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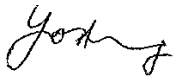
MONTHLY EM&A REPORT

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/0429A

Prepared by	**:**	Rex Chow
Reviewed by	**:**	Cyrus Lai
Certified by	**:**	

David Hung
Environmental Team Leader
Fugro Technical Services Limited

Our ref: ASCL-2018010

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

Attention: Miss FUNG Cannifer

13 March 2020

Dear Miss Fung,

NE/2017/05
Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)
Monthly EM&A Report for February 2020

I refer to the email of the ET dated 12 March 2020 regarding to the captioned Monthly EM&A Report with report No. 0064/18/ED/0429A, we have no adverse comment on it and verify this monthly 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: jkcyan@cedd.gov.hk)

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Date 12 March 2020

Our Ref. MCL/ED/0162/2020/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 Monthly EM&A Report (0064/18/ED/0429A)

Pursuant to EP-463/2013/B Condition 3.4, we hereby submit three hardcopies and two e-copy of the monthly EM&A Report (0064/18/ED/0429A) for your retention. This monthly EM&A Report has been certified by ETL and verified by IEC accordingly.

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

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

David Hung
Environmental Team Leader

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

Encl.

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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 Monthly EM&A report presents the environmental monitoring and audit works for the period between 1 Feb 2020 and 29 Feb 2020. As informed by the Contractor, major activities in the reporting month were summarized as below table:

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
• Trial pits excavation • Construct temporary road and site access • Repair of road surface works • Pre-drill works • Tree Pruning	• Trial pits excavation • Repair of road surface works • Pre-drilling works • Mini pile works	• 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 • Soldier pile works	• Trial pits excavation • Construct temporary road and site access • Underground utilities detections • Underground utilities diversion • Structural Works for Footbridge NF40 Staircases • Foundation works of footbridge NF66 • Pre-drilling works	• 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

Breaches of the Action and Limit Levels

iii. 24-hour and 1-hour TSP impact monitoring were carried out in the reporting month, no Action / Limit Level exceedance was recorded during the period.

iv. Day time construction noise monitoring was carried out in the reporting month, no Action / Limit Level exceedance was recorded during the period. Regular night time noise monitoring was carried out on 6, 13, 21 and 27 Feb 2020 respectively and no exceedance cases were recorded between 2300 and 0700 of the next day during the reporting month.

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Complaint, Notification of Summons and Successful Prosecution

v. One complaint case was received on 29 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. The complaint case is still under ET's investigation.

Reporting Changes

vi. There was no reporting change in the reporting month.

Future Key Issues

vii. The key issues to be considered in the coming reporting month include:

Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, construction noise, water quality, waste management and landscape and visual impact.

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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 Monthly 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 15th monthly 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 1st Feb 2020 and 29th 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**.

1.2.3

Table 1.1 Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Proponent (CEDD)	Senior Engineer	Ms. Cannifer Fung	3152 3446
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**.

1.3.2 A summary of the major construction activities undertaken in the reporting month were shown in below table:

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
• Trial pits excavation • Construct temporary road and site access • Repair of road surface works • Pre-drill works • Tree Pruning	• Trial pits excavation • Repair of road surface works • Pre-drilling works • Mini pile works	• 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 • Soldier pile works	• Trial pits excavation • Construct temporary road and site access • Underground utilities detections • Underground utilities diversion • Structural Works for Footbridge NF40 Staircases • Foundation works of footbridge NF66 • Pre-drilling works	• 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

1.4 Status of Environmental Licenses, 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-RN0002-20	1/02/2020	31/03/2020

2. AIR QUALITY

2.1 Monitoring Requirement

In accordance with the updated EM&A Manuals, 24-hour & 1-hour Total Suspended Particulates (TSP) level at the designated air quality monitoring station are required. Impact 24-hour and 1-hour TSP monitoring should be carried out at least once every 6 days. The Action and Limit Levels of the air quality monitoring are given in **Appendix C**.

2.2 Monitoring Equipment

The 24-hour and 1-hour TSP air quality monitoring was performed using High Volume Air Samplers (HVS) and portable TSP Monitors located at each of the designated monitoring station respectively.

Table 2.1 and 2.2 summarizes the equipment used in air quality monitoring.

Table 2.1 24-hour TSP Monitoring Equipment

Item	Location	Brand	Model	Equipment	Serial Number
1	AMS 4A	*Sibata	Model LD-5R	Sibata Portable TSP Monitors	620408
2	AMS 6	*Sibata	Model LD-5R	Sibata Portable TSP Monitors	882147
3	AMS 8	*Sibata	Model LD-5R	Sibata Portable TSP Monitors	761105
4	AMS 12	*Sibata	Model LD-5R	Sibata Portable TSP Monitors	882148

*Notes: As electricity supply is not available and accessible for the High Volume Samplers (HVS) at AMS 4A, 6, 8, and 12, portable Laser Particle Photometer Monitors will be utilized for 24-hour TSP monitoring instead of High Volume samplers (HVS). The correlation between HVS and the portable Laser Particle Photometer Monitors are presented in Appendix D.

Table 2.2 1-hour TSP Monitoring Equipment

Item	Location	Brand	Model	Equipment	Serial Number
1	AMS 4A	Sibata	Model LD-5R	Sibata Portable TSP Monitors	620408
2	AMS 6	Sibata	Model LD-5R	Sibata Portable TSP Monitors	882147
3	AMS 8	Sibata	Model LD-5R	Sibata Portable TSP Monitors	761105
4	AMS 12	Sibata	Model LD-5R	Sibata Portable TSP Monitors	882148

2.3 Monitoring Methodology

2.3.1 24-hour TSP air quality monitoring by High Volume Air Samplers (HVS)

HVS Installation

The following guidelines were adopted during the installation of HVS:

- Sufficient support is provided to secure the samplers against gusty wind.
- No two samplers are placed less than 2 meters apart.
- The distance between the sampler and an obstacle, such as buildings, is at least twice the height that the obstacle protrudes above the sampler.
- A minimum of 2 meters of separation from walls, parapets and penthouses is required for rooftop samples.
- A minimum of 2 meters separation from any supporting structure, measured horizontally is required.
- No furnaces or incineration flues are nearby.

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- Airflow around the samplers is unrestricted.
- The samplers are more than 20 meters from the drip line.
- Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.

Filters Preparation

Fiberglass filters (provided by the HOKLAS accredited laboratory) shall be used (Note: these filters have a collection efficiency of larger than 99% for particles of 0.3 μm diameter). A HOKLAS accredited laboratory (ALS Technichem (HK) Pty Ltd./Fugro Technical Services Limited) is responsible for the preparation of 24-hr conditioned and pre-weighed filter papers for monitoring team.

All filters are equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature is around 25°C and not variable by more than ±3°C; the relative humidity (RH) is < 50% and not variable by more than ±5%. A convenient working RH is 40%.

Operating / Analytical Procedures

Operating / analytical procedures for the air quality monitoring are highlighted as follows:

- Prior to the commencement of the dust sampling, the flow rate of the HVS are properly set (between 0.6 m^3/min and 1.7 m^3/min) in accordance with the EM&A manual. The flow rate shall be indicated on the flow rate chart.
- The power supply shall be checked to ensure the samplers worked properly.
- On sampling, the samplers shall be operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air quality monitoring station.
- The filter holding frame is then removed by loosening the four nuts and carefully a weighted and conditioned filter is centered with the stamped number upwards, on a supporting screen.
- The filter shall be aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame is tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- The shelter lid shall be closed and secured with the aluminum strip.
- The timer is then programmed. Information shall be recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- After sampling, the filter shall be removed and sent to laboratory for weighing. The elapsed time is also recorded.
- Before weighing, all filters are equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) should be < 50% and not vary by more than ±5%. A convenient working RH is 40%. Weighing results are returned to MCL for further analysis of TSP concentrations collected by each filter.

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2.3.2 24-hour TSP air quality monitoring by portable Laser Particle Photometer Monitors

Operating / Analytical Procedures

The measuring procedures of the 24-hr dust meter are in accordance with the Manufacturer's instruction Manual as follows:

- Pull up the air sampling inlet cover
- Change the Mode 0 to BG once
- Push Start/Stop switch once
- Turn the knob to SENSI.ADJ and press it
- Push Start/Stop switch once
- Return the knob to the position MEASURE slowly
- Push the timer set switch to set measuring time
- Remove the cap and make a measurement

Calculation of the value of 24-hr TSP concentration is given by the average of 24 calculated 1-hr TSP concentration, where the calculated 1-hr TSP concentration is given by the product of the direct reading and the K-factor based on the correlation results between the direct reading meter and high volume sampler.

2.3.3 1-hour TSP air quality monitoring

Operating / Analytical Procedures

The measuring procedures of the 1-hr dust meter are in accordance with the Manufacturer's instruction Manual as follows:

- Pull up the air sampling inlet cover
- Change the Mode 0 to BG once
- Push Start/Stop switch once
- Turn the knob to SENSI.ADJ and press it
- Push Start/Stop switch once
- Return the knob to the position MEASURE slowly
- Push the timer set switch to set measuring time
- Remove the cap and make a measurement

2.4 Maintenance / Calibration

2.4.1 24-hour TSP air quality monitoring

The following maintenance / calibration are required for the HVS:

- The high volume motors and their accessories are properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking are made to ensure that the equipment and necessary power supply are in good working condition.
- All HVS shall be calibrated (five point calibration) using Calibration Kit upon installation and thereafter in every 3 months.
- A copy of the calibration certificates for the HVS and calibrator are provided in **Appendix D**.

2.4.2 1-hour TSP air quality monitoring

The portable TSP monitor should be calibrated at 1 year intervals

2.5 Monitoring Locations

2.5.1 The Impact Air Monitoring Stations to be monitored should be selected based on the prevailing wind direction and their proximity to the active construction works. According to the Hong Kong Observatory, wind direction in Feb 2020 was north, and north east. The most updated locations are summarized in **Table 2.3** and shown in **Figure 2a**.

Table 2.3 Location of Air Quality Monitoring Station

Monitoring Station	Location	Land uses
AMS 4A	Wai Wah Centre	Residential
AMS 6	Shatin Plaza	Residential
AMS 8	Lek Yuen Estate	Residential
AMS 12	Fung Wo Estate	Residential

2.6 Results and Observations

2.6.1 The schedule of air quality monitoring in reporting month is provided in **Appendix E**.

2.6.2 No Action / Limit Level exceedance was recorded for 24-hr and 1-hr TSP at AMS 4A, 6, 8 and 12 in the reporting month.

2.6.3 During the reporting month, major dust sources including trial pits excavation, pre-drilling, mini pile works, soldier pile, sheet pile works and Pre Bored H-pile works were observed in the site. Other factors such as road traffic along Tai Po Road may affect the monitoring results.

2.6.4 The weather conditions during the monitoring are provided in **Appendix K**.

2.6.5 The monitoring data of 24-hr and 1-hr TSP are summarized in **Table 2.4 and 2.5**. Detailed monitoring data are presented in **Appendix F**.

Table 2.4 Summary of 24-hr TSP Monitoring Results

Parameter	Monitoring Station	Average ($\mu g/m^3$)	Range ($\mu g/ m^3$)	Action Level ($\mu g/ m^3$)	Limit Level ($\mu g/ m^3$)
24-hr TSP in $\mu g/m^3$	AMS 4A	85	77 - 95	200	260
	AMS 6	80	65 - 93	165	
	AMS 8	82	59 - 91	161	
	AMS 12	78	59 - 90	168	

Table 2.5 Summary of 1-hr TSP Monitoring Results

Parameter	Monitoring Station	Average ($\mu g/m^3$)	Range ($\mu g/ m^3$)	Action Level ($\mu g/ m^3$)	Limit Level ($\mu g/ m^3$)
1-hr TSP in $\mu g/m^3$	AMS 4A	93	82 - 108	348	500
	AMS 6	86	63 - 102	347	
	AMS 8	87	56 - 108	336	
	AMS 12	81	51 - 101	296	

2.6.6 The Event and Action Plan for air quality is given in **Appendix H**.

3. NOISE

3.1 Monitoring Requirement

3.1.1 In accordance with the updated EM&A Manuals, L_{eq} (30min) monitoring is conducted for at least once a week during the construction phase between 0700 and 1900 on normal weekdays at the designated monitoring locations.

3.2 Monitoring Equipment

3.2.1 The sound level meter used in noise monitoring will comply with the International Electrotechnical Commission Publication 651:1979 (Type 1) and 804:1985 (Type 1) specifications as referred to in the Technical Memorandum issued under the Noise Control Ordinance (NCO).

3.2.2 Sound level calibrator will be used for the on-site calibration of the meter. This calibrator complies with the IEC Publication 942 (1988) Class 1 and ANSI S1.40 - 1984. Noise measurements were only accepted to be valid if the calibration levels from before and after the measurement agree to within 1.0dB.

3.2.3 Measurements shall be recorded to the nearest 0.1dB. Sound level meters are programmed to measure A-weighted equivalent continuous sound pressure level at 30-minute intervals between 0700 and 1900 on normal weekdays at least once a week when construction activities are underway.

Table 3.1 summarizes the noise monitoring equipment model being used for this project.

Table 3.1 Noise Monitoring Equipment

Item	Brand	Model	Equipment	Serial Number
1	Casella	CEL-63X Series	Integrating Sound Level Meter	3756127
2	Casella	CEL-63X Series	Integrating Sound Level Meter	2451082
3	Casella	CEL-63X Series	Integrating Sound Level Meter	2451048
4	Casella	CEL-63X Series	Integrating Sound Level Meter	1488306
5	Casella	CEL-63X Series	Integrating Sound Level Meter	1488304
6	Casella	CEL-63X Series	Integrating Sound Level Meter	1488303
7	Casella	CEL-120 Series	Calibrator	1677126
8	Casella	CEL-120 Series	Calibrator	2383707
9	Casella	CEL-120 Series	Calibrator	2383852
10	Casella	CEL-120 Series	Calibrator	2383982
11	Casella	CEL-120 Series	Calibrator	5230758

3.3 Monitoring Parameters and Frequency

Table 3.2 presents the noise monitoring parameters and frequencies.

Table 3.2 Monitoring Parameters and Frequencies of Noise Monitoring

Parameter	Frequency and Period
L_{Aeq} **(30min)** L_{10} and L_{90} will be recorded for reference	At each station at 0700-1900 hours on normal weekdays at a frequency of once a week

3.4 Monitoring Methodology

3.4.1 The monitoring procedures are as follows:

- The monitoring station is set at a point 1m from the exterior of the sensitive receivers building façade and set at a position 1.2m above the ground.
- The battery condition is checked to ensure good functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time are set as follows:
  - frequency weighting : A
  - time weighting : Fast
  - measurement time : Weekly 30 minutes between 0700-1900 on normal weekdays
- Prior to and after noise measurement, the meter shall be calibrated using the calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement is more than 1.0 dB, the measurement will be considered invalid and repeat of noise measurement is required after re-calibration or repair of the equipment.
- Noise monitoring should be cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.
- Noise measurement should be paused during periods of high intrusive noise if possible and observation shall be recorded when intrusive noise is not avoided.
- At the end of the monitoring period, the Leq, L10 and L90 are recorded. In addition, site conditions and noise sources are recorded on a standard record sheet.

3.5 Maintenance / Calibration

3.5.1 Maintenance and Calibration procedures are as follows:

- The microphone head of the sound level meter and calibrator should be cleaned with a soft cloth at quarterly intervals.
- The sound level meter and calibrator should be calibrated annually by a HOKLAS laboratory.
- Relevant calibration certificates are provided in **Appendix D**.

3.6 Monitoring Locations

3.6.1 According to the updated EM&A Manual, 25 noise monitoring locations were included during the noise monitoring. The monitoring locations are summarized in **Table 3.3** and shown in **Figure 2**.

Table 3.3 Location of Noise Monitoring Station

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

3.7 Results and Observations

3.7.1 The schedule of noise monitoring in reporting month is provided in **Appendix E**.

3.7.2 The exam schedules of the schools and Arrangements on Deferral of Class Resumption for All Schools are provided in **Appendix E**.

3.7.3 During the monitoring month, road traffic along Tai Po Road was observed which may affect the monitoring results.

3.7.4 No raining and wind with speed over 5 m/s was observed during day time noise monitoring according to the onsite observation. The weather conditions during the monitoring month are provided in **Appendix K**.

3.7.5 The day time noise monitoring data are summarized in **Table 3.4**. Detailed monitoring data are presented in **Appendix G**.

Table 3.4 Summary of Day Time Noise Impact Monitoring Results

Monitoring Station	Leq (30min) Range, dB(A) Construction Noise Level	Leq (30min) Limit Level, dB(A)
NMS1	64.4 – 68.6	75
NMS2	57.6 – 64.1	75
NMS3	65.5 – 68.9	75
NMS4	65.8 – 70.6	75
NMS5A	66.7 – 72.6	75
NMS6A	65.7 – 73.6	75
NMS7	70.2 – 73.1	75
NMS8	68.4 – 71.1	75
NMS9	66.5 – 69.5	75
NMS10A	64.0 – 66.8	70*
NMS11	64.8 – 67.4	75
NMS12	63.5 – 65.3	70*
NMS13	67.1 – 68.1	75
NMS14	65.7 – 67.4	75
NMS15	64.8 – 67.1	75
NMS16	65.8 – 67.4	75
NMS17	63.9 – 65.5	70*
NMS18	64.1 – 66.7	75
NMS19	67.1 – 68.2	75
NMS20	66.2 – 67.9	75
NMS23	66.9 – 68.2	75
NMS24	67.3 – 69.8	75
NMS25A	66.9 – 70.5	75
NMS26	68.7 – 74.1	75
NMS27	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 **Appendix E** for reference.

3.7.6 Regular night time noise monitoring were conducted on 6, 13, 21 and 27 Feb 2020 and the results are summarized in **Table 3.5**. Detailed monitoring data are presented in **Appendix G.**

Table 3.5 Summary of Night Time Noise Impact Monitoring Results

Monitoring Station	$L_{eq\ (15min)}$ Range, dB(A) Construction Noise Level	$L_{eq\ (15min)}$ Limit Level, dB(A)
NMS1	56.8 - 60.1	55
NMS2	45.7 - 48.0	55
NMS3	59.5 - 61.8	55
NMS4	56.5 - 57.7	55
NMS5A	58.3 - 67.7	55
NMS6A	67.6 - 69.0	55
NMS7	58.6 - 60.3 [2]	55
NMS8	57.7 - 59.2	55
NMS9	55.1 - 56.5 [2]	55
NMS11	52.9 - 54.8	55
NMS13	56.4 - 58.0 [2]	55
NMS14	54.0 - 55.4 [2]	55
NMS15	52.6 - 54.0	55
NMS16	54.3 - 57.3	55
NMS18	53.3 - 57.0	55
NMS19	58.0 - 61.6	55
NMS20	54.6 - 56.7	55
NMS23	54.5 - 57.9	55
NMS24	55.1 - 57.6	55
NMS25A	56.1 - 59.5	55
NMS26	57.2 - 59.6	55

Note: 1) $L_{eq\ (15min)}$ 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
Calculated CNL = Measured Noise Level during operation – Baseline
3) Detailed analysis of each monitoring location is provided in Appendix G.

3.7.7 Day time construction noise monitoring was carried out in the reporting month, no Action / Limit Level exceedance was recorded during the period. For night time construction noise monitoring, no exceedance case was recorded between 2300 and 0700 of the next day during the reporting month.

3.7.8 The Action and Limit Levels for noise impact monitoring have been set and are presented in **Appendix C**.

3.7.9 The Event and Action Plan for noise is given in **Appendix H**.

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4. LANDSCAPE AND VISUAL

4.1 Audit Requirements

4.1.1 In accordance with the EM&A Manual, the landscape and visual mitigation measures during the construction phase are primarily due to those associated temporary works for the construction of retrofitting noise barriers/enclosures. To ensure compliance with the intended aims of the measures, weekly site inspections are undertaken throughout the construction period.

4.1.2 According to the updated EM&A Manual, measures to mitigate landscape and visual impacts during construction should be checked to ensure compliance with the intended aims of the measures. The progress of the engineering works shall be regularly reviewed onsite to identify the earliest practical opportunities for the landscape works to be undertaken. The ET shall report on the Contractor's compliance on a weekly basis.

4.2 Results and Observations

4.2.1 Site audits were carried out to monitor and audit the implementation of landscape and visual mitigation measures. The summary of the site audits are given in **Appendix M.**

4.2.2 No non-compliance of the landscape and visual impact was recorded in the reporting month.

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5. WASTE MANAGEMENT

5.1 Audit Requirements

5.1.1 The effective management of waste arising during the construction phase will be monitored through the site audit programme. Regular audits and site inspections should be carried out to ensure that the recommended good site practices and other mitigation measures are implemented by the Contractor.

5.1.2 The audit should look at all aspects of on-site waste management practices including the waste generation, storage, recycling, transport and disposal. The aims of waste audit are:

- to ensure the waste arising from the works are handled, stored, collected, transferred and disposed of in an environmentally acceptable manner;
- verify the implementation status and evaluate the effectiveness of the mitigation measures; and
- to encourage the reuse and recycling of material.

5.2 Results and Observations

5.2.1 C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.

5.2.2 The amount of wastes generated by the site activities in the reporting month is shown in **Appendix I**.

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6. SITE INSPECTION

6.1 Site Inspection

6.1.1 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 J**.

6.1.2 In the reporting month, 4 site inspections were carried out on 6, 13, 20, and 27 Feb 2020. The site inspection held on 6 Feb and 27 Feb were joint inspection with the IEC, ER, the Contractor and the ET during the reporting period.

6.1.3 All the follow-up actions requested by ET and IEC during the site inspections were completed as reported by the Contractor. No outstanding issues were reported during the reporting month. Details of observations recorded during the site inspections are summarized in **Appendix M**.

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7. ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

7.1 Environmental Exceedance

7.1.1 24-hour and 1-hour TSP impact monitoring were carried out in the reporting month, no Action / Limit Level exceedance was recorded during the period.

7.1.2 Day time construction noise monitoring was carried out in the reporting month, no Action / Limit Level exceedance was recorded during the period. Regular night time noise monitoring was carried out on 6, 13, 21 and 27 Feb 2020 respectively and no exceedance cases were recorded between 2300 and 0700 of the next day during the reporting month.

7.2 Complaints, Notification of Summons and Prosecution

7.2.1 One complaint case was received on 29 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. The complaint case is still under ET's investigation.

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

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8. IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

8.1 Implementation Status

8.1.1 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Review Report, the EP and the updated EM&A Manuals. The implementation status of the mitigation measures during the reporting month is summarized in **Appendix J**.

8.1.2 According to the environmental audit performed in the reporting month, the following recommendations were made:

Air Quality Impact
- Construction material (cement) shall be covered and stored well. (Zone 3)

Construction Noise Impact
- No specific observation was identified in the reporting month.

Water Quality Impact
- 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
- 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 observation was identified in the reporting month.

Landscape and Visual Impact
- No specific observation was identified in the reporting month.

General Condition
- No specific observation was identified in the reporting month.

Permit / Licenses
- No new permit or license was issued in the reporting month.

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9. FUTURE KEY ISSUES

9.1 Construction Programme for the Next Month

During the coming reporting month, the principal work activities within the site include:

- Trial Pits Excavation in Zone 1 to 5.
- Pre-drill works in Zone 1 to 5.
- Tree felling and pruning in Zone 1, 2, 3 & 5.
- Remedial works for road surface in Zone 1 & 2.
- Construct temporary road & site access in Zone 1 & 5.
- Mini pile Works in Zone 1, 2 & 3.
- Construction / diversion of underground utilities in Zone 3, 4 & 5.
- Soldier pile works & Pre bored H-pile works in Zone 3.
- Construction of Haul Road, Cycle Track Diversion, Temporary Road and Footpath in Zone 4 & 5.
- Construction of footbridge NF40 staircase structure works & Foundation works of footbridge NF66 in Zone 4.
- Noise Barrier Foundation Works and Soil Replacement on Slope in Zone 5

9.2 Key Issues for the Coming Month

9.2.1 Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, construction noise, water quality, waste management and landscape and visual impact.

9.3 Monitoring Schedules for the Next Month

9.3.1 The tentative schedules for environmental monitoring in the coming month are provided in **Appendix E**.

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10. CONCLUSIONS

10.1.1 24-hour and 1-hour TSP impact monitoring were carried out in the reporting month, no Action / Limit Level exceedance was recorded during the period.

10.1.2 Day time construction noise monitoring was carried out in the reporting month, no Action / Limit Level exceedance was recorded during the period. Regular night time noise monitoring was carried out on 6, 13, 21 and 27 Feb 2020 respectively and no exceedance cases were recorded between 2300 and 0700 of the next day during the reporting month.

10.1.3 Four environmental site inspections were carried out in the reporting month. Recommendations on mitigation measures on air quality, chemical and waste management and landscape and visual impact were given to the Contractor for remediating the deficiencies identified during the site inspections.

10.1.4 One complaint case was received on 29 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. The complaint case is still under ET's investigation.

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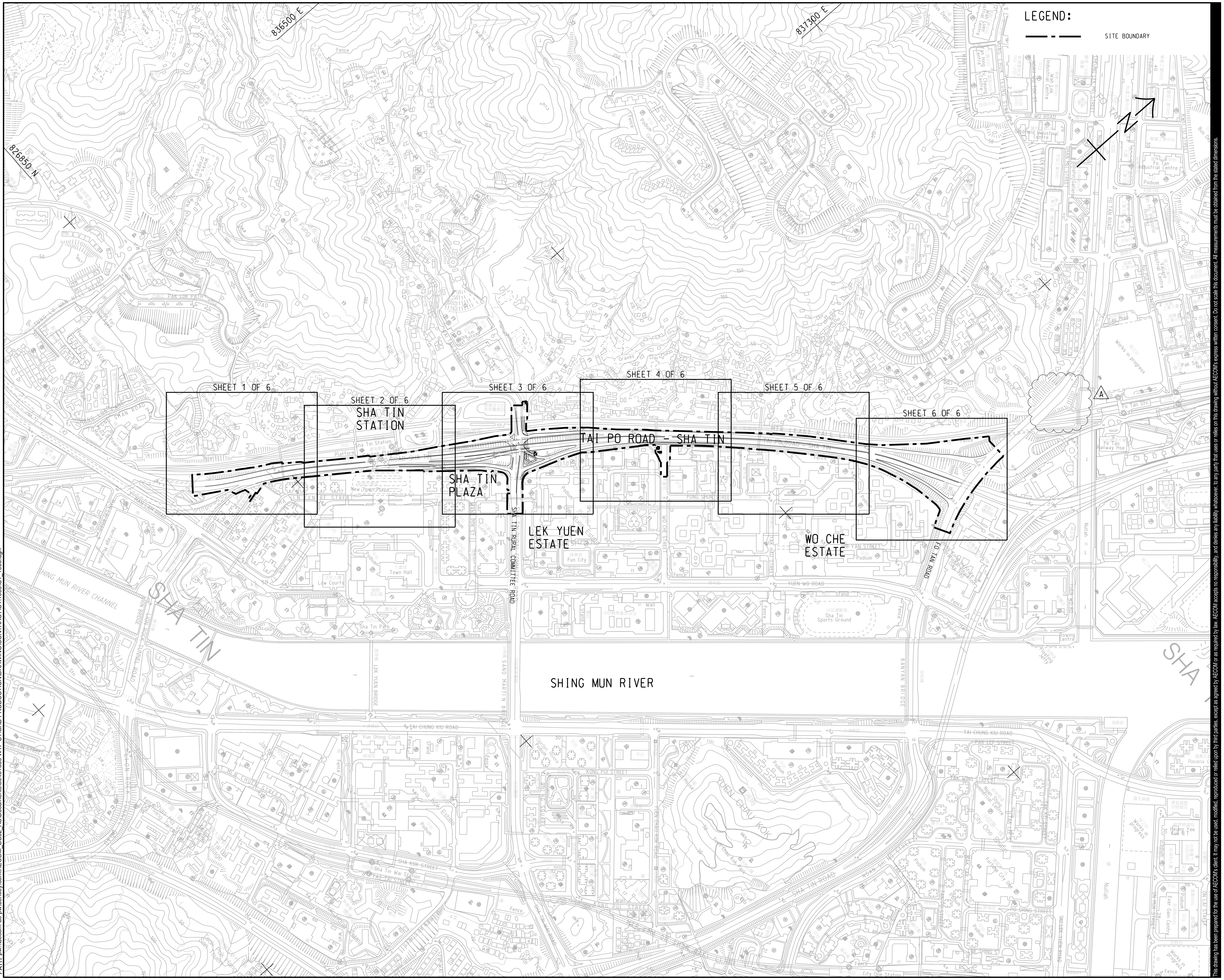
Figure 1

Project General Layout



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PROJECT 項目

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

CLIENT 業主

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

CONSULTANT 工程顧問公司

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A	FEB. 18	TENDER ADDENDUM NO.2	BBC
-	JAN. 18	TENDER DRAWING	BCC

STATUS 階段

SCALE 比例 A1 1 : 4000

DIMENSION UNIT 尺寸單位 METRES

KEY PLAN 索引圖 **FIGURE 1.1a**

CONTRACT NO. 合約編號

NE/2017/05

SHEET TITLE 圖紙名稱

KEY PLAN
FIGURE 1.1a

SHEET NUMBER 圖紙編號

60481656/C1/1000A

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Project Management Initials: | Designer: FMSC | Checked: BCC | Approved: CWN | ISO A1 594mm x 841mm

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:

- SITE BOUNDARY
- N1 NOISE BARRIER WITH VARIOUS HIGH (10.7m TO 8.5m) WITH 2m CANTILEVER (30°) AT BOTH SIDES
- N2 1.2m HIGH NOISE BARRIER ON PARAPET (VERTICAL)
- N3 5m HIGH NOISE BARRIER (VERTICAL)
- N4 5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°)
- N5 5.5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°)
- N6 6m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER
- R1 RETROFITTING 6m HIGH NOISE BARRIER (VERTICAL)
- R2 RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL) WITH 3m CANTILEVER (30°)
- R4 RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL)
- RETAINING WALL
- R5 RETROFITTING 5m HIGH NOISE BARRIER (VERTICAL) WITH 2m CANTILEVER (30°)
- R6 RETROFITTING NOISE BARRIER (VERTICAL) WITH VARIOUS HEIGHT (5m TO 2m)
- EXISTING BOX CULVERT
- NOISE SEMI-ENCLOSURE WITH 2m CANTILEVER (30°)
- CYCLE TRACK
- FOOTPATH
- 6.0m HEIGHT OF NOISE SEMI-ENCLOSURE
- OLD AND VALUABLE TREE (OVT)
- LIFT

837000 E

826650 N

SEE DRAWING NO. 60481656/C1/1002

CUT LINE A-A

EXISTING FOOTBRIDGE, NF71A

RSE1

RSE2

FIGURE 1.1a

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PROJECT 項目

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

CLIENT 業主

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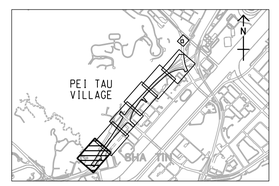
STATUS 階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 40000



CONTRACT NO. 合約編號
60481656 NE/2017/05

SHEET TITLE 圖紙名稱
GENERAL LAYOUT PLAN
FIGURE 1.1 b

SHEET 1 OF 6

SHEET NUMBER 圖紙編號
60481656/C1/1001

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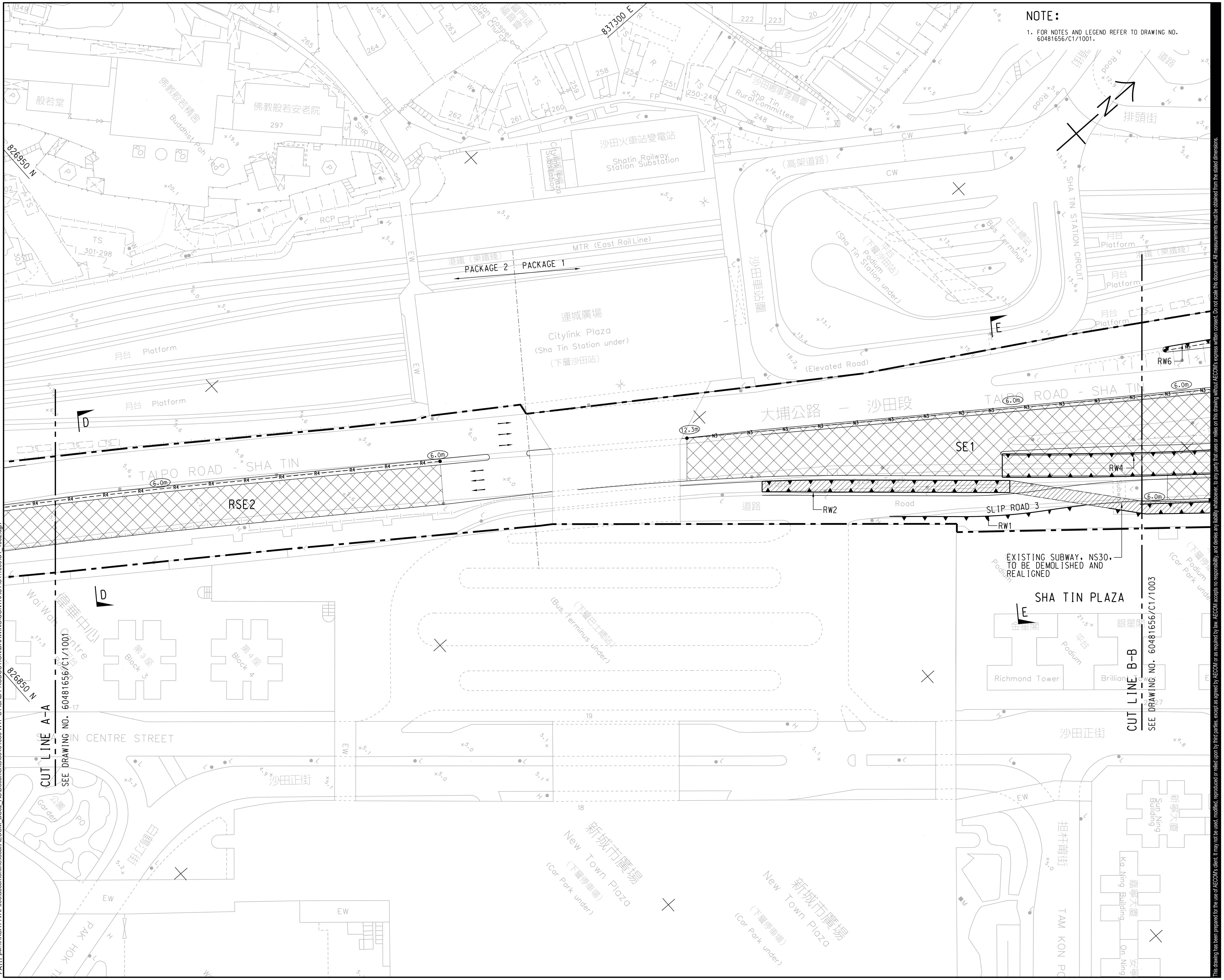

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PROJECT 項目

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

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SCALE 比例 A1 1 : 500

DIMENSION UNIT 尺寸單位 METRES

KEY PLAN 索引圖 A1 1 : 40000

CONTRACT NO. 合約編號 NE/2017/05

SHEET TITLE 圖紙名稱

GENERAL LAYOUT PLAN

FIGURE 1.1b

SHEET 2 OF 6

SHEET NUMBER 圖紙編號

60481656/C1/1002

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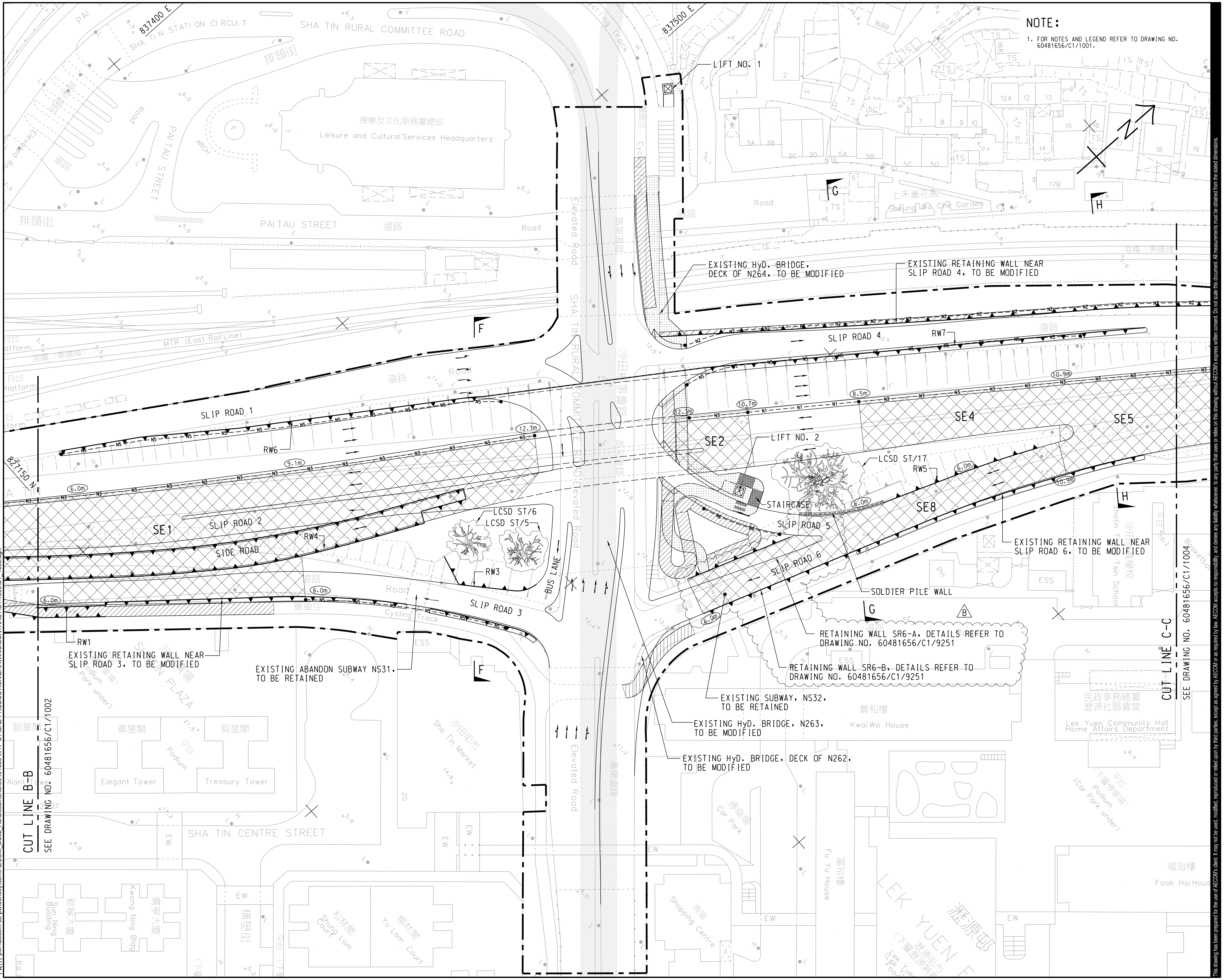

NOTE:
1. FOR NOTES AND LEGEND REFER TO DRAWING NO. 60481656/C1/1001.
837400 E
837500 E
827150 N
SHA TIN RURAL COMMITTEE ROAD
SHA TIN STATION CIRCUIT
PAI TAU STREET
康樂及文化事務署總部
Leisure and Cultural Services Headquarters
LIFT NO. 1
LIFT NO. 2
EXISTING HyD. BRIDGE, DECK OF N264, TO BE MODIFIED
EXISTING RETAINING WALL NEAR SLIP ROAD 4, TO BE MODIFIED
EXISTING RETAINING WALL NEAR SLIP ROAD 6, TO BE MODIFIED
EXISTING RETAINING WALL NEAR SLIP ROAD 3, TO BE MODIFIED
EXISTING ABANDON SUBWAY NS31, TO BE RETAINED
EXISTING SUBWAY, NS32, TO BE RETAINED
EXISTING HyD. BRIDGE, N263, TO BE MODIFIED
EXISTING HyD. BRIDGE, DECK OF N262, TO BE MODIFIED
RETAINING WALL SR6-A, DETAILS REFER TO DRAWING NO. 60481656/C1/9251
RETAINING WALL SR6-B, DETAILS REFER TO DRAWING NO. 60481656/C1/9251
SOLDIER PILE WALL
STAIRCASE
SLIP ROAD 1
SLIP ROAD 2
SLIP ROAD 3
SLIP ROAD 4
SLIP ROAD 5
SLIP ROAD 6
SIDE ROAD
BUS LANE
SE1
SE2
SE4
SE5
SE8
RW1
RW3
RW4
RW5
RW6
RW7
LCSD ST/5
LCSD ST/6
LCSD ST/17
MTR (East Rail Line)
Sheung Wo Che Garden
SHA TIN CENTRE STREET
Elegant Tower
Treasury Tower
Kwai Wo House
Lek Yuen Community Hall
Home Affairs Department
Fu Yu House
Fook Hoi House
Sha Tin Market
Shopping Centre
CUT LINE B-B
SEE DRAWING NO. 60481656/C1/1002
CUT LINE C-C
SEE DRAWING NO. 60481656/C1/1004

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PROJECT

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

CLIENT

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SCALE A1 1 : 500

DIMENSION UNIT METRES

KEY PLAN A1 1 : 40000

CONTRACT NO. NE/2017/05

SHEET TITLE

GENERAL LAYOUT PLAN
FIGURE 1.1 b

SHEET 3 OF 6

SHEET NUMBER 60481656/C1/1003B

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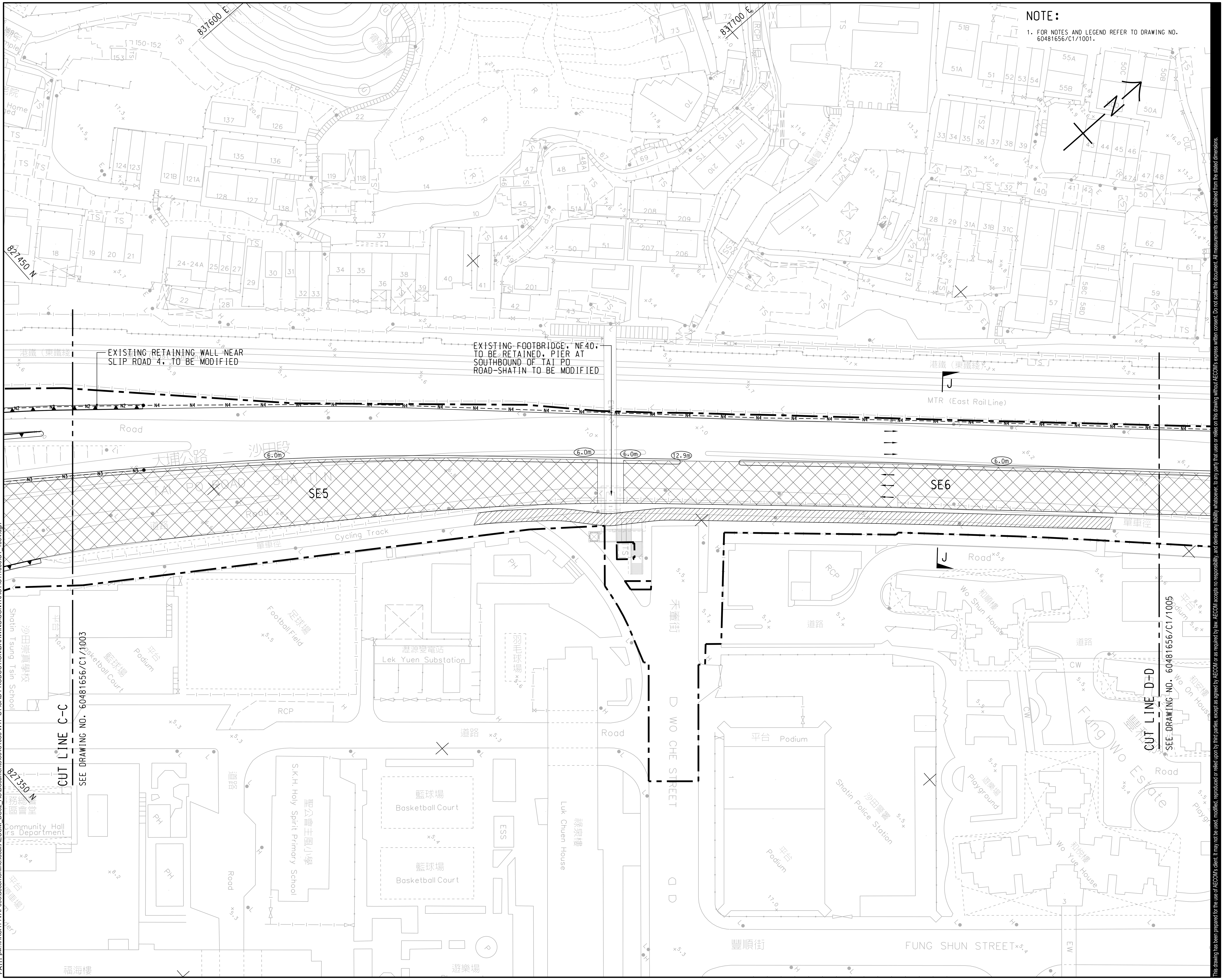
Plot File by: WUMT 2018/2/27



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PROJECT 項目

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

CLIENT 業主

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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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SHEET TITLE 圖紙名稱

GENERAL LAYOUT PLAN

FIGURE 1.1b

SHEET 4 OF 6

SHEET NUMBER 圖紙編號

60481656/C1/1004

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

Plot File by: AS\WUMT 15/01/2018 11:15:19

NOTE:

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

837900 E

827650 N

827550 N

TAI PO ROAD - SHA TIN

SE6

SE3

6.0m

12.9m

EXISTING FOOTBRIDGE, NF66, TO BE RETAINED. PIER AT NORTHBOUND OF TAI PO ROAD-SHATIN TO BE MODIFIED

CUT LINE D-D

SEE DRAWING NO. 60481656/C1/1004

CUT LINE E-E

SEE DRAWING NO. 60481656/C1/1006

Cycling Track

單車徑

Basketball Court

籃球場

King Wo House

景和樓

Shatin Pui Ying College.

沙田培英中學

Kiangsu-Chekiang College (Shatin)

沙田蘇浙公學

Bus Terminus

巴士總站

FUNG SHUN STREET

豐順街

Hau Wo House

厚和樓

Tai Wo House

泰和樓

FUNG WO LANE

豐禾里

Wo On House

和安樓

Wo Che Estate

禾輋邨

Playground

遊樂場

Car Park

停車場

Ramp

斜路

ESS

RCP

TS

FP

K

FIGURE 1.1b

Plot File by: XIEJB
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16/1/2018

ISO A1 594mm x 841mm
CNY
Approved: CWN
Checked: BCC
Designer: FMSC
Project Management Initials:

AECOM

PROJECT
項目

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

CLIENT
業主

土木工程拓展署
Civil Engineering and Development Department

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

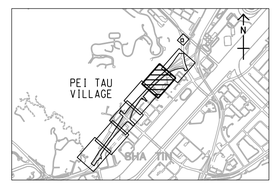
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 復核
-	JAN. 18	TENDER DRAWING	BCC

STATUS
階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 40000



CONTRACT NO.
合約編號

NE/2017/05

SHEET TITLE
圖紙名稱

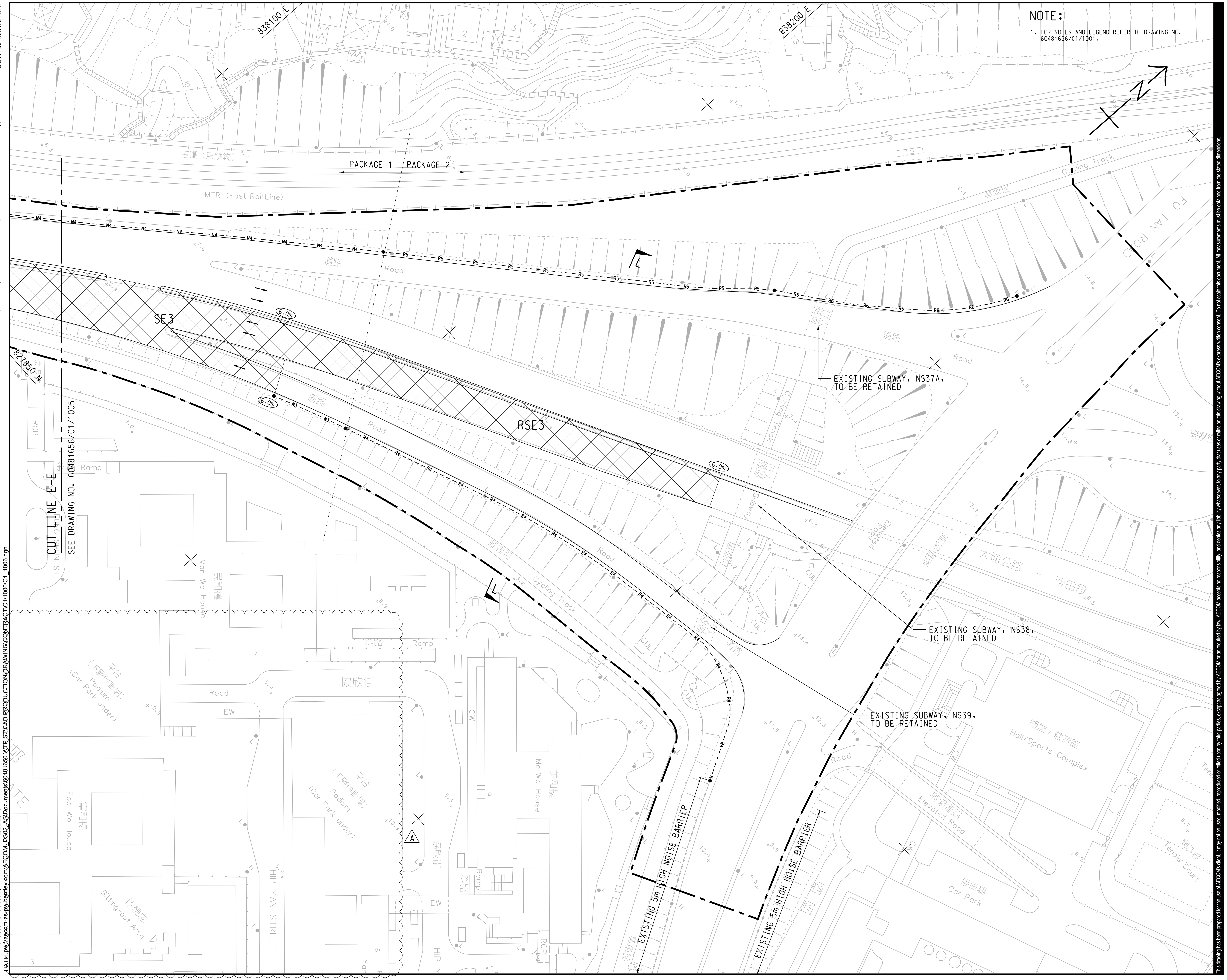
GENERAL LAYOUT PLAN

FIGURE 1.1b

SHEET 5 OF 6

SHEET NUMBER
圖紙編號

60481656/C1/1005



AECOM

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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ISSUE/REVISION 修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
A	FEB. 18	TENDER ADDENDUM NO.2	BCC
-	JAN. 18	TENDER DRAWING	BCC

STATUS 階段

SCALE 比例: A1 1 : 500

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖 A1 1 : 40000

CONTRACT NO. 合約編號: NE/2017/05

SHEET TITLE 圖紙名稱

GENERAL LAYOUT PLAN

FIGURE 1.1b

SHEET 6 OF 6

SHEET NUMBER 圖紙編號: 60481656/C1/1006A

ISO A1 594mm x 841mm
Designer: FMSC Checked: BCC Approved: CWN
Project Management Initials:
2/22/2018
Plot File by: aecompw06ics01$
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FUGRO TECHNICAL SERVICES LIMITED

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

Figure 2a

Air Monitoring Locations

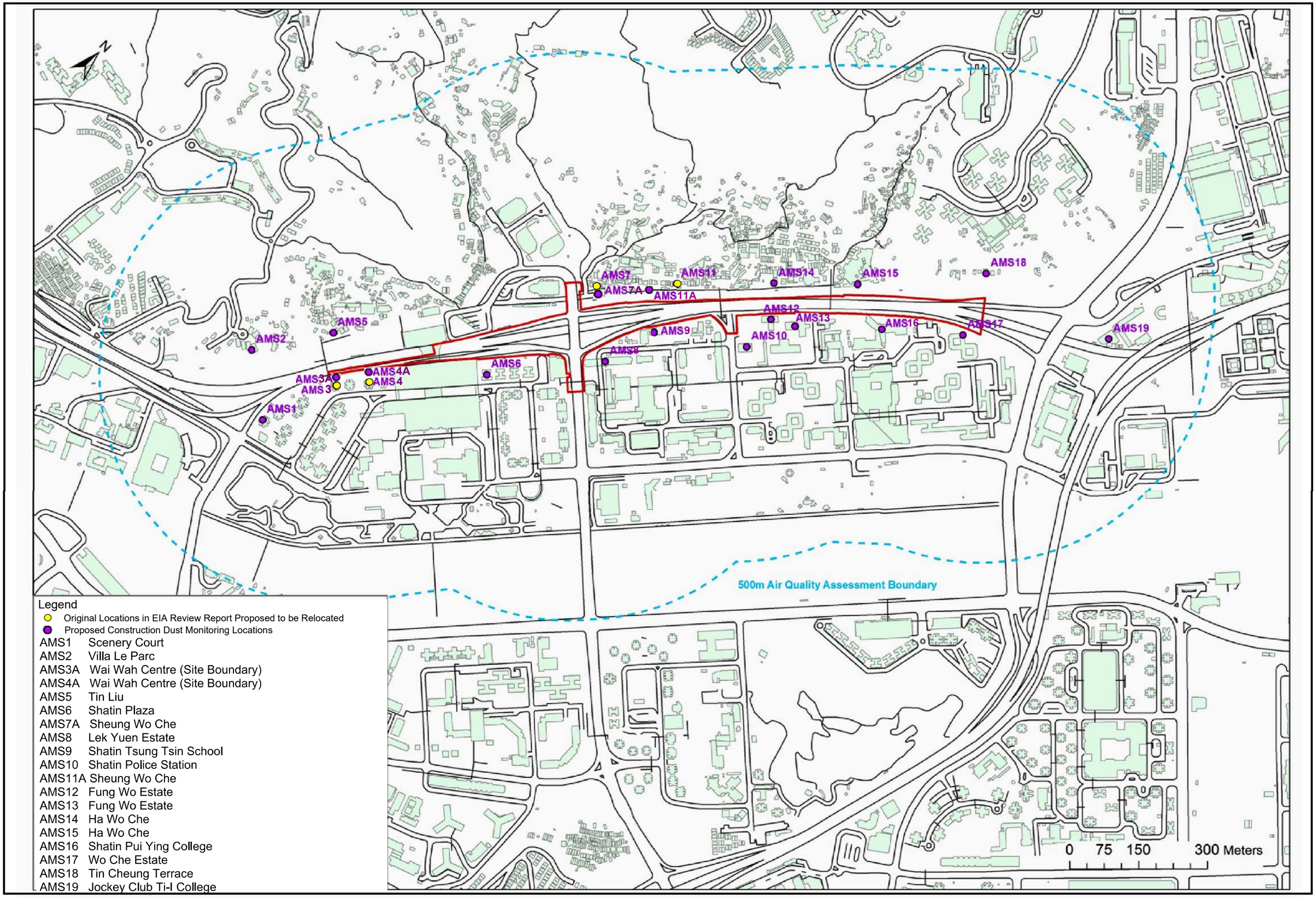

Figure 2a Air Quality Monitoring Locations

FUGRO TECHNICAL SERVICES LIMITED

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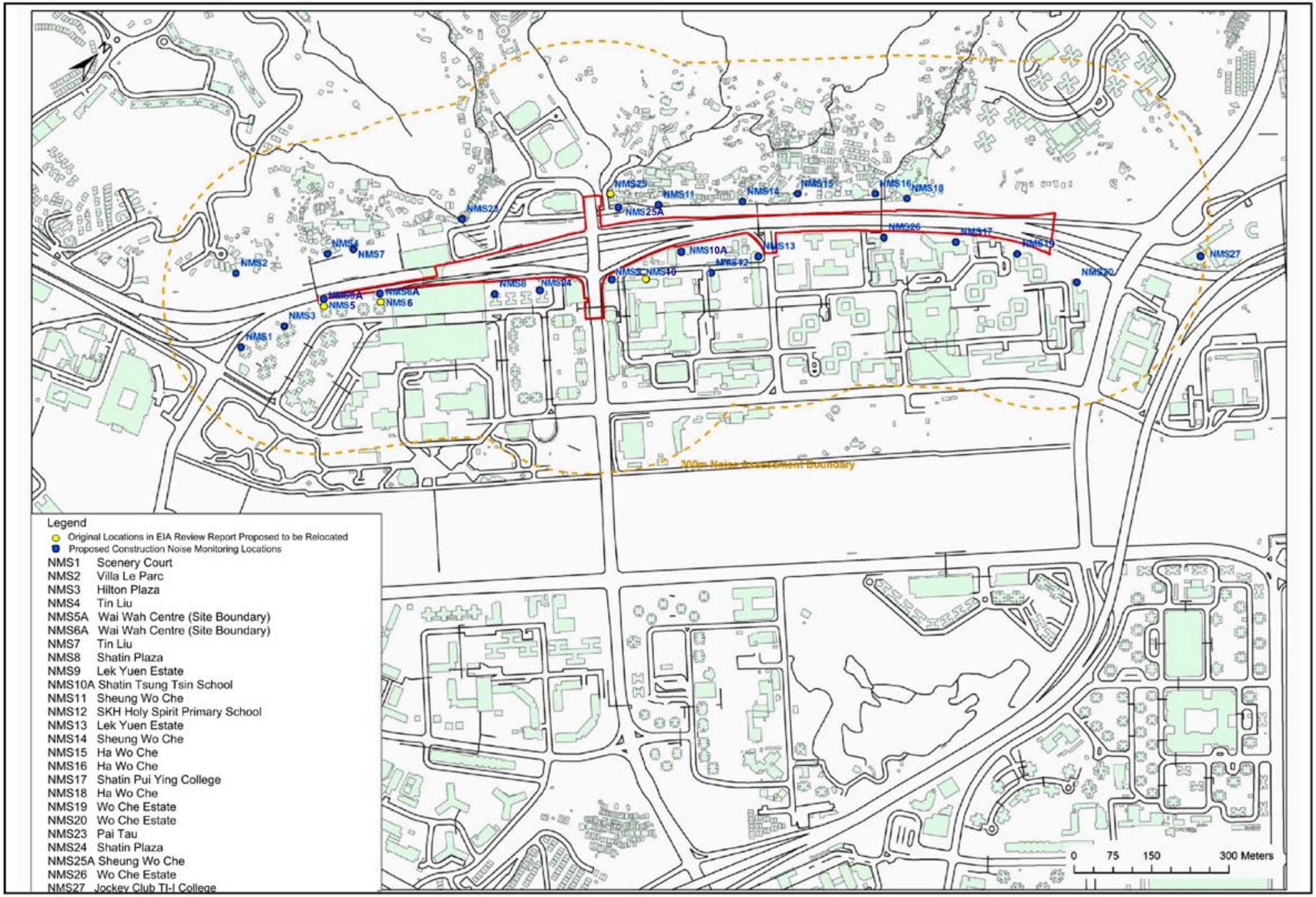
E-mail : matlab@fugro.com
Website : www.fugro.com

Figure 2b

Noise Monitoring Locations



Legend

- Original Locations in EIA Review Report Proposed to be Relocated
- Proposed Construction Noise Monitoring Locations

NMS1 Scenery Court
NMS2 Villa Le Parc
NMS3 Hilton Plaza
NMS4 Tin Liu
NMS5A Wai Wah Centre (Site Boundary)
NMS6A Wai Wah Centre (Site Boundary)
NMS7 Tin Liu
NMS8 Shatin Plaza
NMS9 Lek Yuen Estate
NMS10A Shatin Tsung Tsin School
NMS11 Sheung Wo Che
NMS12 SKH Holy Spirit Primary School
NMS13 Lek Yuen Estate
NMS14 Sheung Wo Che
NMS15 Ha Wo Che
NMS16 Ha Wo Che
NMS17 Shatin Pui Ying College
NMS18 Ha Wo Che
NMS19 Wo Che Estate
NMS20 Wo Che Estate
NMS23 Pai Tau
NMS24 Shatin Plaza
NMS25A Sheung Wo Che
NMS26 Wo Che Estate
NMS27 Jockey Club TI-I College

Figure 2b Noise Monitoring Locations

FUGRO TECHNICAL SERVICES LIMITED

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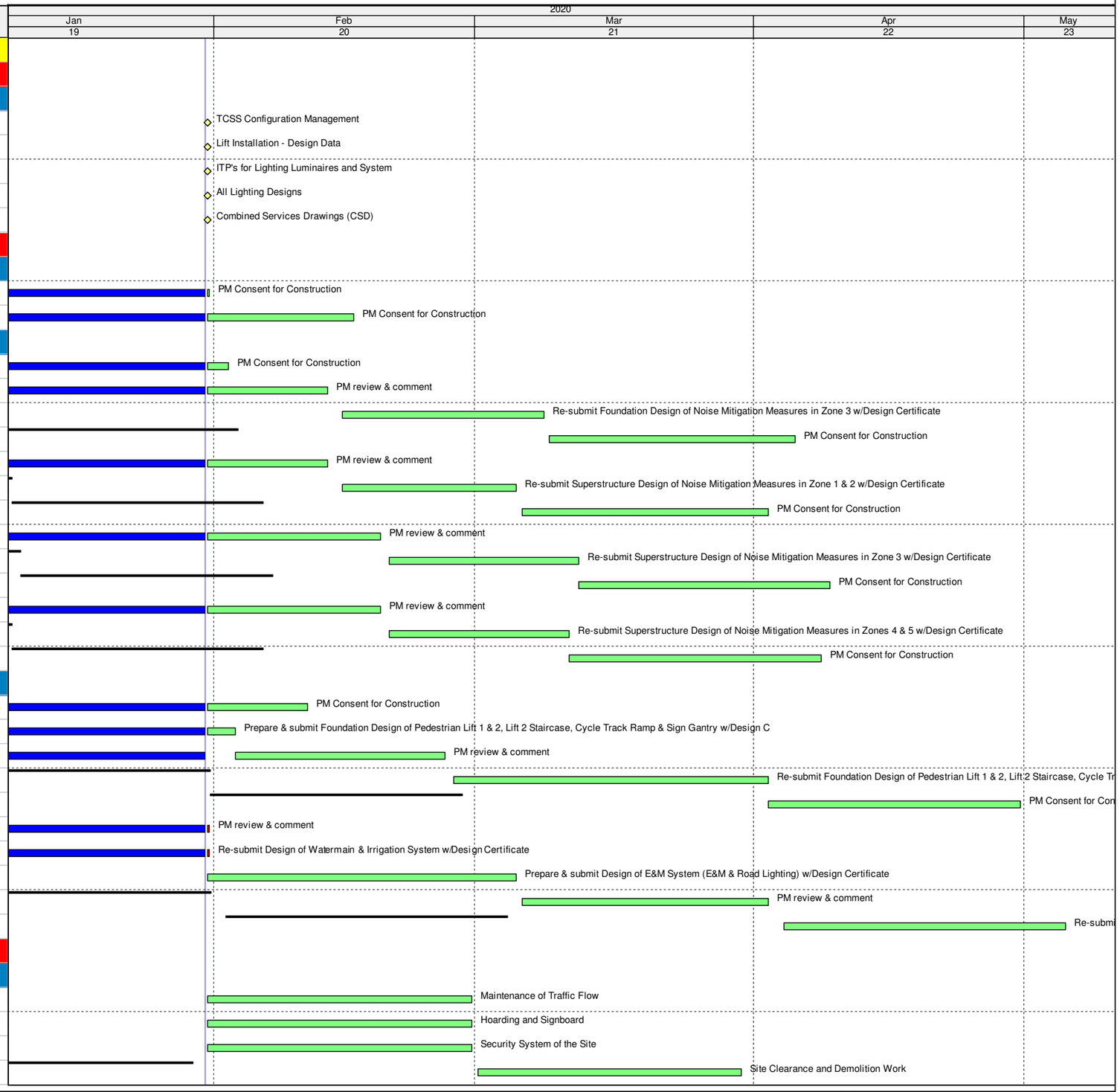
Appendix A

Construction Programme

中國中鐵–中鐵一局–振華工程聯營
CHINA RAILWAY - CHINA RAILWAY FIRST GROUP - ZHEN HUA ENGINEERING JOINT VENTURE

Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP8 Start	AP8 Finish
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	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	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	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

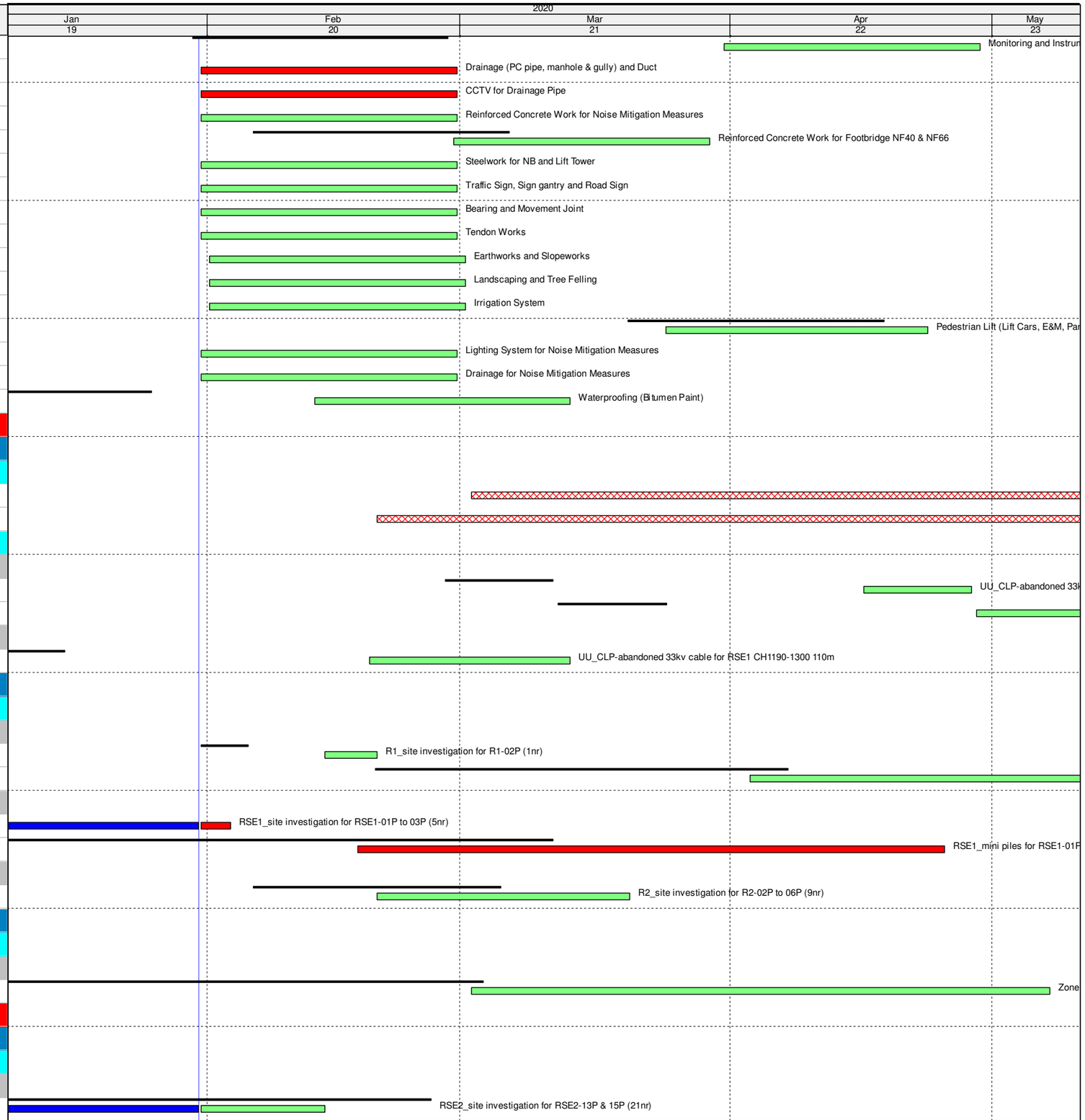


Remaining Level of Effort
Actual Level of Effort
Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Baseline Milestone

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

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
SPS1160	Monitoring and Instrumentation	30	30	31-Mar-20	29-Apr-20	30-Jan-20	28-Feb-20
SPS1210	Drainage (PC pipe, manhole & gully) and Duct	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19
SPS1220	CCTV for Drainage Pipe	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19
SPS1250	Reinforced Concrete Work for Noise Mitigation Measures	30	30	31-Jan-20	29-Feb-20	01-Dec-19	30-Dec-19
SPS1280	Reinforced Concrete Work for Footbridge NF40 & NF66	30	30	29-Feb-20	29-Mar-20	06-Feb-20	06-Mar-20
SPS1290	Steelwork for NB and Lift Tower	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19
SPS1300	Traffic Sign, Sign gantry and Road Sign	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19
SPS1310	Bearing and Movement Joint	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19
SPS1320	Tendon Works	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19
SPS1340	Earthworks and Slopeworks	30	30	01-Feb-20	01-Mar-20	30-Nov-19	29-Dec-19
SPS1350	Landscaping and Tree Felling	30	30	01-Feb-20	01-Mar-20	30-Nov-19	29-Dec-19
SPS1360	Irrigation System	30	30	01-Feb-20	01-Mar-20	30-Nov-19	29-Dec-19
SPS1410	Pedestrian Lift (Lift Cars, E&M, Panel, Lourve & Signature)	30	30	24-Mar-20	23-Apr-20	20-Mar-20	18-Apr-20
SPS1420	Lighting System for Noise Mitigation Measures	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19
SPS1440	Drainage for Noise Mitigation Measures	30	30	31-Jan-20	29-Feb-20	30-Nov-19	29-Dec-19
SPS1460	Waterproofing (Bitumen Paint)	30	30	13-Feb-20	13-Mar-20	27-Dec-19	25-Jan-20
WORK BETWEEN SHING MUN TUNNELS ROAD AND FOOT BRIDGE NF71A (ZONE							
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
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
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
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
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
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
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
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



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

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

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
Z2_1010	RSE2_mini piles for RSE2-01P, 03P to 15P (57nr raking, 59nr ver)	195	185	17-Jan-20 A	07-Dec-20	12-Mar-20	06-Nov-20
WORK BETWEEN CITYLINE PLAZA AND FOOTBRIDGE NF40 (ZONE 3)							
PRELIMINARIES WORKS							
SUMMARY PROGRAMME							
Z3SU5050	Zone 3b (near SR6) Stage 1 SE5, SE8, SR6 foundation and N262 bridge	323	323	31-Jan-20	02-Mar-21	30-Nov-19	11-Feb-21
UTILITIES DIVERSION							
SOUTHBOUND							
Z3_2900	UU_CLP-abandoned 33kv cable for SE5 & SE6 CH2090-2175 85m	17	17	05-Feb-20	25-Feb-20	05-Dec-19	27-Dec-19
NOISE BARRIER AND SEMI-ENCLOSURE							
PILE FOUNDATION WORKS							
SOUTHBOUND							
Z3_1522	SE1-5_site investigation for S1E5-51 (1nr)	5	5	28-Feb-20	05-Mar-20	24-Feb-20	29-Feb-20
Z3_1530	SE1-6_site investigation for S1E6-51P (1nr)	5	5	05-Mar-20	11-Mar-20	29-Feb-20	06-Mar-20
Z3_5630	SE2_site investigation for S2E1-52P (2nr)	10	10	17-Feb-20	28-Feb-20	12-Feb-20	24-Feb-20
Z3_5640	SE2_mini piles for S2E1-52P (12nr raking, 11nr ver)	58	58	13-Mar-20	27-May-20	09-Mar-20	22-May-20
SOUTHBOUND SLIP ROAD							
Z3_1720	SE8-1_site investigation for SR6 1-B (1nr)	5	5	31-Jan-20*	05-Feb-20	30-Nov-19	05-Dec-19
Z3_1730	SE8-1_mini piles for SR6 1-B (8nr)	32	32	06-Apr-20	18-May-20	03-Feb-20	11-Mar-20
BRIDGE AND STRUCTURE WORKS							
PRELIMINARIES WORKS							
UTILITIES DIVERSION							
NORTHBOUND							
Z3_2920	UU_HKT-diversion cable for RW7 CH1830-2000 170m	34	34	19-Feb-20	28-Mar-20	18-Jan-20	29-Feb-20
Z3_2930	UU_CLP-abandoned 11kv cable for RW7 & SR4 CH1825-1950 125m	22	22	04-Mar-20	28-Mar-20	05-Feb-20	29-Feb-20
Z3_3130	UU_Fresh watermain for SR4 178m 200mm (Stage 1a)	30	73	22-Jul-19 A	29-Apr-20	31-Oct-19	04-Dec-19
SOUTHBOUND							
Z3_2970	UU_HKT-new cable for RW1 & SR3 CH1450-2300 850m	127	127	31-Jan-20	06-Jul-20	30-Nov-19	09-May-20
Z3_3100	UU_HKBN-slew cable for N262 CH1800-1810 10m	1	1	31-Jan-20	31-Jan-20	30-Nov-19	30-Nov-19
Z3_5680	UU_Construct combine UU trough between cycle track and RW1 Stage 1	60	60	31-Jan-20*	14-Apr-20	30-Nov-19	14-Feb-20
Z3_5740	UU_Watermain-diversion 400mm pipe for SAW1 (Additional)	70	70	31-Jan-20*	25-Apr-20	06-Jan-20	30-Mar-20
MODIFICATION OF BRIDGE N263							
RECONSTRUCTION ABUTMENT WALL AT NHA							
Z3_4110	NAW-1_construct ELS & piling platform	42	42	05-Feb-20	25-Mar-20	17-Jan-20	09-Mar-20
Z3_4115	NAW-1_site investigation (2nr)	10	0	07-Dec-19 A	20-Jan-20 A	17-Jan-20	31-Jan-20
Z3_4120	NAW-1_piling works for new NHA wall (23nr socket H-pile)	161	161	25-Mar-20	10-Oct-20	10-Mar-20	22-Sep-20
Z3_4160	NAW-2_piling works for new NHA wall (16nr socket H-pile)	112	112	31-Jan-20*	16-Jun-20	30-Dec-19	19-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	25-Apr-20	16-Jun-20	30-Mar-20	25-May-20
Z3_3920	SAW-2 & 3_pile testing	28	14	17-Jan-20 A	14-Feb-20	14-Dec-19	11-Jan-20
Z3_3930	SAW-2 & 3_ELS & pile cap construction	45	45	14-Feb-20	08-Apr-20	11-Jan-20	07-Mar-20
Z3_3940	Modify existing N263 pier wall (North side)	90	90	08-Apr-20	30-Jul-20	07-Mar-20	29-Jun-20
MODIFICATION OF BRIDGE N262							
Z3_3510	C02_piling works 4nr mini pile	16	16	29-Feb-20	18-Mar-20	02-Jan-20	20-Jan-20
Z3_3520	C02_ELS & pile cap construction	30	30	06-Apr-20	15-May-20	10-Feb-20	14-Mar-20
Z3_3540	C03_piling works 7nr mini pile	24	24	01-Feb-20*	28-Feb-20	02-Dec-19	31-Dec-19
Z3_3550	C03_ELS & pile cap construction	30	30	29-Feb-20	03-Apr-20	02-Jan-20	08-Feb-20

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3 Months Rolling Programme (31/01/20)

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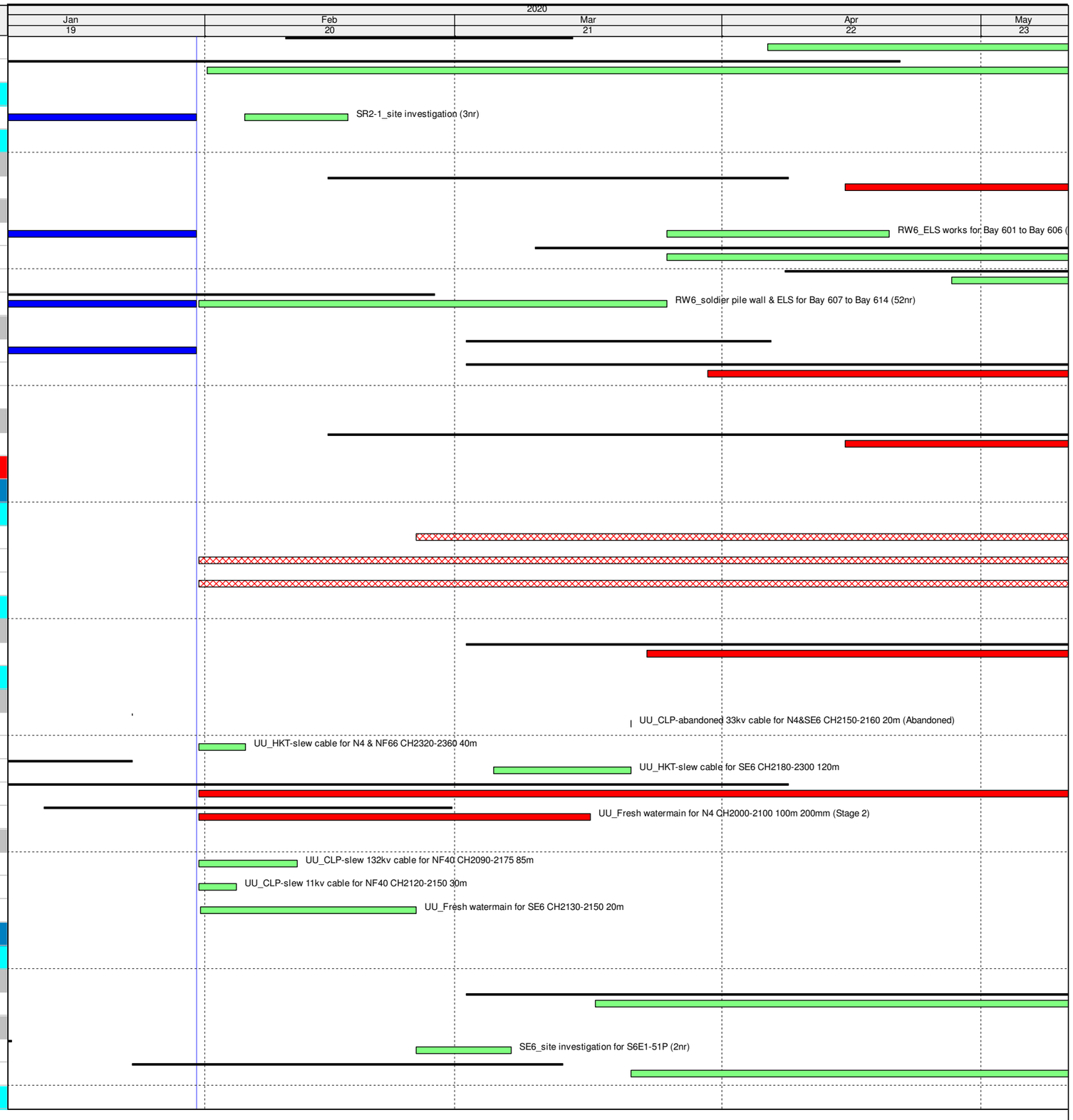
Activity ID	Activity Name	Original Duration	Remaining Duration	3MRP Start	3MRP Finish	AP8 Start	AP8 Finish
Z3_3560	C03_column construction	30	30	06-Apr-20	15-May-20	10-Feb-20	14-Mar-20
Z3_3580	C04_ELS & footing construction 2nr	90	90	01-Feb-20	22-May-20	30-Dec-19	21-Apr-20
NEW SLIP ROAD 2							
Z3_5325	SR2-1_site investigation (3nr)	15	10	11-Jun-19 A	17-Feb-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	15-Apr-20	08-Jun-20	15-Feb-20	08-Apr-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	20-Apr-20	02-Sep-19	02-Oct-19
Z3_1218_1010	RW6_base slab construction for Bay 601 to Bay 606	48	48	25-Mar-20	27-May-20	10-Mar-20	11-May-20
Z3_1218_1020	RW6_retaining wall construction for Bay 601 to Bay 606	72	72	27-Apr-20	24-Jul-20	08-Apr-20	08-Jul-20
Z3_1218_1040	RW6_soldier pile wall & ELS for Bay 607 to Bay 614 (52nr)	58	47	20-Nov-19 A	25-Mar-20	16-Dec-19	27-Feb-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	19-Oct-20	02-Mar-20	06-Apr-20
Z3_1218_2040	RW7_soldier pile wall & ELS for Bay 701 to Bay 705 (62nr)	124	124	30-Mar-20	29-Aug-20	02-Mar-20	01-Aug-20
Z3_1218_2050	RW7_base slab construction for Bay 701 & Bay 704	32	32	03-Aug-20	08-Sep-20	06-Jul-20	11-Aug-20
MODIFY EXISTING SUBWAY NS30							
Z3_5200	Demolish existing subway & construct NS30	160	160	15-Apr-20	24-Oct-20	15-Feb-20	28-Aug-20
WORK BETWEEN FOOTBRIDGE NF40 AND NF66 (ZONE 4)							
PRELIMINARIES WORKS							
SUMMARY PROGRAMME							
Z4SU1000	Zone 4 Stage 1 SE6 51 to 57	154	154	25-Feb-20	01-Sep-20	27-Dec-19	08-Jul-20
Z4SU1005	Zone 4 Stage 2 NB & SB foundation	435	435	31-Jan-20	20-Jul-21	13-Jan-20	28-Jun-21
Z4SU1100	Zone 4 NF66 Construction	230	230	31-Jan-20	06-Nov-20	06-Jan-20	14-Oct-20
PREPARATORY WORKS							
MODIFICATION EXISTING ROAD/TEMPORARY ROAD							
Z4_1335	Zone 4 & 5_construct temporary road platform along Northbound	75	75	23-Mar-20	24-Jun-20	02-Mar-20	03-Jun-20
UTILITIES DIVERSION							
NORTHBOUND							
Z4_1290	UU_CLP-abandoned 33kv cable for N4&SE6 CH2150-2160 20m (Abandoned)	0	0	21-Mar-20	21-Mar-20	23-Jan-20	23-Jan-20
Z4_1300	UU_HKT-slew cable for N4 & NF66 CH2320-2360 40m	5	5	31-Jan-20	05-Feb-20	30-Nov-19	05-Dec-19
Z4_1310	UU_HKT-slew cable for SE6 CH2180-2300 120m	14	14	05-Mar-20	21-Mar-20	07-Jan-20	23-Jan-20
Z4_1490	UU_Fresh watermain for N4 CH2300-2550 250m 600mm (Additional)	105	105	31-Jan-20*	08-Jun-20	30-Nov-19	08-Apr-20
Z4_1500	UU_Fresh watermain for N4 CH2000-2100 100m 200mm (Stage 2)	39	39	31-Jan-20*	16-Mar-20	13-Jan-20	29-Feb-20
SOUTHBOUND							
Z4_1340	UU_CLP-slew 132kv cable for NF40 CH2090-2175 85m	10	10	31-Jan-20	11-Feb-20	30-Nov-19	11-Dec-19
Z4_1350	UU_CLP-slew 11kv cable for NF40 CH2120-2150 30m	4	4	31-Jan-20	04-Feb-20	30-Nov-19	04-Dec-19
Z4_1370	UU_Fresh watermain for SE6 CH2130-2150 20m	21	21	31-Jan-20	25-Feb-20	30-Nov-19	27-Dec-19
NOISE BARRIER AND SEMI-ENCLOSURE							
PILE FOUNDATION WORKS							
NORTHBOUND							
Z4_1510	N4_site investigation for N4-12 to N4-27 (24nr)	60	60	17-Mar-20	01-Jun-20	02-Mar-20	16-May-20
SOUTHBOUND							
Z4_1110	SE6_site investigation for S6E1-51P (2nr)	10	10	25-Feb-20*	07-Mar-20	27-Dec-19	09-Jan-20
Z4_1120	SE6_mini piles for S6E1-51P (10nr ver)	40	40	21-Mar-20	14-May-20	23-Jan-20	13-Mar-20
PILE CAP AND FOOTING							

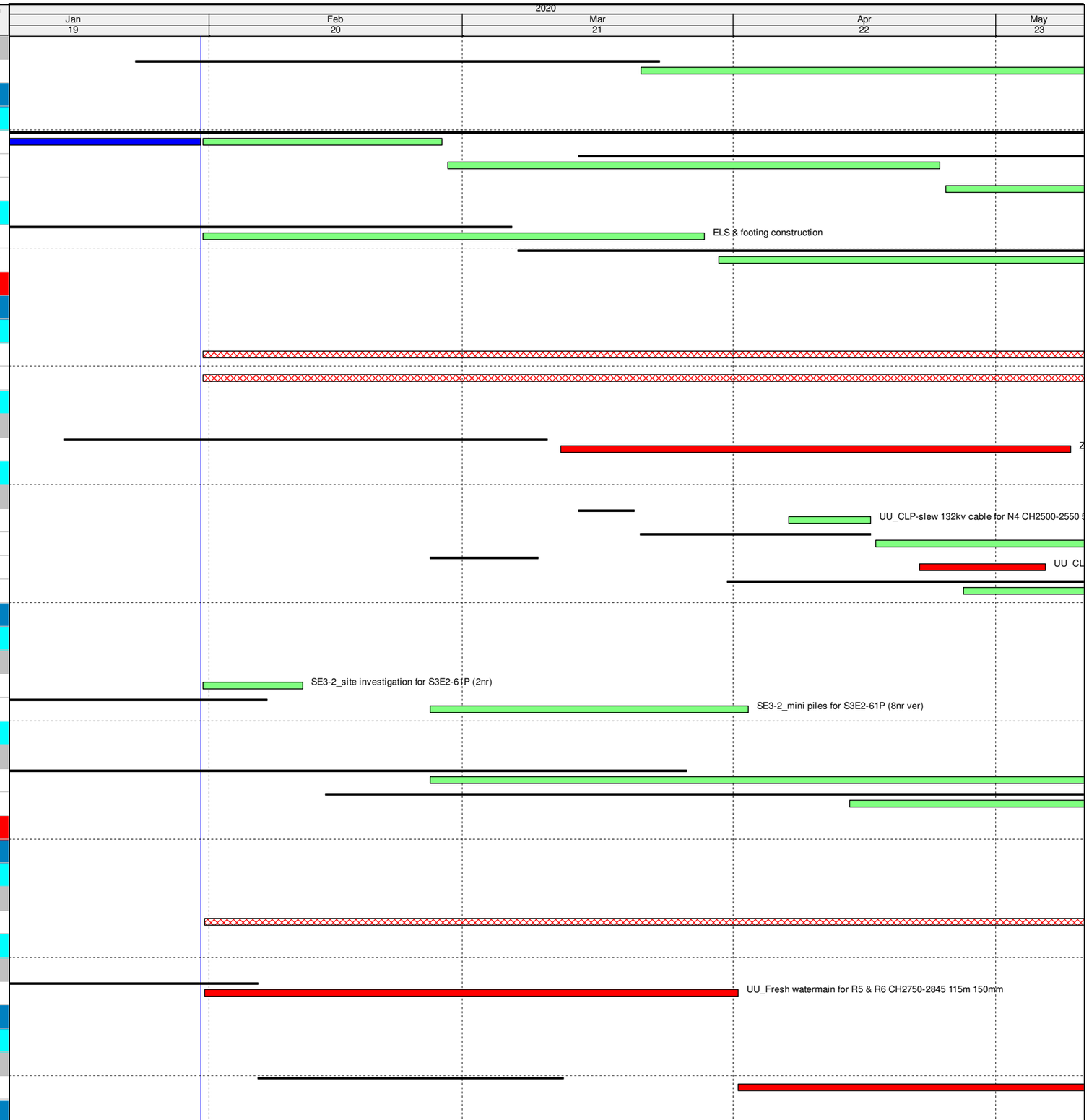


Remaining Level of Effort
Actual Level of Effort
Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Baseline Milestone

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

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
SOUTHBOUND							
Z4_1122	SE6_ELS for footing/cap construction S6E1-51P to S6E1-57 (86m_2 side)	48	48	21-Mar-20	23-May-20	23-Jan-20	23-Mar-20
BRIDGE AND STRUCTURE WORKS							
MODIFICATION WORKS FOR NF40							
NF40_1000	Construct new staircase	120	24	12-Oct-19 A	27-Feb-20	06-Jan-20	03-Jun-20
NF40_1010	Demolish existing staircase	45	45	28-Feb-20	24-Apr-20	14-Mar-20	12-May-20
NF40_1080	Construct pile cap & part of new column	60	60	25-Apr-20	08-Jul-20	13-May-20	23-Jul-20
MODIFICATION WORKS FOR NF66							
NF66_1000	ELS & footing construction	50	50	31-Jan-20*	28-Mar-20	06-Jan-20	06-Mar-20
NF66_1020	Construct the new column & columnhead	60	60	30-Mar-20	13-Jun-20	07-Mar-20	22-May-20
WORK BETWEEN FOOTBRIDGE NF66 AND FO TAN ROAD (ZONE 5)							
PRELIMINARIES WORKS							
SUMMARY PROGRAMME							
Z5SU1000	Zone 5 Stage 1 SE3-2 SB foundation	291	291	31-Jan-20	20-Jan-21	30-Nov-19	23-Nov-20
Z5SU1005	Zone 5 Stage 2 NB & SB foundation	467	467	31-Jan-20	26-Aug-21	30-Nov-19	02-Jul-21
PREPARATORY WORKS							
MODIFICATION EXISTING ROAD/TEMPORARY ROAD							
Z5_1720	Zone 5-1_construct temporary road platform along Northbound	45	45	12-Mar-20	09-May-20	15-Jan-20	10-Mar-20
UTILITIES DIVERSION							
NORTHBOUND							
Z5_1610	UU_CLP-slew 132kv cable for N4 CH2500-2550 50m	6	6	07-Apr-20	16-Apr-20	14-Mar-20	20-Mar-20
Z5_1620	UU_CLP-abandoned 33kv cable for N4 CH2550-2630 100m	19	19	17-Apr-20	11-May-20	21-Mar-20	16-Apr-20
Z5_1650	UU_CLP-abandoned 33kv cable for N4& SE3 CH2640 30m	11	11	22-Apr-20	06-May-20	26-Feb-20	09-Mar-20
Z5_1850	UU_Fresh watermain for N4 CH2450-2560 63m 600mm	35	35	27-Apr-20	08-Jun-20	31-Mar-20	16-May-20
NOISE BARRIER AND SEMI-ENCLOSURE							
PILE FOUNDATION WORKS							
SOUTHBOUND							
Z5_1990	SE3-2_site investigation for S3E2-61P (2nr)	10	10	31-Jan-20*	11-Feb-20	30-Nov-19	11-Dec-19
Z5_2000	SE3-2_mini piles for S3E2-61P (8nr ver)	32	32	26-Feb-20	02-Apr-20	28-Dec-19	07-Feb-20
PILE CAP AND FOOTING							
SOUTHBOUND							
Z5_1230	SE3-2_ELS for footing construction S3E2-51 to S3E2-60 (131m_2 side)	73	73	26-Feb-20	27-May-20	28-Dec-19	26-Mar-20
Z5_1245	SE3-2_footing/cap construction S3E2-51 to 61P (10nr)	210	210	14-Apr-20	22-Dec-20	14-Feb-20	28-Oct-20
PORTION E (ZONE 5)							
PRELIMINARIES WORKS							
SUMMARY PROGRAMME							
TPR NORTHBOUND							
PESU1000	Construction Zone 5 Portion E_Northbound structure	449	449	31-Jan-20	06-Aug-21	30-Nov-19	22-Jul-21
UTILITIES DIVERSION							
NORTHBOUND							
Z5E_1180	UU_Fresh watermain for R5 & R6 CH2750-2845 115m 150mm	52	52	31-Jan-20*	01-Apr-20	30-Nov-19	06-Feb-20
NOISE BARRIER AND SEMI-ENCLOSURE							
PILE FOUNDATION WORKS							
NORTHBOUND SLIP ROAD							
Z5E_1000	R6_site investigation for R6-02P (6nr)	30	30	01-Apr-20	13-May-20	06-Feb-20	12-Mar-20
ROADWORKS AND REMAINING WORKS							

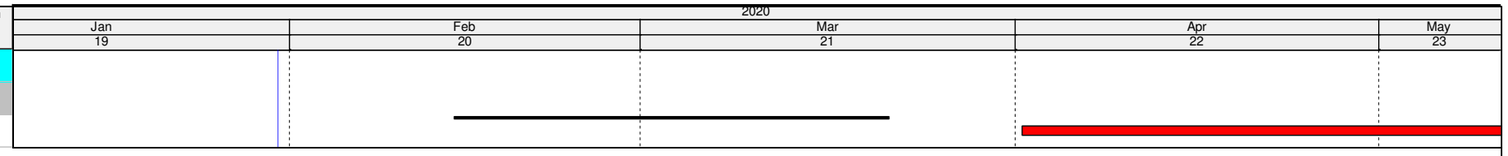


Remaining Level of Effort
Actual Level of Effort
Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Baseline Milestone

ROAD WIDENING & RETROFITTING NOISE BARRIERS ON TAI PO ROAD (SHA TIN SECTION)
3 Months Rolling Programme (31/01/20)
Page 5 of 6

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
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
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Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Baseline Milestone

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

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

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

Appendix B

Project Organization Chart

FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,
5 Lok Yi Street, Tai Lam,
Tuen Mun, N.T.,
Hong Kong.

Tel : +852 2450 8233
Fax : +852 2450 6138
E-mail : matlab@fugro.com
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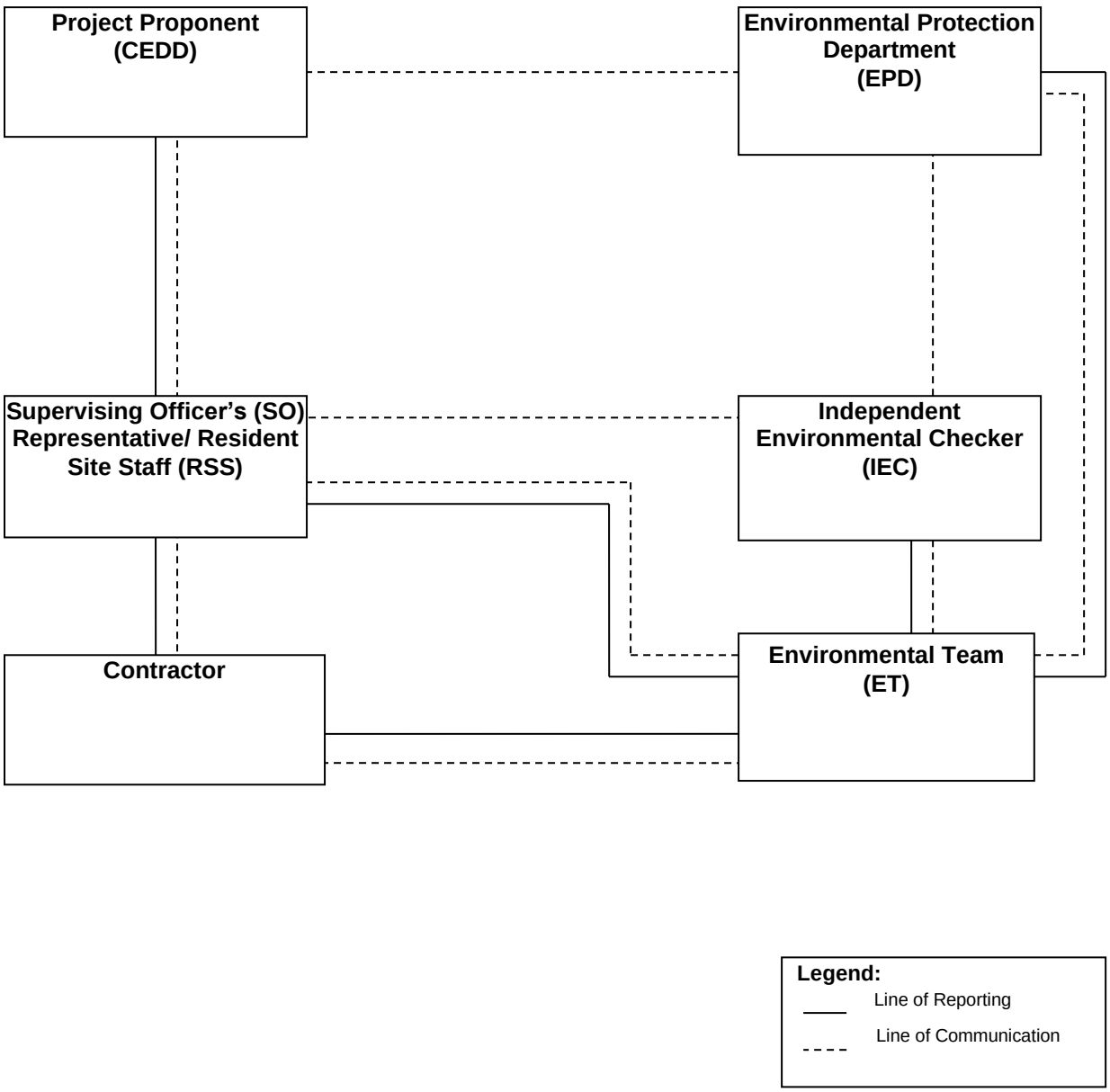

FUGRO TECHNICAL SERVICES LIMITED

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

Appendix C

Action and Limit Levels for Air Quality and Noise

FUGRO TECHNICAL SERVICES LIMITED
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5 Lok Yi Street, Tai Lam,
Tuen Mun, N.T.,
Hong Kong.
Tel : +852 2450 8233
Fax : +852 2450 6138
E-mail : matlab@fugro.com
Website : www.fugro.com

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

Parameter	Monitoring Station	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/ m^3$)
24-hr TSP ($\mu g/m^3$)	AMS 4A	200	260
	AMS 6	165	
	AMS 8	161	
	AMS 12	168	
1-hr TSP ($\mu g/m^3$)	AMS 4A	348	500
	AMS 6	347	
	AMS 8	336	
	AMS 12	296	

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.

FUGRO TECHNICAL SERVICES LIMITED

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

Appendix D

Calibration Certificates of Monitoring Equipment

SIBATA

SIBATA SCIENTIFIC TECHNOLOGY LTD.
1-1-62, Nakane, Soka, Saitama, 340-0005 Japan
TEL : 048-933-1582 FAX : 048-933-1591

CALIBRATION CERTIFICATE

Date: August 28th, 2019

Equipment Name	:	Digital Dust Indicator, Model LD-5R
Code No.	:	080000-72
Quantity	:	1 unit
Serial No.	:	620408
Sensitivity	:	0.001 mg/m3
Sensitivity Adjustment	:	766
Scale Setting	:	August 23rd, 2019

We hereby certify that the above mentioned instrument has been calibrated satisfactory.

Sincerely

SIBATA SCIENTIFIC TECHNOLOGY LTD.

SIBATA SCIENTIFIC TECHNOLOGY LTD.

Tong Zhang

Tong Zhang
Overseas & New Business Group
Overseas Sales Department

TEST CERTIFICATE

Report No. 19-1503

CUSTOMER : INNOTECH INSTRUMENTATION CO.,LTD.

SIBATA SCIENTIFIC TECHNOLOGY LTD.

DATE 27/August /2019

APPROVE BY	VERIFIED BY	ISSUED BY
井上	野手	延岡

PRODUCT NAME	:	Digital Dust Indicator
MODEL NUMBER	:	LD-5R
SERIAL NUMBER	:	620408
CALIBRATION DATE	:	23- August -2019

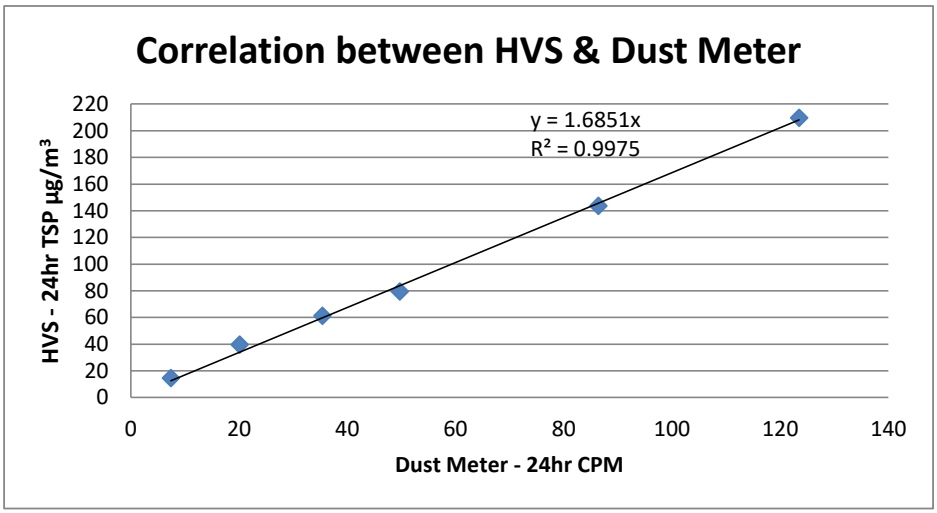
Testing Category	Judging Standard	Judgment			Inspection chart	
Function Test	Switch, Display, Wiring will normally function	OK				
Sensitivity Calibration	Count is ±2% accurate to the master by the standard calibration particle	Reading of Master	Reading of this Instrument	Correction	Reference Value(S)	
		805 CPM	802 CPM	−0.4 %		
Dust Concentration Measuring	Count is ±10% accurate to the master under the 3 different concentration.	2031 CPM	2026 CPM	−0.2 %	766 CPM	
		1004 CPM	987 CPM	−1.7 %		
		513 CPM	507 CPM	−1.2 %	Test atmosphere	
Reproducibility	The difference between maximum and minimum value of sensitivity adjustment scale setting must be 5.0 % or less of maximum value. (The results of measurement of sensitivity adjustment in 5 times are within this range.)	OK			Temperature	Humidity
					20 ℃	50 %
Synthetic Judgment		Good				

Correlation between HVS & Dust Meter

Model: Sibata LD-5R

Serial No: 620408

HVS - 24hr TSP µg/m^3	14.56	39.65	61.24	79.47	143.67	209.65
Dust Meter - 24hr CPM	7.4	20.1	35.4	49.7	86.4	123.5



K factor = 1.685

FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong

Report no. : 940891CA200109

CALIBRATION CERTIFICATE OF DUST METER

Client : Fugro Technical Services Limited

Project : Calibration Services

Client Supplied Information

Details of Unit Under Test, UUT

Description	: Laser dust monitor
Manufacturer	: SIBATA
Model No.	: LD-5R
Serial No.	: 882147
Specification Limit	: NA
Next Calibration Date	: 09-Oct-2020

Laboratory Information

Description	: TSP high volume air sampler
Serial No.	: 4350
Date of Calibration	: 10-Oct-2019 Ambient Temperature : 28 °C
Calibration Location	: Ma Wan A1 Site Boundary
Method Used	: By direct comparison the weight of dust particle trapped in a filter paper using high volume sampler (TSP method) for a certain period, with the reading of the UUT. They should be placed at the same location and powered on and off at the same time.

Calibration Results :

Reference concentration (mg/m^3)	Total count for 1 hour	CPM (Count per minute)
0.1047	2477	41.28
0.0623	2121	35.35
0.0587	2073	34.55

Remarks:

1. The equipment being used in this calibration is traceable to recognized National Standards.
2. The interpolation equation : Concentration (mg/m^3) = K x [UUT reading (CPM)], where K = 0.002030
3. Correlation coefficient (r) : 0.9993

Checked by : Date : 10-2-2020 Certified by : Date : 10-2-2020

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

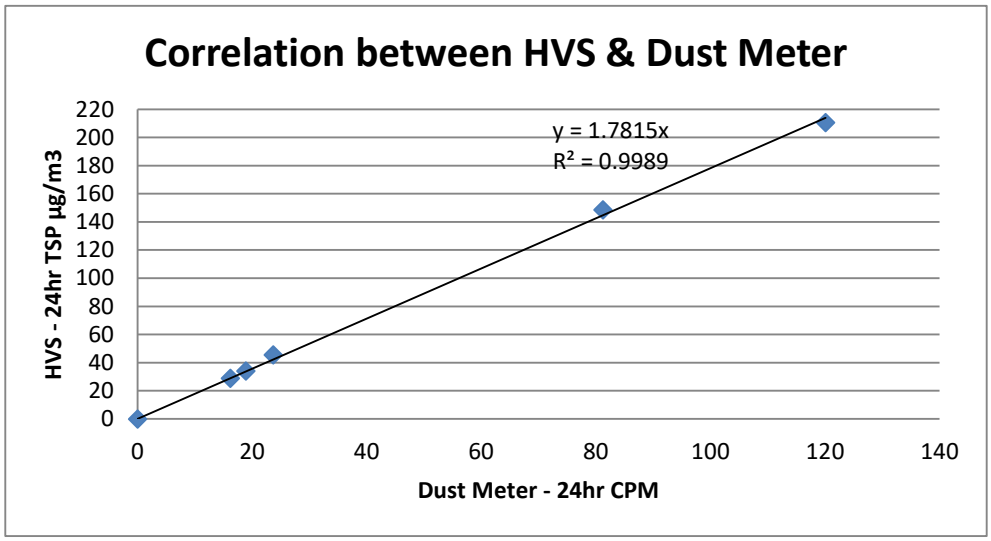
** End of Report **

Correlation between HVS & Dust Meter

Model: Sibata LD-5R

Serial No: 882147

HVS - 24hr TSP µg/m^3	28.99	34.06	45.57	148.63	210.59
Dust Meter - 24hr CPM	16.2	18.9	23.7	81.23	120.11



K factor = 1.782

FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong

Report no. : 940891CA196546(4)

CALIBRATION CERTIFICATE OF DUST METER

Client : Fugro Technical Services Limited

Project : Calibration Services

Client Supplied Information

Details of Unit Under Test, UUT

Description	: Laser dust monitor
Manufacturer	: SIBATA
Model No.	: LD-5R
Serial No.	: 761105
Specification Limit	: NA
Next Calibration Date	: 05-Dec-2020

Laboratory Information

Description	: Reference balance
Equipment ID.	: R-039-12
Date of Calibration	: 06-Dec-2019 Ambient Temperature : 22 °C
Calibration Location	: Calibration Laboratory of FTS
Method Used	: By direct comparison the weight of dust particle trapped in a filter paper using high volume sampler (TSP method) for a certain period, with the reading of the UUT. They should be placed at the same location and powered on and off at the same time.

Calibration Results :

Reference concentration (mg/m^3)	Total count for 1 hour	CPM (Count per minute)
0.0393	1260	21.00
0.0681	1519	25.32
0.0504	1327	22.12

Remarks:

1. The equipment being used in this calibration is traceable to recognized National Standards.
2. The interpolation equation : Concentration (mg/m^3) = K x [UUT reading (CPM)], where K = 0.002306
3. Correlation coefficient (r) : 0.9906

Checked by : Date : 17-12-2019 Certified by : Date : 18-12-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

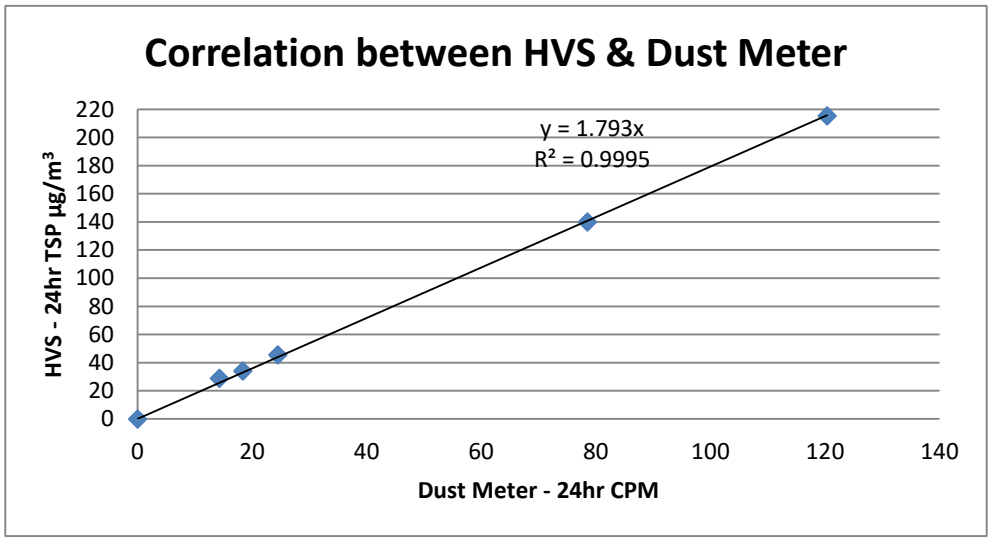
** End of Report **

Correlation between HVS & Dust Meter

Model: Sibata LD-5R

Serial No: 761105

HVS - 24hr TSP µg/m^3	28.99	34.06	45.57	139.89	215.48
Dust Meter - 24hr CPM	14.3	18.4	24.5	78.51	120.36



K factor = 1.793

FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong

Report no. : 940891CA200109(1)

CALIBRATION CERTIFICATE OF DUST METER

Client : Fugro Technical Services Limited

Project : Calibration Services

Client Supplied Information

Details of Unit Under Test, UUT

Description	: Laser dust monitor
Manufacturer	: SIBATA
Model No.	: LD-5R
Serial No.	: 882148
Specification Limit	: NA
Next Calibration Date	: 09-Oct-2020

Laboratory Information

Description	: TSP high volume air sampler
Serial No.	: 4350
Date of Calibration	: 10-Oct-2019 Ambient Temperature : 28 °C
Calibration Location	: Ma Wan A1 Site Boundary
Method Used	: By direct comparison the weight of dust particle trapped in a filter paper using high volume sampler (TSP method) for a certain period, with the reading of the UUT. They should be placed at the same location and powered on and off at the same time.

Calibration Results :

Reference concentration (mg/m^3)	Total count for 1 hour	CPM (Count per minute)
0.1047	2789	46.48
0.0623	1912	31.87
0.0587	1854	30.90

Remarks:

1. The equipment being used in this calibration is traceable to recognized National Standards.
2. The interpolation equation : Concentration (mg/m^3) = K x [UUT reading (CPM)], where K = 0.002066
3. Correlation coefficient (r) : 0.9999

Checked by : _____ Date : 10-2-2020 Certified by : _____ Date : 10-2-2020

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

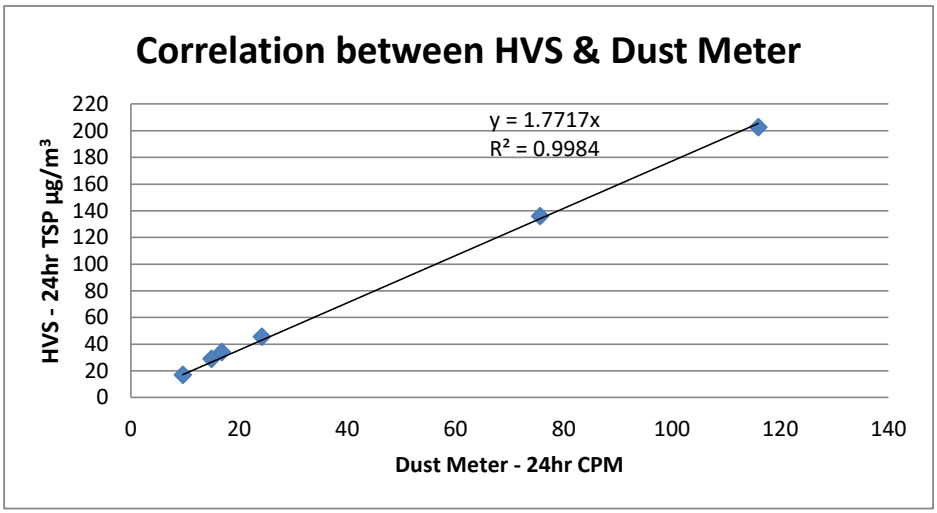
** End of Report **

Correlation between HVS & Dust Meter

Model: Sibata LD-5R

Serial No: 882148

HVS - 24hr TSP µg/m^3	16.99	28.99	34.06	45.57	135.96	202.64
Dust Meter - 24hr CPM	9.6	14.9	16.8	24.2	75.63	115.96



K factor = 1.772

FUGRO TECHNICAL SERVICES LIMITED
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Website : www.fugro.com

MateriaLab

Report no.: 183057CA195577

CALIBRATION CERTIFICATE OF SOUND LEVEL METER

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description : Sound Level Meter

Manufacturer : Casella

	Meter	Microphone	Preamplifier
Model No.	CEL-63X	CE-251	CEL-495
Serial No.	3756127	00995	003359

Next Calibration Date : 16-May-2020

Specification Limit : EN 61672: 2003 Type 1

Laboratory Information

Description : B & K Acoustic Multifunction Calibrator 4226 (Traditional free field setting)

Equipment ID. : R-108-1

Date of Calibration : 17-May-2019 Ambient Temperature : 22 °C

Calibration Location : Calibration Laboratory of FTS

Method Used : By direct comparison

Calibration Results :

Parameters		Mean Value (dB)	Specification Limit(dB)
A-weighting frequency response	4000Hz	1.6	2.6 to -0.6
	2000Hz	1.3	2.8 to -0.4
	1000Hz	0.0	1.1 to -1.1
	500Hz	-3.4	-1.8 to -4.6
	250Hz	-8.7	-7.2 to -10.0
	125Hz	-16.2	-14.6 to -17.6
	63Hz	-26.2	-24.7 to -27.7
	31.5Hz	-39.1	-37.4 to -41.4
Differential level linearity	94dB-104dB	0.0	± 0.6
	104dB-114dB	0.0	± 0.6

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. For calibration: Reference SPL are 94, 104 & 114dB, range setting is 20-140dB & time weighting is fast
4. The equipment does comply with EN 61672: 2003 Type 1 sound level meter for the above measurement.
5. The values given in this Calibration Certificate only relate to the unit-under-test and the values measured at the time of the test. Uncertainties will not include allowances for the environmental changes, variation and shock during transportation, or the capability of any other laboratory to repeat the measurement.

Checked by : William Date : 17-5-2019 Certified by : K T Leung Date : 18-5-2019

Leung Kwok Tai (Assistant Manager)

CA-R-297 (22/07/2009)

** End of Report **

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MateriaLab

Report no.: 183057CA195786(1)

CALIBRATION CERTIFICATE OF SOUND LEVEL METER

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description : Sound Level Meter

Manufacturer : Casella

	Meter	Microphone	Preamplifier
Model No.	CEL-63X	CE-251	CEL-495
Serial No. :	2451082	01378	002317

Next Calibration Date : 16-Jun-2020

Specification Limit : EN 61672: 2003 Type 1

Laboratory Information

Description : B & K Acoustic Multifunction Calibrator 4226 (Traditional free field setting)

Equipment ID. : R-108-1

Date of Calibration : 17-Jun-2019 Ambient Temperature : 22 °C

Calibration Location : Calibration Laboratory of FTS

Method Used : By direct comparison

Calibration Results :

Parameters		Mean Value (dB)	Specification Limit(dB)
A-weighting frequency response	4000Hz	1.4	2.6 to -0.6
	2000Hz	0.9	2.8 to -0.4
	1000Hz	0.0	1.1 to -1.1
	500Hz	-3.2	-1.8 to -4.6
	250Hz	-8.4	-7.2 to -10.0
	125Hz	-15.7	-14.6 to -17.6
	63Hz	-25.8	-24.7 to -27.7
	31.5Hz	-38.8	-37.4 to -41.4
Differential level linearity	94dB-104dB	0.0	± 0.6
	104dB-114dB	0.0	± 0.6

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. For calibration: Reference SPL are 94, 104 & 114dB, range setting is 20-140dB & time weighting is fast
4. The equipment does comply with EN 61672: 2003 Type 1 sound level meter for the above measurement.
5. The values given in this Calibration Certificate only relate to the unit-under-test and the values measured at the time of the test. Uncertainties will not include allowances for the environmental changes, variation and shock during transportation, or the capability of any other laboratory to repeat the measurement.

Checked by : William Date : 21-6-2019 Certified by : K.T. Leung Date : 21-6-2019

Leung Kwok Tai (Assistant Manager)

CA-R-297 (22/07/2009)

** End of Report **

FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong

Report no.: 183057CA196458

CALIBRATION CERTIFICATE OF SOUND LEVEL METER

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description : Sound Level Meter

Manufacturer : Casella

	Meter	Microphone	Preamplifier
Model No. :	CEL-63X	CE-251	CEL-495
Serial No. :	2451048	02789	004065

Equipment ID : N/A

Next Calibration Date : 21-Nov-2020

Specification Limit : EN 61672: 2003 Type 1

Laboratory Information

Details of Reference Equipment -

Description : B & K Acoustic Multifunction Calibrator 4226 (Traditional free field setting)

Equipment ID. : R-108-1

Date of Calibration : 22-Nov-2019 Ambient Temperature : 22 °C

Calibration Location : Calibration Laboratory of FTS

Method Used : By direct comparison

Calibration Results :

Parameters		Mean Value (dB)	Specification Limit(dB)
A-weigthing frequency response	4000Hz	1.9	2.6 to -0.6
	2000Hz	1.5	2.8 to -0.4
	1000Hz	0.0	1.1 to -1.1
	500Hz	-3.4	-1.8 to -4.6
	250Hz	-8.8	-7.2 to -10.0
	125Hz	-16.2	-14.6 to -17.6
	63Hz	-26.2	-24.7 to -27.7
	31.5Hz	-38.9	-37.4 to -41.4
Differential level linearity	94dB-104dB	0.0	± 0.6
	104dB-114dB	0.0	± 0.6

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. For calibration: Reference SPL are 94, 104 & 114dB, range setting is 20-140dB & time weighting is fast
4. The equipment does comply with EN 61672: 2003 Type 1 sound level meter for the above measurement.

Checked by : William Date : 27-11-2019 Certified by : K T Leung Date : 28-11-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong

Report no.: 183057CA196552(2)

CALIBRATION CERTIFICATE OF SOUND LEVEL METER

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description : Sound Level Meter

Manufacturer : Casella

	Meter	Microphone	Preamplifier
Model No. :	CEL-63X	CE-251	CEL-495
Serial No. :	1488306	03999	002748

Equipment ID : N-56

Next Calibration Date : 19-Dec-2020

Specification Limit : EN 61672: 2003 Type 1

Laboratory Information

Details of Reference Equipment -

Description : B & K Acoustic Multifunction Calibrator 4226 (Traditional free field setting)

Equipment ID. : R-108-1

Date of Calibration : 20-Dec-2019

Calibration Location : Calibration Laboratory of FTS Ambient Temperature : 22 °C

Method Used : By direct comparison

Calibration Results :

Parameters		Mean Value (dB)	Specification Limit(dB)
A-weigthing frequency response	4000Hz	1.3	2.6 to -0.6
	2000Hz	1.3	2.8 to -0.4
	1000Hz	0.0	1.1 to -1.1
	500Hz	-3.4	-1.8 to -4.6
	250Hz	-8.8	-7.2 to -10.0
	125Hz	-16.2	-14.6 to -17.6
	63Hz	-26.3	-24.7 to -27.7
	31.5Hz	-39.3	-37.4 to -41.4
Differential level linearity	94dB-104dB	0.0	± 0.6
	104dB-114dB	0.0	± 0.6

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. For calibration: Reference SPL are 94, 104 & 114dB, range setting is 20-140dB & time weighting is fast
4. The UUT complies with EN 61672: 2003 Type 1 sound level meter for the above measurement.
5 The values given in this Calibration Certificate only relate to the values at the time of the test and any uncertainties will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during tranportation, overloading, mis-handling or the capability of any other laboratory to repeat the measurement.

Checked by : William Date : 30-12-2019 Certified by : K T Leung Date : 30-12-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

FUGRO TECHNICAL SERVICES LIMITED
Fugro Development Centre
5 Lok Yi Street, Tai Lam
Tuen Mun, NT
Hong Kong

Report no.: 183057CA196490

CALIBRATION CERTIFICATE OF SOUND LEVEL METER

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description : Sound Level Meter

Manufacturer : Casella

	Meter	Microphone	Preamplifier
Model No. :	CEL-63X	CE-251	CEL-495
Serial No. :	1488304	02695	003984

Equipment ID : N/A

Next Calibration Date : 02-Dec-2020

Specification Limit : EN 61672: 2003 Type 1

Laboratory Information

Details of Reference Equipment -

Description : B & K Acoustic Multifunction Calibrator 4226 (Traditional free field setting)

Equipment ID. : R-108-1

Date of Calibration : 03-Dec-2019

Calibration Location : Calibration Laboratory of FTS Ambient Temperature : 22 °C

Method Used : By direct comparison

Calibration Results :

Parameters		Mean Value (dB)	Specification Limit(dB)
A-weigthing frequency response	4000Hz	0.8	2.6 to -0.6
	2000Hz	1.8	2.8 to -0.4
	1000Hz	1.0	1.1 to -1.1
	500Hz	-2.2	-1.8 to -4.6
	250Hz	-7.6	-7.2 to -10.0
	125Hz	-15.0	-14.6 to -17.6
	63Hz	-25.1	-24.7 to -27.7
	31.5Hz	-38.0	-37.4 to -41.4
Differential level linearity	94dB-104dB	0.0	± 0.6
	104dB-114dB	0.0	± 0.6

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. For calibration: Reference SPL are 94, 104 & 114dB, range setting is 20-140dB & time weighting is fast
4. The UUT complies with EN 61672: 2003 Type 1 sound level meter for the above measurement.
5. The values given in this Calibration Certificate only relate to the values at the time of the test and any uncertainties will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during tranportation, overloading, mis-handling or the capability of any other laboratory to repeat the measurement.

Checked by : William Date : 12-12-2019 Certified by : K T Leung Date : 12-12-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

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MateriaLab

Report no.: 183057CA196119(1)

CALIBRATION CERTIFICATE OF SOUND LEVEL METER

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description : Sound Level Meter

Manufacturer : Casella

	Meter	Microphone	Preamplifier
Model No.	CEL-63X	CE-251	CEL-495
Serial No. :	1488303	02650	003916

Next Calibration Date : 25-Aug-2020

Specification Limit : EN 61672. 2003 Type 1

Laboratory Information

Description : B & K Acoustic Multifunction Calibrator 4226 (Traditional free field setting)

Equipment ID. : R-108-1

Date of Calibration : 26-Aug-2019 Ambient Temperature : 22 °C

Calibration Location : Calibration Laboratory of FTS

Method Used : By direct comparison

Calibration Results :

Parameters		Mean Value (dB)	Specification Limit(dB)
A-weighting frequency response	4000Hz	1.9	2.6 to -0.6
	2000Hz	1.6	2.8 to -0.4
	1000Hz	0.2	1.1 to -1.1
	500Hz	-3.1	-1.8 to -4.6
	250Hz	-8.5	-7.2 to -10.0
	125Hz	-16.0	-14.6 to -17.6
	63Hz	-26.0	-24.7 to -27.7
	31.5Hz	-39.0	-37.4 to -41.4
Differential level linearity	94dB-104dB	0.0	± 0.6
	104dB-114dB	0.0	± 0.6

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. For calibration: Reference SPL are 94, 104 & 114dB, range setting is 20-140dB & time weighting is fast
4. The equipment does comply with EN 61672: 2003 Type 1 sound level meter for the above measurement.
5. The values given in this Calibration Certificate only relate to the unit-under-test and the values measured at the time of the test. Uncertainties will not include allowances for the environmental changes, variation and shock during transportation, or the capability of any other laboratory to repeat the measurement.

Checked by : William Date : 5-9-2019 Certified by : K T Leung Date : 6-9-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

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MateriaLab

Report no.: 183057CA195786(2)

CALIBRATION CERTIFICATE OF SOUND CALIBRATOR

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description	:	Sound Calibrator
Manufacturer	:	Casella (Model no. CEL-120/1)
Serial No.	:	1677126
Equipment ID	:	N/A
Next Calibration Date	:	17-Jun-2020
Specification Limit	:	EN 60942: 2003 Type 1

Laboratory Information

Description	:	Reference Sound level meter
Equipment ID.	:	R-119-1
Date of Calibration :	18-Jun-2019	Ambient Temperature : 22 °C
Calibration Location :	Calibration Laboratory of FTS	
Method Used	:	By direct comparison

Calibration Results :

Parameters (Setting of UUT)	Mean Value (error of measurement)	Specification Limit(dB)
94dB	0.4 dB	±0.4dB
114dB	0.4 dB	

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. The equipment does comply with the specification limit.

Checked by : William Date : 21-6-2019 Certified by : K.T.Leung Date : 21-6-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

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MateriaLab

Report no.: 183057CA196350(4)

CALIBRATION CERTIFICATE OF SOUND CALIBRATOR

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description	:	Sound Calibrator
Manufacturer	:	Casella (Model CEL-120/1)
Serial No.	:	2383707
Equipment ID	:	N/A
Next Calibration Date	:	23-Oct-2020
Specification Limit	:	EN 60942: 2003 Type 1

Laboratory Information

Description	:	Reference Sound level meter
Equipment ID.	:	R-119-1
Date of Calibration :	24-Oct-2019	Ambient Temperature : 22 °C
Calibration Location :	Calibration Laboratory of FTS	
Method Used	:	By direct comparison

Calibration Results :

Parameters (Setting of UUT)	Mean Value (error of measurement)	Specification Limit(dB)
94dB	-0.2 dB	±0.4dB
114dB	-0.1 dB	

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. The equipment does comply with the specification limit.
4. The values given in this Calibration Certificate only relate to the values at the time of the test and any uncertainties will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during tranportation, overloading, mis-handling or the capability of any other laboratory to repeat the measurement.

Checked by : William Date : 1-11-2019 Certified by : R T Leung Date : 1-11-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

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MateriaLab

Report no.: 183057CA196275

CALIBRATION CERTIFICATE OF SOUND CALIBRATOR

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description	:	Sound Calibrator
Manufacturer	:	Casella (Model CEL-120/1)
Serial No.	:	2383852
Equipment ID	:	N/A
Next Calibration Date	:	15-Oct-2020
Specification Limit	:	EN 60942: 2003 Type 1

Laboratory Information

Details of Reference Equipment -

Description	:	Reference Sound level meter
Equipment ID.	:	R-119-1

Date of Calibration : 16-Oct-2019 Ambient Temperature : 22 °C

Calibration Location : Calibration Laboratory of FTS

Method Used : By direct comparison

Calibration Results :

Parameters (Setting of UUT)	Mean Value (error of measurement)	Specification Limit(dB)
94dB	0.0 dB	±0.4dB
114dB	0.0 dB	

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. The equipment does comply with the specification limit.
4. The values given in this Calibration Certificate only relate to the values at the time of the test and any uncertainties will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during tranportation, overloading, mis-handling or the capability of any other laboratory to repeat the measurement.

Checked by : Gillian Date : 22-10-2019 Certified by : K.T. Leung Date : 22-10-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

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MateriaLab

Report no.: 183057CA196350(2)

CALIBRATION CERTIFICATE OF SOUND CALIBRATOR

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description	:	Sound Calibrator
Manufacturer	:	Casella (Model CEL-120/1)
Serial No.	:	2383982
Equipment ID	:	N/A
Next Calibration Date	:	23-Oct-2020
Specification Limit	:	EN 60942: 2003 Type 1

Laboratory Information

Description	:	Reference Sound level meter
Equipment ID.	:	R-119-1
Date of Calibration :	24-Oct-2019	Ambient Temperature : 22 °C
Calibration Location :	Calibration Laboratory of FTS	
Method Used	:	By direct comparison

Calibration Results :

Parameters (Setting of UUT)	Mean Value (error of measurement)	Specification Limit(dB)
94dB	-0.1 dB	±0.4dB
114dB	-0.2 dB	

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. The equipment does comply with the specification limit.
4. The values given in this Calibration Certificate only relate to the values at the time of the test and any uncertainties will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during tranportation, overloading, mis-handling or the capability of any other laboratory to repeat the measurement.

Checked by : William Date : 1-11-2019 Certified by : K.T. Leung Date : 1-11-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

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MateriaLab

Report no.: 183057CA195577(1)

CALIBRATION CERTIFICATE OF SOUND CALIBRATOR

Client Supplied Information

Client : Fugro Technical Services Ltd.

Project : Calibration Services

Details of Unit Under Test, UUT

Description	:	Sound Calibrator
Manufacturer	:	Casella (Model no. CEL-120/1)
Serial No.	:	5230758
Equipment ID	:	FY-SLC-01
Next Calibration Date	:	16-May-2020
Specification Limit	:	EN 60942: 2003 Type 1

Laboratory Information

Description	:	Reference Sound level meter
Equipment ID.	:	R-119-1
Date of Calibration :	17-May-2019	Ambient Temperature : 22 °C
Calibration Location :	Calibration Laboratory of FTS	
Method Used	:	By direct comparison

Calibration Results :

Parameters (Setting of UUT)	Mean Value (error of measurement)	Specification Limit(dB)
94dB	-0.2 dB	±0.4dB
114dB	-0.2 dB	

Remarks :

1. The equipment used in this calibration is traceable to recognized National Standards.
2. The mean value is the average of four measurements.
3. The equipment does comply with the specification limit.
4. The values given in this Calibration Certificate only relate to the unit-under-test and the values measured at the time of the test. Uncertainties will not include allowances for the environmental changes, variation and shock during transportation, or the capability of any other laboratory to repeat the measurement.

Checked by : William Date : 17-5-2019 Certified by : C.T.Leung Date : 18-5-2019

CA-R-297 (22/07/2009)

Leung Kwok Tai (Assistant Manager)

** End of Report **

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Appendix E

Environmental Monitoring Schedules, Examination Schedules and Arrangements on Deferral of Class Resumption for All Schools

Project: Contract No.: NE/2017/05 - Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Feb-20							1
	2	3	4	5	6	7	8
				AMS4A Wai Wah Centre AMS6 Shatin Plaza AMS8 Lek Yuen Estate AMS12 Fung Wo Estate			
				NMS 8, NMS9, NMS 10A, NMS 11, NMS 12, NMS 13, NMS 14, NMS17, NMS 19, NMS 20, NMS 24, NMS 25A, NMS 26	NMS 1, NMS 2, NMS 3, NMS 4, NMS 5A, NMS 6A, NMS 7, NMS 15, NMS 16, NMS 18,NMS 23, NMS 27		
	9	10	11	12	13	14	15
			AMS4A Wai Wah Centre AMS6 Shatin Plaza AMS8 Lek Yuen Estate AMS12 Fung Wo Estate				
			NMS 8, NMS9, NMS 10A, NMS 11, NMS 12, NMS 13, NMS 14, NMS17, NMS 19, NMS 20, NMS 24, NMS 25A, NMS 26	NMS 1, NMS 2, NMS 3, NMS 4, NMS 5A, NMS 6A, NMS 7, NMS 15, NMS 16, NMS 18,NMS 23, NMS 27			
	16	17	18	19	20	21	22
		AMS4A Wai Wah Centre AMS6 Shatin Plaza AMS8 Lek Yuen Estate AMS12 Fung Wo Estate				AMS4A Wai Wah Centre AMS6 Shatin Plaza AMS8 Lek Yuen Estate AMS12 Fung Wo Estate	
		NMS 8, NMS9, NMS 10A, NMS 11, NMS 12, NMS 13, NMS 14, NMS17, NMS 19, NMS 20, NMS 24, NMS 25A, NMS 26	NMS 1, NMS 2, NMS 3, NMS 4, NMS 5A, NMS 6A, NMS 7, NMS 15, NMS 16, NMS 18,NMS 23, NMS 27				
	23	24	25	26	27	28	29
					AMS4A Wai Wah Centre AMS6 Shatin Plaza AMS8 Lek Yuen Estate AMS12 Fung Wo Estate		
					NMS 8, NMS9, NMS 10A, NMS 11, NMS 12, NMS 13, NMS 14, NMS17, NMS 19, NMS 20, NMS 24, NMS 25A, NMS 26	NMS 1, NMS 2, NMS 3, NMS 4, NMS 5A, NMS 6A, NMS 7, NMS 15, NMS 16, NMS 18,NMS 23, NMS 27	

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.
3. According to the Hong Kong Observatory, anticipated wind directions in Feb 2020 are north and north east.
4. According to the Contractor, the anticipated major construction activities in the reporting month includes:
(1) Trial Pits Excatvation in Zone 1 to 5.
(2) Construct temporary road & site access in Zone 1.
(3) Tree pruning in Zone 1.
(4) Pre-drilling works and mini pile works in Zone 1 & 2.
(5) Construction / diversion of underground utilities in Zone 3.
(6) Pre drill, soldier pile, sheet pile works and Pre Bored H-pile works in Zone 3.
(7) Construction of underground utilities in Zone 4 & 5.
(8) Construction of footbridge NF40 staircase structure works in Zone 4.
(9) Construction of Haul Road, Cycle Track Diversion, Temporary Road and Footpath in Zone 5.
(10) Noise Barrier Foundation Works and Soil Replacement on Slope in Zone 5.

Project: Contract No.: NE/2017/05 - Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Section)

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Mar-20	1	2	3	4	5	6	7
				AMS5 Tin Liu AMS7A Sheung Wo Che AMS11A Sheung Wo Che AMS15 Ha Wo Che			
				NMS 8, NMS9, NMS 10A, NMS 11, NMS 12, NMS 13, NMS 14, NMS17, NMS 19, NMS 20, NMS 24, NMS 25A, NMS 26	NMS 1, NMS 2, NMS 3, NMS 4, NMS 5A, NMS 6A, NMS 7, NMS 15, NMS 16, NMS 18,NMS 23, NMS 27		
	8	9	10	11	12	13	14
			AMS5 Tin Liu AMS7A Sheung Wo Che AMS11A Sheung Wo Che AMS15 Ha Wo Che				
			NMS 8, NMS9, NMS 10A, NMS 11, NMS 12, NMS 13, NMS 14, NMS17, NMS 19, NMS 20, NMS 24, NMS 25A, NMS 26	NMS 1, NMS 2, NMS 3, NMS 4, NMS 5A, NMS 6A, NMS 7, NMS 15, NMS 16, NMS 18,NMS 23, NMS 27			
	15	16	17	18	19	20	21
		AMS5 Tin Liu AMS7A Sheung Wo Che AMS11A Sheung Wo Che AMS15 Ha Wo Che				AMS5 Tin Liu AMS7A Sheung Wo Che AMS11A Sheung Wo Che AMS15 Ha Wo Che	
		NMS 8, NMS9, NMS 10A, NMS 11, NMS 12, NMS 13, NMS 14, NMS17, NMS 19, NMS 20, NMS 24, NMS 25A, NMS 26	NMS 1, NMS 2, NMS 3, NMS 4, NMS 5A, NMS 6A, NMS 7, NMS 15, NMS 16, NMS 18,NMS 23, NMS 27				
	22	23	24	25	26	27	28
					AMS5 Tin Liu AMS7A Sheung Wo Che AMS11A Sheung Wo Che AMS15 Ha Wo Che		
					NMS 8, NMS9, NMS 10A, NMS 11, NMS 12, NMS 13, NMS 14, NMS17, NMS 19, NMS 20, NMS 24, NMS 25A, NMS 26	NMS 1, NMS 2, NMS 3, NMS 4, NMS 5A, NMS 6A, NMS 7, NMS 15, NMS 16, NMS 18,NMS 23, NMS 27	
	29	30	31				

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.
3. According to the Hong Kong Observatory, anticipated wind directions in Mar 2020 are east and north east.
4. According to the Contractor, the anticipated major construction activities in the reporting month includes:
(1) Trial Pits Excatvation in Zone 1 to 5.
(2) Pre-drill works in Zone 1 to 5.
(3) Tree felling and pruning in Zone 1, 2, 3 & 5.
(4) Remedial works for road surface in Zone 1 & 2.
(5) Construct temporary road & site access in Zone 1 & 5.
(6) Mini pile Works in Zone 1, 2 & 3.
(7) Construction / diversion of indergound utilities in Zone 3, 4 & 5.
(8) Soldier pile works & Pre bored H-pile works in Zone 3.
(9) Construction of Haul Road, Cycle Track Diversion, Temporary Road and Footpath in Zone 4 & 5.
(10) Construction of footbridge NF40 staircase structure works & Foundation works of footbridge NF66 in Zone 4.
(11) Noise Barrier Foundation Works and Soil Replacement on Slope in Zone 5

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

Tentative Regular Night Time Noise Monitoring Schedule (February 2020)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6 Regular night time noise monitoring	7	8
9	10	11	12	13 Regular night time noise monitoring	14	15
16	17	18	19	20 Regular night time noise monitoring	21	22
23	24	25	26	27 Regular night time noise monitoring	28	29

Remarks

1. Due to safety concern, 2 staffs will carry out the night time noise monitoring together at all 21 monitoring stations on the same monitoring night of each week.
2. Actual monitoring schedule may be subjected to change due to any safety concern or adverse weather condition.

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

Tentative Regular Night Time Noise Monitoring Schedule (March 2020)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5 Regular night time noise monitoring	6	7
8	9	10	11	12 Regular night time noise monitoring	13	14
15	16	17	18	19 Regular night time noise monitoring	20	21
22	23	24	25	26 Regular night time noise monitoring	27	28
29	30	31				

Remarks

1. Due to safety concern, 2 staffs will carry out the night time noise monitoring together at all 21 monitoring stations on the same monitoring night of each week.
2. Actual monitoring schedule may be subjected to change due to any safety concern or adverse weather condition.

培英中學2019至2020年度校曆表

週次		日	一	二	三	四	五	六	假期及注意事項
	八月	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(23-24/8)中一適應營
		(25)	(26)	(27)	(28)	(29)	(30)	(31)	
1	九月	Sept 1	2	3	4	5	6	7	(2/9)開學禮 (3/9)正式上課　(6/9)開學崇拜會
2		8	9	10	11	12	13	*(14)*	(9/9)中一至中四學生開始繳交周記　(10/9)各班拍攝學生相片 (9-13/9)中華文化周　(14/9)中秋節翌日假期
3		15	16	17	18	19	20	21	
4		22	23	24	25	26	27	28	
5	十月	29	30	Oct *(1)*	2	3	4	5	(30/9-4/10)學生會網上選舉　(1/10)國慶日假期 (30/9-4/10)國慶活動暨中國周
6		6	*(7)*	8	9	10	11	12	(7/10)重陽節假期　(8/10)教師專業發展日(1) (11-13/10)風紀組訓練營　(12/10)香港培英校友會校友日
7		13	14	15	16	17	18	19	(18/10)學生領袖就職典禮
8		20	21	22	23	24	25	26	(21-25/10)藝術周
9		27	28[T]	29[T]	30[T]	31[T]	Nov 1[T]	2	(28/10-1/11)中一至中六級統一測驗
10	十一月	3	4	5	6	7	8	9	(5/11-3/12)學業奮進計劃
11		10[△]	11	12	13	14	15	16[△]	(10/11)南區中學巡禮　(14-15/11)中一、二級護苗課程 (16/11下午)家長教師會第二十二屆會員大會
12		17	18	19	20	21	22	23	(18-22/11)體育推廣周
13		24	25	26	27	28	29	30	(25-29/11)敬師周
14	十二月	Dec 1	2	3	4	5	6[△]	7	(6/12)全方位學習日
15		8	9	10	11	12	13	14	(9-13/12)英語周　(10/12)拍攝畢業照及班相 (14/12)中西南區小學數學比賽
16		15	16	17	18	19	20	21	(17-19/12)中六級校外模擬考試　(19/12下午)聖誕遊藝會彩排 (19/12晚上)家教會聖誕聯歡會　(20/12)慶祝聖誕崇拜及遊藝會
17		22	*(23)*	*(24)*	*(25)*	*(26)*	*(27)*	*(28)*	(23/12-1/1)聖誕及新年假期共10天　(23,24,27/12)中六級補課
18	一月	*(29)*	*(30)*	*(31)*	Jan *(1)*	2	3	4	(30,31/12)中六級補課
19		5	6	7[E]	8[E]	9[E]	10[E]	11	(7-16/1)中一至中五級上學期期考共8天　(7-20/1)中六級畢業試
20		12	13[E]	14[E]	15[E]	16[E]	17[E]	18	(17-21/1)中一至中五級試後回饋日
21		19	20[E]	21	*(22)*	*(23)*	*(24)*	*(25)*	(21/1-28/2)中六級試後上課日　(21/1下午)中五級學習概覽講座 (22/1-3/2)農曆新年假期共13天
22		*(26)*	*(27)*	*(28)*	*(29)*	*(30)*	*(31)*	Feb *(1)*	
23	二月	*(2)*	*(3)*	4	5	6	7	8	(4/2)下學期開始　(4/2)教師專業發展日(2) (5-12/2)中一至中五級溫習及補考
24		9	10	11	12	13	14	15	(10/2)中一至中四級學生開始繳交周記 (10-14/2)福音周　(14/2)佈道會
25		16	17	18	19	20	21	22[△]	(17-21/2)個人社會及人文領域周　(22/2)「學校起動計劃」生涯規劃日
26		23	24	25	26	27	28	29[△]	(24-28/2)「基本法之時空解迷」活動 (26/2)畢業典禮習禮、中六級進行學生持份者問卷及教學評鑑 (28/2)中六級感恩惜別會　(29/2)家長日暨中三升中四選科講座

( ) - 假期　[E] - 考試　[△]特別活動　◯　教師發展日，學生不用上課

培英中學2019至2020年度校曆表

		日	一	二	三	四	五	六	假期及注意事項
27	三月	Mar 1	2	3	4	5	6	7	(2/3)中六級開始溫習應付公開試 (6/3)頒獎禮
28		8	9	10	11	12	13	14	(9-13/3)數學周
29		15	16	17	18	19[T]	20[T]	21	(19-25/3)中一至中五級統一測驗
30		22	23[T]	24[T]	25[T]	26	27	28	(27-29/3)趁墟做老闆　(27/3-2/5)香港中學文憑考試
31		29	30	31	Apr 1	2	3	*(4)*	(3/4)教師專業發展日(3)　(1/4-19/5)學業奮進計劃 (30/3-2/4)科學周　(2/4)復活節崇拜　(4/4)清明節假期
32	四月	5	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*	(6-15/4)復活節假期共10天
33		*(12)*	*(13)*	*(14)*	*(15)*	16	17	18	
34		19	20	21	22	23	24△	25	(21/4或22/4)中三全港性系統評估口試　(23/4下午)校祖日彩排 (24/4)校祖日感恩崇拜暨慶祝活動 (24/4)TSA口試後備日　(25/4)區會模範生頒獎典禮
35		26	27	28	29△	*(30)*	May *(1)*	2	(29/4)全方位學習日 (30/4)佛誕假期　(1/5)勞動節假期
36	五月	3	4	5	6	7	8	9	(4-8/5)科技周
37		10	11	12	13	14	15△	16	(15/5下午)畢業典禮　(15/5晚上)歡送畢業生暨校友會迎新晚會
38		17	18	19	20	21△	*(22)*	23	(21/5)第六十一屆陸運會　(22/5)陸運會翌日假期
39		24	25	26	27	28	29	30	(29/5)畢業禮後備日
40	六月	31	Jun 1	2[E]	3[E]	4[E]	5[E]	6	(2-11/6)中一至中四級下學期考試共8天 (2-15/6)中五級下學期考試共10天
41		7	8[E]	9[E]	10[E]	11[E]	12[E]	13	(12-16/6)中一至中四級試後回饋日
42		14	15[E]	16	17	18	19	20	(16-30/6)中五級試後上課周 (16/6下午)中五級學習概覽寫作工作坊 (16-17/6) 中三級全港性系統評估(中英數)　(19/6)中三級全港性系統評估(後備日)
43		21	22	23	24	*(25)*	26	27	(19-23/6)中一至中五級溫習及補考　(25/6)端午節假期
44	七月	28	29	30	Jul *(1)*	2	3	4	(1/7)香港特別行政區成立紀念日假期 (29/6-10/7)暑期英語營　(3/7)中六級中學文憑考試放榜輔導講座
45		5	6	7	8	9	10△	11	(8/7)香港中學文憑考試放榜
46		12	13	*(14)*	*(15)*	*(16)*	*(17)*	*(18)*	(13/7)結業禮　(13/7)接見家長及學生 (14-16/7)各級第二階段溫習及補考 (14/7-31/8)暑假共49天
47		*(19)*	*(20)*	*(21)*	*(22)*	*(23)*	*(24)*	*(25)*	
48		*(26)*	*(27)*	*(28)*	*(29)*	*(30)*	*(31)*	Aug *(1)*	
49	八月	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	
50		*(9)*	*(10)*	*(11)*	*(12)*	*(13)*	*(14)*	*(15)*	(10/8)學生註冊及領取書籍校服　(10-21/8)升中導向課程 (10-21/8)中六級香港中學文憑考試備試課程
51		*(16)*	*(17)*	*(18)*	*(19)*	*(20)*	*(21)*	*(22)*	(21-22/8)中一適應營
52		*(23)*	*(24)*	*(25)*	*(26)*	*(27)*	*(28)*	*(29)*	
53	九月	*(30)*	*(31)*	Sept 1	2	3	4	5	(1/9)下學年開學禮 (2/9)正式上課

( ) - 假期　[E] - 考試　△特別活動　◯　教師發展日，學生不用上課

Jockey Club Ti-I College

School Calendar (2019-20) for Students

Month	Cycle	Sun	Mon	Tue	Wed	Thu	Fri	Sat
September 2019	1	1 ❍	2 %	3 I	4 II	5 III	6[T1] IV	7 ❍
	2	8 ❍	9 V	10 VI	11 I	12 II	13 III	14 ●
	3	15 ❍	16 IV	17 V	18 VI	19 I	20[T2] II	21 ❍
	4	22 ❍	23 III	24 IV	25 V	26 VI	27 I	28 ❍
		29 ❍	30 II					
October 2019				1 ●	2 III	3 IV	4 %	5 ❍
	5	6 ❍	7 ●	8 V	9 VI	10 I	11 II	12 %
	6	13 ❍	14 III	15 IV	16 V	17 VI	18 I	19 ❍
		20 ❍	21 II	22 III	23 IV	24 V	25 VI	26 ❍
	7	27 ❍	28 I	29 II	30 III	31 IV		
November 2019							1 V	2 ❍
	8	3 ❍	4 VI	5 I	6 II	7 III	8 IV	9 ❍
	9	10 ❍	11 V	12 VI	13 I	14 II	15 III	16 ❍
	10	17 ❍	18 IV	19 V	20 VI	21 I	22 %	23 ❍
		24 ❍	25 II	26 III	27 IV	28 V	29 VI	30 ❍
December 2019	11	1 ❍	2 %	3 ❍	4 I	5 II	6 III	7 ❍
	12	8 ❍	9 IV	10 V	11 VI	12 I	13[H] II	14 ❍
		15 %	16 ❍	17 III	18 IV	19 V	20 SD1	21 ❍
		22 ❍	23 ❍	24 ●	25 ●	26 ●	27 ❍	28 ❍
		29 ❍	30 ❍	31 ❍				

Major Events & School Holidays

2 Opening Ceremony
2 Newsletter to Parents (1)
6 School Year Commencement Assembly
9 Deadline of Dropping of Elective Subjects for F.5 & F.6 Students
13 Club Selection Day & SU Election Forum
14 The Day After Chinese Mid-Autumn Festival
17 SU Election Polling Day
20 Student Bodies Joint Inauguration

1 National Day
4 Swimming Gala
7 Chung Yeung Festival
12 Parent-Teacher Sharing Session & PTA AGM
25 F.4 Parents' Night (Academic Adjustment & OLE)
28 Blood Donation Day

1 F.2 Parents' Night (Student Growth & Development)
7 Newsletter to Parents (2)
8 F.1 Parents' Night (Adaptation & Parenting)
11-20 Activities Suspension for F.6 Students
13-20 F.6 First Term Exam
22 Athletics Meet Day 1

2 Athletics Meet Day 2
3 Discretionary Holiday
6 Photo Taking for Staff and Graduation Classes
12 Distribution of First Term Progress Report
13 Preparation for Open Day
15 Open Day cum 30th Anniversary Time Capsule Installation Ceremony & F.1 Admission Information Session
16 Discretionary Holiday
20 Staff Development Day 1 & 30th Anniversary Campus Gala Dinner
23/12-1/1 Christmas & New Year Holiday

Month	Cycle	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Major Events/Holidays & Activities
January 2020					1	2	3	4	2-13 First Term Exam
					●	*	*	*	14-22 First Term Exam Script Review in Normal Timetable
									15 Opening Ceremony of Graduation Class Visual Arts Exhibition
		5	6	7	8	9	10	11	16 Newsletter to Parents (3)
		❍	*	*	*	*	*	*	***23/1 -1/2 Chinese New Year Holiday***
	13	12	13	14	15	16	17	18	
		❍	*	VI	I	II	III	❍	
		19	20	21	22	23	24	25	
		❍	IV	V	VI	❍	❍	●	
		26	27	28	29	30	31		
		●	●	●	❍	❍	❍		
February 2020								1	3-19 F.6 Mock Exam & Activities Suspension for F.6 Students
								❍	14 First Term Prize Presentation Ceremony
	14	2	3	4	5	6	7	8	15 Parents' Day (Distribution of First Term Report Cards)
		❍	I	II	III	IV	V	❍	19-21 F.3 Boost Morale Camp
									24-28 F.6 Mock Exam Script Review
	15	9	10	11	12	13	14^{T2}	15	28 F.6 Farewell Assembly & Mock Release of HKDSE Results for F.6 Students
		❍	VI	I	II	III	IV	%	
	16	16	17	18	19	20	21	22	
		❍	V	VI	I	II	III	❍	
	17	23	24	25	26	27	28^{T2}	29	
		❍	IV	V	VI	I	II	❍	
March 2020	18	1	2	3	4	5	6	7	5 Newsletter to Parents (4)
		❍	III	IV	V	VI	I	%	7 F.1 Admission Practical Test and First Interview
		8	9	10	11	12	13	14	13 F.3 Parents' Night (DSE Curriculum & Streaming)
		❍	II	III	IV	V	VI	❍	20 Staff Development Day 2 (TBC)
	19	15	16	17	18	19	20	21	
		❍	I	II	III	IV	SD2	❍	
	20	22	23	24	25	26	27	28	
		❍	V	VI	I	II	III	❍	
		29	30	31					
		❍	IV	V					
April 2020	21				1	2	3	4	3 Activity Day
					VI	I	%	●	***4 Ching Ming Festival***
									6-14 Easter Holiday
		5	6	7	8	9	10	11	21/22 F.3 TSA (Speaking Assessment)
		❍	❍	❍	❍	❍	●	●	22-24 Reading Week
		12	13	14	15	16	17	18	***30 The Birthday of the Buddha***
		●	●	❍	II	III	IV	❍	
	22	19	20	21	22	23	24	25	
		❍	V	VI	I	II	III	❍	
		26	27	28	29	30			
		❍	IV	V	VI	●			

Month	Cycle	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Major Events/Holidays & Activities
May 2020							1 ●	2 ❍	***1 Labour Day*** 7 Newsletter to Parents (5) 15 Speech Day (TBC) 21 Distribution of Second Term Progress Report 22 F.5 Parents' Night (Careers Planning & Academic Enhancement) 25/5 -20/6 Activities Suspension
	23	3 ❍	4 I	5 II	6 III	7 IV	8 V	9 ❍	
	24	10 ❍	11 VI	12 I	13 II	14 III	15[H] IV	16 ❍	
	25	17 ❍	18 V	19 VI	20 I	21 II	22 III	23 ❍	
	26	24 ❍	25 IV	26 V	27 VI	28 I	29 II	30 ❍	
		31 ❍							
June 2020			1 III	2 IV	3 V	4 VI	5 SD3	6 ❍	5 Staff Development Day 3 8-20 Second Term Exam 16-17 F.3 TSA (Written Assessments) 22-26 Second Term Exam Script Review with Special Timetable ***25 Tuen Ng Festival*** 26 Appreciation Night Dinner (TBC) 29/6 -9/7 Post Exam Activities
		7 ❍	8 *	9 *	10 *	11 *	12 *	13 *	
		14 ❍	15 *	16 *	17 *	18 *	19 *	20 *	
		21 ❍	22 %	23 %	24 %	25 ●	26 %	27 ❍	
		28 ❍	29 %	30 %					
July 2020					1 ●	2 %	3 %	4 ❍	***1 The HKSAR Establishment Day*** 8 HKDSE Results Release (TBC) 10 Newsletter to Parents (6) 10 Closing Ceremony ***13/7 -31/8 Summer Vacation***
		5 ❍	6 %	7 %	8 %	9 %	10 %	11 ❍	
		12 ❍	13 ❍	14 ❍	15 ❍	16 ❍	17 ❍	18 ❍	
		19 ❍	20 ❍	21 ❍	22 ❍	23 ❍	24 ❍	25 ❍	
		26 ❍	27 ❍	28 ❍	29 ❍	30 ❍	31 ❍		
August 2020								1 ❍	17-21 F.1 Summer Bridging Programme (TBC) 22 F.1 Orientation (TBC)
		2 ❍	3 ❍	4 ❍	5 ❍	6 ❍	7 ❍	8 ❍	
		9 ❍	10 ❍	11 ❍	12 ❍	13 ❍	14 ❍	15 ❍	
		16 ❍	17 ❍	18 ❍	19 ❍	20 ❍	21 ❍	22 ❍	
		23 ❍	24 ❍	25 ❍	26 ❍	27 ❍	28 ❍	29 ❍	
		30 ❍	31 ❍						

❍/● *School/Public Holiday* SDn Staff Development Day n

* Examination __ Mock Examination

% Whole-school Events / Special School Functions

XX^{H} / XX^{Tn} Half-day Release Timetable / Special Assembly Timetable Option n

聖公會主風小學 2019-2020 年度上學期校曆表

週次	月份	星期							行事要項	假期日數
		日	一	二	三	四	五	六		
1	2019	1	2✶	3	4	5	6	7	**2/9** 上學期開學日	
2	九	8	9	10	11	12	13✶	14	**13/9** 教師專業發展日　**14/9** 中秋節翌日	**1**
3	月	15	16	17	18	19	20	21		
4		22	23	24	25	26	27	28		
5		29	30							
				1	2	3	4	5	**1/10** 國慶日	**1**
6	十	6	7	8	9	10	11	12	**7/10** 重陽節	**1**
7	月	13	14	15	16	17	18	19		
8		20	21	22	23	***24***	***25***	26	**24/10 – 29/10** 上學期測驗（**J.6** 呈分試）	
9		27	***28***	***29***	30	31				
							1	2		
10	十	3	4	5	6	7	8	9		
11	一	10	11	12	13	14	15	16✶	**16/11** 上學期家長日	
12	月	17	18	19	20	21	22	23		
13		24	25	26	27	28✶	29	30	**28/11** 第十三屆陸運會　**29/11** 陸運會翌日假期	**1**
14		1	2	3	4	5	6	7		
15	十	8	9	10	11	12	13	14		
16	二	15	16	17	18	19	20	21		
17	月	22	23	24	25	26	27	28	**23/12/2019 – 2/1/2020** 聖誕及新年假期	**6**
18		29	30	31						**3**
	2020				1	2	3	4		**2**
19	一	5	6	7	***8***	***9***	***10***	11	**8/1－13/1** 上學期學期試	
20	月	12	***13***	14	15	16	17	18		
21		19	20	21	22	23	24	25	**22/1－1/2** 農曆新年假期	**4**
22		26	27	28	29	30	31			**6**
								1		**1**
	二	2	3✶	4	5	6	7✶	8	**3/2** 下學期開始　**7/2** 旅行日	
	月	9	10	11	12	13	14	15		

附註：□代表假期　✶代表特別事宜

沙 田 崇 真 學 校

2019 - 20 年度校曆表

	日	一	二	三	四	五	六	假 期 / 事 項
九月	1	2	3	4	5	6	7	上學期開始(2/9) P.2-6 半天上課(2-6/9)
	8	9	10	11	12	~~13~~	~~14~~	學校假期(13/9)中秋節翌日(14/9) P.1 半天上課 (2-11/9)
	15	16	17	18	19	20	21	
	22	23	24	25	26	27	28	親師座談會(28/9)
	29	30						
十月			~~1~~	~~2~~	3	4	5	國慶日(1/10) 教師專業發展日(2/10)
	6	~~7~~	8	9	10	11	12	重陽節(7/10)
	13	14	15	16	17	18	19	
	20	21	22	23	24	25	26	
	27	28	29	30	31			P.6 教育營(28/10-1/11)
十一月						1	2	
	3	4	5	6	7	8	9	零功課日(8/11)
	10	11	12	13	14	15	16	
	17	18	19	20	21	22	23	
	24	25	26	27	28	29	~~30~~	一至六年級考試(25-29/11) 教師專業發展日(30/11)
十二月	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	學校旅行(13/12)
	15	16	17	18	19	20	21	專題研習周(16-19/12)聖誕崇拜(20/12)
	~~22~~	~~23~~	~~24~~	~~25~~	~~26~~	~~27~~	~~28~~	聖誕及新年假期(23/12-1/1)
	~~29~~	~~30~~	~~31~~					
二零二零年一月				~~1~~	2	3	4	P.6 家長日(4/1)
	5	6	7	8	9	10	11	P.1-5 家長日(11/1)
	12	13	14	15	16	17	18	跨學科活動日(17/1)
	19	20	~~21~~	~~22~~	~~23~~	~~24~~	~~25~~	陸運會(20/1)農曆新年假期(21/1-3/2)
	~~26~~	~~27~~	~~28~~	~~29~~	~~30~~	~~31~~		
二月							1	
	~~2~~	~~3~~	4	5	6	7	8	下學期開始(4/2)
	9	10	11	12	13	14	15	零功課日(12/2)
	16	17	18	19	20	21	22	
	23	~~24~~	25	26	27	28	29	學校籌款日(23/2) 學校籌款日補假(24/2)
三月	1	2	3	4	5	6	7	一至五年級主科考試(12-13/3) 六年級報分試(9-13/3)
	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	
	22	23	24	25	26	27	28	
	29	30	31					境外學習 (28/3-2/4)

	日	一	二	三	四	五	六	假 期 / 事 項
四月				1	2	3	~~4~~	清明節(4/4)
	5	6	7	~~8~~	~~9~~	~~10~~	~~11~~	福音周及復活節崇拜 (6-7/4)
	~~12~~	~~13~~	~~14~~	~~15~~	16	17	18	復活節假期(8-15/4) 家長日(18/4)
	19	20	21	22	23	24	25	
	26	27	28	29	~~30~~			綵排日 (28/4) 綜藝晚會(29/4) 佛誕 (30/4)
五月						~~1~~	2	勞動節(1/5)
	3	4	5	6	7	8	9	零功課日(4/5)中小辯論賽(9/5)
	10	11	12	13	14	15	16	
	17	18	19	20	21	~~22~~	23	教師專業發展日(22/5)
	24	25	26	27	28	29	30	
	31							
六月		1	2	3	4	5	6	一至六年級考試(1-5/6)
	7	8	9	10	11	12	13	
	14	15	16	17	18	19	20	小一面試 (15-16/6)
	21	22	23	24	~~25~~	26	27	端午節(25/6)
	28	29	30					畢業禮(30/6)
七月				~~1~~	~~2~~	3	4	香港特區成立紀念日 (1/7) 畢業禮補假 (2/7)
	5	6	7	8	9	10	11	
	12	~~13~~	~~14~~	~~15~~	~~16~~	~~17~~	~~18~~	暑假(13/7-31/8)
	~~19~~	~~20~~	~~21~~	~~22~~	~~23~~	~~24~~	~~25~~	
	~~26~~	~~27~~	~~28~~	~~29~~	~~30~~	~~31~~		
八月							1	
	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~8~~	
	~~9~~	~~10~~	~~11~~	~~12~~	~~13~~	~~14~~	~~15~~	
	~~16~~	~~17~~	~~18~~	~~19~~	~~20~~	~~21~~	~~22~~	
	~~23~~	~~24~~	~~25~~	~~26~~	~~27~~	~~28~~	~~29~~	
	~~30~~	~~31~~						

綠色為半天上課日　　橙色為延伸學習活動課（周三）

紅色為公眾假期

本年度上課日數：192 日(包括兩次家長日)

學校假期：90 日

學校自決假期：3 日

周六及日 (不包長假期)：78 日

教師專業發展日：3 日

合計：366 日

	學校假期		學校自決假期
2/10	30/11	22/5	教師專業發展日

新界沙田瀝源邨　　網址：www.stts.edu.hk　　電話：3576 3344　　傳真：2609 0597

中華人民共和國香港特別行政區政府總部教育局
Education Bureau
Government Secretariat, The Government of the Hong Kong Special Administrative Region
The People's Republic of China

本局檔號 Our Ref : EDB(SDCT)3/PRO/10/1/1 電話 Telephone :

來函檔號 Your Ref. : 傳真 Fax Line :

31 January 2020

To: Supervisors / Principals of All Schools

Dear Supervisor / Principal,

Arrangements on Deferral of Class Resumption for All Schools

In view of the latest development of the epidemic, the Education Bureau (EDB) announced all schools (including kindergartens, primary schools, secondary schools, special schools and private schools offering non-formal curriculum) would resume their classes as early as March 2, yet subject to further assessment. The EDB will continue to follow professional health advice, and take into consideration the readiness of schools as well as the supply of epidemic preventive equipment in the community, etc. in making further assessment. We will decide the date of class resumption when there are sufficient grounds to resume class and inform schools as soon as possible so that schools can well prepare for the arrangements.

Students travelling abroad should return to Hong Kong as early as possible

We strongly urged the students to avoid going to affected areas in order to reduce the risk of being infected. Parents should arrange the students who are now travelling overseas to return to Hong Kong. In addition, students should stay at home as far as possible, avoid going to crowded places and pay close attention to the health conditions. They should consult a doctor at once if feeling unwell and inform the health care provider of their travel record. During the deferral period of class resumption, parents should refrain their children from attending group / extra-curricular activities (such as interest classes and tutorial classes) and must not allow their children

to travel abroad. According to the professional advice from the Centre for Health Protection (CHP), the incubation period for novel coronavirus infection can last for 14 days. Hence, students should stay at home as far as possible during the deferral period of class resumption to reduce the risk of infection. In order to facilitate schools to prepare appropriate arrangements, all schools (except private schools offering non-formal curriculum) are requested to contact their students (excluding cross-boundary students) to understand whether they are in Hong Kong on or before 3 February 2020. Please fill in the enclosed form (Appendix) and return by email or fax to the Regional Education Office or Joint Office for Kindergartens and Child Care Centres on or before 6 February 2020. Besides, schools should also have the travel information of teachers and school staff (including whether they have been to the Mainland and the duration of travel) during the Chinese New Year holidays in order to adjust the work arrangement during the deferral of class resumption period (e.g., work at home).

Schools should remain open during the extended holidays

During the deferral period of class resumption, schools should strengthen the cleaning of their premises, put in place all the preventive measures and remain open. They should arrange sufficient staff to be on duty to look after students who have to go back to school, handle school affairs and parents' enquiries.

Learning arrangements

Deferral of class resumption is by no means to stop learning. Schools should make good use of e-learning to arrange appropriate learning activities for students, such as providing learning materials, homework, extensive reading through emails, school homepages, e-learning platforms or other effective means. Schools can also make use of online resources provided by various subject sections of EDB, multimedia and reading materials from Hong Kong Education City and online assessment platform (STAR platform) to facilitate students' self-learning at home. With the guidance from teachers and parents, students can build up their self-learning abilities and get well prepared for class resumption.

All scheduled internal examinations and assessments within the deferral period of class resumption should be cancelled or postponed to avoid crowds. Regarding the primary school internal examination for the purpose of Secondary School Places Allocation, we are closely monitoring the impacts of the novel coronavirus epidemic on the process of allocation of secondary one school places, and we will discuss with various stakeholders for the contingency arrangements.

We will closely follow up and evaluate the situation, maintain close liaison with the Hong Kong Examinations and Assessment Authority (HKEAA) on the support required by schools and candidates, and keep in close contact with the education sector. The HKEAA will formulate the contingency plans on the examination arrangements. For any changes concerning the examination arrangements, the HKEAA will announce as soon as practicable.

Activities arrangements

During the deferral period of class resumption, schools should cancel all the activities inside / outside schools to avoid crowds and reduce the risk of infection. We will cancel or postpone the professional development trainings for teachers and activities for students which scheduled in February, including seminars, workshops and exhibitions. The EDB has also suspended the operation of the Education Services Centre and the Young Achievers' Gallery at Kowloon Tong. Since the epidemic outbreak is still developing, we have suspended or postponed students' exchange programmes on the Mainland organized by EDB. Schools should also make similar arrangements for the self-arranged exchange activities on the Mainland. Besides, as there are various outbreaks occurred globally in different countries / areas recently, there will be risks associated with overseas visits. Schools should adopt the same principle to make similar arrangements. However, if schools have to continue such activities, schools should carefully assess the risk associated, and be considerate if parents want to withdraw from the activities. For updated information on the countries / areas with reported cases of novel coronavirus infection, please visit the relevant webpages on CHP's website (https://www.chp.gov.hk/en/features/102465.html).

The EDB will continue to maintain close liaison with relevant government departments including the CHP, and to inform schools of the latest information and relevant measures on infectious diseases. For enquiries, please contact your respective Senior School Development Officers / Senior Services Officers.

Yours sincerely,

(Ms Cynthia CHAN)
for Secretary for Education

FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,
5 Lok Yi Street, Tai Lam,
Tuen Mun, N.T.,
Hong Kong.

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

Appendix F

Air Quality 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)

AMS4A - Wai Wah Centre

1-hour TSP (μg/m³)								
Date	**Start Time**	**1st hr**	**2nd hr**	**3rd hr**	**Average**	**Action Level**	**Limit Level**	**Weather**
5-Feb-20	15:37	98	88	82	89	348	500	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	93
Max	108
Min	82

AMS 6 - Shatin Plaza

1-hour TSP (μg/m³)								
Date	**Start Time**	**1st hr**	**2nd hr**	**3rd hr**	**Average**	**Action Level**	**Limit Level**	**Weather**
5-Feb-20	19:56	97	77	81	85	347	500	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	86
Max	102
Min	63

AMS 8 - Lek Yuen Estate

1-hour TSP (μg/m³)								
Date	**Start Time**	**1st hr**	**2nd hr**	**3rd hr**	**Average**	**Action Level**	**Limit Level**	**Weather**
5-Feb-20	13:23	108	96	96	100	336	500	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

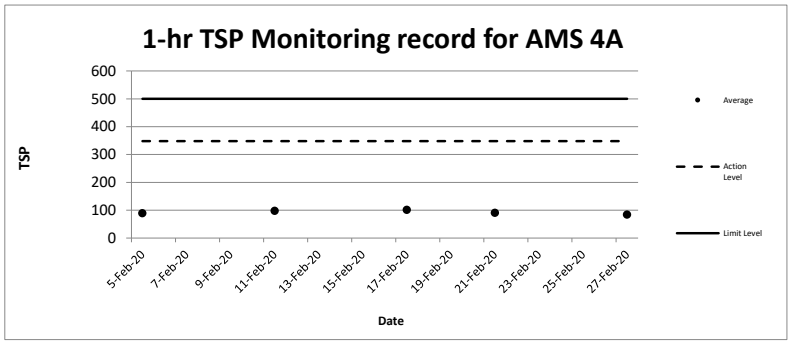
Average	87
Max	108
Min	56

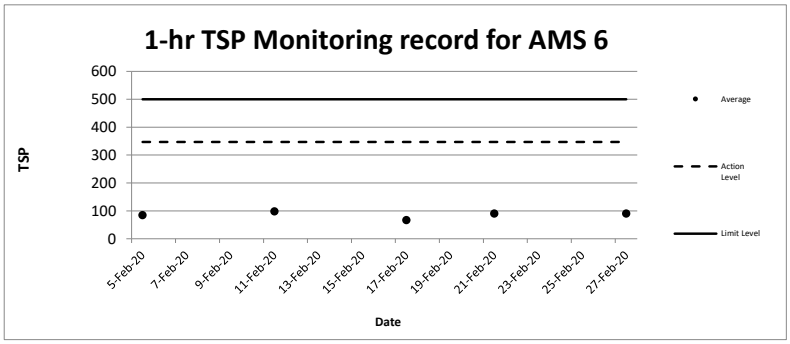
AMS 12 - Fung Wo Estate

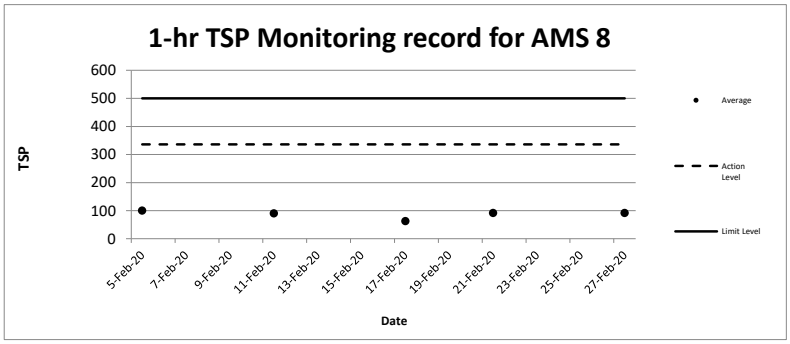
1-hour TSP (μg/m³)								
Date	**Start Time**	**1st hr**	**2nd hr**	**3rd hr**	**Average**	**Action Level**	**Limit Level**	**Weather**
5-Feb-20	14:31	82	62	75	73	296	500	Fine
11-Feb-20	14:56	101	72	91	88			Fine
17-Feb-20	11:34	67	62	51	60			Sunny
21-Feb-20	20:09	99	91	92	94			Sunny
27-Feb-20	11:16	99	81	97	92			Fine

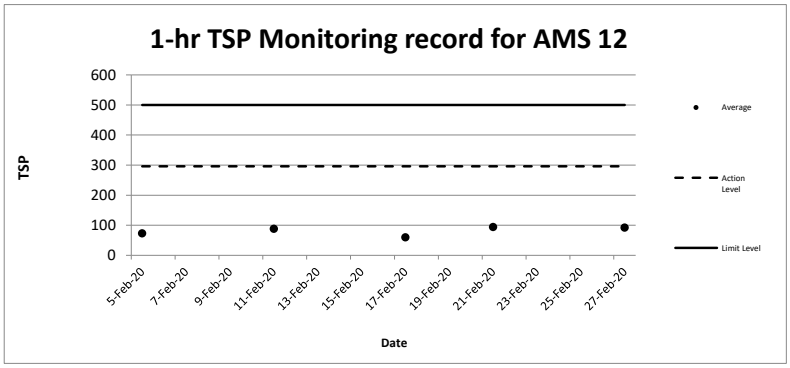
Average	81
Max	101
Min	51

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.


1-hr TSP Monitoring record for AMS 4A
TSP
600
500
400
300
200
100
0
5-Feb-20
7-Feb-20
9-Feb-20
11-Feb-20
13-Feb-20
15-Feb-20
17-Feb-20
19-Feb-20
21-Feb-20
23-Feb-20
25-Feb-20
27-Feb-20
Date
Average
Action Level
Limit Level


1-hr TSP Monitoring record for AMS 6
TSP
600
500
400
300
200
100
0
5-Feb-20
7-Feb-20
9-Feb-20
11-Feb-20
13-Feb-20
15-Feb-20
17-Feb-20
19-Feb-20
21-Feb-20
23-Feb-20
25-Feb-20
27-Feb-20
Date
Average
Action Level
Limit Level


1-hr TSP Monitoring record for AMS 8
TSP
600
500
400
300
200
100
0
5-Feb-20
7-Feb-20
9-Feb-20
11-Feb-20
13-Feb-20
15-Feb-20
17-Feb-20
19-Feb-20
21-Feb-20
23-Feb-20
25-Feb-20
27-Feb-20
Date
Average
Action Level
Limit Level


1-hr TSP Monitoring record for AMS 12
TSP
600
500
400
300
200
100
0
5-Feb-20
7-Feb-20
9-Feb-20
11-Feb-20
13-Feb-20
15-Feb-20
17-Feb-20
19-Feb-20
21-Feb-20
23-Feb-20
25-Feb-20
27-Feb-20
Date
Average
Action Level
Limit Level

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 (μg/m³)
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 (μg/m³)
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 (μg/m³)
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 (μg/m³)
21/2/2020 9:03	73
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 (μg/m³)
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)

AMS6 - Shatin Plaza

Date and Time	TSP Concentration (μg/m³)
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 (μg/m³)
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 (μg/m³)
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 (μg/m³)
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 (μg/m³)
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)

AMS 8 - Lek Yuen Estate

Date and Time	TSP Concentration (μg/m³)
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 (μg/m³)
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 (μg/m³)
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 (μg/m³)
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 (μg/m³)
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 12 - Fung Wo Estate

Date and Time	TSP Concentration (μg/m³)
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

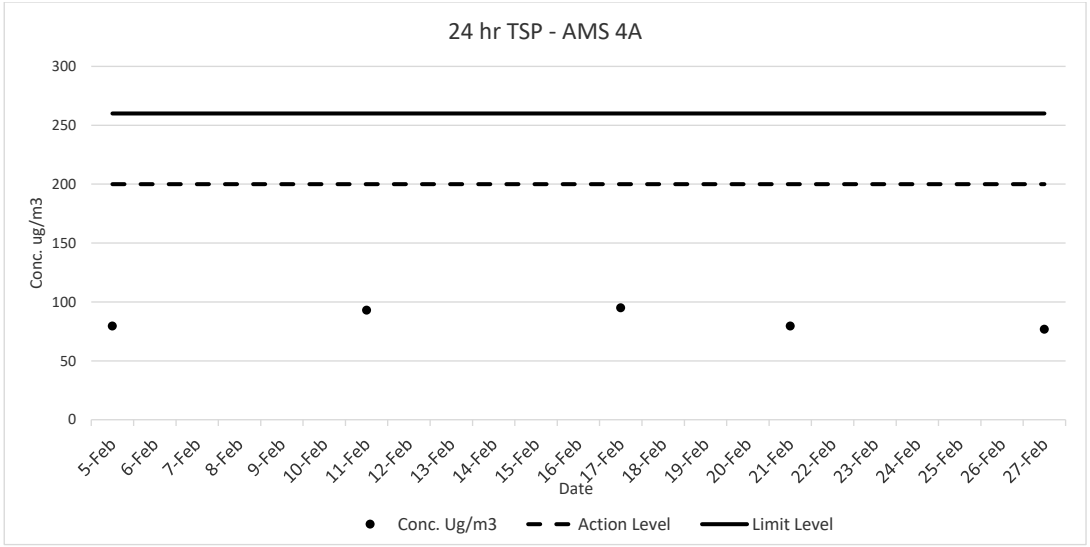
Date and Time	TSP Concentration (μg/m³)
11/2/2020 9:56	72
11/2/2020 10:56	85
11/2/2020 11:56	86
11/2/2020 12:56	79
11/2/2020 13:56	74
11/2/2020 14:56	101
11/2/2020 15:56	72
11/2/2020 16:56	91
11/2/2020 17:56	68
11/2/2020 18:56	82
11/2/2020 19:56	83
11/2/2020 20:56	82
11/2/2020 21:56	85
11/2/2020 22:56	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

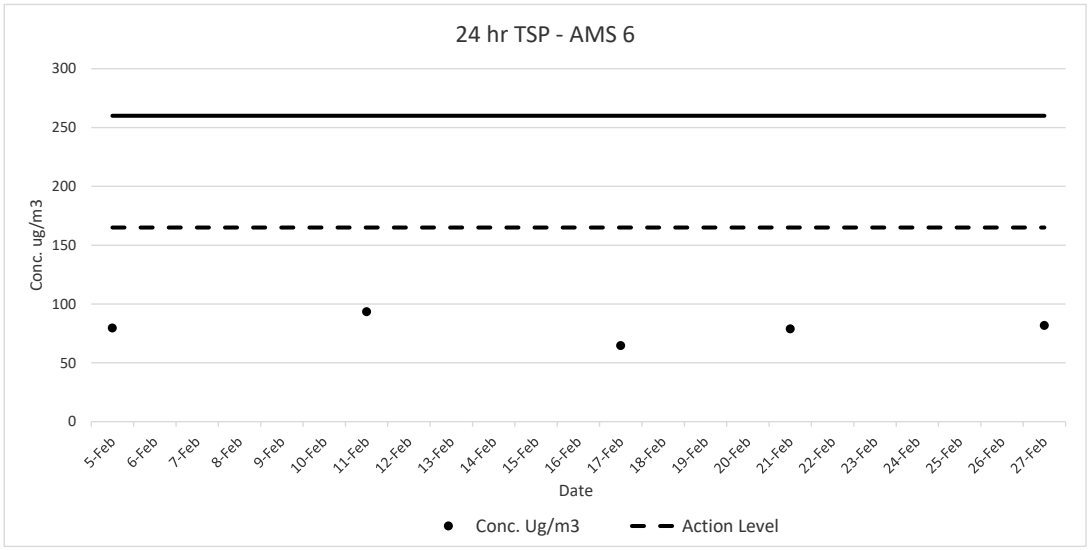
Date and Time	TSP Concentration (μg/m³)
17/2/2020 9:34	55
17/2/2020 10:34	60
17/2/2020 11:34	67
17/2/2020 12:34	62
17/2/2020 13:34	51
17/2/2020 14:34	65
17/2/2020 15:34	55
17/2/2020 16:34	58
17/2/2020 17:34	51
17/2/2020 18:34	55
17/2/2020 19:34	60
17/2/2020 20:34	58
17/2/2020 21:34	62
17/2/2020 22:34	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 (μg/m³)
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 (μg/m³)
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 hr TSP - AMS 4A
300
250
200
150
100
50
0
Conc. ug/m3
5-Feb
6-Feb
7-Feb
8-Feb
9-Feb
10-Feb
11-Feb
12-Feb
13-Feb
14-Feb
15-Feb
16-Feb
17-Feb
18-Feb
19-Feb
20-Feb
21-Feb
22-Feb
23-Feb
24-Feb
25-Feb
26-Feb
27-Feb
Date
Conc. Ug/m3
Action Level
Limit Level


24 hr TSP - AMS 6
300
250
200
150
100
50
0
Conc. ug/m3
5-Feb
6-Feb
7-Feb
8-Feb
9-Feb
10-Feb
11-Feb
12-Feb
13-Feb
14-Feb
15-Feb
16-Feb
17-Feb
18-Feb
19-Feb
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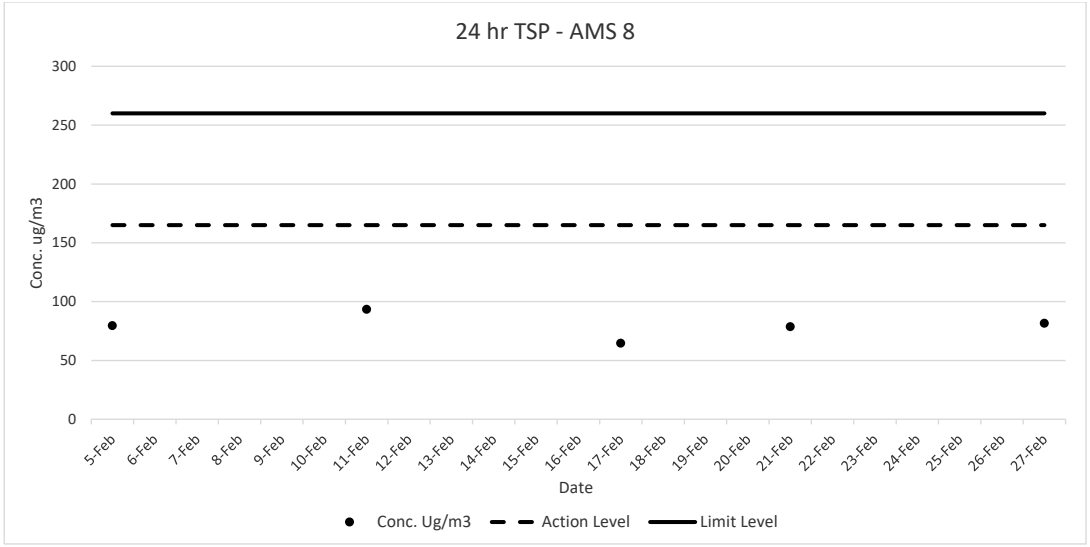
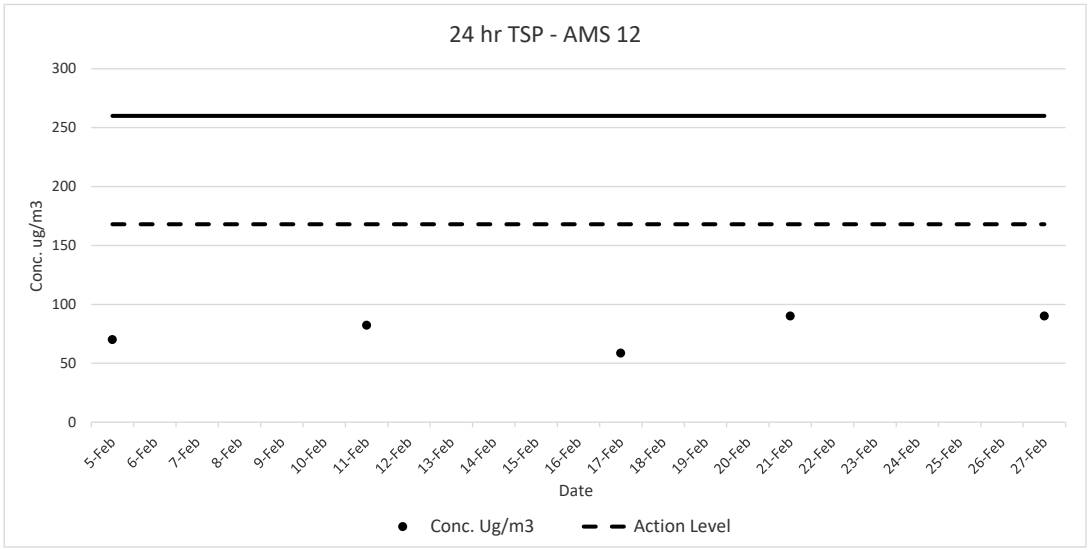
23-Feb
24-Feb
25-Feb
26-Feb
27-Feb
Date
Conc. Ug/m3
Action Level


24 hr TSP - AMS 8
300
250
200
150
100
50
0
Conc. ug/m3
5-Feb
6-Feb
7-Feb
8-Feb
9-Feb
10-Feb
11-Feb
12-Feb
13-Feb
14-Feb
15-Feb
16-Feb
17-Feb
18-Feb
19-Feb
20-Feb
21-Feb
22-Feb
23-feb
24-feb
25-feb
26-feb
27-feb
Date
Conc. Ug/m3
Action Level
Limit Level


24 hr TSP - AMS 12
300
250
200
150
100
50
0
Conc. ug/m3
5-Feb
6-Feb
7-Feb
8-Feb
9-Feb
10-Feb
11-Feb
12-Feb
13-Feb
14-Feb
15-Feb
16-Feb
17-Feb
18-Feb
19-Feb
20-Feb
21-Feb
22-Feb
23-feb
24-feb
25-feb
26-feb
27-feb
Date
Conc. Ug/m3
Action Level

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Appendix G

Noise Monitoring Data

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						
6-Feb-20	8:30	64.4	61.0	66.5	75	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						
6-Feb-20	9:07	64.1	62.0	66.0	75	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						
6-Feb-20	9:41	65.5	63.0	67.5	75	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						
6-Feb-20	10:19	65.8	63.5	68.0	75	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						
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						
6-Feb-20	11:38	65.7	63.5	67.5	75	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						
6-Feb-20	8:42	71.0	67.5	73.2	75	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						
5-Feb-20	8:30	71.1	67.5	73.5	75	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						
5-Feb-20	9:42	66.5	64.0	68.0	75	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						
5-Feb-20	10:20	64.0	61.0	65.5	70	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						
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						
5-Feb-20	10:52	64.3	62.0	66.5	70	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

*Note: The Education Bureau (EDB) announced all schools would resume their classes as early as 20 Apr 2020.

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						
5-Feb-20	11:32	68.1	66.0	71.5	75	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						
5-Feb-20	15:42	66.8	64.0	67.5	75	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						
6-Feb-20	14:44	65.8	62.5	67.0	75	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						
6-Feb-20	9:57	65.8	63.0	68.3	75	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						
5-Feb-20	13:20	63.9	59.0	65.0	70	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

*Note: The Education Bureau (EDB) announced all schools would resume their classes as early as 20 Apr 2020.

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						
6-Feb-20	10:35	66.7	64.5	69.0	75	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						
5-Feb-20	14:30	67.5	65.5	69.0	75	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						
5-Feb-20	15:06	67.9	66.5	70.0	75	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						
6-Feb-20	11:10	67.0	64.5	69.0	75	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						
5-Feb-20	9:03	69.8	66.5	71.5	75	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						
5-Feb-20	16:58	69.2	66.5	72.0	75	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

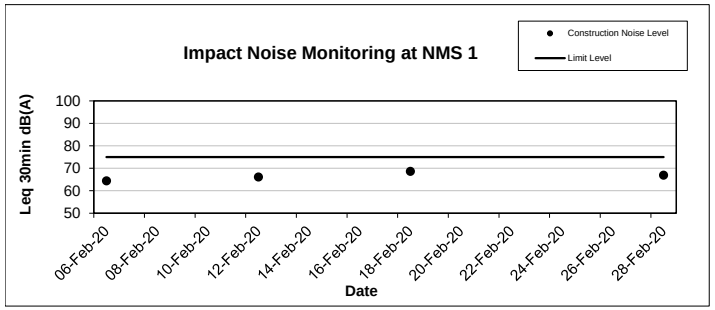
Date	Start Time	Measured Noise Level			Limit Level	Construction Noise Level	Weather	Wind Speed (m/s)
		L_{eq}	L_{90}	L_{10}				
		Unit: dB(A) 30 Mins						
5-Feb-20	13:56	74.1	71.0	75.5	75	74.1	Sunny	0.8
11-Feb-20	11:24	72.8	70.0	75.0		72.8	Fine	0.7
17-Feb-20	13:27	69.8	67.3	72.3		69.8	Fine	0.6
27-Feb-20	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						
6-Feb-20	11:45	64.5	62.0	67.0	70	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

*Note: The Education Bureau (EDB) announced all schools would resume their classes as early as 20 Apr 2020.

Calculated CNL = Measured Noise Level during operation – Baseline (dB(A)).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Limit Level
Leq 30min dB(A)
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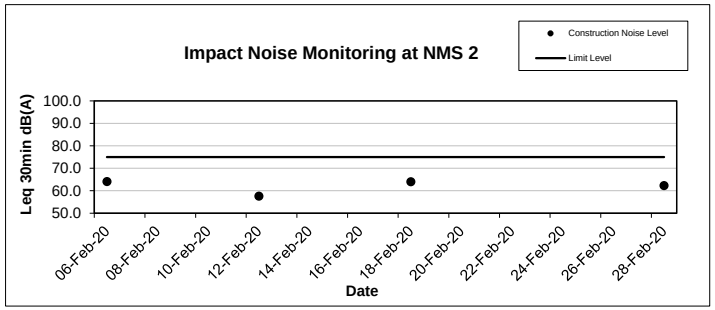
90
80
70
60
50
06-Feb-20
08-Feb-20
10-Feb-20
12-Feb-20
14-Feb-20
16-Feb-20
18-Feb-20
20-Feb-20
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date


Impact Noise Monitoring at NMS 2
Construction Noise Level
Limit Level
Leq 30min dB(A)
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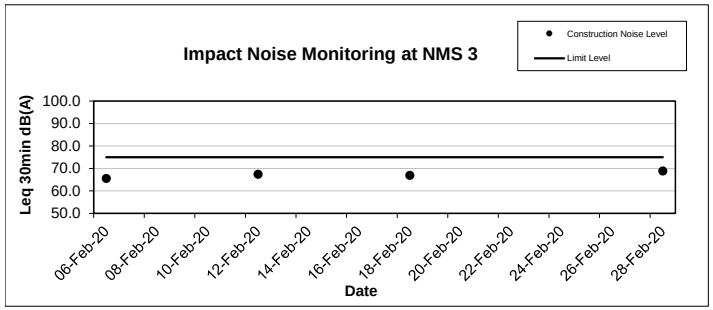
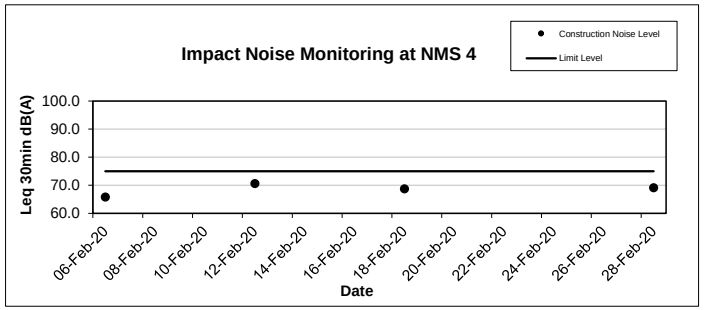
90.0
80.0
70.0
60.0
50.0
06-Feb-20
08-Feb-20
10-Feb-20
12-Feb-20
14-Feb-20
16-Feb-20
18-Feb-20
20-Feb-20
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date


Impact Noise Monitoring at NMS 3
Construction Noise Level
Limit Level
Leq 30min dB(A)
100.0
90.0
80.0
70.0
60.0
50.0
06-Feb-20
08-Feb-20
10-Feb-20
12-Feb-20
14-Feb-20
16-Feb-20
18-Feb-20
20-Feb-20
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date


Impact Noise Monitoring at NMS 4
Construction Noise Level
Limit Level
Leq 30min dB(A)
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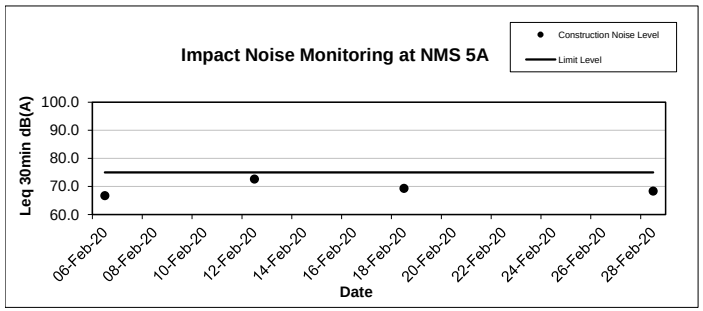
90.0
80.0
70.0
60.0
06-Feb-20
08-Feb-20
10-Feb-20
12-Feb-20
14-Feb-20
16-Feb-20
18-Feb-20
20-Feb-20
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date


Impact Noise Monitoring at NMS 5A
Construction Noise Level
Limit Level
Leq 30min dB(A)
100.0
90.0
80.0
70.0
60.0
06-Feb-20
08-Feb-20
10-Feb-20
12-Feb-20
14-Feb-20
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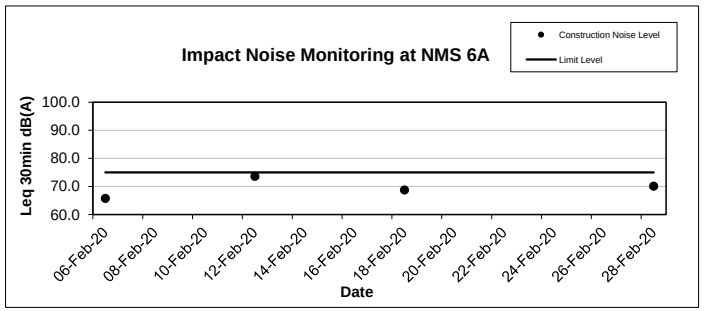
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date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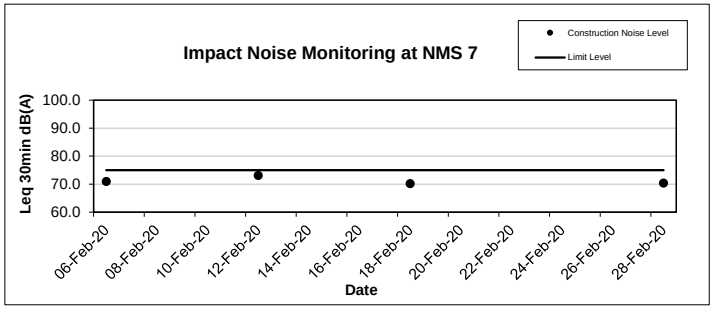
Construction Noise Level
Limit Level
Leq 30min dB(A)
100.0
90.0
80.0
70.0
60.0
06-Feb-20
08-Feb-20
10-Feb-20
12-Feb-20
14-Feb-20
16-Feb-20
18-Feb-20
20-Feb-20
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date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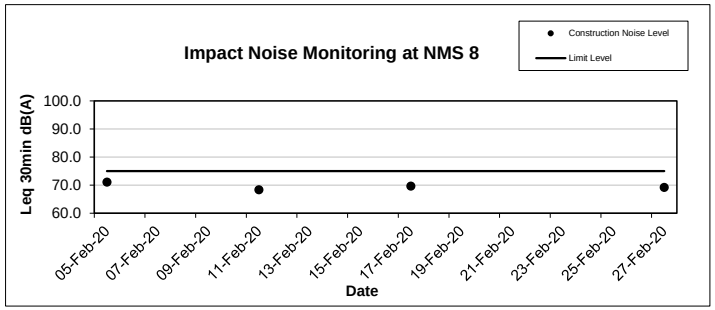
Construction Noise Level
Limit Level
Leq 30min dB(A)
100.0
90.0
80.0
70.0
60.0
06-Feb-20
08-Feb-20
10-Feb-20
12-Feb-20
14-Feb-20
16-Feb-20
18-Feb-20
20-Feb-20
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date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Construction Noise Level
Limit Level
Leq 30min dB(A)
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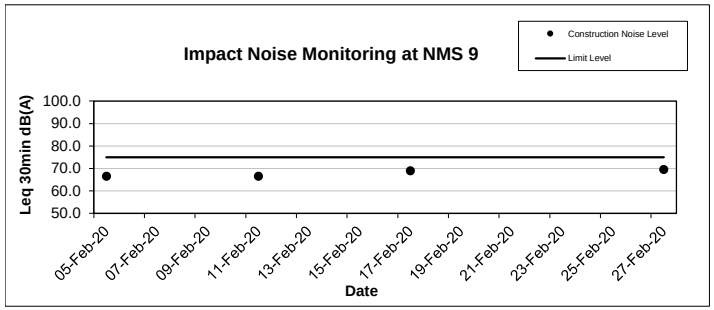
90.0
80.0
70.0
60.0
05-Feb-20
07-Feb-20
09-Feb-20
11-Feb-20
13-Feb-20
15-Feb-20
17-Feb-20
19-Feb-20
21-Feb-20
23-Feb-20
25-Feb-20
27-Feb-20
Date


Impact Noise Monitoring at NMS 9
Construction Noise Level
Limit Level
Leq 30min dB(A)
100.0
90.0
80.0
70.0
60.0
50.0
05-Feb-20
07-Feb-20
09-Feb-20
11-Feb-20
13-Feb-20
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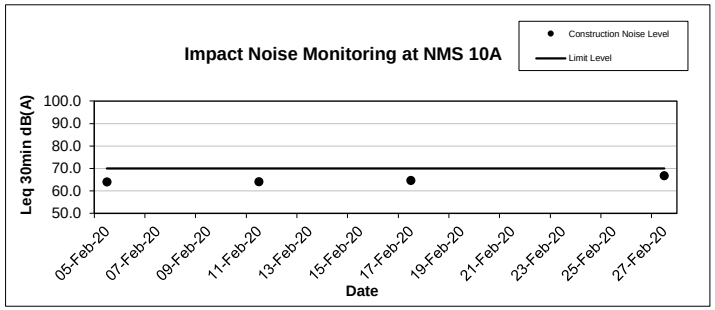
27-Feb-20
Date


Impact Noise Monitoring at NMS 10A
Construction Noise Level
Limit Level
Leq 30min dB(A)
100.0
90.0
80.0
70.0
60.0
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05-Feb-20
07-Feb-20
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11-Feb-20
13-Feb-20
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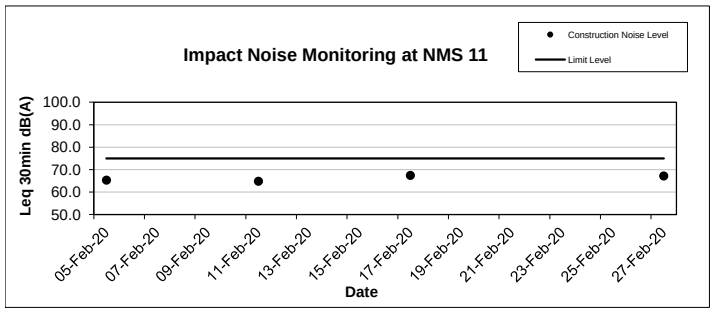
25-Feb-20
27-Feb-20
Date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Construction Noise Level
Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
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05-Feb-20
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11-Feb-20
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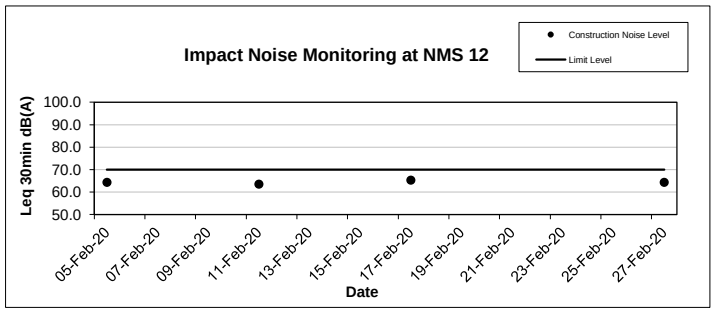
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Construction Noise Level
Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
50.0
05-Feb-20
07-Feb-20
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11-Feb-20
13-Feb-20
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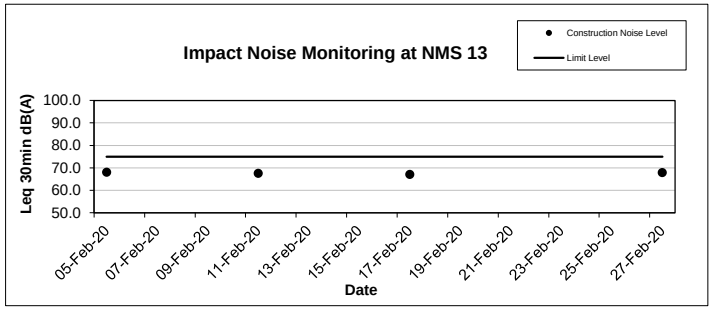
25-Feb-20
27-Feb-20
Date


Impact Noise Monitoring at NMS 13
Construction Noise Level
Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
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05-Feb-20
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11-Feb-20
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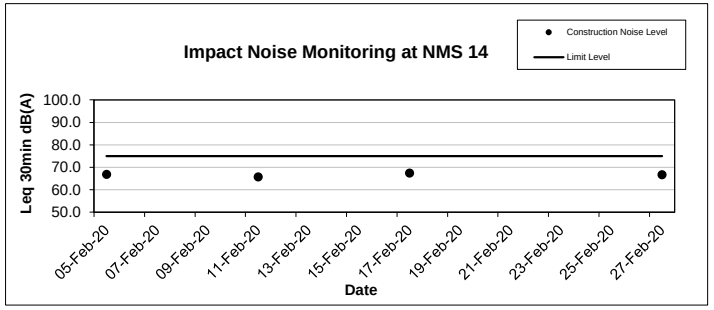
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Construction Noise Level
Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
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05-Feb-20
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11-Feb-20
13-Feb-20
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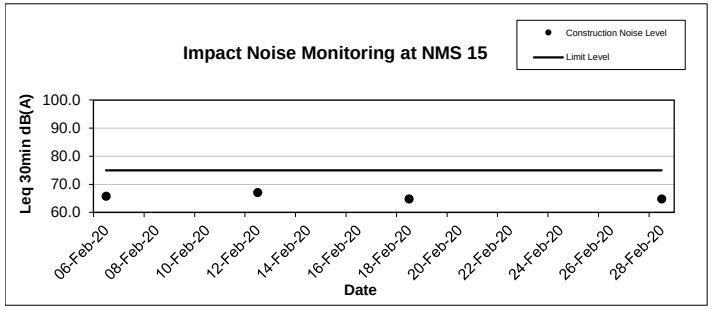
Impact Noise Monitoring at NMS 15
Construction Noise Level
Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
06-Feb-20
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12-Feb-20
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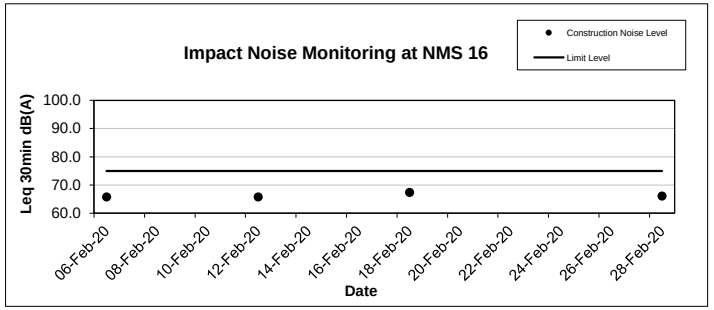
28-Feb-20
Date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Construction Noise Level
Limit Level
Leq 30min dB(A)
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80.0
70.0
60.0
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12-Feb-20
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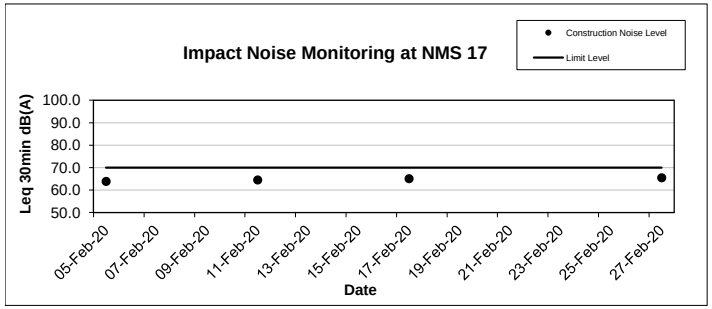
Date


Impact Noise Monitoring at NMS 17
Construction Noise Level
Limit Level
Leq 30min dB(A)
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80.0
70.0
60.0
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11-Feb-20
13-Feb-20
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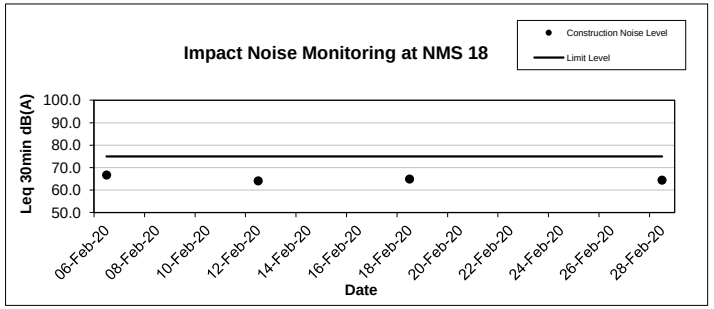
21-Feb-20
23-Feb-20
25-Feb-20
27-Feb-20
Date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90.0
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70.0
60.0
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12-Feb-20
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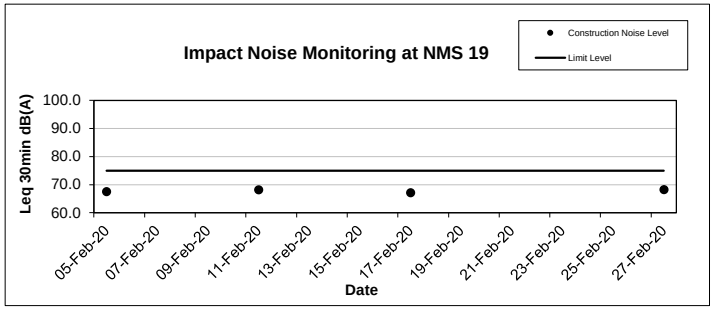
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date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Limit Level
Leq 30min dB(A)
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11-Feb-20
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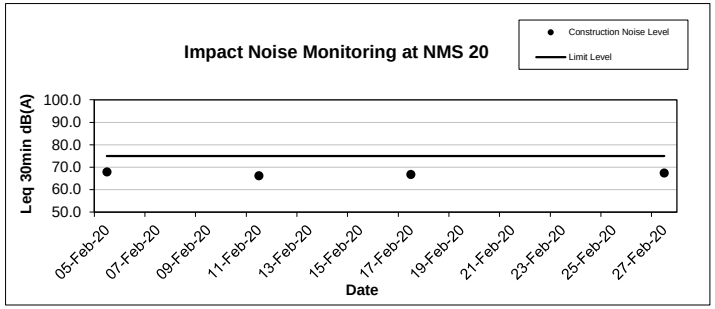
21-Feb-20
23-Feb-20
25-Feb-20
27-Feb-20
Date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Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
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11-Feb-20
13-Feb-20
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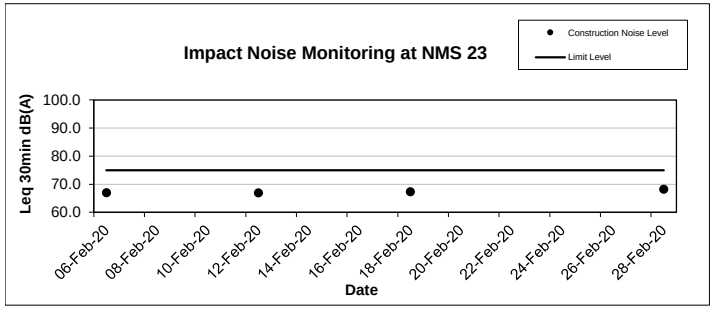
19-Feb-20
21-Feb-20
23-Feb-20
25-Feb-20
27-Feb-20
Date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Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
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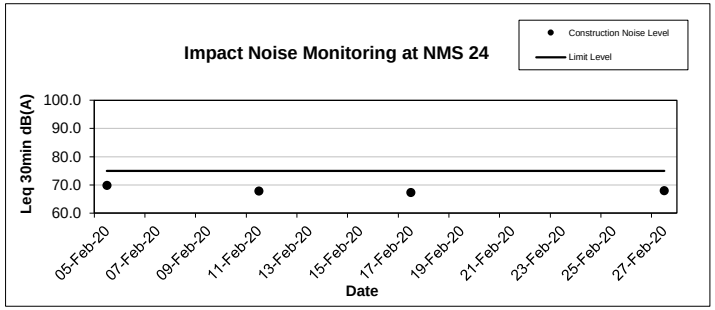
08-Feb-20
10-Feb-20
12-Feb-20
14-Feb-20
16-Feb-20
18-Feb-20
20-Feb-20
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date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Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
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11-Feb-20
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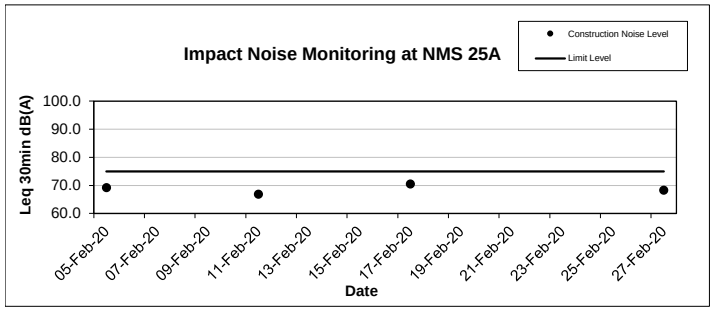
27-Feb-20
Date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Limit Level
Leq 30min dB(A)
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80.0
70.0
60.0
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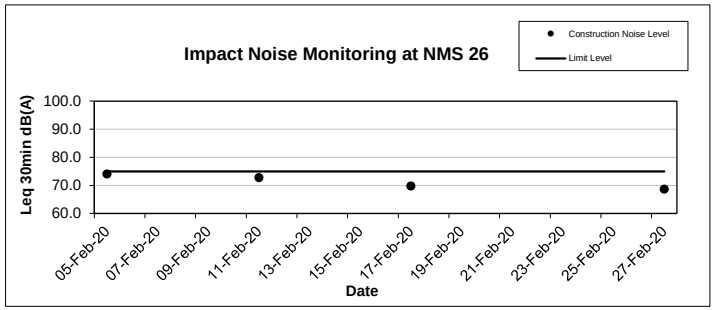
Impact Noise Monitoring at NMS 26
Construction Noise Level
Limit Level
Leq 30min dB(A)
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90.0
80.0
70.0
60.0
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09-Feb-20
11-Feb-20
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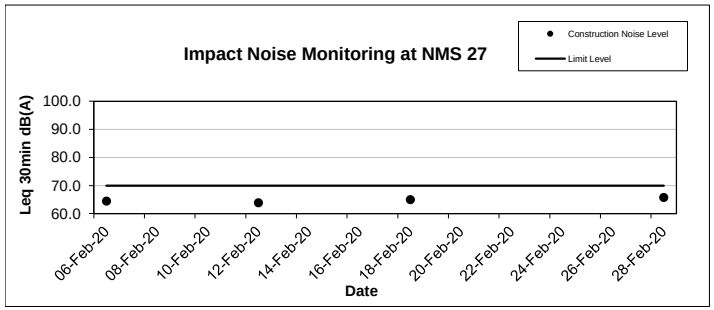
23-Feb-20
25-Feb-20
27-Feb-20
Date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Construction Noise Level
Limit Level
Leq 30min dB(A)
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80.0
70.0
60.0
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08-Feb-20
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12-Feb-20
14-Feb-20
16-Feb-20
18-Feb-20
20-Feb-20
22-Feb-20
24-Feb-20
26-Feb-20
28-Feb-20
Date

Night Time Noise Monitoring Result for
NOD 03-2018 Road Widening and Retrofitting Noise Barriers on Tai Po Road (Sha Tin Sectio

NMS 1 Scenery Court

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
6-Feb-20	23:00	56.8	61.4	52.8 - 66.3	55	Measured Noise Level<Baseline*	Fine	0.5
13-Feb-20	23:02	58.5			55	Measured Noise Level<Baseline*	Fine	0.6
21-Feb-20	23:00	60.1			55	Measured Noise Level<Baseline*	Fine	0.4
27-Feb-20	23:00	57.8			55	Measured Noise Level<Baseline*	Fine	0.6

*Note: Measured Average Leq (15min) was lower than baseline level: 61.4 dB(A).

NMS 2 Villa Le Parc

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	2:40	45.7	49.7	40.1 - 58.2	55	Measured Noise Level<Limit Level	Fine	0.6
14-Feb-20	2:36	46.5			55	Measured Noise Level<Limit Level	Fine	0.8
22-Feb-20	2:30	48.0			55	Measured Noise Level<Limit Level	Fine	0.4
28-Feb-20	2:45	46.2			55	Measured Noise Level<Limit Level	Fine	0.7

*Note: Measured Average Leq (15min) was lower than Limit Level: 55 dB(A).

NMS 3 Hilton Plaza

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
6-Feb-20	23:00	61.3	70.9	60.2 - 78.9	55	Measured Noise Level<Baseline*	Fine	0.4
13-Feb-20	23:00	61.2			55	Measured Noise Level<Baseline*	Fine	0.8
21-Feb-20	23:00	61.8			55	Measured Noise Level<Baseline*	Fine	0.5
27-Feb-20	23:00	59.5			55	Measured Noise Level<Baseline*	Fine	0.8

*Note: Measured Average Leq (15min) was lower than baseline level: 70.9 dB(A).

NMS 4 Tin Liu

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	2:39	56.5	62.6	53.1 - 68.1	55	Measured Noise Level<Baseline*	Fine	0.5
14-Feb-20	2:41	56.6			55	Measured Noise Level<Baseline*	Fine	0.7
22-Feb-20	2:35	57.7			55	Measured Noise Level<Baseline*	Fine	0.3
28-Feb-20	3:01	57.2			55	Measured Noise Level<Baseline*	Fine	0.4

*Note: Measured Average Leq (15min) was lower or equal to baseline level: 62.6 dB(A) or Limit Level: 55 dB(A).

NMS 5A Wai Wah Centre

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
6-Feb-20	23:26	67.7	67.9	62.0 - 75.2	55	Measured Noise Level<Baseline*	Fine	0.6
13-Feb-20	23:31	67.6			55	Measured Noise Level<Baseline*	Fine	0.6
21-Feb-20	23:23	67.4			55	Measured Noise Level≤Baseline*	Fine	0.5
27-Feb-20	23:30	58.3			55	Measured Noise Level<Baseline*	Fine	0.6

*Note: Measured Average Leq (15min) was lower than baseline level: 67.9 dB(A).

**The Corrected Noise Level in Leq (15min) was lower than Limit Level: 55 dB(A).

***The Corrected Noise Level in Leq (15min) was greater than Limit Level: 55 dB(A). There was an exceedance. The exceedance is proved to be not project related by ET's investigation.

NMS 6A Wai Wah Centre

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
6-Feb-20	23:20	67.9	71.5	65.0 - 85.9	55	Measured Noise Level<Baseline*	Fine	0.4
13-Feb-20	23:18	67.6			55	Measured Noise Level<Baseline*	Fine	0.6
21-Feb-20	23:22	69.0			55	Measured Noise Level<Baseline*	Fine	0.5
27-Feb-20	23:20	68.4			55	Measured Noise Level<Baseline*	Fine	0.6

*Note: Measured Average Leq (15min) was lower than baseline level: 71.5 dB(A).

NMS 7 Tin Liu

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	2:20	59.0	59.0	51.4 - 65.5	55	Measured Noise Level<Baseline*	Fine	0.5
14-Feb-20	2:23	60.0		51.4 - 65.5	55	53.0**	Fine	0.6
22-Feb-20	2:17	60.3		51.4 - 65.5	55	54.4**	Fine	0.4
28-Feb-20	2:56	58.6		51.4 - 65.5	55	Measured Noise Level<Baseline*	Fine	0.5

*Note: Measured Average Leq (15min) was lower than baseline level: 59.0 dB(A) or Limit Level: 55 dB(A).
**The Corrected Noise Level in Leq (15min) was lower than Limit Level: 55 dB(A).

NMS 8 Shatin Plaza

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
6-Feb-20	23:45	58.5	64.4	55.6 - 72.8	55	Measured Noise Level<Baseline*	Fine	0.5
13-Feb-20	23:42	57.8		55.6 - 72.8	55	Measured Noise Level<Baseline*	Fine	0.6
21-Feb-20	23:42	59.2		55.6 - 72.8	55	Measured Noise Level<Baseline*	Fine	0.6
27-Feb-20	23:42	57.7		55.6 - 72.8	55	Measured Noise Level<Baseline*	Fine	0.6

*Note: Measured Average Leq (15min) was lower than baseline level: 64.4 dB(A).

NMS 9 Lek Yuen Estate

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	0:10	56.4	53.5	39.5 - 63.1	55	53.2**	Fine	0.6
14-Feb-20	0:16	56.3		39.5 - 63.1	55	53.1**	Fine	0.6
22-Feb-20	0:05	56.5		39.5 - 63.1	55	53.5**	Fine	0.4
28-Feb-20	0:10	55.1		39.5 - 63.1	55	50.1**	Fine	0.8

*Note: Measured Average Leq (15min) was lower than baseline level: 53.5 dB(A) or Limit Level: 55 dB(A).
**The Corrected Noise Level in Leq (15min) was lower than Limit Level: 55 dB(A).

NMS 11 Sheung Wo Che

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	1:37	53.0	53.2	46.1 - 62.8	55	Measured Noise Level<Limit Level*	Fine	0.6
14-Feb-20	1:42	52.9		46.1 - 62.8	55	Measured Noise Level<Limit Level*	Fine	0.6
22-Feb-20	1:40	53.8		46.1 - 62.8	55	Measured Noise Level<Limit Level*	Fine	0.6
28-Feb-20	2:32	54.8		46.1 - 62.8	55	Measured Noise Level<Limit Level*	Fine	0.3

*Note: Measured Average Leq (15min) was lower than Limit Level: 55 dB(A).

NMS 13 Lek Yuen Estate

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	22:12	56.4	57.3	45.4 - 72.5	55	Measured Noise Level<Baseline*	Fine	0.5
14-Feb-20	1:25	57.8		45.4 - 72.5	55	48.5*	Fine	0.6
22-Feb-20	1:14	58.0		45.4 - 72.5	55	50.0*	Fine	0.4
28-Feb-20	0:20	57.7		45.4 - 72.5	55	47.0**	Fine	0.5

*Note: Measured Average Leq (15min) was lower than baseline level: 57.3 dB(A) or Limit Level: 55 dB(A).

**The Corrected Noise Level in Leq (15min) was lower than Limit Level: 55 dB(A).

NMS 14 Sheung Wo Che

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	1:30	54.7	54.1	46.1 - 62.8	55	Measured Noise Level<Limit Level*	Fine	0.5
13-Feb-20	1:30	54.0		46.1 - 62.8	55	Measured Noise Level<Limit Level*	Fine	0.7
22-Feb-20	1:42	54.1		46.1 - 62.8	55	Measured Noise Level<Limit Level*	Fine	0.4
28-Feb-20	1:32	55.4		46.1 - 62.8	55	49.4**	Fine	0.7

*Note: Measured Average Leq (15min) was lower than Limit Level: 55 dB(A).

**The Corrected Noise Level in Leq (15min) was lower than Limit Level: 55 dB(A).

NMS 15 Ha Wo Che

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	1:17	52.6	58.8	48.4 - 69.7	55	Measured Noise Level<Limit Level*	Fine	0.5
14-Feb-20	1:22	52.9		48.4 - 69.7	55	Measured Noise Level<Limit Level*	Fine	0.6
22-Feb-20	1:18	54.0		48.4 - 69.7	55	Measured Noise Level<Limit Level*	Fine	0.5
28-Feb-20	1:34	53.0		48.4 - 69.7	55	Measured Noise Level<Limit Level*	Fine	0.5

*Note: Measured Average Leq (15min) was lower than baseline level: 58.8 dB(A) or Limit Level: 55 dB(A).

NMS 16 Ha Wo Che

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	1:10	57.3	60.1	51.4 - 69.5	55	Measured Noise Level<Baseline*	Fine	0.5
14-Feb-20	1:07	56.9		51.4 - 69.5	55	Measured Noise Level<Baseline*	Fine	0.7
22-Feb-20	1:10	55.6		51.4 - 69.5	55	Measured Noise Level<Baseline*	Fine	0.4
28-Feb-20	1:15	54.3		51.4 - 69.5	55	Measured Noise Level<Limit Level*	Fine	0.7

*Note: Measured Average Leq (15min) was lower than baseline level: 60.1 dB(A) or Limit Level: 55 dB(A).

NMS 18 Ha Wo Che

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	0:55	53.3	63.2	56.0 - 72.1	55	Measured Noise Level<Limit Level*	Fine	0.5
14-Feb-20	0:53	57.0		56.0 - 72.1	55	Measured Noise Level<Baseline*	Fine	0.7
22-Feb-20	0:55	54.2		56.0 - 72.1	55	Measured Noise Level<Limit Level*	Fine	0.5
28-Feb-20	0:55	54.1		56.0 - 72.1	55	Measured Noise Level<Limit Level*	Fine	0.8

*Note: Measured Average Leq (15min) was lower than baseline level: 63.2 dB(A) or Limit Level: 55 dB(A).

NMS 19 Wo Che Estate

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	0:33	58.9	61.7	53.8 - 72.8	55	Measured Noise Level<Baseline*	Fine	0.5
14-Feb-20	0:40	61.6		53.8 - 72.8	55	Measured Noise Level<Baseline*	Fine	0.0
22-Feb-20	0:37	61.2		53.8 - 72.8	55	Measured Noise Level<Baseline*	Fine	0.4
28-Feb-20	0:41	58.0		53.8 - 72.8	55	Measured Noise Level<Baseline*	Fine	0.5

*Note: Measured Average Leq (15min) was lower than baseline level: 61.7 dB(A) or Limit Level: 55 dB(A).

NMS 20 Wo Che Estate

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	0:51	54.6	57.7	48.6 - 71.7	55	Measured Noise Level<Limit Level	Fine	0.4
14-Feb-20	0:48	56.4		48.6 - 71.7	55	Measured Noise Level<Baseline*	Fine	0.0
22-Feb-20	0:56	56.7		48.6 - 71.7	55	Measured Noise Level<Baseline*	Fine	0.4
28-Feb-20	1:34	54.7		48.6 - 71.7	55	Measured Noise Level<Limit Level	Fine	0.5

*Note: Measured Average Leq (15min) was lower than Limit Level: 55 dB(A).

NMS 23 Pai Tau

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	2:00	57.9	59.9	47.8 - 69.8	55	Measured Noise Level<Baseline*	Fine	0.5
13-Feb-20	2:01	54.9		47.8 - 69.8	55	Measured Noise Level<Limit Level	Fine	0.7
22-Feb-20	2:05	56.9		47.8 - 69.8	55	Measured Noise Level<Baseline*	Fine	0.5
28-Feb-20	2:00	54.5		47.8 - 69.8	55	Measured Noise Level<Limit Level	Fine	0.7

*Note: Measured Average Leq (15min) was lower than baseline level: 59.9 dB(A) or Limit Level: 55 dB(A).

NMS 24 Shatin Plaza

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
6-Feb-20	23:47	56.5	58.0	50.2 - 66.7	55	Measured Noise Level<Baseline*	Fine	0.5
13-Feb-20	23:53	57.6		50.2 - 66.7	55	Measured Noise Level<Baseline*	Fine	0.6
21-Feb-20	23:44	57.0		50.2 - 66.7	55	Measured Noise Level<Baseline*	Fine	0.4
27-Feb-20	23:54	55.1		50.2 - 66.7	55	Measured Noise Level<Baseline*	Fine	0.6

*Note: Measured Average Leq (15min) was lower than baseline level: 58.0 dB(A).

**The Corrected Noise Level in Leq (15min) was lower than Limit Level: 55 dB(A).

NMS 25A Sheung Wo Che

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	1:57	56.2	59.7	50.3 - 68.4	55	Measured Noise Level<Baseline*	Fine	0.5
14-Feb-20	2:03	57.2		50.3 - 68.4	55	Measured Noise Level<Baseline*	Fine	0.6
22-Feb-20	1:57	56.1		50.3 - 68.4	55	Measured Noise Level<Baseline*	Fine	0.6
28-Feb-20	2:32	59.5		50.3 - 68.4	55	Measured Noise Level<Baseline*	Fine	0.4

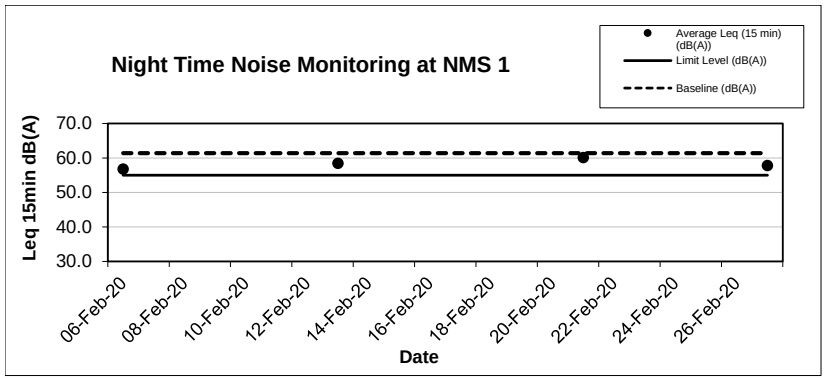
*Note: Measured Average Leq (15min) was lower than baseline level: 59.7 dB(A) or Limit Level: 55 dB(A).

NMS 26 Wo Che Estate

Date	Start Time	Average Leq (15 min) (dB(A))	Baseline (dB(A))	Baseline Range (dB(A))	Limit Level (dB(A))	Corrected Noise Level (dB(A))	Weather	Wind Speed (m/s)
7-Feb-20	0:35	58.6	61.2	45.7 - 70.1	55	Measured Noise Level<Baseline*	Fine	0.4
14-Feb-20	0:35	58.0		45.7 - 70.1	55	Measured Noise Level<Baseline*	Fine	0.7
22-Feb-20	0:37	59.6		45.7 - 70.1	55	Measured Noise Level<Baseline*	Fine	0.5
28-Feb-20	0:39	57.2		45.7 - 70.1	55	Measured Noise Level<Baseline*	Fine	0.6

*Note: Measured Average Leq (15min) was lower than baseline level: 61.2 dB(A).

***The Corrected Noise Level in Leq (15min) was greater than Limit Level: 55 dB(A). There was an exceedance. The exceedance is proved to be not project related by ET's investigation.


Night Time Noise Monitoring at NMS 1
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
70.0
60.0
50.0
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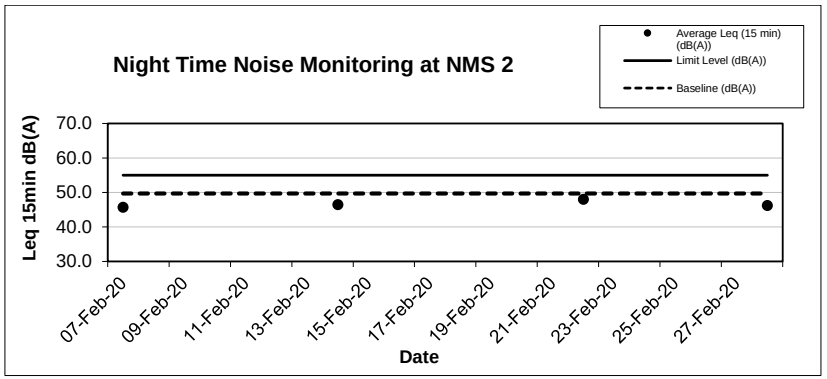
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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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27-Feb-20
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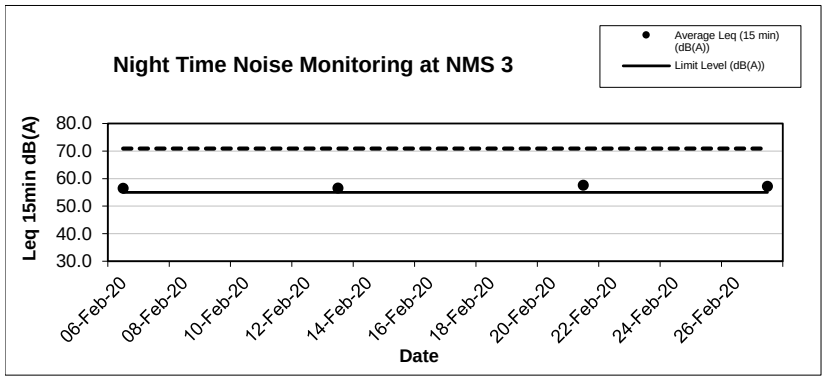
Night Time Noise Monitoring at NMS 3
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Leq 15min dB(A)
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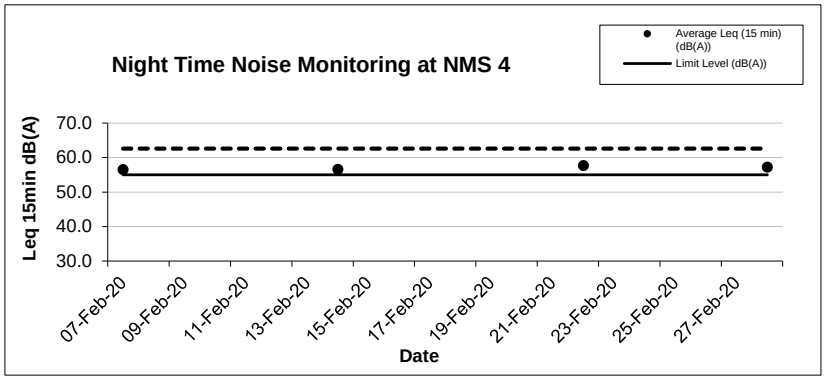
Night Time Noise Monitoring at NMS 4
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Leq 15min dB(A)
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50.0
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30.0
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11-Feb-20
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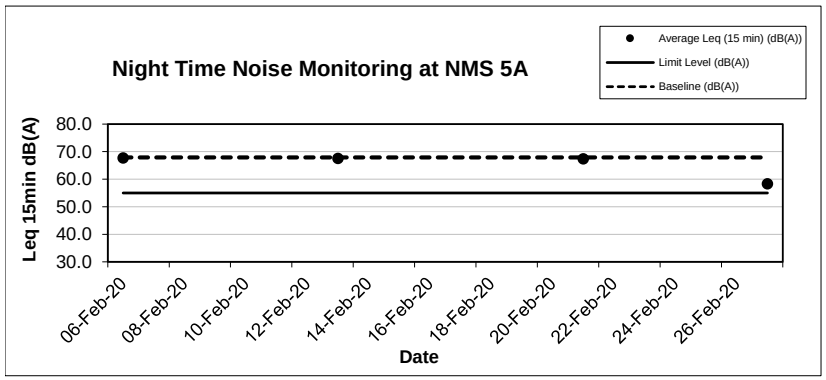
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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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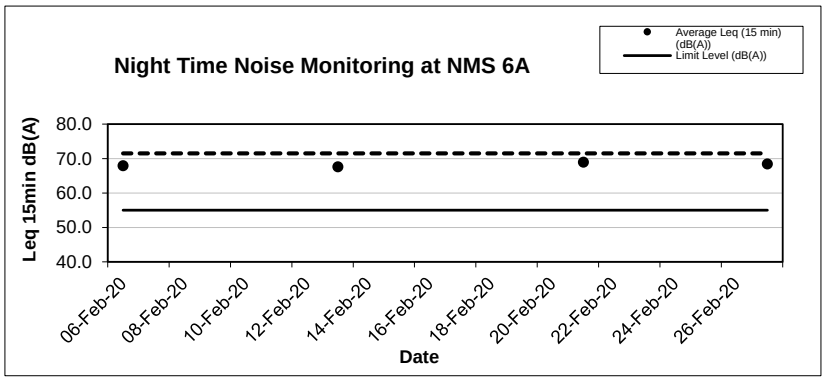
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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
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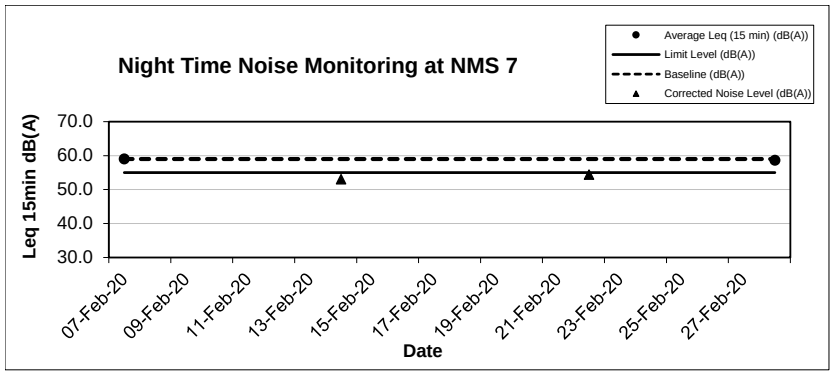
Night Time Noise Monitoring at NMS 7
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
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Corrected Noise Level (dB(A))
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60.0
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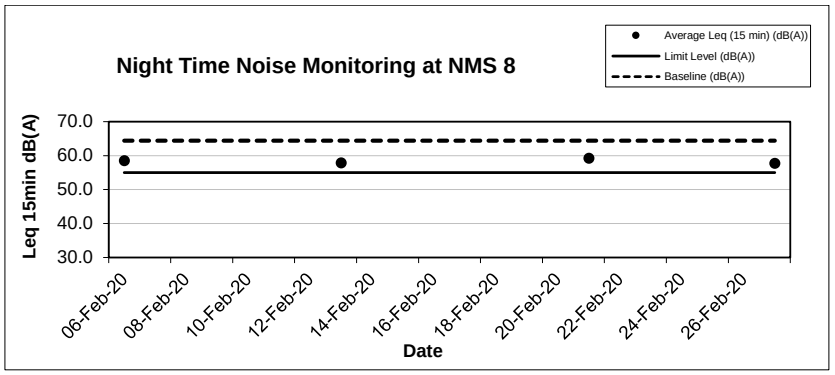
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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
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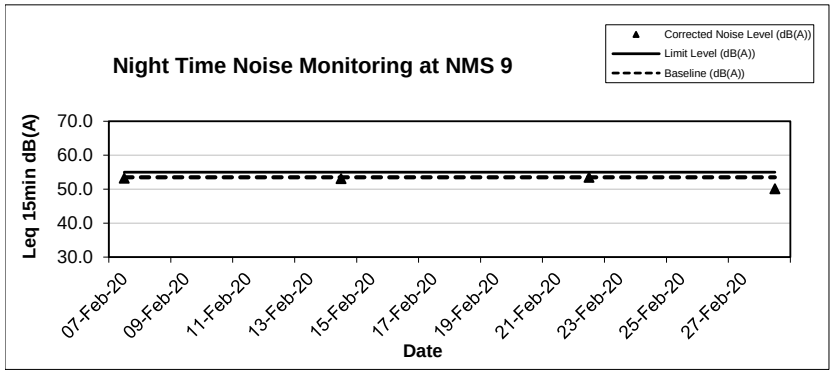
Night Time Noise Monitoring at NMS 9
Corrected Noise Level (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
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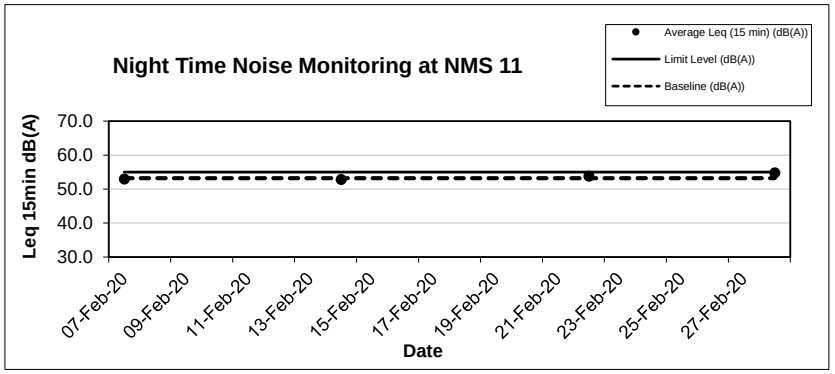
Night Time Noise Monitoring at NMS 11
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
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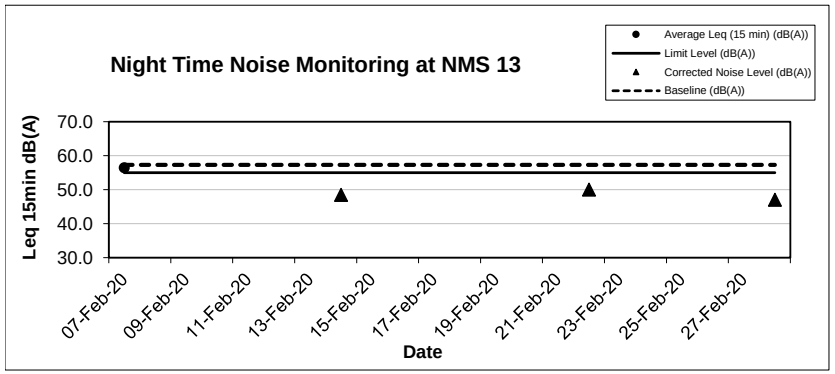
Night Time Noise Monitoring at NMS 13
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Corrected Noise Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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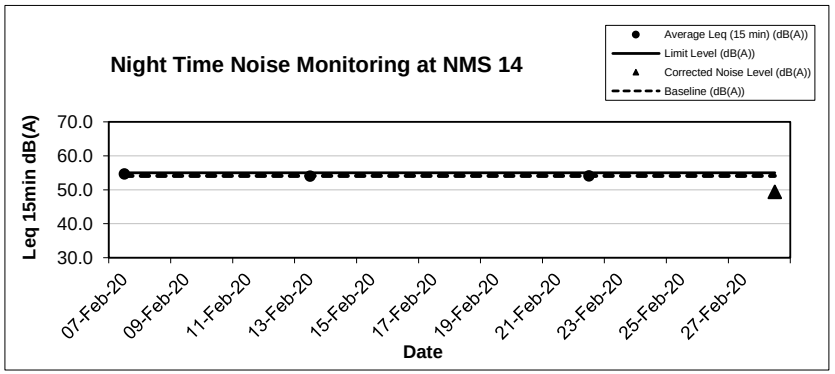
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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Corrected Noise Level (dB(A))
Baseline (dB(A))
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27-Feb-20
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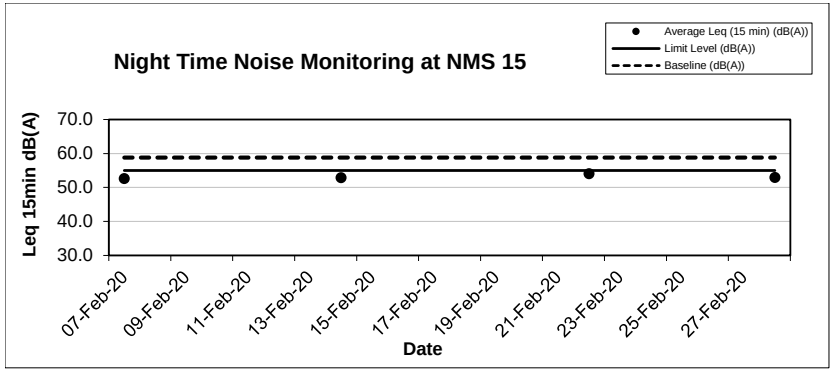
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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
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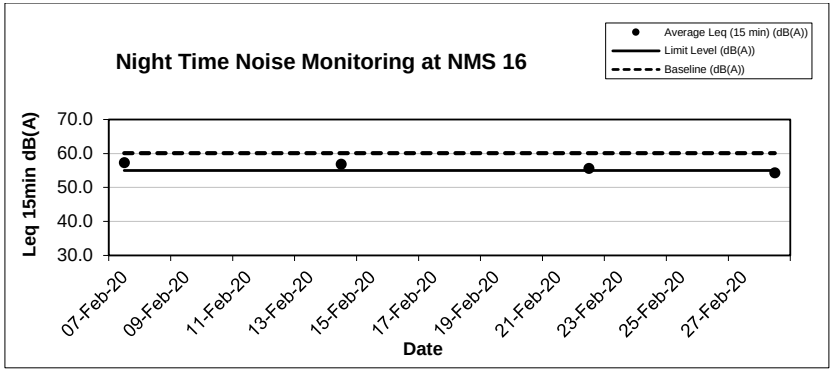
Night Time Noise Monitoring at NMS 16
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Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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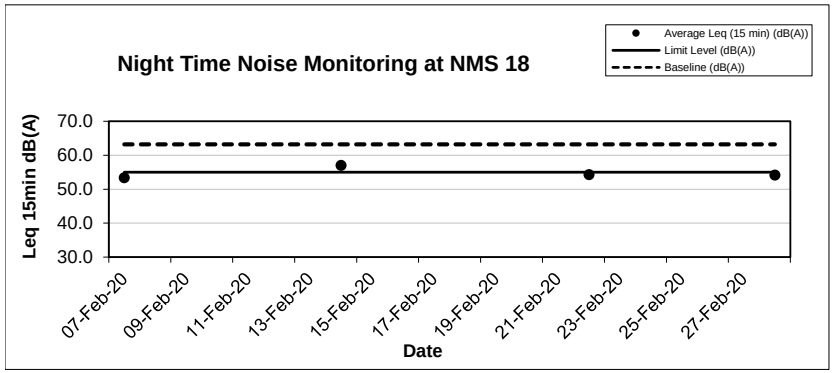
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Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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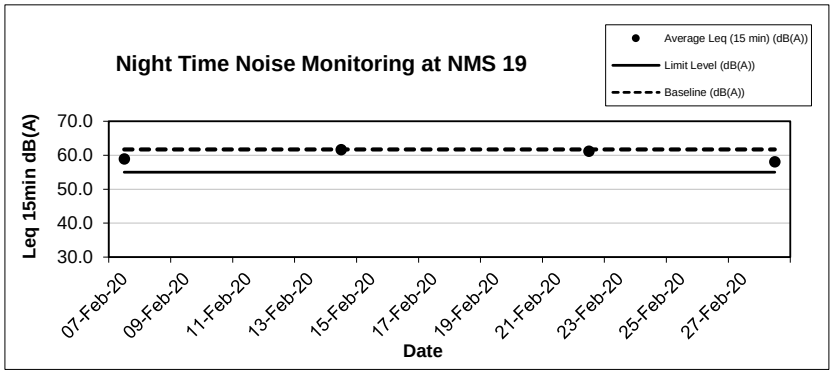
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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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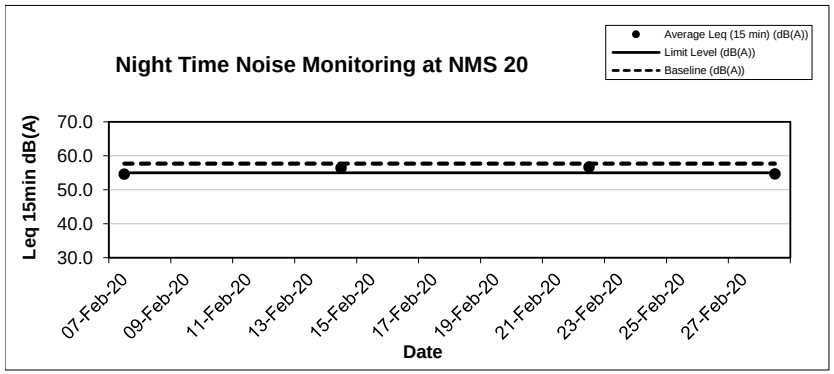
Date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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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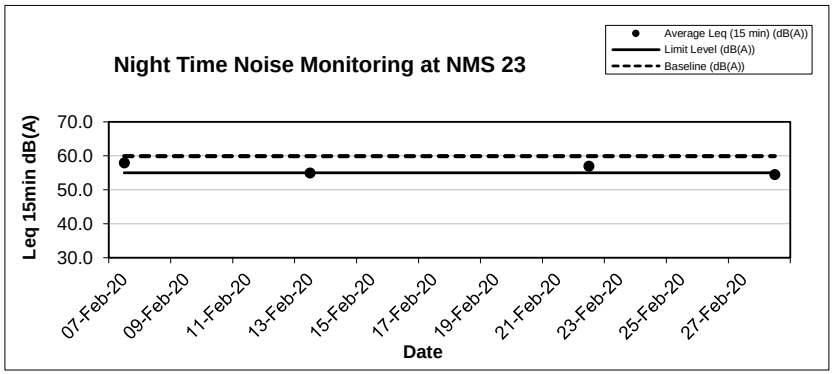
Night Time Noise Monitoring at NMS 23
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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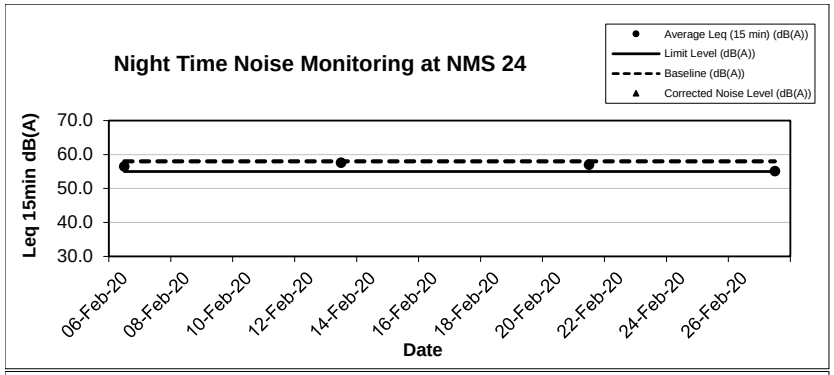
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Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Corrected Noise Level (dB(A))
Leq 15min dB(A)
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50.0
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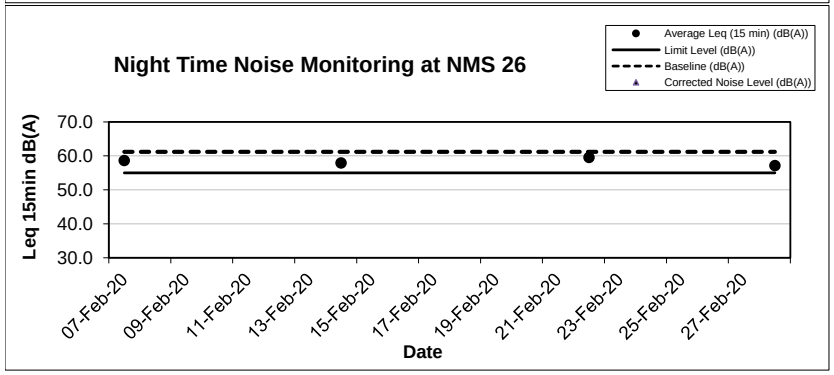
Night Time Noise Monitoring at NMS 26
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Corrected Noise Level (dB(A))
Leq 15min dB(A)
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60.0
50.0
40.0
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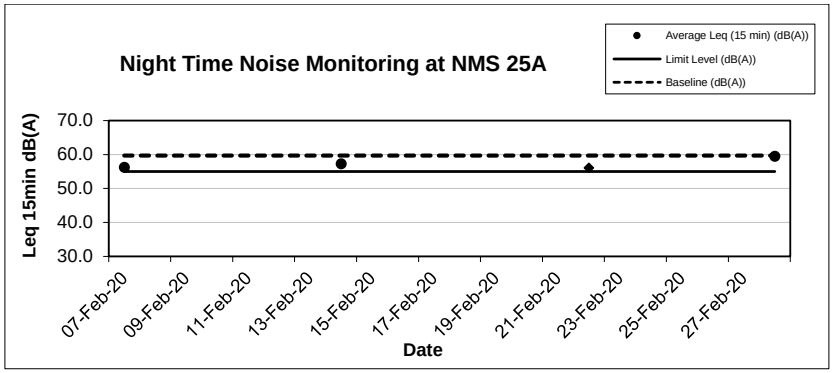
Night Time Noise Monitoring at NMS 25A
Average Leq (15 min) (dB(A))
Limit Level (dB(A))
Baseline (dB(A))
Leq 15min dB(A)
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50.0
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25-Feb-20
27-Feb-20
Date

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Appendix H

Events and Action Plan

FUGRO TECHNICAL SERVICES LIMITED
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Event and Action Plan for Construction Dust Monitoring

EVENT	ACTION			
	ET Leader	IEC	SO	Contractor
Action Level				
1. Exceedance for one sample	1. Identify the source. 2. Inform the IEC and the SO. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by the ET Leader. 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice. 2. Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	1. Identify the source. 2. Inform the IEC and the SO. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency to daily. 5. Discuss with the IEC and the Contractor on remedial actions required. 6. If exceedance continues, arrange meeting with the IEC and the SO. 7. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by the ET Leader. 2. Check the Contractor's working method. 3. Discuss with the ET Leader and the Contractor on possible remedial measures. 4. Advise the SO on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to IEC within 3 working days of notification. 2. Implement the agreed proposals. 3. Amend proposal if appropriate.
Limit Level				
1. Exceedance for one sample	1. Identify the source. 2. Inform the SO and the EPD. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency to daily. 5. Assess effectiveness of Contractor's remedial actions and keep the IEC, the EPD and the SO informed of the results.	1. Check monitoring data submitted by the ET Leader. 2. Check Contractor's working method. 3. Discuss with the ET Leader and the Contractor on possible remedial measures. 4. Advise the SO on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures are properly implemented.	1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals. 4. Amend proposal if appropriate.
2. Exceedance	1. Notify the IEC, the SO and the EPD and the	1. Discuss amongst the SO, ET	1. Confirm receipt of	1. Take immediate action to avoid

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EVENT	ACTION			
	ET Leader	**IEC**	**SO**	**Contractor**
for two or more consecutive samples	Contractor. 2. Identify the source. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency to daily. 5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented. 6. Arrange meeting with the IEC and the SO to discuss the remedial actions to be taken. 7. Assess effectiveness of Contractor's remedial actions and keep the IEC, the EPD and the SO informed of the results. 8. If exceedance stops, cease additional monitoring.	Leader and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SO accordingly. 3. Supervisor implementation of remedial measures.	notification of failure in writing. 2. Notify the Contractor. 3. In consultation with the Contractor on the remedial measures to be implemented. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.	further exceedance. 2. Submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the SO until the exceedance is abated.

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Event and Action Plan for Noise Impact

EVENT	ACTION			
	ET Leader	**IEC**	**SO**	**Contractor**
Action Level	1. Notify the IEC and the Contractor. 2. Carry out investigation. 3. Report the results of investigation to the IEC. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analysed results submitted by the ET. 2. Review the proposed remedial measures by the Contractor and advise the SO accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC. 2. Implement noise mitigation proposals.
Limit Level	1. Notify the IEC, the SO and the Contractor. 2. Identify the source. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Inform the IEC, the SO and the EPD the causes & actions taken for the exceedance. 7. Assess effectiveness if the Contractor's remedial actions and keep the IEC and the SO informed of the results. 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst the SO, the ET Leader and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SO accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activities of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance, 2. Submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant activity of works as determined by the SO until the exceedance is abated.

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Event and Action Plan for Landscape and Visual Impact

Event	Action		
	ET	**SO**	**Contractor**
Non-conformity on one occasion	1. Identify Source; 2. Inform the Contractor and the SO; 3. Discuss remedial actions with the SO and the Contractor; and 4. Monitor remedial actions until rectification has been completed	1. Notify Contractor; and 2. Ensure remedial measures are properly implemented.	1. Amend working methods; 2. Rectify damage and undertake any necessary replacement.
Repeated Non-conformity	1. Identify Source; 2. Inform the Contractor and the SO; 3. Increase monitoring frequency; 4. Discuss remedial actions with the SO and the Contractor; 5. Monitor remedial actions until rectification has been completed; and 6. If exceedance stops, cease additional monitoring.	1. Notify Contractor; and 2. Ensure remedial measures are properly implemented.	1. Amend working methods; 2. Rectify damage and undertake any necessary replacement.

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Appendix I

Waste Flow Table

FUGRO TECHNICAL SERVICES LIMITED

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Waste Flow Table for Year 2018

Monthly Ending	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of Non-inert C&D Wastes Generated Monthly				
	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000Ton)	(in '000kg)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000 kg)	(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

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Waste Flow Table for Year 2019

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	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000Ton)	(in '000kg)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000Ton)	(in '000 kg)	(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	4.200	0.000	0.916	0.000	3.284	1.884	0.001	0.060	0.010	0.000	0.889

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Waste Flow Table for Year 2020

Monthly Ending	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of Non-inert C&D Wastes Generated Monthly				
	Total Quantity Generated (Inert C&D)	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '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[4]	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 m^3.
4) The data is updated for the previous month.

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Appendix J

Environmental Mitigation Implementation Schedule (EMIS)

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		Noise Measures		
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 constriction 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

EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		• 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
Air Quality Measures				
4.12.1 and 4.12.2	Within the boundaries of all construction sites.	• The Contractor shall notify any specific construction works as stated in the Air Pollution Control (Construction Dust) Regulation to the Authority before the commencement of such work. Dust mitigation measures stipulated in the Air Pollution Control (Construction Dust) Regulation should be implemented to control dust emissions from all construction work sites.	Contractor	Implemented
		• The Contractor shall undertake at all times to prevent dust nuisance as a result of his activities. Dust suppression measures such as the water spraying are necessary and should be installed to ensure that the air quality at the boundary of the site and at any sensitive receivers complies with the Hong Kong Air Quality Objectives.	Contractor	Implemented
		• The Contractor shall apply for a license or permit under the requirements of the relevant 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 during the dry season (October to December). It is also suggested that watering with	Contractor	Implemented

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		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	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
		• 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

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4.12.1, 4.13.1 and Table 8.2		•Construction dust monitoring shall be carried out at representative monitoring locations during the construction period.	Contractor	Implemented
		• Path for complaints and handling procedures should be set up and implement.	Contractor	Implemented
NA		• Dark smoke emission shall be control in accordance with the Air Pollution Control (Smoke) Regulation and ETWB TCW 19/2005.	Contractor	Implemented
		• Plant and equipment should be well maintained to prevent dark smoke emission.	Contractor	Implemented
		• Only approved or exempted Non-road Mobile Machineries (NRMMs) including regulated machines and non-road vehicles with proper labels are allowed to be used in specified activities on-site.	Contractor	Implemented
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
		• 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
		• The efficiency of the interceptor channels, traps and sedimentation chambers should be maintained	Contractor	Partially Implemented

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		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.		
		• 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
		• 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
		• 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
		• 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
		• Plant maintenance areas should be paved to prevent waste oils soaking into the ground. Where possible the area should be undercover to minimise the formation of runoff and any runoff from the paved area passed through an oil trap before being discharged to the storm drains. Fuel storage tanks should be surrounded by bunds with a capacity of at least 150% of the storage capacity. The bunded areas should be able to be drained of rain water through the petrol interceptor and accumulated rain removed at regular intervals.	Contractor	Not Applicable
		• 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.	Contractor	Not Applicable

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		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. AII discharges into foul sewers and storm sewers should have to be complied with TM standards under WPCO.		
		• 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
Section 12.6 of the Approved EIA Report		• Regular site inspection of the construction works shall be carried out to determine compliance with the recommended mitigation measures. Inspection should be included:		
		(i) The functioning of onsite surface water collection channels and sediment traps.	Contractor	Partially Implemented
		(ii) The functioning of interception channels at the boundary of the works areas	Contractor	Implemented
		(iii) The covering of stockpiles of fill and construction materials and the routing of any run off through the sediment traps.	Contractor	Implemented
		(iv) The pumping procedures for emptying trenches and other excavations and the use of silt traps prior to the discharge of the water to the storm water system.	Contractor	Implemented
		(v) The use of washwater for hosing down concrete mixing and delivery vehicles and other vehicles leaving the site and the routine of excess water from the facility through sediment traps.	Contractor	Not Applicable
		(vi) The operation of the plant maintenance areas to control small spillages and the correct management of the fuel storage bunded area.	Contractor	Not Applicable
		(vii) The connection of the site office wastewater discharge to an existing foul sewer if appropriate or the operation of the kitchen wastewater grease trap and the regular emptying of the chemical toilets	Contractor	Not Applicable
		(viii)The operation of the roof rain water collection and drainage system.	Contractor	Not Applicable
Landscape and Visual Mitigation Measures				
Table 6.5	**Construction Phase**			
	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

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		• 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
		• 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
		• Shrubs and climbers planting are proposed on the facade of Noise Enclosures and Barriers to mitigate any adverse impact on adjacent VSRs in area where space for tree planting is not feasible.	Contractor	Not Applicable
		Waste Management Measures		
7.6.2 to 7.6.4	Within the boundaries of all construction	• 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	Contractor	Partially Implemented

EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
	sites.	categories of waste to be generated from the construction activities. Such a management plan should incorporate site specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval.		
		• The Contractor should implement the waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor.	Contractor	Partially Implemented
7.6.5 to 7.6.6		• 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
		• Environmental Management Plan (EMP) and trip-ticket system shall be implemented for monitoring management of waste.	Contractor	Implemented
		• 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 designed areas for off-site disposal of materials/Prior to and during construction activities.	• To facilitate adoption of the best-practice philosophy, training shall be provided to all personnel working on site. The training shall promote the concept of general site cleanliness and clearly explain the appropriate waste management procedures defined in the EMP. Overall, the training should encourage all workers to reduce, reuse and recycle wastes.	Contractor	Implemented
7.6.8 to 7.6.9		• The contractor's environmental performance shall be monitored and controlled through the weekly environmental walks. The items after the environmental walks shall include:		
		• A review of the EMP in particular the suitability of the environmental measures on nuisance abatement and waste management adopted by the contractor;	Contractor	Implemented
		• The environmental performance of the contractor and his sub-contractors;	Contractor	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	Contractor	Implemented

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		enclosed containers.		
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
		• 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
		• 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		• 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:		
		• be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;	Contractor	Implemented

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		• have a capacity of less than 450L unless the specifications have been approved by the EPD; and	Contractor	Implemented
		• 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:		
		• be clearly labelled and used solely for the storage of chemical waste;	Contractor	Implemented
		• be enclosed on at least 3 sides;	Contractor	Implemented
		• 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
		• have adequate ventilation;	Contractor	Implemented
		• be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary); and	Contractor	Implemented
		• 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:		
		• via a licensed waste collector; and	Contractor	Implemented
		• 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
		• to a reuser of the waste, under approval from EPD.	Contractor	Not Applicable
7.6.18 to 7.6.20		• General refuse generated on-site should be stored in enclosed bins or compaction units separate from construction and chemical wastes. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily or every second day basis to minimize odour, pest and litter impacts. The burning of refuse on construction sites is prohibited by law.	Contractor	Implemented
		• 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	Implemented
7.7.1		• 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	Implemented

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EIA Review Ref	Location	Environmental Protection Measures/	Implementation Agent	Implementation Status in Construction Phase
		• 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	*General Condition*			
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 ant 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

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Appendix K

Weather and Meteorological Conditions during Reporting Month

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Date	Mean Pressure (hPa)	Air Temperature			Mean Relative Humidity (%)	Total Rainfall (mm)
		Maximum (deg. C)	Mean (deg. C)	Minimum (deg. C)		
Feb 2020						
1	1022.4	18.8	16	14.1	72	-
2	1022	19.5	17.1	15.9	77	-
3	1020.3	20.4	18.1	16.6	78	Trace
4	1020.2	19	17.3	15.4	84	0.8
5	1020.6	18.3	17.5	16.6	83	1
6	1019.8	18.6	17.1	15.9	77	Trace
7	1021.1	20.6	18.7	17.3	82	-
8	1024	19.6	17.8	16.7	76	-
9	1025.7	18.5	16.5	15	77	Trace
10	1023.1	18.6	16.9	15.5	76	-
11	1020.5	19.1	17.6	16.8	86	0.8
12	1017.9	24.7	20.6	18.4	89	-
13	1015.4	20.5	19.6	18.9	94	41.6
14	1013.8	22.5	20.4	19.5	94	9.7
15	1013.6	22.3	21	19.4	95	Trace
16	1020.1	22.4	14.2	10.6	82	25.5
17	1026.2	18	13.6	10.3	53	-
18	1026.4	18.4	14.7	11.6	57	-
19	1024.6	19.4	16.3	14	69	-
20	1024.9	21.2	17.7	15.4	70	-
21	1026.7	22.6	18.9	16.5	73	-
22	1025.7	25.5	20.1	17.1	73	-
23	1024.6	23.9	19.4	17.5	71	-
24	1020.7	22	19.6	17.5	76	-
25	1017.9	25	21.8	19.7	84	Trace
26	1017.9	28.1	23.3	20.6	82	-
27	1019.6	22.6	20.5	19.1	84	0.4
28	1018	25.3	20.8	18.1	78	-
29	1014.7	26.6	22.5	20.2	80	-

Source: Hong Kong Observatory

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Appendix L

Cumulative statistics on Environmental Complaints, Notifications of Summons and Successful Prosecutions

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Environmental Complaints Log

Reference No.	Date of Complaint Received	Received From	Received By	Nature of Complaint	Date of Investigation	Investigation summary & Conclusion	Date of Reply
COM-2019-005	13/2/2019	EPD	CCZJV	Noise	13/2/2019	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.	20/2/2019
COM-2019-006	22/2/2019	Project Hotline of NE/2017/05	CCZJV	Noise	26/2/2019	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 operating during restricted hour. An extended barrier at the top acts as a cantilever shape was recommended to	4/3/2019

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Reference No.	Date of Complaint Received	Received From	Received By	Nature of Complaint	Date of Investigation	Investigation summary & Conclusion	Date of Reply
						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	CCZJV	Noise	28/3/2019	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.	4/4/2019
COM-2019-0033	26/7/2019	Police visit on-site	CCZJV	Noise	26/7/2019	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	30/7/2019

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Reference No.	Date of Complaint Received	Received From	Received By	Nature of Complaint	Date of Investigation	Investigation summary & Conclusion	Date of Reply
						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.	
COM-2019-0045	30/8/2019	1823	CCZJV	Noise	30/8/2019	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 strictly follow the use of acoustic enclosure as in condition 3.d.5. of the CNP during the operation of breaker, hand-held, mass <=10kg (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.	19/9/2019

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Reference No.	Date of Complaint Received	Received From	Received By	Nature of Complaint	Date of Investigation	Investigation summary & Conclusion	Date of Reply
COM-2019-0056	9/10/2019	Project Hotline of NE/2017/05 and EPD	CCZJV	Noise	19/10/2019	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 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.	4/11/2019
COM-2019-0057	9/10/2019	EPD	CCZJV	Noise	18/10/2019	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	21/10/2019

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Reference No.	Date of Complaint Received	Received From	Received By	Nature of Complaint	Date of Investigation	Investigation summary & Conclusion	Date of Reply
						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 generator and the generator operates in daytime 07:00-19:00 only.	
COM-2019-0066	6/11/2019	EPD	CCZJV	Noise	7/11/2019	The complaint of the emergency road repair work is related to the project. The works on on 5th 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.	12/11/2019
COM-2020-0057	29/02/2020	Project email of NE/2017/05	CCZJV	Noise	29/02/2020	The complaint case is still under ET's investigation.	-

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Cumulative Statistics on Complaints

Environmental Parameters	Cumulative No. Brought Forward	No. of Complaints This Month	Cumulative Project-to-Date
Air	0	0	0
Noise	8	1	9
Water	0	0	0
Waste	0	0	0
Total	**8**	**1**	**9**

Cumulative Statistics on Notification of Summons and Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Notification of Summons and Prosecutions This Month	Cumulative Project-to-Date
Air	0	0	0
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
Total	**0**	**0**	**0**

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Appendix M

Summary of Site Audit in the Reporting Month

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Summary of Site Audit in the Reporting Month

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	27 Feb 2020	Reminder: 1.Construction material (cement) shall be covered and stored well. (Zone 3)	-
Noise	No deficiency was found during the reporting month.		
Water Quality	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	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	No deficiency was found during the reporting month.		
Landscape and Visual Impact	No specific observation was identified in the reporting month.		
General Condition	No deficiency was found during the reporting month.		