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Report No.: 0064/18/ED/0441C

QUARTERLY EM&A REPORT

December 2019 – February 2020

Client : Civil Engineering and Development
Department, HKSAR

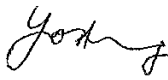
Contract No. : NDO 03/2018

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

Report No. : 0064/18/ED/0441C

Prepared by : Rex Chow

Reviewed by : Cyrus Lai

Certified by : 

David Hung
Environmental Team Leader
Fugro Technical Services Limited

Our ref: PL-202011038

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

Attention: Miss FUNG Cannifer

30 November 2020

Dear Miss Fung,

NE/2017/05

**Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)
Quarterly EM&A Report for December 2019 to February 2020**

I refer to the email of the ET regarding to the captioned Quarterly EM&A Report with report No. 0064/18/ED/0441C, 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)
CEDD – Mr. YAN Joseph (by email only: jkcyang@cedd.gov.hk)



FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre
5 Lok Yi Street, Tai Lam
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Hong Kong

Date 02 December 2020

Our Ref. MCL/ED/0640/2020/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/0441C)

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/0441C) 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. Kevin Yip / Ms. Cannifer Fung (by E-mail)
AECOM Attn: Mr. Albert Yu / Mr. Jacky Tse / Mr. Andrew Cheng /
Mr. Matthew Ma (by E-mail)
IEC Attn: Mr. Kevin Li / Mr. Tandy Tse (by E-mail)
CCZJV Attn: Mr. Chung Sing Chu / Ms. Kimberly Wong / Mr. Aaron Au (by E-mail)

Encl.

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Report No.: 0064/18/ED/0441C

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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 5th Quarterly EM&A Report presents the environmental monitoring and audit works for the period between 1 December 2019 and 29 February 2020. As informed by the Contractor, major activities in the reporting period included:

Date	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Dec 2019	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construct temporary road and site access • Removal of central median • Pre-drilling and mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Removal of central median • Pre-drilling and mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Underground utilities diversion • Retaining wall construction • Bore piling • Construct temporary road & site access • Modification of central median 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Structure Works for Staircase • RC structure works • Removal of central median 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construct temporary road and site access • Foundation of Noise Barrier • Removal of central median
Jan 2020	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construct temporary road and site access • Pre-drilling and mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Pre-drilling and mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construction of underground utilities • Construction of central median and temporary road • Soldier pile works • Soldier pile and Pre Bored H-pile works • Construction of underground utilities and Pre drill works • Pre drill, soldier pile and sheet pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities • Construction of underground utilities • Construction of footbridge NF40 staircase structure works • Construction of footbridge NF66 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construction of underground utilities • Construction of Haul Road, Cycle Track Diversion, Temporary Road and Footpath • Noise Barrier Foundation Works and Soil Replacement on Slope
Feb 2020	<ul style="list-style-type: none"> • Trial pits excavation • Construct temporary road and site access • Repair of road surface works • Pre-drill works • Tree Pruning 	<ul style="list-style-type: none"> • Trial pits excavation • Repair of road surface works • Pre-drilling works 	<ul style="list-style-type: none"> • Trial pits excavation • Construct temporary road and site access • Tree preservation / pruning / transplantation • Underground utilities detections • Underground utilities diversion • Pre-drilling works 	<ul style="list-style-type: none"> • Trial pits excavation • Construct temporary road and site access • Underground utilities detections 	<ul style="list-style-type: none"> • Trial pits excavation • Construct temporary road and site access • Tree preservation / pruning • Underground utilities detections • Underground utilities diversion



		<ul style="list-style-type: none"> • Mini pile works 	<ul style="list-style-type: none"> • Construction of central median (STRCR) • Pre bored H-pile works • Soldier pile works 	<ul style="list-style-type: none"> • Underground utilities diversion • Structural Works for Footbridge NF40 Staircases • Foundation works of footbridge NF66 • Pre-drill works 	<ul style="list-style-type: none"> • Construction of Noise Barrier Foundation and soil replacement at slope
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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, 3 exceedance cases were recorded at NMS 5A, 9 and 26 on 23 Jan, 2 Jan and 23 Jan respectively between 2300 and 0700 of the next day during the reporting quarter. After ET’s further investigation, 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. 1 complaint case was received on 29th Feb 2020 during the report period. The complaint case was from the project email regarding to the dust and noise nuisance near Wai Wah Centre during both the day and night works was at zone 2. The photos and video record attached with the complaint email also showed the day-time construction works at zone 2 and was the same as the mini-piling operation during the day time by the Contractor. Thus, the complaint in daytime is related to the project. The Main Contractor complied with CNP (No.: GW-RN0002-20), and allowed PME in Group A to Group E was used. The main contractor should carry out further review the effectiveness of the enclosure or noise barrier with their mitigation measure and propose alternative noise mitigation measures to enhance the noise reduction on similar day works or night works in restricted hours.
- 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 5th 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 Dec 2019 and 29 Feb 2020.

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:

Date	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Dec 2019	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construct temporary road and site access • Removal of central median • Pre-drilling and mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Removal of central median • Pre-drilling and mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Underground utilities diversion • Retaining wall construction • Bore piling • Construct temporary road & site access • Modification of central median 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Structure Works for Staircase • RC structure works • Removal of central median 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construct temporary road and site access • Foundation of Noise Barrier • Removal of central median
Jan 2020	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construct temporary road and site access • Pre-drilling and mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Pre-drilling and mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construction of underground utilities • Construction of central median and temporary road • Soldier pile works • Soldier pile and Pre Bored H-pile works • Construction of underground utilities and Pre drill works • Pre drill, soldier pile and sheet pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities • Construction of underground utilities • Construction of footbridge NF40 staircase structure works • Construction of footbridge NF66 	<ul style="list-style-type: none"> • Trial pits excavation • Underground utilities detections • Construction of underground utilities • Construction of Haul Road, Cycle Track Diversion, Temporary Road and Footpath • Noise Barrier Foundation Works and Soil Replacement on Slope
Feb 2020	<ul style="list-style-type: none"> • Trial pits excavation • Construct temporary road and site access • Repair of road surface works • Pre-drill works • Tree Pruning 	<ul style="list-style-type: none"> • Trial pits excavation • Repair of road surface works • Pre-drilling works • Mini pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Construct temporary road and site access • Tree preservation / pruning / transplantation • Underground utilities detections • Underground utilities diversion • Pre-drilling works • Construction of central median (STRCR) • Pre bored H-pile works 	<ul style="list-style-type: none"> • Trial pits excavation • Construct temporary road and site access • Underground utilities detections • Underground utilities diversion • Structural Works for Footbridge 	<ul style="list-style-type: none"> • Trial pits excavation • Construct temporary road and site access • Tree preservation / pruning • Underground utilities detections • Underground utilities diversion • Construction of Noise Barrier Foundation and soil replacement at slope

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			<ul style="list-style-type: none"> • Soldier pile works 	NF40 Staircases <ul style="list-style-type: none"> • Foundation works of footbridge NF66 • Pre-drill works 	
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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-RN0842-19	1/12/2019	31/01/2020
	GW-RN0002-20	1/02/2020	31/03/2020



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. 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
Dec 2019	AMS 4A	Wai Wah Centre	Residential
	AMS 6	Shatin Plaza	Residential
	AMS 8	Lek Yuen Estate	Residential
	AMS 15	Ha Wo Che	Residential
Jan 2020	AMS 5	Tin Liu	Residential
	AMS 6	Shatin Plaza	Residential
	AMS 11A	Sheung Wo Che	Residential
	AMS 17	Wo Che Estate	Residential
Feb 2020	AMS 4A	Wai Wah Centre	Residential
	AMS 6	Shatin Plaza	Residential
	AMS 8	Lek Yuen Estate	Residential
	AMS 12	Fung Wo Estate	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-l 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 ($\mu\text{g}/\text{m}^3$)
	Nov 2019	Dec 2019	Jan 2020	Feb 2020			
AMS 3A	47 - 122	-	-	-	78	200	260
AMS 4A	-	48 - 96	-	77 - 95	78	200	
AMS 5	-	-	62 - 84	-	74	156	
AMS 6	40 - 98	39 - 70	56 - 95	65 - 93	71	165	
AMS 7A	36 - 84	-	-	-	65	171	
AMS 8	-	36 - 74	-	59 - 91	69	161	
AMS 11A	-	-	51 - 82	-	60	165	
AMS 12	31 - 82	-	-	59 - 90	68	172	
AMS 15	-	30 - 83	-	-	59	172	
AMS 17	-	-	55 - 83	-	63	171	

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 ($\mu\text{g}/\text{m}^3$)
	Nov 2019	Dec 2019	Jan 2020	Feb 2020			
AMS 3A	47 - 142	-	-	-	85	348	500
AMS 4A	-	45 - 109	-	82 - 108	87	348	
AMS 5	-	-	64 - 102	-	85	340	
AMS 6	39 - 113	38 - 85	63 - 106	63 - 102	74	347	
AMS 7A	37 - 100	-	-	-	70	344	
AMS 8	-	37 - 90	-	56 - 108	74	336	
AMS 11A	-	-	48 - 96	-	64	335	
AMS 12	29 - 89	-	-	51 - 101	72	350	
AMS 15	-	29 - 90	-	-	59	350	
AMS 17	-	-	55 - 93	-	69	338	

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)
	Nov 2019	Dec 2019	Jan 2019	Feb 2020	
NMS1	62.2 – 67.9	66.5 – 69.4	59.4 – 69.1	64.4 – 68.6	75
NMS2	57.9 – 61.2	60.6 – 62.6	55.7 – 62.0	57.6 – 64.1	75
NMS3	59.0 – 68.6	68.1 – 71.2	59.2 – 69.7	65.5 – 68.9	75
NMS4	65.0 – 71.6	69.8 – 72.6	66.1 – 71.0	65.8 – 70.6	75
NMS5A	69.9 – 73.1	72.8 – 74.1	68.4 – 72.6	66.7 – 72.6	75
NMS6A	68.7 – 72.4	72.3 – 74.3	67.8 – 73.1	65.7 – 73.6	75
NMS7	63.7 – 73.7	73.3 – 74.1	65.3 – 72.5	70.2 – 73.1	75
NMS8	68.0 – 71.3	68.6 – 71.0	69.2 – 70.5	68.4 – 71.1	75
NMS9	66.4 – 69.7	66.5 – 71.2	66.5 – 69.5	66.5 – 69.5	75
NMS10A	63.2 – 64.8	63.9 – 64.8	64.2 – 65.5	64.0 – 66.8	70*
NMS11	66.3 – 68.0	64.7 – 68.0	66.8 – 67.7	64.8 – 67.4	75

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NMS12	63.6 – 65.1	64.1 – 69.5	64.1 – 68.7	63.5 – 65.3	70*
NMS13	66.7 – 67.8	65.2 – 68.1	66.1 – 67.8	67.1 – 68.1	75
NMS14	65.7 – 66.3	66.1 – 68.0	65.8 – 66.8	65.7 – 67.4	75
NMS15	64.4 – 65.6	66.1 – 67.8	64.6 – 66.4	64.8 – 67.1	75
NMS16	65.3 – 66.2	65.9 – 68.4	65.2 – 67.5	65.8 – 67.4	75
NMS17	63.7 – 64.6	63.6 – 65.8	63.2 – 64.7	63.9 – 65.5	70*
NMS18	63.7 – 66.1	65.4 – 66.5	60.8 – 65.2	64.1 – 66.7	75
NMS19	68.6 – 71.8	66.5 – 69.0	66.4 – 68.8	67.1 – 68.2	75
NMS20	67.7 – 69.6	66.5 – 70.0	66.8 – 69.0	66.2 – 67.9	75
NMS23	62.8 – 66.5	66.4 – 70.6	66.7 – 69.1	66.9 – 68.2	75
NMS24	69.4 – 72.6	68.9 – 71.6	68.2 – 71.6	67.3 – 69.8	75
NMS25A	72.6 – 74.2	70.5 – 74.2	69.2 – 72.2	66.9 – 70.5	75
NMS26	73.3 – 74.1	72.9 – 74.6	68.9 – 74.6	68.7 – 74.1	75
NMS27	62.8 – 64.3	64.1 – 64.5	61.3 – 66.1	63.9 – 65.8	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, 3 exceedance cases were recorded at NMS 5A, 9 and 26 on 23 Jan, 2 Jan and 23 Jan respectively 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**.

Table 2.6 Summary of Night Time Noise Impact Monitoring Results (2300 – 0700)

Monitoring Station	Leq Range ,dB(A) in Reporting Period				Baseline Level, dB(A)	Leq Limit Level, dB(A)
	Nov 2019	Dec 2019	Jan 2020	Feb 2020		
NMS 1	58.2 - 60.7	58.1 - 58.8	57.9 - 62.0 ^[2]	56.8 - 60.1	61.4	55
NMS 2	44.2 - 46.9	44.8 - 53.5	44.8 - 56.0	45.7 - 48.0	49.7	55
NMS 3	62.0 - 64.2	61.4 - 62.8	61.8 - 63.9	59.5 - 61.8	70.9	55
NMS 4	53.5 - 54.6	54.5 - 58.1	54.2 - 61.9	56.5 - 57.7	62.6	55
NMS 5A	67.6 - 70.9 ^[2]	67.4 - 68.1 ^[2]	58.2 - 72.4 ^[2]	58.3 - 67.7	67.9	55
NMS 6A	68.2 - 69.9	67.0 - 69.3	68.3 - 71.2	67.6 - 69.0	71.5	55
NMS 7	53.4 - 57.1	55.5 - 57.2	55.0 - 59.0	58.6 - 60.3 ^[2]	59.0	55
NMS 8	55.2 - 62.0	58.4 - 60.6	58.1 - 63.5	57.7 - 59.2	64.4	55
NMS 9	55.6 - 57.1	55.5 - 57.3 ^[2]	56.3 - 58.8 ^[2]	55.1 - 56.5 ^[2]	53.5	55
NMS 11	47.9 - 49.9	53.3 - 54.3	51.3 - 56.5	52.9 - 54.8	53.2	55
NMS 13	55.6 - 57.1 ^[2]	55.7 - 57.6 ^[2]	55.0 - 57.9 ^[2]	56.4 - 58.0 ^[2]	57.3	55
NMS 14	51.4 - 53.8 ^[2]	54.5 - 55.9	53.6 - 57.7 ^[2]	54.0 - 55.4 ^[2]	54.1	55
NMS 15	53.2 - 55.5	55.1 - 55.9	54.4 - 57.2	52.6 - 54.0	58.8	55
NMS 16	54.5 - 58.3	56.9 - 60.0	55.1 - 59.0	54.3 - 57.3	60.1	55
NMS 18	50.1 - 58.4	56.0 - 58.2	54.2 - 58.4	53.3 - 57.0	63.2	55
NMS 19	53.8 - 60.2	56.0 - 59.0	55.6 - 62.3 ^[2]	58.0 - 61.6	61.7	55
NMS 20	50.9 - 54.5	54.3 - 55.3	54.4 - 56.1	54.6 - 56.7	57.7	55
NMS 23	50.9 - 58.1	53.3 - 58.7	48.4 - 56.0	54.5 - 57.9	59.9	55
NMS 24	56.4 - 57.8	54.9 - 58.2 ^[2]	56.6 - 59.5 ^[2]	55.1 - 57.6	58.0	55
NMS 25A	46.9 - 54.3	54.2 - 60.3 ^[2]	54.8 - 58.3	56.1 - 59.5	59.7	55
NMS 26	59.0 - 65.9 ^[2]	58.0 - 60.2	59.6 - 69.7 ^[2]	57.2 - 59.6	61.2	55

Note: 1) Leq_(15min) was measured at night-time (2300-0700).

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

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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, pre-drilling and mini pile works were 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	2 Jan 2020	Observation: 1. Stockpile should be covered. (Zone5)	1. (Zone 5) Stockpile was removed.
	27 Feb 2020	Reminder: 1. Construction material (cement) shall be covered and stored well. (Zone 3)	-
Noise	No deficiency was found during the reporting quarter.		
Water Quality	19 Dec 2019	Reminder: 1. Keep tidy of the U-channel in Zone 5.	1. The U-channel was cleared.
	27 Dec 2019	Observation: 1. Provide mitigation measure/ sandbag at gap locations at both sides of trial pit locations near subway (Zone 3). Reminder 1. Regular maintenance of U-channel at exit of site zone 3 to Tai Po Road. 2. Clear debris / tree leave at U-channel at zone 3.	1. Provide sand bags for gaps between Krebs to prevent untreated water leaked to surface channel (N.03) 2. Regular maintenance of U-channel was provided. 3. Debris /tree leave was cleared.
	9 Jan 2020	Reminder: 1. To supplement plastic sheets as secondary measure to avoid outflow. (Zone 3) Observation 1. To provide mitigation measure preventing outflow to cycling path. (Zone 3)	1. (Zone 3) Sand bags were provided to prevent water leakage
	16 Jan 2020	Observation: 1. Mitigation measure shall be provided for any leakage. (Zone 3 S04).	1. (Zone 3) Sand bags were provided.
	22 Jan 2020	Observation: 1. Keep tidy of U channel in Zone 4 and block the U channel.	1. (Zone 4) U channel was cleared and sand bags were provided.
	30 Jan 2020	Observation : 1. Mitigation measurement should be provided to prevent water leakage in Z3 RW7	1. Sand bags were provided to prevent water leakage

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Parameters	Date	Observations and Recommendations	Follow-up
	6 Feb 2020	Reminder: 1. Clarify the function of U-channel, provide mitigation measurement to prevent sand and wastewater leakage. (Zone 5) Observation 1. Sedimentation tank shall be cleared regularly, and functioned in well situation when in used. (Zone 3)	1. (Zone 3) Sedimentation tank was cleared.
	27 Feb 2020	Reminder: 1. Wastewater treatment facility shall be prepared before wet season. 2. Efficiency of wastewater treatment facility shall be enhance.	-
Chemical and Waste Management	12 Dec 2019	Reminder: 1. Regular clearance for the waste storage area (S06).	1. The waste storage was cleared.
	6 Feb 2020	Reminder: 1. Waste storage tank shall be cleared regularly, and housekeeping in site area. (Zone 3)	-
	20 Feb 2020	Reminder: 1. Waste tank in S06 shall be cleared regularly. 2. Drip tray shall be cleared and keep tidy. (Zone 4, NF 40)	-
	27 Feb 2020	Observation: 1. Broken drip tray shall be maintained or replaced.	1. (Zone 3) Drip tray was repaired.
Land Contamination	2 Jan 2020	Observation: 1. The retained trees should be protected by tree fence. (Zone5)	1. (Zone 5) Retained tree was preserved.
Landscape and Visual Impact	No specific observation was identified in the reporting month.		
General Condition	No deficiency was found during the reporting quarter.		



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			
		Dec 2019	Jan 2020	Feb 2020	Total	Dec 2019	Jan 2020	Feb 2020	Total
AMS 4A	AL	0	-	0	0	0	-	0	0
	LL	0	-	0	0	0	-	0	0
AMS 5	AL	-	0	-	0	-	0	-	0
	LL	-	0	-	0	-	0	-	0
AMS 6	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 11A	AL	-	0	-	0	-	0	-	0
	LL	-	0	-	0	-	0	-	0
AMS 12	AL	-	-	0	0	-	-	0	0
	LL	-	-	0	0	-	-	0	0
AMS 15	AL	0	-	-	0	0	-	-	0
	LL	0	-	-	0	0	-	-	0
AMS 17	AL	-	0	-	0	-	0	-	0
	LL	-	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 Daytime Noise Monitoring in Reporting Period

Monitoring Station		Number of exceedance in the reporting period			
		Leq _(30min) dB(A)			Total
		Dec 2019	Jan 2020	Feb 2020	
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
	LL	0	0	0	0
NMS 9	AL	0	0	0	0
	LL	0	0	0	0
NMS 10	AL	0	0	0	0
	LL	0	0	0	0
NMS 11	AL	0	0	0	0
	LL	0	0	0	0
NMS 12	AL	0	0	0	0
	LL	0	0	0	0
NMS 13	AL	0	0	0	0
	LL	0	0	0	0
NMS 14	AL	0	0	0	0
	LL	0	0	0	0
NMS 15	AL	0	0	0	0
	LL	0	0	0	0
NMS 16	AL	0	0	0	0
	LL	0	0	0	0
NMS 17	AL	0	0	0	0
	LL	0	0	0	0
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



Table 6.3 Summary of Exceedance of Night-time Noise Monitoring in Reporting Period

Monitoring Station	Number of exceedance in the reporting period			
	Leq _(15min) dB(A)			
	Dec 2019	Jan 2020	Feb 2020	Total
NMS 1	0	0	0	0
NMS 2	0	0	0	0
NMS 3	0	0	0	0
NMS 4	0	0	0	0
NMS 5A	0	1 ^[1]	0	1 ^[1]
NMS 6A	0	0	0	0
NMS 7	0	0	0	0
NMS 8	0	0	0	0
NMS 9	0	1 ^[1]	0	1 ^[1]
NMS 11	0	0	0	0
NMS 13	0	0	0	0
NMS 14	0	0	0	0
NMS 15	0	0	0	0
NMS 16	0	0	0	0
NMS 18	0	0	0	0
NMS 19	0	0	0	0
NMS 20	0	0	0	0
NMS 23	0	0	0	0
NMS 24	0	0	0	0
NMS 25A	0	0	0	0
NMS 26	0	1 ^[1]	0	1 ^[1]
Total	0	3 ^[1]	0	3 ^[1]

Remark: [1] According to onsite staff's observation, the noise source of the exceedance should be road traffic noise and not project-related construction noise.



6.2 Complaints, Notification of Summons and Prosecution

- 6.2.1 1 complaint case regarding noise nuisance were received on 29th Feb 2020 from the project email regarding to the noise nuisance near Wai Wah Centre about the day time and night time construction works at zone 2. After ET's investigation, the complaint case should be related to the project construction activities.
- 6.2.2 The complaint case on 29/02/2020 near Wai Wah Centre was carrying mini-piling operation during the day time and carrying out the construction works within the site boundary for loading and unloading works in night time. Contractor was reminded to enhance the water spray frequency on the construction site for mitigation measures on dust control. Contractor should provide green tarpaulin curtain and additional acoustic Sound Proof Canvas as a secondary layer at the bottom of the mini-pile drilling machine to secure the total enclose condition to minimize the visual and noise impacts to nearby NSRs. ET checked the regular impact air and noise monitoring data between day time and night-time regular noise monitoring data, no exceedance case was found on both regular impact air and noise monitoring measurement. The main contractor should carry out further review the effectiveness of the enclosure or noise barrier with their mitigation measure and propose alternative noise mitigation measures to enhance the noise reduction on similar day works or night works in restricted hours.
- 6.2.3 No notification of summons or prosecution was received in the reporting period.
- 6.2.4 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, 3 exceedance cases were recorded between 2300 and 0700 of the next day during the reporting quarter. For night time construction noise monitoring, 3 exceedance cases were recorded between 2300 and 0700 of the next day during the reporting quarter. After ET's further investigation, the dominant noise should be the background traffic noise, the noise exceedance cases were considered not project-related.
- 8.1.3 1 complaint case was received on 29th Feb 2020 from the project email regarding to the dust and noise nuisance near Wai Wah Centre during both the day and night works was at zone 2. The photos and video record attached with the complaint email also showed the day-time construction works at zone 2 and was the same as the mini-piling operation during the day time by the Contractor. Thus, the complaint in daytime is related to the project. Furthermore, the Main Contractor complied with CNP (No.: GW-RN0002-20), and carry out the construction works within the site boundary for loading and unloading works in night time. According to the Main Contractor, lorry with crane had been used in loading and unloading material or plant work and repairing works (manual handling) for road surface work on 28th – 29th Feb 2020 during night time. The Main Contractor complied with CNP (No.: GW-RN0002-20), and allowed PME in Group A to Group E was used. Contractor was reminded to enhance the water spray frequency on the construction site for mitigation measures on dust control. Also, Contractor should provide green tarpaulin curtain and additional acoustic Sound Proof Canvas as a secondary layer at the bottom of the mini-pile drilling machine to secure the total enclosure condition to minimize the visual and noise impacts to nearby NSRs. Contractor resumed the mini-piling works on 2nd Mar 2020 in re-arranging the works schedule, procedure and frequency to minimize the noise nuisance to nearby NSRs. ET checked the regular impact air and noise monitoring data between day time and night-time regular noise monitoring data, no exceedance case was found on both regular impact air and noise monitoring measurement. The main contractor should carry out further review the effectiveness of the enclosure or noise barrier with their mitigation measure and propose alternative noise mitigation measures to enhance the noise reduction on similar day works or night works in restricted hours.
- 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

- Stockpile should be covered in Zone 5.
- Construction material (cement) shall be covered and stored well. (Zone 3)

Construction Noise Impact

- No specific recommendation was identified in the reporting period.

Water Quality Impact

- Keep tidy of the U-channel in Zone 5.
- Provide mitigation measure/ sandbag at gap locations at both sides of trial pit locations near subway. (Zone3)
- Regular maintenance of U-channel at exit of site zone 3 to Tai Po Road.
- Clear debris/ tree leave at U-channel at Zone 3.
- To supplement plastic sheets as secondary measure to avoid outflow. (Zone 3)
- To provide mitigation measure preventing outflow to cycling path. (Zone 3)
- Mitigation measure shall be provided for water leakage. (Zone 3 S04)
- Keep tidy of U-channel in Zone 4 and block the U-channel.
- Mitigation measure should be provide to prevent in Zone 3.
- Sedimentation tank shall be cleared regularly, and functioned in well situation when in used. (Zone 3)
- Clarify the function of U-channel, provide mitigation measurement to prevent sand and wastewater leakage. (Zone 5)
- Wastewater treatment facility shall be prepared before wet season.
- Efficiency of wastewater treatment facility shall be enhance.

Chemical and Waste Management

- Regular clearance for the waste storage area (S06).
- Waste storage tank shall be cleared regularly, and housekeeping in site area. (Zone 3)
- Waste tank in S06 shall be cleared regularly.
- Drip tray shall be cleared and keep tidy. (Zone 4, NF 40)
- Waste storage tank shall be cleared regularly, and housekeeping in site area. (Zone 3)
- Waste tank in S06 shall be cleared regularly.
- Drip tray shall be cleared and keep tidy. (Zone 4, NF 40)
- Broken drip tray shall be maintained or replaced.

Land Contamination

- No specific recommendation was identified in the reporting period.

Landscape and Visual Impact

- No specific recommendation was identified in the reporting period.

General Condition

- No specific recommendation was identified in the reporting period.

Permit / Licenses

- No specific recommendation was identified in the reporting period.

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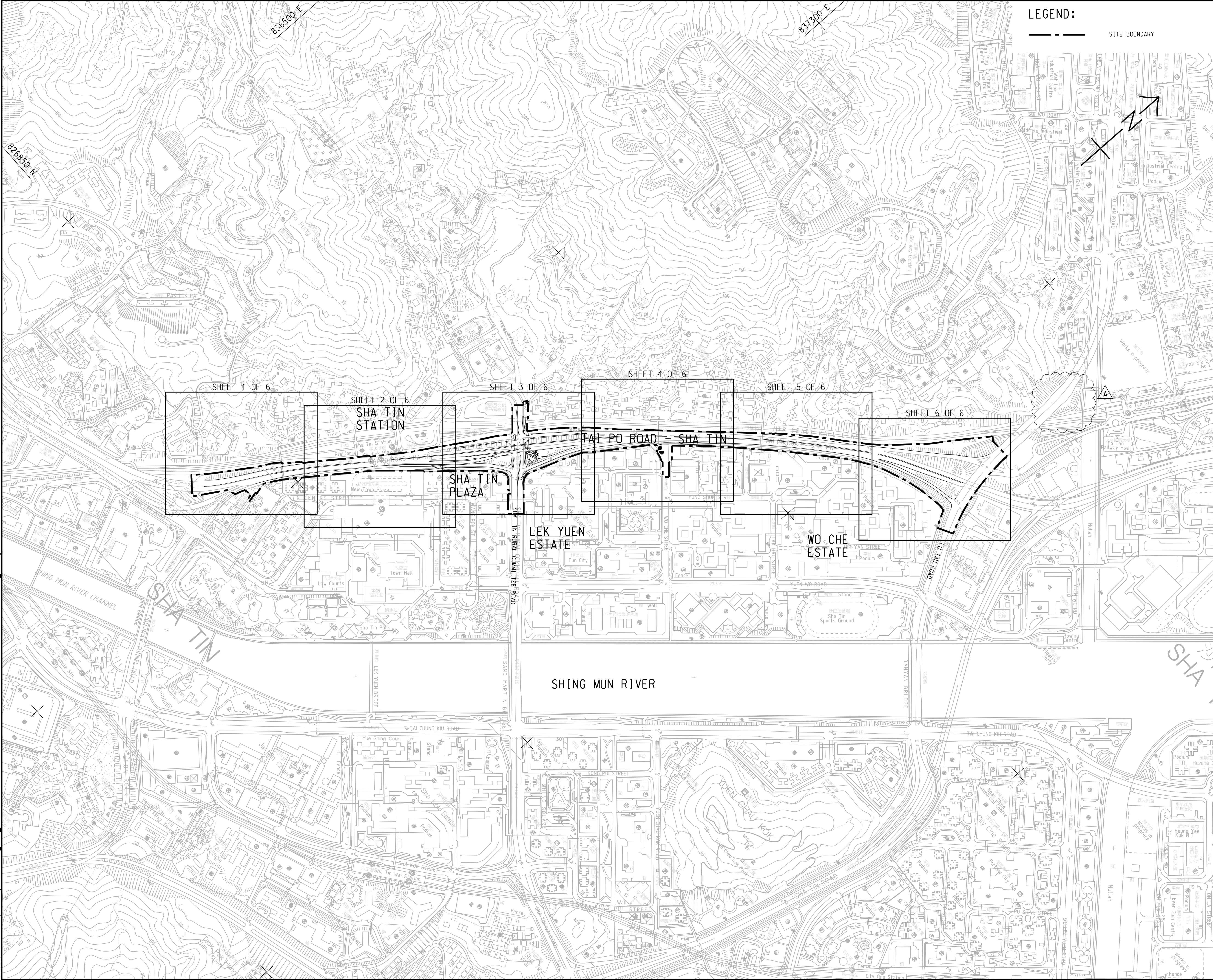
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Figure 1

Project General Layout

Plot File by: aecom\p0163015\...
 2/22/2018
 PATH: p:\aecom\p0163015\...
 Project Management Initials: Designer: FMSK Checked: BCC Approved: CWN
 ISO A1 594mm x 841mm



LEGEND:
 --- SITE BOUNDARY

AECOM

PROJECT
 項目

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

CLIENT
 業主

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 Civil Engineering and Development Department

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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

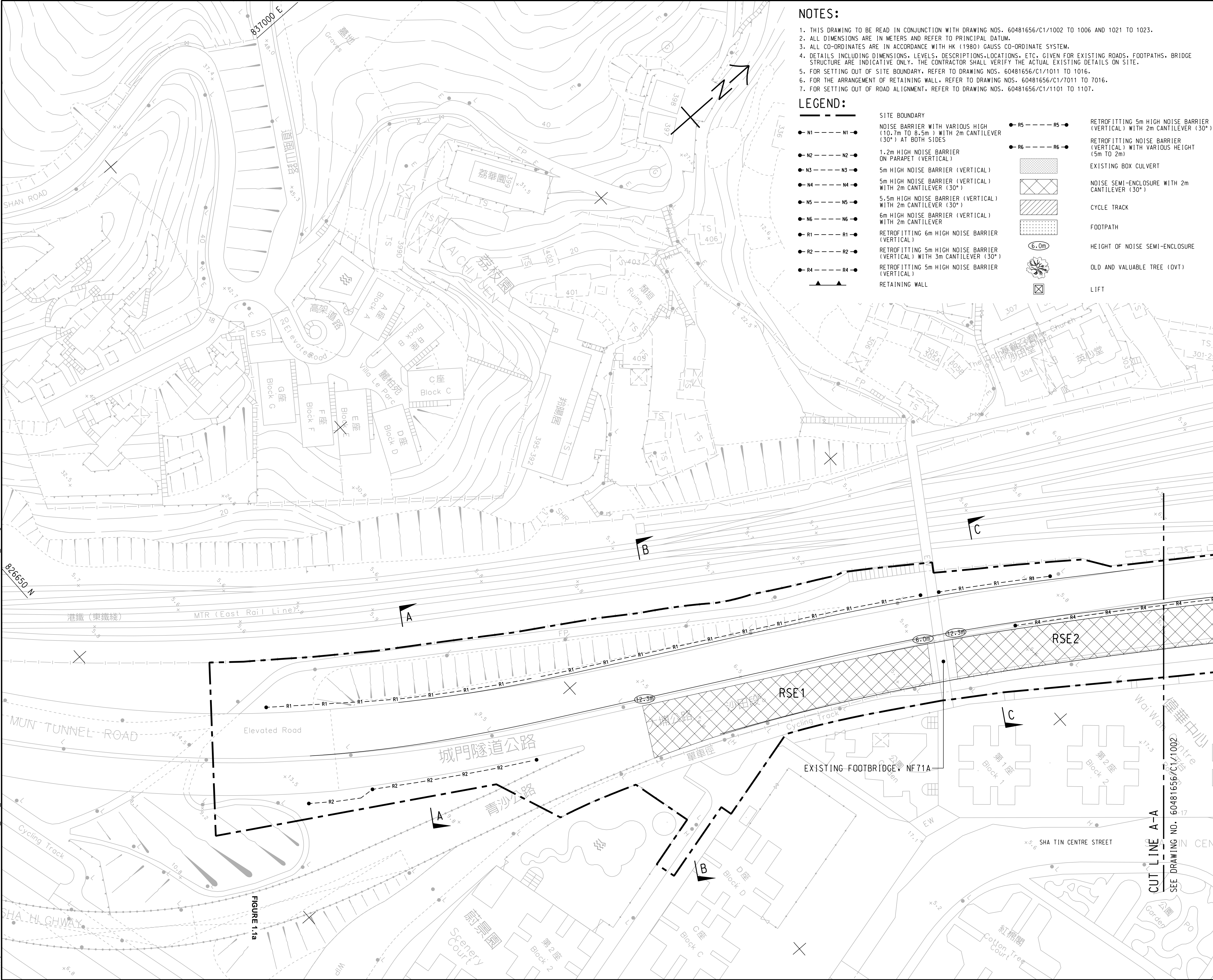
KEY PLAN
FIGURE 1.1a

SHEET NUMBER
 圖紙編號

60481656/C1/1000A

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 Checked: BCC
 Approved: CWN
 ISO A1 594mm x 841mm
 16/12/2018
 PATH: P:\WORK\T1\WAP08.aecommime.local\AECOM_DS02_AS\Documents\60481656_WTP-STP-CAD_PRODUCTION\DRAWING\CONTRACT\11000\CI_1001.dgn



NOTES:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60481656/C1/1002 TO 1006 AND 1021 TO 1023.
2. ALL DIMENSIONS ARE IN METERS AND REFER TO PRINCIPAL DATUM.
3. ALL CO-ORDINATES ARE IN ACCORDANCE WITH HK (1980) GAUSS CO-ORDINATE SYSTEM.
4. 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.
5. FOR SETTING OUT OF SITE BOUNDARY, REFER TO DRAWING NOS. 60481656/C1/1011 TO 1016.
6. FOR THE ARRANGEMENT OF RETAINING WALL, REFER TO DRAWING NOS. 60481656/C1/7011 TO 7016.
7. FOR SETTING OUT OF ROAD ALIGNMENT, REFER TO DRAWING NOS. 60481656/C1/1101 TO 1107.

LEGEND:

<ul style="list-style-type: none"> ● N1 --- N1 ● ● N2 --- N2 ● ● N3 --- N3 ● ● N4 --- N4 ● ● N5 --- N5 ● ● N6 --- N6 ● ● R1 --- R1 ● ● R2 --- R2 ● ● R4 --- R4 ● 	<ul style="list-style-type: none"> SITE BOUNDARY NOISE BARRIER WITH VARIOUS HIGH (10.7m TO 8.5m) WITH 2m CANTILEVER (30°) AT BOTH SIDES 1.2m HIGH NOISE BARRIER ON PARAPET (VERTICAL) 5m HIGH NOISE BARRIER (VERTICAL) 5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°) 5.5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°) 6m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER RETROFITTING 6m HIGH NOISE BARRIER (VERTICAL) RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL) WITH 3m CANTILEVER (30°) RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL) RETAINING WALL 	<ul style="list-style-type: none"> ● R5 --- R5 ● ● R6 --- R6 ● 6.0m 	<ul style="list-style-type: none"> RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°) RETROFITTING NOISE BARRIER (VERTICAL) WITH VARIOUS HEIGHT (5m TO 2m) EXISTING BOX CULVERT NOISE SEMI-ENCLOSURE WITH 2m CANTILEVER (30°) CYCLE TRACK FOOTPATH HEIGHT OF NOISE SEMI-ENCLOSURE OLD AND VALUABLE TREE (OVT) LIFT
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PROJECT
項目

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

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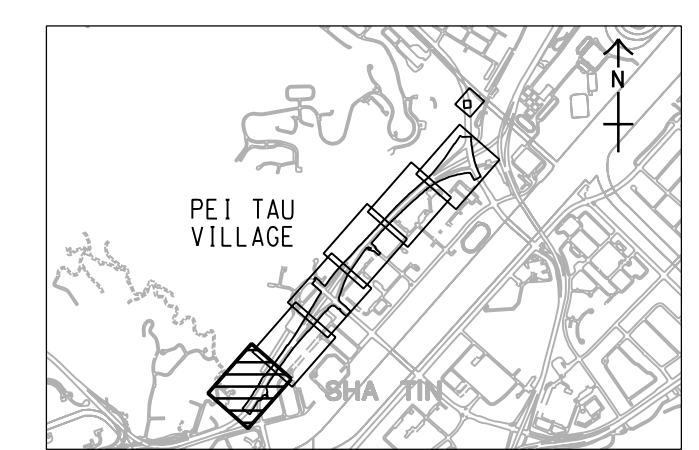
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-	JAN. 18	TENDER DRAWING	BCC

STATUS
階段

SCALE
比例
A1 1:500

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN A1 1:40000
索引圖



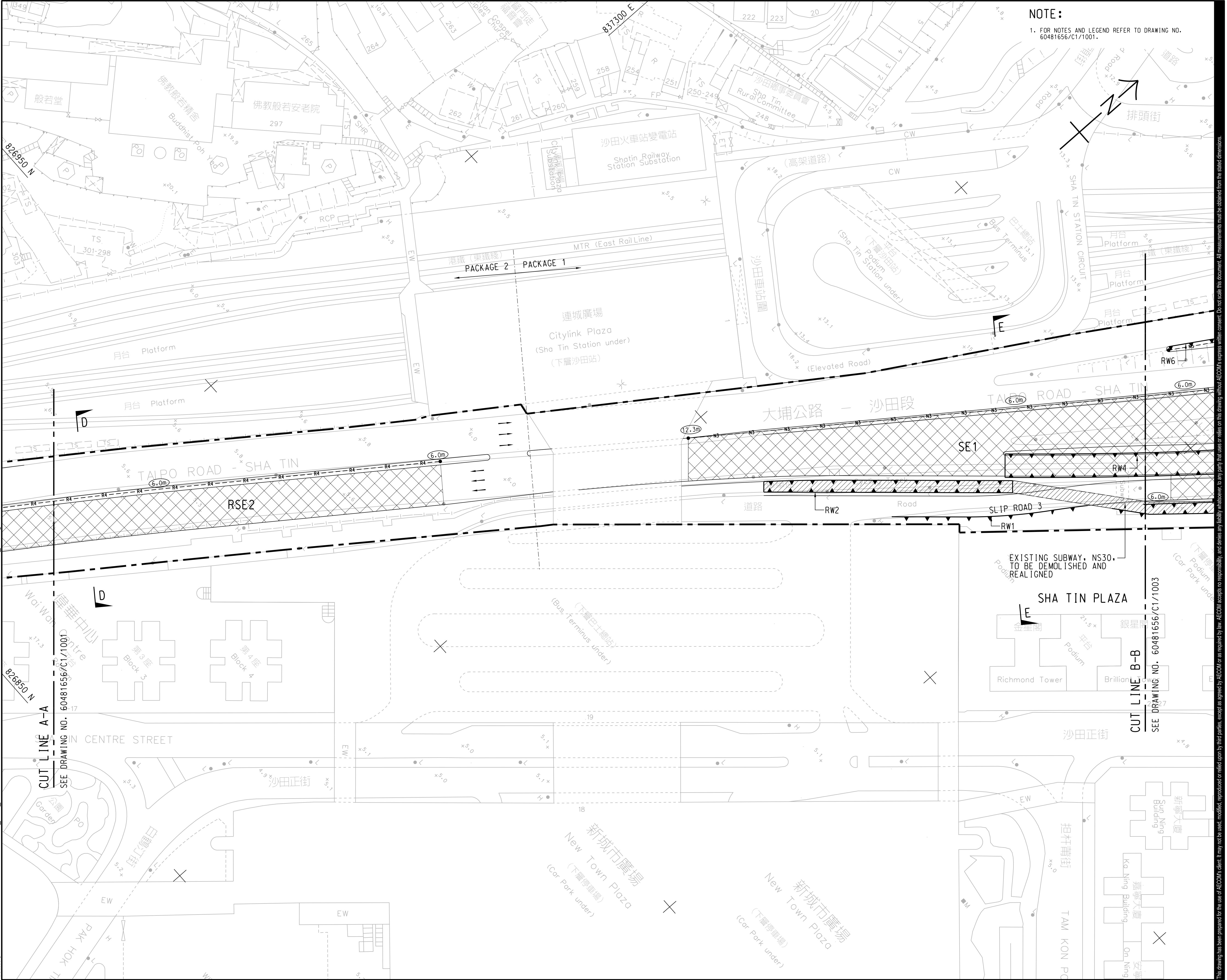
CONTRACT NO.
合約編號
60481656 NE/2017/05

SHEET TITLE
圖紙名稱
GENERAL LAYOUT PLAN
FIGURE 1.1 b

SHEET NUMBER
圖紙編號
60481656/C1/1001

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 CNY



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



PROJECT
項目

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

CLIENT
業主



CONSULTANT
工程顧問公司

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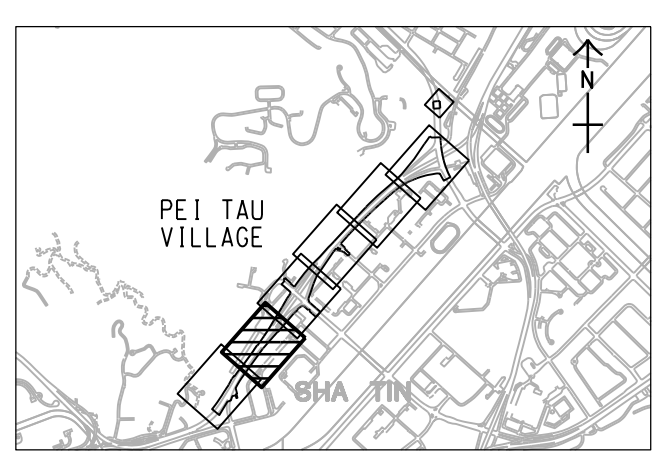
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STATUS
階段

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

KEY PLAN
索引圖: A1 1:40000



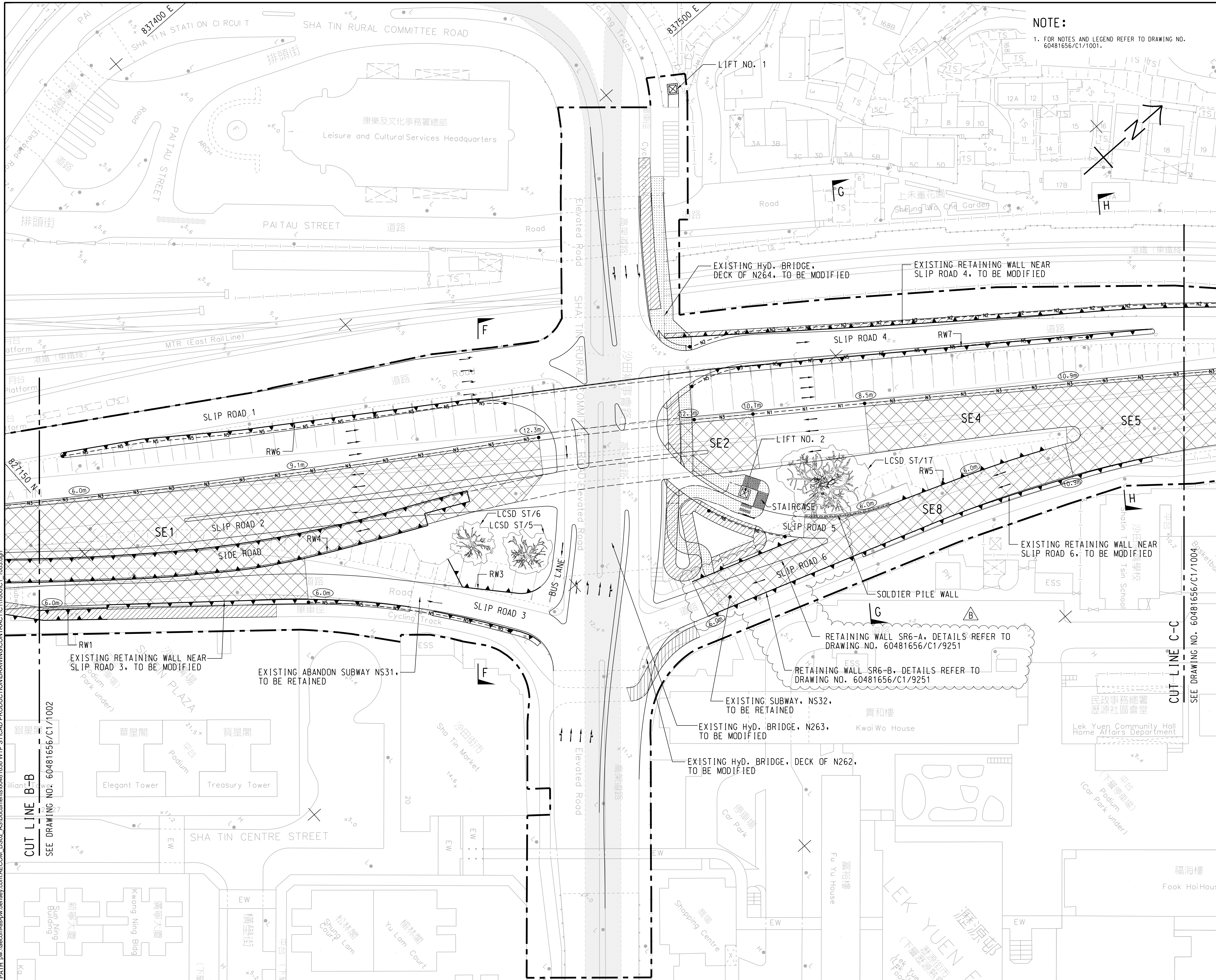
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合約編號: NE/2017/05

SHEET TITLE
圖紙名稱: GENERAL LAYOUT PLAN
FIGURE 1.1b

SHEET NUMBER
圖紙編號: 60481656/C1/1002

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 ISO A1 594mm x 841mm



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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

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-	JAN. 18	TENDER DRAWING	BCC

STATUS
 階段

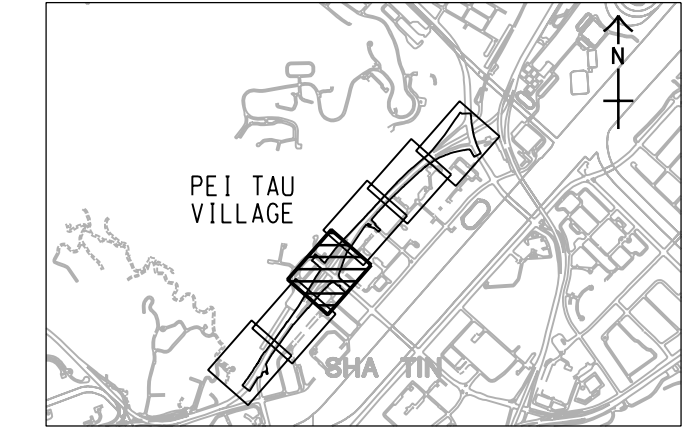
SCALE
 比例

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

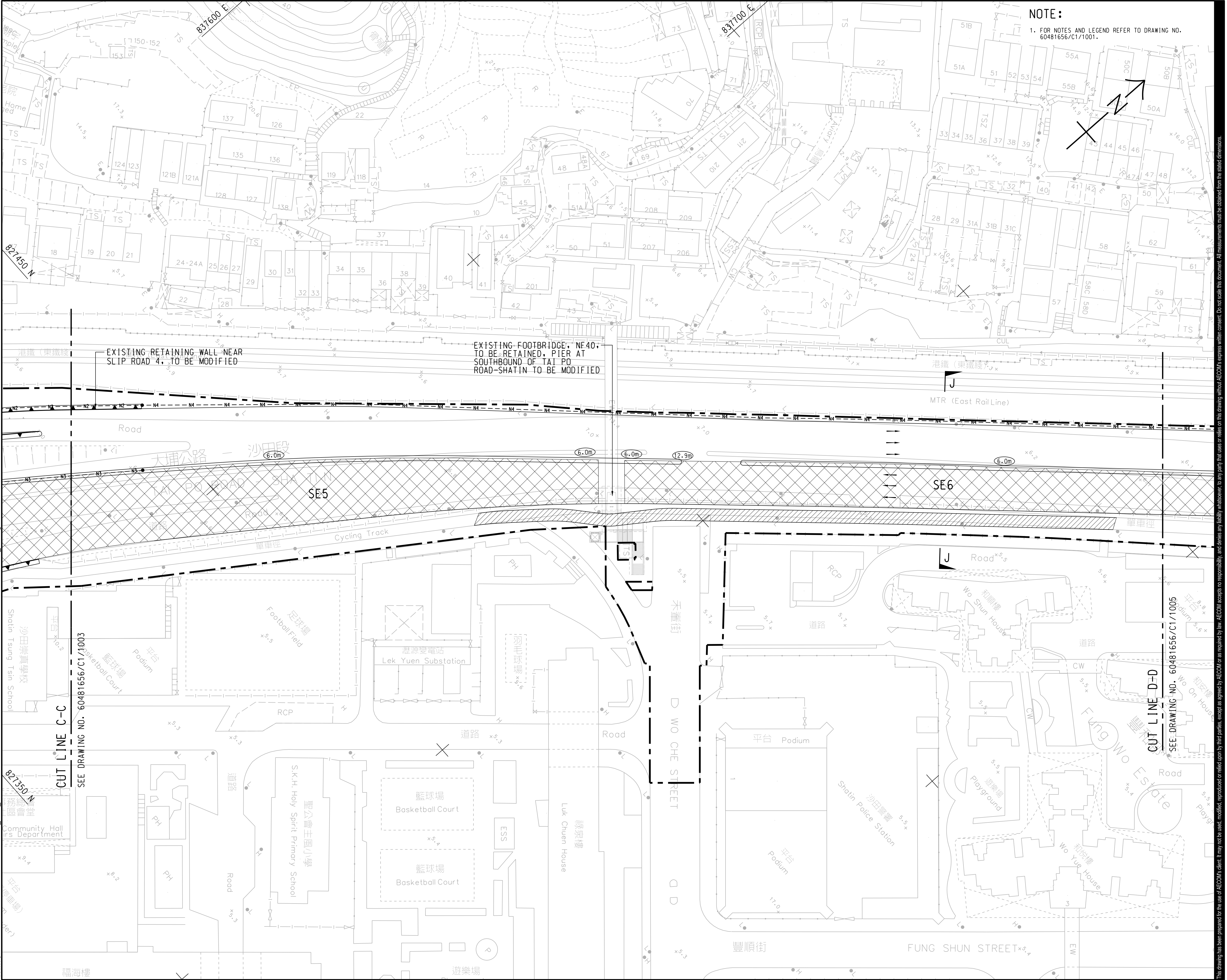
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60481656/C1/1003B

SHEET 3 OF 6

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PROJECT
項目

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

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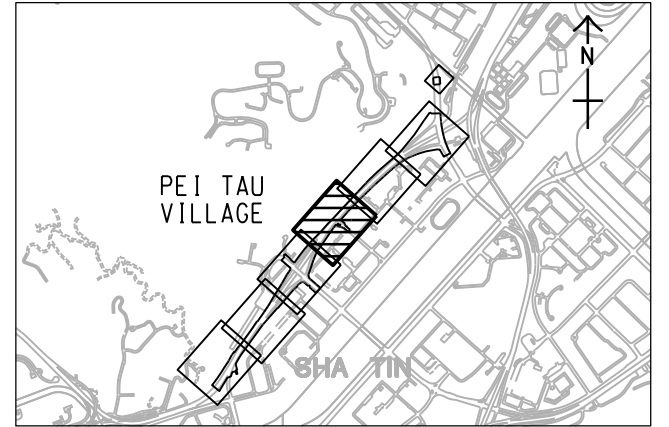
I/R	DATE	DESCRIPTION	CHK.
-	JAN. 18	TENDER DRAWING	BCC

STATUS
階段

SCALE DIMENSION UNIT

A1 1:500 METRES

KEY PLAN A1 1:40000



CONTRACT NO.
合約編號

NE/2017/05

SHEET TITLE
圖紙名稱

GENERAL LAYOUT PLAN

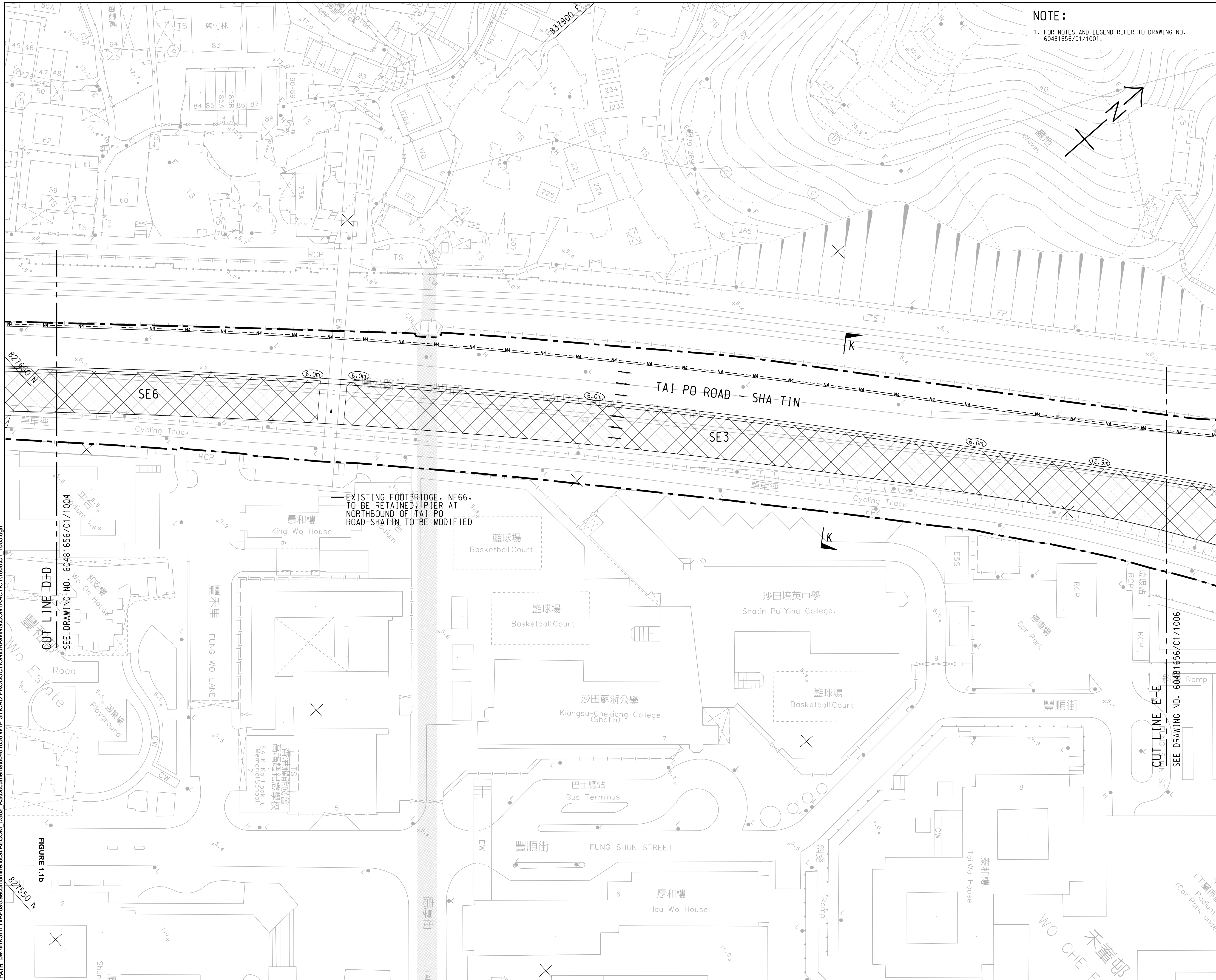
FIGURE 1.1b

SHEET NUMBER
圖紙編號

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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

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

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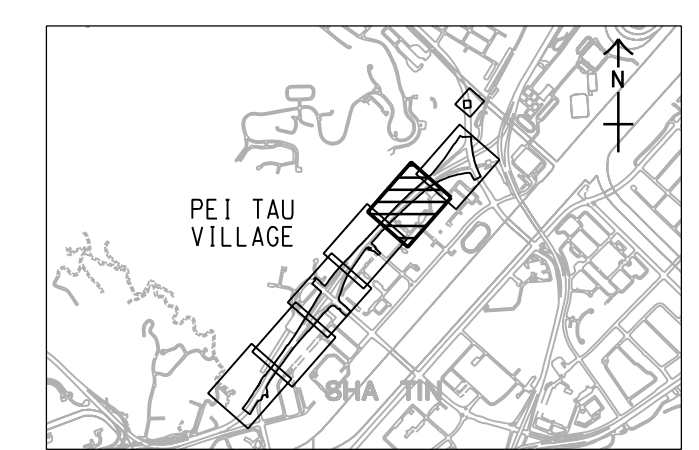
STATUS
階段

SCALE
比例

A1 1: 500

DIMENSION UNIT
尺寸單位

METRES



CONTRACT NO.
合約編號

NE/2017/05

SHEET TITLE
圖紙名稱

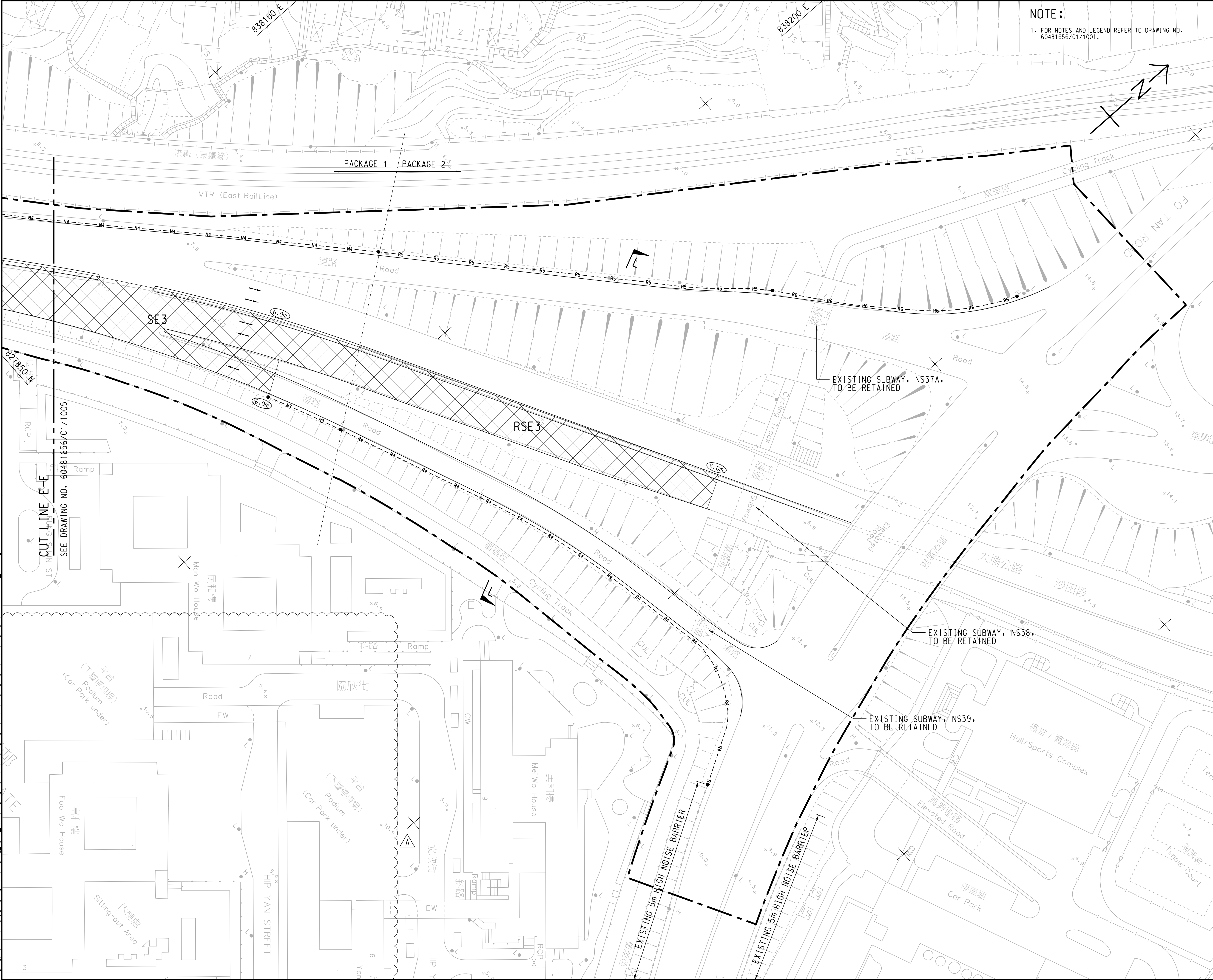
GENERAL LAYOUT PLAN
FIGURE 1.1b

SHEET NUMBER
圖紙編號

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 Approved: CWN
 Checked: BCC
 Designer: FMSC
 Project Management Initials:
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PROJECT
 項目

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

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-	JAN. 18	TENDER DRAWING	BCC

STATUS

擬定

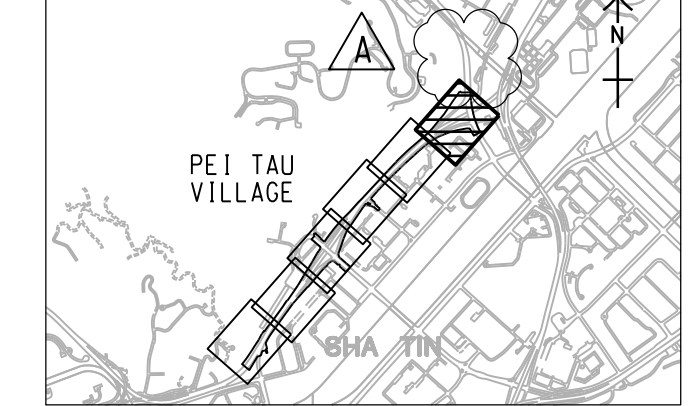
SCALE **DIMENSION UNIT**

比例 尺寸單位

A1 1 : 500 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 1.1b

SHEET NUMBER

圖紙編號
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Tel : +852 2450 8233
Fax : +852 2450 6138
E-mail : matlab@fugro.com
Website : www.fugro.com



Figure 2a

Air Monitoring Locations

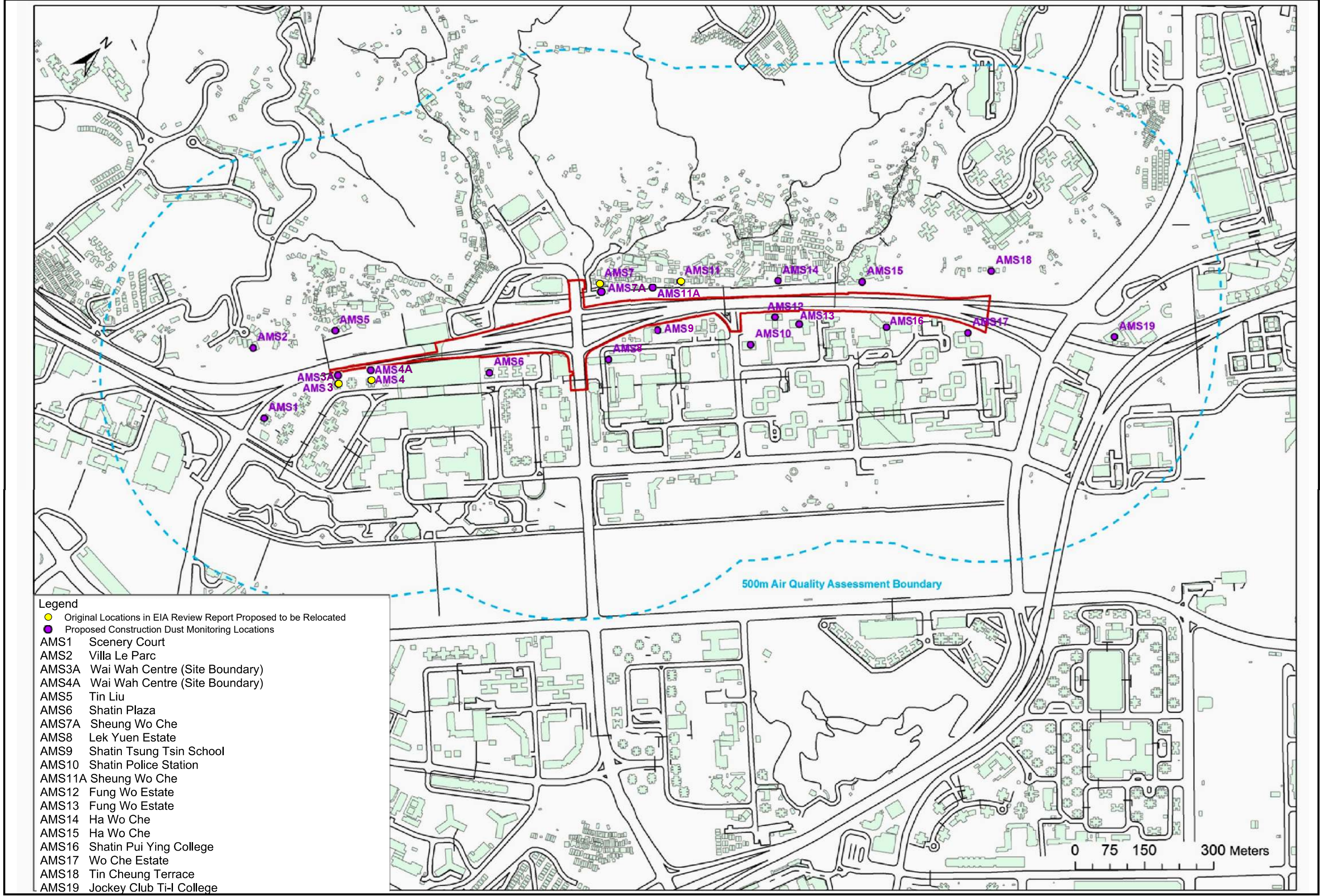


Figure 2a Air Quality Monitoring Locations

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Website : www.fugro.com



Figure 2b

Noise Monitoring Locations

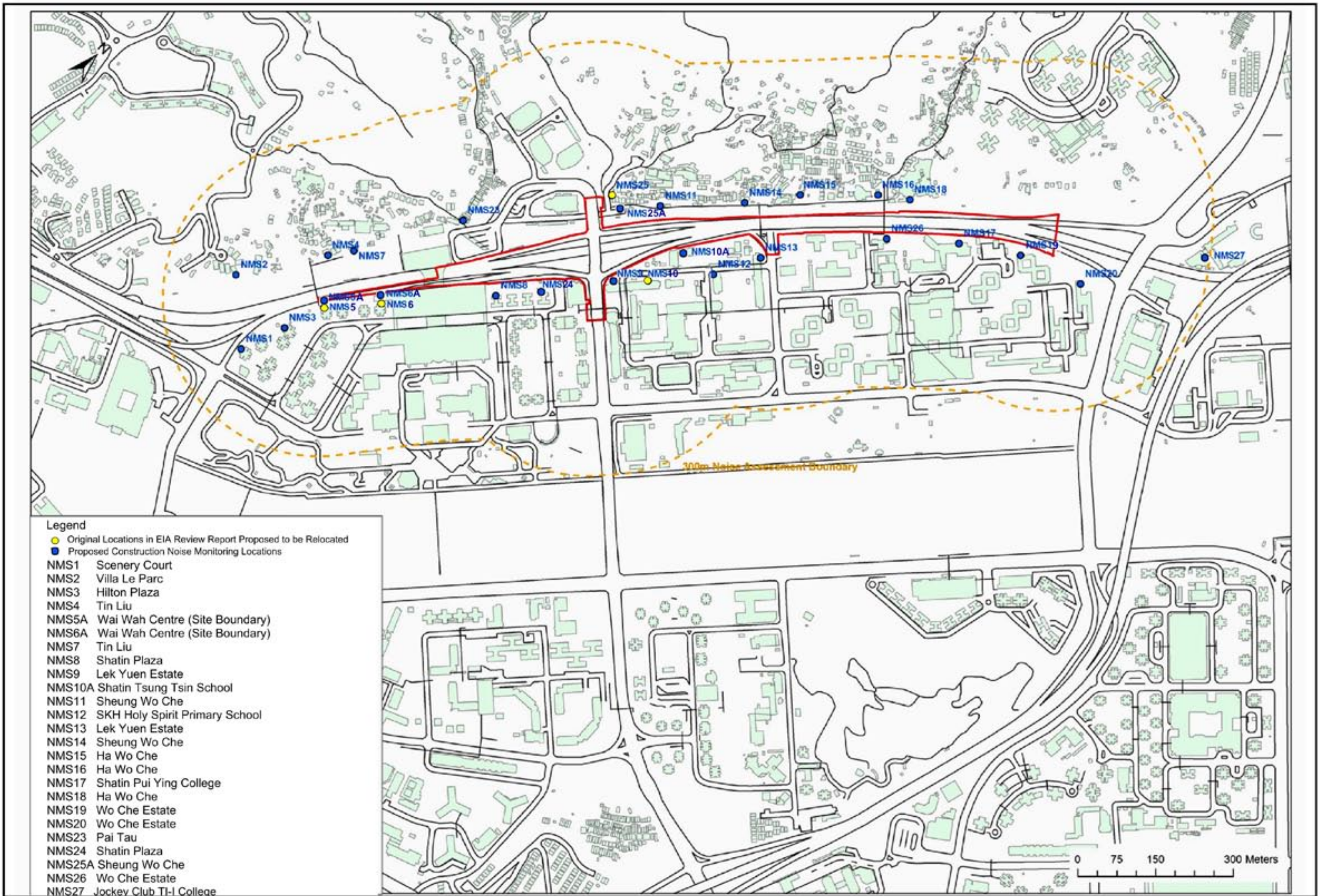


Figure 2b Noise Monitoring Locations

FUGRO TECHNICAL SERVICES LIMITED

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Hong Kong.

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Website : www.fugro.com



Appendix A

Construction Programme

Activity ID	Activity Name	Original Duration	Remaining Duration	SMRP Start	SMRP Finish	AP7 Start	AP7 Finish	2019									
								Nov 17	Dec 18	Jan 19	Feb 20	Mar 21					
Contract NE/2017/05 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)																	
PRELIMINARIES & GENERAL REQUIREMENT																	
GENERAL SUBMITTALS																	
SUB1200	Hoarding Plan	0	0	30-Nov-19*		30-Sep-19											
SUB1343	TCSS Configuration Management	0	0	30-Nov-19*		30-Sep-19											
SUB1347	Lift Installation - Design Data	0	0	30-Nov-19*		30-Sep-19											
SUB1403	ITPs for Lighting Luminaires and System	0	0	30-Nov-19*		30-Sep-19											
SUB1405	All Lighting Designs	0	0	30-Nov-19*		30-Sep-19											
SUB1410	Combined Services Drawings (CSD)	0	0	30-Nov-19*		30-Sep-19											
DESIGN SUBMISSION																	
DESIGN SUBMISSION - SUPERSTRUCTURE WORKS (Noise Mitigation Design)																	
DES1070	PM Consent for Construction	28	1	06-Nov-18 A	30-Nov-19	20-Feb-19	19-Mar-19										
DES1110	PM Consent for Construction	28	15	03-Apr-19 A	15-Dec-19	31-Jul-19	27-Aug-19										
DES1150	PM Consent for Construction	28	17	03-May-19 A	16-Dec-19	31-Jul-19	27-Aug-19										
DESIGN SUBMISSION - INFRASTRUCTURE WORKS																	
DES1190	PM Consent for Construction	28	0	25-Jun-19 A	07-Nov-19 A	31-Jul-19	27-Aug-19										
DES1230	PM Consent for Construction	28	3	02-Jan-19 A	02-Dec-19	31-Jan-19	27-Feb-19										
DES1250	PM review & comment	28	14	12-Jul-19 A	13-Dec-19	01-Sep-19	29-Sep-19										
DES1260	Re-submit Foundation Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	23	23	15-Dec-19	06-Jan-20	26-Oct-19	18-Nov-19										
DES1270	PM Consent for Construction	28	28	07-Jan-20	03-Feb-20	18-Nov-19	18-Dec-19										
DES1290	PM review & comment	28	20	07-Aug-19 A	19-Dec-19	31-Aug-19	27-Sep-19										
DES1300	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 1 & 2 w/Design Certificate	20	20	20-Dec-19	09-Jan-20	26-Oct-19	15-Nov-19										
DES1310	PM Consent for Construction	28	28	09-Jan-20	06-Feb-20	15-Nov-19	13-Dec-19										
DES1330	PM review & comment	28	20	07-Aug-19 A	19-Dec-19	31-Aug-19	27-Sep-19										
DES1340	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	21	21	20-Dec-19	10-Jan-20	26-Oct-19	16-Nov-19										
DES1350	PM Consent for Construction	28	28	10-Jan-20	07-Feb-20	16-Nov-19	14-Dec-19										
DES1370	PM review & comment	28	20	07-Aug-19 A	19-Dec-19	31-Aug-19	27-Sep-19										
DES1380	Re-submit Superstructure Design of Noise Mitigation Measures in Zones 4 & 5 w/Design Certificate	20	20	20-Dec-19	09-Jan-20	26-Oct-19	15-Nov-19										
DES1390	PM Consent for Construction	28	28	09-Jan-20	06-Feb-20	15-Nov-19	13-Dec-19										
REMAINING WORKS																	
DES1430	PM Consent for Construction	28	7	11-Jan-19 A	06-Dec-19	04-Mar-19	31-Mar-19										
DES1470	PM Consent for Construction	28	11	11-Mar-19 A	11-Dec-19	31-Jul-19	27-Aug-19										
DES1480	Prepare & submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sig	21	3	26-Nov-18 A	03-Dec-19	31-Dec-18	20-Jan-19										
DES1490	PM review & comment	28	24	25-Jan-19 A	26-Dec-19	04-Aug-19	01-Sep-19										
DES1500	Re-submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign Gantry	35	35	27-Dec-19	31-Jan-20	27-Oct-19	01-Dec-19										
DES1510	PM Consent for Construction	28	28	31-Jan-20	28-Feb-20	01-Dec-19	29-Dec-19										
DES1530	PM review & comment	28	1	02-Jan-19 A	30-Nov-19	31-Jan-19	27-Feb-19										
DES1540	Re-submit Design of Watermain & Irrigation System w/Design Certificate	32	1	02-Jan-19 A	30-Nov-19	02-Apr-19	03-May-19										
DES1550	PM Consent for Construction	28	20	21-Jan-19 A	20-Dec-19	04-May-19	31-May-19										
DES1560	Prepare & submit Design of EAM System (EAM & Road Lighting) w/Design Certificate	35	35	30-Nov-19	03-Jan-20	30-Sep-19	03-Nov-19										
DES1570	PM review & comment	28	28	04-Jan-20	31-Jan-20	04-Nov-19	01-Dec-19										
DES1580	Re-submit Design of EAM System (EAM & Road Lighting) w/Design Certificate	32	32	02-Feb-20	04-Mar-20	03-Dec-19	03-Jan-20										
SUBLETTING & PROCUREMENT SCHEDULE																	
Subletting																	
SPS1000	Maintenance of Traffic Flow	30	30	01-Dec-19	30-Dec-19	03-Oct-19	01-Nov-19										
SPS1030	Hoarding and Signboard	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19										
SPS1060	Security System of the Site	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19										
SPS1140	Site Clearance and Demolition Work	30	30	31-Dec-19	29-Jan-20	02-Nov-19	01-Dec-19										
SPS1160	Monitoring and Instrumentation	30	30	30-Jan-20	28-Feb-20	02-Dec-19	31-Dec-19										
SPS1200	Waterwork (Pipework)	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19										
SPS1210	Drainage (PC pipe, manhole & gully) and Duct	30	30	29-Jan-20	27-Feb-20	29-Nov-19	28-Dec-19										
SPS1220	CCTV for Drainage Pipe	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19										
SPS1240	Reinforced Concrete Work for Retaining Walls	30	30	31-Dec-19	29-Jan-20	28-Oct-19	24-Nov-19										
SPS1250	Reinforced Concrete Work for Noise Mitigation Measures	30	30	01-Dec-19	30-Dec-19	03-Oct-19	01-Nov-19										
SPS1260	Reinforced Concrete Work for Bridge Work	30	30	30-Nov-19	29-Dec-19	01-Oct-19	30-Oct-19										
SPS1280	Reinforced Concrete Work for Footbridge NF40 & NF66	30	30	06-Feb-20	06-Mar-20	06-Feb-20	06-Mar-20										
SPS1290	Steelwork for NB and Lift Tower	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19										
SPS1300	Traffic Sign, Sign gantry and Road Sign	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19										
SPS1310	Bearing and Movement Joint	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19										
SPS1320	Tendon Works	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-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 (30/11/19)
 Page 1 of 4

Date	Revision	Checked	Approved
07-Dec-19	3MRP DWP 1911	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP7 Start	AP7 Finish	2019					2020						
								Nov 17	Dec 18	Jan 19	Feb 20	Mar 21	Jan 19	Feb 20	Mar 21				
SPS1340	Earthworks and Slopeworks	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19												
SPS1350	Landscaping and Tree Felling	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19												
SPS1360	Irrigation System	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19												
SPS1410	Pedestrian Lift (Lift Cars, E&M, Panel, Louvre & Signature)	30	30	27-Feb-20	27-Mar-20	15-Jan-20	14-Feb-20												
SPS1420	Lighting System for Noise Mitigation Measures	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19												
SPS1440	Drainage for Noise Mitigation Measures	30	30	30-Nov-19	29-Dec-19	30-Sep-19	29-Oct-19												
SPS1460	Waterproofing (Bitumen Paint)	30	30	27-Dec-19	25-Jan-20	25-Oct-19	23-Nov-19												
WORK BETWEEN SHING MUN TUNNELS ROAD AND FOOT BRIDGE NF71A (ZONE 1)																			
PRELIMINARY WORKS																			
SUMMARY PROGRAMME																			
Z1SU1030	Zone 1 Stage 1 RSE1 CM foundation	326	326	30-Nov-19	05-Jan-21	04-Nov-19	05-Nov-20												
Z1SU1032	Zone 1 Stage 1 R1 structure R1-01 to 06	307	307	30-Dec-19	11-Jan-21	04-Nov-19	05-Dec-20												
UTILITIES DIVERSION																			
CENTRAL BARRIER																			
Z1_1300	UU_CLP-abandoned 33kv cable for RSE1 CH1190-1300 110m	20	20	20-Dec-19	15-Jan-20	06-Nov-19	28-Nov-19												
NOISE BARRIER AND SCREEN ENCLOSURE																			
PILE FOUNDATION WORKS																			
NORTHBOUND																			
Z1_1510	R1_site investigation for R1-02P (1nr)	5	5	04-Mar-20	09-Mar-20	31-Jan-20	05-Feb-20												
CENTRAL BARRIER																			
Z1_1490	RSE1_site investigation for RSE1-01P to 03P (5nr)	15	15	30-Nov-19	17-Dec-19	04-Nov-19	20-Nov-19												
Z1_1500	RSE1_mini piles for RSE1-01P to 03P (22nr ver)	55	55	04-Jan-20	11-Mar-20	05-Dec-19	13-Feb-20												
ROADWORKS AND REPAIRS WORKS																			
GEO-TECHNICAL WORKS																			
NORTHBOUND																			
Z1_1320	Zone 1_fill replacement by no-fines concrete 75W-D/FF156 (open excavation) NB_R1	52	52	30-Dec-19	03-Mar-20	04-Nov-19	07-Jan-20												
WORK BETWEEN FOOT BRIDGE NF71A AND CITYLINE PLAZA (ZONE 2)																			
NOISE BARRIER AND SCREEN ENCLOSURE																			
PILE FOUNDATION WORKS																			
CENTRAL BARRIER																			
Z2_1000	RSE2_site investigation for RSE2-13P & 15P (2nr)	55	55	18-Dec-19	26-Feb-20	21-Nov-19	30-Jan-20												
WORK BETWEEN CITYLINE PLAZA AND FOOTBRIDGE NF40 (ZONE 3)																			
NOISE BARRIER AND SCREEN ENCLOSURE																			
PILE FOUNDATION WORKS																			
SOUTHBOUND																			
Z3_2900	UU_CLP-abandoned 33kv cable for SE5 & SE6 CH2090-2175 85m	17	17	04-Jan-20	23-Jan-20	02-Nov-19	22-Nov-19												
NOISE BARRIER AND SCREEN ENCLOSURE																			
PILE FOUNDATION WORKS																			
SOUTHBOUND																			
Z3_1322	SE1-5_site investigation for S1E5-51 (1nr)	5	5	04-Feb-20	10-Feb-20	17-Dec-19	23-Dec-19												
Z3_1530	SE1-6_site investigation for S1E6-51P (1nr)	5	5	10-Feb-20	15-Feb-20	23-Dec-19	31-Dec-19												
Z3_5630	SE2_site investigation for S2E1-S2P (2nr)	10	10	20-Jan-20	04-Feb-20	05-Dec-19	17-Dec-19												
Z3_5640	SE2_mini piles for S2E1-S2P (12nr raking, 11nr ver)	58	58	18-Feb-20	02-May-20	03-Jan-20	14-Mar-20												
SOUTHBOUND SLIP ROAD																			
Z3_1720	SE8-1_site investigation for SR8 1-B (1nr)	5	5	30-Nov-19	05-Dec-19	01-Nov-19	06-Nov-19												
Z3_1730	SE8-1_mini piles for SR8 1-B (8nr)	32	32	03-Feb-20	11-Mar-20	18-Dec-19	30-Jan-20												
BRIDGE AND STRUCTURE WORKS																			
PRELIMINARY WORKS																			
UTILITIES DIVERSION																			
NORTHBOUND																			
Z3_2810	UU_CLP-abandoned 11kv cable for RW6 CH1675-1725 50m	13	13	30-Nov-19	14-Dec-19	30-Sep-19	16-Oct-19												
Z3_2920	UU_HKT-diversion cable for RW7 CH1830-2000 170m	34	34	02-Dec-19	13-Jan-20	02-Oct-19	11-Nov-19												
Z3_2930	UU_CLP-abandoned 11kv cable for RW7 & SR4 CH1825-1950 125m	22	22	16-Dec-19	13-Jan-20	17-Oct-19	11-Nov-19												
Z3_3130	UU_Fresh watermain for SR4 170m 200mm	30	9	22-Jul-19 A	30-Dec-19	30-Sep-19	05-Nov-19												
SOUTHBOUND																			
Z3_2970	UU_HKT-new cable for RW1 & SR3 CH1450-2300 850m	127	127	30-Nov-19	09-May-20	09-Oct-19	11-Mar-20												
Z3_3050	UU_CLP-abandoned 11kv cable for SR2 & N263 CH1710-1950 240m	35	35	19-Dec-19	04-Feb-20	09-Nov-19	20-Dec-19												
Z3_3060	UU_GAS-diversion LP pipe for SR2 & N263 CH1640-1850 210m	51	51	30-Nov-19	04-Feb-20	22-Oct-19	20-Dec-19												
Z3_3070	UU_HKT-diversion cable for SR2 & N263 CH1630-1840 210m	39	39	14-Dec-19	04-Feb-20	05-Nov-19	20-Dec-19												
Z3_3100	UU_HKBN-slew cable for N262 CH1800-1810 10m	1	1	30-Nov-19	30-Nov-19	31-Oct-19	31-Oct-19												
Z3_3110	UU_GAS-diversion LP pipe for N263 CH1825-1960 135m	38	38	16-Dec-19	04-Feb-20	06-Nov-19	20-Dec-19												
Z3_3120	UU_Fresh watermain for Staircase & N263 150PE	23	23	06-Jan-20	04-Feb-20	23-Nov-19	20-Dec-19												
Z3_5680	UU_Construct combine UU trough between cycle track and RW1 Stage 1	60	60	30-Nov-19	14-Feb-20	04-Nov-19	15-Jan-20												
RECONSTRUCTION OF BRIDGE DECK																			
RECONSTRUCTION ABUTMENT WALL AT MHA																			
Z3_4110	NAW-1_construct ELS & piling platform	42	21	29-Jul-19 A	24-Dec-19	30-Sep-19	19-Nov-19												
Z3_4115	NAW-1_site investigation (2nr)	10	10	27-Dec-19	08-Jan-20	31-Oct-19	12-Nov-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 (30/11/19)
 Page 2 of 4

Date	Revision	Checked	Approved
07-Dec-19	3MRP DWP 1911	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	SMRP Start	SMRP Finish	AP7 Start	AP7 Finish	2019					2020				
								Nov 17	Dec 18	Jan 19	Feb 20	Mar 21	Apr 20	May 21	Jun 22		
Z3_4120	NAW-1_piling works for new NHA wall (23nr socket H-pile)	161	161	29-Jan-20	12-Aug-20	28-Nov-19	17-Jun-20										
Z3_4150	NAW-2_construct ELS & piling platform	42	42	30-Nov-19	21-Jan-20	30-Sep-19	19-Nov-19										
Z3_4155	NAW-2_site investigation (2nr)	10	0	22-Nov-19 A	30-Nov-19 A	12-Nov-19	23-Nov-19										
Z3_4160	NAW-2_piling works for new NHA wall (16nr socket H-pile)	112	112	29-Jan-20	13-Jun-20	10-Dec-19	02-May-20										
MODIFICATION EXISTING PIER WALL OF N263																	
Z3_3870	SAW-1_piling works for new south abutment wall (3nr 1.5m bored pile)	42	42	05-Feb-20	24-Mar-20	20-Dec-19	14-Feb-20										
Z3_3910	SAW-2 & 3_piling works for new south abutment wall (4nr 1.5m bored pile)	56	28	15-Oct-19 A	04-Feb-20	15-Oct-19	20-Dec-19										
Z3_3920	SAW-2 & 3_pile testing	28	28	05-Feb-20	03-Mar-20	20-Dec-19	17-Jan-20										
MODIFICATION OF BRIDGE DECK																	
Z3_3510	C02_piling works 4nr mini pile	16	16	02-Jan-20	20-Jan-20	29-Nov-19	17-Dec-19										
Z3_3540	C03_piling works 7nr mini pile	24	24	02-Dec-19*	31-Dec-19	01-Nov-19	28-Nov-19										
Z3_3550	C03_ELS & pile cap construction	30	30	27-Feb-20	02-Apr-20	30-Dec-19	06-Feb-20										
Z3_3580	C04_ELS & footing construction 2nr	90	90	27-Feb-20	18-Jun-20	30-Dec-19	21-Apr-20										
NEW SBP ROAD 2																	
Z3_5325	SR2-1_site investigation (3nr)	15	10	11-Jun-19 A	20-Jan-20	15-Oct-19	31-Oct-19										
RETAINING WALL & SEWER																	
RETAINING WALL NO.1																	
Z3_4550	RW_1_demolish existing retaining structure between Bay 101 and Bay 104	45	45	15-Feb-20	08-Apr-20	16-Jan-20	11-Mar-20										
RETAINING WALL NO.6																	
Z3_1218_1000	RW6_ELS works for Bay 601 to Bay 606 (45m_2 side)	25	18	12-Jul-19 A	08-Jan-20	02-Sep-19	02-Oct-19										
Z3_1218_1010	RW6_base slab construction for Bay 601 to Bay 606	48	48	16-Dec-19	15-Feb-20	17-Oct-19	11-Dec-19										
Z3_1218_1020	RW6_retaining wall construction for Bay 601 to Bay 606	72	72	16-Jan-20	16-Apr-20	14-Nov-19	12-Feb-20										
Z3_1218_1040	RW6_soldier pile wall & ELS for Bay 607 to Bay 614 (52nr)	58	56	20-Nov-19 A	25-Feb-20	17-Oct-19	23-Dec-19										
Z3_1218_1050	RW6_base slab construction for Bay 613 & Bay 614	16	16	17-Feb-20	05-Mar-20	12-Dec-19	02-Jan-20										
RETAINING WALL NO.7																	
Z3_1218_2000	RW7_ELS works for Bay 706 to Bay 711 (54m_2 side)	30	23	26-Jul-19 A	29-May-20	02-Mar-20	06-Apr-20										
Z3_1218_2040	RW7_soldier pile wall & ELS for Bay 701 to Bay 705 (62nr)	69	69	14-Jan-20	07-Apr-20	12-Nov-19	06-Feb-20										
Z3_1218_2050	RW7_base slab construction for Bay 701 & Bay 704	32	32	10-Mar-20	20-Apr-20	07-Jan-20	15-Feb-20										
MODIFY EXISTING RETAINING WALL SR4																	
Z3_5070	SR4_ELS works for Bay SR401 to Bay SR405 (80m_1 side)	13	13	30-Jan-20	13-Feb-20	25-Nov-19	09-Dec-19										
Z3_5080	SR4_base slab construction for Bay SR401 to Bay SR405	20	20	18-Feb-20	11-Mar-20	13-Dec-19	08-Jan-20										
Z3_5110	SR4_ELS works for Bay SR406 to Bay SR409 (80m_1 side)	11	11	14-Jan-20	29-Jan-20	12-Nov-19	23-Nov-19										
Z3_5120	SR4_base slab construction for Bay SR406 to Bay SR409	16	16	30-Jan-20	17-Feb-20	25-Nov-19	12-Dec-19										
Z3_5130	SR4_retaining wall construction for Bay SR406 to SR409	24	24	18-Feb-20	16-Mar-20	13-Dec-19	13-Jan-20										
MODIFY EXISTING SUBWAY NS30																	
Z3_5200	Demolish existing subway & construct NS30	160	160	15-Feb-20	28-Aug-20	16-Jan-20	01-Aug-20										
WORK BETWEEN FOOTBRIDGE NF40 AND NF66 (ZONE 4)																	
PRELIMINARY WORK																	
SUMMARY PROGRAMME																	
Z4SU1000	Zone 4 Stage 1 SE6 51 to 57	154	154	24-Jan-20	03-Aug-20	22-Nov-19	03-Jun-20										
Z4SU1005	Zone 4 Stage 2 NB & SB foundation	450	450	30-Dec-19	09-Jul-21	06-Nov-19	14-May-21										
Z4SU1100	Zone 4 NF66 Construction	230	230	06-Jan-20	14-Oct-20	06-Jan-20	14-Oct-20										
UTILITIES DIVERSION																	
NORTHBOUND																	
Z4_1290	UU_CLP-abandoned 33kv cable for N4&SE6 CH2150-2160 20m (Abandoned)	0	0	22-Feb-20	22-Feb-20	18-Dec-19	18-Dec-19										
Z4_1300	UU_HKT-slew cable for N4 & NF66 CH2320-2360 40m	5	5	30-Nov-19	05-Dec-19	30-Sep-19	05-Oct-19										
Z4_1310	UU_HKT-slew cable for SE6 CH2180-2300 120m	14	14	06-Feb-20	21-Feb-20	02-Dec-19	18-Dec-19										
Z4_1490	UU_Fresh watermain for N4 CH2300-2550 250m 600mm (Additional)	120	120	30-Nov-19*	29-Apr-20	04-Nov-19	30-Mar-20										
Z4_1500	UU_Fresh watermain for N4 CH2000-2100 100m 200mm (Additional)	60	60	30-Dec-19	12-Mar-20	06-Nov-19	17-Jan-20										
SOUTHBOUND																	
Z4_1340	UU_CLP-slew 132kv cable for NF40 CH2090-2175 85m	10	10	30-Nov-19	11-Dec-19	30-Sep-19	12-Oct-19										
Z4_1350	UU_CLP-slew 11kv cable for NF40 CH2120-2150 30m	4	4	30-Nov-19	04-Dec-19	30-Sep-19	04-Oct-19										
Z4_1370	UU_Fresh watermain for SE6 CH2130-2150 20m	21	21	30-Dec-19	23-Jan-20	29-Oct-19	22-Nov-19										
PILE FOUNDATION AND SUBSTRUCTURE WORK																	
PILE FOUNDATION WORK																	
SOUTHBOUND																	
Z4_1110	SE6_site investigation for S6E1-51P (2nr)	10	10	24-Jan-20*	07-Feb-20	22-Nov-19	04-Dec-19										
Z4_1120	SE6_mini piles for S6E1-51P (10nr ver)	40	40	22-Feb-20	09-Apr-20	18-Dec-19	10-Feb-20										
PILE CAP AND FOOTING																	
SOUTHBOUND																	
Z4_1122	SE6_ELS for footing/cap construction S6E1-51P to S6E1-57 (88m_2 side)	48	48	22-Feb-20	22-Apr-20	18-Dec-19	19-Feb-20										
BRIDGE AND STRUCTURE WORK																	
MODIFICATION WORKS FOR NF66																	
NF66_1000	ELS & footing construction	50	50	08-Jan-20*	06-Mar-20	06-Jan-20	06-Mar-20										
WORK BETWEEN FOOTBRIDGE NF66 AND FO TAN ROAD (ZONE 5)																	
PRELIMINARY WORK																	
SUMMARY PROGRAMME																	
Z5SU1000	Zone 5 Stage 1 SE3-2 SB foundation	291	291	30-Nov-19	23-Nov-20	18-Nov-19	10-Nov-20										
Z5SU1005	Zone 5 Stage 2 NB & SB foundation	482	482	30-Nov-19	20-Jul-21	04-Nov-19	23-Jun-21										

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 (30/11/19)
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Date	Revision	Checked	Approved
07-Dec-19	3MRP DWP 1911	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP7 Start	AP7 Finish	2019					2020							
								Nov 17	Dec 18	Jan 19	Feb 20	Mar 21	Nov 17	Dec 18	Jan 19	Feb 20	Mar 21			
PREPARATORY WORKS																				
MODIFICATION EXISTING ROAD/TEMPORARY ROAD																				
Z5_1720	Zone 5-1_construct temporary road platform along Northbound	45	45	06-Feb-20	28-Mar-20	03-Jan-20	28-Feb-20													
WORK BARRIERS AND SIGN ENCLOSEMENT																				
PILE FOUNDATION WORKS																				
SOUTHBOUND																				
Z5_1990	SE3-2_site investigation for S3E2-61P (2nr)	10	10	30-Nov-19*	11-Dec-19	18-Nov-19	28-Nov-19													
Z5_2000	SE3-2_mini piles for S3E2-61P (8nr ver)	32	32	28-Dec-19	07-Feb-20	13-Dec-19	22-Jan-20													
PILE CAP AND FOOTING																				
SOUTHBOUND																				
Z5_1230	SE3-2_ELS for footing construction S3E2-51 to S3E2-60 (131m_2 side)	73	73	28-Dec-19	26-Mar-20	13-Dec-19	13-Mar-20													
Z5_1245	SE3-2_footing/cap construction S3E2-51 to 61P (10nr)	210	210	14-Feb-20	28-Oct-20	01-Feb-20	14-Oct-20													
PORTION E (ZONE 5)																				
PRELIMINARY WORKS																				
SUMMARY PROGRAMME																				
TPR NORTHBOUND																				
PESU1000	Construction Zone 5 Portion E_Northbound structure	495	495	30-Dec-19	31-Aug-21	04-Nov-19	05-Jul-21													
INSTALLATION																				
NORTHBOUND																				
Z5E_1180	UU_Fresh watermain for R5 & R6 CH2750-2845 115m 150mm	52	52	30-Dec-19*	03-Mar-20	04-Nov-19	07-Jan-20													
WORK BARRIERS AND SIGN ENCLOSEMENT																				
PILE FOUNDATION WORKS																				
NORTHBOUND SLIP ROAD																				
Z5E_1000	R6_site investigation for R6-02P (6nr)	30	30	04-Mar-20	08-Apr-20	07-Jan-20	14-Feb-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 (30/11/19)
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Date	Revision	Checked	Approved
07-Dec-19	3MRP DWP 1911	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	APV Start	APV Finish	2019					2020											
								Dec 18	Jan 19	Feb 20	Mar 21	Apr 22	May 23	Jun 24	Jul 25	Aug 26	Sep 27	Oct 28	Nov 29	Dec 30	Jan 31	Feb 01	Mar 02	Apr 03
Contract NE/2017/05 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)																								
PRELIMINARIES & GENERAL REQUIREMENT																								
GENERAL SUBMISSION																								
SUB1200	Hoarding Plan	0	0	31-Dec-19 A		30-Sep-19																		
SUB1343	TCSS Configuration Management	0	0	31-Dec-19*		30-Sep-19																		
SUB1347	Lift Installation - Design Data	0	0	31-Dec-19*		30-Sep-19																		
SUB1403	ITPs for Lighting Luminaires and System	0	0	31-Dec-19*		30-Sep-19																		
SUB1405	All Lighting Designs	0	0	31-Dec-19*		30-Sep-19																		
SUB1410	Combined Services Drawings (CSD)	0	0	31-Dec-19*		30-Sep-19																		
DESIGN SUBMISSION																								
STRUCTURE INTERCHANGE MODIFICATION WORKS (Alternative Design)																								
DES1070	PM Consent for Construction	28	1	06-Nov-18 A	31-Dec-19	20-Feb-19	19-Mar-19																	
DES1110	PM Consent for Construction	28	15	03-Apr-19 A	15-Jan-20	31-Jul-19	27-Aug-19																	
DES1150	PM Consent for Construction	28	17	03-May-19 A	16-Jan-20	31-Jul-19	27-Aug-19																	
NOISE MITIGATION MEASURES																								
DES1230	PM Consent for Construction	28	3	02-Jan-19 A	02-Jan-20	31-Jan-19	27-Feb-19																	
DES1250	PM review & comment	28	14	12-Jul-19 A	13-Jan-20	01-Sep-19	29-Sep-19																	
DES1260	Re-submit Foundation Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	23	23	15-Jan-20	06-Feb-20	28-Oct-19	18-Nov-19																	
DES1270	PM Consent for Construction	28	28	07-Feb-20	05-Mar-20	18-Nov-19	16-Dec-19																	
DES1290	PM review & comment	28	14	07-Aug-19 A	13-Jan-20	31-Aug-19	27-Sep-19																	
DES1300	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 1 & 2 w/Design Certificate	20	20	15-Jan-20	03-Feb-20	28-Oct-19	15-Nov-19																	
DES1310	PM Consent for Construction	28	28	04-Feb-20	02-Mar-20	15-Nov-19	13-Dec-19																	
DES1330	PM review & comment	28	20	07-Aug-19 A	19-Jan-20	31-Aug-19	27-Sep-19																	
DES1340	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	21	21	20-Jan-20	10-Feb-20	26-Oct-19	16-Nov-19																	
DES1350	PM Consent for Construction	28	28	10-Feb-20	09-Mar-20	16-Nov-19	14-Dec-19																	
DES1370	PM review & comment	28	20	07-Aug-19 A	19-Jan-20	31-Aug-19	27-Sep-19																	
DES1380	Re-submit Superstructure Design of Noise Mitigation Measures in Zones 4 & 5 w/Design Certificate	20	20	20-Jan-20	09-Feb-20	26-Oct-19	15-Nov-19																	
DES1390	PM Consent for Construction	28	28	09-Feb-20	08-Mar-20	15-Nov-19	13-Dec-19																	
REMAINING WORKS																								
DES1430	PM Consent for Construction	28	7	11-Jan-19 A	06-Jan-20	04-Mar-19	31-Mar-19																	
DES1470	PM Consent for Construction	28	11	11-Mar-19 A	11-Jan-20	31-Jul-19	27-Aug-19																	
DES1480	Prepare & submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sig	21	3	26-Nov-18 A	03-Jan-20	31-Dec-18	20-Jan-19																	
DES1490	PM review & comment	28	24	25-Jan-19 A	26-Jan-20	04-Aug-19	01-Sep-19																	
DES1500	Re-submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign Gant	35	35	27-Jan-20	02-Mar-20	27-Oct-19	01-Dec-19																	
DES1510	PM Consent for Construction	28	28	02-Mar-20	30-Mar-20	01-Dec-19	29-Dec-19																	
DES1530	PM review & comment	28	1	02-Jan-19 A	31-Dec-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-Dec-19	02-Apr-19	03-May-19																	
DES1550	PM Consent for Construction	28	20	21-Jan-19 A	20-Jan-20	04-May-19	31-May-19																	
DES1560	Prepare & submit Design of E&M System (E&M & Road Lighting) w/Design Certificate	35	35	31-Dec-19	03-Feb-20	30-Sep-19	03-Nov-19																	
DES1570	PM review & comment	28	28	04-Feb-20	02-Mar-20	04-Nov-19	01-Dec-19																	
DES1580	Re-submit Design of E&M System (E&M & Road Lighting) w/Design Certificate	32	32	04-Mar-20	04-Apr-20	03-Dec-19	03-Jan-20																	
SUBLETTING & PROCUREMENT SCHEDULE																								
SUBLETTING																								
SPS1000	Maintenance of Traffic Flow	30	30	31-Dec-19	29-Jan-20	03-Oct-19	01-Nov-19																	
SPS1030	Hoarding and Signboard	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	
SPS1060	Security System of the Site	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	
SPS1140	Site Clearance and Demolition Work	30	30	30-Jan-20	28-Feb-20	02-Nov-19	01-Dec-19																	
SPS1160	Monitoring and Instrumentation	30	30	29-Feb-20	29-Mar-20	02-Dec-19	31-Dec-19																	
SPS1200	Waterwork (Pipework)	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	
SPS1210	Drainage (PC pipe, manhole & gully) and Duct	30	30	29-Feb-20	29-Mar-20	29-Nov-19	28-Dec-19																	
SPS1220	CCTV for Drainage Pipe	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	
SPS1240	Reinforced Concrete Work for Retaining Walls	30	30	28-Jan-20	26-Feb-20	26-Oct-19	24-Nov-19																	
SPS1250	Reinforced Concrete Work for Noise Mitigation Measures	30	30	31-Dec-19	29-Jan-20	03-Oct-19	01-Nov-19																	
SPS1260	Reinforced Concrete Work for Bridge Work	30	30	31-Dec-19	29-Jan-20	01-Oct-19	30-Oct-19																	
SPS1280	Reinforced Concrete Work for Footbridge NF40 & NF66	30	30	06-Feb-20	06-Mar-20	06-Feb-20	06-Mar-20																	
SPS1290	Steelwork for NB and Lift Tower	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	
SPS1300	Traffic Sign, Sign gantry and Road Sign	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	
SPS1310	Bearing and Movement Joint	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	
SPS1320	Tendon Works	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	
SPS1340	Earthworks and Slopeworks	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19																	

Remaining Level of Effort
 Remaining Work
 Critical Remaining Work

Actual Level of Effort
 Milestone

Primary Baseline
 Baseline Milestone

Actual Work
 Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/12/19)
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Date	Revision	Checked	Approved
08-Jan-20	3MRP DWP 1912	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP7 Start	AP7 Finish	2019					2020							
								Dec 18	Jan 19	Feb 20	Mar 21	Apr 22	Dec 19	Jan 20	Feb 20	Mar 21	Apr 22			
SPS1350	Landscaping and Tree Felling	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19													
SPS1360	Irrigation System	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19													
SPS1420	Lighting System for Noise Mitigation Measures	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19													
SPS1440	Drainage for Noise Mitigation Measures	30	30	31-Dec-19	29-Jan-20	30-Sep-19	29-Oct-19													
SPS1460	Waterproofing (Blumen Paint)	30	30	24-Jan-20	22-Feb-20	25-Oct-19	23-Nov-19													
WORK BETWEEN SHING MUN TUNNELS ROAD AND FOOT BRIDGE NF71A (ZONE 1)																				
PRELIMINARY WORKS																				
SUMMARY PROGRAMME																				
Z1SU1030	Zone 1 Stage 1 RSE1 CM foundation	328	328	28-Dec-19 A	05-Feb-21	04-Nov-19	05-Nov-20													
Z1SU1032	Zone 1 Stage 1 R1 structure R1-01 to 08	307	307	29-Jan-20	06-Feb-21	04-Nov-19	05-Dec-20													
UTILITIES DIVERSION																				
CENTRAL BARRIER																				
Z1_1300	UU_CLP-abandoned 33kv cable for RSE1 CH1190-1300 110m	20	20	17-Jan-20	13-Feb-20	06-Nov-19	28-Nov-19													
NOISE BARRIER AND SEMI-ENCLOSURE																				
PILE FOUNDATION WORKS																				
NORTHBOUND																				
Z1_1610	R1_site investigation for R1-02P (1nr)	5	5	30-Mar-20	06-Apr-20	31-Jan-20	05-Feb-20													
CENTRAL BARRIER																				
Z1_1490	RSE1_site investigation for RSE1-01P to 03P (5nr)	15	12	28-Dec-19 A	14-Jan-20	04-Nov-19	20-Nov-19													
Z1_1500	RSE1_mini piles for RSE1-01P to 03P (22nr ver)	55	55	01-Feb-20	05-Apr-20	05-Dec-19	13-Feb-20													
ROADWORKS AND REMAINING WORKS																				
GEOTECHNICAL WORKS																				
NORTHBOUND																				
Z1_1320	Zone 1_fill replacement by no-fines concrete 7SW-DFF156 (open excavation) NB_R1	52	52	29-Jan-20*	30-Mar-20	04-Nov-19	07-Jan-20													
WORK BETWEEN FOOT BRIDGE NF71A AND CITYLINE PLAZA (ZONE 2)																				
NOISE BARRIER AND SEMI-ENCLOSURE																				
PILE FOUNDATION WORKS																				
CENTRAL BARRIER																				
Z2_1000	RSE2_site investigation for RSE2-13P & 15P (21nr)	55	38	09-Dec-19 A	02-Mar-20	21-Nov-19	30-Jan-20													
WORK BETWEEN CITYLINE PLAZA AND FOOTBRIDGE NF40 (ZONE 3)																				
PRELIMINARY WORKS																				
SUMMARY PROGRAMME																				
Z3SU5050	Zone 3b (near SR6) Stage 1 SE5, SE8, SR6 foundation and N262 bridge	366	366	31-Dec-19	25-Mar-21	01-Nov-19	02-Jan-21													
UTILITIES DIVERSION																				
SOUTHBOUND																				
Z3_2900	UU_CLP-abandoned 33kv cable for SE5 & SE6 CH2090-2175 85m	17	17	03-Feb-20	22-Feb-20	02-Nov-19	22-Nov-19													
NOISE BARRIER AND SEMI-ENCLOSURE																				
PILE FOUNDATION WORKS																				
SOUTHBOUND																				
Z3_1522	SE1-5_site investigation for S1E5-51 (1nr)	5	5	27-Mar-20	02-Apr-20	17-Dec-19	23-Dec-19													
Z3_5630	SE2_site investigation for S2E1-S2P (2nr)	10	10	16-Mar-20	27-Mar-20	05-Dec-19	17-Dec-19													
Z3_5640	SE2_mini piles for S2E1-S2P (12nr raking, 11nr ver)	58	58	15-Apr-20*	24-Jun-20	03-Jan-20	14-Mar-20													
SOUTHBOUND SLIP ROAD																				
Z3_1720	SE8-1_site investigation for SR6 1-B (1nr)	5	5	31-Dec-19*	06-Jan-20	01-Nov-19	06-Nov-19													
Z3_1730	SE8-1_mini piles for SR6 1-B (8nr)	32	32	05-Mar-20	16-Apr-20	18-Dec-19	30-Jan-20													
BRIDGE AND STRUCTURE WORKS																				
PRELIMINARY WORKS																				
UTILITIES DIVERSION																				
NORTHBOUND																				
Z3_2910	UU_CLP-abandoned 11kv cable for RW6 CH1675-1725 50m	13	13	31-Dec-19	15-Jan-20	30-Sep-19	16-Oct-19													
Z3_2920	UU_HKT-diversion cable for RW7 CH1830-2000 170m	34	34	02-Jan-20	13-Feb-20	02-Oct-19	11-Nov-19													
Z3_2930	UU_CLP-abandoned 11kv cable for RW7 & SR4 CH1825-1950 125m	22	22	16-Jan-20	13-Feb-20	17-Oct-19	11-Nov-19													
Z3_3130	UU_Fresh watermain for SR4 178m 200mm	30	9	22-Jul-19 A	29-Jan-20	30-Sep-19	05-Nov-19													
SOUTHBOUND																				
Z3_2970	UU_HKT-new cable for RW1 & SR3 CH1450-2300 850m	127	127	31-Dec-19	06-Jun-20	09-Oct-19	11-Mar-20													
Z3_3050	UU_CLP-abandoned 11kv cable for SR2 & N263 CH1710-1950 240m	35	35	20-Jan-20	03-Mar-20	09-Nov-19	20-Dec-19													
Z3_3060	UU_GAS-diversion LP pipe for SR2 & N263 CH1640-1850 210m	51	51	31-Dec-19	03-Mar-20	22-Oct-19	20-Dec-19													
Z3_3070	UU_HKT-diversion cable for SR2 & N263 CH1630-1840 210m	39	39	15-Jan-20	03-Mar-20	05-Nov-19	20-Dec-19													
Z3_3100	UU_HKBN-slew cable for N262 CH1800-1810 10m	1	1	31-Dec-19	31-Dec-19	31-Oct-19	31-Oct-19													
Z3_3110	UU_GAS-diversion LP pipe for N263 CH1825-1960 135m	38	38	16-Jan-20	03-Mar-20	06-Nov-19	20-Dec-19													
Z3_3120	UU_Fresh watermain for Staircase & N263 150PE	23	23	06-Feb-20	03-Mar-20	23-Nov-19	20-Dec-19													
Z3_5680	UU_Construct combine UU trough between cycle track and RW1 Stage 1	60	60	31-Dec-19*	13-Mar-20	04-Nov-19	15-Jan-20													
MODIFICATION OF BRIDGE ROSS																				
RECONSTRUCTION ABUTMENT WALL AT NHA																				
Z3_4110	NAW-1_construct ELS & piling platform	42	42	31-Dec-19	21-Feb-20	30-Sep-19	19-Nov-19													
Z3_4115	NAW-1_site investigation (2nr)	10	10	22-Feb-20	04-Mar-20	31-Oct-19	12-Nov-19													
Z3_4120	NAW-1_piling works for new NHA wall (23nr socket H-pile)	161	161	21-Mar-20	06-Oct-20	28-Nov-19	17-Jun-20													
Z3_4160	NAW-2_piling works for new NHA wall (16nr socket H-pile)	112	112	05-Mar-20	22-Jul-20	10-Dec-19	02-May-20													
MODIFICATION EXISTING PIER WALL OF N263																				
Z3_3970	SAW-1_piling works for new south abutment wall (3nr 1.5m bored pile)	42	42	04-Mar-20	25-Apr-20	20-Dec-19	14-Feb-20													









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

3 Months Rolling Programme (31/12/19)

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

Date	Revision	Checked	Approved
08-Jan-20	3MRP DWP 1912	Tim	









Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP7 Start	AP7 Finish	2019				2020						
								Dec 18	Jan 19	Feb 20	Mar 21	Apr 22	May 23	Jun 24	Jul 25			
Z3_3910	SAW-2 & 3_piling works for new south abutment wall (4nr 1.5m bored pile)	56	0	15-Oct-19 A	13-Dec-19 A	16-Oct-19	20-Dec-19											
Z3_3920	SAW-2 & 3_pile testing	28	28	04-Mar-20	31-Mar-20	20-Dec-19	17-Jan-20											
MODIFICATION OF BRIDGE PILES																		
Z3_3510	C02_piling works 4nr mini pile	16	16	03-Feb-20	20-Feb-20	29-Nov-19	17-Dec-19											
Z3_3540	C03_piling works 7nr mini pile	24	24	02-Jan-20*	01-Feb-20	01-Nov-19	28-Nov-19											
Z3_3550	C03_ELS & pile cap construction	30	30	30-Mar-20	09-May-20	30-Dec-19	06-Feb-20											
NEW SLIP ROAD 2																		
Z3_5325	SR2-1_site investigation (3nr)	15	10	11-Jun-19 A	16-Mar-20	15-Oct-19	31-Oct-19											
RETAINING WALL & SUBWAY																		
RETAINING WALL NO.1																		
Z3_4550	RW1_demolish existing retaining structure between Bay 101 and Bay 104	45	45	14-Mar-20	12-May-20	16-Jan-20	11-Mar-20											
RETAINING WALL NO.6																		
Z3_1218_1000	RW6_ELS works for Bay 601 to Bay 606 (45m_2 side)	25	18	12-Jul-19 A	26-Feb-20	02-Sep-19	02-Oct-19											
Z3_1218_1010	RW6_base slab construction for Bay 601 to Bay 606	48	48	06-Feb-20	01-Apr-20	17-Oct-19	11-Dec-19											
Z3_1218_1020	RW6_retaining wall construction for Bay 601 to Bay 606	72	72	05-Mar-20	03-Jun-20	14-Nov-19	12-Feb-20											
Z3_1218_1040	RW6_soldier pile wall & ELS for Bay 607 to Bay 614 (52nr)	58	56	20-Nov-19 A	24-Mar-20	17-Oct-19	23-Dec-19											
RETAINING WALL NO.7																		
Z3_1218_2000	RW7_ELS works for Bay 706 to Bay 711 (54m_2 side)	30	23	26-Jul-19 A	27-Jun-20	02-Mar-20	06-Apr-20											
Z3_1218_2040	RW7_soldier pile wall & ELS for Bay 701 to Bay 705 (62nr)	69	69	14-Feb-20	11-May-20	12-Nov-19	06-Feb-20											
Z3_1218_2050	RW7_base slab construction for Bay 701 & Bay 704	32	32	08-Apr-20	20-May-20	07-Jan-20	15-Feb-20											
MODIFY EXISTING RETAINING WALL SR4																		
Z3_5070	SR4_ELS works for Bay SR401 to Bay SR405 (90m_1 side)	13	13	27-Feb-20	12-Mar-20	25-Nov-19	09-Dec-19											
Z3_5080	SR4_base slab construction for Bay SR401 to Bay SR405	20	20	17-Mar-20	09-Apr-20	13-Dec-19	08-Jan-20											
Z3_5110	SR4_ELS works for Bay SR406 to Bay SR409 (80m_1 side)	11	11	14-Feb-20	28-Feb-20	12-Nov-19	23-Nov-19											
Z3_5120	SR4_base slab construction for Bay SR406 to Bay SR409	16	16	27-Feb-20	16-Mar-20	25-Nov-19	12-Dec-19											
Z3_5130	SR4_retaining wall construction for Bay SR406 to SR409	24	24	17-Mar-20	17-Apr-20	13-Dec-19	13-Jan-20											
MODIFY EXISTING SUBWAY NS30																		
Z3_5200	Demolish existing subway & construct NS30	160	160	14-Mar-20	25-Sep-20	16-Jan-20	01-Aug-20											
WORK BETWEEN FOOTBRIDGE NF40 AND NF66 (ZONE 4)																		
PRELIMINARY WORKS																		
SUMMARY PROGRAMME																		
Z4SU1000	Zone 4 Stage 1 SE6 51 to 57	154	154	22-Feb-20	29-Aug-20	22-Nov-19	03-Jun-20											
Z4SU1005	Zone 4 Stage 2 NB & SB foundation	450	450	29-Jan-20	05-Aug-21	06-Nov-19	14-May-21											
Z4SU1100	Zone 4 NF66 Construction	230	230	06-Jan-20	14-Oct-20	06-Jan-20	14-Oct-20											
UTILITIES DIVISION																		
NORTHBOUND																		
Z4_1290	UU_CLP-abandoned 33kv cable for N4&SE6 CH2150-2160 20m (Abandoned)	0	0	19-Mar-20	19-Mar-20	18-Dec-19	18-Dec-19											
Z4_1300	UU_HKT-slew cable for N4 & NF66 CH2320-2360 40m	5	5	31-Dec-19	06-Jan-20	30-Sep-19	05-Oct-19											
Z4_1310	UU_HKT-slew cable for SE6 CH2180-2300 120m	14	14	03-Mar-20	19-Mar-20	02-Dec-19	18-Dec-19											
Z4_1490	UU_Fresh watermain for N4 CH2300-2550 250m 600mm (Additional)	120	120	31-Dec-19*	29-May-20	04-Nov-19	30-Mar-20											
Z4_1500	UU_Fresh watermain for N4 CH2000-2100 100m 200mm (Additional)	60	60	29-Jan-20	09-Apr-20	06-Nov-19	17-Jan-20											
SOUTHBOUND																		
Z4_1340	UU_CLP-slew 132kv cable for NF40 CH2090-2175 85m	10	10	31-Dec-19	11-Jan-20	30-Sep-19	12-Oct-19											
Z4_1350	UU_CLP-slew 11kv cable for NF40 CH2120-2150 30m	4	4	31-Dec-19	04-Jan-20	30-Sep-19	04-Oct-19											
Z4_1370	UU_Fresh watermain for SE6 CH2130-2150 20m	21	21	29-Jan-20	22-Feb-20	29-Oct-19	22-Nov-19											
NOISE BARRIER AND SEMI-ENCLOSURE																		
PILE FOUNDATION WORKS																		
SOUTHBOUND																		
Z4_1110	SE6_site investigation for S6E1-51P (2nr)	10	10	22-Feb-20*	05-Mar-20	22-Nov-19	04-Dec-19											
Z4_1120	SE6_mini piles for S6E1-51P (10nr ver)	40	40	19-Mar-20	12-May-20	18-Dec-19	10-Feb-20											
PILE CAP AND FOOTING																		
SOUTHBOUND																		
Z4_1122	SE6_ELS for footing/cap construction S6E1-51P to S6E1-57 (86m_2 side)	48	48	19-Mar-20	21-May-20	18-Dec-19	19-Feb-20											
BRIDGE AND STRUCTURE WORKS																		
MODIFICATION WORKS FOR NF40																		
NF40_1000	Construct new staircase	120	36	12-Oct-19 A	14-Feb-20	06-Jan-20	03-Jun-20											
NF40_1010	Demolish existing staircase	45	45	15-Feb-20	08-Apr-20	04-Jun-20	28-Jul-20											
MODIFICATION WORKS FOR NF66																		
NF66_1000	ELS & footing construction	50	50	06-Jan-20*	06-Mar-20	06-Jan-20	06-Mar-20											
NF66_1020	Construct the new column & columnhead	60	60	07-Mar-20	22-May-20	07-Mar-20	22-May-20											
WORK BETWEEN FOOTBRIDGE NF66 AND FO TAN ROAD (ZONE 5)																		
PRELIMINARY WORKS																		
SUMMARY PROGRAMME																		
Z5SU1000	Zone 5 Stage 1 SE3-2 SB foundation	291	291	31-Dec-19	21-Dec-20	18-Nov-19	10-Nov-20											
Z5SU1005	Zone 5 Stage 2 NB & SB foundation	482	482	31-Dec-19	17-Aug-21	04-Nov-19	23-Jun-21											
PREPARATORY WORKS																		
MODIFICATION EXISTING ROAD/TEMPORARY ROAD																		
N5_1720	Zone 5-1_construct temporary road platform along Northbound	45	45	03-Mar-20	28-Apr-20	03-Jan-20	28-Feb-20											
NOISE BARRIER AND SEMI-ENCLOSURE																		
PILE FOUNDATION 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 (31/12/19)
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Date	Revision	Checked	Approved
08-Jan-20	3MRP DWP 1912	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP7 Start	AP7 Finish	2019		2020			
								Dec 18	Jan 19	Feb 20	Mar 21	Apr 22	
SOUTHBOUND													
Z5_1990	SE3-2_site investigation for S3E2-61P (2hr)	10	10	31-Dec-19*	11-Jan-20	18-Nov-19	28-Nov-19						
Z5_2000	SE3-2_mini piles for S3E2-61P (8hr var)	32	32	30-Jan-20	06-Mar-20	13-Dec-19	22-Jan-20						
PILE CAP AND FOOTING													
SOUTHBOUND													
Z5_1230	SE3-2_ELS for footing construction S3E2-51 to S3E2-60 (131m_2 side)	73	73	30-Jan-20	28-Apr-20	13-Dec-19	13-Mar-20						
Z5_1245	SE3-2_footing/cap construction S3E2-51 to 61P (10hr)	210	210	13-Mar-20	25-Nov-20	01-Feb-20	14-Oct-20						
PORTION E (ZONE 5)													
PRELIMINARY WORKS													
SUMMARY PROGRAMME													
TPR NORTHBOUND													
PESU1000	Construction Zone 5 Portion E_Northbound structure	497	497	29-Jan-20	30-Sep-21	04-Nov-19	05-Jul-21						
UTILITIES OVERHEAD													
NORTHBOUND													
Z5E_1180	UU_Fresh watermain for R5 & R6 CH2750-2845 115m 150mm	52	52	29-Jan-20*	30-Mar-20	04-Nov-19	07-Jan-20						
NOISE BARRIER AND SEMI-ENCLOSURE													
PILE FOUNDATION WORKS													
NORTHBOUND SLIP ROAD													
Z5E_1000	R6_site investigation for R6-02P (6hr)	30	30	30-Mar-20	11-May-20	07-Jan-20	14-Feb-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 (31/12/19)

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Date	Revision	Checked	Approved
08-Jan-20	3MRP DWP 1912	Tim	



Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP8 Start	AP8 Finish	2020				
								Jan 19	Feb 20	Mar 21	Apr 22	May 23
Contract NE/2017/05 Road Widening and Retrofitting Noise Barriers on Tai Po Roa												
PRELIMINARIES & GENERAL REQUIREMENT												
GENERAL SUBMISSION												
SUB1343	TCSS Configuration Management	0	0	31-Jan-20*		30-Nov-19						
SUB1347	Lift Installation - Design Data	0	0	31-Jan-20*		30-Nov-19						
SUB1403	ITP's for Lighting Luminaires and System	0	0	31-Jan-20*		30-Nov-19						
SUB1405	All Lighting Designs	0	0	31-Jan-20*		30-Nov-19						
SUB1410	Combined Services Drawings (CSD)	0	0	31-Jan-20*		30-Nov-19						
DESIGN SUBMISSION												
STRCR INTERCHANGE MODIFICATION WORKS (Alternative Design)												
DES1070	PM Consent for Construction	28	1	06-Nov-18 A	31-Jan-20	20-Feb-19	19-Mar-19					
DES1150	PM Consent for Construction	28	17	03-May-19 A	16-Feb-20	31-Jul-19	27-Aug-19					
NOISE MITIGATION MEASURES												
DES1230	PM Consent for Construction	28	3	02-Jan-19 A	02-Feb-20	31-Jan-19	27-Feb-19					
DES1250	PM review & comment	28	14	12-Jul-19 A	13-Feb-20	01-Sep-19	29-Sep-19					
DES1260	Re-submit Foundation Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	23	23	15-Feb-20	08-Mar-20	15-Dec-19	06-Jan-20					
DES1270	PM Consent for Construction	28	28	09-Mar-20	05-Apr-20	07-Jan-20	03-Feb-20					
DES1290	PM review & comment	28	14	07-Aug-19 A	13-Feb-20	31-Aug-19	27-Sep-19					
DES1300	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 1 & 2 w/Design Certificate	20	20	15-Feb-20	05-Mar-20	20-Dec-19	09-Jan-20					
DES1310	PM Consent for Construction	28	28	06-Mar-20	02-Apr-20	09-Jan-20	06-Feb-20					
DES1330	PM review & comment	28	20	07-Aug-19 A	19-Feb-20	31-Aug-19	27-Sep-19					
DES1340	Re-submit Superstructure Design of Noise Mitigation Measures in Zone 3 w/Design Certificate	21	21	20-Feb-20	12-Mar-20	20-Dec-19	10-Jan-20					
DES1350	PM Consent for Construction	28	28	12-Mar-20	09-Apr-20	10-Jan-20	07-Feb-20					
DES1370	PM review & comment	28	20	07-Aug-19 A	19-Feb-20	31-Aug-19	27-Sep-19					
DES1380	Re-submit Superstructure Design of Noise Mitigation Measures in Zones 4 & 5 w/Design Certificate	20	20	20-Feb-20	11-Mar-20	20-Dec-19	09-Jan-20					
DES1390	PM Consent for Construction	28	28	11-Mar-20	08-Apr-20	09-Jan-20	06-Feb-20					
REMAINING WORKS												
DES1470	PM Consent for Construction	28	11	11-Mar-19 A	11-Feb-20	31-Jul-19	27-Aug-19					
DES1480	Prepare & submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign Gantry w/Design Certificate	21	3	26-Nov-18 A	03-Feb-20	31-Dec-18	20-Jan-19					
DES1490	PM review & comment	28	24	25-Jan-19 A	26-Feb-20	04-Aug-19	01-Sep-19					
DES1500	Re-submit Foundation Design of Pedestrian Lift 1 & 2, Lift 2 Staircase, Cycle Track Ramp & Sign Gantry	35	35	27-Feb-20	02-Apr-20	27-Dec-19	31-Jan-20					
DES1510	PM Consent for Construction	28	28	02-Apr-20	30-Apr-20	31-Jan-20	28-Feb-20					
DES1530	PM review & comment	28	1	02-Jan-19 A	31-Jan-20	31-Jan-19	27-Feb-19					
DES1540	Re-submit Design of Watermain & Irrigation System w/Design Certificate	32	1	02-Jan-19 A	31-Jan-20	02-Apr-19	03-May-19					
DES1560	Prepare & submit Design of E&M System (E&M & Road Lighting) w/Design Certificate	35	35	31-Jan-20	05-Mar-20	30-Nov-19	03-Jan-20					
DES1570	PM review & comment	28	28	06-Mar-20	02-Apr-20	04-Jan-20	31-Jan-20					
DES1580	Re-submit Design of E&M System (E&M & Road Lighting) w/Design Certificate	32	32	04-Apr-20	05-May-20	02-Feb-20	04-Mar-20					
SUBLETTING & PROCUREMENT SCHEDULE												
SUBLETTING												
SPS1000	Maintenance of Traffic Flow	30	30	31-Jan-20	29-Feb-20	01-Dec-19	30-Dec-19					
SPS1030	Hoarding and Signboard	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19					
SPS1060	Security System of the Site	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19					
SPS1140	Site Clearance and Demolition Work	30	30	01-Mar-20	30-Mar-20	31-Dec-19	29-Jan-20					

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

Date	Revision	Checked	Approved
08-Feb-20	3MRP DWP 2001	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP8 Start	AP8 Finish	2020						
								Jan 19	Feb 20	Mar 21	Apr 22	May 23		
SPS1160	Monitoring and Instrumentation	30	30	31-Mar-20	29-Apr-20	30-Jan-20	28-Feb-20							Monitoring and Instrum
SPS1210	Drainage (PC pipe, manhole & gully) and Duct	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19							Drainage (PC pipe, manhole & gully) and Duct
SPS1220	CCTV for Drainage Pipe	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19							CCTV for Drainage Pipe
SPS1250	Reinforced Concrete Work for Noise Mitigation Measures	30	30	31-Jan-20	29-Feb-20	01-Dec-19	30-Dec-19							Reinforced Concrete Work for Noise Mitigation Measures
SPS1280	Reinforced Concrete Work for Footbridge NF40 & NF66	30	30	29-Feb-20	29-Mar-20	06-Feb-20	06-Mar-20							Reinforced Concrete Work for Footbridge NF40 & NF66
SPS1290	Steelwork for NB and Lift Tower	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19							Steelwork for NB and Lift Tower
SPS1300	Traffic Sign, Sign gantry and Road Sign	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19							Traffic Sign, Sign gantry and Road Sign
SPS1310	Bearing and Movement Joint	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19							Bearing and Movement Joint
SPS1320	Tendon Works	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19							Tendon Works
SPS1340	Earthworks and Slopeworks	30	30	01-Feb-20	01-Mar-20	30-Nov-19	29-Dec-19							Earthworks and Slopeworks
SPS1350	Landscaping and Tree Felling	30	30	01-Feb-20	01-Mar-20	30-Nov-19	29-Dec-19							Landscaping and Tree Felling
SPS1360	Irrigation System	30	30	01-Feb-20	01-Mar-20	30-Nov-19	29-Dec-19							Irrigation System
SPS1410	Pedestrian Lift (Lift Cars, E&M, Panel, Lourve & Signature)	30	30	24-Mar-20	23-Apr-20	20-Mar-20	18-Apr-20							Pedestrian Lift (Lift Cars, E&M, Pa
SPS1420	Lighting System for Noise Mitigation Measures	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19							Lighting System for Noise Mitigation Measures
SPS1440	Drainage for Noise Mitigation Measures	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19							Drainage for Noise Mitigation Measures
SPS1460	Waterproofing (Bitumen Paint)	30	30	13-Feb-20	13-Mar-20	27-Dec-19	25-Jan-20							Waterproofing (Bitumen Paint)

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

PRELIMINARIES WORKS														
SUMMARY PROGRAMME														
Z1SU1032	Zone 1 Stage 1 R1 structure R1-01 to 08	269	269	02-Mar-20	25-Jan-21	30-Dec-19	05-Dec-20							
Z1SU1034	Zone 1 Stage 1 R1 structure R2	436	436	20-Feb-20	10-Aug-21	06-Feb-20	28-Jun-21							

UTILITIES DIVERSION														
NORTHBOUND														
Z1_1330	UU_CLP-abandoned 33kv cable for R1 & R2 CH1075 30m	11	11	16-Apr-20	28-Apr-20	28-Feb-20	11-Mar-20							UU_CLP-abandoned 33kv
Z1_1340	UU_CLP-abandoned 11kv cable for R1 & R2 CH1090-1110 40m	11	11	29-Apr-20	13-May-20	12-Mar-20	24-Mar-20							
CENTRAL BARRIER														
Z1_1300	UU_CLP-abandoned 33kv cable for RSE1 CH1190-1300 110m	20	20	19-Feb-20	13-Mar-20	20-Dec-19	15-Jan-20							UU_CLP-abandoned 33kv cable for RSE1 CH1190-1300 110m

NOISE BARRIER AND SEMI-ENCLOSURE														
PILE FOUNDATION WORKS														
NORTHBOUND														
Z1_1510	R1_site investigation for R1-02P (1nr)	5	5	14-Feb-20	20-Feb-20	31-Jan-20	05-Feb-20							R1_site investigation for R1-02P (1nr)
Z1_1520	R1_mini piles for R1-02P (5nr raking, 3nr ver)	40	40	03-Apr-20	26-May-20	20-Feb-20	07-Apr-20							
CENTRAL BARRIER														
Z1_1490	RSE1_site investigation for RSE1-01P to 03P (5nr)	15	3	28-Dec-19 A	03-Feb-20	30-Nov-19	17-Dec-19							RSE1_site investigation for RSE1-01P to 03P (5nr)
Z1_1500	RSE1_mini piles for RSE1-01P to 03P (22nr ver)	55	55	18-Feb-20	25-Apr-20	04-Jan-20	11-Mar-20							RSE1_mini piles for RSE1-01P
SOUTHBOUND														
Z1_1050	R2_site investigation for R2-02P to 06P (9nr)	25	25	20-Feb-20	20-Mar-20	06-Feb-20	05-Mar-20							R2_site investigation for R2-02P to 06P (9nr)

ROADWORKS AND REMAINING WORKS														
GEOTECHNICAL WORKS														
NORTHBOUND														
Z1_1320	Zone 1 fill replacement by no-fines concrete 7SW-D/FF156 (open excavation) NB_R1	52	52	02-Mar-20*	07-May-20	30-Dec-19	03-Mar-20							Zone

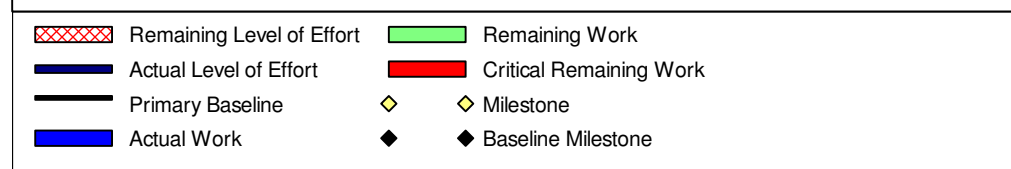
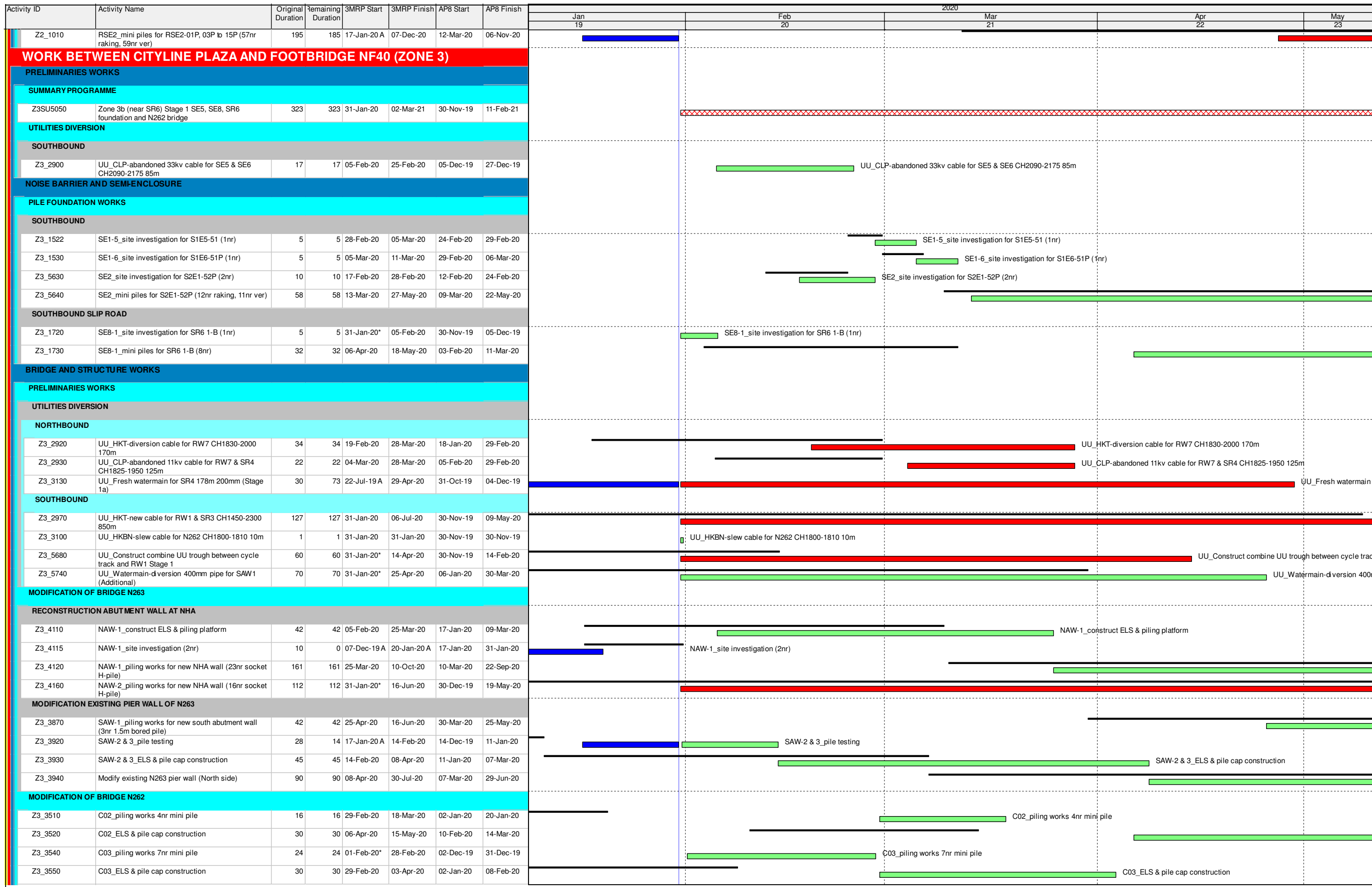
WORK BETWEEN FOOT BRIDGE NF71A AND CITYLINE PLAZA (ZONE 2)

NOISE BARRIER AND SEMI-ENCLOSURE														
PILE FOUNDATION WORKS														
CENTRAL BARRIER														
Z2_1000	RSE2_site investigation for RSE2-13P & 15P (21nr)	55	12	21-Nov-19 A	14-Feb-20	18-Dec-19	26-Feb-20							RSE2_site investigation for RSE2-13P & 15P (21nr)

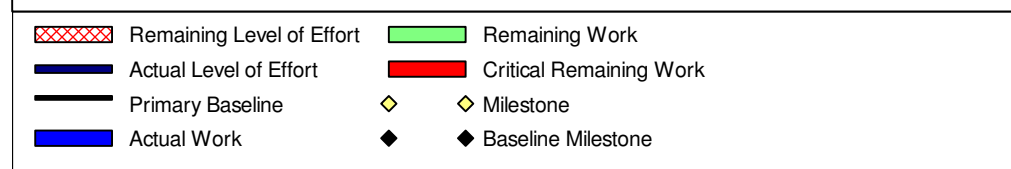
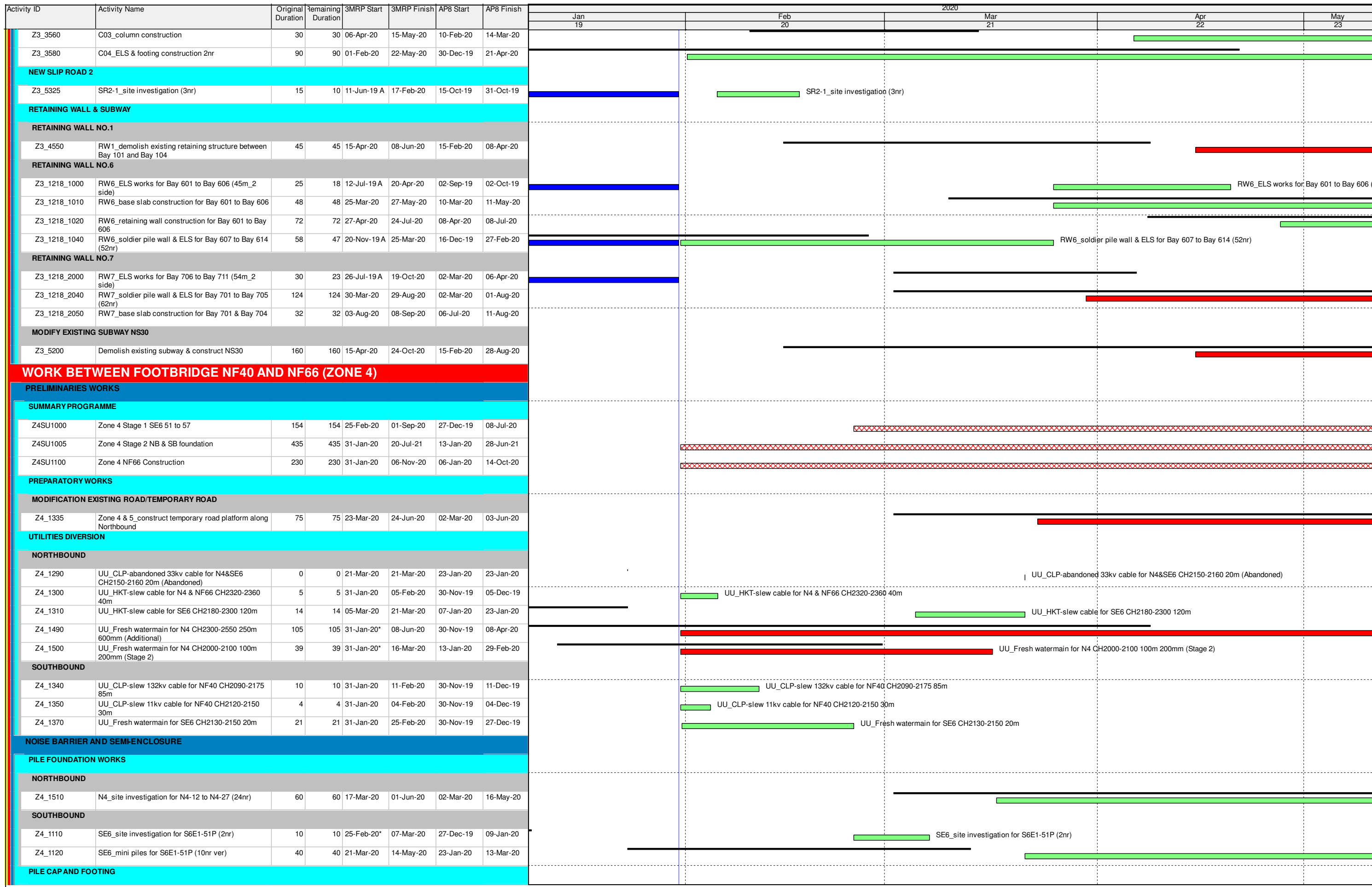
-  Remaining Level of Effort
-  Remaining Work
-  Actual Level of Effort
-  Critical Remaining Work
-  Primary Baseline
-  Milestone
-  Actual Work
-  Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/01/20)
 Page 2 of 6

Date	Revision	Checked	Approved
08-Feb-20	3MRP DWP 2001	Tim	

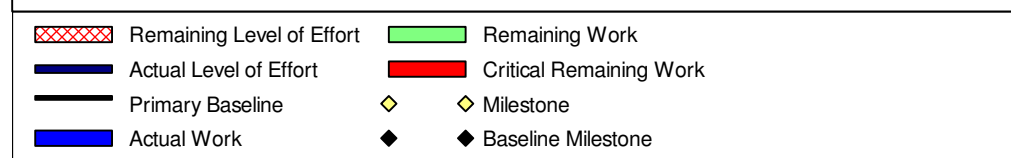
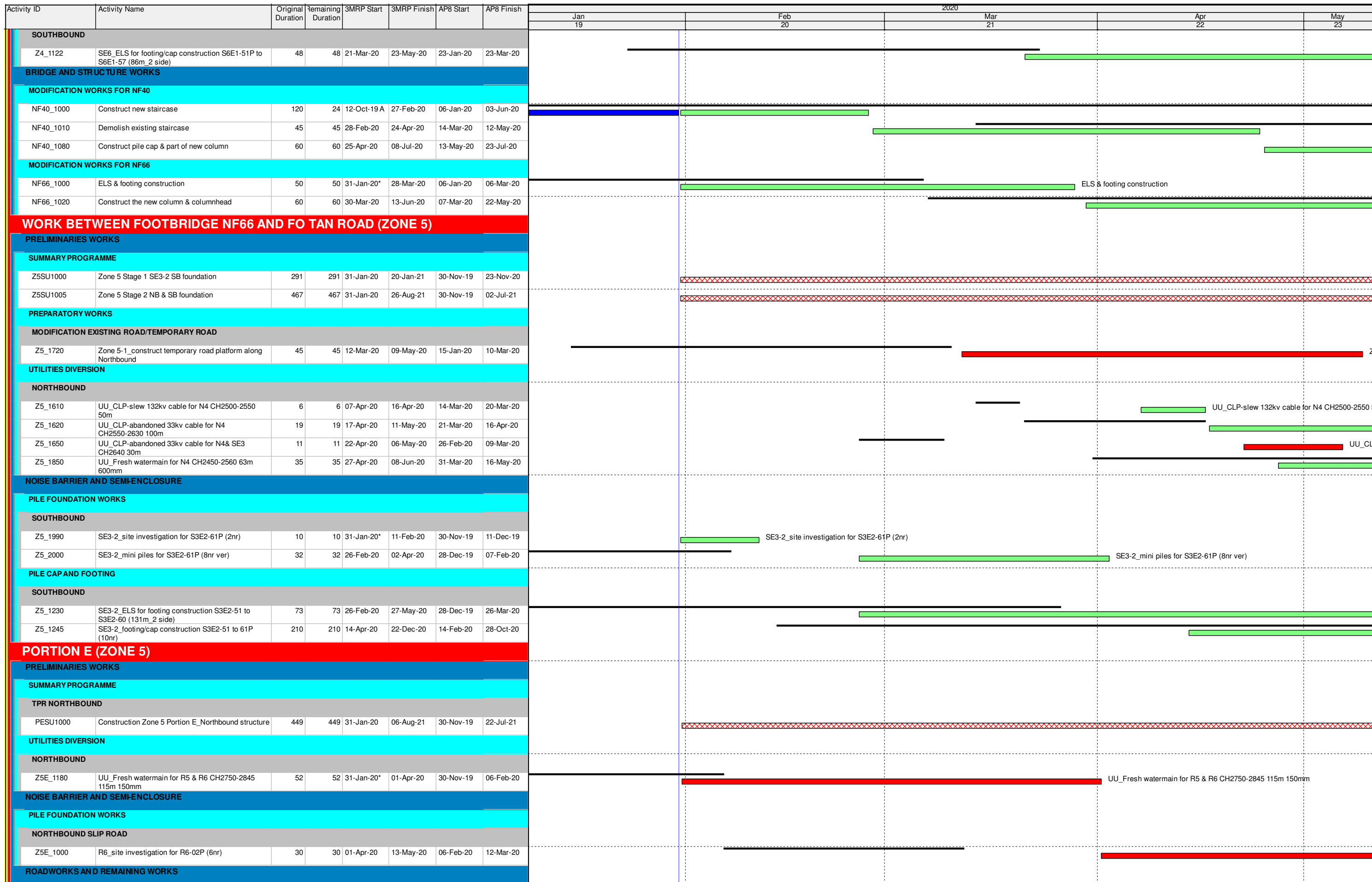


Date	Revision	Checked	Approved
08-Feb-20	3MRP DWP 2001	Tim	











ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/01/20)
 Page 4 of 6

Date	Revision	Checked	Approved
08-Feb-20	3MRP DWP 2001	Tim	



Date	Revision	Checked	Approved
08-Feb-20	3MRP DWP 2001	Tim	

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP8 Start	AP8 Finish	2020				
								Jan 19	Feb 20	Mar 21	Apr 22	May 23
GEOTECHNICAL WORKS												
NORTHBOUND SLIP ROAD												
Z5E_1150	Zone 5 Portion E_fill replacement by no-fines concrete 7SE-A/F163 (open excavation)	31	31	01-Apr-20*	14-May-20	14-Feb-20	21-Mar-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 (31/01/20)
 Page 6 of 6

Date	Revision	Checked	Approved
08-Feb-20	3MRP DWP 2001	Tim	

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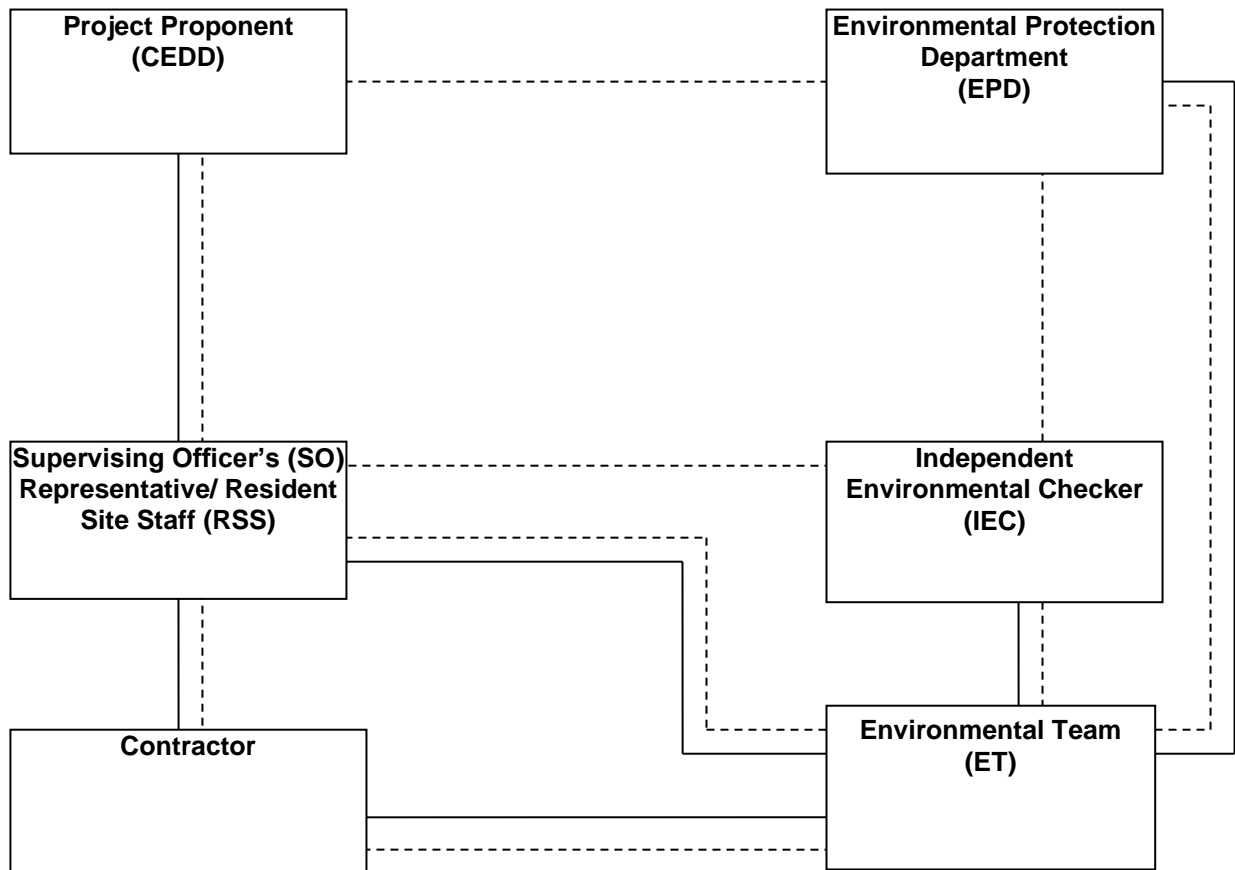
Appendix B

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

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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 ($\mu\text{g}/\text{m}^3$)	AMS1	171	260
	AMS2	166	
	AMS3A	200	
	AMS4A	200	
	AMS5	156	
	AMS6	165	
	AMS7A	171	
	AMS8	161	
	AMS9	159	
	AMS10	155	
	AMS11A	165	
	AMS12	168	
	AMS13	174	
	AMS14	174	
	AMS15	172	
	AMS16	180	
	AMS17	171	
	AMS18	175	
	AMS19	174	
1-hr TSP ($\mu\text{g}/\text{m}^3$)	AMS1	350	500
	AMS2	324	
	AMS3A	350	
	AMS4A	348	
	AMS5	340	
	AMS6	347	
	AMS7A	344	
	AMS8	336	
	AMS9	327	
	AMS10	330	
	AMS11A	335	
	AMS12	296	
	AMS13	303	
	AMS14	350	
	AMS15	350	
	AMS16	310	
	AMS17	338	
	AMS18	308	
	AMS19	305	

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Action and Limit Levels for Construction Noise, Leq (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.

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 3A - 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
4-Nov-19	9:00	87	82	82	84	348	500	Fine
9-Nov-19	12:04	56	47	49	51			Fine
15-Nov-19	10:34	70	52	61	61			Fine
21-Nov-19	9:03	142	137	135	138			Fine
27-Nov-19	10:32	101	87	88	92			Fine
Average		85						
Max		142						
Min		47						

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	
3-Dec-19	17:05	94	85	81	87	348	500	Sunny	
9-Dec-19	15:48	109	104	98	104			Sunny	
14-Dec-19	17:04	52	48	45	48			Fine	
20-Dec-19	18:10	82	82	80	81			Fine	
24-Dec-19	19:04	97	88	87	91			Sunny	
30-Dec-19	17:32	80	80	73	78			Fine	
5-Feb-20	15:37	98	88	82	89			Fine	
11-Feb-20	17:58	100	97	97	98			Fine	
17-Feb-20	19:42	108	97	100	102			Sunny	
21-Feb-20	19:03	97	92	84	91			Sunny	
27-Feb-20	13:16	86	84	84	85			Fine	
Average		87							
Max		109							
Min		45							

AMS 5 - Tin Liu

1-hour TSP ($\mu\text{g}/\text{m}^3$)								
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather
3-Jan-20	20:11	97	87	85	90	340	500	Sunny
9-Jan-20	14:49	73	69	64	69			Fine
15-Jan-20	17:44	102	90	89	94			Fine
21-Jan-20	10:01	88	86	72	82			Sunny
24-Jan-20	16:34	96	89	93	93			Fine
30-Jan-20	12:49	88	87	67	81			Fine
Average		85						
Max		102						
Min		64						

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	
4-Nov-19	9:14	63	52	54	56	347	500	Fine	
9-Nov-19	12:26	48	39	39	42			Fine	
15-Nov-19	13:11	73	66	65	68			Fine	
21-Nov-19	9:15	113	107	95	105			Fine	
27-Nov-19	11:44	75	74	66	72			Fine	
3-Dec-19	19:38	85	85	57	76			Sunny	
9-Dec-19	17:59	72	64	60	65			Sunny	
14-Dec-19	15:26	48	38	38	41			Fine	
20-Dec-19	18:36	78	76	76	77			Fine	
24-Dec-19	16:35	78	68	65	70			Sunny	
30-Dec-19	15:44	74	72	72	73			Fine	
3-Jan-20	17:35	84	70	74	76			Sunny	
9-Jan-20	14:14	106	100	94	100			Fine	
15-Jan-20	16:02	68	66	64	66			Fine	
21-Jan-20	21:22	78	63	67	69			Sunny	
24-Jan-20	21:57	67	84	66	72			Fine	
30-Jan-20	18:08	74	66	68	69			Fine	
5-Feb-20	19:56	97	77	81	85			Fine	
11-Feb-20	19:22	102	97	97	99			Fine	
17-Feb-20	17:51	71	63	67	67			Sunny	
21-Feb-20	18:27	95	84	92	90			Sunny	
27-Feb-20	15:34	96	92	83	90			Fine	
Average		74							
Max		113							
Min		38							

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
4-Nov-19	10:02	81	81	76	79	344	500	Fine
9-Nov-19	13:26	48	40	37	42			Fine
15-Nov-19	14:44	77	61	84	74			Fine
21-Nov-19	9:28	100	91	89	93			Fine
27-Nov-19	13:16	71	56	53	60			Fine
Average		70						
Max		100						
Min		37						

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	
3-Dec-19	18:23	44	37	44	42	336	500	Sunny	
9-Dec-19	21:18	63	70	65	66			Sunny	
14-Dec-19	21:26	48	40	37	42			Fine	
20-Dec-19	15:45	90	80	82	84			Fine	
24-Dec-19	13:20	88	64	64	72			Sunny	
30-Dec-19	15:52	84	75	67	75			Fine	
5-Feb-20	13:23	108	96	96	100			Fine	
11-Feb-20	18:41	95	94	82	90			Fine	
17-Feb-20	17:18	72	56	60	63			Sunny	
21-Feb-20	10:51	96	94	84	91			Sunny	
27-Feb-20	16:56	99	95	81	92			Fine	
Average		74							
Max		108							
Min		37							

AMS 11A - 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
3-Jan-20	11:17	60	49	49	53	335	500	Sunny
9-Jan-20	14:29	57	52	48	52			Fine
15-Jan-20	22:16	75	69	67	70			Fine
21-Jan-20	15:43	61	51	50	54			Sunny
24-Jan-20	21:26	96	90	72	86			Fine
30-Jan-20	18:10	71	70	66	69			Fine
Average		64						
Max		96						
Min		48						

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	
4-Nov-19	10:20	71	60	56	62	296	500	Fine	
9-Nov-19	14:02	40	36	29	35			Fine	
15-Nov-19	15:20	72	70	57	66			Fine	
21-Nov-19	9:37	66	58	58	61			Fine	
27-Nov-19	13:45	89	84	88	87			Fine	
5-Feb-20	14:31	82	62	75	73			Fine	
11-Feb-20	14:56	101	72	91	88			Fine	
17-Feb-20	11:34	67	62	51	60			Sunny	
21-Feb-20	20:09	99	91	92	94			Sunny	
27-Feb-20	11:16	99	81	97	92			Fine	
Average		72							
Max		101							
Min		29							

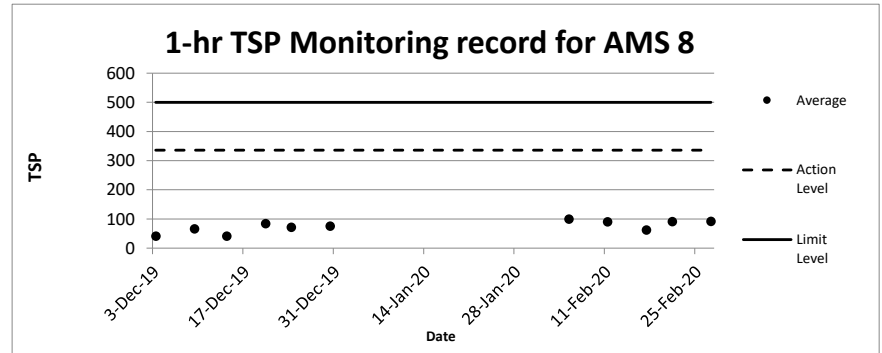
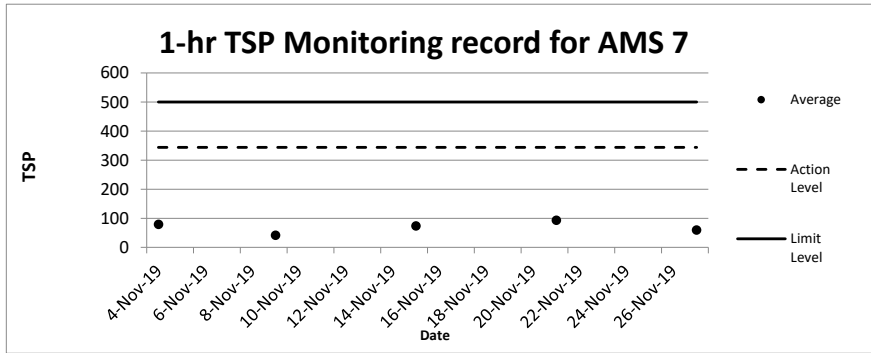
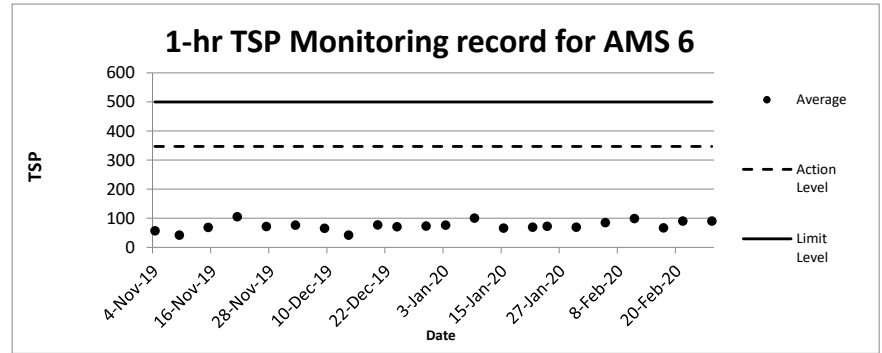
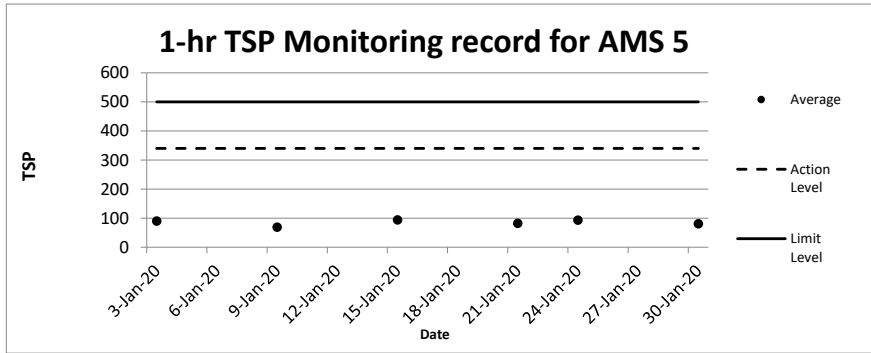
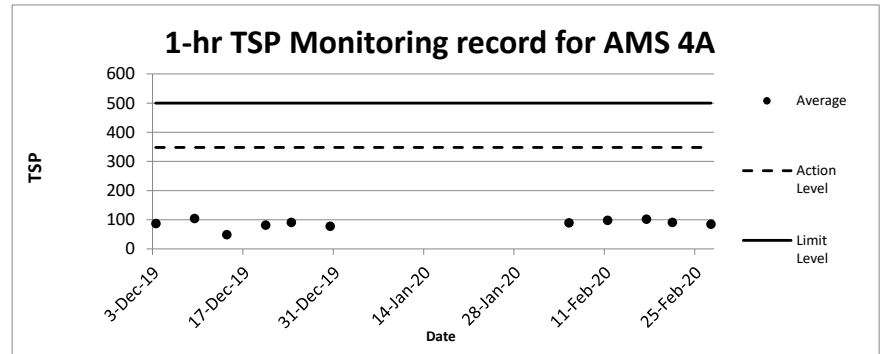
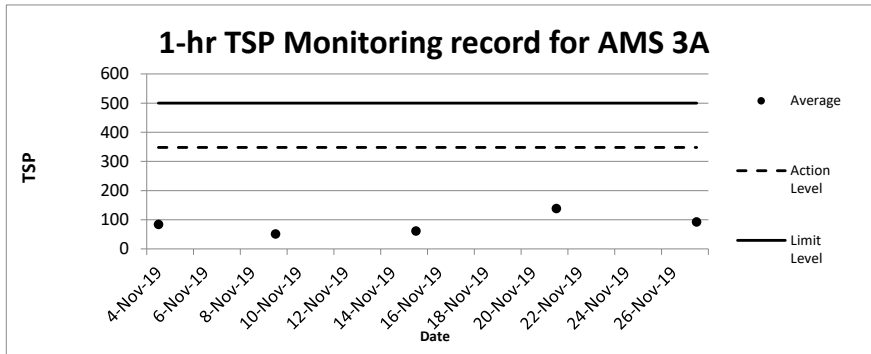
AMS 15 - Ha Wo Che

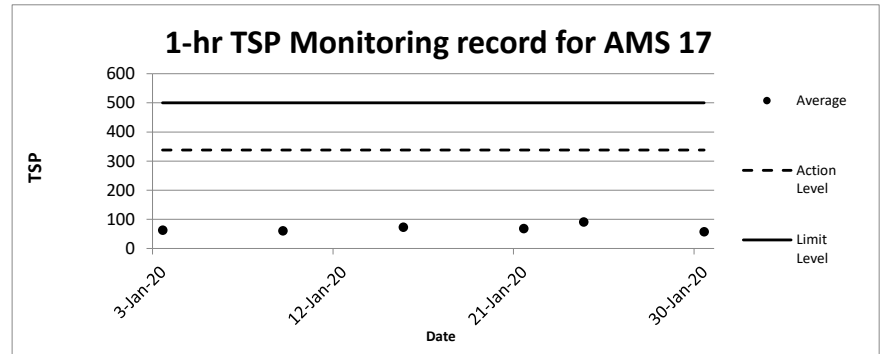
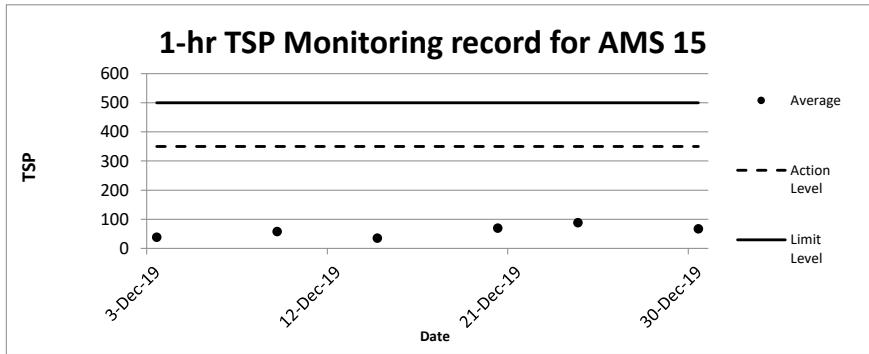
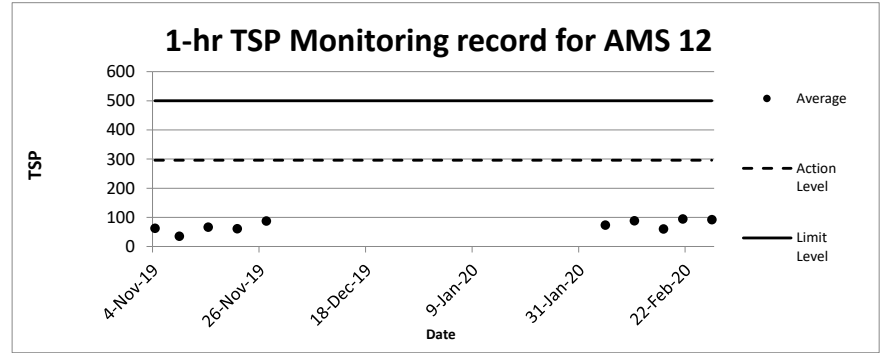
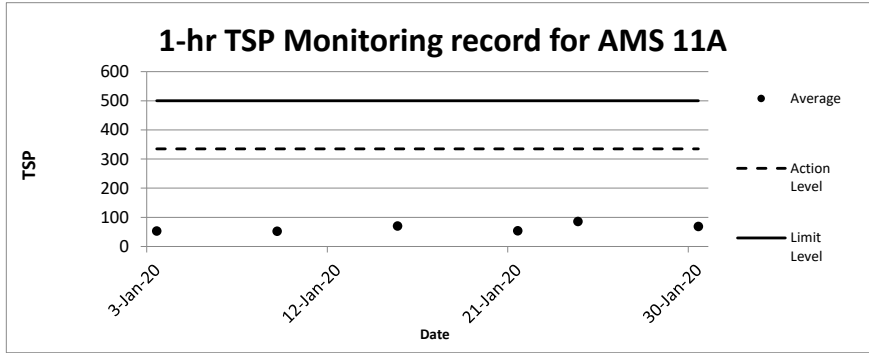
1-hour TSP ($\mu\text{g}/\text{m}^3$)								
Date	Start Time	1st hr	2nd hr	3rd hr	Average	Action Level	Limit Level	Weather
3-Dec-19	21:37	43	36	36	38	350	500	Sunny
9-Dec-19	20:25	64	54	54	57			Sunny
14-Dec-19	19:39	40	36	29	35			Fine
20-Dec-19	21:03	68	72	68	69			Fine
24-Dec-19	19:22	90	86	88	88			Sunny
30-Dec-19	21:10	68	65	67	67			Fine
Average		59						
Max		90						
Min		29						

AMS 17 - Wo Che 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
3-Jan-20	19:35	65	62	61	63	338	500	Sunny
9-Jan-20	16:47	66	58	56	60			Fine
15-Jan-20	21:47	70	72	76	73			Fine
21-Jan-20	20:59	75	63	67	68			Sunny
24-Jan-20	19:43	93	89	91	91			Fine
30-Jan-20	21:47	60	57	55	57			Fine
Average		69						
Max		93						
Min		55						

- 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 constructi





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

AMS3A - Wai Wah Centre

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
4/11/2019 9:00	70
4/11/2019 10:00	74
4/11/2019 11:00	81
4/11/2019 12:00	76
4/11/2019 13:00	76
4/11/2019 14:00	72
4/11/2019 15:00	68
4/11/2019 16:00	68
4/11/2019 17:00	76
4/11/2019 18:00	80
4/11/2019 19:00	84
4/11/2019 20:00	87
4/11/2019 21:00	82
4/11/2019 22:00	82
4/11/2019 23:00	76
5/11/2019 0:00	72
5/11/2019 1:00	68
5/11/2019 2:00	74
5/11/2019 3:00	67
5/11/2019 4:00	68
5/11/2019 5:00	70
5/11/2019 6:00	70
5/11/2019 7:00	67
5/11/2019 8:00	96
Average	75
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/11/2019 12:04	45
9/11/2019 13:04	49
9/11/2019 14:04	21
9/11/2019 15:04	41
9/11/2019 16:04	51
9/11/2019 17:04	53
9/11/2019 18:04	49
9/11/2019 19:04	45
9/11/2019 20:04	45
9/11/2019 21:04	56
9/11/2019 22:04	47
9/11/2019 23:04	49
10/11/2019 0:04	53
10/11/2019 1:04	45
10/11/2019 2:04	45
10/11/2019 3:04	49
10/11/2019 4:04	53
10/11/2019 5:04	56
10/11/2019 6:04	45
10/11/2019 7:04	47
10/11/2019 8:04	49
10/11/2019 9:04	41
10/11/2019 10:04	51
10/11/2019 11:04	38
Average	47
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/11/2019 10:34	65
15/11/2019 11:34	68
15/11/2019 12:34	63
15/11/2019 13:34	66
15/11/2019 14:34	61
15/11/2019 15:34	67
15/11/2019 16:34	68
15/11/2019 17:34	56
15/11/2019 18:34	56
15/11/2019 19:34	70
15/11/2019 20:34	60
15/11/2019 21:34	67
15/11/2019 22:34	70
15/11/2019 23:34	52
16/11/2019 0:34	61
16/11/2019 1:34	71
16/11/2019 2:34	73
16/11/2019 3:34	63
16/11/2019 4:34	64
16/11/2019 5:34	73
16/11/2019 6:34	57
16/11/2019 7:34	72
16/11/2019 8:34	71
16/11/2019 9:34	57
Average	65
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/11/2019 9:03	120
21/11/2019 10:03	122
21/11/2019 11:03	118
21/11/2019 12:03	116
21/11/2019 13:03	120
21/11/2019 14:03	122
21/11/2019 15:03	129
21/11/2019 16:03	133
21/11/2019 17:03	138
21/11/2019 18:03	142
21/11/2019 19:03	137
21/11/2019 20:03	135
21/11/2019 21:03	137
21/11/2019 22:03	131
21/11/2019 23:03	127
22/11/2019 0:03	124
22/11/2019 1:03	118
22/11/2019 2:03	114
22/11/2019 3:03	109
22/11/2019 4:03	103
22/11/2019 5:03	107
22/11/2019 6:03	107
22/11/2019 7:03	111
22/11/2019 8:03	114
Average	122
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/11/2019 10:32	74
27/11/2019 11:32	78
27/11/2019 12:32	84
27/11/2019 13:32	87
27/11/2019 14:32	81
27/11/2019 15:32	80
27/11/2019 16:32	78
27/11/2019 17:32	87
27/11/2019 18:32	84
27/11/2019 19:32	93
27/11/2019 20:32	101
27/11/2019 21:32	87
27/11/2019 22:32	88
27/11/2019 23:32	85
28/11/2019 0:32	84
28/11/2019 1:32	82
28/11/2019 2:32	75
28/11/2019 3:32	79
28/11/2019 4:32	72
28/11/2019 5:32	80
28/11/2019 6:32	76
28/11/2019 7:32	81
28/11/2019 8:32	74
28/11/2019 9:32	80
Average	82
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.

**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 ($\mu\text{g}/\text{m}^3$)
3/12/2019 10:05	72
3/12/2019 11:05	65
3/12/2019 12:05	59
3/12/2019 13:05	61
3/12/2019 14:05	70
3/12/2019 15:05	80
3/12/2019 16:05	81
3/12/2019 17:05	94
3/12/2019 18:05	85
3/12/2019 19:05	81
3/12/2019 20:05	85
3/12/2019 21:05	92
3/12/2019 22:05	85
3/12/2019 23:05	81
4/12/2019 0:05	85
4/12/2019 1:05	80
4/12/2019 2:05	81
4/12/2019 3:05	76
4/12/2019 4:05	70
4/12/2019 5:05	74
4/12/2019 6:05	67
4/12/2019 7:05	78
4/12/2019 8:05	74
4/12/2019 9:05	70
Average	77
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/12/2019 8:48	98
9/12/2019 9:48	100
9/12/2019 10:48	96
9/12/2019 11:48	100
9/12/2019 12:48	106
9/12/2019 13:48	108
9/12/2019 14:48	106
9/12/2019 15:48	109
9/12/2019 16:48	104
9/12/2019 17:48	98
9/12/2019 18:48	96
9/12/2019 19:48	93
9/12/2019 20:48	95
9/12/2019 21:48	95
9/12/2019 22:48	91
9/12/2019 23:48	93
10/12/2019 0:48	87
10/12/2019 1:48	93
10/12/2019 2:48	87
10/12/2019 3:48	85
10/12/2019 4:48	91
10/12/2019 5:48	87
10/12/2019 6:48	91
10/12/2019 7:48	87
Average	96
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
14/12/2019 12:04	45
14/12/2019 13:04	48
14/12/2019 14:04	50
14/12/2019 15:04	41
14/12/2019 16:04	50
14/12/2019 17:04	52
14/12/2019 18:04	48
14/12/2019 19:04	45
14/12/2019 20:04	56
14/12/2019 21:04	47
14/12/2019 22:04	48
14/12/2019 23:04	52
15/12/2019 0:04	45
15/12/2019 1:04	45
15/12/2019 2:04	48
15/12/2019 3:04	52
15/12/2019 4:04	56
15/12/2019 5:04	45
15/12/2019 6:04	47
15/12/2019 7:04	48
15/12/2019 8:04	41
15/12/2019 9:04	50
15/12/2019 10:04	37
15/12/2019 11:04	48
Average	48
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
20/12/2019 9:10	60
20/12/2019 10:10	60
20/12/2019 11:10	60
20/12/2019 12:10	72
20/12/2019 13:10	70
20/12/2019 14:10	64
20/12/2019 15:10	66
20/12/2019 16:10	70
20/12/2019 17:10	76
20/12/2019 18:10	82
20/12/2019 19:10	82
20/12/2019 20:10	80
20/12/2019 21:10	72
20/12/2019 22:10	66
20/12/2019 23:10	66
21/12/2019 0:10	70
21/12/2019 1:10	60
21/12/2019 2:10	62
21/12/2019 3:10	64
21/12/2019 4:10	68
21/12/2019 5:10	68
21/12/2019 6:10	66
21/12/2019 7:10	64
21/12/2019 8:10	64
Average	68
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
24/12/2019 10:04	78
24/12/2019 11:04	84
24/12/2019 12:04	88
24/12/2019 13:04	91
24/12/2019 14:04	85
24/12/2019 15:04	85
24/12/2019 16:04	81
24/12/2019 17:04	90
24/12/2019 18:04	86
24/12/2019 19:04	97
24/12/2019 20:04	88
24/12/2019 21:04	87
24/12/2019 22:04	89
24/12/2019 23:04	89
25/12/2019 0:04	89
25/12/2019 1:04	83
25/12/2019 2:04	77
25/12/2019 3:04	84
25/12/2019 4:04	76
25/12/2019 5:04	83
25/12/2019 6:04	76
25/12/2019 7:04	83
25/12/2019 8:04	78
25/12/2019 9:04	85
Average	85
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
30/12/2019 8:32	51
30/12/2019 9:32	54
30/12/2019 10:32	54
30/12/2019 11:32	65
30/12/2019 12:32	63
30/12/2019 13:32	60
30/12/2019 14:32	60
30/12/2019 15:32	66
30/12/2019 16:32	69
30/12/2019 17:32	80
30/12/2019 18:32	80
30/12/2019 19:32	73
30/12/2019 20:32	66
30/12/2019 21:32	60
30/12/2019 22:32	60
30/12/2019 23:32	63
31/12/2019 0:32	55
31/12/2019 1:32	57
31/12/2019 2:32	60
31/12/2019 3:32	62
31/12/2019 4:32	62
31/12/2019 5:32	64
31/12/2019 6:32	60
31/12/2019 7:32	60
Average	63
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.

**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 ($\mu\text{g}/\text{m}^3$)
5/2/2020 8:37	75
5/2/2020 9:37	73
5/2/2020 10:37	71
5/2/2020 11:37	69
5/2/2020 12:37	73
5/2/2020 13:37	81
5/2/2020 14:37	86
5/2/2020 15:37	98
5/2/2020 16:37	88
5/2/2020 17:37	82
5/2/2020 18:37	85
5/2/2020 19:37	88
5/2/2020 20:37	89
5/2/2020 21:37	81
5/2/2020 22:37	83
5/2/2020 23:37	80
6/2/2020 0:37	79
6/2/2020 1:37	78
6/2/2020 2:37	72
6/2/2020 3:37	78
6/2/2020 4:37	70
6/2/2020 5:37	82
6/2/2020 6:37	78
6/2/2020 7:37	71
Average	80
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
11/2/2020 8:58	99
11/2/2020 9:58	94
11/2/2020 10:58	91
11/2/2020 11:58	93
11/2/2020 12:58	88
11/2/2020 13:58	91
11/2/2020 14:58	97
11/2/2020 15:58	92
11/2/2020 16:58	97
11/2/2020 17:58	100
11/2/2020 18:58	97
11/2/2020 19:58	93
11/2/2020 20:58	95
11/2/2020 21:58	95
11/2/2020 22:58	94
11/2/2020 23:58	96
12/2/2020 0:58	87
12/2/2020 1:58	95
12/2/2020 2:58	89
12/2/2020 3:58	88
12/2/2020 4:58	93
12/2/2020 5:58	88
12/2/2020 6:58	91
12/2/2020 7:58	90
Average	93
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
17/2/2020 8:42	87
17/2/2020 9:42	91
17/2/2020 10:42	87
17/2/2020 11:42	95
17/2/2020 12:42	89
17/2/2020 13:42	87
17/2/2020 14:42	91
17/2/2020 15:42	95
17/2/2020 16:42	99
17/2/2020 17:42	104
17/2/2020 18:42	100
17/2/2020 19:42	108
17/2/2020 20:42	97
17/2/2020 21:42	100
17/2/2020 22:42	99
17/2/2020 23:42	97
18/2/2020 0:42	93
18/2/2020 1:42	91
18/2/2020 2:42	91
18/2/2020 3:42	95
18/2/2020 4:42	99
18/2/2020 5:42	100
18/2/2020 6:42	93
18/2/2020 7:42	93
Average	95
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/2/2020 9:03	75
21/2/2020 10:03	74
21/2/2020 11:03	72
21/2/2020 12:03	83
21/2/2020 13:03	80
21/2/2020 14:03	71
21/2/2020 15:03	79
21/2/2020 16:03	76
21/2/2020 17:03	90
21/2/2020 18:03	95
21/2/2020 19:03	97
21/2/2020 20:03	92
21/2/2020 21:03	84
21/2/2020 22:03	75
21/2/2020 23:03	71
22/2/2020 0:03	82
22/2/2020 1:03	74
22/2/2020 2:03	73
22/2/2020 3:03	78
22/2/2020 4:03	81
22/2/2020 5:03	80
22/2/2020 6:03	81
22/2/2020 7:03	74
22/2/2020 8:03	73
Average	80
Action Level	200
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/2/2020 9:16	77
27/2/2020 10:16	70
27/2/2020 11:16	77
27/2/2020 12:16	79
27/2/2020 13:16	86
27/2/2020 14:16	84
27/2/2020 15:16	84
27/2/2020 16:16	75
27/2/2020 17:16	75
27/2/2020 18:16	84
27/2/2020 19:16	79
27/2/2020 20:16	68
27/2/2020 21:16	73
27/2/2020 22:16	77
27/2/2020 23:16	73
28/2/2020 0:16	68
28/2/2020 1:16	79
28/2/2020 2:16	77
28/2/2020 3:16	73
28/2/2020 4:16	75
28/2/2020 5:16	86
28/2/2020 6:16	79
28/2/2020 7:16	75
28/2/2020 8:16	70
Average	77
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.

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

AMS5 - Tin Liu

Date and Time	TSP Concentration (µg/m ³)
3/1/2020 9:11	75
3/1/2020 10:11	65
3/1/2020 11:11	62
3/1/2020 12:11	65
3/1/2020 13:11	73
3/1/2020 14:11	83
3/1/2020 15:11	83
3/1/2020 16:11	97
3/1/2020 17:11	88
3/1/2020 18:11	82
3/1/2020 19:11	87
3/1/2020 20:11	97
3/1/2020 21:11	87
3/1/2020 22:11	85
3/1/2020 23:11	88
4/1/2020 0:11	84
4/1/2020 1:11	82
4/1/2020 2:11	79
4/1/2020 3:11	74
4/1/2020 4:11	75
4/1/2020 5:11	69
4/1/2020 6:11	84
4/1/2020 7:11	76
4/1/2020 8:11	72
Average	80
Action Level	156
Limit Level	260

Date and Time	TSP Concentration (µg/m ³)
9/1/2020 8:49	69
9/1/2020 9:49	59
9/1/2020 10:49	64
9/1/2020 11:49	51
9/1/2020 12:49	62
9/1/2020 13:49	66
9/1/2020 14:49	73
9/1/2020 15:49	69
9/1/2020 16:49	64
9/1/2020 17:49	66
9/1/2020 18:49	68
9/1/2020 19:49	69
9/1/2020 20:49	71
9/1/2020 21:49	64
9/1/2020 22:49	57
9/1/2020 23:49	53
10/1/2020 0:49	57
10/1/2020 1:49	55
10/1/2020 2:49	51
10/1/2020 3:49	53
10/1/2020 4:49	53
10/1/2020 5:49	64
10/1/2020 6:49	62
10/1/2020 7:49	64
Average	62
Action Level	156
Limit Level	260

Date and Time	TSP Concentration (µg/m ³)
15/1/2020 8:44	80
15/1/2020 9:44	89
15/1/2020 10:44	92
15/1/2020 11:44	89
15/1/2020 12:44	85
15/1/2020 13:44	83
15/1/2020 14:44	79
15/1/2020 15:44	89
15/1/2020 16:44	84
15/1/2020 17:44	102
15/1/2020 18:44	90
15/1/2020 19:44	89
15/1/2020 20:44	91
15/1/2020 21:44	59
15/1/2020 22:44	64
15/1/2020 23:44	62
16/1/2020 0:44	58
16/1/2020 1:44	54
16/1/2020 2:44	60
16/1/2020 3:44	57
16/1/2020 4:44	64
16/1/2020 5:44	70
16/1/2020 6:44	63
16/1/2020 7:44	63
Average	76
Action Level	156
Limit Level	260

Date and Time	TSP Concentration (µg/m ³)
21/1/2020 10:01	88
21/1/2020 11:01	86
21/1/2020 12:01	72
21/1/2020 13:01	83
21/1/2020 14:01	79
21/1/2020 15:01	83
21/1/2020 16:01	73
21/1/2020 17:01	82
21/1/2020 18:01	63
21/1/2020 19:01	63
21/1/2020 20:01	63
21/1/2020 21:01	74
21/1/2020 22:01	77
21/1/2020 23:01	67
22/1/2020 0:01	61
22/1/2020 1:01	75
22/1/2020 2:01	75
22/1/2020 3:01	78
22/1/2020 4:01	88
22/1/2020 5:01	76
22/1/2020 6:01	78
22/1/2020 7:01	64
22/1/2020 8:01	63
22/1/2020 9:01	67
Average	74
Action Level	156
Limit Level	260

Date and Time	TSP Concentration (µg/m ³)
24/1/2020 9:34	87
24/1/2020 10:34	81
24/1/2020 11:34	86
24/1/2020 12:34	95
24/1/2020 13:34	74
24/1/2020 14:34	76
24/1/2020 15:34	83
24/1/2020 16:34	96
24/1/2020 17:34	89
24/1/2020 18:34	93
24/1/2020 19:34	91
24/1/2020 20:34	89
24/1/2020 21:34	87
24/1/2020 22:34	75
24/1/2020 23:34	90
25/1/2020 0:34	87
25/1/2020 1:34	76
25/1/2020 2:34	81
25/1/2020 3:34	87
25/1/2020 4:34	75
25/1/2020 5:34	88
25/1/2020 6:34	79
25/1/2020 7:34	82
25/1/2020 8:34	79
Average	84
Action Level	156
Limit Level	260

Date and Time	TSP Concentration (µg/m ³)
30/1/2020 8:49	84
30/1/2020 9:49	85
30/1/2020 10:49	82
30/1/2020 11:49	77
30/1/2020 12:49	88
30/1/2020 13:49	87
30/1/2020 14:49	67
30/1/2020 15:49	79
30/1/2020 16:49	82
30/1/2020 17:49	87
30/1/2020 18:49	77
30/1/2020 19:49	80
30/1/2020 20:49	61
30/1/2020 21:49	62
30/1/2020 22:49	65
30/1/2020 23:49	65
31/1/2020 0:49	49
31/1/2020 1:49	62
31/1/2020 2:49	59
31/1/2020 3:49	55
31/1/2020 4:49	62
31/1/2020 5:49	71
31/1/2020 6:49	59
31/1/2020 7:49	63
Average	71
Action Level	156
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.

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

AMS6 - Shatin Plaza

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
4/11/2019 9:14	57
4/11/2019 10:14	59
4/11/2019 11:14	63
4/11/2019 12:14	52
4/11/2019 13:14	54
4/11/2019 14:14	56
4/11/2019 15:14	56
4/11/2019 16:14	52
4/11/2019 17:14	50
4/11/2019 18:14	48
4/11/2019 19:14	54
4/11/2019 20:14	56
4/11/2019 21:14	63
4/11/2019 22:14	57
4/11/2019 23:14	56
5/11/2019 0:14	52
5/11/2019 1:14	50
5/11/2019 2:14	46
5/11/2019 3:14	52
5/11/2019 4:14	52
5/11/2019 5:14	48
5/11/2019 6:14	46
5/11/2019 7:14	54
5/11/2019 8:14	60
Average	54
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/11/2019 12:26	37
9/11/2019 13:26	41
9/11/2019 14:26	44
9/11/2019 15:26	48
9/11/2019 16:26	39
9/11/2019 17:26	39
9/11/2019 18:26	39
9/11/2019 19:26	39
9/11/2019 20:26	48
9/11/2019 21:26	44
9/11/2019 22:26	41
9/11/2019 23:26	37
10/11/2019 0:26	31
10/11/2019 1:26	33
10/11/2019 2:26	33
10/11/2019 3:26	39
10/11/2019 4:26	41
10/11/2019 5:26	44
10/11/2019 6:26	35
10/11/2019 7:26	37
10/11/2019 8:26	39
10/11/2019 9:26	41
10/11/2019 10:26	37
10/11/2019 11:26	43
Average	40
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/11/2019 13:11	71
15/11/2019 14:11	73
15/11/2019 15:11	66
15/11/2019 16:11	65
15/11/2019 17:11	65
15/11/2019 18:11	71
15/11/2019 19:11	73
15/11/2019 20:11	62
15/11/2019 21:11	57
15/11/2019 22:11	71
15/11/2019 23:11	67
16/11/2019 0:11	72
16/11/2019 1:11	72
16/11/2019 2:11	55
16/11/2019 3:11	62
16/11/2019 4:11	77
16/11/2019 5:11	78
16/11/2019 6:11	65
16/11/2019 7:11	67
16/11/2019 8:11	74
16/11/2019 9:11	57
16/11/2019 10:11	73
16/11/2019 11:11	71
16/11/2019 12:11	65
Average	68
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/11/2019 9:15	90
21/11/2019 10:15	93
21/11/2019 11:15	88
21/11/2019 12:15	91
21/11/2019 13:15	97
21/11/2019 14:15	103
21/11/2019 15:15	109
21/11/2019 16:15	107
21/11/2019 17:15	111
21/11/2019 18:15	105
21/11/2019 19:15	101
21/11/2019 20:15	109
21/11/2019 21:15	107
21/11/2019 22:15	113
21/11/2019 23:15	107
22/11/2019 0:15	95
22/11/2019 1:15	91
22/11/2019 2:15	91
22/11/2019 3:15	95
22/11/2019 4:15	91
22/11/2019 5:15	88
22/11/2019 6:15	90
22/11/2019 7:15	88
22/11/2019 8:15	86
Average	98
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/11/2019 11:44	64
27/11/2019 12:44	70
27/11/2019 13:44	65
27/11/2019 14:44	55
27/11/2019 15:44	58
27/11/2019 16:44	62
27/11/2019 17:44	75
27/11/2019 18:44	74
27/11/2019 19:44	66
27/11/2019 20:44	62
27/11/2019 21:44	60
27/11/2019 22:44	71
27/11/2019 23:44	70
28/11/2019 0:44	74
28/11/2019 1:44	72
28/11/2019 2:44	71
28/11/2019 3:44	67
28/11/2019 4:44	57
28/11/2019 5:44	57
28/11/2019 6:44	61
28/11/2019 7:44	70
28/11/2019 8:44	72
28/11/2019 9:44	76
28/11/2019 10:44	65
Average	66
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.

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

AMS6 - Shatin Plaza

Date and Time	TSP Concentration (µg/m³)
3/12/2019 9:38	36
3/12/2019 10:38	45
3/12/2019 11:38	53
3/12/2019 12:38	57
3/12/2019 13:38	74
3/12/2019 14:38	45
3/12/2019 15:38	53
3/12/2019 16:38	68
3/12/2019 17:38	75
3/12/2019 18:38	81
3/12/2019 19:38	85
3/12/2019 20:38	85
3/12/2019 21:38	57
3/12/2019 22:38	45
3/12/2019 23:38	49
4/12/2019 0:38	45
4/12/2019 1:38	53
4/12/2019 2:38	51
4/12/2019 3:38	45
4/12/2019 4:38	53
4/12/2019 5:38	51
4/12/2019 6:38	41
4/12/2019 7:38	47
4/12/2019 8:38	41
Average	56
Action Level	165
Limit Level	260

Date and Time	TSP Concentration (µg/m³)
9/12/2019 8:59	60
9/12/2019 9:59	64
9/12/2019 10:59	60
9/12/2019 11:59	68
9/12/2019 12:59	64
9/12/2019 13:59	70
9/12/2019 14:59	68
9/12/2019 15:59	60
9/12/2019 16:59	62
9/12/2019 17:59	72
9/12/2019 18:59	64
9/12/2019 19:59	60
9/12/2019 20:59	60
9/12/2019 21:59	57
9/12/2019 22:59	58
9/12/2019 23:59	55
10/12/2019 0:59	51
10/12/2019 1:59	55
10/12/2019 2:59	62
10/12/2019 3:59	60
10/12/2019 4:59	72
10/12/2019 5:59	58
10/12/2019 6:59	72
10/12/2019 7:59	64
Average	62
Action Level	165
Limit Level	260

Date and Time	TSP Concentration (µg/m³)
14/12/2019 12:26	37
14/12/2019 13:26	40
14/12/2019 14:26	44
14/12/2019 15:26	48
14/12/2019 16:26	38
14/12/2019 17:26	38
14/12/2019 18:26	38
14/12/2019 19:26	38
14/12/2019 20:26	48
14/12/2019 21:26	44
14/12/2019 22:26	40
14/12/2019 23:26	37
15/12/2019 0:26	31
15/12/2019 1:26	33
15/12/2019 2:26	33
15/12/2019 3:26	38
15/12/2019 4:26	40
15/12/2019 5:26	44
15/12/2019 6:26	35
15/12/2019 7:26	37
15/12/2019 8:26	38
15/12/2019 9:26	40
15/12/2019 10:26	37
15/12/2019 11:26	42
Average	39
Action Level	165
Limit Level	260

Date and Time	TSP Concentration (µg/m³)
20/12/2019 9:30	66
20/12/2019 10:30	72
20/12/2019 11:30	72
20/12/2019 12:30	64
20/12/2019 13:30	60
20/12/2019 14:30	64
20/12/2019 15:30	60
20/12/2019 16:30	64
20/12/2019 17:30	66
20/12/2019 18:30	78
20/12/2019 19:30	76
20/12/2019 20:30	76
20/12/2019 21:30	70
20/12/2019 22:30	70
20/12/2019 23:30	66
21/12/2019 0:30	60
21/12/2019 1:30	59
21/12/2019 2:30	58
21/12/2019 3:30	58
21/12/2019 4:30	60
21/12/2019 5:30	66
21/12/2019 6:30	68
21/12/2019 7:30	64
21/12/2019 8:30	68
Average	66
Action Level	165
Limit Level	260

Date and Time	TSP Concentration (µg/m³)
24/12/2019 9:35	68
24/12/2019 10:35	73
24/12/2019 11:35	68
24/12/2019 12:35	60
24/12/2019 13:35	62
24/12/2019 14:35	64
24/12/2019 15:35	76
24/12/2019 16:35	78
24/12/2019 17:35	68
24/12/2019 18:35	65
24/12/2019 19:35	64
24/12/2019 20:35	74
24/12/2019 21:35	71
24/12/2019 22:35	76
24/12/2019 23:35	73
25/12/2019 0:35	77
25/12/2019 1:35	73
25/12/2019 2:35	60
25/12/2019 3:35	60
25/12/2019 4:35	62
25/12/2019 5:35	73
25/12/2019 6:35	74
25/12/2019 7:35	80
25/12/2019 8:35	70
Average	70
Action Level	165
Limit Level	260

Date and Time	TSP Concentration (µg/m³)
30/12/2019 8:44	62
30/12/2019 9:44	68
30/12/2019 10:44	68
30/12/2019 11:44	60
30/12/2019 12:44	57
30/12/2019 13:44	60
30/12/2019 14:44	62
30/12/2019 15:44	74
30/12/2019 16:44	72
30/12/2019 17:44	72
30/12/2019 18:44	66
30/12/2019 19:44	66
30/12/2019 20:44	62
30/12/2019 21:44	57
30/12/2019 22:44	53
30/12/2019 23:44	55
31/12/2019 0:44	55
31/12/2019 1:44	57
31/12/2019 2:44	62
31/12/2019 3:44	64
31/12/2019 4:44	62
31/12/2019 5:44	60
31/12/2019 6:44	68
31/12/2019 7:44	72
Average	63
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.

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

AMS6 - Shatin Plaza

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
3/1/2020 9:35	45
3/1/2020 10:35	50
3/1/2020 11:35	47
3/1/2020 12:35	50
3/1/2020 13:35	64
3/1/2020 14:35	55
3/1/2020 15:35	65
3/1/2020 16:35	71
3/1/2020 17:35	84
3/1/2020 18:35	70
3/1/2020 19:35	74
3/1/2020 20:35	81
3/1/2020 21:35	52
3/1/2020 22:35	49
3/1/2020 23:35	46
4/1/2020 0:35	50
4/1/2020 1:35	63
4/1/2020 2:35	45
4/1/2020 3:35	38
4/1/2020 4:35	38
4/1/2020 5:35	52
4/1/2020 6:35	46
4/1/2020 7:35	59
4/1/2020 8:35	42
Average	56
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/1/2020 9:14	93
9/1/2020 10:14	98
9/1/2020 11:14	94
9/1/2020 12:14	100
9/1/2020 13:14	91
9/1/2020 14:14	106
9/1/2020 15:14	100
9/1/2020 16:14	94
9/1/2020 17:14	104
9/1/2020 18:14	94
9/1/2020 19:14	104
9/1/2020 20:14	98
9/1/2020 21:14	96
9/1/2020 22:14	101
9/1/2020 23:14	99
10/1/2020 0:14	95
10/1/2020 1:14	94
10/1/2020 2:14	89
10/1/2020 3:14	91
10/1/2020 4:14	89
10/1/2020 5:14	93
10/1/2020 6:14	81
10/1/2020 7:14	89
10/1/2020 8:14	81
Average	95
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/1/2020 9:02	62
15/1/2020 10:02	53
15/1/2020 11:02	49
15/1/2020 12:02	55
15/1/2020 13:02	57
15/1/2020 14:02	60
15/1/2020 15:02	60
15/1/2020 16:02	68
15/1/2020 17:02	66
15/1/2020 18:02	64
15/1/2020 19:02	57
15/1/2020 20:02	49
15/1/2020 21:02	55
15/1/2020 22:02	57
15/1/2020 23:02	62
16/1/2020 0:02	64
16/1/2020 1:02	68
16/1/2020 2:02	72
16/1/2020 3:02	66
16/1/2020 4:02	60
16/1/2020 5:02	53
16/1/2020 6:02	55
16/1/2020 7:02	62
16/1/2020 8:02	61
Average	60
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/1/2020 10:22	73
21/1/2020 11:22	70
21/1/2020 12:22	72
21/1/2020 13:22	64
21/1/2020 14:22	65
21/1/2020 15:22	64
21/1/2020 16:22	56
21/1/2020 17:22	63
21/1/2020 18:22	73
21/1/2020 19:22	77
21/1/2020 20:22	75
21/1/2020 21:22	78
21/1/2020 22:22	63
21/1/2020 23:22	67
22/1/2020 0:22	59
22/1/2020 1:22	59
22/1/2020 2:22	53
22/1/2020 3:22	54
22/1/2020 4:22	57
22/1/2020 5:22	59
22/1/2020 6:22	66
22/1/2020 7:22	71
22/1/2020 8:22	68
22/1/2020 9:22	71
Average	66
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
24/1/2020 9:57	68
24/1/2020 10:57	69
24/1/2020 11:57	66
24/1/2020 12:57	54
24/1/2020 13:57	61
24/1/2020 14:57	69
24/1/2020 15:57	77
24/1/2020 16:57	80
24/1/2020 17:57	71
24/1/2020 18:57	65
24/1/2020 19:57	58
24/1/2020 20:57	74
24/1/2020 21:57	67
24/1/2020 22:57	84
24/1/2020 23:57	66
25/1/2020 0:57	73
25/1/2020 1:57	69
25/1/2020 2:57	57
25/1/2020 3:57	64
25/1/2020 4:57	60
25/1/2020 5:57	75
25/1/2020 6:57	80
25/1/2020 7:57	83
25/1/2020 8:57	70
Average	69
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
30/1/2020 9:08	67
30/1/2020 10:08	62
30/1/2020 11:08	66
30/1/2020 12:08	57
30/1/2020 13:08	45
30/1/2020 14:08	68
30/1/2020 15:08	58
30/1/2020 16:08	67
30/1/2020 17:08	69
30/1/2020 18:08	74
30/1/2020 19:08	66
30/1/2020 20:08	68
30/1/2020 21:08	61
30/1/2020 22:08	55
30/1/2020 23:08	49
31/1/2020 0:08	57
31/1/2020 1:08	50
31/1/2020 2:08	51
31/1/2020 3:08	69
31/1/2020 4:08	70
31/1/2020 5:08	68
31/1/2020 6:08	67
31/1/2020 7:08	69
31/1/2020 8:08	69
Average	63
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.

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

AMS6 - Shatin Plaza

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
5/2/2020 8:56	68
5/2/2020 9:56	69
5/2/2020 10:56	68
5/2/2020 11:56	78
5/2/2020 12:56	92
5/2/2020 13:56	86
5/2/2020 14:56	86
5/2/2020 15:56	94
5/2/2020 16:56	91
5/2/2020 17:56	84
5/2/2020 18:56	96
5/2/2020 19:56	97
5/2/2020 20:56	77
5/2/2020 21:56	81
5/2/2020 22:56	76
5/2/2020 23:56	80
6/2/2020 0:56	90
6/2/2020 1:56	73
6/2/2020 2:56	74
6/2/2020 3:56	60
6/2/2020 4:56	82
6/2/2020 5:56	74
6/2/2020 6:56	75
6/2/2020 7:56	61
Average	80
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
11/2/2020 9:22	81
11/2/2020 10:22	85
11/2/2020 11:22	99
11/2/2020 12:22	94
11/2/2020 13:22	92
11/2/2020 14:22	83
11/2/2020 15:22	83
11/2/2020 16:22	82
11/2/2020 17:22	100
11/2/2020 18:22	100
11/2/2020 19:22	102
11/2/2020 20:22	97
11/2/2020 21:22	97
11/2/2020 22:22	92
11/2/2020 23:22	91
12/2/2020 0:22	92
12/2/2020 1:22	93
12/2/2020 2:22	96
12/2/2020 3:22	100
12/2/2020 4:22	102
12/2/2020 5:22	102
12/2/2020 6:22	92
12/2/2020 7:22	92
12/2/2020 8:22	96
Average	93
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
17/2/2020 8:51	65
17/2/2020 9:51	67
17/2/2020 10:51	65
17/2/2020 11:51	61
17/2/2020 12:51	59
17/2/2020 13:51	57
17/2/2020 14:51	59
17/2/2020 15:51	63
17/2/2020 16:51	65
17/2/2020 17:51	71
17/2/2020 18:51	63
17/2/2020 19:51	67
17/2/2020 20:51	63
17/2/2020 21:51	69
17/2/2020 22:51	71
17/2/2020 23:51	65
18/2/2020 0:51	67
18/2/2020 1:51	69
18/2/2020 2:51	71
18/2/2020 3:51	69
18/2/2020 4:51	65
18/2/2020 5:51	61
18/2/2020 6:51	61
18/2/2020 7:51	59
Average	65
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/2/2020 9:27	89
21/2/2020 10:27	87
21/2/2020 11:27	83
21/2/2020 12:27	72
21/2/2020 13:27	81
21/2/2020 14:27	79
21/2/2020 15:27	74
21/2/2020 16:27	74
21/2/2020 17:27	85
21/2/2020 18:27	95
21/2/2020 19:27	84
21/2/2020 20:27	92
21/2/2020 21:27	69
21/2/2020 22:27	85
21/2/2020 23:27	74
22/2/2020 0:27	67
22/2/2020 1:27	64
22/2/2020 2:27	70
22/2/2020 3:27	70
22/2/2020 4:27	70
22/2/2020 5:27	78
22/2/2020 6:27	79
22/2/2020 7:27	85
22/2/2020 8:27	87
Average	79
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/2/2020 9:34	81
27/2/2020 10:34	83
27/2/2020 11:34	74
27/2/2020 12:34	65
27/2/2020 13:34	76
27/2/2020 14:34	77
27/2/2020 15:34	96
27/2/2020 16:34	92
27/2/2020 17:34	83
27/2/2020 18:34	74
27/2/2020 19:34	74
27/2/2020 20:34	87
27/2/2020 21:34	83
27/2/2020 22:34	91
27/2/2020 23:34	77
28/2/2020 0:34	85
28/2/2020 1:34	81
28/2/2020 2:34	76
28/2/2020 3:34	82
28/2/2020 4:34	79
28/2/2020 5:34	93
28/2/2020 6:34	87
28/2/2020 7:34	87
28/2/2020 8:34	79
Average	82
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.

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

AMS7A - Sheung Wo Che

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
4/11/2019 10:02	76
4/11/2019 11:02	76
4/11/2019 12:02	79
4/11/2019 13:02	81
4/11/2019 14:02	81
4/11/2019 15:02	76
4/11/2019 16:02	70
4/11/2019 17:02	66
4/11/2019 18:02	60
4/11/2019 19:02	72
4/11/2019 20:02	70
4/11/2019 21:02	66
4/11/2019 22:02	68
4/11/2019 23:02	74
5/11/2019 0:02	70
5/11/2019 1:02	68
5/11/2019 2:02	74
5/11/2019 3:02	66
5/11/2019 4:02	62
5/11/2019 5:02	68
5/11/2019 6:02	68
5/11/2019 7:02	74
5/11/2019 8:02	74
5/11/2019 9:02	72
Average	71
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/11/2019 13:26	31
9/11/2019 14:26	29
9/11/2019 15:26	39
9/11/2019 16:26	44
9/11/2019 17:26	37
9/11/2019 18:26	31
9/11/2019 19:26	33
9/11/2019 20:26	40
9/11/2019 21:26	48
9/11/2019 22:26	40
9/11/2019 23:26	37
10/11/2019 0:26	31
10/11/2019 1:26	29
10/11/2019 2:26	28
10/11/2019 3:26	31
10/11/2019 4:26	35
10/11/2019 5:26	37
10/11/2019 6:26	39
10/11/2019 7:26	37
10/11/2019 8:26	41
10/11/2019 9:26	37
10/11/2019 10:26	34
10/11/2019 11:26	42
10/11/2019 12:26	37
Average	36
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/11/2019 14:44	71
15/11/2019 15:44	63
15/11/2019 16:44	69
15/11/2019 17:44	74
15/11/2019 18:44	72
15/11/2019 19:44	58
15/11/2019 20:44	61
15/11/2019 21:44	55
15/11/2019 22:44	66
15/11/2019 23:44	68
16/11/2019 0:44	77
16/11/2019 1:44	61
16/11/2019 2:44	84
16/11/2019 3:44	80
16/11/2019 4:44	73
16/11/2019 5:44	73
16/11/2019 6:44	64
16/11/2019 7:44	67
16/11/2019 8:44	60
16/11/2019 9:44	59
16/11/2019 10:44	69
16/11/2019 11:44	70
16/11/2019 12:44	57
16/11/2019 13:44	63
Average	67
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/11/2019 9:28	76
21/11/2019 10:28	80
21/11/2019 11:28	76
21/11/2019 12:28	80
21/11/2019 13:28	82
21/11/2019 14:28	87
21/11/2019 15:28	89
21/11/2019 16:28	87
21/11/2019 17:28	82
21/11/2019 18:28	93
21/11/2019 19:28	100
21/11/2019 20:28	91
21/11/2019 21:28	89
21/11/2019 22:28	82
21/11/2019 23:28	87
22/11/2019 0:28	82
22/11/2019 1:28	80
22/11/2019 2:28	76
22/11/2019 3:28	78
22/11/2019 4:28	82
22/11/2019 5:28	82
22/11/2019 6:28	85
22/11/2019 7:28	83
22/11/2019 8:28	87
Average	84
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/11/2019 13:16	71
27/11/2019 14:16	56
27/11/2019 15:16	53
27/11/2019 16:16	43
27/11/2019 17:16	51
27/11/2019 18:16	63
27/11/2019 19:16	65
27/11/2019 20:16	60
27/11/2019 21:16	59
27/11/2019 22:16	55
27/11/2019 23:16	60
28/11/2019 0:16	66
28/11/2019 1:16	72
28/11/2019 2:16	70
28/11/2019 3:16	65
28/11/2019 4:16	61
28/11/2019 5:16	62
28/11/2019 6:16	54
28/11/2019 7:16	61
28/11/2019 8:16	61
28/11/2019 9:16	66
28/11/2019 10:16	72
28/11/2019 11:16	69
28/11/2019 12:16	60
Average	66
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.

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

AMS 8 - Lek Yuen Estate

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
3/12/2019 10:23	38
3/12/2019 11:23	33
3/12/2019 12:23	33
3/12/2019 13:23	35
3/12/2019 14:23	38
3/12/2019 15:23	44
3/12/2019 16:23	37
3/12/2019 17:23	38
3/12/2019 18:23	44
3/12/2019 19:23	37
3/12/2019 20:23	44
3/12/2019 21:23	40
3/12/2019 22:23	37
3/12/2019 23:23	46
4/12/2019 0:23	40
4/12/2019 1:23	44
4/12/2019 2:23	46
4/12/2019 3:23	38
4/12/2019 4:23	37
4/12/2019 5:23	33
4/12/2019 6:23	35
4/12/2019 7:23	38
4/12/2019 8:23	46
4/12/2019 9:23	40
Average	39
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/12/2019 9:18	59
9/12/2019 10:18	55
9/12/2019 11:18	51
9/12/2019 12:18	53
9/12/2019 13:18	48
9/12/2019 14:18	51
9/12/2019 15:18	51
9/12/2019 16:18	55
9/12/2019 17:18	59
9/12/2019 18:18	63
9/12/2019 19:18	55
9/12/2019 20:18	65
9/12/2019 21:18	63
9/12/2019 22:18	70
9/12/2019 23:18	65
10/12/2019 0:18	67
10/12/2019 1:18	74
10/12/2019 2:18	65
10/12/2019 3:18	63
10/12/2019 4:18	59
10/12/2019 5:18	67
10/12/2019 6:18	72
10/12/2019 7:18	68
10/12/2019 8:18	65
Average	61
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
14/12/2019 13:26	31
14/12/2019 14:26	29
14/12/2019 15:26	39
14/12/2019 16:26	44
14/12/2019 17:26	37
14/12/2019 18:26	31
14/12/2019 19:26	33
14/12/2019 20:26	40
14/12/2019 21:26	48
14/12/2019 22:26	40
14/12/2019 23:26	37
15/12/2019 0:26	31
15/12/2019 1:26	29
15/12/2019 2:26	28
15/12/2019 3:26	31
15/12/2019 4:26	35
15/12/2019 5:26	37
15/12/2019 6:26	39
15/12/2019 7:26	37
15/12/2019 8:26	41
15/12/2019 9:26	37
15/12/2019 10:26	34
15/12/2019 11:26	42
15/12/2019 12:26	37
Average	36
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
20/12/2019 9:45	72
20/12/2019 10:45	76
20/12/2019 11:45	80
20/12/2019 12:45	80
20/12/2019 13:45	84
20/12/2019 14:45	86
20/12/2019 15:45	90
20/12/2019 16:45	80
20/12/2019 17:45	82
20/12/2019 18:45	82
20/12/2019 19:45	68
20/12/2019 20:45	66
20/12/2019 21:45	68
20/12/2019 22:45	60
20/12/2019 23:45	66
21/12/2019 0:45	72
21/12/2019 1:45	70
21/12/2019 2:45	64
21/12/2019 3:45	66
21/12/2019 4:45	72
21/12/2019 5:45	76
21/12/2019 6:45	78
21/12/2019 7:45	77
21/12/2019 8:45	72
Average	74
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
24/12/2019 10:20	74
24/12/2019 11:20	64
24/12/2019 12:20	56
24/12/2019 13:20	88
24/12/2019 14:20	64
24/12/2019 15:20	64
24/12/2019 16:20	69
24/12/2019 17:20	65
24/12/2019 18:20	59
24/12/2019 19:20	60
24/12/2019 20:20	63
24/12/2019 21:20	67
24/12/2019 22:20	73
24/12/2019 23:20	72
25/12/2019 0:20	69
25/12/2019 1:20	64
25/12/2019 2:20	62
25/12/2019 3:20	59
25/12/2019 4:20	65
25/12/2019 5:20	64
25/12/2019 6:20	69
25/12/2019 7:20	76
25/12/2019 8:20	70
25/12/2019 9:20	63
Average	70
Action Level	161
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
30/12/2019 9:52	67
30/12/2019 10:52	71
30/12/2019 11:52	75
30/12/2019 12:52	75
30/12/2019 13:52	79
30/12/2019 14:52	81
30/12/2019 15:52	84
30/12/2019 16:52	75
30/12/2019 17:52	67
30/12/2019 18:52	67
30/12/2019 19:52	64
30/12/2019 20:52	62
30/12/2019 21:52	64
30/12/2019 22:52	56
30/12/2019 23:52	62
31/12/2019 0:52	67
31/12/2019 1:52	66
31/12/2019 2:52	60
31/12/2019 3:52	62
31/12/2019 4:52	67
31/12/2019 5:52	71
31/12/2019 6:52	73
31/12/2019 7:52	69
31/12/2019 8:52	67
Average	63
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.

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

AMS 8 - Lek Yuen Estate

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
5/2/2020 9:23	83
5/2/2020 10:23	76
5/2/2020 11:23	76
5/2/2020 12:23	87
5/2/2020 13:23	108
5/2/2020 14:23	96
5/2/2020 15:23	96
5/2/2020 16:23	94
5/2/2020 17:23	96
5/2/2020 18:23	90
5/2/2020 19:23	96
5/2/2020 20:23	91
5/2/2020 21:23	84
5/2/2020 22:23	87
5/2/2020 23:23	84
6/2/2020 0:23	97
6/2/2020 1:23	97
6/2/2020 2:23	82
6/2/2020 3:23	88
6/2/2020 4:23	70
6/2/2020 5:23	91
6/2/2020 6:23	85
6/2/2020 7:23	81
6/2/2020 8:23	75
Average	88
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
11/2/2020 9:41	84
11/2/2020 10:41	85
11/2/2020 11:41	80
11/2/2020 12:41	91
11/2/2020 13:41	92
11/2/2020 14:41	89
11/2/2020 15:41	93
11/2/2020 16:41	92
11/2/2020 17:41	92
11/2/2020 18:41	95
11/2/2020 19:41	94
11/2/2020 20:41	82
11/2/2020 21:41	84
11/2/2020 22:41	87
11/2/2020 23:41	79
12/2/2020 0:41	78
12/2/2020 1:41	70
12/2/2020 2:41	79
12/2/2020 3:41	84
12/2/2020 4:41	89
12/2/2020 5:41	89
12/2/2020 6:41	91
12/2/2020 7:41	92
12/2/2020 8:41	83
Average	86
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
17/2/2020 9:18	58
17/2/2020 10:18	66
17/2/2020 11:18	58
17/2/2020 12:18	52
17/2/2020 13:18	64
17/2/2020 14:18	62
17/2/2020 15:18	60
17/2/2020 16:18	54
17/2/2020 17:18	72
17/2/2020 18:18	56
17/2/2020 19:18	60
17/2/2020 20:18	62
17/2/2020 21:18	64
17/2/2020 22:18	64
17/2/2020 23:18	66
18/2/2020 0:18	56
18/2/2020 1:18	60
18/2/2020 2:18	58
18/2/2020 3:18	58
18/2/2020 4:18	50
18/2/2020 5:18	50
18/2/2020 6:18	54
18/2/2020 7:18	58
18/2/2020 8:18	58
Average	59
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/2/2020 9:51	93
21/2/2020 10:51	96
21/2/2020 11:51	94
21/2/2020 12:51	84
21/2/2020 13:51	95
21/2/2020 14:51	92
21/2/2020 15:51	83
21/2/2020 16:51	88
21/2/2020 17:51	90
21/2/2020 18:51	91
21/2/2020 19:51	93
21/2/2020 20:51	85
21/2/2020 21:51	88
21/2/2020 22:51	94
21/2/2020 23:51	88
22/2/2020 0:51	74
22/2/2020 1:51	81
22/2/2020 2:51	82
22/2/2020 3:51	80
22/2/2020 4:51	86
22/2/2020 5:51	93
22/2/2020 6:51	90
22/2/2020 7:51	80
22/2/2020 8:51	81
Average	88
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/2/2020 9:56	96
27/2/2020 10:56	97
27/2/2020 11:56	85
27/2/2020 12:56	81
27/2/2020 13:56	84
27/2/2020 14:56	90
27/2/2020 15:56	96
27/2/2020 16:56	99
27/2/2020 17:56	95
27/2/2020 18:56	81
27/2/2020 19:56	89
27/2/2020 20:56	93
27/2/2020 21:56	92
27/2/2020 22:56	99
27/2/2020 23:56	84
28/2/2020 0:56	93
28/2/2020 1:56	95
28/2/2020 2:56	82
28/2/2020 3:56	92
28/2/2020 4:56	88
28/2/2020 5:56	95
28/2/2020 6:56	96
28/2/2020 7:56	86
28/2/2020 8:56	93
Average	91
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.

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

AMS 11A - Sheung Wo Che

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
3/1/2020 10:17	54
3/1/2020 11:17	60
3/1/2020 12:17	49
3/1/2020 13:17	49
3/1/2020 14:17	48
3/1/2020 15:17	54
3/1/2020 16:17	58
3/1/2020 17:17	43
3/1/2020 18:17	48
3/1/2020 19:17	54
3/1/2020 20:17	57
3/1/2020 21:17	56
3/1/2020 22:17	47
3/1/2020 23:17	51
4/1/2020 0:17	44
4/1/2020 1:17	48
4/1/2020 2:17	58
4/1/2020 3:17	54
4/1/2020 4:17	53
4/1/2020 5:17	58
4/1/2020 6:17	51
4/1/2020 7:17	34
4/1/2020 8:17	54
4/1/2020 9:17	53
Average	51
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/1/2020 9:29	54
9/1/2020 10:29	52
9/1/2020 11:29	57
9/1/2020 12:29	50
9/1/2020 13:29	48
9/1/2020 14:29	57
9/1/2020 15:29	52
9/1/2020 16:29	48
9/1/2020 17:29	50
9/1/2020 18:29	54
9/1/2020 19:29	52
9/1/2020 20:29	50
9/1/2020 21:29	55
9/1/2020 22:29	52
9/1/2020 23:29	50
10/1/2020 0:29	54
10/1/2020 1:29	52
10/1/2020 2:29	54
10/1/2020 3:29	50
10/1/2020 4:29	46
10/1/2020 5:29	46
10/1/2020 6:29	43
10/1/2020 7:29	46
10/1/2020 8:29	50
Average	51
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/1/2020 9:16	40
15/1/2020 10:16	64
15/1/2020 11:16	75
15/1/2020 12:16	69
15/1/2020 13:16	67
15/1/2020 14:16	67
15/1/2020 15:16	62
15/1/2020 16:16	60
15/1/2020 17:16	60
15/1/2020 18:16	56
15/1/2020 19:16	54
15/1/2020 20:16	51
15/1/2020 21:16	51
15/1/2020 22:16	56
15/1/2020 23:16	60
16/1/2020 0:16	58
16/1/2020 1:16	58
16/1/2020 2:16	59
16/1/2020 3:16	67
16/1/2020 4:16	66
16/1/2020 5:16	62
16/1/2020 6:16	69
16/1/2020 7:16	60
16/1/2020 8:16	56
Average	60
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/1/2020 10:43	55
21/1/2020 11:43	58
21/1/2020 12:43	51
21/1/2020 13:43	49
21/1/2020 14:43	43
21/1/2020 15:43	61
21/1/2020 16:43	51
21/1/2020 17:43	50
21/1/2020 18:43	50
21/1/2020 19:43	56
21/1/2020 20:43	52
21/1/2020 21:43	49
21/1/2020 22:43	61
21/1/2020 23:43	46
22/1/2020 0:43	49
22/1/2020 1:43	49
22/1/2020 2:43	51
22/1/2020 3:43	56
22/1/2020 4:43	48
22/1/2020 5:43	46
22/1/2020 6:43	39
22/1/2020 7:43	46
22/1/2020 8:43	47
22/1/2020 9:43	49
Average	51
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
24/1/2020 10:26	72
24/1/2020 11:26	84
24/1/2020 12:26	76
24/1/2020 13:26	77
24/1/2020 14:26	67
24/1/2020 15:26	80
24/1/2020 16:26	75
24/1/2020 17:26	79
24/1/2020 18:26	82
24/1/2020 19:26	89
24/1/2020 20:26	84
24/1/2020 21:26	96
24/1/2020 22:26	90
24/1/2020 23:26	72
25/1/2020 0:26	76
25/1/2020 1:26	89
25/1/2020 2:26	88
25/1/2020 3:26	86
25/1/2020 4:26	100
25/1/2020 5:26	82
25/1/2020 6:26	79
25/1/2020 7:26	85
25/1/2020 8:26	81
25/1/2020 9:26	81
Average	82
Action Level	165
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
30/1/2020 10:10	68
30/1/2020 11:10	70
30/1/2020 12:10	64
30/1/2020 13:10	62
30/1/2020 14:10	66
30/1/2020 15:10	62
30/1/2020 16:10	64
30/1/2020 17:10	60
30/1/2020 18:10	71
30/1/2020 19:10	70
30/1/2020 20:10	66
30/1/2020 21:10	68
30/1/2020 22:10	70
30/1/2020 23:10	71
31/1/2020 0:10	73
31/1/2020 1:10	73
31/1/2020 2:10	71
31/1/2020 3:10	66
31/1/2020 4:10	66
31/1/2020 5:10	62
31/1/2020 6:10	68
31/1/2020 7:10	62
31/1/2020 8:10	60
31/1/2020 9:10	62
Average	66
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.

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

AMS 12 - Fung Wo Estate

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
4/11/2019 10:20	58
4/11/2019 11:20	56
4/11/2019 12:20	65
4/11/2019 13:20	60
4/11/2019 14:20	60
4/11/2019 15:20	67
4/11/2019 16:20	71
4/11/2019 17:20	60
4/11/2019 18:20	56
4/11/2019 19:20	52
4/11/2019 20:20	49
4/11/2019 21:20	54
4/11/2019 22:20	50
4/11/2019 23:20	50
5/11/2019 0:20	47
5/11/2019 1:20	54
5/11/2019 2:20	56
5/11/2019 3:20	45
5/11/2019 4:20	43
5/11/2019 5:20	49
5/11/2019 6:20	56
5/11/2019 7:20	60
5/11/2019 8:20	60
5/11/2019 9:20	56
Average	56
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/11/2019 14:02	31
9/11/2019 15:02	31
9/11/2019 16:02	27
9/11/2019 17:02	33
9/11/2019 18:02	36
9/11/2019 19:02	40
9/11/2019 20:02	36
9/11/2019 21:02	29
9/11/2019 22:02	29
9/11/2019 23:02	33
10/11/2019 0:02	36
10/11/2019 1:02	36
10/11/2019 2:02	27
10/11/2019 3:02	27
10/11/2019 4:02	29
10/11/2019 5:02	29
10/11/2019 6:02	33
10/11/2019 7:02	25
10/11/2019 8:02	25
10/11/2019 9:02	29
10/11/2019 10:02	27
10/11/2019 11:02	27
10/11/2019 12:02	29
10/11/2019 13:02	25
Average	31
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/11/2019 15:20	61
15/11/2019 16:20	68
15/11/2019 17:20	66
15/11/2019 18:20	71
15/11/2019 19:20	60
15/11/2019 20:20	67
15/11/2019 21:20	72
15/11/2019 22:20	70
15/11/2019 23:20	57
16/11/2019 0:20	60
16/11/2019 1:20	68
16/11/2019 2:20	68
16/11/2019 3:20	65
16/11/2019 4:20	66
16/11/2019 5:20	58
16/11/2019 6:20	75
16/11/2019 7:20	75
16/11/2019 8:20	72
16/11/2019 9:20	68
16/11/2019 10:20	56
16/11/2019 11:20	56
16/11/2019 12:20	67
16/11/2019 13:20	58
16/11/2019 14:20	70
Average	66
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/11/2019 9:37	58
21/11/2019 10:37	60
21/11/2019 11:37	64
21/11/2019 12:37	64
21/11/2019 13:37	66
21/11/2019 14:37	58
21/11/2019 15:37	58
21/11/2019 16:37	66
21/11/2019 17:37	64
21/11/2019 18:37	57
21/11/2019 19:37	66
21/11/2019 20:37	64
21/11/2019 21:37	60
21/11/2019 22:37	57
21/11/2019 23:37	55
22/11/2019 0:37	55
22/11/2019 1:37	51
22/11/2019 2:37	47
22/11/2019 3:37	57
22/11/2019 4:37	64
22/11/2019 5:37	62
22/11/2019 6:37	66
22/11/2019 7:37	62
22/11/2019 8:37	66
Average	60
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/11/2019 13:45	71
27/11/2019 14:45	81
27/11/2019 15:45	80
27/11/2019 16:45	76
27/11/2019 17:45	72
27/11/2019 18:45	76
27/11/2019 19:45	80
27/11/2019 20:45	82
27/11/2019 21:45	89
27/11/2019 22:45	84
27/11/2019 23:45	88
28/11/2019 0:45	87
28/11/2019 1:45	83
28/11/2019 2:45	76
28/11/2019 3:45	79
28/11/2019 4:45	84
28/11/2019 5:45	86
28/11/2019 6:45	88
28/11/2019 7:45	94
28/11/2019 8:45	87
28/11/2019 9:45	80
28/11/2019 10:45	83
28/11/2019 11:45	78
28/11/2019 12:45	77
Average	82
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-hour TSP Impact Monitoring Result for
NOD 03-2018 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)**

AMS 12 - Fung Wo Estate

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
5/2/2020 9:31	63
5/2/2020 10:31	74
5/2/2020 11:31	71
5/2/2020 12:31	72
5/2/2020 13:31	65
5/2/2020 14:31	82
5/2/2020 15:31	62
5/2/2020 16:31	75
5/2/2020 17:31	60
5/2/2020 18:31	67
5/2/2020 19:31	67
5/2/2020 20:31	68
5/2/2020 21:31	75
5/2/2020 22:31	78
5/2/2020 23:31	63
6/2/2020 0:31	62
6/2/2020 1:31	68
6/2/2020 2:31	77
6/2/2020 3:31	75
6/2/2020 4:31	67
6/2/2020 5:31	70
6/2/2020 6:31	70
6/2/2020 7:31	67
6/2/2020 8:31	81
Average	70
Action Level	168
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
11/2/2020 9:56	72
11/2/2020 10:56	85
11/2/2020 11:56	86
11/2/2020 12:56	79
11/2/2020 13:56	74
11/2/2020 14:56	101
11/2/2020 15:56	72
11/2/2020 16:56	91
11/2/2020 17:56	68
11/2/2020 18:56	82
11/2/2020 19:56	83
11/2/2020 20:56	82
11/2/2020 21:56	85
11/2/2020 22:56	88
11/2/2020 23:56	73
12/2/2020 0:56	77
12/2/2020 1:56	88
12/2/2020 2:56	87
12/2/2020 3:56	85
12/2/2020 4:56	77
12/2/2020 5:56	86
12/2/2020 6:56	78
12/2/2020 7:56	81
12/2/2020 8:56	94
Average	82
Action Level	168
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
17/2/2020 9:34	55
17/2/2020 10:34	60
17/2/2020 11:34	67
17/2/2020 12:34	62
17/2/2020 13:34	51
17/2/2020 14:34	65
17/2/2020 15:34	55
17/2/2020 16:34	58
17/2/2020 17:34	51
17/2/2020 18:34	55
17/2/2020 19:34	60
17/2/2020 20:34	58
17/2/2020 21:34	62
17/2/2020 22:34	58
17/2/2020 23:34	53
18/2/2020 0:34	55
18/2/2020 1:34	60
18/2/2020 2:34	65
18/2/2020 3:34	58
18/2/2020 4:34	53
18/2/2020 5:34	60
18/2/2020 6:34	60
18/2/2020 7:34	58
18/2/2020 8:34	67
Average	59
Action Level	168
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/2/2020 10:09	89
21/2/2020 11:09	91
21/2/2020 12:09	95
21/2/2020 13:09	88
21/2/2020 14:09	86
21/2/2020 15:09	85
21/2/2020 16:09	81
21/2/2020 17:09	86
21/2/2020 18:09	86
21/2/2020 19:09	96
21/2/2020 20:09	99
21/2/2020 21:09	91
21/2/2020 22:09	92
21/2/2020 23:09	98
22/2/2020 0:09	92
22/2/2020 1:09	88
22/2/2020 2:09	97
22/2/2020 3:09	96
22/2/2020 4:09	94
22/2/2020 5:09	87
22/2/2020 6:09	82
22/2/2020 7:09	90
22/2/2020 8:09	93
22/2/2020 9:09	83
Average	90
Action Level	168
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
27/2/2020 10:16	80
27/2/2020 11:16	99
27/2/2020 12:16	81
27/2/2020 13:16	97
27/2/2020 14:16	92
27/2/2020 15:16	98
27/2/2020 16:16	85
27/2/2020 17:16	85
27/2/2020 18:16	83
27/2/2020 19:16	97
27/2/2020 20:16	97
27/2/2020 21:16	90
27/2/2020 22:16	97
27/2/2020 23:16	80
28/2/2020 0:16	95
28/2/2020 1:16	82
28/2/2020 2:16	87
28/2/2020 3:16	96
28/2/2020 4:16	91
28/2/2020 5:16	90
28/2/2020 6:16	85
28/2/2020 7:16	84
28/2/2020 8:16	99
28/2/2020 9:16	92
Average	90
Action Level	168
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-hour TSP Impact Monitoring Result for
NOD 03-2018 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)**

AMS 15 - Ha Wo Che

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
3/12/2019 10:37	43
3/12/2019 11:37	32
3/12/2019 12:37	30
3/12/2019 13:37	32
3/12/2019 14:37	32
3/12/2019 15:37	36
3/12/2019 16:37	32
3/12/2019 17:37	26
3/12/2019 18:37	26
3/12/2019 19:37	36
3/12/2019 20:37	39
3/12/2019 21:37	43
3/12/2019 22:37	36
3/12/2019 23:37	36
4/12/2019 0:37	45
4/12/2019 1:37	43
4/12/2019 2:37	39
4/12/2019 3:37	45
4/12/2019 4:37	45
4/12/2019 5:37	52
4/12/2019 6:37	41
4/12/2019 7:37	39
4/12/2019 8:37	37
4/12/2019 9:37	39
Average	38
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/12/2019 9:25	54
9/12/2019 10:25	60
9/12/2019 11:25	56
9/12/2019 12:25	58
9/12/2019 13:25	54
9/12/2019 14:25	56
9/12/2019 15:25	52
9/12/2019 16:25	60
9/12/2019 17:25	62
9/12/2019 18:25	52
9/12/2019 19:25	58
9/12/2019 20:25	64
9/12/2019 21:25	54
9/12/2019 22:25	54
9/12/2019 23:25	60
10/12/2019 0:25	56
10/12/2019 1:25	60
10/12/2019 2:25	60
10/12/2019 3:25	647
10/12/2019 4:25	64
10/12/2019 5:25	58
10/12/2019 6:25	66
10/12/2019 7:25	56
10/12/2019 8:25	58
Average	82
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
14/12/2019 14:39	31
14/12/2019 15:39	31
14/12/2019 16:39	27
14/12/2019 17:39	33
14/12/2019 18:39	36
14/12/2019 19:39	40
14/12/2019 20:39	36
14/12/2019 21:39	29
14/12/2019 22:39	29
14/12/2019 23:39	32
15/12/2019 0:39	36
15/12/2019 1:39	36
15/12/2019 2:39	27
15/12/2019 3:39	27
15/12/2019 4:39	29
15/12/2019 5:39	29
15/12/2019 6:39	33
15/12/2019 7:39	25
15/12/2019 8:39	25
15/12/2019 9:39	29
15/12/2019 10:39	27
15/12/2019 11:39	27
15/12/2019 12:39	29
15/12/2019 13:39	25
Average	30
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
20/12/2019 10:03	52
20/12/2019 11:03	56
20/12/2019 12:03	58
20/12/2019 13:03	58
20/12/2019 14:03	64
20/12/2019 15:03	64
20/12/2019 16:03	62
20/12/2019 17:03	64
20/12/2019 18:03	66
20/12/2019 19:03	70
20/12/2019 20:03	68
20/12/2019 21:03	68
20/12/2019 22:03	72
20/12/2019 23:03	68
21/12/2019 0:03	70
21/12/2019 1:03	72
21/12/2019 2:03	70
21/12/2019 3:03	78
21/12/2019 4:03	54
21/12/2019 5:03	52
21/12/2019 6:03	52
21/12/2019 7:03	62
21/12/2019 8:03	62
21/12/2019 9:03	64
Average	64
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
24/12/2019 11:22	74
24/12/2019 12:22	82
24/12/2019 13:22	83
24/12/2019 14:22	77
24/12/2019 15:22	72
24/12/2019 16:22	79
24/12/2019 17:22	80
24/12/2019 18:22	85
24/12/2019 19:22	90
24/12/2019 20:22	86
24/12/2019 21:22	88
24/12/2019 22:22	89
24/12/2019 23:22	85
25/12/2019 0:22	76
25/12/2019 1:22	79
25/12/2019 2:22	85
25/12/2019 3:22	88
25/12/2019 4:22	89
25/12/2019 5:22	97
25/12/2019 6:22	87
25/12/2019 7:22	81
25/12/2019 8:22	83
25/12/2019 9:22	81
25/12/2019 10:22	80
Average	83
Action Level	172
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
30/12/2019 10:10	49
30/12/2019 11:10	53
30/12/2019 12:10	55
30/12/2019 13:10	55
30/12/2019 14:10	61
30/12/2019 15:10	59
30/12/2019 16:10	61
30/12/2019 17:10	63
30/12/2019 18:10	67
30/12/2019 19:10	65
30/12/2019 20:10	65
30/12/2019 21:10	68
30/12/2019 22:10	65
30/12/2019 23:10	67
31/12/2019 0:10	61
31/12/2019 1:10	57
31/12/2019 2:10	53
31/12/2019 3:10	51
31/12/2019 4:10	49
31/12/2019 5:10	49
31/12/2019 6:10	59
31/12/2019 7:10	59
31/12/2019 8:10	61
31/12/2019 9:10	65
Average	59
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-hour TSP Impact Monitoring Result for
NOD 03-2018 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)**

AMS 17 - Wo Che Estate

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
3/1/2020 10:35	45
3/1/2020 11:35	49
3/1/2020 12:35	48
3/1/2020 13:35	43
3/1/2020 14:35	49
3/1/2020 15:35	50
3/1/2020 16:35	46
3/1/2020 17:35	51
3/1/2020 18:35	55
3/1/2020 19:35	65
3/1/2020 20:35	62
3/1/2020 21:35	61
3/1/2020 22:35	56
3/1/2020 23:35	58
4/1/2020 0:35	54
4/1/2020 1:35	54
4/1/2020 2:35	62
4/1/2020 3:35	66
4/1/2020 4:35	49
4/1/2020 5:35	58
4/1/2020 6:35	46
4/1/2020 7:35	56
4/1/2020 8:35	64
4/1/2020 9:35	66
Average	55
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
9/1/2020 9:47	60
9/1/2020 10:47	66
9/1/2020 11:47	60
9/1/2020 12:47	62
9/1/2020 13:47	56
9/1/2020 14:47	58
9/1/2020 15:47	54
9/1/2020 16:47	66
9/1/2020 17:47	58
9/1/2020 18:47	56
9/1/2020 19:47	60
9/1/2020 20:47	66
9/1/2020 21:47	54
9/1/2020 22:47	49
9/1/2020 23:47	51
10/1/2020 0:47	62
10/1/2020 1:47	51
10/1/2020 2:47	47
10/1/2020 3:47	52
10/1/2020 4:47	56
10/1/2020 5:47	49
10/1/2020 6:47	56
10/1/2020 7:47	49
10/1/2020 8:47	52
Average	56
Action Level	171
Limit Level	260

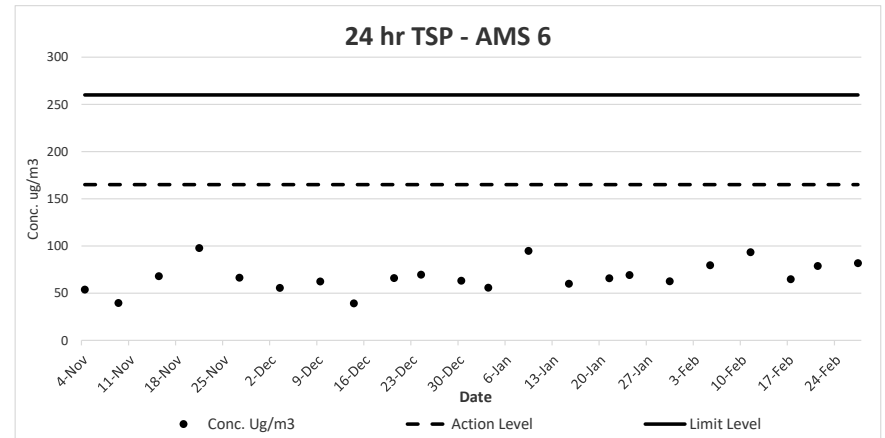
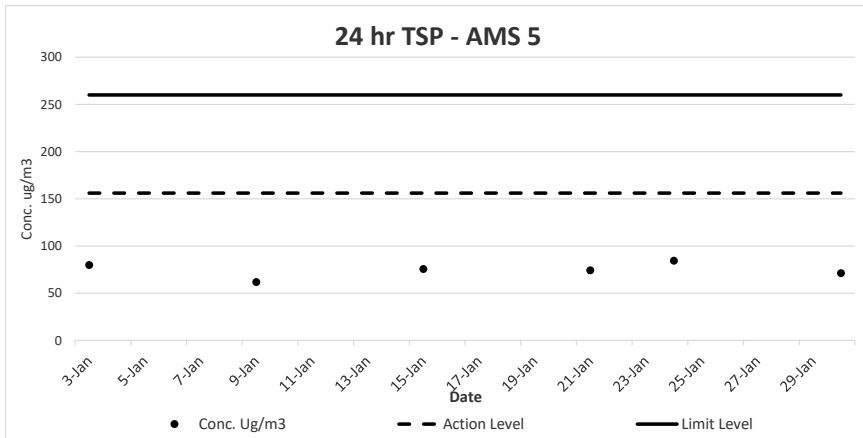
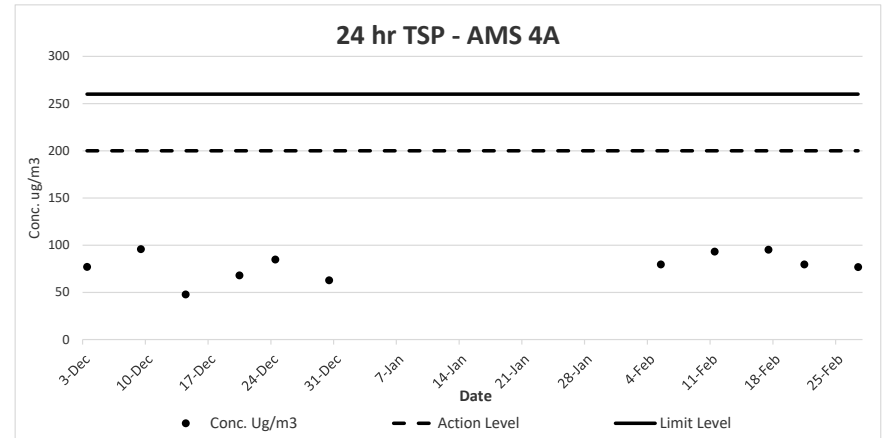
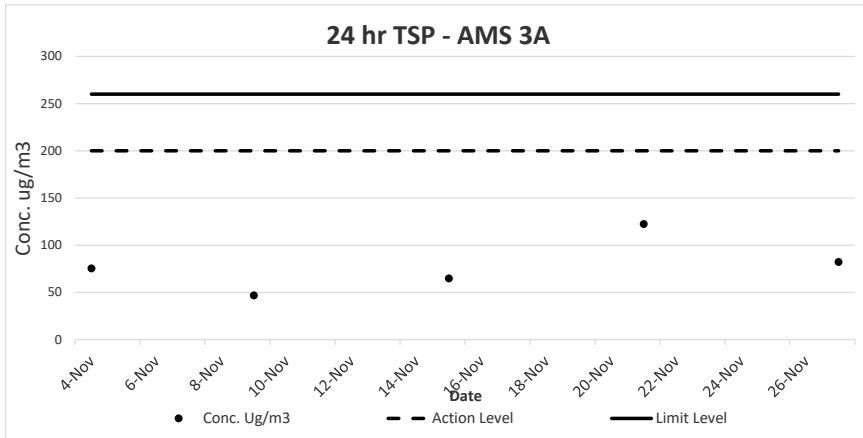
Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
15/1/2020 9:47	65
15/1/2020 10:47	63
15/1/2020 11:47	59
15/1/2020 12:47	53
15/1/2020 13:47	61
15/1/2020 14:47	57
15/1/2020 15:47	57
15/1/2020 16:47	63
15/1/2020 17:47	68
15/1/2020 18:47	68
15/1/2020 19:47	61
15/1/2020 20:47	63
15/1/2020 21:47	70
15/1/2020 22:47	72
15/1/2020 23:47	76
16/1/2020 0:47	80
16/1/2020 1:47	80
16/1/2020 2:47	70
16/1/2020 3:47	67
16/1/2020 4:47	63
16/1/2020 5:47	72
16/1/2020 6:47	65
16/1/2020 7:47	63
16/1/2020 8:47	57
Average	65
Action Level	171
Limit Level	260

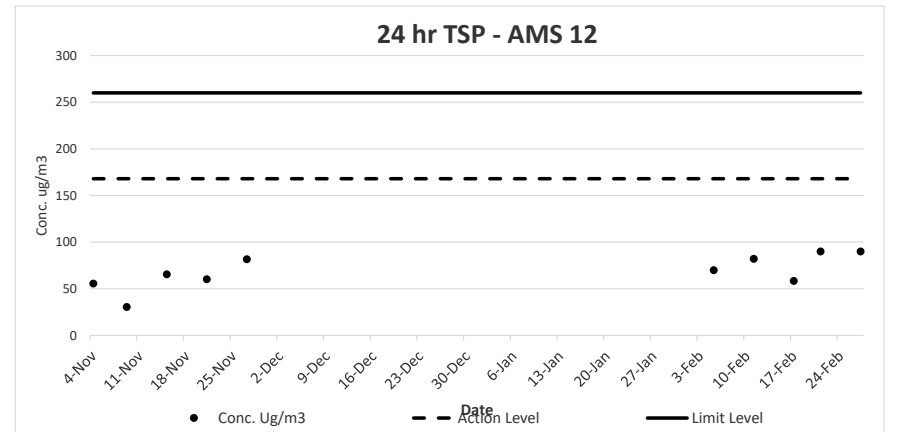
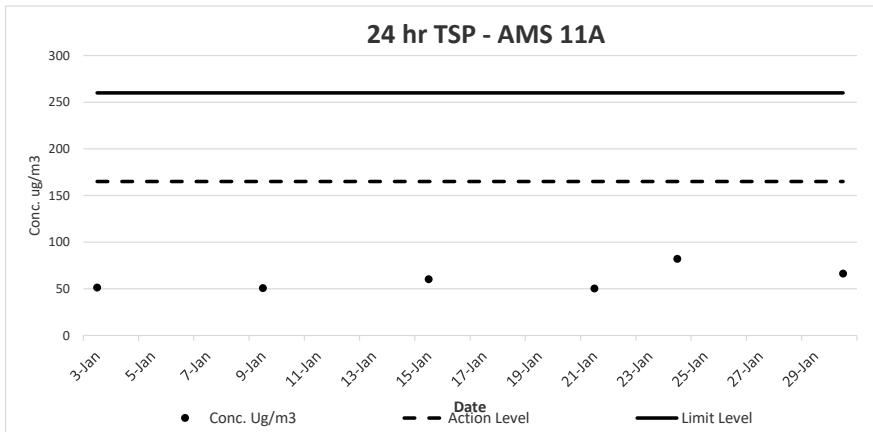
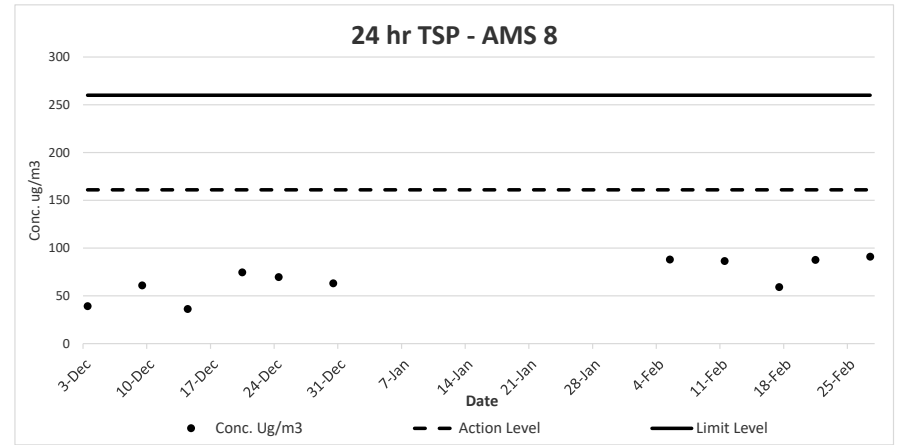
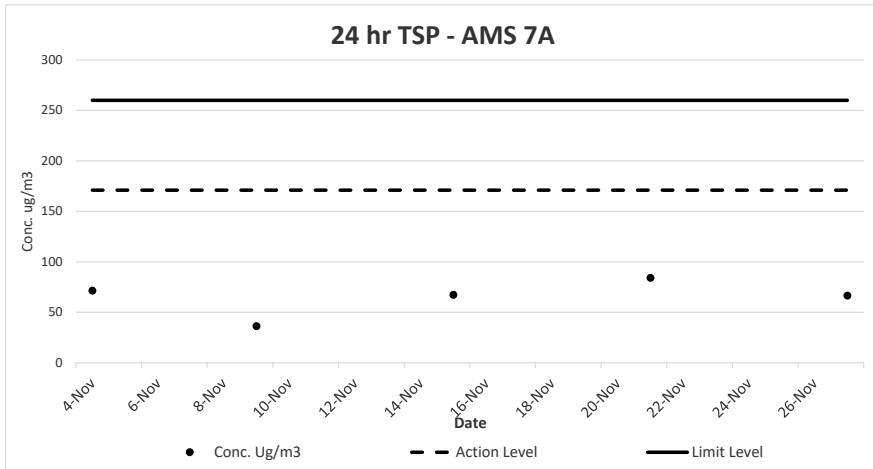
Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
21/1/2020 10:59	58
21/1/2020 11:59	59
21/1/2020 12:59	63
21/1/2020 13:59	65
21/1/2020 14:59	63
21/1/2020 15:59	66
21/1/2020 16:59	66
21/1/2020 17:59	62
21/1/2020 18:59	70
21/1/2020 19:59	65
21/1/2020 20:59	75
21/1/2020 21:59	63
21/1/2020 22:59	67
21/1/2020 23:59	68
22/1/2020 0:59	68
22/1/2020 1:59	73
22/1/2020 2:59	76
22/1/2020 3:59	74
22/1/2020 4:59	57
22/1/2020 5:59	56
22/1/2020 6:59	64
22/1/2020 7:59	66
22/1/2020 8:59	60
22/1/2020 9:59	64
Average	65
Action Level	171
Limit Level	260

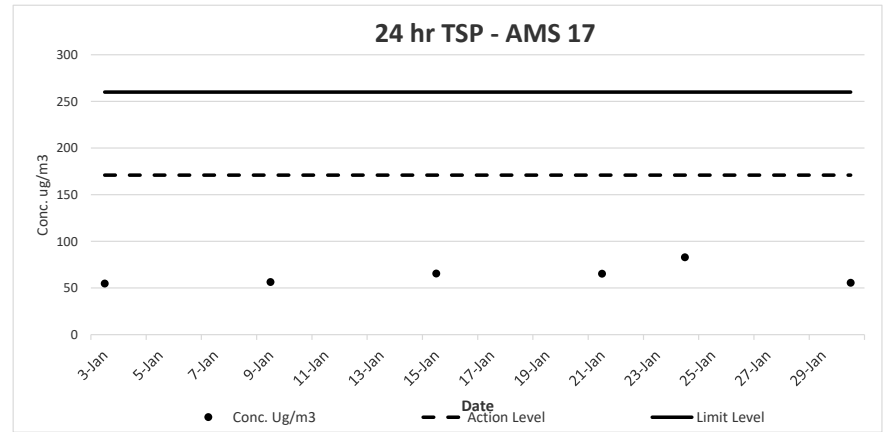
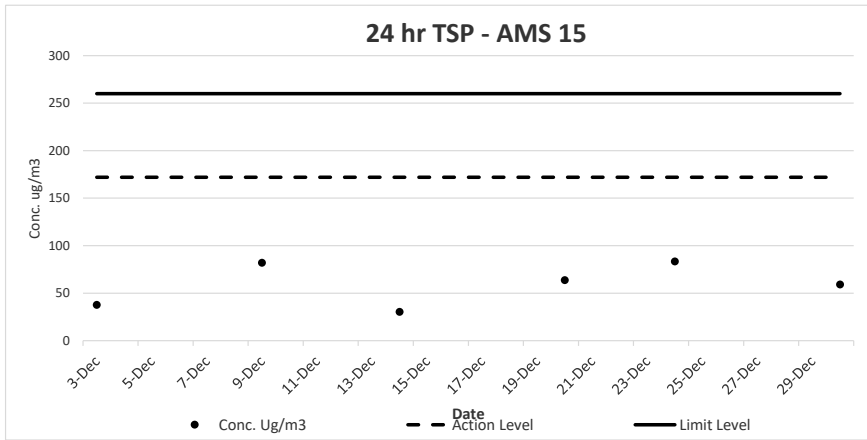
Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
24/1/2020 10:43	75
24/1/2020 11:43	80
24/1/2020 12:43	83
24/1/2020 13:43	78
24/1/2020 14:43	71
24/1/2020 15:43	76
24/1/2020 16:43	75
24/1/2020 17:43	87
24/1/2020 18:43	83
24/1/2020 19:43	93
24/1/2020 20:43	89
24/1/2020 21:43	91
24/1/2020 22:43	86
24/1/2020 23:43	80
25/1/2020 0:43	80
25/1/2020 1:43	78
25/1/2020 2:43	87
25/1/2020 3:43	85
25/1/2020 4:43	96
25/1/2020 5:43	91
25/1/2020 6:43	82
25/1/2020 7:43	83
25/1/2020 8:43	77
25/1/2020 9:43	79
Average	83
Action Level	171
Limit Level	260

Date and Time	TSP Concentration ($\mu\text{g}/\text{m}^3$)
30/1/2020 10:17	55
30/1/2020 11:17	53
30/1/2020 12:17	55
30/1/2020 13:17	59
30/1/2020 14:17	53
30/1/2020 15:17	53
30/1/2020 16:17	57
30/1/2020 17:17	59
30/1/2020 18:17	59
30/1/2020 19:17	55
30/1/2020 20:17	60
30/1/2020 21:17	57
30/1/2020 22:17	55
30/1/2020 23:17	51
31/1/2020 0:17	51
31/1/2020 1:17	55
31/1/2020 2:17	53
31/1/2020 3:17	57
31/1/2020 4:17	59
31/1/2020 5:17	55
31/1/2020 6:17	60
31/1/2020 7:17	53
31/1/2020 8:17	53
31/1/2020 9:17	55
Average	56
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.







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						
5-Nov-19	13:12	67.4	63.0	68.5	75	67.4	Fine	0.7
15-Nov-19	10:56	67.9	63.0	69.0		67.9	Sunny	0.8
22-Nov-19	11:15	67.8	63.0	70.5		67.8	Fine	1.2
28-Nov-19	8:50	62.2	58.9	64.5		62.2	Sunny	0.3
4-Dec-19	13:00	66.5	62.0	67.5		66.5	Sunny	0.7
10-Dec-19	16:44	66.8	63.0	69.0		66.8	Sunny	0.6
19-Dec-19	8:30	69.2	66.5	72.0		69.2	Sunny	0.6
23-Dec-19	8:33	69.4	67.5	72.5		69.4	Fine	0.9
31-Dec-19	8:30	68.2	64.5	70.5		68.2	Fine	0.7
9-Jan-20	9:25	66.2	62.5	67.5		66.2	Fine	0.4
15-Jan-20	9:02	59.4	57.0	62.0		59.4	Fine	0.2
21-Jan-20	8:56	69.1	67.1	72.1		69.1	Sunny	0.2
30-Jan-20	9:06	67.2	64.1	69.3		67.2	Fine	0.3
6-Feb-20	8:30	64.4	61.0	66.5		64.4	Sunny	0.6
12-Feb-20	8:33	66.1	63.0	69.0		66.1	Fine	0.8
18-Feb-20	8:36	68.6	66.0	70.3		68.6	Fine	0.8
28-Feb-20	8:38	66.9	63.5	70.1		66.9	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						
5-Nov-19	8:30	61.2	75.5	62.5	75	61.2	Fine	0.9
15-Nov-19	8:32	58.6	51.0	59.5		58.6	Sunny	0.4
22-Nov-19	9:35	58.3	52.5	60.0		58.3	Fine	0.4
28-Nov-19	11:18	57.9	53.3	60.0		57.9	Sunny	0.6
4-Dec-19	8:30	61.2	75.5	62.5		61.2	Sunny	0.9
10-Dec-19	14:13	62.5	52.5	63.5		62.5	Sunny	0.8
19-Dec-19	10:50	60.6	52.5	62.0		60.6	Sunny	0.9
23-Dec-19	10:55	61.7	52.0	63.0		61.7	Fine	0.7
31-Dec-19	13:00	62.6	52.0	63.5		62.6	Fine	0.7
9-Jan-20	11:42	60.2	52.0	61.5		60.2	Fine	0.8
15-Jan-20	11:30	55.7	53.5	58.0		55.7	Fine	0.3
21-Jan-20	11:37	62.0	58.0	65.0		62.0	Sunny	0.3
30-Jan-20	11:34	61.7	58.2	66.1		61.7	Fine	0.4
6-Feb-20	9:07	64.1	62.0	66.0		64.1	Sunny	0.8
12-Feb-20	11:36	57.6	51.5	59.0		57.6	Fine	0.5
18-Feb-20	8:59	64.0	57.5	66.7		64.0	Fine	0.6
28-Feb-20	11:44	62.3	57.4	64.5		62.3	Fine	0.9

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						
5-Nov-19	11:37	66.6	62.5	68.0	75	66.6	Fine	0.9
15-Nov-19	10:16	67.0	62.5	69.5		67.0	Sunny	0.6
22-Nov-19	10:38	68.6	64.5	71.5		68.6	Fine	1.4
28-Nov-19	9:26	59.0	55.6	62.0		59.0	Sunny	0.6
4-Dec-19	11:34	68.1	64.0	69.5		68.1	Sunny	1.1
10-Dec-19	16:05	68.6	64.0	70.5		68.6	Sunny	0.6
19-Dec-19	9:06	70.6	67.0	73.0		70.6	Sunny	0.4
23-Dec-19	9:10	70.8	68.0	73.0		70.8	Fine	0.6
31-Dec-19	9:08	71.2	66.5	73.5		71.2	Fine	0.5
9-Jan-20	10:02	68.5	65.0	70.5		68.5	Fine	0.6
15-Jan-20	9:35	59.2	57.0	62.0		59.2	Fine	0.3
21-Jan-20	9:18	67.8	64.2	71.1		67.8	Sunny	0.4
30-Jan-20	9:37	69.7	67.8	72.4		69.7	Fine	0.6
6-Feb-20	9:41	65.5	63.0	67.5		65.5	Sunny	0.4
12-Feb-20	9:10	67.4	64.5	68.5		67.4	Fine	0.7
18-Feb-20	9:33	66.9	63.4	69.4		66.9	Fine	0.6
28-Feb-20	9:12	68.9	66.4	71.1		68.9	Fine	0.8

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						
5-Nov-19	9:09	69.6	65.0	72.0	75	69.6	Fine	0.7
15-Nov-19	9:40	69.8	65.5	73.0		69.8	Sunny	0.5
22-Nov-19	10:12	71.6	67.0	74.5		71.6	Fine	0.4
28-Nov-19	13:22	65.0	61.0	68.0		65.0	Sunny	0.7
4-Dec-19	9:11	72.6	68.0	74.5		72.6	Sunny	0.4
10-Dec-19	13:36	72.5	67.0	75.0		72.5	Sunny	0.7
19-Dec-19	11:25	70.8	65.5	73.0		70.8	Sunny	0.5
23-Dec-19	11:31	69.8	66.0	73.0		69.8	Fine	0.5
31-Dec-19	11:28	72.2	66.0	74.5		72.2	Fine	0.4
9-Jan-20	13:00	67.7	64.5	69.0		67.7	Fine	0.4
15-Jan-20	13:04	66.1	63.0	68.0		66.1	Fine	0.1
21-Jan-20	12:16	71.0	64.8	72.4		71.0	Sunny	0.5
30-Jan-20	13:06	68.4	64.2	70.3		68.4	Fine	0.5
6-Feb-20	10:19	65.8	63.5	68.0		65.8	Sunny	0.7
12-Feb-20	16:20	70.6	67.0	72.5		70.6	Fine	0.8
18-Feb-20	9:35	68.7	65.2	71.1		68.7	Fine	0.6
28-Feb-20	16:22	69.1	64.8	73.2		69.1	Fine	0.9

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						
5-Nov-19	10:57	70.7	68.0	74.0	75	70.7	Fine	0.6
15-Nov-19	11:36	70.6	68.5	74.0		70.6	Sunny	0.3
22-Nov-19	9:59	73.1	69.0	76.5		73.1	Fine	0.6
28-Nov-19	10:12	69.9	67.0	72.3		69.9	Sunny	0.6
4-Dec-19	10:29	73.1	68.5	76.0	75	73.1	Sunny	0.7
10-Dec-19	15:30	74.1	68.5	76.5		74.1	Sunny	0.5
19-Dec-19	9:40	72.8	67.5	74.0		72.8	Sunny	0.6
23-Dec-19	9:44	72.9	68.5	74.5		72.9	Fine	0.8
31-Dec-19	9:45	73.9	68.5	76.0	73.9	Fine	1.8	
9-Jan-20	10:36	72.6	69.0	74.5	75	72.6	Fine	0.8
15-Jan-20	10:09	68.4	66.0	71.0		68.4	Fine	0.1
21-Jan-20	9:52	70.8	68.0	73.1		70.8	Sunny	0.6
30-Jan-20	10:11	71.5	67.3	72.8		71.5	Fine	0.8
6-Feb-20	10:58	66.7	64.5	69.0	75	66.7	Sunny	0.7
12-Feb-20	9:52	72.6	68.5	75.5		72.6	Fine	0.6
18-Feb-20	10:45	69.3	67.0	71.5		69.3	Fine	0.8
28-Feb-20	9:57	68.3	66.2	70.8		68.3	Fine	0.6

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						
5-Nov-19	10:21	68.7	66.5	72.0	75	68.7	Fine	0.7
15-Nov-19	13:00	69.0	66.5	72.0		69.0	Sunny	0.6
22-Nov-19	9:25	72.4	68.5	75.0		72.4	Fine	0.8
28-Nov-19	10:36	70.0	66.8	71.8		70.0	Sunny	0.8
4-Dec-19	10:55	72.3	68.0	75.0		72.3	Sunny	0.8
10-Dec-19	14:49	73.8	67.5	75.5		73.8	Sunny	0.4
19-Dec-19	10:13	73.7	67.5	75.0		73.7	Sunny	0.8
23-Dec-19	10:19	73.7	69.0	75.5		73.7	Fine	1.1
31-Dec-19	10:19	74.3	69.5	77.0		74.3	Fine	0.6
9-Jan-20	11:09	73.1	68.5	75.5		73.1	Fine	0.7
15-Jan-20	10:41	67.8	65.0	70.5		67.8	Fine	0.5
21-Jan-20	10:25	71.1	65.9	73.1		71.1	Sunny	0.8
30-Jan-20	10:43	69.8	66.0	70.1		69.8	Fine	1.1
6-Feb-20	11:38	65.7	63.5	67.5		65.7	Sunny	0.9
12-Feb-20	10:27	73.6	69.5	76.5		73.6	Fine	0.8
18-Feb-20	11:25	68.7	64.5	71.2		68.7	Fine	0.7
28-Feb-20	10:37	70.1	65.2	73.2		70.1	Fine	1.3

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			
5-Nov-19	9:45	73.7	68.0	77.0		73.7	Fine	0.3
15-Nov-19	8:30	63.7	58.0	67.5		63.7	Sunny	0.5
22-Nov-19	10:46	73.4	68.5	78.0		73.4	Fine	0.6
28-Nov-19	13:57	72.1	67.8	76.0		72.1	Sunny	0.9
4-Dec-19	9:44	73.6	69.5	76.5		73.6	Sunny	0.3
10-Dec-19	13:00	73.9	69.5	76.0		73.9	Sunny	0.9
19-Dec-19	13:00	74.1	69.0	77.5		74.1	Sunny	0.7
23-Dec-19	13:00	73.3	69.0	77.0		73.3	Fine	0.8
31-Dec-19	10:54	73.6	67.5	75.5		73.6	Fine	0.8
9-Jan-20	13:33	72.5	68.0	74.0		72.5	Fine	0.5
15-Jan-20	13:39	65.3	62.0	68.5		65.3	Fine	0.3
21-Jan-20	12:49	72.3	68.7	74.2		72.3	Sunny	0.7
30-Jan-20	13:41	69.5	67.8	71.8		69.5	Fine	0.8
6-Feb-20	8:42	71.0	67.5	73.2		71.0	Sunny	0.9
12-Feb-20	15:46	73.1	68.5	76.0		73.1	Fine	0.8
18-Feb-20	8:50	70.2	67.4	73.5		70.2	Fine	0.9
28-Feb-20	15:50	70.4	66.7	74.8		70.4	Fine	0.9

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			
4-Nov-19	8:41	68.1	66.0	71.5		68.1	Fine	0.7
14-Nov-19	9:00	68.0	65.5	71.5		68.0	Sunny	0.7
21-Nov-19	8:32	71.3	67.0	74.5		71.3	Sunny	0.9
27-Nov-19	13:22	70.0	65.9	73.2		70.0	Fine	1.0
3-Dec-19	8:30	70.6	67.8	72.5		70.6	Sunny	0.6
9-Dec-19	16:08	69.2	67.0	72.5		69.2	Sunny	0.9
20-Dec-19	8:35	68.6	64.5	70.5		68.6	Fine	0.5
24-Dec-19	13:11	71.0	66.0	72.9		71.0	Fine	1.1
30-Dec-19	13:21	70.0	65.6	73.1		70.0	Fine	0.9
8-Jan-20	8:30	69.7	66.5	72.0		69.7	Sunny	0.8
14-Jan-20	16:08	69.2	67.0	72.5		69.2	Fine	0.9
20-Jan-20	8:30	70.5	68.4	72.3		70.5	Sunny	0.5
29-Jan-20	16:10	70.2	67.2	71.9		70.2	Fine	0.6
5-Feb-20	8:30	71.1	67.5	73.5		71.1	Sunny	0.4
11-Feb-20	16:20	68.4	65.5	70.5		68.4	Fine	0.4
17-Feb-20	8:38	69.7	66.3	70.9		69.7	Fine	0.9
27-Feb-20	16:31	69.2	66.3	71.9		69.2	Fine	1.2

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			
4-Nov-19	9:53	66.4	63.0	67.5		66.4	Fine	1.4
14-Nov-19	14:17	67.5	64.0	70.0		67.5	Sunny	0.9
21-Nov-19	11:32	67.1	62.5	68.5		67.1	Sunny	0.3
27-Nov-19	11:03	69.7	65.8	72.5		69.7	Fine	0.5
3-Dec-19	9:41	66.5	61.8	67.0		66.5	Sunny	0.6
9-Dec-19	15:31	67.5	64.0	69.5		67.5	Sunny	0.6
20-Dec-19	9:48	67.2	63.5	68.5		67.2	Fine	0.3
24-Dec-19	10:52	70.0	64.8	71.9		70.0	Fine	0.4
30-Dec-19	12:05	71.2	65.8	72.0		71.2	Fine	0.8
8-Jan-20	9:43	66.5	63.0	68.0		66.5	Sunny	0.9
14-Jan-20	8:31	66.7	63.0	69.0		66.7	Fine	0.8
20-Jan-20	8:59	68.0	65.4	71.3		68.0	Sunny	0.3
29-Jan-20	8:33	69.5	65.4	72.7		69.5	Fine	0.4
5-Feb-20	9:42	66.5	64.0	68.0		66.5	Sunny	1.1
11-Feb-20	13:42	66.5	63.0	67.5		66.5	Fine	0.8
17-Feb-20	9:49	69.0	66.1	72.6		69.0	Fine	0.7
27-Feb-20	13:44	69.5	65.4	72.7		69.5	Fine	1.1

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								
4-Nov-19	10:28	64.1	60.0	65.5	70	64.1	Fine	1.2
14-Nov-19	13:42	64.8	61.5	66.0		64.8	Sunny	0.4
21-Nov-19	9:05	63.2	59.0	64.5		63.2	Sunny	1.4
27-Nov-19	13:45	64.8	59.8	66.0		64.8	Fine	0.8
3-Dec-19	10:18	64.3	61.0	65.5		64.3	Sunny	0.7
9-Dec-19	14:49	64.2	61.0	66.0		64.2	Sunny	1.2
20-Dec-19	10:06	63.9	60.0	64.5		63.9	Fine	0.5
24-Dec-19	13:44	63.9	58.8	66.0		63.9	Fine	0.7
30-Dec-19	14:50	64.8	59.4	67.5		64.8	Fine	0.9
8-Jan-20	10:20	64.3	61.0	66.0		64.3	Sunny	0.8
14-Jan-20	14:49	64.2	61.0	66.0		64.2	Fine	0.8
20-Jan-20	9:36	65.5	63.0	67.9		65.5	Sunny	0.5
29-Jan-20	14:51	64.2	60.3	67.5		64.2	Fine	0.6
5-Feb-20	10:20	64.0	61.0	65.5		64.0	Sunny	0.6
11-Feb-20	14:52	64.1	61.0	65.5		64.1	Fine	1.2
17-Feb-20	9:36	64.7	62.3	66.9		64.7	Fine	0.8
27-Feb-20	14:57	66.8	63.5	69.7		66.8	Fine	0.9

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								
4-Nov-19	9:02	66.3	61.0	67.0	75	66.3	Fine	0.8
14-Nov-19	14:58	66.6	62.5	67.5		66.6	Sunny	0.6
21-Nov-19	10:22	67.0	63.5	69.5		67.0	Sunny	0.3
27-Nov-19	9:50	68.0	62.9	71.0		68.0	Fine	0.7
3-Dec-19	16:07	64.7	61.3	66.0		64.7	Sunny	0.6
9-Dec-19	9:11	65.4	63.0	67.5		65.4	Sunny	0.7
20-Dec-19	16:10	65.9	63.5	68.0		65.9	Fine	0.9
24-Dec-19	9:44	68.0	61.5	70.0		68.0	Fine	0.9
30-Dec-19	10:52	67.7	62.3	69.6		67.7	Fine	1.0
8-Jan-20	16:04	66.9	64.0	68.5		66.9	Sunny	0.7
14-Jan-20	9:44	67.6	65.0	70.5	75	67.6	Fine	1.3
20-Jan-20	15:20	66.8	63.4	69.8		66.8	Sunny	0.9
29-Jan-20	9:46	67.7	63.4	71.1		67.7	Fine	0.9
5-Feb-20	16:24	65.3	63.5	66.5	75	65.3	Sunny	0.7
11-Feb-20	9:06	64.8	62.0	65.5		64.8	Fine	0.5
17-Feb-20	16:16	67.4	62.9	70.1		67.4	Fine	0.8
27-Feb-20	9:08	67.2	64.5	70.7		67.2	Fine	1.3

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								
4-Nov-19	11:06	64.7	59.0	65.0	70	64.7	Fine	0.7
14-Nov-19	13:06	64.4	61.0	65.5		64.4	Sunny	1.3
21-Nov-19	9:41	63.6	60.0	65.5		63.6	Sunny	0.7
27-Nov-19	13:00	65.1	60.2	67.0		65.1	Fine	0.6
3-Dec-19	10:55	64.1	60.5	65.0		64.1	Sunny	0.8
9-Dec-19	14:12	64.6	61.5	65.5		64.6	Sunny	0.9
20-Dec-19	16:46	69.5	65.0	72.5		69.5	Fine	0.8
24-Dec-19	13:03	66.0	60.1	68.0		66.0	Fine	0.9
30-Dec-19	14:09	68.0	63.2	70.3		68.0	Fine	0.9
8-Jan-20	10:54	64.1	60.5	65.5		65	64.1	Sunny
14-Jan-20	14:12	64.6	61.5	65.5	70	64.6	Fine	0.9
20-Jan-20	10:10	68.7	64.5	70.8		68.7	Sunny	0.8
29-Jan-20	14:14	65.8	61.5	69.6		65.8	Fine	0.9
5-Feb-20	10:52	64.3	62.0	66.5		64.3	Sunny	0.7
11-Feb-20	14:16	63.5	59.5	64.5		63.5	Fine	1.1
17-Feb-20	10:43	65.3	63.1	68.4		65.3	Fine	0.9
27-Feb-20	14:26	64.3	62.3	67.3		64.3	Fine	0.7

Calculated CNL = Measured Noise Level during operation – Baseline (dB(A)).

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					75			
4-Nov-19	11:41	66.7	62.5	68.0		66.7	Fine	0.9
14-Nov-19	10:58	66.7	64.5	69.0		66.7	Sunny	0.4
21-Nov-19	10:18	67.8	65.5	70.5		67.8	Sunny	0.7
27-Nov-19	11:09	67.3	63.9	70.2		67.3	Fine	0.5
3-Dec-19	11:32	65.2	62.0	67.0		65.2	Sunny	0.7
9-Dec-19	13:36	66.6	63.0	68.0		66.6	Sunny	0.8
20-Dec-19	11:37	65.8	63.0	67.5		65.8	Fine	0.4
24-Dec-19	11:16	68.1	62.3	71.1		68.1	Fine	0.6
30-Dec-19	12:22	67.6	60.3	69.1		67.6	Fine	0.8
8-Jan-20	11:31	67.6	63.3	69.0		67.6	Sunny	0.6
14-Jan-20	13:36	66.6	63.0	68.0		66.6	Fine	0.8
20-Jan-20	10:47	66.1	62.5	68.9		66.1	Sunny	0.4
29-Jan-20	13:38	67.8	63.5	70.1		67.8	Fine	0.6
5-Feb-20	11:32	68.1	66.0	71.5		68.1	Sunny	0.9
11-Feb-20	15:42	67.6	65.5	69.0		67.6	Fine	0.6
17-Feb-20	11:24	67.1	62.9	69.7		67.1	Fine	0.8
27-Feb-20	15:46	67.9	64.3	68.6		67.9	Fine	0.9

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					75			
4-Nov-19	9:36	65.7	61.0	66.5		65.7	Fine	0.6
14-Nov-19	11:33	65.7	61.0	66.5		65.7	Sunny	0.6
21-Nov-19	10:57	66.2	62.0	67.0		66.2	Sunny	0.6
27-Nov-19	10:26	66.3	61.8	68.2		66.3	Fine	0.9
3-Dec-19	16:40	66.1	62.0	68.0		66.1	Sunny	0.9
9-Dec-19	9:49	66.8	63.5	68.5		66.8	Sunny	0.6
20-Dec-19	15:26	66.8	64.0	69.0		66.8	Fine	0.6
24-Dec-19	10:13	67.0	63.0	69.5		67.0	Fine	0.8
30-Dec-19	11:13	68.0	64.2	70.2		68.0	Fine	0.9
8-Jan-20	15:28	66.2	63.5	68.0		66.2	Sunny	0.8
14-Jan-20	10:20	66.8	63.5	68.0		66.8	Fine	0.7
20-Jan-20	14:44	66.4	63.2	70.2		66.4	Sunny	0.6
29-Jan-20	10:22	65.8	62.8	69.7		65.8	Fine	0.8
5-Feb-20	15:42	66.8	64.0	67.5		66.8	Sunny	0.9
11-Feb-20	9:40	65.7	64.0	67.0		65.7	Fine	0.7
17-Feb-20	15:36	67.4	64.5	69.4		67.4	Fine	0.6
27-Feb-20	9:45	66.7	63.8	70.1		66.7	Fine	0.9

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					75			
5-Nov-19	9:26	64.7	60.0	65.5		64.7	Fine	1.2
15-Nov-19	9:59	64.8	60.5	67.5		64.8	Sunny	0.0
22-Nov-19	13:00	65.6	62.0	67.5		65.6	Fine	0.6
28-Nov-19	10:04	64.4	58.9	66.1		64.4	Sunny	0.6
4-Dec-19	15:58	66.4	62.5	68.0		66.4	Sunny	0.7
10-Dec-19	10:39	66.9	62.5	68.0		66.9	Sunny	0.4
19-Dec-19	14:12	66.2	62.5	68.0		66.2	Sunny	0.2
23-Dec-19	15:48	67.8	64.0	69.5		67.8	Fine	0.5
31-Dec-19	11:22	66.1	63.0	67.5		66.1	Fine	0.3
9-Jan-20	14:44	65.8	62.5	67.0		65.8	Fine	0.9
15-Jan-20	9:59	64.6	61.0	67.0		64.6	Fine	0.4
21-Jan-20	14:00	65.5	63.1	69.8		65.5	Sunny	0.2
30-Jan-20	10:01	66.4	63.5	68.7		66.4	Fine	0.5
6-Feb-20	14:44	65.8	62.5	67.0		65.8	Sunny	0.9
12-Feb-20	15:09	67.1	64.5	69.0		67.1	Fine	0.5
18-Feb-20	14:38	64.8	62.7	69.8		64.8	Fine	0.9
28-Feb-20	15:06	64.8	63.4	68.8		64.8	Fine	1.1

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					75			
5-Nov-19	10:02	65.3	61.0	66.5		65.3	Fine	0.8
15-Nov-19	9:17	65.8	61.5	68.5		65.8	Sunny	0.8
22-Nov-19	13:36	66.2	63.5	68.5		66.2	Fine	0.4
28-Nov-19	10:49	65.4	59.5	67.2		65.4	Sunny	0.6
4-Dec-19	15:18	66.9	63.5	68.5		66.9	Sunny	0.4
10-Dec-19	10:05	65.9	62.0	66.5		65.9	Sunny	0.9
19-Dec-19	14:45	67.2	64.0	69.5		67.2	Sunny	0.4
23-Dec-19	15:11	68.4	65.0	70.5		68.4	Fine	0.6
31-Dec-19	10:28	67.6	63.5	68.5		67.6	Fine	0.6
9-Jan-20	15:22	65.2	62.0	66.5		65.2	Fine	0.9
15-Jan-20	10:36	66.2	61.8	68.1		66.2	Fine	0.2
21-Jan-20	14:38	66.7	63.4	70.4		66.7	Sunny	0.4
30-Jan-20	10:38	67.5	64.3	71.3		67.5	Fine	0.6
6-Feb-20	9:57	65.8	63.0	68.3		65.8	Sunny	1.0
12-Feb-20	14:36	65.8	63.0	67.0		65.8	Fine	0.9
18-Feb-20	9:13	67.4	64.1	68.0		67.4	Fine	0.8
28-Feb-20	14:38	66.1	63.7	67.8		66.1	Fine	0.9

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					70			
4-Nov-19	10:48	63.9	59.3	65.0		63.9	Fine	0.6
14-Nov-19	9:46	64.3	60.0	66.9		64.3	Sunny	1.1
21-Nov-19	11:30	64.6	62.0	66.5		64.6	Sunny	0.8
27-Nov-19	9:40	63.7	60.2	66.0		63.7	Fine	0.5
3-Dec-19	13:36	64.8	61.5	66.5		64.8	Sunny	0.5
9-Dec-19	11:39	63.6	60.0	65.0		63.6	Sunny	1.2
20-Dec-19	11:30	64.6	62.0	66.5		64.6	Fine	0.8
24-Dec-19	9:50	64.2	61.2	66.0		64.2	Fine	0.7
30-Dec-19	10:30	65.8	62.3	68.9		65.8	Fine	0.8
8-Jan-20	13:40	63.6	59.5	65.5		63.6	Sunny	0.6
14-Jan-20	10:55	63.6	59.0	65.5		63.6	Fine	0.6
20-Jan-20	12:56	63.2	63.0	67.5	63.2	Sunny	0.8	
29-Jan-20	10:57	64.7	63.3	68.2	64.7	Fine	0.7	
5-Feb-20	13:20	63.9	59.0	65.0	63.9	Sunny	0.8	
11-Feb-20	13:07	64.5	60.5	66.0	64.5	Fine	0.8	
17-Feb-20	13:17	65.1	62.4	68.1	65.1	Fine	0.8	
27-Feb-20	13:11	65.5	63.4	68.4	65.5	Fine	0.9	

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					75			
5-Nov-19	10:38	65.1	60.0	66.0		65.1	Fine	1.0
15-Nov-19	10:42	63.7	59.5	66.5		63.7	Sunny	0.8
22-Nov-19	14:11	65.6	60.0	66.3		65.6	Fine	0.4
28-Nov-19	11:19	66.1	61.0	68.9		66.1	Sunny	0.3
4-Dec-19	14:40	65.5	60.0	66.5		65.5	Sunny	0.6
10-Dec-19	9:30	66.5	61.0	67.5		66.5	Sunny	0.6
19-Dec-19	15:22	65.4	63.0	67.5		65.4	Sunny	0.9
23-Dec-19	14:35	66.2	62.0	67.5		66.2	Fine	0.8
31-Dec-19	9:53	65.6	61.0	66.5		65.6	Fine	0.3
9-Jan-20	15:58	64.9	61.0	66.0		64.9	Fine	0.9
15-Jan-20	11:14	60.8	57.5	63.0		60.8	Fine	0.2
21-Jan-20	15:14	63.9	61.1	67.2		63.9	Sunny	0.9
30-Jan-20	11:16	65.2	63.1	68.4		65.2	Fine	0.8
6-Feb-20	10:35	66.7	64.5	69.0		66.7	Sunny	0.7
12-Feb-20	14:03	64.1	60.0	65.0		64.1	Fine	0.8
18-Feb-20	10:20	64.9	62.0	68.5		64.9	Fine	0.8
28-Feb-20	14:07	64.4	62.4	69.5		64.4	Fine	1.1

Calculated CNL = Measured Noise Level during operation – Baseline (dB(A)).

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								
4-Nov-19	11:28	68.6	64.0	70.0	75	68.6	Fine	1.1
14-Nov-19	9:08	70.6	66.3	73.5		70.6	Sunny	0.6
21-Nov-19	13:12	71.8	67.5	74.0		71.8	Sunny	1.1
27-Nov-19	9:06	69.2	65.0	72.1		69.2	Fine	0.8
3-Dec-19	14:11	67.1	63.5	69.5		67.1	Sunny	1.1
9-Dec-19	11:04	66.5	63.0	67.5		66.5	Sunny	0.7
20-Dec-19	14:16	67.0	64.0	69.5		67.0	Fine	0.9
24-Dec-19	9:11	69.0	67.2	71.9		69.0	Fine	0.7
30-Dec-19	10:00	68.7	64.3	70.8		68.7	Fine	0.8
8-Jan-20	14:16	67.4	64.0	68.5		67.4	Sunny	0.7
14-Jan-20	11:31	66.4	63.0	68.5		66.4	Fine	0.9
20-Jan-20	13:32	66.8	63.3	70.1		66.8	Sunny	0.8
29-Jan-20	11:33	68.8	65.1	72.0		68.8	Fine	0.7
5-Feb-20	14:30	67.5	65.5	69.0		67.5	Sunny	0.6
11-Feb-20	10:49	68.1	67.0	70.0		68.1	Fine	0.6
17-Feb-20	14:38	67.1	64.3	71.1		67.1	Fine	0.9
27-Feb-20	10:40	68.2	65.3	71.0		68.2	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								
4-Nov-19	13:06	67.7	63.5	69.0	75	67.7	Fine	1.2
14-Nov-19	8:33	69.6	66.0	73.3		69.6	Sunny	0.6
21-Nov-19	13:07	68.9	66.0	71.5		68.9	Sunny	0.8
27-Nov-19	9:42	69.0	64.3	72.0		69.0	Fine	0.8
3-Dec-19	14:45	66.5	62.0	67.5		66.5	Sunny	0.7
9-Dec-19	10:28	68.4	65.5	69.5		68.4	Sunny	0.9
20-Dec-19	14:50	67.2	65.0	70.0		67.2	Fine	0.6
24-Dec-19	9:55	70.0	65.0	72.2		70.0	Fine	0.7
30-Dec-19	10:42	68.8	64.3	71.5		68.8	Fine	0.7
8-Jan-20	13:03	67.8	66.0	70.5		67.8	Sunny	0.6
14-Jan-20	10:28	68.4	65.5	69.5		68.4	Fine	0.9
20-Jan-20	12:19	66.8	63.2	69.9		66.8	Sunny	0.6
29-Jan-20	10:30	69.0	66.8	73.2		69.0	Fine	0.6
5-Feb-20	15:06	67.9	66.5	70.0		67.9	Sunny	0.5
11-Feb-20	10:15	66.2	65.0	67.5		66.2	Fine	0.4
17-Feb-20	14:57	66.8	63.2	69.9		66.8	Fine	0.6
27-Feb-20	11:02	67.4	64.3	71.2		67.4	Fine	0.9

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								
5-Nov-19	8:44	66.5	62.0	67.5	75	66.5	Fine	1.1
15-Nov-19	11:27	62.8	58.5	65.0		62.8	Sunny	0.7
22-Nov-19	11:24	66.4	63.5	69.0		66.4	Fine	0.3
28-Nov-19	9:33	64.5	60.0	69.8		64.5	Sunny	0.7
4-Dec-19	10:19	70.6	67.0	72.0		70.6	Sunny	0.8
10-Dec-19	11:17	66.4	62.0	67.5		66.4	Sunny	1.2
19-Dec-19	13:37	68.9	66.5	72.0		68.9	Sunny	0.8
23-Dec-19	16:22	67.2	63.0	68.5		67.2	Fine	0.9
31-Dec-19	11:36	68.6	63.0	70.2		68.6	Fine	0.7
9-Jan-20	14:08	68.2	66.0	70.5		68.2	Fine	0.7
15-Jan-20	9:16	67.0	62.3	68.1		67.0	Fine	0.2
21-Jan-20	13:24	66.7	65.1	71.1		66.7	Sunny	0.8
30-Jan-20	9:20	69.1	65.8	72.1		69.1	Fine	0.9
6-Feb-20	11:10	67.0	64.5	69.0		67.0	Sunny	0.7
12-Feb-20	11:02	66.9	65.0	68.0		66.9	Fine	0.7
18-Feb-20	10:26	67.3	64.8	72.0		67.3	Fine	0.8
28-Feb-20	11:09	68.2	66.2	69.7		68.2	Fine	0.8

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								
4-Nov-19	9:15	69.4	67.0	73.0	75	69.4	Fine	1.1
14-Nov-19	16:44	70.6	67.0	73.5		70.6	Sunny	0.7
21-Nov-19	9:06	72.6	67.5	75.5		72.6	Sunny	1.2
27-Nov-19	13:05	71.1	67.5	75.0		71.1	Fine	0.7
3-Dec-19	9:04	71.6	68.0	73.5		71.6	Sunny	1.1
9-Dec-19	16:44	70.6	67.0	73.5		70.6	Sunny	0.7
20-Dec-19	9:11	69.3	66.0	72.5		69.3	Fine	0.3
24-Dec-19	13:09	70.0	68.8	73.6		70.0	Fine	0.8
30-Dec-19	14:22	68.9	67.8	72.1		68.9	Fine	0.7
8-Jan-20	9:06	71.6	67.5	73.0		71.6	Sunny	0.8
14-Jan-20	16:44	70.6	67.0	73.5		70.6	Fine	0.7
20-Jan-20	8:22	68.9	65.6	73.2		68.9	Sunny	0.6
29-Jan-20	16:48	68.2	66.8	72.3		68.2	Fine	0.8
5-Feb-20	9:03	69.8	66.5	71.5		69.8	Sunny	0.8
11-Feb-20	16:57	67.8	64.5	69.0		67.8	Fine	0.8
17-Feb-20	9:07	67.3	64.9	70.8		67.3	Fine	0.8
27-Feb-20	17:01	67.9	65.8	71.8		67.9	Fine	1.1

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					75			
4-Nov-19	13:00	72.6	65.0	76.0		72.6	Fine	0.0
14-Nov-19	15:32	73.1	69.5	76.5		73.1	Sunny	0.3
21-Nov-19	9:48	74.2	70.0	78.5		74.2	Sunny	0.7
27-Nov-19	9:58	73.4	66.9	76.8		73.4	Fine	0.8
3-Dec-19	15:31	71.9	67.5	74.0		71.9	Sunny	0.7
9-Dec-19	8:46	70.6	66.5	71.5		70.6	Sunny	0.4
20-Dec-19	9:48	74.2	70.0	78.5		74.2	Fine	0.7
24-Dec-19	10:03	72.1	68.0	75.4		72.1	Fine	0.7
30-Dec-19	11:20	70.5	67.2	74.1		70.5	Fine	0.9
8-Jan-20	9:07	72.2	68.0	75.0		72.2	Sunny	1.1
14-Jan-20	8:46	70.6	66.5	71.5		70.6	Fine	0.4
20-Jan-20	8:23	72.2	68.8	75.8		72.2	Sunny	0.8
29-Jan-20	8:50	69.2	68.0	74.1		69.2	Fine	0.7
5-Feb-20	16:58	69.2	66.5	72.0		69.2	Sunny	1.1
11-Feb-20	8:30	66.9	65.0	68.5		66.9	Fine	1.2
17-Feb-20	16:14	70.5	67.2	73.1		70.5	Fine	0.8
27-Feb-20	8:34	68.3	64.7	69.7		68.3	Fine	1.2

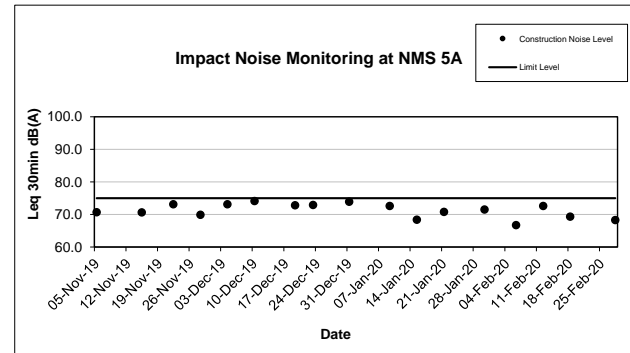
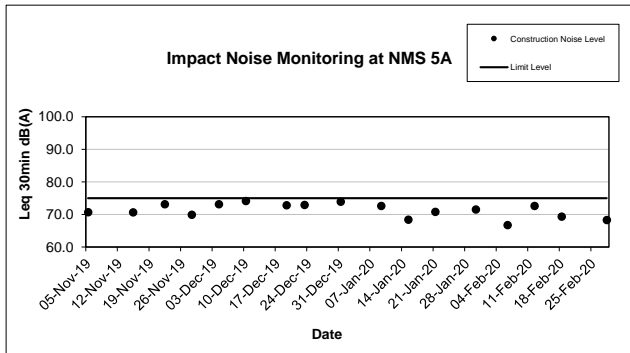
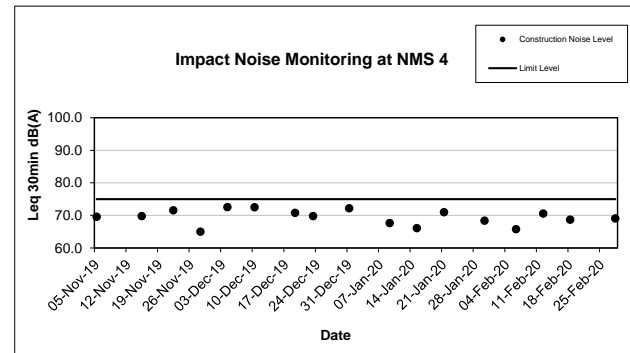
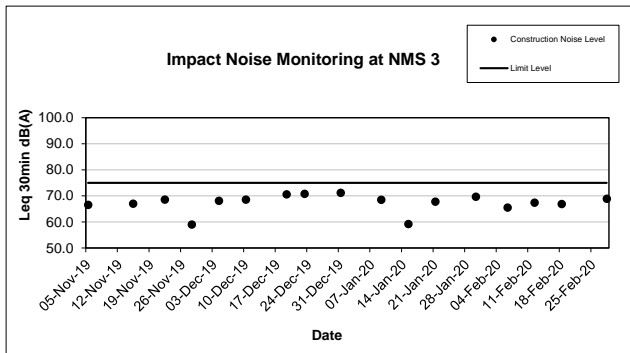
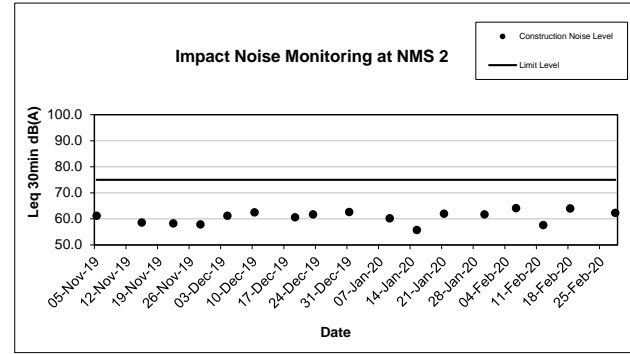
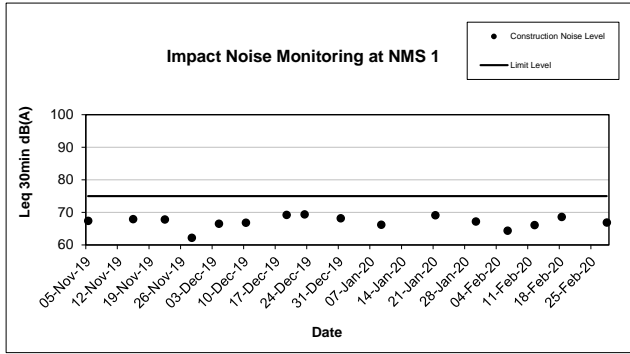
NMS 26 Wo Che Estate

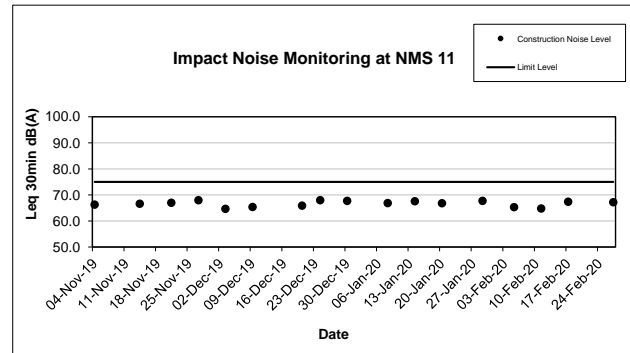
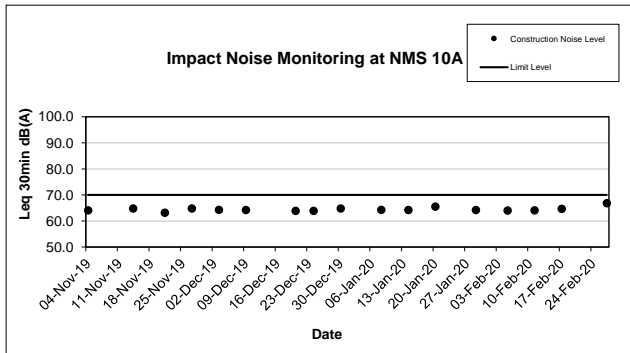
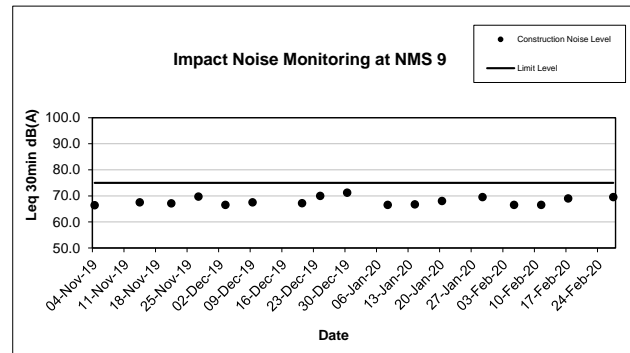
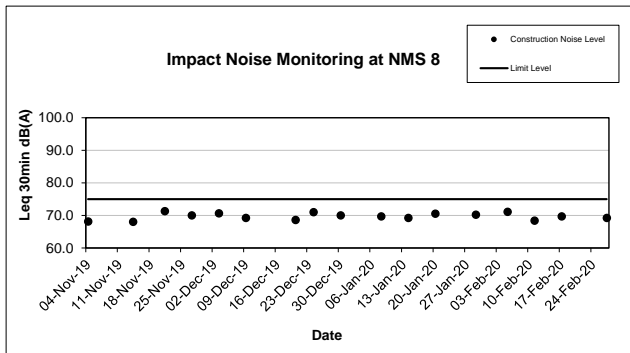
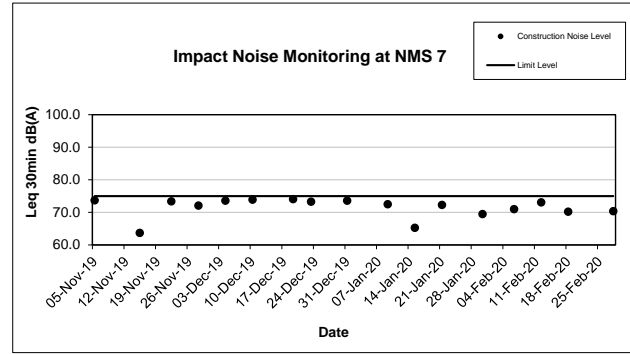
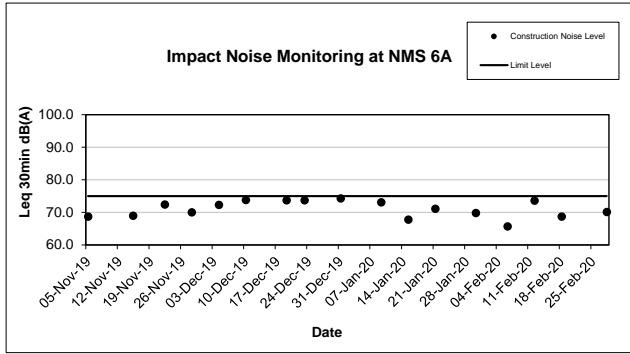
Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L _{eq}	L ₉₀	L ₁₀				
Unit: dB(A) 30 Mins					75			
4-Nov-19	10:11	74.1	70.0	78.0		74.1	Fine	0.9
14-Nov-19	10:21	73.9	71.0	77.5		73.9	Sunny	0.8
21-Nov-19	10:55	73.3	70.5	76.5		73.3	Sunny	0.6
27-Nov-19	10:36	73.5	68.9	76.2		73.5	Fine	0.9
3-Dec-19	13:00	72.9	69.0	74.8		72.9	Sunny	0.6
9-Dec-19	13:00	74.6	71.0	77.0		74.6	Sunny	0.6
20-Dec-19	13:06	74.5	70.5	78.0		74.5	Fine	0.4
24-Dec-19	10:41	74.1	67.2	74.2		74.1	Fine	0.8
30-Dec-19	11:47	73.4	68.2	74.6		73.4	Fine	0.9
8-Jan-20	13:00	74.3	69.5	77.5		74.3	Sunny	0.6
14-Jan-20	13:00	74.6	71.0	77.0		74.6	Fine	0.6
20-Jan-20	12:31	68.9	66.5	74.7		68.9	Sunny	0.4
29-Jan-20	13:04	69.7	66.1	73.4		69.7	Fine	0.7
5-Feb-20	13:56	74.1	71.0	75.5		74.1	Sunny	0.8
11-Feb-20	11:24	72.8	70.0	75.0		72.8	Fine	0.7
17-Feb-20	13:27	69.8	67.3	72.3		69.8	Fine	0.6
27-Feb-20	11:28	68.7	66.7	73.5		68.7	Fine	0.8

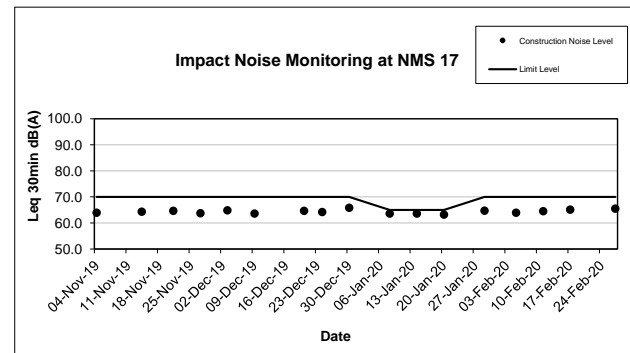
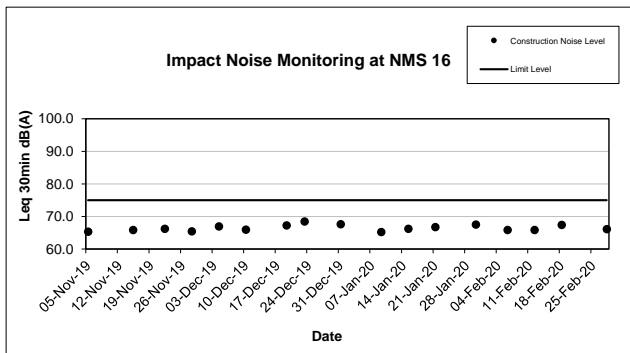
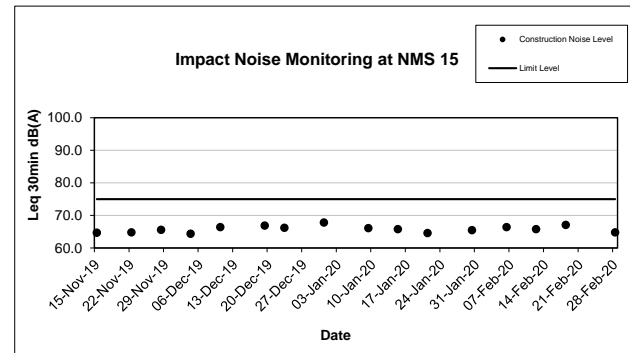
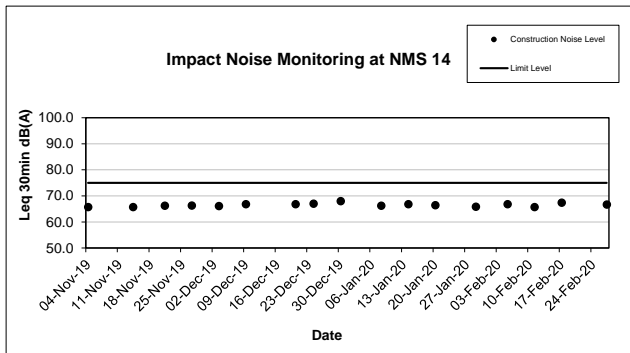
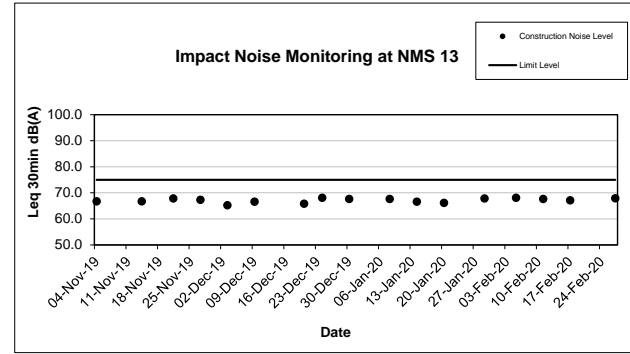
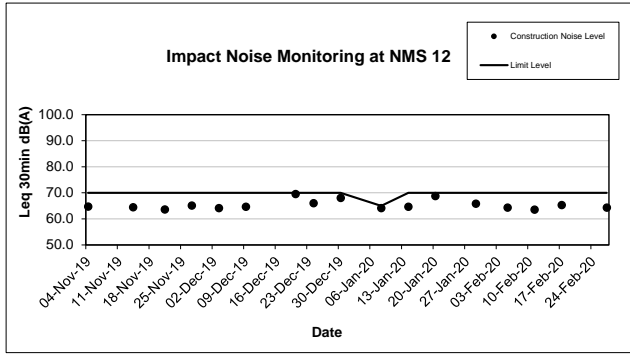
NMS 27 Jockey Club Ti-I College

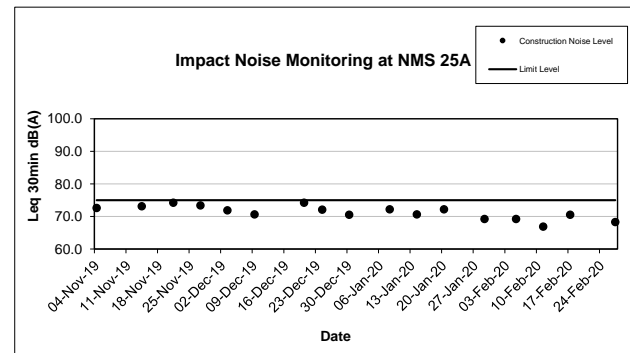
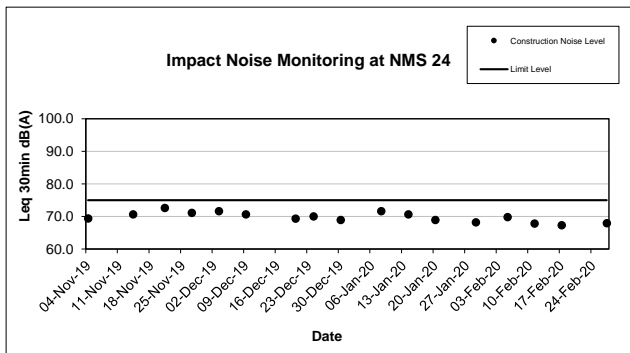
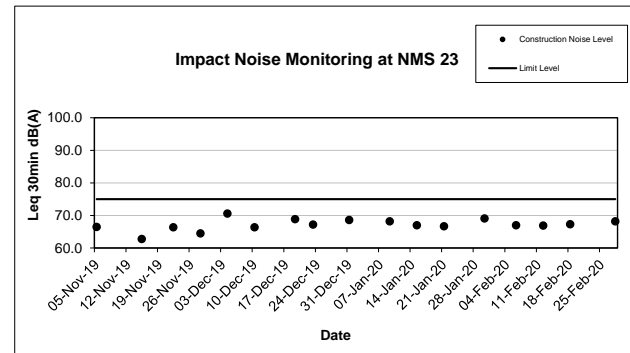
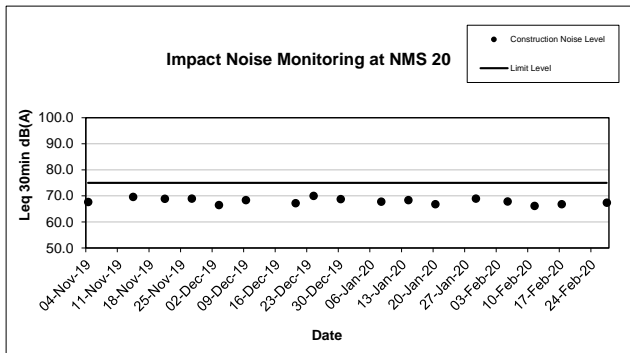
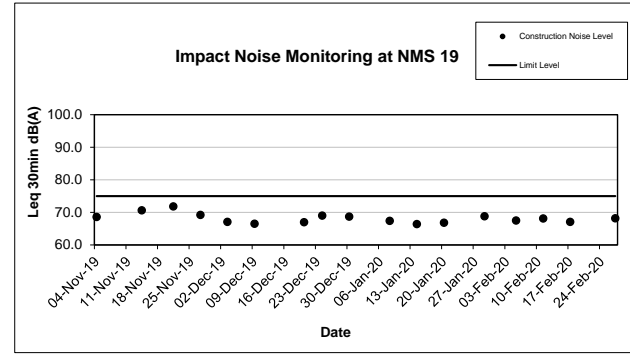
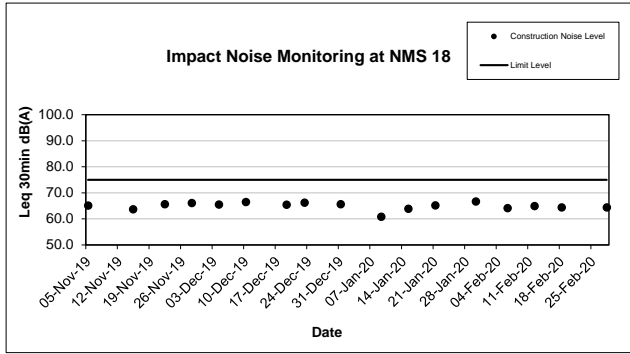
Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)	
		L _{eq}	L ₉₀	L ₁₀					
Unit: dB(A) 30 Mins					70				
5-Nov-19	13:39	64.1	61.0	66.0	70	64.1	Fine	0.7	
15-Nov-19	13:17	64.3	61.5	68.5	65*	64.3	Sunny	0.7	
22-Nov-19	8:40	64.2	61.5	66.5	70	64.2	Fine	0.7	
28-Nov-19	13:31	62.8	60.8	67.3		62.8	Sunny	0.7	
4-Dec-19	13:52	64.4	60.0	66.0		64.4	Sunny	0.9	
10-Dec-19	8:35	64.1	61.5	66.0		64.1	Sunny	0.6	
19-Dec-19	16:15	64.1	60.5	66.5		64.1	Sunny	0.5	
23-Dec-19	13:32	64.5	61.5	66.5		64.5	Fine	0.4	
31-Dec-19	9:00	64.1	60.5	65.5		64.1	Fine	0.9	
9-Jan-20	8:33	64.6	61.0	66.5		65	64.6	Fine	0.4
15-Jan-20	13:06	61.3	59.0	64.0		70	61.3	Fine	0.4
21-Jan-20	8:04	66.1	62.1	69.2			66.1	Sunny	0.6
30-Jan-20	13:10	65.4	62.1	68.6	65.4		Fine	0.4	
6-Feb-20	11:45	64.5	62.0	67.0	64.5		Sunny	0.5	
12-Feb-20	13:08	63.9	61.0	65.5	63.9		Fine	1.1	
18-Feb-20	11:16	65.0	63.1	68.5	65.0		Fine	0.8	
28-Feb-20	13:12	65.8	63.6	69.8	65.8	Fine	1.0		

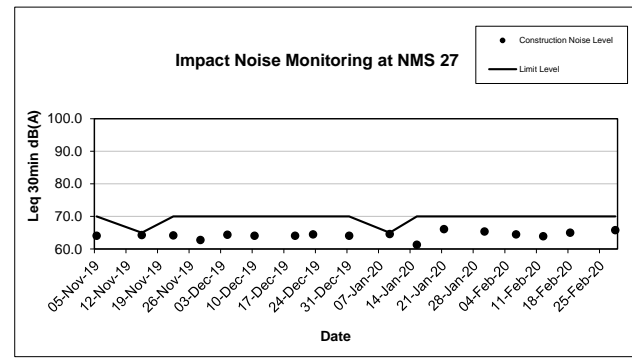
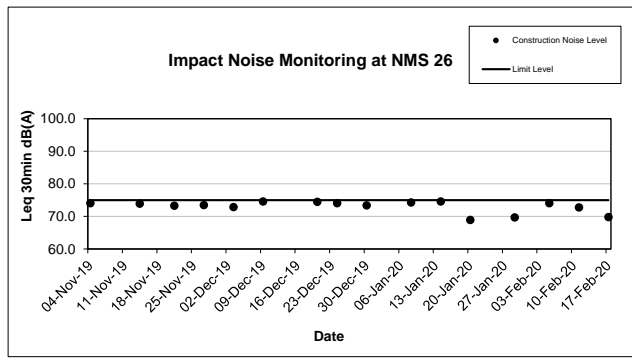
Calculated CNL = Measured Noise Level during operation – Baseline (dB(A)).











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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 (T)	Hard Rock and Large Broken Concrete (A)	Reused in the Contract (B)	Reused in other Projects (C)	Disposed as Public Fill (D)	Imported Fill	Metals	Paper/ cardboard packaging	Plastics ²	Chemical Waste	Others, e.g. general refuse
	(in '000Ton)	(in '000kg)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000Ton)
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.
 - 4) (T) = (A) + (B) + (C) + (D)

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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 (T)	Hard Rock and Large Broken Concrete (A)	Reused in the Contract (B)	Reused in other Projects (C)	Disposed as Public Fill (D)	Imported Fill	Metals	Paper/ cardboard packaging	Plastics ²	Chemical Waste	Others, e.g. general refuse
	(in '000Ton)	(in '000kg)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000Ton)
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	0.712	0.000	0.223	0.000	0.489	0.297	0.000	0.000	0.000	0.000	0.046
2019 Oct	0.663	0.000	0.306	0.000	0.357	1.085	0.001	0.027	0.009	0.000	0.027
2019 Nov	1.154	0.000	0.143	0.000	1.011	0.428	0.000	0.019	0.000	0.000	0.095
2019 Dec	0.849	0.000	0.023	0.000	0.826	0.074	0.000	0.014	0.001	0.000	0.034
Total	3.351	0.000	0.893	0.000	2.458	1.810	0.001	0.046	0.009	0.000	0.855

- 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.
 - 4) (T) = (A) + (B) + (C) + (D)

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Waste Flow Table for Year 2020

Months	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of Non-inert C&D Wastes Generated Monthly				
	Total Quantity Generated (T)	Hard Rock and Large Broken Concrete (A)	Reused in the Contract (B)	Reused in other Projects (C)	Disposed as Public Fill (D)	Imported Fill	Metals	Paper/ cardboard packaging	Plastics ²	Chemical Waste	Others, e.g. general refuse
	(in '000Ton)	(in '000kg)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000Ton)
2020 Jan	0.584	0.000	0.027	0.000	0.557	0.040	0.001	0.030	0.001	0.000	0.039
2020 Feb	1.072	0.000	0.042	0.000	1.030	0.000	0.001	0.026	0.003	0.000	0.013
2020 Mar											
2020 Apr											
2020 May											
2020 Jun											
Sub-Total	1.656	0.000	0.069	0.000	1.587	0.040	0.002	0.056	0.004	0.000	0.052
2020 Jul											
2020 Aug											
2020 Sep											
2020 Oct											
2020 Nov											
2020 Dec											
Total	1.656	0.000	0.069	0.000	1.587	0.040	0.002	0.056	0.004	0.000	0.052

- 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	2/2/2019	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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Reference No.	Date of Complaint Received	Received From	Nature of Complaint	Investigation/Mitigation Action	Outcome	Status
				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

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Reference No.	Date of Complaint Received	Received From	Nature of Complaint	Investigation/Mitigation Action	Outcome	Status
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 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.	Project-not related	Closed
COM-2019-0045	30/8/2019	1823	Regarding to noise nuisance near Hilton Plaza and Scenery Court at 11:10 pm.	The complaint is related to the project. 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 should	Project-related	Closed

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Reference No.	Date of Complaint Received	Received From	Nature of Complaint	Investigation/Mitigation Action	Outcome	Status
				strictly follow the use of acoustic enclosure as in condition 3.d.5. of the CNP during the operation of breaker, hand-held, mass $\leq 10\text{kg}$ (CNP023) shall only be operated inside the acoustic enclosure composed of four side-panels and one top-panel, so that no part of such equipment is visible from any nearby noise sensitive receiver. The panels shall be made of minimum 10mm thick plywood or 1mm thick steel outer skin and minimum 50mm thick sound absorbing lining, or equivalent construction. Contractor was reminded to use portable phones and head-set only for communication, and none of loudspeakers is allowed for night work activities.		
COM-2019-0056	9/10/2019	Project Hotline of NE/2017/05and EPD	Noise	The complaint of the construction noise especially the breaker noise is project related. Due to the concern of road safety, the Contractor conducted the emergency road repair works under an Emergency Excavation Permit (EXP) of Plan ID: EO13123 issued by Highways Department (HyD). The main contractor's PR / hotline staff was reminded to enhance communication with sufficient information provided for replying any enquiry / complaint in the future. The main contractor	Project-related	Closed

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Reference No.	Date of Complaint Received	Received From	Nature of Complaint	Investigation/Mitigation Action	Outcome	Status
				was also reminded that noise mitigation measures should be provided as far as practicable subject to the emergency situation. For construction works covered by the CNP issued by EPD, the main contractor should fully complied with the conditions as stipulated and provided all noise mitigation measures as required under the conditions of the CNP. For works subject to the emergency situation, noise mitigation measures such as noise barrier, enclosure etc. should be provided as far as practicable to minimise the noise nuisance to the NSRs.		
COM-2019-0057	9/10/2019	EPD	Noise	The complaint of the generator noise nuisance is related to the project. The concerned portable generator is supplying electric power for the Variable Message Sign (VMS) showing the speed limit in 50 km/hr. It is switched on and off manually by manpower, and would only be operated between daytime 07:00-19:00. No construction noise permit (CNP) should be required as the portable generator is not operating in restricted hours. The main contractor was reminded to strictly follow the use of their proposed semi-enclosure as the mitigation measures for the portable	Project-related	Closed

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Reference No.	Date of Complaint Received	Received From	Nature of Complaint	Investigation/Mitigation Action	Outcome	Status
				generator and the generator operates in daytime 07:00-19:00 only.		
COM-2019-0066	6/11/2019	EPD	Noise	The complaint of the emergency road repair work is related to the project. The works on on 5 th November 2019 between 22:00 and 06:00 the next day at southbound slow lane of Tai Po Road outside Wai Wah Centre, including breaking operation. The main contractor should inform the EPD in advance of any emergency opening works of the Project in future to facilitate the effective handling of noise complaint that may arise.	Project-related	Closed
COM-2020-0083	29/02/2020	Project email of NE/2017/05	Noise and Dust	The complaint of the dust and noise nuisance near Wai Wah Centre during both the day and night works was at zone 2. The construction works at zone 2 was the mini-piling operation during the day time was same as the complaint. Thus, the complaint in daytime is related to the project. Furthermore, loading and unloading works was carried in night time. Contractor was reminded to enhance the water spray frequency on the construction site for mitigation measures on dust control. Also, Contractor should provide green tarpaulin curtain and additional acoustic	Project-related	Closed

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Reference No.	Date of Complaint Received	Received From	Nature of Complaint	Investigation/Mitigation Action	Outcome	Status
				<p>Sound Proof Canvas as a secondary layer at the bottom of the mini-pile drilling machine to secure the total enclosure condition to minimize the visual and noise impacts to nearby NSRs.</p> <p>ET checked the regular impact air and noise monitoring data between day time and night-time regular noise monitoring data, no exceedance case was found on both regular impact air and noise monitoring measurement.</p> <p>The main contractor should carry out further review the effectiveness of the enclosure or noise barrier with their mitigation measure and propose alternative noise mitigation measures to enhance the noise reduction on similar day works or night works in restricted hours.</p>		

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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
		Dec 2019	Jan 2020	Feb 2020	
Air	0	0	0	0	0
Noise	8	0	0	1	9
Water	0	0	0	0	0
Waste	0	0	0	0	0
Total	8	0	0	1	9

Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Complaints This Reporting Period			Cumulative Project-to-Date
		Dec 2019	Jan 2020	Feb 2020	
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 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.	Contractor	Not Applicable
		• These temporary noise barriers should be located immediately adjacent to working area.	Contractor	Not Applicable

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		• 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
3.10.3		• Silencers, mufflers and enclosures for plant should be used where possible and maintained adequately throughout the works;	Contractor	Not Applicable
		• 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
<u>Air Quality Measures</u>				
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 legislation (e.g. Air Pollution Control Ordinance and its subsidiary regulations) wherever applicable.	Contractor	Implemented
		• 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	Contractor	Implemented

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		during the dry season (October to December). It is also suggested that watering with complete coverage of active construction area eight times a day.		
		• 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		• Stockpiles of sand, aggregate or any other dusty materials greater than 20m ³ shall be enclosed on three sides, with walls extending above the pile and 1 meter beyond the front of the pile.	Contractor	Partially Implemented
		• Suitable chemical wetting agent such as dust suppression chemical shall be used on completed cuts and fills to reduce wind erosion.	Contractor	Not Observed
		• 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
		• 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
		• Construction working areas should be restricted to a minimum practicable size.	Contractor	Implemented
		• 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
		• 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
		• 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	Implemented

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4.12.1, 4.13.1 and Table 8.2		• 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
		• 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
Water Quality Measures				
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	Partially Implemented
		• Construction works should be programmed so as to minimise excavation during the wet season (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.	Contractor	Implemented
		• 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	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	Implemented

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		<ul style="list-style-type: none"> 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 outwit 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	Implemented
		<ul style="list-style-type: none"> 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
		<ul style="list-style-type: none"> 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	Partially Implemented
		<ul style="list-style-type: none"> 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
		<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 	Contractor	Not Applicable

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		areas should be able to be drained of rain water through the petrol interceptor and accumulated rain removed at regular intervals.		
		• 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
		• 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
		• 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
		• Discharges from the site shall be required to meet the terms and conditions of a valid WPCO Water Pollution Control Ordinance (WPCO).	Contractor	Implemented
		• Regular site inspection of the construction works shall be carried out to determine compliance with the recommended mitigation measures. Inspection should be included:		
Section 12.6 of the Approved EIA Report		(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	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

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		(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.	• 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	
		• 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	
		• Old and valuable trees (OVTs) identified in the Project Boundary shall be protected in accordance with ETWB TCW no. 29/2004.	Contractor	Implemented	
		• Night-time lighting glare shall be properly managed and control during construction so as to minimize any adverse visual impact on adjacent VSRs.	Contractor	Not Applicable	
		• 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				
	During construction within the Project Boundary.	• 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	
		• 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	
• 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		

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		<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
<i>Waste Management Measures</i>				
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 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. 	Contractor	Partially Implemented
		<ul style="list-style-type: none"> 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
7.6.5 to 7.6.6		<ul style="list-style-type: none"> 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	Implemented
		<ul style="list-style-type: none"> Environmental Management Plan (EMP) and trip-ticket system shall be implemented for monitoring management of waste. 	Contractor	Implemented
		<ul style="list-style-type: none"> 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
7.6.7	Within the boundaries of all construction sites as well as transportation routes to	<ul style="list-style-type: none"> 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		<ul style="list-style-type: none"> The contractor's environmental performance shall be monitored and controlled through the weekly environmental walks. The items after the environmental walks shall include: 		
		<ul style="list-style-type: none"> 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

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	designed areas for off-site disposal of materials/Prior to and during construction activities.	• The environmental performance of the contractor and his sub-contractors;	Contractor	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 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.	Contractor	Implemented
7.6.10		• 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	Implemented
7.6.11 to 7.6.14		• 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
		• 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
		• 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
		• Paving bricks arising from existing pavement should be recycled on site as much as possible.	Contractor	Not Applicable
		• Existing marginal roadside barriers comprise pre-cast units should be reused in the following widening works as much as possible,	Contractor	Not Applicable

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		<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
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; 	Contractor	Implemented
		<ul style="list-style-type: none"> have a capacity of less than 450L unless the specifications have been approved by the EPD; and 	Contractor	Implemented
		<ul style="list-style-type: none"> 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). 	Contractor	Implemented
		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; 	Contractor	Implemented
		<ul style="list-style-type: none"> be enclosed on at least 3 sides; 	Contractor	Implemented
		<ul style="list-style-type: none"> 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; 	Contractor	Implemented
		<ul style="list-style-type: none"> have adequate ventilation; 	Contractor	Implemented
		<ul style="list-style-type: none"> be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary); and 	Contractor	Implemented
		<ul style="list-style-type: none"> be arranged so that incompatible materials are adequately separated. 	Contractor	Implemented
		The Contractor shall register with EPD as a Chemical Waste Producer. Waste oils and other chemical wastes as defined in the Waste Disposal (Chemical Waste) (General) Regulation will require disposal by appropriate means and could require pre-notification to EPD prior to disposal. Appropriate means include disposal:		
		<ul style="list-style-type: none"> via a licensed waste collector; and 	Contractor	Implemented
<ul style="list-style-type: none"> to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Facility which also offers a chemical waste collection service and can supply the necessary storage containers; or 	Contractor	Implemented		
<ul style="list-style-type: none"> to a reuser of the waste, under approval from EPD. 	Contractor	Not Applicable		
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 	Contractor	Partially Implemented

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7.7.1		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 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		<u>General Condition</u>		
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