the Ching Ming and Chung Yeung Festival Periods i.e. within 4 weeks before and 4 weeks after the Ching Ming Festival Day, and within 4 weeks before and 4 weeks after the Chung Yeung Festival Day (hereinafter the "Festival Periods"), visitation to the Proposed Columbarium is by appointment only and is from 0700 to 1700 hours on weekdays, i.e. Monday to Friday, and closed on Saturdays, Sundays, and public holidays, including Ching Ming and Chung Yeung Festival Days;

(ii) Outside the Festival Periods, visitation to the Proposed Columbarium is also by appointment only and is from 0900 to 1600 hours on Mondays to Fridays; but, closed on Saturdays, Sundays, and public holidays;

(iii) Visit-by-appointment arrangement will be implemented with a capacity of 4 visitors per 30-minute session, and all reservations must be made at least 2 days in advance;

(iv) All visitors are advised and encouraged to use public transport service, i.e. Green Minibus ("GMB") No. 33 ("GMB 33") from Yuen Long to Ha Pak Nai via Tin Shui Wai, and reminded that access by private car and taxi are discouraged, and car parking is not available at the Proposed Columbarium and in the vicinity; and

(v) Internet memorial service will be provided by the Applicant for all niche owners as an alternative to in-person visitation.

Scope of Study

1.5 The main objectives of this study are as follows:

- To present existing traffic information associated with the Subject Site;
- To review the traffic conditions in the vicinity of the Subject Site;
- To present the proposed traffic and pedestrian management measure for the Proposed Columbarium;
- To quantify the traffic and pedestrian generated by the Proposed Columbarium;
- To examine the traffic and pedestrian impact on the local road junctions, road links, pedestrian facilities, and public transport services; and
- To identify deficiencies, if any, in the road network and pedestrian facilities in accommodating the impact associated with the Proposed Columbarium.

Contents of the Report

1.6 After this introduction, the remaining chapters contain the following:

Chapter Two - Describes the existing condition and surveys,
Chapter Three - Outlines the Proposed Columbarium and the proposed special traffic and pedestrian arrangement,
Chapter Four - Presents the traffic, pedestrian, public transport impact analyses, and
Chapter Five - Summarises the overall conclusion.

2.0 THE EXISTING SITUATION

The Subject Site and Proposed Columbarium

2.1 The Subject Site is located off the western side of Nim Wan Road in Ha Pak Nai. **Figure 2.1** shows the existing layout. It is a NTEH, and has no internal transport facilities. As of December 2025, the Proposed Columbarium has 4 occupied niches.

The Road Network

2.2 Nim Wan Road in vicinity of the Subject Site runs along the coastline from Ha Pak Nai to Sheung Pak Nai. It then continues northward as Deep Bay Road towards Lau Fau Shan, where it connects with Lau Fau Shan Road providing external regional access.

2.3 At present, both Nim Wan Road and Deep Bay Road are single track roads with passing bays and passing areas serving local developments and villages between Ha Pak Nai and Lau Fau Shan. Some sections of carriageway are around 6m allowing concurrent 2-way traffic flow.

Traffic Surveys

2.4 In view the Proposed Columbarium will only open on weekdays, traffic surveys were conducted on Tuesday, 8th April, 2025, which is the first Tuesday after the 2025 Ching Ming Festival Day on Friday, 4th April, 2025, i.e. a weekday within the Ching Ming Festival Period. Details of the traffic surveys are described in below paragraphs.

Traffic Counts at Junction and Road Links

2.5 Manual classified traffic counts were conducted at the selected junction and road links within the Area of Influence ("AOI") as indicated in **Figure 2.2**, and summarised in Table 2.1.

TABLE 2.1 SURVEYED JUNCTION AND ROAD LINKS

Ref.	Surveyed Location
Road Junction	
J01	Lau Fau Shan Roundabout
Road Link	
L01	Deep Bay Road south of Lau Fau Shan Roundabout
L02	Deep Bay Road / Nim Wan Road in Sheung Pak Nai
L03	Nim Wan Road near the Subject Site

2.6 The traffic counts were classified by vehicle types to enable traffic flows in passenger car unit ("pcu") to be calculated. The AM, Noon, and PM peak hour identified are 0800 to 0900 hours, 1300 to 1400 hours, and 1700 to 1800 hours, and the peak hour traffic flows are shown in **Figure 2.3**.

Operational Performance at Surveyed Junction and Road Links

2.7 Existing operational performance of the surveyed junction and road links are calculated based on the peak hour traffic flows, and the analysis method found in Volume 2 of the Transport Planning and Design Manual ("TPDM"). Tables 2.2 and 2.3 summarises the analysis results, and the detailed calculations are found in **Appendix A**.

TABLE 2.2 EXISTING JUNCTION OPERATIONAL PERFORMANCE

Junction		Peak Hour RFC		
		AM	Noon	PM
J01	Lau Fau Shan Roundabout	0.326	0.429	0.348

Note: RFC – Ratio of Flow to Capacity

2.8 Table 2.2 indicates the Lau Fau Shan Roundabout operates with capacities during the analysed peak hours.

TABLE 2.3 EXISTING LINK OPERATIONAL PERFORMANCE

Link		Peak Hour P/Df		
		AM	Noon	PM
L01	Deep Bay Road south of Lau Fau Shan Roundabout	2.04	2.00	1.88
L02	Deep Bay Road / Nim Wan Road, Sheung Pak Nai	0.72	0.62	0.60
L03	Nim Wan Road near the Subject Site in Ha Pak Nai	0.50	0.38	0.29

Note: P/Df - Peak Hourly Flows/ Design Flow Ratios, where design flow in reference with TPDM for single track access road, i.e. 100 veh/hr.

2.9 Table 2.3 indicates Deep Bay Road south of Lau Fau Shan Roundabout (L01) currently operates over-capacity during the analysed peak hours. Whereas, Deep Bay Road / Nim Wan Road in Sheung Pak Nai (L02), and Nim Wan Road near the Subject Site (L03) operate with capacities.

Pedestrian Count at Pedestrian Facilities

2.10 Pedestrian counts were conducted at the track between Nim Wan Road and the Subject Site as indicated in **Figure 2.2**.

2.11 Based on the peak hour pedestrian flows observed, the Level of Service ("LOS") analysis with reference to TPDM Volume 6, Section 10.4 was conducted and Table 2.4 summarize the pedestrian flows and analysis results.

TABLE 2.4 EXISTING PEDESTRIAN FACILITIES OPERATIONAL PERFORMANCE

Pedestrian Facilities		Measured Width (m)	Effective Width (m)	Peak Hour					
				2-way Pedestrian Flow (ped/hour)			Flow Rates [LOS] (ped/m/min)		
				AM	Noon	PM	AM	Noon	PM
FP01	Pedestrian Track between Nim Wan Road and the Subject Site	3.0m	2.0m	5	5	5	0.1 [A]	0.1 [A]	0.1 [A]

Note: Due to small amount of pedestrian, 2-way pedestrian flows are rounded-up to nearest 5.

2.12 Table 2.4 shows that the surveyed pedestrian track operates satisfactorily.

Public Transport Service

2.13 GMB 33 is the only public transport service which operates along Nim Wan Road, and Table 2.5 summarises the details.

TABLE 2.5 PUBLIC TRANSPORT SERVICE OPERATING NEAR THE SUBJECT SITE

Route	Routing	Service Hour	Frequency (minutes)
GMB 33	Yuen Long (Tai Fung Street) ⇔ Ha Pak Nai	Daily 0500 – 2130 hours	20 - 30

Source: HKeMobility, Transport Department

Occupancy of Existing Public Transport Service

2.14 Occupancy survey for GMB 33 was conducted at the Lau Fau Shan Roundabout on Tuesday, 8th April, 2025, and the results are summarised in Table 2.6.

TABLE 2.6 RESULTS OF OCCUPANCY SURVEY FOR GMB 33

Hour	Inbound towards Ha Pak Nai				Outbound towards Yuen Long			
	Number of Trips Observed (trips/hr)	(1) Hourly Capacity (pax/hr)	Number of Passenger Observed (pax/hr)	Surplus Capacity (pax/hr)	Number of Trips Observed (trips/hr)	(1) Hourly Capacity (pax/hr)	Number of Passenger Observed (pax/hr)	Surplus Capacity (pax/hr)
0700 – 0800	2	32	18	**14**	2	32	20	**12**
0800 – 0900	2	32	21	**11**	2	32	17	**15**
0900 – 1000	2	32	17	**15**	2	32	18	**14**
1000 – 1100	2	32	16	**16**	2	32	17	**15**
1100 – 1200	2	32	21	**11**	2	32	18	**14**
1200 – 1300	2	32	9	**23**	2	32	14	**18**
1300 – 1400	2	32	15	**17**	2	32	20	**12**
1400 – 1500	2	32	12	**20**	2	32	17	**15**
1500 – 1600	2	32	14	**18**	2	32	19	**13**
1600 – 1700	2	32	13	**19**	2	32	21	**11**
1700 – 1800	2	32	14	**18**	2	32	19	**13**
1800 – 1900	2	32	15	**17**	2	32	17	**15**

(1) Only 16-seat vehicles were observed operating GMB 33.

2.15 Table 2.6 shows GMB 33 operates with capacity during the surveyed period at present.

3.0 THE PROPOSED COLUMBARIUM

Layout of the Subject Site with the Proposed Columbarium

3.1 Layout of the Subject Site with the Proposed Columbarium remains as in the present and is shown in **Figure 2.1**.

3.2 The Proposed Columbarium will accommodate 967 niches, of which 4 has been occupied as of December 2025.

Internal Transport Facilities

3.3 The Proposed Columbarium has no internal transport facilities, and all staff and visitors are advised and encouraged to arrive and depart using public transport service, and are also reminded that the use of private cars and taxis are discouraged in view that car parking is not available at the Proposed Columbarium.

Pedestrian Access of the Subject Site

3.4 Pedestrian access of the Subject Site, including the Proposed Columbarium, will remain unchanged as in the present condition.

Special Traffic and Pedestrian Arrangements

3.5 Special traffic and pedestrian arrangements are proposed by the Applicant to manage and minimise the potential traffic and pedestrian impact. Details are described in below paragraphs below.

Opening Hours

3.6 During the Ching Ming and Chung Yeung Festival Periods i.e. within 4 weeks before and 4 weeks after the Ching Ming Festival Day, and within 4 weeks before and 4 weeks after the Chung Yeung Festival Day, visitation is by appointment only and is from 0700 to 1700 hours on weekdays, i.e. Monday to Friday, and closed on Saturdays, Sundays, and public holidays, including Ching Ming and Chung Yeung Festival Days.

3.7 Outside the Festival Periods, visitation is also by appointment only and is from 0900 to 1600 hours on Mondays to Fridays; and closed on Saturdays, Sundays, and public holidays.

Visit-by-Appointment Arrangement

3.8 Visit-by-Appointment Arrangement will be implemented by the Applicant requiring all visitors to register at least 2 days prior to visiting at all times; hence, the number of grave sweepers can be regulated.

3.9 Registration will be available via internet, smartphone application, or by phone. Visitors are required to provide the Applicant with the expected number of visitors, the niche to be visited, and the intended visiting time and date. The registration will only be regarded as successful after the Applicant has confirmed the visiting details with the grave sweepers.

Transport Arrangement

3.10 The Applicant will advise and encourage all visitors to access the Proposed Columbarium by GMB 33. Visitors will also be reminded access by private car and taxi are discouraged, and car parking is not available at the Proposed Columbarium.

Notice on Visiting and Transport Arrangements

3.11 Under the condition of sale of niches, the Applicant will clearly state and emphasise the following:

(i) Opening hours and closure period,
(ii) Visit-by-Appointment Arrangement required,
(iii) Encourage the use of GMB Service,
(iv) Discourage access by private car and taxi,
(v) No parking at the Proposed Columbarium, and
(vi) The Applicant reserves the right to adjust the closure period and other operational arrangement without prior notice.

3.12 Niche owners will be reminded prior to each Ching Ming and Chung Yeung Festival Periods of the above condition of sale.

Visiting Capacity

3.13 Visiting capacity will be limited to 4 visitors per session, and the length of each session is 30 minutes, i.e. 8 visitors per hour.

3.14 According to the *"Fire Safety Management Plan" ("FSMP")* prepared for the Proposed Columbarium, the maximum occupancy on each floor is 10 people at any one time. Hence, limiting the visiting capacity at 4 visitors per session is considered necessary to ensure no more than 10 people would occupy the Proposed Columbarium at any one time, say, during the time in-between 2 sessions, with a departing group of 4 visitors, an arriving group of 4 visitors and 2 staff.

3.15 An extract of the FSMP is found in Appendix B for reference.

Waiting Areas

3.16 In view that the number of visitors is limited to only 4 per session, a designated waiting area is not needed.

Availability of Internet Memorial Service

3.17 Internet memorial service will be provided by the Applicant for all niche owners as an alternative to in-person visitation.

Data Collection and Review of the Special Traffic and Pedestrian Arrangement

3.18 The Applicant will maintain records on visit-by-appointment, number of niches occupied, and observed operation condition etc., after obtaining the Town Planning Approval and the Private Columbarium License. This information can be used to review and evaluate the operation efficiency of the special traffic and pedestrian arrangement.

3.19 A revised Traffic and Crowd Management Plan can be submitted to the Transport Department and the Hong Kong Police Force for follow-up reviews, and if necessary, makes amendments. The special traffic and pedestrian arrangements will be detailed in the Traffic and Crowd Management Plan of the Private Columbarium Licence, and implementation of these arrangements will be closely monitored by the PCLB to ensure compliance.

Comparison on Visiting Demand and Visiting Capacity

3.20 Table 3.1 compares the estimated visitor demand and visiting capacity for the Proposed Columbarium during the Festival Periods.

TABLE 3.1 COMPARISON ON VISITOR DEMAND AND VISITING CAPACITY DURING THE FESTIVE PERIODS

Estimated Visitor Demand for each Festive Period	
Number of visitors / occupied niches	= 2.89 visitors/niche (Note 1)
Total number of niches	= 967 niches
Total number of visitors per year (Each niche is visited once per year)	= 967 niches x 2.89 visitors/niche **= 2,795 visitors**
Visiting Capacity for each Festive Period	
Visiting capacity	= 4 persons per session
Number of sessions / hour	= 60 min/hr ÷ 30 min/session = 2 sessions/hr
Opening hours of the Subject Site	= 0700 to 1700 hours = 10 hrs/day
Number of sessions / day	= 10 hrs/day x 2 sessions/hr **= 20 sessions/day**
Daily visiting capacity	= 4 visitors/session x 20 sessions/day **= 80 visitors/day**
Number of Weekdays	Ching Ming Festival Period = 5 days / week x 8 weeks – 5 public holidays (Note 2) **= 35 weekdays** Chung Yeung Festival Period = 5 days / week x 8 weeks – 3 public holidays (Note 3) **= 37 weekdays**
Minimum Visiting Capacity	Ching Ming Festival Period = 35 days x 80 visitors / day **= 2,800 visitors > Visitor Demand of 2,795 hence, OK** Chung Yeung Festival Period = 37 days x 80 visitors / day **= 2,960 visitors > Visitor Demand of 2,795 hence, OK**

Note 1: Based on surveys conducted at the Memorial Park Hong Kong located at 93 Fo Tan Village, Sha Tin, which is an existing columbarium approved under Rezoning Application TPB Y/ST/47, and PCLB Serial 1 with Approval-in-Principle under License Application.

Note 2: Ching Ming Festival Period has 5 public holidays, including (i) Ching Ming Festival Day, (ii) Good Friday, (iii) the Day following Good Friday, (iv) Easter Monday, and (v) Labour Day (1st May).

Note 3: Chung Yeung Festival Period has 3 public holidays, including (i) Chung Yeung Festival Day, (ii) National Day (1st October), and (iii) the Day following Mid-Autumn Festival.

3.21 Table 3.1 shows the visitor demand is estimated to be 2,795 per festive period, which is less than the visiting capacity of 2,800 visitors during Ching Ming Festival Period, and 2,960 visitors during Chung Yeung Festival Period.

3.22 Hence, the proposed visiting capacity of 4 persons for each visiting session to be implemented during the Festive Periods, is considered acceptable, and will be sufficient to accommodate the expected festive visitor demand.

Pedestrian and Traffic Generation of the Proposed Columbarium

3.23 Pedestrian generation associated with the Proposed Columbarium will be controlled with the implementation of the Visit-by-Appointment. Table 3.2 summarises the peak hour pedestrian generation of the Proposed Columbarium.

TABLE 3.2 PEAK HOUR PEDESTRIAN GENERATION OF THE PROPOSED COLUMBARIUM

Item	Peak Hour Pedestrian Generation
Number of visitors controlled by visit-by-appointment arrangement (From Table 3.1)	= 4 visitors / sessions x 2 sessions / hour **= 8 visitors / hour**
TOTAL	**= 8 people / hour**

3.24 As mentioned above, all visitors are advised and encouraged to access the Proposed Columbarium by GMB 33, and are discouraged from using private cars and taxis. Hence, there is NO additional peak hour traffic generation, but only 8 additional passengers per hour on GMB 33.

Placement of Cremated Ashes

3.25 Placing of cremated ashes into niches must also follow above management arrangement. It will be by appointment only, and considered as a regular visiting session.

4.0 TRAFFIC IMPACT

Design Year

4.1 A planning horizon of 5 years is assumed for the Proposed Columbarium to obtain its Private Columbarium Licence from the PCLB, i.e. say by 2030, and the assessment year adopted is 2033, i.e. 3 years after its license approval. The following scenarios are assessed:

(i) Year 2033 without the Proposed Columbarium; and
(ii) Year 2033 with the Proposed Columbarium.

Population Projection

4.2 Reference is made to the "*Projections of Population Distribution 2023 - 2031*" published by the Planning Department for new towns located nearby including Tin Shui Wai New Town and Hung Shui Kiu / Ha Tsuen New Town. Table 4.1 presents the population projections.

TABLE 4.1 PROJECTED POPULATIONS FOR NEARBY NEW TOWNS

Year	Population Projection		
	Tin Shui Wai New Town	Hung Shui Kiu / Ha Tsuen New Town	TOTAL
2025	281,000	47,700	328,700
2031	277,500	52,900	330,400
		Average Annual Growth (2025 to 2031)	+0.1%

4.3 Table 4.1 shows that population for new towns in the vicinity are projected to increase by 0.1% per annum from 2025 to 2031.

Historic Traffic Flow

4.4 The annual average daily traffic ("AADT") of roads located in the vicinity from the Annual Traffic Census ("ATC") published by Transport Department, are presented in Table 4.2.

TABLE 4.2 AADT OF ATC STATIONS IN THE VICINITY

ATC Station No.	5689	5858	6603	Overall
Road	Ping Ha Road	Ping Ha Road & Lau Fau Shan Road	Deep Bay Road	
From	Hung Tin Road	Tin Ha Road	Lau Fau Shan Road	
To	Tin Ha Road	Deep Bay Road	Nam Sha Po	
Year	Annual Average Daily Traffic (vehicles / day)			
2017	16,800	12,370	2,330	31,500
2018	17,210	12,680	2,920	32,810
2019	17,090	12,590	2,320	32,000
2020	-	-	-	-
2021	-	-	-	-
2022	-	-	-	-
2023	20,170	8,590	2,960	31,720
2024	20,220	8,610	3,180	32,010
			Average Annual Growth	+0.2%

Note: Due to COVID-19 pandemic, AADT between 2020 and 2022 are disregarded and not shown above.

4.5 Disregarding the AADT for 2020 to 2022 due to the COVID-19 pandemic, Table 4.2 shows that the overall average annual growth in AADT is +0.2% between 2017 and 2024.

Traffic Forecast

4.6 The design year traffic flows are estimated as follows:

(i) Expected traffic growth from 2025 to 2033;

(ii) Traffic generated by other known planned / committed developments located in the vicinity, and

(iii) Traffic generation of the Proposed Columbarium

(i) Traffic Growth Rate

4.7 In view that the population growth from 2025 to 2031, is +0.1% per annum (Table 4.1 refers), and the historic traffic flow from 2017 to 2024 is +0.2% per annum (Table 4.2 refers), a conservative growth rate of +0.5% per annum is adopted to derive the 2033 traffic flows.

(ii) Other Known Major Planned / Committed Developments

4.8 A review of public domain, including the Town Planning Board's Statutory Planning Portal 3, etc., was undertaken to identify other known major planned / committed developments located within the AOI, and details are presented in **Table 4.3**.

TABLE 4.3 DETAILS OF OTHER KNOWN MAJOR PLANNED / COMMITTED DEVELOPMENT

Ref.	Planned / Committed Development	Parameter
A.	Proposed Temporary Transitional Housing with Ancillary Uses (Approved Planning Application Nos. A/YL-LFS/425 and A/YL-LFS/509)	1,233 flats

(iii) Traffic Generation of the Proposed Columbarium

4.9 As stated in Paragraph 3.24, the Proposed Columbarium is **not** anticipated to generate any additional traffic.

2033 Traffic Flow

4.10 Year 2033 traffic flows for the following cases are derived:

2033 Traffic Flows without the Proposed Columbarium [A] = *2025 Existing Traffic Flows + Traffic Growth from 2025 to 2033 + Traffic Generated by Other Development*

2033 Traffic Flows with the Proposed Columbarium = *[A]*

4.11 **Figure 4.1** shows the year 2033 peak hour traffic flow for the case without the Proposed Columbarium, which is also the same as the case with the Proposed Columbarium in view no additional traffic will be generated.

Planned Upgrading of Deep Bay Road and Nim Wan Road by the Government - Public Works Programme ("PWP") Item No. 878th

Upgrading of Deep Bay Road

4.12 On 10th December 2021, the Government gazetted the widening work to upgrade the section of Deep Bay Road between Lau Fau Shan Roundabout and Nim Wan Road, from the existing single lane access track configuration to become standard single 2-lane carriageway.

Upgrading of Nim Wan Road (North)

4.13 As part of PWP Item No. 878th, the Nim Wan Road (North) section between Deep Bay Road and the West New Territories Landfill is proposed for upgrading which include realigning and widening the existing single lane carriageway with 2-way traffic to become a standard single 2-lane carriageway.

Implementation Programme

4.14 According to the Legislative Council ("LegCo") Paper No. CB(1)177/2022(05), dated 25th April 2022, the Upgrading of Deep Bay Road and the Upgrading of Nim Wan Road (North) are anticipated to be completed in phases by around 2029.

Year 2033 Capacity Analysis

4.15 In view completion year of the Upgrading of Deep Bay Road and Nim Wan Road are both uncertain as of December 2025, the 2033 junction and road link capacity analyses were performed by adopting the following scenarios:

Scenario (1): Without upgrading of Deep Bay Road and Nim Wan Road, i.e. both remain as single track access road as in present condition; and

Scenario (2): With upgrading of Deep Bay Road and Nim Wan Road, i.e. both become single-2 lane carriageway standard.

4.16 Tables 4.4 and 4.5 summarise the analysis results, and detailed calculations are found in **Appendix A**.

TABLE 4.4 YEAR 2033 JUNCTION OPERATIONAL PERFORMANCE

Junction		Scenario	Peak Hour RFC					
			Without Proposed Columbarium			With Proposed Columbarium		
			AM	Noon	PM	AM	Noon	PM
J01	Lau Fau Shan Roundabout	(1)	0.365	0.472	0.386	0.365	0.472	0.386
		(2)	*0.340*	*0.440*	*0.360*	*0.340*	*0.440*	*0.360*

Note: RFC – Ratio of Flow to Capacity
Scenario (1) - Without upgrading of Deep Bay Road, i.e. no modification of Lau Fau Shan Roundabout.
Scenario (2) - With upgrading of Deep Bay Road. , i.e. includes modification of Lau Fau Shan Roundabout.

TABLE 4.5 YEAR 2033 LINK OPERATIONAL PERFORMANCE

Link		Scenario	Peak Hour P/Df					
			Without Proposed Columbarium			With Proposed Columbarium		
			AM	Noon	PM	AM	Noon	PM
L01	Deep Bay Road south of Lau Fau Shan Roundabout)	(1)	2.110	2.080	1.950	2.110	2.080	1.950
		(2)	*0.151*	*0.149*	*0.139*	*0.151*	*0.149*	*0.139*
L02	Deep Bay Road / Nim Wan Road, Sheung Pak Nai	(1)	0.750	0.650	0.620	0.750	0.650	0.620
		(2)	*0.054*	*0.046*	*0.044*	*0.054*	*0.046*	*0.044*
L03	Nim Wan Road near the Subject Site in Ha Pak Nai	(1)	0.520	0.390	0.300	0.520	0.390	0.300
		(2)	*0.037*	*0.028*	*0.021*	*0.037*	*0.028*	*0.021*

Note: P/Df - Peak Hourly Flows/ Design Flow Ratios
Scenario (1) - Without upgrading of Deep Bay Road and Nim Wan Road, Design flow in reference with TPDM for single track access road, i.e. 100 veh/hr.
Scenario (2) - With upgrading of Deep Bay Road and Nim Wan Road,.Design flow in reference with TPDM for single 2-lane 6.75m carriageway, i.e. 1,400 veh/hr for **both** direction of flow.

4.17 Tables 4.4 and 4.5 show that, with the proposed special traffic and pedestrian arrangements implemented, the Proposed Columbarium will not result in traffic impact at the surveyed junctions and road links.

Pedestrian Forecast

4.18 Year 2033 columbarium peak hour pedestrian flows are estimated based on the existing pedestrian flow and the estimated pedestrian growth to 2033 shown in Table 4.1. To be conservative, a growth rate of 0.5% per annum is adopted to derive the 2033 pedestrian flows:

Year 2033 Reference Case without the Proposed Columbarium [A] = *Existing Pedestrian Flows + Estimated Pedestrian Growth to 2033*

Year 2033 Design Case with the Proposed Columbarium = *[A] + Pedestrian Generation associated with Proposed Columbarium*

Year 2033 Pedestrian Facilities Operation Performance

4.19 Year 2033 columbarium peak hour pedestrian facilities operational performance is calculated and summarised in Table 4.6.

TABLE 4.6 YEAR 2033 PEDESTRIAN FACILITIES OPERATIONAL PERFORMANCE

Pedestrian Facilities	Actual Width (m)	Effective Width (m)	Item	Without Proposed Columbarium			With Proposed Columbarium		
				AM	Noon	PM	AM	Noon	PM
FP01	3.0m	2.0m	2-way Ped. Flow (ped/hr)	5	5	5	20	20	20
			Flow Rate (ped/min/m)	0.1	0.1	0.1	0.2	0.2	0.2
			LOS	[A]	[A]	[A]	[A]	[A]	[A]

Note: Due to small amount of pedestrian, 2-way pedestrian flow is rounded-up to nearest 5.

4.20 Table 4.6 shows during columbarium peak hours, the pedestrian track analysed shall operate satisfactorily, i.e. LOS C or better.

Assessment on Public Transport Service

4.21 As mentioned in Paragraph 3.24, up to 4 visitors will access the Proposed Columbarium during each 30-minute session, i.e. a total 8 additional passengers will be generated on GMB 33 for each hour in each direction on weekday.

4.22 Table 2.6 shows GMB 33 operates with spare capacity at present during the opening hours of the Proposed Columbarium. For inbound towards Ha Pak Nai, 11 to 23 seats is available hourly. For outbound towards Yuen Long, 11 to 18 seats is available. Both inbound and outbound services have sufficient capacity to accommodate the additional passenger demand of 8 passengers per hour per direction.

4.23 In addition, Table 2.5 shows GMB 33 is scheduled to operate at a frequency of 20 to 30 minutes, i.e. 2 to 3 trips per hour, where Table 2.6 shows only 2 trips were observed for each hour, i.e. an additional 1 trip per hour could be added under the present service schedule to increase the hourly capacity.

4.24 Also, GMB 33 currently operates with 16-seat vehicles, of which these vehicles have gradually been replaced by 19-seat vehicles in the territory. Hence, in long term, the carrying capacity will also increase by 3 seats per vehicle.

4.25 With an additional 1 trip and replacement with 19-seat vehicles, the hourly capacity of GMB 33 could be increased with an additional 25 seats per hour *[Calculation: 1x 19-seat + 2x 3 additional seats = 25 seats]*, an increase of 78%.

5.0 SUMMARY

5.1 The Subject Site, Koon Yam Tong, is located at 13 Nim Wan Road, Ha Pak Nai, Yuen Long, i.e. Lot No. 118 in D.D. 135, which is an existing NTEH being used as a columbarium, i.e. the Proposed Columbarium. The Applicant proposes to provide 967 niches. As of December 2025, it has 4 occupied niches.

5.2 Internal transport facilities are not provided at present within the Subject Site, and cannot be provided in the future.

5.3 As traffic and pedestrian management measure, the Proposed Columbarium will open by appointment only on weekday, and be closed on Saturdays, Sundays, and public holidays, including the Ching Ming and Chung Yeung Festival Days.

5.4 During the Ching Ming and Chung Yeung Festival Periods, visitation to the Proposed Columbarium is by appointment only and is from 0700 to 1700 hours on weekdays, i.e. Monday to Friday, and closed on Saturdays, Sundays, and public holidays, including Ching Ming and Chung Yeung Festival Days.

5.5 Outside the Festival Periods, visitation to the Proposed Columbarium is also by appointment only and is from 0900 to 1600 hours on Mondays to Fridays, and closed on Saturdays, Sundays, and public holidays

5.6 Visit-by-Appointment arrangement will be implemented year-round with a visiting capacity of 4 persons per each 30-minute session, and all reservations must be made at least 2 days in advance. Hence, the number of visitor will be controlled.

5.7 Visitors are advised and encouraged to use public transport service, i.e. GMB 33, and reminded that access by private car and taxi are discouraged, and car parking is not available at the Proposed Columbarium.

5.8 Internet memorial service will be provided by the Applicant for all niche owners as an alternative to in-person visitation.

5.9 Manual traffic counts were conducted at selected junction and road links on a weekday in April 2025, and the observed traffic flows are used as basis to estimate the 2033 traffic flows for analyses without and with the Proposed Columbarium.

5.10 Pedestrian flows were counted at the track between the Subject Site and Nim Wan Road, and the observed pedestrian flows are used as basis to estimate the 2033 pedestrian flows for analyses without and with the Proposed Columbarium.

5.11 Occupancy survey for public transport service, i.e. GMB 33, was conducted and has identified spare capacities.

5.12 Pedestrian generation of the Proposed Columbarium will be controlled by the Visit-by-Appointment Arrangement, with an hourly generation of 8 visitors per hour. Hence, the additional passenger demand on GMB 33 is 8 passengers per hour, and there will be no additional traffic generation.

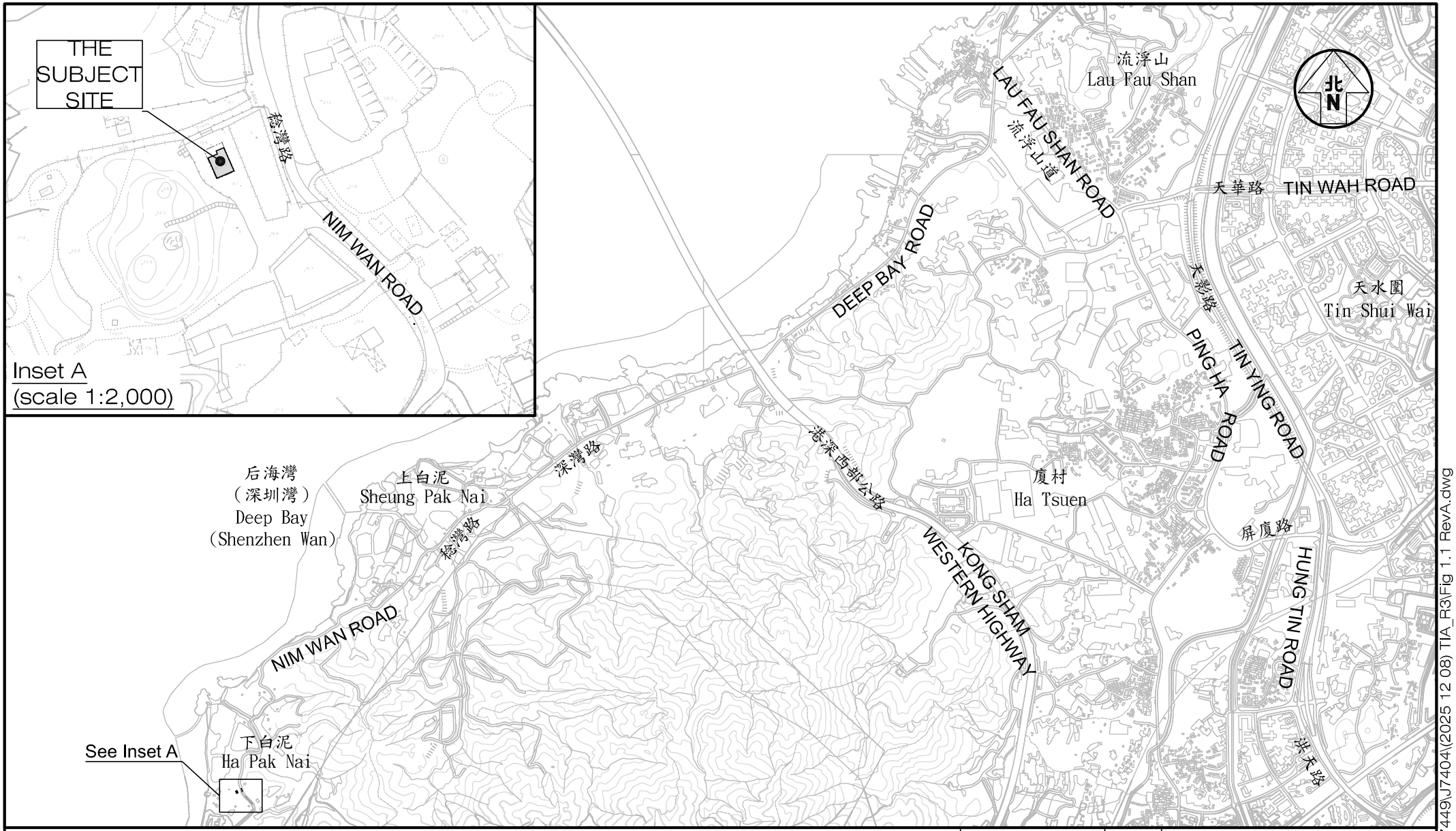
5.13 In view completion year of the Upgrading of Deep Bay Road and Nim Wan Road are both uncertain as of December 2025, the 2033 junction and road link capacity analyses were performed for the scenarios without and with the planned upgrading work.

5.14 The year 2033 traffic and pedestrian analyses concluded that the Proposed Columbarium with the proposed special traffic and pedestrian arrangements implemented, it will not result in traffic and pedestrian impact.

5.15 Existing GMB 33 has sufficient capacity to accommodate the additional passenger demand generated by the Proposed Columbarium. Potentially, additional carrying capacity could be introduced.

5.16 In view of the above, the Proposed Columbarium is acceptable from traffic engineering aspect.

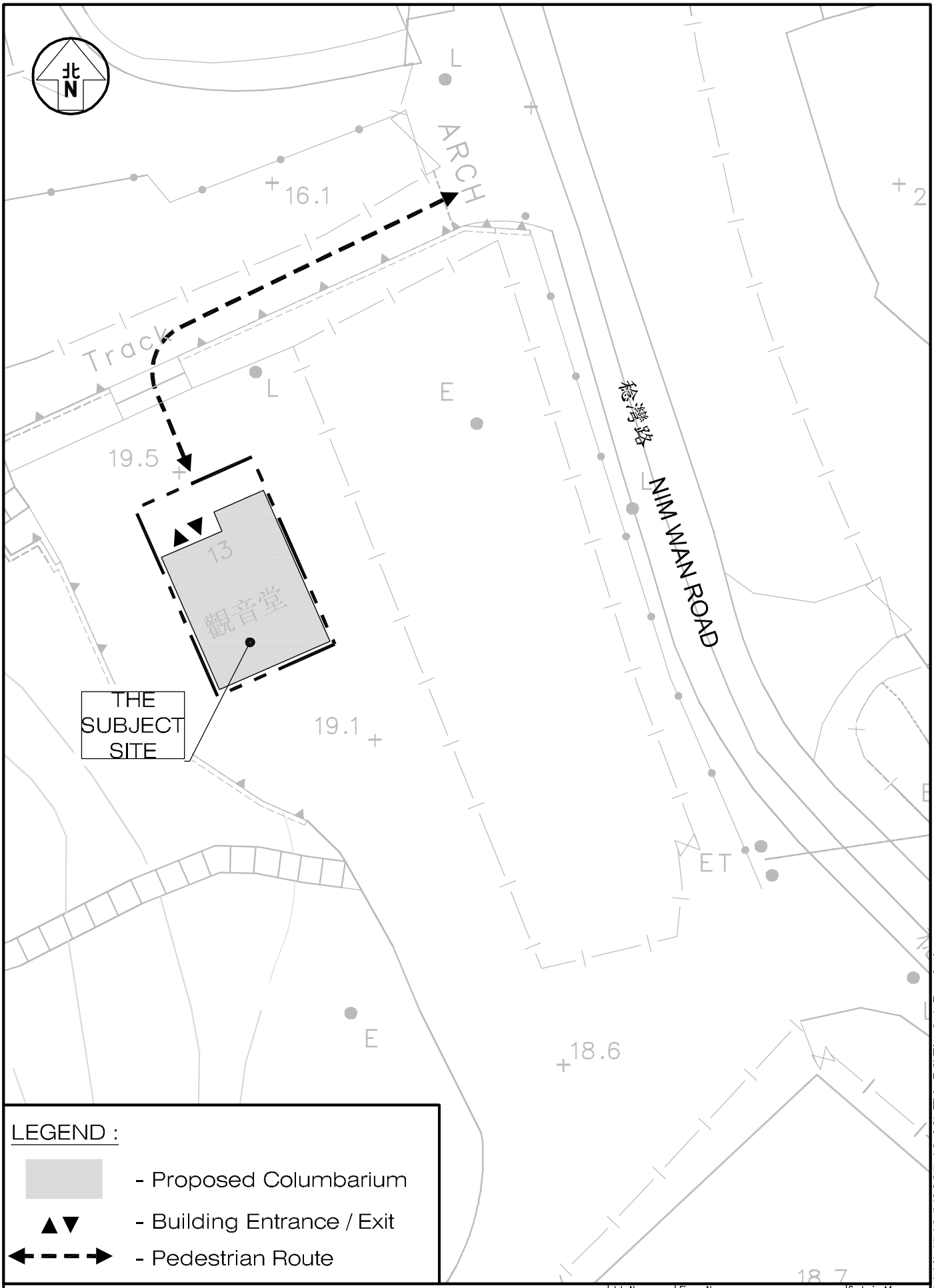
Figures



Project Title	PROPOSED COLUMBARIUM, KOON YAM TONG, 13 NIM WAN ROAD LOT NO. 118 IN D.D. 135, HA PAK NAI, YUEN LONG, NEW TERRITORIES	J7404	Figure No. 1.1 / Revision A
Figure Title	LOCATION OF THE SUBJECT SITE	Designed by W C H / Drawn by S C Y / Checked by K C	Scale in A4 1 : 25,000 / Date 12 DEC 2025

CKM Asia Limited
Traffic and Transportation Planning Consultants
21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong
Tel : (852) 2520 5990 Fax : (852) 2528 6343
Email : mail@ckmasia.com.hk

T:\JOB\J7400-J7449\J7404\(2025 12 08) TIA_R3\Fig 1.1 RevA.dwg



Project Title

PROPOSED COLUMBARIUM, KOON YAM TONG, 13 NIM WAN ROAD
LOT NO. 118 IN D.D. 135, HA PAK NAI, YUEN LONG, NEW TERRITORIES

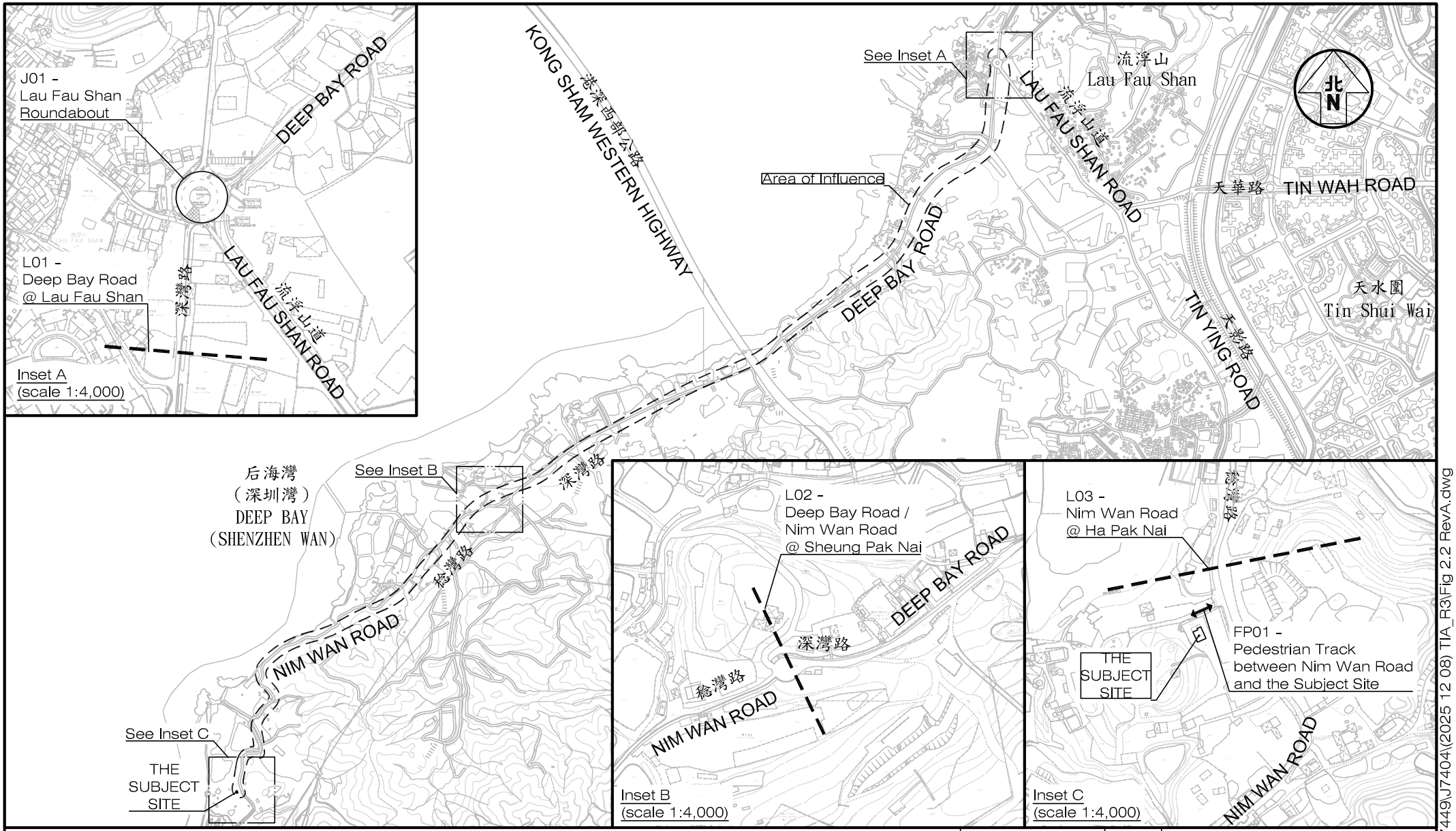
Job No.	Figure No.			Scale in A4
J7404	2.1			1 : 300
Designed by	Drawn by	Checked by	Revision	Date
W C H	S C Y	K C	A	12 DEC 2025

Figure Title

EXISTING LAYOUT OF THE SUBJECT SITE

CKM Asia Limited
Traffic and Transportation Planning Consultants
21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong
Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk

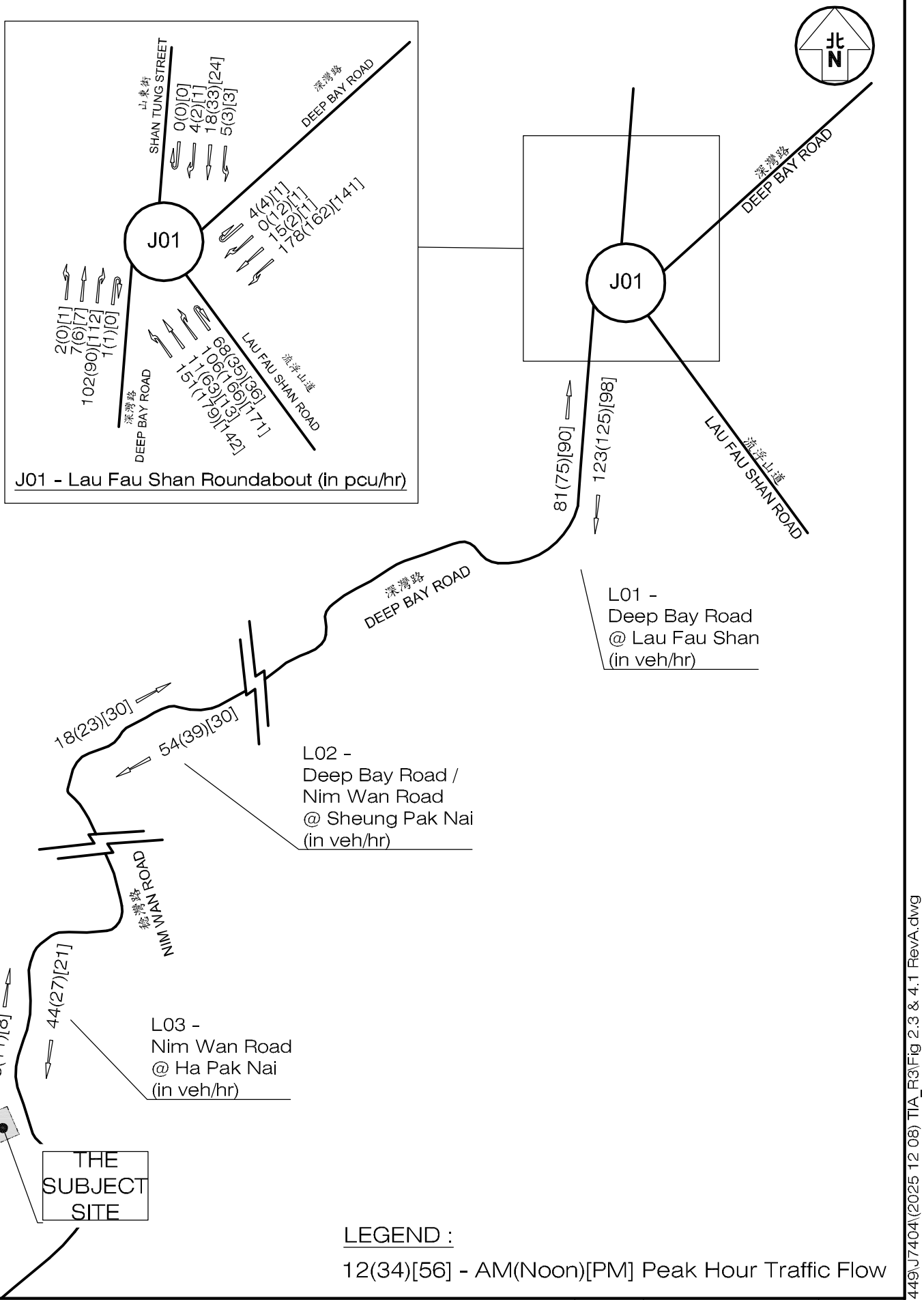
T:\JOB\J7400-J7449\J7404\(2025 12 08) TIA_R3\Fig 2.1 RevA.dwg



Project Title	PROPOSED COLUMBARIUM, KOON YAM TONG, 13 NIM WAN ROAD LOT NO. 118 IN D.D. 135, HA PAK NAI, YUEN LONG, NEW TERRITORIES	J7404	Figure No. 2.2 / Revision A
Figure Title	AREA OF INFLUENCE AND LOCATIONS OF SURVEYED JUNCTION, ROAD LINKS AND PEDESTRIAN TRACK	Designed by W C H / Drawn by S C Y / Checked by K C Scale in A4 1 : 25,000 / Date 12 DEC 2025	

CKM Asia Limited
Traffic and Transportation Planning Consultants
21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong
Tel : (852) 2520 5990 Fax : (852) 2528 6343
Email : mail@ckmasia.com.hk

T:\JOB\J7400-J7449\J7404\(2025 12 08) TIA_R3\Fig 2.2 RevA.dwg



Project Title

PROPOSED COLUMBARIUM, KOON YAM TONG, 13 NIM WAN ROAD
LOT NO. 118 IN D.D. 135, HA PAK NAI, YUEN LONG, NEW TERRITORIES

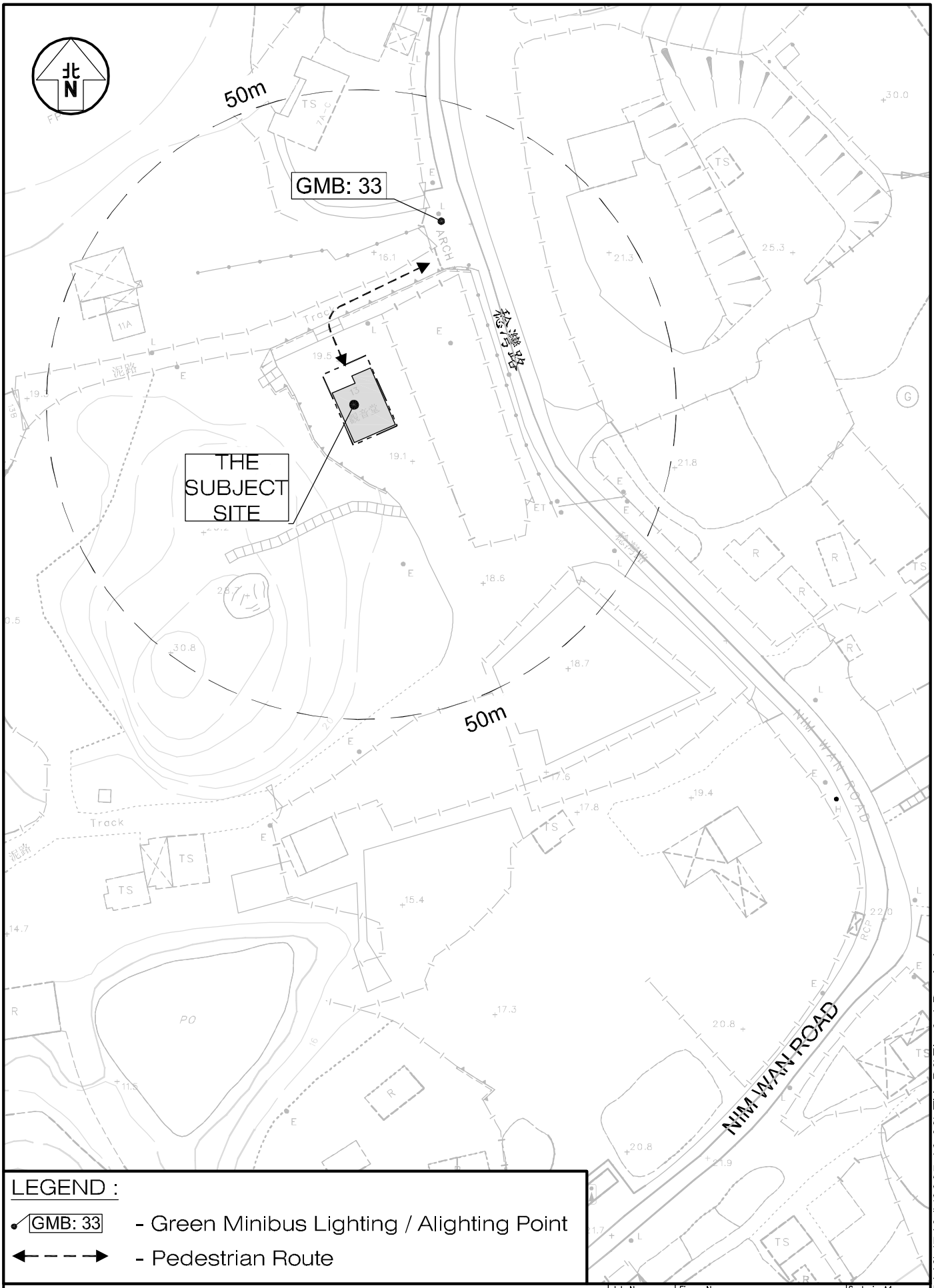
Job No.	Figure No.			Scale in A4
J7404	2.3			N.T.S.
Designed by	Drawn by	Checked by	Revision	Date
W C H	S C Y	K C	A	12 DEC 2025

Figure Title

EXISTING COLUMBARIUM PEAK HOUR TRAFFIC FLOWS

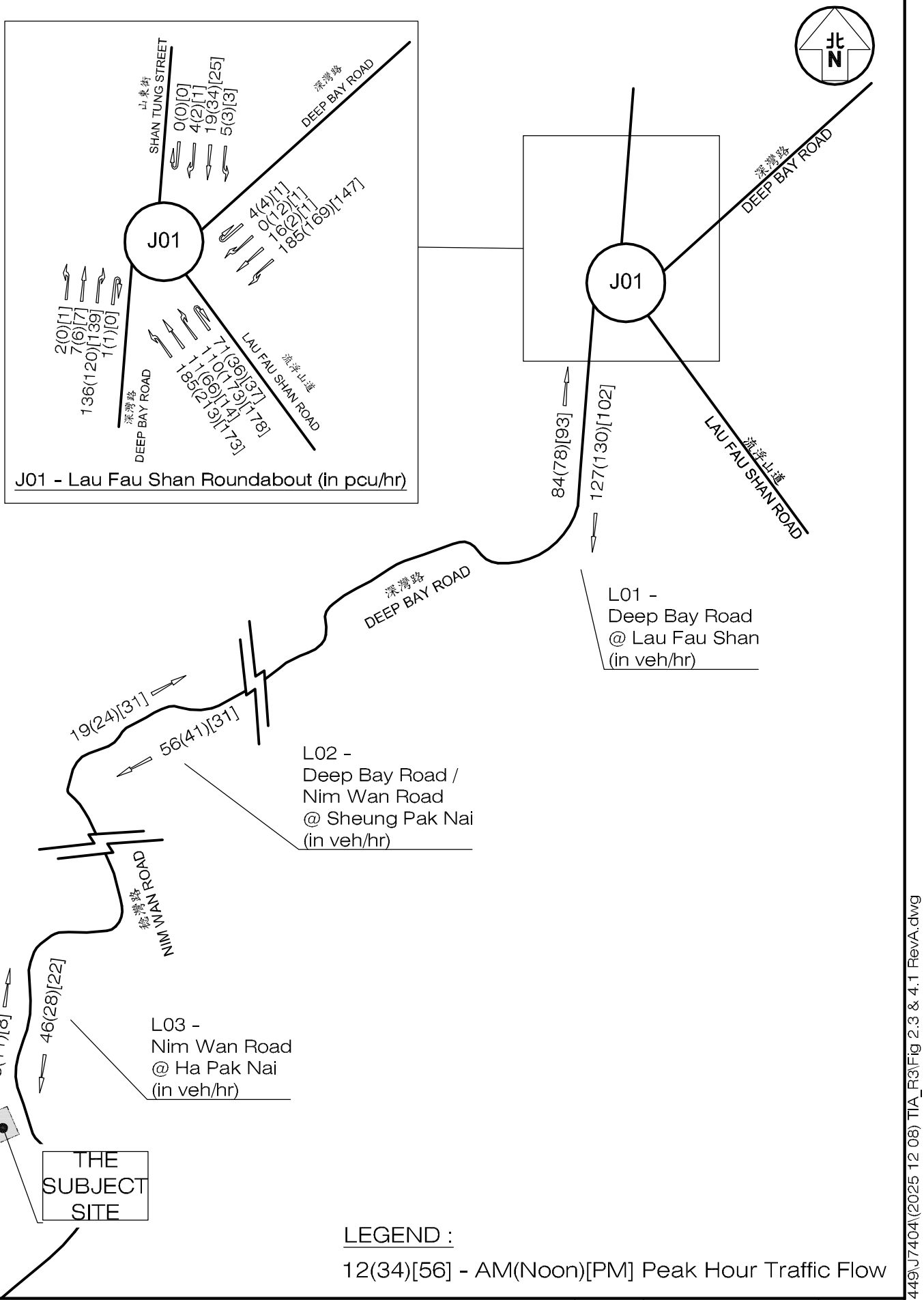
CKM Asia Limited
Traffic and Transportation Planning Consultants
21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong
Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk

T:\JOB\J7400-J7449\J7404\(2025 12 08) TIA_R3\Fig 2.3 & 4.1 RevA.dwg



Project Title: PROPOSED COLUMBARIUM, KOON YAM TONG, 13 NIM WAN ROAD LOT NO. 118 IN D.D. 135, HA PAK NAI, YUEN LONG, NEW TERRITORIES	Job No. J7404	Figure No. 2.4			Scale in A4 1 : 800
	Designed by W C H	Drawn by S C Y	Checked by K C	Revision A	Date 12 DEC 2025
Figure Title: ROAD-BASED PUBLIC TRANSPORT SERVICES OPERATING NEAR THE SUBJECT SITE	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

T:\JOB\J7400-J7449\J7404\(2025 12 08) TIA_R3\Fig 2.4 RevA.dwg



LEGEND :

12(34)[56] - AM(Noon)[PM] Peak Hour Traffic Flow

Project Title: PROPOSED COLUMBARIUM, KOON YAM TONG, 13 NIM WAN ROAD LOT NO. 118 IN D.D. 135, HA PAK NAI, YUEN LONG, NEW TERRITORIES	Job No. J7404	Figure No. 4.1		Scale in A4 N.T.S.
	Designed by W C H	Drawn by S C Y	Checked by K C	Revision A
				Date 12 DEC 2025
Figure Title: 2033 COLUMBARIUM PEAK HOUR TRAFFIC FLOWS – WITHOUT AND WITH THE PROPOSED COLUMBARIUM	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk			

T:\JOBs\J7400-J7449\J7404\(2025 12 08) TIA_R3\Fig 2.3 & 4.1 RevA.dwg

Appendix A – Junction Capacity Analysis

Roundabout Analysis

Junction: Lau Fau Shan Road / Deep Bay Road / Shan Tung Street - Lau Fau Shan Roundabout Job Number: J7404
Scenario: 2025 Exisitng Weekday J01 - P. 1
Design Year: 2025 Designed By: WCH Checked By: WCH Date: 10 October 2025

AM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	68	151	11	106					336	24
From B	102	1	2	7					112	189
From C	18	4	0	5					27	288
From D	178	15	0	4					197	193
From E										
From F										
From G										
From H										
Total	366	171	13	122					672	

Noon Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	35	179	63	166					443	21
From B	90	1	0	6					97	280
From C	33	2	0	3					38	302
From D	162	2	12	4					180	313
From E										
From F										
From G										
From H										
Total	320	184	75	179	0	0	0	0	758	

PM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	36	142	13	171					362	4
From B	112	0	1	7					120	222
From C	24	1	0	3					28	327
From D	141	1	1	1					144	329
From E										
From F										
From G										
From H										
Total	313	144	15	182	0	0	0	0	654	

Legend

Arm	Road (in clockwise order)
A	Lau Fau Shan Road
B	Deep Bay Road (Pak Nai)
C	Shan Tung Street
D	Deep Bay Road (Tsim Pei Tsui)
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	4.5	3.5	10.0	3.0	40	55	0.5
From B	4.5	3.5	20.0	3.0	40	55	0.5
From C	4.0	3.0	15.0	5.0	40	55	0.3
From D	5.0	2.5	40.0	5.0	40	25	0.8
From E							
From F							
From G							
From H							

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-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)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	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
∅	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	Noon	PM	AM	Noon	PM	AM	Noon	PM
From A	3.984	0.135	1.440	0.864	1207	0.543	1032	1034	1041	336	443	362	0.326	0.429	0.348
From B	3.984	0.135	1.440	0.913	1207	0.543	1009	963	992	112	97	120	0.111	0.101	0.121
From C	3.610	0.135	1.440	0.897	1094	0.521	846	840	828	27	38	28	0.032	0.045	0.034
From D	3.462	0.135	1.440	1.042	1049	0.512	990	926	917	197	180	144	0.199	0.194	0.157
From E															
From F															
From G															
From H															

Roundabout Analysis

Junction: Lau Fau Shan Road / Deep Bay Road / Shan Tung Street - Lau Fau Shan Roundabout Job Number: J7404
Scenario: 2033 Without Proposed Columbarium (No Upgrading of Deep Bay Road) J01 - P. 2
Design Year: 2033 Designed By: WCH Checked By: WCH Date: 10 October 2025

AM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	71	185	11	110					377	25
From B	136	1	2	7					146	196
From C	19	4	0	5					28	329
From D	185	16	0	4					205	231
From E										
From F										
From G										
From H										
Total	411	206	13	126					756	

Noon Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	36	213	66	173					488	21
From B	120	1	0	6					127	291
From C	34	2	0	3					39	340
From D	169	2	12	4					187	351
From E										
From F										
From G										
From H										
Total	359	218	78	186	0	0	0	0	841	

PM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	37	173	14	178					402	4
From B	139	0	1	7					147	231
From C	25	1	0	3					29	362
From D	147	1	1	1					150	364
From E										
From F										
From G										
From H										
Total	348	175	16	189	0	0	0	0	728	

Legend

Arm	Road (in clockwise order)
A	Lau Fau Shan Road
B	Deep Bay Road (Pak Nai)
C	Shan Tung Street
D	Deep Bay Road (Tsim Pei Tsui)
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	4.5	3.5	10.0	3.0	40	55	0.5
From B	4.5	3.5	20.0	3.0	40	55	0.5
From C	4.0	3.0	15.0	5.0	40	55	0.3
From D	5.0	2.5	40.0	5.0	40	25	0.8
From E							
From F							
From G							
From H							

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-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)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	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
∅	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	Noon	PM	AM	Noon	PM	AM	Noon	PM
From A	3.984	0.135	1.440	0.864	1207	0.543	1032	1034	1041	377	488	402	0.365	0.472	0.386
From B	3.984	0.135	1.440	0.913	1207	0.543	1005	958	988	146	127	147	0.145	0.133	0.149
From C	3.610	0.135	1.440	0.897	1094	0.521	827	822	812	28	39	29	0.034	0.047	0.036
From D	3.462	0.135	1.440	1.042	1049	0.512	969	906	899	205	187	150	0.211	0.207	0.167
From E															
From F															
From G															
From H															

Roundabout Analysis

Junction: Lau Fau Shan Road / Deep Bay Road / Shan Tung Street - Lau Fau Shan Roundabout Job Number: J7404
Scenario: 2033 With Proposed Columbarium (No Upgrading of Deep Bay Road) J01 - P. 3
Design Year: 2033 Designed By: WCH Checked By: WCH Date: 10 October 2025

AM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	71	185	11	110					377	25
From B	136	1	2	7					146	196
From C	19	4	0	5					28	329
From D	185	16	0	4					205	231
From E										
From F										
From G										
From H										
Total	411	206	13	126					756	

Noon Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	36	213	66	173					488	21
From B	120	1	0	6					127	291
From C	34	2	0	3					39	340
From D	169	2	12	4					187	351
From E										
From F										
From G										
From H										
Total	359	218	78	186	0	0	0	0	841	

PM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	37	173	14	178					402	4
From B	139	0	1	7					147	231
From C	25	1	0	3					29	362
From D	147	1	1	1					150	364
From E										
From F										
From G										
From H										
Total	348	175	16	189	0	0	0	0	728	

Legend

Arm	Road (in clockwise order)
A	Lau Fau Shan Road
B	Deep Bay Road (Pak Nai)
C	Shan Tung Street
D	Deep Bay Road (Tsim Pei Tsui)
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	4.5	3.5	10.0	3.0	40	55	0.5
From B	4.5	3.5	20.0	3.0	40	55	0.5
From C	4.0	3.0	15.0	5.0	40	55	0.3
From D	5.0	2.5	40.0	5.0	40	25	0.8
From E							
From F							
From G							
From H							

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-30)-0.978[(1/r)-0.05]
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t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	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
∅	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	Noon	PM	AM	Noon	PM	AM	Noon	PM
From A	3.984	0.135	1.440	0.864	1207	0.543	1032	1034	1041	377	488	402	0.365	0.472	0.386
From B	3.984	0.135	1.440	0.913	1207	0.543	1005	958	988	146	127	147	0.145	0.133	0.149
From C	3.610	0.135	1.440	0.897	1094	0.521	827	822	812	28	39	29	0.034	0.047	0.036
From D	3.462	0.135	1.440	1.042	1049	0.512	969	906	899	205	187	150	0.211	0.207	0.167
From E															
From F															
From G															
From H															

Roundabout Analysis

Junction: Lau Fau Shan Road / Deep Bay Road / Shan Tung Street - Lau Fau Shan Roundabout Job Number: J7404
Scenario: 2033 Without Proposed Columbarium (With Upgrading of Deep Bay Road) J01 - P. 4
Design Year: 2033 Designed By: WCH Checked By: WCH Date: 10 October 2025

AM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	71	185	11	110					377	25
From B	136	1	2	7					146	196
From C	19	4	0	5					28	329
From D	185	16	0	4					205	231
From E										
From F										
From G										
From H										
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Noon Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	36	213	66	173					488	21
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From C	34	2	0	3					39	340
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From E										
From F										
From G										
From H										
Total	359	218	78	186	0	0	0	0	841	

PM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	37	173	14	178					402	4
From B	139	0	1	7					147	231
From C	25	1	0	3					29	362
From D	147	1	1	1					150	364
From E										
From F										
From G										
From H										
Total	348	175	16	189	0	0	0	0	728	

Legend

Arm	Road (in clockwise order)
A	Lau Fau Shan Road
B	Deep Bay Road (Pak Nai)
C	Shan Tung Street
D	Deep Bay Road (Tsim Pei Tsui)
E	
F	
G	
H	

Geometric Parameters

Arm	e (m)	v (m)	r (m)	L (m)	D (m)	∅ (°)	S
From A	6.0	3.5	12.5	3.0	40	55	1.3
From B	4.5	3.5	20.0	3.0	40	55	0.5
From C	4.0	3.0	15.0	5.0	40	55	0.3
From D	5.0	2.5	40.0	5.0	40	25	0.8
From E							
From F							
From G							
From H							

Predictive Equation $Q_E = K(F - f_c q_c)$

Q_E	Entry Capacity
q_c	Circulating Flow across the Entry
K	= 1-0.00347(∅-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)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	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
∅	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	Noon	PM	AM	Noon	PM	AM	Noon	PM
From A	4.182	0.135	1.440	0.884	1267	0.555	1108	1110	1118	377	488	402	0.340	0.440	0.360
From B	3.984	0.135	1.440	0.913	1207	0.543	1005	958	988	146	127	147	0.145	0.133	0.149
From C	3.610	0.135	1.440	0.897	1094	0.521	827	822	812	28	39	29	0.034	0.047	0.036
From D	3.462	0.135	1.440	1.042	1049	0.512	969	906	899	205	187	150	0.211	0.207	0.167
From E															
From F															
From G															
From H															

Roundabout Analysis

Junction: Lau Fau Shan Road / Deep Bay Road / Shan Tung Street - Lau Fau Shan Roundabout Job Number: J7404
Scenario: 2033 With Proposed Columbarium (With Upgrading of Deep Bay Road) J01 - P. 5
Design Year: 2033 Designed By: WCH Checked By: WCH Date: 10 October 2025

AM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	71	185	11	110					377	25
From B	136	1	2	7					146	196
From C	19	4	0	5					28	329
From D	185	16	0	4					205	231
From E										
From F										
From G										
From H										
Total	411	206	13	126					756	

Noon Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	36	213	66	173					488	21
From B	120	1	0	6					127	291
From C	34	2	0	3					39	340
From D	169	2	12	4					187	351
From E										
From F										
From G										
From H										
Total	359	218	78	186	0	0	0	0	841	

PM Peak Hour

Arm	To A	To B	To C	To D	To E	To F	To G	To H	Total	q_c
From A	37	173	14	178					402	4
From B	139	0	1	7					147	231
From C	25	1	0	3					29	362
From D	147	1	1	1					150	364
From E										
From F										
From G										
From H										
Total	348	175	16	189	0	0	0	0	728	

Legend

Arm	Road (in clockwise order)
A	Lau Fau Shan Road
B	Deep Bay Road (Pak Nai)
C	Shan Tung Street
D	Deep Bay Road (Tsim Pei Tsui)
E	
F	
G	
H	

Geometric Parameters

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From D	5.0	2.5	40.0	5.0	40	25	0.8
From E							
From F							
From G							
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t_D	= 1+0.5/(1+M)
M	= exp[(D-60)/10]
x_2	= v+(e-v)/(1+2S)
S	= 1.6(e-v)/L

Limitation

e	Entry Width	4.0 - 15.0 m
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D	Inscribed Circle Diameter	15 - 100 m
∅	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	Noon	PM	AM	Noon	PM	AM	Noon	PM
From A	4.182	0.135	1.440	0.884	1267	0.555	1108	1110	1118	377	488	402	0.340	0.440	0.360
From B	3.984	0.135	1.440	0.913	1207	0.543	1005	958	988	146	127	147	0.145	0.133	0.149
From C	3.610	0.135	1.440	0.897	1094	0.521	827	822	812	28	39	29	0.034	0.047	0.036
From D	3.462	0.135	1.440	1.042	1049	0.512	969	906	899	205	187	150	0.211	0.207	0.167
From E															
From F															
From G															
From H															

Road Link Analyses

Project Number: J7404 Date: 10 October 2025

2025 Existing

	Peak Hourt Traffic Flow (vph)			Design	Peak Hourly Flow / Design Flow Ratios		
Link	AM	Noon	PM	Flow	AM	Noon	PM
L01	204	200	188	100	2.040	2.000	1.880
L02	72	62	60	100	0.720	0.620	0.600
L03	50	38	29	100	0.500	0.380	0.290

2033 Without Proposed Columbarium - No Upgrading of Deep Bay Road & Nim Wan Road

	Peak Hourt Traffic Flow (vph)			Design	Peak Hourly Flow / Design Flow Ratios		
Link	AM	Noon	PM	Flow	AM	Noon	PM
L01	211	208	195	100	2.110	2.080	1.950
L02	75	65	62	100	0.750	0.650	0.620
L03	52	39	30	100	0.520	0.390	0.300

2033 With Proposed Columbarium - No Upgrading of Deep Bay Road & Nim Wan Road

	Peak Hourt Traffic Flow (vph)			Design	Peak Hourly Flow / Design Flow Ratios		
Link	AM	Noon	PM	Flow	AM	Noon	PM
L01	211	208	195	100	2.110	2.080	1.950
L02	75	65	62	100	0.750	0.650	0.620
L03	52	39	30	100	0.520	0.390	0.300

2033 Without Proposed Columbarium - With Upgrading of Deep Bay Road & Nim Wan Road

	Peak Hourt Traffic Flow (vph)			Design	Peak Hourly Flow / Design Flow Ratios		
Link	AM	Noon	PM	Flow	AM	Noon	PM
L01	211	208	195	1,400	0.151	0.149	0.139
L02	75	65	62	1,400	0.054	0.046	0.044
L03	52	39	30	1,400	0.037	0.028	0.021

2033 With Proposed Columbarium - With Upgrading of Deep Bay Road & Nim Wan Road

	Peak Hourt Traffic Flow (vph)			Design	Peak Hourly Flow / Design Flow Ratios		
Link	AM	Noon	PM	Flow	AM	Noon	PM
L01	211	208	195	1,400	0.151	0.149	0.139
L02	75	65	62	1,400	0.054	0.046	0.044
L03	52	39	30	1,400	0.037	0.028	0.021

Appendix B –
Extract of "Fire Safety Management Plan"

Fire Safety Management Plan for Koon Yam Tong at No. 13 Nim Wan Road, Ha Pak Nai, Lau Fau Shan, Yuen Long

元朗流浮山下白泥稔灣路 13 號觀音堂 消防安全管理計劃

(FSMP)

Issue 1

第一版

28 Mar 2024

2024 年 03 月 28 日

Prepared by Arch & Fire Professional (Int'l) Ltd.

本計劃由 Arch & Fire Professional (Int'l) Limited 編寫

Table of Contents (目錄)

Undertaking Letter 承諾書

To whom it may concern

Undertaking Letter for Fire Safety Management Plan

Dear Sir/Madam,

I, **Tang Fu Sing** , as the operator of **Koon Yam Tong (觀音堂) Columbaria** at **No. 13 Nim Wan Road, Lau Fau Shan, Yuen Long, New Territories (Lot No. 118 in D.D. 135),** fully understand that the approval of the building plans with Fire Safety Assessment Report being submitted to Food and Environmental Hygiene Department Private Columbaria Affairs Office in regards to the application for "Temporary Suspension of Liability" and "Pre-cut-off Columbarium License" for the subject columbaria is subject to the conditions that all compensatory measures as stated in the Fire Safety Management Plan are complied with. We will manage the premises complying with all the measures as stated in Fire Safety Management Plan. The Fire Safety Management Plan will be incorporated into the conditions in every assignment/sub-letting or as part of the tenancy/leasing agreement of the premises, if any.

Thank you for your attention.

Yours faithfully,
For and on behalf of
Koon Yam Tong (觀音堂)

Tang Fu Sing
HKIC No. C245718(9)

Summary 摘要

This Fire Safety Management Plan (FSMP) describes the arrangements and procedures to reduce the risk of fire and protect the safety of occupants and property for the private columbarium building, Koon Yam Tong. The building is served by only one staircase with winders, which cannot comply with relevant statutory requirements.

本消防安全管理計劃(“計劃”)闡述防火安排及程序以減低私營骨灰安置所“觀音堂”的火災風險, 並保障建築內的人員及財物安全。該建築只有一道帶斜踏的樓梯，不符合相關的法定要求。

This FSMP addresses responsibilities of staff who should implement the FSMP and the training of staff to perform their duties. To ensure safe evacuation of occupants, fire action plan is developed. The FSMP also contains measures to prevent fire and the maintenance regime of fire safety provisions.

本計劃內容涉及執行本計劃工作人員的責任以及相關培訓。為確保建築內人員的安全疏散，製定了相應的火警行動方案。本計劃亦載有防火措施及消防安全設施的保養方案。

This FSMP should be endorsed by the owner to ensure that the FSMP will be implemented throughout the lifetime of the development in order to assure the fire safety. An undertaking letter endorsed by the building owner should be incorporated into this FSMP.

業主應簽名確認本計劃將會在建築使用期內予以執行，以確保消防安全。由業主簽署的承諾書須納入本計劃書內。

A set of approved General Building Plan (GBP), Fire Service Installations (FSI) plans and any relevant documents shall be incorporated into this FSMP. Copies of FSMP should be kept at building management office. The management procedures stated in the FSMP should be effectively implemented.

獲批准的建築圖則、消防裝置圖則及任何有關文件均須納入本消防安全管理計劃內。消防安全管理計劃副本應備存於物業管理處。消防安全管理計劃所訂立的管理程序須得到有效執行。

The FSMP should be regularly reviewed to ensure that it reflects the most up-to-date status of the building.

消防安全管理計劃應進行定期檢討，以確保計劃能反映建築最新狀態。

隔至少 1 米的距離。

- No smoking or naked flame is allowed. Burning of joss stick, joss paper, incense and candle is prohibited in the building.

  建築內禁止吸烟或使用明火。禁止在建築內燒香、燒紙、點燃熏香和蠟燭。
- Custody services will be provided at open space outside the building for bulk belongings brought by visitors.

  將在大樓外的空地區域為到訪人員提供大件物品保管服務。
- Rubbish bin will be placed outside the building and regularly being cleared to prevent waste accumulation.

  垃圾桶將放置在建築外，並定期清理，以防止垃圾堆積。

- **Occupant Control 容納人數控制**

The maximum number of persons on each floor will be controlled not to exceed the following design occupant capacity:

每層樓的人數應控制在以下設計可容納人數範圍內：

Floor 樓層	**Design Occupant Capacity*** 設計可容納人數
G/F 地下	10 max. 最多 10 人
1/F 一樓	10 max. 最多 10 人
2/F 二樓	10 max. 最多 10 人

Remarks: *Staff is included in the design occupant capacity.
備註：*工作人員包含在設計可容納人數中。

Min. one staff (included in the maximum 10 persons per floor) will be deployed on each floor for population control. Visitors entering the building will be required to register their names, contacts, the arrival and leaving time on each floor. By this method, staff can control the number of visitors. In addition, these staff will also monitor the situation of the respective floor. In case of fire, these trained staff will take actions to direct occupants to evacuate according to the established fire evacuation strategies and provide timely assistance.

每層樓將至少部署一名工作人員進行人數控制（工作人員的數量包含在每層樓的設計可容納人數 10 人內）。進入大樓的人員需要在每層樓登記姓名、連絡人、到達和離開時間。 通過這種方式，工作人員可以控制到訪人員的數量。 此外，這些工作人員還將監察各自樓層的情況。 一旦發