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Report No.: 0064/18/ED/0361B

QUARTERLY EM&A REPORT

June 2019 – August 2019

Client : Civil Engineering and Development
Department, HKSAR

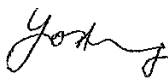
Contract No. : NDO 03/2018

Contract Name : Road Widening and Retrofitting Noise Barriers
on Tai Po Road (Sha Tin Section)

Report No. : 0064/18/ED/0361B

Prepared by : Sang Wu

Reviewed by : Cyrus Lai

Certified by : 

David Hung
Environmental Team Leader
Fugro Technical Services Limited



Our ref: ASCL-2018010

Unit 1501, Level 15,
Tower I, Metroplaza,
223 Hing Fong Road, Kwai Fong,
N.T., Hong Kong.

Attention: Miss FUNG Cannifer

16 December 2019

Dear Miss Fung,

NE/2017/05

**Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)
Quarterly EM&A Report for June to August 2019**

I refer to the email of ET regarding to the captioned Quarterly EM&A Report with report No. 0064/18/ED/0361B, we have no adverse comment on it and verify this quarterly report according to section 1.9 of the Environmental Permit with Permit No. EP 463/2013/B

Yours faithfully,



Li Wai Ming Kevin
Independent Environmental Checker

cc. CRE – Mr. YU Albert (by email only: albert.yu@aecom.com)
ET Leader – Mr. Hung David (by email only: d.hung@fugro.com)



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Date 20 December 2019

Our Ref. MCL/ED/0625/2019/C

The EIA Ordinance Register Office
Environmental Protection Department
27/F, Southorn Centre,
130 Hennessy Road, Wan Chai, Hong Kong
Attn: Ms. LAU Yee Ching, Eva

BY HAND & E-MAIL

Dear Ms. Lau,

Contract No. NE/2017/05

Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)

Environmental Permit: EP-463/2013B

Submission of Quarterly EM&A Report (0064/18/ED/0361B)

Pursuant to Updated EM&A Manual Section 8.7, we hereby submit three hardcopies and two e-copy of the quarterly EM&A Report (0064/18/ED/0361B) for your retention. This quarterly EM&A Report has been certified by ETL and verified by IEC accordingly.

Thank you for your attention, should there be any comments or queries, please contact our Environmental Team Leader David Hung at 3565-4371.

Yours faithfully,
for and on behalf of
FUGRO TECHNICAL SERVICES LIMITED

David Hung
Environmental Team Leader

c.c. CEDD Attn: Mr. Joseph Yan / Ms. Cannifer Fung (by E-mail)
AECOM Attn: Mr. Albert Yu / Mr. Bobby Hung / Mr. Andrew Cheng /
Ms. Kate Chen / Ms. Catherine Tam (by E-mail)
IEC Attn: Mr. Kevin Li / Mr. Tandy Tse (by E-mail)
CCZJV Attn: Mr. Chung Sing Chu / Ms. Kimberly Wong / Mr. Alvin Chan (by E-mail)

Encl.

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Report No.: 0064/18/ED/0361B

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EXECUTIVE SUMMARY

- i. The Civil Engineering and Development Department HKSAR has appointed Fugro Technical Services Limited (FTS) to undertake the Environmental Team services for the Project and implement the EM&A works.
- ii. This is the 3rd Quarterly EM&A Report presents the environmental monitoring and audit works for the period between 1 June 2019 and 31 August 2019. As informed by the Contractor, major activities in the reporting period included:

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Jun 2019	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access • Underground utilities diversion • ELS and piling construction • Ground investigation works 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access
Jul 2019	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning / preservation • Construction of temporary road and site access • Ground Investigation Works 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning / preservation • Constructing temporary road and site access • Underground utilities diversion • Construction of ELS and piling platform • Retaining Wall Construction 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning / preservation • Construction of temporary road and site access
Aug 2019	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground

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	<p>utilities detections</p> <ul style="list-style-type: none"> • Tree felling / pruning / preservation • Construction of temporary road and site access 	<p>utilities detections</p> <ul style="list-style-type: none"> • Tree felling / pruning • Construction of temporary road and site access • Underground utilities diversion 	<p>utilities detections</p> <ul style="list-style-type: none"> • Tree felling / pruning / preservation • Construction of temporary road and site access • Underground utilities diversion • Construction of ELS and piling platform • Retaining Wall Construction • Central divider modification 	<p>utilities detections</p> <ul style="list-style-type: none"> • Tree felling / pruning • Construction of temporary road and site access 	<p>utilities detections</p> <ul style="list-style-type: none"> • Tree felling / pruning • Construction of temporary road and site access • Underground utilities diversion
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Breaches of the Action and Limit Levels

- iii. No Action / Limit Level exceedance was recorded for 24-hr and 1-hr TSP at the site area in the reporting quarter.
- iv. Day time construction noise monitoring was carried out in the reporting quarter, no Action / Limit Level exceedance was recorded during the period. For night time construction noise monitoring, fourteen exceedance cases were recorded between 2300 and 0700 of the next day during the reporting quarter. After ET's further investigation, as the dominant noise should be the background traffic noise, the noise exceedance cases were considered not project-related.

Complaint, Notification of Summons and Successful Prosecution

- v. Two complaint cases regarding noise nuisance were received on 26/7/2019 and 30/8/2019 respectively. After ET's investigation, the complaint case on 26/7/2019 should be related to traffic noise but not the project-related construction activities. The complaint case on 30/8/2019 was considered project-related. It was regarding noise nuisance from breaking works at road side around midnight and the major night works of the main contractor on 28th – 30th August 2019 between 11:00pm and 00:30am the next day was road breaking work at zone 2 (south bound) adjacent to Wai Wah Centre. The main contractor had complied with the conditions as stipulated in the CNP No.: GW-RN0443-19; an acoustic enclosure with four sides and a top was used when operating the hand-held breaker such that no part of the powered mechanical equipment was visible by nearby noise sensitive receiver. And the main contractor was recommended to regular review the effectiveness of the enclosure or noise mitigation measure to enhance noise reduction on similar night works in restricted hours. Also, the main contractor was reminded to add their proposed night-time construction activities into their advance notice to the affected residents especially noisy works that concerned the stakeholder/resident.
- vi. No notification of summons and successful prosecution were received in the reporting period.



1. INTRODUCTION

1.1 Background

1.1.1 Contract No. NE/2017/05 – Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section) (TPR-ST) (hereafter referred as “the Contract”), is the Works Contract involved the construction of road widening and retrofitting noise barriers on TPR-ST.

1.1.2 The Works of road widening on TPR-ST is classified as a designated project (DP) under the Part I of Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499). The scale and scope of DP is classified as below:

- Widening and reconstruction of an approximate 1.2 km long of the existing Tai Po Road (Sha Tin Section) from dual 2-lane to dual 3-lane carriageway; and improvement of the existing Sha Tin Rural Committee Road and its junctions.

1.1.3 The Environmental Monitoring and Audit (EM&A) programme under this Contract is governed by the Environmental Permit (EP) (EP No: EP-463/2013/B) and the updated EM&A Manual (Reference No.: 0064/18/ED/0122D). The Works to be executed under this Contract and corresponding EPs include but not be limited to the following main items:

- (i) Road widening works of TPR-ST:
 - (a) widening of TPR-ST of about 1.1 kilometres between Sha Tin Rural Committee Road (STRCR) and Fo Tan Road from dual two-lane to dual three-lane;
 - (b) modification to the existing diamond interchange at TPR-ST / STRCR (STRCR Interchange);
 - (c) provision of two pedestrian lifts, re-provision of staircase and cycle track ramp at the modified STRCR Interchange;
 - (d) modification of existing cycle track subway no. NS30 near Sha Tin Plaza;
 - (e) modification of the existing footbridge no. NF40 across TPR-ST near Wo Che Street;
 - (f) modification of the existing footbridge no. NF66 near Fung Wo Lane;
 - (g) installation of noise mitigation measures between Citylink Plaza and Mei Wo House of Wo Che Estate;
 - (h) associated drainage works, waterworks, street lighting works and traffic control and surveillance system (TCSS).
- (ii) Retrofitting of noise barriers along TPR-ST:
 - (a) western section between Citylink Plaza and Scenery Court;
 - (b) eastern section between Mei Wo House of Wo Che Estate and Fo Tan Road; and
 - (c) associated drainage works, waterworks and street lighting works.



- (iii) Associated street furniture, road marking, traffic signs, directional signs, services and utilities, and
- (iv) Associated landscaping works.

1.1.4 The location and boundary of the site is shown in **Figure 1**.

1.1.5 This quarterly EM&A report is required under EP-463/2013/B Condition 3.4. It is to report the results and findings of the EM&A programme required in the updated EM&A Manual.

1.1.6 This is the 3rd quarterly EM&A Report which summarized the impact monitoring results and audit findings for the construction of the road widening and retrofitting noise barriers on Tai Po Road (Sha Tin Section) (TPR-ST) (hereafter referred as “the Project”) within the period between 1 June 2019 and 31 August 2019.

1.2 Project Organization

1.2.1 The project proponent was the Civil Engineering and Development Department, HKSAR (CEDD). AECOM Asia Co. Ltd. (AECOM) was commissioned by CEDD as the Engineer for the Project. Acuity Sustainability Consulting Limited – Nature & Technologies (HK) Limited Joint Venture was commissioned as the Independent Environmental Checker (IEC). China railway – China Railway First Group – Zhen Hua Engineering Joint Venture (CCZJV) was appointed as the main contractor for the construction works under the contract NE/2017/05. Fugro Technical Services Limited (FTS) was appointed as the Environmental Team (ET) by CEDD to implement the EM&A programme for the Project.

1.2.2 The organization structure is shown in **Appendix B**. The key personnel contact names and numbers for the Project are summarized in **Table 1.1**.

Table 1.1 Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Proponent (CEDD)	Senior Engineer	Mr. Andrew Cheung	3152 3500
Engineer’s Representative (AECOM)	Chief Resident Engineer	Mr. Albert Yu	2276 0618
IEC (Acuity Sustainability Consulting Limited – Nature & Technologies (HK) Limited Joint Venture)	Independent Environmental Checker	Mr. Kevin Li	9779 2247
Main Contractor (CCZJV)	Site Agent	Mr. Alvin Chan	9800 9494
	Environmental Officer	Ms. Kimberly Wong	5542 1669
ET (FTS)	Environmental Team Leader	Mr. David Hung	3565 4371



1.3 Construction Programme and Activities

1.3.1 The construction of the Project commenced on 29 November 2018 and is expected to complete in 2023. The construction programme is shown in **Appendix A**. A summary of the major construction activities undertaken in the reporting period were:

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Jun 2019	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access • Underground utilities diversion • ELS and piling construction • Ground investigation works 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling • Construction of temporary road and site access
Jul 2019	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning / preservation • Construction of temporary road and site access • Ground Investigation Works 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning / preservation • Constructing temporary road and site access • Underground utilities diversion • Construction of ELS and piling platform • Retaining Wall Construction 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning • Construction of temporary road and site access 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground utilities detections • Tree felling / pruning / preservation • Construction of temporary road and site access
Aug 2019	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground 	<ul style="list-style-type: none"> • Trial Pits Excavation • Undergroun 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground 	<ul style="list-style-type: none"> • Trial Pits Excavation • Underground



	utilities detections <ul style="list-style-type: none"> • Tree felling / pruning / preservation • Construction of temporary road and site access 	utilities detections <ul style="list-style-type: none"> • Tree felling / pruning • Construction of temporary road and site access • Underground utilities diversion 	d utilities detections <ul style="list-style-type: none"> • Tree felling / pruning / preservation • Construction of temporary road and site access • Underground utilities diversion • Construction of ELS and piling platform • Retaining Wall Construction • Central divider modification 	utilities detections <ul style="list-style-type: none"> • Tree felling / pruning • Construction of temporary road and site access 	utilities detections <ul style="list-style-type: none"> • Tree felling / pruning • Construction of temporary road and site access • Underground utilities diversion
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1.4 Status of Environmental Licences, Notifications and Permits

1.4.1 A summary of the relevant environmental licenses, permits and/or notifications on environmental protection for this Contract is presented in **Table 1.2**.

Table 1.2 Relevant Environmental Licenses, Permits and/or Notifications

Environmental License / Permit / Notification	Reference Number	Valid From	Valid Till
Environmental Permit for whole project	EP-463/2013/B	20/12/2016	Nil
Receipt of the notification of construction dust production	Form NA	27/7/2018	Nil
Construction Waste Disposal Account	7031619	17/8/2018	Nil
Chemical Waste Producer Registration	5318-758-C4314-01	6/11/2018	Nil
Effluent Discharge License (Zone 1 – Zone 5)	WT00032446-2018	9/11/2018	30/11/2023
Construction Noise Permit for Road Closure works at restricted hours	GW-RN0246-19	1/5/2019	30/6/2019
	GW-RN0443-19	1/7/2019	30/9/2019
	GW-RN0612-19	30/8/2019	31/10/2019



2. SUMMARY OF EM&A REQUIREMENTS AND MONITORING RESULTS

2.1 Monitoring Requirement

2.1.1 In accordance with the updated EM&A Manuals, 24-hour & 1-hour Total Suspended Particulates (TSP) level and Leq (30min) at the designated monitoring stations is required. Impact 24-hour and 1-hour TSP monitoring should be carried out at least once every 6 days. Leq (30min) monitoring is conducted for at least once a week during the construction phase between 0700 and 1900 on normal weekdays. The Action and Limit Levels of the air quality monitoring and noise monitoring are given in **Appendix C**.

2.2 Monitoring Locations

2.2.1 The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works. According to the Hong Kong Observatory, wind directions were south west in June 2019; south west and east in July 2019 and south west, north east and east in August 2019. The most updated locations are summarized in **Table 2.1** and shown in **Figure 2a**.

Table 2.1 Location of Air Quality Monitoring

Reporting Period	Monitoring Station	Location	Land uses
June 2019	AMS 4A	Wai Wah Centre	Residential
	AMS 7A	Sheung Wo Che	Residential
	AMS 8	Lek Yuen Estate	Residential
	AMS 13	Fung Wo Estate	Residential
July 2019	AMS 4A	Wai Wah Centre	Residential
	AMS 7A	Sheung Wo Che	Residential
	AMS 8	Lek Yuen Estate	Residential
	AMS 15	Ha Wo Che	Residential
August 2019	AMS 4A	Wai Wah Centre	Residential
	AMS 6	Shatin Plaza	Residential
	AMS 7A	Sheung Wo Che	Residential
	AMS 15	Ha Wo Che	Residential

2.2.2 According to the updated EM&A Manual, 25 noise monitoring locations were included during the noise monitoring. The most updated locations are summarized in **Table 2.2** and shown in **Figure 2b**.



Table 2.2 Location of Noise Monitoring Station

Monitoring Station	Location	Land Uses	Type of Measurement
NMS1	Scenery Court	Residential	Façade
NMS2	Villa Le Parc	Residential	Façade
NMS3	Hilton Plaza	Residential	Façade
NMS4	Tin Liu	Residential Village	Façade
NMS5A	Wai Wah Centre	Residential	Façade
NMS6A	Wai Wah Centre	Residential	Façade
NMS7	Tin Liu	Residential Village	Façade
NMS8	Shatin Plaza	Residential	Façade
NMS9	Lek Yuen Estate	Residential	Façade
NMS10A	Shatin Tsung Tsin School	School	Façade
NMS11	Sheung Wo Che	Residential Village	Façade
NMS12	SKH Holy Spirit Primary School	School	Façade
NMS13	Lek Yuen Estate	Residential	Façade
NMS14	Sheung Wo Che	Residential Village	Façade
NMS15	Ha Wo Che	Residential Village	Façade
NMS16	Ha Wo Che	Residential Village	Façade
NMS17	Shatin Pui Ying College	School	Façade
NMS18	Ha Wo Che	Residential Village	Façade
NMS19	Wo Che Estate	Residential	Façade
NMS20	Wo Che Estate	Residential	Façade
NMS23	Pai Tau	Residential Village	Façade
NMS24	Shatin Plaza	Residential	Façade
NMS25A	Sheung Wo Che	Residential Village	Façade
NMS26	Wo Che Estate	Residential	Façade
NMS27	Jockey Club Ti-I College	School	Façade

2.3 Results and Observations

2.3.1 No Action and Limit Level exceedance for 24-hr & 1-hr TSP was recorded in the reporting period at all monitoring stations. The monitoring data of 24-hr and 1-hr TSP are summarized in **Table 2.3 and 2.4**. Graphical presentation of the monitoring data in the reporting period is presented in **Appendix D**.



Table 2.3 Summary of 24-hr TSP Monitoring Results

Monitoring Station	24-hr TSP ($\mu\text{g}/\text{m}^3$) in Reporting Period				Average ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
	May 2019	June 2019	July 2019	August 2019			
AMS 4A	-	37 - 85	56 - 77	51 - 104	70	200	260
AMS 6	11 - 37	-	-	50 - 83	45	165	
AMS 7A	26 - 83	23 - 117	44 - 68	62 - 90	63	171	
AMS 8	-	24 - 108	43 - 81	-	66	161	
AMS 12	30 - 85	-	-	-	56	168	
AMS 13	-	36 - 89	-	-	60	174	
AMS 15	8 - 40	-	52 - 74	53 - 77	52	172	

Table 2.4 Summary of 1-hr TSP Monitoring Results

Monitoring Station	1-hr TSP ($\mu\text{g}/\text{m}^3$) in Reporting Period				Average ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
	May 2019	June 2019	July 2019	August 2019			
AMS 4A	-	33 - 109	57 - 96	51 - 102	78	348	500
AMS 6	46 - 82	-	-	49 - 104	76	347	
AMS 7A	24 - 114	21 - 141	41 - 93	63 - 101	71	344	
AMS 8	-	23 - 149	44 - 100	-	74	366	
AMS 12	32 - 92	-	-	-	57	296	
AMS 13	-	35 - 106	-	-	65	303	
AMS 15	39 - 86	-	57 - 88	54 - 92	73	350	

2.3.2 No Action / Limit Level exceedance for day time construction noise monitoring was recorded in the reporting period at all monitoring stations. The results are summarized in **Table 2.5**. Graphical presentation of the monitoring data in the reporting period is presented in **Appendix D**.

Table 2.5 Summary of Day Time Noise Impact Monitoring Results

Monitoring Station	Leq (30min) Range ,dB(A) in Reporting Period				Leq (30min) Limit Level, dB(A)
	May 2019	June 2019	July 2019	August 2019	
NMS1	66.4 – 70.6	60.9 – 69.5	63.1 – 67.2	61.8 – 66.7	75
NMS2	59.0 – 61.6	54.6 – 72.0	58.6 – 61.5	56.4 – 61.8	75
NMS3	71.2 – 72.3	60.3 – 71.6	68.6 – 70.1	58.3 – 69.1	75
NMS4	72.1 – 73.1	64.1 – 71.6	67.2 – 71.6	63.1 – 70.9	75
NMS5A	70.9 – 74.1	68.9 – 73.8	71.8 – 73.6	66.7 – 72.2	75
NMS6A	73.2 – 74.2	69.4 – 72.1	72.1 – 73.8	67.2 – 72.7	75
NMS7	73.0 – 74.7	63.3 – 74.1	72.6 – 74.7	64.6 – 74.1	75
NMS8	66.2 – 72.1	65.9 – 71.1	66.4 – 72.0	63.8 – 68.6	75
NMS9	65.0 – 70.6	64.4 – 70.7	65.1 – 69.6	66.1 – 67.6	75
NMS10A	63.1 – 65.8	62.7 – 65.9	62.1 – 66.3	62.4 – 65.6	70*
NMS11	60.8 – 66.5	60.4 – 70.1	61.1 – 67.6	60.0 – 68.8	75
NMS12	59.5 – 64.6	58.5 – 63.9	64.2 – 64.8	62.0 – 66.1	70*
NMS13	55.4 – 71.0	55.8 – 68.6	61.9 – 69.1	60.5 – 68.0	75

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NMS14	60.7 – 68.2	66.6 – 68.3	62.7 – 67.1	57.4 – 66.1	75
NMS15	64.9 – 69.2	63.8 – 71.5	66.1 – 68.1	63.2 – 68.2	75
NMS16	66.8 – 68.7	62.4 – 70.0	65.8 – 67.5	62.8 – 66.8	75
NMS17	60.3 – 64.6	62.2 – 66.5	62.5 – 66.7	60.2 – 68.1	70*
NMS18	65.8 – 67.6	60.7 – 72.5	64.9 – 66.1	60.5 – 66.0	75
NMS19	66.3 – 68.6	66.2 – 70.6	61.8 – 68.4	66.8 – 69.5	75
NMS20	60.6 – 70.7	63.4 – 68.1	63.1 – 68.2	59.4 – 67.1	75
NMS23	67.5 – 71.0	61.7 – 69.5	66.1 – 70.7	61.3 – 70.1	75
NMS24	63.7 – 72.1	64.2 – 72.1	62.5 – 72.1	61.4 – 69.1	75
NMS25A	69.2 – 71.2	66.7 – 72.6	67.7 – 72.6	66.1 – 72.1	75
NMS26	68.2 – 74.5	72.9 – 74.1	66.2 – 74.5	68.8 – 73.7	75
NMS27	62.1 – 64.7	62.6 – 66.0	64.1 – 64.7	61.9 – 64.3	70*

Note: 1. Leq_(30min) was measured at day-time (0700-1900) on normal weekdays.
2. 70 dB(A) for schools and 65 dB(A) for schools during examination period. Exam schedules of NMS 10A, NMS12, NMS 17 and NMS 27 are provided in the monthly report for reference.

2.3.3 According to the Monthly EM&A reports, fourteen exceedance cases were recorded between 2300 and 0700 of the next day during the reporting quarter. After ET's further investigation, as the dominant noise should be the background traffic noise, the noise exceedance cases were considered not project-related. The results are summarized in **Table 2.6** and **2.7**.

Table 2.6 Summary of Night Time Noise Impact Monitoring Results (1900 – 2300)

Monitoring Station	Leq Range ,dB(A) in Reporting Period ¹			Baseline Level, dB(A)	Leq Limit Level, dB(A)
	May 2019	June 2019	July 2019		
NMS 1	-	-	60.7 – 63.4	64.4	55
NMS 4	-	-	63.2 – 66.0	66.4	55
NMS 7	-	-	60.5 – 64.6	63.2	55
NMS 8	-	-	61.1 – 64.7	67.5	55
NMS 9	-	-	60.6 – 66.9	63.3	55
NMS 13	65.3 – 68.6	-	-	59.8	55
NMS 14	-	-	58.7 – 61.7	57.8	55
NMS 15	59.4 – 64.2	-	-	62.0	55
NMS 16	-	50.5 – 55.0	-	63.3	55
NMS 18	60.7 – 64.4	56.3 – 65.6	62.1 – 65.9	64.2	55
NMS 19	-	-	65.7 – 70.0	65.3	55
NMS 20	-	-	56.5 – 66.5	59.2	55
NMS 25A	-	-	61.5 – 67.1	62.6	55
NMS 26	59.1 – 63.6	60.1 – 65.9	66.1 – 70.6	64.7	55

Note: 1. Leq_(5min) was measured at night-time (1900-2300) in May, June and July 2019.

Table 2.7 Summary of Night Time Noise Impact Monitoring Results (2300 – 0700)

Monitoring Station	Leq Range ,dB(A) in Reporting Period ³				Baseline Level, dB(A)	Leq Limit Level, dB(A)
	May ¹ 2019	June ¹ 2019	July ¹ 2019	August ² 2019		
NMS 1	-	-	52.6 – 66.6	57.9 - 60.2	61.4	55
NMS 2	-	-	-	48.4 - 54.7	49.7	55
NMS 3	-	-	-	62.2 - 65.7	70.9	55

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NMS 4	-	-	61.9 – 63.5	51.2 - 58.3	62.6	55
NMS 5A	-	-	-	61.8 - 67.6	67.9	55
NMS 6A	-	-	-	64.4 - 69.0	71.5	55
NMS 7	-	-	54.2 – 65.7	52.3 - 58.9	59.0	55
NMS 8	-	-	57.7 – 61.2	57.3 - 61.8	64.4	55
NMS 9	-	-	55.2 – 66.1	55.3 - 57.6	53.5	55
NMS 11	-	-	-	49.1 - 56.1	53.2	55
NMS 13	60.5 – 66.0	-	-	53.6 - 58.8	57.3	55
NMS 14	-	-	51.9 – 59.9	54.9 - 59.4	54.1	55
NMS 15	53.1 – 61.4	-	-	56.2 - 59.7	58.8	55
NMS 16	-	45.2 – 46.9	-	56.2 - 58.3	60.1	55
NMS 18	59.1 – 62.4	51.2 – 54.9	59.1 – 75.6	56.6 - 60.4	63.2	55
NMS 19	-	-	58.9 – 70.1	58.8 - 61.5	61.7	55
NMS 20	-	-	51.9 – 66.3	52.0 - 58.4	57.7	55
NMS 23	-	-	-	50.0 - 70.3	59.9	55
NMS 24	-	-	-	55.2 - 59.4	58.0	55
NMS 25A	-	-	59.5 – 61.8	51.3 - 63.6	59.7	55
NMS 26	54.5 – 61.4	57.1 – 61.7	60.5 – 76.9	58.0 - 67.4	61.2	55

Note: 1. Leq_(5min) was measured at night-time (2300-0700) in May, June and July 2019.

2. Leq_(15min) was measured at night-time (2300-0700) in August 2019.

3. When the Average Measured Noise Level is greater than Limit Level, Average Construction Noise Level (CNL) will be applied.

Calculated CNL = Measured Noise Level during operation – Baseline

- 2.3.4 No raining and wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation.
- 2.3.5 During the reporting period, major dust sources including trial pits excavation was observed in the site. Other factors such as road traffic along Tai Po Road may affect the monitoring results. Major noise sources including road traffic along Tai Po Road was observed which may affect the monitoring results.

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3. LANDSCAPE AND VISUAL

3.1 Results and Observations

- 3.1.1 Site audits were carried out to monitor and audit the implementation of landscape and visual mitigation measures.
- 3.1.2 No non-compliance was recorded in the weekly Site audits in the reporting period.
- 3.1.3 Observations and recommendations during site audits are summarized in **Table 5.1**.



4. WASTE MANAGEMENT

4.1 Results and Observations

- 4.1.1 C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.
- 4.1.2 The amount of wastes generated by the site activities in the reporting period is shown in **Appendix E**.
- 4.1.3 The Contractor is advised to properly maintain on site C&D materials and wastes collection, sorting and recording system and maximize reuse / recycle of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.
- 4.1.4 The Contractor is reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.



5. SITE INSPECTION

5.1 Site Inspection

- 5.1.1 Site inspections were carried out weekly to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. A summary of the mitigation measures implementation schedule is provided in **Appendix G**.
- 5.1.2 In the reporting quarter, 13 site inspections were carried out. 3 of them were the joint inspections with the IEC, ER, the Contractor and the ET.
- 5.1.3 All the follow-up actions requested by Contractor’s ET and IEC during the site inspections were completed as reported by the Contractor. No outstanding issues were reported during the reporting period.
- 5.1.4 Details of observations recorded during the site inspections are presented in **Table 5.1**.

Table 5.1 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	25 July 2019	Observation: 1. Excavated materials should be covered with impervious sheeting (Zone 2)	1. Excavated materials were covered by impervious sheeting (Zone 2) on 29/7/2019.
	22 August 2019	Reminder: 1. Keep the ground surface wet by spraying water frequently in Zone 4 (N04).	NA
Noise	No deficiency was found during the reporting quarter.		
Water Quality	6 June 2019	Reminder: 1. Frequently clear the leaves at the trench exit at S05 access.	NA
	13 June 2019	Observation: 1. Replace the damaged sandbags in Zone 3 (S06). 2. Clear leaves at the trench exit in Zone 3 (S05 & S06). 3. Clear sand and silt in U Channel in Zone 3 (S05). Reminder: 1. Enhance bunding near S06.	1. Damaged sandbags were replaced on 14/6/2019. 2. Leaves at the trench exit were removed on 17/6/2019. 3. Sediment was cleared on 16/6/2019.
	20 June 2019	Observation: 1. Relocate the sandbags to prevent surface run-off from flowing outside the site boundary in Zone 3.	1. Sandbags were relocated to prevent surface run off outside site boundary on 24/6/2019.
	4 July 2019	Observation: 1. Cover the pit by impervious sheeting in Zone 2.	1. The pit was covered by impervious sheeting on 6/7/2019.

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Parameters	Date	Observations and Recommendations	Follow-up
	11 July 2019	Reminder: 1. Enhance the efficiency of sedimentation tank in S06.	NA
	25 July 2019	Observation: 1. Excavated materials should be covered with impervious sheeting (Zone 2)	1. Excavated materials were covered by impervious sheeting (Zone 2) on 9/7/2019.
	31 July 2019	Observation: 1. S06 sedimentation tank should be maintained in a functionable condition.	1. (Zone 3) Sedimentation tank at S06 should be maintained in a functional condition on 3/8/2019.
	8 August 2019	Reminder: 1. Enhance the bunding at Zone 5 exit (North Bound). 2. Remove the tree branches at Zone 5 (North Bound).	NA
	15 August 2019	Observation: 1. Replace the damaged sandbags near S06 exit.	1. The broken sandbags were removed on 16/8/2019.
	28 August 2019	Observation: 1. Increase the efficiency of sedimentation of the S05 sedimentation tank.	1. The sedimentation tank at the exit 05 is maintained well on 29/8/2019.
		Reminder: 1. Prevent the surface run-off from flowing into the storm drain (Zone 2).	NA
Chemical and Waste Management	20 June 2019	Observation: 1. Waste materials accumulated at the site exit should be sorted and cleared in Zone 3.	1. Wastes were removed on 21/6/2019.
	26 June 2019	Reminder: 1. Centralize the waste collection zones to a particular area in Zone 3 as far as possible.	NA
	11 July 2019	Observation: 1. Place the chemicals in the drip tray (Zone 3).	1. All Chemicals were removed on 15/7/2019.
	18 July 2019	Observation: 1. Drip tray should be provided for the chemical (S05). Reminder: 1. Remove the tree branches stored in Zone 3 (near S06).	1. Drip trap was provided (Zone 3) on 23/7/2019.

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Parameters	Date	Observations and Recommendations	Follow-up
	31 July 2019	Observation: 1. Clear other site materials in front of the chemical waste storage area. 2. Diesel in Zone 2 (near gate) should be placed in dangerous goods storage area.	1. (Zone 3) Clear the site materials in front of the chemical waste storage area. On 3/8/2019. 2. (Zone 2) Diesel was removed on 31/7/2019.
	22 August 2019	Reminder: 1. Clear the waste materials in Zone 3 (RW 07).	NA
	28 August 2019	Reminder: 1. Waste Materials should be packed properly (Zone 2).	NA
Land Contamination	No deficiency was found during the reporting quarter.		
Landscape and Visual Impact	31 July 2019	Reminder: 1. Provide sufficient protection space for the OVTs in Zone 3.	NA
General Condition	No deficiency was found during the reporting quarter.		

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6. ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

6.1 Environmental Exceedance

6.1.1 No project-related Action and Limit Level exceedance for 24-hr & 1-hr TSP and noise was recorded in the reporting period at all monitoring stations. Number of exceedance in the reporting period was summarized in **Table 6.1** and **6.2**.

Table 6.1 Summary of Exceedance of Dust Monitoring in Reporting Period

Monitoring Station		Number of exceedance in the reporting period							
		24-hour TSP				1-hour TSP			
		June 2019	July 2019	August 2019	Total	June 2019	July 2019	August 2019	Total
AMS 4A	AL	-	0	0	0	-	0	0	0
	LL	-	0	0	0	-	0	0	0
AMS 6	AL	0	-	-	0	0	-	-	0
	LL	0	-	-	0	0	-	-	0
AMS 7A	AL	0	0	0	0	0	0	0	0
	LL	0	0	0	0	0	0	0	0
AMS 8	AL	-	0	0	0	-	0	0	0
	LL	-	0	0	0	-	0	0	0
AMS 12	AL	0	-	-	0	0	-	-	0
	LL	0	-	-	0	0	-	-	0
AMS 13	AL	-	-	-	0	-	-	-	0
	LL	-	-	-	0	-	-	-	0
AMS 15	AL	0	0	0	0	0	0	0	0
	LL	0	0	0	0	0	0	0	0
Total	AL	0	0	0	0	0	0	0	0
	LL	0	0	0	0	0	0	0	0



Table 6.2 Summary of Exceedance of Noise Monitoring in Reporting Period

Monitoring Station		Number of exceedance in the reporting period			
		Leq (30min)&(15min) dB(A)			Total
		June 2019	July 2019	August 2019	
NMS 1	AL	0	0	0	0
	LL	0	0	0	0
NMS 2	AL	0	0	0	0
	LL	0	0	0	0
NMS 3	AL	0	0	0	0
	LL	0	0	0	0
NMS 4	AL	0	0	0	0
	LL	0	0	0	0
NMS 5A	AL	0	0	0	0
	LL	0	0	0	0
NMS 6A	AL	0	0	0	0
	LL	0	0	0	0
NMS 7	AL	0	0	0	0
	LL	0	0	0	0
NMS 8	AL	0	0	0	0
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NMS 9	AL	0	0	0	0
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NMS 18	AL	0	0	0	0
	LL	0	0	0	0
NMS 19	AL	0	0	0	0
	LL	0	0	0	0
NMS 20	AL	0	0	0	0
	LL	0	0	0	0
NMS 23	AL	0	0	0	0
	LL	0	0	0	0
NMS 24	AL	0	0	0	0
	LL	0	0	0	0
NMS 25A	AL	0	0	0	0
	LL	0	0	0	0
NMS 26	AL	0	0	0	0
	LL	0	0	0	0
NMS 27	AL	0	0	0	0
	LL	0	0	0	0
Total	AL	0	0	0	0
	LL	0	0	0	0

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6.2 Complaints, Notification of Summons and Prosecution

6.2.1 Two complaint cases regarding noise nuisance were received on 26/7/2019 and 30/8/2019 respectively. After ET's investigation, the complaint case on 26/7/2019 should be related to traffic noise but not the project-related construction activities. The complaint case on 30/8/2019 is still under ET's investigation.

6.2.2 No notification of summons or prosecution was received in the reporting period.

6.2.3 Cumulative complaint log, summaries of complaints, notification of summons and successful prosecutions are presented in **Appendix F**.

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7. IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

7.1 Implementation Status

- 7.1.1 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Reports, the EP and the EM&A Manuals. The implementation status of the mitigation measures during the reporting period is summarized in **Appendix G**.



8. CONCLUSIONS

- 8.1.1 No Action and Limit Level exceedance for 24-hr & 1-hr TSP was recorded in the reporting period at all monitoring stations.
- 8.1.2 Day time construction noise monitoring was carried out in the reporting quarter, no Action / Limit Level exceedance was recorded during the period. For night time construction noise monitoring, fourteen exceedance cases were recorded between 2300 and 0700 of the next day during the reporting quarter. After ET's further investigation, as the dominant noise should be the background traffic noise, the noise exceedance cases were considered not project-related.
- 8.1.3 Two complaint cases regarding noise nuisance were received on 26/7/2019 and 30/8/2019 respectively. After ET's investigation, the complaint case on 26/7/2019 should be related to traffic noise but not the project-related construction activities. The complaint case on 30/8/2019 was considered project-related. It was regarding noise nuisance from breaking works at road side around midnight and the major night works of the main contractor on 28th – 30th August 2019 between 11:00pm and 00:30am the next day was road breaking work at zone 2 (south bound) adjacent to Wai Wah Centre. The main contractor had complied with the conditions as stipulated in the CNP No.: GW-RN0443-19; an acoustic enclosure with four sides and a top was used when operating the hand-held breaker such that no part of the powered mechanical equipment was visible by nearby noise sensitive receiver. And the main contractor was recommended to regular review the effectiveness of the enclosure or noise mitigation measure to enhance noise reduction on similar night works in restricted hours. Also, the main contractor was reminded to add their proposed night-time construction activities into their advance notice to the affected residents especially noisy works that concerned the stakeholder/resident.
- 8.1.4 13 weekly environmental site inspections were carried out in the reporting period. Recommendations on mitigation measures on air quality, noise quality, water quality, chemical and waste management, landscape and visual impact were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 8.1.5 Referring to the Contractor's information, no notification of summons and successful prosecution was received in the reporting period.

Comment and Recommendations

- 8.1.6 The recommended environmental mitigation measures, as proposed in the EIA reports and EM&A Manuals shall be effectively implemented to minimize the potential environmental impacts from the Project. The EM&A programme would effectively monitor the environmental impacts generated from the construction activities and ensure the proper implementation of mitigation measures.
- 8.1.7 According to the environmental audit performed in the reporting period, the following recommendations were made:

Air Quality Impact

- Keep the ground surface wet by spraying water frequently in Zone 4 (N04).

Construction Noise Impact

- No specific observation was identified in the reporting period.

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Water Quality Impact

- Frequently clear the leaves at the trench exit at S05 access.
- Enhance bunding near S06.
- Enhance the efficiency of the sedimentation tank in S06.
- Enhance the bunding at Zone 5 exit (North Bound).
- Prevent the surface run-off from flowing into the storm drain (Zone 2).

Chemical and Waste Management

- Centralize the waste collection zones to a particular area in Zone 3 as far as possible.
- Remove the tree branches stored in Zone 3(near S06).
- Remove the tree branches at Zone 5(North Bound).
- Clear the waste materials in Zone 3 (RW07).
- Waste materials should be packed properly (Zone 2).

Land Contamination

- No specific observation was identified in the reporting period.

Landscape and Visual Impact

- Provide sufficient protection space for the OVTS in Zone 3.

General Condition

- No specific observation was identified in the reporting period.

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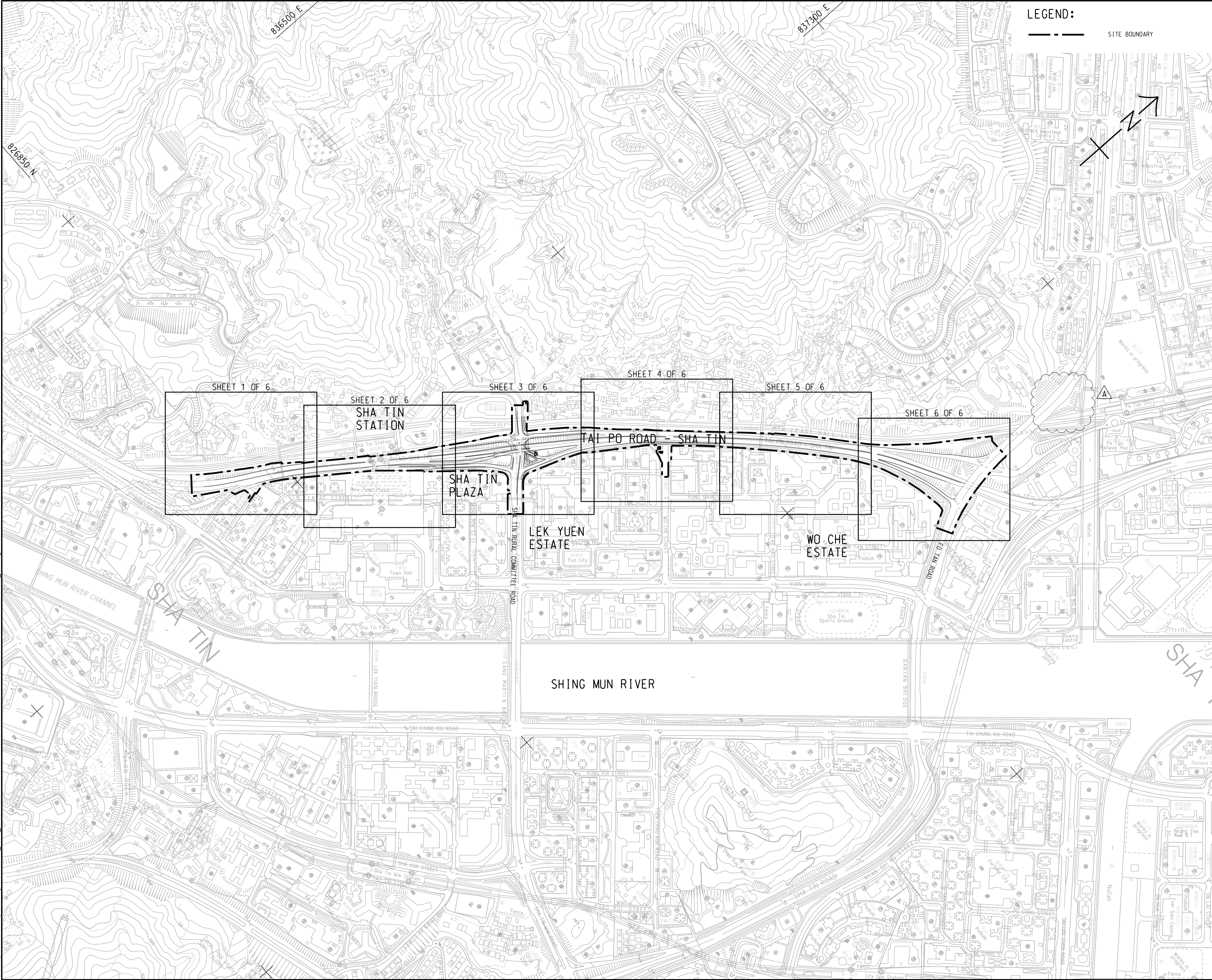
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Figure 1 Project General Layout

Plot File by: aecom\p0163015 PATH p:\aecom\sp-pw\benley.com\AECOM_DSG2_AS\Documents\60481656 WTP STCAD PRODUCTION\DRAWING\CONTRACT\11000\C1_1000.dgn
 2/22/2018
 Project Management Initials: Designer: FMSC Checked: BCC Approved: CWN
 ISO A1 594mm x 841mm



LEGEND:
 - - - - - SITE BOUNDARY

AECOM

PROJECT
 ROAD WIDENING AND RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

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CEDD Civil Engineering and Development Department

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ISSUE/REVISION

I/R	DATE	DESCRIPTION	CHK.
A	FEB. 18	TENDER ADDENDUM NO.2	BBC
-	JAN. 18	TENDER DRAWING	BCC

STATUS
 階段

SCALE
 比例
 A1 1:4000

DIMENSION UNIT
 尺寸單位
 METRES

KEY PLAN
 索引圖
FIGURE 1.1a

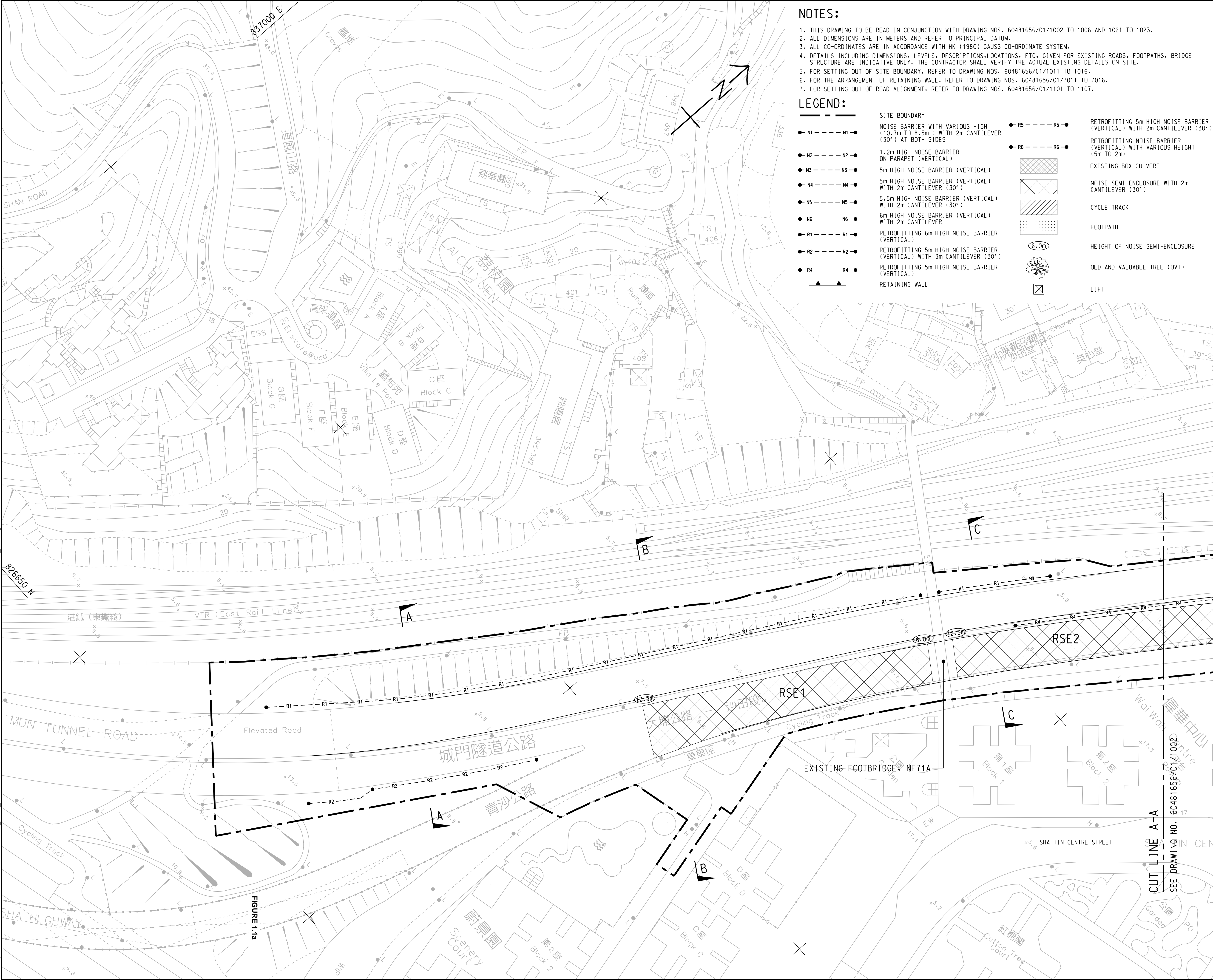
CONTRACT NO.
 合約編號
 NE/2017/05

SHEET TITLE
 圖紙名稱
KEY PLAN
FIGURE 1.1a

SHEET NUMBER
 圖紙編號
 60481656/C1/1000A

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 Project Management Initials: Designer: FMSC Checked: BCC Approved: CWN
 ISO A1 594mm x 841mm
 16/12/2018
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 ISO A1 594mm x 841mm



- NOTES:**
- THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60481656/C1/1002 TO 1006 AND 1021 TO 1023.
 - ALL DIMENSIONS ARE IN METERS AND REFER TO PRINCIPAL DATUM.
 - ALL CO-ORDINATES ARE IN ACCORDANCE WITH HK (1980) GAUSS CO-ORDINATE SYSTEM.
 - DETAILS INCLUDING DIMENSIONS, LEVELS, DESCRIPTIONS, LOCATIONS, ETC. GIVEN FOR EXISTING ROADS, FOOTPATHS, BRIDGE STRUCTURE ARE INDICATIVE ONLY. THE CONTRACTOR SHALL VERIFY THE ACTUAL EXISTING DETAILS ON SITE.
 - FOR SETTING OUT OF SITE BOUNDARY, REFER TO DRAWING NOS. 60481656/C1/1011 TO 1016.
 - FOR THE ARRANGEMENT OF RETAINING WALL, REFER TO DRAWING NOS. 60481656/C1/7011 TO 7016.
 - FOR SETTING OUT OF ROAD ALIGNMENT, REFER TO DRAWING NOS. 60481656/C1/1101 TO 1107.

LEGEND:

—●— N1 —●— N1	SITE BOUNDARY	—●— R5 —●— R5	RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°)
—●— N2 —●— N2	NOISE BARRIER WITH VARIOUS HIGH (10.7m TO 8.5m) WITH 2m CANTILEVER (30°) AT BOTH SIDES	—●— R6 —●— R6	RETROFITTING NOISE BARRIER (VERTICAL) WITH VARIOUS HEIGHT (5m TO 2m)
—●— N3 —●— N3	1.2m HIGH NOISE BARRIER ON PARAPET (VERTICAL)	[Hatched Box]	EXISTING BOX CULVERT
—●— N4 —●— N4	5m HIGH NOISE BARRIER (VERTICAL)	[Diagonal Lines]	NOISE SEMI-ENCLOSURE WITH 2m CANTILEVER (30°)
—●— N5 —●— N5	5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°)	[Dotted Box]	CYCLE TRACK
—●— N6 —●— N6	5.5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°)	[Dotted Box]	FOOTPATH
—●— R1 —●— R1	6m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER	(6.0m)	HEIGHT OF NOISE SEMI-ENCLOSURE
—●— R2 —●— R2	RETROFITTING 6m HIGH NOISE BARRIER (VERTICAL)	[Tree Symbol]	OLD AND VALUABLE TREE (OVT)
—●— R3 —●— R3	RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL) WITH 3m CANTILEVER (30°)	[Square with X]	LIFT
—●— R4 —●— R4	RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL)		
▲▲	RETAINING WALL		

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PROJECT
項目

ROAD WIDENING AND RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

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業主

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REV	DATE	DESCRIPTION	CHK.
-	JAN. 18	TENDER DRAWING	BCC
1/R	修改日期	內容修改	校核

STATUS
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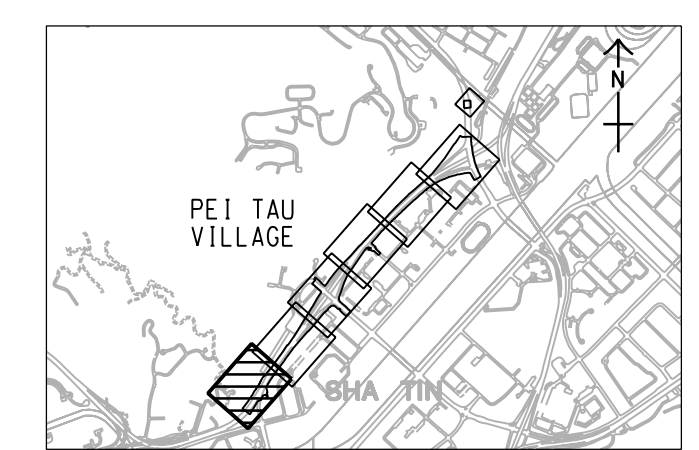
SCALE
比例

A1 1: 500

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN A1 1: 40000
索引圖



CONTRACT NO.
合約編號

60481656 NE/2017/05

SHEET TITLE
圖紙名稱

GENERAL LAYOUT PLAN
FIGURE 1.1 b

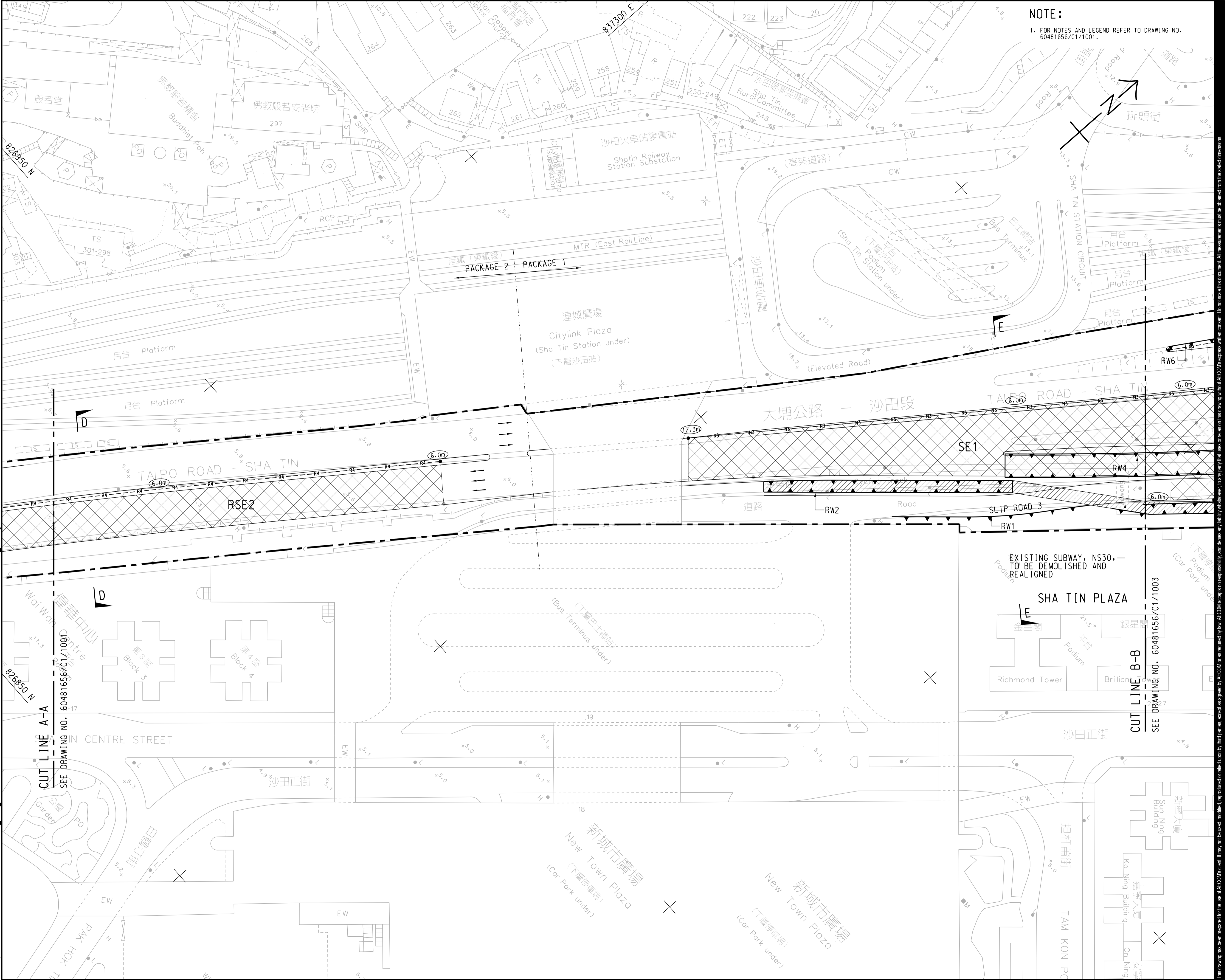
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SHEET 1 OF 6

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NOTE:
 1. FOR NOTES AND LEGEND REFER TO DRAWING NO. 60481656/C1/1001.

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PROJECT
 項目

ROAD WIDENING AND RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

CLIENT
 業主

CEDD 土木工程拓展署
 Civil Engineering and Development Department

CONSULTANT
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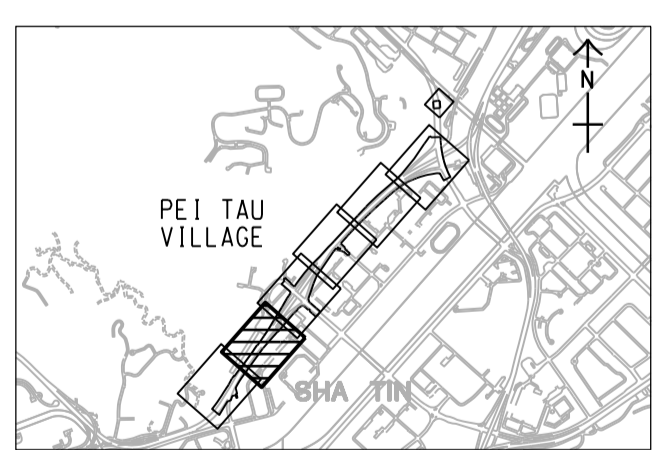
ISSUE/REVISION
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-	JAN. 18	TENDER DRAWING	BCC
			CHK.

STATUS
 階段

SCALE 比例: A1 1:500
DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖: A1 1:40000



CONTRACT NO. 合約編號: NE/2017/05

SHEET TITLE 圖紙名稱: GENERAL LAYOUT PLAN

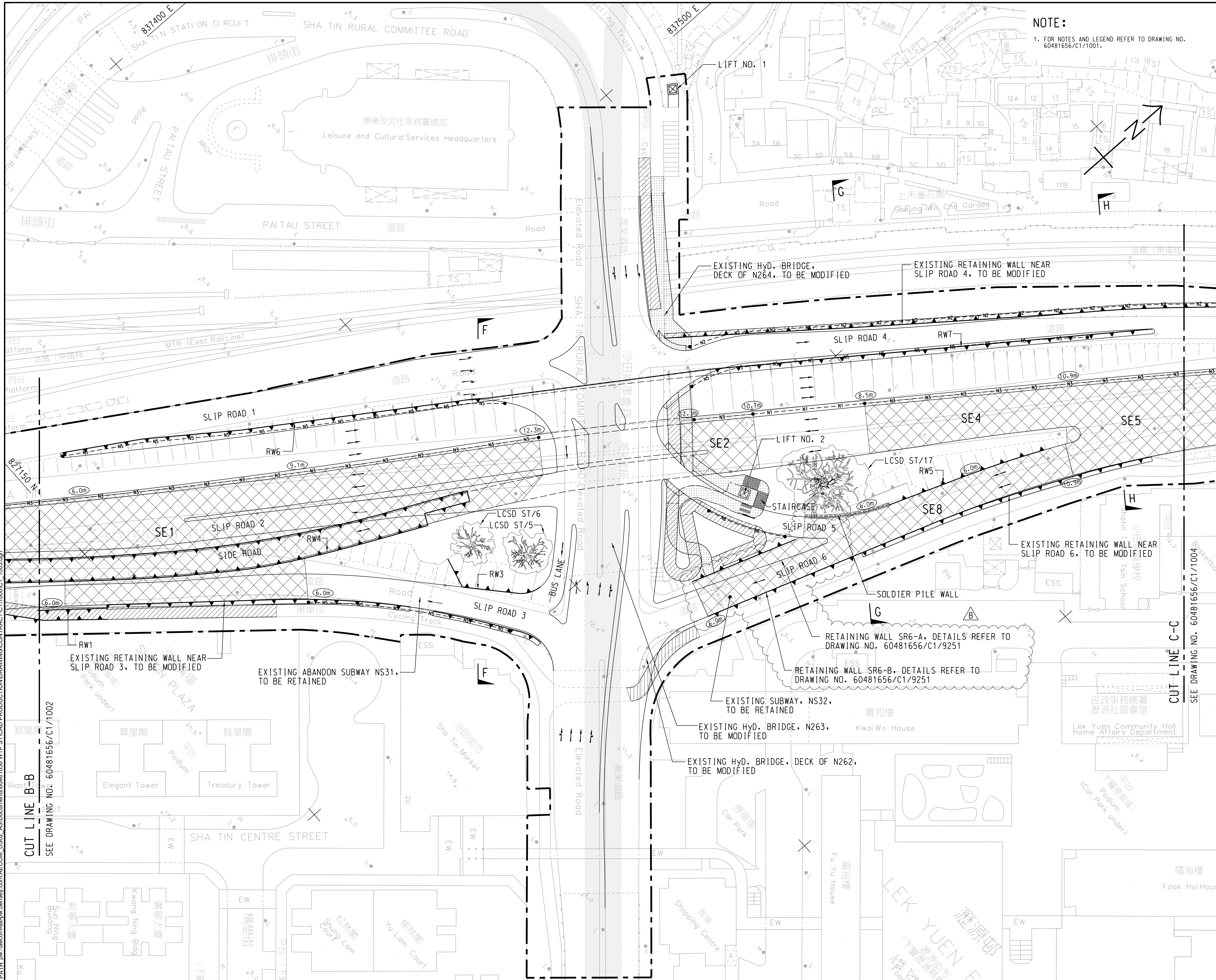
FIGURE 1.1b

SHEET NUMBER 圖紙編號: 60481656/C1/1002

SHEET 2 OF 6

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A	FEB. 18	TENDER ADDENDUM NO. 1	BCC
-	JAN. 18	TENDER DRAWING	BCC

STATUS
 階段

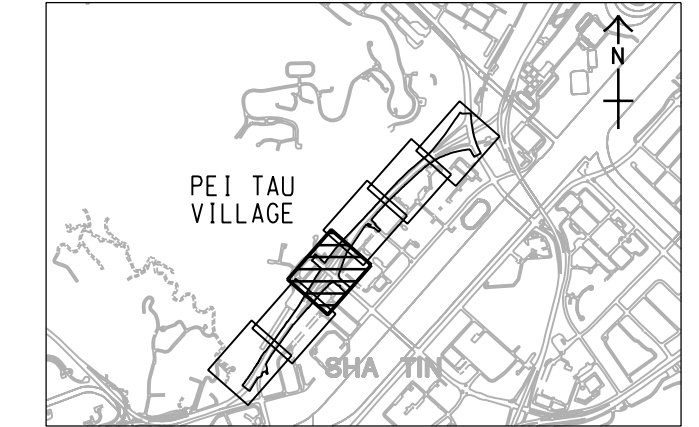
SCALE
 比例

A1 1:500

DIMENSION UNIT
 尺寸單位

METRES

KEY PLAN A1 1:40000
 索引圖



CONTRACT NO.
 合約編號

NE/2017/05

SHEET TITLE
 圖紙名稱

GENERAL LAYOUT PLAN
FIGURE 1.1 b

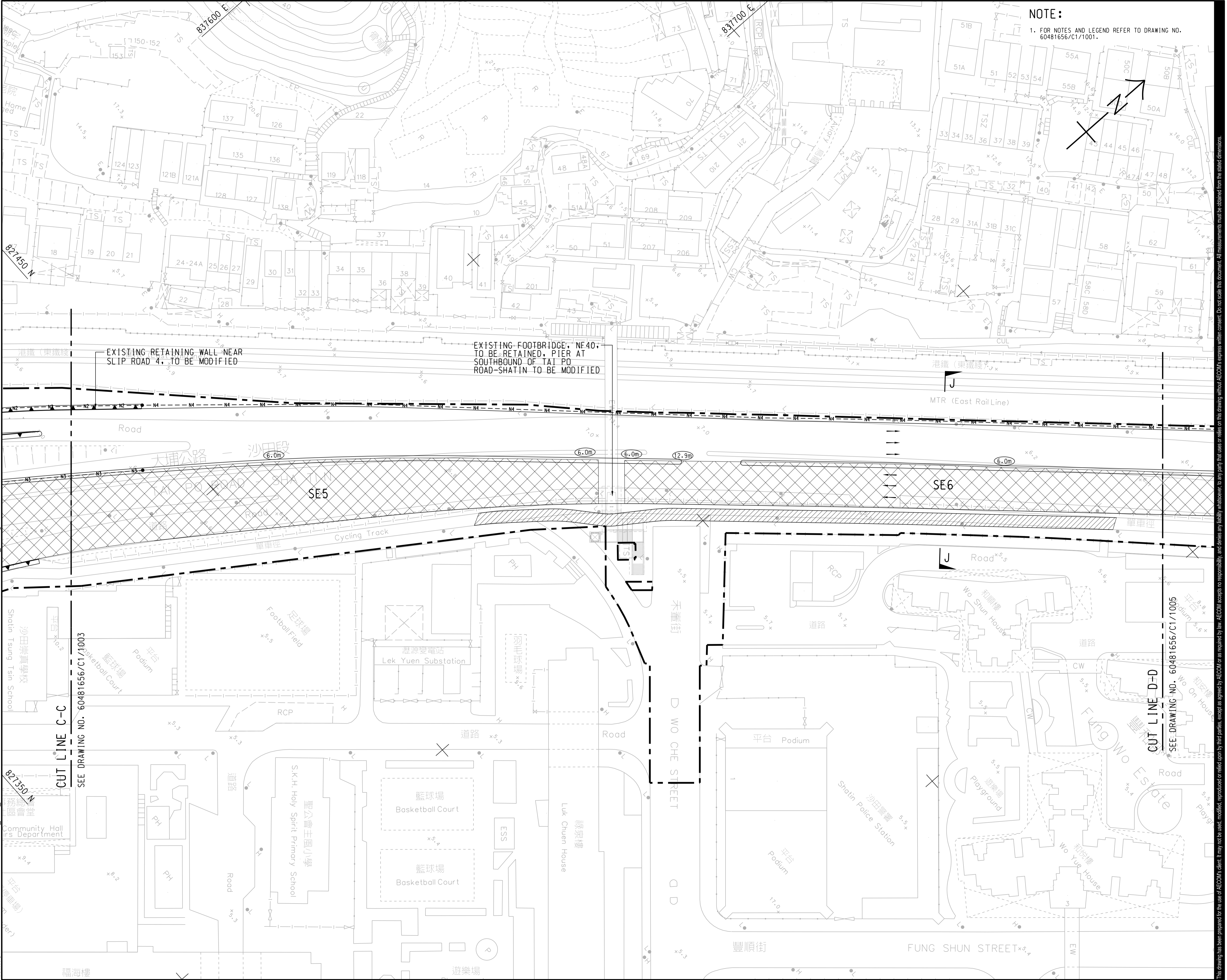
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SHEET 3 OF 6

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PROJECT
ROAD WIDENING AND RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

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Civil Engineering and Development Department

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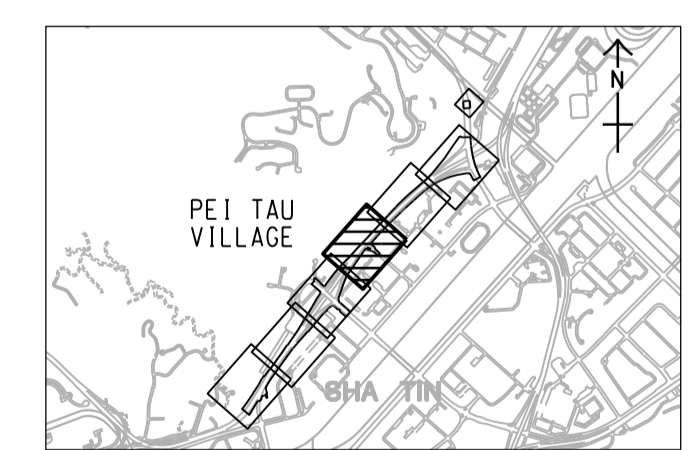
I/R	DATE	DESCRIPTION	CHK.
-	JAN. 18	TENDER DRAWING	BCC

STATUS
階段

SCALE
比例
A1 1:500

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖
A1 1:40000



CONTRACT NO.
合約編號
NE/2017/05

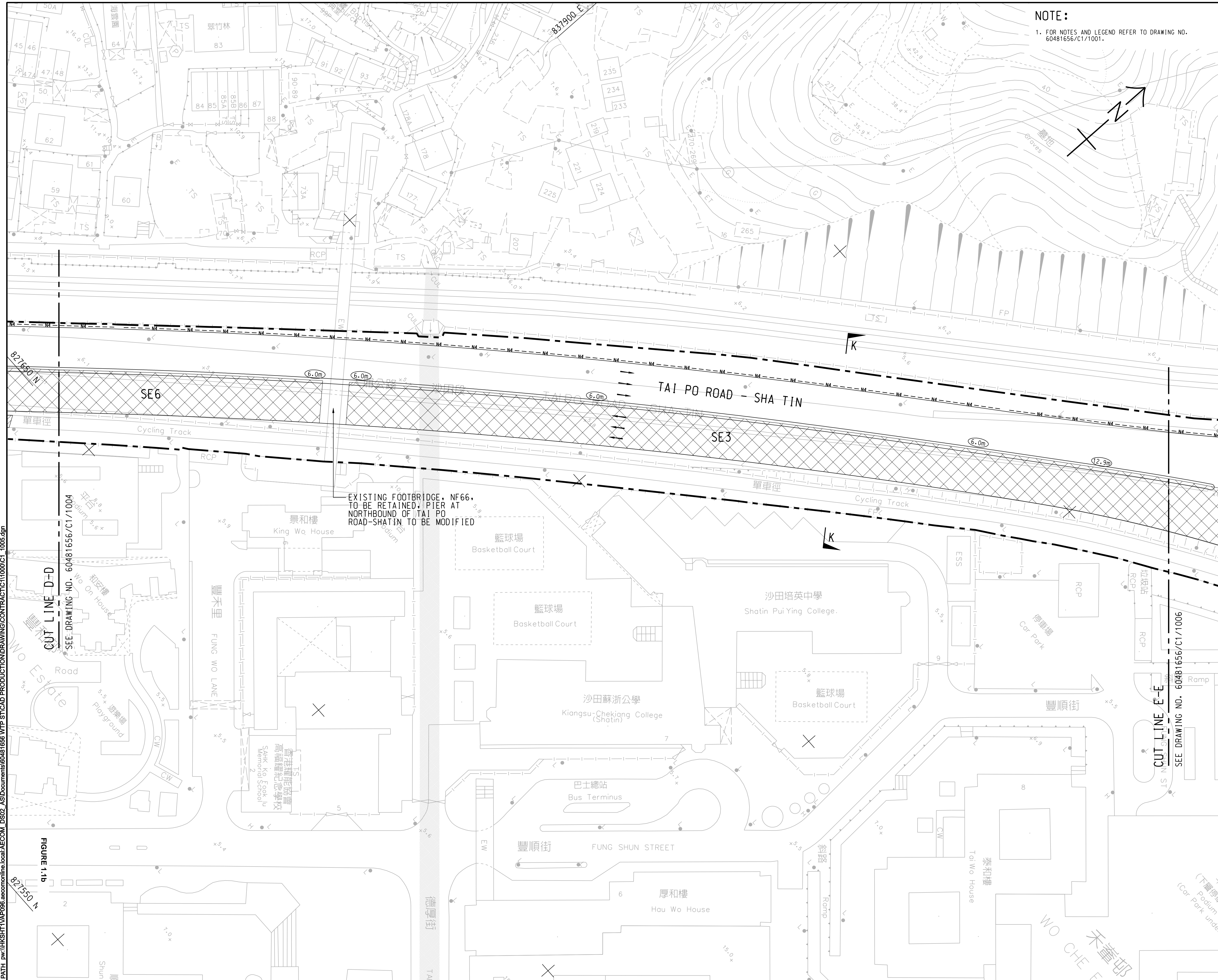
SHEET TITLE
圖紙名稱
GENERAL LAYOUT PLAN
FIGURE 1.1b

SHEET NUMBER
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PROJECT
 項目
ROAD WIDENING AND RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

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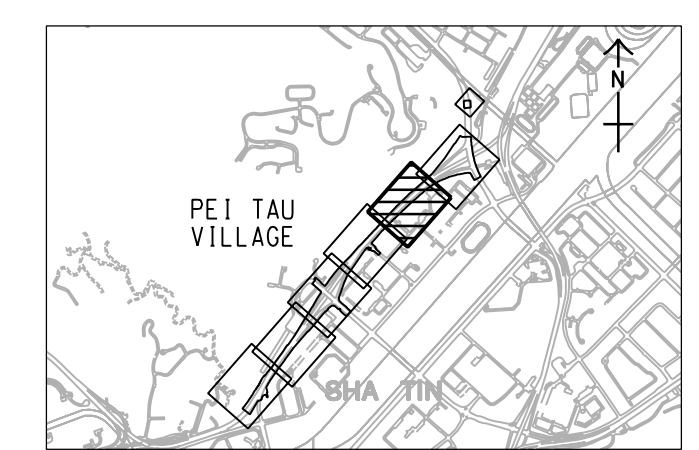
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I/R	DATE	DESCRIPTION	CHK.
修改	日期	內容摘要	核核

STATUS
 階段

SCALE
 比例
 A1 1:500

DIMENSION UNIT
 尺寸單位
 METRES



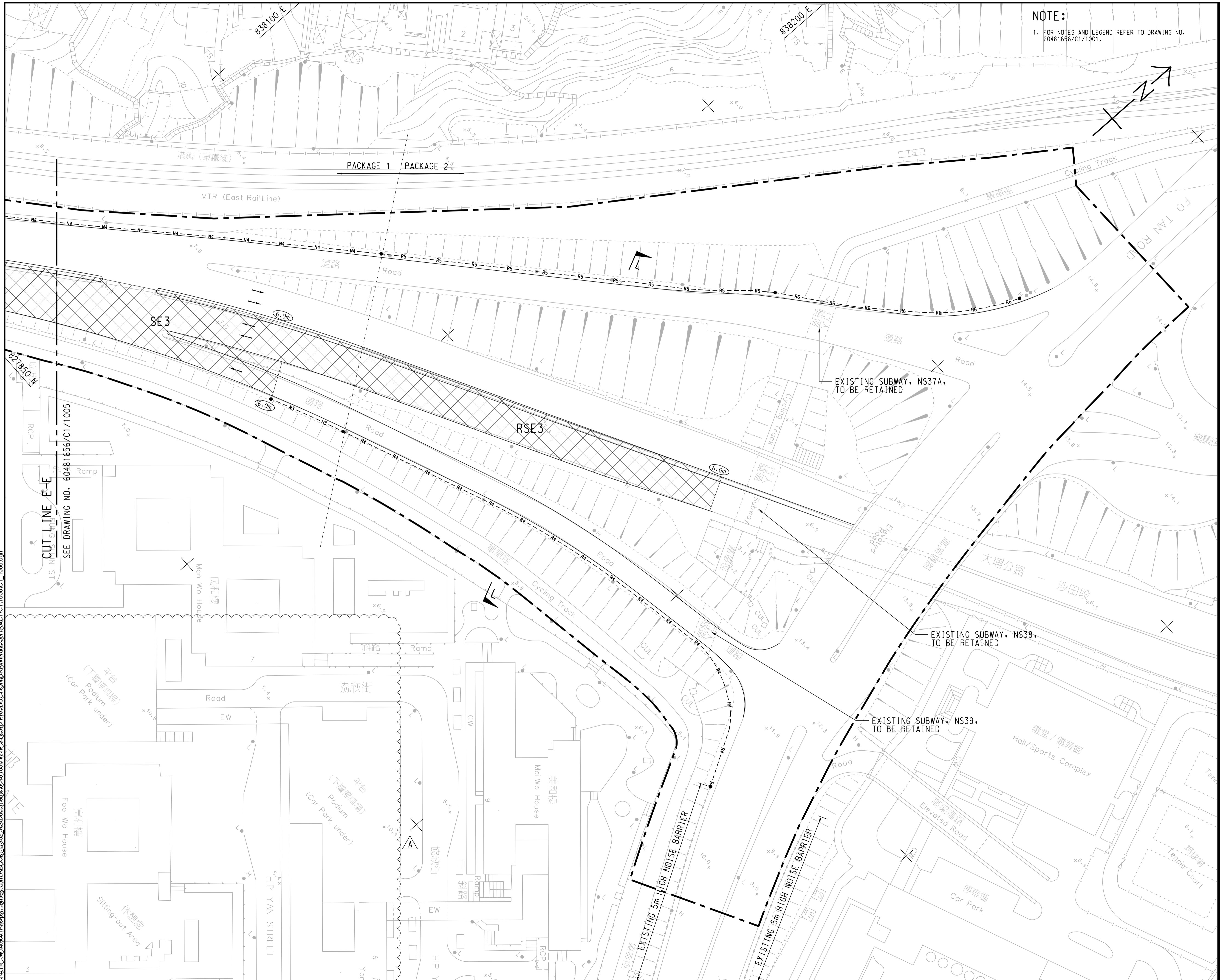
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 NE/2017/05

SHEET TITLE
 圖紙名稱
 GENERAL LAYOUT PLAN
 FIGURE 1.1b

SHEET NUMBER
 圖紙編號
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 ISO A1 594mm x 841mm
 2/22/2018



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PROJECT

ROAD WIDENING AND RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

CLIENT

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-	JAN. 18	TENDER DRAWING	BCC

STATUS

擬定

SCALE

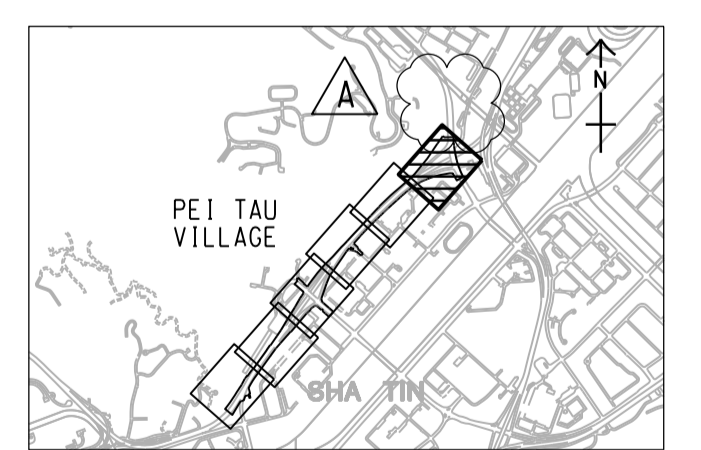
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DIMENSION UNIT

METRES

KEY PLAN

A1 1:40000



CONTRACT NO.

NE/2017/05

SHEET TITLE

GENERAL LAYOUT PLAN

FIGURE 1.1b

SHEET NUMBER

60481656/C1/1006A

SHEET 6 OF 6

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Fax : +852 2450 6138
E-mail : matlab@fugro.com
Website : www.fugro.com



Figure 2a

Air Monitoring Locations

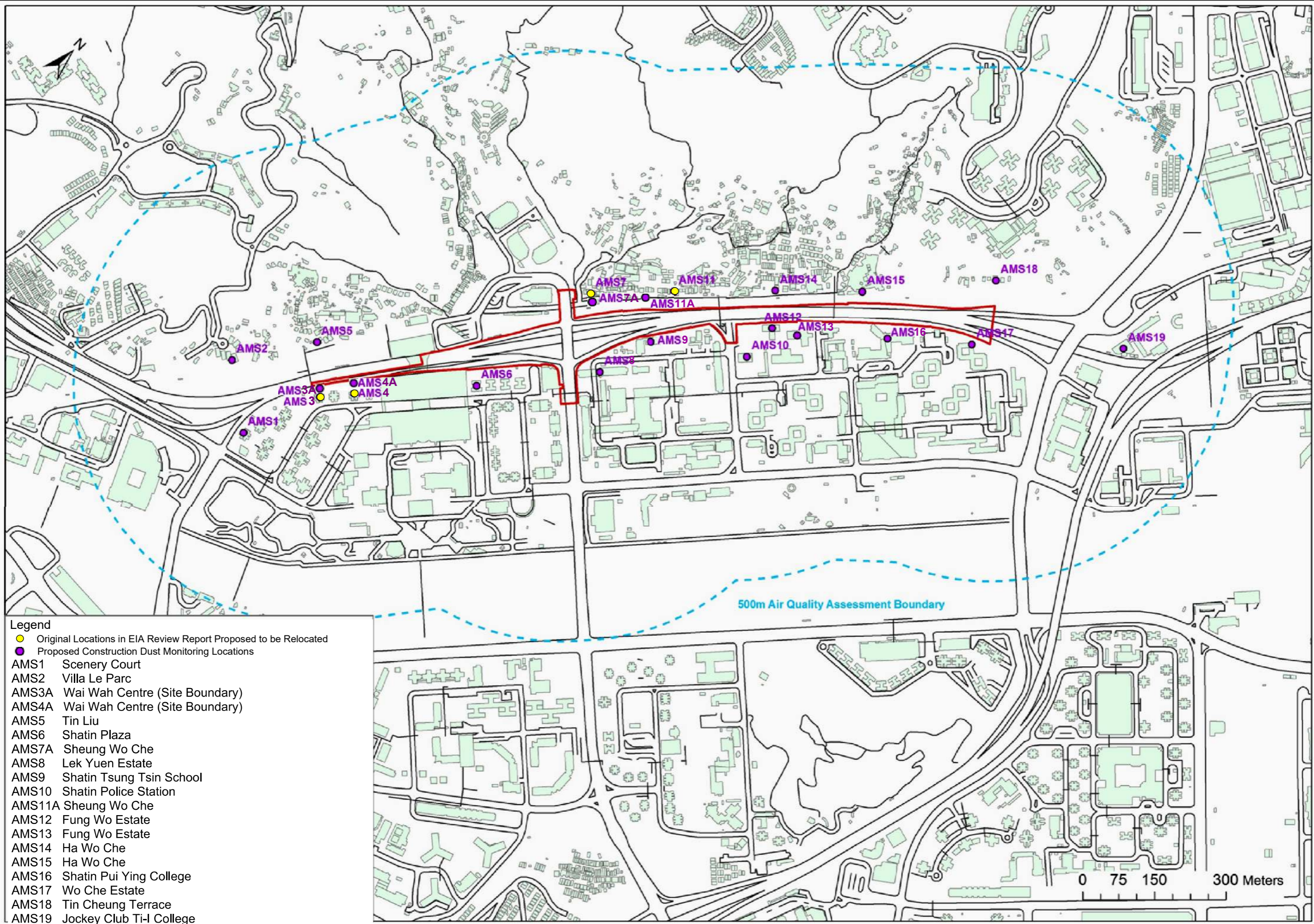


Figure 2a Air Quality Monitoring Locations

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Website : www.fugro.com



Figure 2b

Noise Monitoring Locations

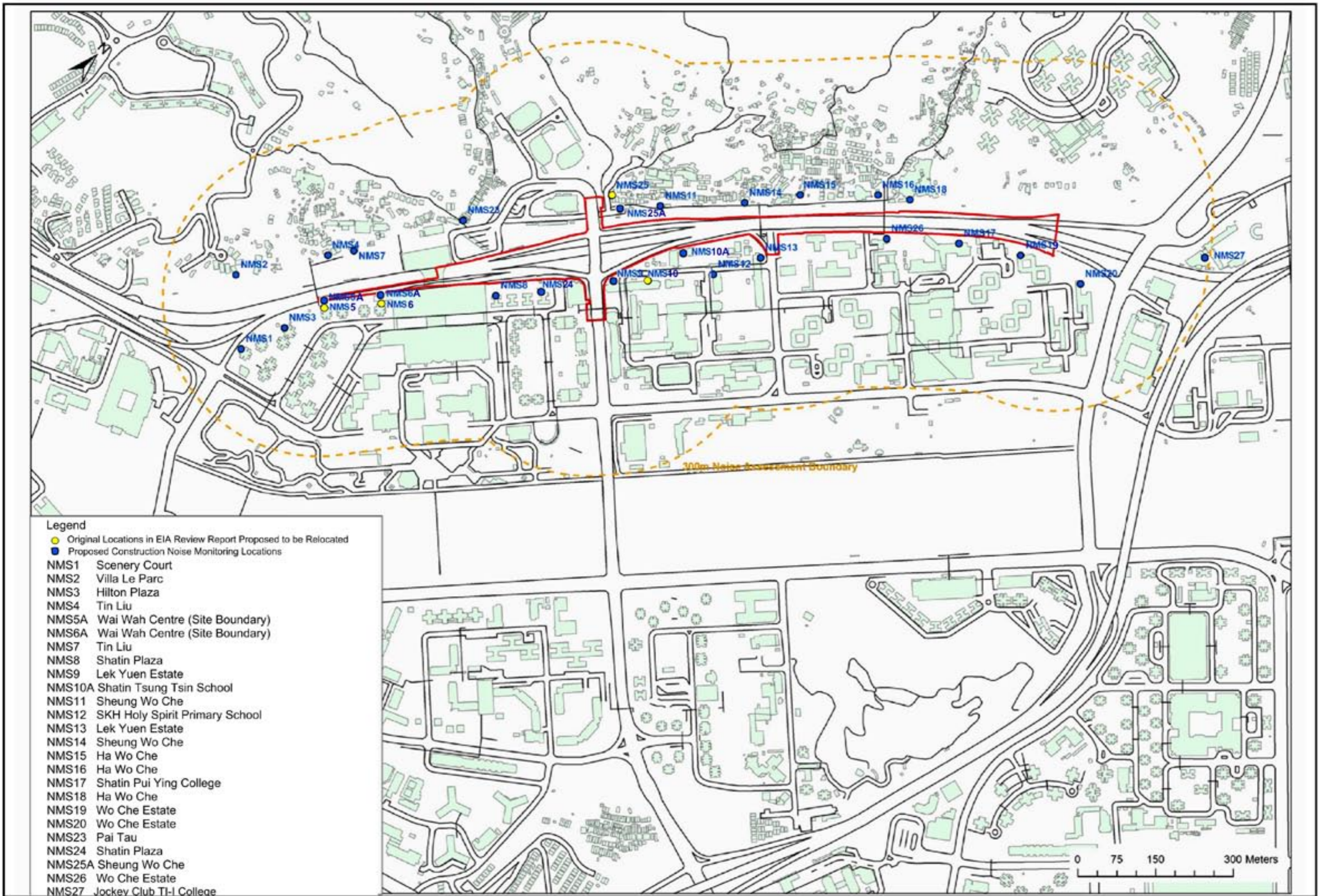


Figure 2b Noise Monitoring Locations

FUGRO TECHNICAL SERVICES LIMITED

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Tuen Mun, N.T.,
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Fax : +852 2450 6138
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Website : www.fugro.com



Appendix A

Construction Programme



Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP5 Start	AP5 Finish	2019				
								May 11	Jun 12	Jul 13	Aug 14	Sep 15
Contract NE/2017/05 Road Widening and Retrofitting Noise Barriers on Tai Po Roa												
PRELIMINARIES & GENERAL REQUIREMENT												
GENERAL SUBMISSION												
SUB1115	Survey of the Site	0	0	31-May-19*		31-Mar-19						
SUB1153	BIM Team	0	0	31-May-19*		31-Mar-19						
SUB1155	BIM Execution Plan	0	0	31-May-19*		31-Mar-19						
SUB1200	Hoarding Plan	0	0	31-May-19*		31-Mar-19						
SUB1343	TCSS Configuration Management	0	0	31-May-19*		31-Mar-19						
SUB1347	Lift Installation - Design Data	0	0	31-May-19*		31-Mar-19						
SUB1403	ITP's for Lighting Luminaires and System	0	0	31-May-19*		31-Mar-19						
SUB1405	All Lighting Designs	0	0	31-May-19*		31-Mar-19						
SUB1410	Combined Services Drawings (CSD)	0	0	31-May-19*		31-Mar-19						
DESIGN SUBMISSION												
STRICH INTERCHANGE MODIFICATION WORKS (Alternative Design)												
DES1070	PM Consent for Construction	28	3	06-Nov-18 A	02-Jun-19	20-Feb-19	19-Mar-19					
DES1090	PM review & comment	28	3	07-Dec-18 A	02-Jun-19	05-Oct-18	01-Nov-18					
DES1110	PM Consent for Construction	28	28	03-Jun-19	01-Jul-19	29-Apr-19	26-May-19					
DES1140	Re-submit Alternative Design of Bridges SR2 & SR5, Slab Widening of SHA & Widening of Bridge N262	28	3	19-Feb-19 A	02-Jun-19	12-Apr-19	09-May-19					
DES1150	PM Consent for Construction	28	28	02-Jun-19	30-Jun-19	22-Apr-19	20-May-19					
NOISE MITIGATION MEASURES												
DES1180	Re-submit Foundation Design of Noise Mitigation Measures in Zones 1 & 2 w/Design Certificate	22	2	24-Nov-18 A	02-Jun-19	29-Jan-19	19-Feb-19					
DES1190	PM Consent for Construction	28	28	02-Jun-19	30-Jun-19	04-Apr-19	02-May-19					
DES1230	PM Consent for Construction	28	11	02-Jan-19 A	11-Jun-19	31-Jan-19	27-Feb-19					
DES1240	Prepare & submit Foundation Design of Mitigation Measures in Zone 3 w/Design Certificate	21	4	26-Nov-18 A	04-Jun-19	31-Dec-18	20-Jan-19					
DES1250	PM review & comment	28	28	04-Jun-19	02-Jul-19	05-Apr-19	02-May-19					
DES1260	Re-submit Foundation Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	23	23	03-Jul-19	26-Jul-19	04-May-19	26-May-19					

	Remaining Level of Effort		Remaining Work
	Actual Level of Effort		Critical Remaining Work
	Primary Baseline		Milestone
	Actual Work		Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

3 Months Rolling Programme (31/05/19)

Date	Revision	Check...	Approved
08-Jun-19	3MRP DWP 1905	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	APE Start	APE Finish	2019							
								May 11	Jun 12	Jul 13	Aug 14	Sep 15			
DES1270	PM Consent for Construction	28	28	26-Jul-19	23-Aug-19	27-May-19	23-Jun-19								
DES1280	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zones 1 & 2 w/Design	21	2	14-Jan-19 A	06-Jun-19	05-Feb-19	25-Feb-19								
DES1290	PM review & comment	28	28	06-Jun-19	04-Jul-19	08-Apr-19	05-May-19								
DES1300	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 1 & 2 w/Design	20	20	05-Jul-19	25-Jul-19	07-May-19	26-May-19								
DES1310	PM Consent for Construction	28	28	25-Jul-19	22-Aug-19	27-May-19	23-Jun-19								
DES1320	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	21	17	20-Mar-19 A	23-Jun-19	08-Apr-19	28-Apr-19								
DES1330	PM review & comment	28	28	23-Jun-19	21-Jul-19	26-Apr-19	24-May-19								
DES1340	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	21	21	22-Jul-19	12-Aug-19	25-May-19	15-Jun-19								
DES1350	PM Consent for Construction	28	28	12-Aug-19	09-Sep-19	15-Jun-19	13-Jul-19								
DES1360	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zones 4 & 5 w/Design	21	17	20-Mar-19 A	09-Jul-19	26-Apr-19	17-May-19								
DES1370	PM review & comment	28	28	09-Jul-19	06-Aug-19	15-May-19	12-Jun-19								
DES1380	Re-submit Superstructure Design of Noise Mitigation Measures in Zones 4 & 5 w/Design	20	20	07-Aug-19	27-Aug-19	13-Jun-19	03-Jul-19								
DES1390	PM Consent for Construction	28	28	27-Aug-19	24-Sep-19	03-Jul-19	31-Jul-19								
REMAINING WORKS															
DES1430	PM Consent for Construction	28	11	11-Jan-19 A	11-Jun-19	04-Mar-19	31-Mar-19								
DES1460	Re-submit Foundation Design of Footbridge NF40 & NF66 w/Design Certificate	35	32	13-Apr-19 A	01-Jul-19	06-Apr-19	10-May-19								
DES1470	PM Consent for Construction	28	28	01-Jul-19	29-Jul-19	11-May-19	07-Jun-19								
DES1480	Prepare & submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign	21	5	26-Nov-18 A	04-Jun-19	31-Dec-18	20-Jan-19								
DES1490	PM review & comment	28	28	05-Jun-19	02-Jul-19	05-Apr-19	02-May-19								
DES1500	Re-submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign Gantry	35	35	04-Jul-19	07-Aug-19	04-May-19	07-Jun-19								
DES1510	PM Consent for Construction	28	28	08-Aug-19	04-Sep-19	08-Jun-19	05-Jul-19								
DES1530	PM review & comment	28	1	02-Jan-19 A	31-May-19	31-Jan-19	27-Feb-19								
DES1540	Re-submit Design of Watermain & Irrigation System w/Design Certificate	32	1	02-Jan-19 A	31-May-19	02-Apr-19	03-May-19								
DES1550	PM Consent for Construction	28	28	21-Jan-19 A	28-Jun-19	04-May-19	31-May-19								
DES1560	Prepare & submit Design of E&M System (E&M & Road Lighting) w/Design Certificate	35	35	31-May-19	04-Jul-19	31-Mar-19	04-May-19								
DES1570	PM review & comment	28	28	05-Jul-19	01-Aug-19	05-May-19	01-Jun-19								
DES1580	Re-submit Design of E&M System (E&M & Road Lighting) w/Design Certificate	32	32	03-Aug-19	03-Sep-19	03-Jun-19	04-Jul-19								
SUBLETTING & PROCUREMENT SCHEDULE															
SUBLETTING															
SPS1000	Maintenance of Traffic Flow	30	30	31-May-19	29-Jun-19	31-Mar-19	29-Apr-19								

- Remaining Level of Effort
- Actual Level of Effort
- Primary Baseline
- Actual Work
- Remaining Work
- Critical Remaining Work
- Milestone
- Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/05/19)
Page 2 of 7

Date	Revision	Check...	Approved
08-Jun-19	3MRP DWP 1905	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	APE Start	APE Finish	2019				
								May 11	Jun 12	Jul 13	Aug 14	Sep 15
SPS1010	Electronic Document Management System (EDMS) for the use of the Project Manager	30	1	18-Oct-18 A	31-May-19*	31-Dec-18	29-Jan-19	Electronic Document Management System (EDMS) for the use of the Project Manager				
SPS1030	Hoarding and Signboard	30	30	31-May-19	29-Jun-19	31-Mar-19	29-Apr-19	Hoarding and Signboard				
SPS1040	Survey of the Site	30	30	31-May-19	29-Jun-19	31-Mar-19	29-Apr-19	Survey of the Site				
SPS1060	Security System of the Site	30	30	31-May-19	29-Jun-19	31-Mar-19	29-Apr-19	Security System of the Site				
SPS1090	Building Information Model (BIM)	30	17	12-Mar-19 A	29-Jun-19	31-Mar-19	29-Apr-19	Building Information Model (BIM)				
SPS1140	Site Clearance and Demolition Work	30	30	20-Jun-19	20-Jul-19	07-Apr-19	06-May-19	Site Clearance and Demolition Work				
SPS1160	Monitoring and Instrumentation	30	30	20-Jun-19	20-Jul-19	07-Apr-19	06-May-19	Monitoring and Instrumentation				
SPS1170	Piling Works and Pile Testing	30	1	21-Dec-18 A	31-May-19	28-Feb-19	29-Mar-19	Piling Works and Pile Testing				
SPS1200	Waterwork (Pipework)	30	30	31-May-19	29-Jun-19	31-Mar-19	29-Apr-19	Waterwork (Pipework)				
SPS1210	Drainage (PC pipe, manhole & gully) and Duct	30	30	30-Jul-19	28-Aug-19	31-May-19	29-Jun-19	Drainage				
SPS1220	CCTV for Drainage Pipe	30	30	31-May-19	29-Jun-19	01-Apr-19	30-Apr-19	CCTV for Drainage Pipe				
SPS1240	Reinforced Concrete Work for Retaining Walls	30	30	31-May-19	29-Jun-19	31-Mar-19	29-Apr-19	Reinforced Concrete Work for Retaining Walls				
SPS1250	Reinforced Concrete Work for Noise Mitigation Measures	30	30	31-May-19	29-Jun-19	31-Mar-19	29-Apr-19	Reinforced Concrete Work for Noise Mitigation Measures				
SPS1260	Reinforced Concrete Work for Bridge Work	30	30	27-Jun-19	27-Jul-19	28-Apr-19	28-May-19	Reinforced Concrete Work for Bridge Work				
SPS1280	Reinforced Concrete Work for Footbridge NF40 & NF66	30	30	17-Jul-19	16-Aug-19	23-May-19	22-Jun-19	Reinforced Concrete Work for Footbridge NF40 & NF66				
SPS1290	Steelwork for NB and Lift Tower	30	30	26-Jun-19	25-Jul-19	24-Apr-19	23-May-19	Steelwork for NB and Lift Tower				
SPS1310	Bearing and Movement Joint	30	30	06-Jul-19	04-Aug-19	01-May-19	31-May-19	Bearing and Movement Joint				
SPS1320	Tendon Works	30	30	06-Jul-19	04-Aug-19	01-May-19	31-May-19	Tendon Works				
SPS1410	Pedestrian Lift (Lift Cars, E&M, Panel, Louvre & Signature)	30	30	09-Jul-19	07-Aug-19	02-May-19	31-May-19	Pedestrian Lift (Lift Cars, E&M, Panel, Louvre & Signature)				
SPS1420	Lighting System for Noise Mitigation Measures	30	30	03-Aug-19	01-Sep-19	12-Jul-19	10-Aug-19	Lighting System for Noise Mitigation Measures				
SPS1440	Drainage for Noise Mitigation Measures	30	30	03-Aug-19	01-Sep-19	12-Jul-19	10-Aug-19	Drainage for Noise Mitigation Measures				
SPS1460	Waterproofing (Bitumen Paint)	30	30	18-Jun-19	18-Jul-19	06-Apr-19	05-May-19	Waterproofing (Bitumen Paint)				
WORK BETWEEN SHING MUN TUNNELS ROAD AND FOOT BRIDGE NF71A (ZONE 1)												
PRELIMINARY WORKS												
TEMPORARY TRAFFIC ARRANGEMENT												
TTA PERIOD												
Z1_1410	Construction Zone 1_Stage 1 Northbound R1 structure	300	300	11-Jul-19	14-Jul-20	19-Jun-19	20-Jun-20					
PREPARATORY WORKS												
TREE FELLING/TRANPLANT												
Z1_1290	Zone 1_tree felling works	18	19	25-Jan-19 A	22-Jun-19	11-Mar-19	01-Apr-19	Zone 1_tree felling works				

 Remaining Level of Effort	 Remaining Work
 Actual Level of Effort	 Critical Remaining Work
 Primary Baseline	 Milestone
 Actual Work	 Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/05/19)
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Date	Revision	Check...	Approved
08-Jun-19	3MRP DWP 1905	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019					
								May 11	Jun 12	Jul 13	Aug 14	Sep 15	
MODIFICATION EXISTING ROAD/TEMPORARY ROAD													
Z1_1270	Zone 1-1_construct temporary road platform along Northbound for R1	60	60	11-Jul-19	19-Sep-19	19-Jun-19	28-Aug-19						
UTILITIES DIVERSION													
CENTRAL BARRIER													
Z1_1300	UU_CLP-abandoned 33kv cable for RSE1 CH1190-1300 110m	20	20	23-Aug-19	16-Sep-19	02-Aug-19	24-Aug-19						
WORK BETWEEN FOOT BRIDGE NF71A AND CITYLINE PLAZA (ZONE 2)													
PRELIMINARY WORKS													
TEMPORARY TRAFFIC ARRANGEMENT													
TTA PERIOD													
Z2_1260	Construction Zone 2_Stage 1 Central Barrier structure	518	518	22-Jun-19	18-Mar-21	31-May-19	25-Feb-21						
PREPARATORY WORKS													
TREE FELLING/TRANPLANT													
Z2_1220	Zone 2_tree felling works	18	18	19-Feb-19 A	21-Jun-19	24-Jan-20	17-Feb-20						
MODIFICATION EXISTING ROAD/TEMPORARY ROAD													
Z2_1230	Zone 2-1_construct temporary road platform along Southbound	60	60	22-Jun-19	31-Aug-19	31-May-19	10-Aug-19						
WORK BETWEEN CITYLINE PLAZA AND FOOTBRIDGE NF40 (ZONE 3)													
PRELIMINARY WORKS													
TEMPORARY TRAFFIC ARRANGEMENT													
TTA PERIOD													
Z3_3270	Construction period of Zone 3a_1	341	341	31-May-19	23-Jul-20	17-Apr-19	20-May-20						
Z3_3340	Construction period of Zone 3c_1	340	340	31-May-19	22-Jul-20	22-May-19	30-May-20						
Z3_3400	Construction period of Zone 3b_1	300	300	30-Jul-19	03-Aug-20	30-May-19	30-May-20						
PREPARATORY WORKS													
TREE FELLING/TRANPLANT													
Z3_2900	Zone 3_tree felling works	18	1	22-Jan-19 A	31-May-19	25-Feb-19	16-Mar-19						
BRIDGE AND STRUCTURE WORKS													
PRELIMINARY WORKS													
UTILITIES DIVERSION													
NORTHBOUND													
Z3_2910	UU_CLP-abandoned 11kv cable for RW6 CH1675-1725 50m	13	13	31-May-19	15-Jun-19	03-Apr-19	18-Apr-19						

-  Remaining Level of Effort
-  Remaining Work
-  Actual Level of Effort
-  Critical Remaining Work
-  Primary Baseline
-  Milestone
-  Actual Work
-  Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/05/19)
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Date	Revision	Check...	Approved
08-Jun-19	3MRP DWP 1905	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	APE Start	APE Finish	2019						
								May 11	Jun 12	Jul 13	Aug 14	Sep 15		
Z3_2920	UU_HKT-diversion cable for RW7 CH1830-2000 170m	34	34	18-Jun-19	27-Jul-19	16-Apr-19	31-May-19							
Z3_2930	UU_CLP-abandoned 11kv cable for RW7 & SR4 CH1825-1950 125m	22	22	03-Jul-19	27-Jul-19	04-May-19	31-May-19							
Z3_3130	UU_Fresh watermain for SR4 178m 200mm	23	23	03-Jul-19	30-Jul-19	03-May-19	31-May-19							
SOUTHBOUND														
Z3_2970	UU_HKT-new cable for RW1 & SR3 CH1450-2300 850m	127	127	31-May-19	31-Oct-19	01-Apr-19	04-Sep-19							
Z3_3050	UU_CLP-abandoned 11kv cable for SR2 & N263 CH1710-1950 240m	35	35	20-Jun-19	31-Jul-19	24-Apr-19	05-Jun-19							
Z3_3060	UU_GAS-diversion LP pipe for SR2 & N263 CH1640-1850 210m	51	51	31-May-19	31-Jul-19	01-Apr-19	05-Jun-19							
Z3_3070	UU_HKT-diversion cable for SR2 & N263 CH1630-1840 210m	39	39	15-Jun-19	31-Jul-19	16-Apr-19	05-Jun-19							
Z3_3110	UU_GAS-diversion LP pipe for N263 CH1825-1960 135m	38	38	17-Jun-19	31-Jul-19	17-Apr-19	05-Jun-19							
Z3_3120	UU_Fresh watermain for Staircase & N263 150PE	23	23	23-Aug-19	19-Sep-19	29-Jun-19	26-Jul-19							
WIDENING FOR NORTH HOLLOW ABUTMENT (N264)														
Z3_4200	C01_ELS & footing construction	45	45	03-Jun-19	26-Jul-19	05-Apr-19	04-Jun-19							
Z3_4210	C01_column construction	40	40	27-Jul-19	11-Sep-19	04-Jun-19	23-Jul-19							
Z3_4220	N264_modification existing MTRC fencing for deck widening	60	60	03-Jun-19	13-Aug-19	05-Apr-19	22-Jun-19							
Z3_4240	N264_temporary protection MTRC cable	45	45	27-Jul-19	18-Sep-19	04-Jun-19	29-Jul-19							
MODIFICATION OF BRIDGE N263														
RECONSTRUCTION ABUTMENT WALL AT NHA														
Z3_4100	Demolish part of existing NHA wall for construction new wall	60	60	31-May-19*	10-Aug-19	17-Apr-19	03-Jul-19							
Z3_4110	NAW-1_construct ELS & piling platform	42	42	31-May-19*	20-Jul-19	17-Apr-19	11-Jun-19							
Z3_4120	NAW-1_piling works for new NHA wall 5nr 1.5m bored pile	70	70	30-Jul-19	23-Oct-19	12-Jun-19	02-Sep-19							
Z3_4150	NAW-2_construct ELS & piling platform	42	42	31-May-19	20-Jul-19	17-Apr-19	11-Jun-19							
Z3_4160	NAW-2_piling works for new NHA wall 4nr 1.5m bored pile	56	56	30-Jul-19	05-Oct-19	12-Jun-19	16-Aug-19							
MODIFICATION EXISTING PIER WALL OF N263														
Z3_3870	SAW-1_piling works for new NHA wall 3nr 1.5m bored pile	42	42	01-Aug-19	19-Sep-19	06-Jun-19	26-Jul-19							
MODIFICATION EXISTING SOUTH HOLLOW ABUTMENT WALL														
Z3_3950	SHA_piling works for pier SHA 6 nos. Socket H-pile	48	48	30-Jul-19	25-Sep-19	30-May-19	27-Jul-19							
RETAINING WALL & SUBWAY														
RETAINING WALL NO.1														
Z3_4550	RW1_demolish existing retaining structure between Bay 101 and Bay 104	45	45	31-May-19	24-Jul-19	22-May-19	16-Jul-19							
Z3_4600	RW1_demolish existing retaining structure between Bay 105 and Bay 107	45	45	25-Jul-19	16-Sep-19	16-Jul-19	06-Sep-19							

Remaining Level of Effort Remaining Work
 Actual Level of Effort Critical Remaining Work
 Primary Baseline Milestone
 Actual Work Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/05/19)
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Date	Revision	Check...	Approved
08-Jun-19	3MRP DWP 1905	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	APE Start	APE Finish	2019					
								May 11	Jun 12	Jul 13	Aug 14	Sep 15	
RETAINING WALL NO.6													
Z3_1218_1000	RW6_ELS works for Bay 601 to Bay 608 (62m_2 side)	35	35	05-Jul-19	22-Aug-19	27-May-19	12-Jul-19						
Z3_1218_1010	RW6_base slab construction for Bay 601 to Bay 608	64	64	31-Jul-19	28-Oct-19	20-Jun-19	17-Sep-19						
Z3_1218_1020	RW6_retaining wall construction for Bay 601 to Bay 608	96	96	22-Aug-19	02-Jan-20	12-Jul-19	22-Nov-19						
Z3_1218_1040	RW6_soldier pile wall for Bay 609 to Bay 614 (53nr)	30	30	17-Jun-19	26-Jul-19	19-Apr-19	31-May-19						
RETAINING WALL NO.7													
Z3_1218_2040	RW7_soldier pile wall for Bay 701 to Bay 705 (62nr)	35	35	29-Jul-19	19-Sep-19	31-May-19	19-Jul-19						
Z3_1218_2050	RW7_base slab construction for Bay 701 & Bay 704	32	32	19-Aug-19	01-Oct-19	21-Jun-19	06-Aug-19						
MODIFY EXISTING RETAINING WALL SR4													
Z3_5070	SR4_ELS works for Bay SR401 to Bay SR405 (90m_1 side)	25	25	30-Jul-19	28-Aug-19	31-May-19	02-Jul-19						
Z3_5080	SR4_base slab construction for Bay SR401 to Bay SR405	40	40	30-Jul-19	16-Sep-19	31-May-19	19-Jul-19						
Z3_5090	SR4_retaining wall construction for Bay SR401 to SR405	60	60	22-Aug-19	04-Nov-19	25-Jun-19	04-Sep-19						
Z3_5110	SR4_ELS works for Bay SR406 to Bay SR409 (80m_1 side)	22	22	28-Aug-19	24-Sep-19	02-Jul-19	27-Jul-19						
MODIFY EXISTING SUBWAY NS30													
Z3_5200	Re-align existing subway NS30	120	120	31-May-19	23-Oct-19	22-May-19	15-Oct-19						
WORK BETWEEN FOOTBRIDGE NF40 AND NF66 (ZONE 4)													
PRELIMINARY WORKS													
TEMPORARY TRAFFIC ARRANGEMENT													
TTA PERIOD													
Z4_1390	Construction Zone 4_Stage 1 Northbound structure	207	207	20-Jul-19	27-Mar-20	07-May-19	14-Jan-20						
Z4_1470	Construction Zone 4_NF66 Construction	220	220	18-Jun-19	12-Mar-20	18-Apr-19	15-Jan-20						
Z4_1480	Construction Zone 4_NF40 Construction	489	489	31-May-19	19-Jan-21	01-Apr-19	23-Nov-20						
PREPARATORY WORKS													
TREE FELLING/TRANPLANT													
Z4_1320	Zone 4_NB tree felling works	18	18	25-Jan-19A	20-Jun-19	31-Jan-19	23-Feb-19						
UTILITIES DIVERSION													
NORTHBOUND													
Z4_1270	UU_CLP-abandoned 33kv cable for N4 CH2100-2350 250m (Abandoned)	0	0	20-Jul-19	20-Jul-19	07-May-19	07-May-19						
Z4_1280	UU_CATV-slew cable for N4 CH2190-2400 210m	25	25	20-Jun-19	20-Jul-19	02-Apr-19	06-May-19						
Z4_1290	UU_CLP-abandoned 33kv cable for N4&SE6 CH2150-2160 20m (Abandoned)	0	0	20-Jul-19	20-Jul-19	07-May-19	07-May-19						

- Remaining Level of Effort
- Actual Level of Effort
- Primary Baseline
- Actual Work
- Remaining Work
- Critical Remaining Work
- Milestone
- Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
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Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	APE Start	APE Finish	2019							
								May 11	Jun 12	Jul 13	Aug 14	Sep 15			
Z4_1300	UU_HKT-slew cable for N4 & NF66 CH2320-2360 40m	5	5	20-Jun-19	26-Jun-19	02-Apr-19	08-Apr-19								
Z4_1360	UU_Fresh watermain for N4 CH2150-2200 77m 600mm	40	40	20-Jul-19	05-Sep-19	07-May-19	24-Jun-19								
NOISE BARRIER AND SEMI-ENCLOSURE															
PILE CAP AND FOOTING															
NORTHBOUND															
Z4_1000	N4_ELS for footing construction N4-12 to N4-29 (231m_2 side)	64	64	20-Jul-19	05-Oct-19	07-May-19	23-Jul-19								
Z4_1010	N4_footing construction N4-12 to N4-29 (18m)	126	126	17-Aug-19	18-Jan-20	05-Jun-19	04-Nov-19								
BRIDGE AND STRUCTURE WORKS															
MODIFICATION WORKS FOR NF66															
NF40_1000	Construct temporary staircase	60	60	31-May-19	10-Aug-19	01-Apr-19	17-Jun-19								
NF40_1010	Demolish existing staircase & part of existing footing	45	45	12-Aug-19	04-Oct-19	18-Jun-19	09-Aug-19								
MODIFICATION WORKS FOR NF66															
NF66_1000	ELS & 1st stage pile cap construction (CSD)	50	50	18-Jun-19	16-Aug-19	18-Apr-19	22-Jun-19								
NF66_1010	Pile cap construction (CSD)	35	35	16-Aug-19	27-Sep-19	22-Jun-19	03-Aug-19								
WORK BETWEEN FOOTBRIDGE NF66 AND FO TAN ROAD (ZONE 5)															
PRELIMINARY WORKS															
PREPARATORY WORKS															
TREE FELLING/TRANPLANT															
Z5_1710	Zone 5_tree felling works	18	7	22-Jan-19 A	02-Jan-20	21-Sep-19	15-Oct-19								
PORTION E (ZONE 5)															
PRELIMINARY WORKS															
PREPARATORY WORKS															
TREE FELLING/TRANPLANT															
Z5E_1140	Portion E_tree felling works	30	13	22-Jan-19 A	07-Aug-20	15-Apr-20	22-May-20								

	Remaining Level of Effort		Remaining Work
	Actual Level of Effort		Critical Remaining Work
	Primary Baseline		Milestone
	Actual Work		Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/05/19)
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Date	Revision	Check...	Approved
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Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019				
								Jun 12	Jul 13	Aug 14	Sep 15	Oct 16
Contract NE/2017/05 Road Widening and Retrofitting Noise Barriers on Tai Po Roa												
PRELIMINARIES & GENERAL REQUIREMENT												
GENERAL SUBMISSION												
SUB1115	Survey of the Site	0	0	30-Jun-19*		31-Mar-19						
SUB1153	BIM Team	0	0	30-Jun-19*		31-Mar-19						
SUB1155	BIM Execution Plan	0	0	30-Jun-19*		31-Mar-19						
SUB1200	Hoarding Plan	0	0	30-Jun-19*		31-Mar-19						
SUB1343	TCSS Configuration Management	0	0	30-Jun-19*		31-Mar-19						
SUB1347	Lift Installation - Design Data	0	0	30-Jun-19*		31-Mar-19						
SUB1403	ITP's for Lighting Luminaires and System	0	0	30-Jun-19*		31-Mar-19						
SUB1405	All Lighting Designs	0	0	30-Jun-19*		31-Mar-19						
SUB1410	Combined Services Drawings (CSD)	0	0	30-Jun-19*		31-Mar-19						
DESIGN SUBMISSION												
STRCR INTERCHANGE MODIFICATION WORKS (Alternative Design)												
DES1070	PM Consent for Construction	28	2	06-Nov-18 A	01-Jul-19	20-Feb-19	19-Mar-19					
DES1090	PM review & comment	28	2	07-Dec-18 A	01-Jul-19	05-Oct-18	01-Nov-18					
DES1110	PM Consent for Construction	28	28	02-Jul-19	30-Jul-19	29-Apr-19	26-May-19					
DES1140	Re-submit Alternative Design of Bridges SR2 & SR5, Slab Widening of SHA & Widening of Bridge N262	28	2	19-Feb-19 A	01-Jul-19	12-Apr-19	09-May-19					
DES1150	PM Consent for Construction	28	28	01-Jul-19	29-Jul-19	22-Apr-19	20-May-19					
NOISE MITIGATION MEASURES												
DES1180	Re-submit Foundation Design of Noise Mitigation Measures in Zones 1 & 2 w/Design Certificate	22	2	24-Nov-18 A	02-Jul-19	29-Jan-19	19-Feb-19					
DES1190	PM Consent for Construction	28	28	02-Jul-19	30-Jul-19	04-Apr-19	02-May-19					
DES1230	PM Consent for Construction	28	10	02-Jan-19 A	09-Jul-19	31-Jan-19	27-Feb-19					
DES1240	Prepare & submit Foundation Design of Mitigation Measures in Zone 3 w/Design Certificate	21	2	26-Nov-18 A	02-Jul-19	31-Dec-18	20-Jan-19					
DES1250	PM review & comment	28	28	02-Jul-19	30-Jul-19	05-Apr-19	02-May-19					
DES1260	Re-submit Foundation Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	23	23	31-Jul-19	23-Aug-19	04-May-19	26-May-19					

	Remaining Level of Effort		Remaining Work
	Actual Level of Effort		Critical Remaining Work
	Primary Baseline		Milestone
	Actual Work		Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

3 Months Rolling Programme (30/06/19)

Date	Revision	Check...	Approved
08-Jul-19	3MRP DWP 1906	Tim	


Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019									
								Jun 12	Jul 13	Aug 14	Sep 15	Oct 16					
DES1270	PM Consent for Construction	28	28	23-Aug-19	20-Sep-19	27-May-19	23-Jun-19										PM Consent for Co
DES1280	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zones 1 & 2 w/Design	21	1	14-Jan-19 A	03-Jul-19	05-Feb-19	25-Feb-19										Prepare & submit Superstructure Design of Noise Mitigation Measures in Zones 1 & 2 w/Design Certific
DES1290	PM review & comment	28	28	03-Jul-19	31-Jul-19	08-Apr-19	05-May-19										PM review & comment
DES1300	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 1 & 2 w/Design	20	20	01-Aug-19	21-Aug-19	07-May-19	26-May-19										Re-submit Superstructure Design of Noise Mitigati
DES1310	PM Consent for Construction	28	28	21-Aug-19	18-Sep-19	27-May-19	23-Jun-19										PM Consent for Con
DES1320	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	21	16	20-Mar-19 A	19-Jul-19	08-Apr-19	28-Apr-19										Prepare & submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/De
DES1330	PM review & comment	28	28	19-Jul-19	16-Aug-19	26-Apr-19	24-May-19										PM review & comment
DES1340	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	21	21	17-Aug-19	07-Sep-19	25-May-19	15-Jun-19										Re-submit Superstructure Desig
DES1350	PM Consent for Construction	28	28	07-Sep-19	05-Oct-19	15-Jun-19	13-Jul-19										PM
DES1360	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zones 4 & 5 w/Design	21	16	20-Mar-19 A	04-Aug-19	26-Apr-19	17-May-19										Prepare & submit Superstructure Design of Noise Mitigation Measure
DES1370	PM review & comment	28	28	04-Aug-19	01-Sep-19	15-May-19	12-Jun-19										PM review & comment
DES1380	Re-submit Superstructure Design of Noise Mitigation Measures in Zones 4 & 5 w/Design	20	20	02-Sep-19	22-Sep-19	13-Jun-19	03-Jul-19										Re-submit Supe
DES1390	PM Consent for Construction	28	28	22-Sep-19	20-Oct-19	03-Jul-19	31-Jul-19										
REMAINING WORKS																	
DES1430	PM Consent for Construction	28	11	11-Jan-19 A	11-Jul-19	04-Mar-19	31-Mar-19										PM Consent for Construction
DES1460	Re-submit Foundation Design of Footbridge NF40 & NF66 w/Design Certificate	35	30	13-Apr-19 A	29-Jul-19	06-Apr-19	10-May-19										Re-submit Foundation Design of Footbridge NF40 & NF66 w/Design Certific
DES1470	PM Consent for Construction	28	28	29-Jul-19	26-Aug-19	11-May-19	07-Jun-19										PM Consent for Construction
DES1480	Prepare & submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign	21	5	26-Nov-18 A	04-Jul-19	31-Dec-18	20-Jan-19										Prepare & submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign
DES1490	PM review & comment	28	28	05-Jul-19	01-Aug-19	05-Apr-19	02-May-19										PM review & comment
DES1500	Re-submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign Gantry	35	35	03-Aug-19	06-Sep-19	04-May-19	07-Jun-19										Re-submit Foundation Design of
DES1510	PM Consent for Construction	28	28	07-Sep-19	04-Oct-19	08-Jun-19	05-Jul-19										PM
DES1530	PM review & comment	28	1	02-Jan-19 A	30-Jun-19	31-Jan-19	27-Feb-19										PM review & comment
DES1540	Re-submit Design of Watermain & Irrigation System w/Design Certificate	32	1	02-Jan-19 A	30-Jun-19	02-Apr-19	03-May-19										Re-submit Design of Watermain & Irrigation System w/Design Certificate
DES1550	PM Consent for Construction	28	28	21-Jan-19 A	28-Jul-19	04-May-19	31-May-19										PM Consent for Construction
DES1560	Prepare & submit Design of E&M System (E&M & Road Lighting) w/Design Certificate	35	35	30-Jun-19	03-Aug-19	31-Mar-19	04-May-19										Prepare & submit Design of E&M System (E&M & Road Lighting) w/De
DES1570	PM review & comment	28	28	04-Aug-19	31-Aug-19	05-May-19	01-Jun-19										PM review & comment
DES1580	Re-submit Design of E&M System (E&M & Road Lighting) w/Design Certificate	32	32	02-Sep-19	03-Oct-19	03-Jun-19	04-Jul-19										Re-
SUBLETTING & PROCUREMENT SCHEDULE																	
SUBLETTING																	
SPS1000	Maintenance of Traffic Flow	30	30	30-Jun-19	29-Jul-19	31-Mar-19	29-Apr-19										Maintenance of Traffic Flow

Remaining Level of Effort	Remaining Work
Actual Level of Effort	Critical Remaining Work
Primary Baseline	Milestone
Actual Work	Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI
PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (30/06/19)
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Date	Revision	Check...	Approved
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Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019				
								Jun 12	Jul 13	Aug 14	Sep 15	Oct 16
SPS1010	Electronic Document Management System (EDMS) for the use of the Project Manager	30	0	18-Oct-18 A	30-Jun-19*	31-Dec-18	29-Jan-19	Electronic Document Management System (EDMS) for the use of the Project Manager				
SPS1030	Hoarding and Signboard	30	30	30-Jun-19	29-Jul-19	31-Mar-19	29-Apr-19	Hoarding and Signboard				
SPS1040	Survey of the Site	30	30	30-Jun-19	29-Jul-19	31-Mar-19	29-Apr-19	Survey of the Site				
SPS1060	Security System of the Site	30	30	30-Jun-19	29-Jul-19	31-Mar-19	29-Apr-19	Security System of the Site				
SPS1090	Building Information Model (BIM)	30	0	12-Mar-19 A	14-Jun-19 A	31-Mar-19	29-Apr-19	Building Information Model (BIM)				
SPS1140	Site Clearance and Demolition Work	30	30	01-Jul-19	30-Jul-19	07-Apr-19	06-May-19	Site Clearance and Demolition Work				
SPS1160	Monitoring and Instrumentation	30	30	01-Jul-19	30-Jul-19	07-Apr-19	06-May-19	Monitoring and Instrumentation				
SPS1170	Piling Works and Pile Testing	30	1	21-Dec-18 A	30-Jun-19	28-Feb-19	29-Mar-19	Piling Works and Pile Testing				
SPS1200	Waterwork (Pipework)	30	30	30-Jun-19	29-Jul-19	31-Mar-19	29-Apr-19	Waterwork (Pipework)				
SPS1210	Drainage (PC pipe, manhole & gully) and Duct	30	30	29-Aug-19	27-Sep-19	31-May-19	29-Jun-19	Drainage (PC pipe, manhole & gully) and Duct				
SPS1220	CCTV for Drainage Pipe	30	30	30-Jun-19	29-Jul-19	01-Apr-19	30-Apr-19	CCTV for Drainage Pipe				
SPS1240	Reinforced Concrete Work for Retaining Walls	30	30	30-Jun-19	29-Jul-19	31-Mar-19	29-Apr-19	Reinforced Concrete Work for Retaining Walls				
SPS1250	Reinforced Concrete Work for Noise Mitigation Measures	30	30	30-Jun-19	29-Jul-19	31-Mar-19	29-Apr-19	Reinforced Concrete Work for Noise Mitigation Measures				
SPS1260	Reinforced Concrete Work for Bridge Work	30	30	30-Jul-19	29-Aug-19	28-Apr-19	28-May-19	Reinforced Concrete Work for Bridge Work				
SPS1280	Reinforced Concrete Work for Footbridge NF40 & NF66	30	30	17-Aug-19	16-Sep-19	23-May-19	22-Jun-19	Reinforced Concrete Work for Footbridge NF40 & NF66				
SPS1290	Steelwork for NB and Lift Tower	30	30	24-Jul-19	22-Aug-19	24-Apr-19	23-May-19	Steelwork for NB and Lift Tower				
SPS1310	Bearing and Movement Joint	30	30	31-Jul-19	29-Aug-19	01-May-19	31-May-19	Bearing and Movement Joint				
SPS1320	Tendon Works	30	30	31-Jul-19	29-Aug-19	01-May-19	31-May-19	Tendon Works				
SPS1410	Pedestrian Lift (Lift Cars, E&M, Panel, Louvre & Signature)	30	30	06-Aug-19	04-Sep-19	02-May-19	31-May-19	Pedestrian Lift (Lift Cars, E&M, Panel, Louvre & Signature)				
SPS1420	Lighting System for Noise Mitigation Measures	30	30	19-Aug-19	18-Sep-19	12-Jul-19	10-Aug-19	Lighting System for Noise Mitigation Measures				
SPS1440	Drainage for Noise Mitigation Measures	30	30	19-Aug-19	18-Sep-19	12-Jul-19	10-Aug-19	Drainage for Noise Mitigation Measures				
SPS1460	Waterproofing (Bitumen Paint)	30	30	30-Jun-19	29-Jul-19	06-Apr-19	05-May-19	Waterproofing (Bitumen Paint)				
WORK BETWEEN SHING MUN TUNNELS ROAD AND FOOT BRIDGE NF71 A (ZON)												
PRELIMINARIES WORKS												
TEMPORARY TRAFFIC ARRANGEMENT												
TTA PERIOD												
Z1_1410	Construction Zone 1_Stage 1 Northbound R1 structure	300	300	27-Jul-19	31-Jul-20	19-Jun-19	20-Jun-20	Construction Zone 1_Stage 1 Northbound R1 structure				
Z1_1430	Construction Zone 1_Stage 1 Central Barrier structure	303	303	19-Sep-19	25-Sep-20	12-Aug-19	18-Aug-20	Construction Zone 1_Stage 1 Central Barrier structure				
PREPARATORY WORKS												
TREE FELLING/TRANPLANT												

-  Remaining Level of Effort
-  Remaining Work
-  Actual Level of Effort
-  Critical Remaining Work
-  Primary Baseline
-  Milestone
-  Actual Work
-  Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

3 Months Rolling Programme (30/06/19)

Date	Revision	Check...	Approved
08-Jul-19	3MRP DWP 1906	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019						
								Jun 12	Jul 13	Aug 14	Sep 15	Oct 16		
Z1_1290	Zone 1_tree felling works	18	10	25-Jan-19 A	12-Jul-19	11-Mar-19	01-Apr-19							
MODIFICATION EXISTING ROAD/TEMPORARY ROAD														
Z1_1270	Zone 1-1_construct temporary road platform along Northbound for R1	60	60	27-Jul-19	09-Oct-19	19-Jun-19	28-Aug-19							
UTILITIES DIVERSION														
CENTRAL BARRIER														
Z1_1300	UU_CLP_abandoned 33kv cable for RSE1 CH1190-1300 110m	20	20	09-Sep-19	04-Oct-19	02-Aug-19	24-Aug-19							UU
NOISE BARRIER AND SEMI-ENCLOSURE														
PILE FOUNDATION WORKS														
CENTRAL BARRIER														
Z1_1490	RSE1_site investigation for RSE1-01P to 03P (6nr)	15	15	19-Sep-19	09-Oct-19	12-Aug-19	28-Aug-19							
WORK BETWEEN FOOT BRIDGE NF71A AND CITYLINE PLAZA (ZONE 2)														
PRELIMINARIES WORKS														
TEMPORARY TRAFFIC ARRANGEMENT														
TTA PERIOD														
Z2_1260	Construction Zone 2_Stage 1 Central Barrier structure	518	518	10-Jul-19	08-Apr-21	31-May-19	25-Feb-21							
PREPARATORY WORKS														
TREE FELLING/TRANPLANT														
Z2_1220	Zone 2_tree felling works	18	7	19-Feb-19 A	10-Jul-19	24-Jan-20	17-Feb-20							
MODIFICATION EXISTING ROAD/TEMPORARY ROAD														
Z2_1230	Zone 2-1_construct temporary road platform along Southbound	60	60	10-Jul-19	19-Sep-19	31-May-19	10-Aug-19							Zone 2-1_construct
NOISE BARRIER AND SEMI-ENCLOSURE														
PILE FOUNDATION WORKS														
CENTRAL BARRIER														
Z2_1000	RSE2_site investigation for RSE2-13P & 15P (30nr)	50	50	19-Sep-19	19-Nov-19	12-Aug-19	11-Oct-19							
WORK BETWEEN CITYLINE PLAZA AND FOOTBRIDGE NF40 (ZONE 3)														
PRELIMINARIES WORKS														
TEMPORARY TRAFFIC ARRANGEMENT														
TTA PERIOD														
Z3_3270	Construction period of Zone 3a_1	337	337	02-Jul-19	17-Aug-20	17-Apr-19	20-May-20							
Z3_3340	Construction period of Zone 3c_1	340	340	02-Jul-19	20-Aug-20	22-May-19	30-May-20							

	Remaining Level of Effort		Remaining Work
	Actual Level of Effort		Critical Remaining Work
	Primary Baseline		Milestone
	Actual Work		Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (30/06/19)
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Date	Revision	Check...	Approved
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Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019												
								Jun 12	Jul 13	Aug 14	Sep 15	Oct 16								
Z3_3400	Construction period of Zone 3b_1	296	296	29-Aug-19	28-Aug-20	30-May-19	30-May-20													
PREPARATORY WORKS																				
TREE FELLING/TRANPLANT																				
Z3_2800	Zone 3_tree felling works	18	1	22-Jan-19 A	02-Jul-19	25-Feb-19	16-Mar-19													
BRIDGE AND STRUCTURE WORKS																				
PRELIMINARIES WORKS																				
UTILITIES DIVERSION																				
NORTHBOUND																				
Z3_2910	UU_CLP-abandoned 11kv cable for RW6 CH1675-1725 50m	13	13	02-Jul-19	16-Jul-19	03-Apr-19	18-Apr-19													
Z3_2920	UU_HKT-diversion cable for RW7 CH1830-2000 170m	34	34	19-Jul-19	27-Aug-19	16-Apr-19	31-May-19													
Z3_2930	UU_CLP-abandoned 11kv cable for RW7 & SR4 CH1825-1950 125m	22	22	02-Aug-19	27-Aug-19	04-May-19	31-May-19													
Z3_3130	UU_Fresh watermain for SR4 178m 200mm	23	23	02-Aug-19	29-Aug-19	03-May-19	31-May-19													
SOUTHBOUND																				
Z3_2970	UU_HKT-new cable for RW1 & SR3 CH1450-2300 850m	127	127	02-Jul-19	29-Nov-19	01-Apr-19	04-Sep-19													
Z3_3050	UU_CLP-abandoned 11kv cable for SR2 & N263 CH1710-1950 240m	35	35	20-Jul-19	29-Aug-19	24-Apr-19	05-Jun-19													
Z3_3060	UU_GAS-diversion LP pipe for SR2 & N263 CH1640-1850 210m	51	51	02-Jul-19	29-Aug-19	01-Apr-19	05-Jun-19													
Z3_3070	UU_HKT-diversion cable for SR2 & N263 CH1630-1840 210m	39	39	16-Jul-19	29-Aug-19	16-Apr-19	05-Jun-19													
Z3_3110	UU_GAS-diversion LP pipe for N263 CH1825-1960 135m	38	38	17-Jul-19	29-Aug-19	17-Apr-19	05-Jun-19													
Z3_3120	UU_Fresh watermain for Staircase & N263 150PE	23	23	23-Sep-19	21-Oct-19	29-Jun-19	26-Jul-19													
WIDENING FOR NORTH HOLLOW ABUTMENT (N264)																				
Z3_4200	C01_ELS & footing construction	45	45	02-Jul-19	22-Aug-19	05-Apr-19	04-Jun-19													
Z3_4210	C01_column construction	40	40	23-Aug-19	11-Oct-19	04-Jun-19	23-Jul-19													
Z3_4220	N264_modification existing MTRC fencing for deck widening	60	60	02-Jul-19	09-Sep-19	05-Apr-19	22-Jun-19													
Z3_4240	N264_temporary protection MTRC cable	45	45	23-Aug-19	17-Oct-19	04-Jun-19	29-Jul-19													
MODIFICATION OF BRIDGE N263																				
RECONSTRUCTION ABUTMENT WALL AT NHA																				
Z3_4100	Demolish part of existing NHA wall for construction new wall	60	60	02-Jul-19*	09-Sep-19	17-Apr-19	03-Jul-19													
Z3_4110	NAW-1_construct ELS & piling platform	42	42	02-Jul-19*	19-Aug-19	17-Apr-19	11-Jun-19													
Z3_4120	NAW-1_piling works for new NHA wall 5nr 1.5m bored pile	70	70	29-Aug-19	22-Nov-19	12-Jun-19	02-Sep-19													
Z3_4150	NAW-2_construct ELS & piling platform	42	42	02-Jul-19	19-Aug-19	17-Apr-19	11-Jun-19													


	Remaining Level of Effort		Remaining Work
	Actual Level of Effort		Critical Remaining Work
	Primary Baseline		Milestone
	Actual Work		Baseline Milestone

**ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI
PO ROAD (SHA TIN SECTION)**

3 Months Rolling Programme (30/06/19)

Date	Revision	Check...	Approved
08-Jul-19	3MRP DWP 1906	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019						
								Jun 12	Jul 13	Aug 14	Sep 15	Oct 16		
Z3_4160	NAW-2_piling works for new NHA wall 4nr 1.5m bored pile	56	56	29-Aug-19	06-Nov-19	12-Jun-19	16-Aug-19							
MODIFICATION EXISTING PIER WALL OF N263														
Z3_3870	SAW-1_piling works for new NHA wall 3nr 1.5m bored pile	42	42	30-Aug-19	21-Oct-19	06-Jun-19	26-Jul-19							
MODIFICATION EXISTING SOUTH HOLLOW ABUTMENT WALL														
Z3_3950	SHA_piling works for pier SHA 6 nos. Socket H-pile	48	48	29-Aug-19	28-Oct-19	30-May-19	27-Jul-19							
RETAINING WALL & SUBWAY														
RETAINING WALL NO.1														
Z3_4550	RW1_demolish existing retaining structure between Bay 101 and Bay 104	45	45	02-Jul-19	22-Aug-19	22-May-19	16-Jul-19							
Z3_4600	RW1_demolish existing retaining structure between Bay 105 and Bay 107	45	45	23-Aug-19	17-Oct-19	16-Jul-19	06-Sep-19							
RETAINING WALL NO.6														
Z3_1218_1000	RW6_ELS works for Bay 601 to Bay 608 (62m_2 side)	35	35	05-Aug-19	20-Sep-19	27-May-19	12-Jul-19							
Z3_1218_1010	RW6_base slab construction for Bay 601 to Bay 608	64	64	29-Aug-19	26-Nov-19	20-Jun-19	17-Sep-19							
Z3_1218_1020	RW6_retaining wall construction for Bay 601 to Bay 608	96	96	20-Sep-19	31-Jan-20	12-Jul-19	22-Nov-19							
Z3_1218_1040	RW6_soldier pile wall for Bay 609 to Bay 614 (53nr)	30	30	17-Jul-19	27-Aug-19	19-Apr-19	31-May-19							
RETAINING WALL NO.7														
Z3_1218_2040	RW7_soldier pile wall for Bay 701 to Bay 705 (62nr)	35	35	28-Aug-19	15-Oct-19	31-May-19	19-Jul-19							
Z3_1218_2050	RW7_base slab construction for Bay 701 & Bay 704	32	32	18-Sep-19	31-Oct-19	21-Jun-19	06-Aug-19							
MODIFY EXISTING RETAINING WALL SR4														
Z3_5070	SR4_ELS works for Bay SR401 to Bay SR405 (90m_1 side)	25	25	29-Aug-19	28-Sep-19	31-May-19	02-Jul-19							
Z3_5080	SR4_base slab construction for Bay SR401 to Bay SR405	40	40	29-Aug-19	18-Oct-19	31-May-19	19-Jul-19							
Z3_5090	SR4_retaining wall construction for Bay SR401 to SR405	60	60	23-Sep-19	04-Dec-19	25-Jun-19	04-Sep-19							
MODIFY EXISTING SUBWAY NS30														
Z3_5200	Re-align existing subway NS30	120	120	02-Jul-19	21-Nov-19	22-May-19	15-Oct-19							
WORK BETWEEN FOOTBRIDGE NF40 AND NF66 (ZONE 4)														
PRELIMINARIES WORKS														
TEMPORARY TRAFFIC ARRANGEMENT														
TTA PERIOD														
Z4_1390	Construction Zone 4_Stage 1 Northbound structure	207	207	31-Jul-19	08-Apr-20	07-May-19	14-Jan-20							
Z4_1470	Construction Zone 4_NF66 Construction	220	220	18-Jul-19	15-Apr-20	18-Apr-19	15-Jan-20							
Z4_1480	Construction Zone 4_NF40 Construction	489	489	02-Jul-19	20-Feb-21	01-Apr-19	23-Nov-20							

	Remaining Level of Effort		Remaining Work
	Actual Level of Effort		Critical Remaining Work
	Primary Baseline		Milestone
	Actual Work		Baseline Milestone

**ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI
PO ROAD (SHA TIN SECTION)**

3 Months Rolling Programme (30/06/19)

Date	Revision	Check...	Approved
08-Jul-19	3MRP DWP 1906	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019				
								Jun 12	Jul 13	Aug 14	Sep 15	Oct 16
PREPARATORY WORKS												
TREE FELLING/TRANPLANT												
Z4_1320	Zone 4_NB tree felling works	18	0	25-Jan-19 A	29-Jun-19 A	31-Jan-19	23-Feb-19	Zone 4_NB tree felling works				
UTILITIES DIVERSION												
NORTHBOUND												
Z4_1270	UU_CLP-abandoned 33kv cable for N4 CH2100-2350 250m (Abandoned)	0	0	31-Jul-19	31-Jul-19	07-May-19	07-May-19	UU_CLP-abandoned 33kv cable for N4 CH2100-2350 250m (Abandoned)				
Z4_1280	UU_CATV-slew cable for N4 CH2190-2400 210m	25	25	02-Jul-19	30-Jul-19	02-Apr-19	06-May-19	UU_CATV-slew cable for N4 CH2190-2400 210m				
Z4_1290	UU_CLP-abandoned 33kv cable for N4&SE6 CH2150-2160 20m (Abandoned)	0	0	31-Jul-19	31-Jul-19	07-May-19	07-May-19	UU_CLP-abandoned 33kv cable for N4&SE6 CH2150-2160 20m (Abandoned)				
Z4_1300	UU_HKT-slew cable for N4 & NF66 CH2320-2360 40m	5	5	02-Jul-19	06-Jul-19	02-Apr-19	08-Apr-19	UU_HKT-slew cable for N4 & NF66 CH2320-2360 40m				
Z4_1360	UU_Fresh watermain for N4 CH2150-2200 77m 600mm	40	40	31-Jul-19	16-Sep-19	07-May-19	24-Jun-19	UU_Fresh watermain				
NOISE BARRIER AND SEMI-ENCLOSURE												
PILE CAP AND FOOTING												
NORTHBOUND												
Z4_1000	N4_ELS for footing construction N4-12 to N4-29 (231m 2 side)	64	64	31-Jul-19	16-Oct-19	07-May-19	23-Jul-19	N4_ELS for footing construction N4-12 to N4-29 (231m 2 side)				
Z4_1010	N4_footing construction N4-12 to N4-29 (18nr)	126	126	28-Aug-19	01-Feb-20	05-Jun-19	04-Nov-19	N4_footing construction N4-12 to N4-29 (18nr)				
BRIDGE AND STRUCTURE WORKS												
MODIFICATION WORKS FOR NF40												
NF40_1000	Construct temporary staircase	60	60	02-Jul-19	09-Sep-19	01-Apr-19	17-Jun-19	Construct temporary staircase				
NF40_1010	Demolish existing staircase & part of existing footing	45	45	10-Sep-19	04-Nov-19	18-Jun-19	09-Aug-19	Demolish existing staircase & part of existing footing				
MODIFICATION WORKS FOR NF66												
NF66_1000	ELS & 1st stage pile cap construction (CSD)	50	50	18-Jul-19	16-Sep-19	18-Apr-19	22-Jun-19	ELS & 1st stage pile cap construction (CSD)				
NF66_1010	Pile cap construction (CSD)	35	35	16-Sep-19	29-Oct-19	22-Jun-19	03-Aug-19	Pile cap construction (CSD)				
WORK BETWEEN FOOTBRIDGE NF66 AND FO TAN ROAD (ZONE 5)												
PRELIMINARIES WORKS												
PREPARATORY WORKS												
TREE FELLING/TRANPLANT												
Z5_1710	Zone 5_tree felling works	18	7	22-Jan-19 A	17-Jan-20	21-Sep-19	15-Oct-19	Zone 5_tree felling works				
PORTION E (ZONE 5)												
PRELIMINARIES WORKS												
PREPARATORY WORKS												

	Remaining Level of Effort		Remaining Work
	Actual Level of Effort		Critical Remaining Work
	Primary Baseline		Milestone
	Actual Work		Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)

3 Months Rolling Programme (30/06/19)

Date	Revision	Check...	Approved
08-Jul-19	3MRP DWP 1906	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019				
								Jun 12	Jul 13	Aug 14	Sep 15	Oct 16
TREE FELLING/TRANPLANT												
Z5E_1140	Portion E_tree felling works	30	12	22-Jan-19 A	21-Aug-20	15-Apr-20	22-May-20					

 Remaining Level of Effort	 Remaining Work
 Actual Level of Effort	 Critical Remaining Work
 Primary Baseline	 Milestone
 Actual Work	 Baseline Milestone

**ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI
 PO ROAD (SHA TIN SECTION)
 3 Months Rolling Programme (30/06/19)**
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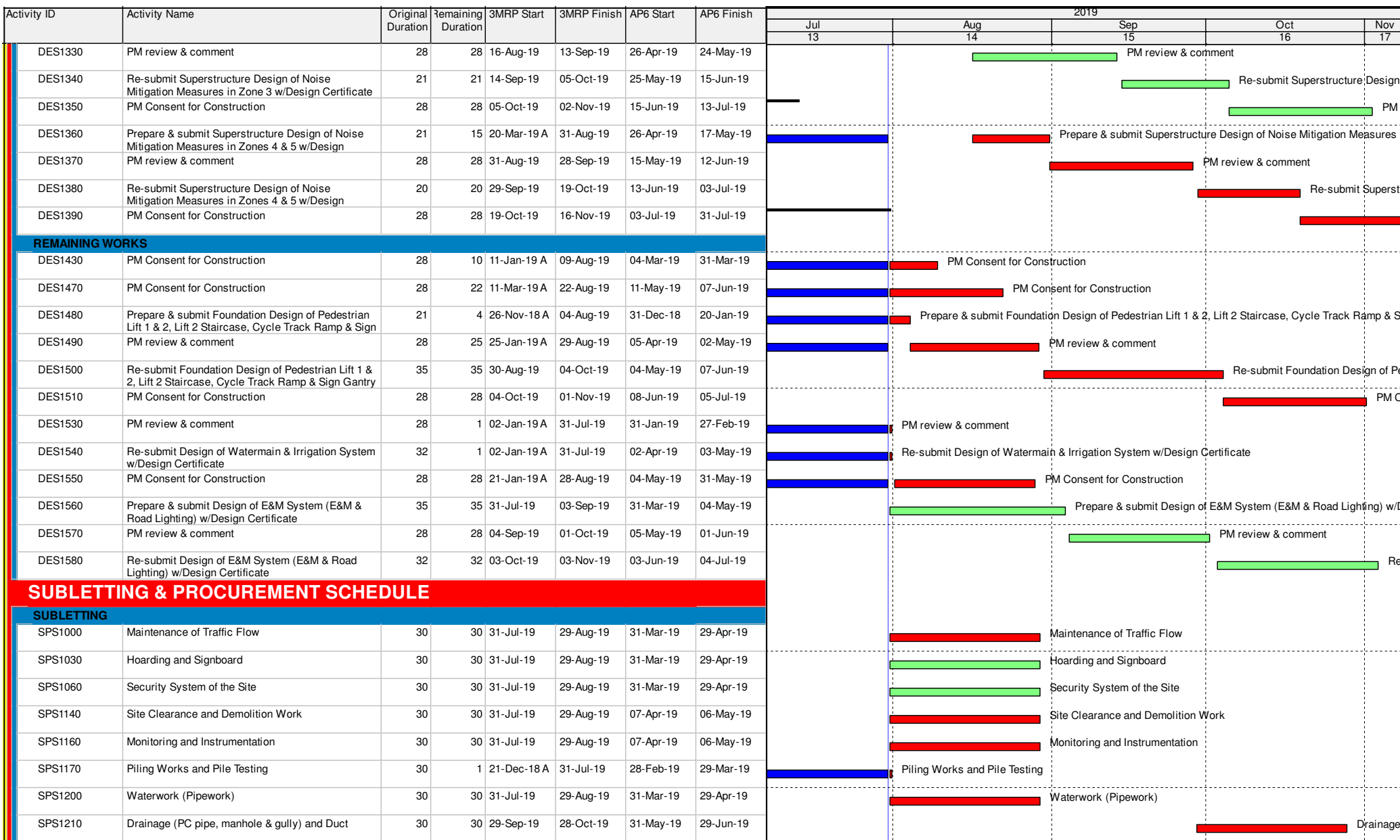
Date	Revision	Check...	Approved
08-Jul-19	3MRP DWP 1906	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019						
								Jul 13	Aug 14	Sep 15	Oct 16	Nov 17		
Contract NE/2017/05 Road Widening and Retrofitting Noise Barriers on Tai Po Roa														
PRELIMINARIES & GENERAL REQUIREMENT														
GENERAL SUBMISSION														
SUB1155	BIM Execution Plan	0	0	31-Jul-19*		31-Mar-19		◆	BIM Execution Plan					
SUB1200	Hoarding Plan	0	0	31-Jul-19*		31-Mar-19		◆	Hoarding Plan					
SUB1343	TCSS Configuration Management	0	0	31-Jul-19*		31-Mar-19		◆	TCSS Configuration Management					
SUB1347	Lift Installation - Design Data	0	0	31-Jul-19*		31-Mar-19		◆	Lift Installation - Design Data					
SUB1403	ITP's for Lighting Luminaires and System	0	0	31-Jul-19*		31-Mar-19		◆	ITP's for Lighting Luminaires and System					
SUB1405	All Lighting Designs	0	0	31-Jul-19*		31-Mar-19		◆	All Lighting Designs					
SUB1410	Combined Services Drawings (CSD)	0	0	31-Jul-19*		31-Mar-19		◆	Combined Services Drawings (CSD)					
DESIGN SUBMISSION														
STRCR INTERCHANGE MODIFICATION WORKS (Alternative Design)														
DES1070	PM Consent for Construction	28	1	06-Nov-18 A	01-Aug-19	20-Feb-19	19-Mar-19	■	PM Consent for Construction					
DES1110	PM Consent for Construction	28	22	03-Apr-19 A	22-Aug-19	29-Apr-19	26-May-19	■	PM Consent for Construction					
DES1150	PM Consent for Construction	28	22	03-May-19 A	22-Aug-19	22-Apr-19	20-May-19	■	PM Consent for Construction					
NOISE MITIGATION MEASURES														
DES1190	PM Consent for Construction	28	14	25-Jun-19 A	13-Aug-19	04-Apr-19	02-May-19	■	PM Consent for Construction					
DES1230	PM Consent for Construction	28	6	02-Jan-19 A	05-Aug-19	31-Jan-19	27-Feb-19	■	PM Consent for Construction					
DES1240	Prepare & submit Foundation Design of Mitigation Measures in Zone 3 w/Design Certificate	21	1	26-Nov-18 A	01-Aug-19	31-Dec-18	20-Jan-19	■	Prepare & submit Foundation Design of Mitigation Measures in Zone 3 w/Design Certificate					
DES1250	PM review & comment	28	28	01-Aug-19	29-Aug-19	05-Apr-19	02-May-19	■	PM review & comment					
DES1260	Re-submit Foundation Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	23	23	30-Aug-19	22-Sep-19	04-May-19	26-May-19	■	Re-submit Foundation Design of Noise Mitigation					
DES1270	PM Consent for Construction	28	28	22-Sep-19	20-Oct-19	27-May-19	23-Jun-19	■	PM Consent for Construction					
DES1280	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zones 1 & 2 w/Design Certificate	21	1	14-Jan-19 A	02-Aug-19	05-Feb-19	25-Feb-19	■	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zones 1 & 2 w/Design Certificate					
DES1290	PM review & comment	28	28	02-Aug-19	30-Aug-19	08-Apr-19	05-May-19	■	PM review & comment					
DES1300	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 1 & 2 w/Design Certificate	20	20	31-Aug-19	20-Sep-19	07-May-19	26-May-19	■	Re-submit Superstructure Design of Noise Mitigation					
DES1310	PM Consent for Construction	28	28	20-Sep-19	18-Oct-19	27-May-19	23-Jun-19	■	PM Consent for Construction					
DES1320	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	21	15	20-Mar-19 A	16-Aug-19	08-Apr-19	28-Apr-19	■	Prepare & submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate					

	Remaining Level of Effort		Remaining Work
	Actual Level of Effort		Critical Remaining Work
	Primary Baseline		Milestone
	Actual Work		Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/07/19)

Date	Revision	Check...	Approved
08-Aug-19	3MRP DWP 1907	Tim	



ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/07/19)
Page 2 of 7

Date	Revision	Check...	Approved
08-Aug-19	3MRP DWP 1907	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019							
								Jul 13	Aug 14	Sep 15	Oct 16	Nov 17			
SPS1220	CCTV for Drainage Pipe	30	30	31-Jul-19	29-Aug-19	01-Apr-19	30-Apr-19								
SPS1240	Reinforced Concrete Work for Retaining Walls	30	30	31-Jul-19	29-Aug-19	31-Mar-19	29-Apr-19								
SPS1250	Reinforced Concrete Work for Noise Mitigation Measures	30	30	31-Jul-19	29-Aug-19	31-Mar-19	29-Apr-19								
SPS1260	Reinforced Concrete Work for Bridge Work	30	30	27-Aug-19	26-Sep-19	28-Apr-19	28-May-19								
SPS1270	Reinforced Concrete Work for Pedestrian Lift	30	30	26-Oct-19	25-Nov-19	30-Jun-19	29-Jul-19								
SPS1280	Reinforced Concrete Work for Footbridge NF40 & NF66	30	30	19-Sep-19	18-Oct-19	23-May-19	22-Jun-19								
SPS1290	Steelwork for NB and Lift Tower	30	30	23-Aug-19	22-Sep-19	24-Apr-19	23-May-19								
SPS1310	Bearing and Movement Joint	30	30	27-Aug-19	25-Sep-19	01-May-19	31-May-19								
SPS1320	Tendon Works	30	30	27-Aug-19	25-Sep-19	01-May-19	31-May-19								
SPS1410	Pedestrian Lift (Lift Cars, E&M, Panel, Lourve & Signature)	30	30	31-Aug-19	30-Sep-19	02-May-19	31-May-19								
SPS1420	Lighting System for Noise Mitigation Measures	30	30	06-Sep-19	06-Oct-19	12-Jul-19	10-Aug-19								
SPS1440	Drainage for Noise Mitigation Measures	30	30	06-Sep-19	06-Oct-19	12-Jul-19	10-Aug-19								
SPS1460	Waterproofing (Bitumen Paint)	30	30	01-Aug-19	30-Aug-19	06-Apr-19	05-May-19								

WORK BETWEEN SHING MUN TUNNELS ROAD AND FOOT BRIDGE NF71A (ZONE 1)

PRELIMINARIES WORKS

TEMPORARY TRAFFIC ARRANGEMENT

TTA PERIOD		Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish
Z1_1410	Construction Zone 1_Stage 1 Northbound R1 structure	300	300	12-Aug-19	15-Aug-20	19-Jun-19	20-Jun-20
Z1_1430	Construction Zone 1_Stage 1 Central Barrier structure	303	303	05-Oct-19	13-Oct-20	12-Aug-19	18-Aug-20

PREPARATORY WORKS

TREE FELLING/TRANPLANT

Z1_1290	Zone 1_tree felling works	18	8	25-Jan-19 A	09-Aug-19	11-Mar-19	01-Apr-19
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MODIFICATION EXISTING ROAD/TEMPORARY ROAD

Z1_1270	Zone 1-1_construct temporary road platform along Northbound for R1	60	60	12-Aug-19	24-Oct-19	19-Jun-19	28-Aug-19
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UTILITIES DIVERSION

CENTRAL BARRIER

Z1_1300	UU_CLP_abandoned 33kv cable for RSE1 CH1190-1300 110m	20	20	25-Sep-19	21-Oct-19	02-Aug-19	24-Aug-19
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NOISE BARRIER AND SEMI-ENCLOSURE

PILE FOUNDATION WORKS

NORTHBOUND

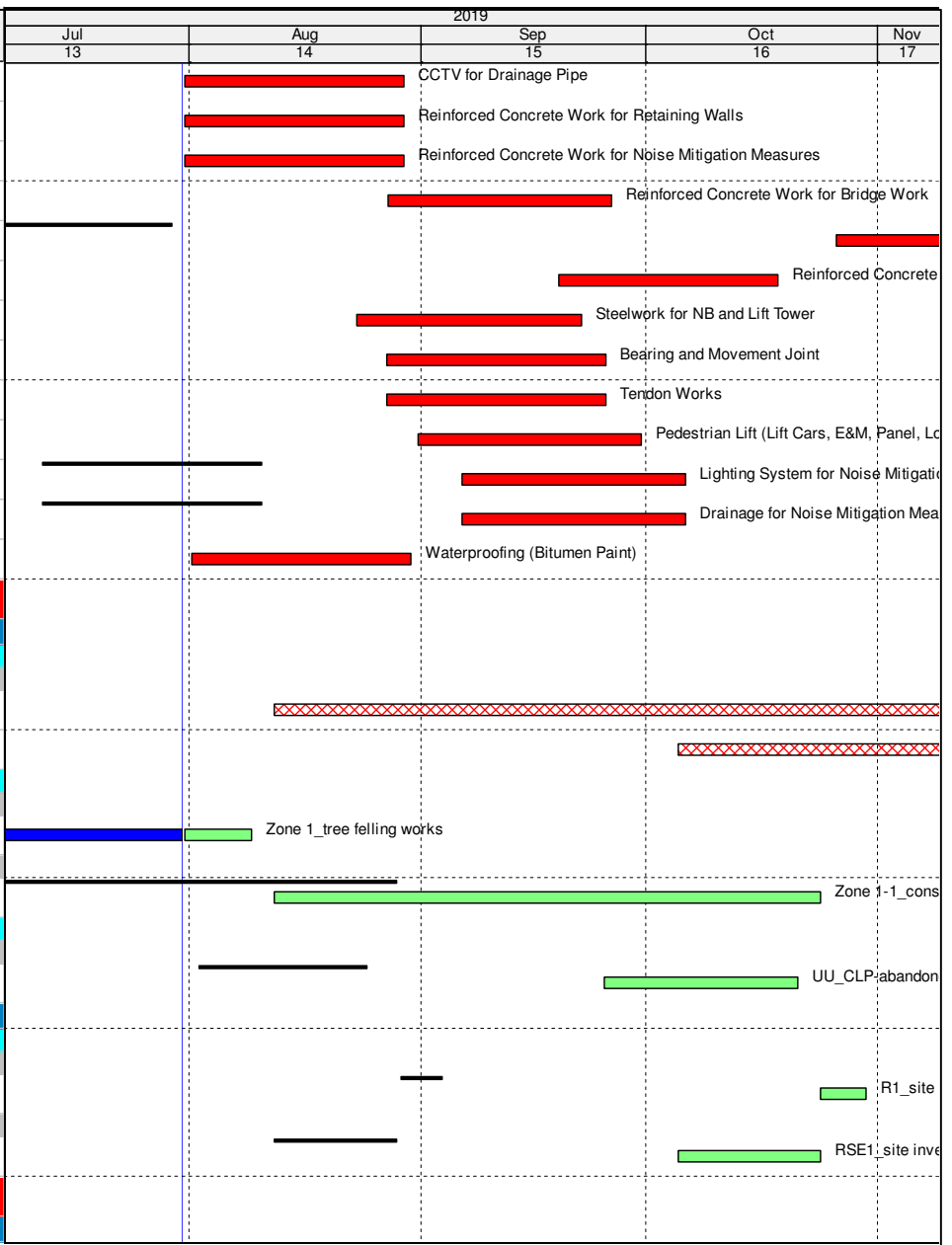
Z1_1510	R1_site investigation for R1-02P (1nr)	5	5	24-Oct-19	30-Oct-19	29-Aug-19	03-Sep-19
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CENTRAL BARRIER

Z1_1490	RSE1_site investigation for RSE1-01P to 03P (6nr)	15	15	05-Oct-19	24-Oct-19	12-Aug-19	28-Aug-19
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WORK BETWEEN FOOT BRIDGE NF71A AND CITYLINE PLAZA (ZONE 2)

PRELIMINARIES WORKS



Remaining Level of Effort	Remaining Work
Actual Level of Effort	Critical Remaining Work
Primary Baseline	Milestone
Actual Work	Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/07/19)
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Date	Revision	Check...	Approved
08-Aug-19	3MRP DWP 1907	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019				
								Jul 13	Aug 14	Sep 15	Oct 16	Nov 17
TEMPORARY TRAFFIC ARRANGEMENT												
TTA PERIOD												
Z2_1260	Construction Zone 2_Stage 1 Central Barrier structure	518	514	10-Jul-19 A	26-Apr-21	31-May-19	25-Feb-21					
PREPARATORY WORKS												
TREE FELLING/TRANPLANT												
Z2_1220	Zone 2_tree felling works	18	7	19-Feb-19 A	08-Aug-19	24-Jan-20	17-Feb-20					
MODIFICATION EXISTING ROAD/TEMPORARY ROAD												
Z2_1230	Zone 2-1_construct temporary road platform along Southbound	60	48	10-Jul-19 A	05-Oct-19	31-May-19	10-Aug-19					
NOISE BARRIER AND SEMI-ENCLOSURE												
PILE FOUNDATION WORKS												
CENTRAL BARRIER												
Z2_1000	RSE2_site investigation for RSE2-13P & 15P (30nr)	50	50	05-Oct-19	04-Dec-19	12-Aug-19	11-Oct-19					
WORK BETWEEN CITYLINE PLAZA AND FOOTBRIDGE NF40 (ZONE 3)												
PRELIMINARIES WORKS												
TEMPORARY TRAFFIC ARRANGEMENT												
TTA PERIOD												
Z3_3270	Construction period of Zone 3a_1	334	334	31-Jul-19	11-Sep-20	17-Apr-19	20-May-20					
Z3_3340	Construction period of Zone 3c_1	343	343	31-Jul-19	22-Sep-20	22-May-19	30-May-20					
Z3_3400	Construction period of Zone 3b_1	294	294	30-Sep-19	24-Sep-20	30-May-19	30-May-20					
PREPARATORY WORKS												
TREE FELLING/TRANPLANT												
Z3_2800	Zone 3_tree felling works	18	1	22-Jan-19 A	31-Jul-19	25-Feb-19	16-Mar-19					
BRIDGE AND STRUCTURE WORKS												
PRELIMINARIES WORKS												
UTILITIES DIVERSION												
NORTHBOUND												
Z3_2910	UU_CLP-abandoned 11kv cable for RW6 CH1675-1725 50m	13	13	31-Jul-19	14-Aug-19	03-Apr-19	18-Apr-19					
Z3_2920	UU_HKT-diversion cable for RW7 CH1830-2000 170m	34	34	16-Aug-19	25-Sep-19	16-Apr-19	31-May-19					
Z3_2930	UU_CLP-abandoned 11kv cable for RW7 & SR4 CH1825-1950 125m	22	22	30-Aug-19	25-Sep-19	04-May-19	31-May-19					
Z3_3130	UU_Fresh watermain for SR4 178m 200mm	23	23	02-Sep-19	30-Sep-19	03-May-19	31-May-19					
SOUTHBOUND												
Z3_2970	UU_HKT-new cable for RW1 & SR3 CH1450-2300 850m	127	127	31-Jul-19	31-Dec-19	01-Apr-19	04-Sep-19					
Z3_3050	UU_CLP-abandoned 11kv cable for SR2 & N263 CH1710-1950 240m	35	35	19-Aug-19	28-Sep-19	24-Apr-19	05-Jun-19					
Z3_3060	UU_GAS-diversion LP pipe for SR2 & N263 CH1640-1850 210m	51	51	31-Jul-19	28-Sep-19	01-Apr-19	05-Jun-19					
Z3_3070	UU_HKT-diversion cable for SR2 & N263 CH1630-1840 210m	39	39	14-Aug-19	28-Sep-19	16-Apr-19	05-Jun-19					
Z3_3110	UU_GAS-diversion LP pipe for N263 CH1825-1960 135m	38	38	15-Aug-19	28-Sep-19	17-Apr-19	05-Jun-19					
Z3_3120	UU_Fresh watermain for Staircase & N263 150PE	23	23	24-Oct-19	19-Nov-19	29-Jun-19	26-Jul-19					
WIDENING FOR NORTH HOLLOW ABUTMENT (N264)												

- Remaining Level of Effort
- Remaining Work
- Actual Level of Effort
- Critical Remaining Work
- Primary Baseline
- Milestone
- Actual Work
- Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/07/19)
Page 4 of 7

Date	Revision	Check...	Approved
08-Aug-19	3MRP DWP 1907	Tim	






Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019				
								Jul 13	Aug 14	Sep 15	Oct 16	Nov 17
WORK BETWEEN FOOTBRIDGE NF40 AND NF66 (ZONE 4)												
PRELIMINARIES WORKS												
TEMPORARY TRAFFIC ARRANGEMENT												
TTA PERIOD												
Z4_1390	Construction Zone 4_Stage 1 Northbound structure	208	208	29-Aug-19	15-May-20	07-May-19	14-Jan-20					
Z4_1470	Construction Zone 4_NF66 Construction	220	220	19-Aug-19	18-May-20	18-Apr-19	15-Jan-20					
Z4_1480	Construction Zone 4_NF40 Construction	489	489	31-Jul-19	22-Mar-21	01-Apr-19	23-Nov-20					
PREPARATORY WORKS												
TREE FELLING/TRANPLANT												
Z4_1320	Zone 4_NB tree felling works	18	0	25-Jan-19 A	29-Jun-19 A	31-Jan-19	23-Feb-19					
UTILITIES DIVERSION												
NORTHBOUND												
Z4_1270	UU_CLP-abandoned 33kv cable for N4 CH2100-2350 250m (Abandoned)	0	0	29-Aug-19	29-Aug-19	07-May-19	07-May-19					
Z4_1280	UU_CATV-slew cable for N4 CH2190-2400 210m	25	25	31-Jul-19	29-Aug-19	02-Apr-19	06-May-19					
Z4_1290	UU_CLP-abandoned 33kv cable for N4&SE6 CH2150-2160 20m (Abandoned)	0	0	29-Aug-19	29-Aug-19	07-May-19	07-May-19					
Z4_1300	UU_HKT-slew cable for N4 & NF66 CH2320-2360 40m	5	5	31-Jul-19	05-Aug-19	02-Apr-19	08-Apr-19					
Z4_1360	UU_Fresh watermain for N4 CH2150-2200 77m 600mm	40	40	29-Aug-19	18-Oct-19	07-May-19	24-Jun-19					
NOISE BARRIER AND SEMI-ENCLOSURE												
PILE CAP AND FOOTING												
NORTHBOUND												
Z4_1000	N4_ELS for footing construction N4-12 to N4-29 (231m_2 side)	64	64	29-Aug-19	15-Nov-19	07-May-19	23-Jul-19					
Z4_1010	N4_footing construction N4-12 to N4-29 (18nr)	126	126	30-Sep-19	03-Mar-20	05-Jun-19	04-Nov-19					
BRIDGE AND STRUCTURE WORKS												
MODIFICATION WORKS FOR NF40												
NF40_1000	Construct temporary staircase	60	60	31-Jul-19	11-Oct-19	01-Apr-19	17-Jun-19					
NF40_1010	Demolish existing staircase & part of existing footing	45	45	12-Oct-19	03-Dec-19	18-Jun-19	09-Aug-19					
MODIFICATION WORKS FOR NF66												
NF66_1000	ELS & 1st stage pile cap construction (CSD)	50	50	19-Aug-19	18-Oct-19	18-Apr-19	22-Jun-19					
NF66_1010	Pile cap construction (CSD)	35	35	19-Oct-19	28-Nov-19	22-Jun-19	03-Aug-19					
WORK BETWEEN FOOTBRIDGE NF66 AND FO TAN ROAD (ZONE 5)												
PRELIMINARIES WORKS												
PREPARATORY WORKS												
TREE FELLING/TRANPLANT												
Z5_1710	Zone 5_tree felling works	18	6	22-Jan-19 A	18-Feb-20	21-Sep-19	15-Oct-19					
PORTION E (ZONE 5)												
PRELIMINARIES WORKS												
PREPARATORY WORKS												

-  Remaining Level of Effort
-  Remaining Work
-  Actual Level of Effort
-  Critical Remaining Work
-  Primary Baseline
-  Milestone
-  Actual Work
-  Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/07/19)
Page 6 of 7

Date	Revision	Check...	Approved
08-Aug-19	3MRP DWP 1907	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP6 Start	AP6 Finish	2019				
								Jul 13	Aug 14	Sep 15	Oct 16	Nov 17
TREE FELLING/TRANPLANT												
Z5E_1140	Portion E_tree felling works	30	7	22-Jan-19 A	21-Sep-20	15-Apr-20	22-May-20					

-  Remaining Level of Effort
-  Remaining Work
-  Actual Level of Effort
-  Critical Remaining Work
-  Primary Baseline
-  Milestone
-  Actual Work
-  Baseline Milestone

**ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI
PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/07/19)
Page 7 of 7**

Date	Revision	Check...	Approved
08-Aug-19	3MRP DWP 1907	Tim	

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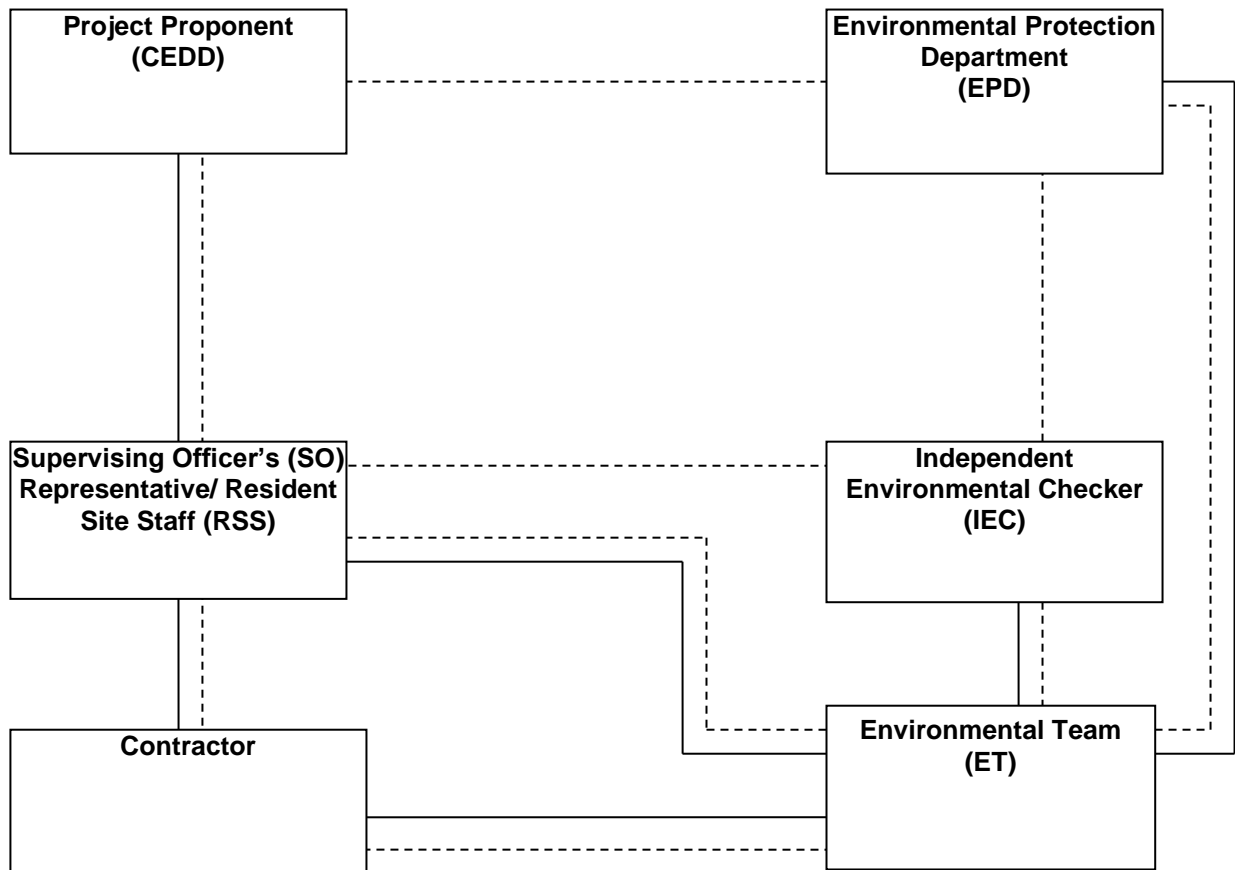
Appendix B

Project Organization Chart

FUGRO TECHNICAL SERVICES LIMITED

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Legend:
—— Line of Reporting
- - - - Line of Communication

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Appendix C

Action and Limit Levels for Air Quality and Noise

FUGRO TECHNICAL SERVICES LIMITED

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Action and Limit Levels for 24-hr TSP and 1-hr TSP

Parameter	Monitoring Station	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
24-hr TSP ($\mu\text{g}/\text{m}^3$)	AMS 4A	200	260
	AMS 6	165	
	AMS 7A	171	
	AMS 8	161	
	AMS 12	168	
	AMS 13	174	
	AMS 15	172	
1-hr TSP ($\mu\text{g}/\text{m}^3$)	AMS 4A	348	500
	AMS 6	347	
	AMS 7A	344	
	AMS 8	366	
	AMS 12	296	
	AMS 13	303	
	AMS 15	350	

Action and Limit Levels for Construction Noise, L_{eq} (30min), dB(A)

Time Period	Location	Action	Limit
0700-1900 hrs on normal weekdays	NMS1 NMS2 NMS3 NMS4 NMS5A NMS6A NMS7 NMS8 NMS9 NMS10A* NMS11 NMS12* NMS13 NMS14 NMS15 NMS16 NMS17* NMS18 NMS19 NMS20 NMS23 NMS24 NMS25A NMS26 NMS27*	When one documented complaint is received	75 dB(A)

* For NMS 10A, 12, 17 and 27, the Limit Level is reduced to 70 dB(A) for schools and 65 dB(A) during school examination periods.

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Action and Limit Levels for Construction Noise, Leq (15min), dB(A)

Time Period	Location	Action	Limit
2300-0700 hrs of next day	NMS1 NMS2 NMS3 NMS4 NMS5A NMS6A NMS7 NMS8 NMS9 NMS11 NMS13 NMS14 NMS15 NMS16 NMS18 NMS19 NMS20 NMS23 NMS24 NMS25A NMS26	When one documented complaint is received	55 dB(A)

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Appendix D

Graphical Presentation of Monitoring Data

**1-hour TSP Impact Monitoring Result for
NOD 03-2018 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)**

AMS 4A - Wai Wah Centre

1-hour TSP ($\mu\text{g}/\text{m}^3$)									
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather	
03-Jun-19	15:11	105	97	86	96	348	500	Overcast	
08-Jun-19	10:05	88	95	93	92			Sunny	
14-Jun-19	08:09	93	106	102	100			Overcast	
19-Jun-19	10:10	109	101	99	103			Sunny	
25-Jun-19	15:32	33	37	41	37			Fine	
29-Jun-19	12:21	45	45	39	43			Fine	
05-Jul-19	11:12	91	91	88	90			Sunny	
11-Jul-19	08:47	79	68	60	69			Sunny	
17-Jul-19	15:08	57	77	79	71			Sunny	
23-Jul-19	11:14	91	79	96	89			Sunny	
29-Jul-19	09:42	76	76	83	78			Sunny	
03-Aug-19	15:00	98	102	98	99			Overcast	
09-Aug-19	10:09	77	62	57	65			Sunny	
15-Aug-19	09:13	66	74	63	68			Sunny	
21-Aug-19	14:47	51	57	53	54			Sunny	
27-Aug-19	11:34	94	94	81	90			Fine	
Average		78							
Max		109							
Min		33							

AMS 6 - Shatin Plaza

1-hour TSP ($\mu\text{g}/\text{m}^3$)									
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather	
04-May-19	11:05	50	66	69	62	347	500	Fine	
10-May-19	09:25	57	55	64	59			Sunny	
16-May-19	10:00	75	82	69	75			Sunny	
22-May-19	08:28	48	46	52	49			Fine	
28-May-19	09:08	78	73	71	74			Overcast	
03-Aug-19	12:11	98	104	97	100			Overcast	
09-Aug-19	15:31	78	59	97	78			Sunny	
15-Aug-19	14:43	80	80	74	78			Sunny	
21-Aug-19	09:04	55	49	49	51			Sunny	
27-Aug-19	09:01	78	73	70	74			Fine	
Average		76							
Max		104							
Min		49							

AMS 7A - Sheung Wo Che

1-hour TSP ($\mu\text{g}/\text{m}^3$)									
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather	
04-May-19	14:46	25	25	24	25	344	500	Fine	
10-May-19	11:56	47	44	40	44			Sunny	
16-May-19	15:35	42	45	51	46			Sunny	
22-May-19	15:01	81	81	90	84			Fine	
28-May-19	13:14	105	114	92	104			Overcast	
03-Jun-19	11:19	78	84	80	81			Overcast	
08-Jun-19	15:05	76	81	81	79			Sunny	
14-Jun-19	12:07	61	68	65	65			Overcast	
19-Jun-19	15:03	77	80	84	80			Sunny	
25-Jun-19	15:49	134	141	141	139			Fine	
29-Jun-19	15:19	23	21	23	22			Fine	
05-Jul-19	13:25	86	79	93	86			Sunny	
11-Jul-19	15:18	71	73	79	74			Sunny	
17-Jul-19	11:41	41	52	56	50			Sunny	
23-Jul-19	10:18	49	41	54	48			Sunny	
29-Jul-19	15:11	49	51	53	51			Sunny	
03-Aug-19	15:00	97	101	99	99			Overcast	
09-Aug-19	11:06	71	77	67	72			Sunny	
15-Aug-19	11:48	78	74	69	74			Sunny	
21-Aug-19	13:30	94	101	87	94			Sunny	
27-Aug-19	12:23	73	81	63	72			Fine	
Average		71							
Max		141							
Min		21							

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS 8 - Lek Yuen Estate

1-hour TSP ($\mu\text{g}/\text{m}^3$)										
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather		
03-Jun-19	15:12	68	66	76	70	336	500	Overcast		
08-Jun-19	15:19	67	70	76	71			Sunny		
14-Jun-19	11:31	96	99	86	94			Overcast		
19-Jun-19	12:02	66	69	77	71			Sunny		
25-Jun-19	08:37	149	103	109	120			Fine		
29-Jun-19	15:31	23	25	29	26			Fine		
05-Jul-19	15:12	89	95	100	95			Sunny		
11-Jul-19	09:47	87	79	72	79			Sunny		
17-Jul-19	12:11	44	44	44	44			Sunny		
23-Jul-19	14:04	81	81	79	80			Sunny		
29-Jul-19	13:07	64	60	57	60			Sunny		
Average		74								
Max		149								
Min		23								

AMS 12 - Fung Wo Estate

1-hour TSP ($\mu\text{g}/\text{m}^3$)								
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather
04-May-19	12:00	32	32	32	32	296	500	Fine
10-May-19	11:57	92	52	52	65			Sunny
16-May-19	12:13	79	83	70	77			Sunny
22-May-19	14:43	55	58	56	56			Fine
28-May-19	12:06	52	58	55	55			Overcast
Average		57						
Max		92						
Min		32						

AMS 13 - Fung Wo Estate

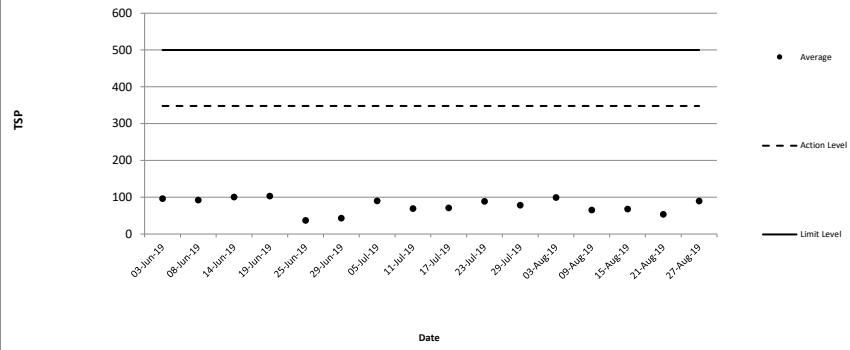
1-hour TSP ($\mu\text{g}/\text{m}^3$)								
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather
03-Jun-19	13:37	53	57	57	56	303	500	Overcast
08-Jun-19	10:25	80	61	61	67			Sunny
14-Jun-19	10:13	76	74	67	72			Overcast
19-Jun-19	09:37	101	106	104	104			Sunny
25-Jun-19	15:26	53	53	57	54			Fine
29-Jun-19	10:46	43	37	35	38			Fine
Average		65						
Max		106						
Min		35						

AMS 15 - Ha Wo Che

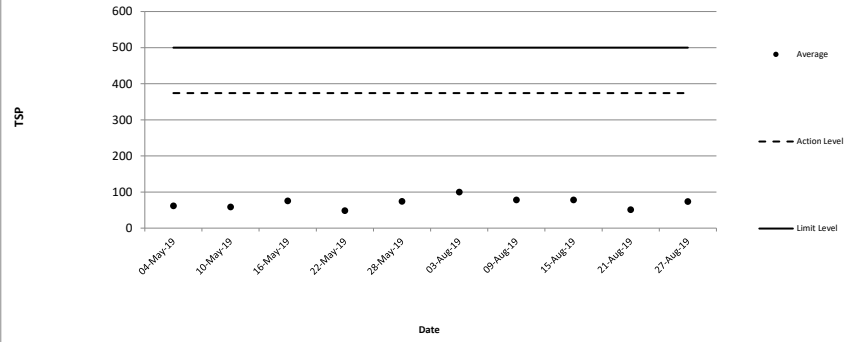
1-hour TSP ($\mu\text{g}/\text{m}^3$)										
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather		
04-May-19	09:36	72	77	70	73	350	500	Fine		
10-May-19	13:45	81	86	74	80			Sunny		
16-May-19	10:40	57	63	72	64			Sunny		
22-May-19	13:07	68	64	73	68			Fine		
28-May-19	14:00	50	39	53	47			Overcast		
05-Jul-19	15:40	59	57	61	59			Sunny		
11-Jul-19	14:07	72	79	84	78			Sunny		
17-Jul-19	15:41	74	83	77	78			Sunny		
23-Jul-19	14:18	77	81	88	82			Sunny		
29-Jul-19	12:27	85	86	79	83			Sunny		
03-Aug-19	14:00	54	54	56	55			Overcast		
09-Aug-19	14:41	87	92	91	90			Sunny		
15-Aug-19	15:59	68	68	63	66			Sunny		
21-Aug-19	15:50	72	87	91	83			Sunny		
27-Aug-19	13:27	69	75	71	72			Fine		
Average		73								
Max		92								
Min		54								

1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

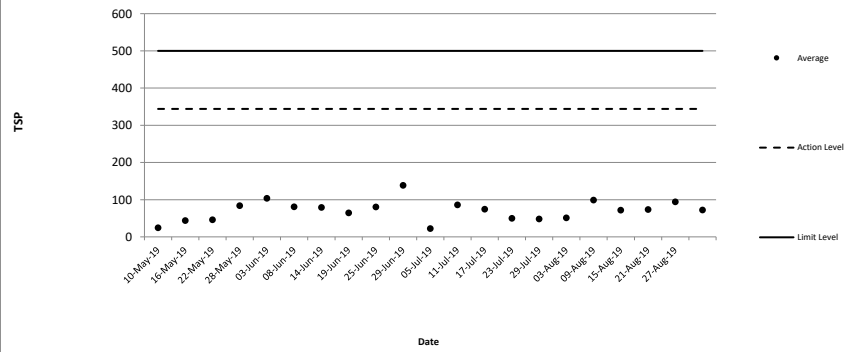
1-hr TSP Monitoring record for AMS 4A



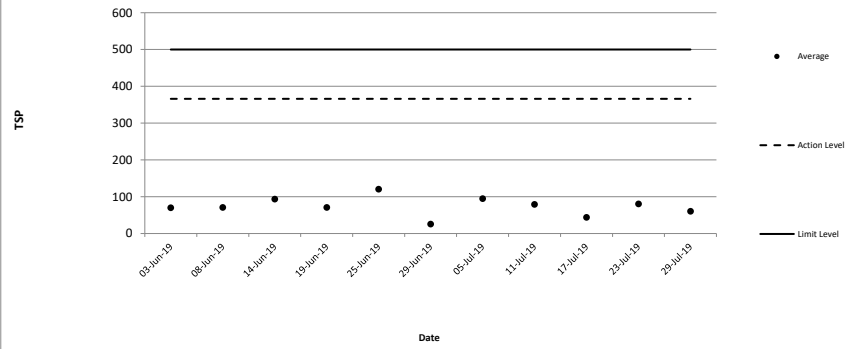
1-hr TSP Monitoring record for AMS 6



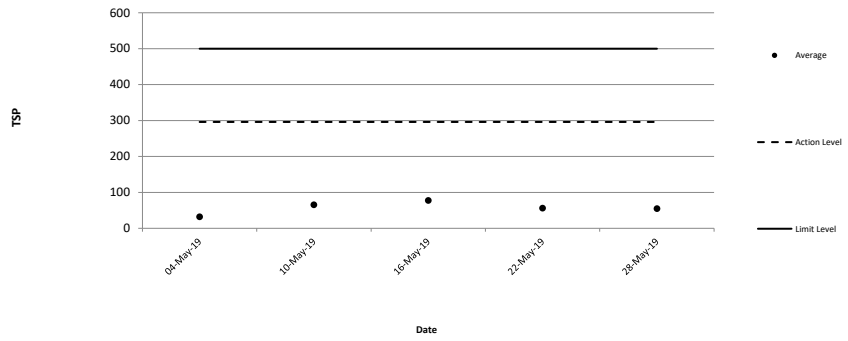
1-hr TSP Monitoring record for AMS 7A



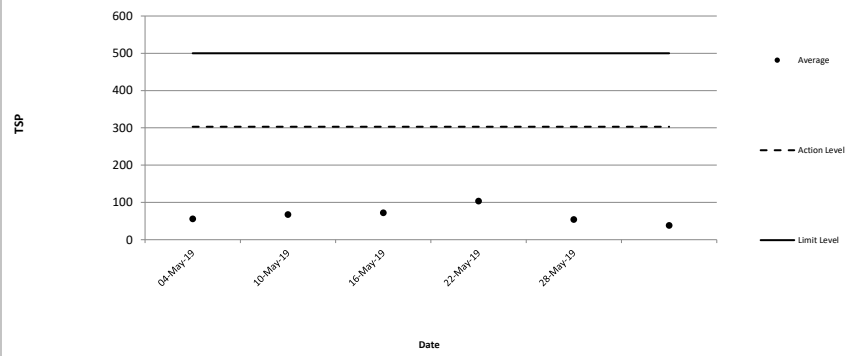
1-hr TSP Monitoring record for AMS 8



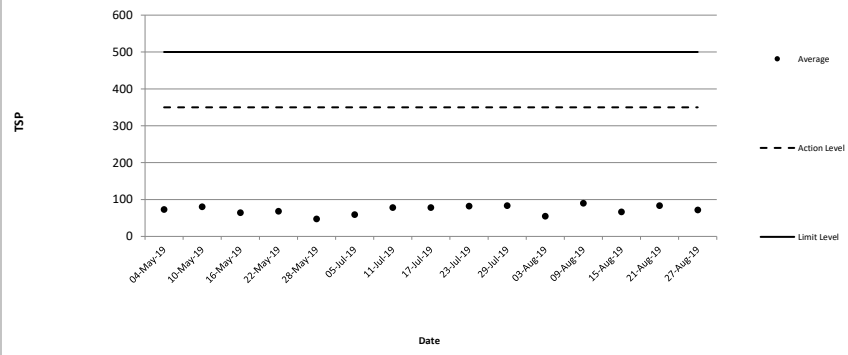
1-hr TSP Monitoring record for AMS 12



1-hr TSP Monitoring record for AMS 13



1-hr TSP Monitoring record for AMS 15



AMS 6 - Shatin Plaza

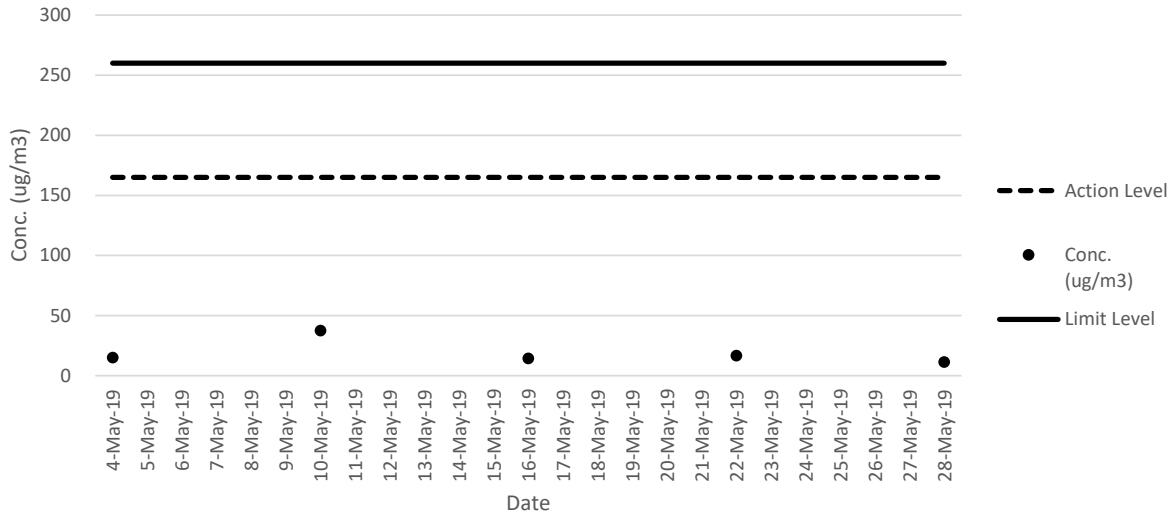
Start Date	Weather Condition	Air Temperature (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Sampling Time(hrs)	Flow Rate (m ³ /min.)		Average flow (m ³ /min.)	Total volume (m ³)	Conc. (ug/m ³)	Action Level (ug/m ³)	Limit Level (ug/m ³)
				Initial	Final			Initial	Final					
4-May-19	Fine	295.8	760	2.7646	2.8001	0.0355	24	1.6443	1.6381	1.64	2363.2636	15	165	260
10-May-19	Sunny	297.1	758	2.7513	2.8086	0.0573	24	1.0619	1.0619	1.06	1529.1215	37		
16-May-19	Sunny	302.4	756	2.7042	2.7365	0.0323	24	1.5400	1.5557	1.55	2228.9087	14		
22-May-19	Fine	298.5	758	2.7710	2.8105	0.0395	24	1.6343	1.6381	1.64	2356.0567	17		
28-May-19	Overcast	299.1	757	2.7654	2.7897	0.0243	24	1.47	1.47	1.47	2117.48	11		
											Min	11		
											Max	37		
											Average	19		

AMS 15 - Ha Wo Che

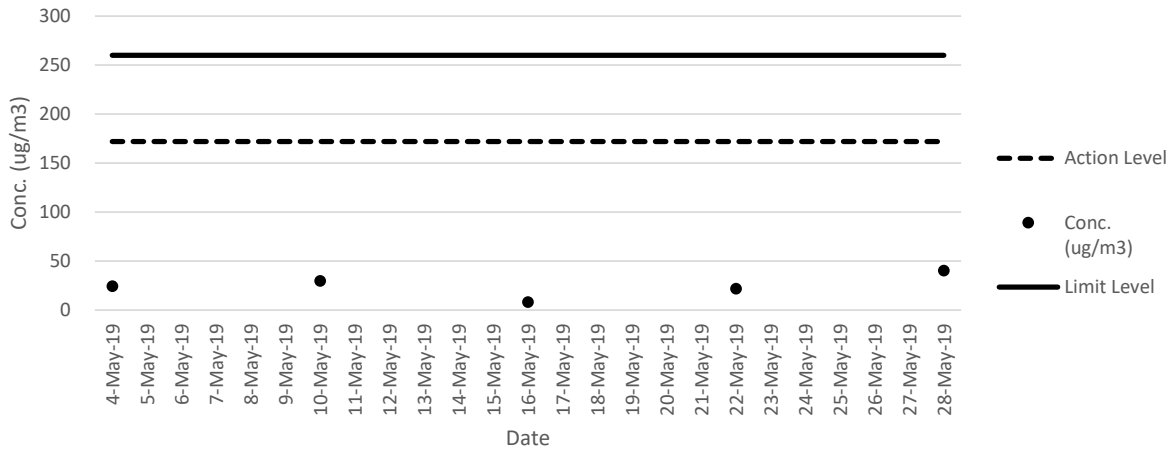
Start Date	Weather Condition	Air Temperature (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Sampling Time(hrs)	Flow Rate (m ³ /min.)		Average flow (m ³ /min.)	Total volume (m ³)	Conc. (ug/m ³)	Action Level (ug/m ³)	Limit Level (ug/m ³)
				Initial	Final			Initial	Final					
4-May-19	Fine	295.8	760	2.7773	2.8031	0.0258	24	0.74	0.73	0.73	1057.05	24	172	260
10-May-19	Sunny	297.1	758	2.7330	2.7751	0.0421	24	0.98	0.98	0.98	1410.60	30		
16-May-19	Sunny	302.4	756	2.6877	2.6963	0.0086	24	0.73	0.73	0.73	1049.65	8		
22-May-19	Fine	298.5	758	2.7690	2.7920	0.0230	24	0.73	0.73	0.73	1053.80	22		
28-May-19	Overcast	299.1	757	2.7027	2.7878	0.0851	24	1.47	1.47	1.47	2117.48	40		
											Min	8		
											Max	40		
											Average	25		

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

24 hr TSP - AMS 6



24 hr TSP - AMS 15



**24-hour TSP Impact Monitoring Result for
NOD 03-2018 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)**

AMS4A - Wai Wah Centre

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
03/06/19 09:11	86
03/06/19 10:11	90
03/06/19 11:11	99
03/06/19 12:11	94
03/06/19 13:11	96
03/06/19 14:11	96
03/06/19 15:11	105
03/06/19 16:11	97
03/06/19 17:11	86
03/06/19 18:11	92
03/06/19 19:11	60
03/06/19 20:11	69
03/06/19 21:11	73
03/06/19 22:11	79
03/06/19 23:11	82
04/06/19 00:11	77
04/06/19 01:11	69
04/06/19 02:11	67
04/06/19 03:11	58
04/06/19 04:11	59
04/06/19 05:11	67
04/06/19 06:11	67
04/06/19 07:11	69
04/06/19 08:11	77
Average	80
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
08/06/19 10:05	88
08/06/19 11:05	95
08/06/19 12:05	93
08/06/19 13:05	84
08/06/19 14:05	88
08/06/19 15:05	77
08/06/19 16:05	75
08/06/19 17:05	68
08/06/19 18:05	71
08/06/19 19:05	77
08/06/19 20:05	84
08/06/19 21:05	68
08/06/19 22:05	91
08/06/19 23:05	82
09/06/19 00:05	84
09/06/19 01:05	58
09/06/19 02:05	62
09/06/19 03:05	69
09/06/19 04:05	69
09/06/19 05:05	75
09/06/19 06:05	68
09/06/19 07:05	64
09/06/19 08:05	77
09/06/19 09:05	77
Average	77
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
14/06/19 08:09	93
14/06/19 09:09	106
14/06/19 10:09	102
14/06/19 11:09	88
14/06/19 12:09	84
14/06/19 13:09	77
14/06/19 14:09	79
14/06/19 15:09	73
14/06/19 16:09	69
14/06/19 17:09	66
14/06/19 18:09	71
14/06/19 19:09	75
14/06/19 20:09	66
14/06/19 21:09	71
14/06/19 22:09	62
14/06/19 23:09	68
15/06/19 00:09	66
15/06/19 01:09	71
15/06/19 02:09	66
15/06/19 03:09	68
15/06/19 04:09	71
15/06/19 05:09	59
15/06/19 06:09	66
15/06/19 07:09	60
Average	74
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
19/06/19 10:10	109
19/06/19 11:10	101
19/06/19 12:10	99
19/06/19 13:10	84
19/06/19 14:10	86
19/06/19 15:10	88
19/06/19 16:10	84
19/06/19 17:10	80
19/06/19 18:10	84
19/06/19 19:10	82
19/06/19 20:10	82
19/06/19 21:10	76
19/06/19 22:10	80
19/06/19 23:10	71
20/06/19 00:10	71
20/06/19 01:10	82
20/06/19 02:10	86
20/06/19 03:10	97
20/06/19 04:10	94
20/06/19 05:10	88
20/06/19 06:10	80
20/06/19 07:10	76
20/06/19 08:10	78
20/06/19 09:10	82
Average	85
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
25/06/19 08:32	36
25/06/19 09:32	37
25/06/19 10:32	39
25/06/19 11:32	39
25/06/19 12:32	36
25/06/19 13:32	35
25/06/19 14:32	36
25/06/19 15:32	33
25/06/19 16:32	37
25/06/19 17:32	41
25/06/19 18:32	36
25/06/19 19:32	39
25/06/19 20:32	37
25/06/19 21:32	33
25/06/19 22:32	36
25/06/19 23:32	35
26/06/19 00:32	40
26/06/19 01:32	42
26/06/19 02:32	44
26/06/19 03:32	39
26/06/19 04:32	32
26/06/19 05:32	36
26/06/19 06:32	37
26/06/19 07:32	40
Average	37
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
29/06/19 11:21	36
29/06/19 12:21	45
29/06/19 13:21	45
29/06/19 14:21	39
29/06/19 15:21	45
29/06/19 16:21	36
29/06/19 17:21	30
29/06/19 18:21	62
29/06/19 19:21	47
29/06/19 20:21	67
29/06/19 21:21	60
29/06/19 22:21	43
29/06/19 23:21	43
30/06/19 00:21	41
30/06/19 01:21	37
30/06/19 02:21	32
30/06/19 03:21	28
30/06/19 04:21	29
30/06/19 05:21	29
30/06/19 06:21	35
30/06/19 07:21	34
30/06/19 08:21	26
30/06/19 09:21	32
30/06/19 10:21	30
Average	40
Action Level	200
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS4A - Wai Wah Centre

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
05/07/19 09:12	75
05/07/19 10:12	80
05/07/19 11:12	91
05/07/19 12:12	91
05/07/19 13:12	88
05/07/19 14:12	77
05/07/19 15:12	86
05/07/19 16:12	73
05/07/19 17:12	68
05/07/19 18:12	69
05/07/19 19:12	84
05/07/19 20:12	77
05/07/19 21:12	77
05/07/19 22:12	69
05/07/19 23:12	82
06/07/19 00:12	79
06/07/19 01:12	84
06/07/19 02:12	77
06/07/19 03:12	80
06/07/19 04:12	66
06/07/19 05:12	66
06/07/19 06:12	71
06/07/19 07:12	73
06/07/19 08:12	75
Average	77
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
11/07/19 08:47	79
11/07/19 09:47	68
11/07/19 10:47	60
11/07/19 11:47	64
11/07/19 12:47	66
11/07/19 13:47	66
11/07/19 14:47	57
11/07/19 15:47	70
11/07/19 16:47	60
11/07/19 17:47	53
11/07/19 18:47	64
11/07/19 19:47	68
11/07/19 20:47	62
11/07/19 21:47	68
11/07/19 22:47	70
11/07/19 23:47	77
12/07/19 00:47	83
12/07/19 01:47	74
12/07/19 02:47	68
12/07/19 03:47	72
12/07/19 04:47	68
12/07/19 05:47	68
12/07/19 06:47	64
12/07/19 07:47	60
Average	67
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
17/07/19 09:08	49
17/07/19 10:08	41
17/07/19 11:08	55
17/07/19 12:08	60
17/07/19 13:08	68
17/07/19 14:08	57
17/07/19 15:08	57
17/07/19 16:08	77
17/07/19 17:08	79
17/07/19 18:08	72
17/07/19 19:08	60
17/07/19 20:08	53
17/07/19 21:08	46
17/07/19 22:08	42
17/07/19 23:08	55
18/07/19 00:08	53
18/07/19 01:08	47
18/07/19 02:08	57
18/07/19 03:08	45
18/07/19 04:08	59
18/07/19 05:08	60
18/07/19 06:08	49
18/07/19 07:08	49
18/07/19 08:08	53
Average	56
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
23/07/19 09:14	79
23/07/19 10:14	83
23/07/19 11:14	91
23/07/19 12:14	79
23/07/19 13:14	96
23/07/19 14:14	76
23/07/19 15:14	72
23/07/19 16:14	72
23/07/19 17:14	74
23/07/19 18:14	79
23/07/19 19:14	79
23/07/19 20:14	85
23/07/19 21:14	72
23/07/19 22:14	68
23/07/19 23:14	66
24/07/19 00:14	68
24/07/19 01:14	60
24/07/19 02:14	57
24/07/19 03:14	53
24/07/19 04:14	66
24/07/19 05:14	72
24/07/19 06:14	76
24/07/19 07:14	81
24/07/19 08:14	77
Average	74
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
29/07/19 08:42	74
29/07/19 09:42	76
29/07/19 10:42	76
29/07/19 11:42	83
29/07/19 12:42	68
29/07/19 13:42	68
29/07/19 14:42	62
29/07/19 15:42	66
29/07/19 16:42	64
29/07/19 17:42	64
29/07/19 18:42	76
29/07/19 19:42	79
29/07/19 20:42	87
29/07/19 21:42	68
29/07/19 22:42	72
29/07/19 23:42	74
30/07/19 00:42	72
30/07/19 01:42	72
30/07/19 02:42	62
30/07/19 03:42	64
30/07/19 04:42	60
30/07/19 05:42	64
30/07/19 06:42	59
30/07/19 07:42	62
Average	70
Action Level	200
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS4A - Wai Wah Centre

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
03/08/19 07:00	98
03/08/19 08:00	87
03/08/19 09:00	84
03/08/19 10:00	93
03/08/19 11:00	96
03/08/19 12:00	102
03/08/19 13:00	98
03/08/19 14:00	102
03/08/19 15:00	98
03/08/19 16:00	109
03/08/19 17:00	103
03/08/19 18:00	109
03/08/19 19:00	119
03/08/19 20:00	119
03/08/19 21:00	134
03/08/19 22:00	128
03/08/19 23:00	128
04/08/19 00:00	114
04/08/19 01:00	103
04/08/19 02:00	109
04/08/19 03:00	89
04/08/19 04:00	87
04/08/19 05:00	86
04/08/19 06:00	91
Average	104
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
09/08/19 10:09	77
09/08/19 11:09	62
09/08/19 12:09	57
09/08/19 13:09	67
09/08/19 14:09	73
09/08/19 15:09	56
09/08/19 16:09	60
09/08/19 17:09	73
09/08/19 18:09	67
09/08/19 19:09	90
09/08/19 20:09	102
09/08/19 21:09	97
09/08/19 22:09	95
09/08/19 23:09	91
10/08/19 00:09	80
10/08/19 01:09	76
10/08/19 02:09	77
10/08/19 03:09	69
10/08/19 04:09	53
10/08/19 05:09	95
10/08/19 06:09	106
10/08/19 07:09	101
10/08/19 08:09	78
10/08/19 09:09	63
Average	78
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/08/19 09:13	66
15/08/19 10:13	74
15/08/19 11:13	63
15/08/19 12:13	60
15/08/19 13:13	64
15/08/19 14:13	69
15/08/19 15:13	59
15/08/19 16:13	62
15/08/19 17:13	70
15/08/19 18:13	69
15/08/19 19:13	83
15/08/19 20:13	95
15/08/19 21:13	99
15/08/19 22:13	102
15/08/19 23:13	95
16/08/19 00:13	87
16/08/19 01:13	80
16/08/19 02:13	76
16/08/19 03:13	71
16/08/19 04:13	59
16/08/19 05:13	81
16/08/19 06:13	90
16/08/19 07:13	85
16/08/19 08:13	81
Average	77
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/08/19 09:47	47
21/08/19 10:47	42
21/08/19 11:47	38
21/08/19 12:47	55
21/08/19 13:47	47
21/08/19 14:47	51
21/08/19 15:47	57
21/08/19 16:47	53
21/08/19 17:47	45
21/08/19 18:47	38
21/08/19 19:47	60
21/08/19 20:47	57
21/08/19 21:47	53
21/08/19 22:47	62
21/08/19 23:47	53
22/08/19 00:47	59
22/08/19 01:47	51
22/08/19 02:47	51
22/08/19 03:47	55
22/08/19 04:47	59
22/08/19 05:47	60
22/08/19 06:47	51
22/08/19 07:47	47
22/08/19 08:47	45
Average	51
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/08/19 08:34	74
27/08/19 09:34	78
27/08/19 10:34	70
27/08/19 11:34	94
27/08/19 12:34	94
27/08/19 13:34	81
27/08/19 14:34	81
27/08/19 15:34	78
27/08/19 16:34	68
27/08/19 17:34	70
27/08/19 18:34	78
27/08/19 19:34	74
27/08/19 20:34	74
27/08/19 21:34	70
27/08/19 22:34	70
27/08/19 23:34	83
28/08/19 00:34	83
28/08/19 01:34	89
28/08/19 02:34	87
28/08/19 03:34	70
28/08/19 04:34	76
28/08/19 05:34	80
28/08/19 06:34	74
28/08/19 07:34	70
Average	78
Action Level	200
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS6 - Shatin Plaza

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
03/08/19 07:11	57
03/08/19 08:11	69
03/08/19 09:11	83
03/08/19 10:11	90
03/08/19 11:11	95
03/08/19 12:11	98
03/08/19 13:11	104
03/08/19 14:11	97
03/08/19 15:11	90
03/08/19 16:11	80
03/08/19 17:11	77
03/08/19 18:11	95
03/08/19 19:11	95
03/08/19 20:11	87
03/08/19 21:11	80
03/08/19 22:11	71
03/08/19 23:11	69
04/08/19 00:11	67
04/08/19 01:11	70
04/08/19 02:11	70
04/08/19 03:11	66
04/08/19 04:11	70
04/08/19 05:11	64
04/08/19 06:11	60
Average	79
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
09/08/19 11:31	80
09/08/19 12:31	76
09/08/19 13:31	77
09/08/19 14:31	80
09/08/19 15:31	78
09/08/19 16:31	59
09/08/19 17:31	97
09/08/19 18:31	83
09/08/19 19:31	78
09/08/19 20:31	91
09/08/19 21:31	87
09/08/19 22:31	90
09/08/19 23:31	94
10/08/19 00:31	91
10/08/19 01:31	78
10/08/19 02:31	78
10/08/19 03:31	80
10/08/19 04:31	63
10/08/19 05:31	67
10/08/19 06:31	95
10/08/19 07:31	98
10/08/19 08:31	94
10/08/19 09:31	77
10/08/19 10:31	64
Average	81
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/08/19 10:43	69
15/08/19 11:43	81
15/08/19 12:43	76
15/08/19 13:43	74
15/08/19 14:43	80
15/08/19 15:43	80
15/08/19 16:43	74
15/08/19 17:43	77
15/08/19 18:43	81
15/08/19 19:43	87
15/08/19 20:43	90
15/08/19 21:43	91
15/08/19 22:43	84
15/08/19 23:43	94
16/08/19 00:43	91
16/08/19 01:43	81
16/08/19 02:43	83
16/08/19 03:43	88
16/08/19 04:43	80
16/08/19 05:43	81
16/08/19 06:43	73
16/08/19 07:43	88
16/08/19 08:43	92
16/08/19 09:43	85
Average	83
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/08/19 09:04	55
21/08/19 10:04	49
21/08/19 11:04	49
21/08/19 12:04	46
21/08/19 13:04	44
21/08/19 14:04	51
21/08/19 15:04	53
21/08/19 16:04	44
21/08/19 17:04	43
21/08/19 18:04	55
21/08/19 19:04	51
21/08/19 20:04	57
21/08/19 21:04	57
21/08/19 22:04	44
21/08/19 23:04	49
22/08/19 00:04	53
22/08/19 01:04	44
22/08/19 02:04	49
22/08/19 03:04	53
22/08/19 04:04	44
22/08/19 05:04	55
22/08/19 06:04	57
22/08/19 07:04	55
22/08/19 08:04	48
Average	50
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/08/19 09:01	78
27/08/19 10:01	73
27/08/19 11:01	70
27/08/19 12:01	67
27/08/19 13:01	73
27/08/19 14:01	62
27/08/19 15:01	69
27/08/19 16:01	63
27/08/19 17:01	67
27/08/19 18:01	66
27/08/19 19:01	66
27/08/19 20:01	55
27/08/19 21:01	56
27/08/19 22:01	56
27/08/19 23:01	59
28/08/19 00:01	64
28/08/19 01:01	57
28/08/19 02:01	59
28/08/19 03:01	51
28/08/19 04:01	53
28/08/19 05:01	54
28/08/19 06:01	50
28/08/19 07:01	56
28/08/19 08:01	57
Average	62
Action Level	165
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

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Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
04/05/19 10:46	22
04/05/19 11:46	24
04/05/19 12:46	24
04/05/19 13:46	24
04/05/19 14:46	25
04/05/19 15:46	24
04/05/19 16:46	25
04/05/19 17:46	25
04/05/19 18:46	24
04/05/19 19:46	23
04/05/19 20:46	30
04/05/19 21:46	31
04/05/19 22:46	31
04/05/19 23:46	32
05/05/19 00:46	22
05/05/19 01:46	27
05/05/19 02:46	26
05/05/19 03:46	29
05/05/19 04:46	28
05/05/19 05:46	29
05/05/19 06:46	20
05/05/19 07:46	21
05/05/19 08:46	23
05/05/19 09:46	24
Average	26
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
10/05/19 09:56	41
10/05/19 10:56	42
10/05/19 11:56	47
10/05/19 12:56	44
10/05/19 13:56	40
10/05/19 14:56	39
10/05/19 15:56	36
10/05/19 16:56	37
10/05/19 17:56	38
10/05/19 18:56	41
10/05/19 19:56	47
10/05/19 20:56	45
10/05/19 21:56	52
10/05/19 22:56	57
10/05/19 23:56	69
11/05/19 00:56	70
11/05/19 01:56	67
11/05/19 02:56	48
11/05/19 03:56	40
11/05/19 04:56	34
11/05/19 05:56	37
11/05/19 06:56	38
11/05/19 07:56	36
11/05/19 08:56	35
Average	45
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
16/05/19 08:35	45
16/05/19 09:35	41
16/05/19 10:35	50
16/05/19 11:35	45
16/05/19 12:35	43
16/05/19 13:35	37
16/05/19 14:35	40
16/05/19 15:35	42
16/05/19 16:35	45
16/05/19 17:35	51
16/05/19 18:35	51
16/05/19 19:35	53
16/05/19 20:35	61
16/05/19 21:35	64
16/05/19 22:35	67
16/05/19 23:35	66
17/05/19 00:35	56
17/05/19 01:35	54
17/05/19 02:35	41
17/05/19 03:35	42
17/05/19 04:35	43
17/05/19 05:35	43
17/05/19 06:35	32
17/05/19 07:35	41
Average	48
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
22/05/19 11:01	59
22/05/19 12:01	63
22/05/19 13:01	79
22/05/19 14:01	74
22/05/19 15:01	81
22/05/19 16:01	81
22/05/19 17:01	90
22/05/19 18:01	83
22/05/19 19:01	79
22/05/19 20:01	70
22/05/19 21:01	70
22/05/19 22:01	63
22/05/19 23:01	70
23/05/19 00:01	72
23/05/19 01:01	79
23/05/19 02:01	72
23/05/19 03:01	81
23/05/19 04:01	61
23/05/19 05:01	57
23/05/19 06:01	74
23/05/19 07:01	74
23/05/19 08:01	70
23/05/19 09:01	61
23/05/19 10:01	55
Average	72
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
28/05/19 11:14	81
28/05/19 12:14	96
28/05/19 13:14	105
28/05/19 14:14	114
28/05/19 15:14	92
28/05/19 16:14	87
28/05/19 17:14	79
28/05/19 18:14	92
28/05/19 19:14	81
28/05/19 20:14	81
28/05/19 21:14	63
28/05/19 22:14	70
28/05/19 23:14	79
29/05/19 00:14	70
29/05/19 01:14	83
29/05/19 02:14	70
29/05/19 03:14	81
29/05/19 04:14	90
29/05/19 05:14	87
29/05/19 06:14	77
29/05/19 07:14	77
29/05/19 08:14	70
29/05/19 09:14	87
29/05/19 10:14	83
Average	83
Action Level	171
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

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Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
03/06/19 09:19	68
03/06/19 10:19	72
03/06/19 11:19	78
03/06/19 12:19	84
03/06/19 13:19	80
03/06/19 14:19	68
03/06/19 15:19	72
03/06/19 16:19	74
03/06/19 17:19	78
03/06/19 18:19	78
03/06/19 19:19	70
03/06/19 20:19	67
03/06/19 21:19	76
03/06/19 22:19	80
03/06/19 23:19	68
04/06/19 00:19	70
04/06/19 01:19	74
04/06/19 02:19	78
04/06/19 03:19	68
04/06/19 04:19	65
04/06/19 05:19	65
04/06/19 06:19	67
04/06/19 07:19	70
04/06/19 08:19	74
Average	73
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
08/06/19 09:05	59
08/06/19 10:05	67
08/06/19 11:05	57
08/06/19 12:05	56
08/06/19 13:05	67
08/06/19 14:05	68
08/06/19 15:05	76
08/06/19 16:05	81
08/06/19 17:05	81
08/06/19 18:05	67
08/06/19 19:05	70
08/06/19 20:05	59
08/06/19 21:05	54
08/06/19 22:05	48
08/06/19 23:05	56
09/06/19 00:05	56
09/06/19 01:05	57
09/06/19 02:05	54
09/06/19 03:05	52
09/06/19 04:05	63
09/06/19 05:05	59
09/06/19 06:05	70
09/06/19 07:05	59
09/06/19 08:05	67
Average	63
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
14/06/19 09:07	49
14/06/19 10:07	53
14/06/19 11:07	61
14/06/19 12:07	61
14/06/19 13:07	68
14/06/19 14:07	65
14/06/19 15:07	59
14/06/19 16:07	59
14/06/19 17:07	53
14/06/19 18:07	51
14/06/19 19:07	57
14/06/19 20:07	59
14/06/19 21:07	65
14/06/19 22:07	63
14/06/19 23:07	63
15/06/19 00:07	55
15/06/19 01:07	55
15/06/19 02:07	49
15/06/19 03:07	49
15/06/19 04:07	48
15/06/19 05:07	48
15/06/19 06:07	44
15/06/19 07:07	53
15/06/19 08:07	48
Average	56
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
19/06/19 09:03	69
19/06/19 10:03	73
19/06/19 11:03	59
19/06/19 12:03	62
19/06/19 13:03	68
19/06/19 14:03	71
19/06/19 15:03	77
19/06/19 16:03	80
19/06/19 17:03	84
19/06/19 18:03	90
19/06/19 19:03	95
19/06/19 20:03	91
19/06/19 21:03	95
19/06/19 22:03	99
19/06/19 23:03	88
20/06/19 00:03	77
20/06/19 01:03	69
20/06/19 02:03	71
20/06/19 03:03	75
20/06/19 04:03	75
20/06/19 05:03	80
20/06/19 06:03	73
20/06/19 07:03	68
20/06/19 08:03	66
Average	77
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
25/06/19 08:49	108
25/06/19 09:49	126
25/06/19 10:49	122
25/06/19 11:49	122
25/06/19 12:49	124
25/06/19 13:49	132
25/06/19 14:49	130
25/06/19 15:49	134
25/06/19 16:49	141
25/06/19 17:49	141
25/06/19 18:49	137
25/06/19 19:49	130
25/06/19 20:49	124
25/06/19 21:49	126
25/06/19 22:49	119
25/06/19 23:49	115
26/06/19 00:49	109
26/06/19 01:49	108
26/06/19 02:49	108
26/06/19 03:49	93
26/06/19 04:49	91
26/06/19 05:49	85
26/06/19 06:49	91
26/06/19 07:49	98
Average	117
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
29/06/19 11:19	25
29/06/19 12:19	19
29/06/19 13:19	19
29/06/19 14:19	19
29/06/19 15:19	23
29/06/19 16:19	21
29/06/19 17:19	23
29/06/19 18:19	25
29/06/19 19:19	25
29/06/19 20:19	23
29/06/19 21:19	25
29/06/19 22:19	23
29/06/19 23:19	23
30/06/19 00:19	23
30/06/19 01:19	25
30/06/19 02:19	23
30/06/19 03:19	24
30/06/19 04:19	24
30/06/19 05:19	24
30/06/19 06:19	21
30/06/19 07:19	28
30/06/19 08:19	23
30/06/19 09:19	23
30/06/19 10:19	25
Average	23
Action Level	171
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

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Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
05/07/19 09:25	59
05/07/19 10:25	67
05/07/19 11:25	56
05/07/19 12:25	78
05/07/19 13:25	86
05/07/19 14:25	79
05/07/19 15:25	93
05/07/19 16:25	63
05/07/19 17:25	63
05/07/19 18:25	76
05/07/19 19:25	76
05/07/19 20:25	81
05/07/19 21:25	78
05/07/19 22:25	67
05/07/19 23:25	67
06/07/19 00:25	63
06/07/19 01:25	63
06/07/19 02:25	64
06/07/19 03:25	52
06/07/19 04:25	48
06/07/19 05:25	57
06/07/19 06:25	63
06/07/19 07:25	68
06/07/19 08:25	74
Average	68
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
11/07/19 09:18	71
11/07/19 10:18	67
11/07/19 11:18	60
11/07/19 12:18	58
11/07/19 13:18	56
11/07/19 14:18	66
11/07/19 15:18	71
11/07/19 16:18	73
11/07/19 17:18	79
11/07/19 18:18	77
11/07/19 19:18	69
11/07/19 20:18	69
11/07/19 21:18	60
11/07/19 22:18	56
11/07/19 23:18	52
12/07/19 00:18	52
12/07/19 01:18	41
12/07/19 02:18	49
12/07/19 03:18	56
12/07/19 04:18	58
12/07/19 05:18	64
12/07/19 06:18	56
12/07/19 07:18	52
12/07/19 08:18	54
Average	61
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
17/07/19 09:41	52
17/07/19 10:41	49
17/07/19 11:41	41
17/07/19 12:41	52
17/07/19 13:41	56
17/07/19 14:41	34
17/07/19 15:41	49
17/07/19 16:41	52
17/07/19 17:41	30
17/07/19 18:41	60
17/07/19 19:41	58
17/07/19 20:41	56
17/07/19 21:41	54
17/07/19 22:41	49
17/07/19 23:41	50
18/07/19 00:41	52
18/07/19 01:41	52
18/07/19 02:41	60
18/07/19 03:41	45
18/07/19 04:41	34
18/07/19 05:41	34
18/07/19 06:41	49
18/07/19 07:41	32
18/07/19 08:41	34
Average	47
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
23/07/19 10:18	49
23/07/19 11:18	41
23/07/19 12:18	54
23/07/19 13:18	37
23/07/19 14:18	43
23/07/19 15:18	45
23/07/19 16:18	45
23/07/19 17:18	34
23/07/19 18:18	30
23/07/19 19:18	50
23/07/19 20:18	54
23/07/19 21:18	60
23/07/19 22:18	52
23/07/19 23:18	58
24/07/19 00:18	56
24/07/19 01:18	49
24/07/19 02:18	49
24/07/19 03:18	64
24/07/19 04:18	56
24/07/19 05:18	41
24/07/19 06:18	45
24/07/19 07:18	54
24/07/19 08:18	60
24/07/19 09:18	62
Average	49
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
29/07/19 09:11	40
29/07/19 10:11	42
29/07/19 11:11	40
29/07/19 12:11	40
29/07/19 13:11	48
29/07/19 14:11	48
29/07/19 15:11	49
29/07/19 16:11	51
29/07/19 17:11	53
29/07/19 18:11	44
29/07/19 19:11	48
29/07/19 20:11	46
29/07/19 21:11	37
29/07/19 22:11	33
29/07/19 23:11	29
30/07/19 00:11	55
30/07/19 01:11	58
30/07/19 02:11	51
30/07/19 03:11	49
30/07/19 04:11	44
30/07/19 05:11	42
30/07/19 06:11	35
30/07/19 07:11	33
30/07/19 08:11	40
Average	44
Action Level	171
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

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Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
03/08/19 07:00	82
03/08/19 08:00	81
03/08/19 09:00	82
03/08/19 10:00	84
03/08/19 11:00	88
03/08/19 12:00	92
03/08/19 13:00	96
03/08/19 14:00	97
03/08/19 15:00	97
03/08/19 16:00	101
03/08/19 17:00	99
03/08/19 18:00	99
03/08/19 19:00	97
03/08/19 20:00	101
03/08/19 21:00	96
03/08/19 22:00	99
03/08/19 23:00	94
04/08/19 00:00	86
04/08/19 01:00	86
04/08/19 02:00	88
04/08/19 03:00	86
04/08/19 04:00	79
04/08/19 05:00	75
04/08/19 06:00	79
Average	90
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
09/08/19 07:06	52
09/08/19 08:06	62
09/08/19 09:06	62
09/08/19 10:06	64
09/08/19 11:06	71
09/08/19 12:06	77
09/08/19 13:06	67
09/08/19 14:06	66
09/08/19 15:06	66
09/08/19 16:06	71
09/08/19 17:06	75
09/08/19 18:06	79
09/08/19 19:06	82
09/08/19 20:06	81
09/08/19 21:06	90
09/08/19 22:06	84
09/08/19 23:06	86
10/08/19 00:06	79
10/08/19 01:06	75
10/08/19 02:06	77
10/08/19 03:06	67
10/08/19 04:06	64
10/08/19 05:06	58
10/08/19 06:06	54
Average	71
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/08/19 11:48	78
15/08/19 12:48	74
15/08/19 13:48	69
15/08/19 14:48	69
15/08/19 15:48	67
15/08/19 16:48	70
15/08/19 17:48	65
15/08/19 18:48	74
15/08/19 19:48	72
15/08/19 20:48	69
15/08/19 21:48	67
15/08/19 22:48	70
15/08/19 23:48	78
16/08/19 00:48	83
16/08/19 01:48	80
16/08/19 02:48	76
16/08/19 03:48	81
16/08/19 04:48	80
16/08/19 05:48	76
16/08/19 06:48	74
16/08/19 07:48	70
16/08/19 08:48	72
16/08/19 09:48	65
16/08/19 10:48	57
Average	72
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/08/19 08:30	66
21/08/19 09:30	77
21/08/19 10:30	70
21/08/19 11:30	50
21/08/19 12:30	77
21/08/19 13:30	94
21/08/19 14:30	101
21/08/19 15:30	87
21/08/19 16:30	68
21/08/19 17:30	81
21/08/19 18:30	61
21/08/19 19:30	66
21/08/19 20:30	57
21/08/19 21:30	63
21/08/19 22:30	70
21/08/19 23:30	79
22/08/19 00:30	87
22/08/19 01:30	70
22/08/19 02:30	59
22/08/19 03:30	61
22/08/19 04:30	72
22/08/19 05:30	79
22/08/19 06:30	68
22/08/19 07:30	77
Average	73
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/08/19 09:23	50
27/08/19 10:23	50
27/08/19 11:23	55
27/08/19 12:23	73
27/08/19 13:23	81
27/08/19 14:23	63
27/08/19 15:23	63
27/08/19 16:23	56
27/08/19 17:23	56
27/08/19 18:23	56
27/08/19 19:23	64
27/08/19 20:23	63
27/08/19 21:23	70
27/08/19 22:23	52
27/08/19 23:23	51
28/08/19 00:23	55
28/08/19 01:23	56
28/08/19 02:23	78
28/08/19 03:23	78
28/08/19 04:23	57
28/08/19 05:23	64
28/08/19 06:23	60
28/08/19 07:23	78
28/08/19 08:23	52
Average	62
Action Level	171
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS8 - Lek Yuen Estate

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
03/06/19 10:12	54
03/06/19 11:12	56
03/06/19 12:12	62
03/06/19 13:12	70
03/06/19 14:12	68
03/06/19 15:12	68
03/06/19 16:12	66
03/06/19 17:12	76
03/06/19 18:12	82
03/06/19 19:12	80
03/06/19 20:12	78
03/06/19 21:12	72
03/06/19 22:12	62
03/06/19 23:12	70
04/06/19 00:12	72
04/06/19 01:12	72
04/06/19 02:12	60
04/06/19 03:12	56
04/06/19 04:12	54
04/06/19 05:12	58
04/06/19 06:12	62
04/06/19 07:12	66
04/06/19 08:12	70
04/06/19 09:12	64
Average	67
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
08/06/19 09:19	46
08/06/19 10:19	60
08/06/19 11:19	56
08/06/19 12:19	67
08/06/19 13:19	69
08/06/19 14:19	72
08/06/19 15:19	67
08/06/19 16:19	70
08/06/19 17:19	76
08/06/19 18:19	74
08/06/19 19:19	74
08/06/19 20:19	67
08/06/19 21:19	69
08/06/19 22:19	59
08/06/19 23:19	67
09/06/19 00:19	70
09/06/19 01:19	82
09/06/19 02:19	78
09/06/19 03:19	59
09/06/19 04:19	67
09/06/19 05:19	67
09/06/19 06:19	69
09/06/19 07:19	54
09/06/19 08:19	52
Average	66
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
14/06/19 09:31	73
14/06/19 10:31	86
14/06/19 11:31	96
14/06/19 12:31	99
14/06/19 13:31	86
14/06/19 14:31	79
14/06/19 15:31	77
14/06/19 16:31	54
14/06/19 17:31	64
14/06/19 18:31	64
14/06/19 19:31	69
14/06/19 20:31	73
14/06/19 21:31	79
14/06/19 22:31	79
14/06/19 23:31	66
15/06/19 00:31	69
15/06/19 01:31	60
15/06/19 02:31	52
15/06/19 03:31	47
15/06/19 04:31	49
15/06/19 05:31	54
15/06/19 06:31	52
15/06/19 07:31	64
15/06/19 08:31	58
Average	69
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
19/06/19 11:02	60
19/06/19 12:02	66
19/06/19 13:02	69
19/06/19 14:02	77
19/06/19 15:02	62
19/06/19 16:02	45
19/06/19 17:02	56
19/06/19 18:02	75
19/06/19 19:02	96
19/06/19 20:02	103
19/06/19 21:02	96
19/06/19 22:02	94
19/06/19 23:02	75
20/06/19 00:02	79
20/06/19 01:02	79
20/06/19 02:02	75
20/06/19 03:02	77
20/06/19 04:02	71
20/06/19 05:02	79
20/06/19 06:02	73
20/06/19 07:02	107
20/06/19 08:02	88
20/06/19 09:02	82
20/06/19 10:02	79
Average	77
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
25/06/19 08:37	149
25/06/19 09:37	103
25/06/19 10:37	109
25/06/19 11:37	117
25/06/19 12:37	113
25/06/19 13:37	113
25/06/19 14:37	111
25/06/19 15:37	115
25/06/19 16:37	117
25/06/19 17:37	120
25/06/19 18:37	120
25/06/19 19:37	113
25/06/19 20:37	107
25/06/19 21:37	105
25/06/19 22:37	105
25/06/19 23:37	101
26/06/19 00:37	101
26/06/19 01:37	97
26/06/19 02:37	92
26/06/19 03:37	92
26/06/19 04:37	97
26/06/19 05:37	99
26/06/19 06:37	103
26/06/19 07:37	103
Average	108
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
29/06/19 10:31	18
29/06/19 11:31	26
29/06/19 12:31	23
29/06/19 13:31	23
29/06/19 14:31	25
29/06/19 15:31	23
29/06/19 16:31	25
29/06/19 17:31	29
29/06/19 18:31	23
29/06/19 19:31	18
29/06/19 20:31	26
29/06/19 21:31	18
29/06/19 22:31	25
29/06/19 23:31	25
30/06/19 00:31	23
30/06/19 01:31	27
30/06/19 02:31	27
30/06/19 03:31	27
30/06/19 04:31	21
30/06/19 05:31	27
30/06/19 06:31	25
30/06/19 07:31	23
30/06/19 08:31	21
30/06/19 09:31	25
Average	24
Action Level	161
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS8 - Lek Yuen Estate

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
05/07/19 10:12	70
05/07/19 11:12	76
05/07/19 12:12	82
05/07/19 13:12	83
05/07/19 14:12	83
05/07/19 15:12	89
05/07/19 16:12	95
05/07/19 17:12	100
05/07/19 18:12	104
05/07/19 19:12	95
05/07/19 20:12	82
05/07/19 21:12	78
05/07/19 22:12	70
05/07/19 23:12	76
06/07/19 00:12	67
06/07/19 01:12	72
06/07/19 02:12	72
06/07/19 03:12	78
06/07/19 04:12	76
06/07/19 05:12	70
06/07/19 06:12	76
06/07/19 07:12	83
06/07/19 08:12	78
06/07/19 09:12	81
Average	81
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
11/07/19 09:47	87
11/07/19 10:47	79
11/07/19 11:47	72
11/07/19 12:47	68
11/07/19 13:47	75
11/07/19 14:47	75
11/07/19 15:47	77
11/07/19 16:47	79
11/07/19 17:47	83
11/07/19 18:47	70
11/07/19 19:47	60
11/07/19 20:47	70
11/07/19 21:47	72
11/07/19 22:47	77
11/07/19 23:47	75
12/07/19 00:47	62
12/07/19 01:47	64
12/07/19 02:47	68
12/07/19 03:47	72
12/07/19 04:47	66
12/07/19 05:47	66
12/07/19 06:47	60
12/07/19 07:47	57
12/07/19 08:47	81
Average	72
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
17/07/19 10:11	40
17/07/19 11:11	44
17/07/19 12:11	44
17/07/19 13:11	44
17/07/19 14:11	44
17/07/19 15:11	40
17/07/19 16:11	33
17/07/19 17:11	33
17/07/19 18:11	37
17/07/19 19:11	40
17/07/19 20:11	33
17/07/19 21:11	29
17/07/19 22:11	51
17/07/19 23:11	44
18/07/19 00:11	44
18/07/19 01:11	48
18/07/19 02:11	49
18/07/19 03:11	53
18/07/19 04:11	57
18/07/19 05:11	55
18/07/19 06:11	44
18/07/19 07:11	46
18/07/19 08:11	40
18/07/19 09:11	38
Average	43
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
23/07/19 11:04	64
23/07/19 12:04	68
23/07/19 13:04	73
23/07/19 14:04	81
23/07/19 15:04	81
23/07/19 16:04	79
23/07/19 17:04	79
23/07/19 18:04	68
23/07/19 19:04	60
23/07/19 20:04	64
23/07/19 21:04	77
23/07/19 22:04	81
23/07/19 23:04	81
24/07/19 00:04	55
24/07/19 01:04	57
24/07/19 02:04	62
24/07/19 03:04	64
24/07/19 04:04	53
24/07/19 05:04	46
24/07/19 06:04	64
24/07/19 07:04	68
24/07/19 08:04	76
24/07/19 09:04	64
24/07/19 10:04	66
Average	68
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
29/07/19 11:07	51
29/07/19 12:07	51
29/07/19 13:07	64
29/07/19 14:07	60
29/07/19 15:07	57
29/07/19 16:07	59
29/07/19 17:07	57
29/07/19 18:07	49
29/07/19 19:07	49
29/07/19 20:07	49
29/07/19 21:07	53
29/07/19 22:07	42
29/07/19 23:07	45
30/07/19 00:07	47
30/07/19 01:07	47
30/07/19 02:07	53
30/07/19 03:07	60
30/07/19 04:07	60
30/07/19 05:07	40
30/07/19 06:07	38
30/07/19 07:07	36
30/07/19 08:07	42
30/07/19 09:07	45
30/07/19 10:07	43
Average	50
Action Level	161
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS13 - Fung Wo Estate

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
03/06/19 10:37	48
03/06/19 11:37	40
03/06/19 12:37	51
03/06/19 13:37	53
03/06/19 14:37	57
03/06/19 15:37	57
03/06/19 16:37	51
03/06/19 17:37	48
03/06/19 18:37	40
03/06/19 19:37	38
03/06/19 20:37	40
03/06/19 21:37	44
03/06/19 22:37	49
03/06/19 23:37	55
04/06/19 00:37	59
04/06/19 01:37	49
04/06/19 02:37	53
04/06/19 03:37	59
04/06/19 04:37	60
04/06/19 05:37	66
04/06/19 06:37	59
04/06/19 07:37	53
04/06/19 08:37	49
04/06/19 09:37	48
Average	51
Action Level	174
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
08/06/19 10:25	80
08/06/19 11:25	61
08/06/19 12:25	61
08/06/19 13:25	57
08/06/19 14:25	59
08/06/19 15:25	53
08/06/19 16:25	49
08/06/19 17:25	59
08/06/19 18:25	68
08/06/19 19:25	72
08/06/19 20:25	80
08/06/19 21:25	84
08/06/19 22:25	99
08/06/19 23:25	103
09/06/19 00:25	95
09/06/19 01:25	80
09/06/19 02:25	72
09/06/19 03:25	53
09/06/19 04:25	53
09/06/19 05:25	55
09/06/19 06:25	63
09/06/19 07:25	68
09/06/19 08:25	61
09/06/19 09:25	63
Average	69
Action Level	174
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
14/06/19 10:13	76
14/06/19 11:13	74
14/06/19 12:13	67
14/06/19 13:13	52
14/06/19 14:13	69
14/06/19 15:13	72
14/06/19 16:13	67
14/06/19 17:13	57
14/06/19 18:13	56
14/06/19 19:13	56
14/06/19 20:13	48
14/06/19 21:13	45
14/06/19 22:13	54
14/06/19 23:13	57
15/06/19 00:13	59
15/06/19 01:13	67
15/06/19 02:13	70
15/06/19 03:13	82
15/06/19 04:13	74
15/06/19 05:13	59
15/06/19 06:13	59
15/06/19 07:13	57
15/06/19 08:13	48
15/06/19 09:13	57
Average	62
Action Level	174
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
19/06/19 09:37	101
19/06/19 10:37	106
19/06/19 11:37	104
19/06/19 12:37	99
19/06/19 13:37	87
19/06/19 14:37	83
19/06/19 15:37	91
19/06/19 16:37	97
19/06/19 17:37	87
19/06/19 18:37	79
19/06/19 19:37	75
19/06/19 20:37	70
19/06/19 21:37	66
19/06/19 22:37	66
19/06/19 23:37	81
20/06/19 00:37	87
20/06/19 01:37	91
20/06/19 02:37	95
20/06/19 03:37	104
20/06/19 04:37	106
20/06/19 05:37	97
20/06/19 06:37	95
20/06/19 07:37	87
20/06/19 08:37	91
Average	89
Action Level	174
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
25/06/19 08:26	51
25/06/19 09:26	53
25/06/19 10:26	55
25/06/19 11:26	53
25/06/19 12:26	51
25/06/19 13:26	51
25/06/19 14:26	49
25/06/19 15:26	53
25/06/19 16:26	53
25/06/19 17:26	57
25/06/19 18:26	59
25/06/19 19:26	55
25/06/19 20:26	51
25/06/19 21:26	59
25/06/19 22:26	55
25/06/19 23:26	61
26/06/19 00:26	53
26/06/19 01:26	61
26/06/19 02:26	65
26/06/19 03:26	74
26/06/19 04:26	45
26/06/19 05:26	47
26/06/19 06:26	47
26/06/19 07:26	53
Average	55
Action Level	174
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
29/06/19 10:46	43
29/06/19 11:46	37
29/06/19 12:46	35
29/06/19 13:46	35
29/06/19 14:46	33
29/06/19 15:46	35
29/06/19 16:46	29
29/06/19 17:46	33
29/06/19 18:46	41
29/06/19 19:46	43
29/06/19 20:46	39
29/06/19 21:46	43
29/06/19 22:46	41
29/06/19 23:46	43
30/06/19 00:46	43
30/06/19 01:46	39
30/06/19 02:46	33
30/06/19 03:46	34
30/06/19 04:46	34
30/06/19 05:46	29
30/06/19 06:46	33
30/06/19 07:46	33
30/06/19 08:46	29
30/06/19 09:46	38
Average	36
Action Level	174
Limit Level	260

- Remark
- Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 - The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS15 - Ha Wo Che

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
05/07/19 10:40	53
05/07/19 11:40	46
05/07/19 12:40	49
05/07/19 13:40	53
05/07/19 14:40	59
05/07/19 15:40	59
05/07/19 16:40	57
05/07/19 17:40	61
05/07/19 18:40	53
05/07/19 19:40	42
05/07/19 20:40	46
05/07/19 21:40	38
05/07/19 22:40	36
05/07/19 23:40	46
06/07/19 00:40	53
06/07/19 01:40	57
06/07/19 02:40	61
06/07/19 03:40	53
06/07/19 04:40	55
06/07/19 05:40	57
06/07/19 06:40	65
06/07/19 07:40	57
06/07/19 08:40	49
06/07/19 09:40	51
Average	52
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
11/07/19 10:07	51
11/07/19 11:07	65
11/07/19 12:07	68
11/07/19 13:07	67
11/07/19 14:07	72
11/07/19 15:07	79
11/07/19 16:07	84
11/07/19 17:07	70
11/07/19 18:07	53
11/07/19 19:07	55
11/07/19 20:07	55
11/07/19 21:07	65
11/07/19 22:07	70
11/07/19 23:07	70
12/07/19 00:07	57
12/07/19 01:07	51
12/07/19 02:07	51
12/07/19 03:07	53
12/07/19 04:07	49
12/07/19 05:07	57
12/07/19 06:07	61
12/07/19 07:07	57
12/07/19 08:07	53
12/07/19 09:07	49
Average	61
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
17/07/19 10:41	68
17/07/19 11:41	68
17/07/19 12:41	77
17/07/19 13:41	76
17/07/19 14:41	72
17/07/19 15:41	74
17/07/19 16:41	83
17/07/19 17:41	77
17/07/19 18:41	68
17/07/19 19:41	68
17/07/19 20:41	60
17/07/19 21:41	57
17/07/19 22:41	53
17/07/19 23:41	47
18/07/19 00:41	53
18/07/19 01:41	60
18/07/19 02:41	59
18/07/19 03:41	68
18/07/19 04:41	72
18/07/19 05:41	77
18/07/19 06:41	77
18/07/19 07:41	72
18/07/19 08:41	70
18/07/19 09:41	69
Average	68
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
23/07/19 11:18	66
23/07/19 12:18	66
23/07/19 13:18	70
23/07/19 14:18	77
23/07/19 15:18	81
23/07/19 16:18	88
23/07/19 17:18	77
23/07/19 18:18	93
23/07/19 19:18	77
23/07/19 20:18	75
23/07/19 21:18	70
23/07/19 22:18	71
23/07/19 23:18	66
24/07/19 00:18	66
24/07/19 01:18	55
24/07/19 02:18	62
24/07/19 03:18	62
24/07/19 04:18	59
24/07/19 05:18	53
24/07/19 06:18	51
24/07/19 07:18	66
24/07/19 08:18	66
24/07/19 09:18	59
24/07/19 10:18	62
Average	68
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
29/07/19 10:27	79
29/07/19 11:27	79
29/07/19 12:27	85
29/07/19 13:27	86
29/07/19 14:27	79
29/07/19 15:27	79
29/07/19 16:27	72
29/07/19 17:27	68
29/07/19 18:27	60
29/07/19 19:27	60
29/07/19 20:27	64
29/07/19 21:27	66
29/07/19 22:27	68
29/07/19 23:27	79
30/07/19 00:27	81
30/07/19 01:27	68
30/07/19 02:27	70
30/07/19 03:27	60
30/07/19 04:27	64
30/07/19 05:27	76
30/07/19 06:27	76
30/07/19 07:27	83
30/07/19 08:27	81
30/07/19 09:27	85
Average	74
Action Level	172
Limit Level	260

- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

AMS15 - Ha Wo Che

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
03/08/19 07:00	44
03/08/19 08:00	42
03/08/19 09:00	48
03/08/19 10:00	52
03/08/19 11:00	50
03/08/19 12:00	52
03/08/19 13:00	50
03/08/19 14:00	54
03/08/19 15:00	54
03/08/19 16:00	56
03/08/19 17:00	50
03/08/19 18:00	52
03/08/19 19:00	58
03/08/19 20:00	62
03/08/19 21:00	62
03/08/19 22:00	60
03/08/19 23:00	58
04/08/19 00:00	56
04/08/19 01:00	54
04/08/19 02:00	50
04/08/19 03:00	56
04/08/19 04:00	52
04/08/19 05:00	48
04/08/19 06:00	48
Average	53
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
09/08/19 09:41	81
09/08/19 10:41	89
09/08/19 11:41	79
09/08/19 12:41	87
09/08/19 13:41	81
09/08/19 14:41	87
09/08/19 15:41	92
09/08/19 16:41	91
09/08/19 17:41	85
09/08/19 18:41	83
09/08/19 19:41	85
09/08/19 20:41	79
09/08/19 21:41	75
09/08/19 22:41	71
09/08/19 23:41	68
10/08/19 00:41	64
10/08/19 01:41	69
10/08/19 02:41	66
10/08/19 03:41	73
10/08/19 04:41	69
10/08/19 05:41	68
10/08/19 06:41	68
10/08/19 07:41	71
10/08/19 08:41	73
Average	77
Action Level	172
Limit Level	260

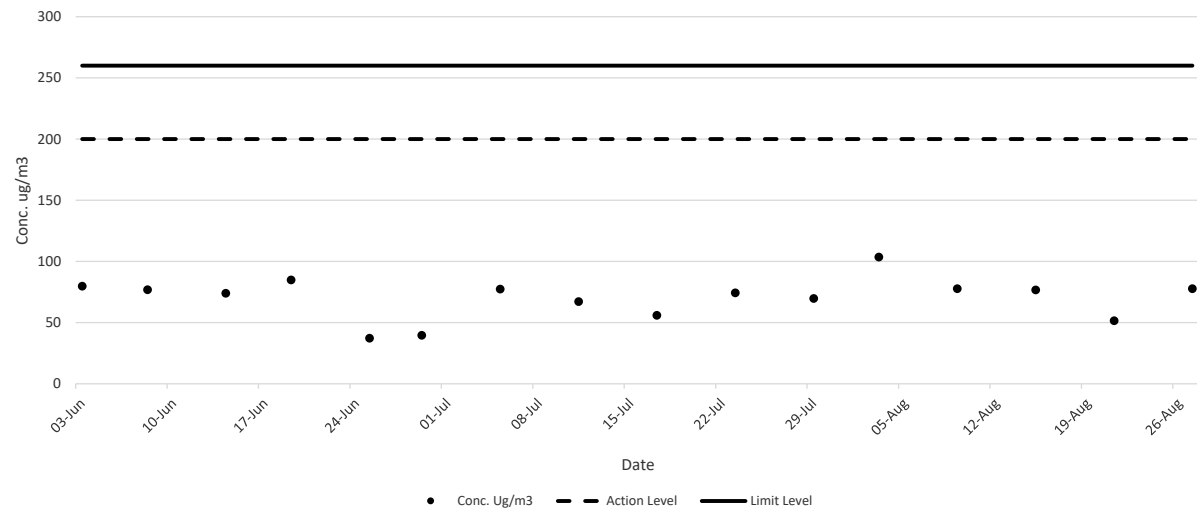
Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/08/19 11:59	65
15/08/19 12:59	63
15/08/19 13:59	59
15/08/19 14:59	67
15/08/19 15:59	68
15/08/19 16:59	68
15/08/19 17:59	63
15/08/19 18:59	57
15/08/19 19:59	65
15/08/19 20:59	72
15/08/19 21:59	68
15/08/19 22:59	70
15/08/19 23:59	78
16/08/19 00:59	81
16/08/19 01:59	74
16/08/19 02:59	70
16/08/19 03:59	67
16/08/19 04:59	68
16/08/19 05:59	70
16/08/19 06:59	67
16/08/19 07:59	65
16/08/19 08:59	61
16/08/19 09:59	59
16/08/19 10:59	59
Average	67
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/08/19 08:50	78
21/08/19 09:50	88
21/08/19 10:50	80
21/08/19 11:50	70
21/08/19 12:50	67
21/08/19 13:50	59
21/08/19 14:50	65
21/08/19 15:50	72
21/08/19 16:50	87
21/08/19 17:50	91
21/08/19 18:50	96
21/08/19 19:50	83
21/08/19 20:50	83
21/08/19 21:50	70
21/08/19 22:50	82
21/08/19 23:50	59
22/08/19 00:50	65
22/08/19 01:50	57
22/08/19 02:50	52
22/08/19 03:50	56
22/08/19 04:50	59
22/08/19 05:50	70
22/08/19 06:50	78
22/08/19 07:50	80
Average	73
Action Level	172
Limit Level	260

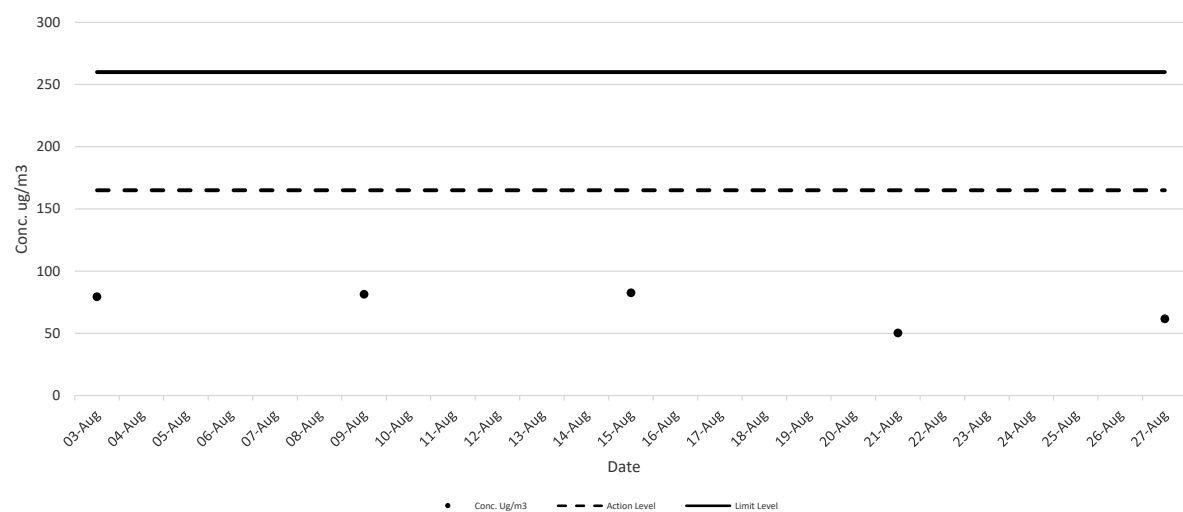
Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/08/19 10:27	64
27/08/19 11:27	64
27/08/19 12:27	66
27/08/19 13:27	69
27/08/19 14:27	75
27/08/19 15:27	71
27/08/19 16:27	68
27/08/19 17:27	68
27/08/19 18:27	82
27/08/19 19:27	78
27/08/19 20:27	77
27/08/19 21:27	71
27/08/19 22:27	71
27/08/19 23:27	75
28/08/19 00:27	64
28/08/19 01:27	57
28/08/19 02:27	57
28/08/19 03:27	53
28/08/19 04:27	61
28/08/19 05:27	61
28/08/19 06:27	57
28/08/19 07:27	68
28/08/19 08:27	62
28/08/19 09:27	64
Average	67
Action Level	172
Limit Level	260

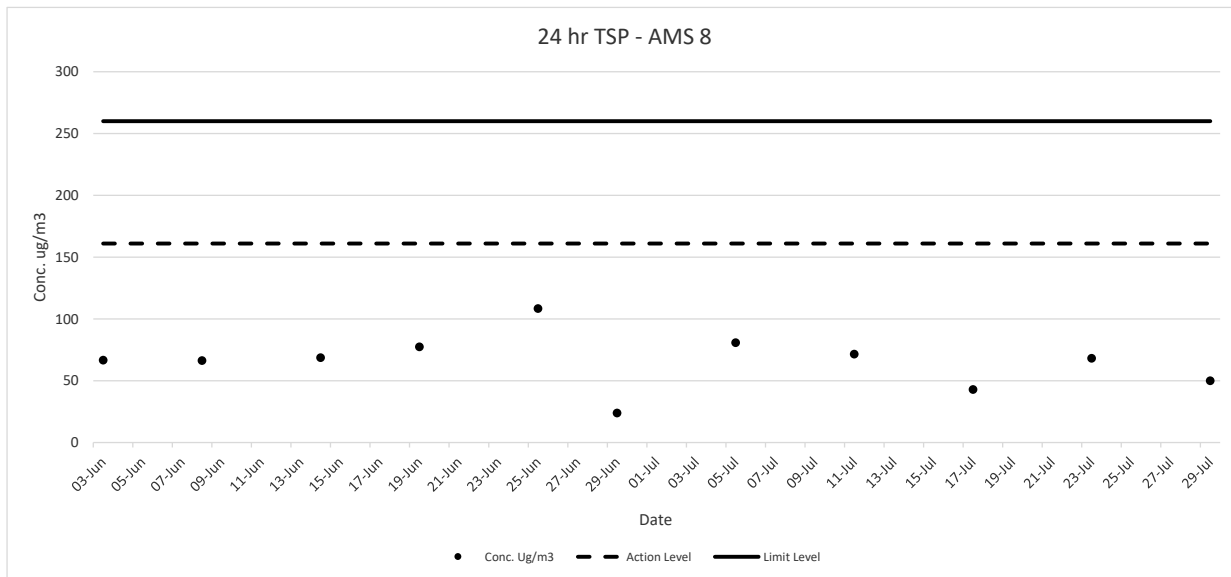
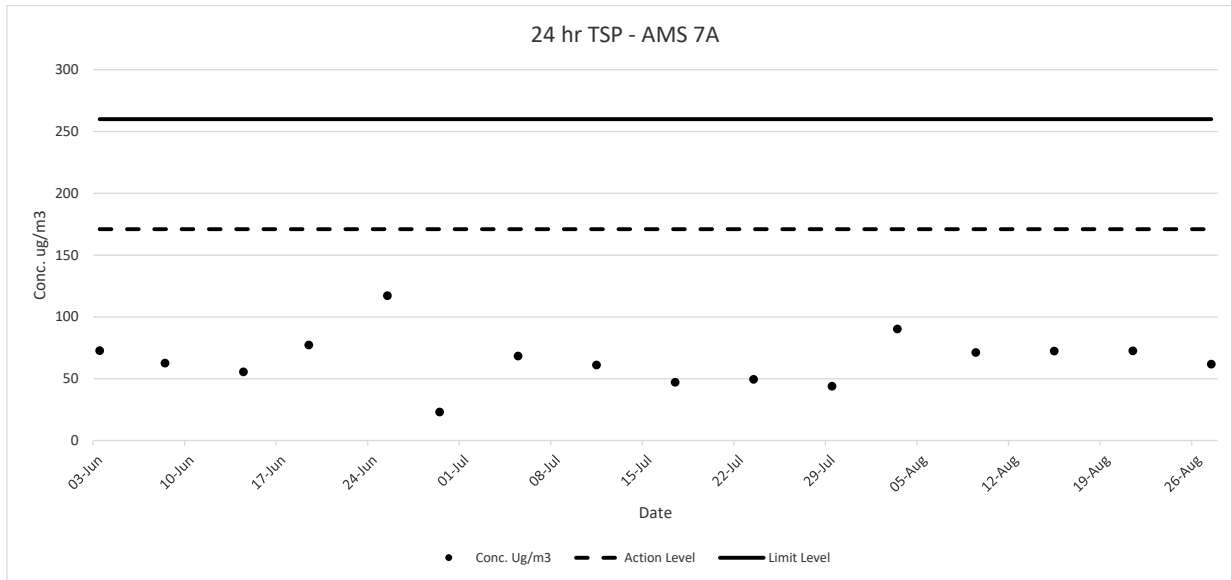
- Remark
1. Actual monitoring may be subjected to change due to any safety concern or adverse weather condition.
 2. The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works.

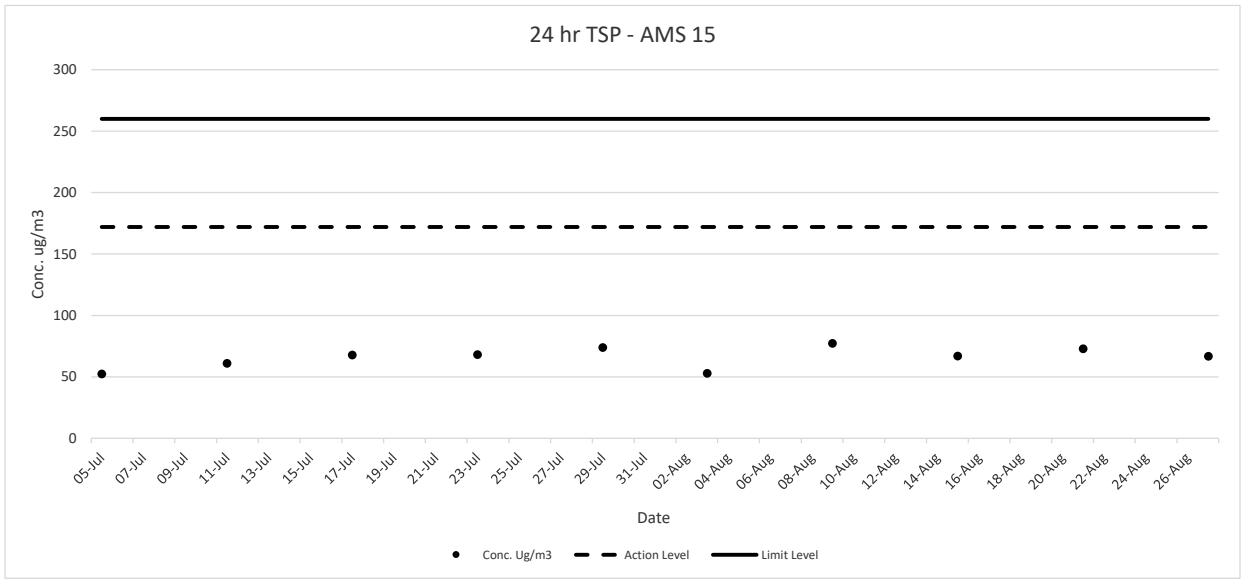
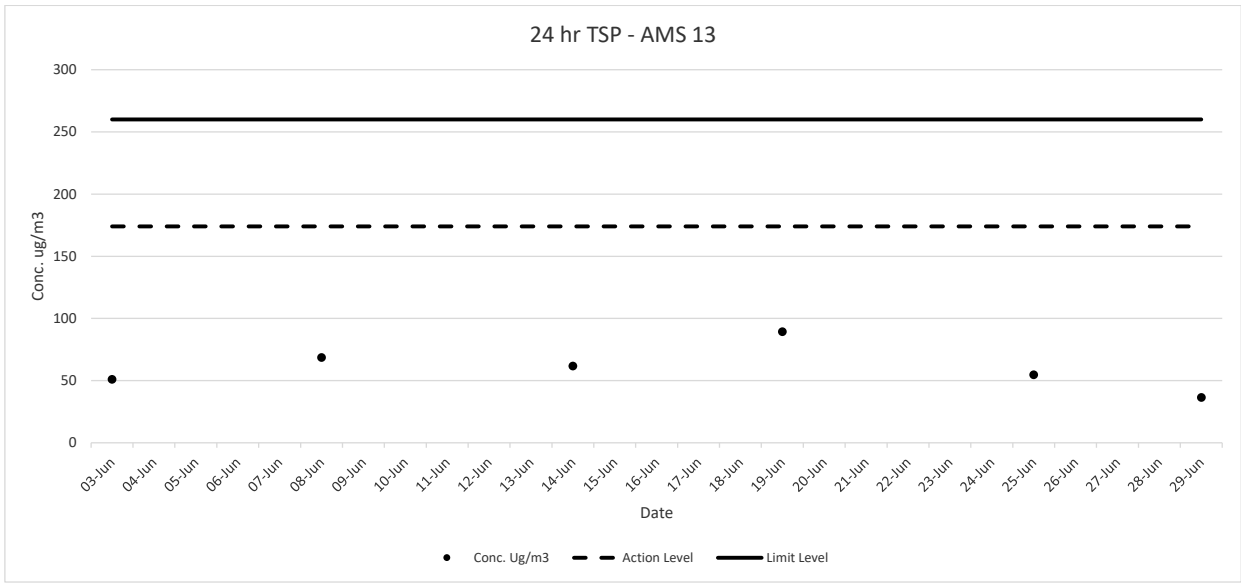
24 hr TSP - AMS 4A



24 hr TSP - AMS 6







**Impact Noise Monitoring Result for
NOD 03-2018 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)**

NMS 1 Scenery Court

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins					75			
11-May-19	13:02	67.6	61.5	71.0		67.6	Fine	1.0
17-May-19	13:05	66.4	60.5	67.0		66.4	Sunny	1.3
23-May-19	08:00	70.6	64.5	72.0		70.6	Fine	0.9
29-May-19	13:40	66.8	62.5	69.0		66.8	Overcast	1.3
04-Jun-19	09:04	60.9	58.0	62.5		60.9	Sunny	0.1
14-Jun-19	08:32	68.5	61.5	72.0		68.5	Overcast	0.4
20-Jun-19	13:04	69.5	64.5	72.0		69.5	Sunny	0.4
26-Jun-19	08:32	69.5	68.0	72.6		69.5	Fine	0.2
06-Jul-19	13:00	63.1	59.0	66.5		63.1	Fine	1.1
12-Jul-19	08:34	67.2	63.0	69.0		67.2	Sunny	0.5
18-Jul-19	11:32	66.1	60.5	68.0		66.1	Sunny	0.4
24-Jul-19	10:08	65.8	62.0	68.5		65.8	Sunny	0.7
30-Jul-19	10:29	66.1	62.0	68.0		66.1	Sunny	0.9
10-Aug-19	09:20	66.7	63.5	70.0		66.7	Fine	0.6
16-Aug-19	09:16	61.8	59.0	64.0		61.8	Sunny	0.0
22-Aug-19	15:37	66.5	62.0	68.0		66.5	Fine	0.0
28-Aug-19	09:04	65.7	62.5	68.0		65.7	Fine	0.7

NMS 2 Villa Le Parc

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins					75			
11-May-19	08:30	59.2	52.5	62.0		59.2	Fine	1.1
17-May-19	08:40	60.6	52.5	63.0		60.6	Sunny	1.2
23-May-19	13:00	61.6	50.5	62.0		61.6	Fine	1.2
29-May-19	08:35	59.0	52.0	60.5		59.0	Overcast	1.0
04-Jun-19	12:43	54.6	52.0	56.0		54.6	Sunny	0.2
14-Jun-19	13:00	58.5	50.5	60.0		58.5	Overcast	1.1
20-Jun-19	08:35	58.7	51.0	59.5		58.7	Sunny	0.6
26-Jun-19	09:11	72.0	66.0	74.5		72.0	Fine	0.1
06-Jul-19	08:32	58.6	52.0	60.5		58.6	Fine	0.6
12-Jul-19	13:00	61.5	52.5	62.5		61.5	Sunny	1.1
18-Jul-19	08:36	61.2	52.0	62.5		61.2	Sunny	0.9
24-Jul-19	13:48	60.5	51.0	61.0		60.5	Sunny	0.6
30-Jul-19	08:33	61.5	52.0	63.0		61.5	Sunny	0.7
10-Aug-19	11:41	60.2	51.5	62.0		60.2	Fine	0.6
16-Aug-19	11:48	56.4	53.0	58.5		56.4	Sunny	0.0
22-Aug-19	08:30	61.8	52.5	63.0		61.8	Fine	0.0
28-Aug-19	10:03	58.2	51.5	60.0		58.2	Fine	0.7

NMS 3 Hilton Plaza

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins					75			
11-May-19	11:23	71.2	66.0	73.5		71.2	Fine	1.2
17-May-19	11:44	71.8	66.5	74.5		71.8	Sunny	0.8
23-May-19	08:34	72.3	66.0	74.5		72.3	Fine	1.2
29-May-19	13:00	72.2	66.5	74.0		72.2	Overcast	0.7
04-Jun-19	09:39	60.3	57.5	61.5		60.3	Sunny	0.2
14-Jun-19	09:06	71.6	63.5	74.0		71.6	Overcast	0.6
20-Jun-19	11:32	68.6	64.0	70.5		68.6	Sunny	0.6
26-Jun-19	09:47	68.5	64.0	72.5		68.5	Fine	0.0
06-Jul-19	13:39	70.1	66.5	72.0		70.1	Fine	0.7
12-Jul-19	09:08	68.6	64.0	71.0		68.6	Sunny	0.9
18-Jul-19	13:00	69.7	66.0	72.0		69.7	Sunny	0.7
24-Jul-19	10:45	69.8	63.5	73.0		69.8	Sunny	0.6
30-Jul-19	11:37	68.7	65.0	71.0		68.7	Sunny	0.6
10-Aug-19	09:56	68.1	66.0	72.0		68.1	Fine	0.4
16-Aug-19	09:52	58.3	55.5	61.0		58.3	Sunny	0.2
22-Aug-19	09:16	69.1	65.5	71.5		69.1	Fine	0.0
28-Aug-19	14:12	67.9	64.0	71.0		67.9	Fine	0.3

NMS 4 Tin Liu

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
11-May-19	09:07	72.6	66.5	75.0	75	72.6	Fine	1.2
17-May-19	09:18	73.1	67.0	76.0		73.1	Sunny	1.0
23-May-19	11:33	72.1	66.0	75.5		72.1	Fine	1.3
29-May-19	09:11	72.1	67.5	76.5		72.1	Overcast	1.2
04-Jun-19	11:24	64.1	61.5	67.0		64.1	Sunny	0.2
14-Jun-19	11:25	71.6	66.0	74.5		71.6	Overcast	0.5
20-Jun-19	09:10	71.6	65.0	73.5		71.6	Sunny	0.4
26-Jun-19	10:22	70.5	68.0	75.5		70.5	Fine	0.2
06-Jul-19	09:10	69.7	62.5	72.0		69.7	Fine	0.4
12-Jul-19	11:31	71.6	63.0	72.5		71.6	Sunny	0.5
18-Jul-19	09:47	70.6	63.0	72.0		70.6	Sunny	0.4
24-Jul-19	09:11	67.2	63.0	70.5		67.2	Sunny	0.4
30-Jul-19	09:45	70.6	64.5	72.0		70.6	Sunny	0.0
10-Aug-19	12:15	70.1	66.0	73.0		70.1	Fine	0.8
16-Aug-19	13:04	63.1	60.5	65.0		63.1	Sunny	0.1
22-Aug-19	10:00	70.9	65.5	72.5		70.9	Fine	0.0
28-Aug-19	10:39	69.5	65.5	72.5		69.5	Fine	0.6

NMS 5A Wai Wah Centre

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
11-May-19	10:48	72.8	67.5	74.5	75	72.8	Fine	1.1
17-May-19	10:58	70.9	66.0	73.0		70.9	Sunny	1.4
23-May-19	09:08	73.6	69.5	77.0		73.6	Fine	1.4
29-May-19	11:33	74.1	69.5	77.0		74.1	Overcast	0.9
04-Jun-19	10:13	68.9	66.0	70.5		68.9	Sunny	0.3
14-Jun-19	09:41	73.8	69.0	77.0		73.8	Overcast	0.7
20-Jun-19	10:54	72.6	68.5	74.5		72.6	Sunny	0.4
26-Jun-19	11:17	69.5	66.5	74.0		69.5	Fine	0.2
06-Jul-19	11:36	73.6	69.0	76.5		73.6	Fine	0.6
12-Jul-19	09:47	72.0	68.0	73.5		72.0	Sunny	0.4
18-Jul-19	13:38	72.1	68.0	74.5		72.1	Sunny	0.9
24-Jul-19	11:19	71.8	67.5	74.0		71.8	Sunny	1.0
30-Jul-19	13:00	72.0	67.5	74.5		72.0	Sunny	0.2
10-Aug-19	10:31	71.8	68.0	74.0		71.8	Fine	0.6
16-Aug-19	10:27	66.7	63.5	68.0		66.7	Sunny	0.3
22-Aug-19	14:00	72.2	67.6	75.8		72.2	Fine	0.0
28-Aug-19	13:35	71.1	68.0	74.5		71.1	Fine	0.5

NMS 6A Wai Wah Centre

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
11-May-19	10:16	73.2	68.5	76.5	75	73.2	Fine	1.2
17-May-19	10:25	74.0	66.5	78.0		74.0	Sunny	1.1
23-May-19	09:41	74.2	69.0	77.5		74.2	Fine	1.1
29-May-19	11:00	73.7	69.0	76.5		73.7	Overcast	1.6
04-Jun-19	10:47	69.4	67.0	71.0		69.4	Sunny	0.3
14-Jun-19	10:16	72.1	68.5	76.5		72.1	Overcast	0.6
20-Jun-19	10:20	70.8	68.0	72.0		70.8	Sunny	0.3
26-Jun-19	11:50	71.0	67.0	74.5		71.0	Fine	0.5
06-Jul-19	11:04	72.1	68.5	75.0		72.1	Fine	0.7
12-Jul-19	10:20	73.8	70.0	77.0		73.8	Sunny	0.5
18-Jul-19	09:16	73.6	69.5	77.0		73.6	Sunny	0.8
24-Jul-19	13:08	73.2	69.5	76.5		73.2	Sunny	1.1
30-Jul-19	13:34	72.8	68.0	75.0		72.8	Sunny	0.4
10-Aug-19	11:06	70.1	67.0	73.5		70.1	Fine	0.3
16-Aug-19	11:01	67.2	64.0	69.0		67.2	Sunny	0.3
22-Aug-19	14:47	72.7	68.5	75.0		72.7	Fine	0.0
28-Aug-19	13:02	69.0	66.0	72.5		69.0	Fine	0.4

NMS 7 Tin Liu

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins					75	74.1	Fine	1.6
11-May-19	09:40	74.1	68.0	77.5		74.1	Fine	1.6
17-May-19	09:50	74.7	69.0	78.0		74.7	Sunny	1.4
23-May-19	11:01	73.0	66.0	77.5		73.0	Fine	1.0
29-May-19	09:44	73.6	69.0	78.0		73.6	Overcast	0.7
04-Jun-19	11:58	63.3	61.0	65.0		63.3	Sunny	0.1
14-Jun-19	10:51	74.1	66.5	78.0		74.1	Overcast	0.4
20-Jun-19	09:43	73.8	66.0	77.0		73.8	Sunny	0.3
26-Jun-19	13:21	70.0	68.5	75.0		70.0	Fine	0.1
06-Jul-19	09:43	72.6	64.0	75.0		72.6	Fine	0.6
12-Jul-19	10:57	74.7	66.0	78.0		74.7	Sunny	0.4
18-Jul-19	10:20	73.6	65.0	77.0		73.6	Sunny	0.6
24-Jul-19	09:44	74.5	65.0	78.0		74.5	Sunny	0.6
30-Jul-19	09:09	74.1	68.5	76.5		74.1	Sunny	0.4
10-Aug-19	12:47	74.1	67.0	76.5		74.1	Fine	0.3
16-Aug-19	13:37	64.6	61.0	67.0		64.6	Sunny	0.0
22-Aug-19	14:00	72.3	67.4	75.2		72.3	Fine	0.0
28-Aug-19	11:20	72.1	67.0	74.0		72.1	Fine	0.5

NMS 8 Shatin Plaza

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins					75	66.2	Sunny	0.2
10-May-19	10:11	66.2	65.0	68.5		66.2	Sunny	0.2
16-May-19	08:35	70.6	66.5	73.0		70.6	Sunny	1.0
22-May-19	08:02	71.2	66.0	74.0		71.2	Fine	0.7
28-May-19	08:33	72.1	66.5	75.5		72.1	Overcast	1.2
03-Jun-19	08:31	69.6	63.5	72.0		69.6	Overcast	0.6
13-Jun-19	08:30	71.1	66.5	73.0		71.1	Overcast	1.1
19-Jun-19	09:35	65.9	63.5	68.0		65.9	Sunny	0.2
25-Jun-19	08:34	66.3	64.5	68.5		66.3	Fine	0.9
05-Jul-19	13:35	66.4	63.5	67.5		66.4	Sunny	0.0
11-Jul-19	08:35	67.8	64.0	71.0		67.8	Sunny	0.6
17-Jul-19	09:05	71.6	64.5	72.5		71.6	Sunny	1.0
23-Jul-19	08:38	70.6	63.5	72.5		70.6	Sunny	0.4
29-Jul-19	09:08	72.0	67.0	74.5		72.0	Sunny	0.0
09-Aug-19	13:36	63.8	62.0	65.0		63.8	Sunny	0.1
15-Aug-19	09:33	68.6	66.0	71.0		68.6	Sunny	0.8
21-Aug-19	08:44	65.7	63.0	67.0		65.7	Sunny	0.1
27-Aug-19	08:36	67.3	63.5	70.5		67.3	Fine	0.4

NMS 9 Lek Yuen Estate

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins					75	65.0	Sunny	0.1
10-May-19	10:47	65.0	62.0	67.0		65.0	Sunny	0.1
16-May-19	09:46	67.4	60.5	69.5		67.4	Sunny	1.4
22-May-19	09:11	68.6	66.5	71.5		68.6	Fine	1.1
28-May-19	09:09	70.6	67.0	72.0		70.6	Overcast	1.1
03-Jun-19	09:46	70.7	66.5	73.0		70.7	Overcast	1.0
13-Jun-19	09:41	70.6	65.0	72.0		70.6	Overcast	0.6
19-Jun-19	10:20	64.4	61.5	66.0		64.4	Sunny	0.0
25-Jun-19	09:47	64.7	62.0	67.5		64.7	Fine	0.6
05-Jul-19	10:50	65.1	63.0	66.5		65.1	Sunny	0.1
11-Jul-19	09:49	68.6	63.0	70.5		68.6	Sunny	0.7
17-Jul-19	09:44	66.5	62.0	69.0		66.5	Sunny	0.5
23-Jul-19	13:00	69.2	64.5	72.5		69.2	Sunny	0.5
29-Jul-19	09:38	69.6	66.0	73.0		69.6	Sunny	0.7
09-Aug-19	08:42	66.7	61.5	69.0		66.7	Sunny	0.0
15-Aug-19	10:10	67.6	61.5	69.0		67.6	Sunny	0.5
21-Aug-19	09:20	66.1	62.5	67.5		66.1	Sunny	0.4
27-Aug-19	09:48	66.6	61.0	69.5		66.6	Fine	0.6

NMS 10A Shatin Tsung Tsin School

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	11:21	65.8	60.5	68.5	70	65.8	Sunny	0.1
16-May-19	10:23	63.2	58.5	64.5		63.2	Sunny	1.0
22-May-19	09:45	70.6	66.0	73.0		64.7*	Fine	1.4
28-May-19	09:43	63.1	58.5	65.0		63.1	Overcast	1.5
03-Jun-19	10:20	64.0	58.5	66.0	65	64.0	Overcast	1.1
13-Jun-19	10:09	62.7	58.0	64.5	70	62.7	Overcast	0.7
19-Jun-19	10:57	65.4	60.5	68.0		65.4	Sunny	0.3
25-Jun-19	10:24	65.9	60.5	68.0		65.9	Fine	0.8
05-Jul-19	10:01	66.3	60.0	69.5		66.3	Sunny	0.0
11-Jul-19	10:26	63.1	59.5	64.5		63.1	Sunny	1.1
17-Jul-19	10:20	62.1	58.0	64.0		62.1	Sunny	0.7
23-Jul-19	13:44	65.2	61.0	66.0		65.2	Sunny	0.9
29-Jul-19	10:14	66.0	61.0	67.5		66.0	Sunny	0.6
09-Aug-19	10:17	62.4	58.5	63.0		62.4	Sunny	0.3
15-Aug-19	10:47	65.6	61.0	67.5		65.6	Sunny	0.8
21-Aug-19	09:26	64.9	60.0	67.0		64.9	Sunny	0.0
27-Aug-19	10:26	64.7	61.0	66.5		64.7	Fine	0.8

Note: *Since the measured noise level was greater than the limit level, construction noise level (CNL) was applied on 22/5, where Calculated CNL = Measured Noise Level during operation – Baseline (69.3 dB(A)).

NMS 11 Sheung Wo Che

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	11:58	60.8	52.5	63.0	75	60.8	Sunny	0.3
16-May-19	16:02	66.5	61.5	69.0		66.5	Sunny	1.4
22-May-19	13:00	66.1	60.5	68.0		66.1	Fine	1.1
28-May-19	13:00	66.4	61.0	69.0		66.4	Overcast	1.4
03-Jun-19	13:00	67.6	60.5	69.0		67.6	Overcast	0.8
13-Jun-19	13:44	70.1	62.5	72.5		70.1	Overcast	0.7
19-Jun-19	11:33	61.1	54.0	63.0		61.1	Sunny	0.1
25-Jun-19	11:01	60.4	57.0	63.0		60.4	Fine	0.6
05-Jul-19	11:33	61.1	53.5	64.5		61.1	Sunny	0.1
11-Jul-19	13:38	66.2	61.5	67.5		66.2	Sunny	0.5
17-Jul-19	13:33	67.6	61.5	69.0		67.6	Sunny	0.3
23-Jul-19	10:23	66.2	60.5	67.0		66.2	Sunny	0.7
29-Jul-19	15:58	66.1	61.0	67.5		66.1	Sunny	0.4
09-Aug-19	11:41	60.0	51.0	62.0		60.0	Sunny	0.2
15-Aug-19	16:39	68.8	63.5	71.5		68.8	Sunny	0.6
21-Aug-19	12:04	65.3	58.5	67.5		65.3	Sunny	0.0
27-Aug-19	10:06	68.1	61.0	69.5		68.1	Fine	0.3

NMS 12 SKH Holy Spirit Primary School

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	12:36	59.5	55.5	62.0	70	59.5	Sunny	0.2
16-May-19	10:57	62.8	57.5	64.5		62.8	Sunny	1.2
22-May-19	10:19	64.6	61.5	69.0		64.6	Fine	0.7
28-May-19	10:17	64.2	60.0	66.0		64.2	Overcast	1.0
03-Jun-19	10:56	62.7	57.5	64.5	65	62.7	Overcast	1.1
13-Jun-19	10:44	63.9	59.0	66.0	70	63.9	Overcast	0.9
19-Jun-19	13:07	58.5	55.5	61.0		58.5	Sunny	0.3
25-Jun-19	11:39	59.3	56.0	62.0		59.3	Fine	0.7
05-Jul-19	10:40	64.8	59.5	68.0		64.8	Sunny	0.1
11-Jul-19	11:02	64.7	60.0	66.0		64.7	Sunny	0.7
17-Jul-19	10:56	64.7	60.0	65.5		64.7	Sunny	1.1
23-Jul-19	14:20	64.2	60.0	65.0		64.2	Sunny	0.9
29-Jul-19	10:51	64.7	59.0	65.5		64.7	Sunny	0.8
09-Aug-19	11:02	62.0	57.0	62.5		62.0	Sunny	0.1
15-Aug-19	13:00	64.0	59.5	65.0		64.0	Sunny	0.7
21-Aug-19	10:00	64.5	60.5	67.5		64.5	Sunny	0.0
27-Aug-19	11:02	66.1	61.0	67.5		66.1	Fine	0.6

NMS 13 Lek Yuen Estate

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	13:18	55.4	53.5	63.0	75	55.4	Sunny	0.2
16-May-19	11:30	63.0	61.5	67.5		63.0	Sunny	0.8
22-May-19	10:53	70.6	63.0	72.5		70.6	Fine	0.9
28-May-19	10:52	71.0	63.5	73.0		71.0	Overcast	1.2
03-Jun-19	11:31	68.6	63.0	72.0		68.6	Overcast	0.7
13-Jun-19	11:20	68.2	63.0	70.5		68.2	Overcast	0.6
19-Jun-19	13:48	55.8	52.5	59.0		55.8	Sunny	0.5
25-Jun-19	13:00	60.6	55.0	63.5		60.6	Fine	0.5
05-Jul-19	10:00	61.9	60.5	63.5		61.9	Sunny	0.4
11-Jul-19	11:38	69.1	63.5	71.0		69.1	Sunny	0.4
17-Jul-19	11:30	67.6	63.5	69.0		67.6	Sunny	0.6
23-Jul-19	11:35	66.7	64.5	68.0		66.7	Sunny	0.8
29-Jul-19	11:29	67.1	63.0	69.0		67.1	Sunny	0.6
09-Aug-19	09:28	60.5	58.0	63.0		60.5	Sunny	0.1
15-Aug-19	11:24	68.0	65.0	72.0		68.0	Sunny	0.6
21-Aug-19	10:04	60.5	58.5	63.0		60.5	Sunny	0.0
27-Aug-19	11:39	67.5	64.0	70.0		67.5	Fine	0.7

NMS 14 Sheung Wo Che

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	13:55	60.7	56.0	62.5	75	60.7	Sunny	0.2
16-May-19	15:28	68.2	63.5	70.5		68.2	Sunny	1.2
22-May-19	11:30	68.1	60.5	69.5		68.1	Fine	1.1
28-May-19	11:33	67.6	60.0	69.0		67.6	Overcast	1.5
03-Jun-19	09:00	66.7	61.5	68.5		66.7	Overcast	0.8
13-Jun-19	14:24	68.3	62.0	71.0		68.3	Overcast	0.5
19-Jun-19	09:12	68.0	62.0	70.5		68.0	Sunny	0.3
25-Jun-19	08:36	66.6	60.5	68.0		66.6	Fine	0.4
05-Jul-19	11:27	62.7	58.5	66.0		62.7	Sunny	0.2
11-Jul-19	14:11	64.5	61.0	67.0		64.5	Sunny	0.7
17-Jul-19	14:09	66.7	60.5	68.0		66.7	Sunny	0.5
23-Jul-19	10:58	67.1	61.0	68.5		67.1	Sunny	0.6
29-Jul-19	15:22	65.7	60.5	66.5		65.7	Sunny	0.9
09-Aug-19	10:01	57.4	55.0	60.0		57.4	Sunny	0.0
15-Aug-19	16:05	66.1	60.0	67.0		66.1	Sunny	0.4
21-Aug-19	11:58	63.0	57.0	65.5		63.0	Sunny	0.0
27-Aug-19	10:45	66.1	60.5	67.5		66.1	Fine	0.7

NMS 15 Ha Wo Che

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
11-May-19	11:16	65.1	61.5	66.0	75	65.1	Fine	0.8
17-May-19	10:17	64.9	60.0	66.0		64.9	Sunny	1.1
23-May-19	11:40	65.8	61.0	67.0		65.8	Fine	0.7
29-May-19	11:46	69.2	63.5	73.0		69.2	Overcast	1.1
04-Jun-19	15:09	63.8	61.0	65.5		63.8	Sunny	0.2
14-Jun-19	16:38	66.8	62.0	69.0		66.8	Overcast	0.9
20-Jun-19	16:11	66.2	61.0	68.0		66.2	Sunny	0.4
26-Jun-19	13:55	71.5	66.0	72.5		71.5	Fine	0.1
06-Jul-19	15:20	67.2	62.1	69.0		67.2	Fine	0.6
12-Jul-19	14:23	68.1	64.0	70.0		68.1	Sunny	0.3
18-Jul-19	13:47	67.0	62.0	69.0		67.0	Sunny	0.6
24-Jul-19	10:45	66.7	61.0	68.0		66.7	Sunny	0.0
30-Jul-19	14:11	66.1	60.0	68.5		66.1	Sunny	0.5
10-Aug-19	14:38	66.5	62.5	68.0		66.5	Fine	0.2
16-Aug-19	14:58	63.2	60.0	65.0		63.2	Sunny	0.2
22-Aug-19	09:30	64.3	59.6	67.2		64.3	Fine	0.3
28-Aug-19	10:23	68.2	64.5	70.5		68.2	Fine	0.7

NMS 16 Ha Wo Che

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
11-May-19	10:41	66.8	62.0	68.5	75	66.8	Fine	1.3
17-May-19	10:41	67.0	63.5	69.5		67.0	Sunny	0.8
23-May-19	11:06	66.8	61.5	67.5		66.8	Fine	1.1
29-May-19	11:14	68.7	63.0	71.5		68.7	Overcast	1.3
04-Jun-19	15:44	62.4	58.0	64.5		62.4	Sunny	0.2
14-Jun-19	16:02	65.5	60.5	67.0		65.5	Overcast	0.6
20-Jun-19	15:37	67.1	61.5	69.0		67.1	Sunny	0.6
26-Jun-19	14:33	70.0	67.5	71.0		70.0	Fine	0.2
06-Jul-19	15:56	66.2	63.0	68.0		66.2	Fine	1.0
12-Jul-19	14:57	67.5	63.5	68.5		67.5	Sunny	0.8
18-Jul-19	13:02	66.1	60.0	67.5		66.1	Sunny	0.7
24-Jul-19	11:21	66.9	61.5	69.0		66.9	Sunny	0.7
30-Jul-19	14:45	65.8	60.0	68.0		65.8	Sunny	0.3
10-Aug-19	15:14	66.8	63.0	69.0		66.8	Fine	0.0
16-Aug-19	15:31	62.8	57.5	64.5		62.8	Sunny	0.0
22-Aug-19	10:08	65.9	60.3	68.2		65.9	Fine	0.0
28-Aug-19	11:05	65.6	60.5	67.5		65.6	Fine	0.5

NMS 17 Shatin Pui Ying College

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	14:36	60.3	58.0	62.0	70	60.3	Sunny	0.2
16-May-19	13:41	64.6	58.5	66.0		64.6	Sunny	1.1
22-May-19	16:40	64.0	59.5	65.0		64.0	Fine	1.0
28-May-19	16:21	64.1	59.0	65.5		64.1	Overcast	1.3
03-Jun-19	09:38	68.1	62.0	71.5	65	62.2*	Overcast	1.2
13-Jun-19	10:02	64.2	60.0	66.0		64.2	Overcast	0.9
19-Jun-19	09:49	66.5	61.0	68.0	70	66.5^	Sunny	0.4
25-Jun-19	09:52	63.8	60.5	65.0		63.8	Fine	0.8
05-Jul-19	09:20	66.7	61.5	70.0		66.7	Sunny	0.1
11-Jul-19	15:22	62.5	58.0	64.5		62.5	Sunny	1.1
17-Jul-19	15:21	66.5	61.5	67.5		66.5^	Sunny	0.7
23-Jul-19	15:33	65.7	61.0	66.5		65.7	Sunny	0.7
29-Jul-19	13:38	64.3	59.5	66.0		65	64.3	Sunny
09-Aug-19	11:28	60.2	58.0	62.0	60.2		Sunny	0.2
15-Aug-19	14:17	63.8	59.0	65.0	70	63.8	Sunny	0.8
21-Aug-19	10:37	68.1	65.0	69.5		68.1	Sunny	0.0
27-Aug-19	13:02	64.6	60.5	66.0		64.6	Fine	0.4

Note: *Since the measured noise level was greater than the limit level, construction noise level (CNL) was applied on 3/6/2019, where Calculated CNL = Measured Noise Level during operation – Baseline (66.8 dB(A)).
 ^The measured noise level was lower than the baseline level (66.8 dB(A)).

NMS 18 Ha Wo Che

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
11-May-19	10:05	67.6	61.5	71.0	75	67.6	Fine	1.4
17-May-19	11:30	65.8	60.5	68.0		65.8	Fine	1.1
23-May-19	10:26	67.6	60.0	69.0		67.6	Fine	1.2
29-May-19	10:20	67.6	62.5	69.5		67.6	Fine	1.7
04-Jun-19	16:19	60.7	58.0	63.0		60.7	Sunny	0.2
14-Jun-19	15:27	66.4	60.5	68.5		66.4	Overcast	0.4
20-Jun-19	15:02	66.2	60.5	67.5		66.2	Sunny	0.3
26-Jun-19	15:17	72.5	66.0	78.5		72.5	Fine	0.4
06-Jul-19	16:31	65.6	60.5	66.5		65.6	Fine	1.1
12-Jul-19	15:30	66.1	59.0	67.0		66.1	Sunny	0.4
18-Jul-19	11:14	65.1	61.0	67.5		65.1	Sunny	0.4
24-Jul-19	13:09	66.1	60.0	67.5		66.1	Sunny	0.4
30-Jul-19	15:19	64.9	59.0	67.0		64.9	Sunny	0.0
10-Aug-19	16:02	65.2	61.0	66.0		65.2	Fine	0.4
16-Aug-19	16:05	60.5	58.0	62.5		60.5	Sunny	0.0
22-Aug-19	10:45	65.7	58.9	68.3		65.7	Fine	0.0
28-Aug-19	11:40	66.0	58.5	68.0		66.0	Fine	0.3

NMS 19 Wo Che Estate

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	15:11	67.4	64.0	70.0	75	67.4	Sunny	0.2
16-May-19	14:14	66.3	60.5	69.0		66.3	Sunny	1.2
22-May-19	15:52	67.5	63.0	71.0		67.5	Fine	0.9
28-May-19	15:40	68.6	63.5	72.0		68.6	Overcast	0.8
03-Jun-19	10:14	70.6	63.5	74.0		70.6	Overcast	0.9
13-Jun-19	10:38	66.2	63.0	69.0		66.2	Overcast	0.4
19-Jun-19	11:08	67.2	63.0	70.0		67.2	Sunny	0.6
25-Jun-19	11:10	66.7	61.5	68.5		66.7	Fine	0.7
05-Jul-19	08:42	61.8	57.0	64.5		61.8	Sunny	0.2
11-Jul-19	15:58	68.4	66.0	71.0		68.4	Sunny	0.8
17-Jul-19	15:56	66.7	63.0	68.0		66.7	Sunny	0.6
23-Jul-19	16:11	67.0	63.0	69.0		67.0	Sunny	0.4
29-Jul-19	14:12	66.5	63.0	69.0		66.5	Sunny	0.6
09-Aug-19	12:10	66.8	64.0	68.5		66.8	Sunny	0.0
15-Aug-19	14:51	66.8	64.0	67.5		66.8	Sunny	0.5
21-Aug-19	10:40	69.5	65.0	71.0		69.5	Sunny	0.0
27-Aug-19	13:45	66.8	62.5	68.5		66.8	Fine	0.8

NMS 20 Wo Che Estate

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	15:45	60.6	57.0	62.5	75	60.6	Sunny	0.2
16-May-19	14:50	70.7	62.5	72.0		70.7	Sunny	1.1
22-May-19	15:14	66.2	61.0	69.0		66.2	Fine	1.2
28-May-19	14:55	65.8	60.0	68.0		65.8	Overcast	1.0
03-Jun-19	11:33	63.4	60.0	66.0		63.4	Overcast	0.6
13-Jun-19	11:13	67.1	63.5	70.0		67.1	Overcast	0.7
19-Jun-19	11:42	68.1	63.5	70.5		68.1	Sunny	0.4
25-Jun-19	11:47	66.2	61.0	67.5		66.2	Fine	0.6
05-Jul-19	08:40	63.1	58.5	65.5		63.1	Sunny	0.0
11-Jul-19	16:40	66.7	63.0	69.0		66.7	Sunny	0.6
17-Jul-19	16:11	68.1	64.0	70.0		68.1	Sunny	0.5
23-Jul-19	16:52	68.1	65.0	71.5		68.1	Sunny	0.6
29-Jul-19	14:46	68.2	65.0	70.5		68.2	Sunny	0.4
09-Aug-19	13:21	60.7	57.0	62.5		60.7	Sunny	0.1
15-Aug-19	13:26	67.1	64.5	69.0		67.1	Sunny	0.7
21-Aug-19	11:20	59.4	55.5	65.5		59.4	Sunny	0.0
27-Aug-19	14:32	67.1	63.5	70.5		67.1	Fine	0.7

NMS 23 Pai Tau

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
11-May-19	13:00	67.5	62.0	69.0	75	67.5	Fine	0.9
17-May-19	09:40	68.0	60.5	71.5		68.0	Sunny	1.0
23-May-19	10:27	71.0	63.5	72.5		71.0	Fine	0.9
29-May-19	10:20	70.7	63.0	71.5		70.7	Overcast	0.8
04-Jun-19	14:26	61.7	57.0	63.0		61.7	Sunny	0.1
14-Jun-19	13:37	68.6	62.5	71.0		68.6	Overcast	0.5
20-Jun-19	16:53	67.2	63.5	70.5		67.2	Sunny	0.4
26-Jun-19	15:59	69.5	68.0	76.5		69.5	Fine	0.2
06-Jul-19	10:29	66.4	60.0	68.0		66.4	Fine	0.4
12-Jul-19	13:38	70.7	62.0	73.0		70.7	Sunny	0.7
18-Jul-19	10:56	66.8	61.5	67.5		66.8	Sunny	0.3
24-Jul-19	10:19	66.1	61.5	67.0		66.1	Sunny	0.7
						0.0		
10-Aug-19	14:00	70.1	63.0	72.5		70.1	Fine	0.0
16-Aug-19	14:15	61.3	57.5	63.0		61.3	Sunny	0.0
22-Aug-19	11:29	69.8	64.2	74.6		69.8	Fine	1.4
28-Aug-19	09:43	66.3	63.0	69.0		66.3	Fine	0.5

NMS 24 Shatin Plaza

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	09:36	63.7	61.0	66.0	75	63.7	Sunny	0.2
16-May-19	09:07	71.8	67.0	74.0		71.8	Sunny	1.2
22-May-19	08:35	72.1	66.5	75.5		72.1	Fine	0.9
28-May-19	08:00	70.6	66.0	73.5		70.6	Overcast	1.4
03-Jun-19	09:04	71.2	65.5	74.5		71.2	Overcast	0.7
13-Jun-19	09:04	72.1	67.0	75.5		72.1	Overcast	0.8
19-Jun-19	08:31	64.2	62.0	65.0		64.2	Sunny	0.2
25-Jun-19	09:09	69.7	63.5	71.5		69.7	Fine	1.1
05-Jul-19	13:32	62.5	61.0	64.0		62.5	Sunny	0.0
11-Jul-19	09:08	70.6	66.0	72.0		70.6	Sunny	0.8
17-Jul-19	08:31	70.6	64.0	71.5		70.6	Sunny	0.8
23-Jul-19	09:11	72.1	65.0	73.5		72.1	Sunny	0.6
29-Jul-19	08:26	71.6	66.0	74.0		71.6	Sunny	0.9
09-Aug-19	08:44	61.7	60.0	63.5		61.7	Sunny	0.2
15-Aug-19	08:30	69.1	66.0	72.0		69.1	Sunny	0.4
21-Aug-19	08:42	61.4	28.0	63.0		61.4	Sunny	0.0
27-Aug-19	09:09	68.9	65.0	72.5		68.9	Fine	0.7

NMS 25A Sheung Wo Che

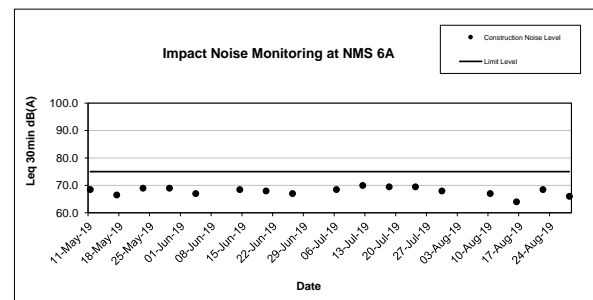
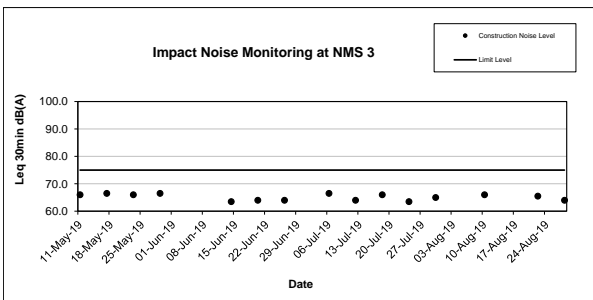
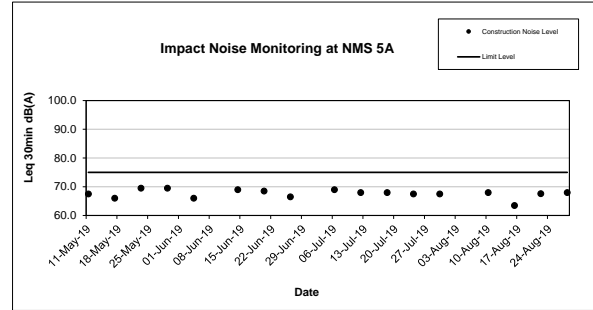
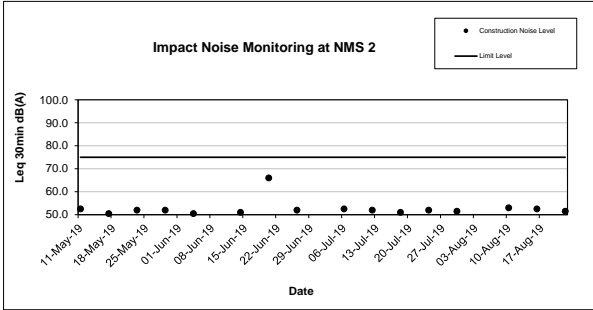
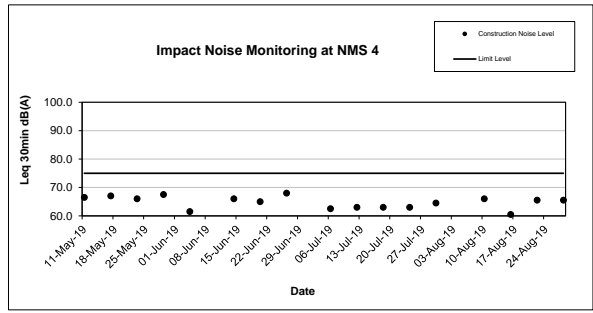
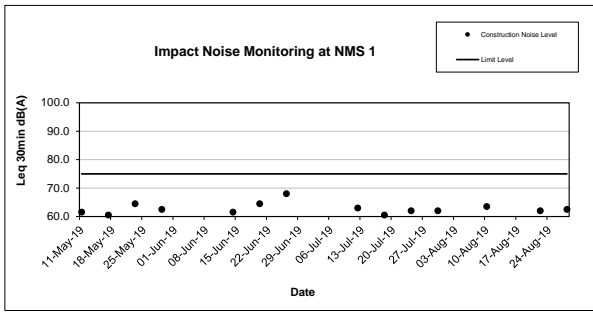
Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	17:02	70.4	67.0	72.0	75	70.4	Sunny	0.3
16-May-19	16:40	69.2	62.0	73.0		69.2	Sunny	1.2
22-May-19	13:34	70.5	63.0	72.0		70.5	Fine	1.2
28-May-19	13:40	71.2	64.0	73.5		71.2	Overcast	1.2
03-Jun-19	13:37	69.5	66.0	72.5		69.5	Overcast	1.1
13-Jun-19	13:03	72.6	66.5	74.5		72.6	Overcast	0.4
19-Jun-19	08:35	66.7	61.5	69.0		66.7	Sunny	0.3
25-Jun-19	09:11	72.1	65.5	74.0		72.1	Fine	0.6
05-Jul-19	12:05	67.7	57.0	70.0		67.7	Sunny	0.0
11-Jul-19	13:02	72.1	66.0	75.5		72.1	Sunny	0.4
17-Jul-19	13:00	72.6	66.0	75.5		72.6	Sunny	0.4
23-Jul-19	09:50	68.6	61.5	71.0		68.6	Sunny	0.4
29-Jul-19	16:36	70.6	63.0	74.0		70.6	Sunny	0.7
09-Aug-19	09:23	68.4	66.0	70.5		68.4	Sunny	0.1
15-Aug-19	17:13	69.9	66.0	73.0		69.9	Sunny	0.3
21-Aug-19	12:37	66.1	59.5	70.5		66.1	Sunny	0.0
27-Aug-19	09:30	72.1	65.5	74.0		72.1	Fine	0.3

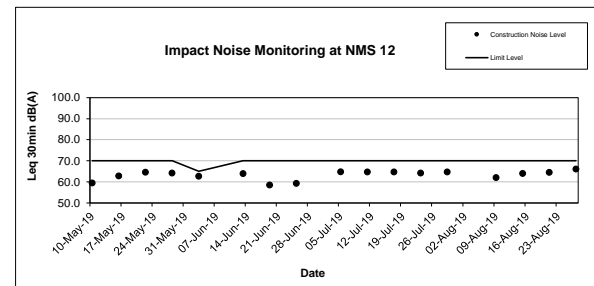
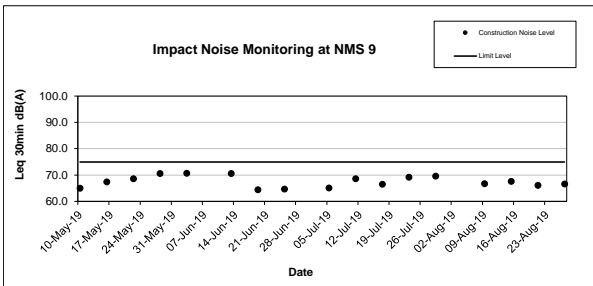
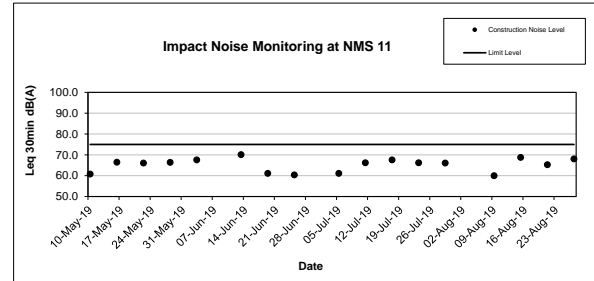
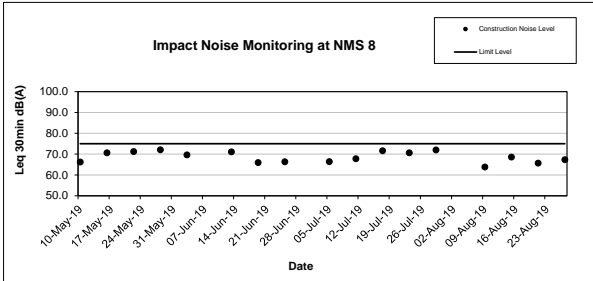
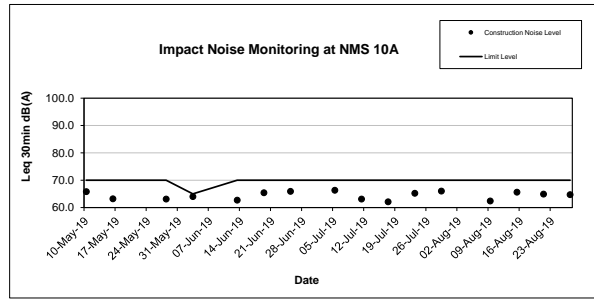
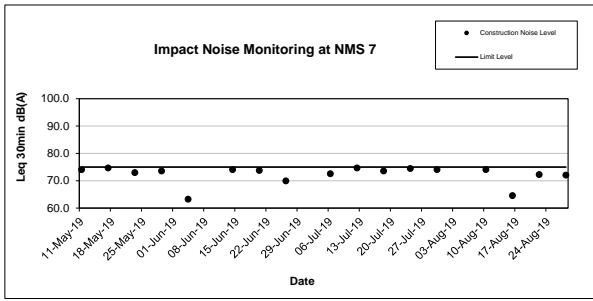
NMS 26 Wo Che Estate

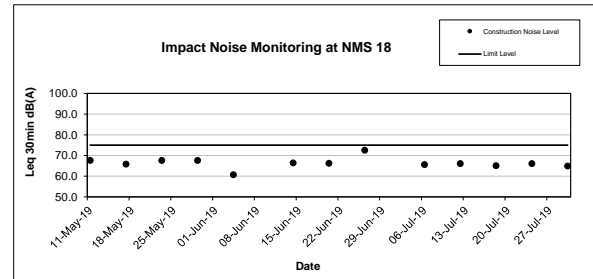
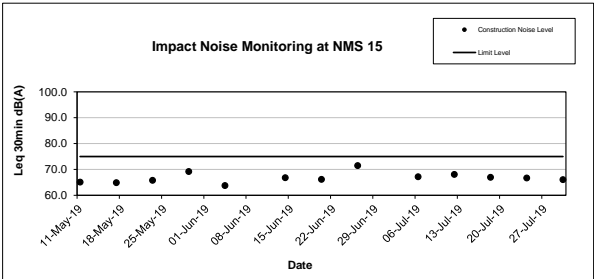
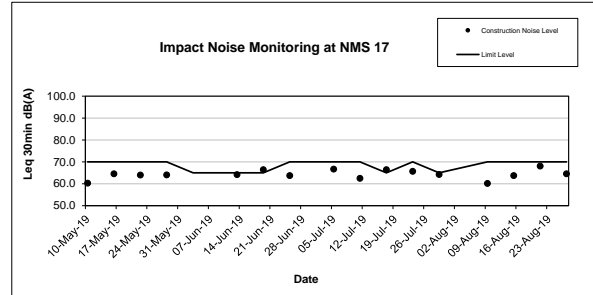
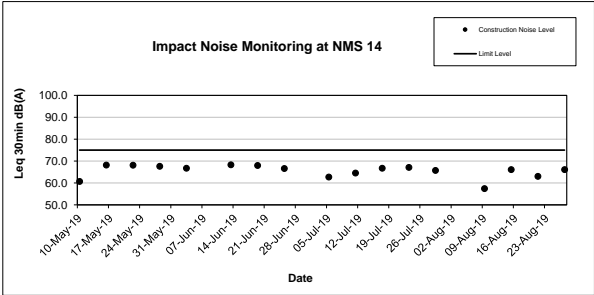
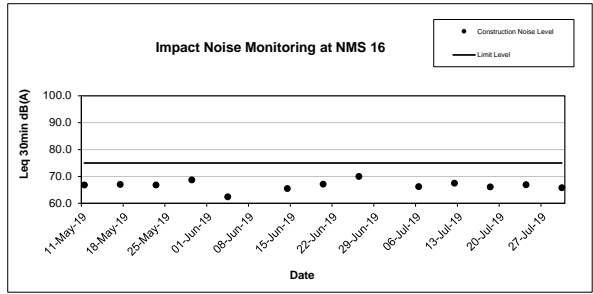
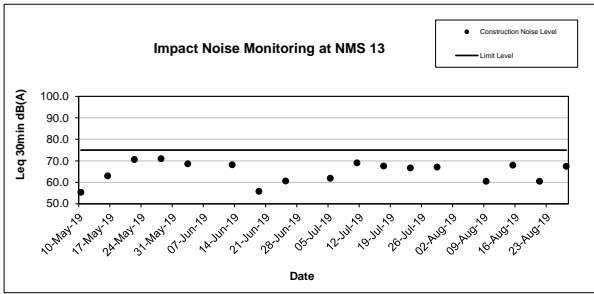
Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
10-May-19	16:26	68.2	65.5	70.5	75	68.2	Sunny	0.2
16-May-19	13:00	74.1	69.5	77.0		74.1	Sunny	1.3
22-May-19	14:22	73.6	53.5	78.0		73.6	Fine	0.7
28-May-19	14:16	74.5	68.5	78.0		74.5	Overcast	1.0
03-Jun-19	10:52	73.8	69.5	78.5		73.8	Overcast	1.2
13-Jun-19	09:08	73.6	69.0	78.0		73.6	Overcast	0.6
19-Jun-19	10:31	72.9	67.0	76.0		72.9	Sunny	0.7
25-Jun-19	10:32	74.1	69.5	78.5		74.1	Fine	0.6
05-Jul-19	09:17	66.2	61.0	68.0		66.2	Sunny	0.0
11-Jul-19	14:48	73.7	69.5	77.0		73.7	Sunny	0.5
17-Jul-19	14:46	74.5	69.0	78.0		74.5	Sunny	0.6
23-Jul-19	14:58	74.1	69.5	77.0		74.1	Sunny	0.6
29-Jul-19	13:02	73.7	70.0	77.0		73.7	Sunny	0.5
09-Aug-19	10:43	68.8	66.0	70.5		68.8	Sunny	0.2
15-Aug-19	13:42	73.6	70.0	76.0		73.6	Sunny	0.8
21-Aug-19	11:23	70.6	67.5	73.0		70.6	Sunny	0.0
27-Aug-19	11:22	73.7	69.5	77.5		73.7	Fine	0.6

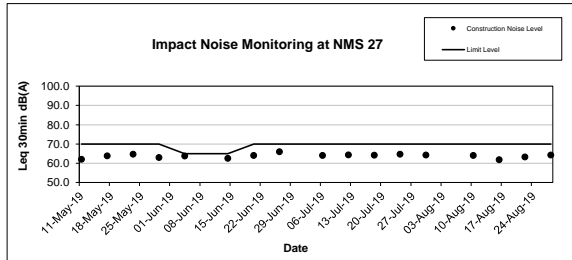
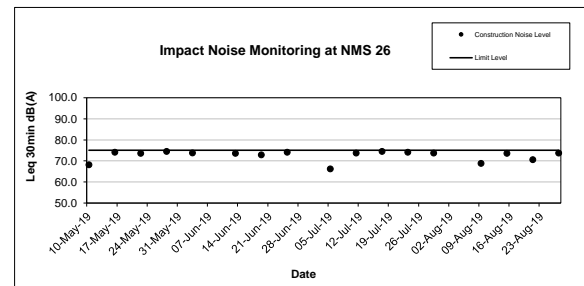
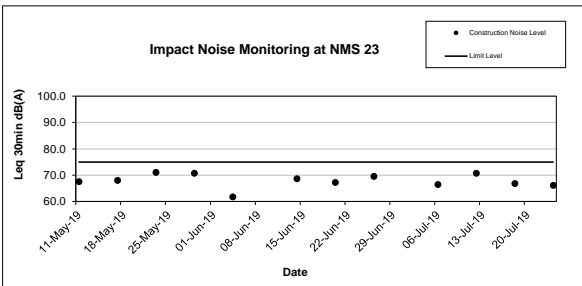
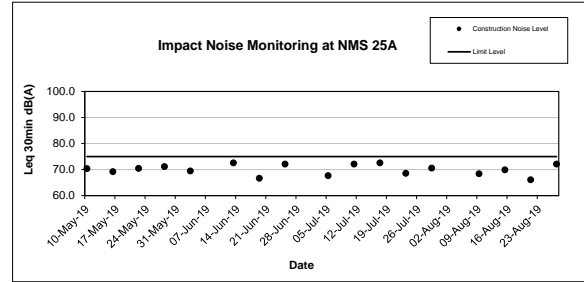
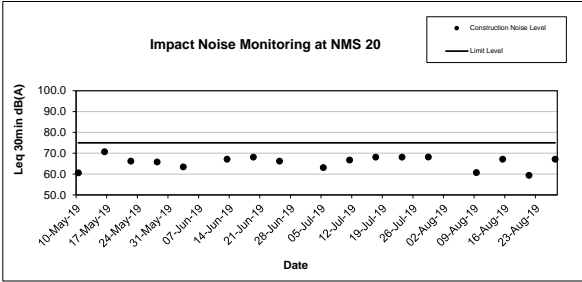
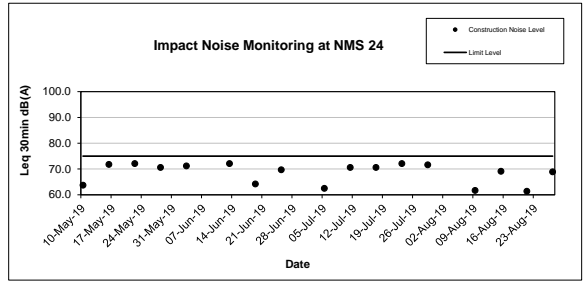
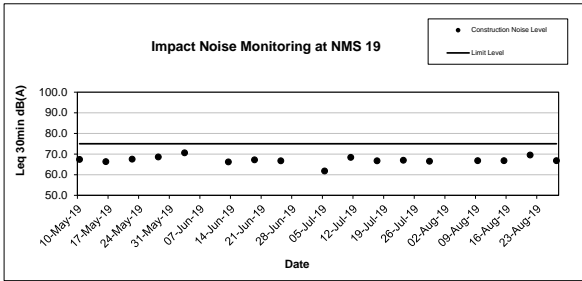
NMS 27 Jockey Club Ti-I College

Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins								
11-May-19	09:10	62.1	57.5	64.0	70	62.1	Fine	1.0
17-May-19	13:40	63.9	57.5	65.0		63.9	Sunny	0.6
23-May-19	09:30	64.7	56.5	66.0		64.7	Fine	1.2
29-May-19	09:35	63.0	58.0	64.5		63.0	Overcast	1.0
04-Jun-19	17:04	63.8	62.0	67.0	65	63.8	Sunny	0.1
14-Jun-19	14:28	62.6	58.0	64.0		62.6	Overcast	0.6
20-Jun-19	14:01	64.1	60.5	66.0	70	64.1	Sunny	0.6
26-Jun-19	16:41	66.0	64.5	70.0		66.0	Fine	0.2
06-Jul-19	14:28	64.1	60.0	65.5		64.1	Fine	0.7
12-Jul-19	16:18	64.4	60.0	66.0		64.4	Sunny	0.9
18-Jul-19	10:24	64.2	61.0	65.5		64.2	Sunny	0.9
24-Jul-19	09:04	64.7	61.0	66.0		64.7	Sunny	0.8
30-Jul-19	16:50	64.3	59.5	66.0		64.3	Sunny	0.5
10-Aug-19	08:34	64.1	60.0	67.0		64.1	Fine	0.4
16-Aug-19	16:53	61.9	60.0	64.0		61.9	Sunny	0.2
22-Aug-19	13:00	63.3	58.6	67.8		63.3	Fine	1.0
28-Aug-19	09:04	64.3	61.0	66.5		64.3	Fine	0.6









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Appendix E

Waste Flow Table

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Waste Flow Table for Year 2018											
Months	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of Non-inert C&D Wastes Generated Monthly				
	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
2018 Jan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 Mar	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 Apr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 May	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 Jun	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sub-Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 Jul	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 Aug	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 Sep	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018 Oct	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013
2018 Nov	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004
2018 Dec	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001
Total	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.018

Note:

- 1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- 2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.
- 3) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m³.

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Waste Flow Table for Year 2019											
Months	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of Non-inert C&D Wastes Generated Monthly				
	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
2019 Jan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021
2019 Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049
2019 Mar	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048
2019 Apr	0.100	0.000	0.000	0.000	0.100	0.000	0.000	0.000	0.000	0.000	0.089
2019 May	0.150	0.000	0.000	0.000	0.150	0.000	0.000	0.000	0.000	0.000	0.175
2019 Jun	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.082
Sub-Total	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.464
2019 Jul	0.141	0.000	0.000	0.000	0.141	0.000	0.000	0.000	0.000	0.000	0.069
2019 Aug	0.431	0.000	0.221	0.000	0.210	0.000	0.000	0.000	0.000	0.000	0.154
2019 Sep											
2019 Oct											
2019 Nov											
2019 Dec											
Total	0.822	0.000	0.221	0.000	0.601	0.000	0.000	0.000	0.000	0.000	0.687

Note:

- 1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- 2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging materials.
- 3) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m³.

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Appendix F

Cumulative Statistics on Exceedances, Complaints, Notifications of Summons and Successful Prosecutions

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Environmental Complaints Log

Reference No.	Date of Complaint Received	Received From	Nature of Complaint	Investigation/Mitigation Action	Outcome	Status
COM-2019-005	13/2/2019	EPD	Regarding to continuous noise nuisance starting from around 1 a.m. near Lek Yuen Estate Kwai Wo House.	According to the photo taken from the complainant, the complaint was related to the project. Although the tree felling works were covered by the valid CNP (GW-RN0783-18), Contractor was reminded to strictly follow and fully comply with the CNP conditions and the mitigation measures stipulated in the EM&A Manual when construction activities are operating during restricted hour. Contractor was recommended to increase the frequency of using the electrical chain saw instead of the diesel chain saw for reducing the noise impact. Environmental Team conducted additional ad-hoc noise monitoring on 19:00 14th February 2019 to 07:00 15th February 2019 for evaluate the effectiveness on the proposed mitigation measures. No project-related noise exceedance case on 14-15 Feb 2019 Contractor's night tree-felling and removal works. The proposed mitigation measures were effective for noise impact.	Project-related	Closed
COM-2019-006	22/2/2019	Project Hotline of NE/2017/05	Regarding to continuous noise generated from the tree felling works during the midnight 12:00am near Lek Yuen Estate Kwai Wo House.	According to the location of complainant from Kwai Wo House, the complaint was related to the project. Although the tree felling works were covered by the valid CNP (GW-RN0783-18), Contractor was reminded to strictly follow and fully comply with the CNP conditions and the mitigation measures stipulated in the EM&A Manual when construction activities are	Project-related	Closed

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				operating during restricted hour. An extended barrier at the top acts as a cantilever shape was recommended to modify the existing semi-enclosure installed in the cherry picker Also, three sides with top as a semi-enclosure to be used and those tree felling activities should be inside the semi-enclosure in the ground slope. The main contractor had been recommended to review their works program and methods of tree felling as to minimize the night time tree felling activities.		
COM-2019-0010	28/3/2019	Project Hotline of NE/2017/05	Regarding nuisance noise at 03:35am.	The complaint case should be related to the MTR night time maintenance works. Main Contractor used portable phones and head-set only for communication, and none of loudspeakers were allowed to be used. Main Contractor handled of tree debris into the lorry skip in care when loading. Besides, a layer of soft material (soil/tree debris) was observed leaving inside the skip of the grab lorry to reduce the loading noise. Contractor was reminded to strictly follow and fully comply with the CNP (GW-RN0132-19) conditions and the mitigation measures stipulated in the EM&A Manual when construction activities are operating during restricted hour.	Project-not related	Closed
COM-2019-0033	26/7/2019	Police visit on-site	Regarding to noise nuisance	The complaint is related to the project. The Main Contractor comply with CNP No.: GW-RN0443-19 allowable construction site and within the site boundary to carry	Project-not related	Closed

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				<p>out night work on tree felling and the clearance of felled tree debris during the restricted hour. Contractor was reminded to strictly follow and fully comply with the CNP (GW-RN0443-19) conditions and the mitigation measures stipulated in the EM&A Manual when construction activities are operating during restricted hour. Contractor was recommended to increase the frequency of using the electrical chain saw instead of the diesel chain saw for reducing the noise impact. Contractor was reminded to reschedule of tree felling arrangement that most of the fell branches and trunks were temporary laid on slope and arranged to cut smaller on Day Time to minimize the noise nuisance to the nearby NSRs.</p>		
COM-2019-0045	30/8/2019	1823	Regarding to noise nuisance near Hilton Plaza and Scenery Court at 11:10 pm.	The complaint case is still under ET's investigation.	-	-

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Cumulative Statistics on Complaints

Environmental Parameters	Cumulative No. Brought Forward	No. of Complaints in the Reporting Period			Cumulative Project-to-Date
		June 2019	July 2019	August 2019	
Air	0	0	0	0	0
Noise	2	0	1	1	5
Water	0	0	0	0	0
Waste	0	0	0	0	0
Total	0	0	0	0	0

Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Complaints This Reporting Period			Cumulative Project-to-Date
		June 2019	July 2019	August 2019	
Air	0	0	0	0	0
Noise	0	0	0	0	0
Water	0	0	0	0	0
Waste	0	0	0	0	0
Total	0	0	0	0	0

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Appendix G

Environmental Mitigation Implementation Schedule (EMIS)

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
<u>Noise Measures</u>				
3.10.2, 3.10.3, 3.10.14, 3.10.15 and Table 3.10	Within the boundaries of all construction sites.	• Scheduling the construction activities carefully according to the actual site work situation, avoid of concurrent activities and construction works fronting the affected schools, to minimize the total noise generated (max as 102dB (A)).	Contractor	Implemented
		• PME is recommended to operate in sub-grouping, and different sub-groups shall not be operated concurrently within any half hour period	Contractor	Implemented
		• The construction activities should be carried out in the daytime hours (0700 – 1900). Construction Noise Permit (CNP) for construction activities is required during evening or night time hours.	Contractor	Implemented
		• Construction work programme should be considered before actual construction work is undertaken, and noise mitigation measures should be implemented to minimize the potential construction noise impact. Selection and optimization of construction programmes, avoidance and reduction of parallel operation of noisy PME during noise sensitive periods.	Contractor	Implemented
		• Use of well-maintained and regularly-serviced plant during the works.	Contractor	Implemented
		• Plant operating on intermittent basis should be turned off or throttled down when not in active use.	Contractor	Implemented
		• Plant that is known to emit noise strongly in one direction should be orientated to face away from the NSRs.	Contractor	Implemented
		• Silencers, mufflers and enclosures for plant should be used where possible and maintained adequately throughout the works.	Contractor	Not Applicable
		• Fixed plants should be sited away from NSRs where possible.	Contractor	Not Applicable
		• Stockpiles of excavated materials and other structures such as site buildings should be used effectively to screen noise from the works.	Contractor	Not Applicable
3.10.4, 3.10.5 and Table 3.3		• The use of particular plant with equipment quieter than those specified in the GW-TM are recommended to reduce the noise levels generated by the plant.	Contractor	Not Applicable
		• Other type of quiet PME are allowed to use for their needs based on the actual construction conditions and programmes	Contractor	Not Applicable
3.10.6 to 3.10.9		• Temporary noise barriers provide noise attenuation by screening NSRs from stationary and mobile plants from direct line-of-sight in shadow zone.	Contractor	Not Applicable
		• The use of 3m high moveable barriers with skid footing and a small cantilevered upper portion	Contractor	Not Applicable

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		should be adopted. The barrier material shall have a surface mass of not less than 14kg/m ² on skid footing with 25mm thick internal sound absorptive lining to achieve the maximum screening effect.		
		• These temporary noise barriers should be located immediately adjacent to working area.	Contractor	Not Applicable
		• The temporary noise barriers should be located along the working area to make sure the construction plant could be screened during all kinds of construction activities as far as practicable.	Contractor	Not Applicable
		• Noise jacket/muffler shall be used to cover the noisy part of the engine or at the engine exhaust of particular mobile plants respectively when temporary noise barriers are not practicable or noise reduction achieved is insufficient.	Contractor	Not Applicable
		• For the stationary plant bored pile oscillator, temporary noise barriers of sufficient height with skid footing and small cantilevered upper portion should be provided.	Contractor	Not Applicable
		• Barrier material of surface density of at least 14 kg/m ² is recommended in order to achieve the necessary screening effect.	Contractor	Not Applicable
3.10.10		• Full noise enclosures should cover the PME or fixed plants such as air compressor.	Contractor	Not Applicable
		• Silencers, mufflers and enclosures for plant should be used where possible and maintained adequately throughout the works;	Contractor	Not Applicable
3.10.3		• Where possible fixed plants should be sited away from NSRs; and	Contractor	Not Applicable
		• Stockpiles of excavated materials and other structures such as site buildings should be used effectively to screen noise from the works.	Contractor	Not Applicable
Air Quality Measures				
4.12.1 and 4.12.2	Within the boundaries of all construction sites.	• The Contractor shall notify any specific construction works as stated in the Air Pollution Control (Construction Dust) Regulation to the Authority before the commencement of such work. Dust mitigation measures stipulated in the Air Pollution Control (Construction Dust) Regulation should be implemented to control dust emissions from all construction work sites.	Contractor	Implemented
		• The Contractor shall undertake at all times to prevent dust nuisance as a result of his activities. Dust suppression measures such as the water spraying are necessary and should be installed to ensure that the air quality at the boundary of the site and at any sensitive receivers complies with the Hong Kong Air Quality Objectives.	Contractor	Implemented
		• The Contractor shall apply for a license or permit under the requirements of the relevant	Contractor	Implemented

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		legislation (e.g. Air Pollution Control Ordinance and its subsidiary regulations) wherever applicable.		
		<ul style="list-style-type: none"> Watering of unpaved areas, access roads, construction areas and dusty stockpiles shall be undertaken at least eight times daily during dry and windy weather. Watering of the haul road shall be undertaken four to eight times daily during dry or windy weather. Water sprays may be either fixed or mobile to follow individual areas to be wetted as and when required. Application of suitable wetting agents, such as dust suppression chemicals, shall be used in addition to water, especially during the dry season (October to December). It is also suggested that watering with complete coverage of active construction area eight times a day. 	Contractor	Implemented
		<ul style="list-style-type: none"> Effective water sprays shall be used during the delivery and handling of all raw sand and aggregate, and other similar materials, wet dust is likely to be created and to dampen all stored materials during dry and windy weather. 	Contractor	Implemented
4.12.1		<ul style="list-style-type: none"> Stockpiles of sand, aggregate or any other dusty materials greater than 20m³ shall be enclosed on three sides, with walls extending above the pile and 1 meter beyond the front of the pile. 	Contractor	Implemented
		<ul style="list-style-type: none"> Suitable chemical wetting agent such as dust suppression chemical shall be used on completed cuts and fills to reduce wind erosion. 	Contractor	Not Observed
		<ul style="list-style-type: none"> Areas within the construction site where there is a regular movement of vehicles shall have a paved surface and be kept clear of loose surface material. 	Contractor	Implemented
		<ul style="list-style-type: none"> The Contractor shall restrict all motorized vehicles within the construction site, excluding those on public roads, to maximum speed of 20 km per hour and confine haulage and delivery vehicles to designated roadways inside the Site. 	Contractor	Implemented
		<ul style="list-style-type: none"> Construction working areas should be restricted to a minimum practicable size. 	Contractor	Implemented
		<ul style="list-style-type: none"> The Contractor shall ensure that no earth, rock or debris is deposited on public or private rights of way as result of his activities, including any deposits arising from the movement of plant or vehicles. 	Contractor	Implemented
		<ul style="list-style-type: none"> The Contractor shall provide a wheel washing facility at the exits from work areas to the satisfaction of the Engineer and to the requirements of the Commissioner of Police. Water in wheel washing facilities and sediment shall be changed and removed respectively at least once a month. 	Contractor	Not Applicable

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		• The Contractor shall submit details of the wheel washing facilities, which shall be usable prior to any earthworks excavation activity on the construction site. The Contractor shall also provide a hard-surfaced road between any washing facility and the public road.	Contractor	Not Applicable
		• In the event of any spoil or debris from construction works being deposited on adjacent land, or steams, or any slit being washed down to any area, then all such spoil, debris or material and silt shall be immediately removed and the affected land and areas restored to their natural state by the Contractor to the satisfaction of the Engineer.	Contractor	Not Applicable
		• If spoil cannot be immediately transported out of the Site, stockpiles should be stored in sheltered areas.	Contractor	Partially Implemented
		• Plant and vehicles shall be inspected annually to ensure that they are operating efficiently and that exhaust emissions are not causing a nuisance. All site vehicle exhausts should be directed vertically upwards or directed away from ground.	Contractor	Implemented
4.12.1, 4.13.1 and Table 8.2		• Construction dust monitoring shall be carried out at representative monitoring locations during the construction period.	Contractor	Implemented
		• Path for complaints and handling procedures should be set up and implement.	Contractor	Implemented
NA		• Dark smoke emission shall be control in accordance with the Air Pollution Control (Smoke) Regulation and ETWB TCW 19/2005.	Contractor	Implemented
		• Plant and equipment should be well maintained to prevent dark smoke emission.	Contractor	Implemented
		• Only approved or exempted Non-road Mobile Machineries (NRMMS) including regulated machines and non-road vehicles with proper labels are allowed to be used in specified activities on-site.	Contractor	Implemented
<u>Water Quality Measures</u>				
5.7	Within the boundaries of all construction sites.	• Silt-laden surface run-off should be prevented from directly entering the sensitive receivers during the construction works. The mitigation measures described below for the construction phase are in accordance with ProPECC PN 1/94:	Contractor	Implemented
		• Construction works should be programmed so as to minimise excavation during the wet season	Contractor	Implemented

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		(April to September). If this is not possible then measures should be taken to minimise the areas exposed by covering temporary exposed slopes with tarpaulins or similar material, the protection of temporary road surfaces with gravel or crushed stone and the early reinstatement of final surfaces with hydro seed grass/shrub mixture. This latter measure would have the added benefit of reducing the windblown dust during the dry season. Where temporary covering of slopes is required this should be carried out before the onset of the rainfall or storm.		
		• Existing and newly constructed open manholes should be covered and sealed to prevent run off and water borne debris entering the drainage network without having previously passed through a sediment trap.	Contractor	Partially Implemented
		• Stock piles of construction materials, sand and gravel or excavated material should be covered with tarpaulins prior to rainstorms. The washing of material from the stockpiles directly into the storm drains should be prevented by passing the run off through a sediment trap.	Contractor	Partially Implemented
		• The surface water from the site should be discharged into storm water drain after passing through sand and silt traps designed to accommodate the maximum discharge from the site. Within the site channels, bunds or sandbags should be used to direct run off into the traps. Storm water from outside the site should be prevented from washing over the site by the construction of interceptor channels at the site boundary. Both perimeter channels and the sedimentation traps should be constructed prior to the commencement of site formation and earthworks.	Contractor	Partially Implemented
		• The efficiency of the interceptor channels, traps and sedimentation chambers should be maintained by regular cleaning of accumulated silt and sand. Particular attention should be paid to maintenance following heavy rainfall and immediately after the issue of heavy rainfall warning by the Hong Kong Observatory.	Contractor	Partially Implemented
		• The ingress of rainwater into trenches should be minimised by the construction of bunds to prevent water flowing into the trench and covering by tarpaulins to prevent direct entry. The lengths of excavated trenches should be minimised and backfilled at the earliest opportunity. Water pumped from the trenches should be discharged to the storm water drains following passage through a suitable silt trap.	Contractor	Implemented
		• Any ground water seeping into any trenches or foundation works should be passed through a silt trap prior to discharge to the storm water drains.	Contractor	Implemented

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		<ul style="list-style-type: none"> The water used for the washing down of mixing drums used for onsite batching of concrete and delivery lorries for off-site batched concrete should be recycled whenever possible. Wastewater generated from the washing which is discharged should be passed through a silt trap before discharge to the storm water system. 	Contractor	Not Applicable
		<ul style="list-style-type: none"> The wastewater from the washing of the wheels and subframe of vehicles returning from the site onto public roads will contain suspended solids and debris. A washing bay should be provided at the exit from the site and should, where practicable, incorporate water recirculation. Water from the washing bay which is discharged to the storm water system should first be passed through a silt trap which also includes an oil/grease removal weir. 	Contractor	Not Applicable
		<ul style="list-style-type: none"> Plant maintenance areas should be paved to prevent waste oils soaking into the ground. Where possible the area should be undercover to minimise the formation of runoff and any runoff from the paved area passed through an oil trap before being discharged to the storm drains. Fuel storage tanks should be surrounded by bunds with a capacity of at least 150% of the storage capacity. The bunded areas should be able to be drained of rain water through the petrol interceptor and accumulated rain removed at regular intervals. 	Contractor	Not Applicable
		<ul style="list-style-type: none"> Waste oils from the site should be collected and stored for recycling or disposal in accordance with the Waste Disposal Ordinance and absorbent cloths and granules should be available for the cleanup of spillages. 	Contractor	Not Applicable
		<ul style="list-style-type: none"> Sewage from toilets and kitchens should be discharged directly into a foul sewer. If it is not possible to locate the site offices within easy access of a foul sewer a septic tank and soakaway should be constructed before the offices are occupied. Chemical toilets should be emptied on a daily basis and the contents taken to a foul sewer or the Sha Tin Sewage Treatment Works for disposal. Wastewater collected from canteen kitchens should be discharged to the foul sewers via grease traps which provide a minimum of 20 minutes retention during peak flow. All discharges into foul sewers and storm sewers should have to be complied with TM standards under WPCO. 	Contractor	Not Applicable
		<ul style="list-style-type: none"> Run off from roofed surfaces of site facilities should be collected and diverted to a storm water drain. Passage through a silt trap is only required if the water is diverted via open channels which might accumulate solids during non-rainy periods or which intercept surface run off from unpaved areas. 	Contractor	Not Applicable

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		<ul style="list-style-type: none"> Discharges from the site shall be required to meet the terms and conditions of a valid WPCO Water Pollution Control Ordinance (WPCO). 	Contractor	Implemented
Section 12.6 of the Approved EIA Report		<ul style="list-style-type: none"> Regular site inspection of the construction works shall be carried out to determine compliance with the recommended mitigation measures. Inspection should be included: 		
		(i) The functioning of onsite surface water collection channels and sediment traps.	Contractor	Partially Implemented
		(ii) The functioning of interception channels at the boundary of the works areas	Contractor	Partially Implemented
		(iii) The covering of stockpiles of fill and construction materials and the routing of any run off through the sediment traps.	Contractor	Implemented
		(iv) The pumping procedures for emptying trenches and other excavations and the use of silt traps prior to the discharge of the water to the storm water system.	Contractor	Implemented
		(v) The use of washwater for hosing down concrete mixing and delivery vehicles and other vehicles leaving the site and the routine of excess water from the facility through sediment traps.	Contractor	Not Applicable
		(vi) The operation of the plant maintenance areas to control small spillages and the correct management of the fuel storage bunded area.	Contractor	Not Applicable
		(vii) The connection of the site office wastewater discharge to an existing foul sewer if appropriate or the operation of the kitchen wastewater grease trap and the regular emptying of the chemical toilets	Contractor	Not Applicable
		(viii) The operation of the roof rain water collection and drainage system.	Contractor	Not Applicable
<i>Landscape and Visual Mitigation Measures</i>				
Construction Phase				
Table 6.5	During construction within the Project Boundary.	<ul style="list-style-type: none"> Existing trees shall be preserved as much as possible. Detailed tree preservation and transplanting proposals shall be submitted to relevant government departments for approval in accordance with DEVB TC (W) No. 7/2015. 	Contractor	Implemented
		<ul style="list-style-type: none"> Topsoil will be conserved as far as possible during the road improvement works and utilized during the replanting operations. The stock piling height of the topsoil will not be more than 2m. 	Contractor	Implemented
		<ul style="list-style-type: none"> Old and valuable trees (OVTs) identified in the Project Boundary shall be protected in accordance with ETWB TCW no. 29/2004. 	Contractor	Implemented
		<ul style="list-style-type: none"> Night-time lighting glare shall be properly managed and control during construction so as 	Contractor	Not Applicable

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	During construction within the Project Boundary.	to minimize any adverse visual impact on adjacent VSRs.			
		<ul style="list-style-type: none"> Decorative screen hoarding with design compatible with the surrounding landscape setting shall be erected along the southern boundary of Tai Po Road to mitigate any potential adverse impact on adjacent Pedestrian and Cyclists on Footpath/Bicycle Track. 	Contractor	Not Applicable	
		Operation Phase			
		<ul style="list-style-type: none"> Compensatory planting shall be provided within and outside the project boundary where possible. Detailed compensatory planting proposal will be prepared in accordance with DEVB TC (W) No. 7/2015. 	Contractor	Not Applicable	
		<ul style="list-style-type: none"> Planting shall be undertaken at the earliest practical time in the construction period. The planting proposal shall aim to strengthen the existing tree species and supplement the existing tree planting to provide an effective screen to ameliorate any potential landscape and visual impacts. The proposed species to be utilized for road improvement works shall be agreed with LCSD and future maintenance authorities. All the proposed species for compensatory planting shall be suitable for roadside streetscape planting. 	Contractor	Not Applicable	
		<ul style="list-style-type: none"> Provision of visually pleasing noise barriers and enclosures design shall be proposed. The design of these structures aims to minimize any potential visual impact and visually integrate the proposed structures into the adjacent landscape context. This should be achieved through the use of form, color, tones, materials and planting materials. 	Contractor	Not Applicable	
		<ul style="list-style-type: none"> Aesthetically pleasing hard landscape treatment of the carriageway and roadside furniture shall be proposed, including development of chromatic themes in the architectural treatment of engineering structures, and the consideration of landscape lighting and special landscape features. 	Contractor	Not Applicable	
		<ul style="list-style-type: none"> Shrubs and climbers planting are proposed on the facade of Noise Enclosures and Barriers to mitigate any adverse impact on adjacent VSRs in area where space for tree planting is not feasible. 	Contractor	Not Applicable	
Waste Management Measures					
7.6.2 to 7.6.4	Within the boundaries of all construction sites.	<ul style="list-style-type: none"> In accordance with ETWB TC (W) No. 19/2005 - Environmental Management on Construction Sites", the Contractor shall prepare and implement a Waste Management Plan (WMP) as part of the Environmental Management Plan (EMP). The EMP shall describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and 	Contractor	Implemented	

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
7.6.5 to 7.6.6		disposal of different categories of waste to be generated from the construction activities. Such a management plan should incorporate site specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval.		
		• The Contractor should implement the waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor.	Contractor	Implemented
		• Recommendations of good site practices and waste reduction measures should be stated in order to achieve avoidance and minimization of waste generation in the hierarchy.	Contractor	Partially Implemented
		• Environmental Management Plan (EMP) and trip-ticket system shall be implemented for monitoring management of waste.	Contractor	Implemented
7.6.7	Within the boundaries of all construction sites as well as transportation routes to designed areas for off-site disposal of materials/Prior to and during construction activities.	• Specific measures targeting the mitigation of impacts in works areas and the transportation of spoil off-site should be provided to minimize the potential impacts to the surrounding environment.	Contractor	Implemented
		• To facilitate adoption of the best-practice philosophy, training shall be provided to all personnel working on site. The training shall promote the concept of general site cleanliness and clearly explain the appropriate waste management procedures defined in the EMP. Overall, the training should encourage all workers to reduce, reuse and recycle wastes.	Contractor	Implemented
7.6.8 to 7.6.9		• The contractor's environmental performance shall be monitored and controlled through the weekly environmental walks. The items after the environmental walks shall include:		
		• A review of the EMP in particular the suitability of the environmental measures on nuisance abatement and waste management adopted by the contractor;	Contractor	Implemented
		• The environmental performance of the contractor and his sub-contractors;	Contractor	Partially Implemented
		• The effectiveness of the environmental measures on nuisance abatement and waste management implemented on the site, and any complaints received; and	Contractor	Implemented
		• The promptness of rectification or improvement actions of the Contractor on the defects and deficiencies identified during inspections of the site.	Contractor	Implemented
	• Waste shall only be disposed of at licensed sites and the WMP should include procedures to ensure that illegal disposal of wastes does not occur. Only waste haulers authorized to collect the specific category of waste concerned should be employed and a trip ticket system shall be implemented for offsite disposal of inert C&D materials and non-inert C&D materials at public	Contractor	Implemented	

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		fill reception facilities and landfills, respectively. Appropriate measures should be employed to minimize windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers.		
7.6.10		<ul style="list-style-type: none"> Work site(s) shall be arranged and managed to facilitate the proper management of wastes and materials. The WMP shall include plans indicating specific areas designated for the storage of particular types of waste, reusable and recyclable materials as well as areas and management proposals for any stockpiling areas. Waste storage areas should be well maintained and cleaned regularly. Specific provisions for different types of material are outlined below. In general, these areas should be designed to avoid cross contamination of materials as well as pollution of the surrounding environment. 	Contractor	Partially Implemented
7.6.11 to 7.6.14		<ul style="list-style-type: none"> In order to minimize the impact resulting from collection and transportation of C&D material for off-site disposal, the excavated fill materials should be reused on site as backfill material as far as possible. 	Contractor	Implemented
		<ul style="list-style-type: none"> Careful design, planning and good site management should be maintained in order to minimise over ordering and generation of surplus materials such as concrete, mortars and cement grouts. The design of formwork should maximise the use of standard wooden panels so that high reuse levels can be achieved. Alternatives such as steel formwork or plastic facing should be considered to increase the potential for reuse. 	Contractor	Implemented
		<ul style="list-style-type: none"> C&D materials should be segregated on site into different waste and material types. The Contractor should clearly demonstrate in the EMP how he intends to maximise the reuse of C&D material on-site. Where reuse of materials on site is not feasible, the Contractor should explore opportunities for recycling materials off-site, and inert C&D materials shall be reused on site as much as possible. 	Contractor	Implemented
		<ul style="list-style-type: none"> Paving bricks arising from existing pavement should be recycled on site as much as possible. 	Contractor	Not Applicable
		<ul style="list-style-type: none"> Existing marginal roadside barriers comprise pre-cast units should be reused in the following widening works as much as possible, 	Contractor	Not Applicable
		<ul style="list-style-type: none"> Existing bridge parapets comprise aluminum post and railings, which have a recyclable value and should be sold for reconditioning or reused for scrap metal as much as possible 	Contractor	Not Applicable
		<ul style="list-style-type: none"> Any stockpile should be sited away from existing watercourses and suitably covered to prevent wind erosion and impacts on air and water quality. 	Contractor	Implemented

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
7.6.15 to 7.6.17		<ul style="list-style-type: none"> Chemical waste shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows. Containers used for the storage of chemical wastes should: <ul style="list-style-type: none"> be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450L unless the specifications have been approved by the EPD; and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). 		
		The storage area for chemical wastes should: <ul style="list-style-type: none"> be clearly labelled and used solely for the storage of chemical waste; be enclosed on at least 3 sides; have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; have adequate ventilation; be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary); and be arranged so that incompatible materials are adequately separated. 	Contractor	Implemented
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			Contractor	Implemented
7.6.18 to 7.6.20		<ul style="list-style-type: none"> General refuse generated on-site should be stored in enclosed bins or compaction units separate from construction and chemical wastes. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily or every second day basis to minimize 	Contractor	Partially Implemented

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
7.7.1		odour, pest and litter impacts. The burning of refuse on construction sites is prohibited by law.		
		• Separate labelled bins should be provided if feasible.	Contractor	Not Observed
		• Office waste can be reduced through recycling of paper if volume is large enough to warrant collection. Participation in a local collection scheme should be considered if one is available.	Contractor	Not Observed
		• All wastes produced during the construction of the Project shall be handled, stored, and disposed of in accordance with good waste management practices and relevant regulations and requirements.	Contractor	Partially Implemented
		• The mitigation measures recommended in the EIA/EIA review report should form a basis of the WMP to be developed by the Contractor in the construction phase of the Project.	Contractor	Implemented
EP 1.5	<i>General Condition</i>			
N.A	During construction within the Project Boundary.	• The Permit Holder shall display conspicuously a copy of this Permit on the Project site(s) at all vehicular site entrance/exits or at a convenient location for public information at all times. The Permit Holder shall ensure that the most updated information about the Permit, including any amended Permit, is displayed at such locations. If the Permit Holder surrenders a part or the whole of the Permit, the notice he sends to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site(s).	Contractor	Implemented

Implementation status: Implemented / Partially Implemented / Not Implemented / Not Observed / Not Applicable