

Our ref: 23-4-2023

23-4-2023

By hand

Environmental Protection Department

Environmental Assessment Division

Metro Assessment Group

Kowloon Section (2)

27th floor, Southorn Centre,

130 Hennessy Road,

Wan Chai, Hong Kong

(Attn: Mr. TANG Ho Him, Matthew)

Dear Mr. TANG,

**Contract No. EDO 2/2020**

**Environmental Monitoring Works for Contract No. ED/2018/05 – Kai Tak Development – Stage 5B Infrastructure Works at the Former North Apron Area**

**Submission of Quarterly EM&A Report for November 2022 to January 2023 (Version 1.0)**

I refer to the Environment Permit (EP) No. EP-337/2009 and EP-445/2013/A for the captioned project.

Pursuant to Condition 3.3 of the EP-337/2009 and Condition of the 3.2 of the EP-445/2013/A, please find enclosed four hard copies and one electronic copy of Quarterly EM&A Report for November 2022 to January 2023 (Version 1.0), which has been verified by the IEC for your reference.

Thank you very much for your attention and please feel free to contact Mr. Lee at 2618 2166 should you require further information.

Yours faithfully,

For and on behalf of

Ka Shing Management Consultant Limited

**AKCL**

Applied knowledge center limited

Company Secretary

Encl. Quarterly EM&A Report for November 2022 to January 2023 (Version 1.0)

Date: 22 April 2023

Your ref:

Our ref: PL-202304025

AECOM Asia Company Limited  
12/F, Grand Central Plaza, Tower 2,  
138 Shatin Rural Committee Road,  
Shatin, New Territories, Hong  
Kong

**Attn.: Ms. Mavis Law, SRE**

Dear Ms. Law,

**Re: Agreement No. EDO 6/2019  
Independent Environmental Checker for Contract No. ED/2018/05 Kai Tak Development –  
Stage 5B Infrastructure Works at the Former North Apron Area  
Verification of Quarterly EM&A Summary Report (November 2022 – January 2023)**

Reference is made to the Quarterly EM&A Summary Report (November 2022 to January 2023)  
(Version 1.0) submitted by the Environmental Team on 19 April 2023.

Please be informed that we have no adverse comment on the captioned submission.

Thank you for your attention.

Yours sincerely,  
For and on behalf of  
Acuity Sustainability Consulting Limited



Kevin Li  
Independent Environmental Checker

c.c. CEDD  
Ka Shing

Attn.: Mr. Albert Tse  
Attn.: Mr. Chan Pang (ETL)

By email  
By email

**Quarterly Environmental Monitoring and Audit  
Summary Report (November 2022 – January 2023)  
for  
Contract No. ED/2018/05 –  
Kai Tak Development – Stage 5B infrastructure  
works at the former north apron area**

**Contract No.: EDO 2/2020**

(Version 1.1)

Certified By:



(Environmental Team Leader)

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## **EXECUTIVE SUMMARY**

1. This is the 8<sup>th</sup> Quarterly Environmental Monitoring & Audit (EM&A) Summary Report which summarises the findings of the EM&A Programme during the reporting period from 1 November 2022 to 31 January 2023 (the “reporting period”).

### **Breaches of Action and Limit Levels**

2. 1-hour TSP monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.
3. 24-hour TSP monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.
4. Construction noise monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.

### **Complaint log**

5. No complaint was received in the reporting period.

### **Notifications of Summons and Successful Prosecutions**

6. No notification of summons and successful prosecutions was received in the reporting period.

### **Report changes**

7. There was no reporting change in the reporting period.



**Major construction works in the reporting period**

8. Major construction activities undertake during the reporting period included:

*Table I Major construction activities in the reporting period*

November 2022	December 2022	January 2023
- Erection of falseworks and working platform for decking of Elevated Walkway LW-02	- Erection of falseworks and working platform for decking of Elevated Walkway LW-02	- Erection of falseworks and working platform for decking of Elevated Walkway LW-02
- Mini pile construction works for LW-02 lift and staircase	- Post-piling tests and proof drilling for LW02 lift and staircase	- ELS and excavation works for lift and staircase of LW-02
- Post-piling tests and proof drilling for LW02 lift and staircase	- ELS and excavation works at Sa Po Road	- ELS and excavation works at Sa Po Road
- Ground improvement works at Sa Po Road	- RC construction at launching shaft for subway SB-01	- RC construction at launching shaft for subway SB-01
- RC construction at launching shaft for subway SB-01	- Construction works for Pedestrian Street No. 2	- Construction of antry footing at launching shaft for subway SB-01
- Construction works for Pedestrian Street No. 2	- Construction works for Road L16	- Construction works for Road L16
- Construction works for Road L16	- Construction works for DCS	- Construction works for DCS
- Construction works for DCS	- Construction works for Olympic Avenue	- Construction works for Olympic Avenue
- Construction works for Olympic Avenue	- RC construction for Subway KS10 Lift and Staircase	- RC construction for Subway KS10 Lift and Staircase
- RC construction for Subway KS10 Lift and Staircase	- Renovation works for existing subways KS9, KS32 and KS10	- Renovation works for existing subways KS9, KS32 and KS10
- Renovation works for existing subways KS9, KS32 and KS10	- Pre-bored socket H-pile construction works for Slip Road S14	- Pre-bored socket H-pile construction works for Slip Road S14
- Pre-bored socket H-pile construction works for Slip Road S14	- Construction works for additional run-in at Road L7	- Construction works for additional run-in at Road L7
- Construction works for additional run-in at Road L7	- Dismantling of gantry crane at casting yard	- Dismantling of gantry crane at casting yard

# 1. INTRODUCTION

## Project Background

- 1.1 The Kai Tak Development (KTD) is located in the southern part of Kowloon Peninsula of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling.
- 1.2 Contract No. ED/2018/05 - Kai Tak Development – stage 5B infrastructure works at the former north apron area (The Project), comprises mainly the design and construction of a section of dual two-lane Road D1; single two-lane Road L9 and Road L16; a single-lane slip road S14; a pedestrian subway SB-01; an elevated walkway LW-02; renovation of the existing pedestrian subways KS9, KS10 and KS32, as well as modification of the southern end of the existing pedestrian subway KS10; associated footpaths, street lighting, traffic aids, drainage, sewerage, water mains, landscaping, electrical and mechanical works, and ancillary works. The proposed works are shown in Figure 1 and Figure 2. The proposed works and site boundary are shown in Figure 3 and Figure 4. Civil Engineering and Development Department (CEDD) had completed an Environmental Impact Assessment (EIA) and is the Permit Holder.
- 1.3 In accordance with the approved EIA Reports, Environmental Monitoring and Audit (EM&A) programmes are recommended to ensure compliance with the EIA study recommendations. The project proponent was the Civil Engineering and Development Department (CEDD). AECOM Asia Co. Ltd. (AECOM) was commissioned by CEDD as Supervisor (act as Engineers' Representative (ER) listed in EM&A Manual). Acuity Sustainability Consulting Limited (Acuity) was commissioned as the Independent Environmental Checker (IEC). Build King – STEC Joint Venture (Build King) was appointed as the main Contractor for the construction works of Contract No. ED/2018/05. Ka Shing was commissioned by CEDD to undertake the role of the Environmental Team (ET) to implement the EM&A programme for The Project.
- 1.4 The construction work under ED/2018/05 comprises the EM&A Manual (EIA Register No. AEIAR-130/2009 for Kai Tak Development) and Environmental Permit No. EP- 337/2009.
- 1.5 Air quality and noise monitoring has been proposed in the EM&A Manual with EIA Register No. AEIAR-130/2009 for Kai Tak Development.

## **Project Organization**

1.6 The project organization chart and emergency team and with respect to the EM&A programme is shown in Appendix A. Information of key personnel contact names and telephone numbers are summarized in Table 1.1.

*Table 1.1 Contact information of key personnel*

Party	Role	Contact Person	Position	Phone No.	E-mail
Civil Engineering and Development Department (CEDD)	Project Proponent	Mr. Lam Shing Tim	Permit Holder	3842 7090	<a href="mailto:st_lam@cedd.gov.hk">st_lam@cedd.gov.hk</a>
AECOM Asia Co. Ltd. (AECOM)	Supervisor (act as Engineers' Representative (ER) listed in EM&A Manual)	Mr. Vincent Lee	Supervisor's Delegate	2798 0771	<a href="mailto:sre2@ktd-stage5.com">sre2@ktd-stage5.com</a>
Acuity Sustainability Consulting Limited (Acuity)	Independent Environmental Checker (IEC)	Mr. Kevin Li	IEC	9779 2247	<a href="mailto:kli@acuityhk.com">kli@acuityhk.com</a>
Ka Shing Management Consultant Limited (Ka Shing)	Environmental Team (ET)	Mr. Pang Chan	ET Leader	6082 2973	<a href="mailto:stage5b@ka-shing.net">stage5b@ka-shing.net</a>
Build King – STEC Joint Venture (BK-STEAC)	Contractor	Mr. Rex Lau	Contractor's Representative	6282 5154	<a href="mailto:rex.lau@buildking.hk">rex.lau@buildking.hk</a>

## **Works Area and Construction Programme**

1.7 The construction works commenced on 16 February 2021. The construction programme of the Project is given in Appendix B.

**Construction works undertaken during reporting period**

1.8 Major construction works of the Project in the reporting period are summarized in Table 1.2:

*Table 1.2 Major construction activities in the reporting period*

November 2022	December 2022	January 2023
- Erection of falseworks and working platform for decking of Elevated Walkway LW-02	- Erection of falseworks and working platform for decking of Elevated Walkway LW-02	- Erection of falseworks and working platform for decking of Elevated Walkway LW-02
- Mini pile construction works for LW-02 lift and staircase	- Post-piling tests and proof drilling for LW02 lift and staircase	- ELS and excavation works for lift and staircase of LW-02
- Post-piling tests and proof drilling for LW02 lift and staircase	- ELS and excavation works at Sa Po Road	- ELS and excavation works at Sa Po Road
- Ground improvement works at Sa Po Road	- RC construction at launching shaft for subway SB-01	- RC construction at launching shaft for subway SB-01
- RC construction at launching shaft for subway SB-01	- Construction works for Pedestrian Street No. 2	- Construction of antry footing at launching shaft for subway SB-01
- Construction works for Pedestrian Street No. 2	- Construction works for Road L16	- Construction works for Road L16
- Construction works for Road L16	- Construction works for DCS	- Construction works for DCS
- Construction works for DCS	- Construction works for Olympic Avenue	- Construction works for Olympic Avenue
- Construction works for Olympic Avenue	- RC construction for Subway KS10 Lift and Staircase	- RC construction for Subway KS10 Lift and Staircase
- RC construction for Subway KS10 Lift and Staircase	- Renovation works for existing subways KS9, KS32 and KS10	- Renovation works for existing subways KS9, KS32 and KS10
- Renovation works for existing subways KS9, KS32 and KS10	- Pre-bored socket H-pile construction works for Slip Road S14	- Pre-bored socket H-pile construction works for Slip Road S14
- Pre-bored socket H-pile construction works for Slip Road S14	- Construction works for additional run-in at Road L7	- Construction works for additional run-in at Road L7
- Construction works for additional run-in at Road L7	- Dismantling of gantry crane at casting yard	- Dismantling of gantry crane at casting yard

## 2. SUMMARY OF EM&A REQUIREMENTS AND MONITORING RESULTS

### Monitoring Requirements

2.1 In accordance with EM&A Manual (EIA Register Nos. AEIAR-130/2009), impact air quality monitoring and impact noise monitoring shall be carried out during the construction phase of the Project.

### Air Quality Monitoring Locations

2.2 Two designated monitoring stations were selected for air quality monitoring programme. Impact air quality monitoring was conducted at two air quality monitoring stations in the reporting period. Table 2.1 describes the air quality monitoring locations, which are also depicted in Figure 5.

*Table 2.1 Locations of air quality monitoring stations*

Air Quality Monitoring Locations for the Project	Location of Measurement
AM2(A) – Ng Wah Catholic Secondary School	Rooftop
AM3 – Sky Tower	Podium floor near T7

### Air Quality Monitoring Parameters, Frequency and Duration

2.3 The air quality monitoring locations and monitoring frequency are listed in Table 2.2.

*Table 2.2 Air quality monitoring parameters, frequency and duration*

Air Monitoring Station	Location for Measurement	Parameter	Duration	Frequency
AM2(A) – Ng Wah Catholic Secondary School	Rooftop	- 24-hour average TSP	- 24 hours	- Once every 6 days
AM3 – Sky Tower	Podium floor near T7	- 1-hour average TSP	- 1 hour	- Three times every 6 days

## **Air Quality Monitoring Equipment**

2.4 24-hour average TSP and 1-hour average TSP levels were measured for impact monitoring. 24-hour average TSP levels were measured by the High Volume Samplers (HVS) and 1-hour average TSP levels were measured by direct reading method to indicate short-term impacts. Wind data monitoring equipment was set up at conspicuous locations for logging wind speed and wind direction near to the dust monitoring locations. Table 2.3 summarizes the equipment to be used in the air quality monitoring.

*Table 2.3 Air Quality Monitoring Equipment*

Equipment	Model	Quantity	Calibration Interval
HVS Sampler	TE-5170 X c/w of TSP sampling inlet	2	2 months
HVS Calibrator	TISCH TE-5025A	1	1 year
1-hour TSP Dust Meter	TSI Model AM510 SidePak Personal Aerosol Monitor	3	1 year
Wind Logger and Wind Station	Davis Vantage Pro2 Weather Station	1	6 months

2.5 High volume samplers (HVS) (TE-5170 X c/w of TSP sampling inlet) comprising with appropriate sampling inlets were employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

## **Air Quality Monitoring Methodology and QA/QC Procedure**

### ***24-hour TSP Monitoring***

#### **Operating/Analytical Procedures**

2.6 Setup criteria of HVS are shown as follows:

- A horizontal platform with appropriate support to secure the samplers against gusty wind was provided.
- No two samplers were placed less than 2m apart.
- The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.

- A minimum of 2m of separation from walls, parapets and penthouses was set for the rooftop samples.
- A minimum of 2m separation from any supporting structure, measured horizontally was set.
- No furnaces or incineration flues was nearby.
- Airflow around the sampler was unrestricted.
- Any wire fence and gate, to protect the samplers, was not caused any obstruction during monitoring.
- Permission were obtained to setup the samplers and to obtain access to the monitoring stations.
- A secured supply of electricity was provided to operate the samplers.

2.7 Prior to the commencement of the dust sampling, the flow rate of the HVS was properly set (between 1.1 m<sup>3</sup>/min. and 1.7 m<sup>3</sup>/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.

2.8 For TSP sampling, Glass Fiber Filter Media 8" x 10" have a collection efficiency of > 99 % for particles of 0.3 µm diameter were used.

2.9 The power supply was checked to ensure the sampler worked properly and then placed any filter media at the designated air monitoring station.

2.10 The filter holding frame was removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.

2.11 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure was sufficient to avoid air leakage at the edges.

2.12 The shelter lid was closed and secured with the aluminium strip.

2.13 The timer was programmed. Information was 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).

2.14 After sampling, the filter was removed from the HVS and put into a clean and labeled seal plastic bag to avoid cross contamination. The elapsed time was also be recorded. The sampled

filters were sent to the HOKLAS accredited or other internationally accredited laboratory for weighting.

#### Maintenance/Calibration

2.15 The following maintenance/calibration are required for the HVS:

- The HVS and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.
- High volume samplers were calibrated with at bi-monthly intervals using TE-5025A Calibration Kit throughout all stages of the air quality monitoring.

#### ***1-hour TSP Monitoring***

#### Measurement Procedures

2.16 The measurement procedures of the 1-hour TSP were conducted in accordance with the Manufacturer's Instruction Manual as follows:

- Set up the dust meter on a tripod at 1.2m level.
- Turned on the dust meter and check the battery, if too low, change new ones. Pointed the meter to the source area or the planned measurement area.
- The zero calibration of the instrument was conducted before and after each sampling.
- TSP levels were recorded for 1-hour with 5-minute data logging interval.
- Recorded down the general meteorological conditions, Test ID no., start/end time, spot check reading at each sampling location for data processing.
- Recorded any activities that may generate dust during measurement period.

#### Maintenance/Calibration

2.17 The following maintenance/calibration are required for the direct dust meters:

- To validate the accuracy of dust meter, compare the results measured by dust meter and HVS by direct reading method every 12 months throughout all stages of the air quality monitoring.



## **Wind Data Monitoring**

2.18 Wind Anemometer was installed at the roof-top of AM2(A) – Ng Wah Catholic Secondary School with 10m above ground and clear of constructions or turbulence caused by the buildings to record wind speed and wind direction.

2.19 Details of weather information during the monitoring period are shown in Appendix C.

## **Impact Air Quality Action and Limit Levels**

2.20 The Action and Limit Levels of 24-hour average TSP and 1-hour average TSP are summarized in Table 2.4 and Table 2.5 respectively.

*Table 2.4 Action and Limit Levels of 24-hour average TSP for construction dust monitoring*

Parameter	Air Monitoring Station	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
24-hour average TSP	AM2(A)	175	260
	AM3	172	260

*Table 2.5 Action and Limit Levels of 1-hour average TSP for construction dust monitoring*

Parameter	Air Monitoring Station	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
1-hour average TSP	AM2(A)	302	500
	AM3	301	500

## **Impact Air Quality Monitoring results**

2.21 Impact monitoring results for 24-hour average TSP and 1-hour average TSP levels at the designated air quality monitoring stations are summarized in Table 2.6 and Table 2.7 respectively.

*Table 2.6 Summary of 24-hour average TSP monitoring data during the reporting period*

Air Monitoring Station	November 2022		December 2022		January 2023		Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	Range, $\mu\text{g}/\text{m}^3$	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	Range, $\mu\text{g}/\text{m}^3$	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	Range, $\mu\text{g}/\text{m}^3$		
AM2(A)	48	28 – 76	64	40 – 99	54	30 – 100	175	260
AM3	57	42 – 91	81	38 – 113	65	35 – 98	172	260

*Table 2.7 Summary of 1-hour average TSP monitoring data during the reporting period*

Air Monitoring Station	November 2022		December 2022		January 2023		Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	Range, $\mu\text{g}/\text{m}^3$	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	Range, $\mu\text{g}/\text{m}^3$	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	Range, $\mu\text{g}/\text{m}^3$		
AM2(A)	43	20 – 74	59	35 – 91	48	28 – 85	302	500
AM3	50	25 – 89	81	30 – 114	54	31 – 85	301	500

2.22 There was no Action and Limit Level exceedance of 24-hour average TSP and 1-hour average TSP levels recorded during the reporting period.

2.23 Graphical presentation and detailed monitoring results of 24-hour average TSP and 1-hour average TSP levels are shown in Appendix D.

2.24 The Event and Action Plan is provided in Appendix E.

2.25 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

### **Noise Monitoring Locations**

2.26 Two designated monitoring stations were selected for noise monitoring programme. Impact noise monitoring was conducted at two noise monitoring stations in the reporting period. Table 2.8 describes the noise monitoring locations, which are also depicted in Figure 6.

*Table 2.8 Locations of noise monitoring stations*

Noise Monitoring Locations for the Project	Location of Measurement
M4(A) – Le Billionnaire	Podium (Façade)
M5(A) – Prince Ritz	Podium (Façade)

**Noise Monitoring Parameters, Frequency and Duration**

2.27 The noise monitoring locations and monitoring frequency are listed in Table 2.9.

*Table 2.9 Noise monitoring parameters, frequency and duration*

Noise Monitoring Station	Location for Measurement	Parameter	Frequency and Duration
M4(A) – Le Billionnaire	Podium (Façade)	L <sub>Aeq</sub> , L <sub>A10</sub> and L <sub>A90</sub>	30 - minutes measurement at each monitoring station between 0700 – 1900 hrs on normal weekdays (Monday to Saturday) at frequency of once per week.
M5(A) – Prince Ritz	Podium (Façade)		

**Noise Monitoring Equipment**

2.28 As referred to in the Technical Memorandum (TM) issued under the Noise Control Ordinance (NCO), sound level meters in compliance with the IEC 61672-1 (Type 1) standard [this standard replaced the International Electrotechnical Commission Publications 60651:1979 (Type 1) and 60804:1985 (Type 1)] were used for noise monitoring. Table 2.10 summarizes the equipment to be used in the noise monitoring.

*Table 2.10 Noise Monitoring Equipment*

Equipment	Model	Quantity	Calibration Interval
Sound Level Meter	RION NL52	1	1 year
Sound Level Calibrator	RION NC 74	1	1 year
Air Flowmeter	TSI TA440 Air Velocity	1	1 year

## **Monitoring Methodology and QA/QC Procedure**

- 2.29 The noise level measurement was conducted at 1m from the exterior of the nearby noise sensitive receivers building façade and at 1.2m above the ground and facing to the source area or the planned measurement area.
- 2.30 No noise measurement was conducted in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. Air flow was measured by air flow meter.
- 2.31 Turned on the sound level meter and check the battery, if too low, change new ones.
- 2.32 Calibration was conducted immediately prior to and after each noise measurement, the accuracy of the sound level meters was checked by using sound calibrator generating 1,000 Hz with 94dB. Measurement data was found to be valid only if the calibration levels from before and after the noise measurement agreed to within 1.0 dB.
- 2.33 Noise level was recorded.
- 2.34 Recorded any activities that may generate noise during measurement period.

## **Maintenance and Calibration**

- 2.35 The microphone head of the sound level meter and calibrator was cleaned with a soft cloth at quarterly intervals.
- 2.36 The sound level meter and sound calibrator were calibrated annually.
- 2.37 Calibration for sound level meter was conducted immediately prior to and following each noise measurement by using sound calibrator generating a known sound pressure level at a known frequency (1,000 Hz with 94dB). Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

**Impact Noise Action and Limit Levels**

2.38 The Baseline Noise Levels and Action and Limit Levels for construction noise is presented in Table 2.11.

*Table 2.11 Baseline noise level and Action and Limit Levels for construction noise monitoring*

Time Period	Noise Monitoring Station	Baseline Noise Levels, dB (A)	Action Level	Limit Level ^
0700 – 1900 on normal weekdays	M4(A)	69.5	When one documented complaint is received.	75 dB(A)
	M5(A)	72.5		

Note: ^ If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

**Impact Noise Monitoring results**

2.39 Impact noise monitoring results at the designated noise monitoring stations are summarized in Table 2.12.

*Table 2.12 Summary of noise monitoring data during the reporting period*

Noise Monitoring Station	November 2022		December 2022		January 2023		Action Level	Limit Level ^
	Measured $L_{Aeq, 30-min}$ , Average, dB(A)	Measured $L_{Aeq, 30-min}$ , Range, dB(A)	Measured $L_{Aeq, 30-min}$ , Average, dB(A)	Measured $L_{Aeq, 30-min}$ , Range, dB(A)	Measured $L_{Aeq, 30-min}$ , Average, dB(A)	Measured $L_{Aeq, 30-min}$ , Range, dB(A)		
M4(A)	69.6	69.3 – 70.1	70.0	69.6 – 70.3	69.8	69.4 – 70.1	When one documented complaint is received	75 dB(A)
M5(A)	73.0	72.2 – 73.7	72.7	72.2 – 73.6	72.7	72.2 – 73.3		

Note: ^ If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

2.40 There were no Action Level exceedance of noise monitoring and Limit Level exceedance of  $L_{Aeq, 30min}$  recorded during the reporting period.

2.41 Graphical presentation and detailed monitoring results of impact noise are shown in Appendix D.

2.42 The Event and Action Plan is provided in Appendix E.

2.43 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

**Comparison of EM&A Results with EIA Predictions**

2.44 The environmental impacts predictions were given in Agreement No. CE 35/2006(CE) Kai Tak Development Engineering Study cum Design and Construction of Advance Works - Investigation, Design and Construction - Kai Tak Development Environmental Impact Assessment Report, EIA Register Nos. AEIAR-130/2009 for Kai Tak Development (The EIA Report). The EM&A data was compared with the EIA predictions as summarized in Table 2.13 to Table 2.15.

*Table 2.13 Comparison of 24-hour average TSP monitoring data with EIA predictions*

Air Monitoring Station	ASR No. in EIA report	Predicted Cumulative Maximum 24-hr average TSP concentration		Measured 24-hr average TSP in Reporting Month (November 2022) $\mu\text{g}/\text{m}^3$	Measured 24-hr average TSP in Reporting Month (December 2022) $\mu\text{g}/\text{m}^3$	Measured 24-hr average TSP in Reporting Month (January 2023) $\mu\text{g}/\text{m}^3$
		Scenario 1 (Mid 2009 to Mid 2013), $\mu\text{g}/\text{m}^3$	Scenario 2 (Mid 2013 to Late 2016), $\mu\text{g}/\text{m}^3$			
AM2(A) - Ng Wah Catholic Secondary School	NA	NA	NA	28 – 76	40 – 99	30 – 100
AM3 - Sky Tower	A40	106 <sup>^</sup>	138 <sup>^</sup>	42 – 91	38 – 113	35 – 98

Note:

<sup>^</sup> Prediction results are given in the Table 3.13 of the EIA report EIA Register No. AEIAR-130/2009 for Kai Tak Development.

*Table 2.14 Comparison of 1-hour average TSP monitoring data with EIA predictions*

Air Monitoring Station	ASR No. in EIA report	Predicted Cumulative Maximum 1-hour average TSP concentration		Measured 1-hr average TSP in Reporting Month (November 2022) $\mu\text{g}/\text{m}^3$	Measured 1-hr average TSP in Reporting Month (December 2022) $\mu\text{g}/\text{m}^3$	Measured 1-hr average TSP in Reporting Month (January 2023) $\mu\text{g}/\text{m}^3$
		Scenario 1 (Mid 2009 to Mid 2013), $\mu\text{g}/\text{m}^3$	Scenario 2 (Mid 2013 to Late 2016), $\mu\text{g}/\text{m}^3$			
AM2(A) - Ng Wah Catholic Secondary School	NA	NA	NA	20 – 74	35 – 91	28 – 85
AM3 - Sky Tower	A40	217 <sup>^</sup>	247 <sup>^</sup>	25 – 89	30 – 114	31 – 85

Note:

<sup>^</sup> Prediction results are given in the Table 3.13 of the EIA report EIA Register No. AEIAR-130/2009 for Kai Tak Development.

*Table 2.15 Comparison of noise monitoring data with EIA predictions*

Noise Monitoring Station	NSR No. in EIA report	Predicted Mitigated Construction Noise Levels during Normal Daytime Working Hour $L_{Aeq, 30min}, \text{dB(A)}$	Measured Noise Level in Reporting Month (November 2022) $L_{Aeq, 30min}, \text{dB(A)}$	Measured Noise Level in Reporting Month (December 2022) $L_{Aeq, 30min}, \text{dB(A)}$	Measured Noise Level in Reporting Month (January 2023) $L_{Aeq, 30min}, \text{dB(A)}$
M4(A) – Le Billionnaire	NA	NA	69.3 – 70.1	69.6 – 70.3	69.4 – 70.1
M5(A) – Prince Ritz	NA	NA	72.2 – 73.7	72.2 – 73.6	72.2 – 73.3

2.45 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

2.46 No prediction in the EIA Report for 24-hour TSP monitoring results at AM2(A).

2.47 24-hour TSP monitoring results in December 2022 at AM3 was recorded higher than the prediction in Scenario 1 (Mid 2009 to Mid 2013) of the EIA Report. Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

2.48 No prediction in the EIA Report for 1-hour TSP monitoring results at AM2(A).

2.49 1-hour TSP monitoring results at AM3 recorded in the reporting period were recorded lower

than the prediction in the EIA Report.

2.50 No prediction in the EIA Report for noise monitoring results at M4(A) and M5(A).



### **3. LANDSCAPE AND VISUAL MONITORING**

- 3.1 In accordance with EM&A Manual (EIA Register Nos. AEIAR-130/2009), Landscape and Visual Monitoring shall be carried out during the construction phase of the Project. Regular impact monitoring will be conducted at least once per week.
- 3.2 Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 3.3 No non-compliance of the landscape and visual impact was recorded in the reporting period.
- 3.4 Should non-compliance of the landscape and visual impact occur, action in accordance with the action plan presented in Appendix E shall be performed.

### **4. SOLID AND LIQUID WASTE MANAGEMENT**

- 4.1 The amount of wastes generated by the major site activities of the work contracts within the Project during the reporting period is shown in Appendix F.
- 4.2 The Contractor was registered as a chemical waste producer for the Project.
- 4.3 Mitigation measures recommended in the EIA Report were implemented by the Contractor where applicable and were considered effective in reducing the waste generation during the reporting period.
- 4.4 The Contractor was reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

## 5. ENVIRONMENTAL SITE INSPECTION AND AUDIT

### Site Inspection

- 5.1 Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures and given advise if applicable in the Project site.
- 5.2 All follow-up actions requested by ET and/or IEC during site inspections were undertaken by the Contractor and ET reviewed the effectiveness in the following weekly site inspection.
- 5.3 The summaries of site audits are attached in Table 5.1.

*Table 5.1 Summary of site inspections observations during the reporting period*

Inspection Date	Key Observations / Advice / Recommendations /	Actions	Close-out Date / Status
3 November 2022	Observation: Stockpiles should be fully covered by impermeable sheeting to reduce dust emission in SB01.	Action Taken: Stockpiles has been fully covered by impermeable sheeting to reduce dust emission in SB01.	Closed out on 10 November 2022
10 November 2022	Observation: Stockpiles should be fully covered by impermeable sheeting to reduce dust emission in LW02.	Action Taken: Stockpiles have been removed.	Closed out on 17 November 2022
17 November 2022	Observation: Some small pieces of plywood and sawdust found@ SB01 ELS shall be removed to uphold the housekeeping and minimize the dust emissions.	Action Taken: Some small pieces of plywood and sawdust found@SB01 ELS have been removed to uphold the housekeeping and minimize the dust emissions.	Closed out on 24 November 2022
24 November 2022	Observation: Secondary container shall be provided for the plastic diesel engine oil to prevent soil contamination in LW02.	Action taken: Secondary container has been removed.	Closed out on 1 December 2022
1 December 2022	Observation: Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the	Action Taken: Cement bags were removed.	Closed out on 8 December 2022

Inspection Date	Key Observations / Advice / Recommendations /	Actions	Close-out Date / Status
	top and the three sides.		
8 December 2022	Observation: The Non-Road Mobile Machinery (NRMM) label for the digger was missing. Please ensure the label should be properly demonstrated.	Action Taken: The Non-Road Mobile Machinery (NRMM) label was display on the digger.	Closed out on 15 December 2022
15 December 2022	Observation: The vehicles should be restricted to maximum speed of 10 km per hour.	Action Taken: The vehicles had been restricted to maximum speed of 10 km per hour.	Closed out on 22 December 2022
22 December 2022	Observation: Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the three sides.	Action taken: Cement bags were removed.	Closed out on 29 December 2022
29 December 2022	Observation: Secondary container should be provided for the plastic diesel engine oil to prevent soil contamination in LW02.	Action taken: The plastic diesel engine oil was removed.	Closed out on 5 January 2023
5 January 2023	Observation: The QPME label for the generator was missing. Please ensure the label is properly demonstrated.	Action Taken: The QPME label has been display for the generator.	Closed out on 12 January 2023
12 January 2023	Observation: Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.	Action Taken: Stockpiles were fully covered by impermeable sheeting to reduce dust emission.	Closed out on 19 January 2022
19 January 2022	Observation: Opened cement shall be properly covered to prevent dust emissions KS10 subway area.	Action Taken: Every stock of more than 20 bags of cement were covered entirely by impervious sheeting placed in an area sheltered on the top and the three sides.	Closed out on 26 January 2023
26 January 2023	Observation: Secondary container shall be provided for the plastic diesel engine oil to prevent soil contamination in LW02.	Action taken: Plastic diesel engine oil has been removed.	Closed out on 2 February 2023

## **Implementation Status of Environmental Mitigation Measures**

- 5.4 The Contractor has implemented environmental mitigation measures and requirement as stated in the EIA report, the EP and the EM&A Manual. The implementation status of the mitigation measures during the reporting period is summarized in Appendix G.
- 5.5 Based on the observations from the site inspection, it would be considered that the pollution control and mitigation measures were effective and efficient in controlling the environmental impacts generated from the construction activities of the Project site.

## 6. SUMMARY OF NON-COMPLIANCE STATUS

### Breaches of Action and Limit Levels

- 6.1 1-hour TSP monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.
- 6.2 24-hour TSP monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.
- 6.3 Construction noise monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.
- 6.4 Summary of the non-compliance in the reporting period for the Project is tabulated in Table 6.1.

*Table 6.1 Non-compliance record in the reporting period*

Parameter	Reporting Period	No. of Exceedance		Possible reasons for non-compliance	Action Taken
		Action Level	Limit Level		
1-hr TSP	Nov 2022	0	0	N/A	N/A
	Dec 2022	0	0	N/A	N/A
	Jan 2023	0	0	N/A	N/A
24-hr TSP	Nov 2022	0	0	N/A	N/A
	Dec 2022	0	0	N/A	N/A
	Jan 2023	0	0	N/A	N/A
Construction noise	Nov 2022	0	0	N/A	N/A
	Dec 2022	0	0	N/A	N/A
	Jan 2023	0	0	N/A	N/A

### Environmental Complaint and Non-compliance

- 6.5 No complaint was received in the reporting period. Summary of complaints in the reporting period is tabulated in Table 6.2.

*Table 6.2 Summary of complaints in the reporting period*

Date of receiving complaint	Date of compliant	Description of complaint	Recommendations / Action take	Close-out date / Status
No complaint was received in the reporting period.	NA	NA	NA	NA

6.6 Complaint log is shown in Appendix H.

**Notifications of summons and successful prosecutions**

6.7 No notification of summons and successful prosecutions was received in the reporting period. Summary of summons and successful prosecutions in the reporting period is tabulated in Table 6.3.

*Table 6.3 Summary of summons and successful prosecutions in the reporting period*

Date of receiving notification of summons or prosecutions	Date of event	Description of event	Action take	Close-out date / Status
No notification of summons and successful prosecutions were received in the reporting period.	NA	NA	NA	NA

6.8 The summaries of cumulative environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in Appendix H.

## 7. COMMENTS, RECOMMENDATIONS AND CONCLUSIONS

### Comments

- 7.1 Mitigation measures in the EM&A Manuals were implemented during the reporting period. The effectiveness and efficiency of the mitigation measures were reviewed during the weekly environmental site inspection and audit.
- 7.2 Environmental monitoring works (air quality and construction noise) were performed in the reporting period to monitor the environmental impacts from the Project site.
- 7.3 Based on the observations from the site inspection and reviewing the environmental monitoring results, it would be considered that the mitigation measures were effective and efficient in controlling the environmental impacts generated from the construction activities of the Project site.

### Recommendations

- 7.4 During the weekly environmental site inspection and audit performed in the reporting period, the following recommendations were provided:

*Table 7.1 Summary of recommendations / reminders made in site inspections during the reporting period*

Inspection Date	Recommendations / Reminders
3 November 2022	Stockpiles should be fully covered by impermeable sheeting to reduce dust emission in SB01.
10 November 2022	Stockpiles should be fully covered by impermeable sheeting to reduce dust emission in LW02.
17 November 2022	Some small pieces of plywood and sawdust found@ SB01 ELS shall be removed.
24 November 2022	Secondary container shall be provided for the plastic diesel engine oil to prevent soil contamination in LW02.
1 December 2022	Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the three sides.
8 December 2022	The Non-Road Mobile Machinery (NRMM) label should be properly demonstrated on the digger.
15 December	The vehicles should be restricted to maximum speed of 10 km per hour.

Inspection Date	Recommendations / Reminders
2022	
22 December 2022	Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the three sides.
29 December 2022	Secondary container should be provided for the plastic diesel engine oil to prevent soil contamination in LW02.
5 January 2023	The QPME label should be properly demonstrated on the generator.
12 January 2023	Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.
19 January 2023	Opened cement shall be properly covered to prevent dust emission KS10 subway area.
26 January 2023	Secondary container should be provided for the plastic diesel engine oil to prevent soil contamination in LW02.

## **Conclusions**

- 7.5 Environmental monitoring works were performed in the reporting period and all monitoring results were checked and reviewed.
- 7.6 1-hour TSP monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.
- 7.7 24-hour TSP monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.
- 7.8 Construction noise monitoring was conducted as scheduled in the reporting period. No Action/Limit Level exceedance was recorded.
- 7.9 No complaint was received in the reporting period.
- 7.10 No notification of summons and successful prosecutions was received in the reporting period.



**Figure**

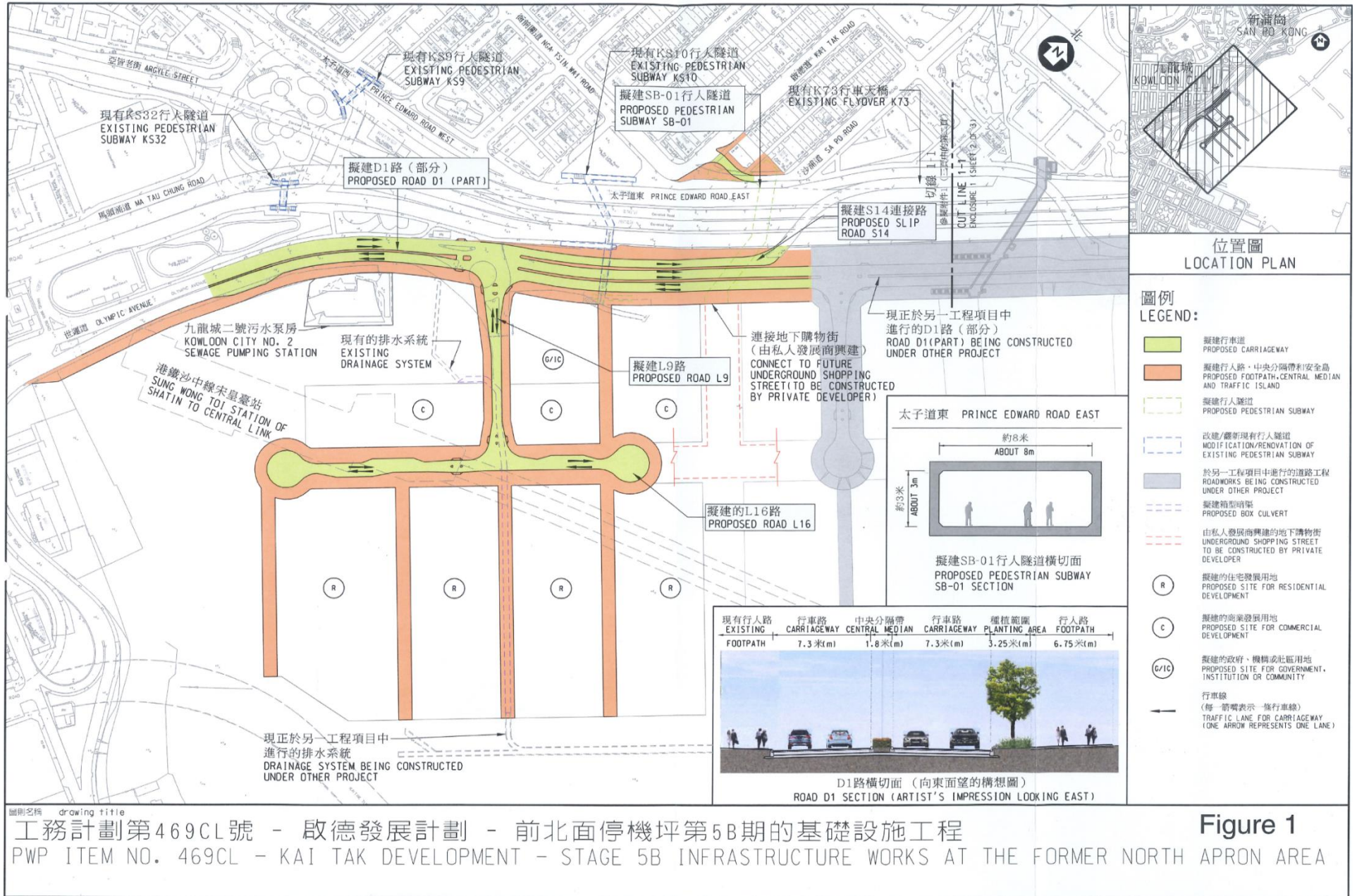


Figure 1 – Proposed works of Contract No. ED/2018/05

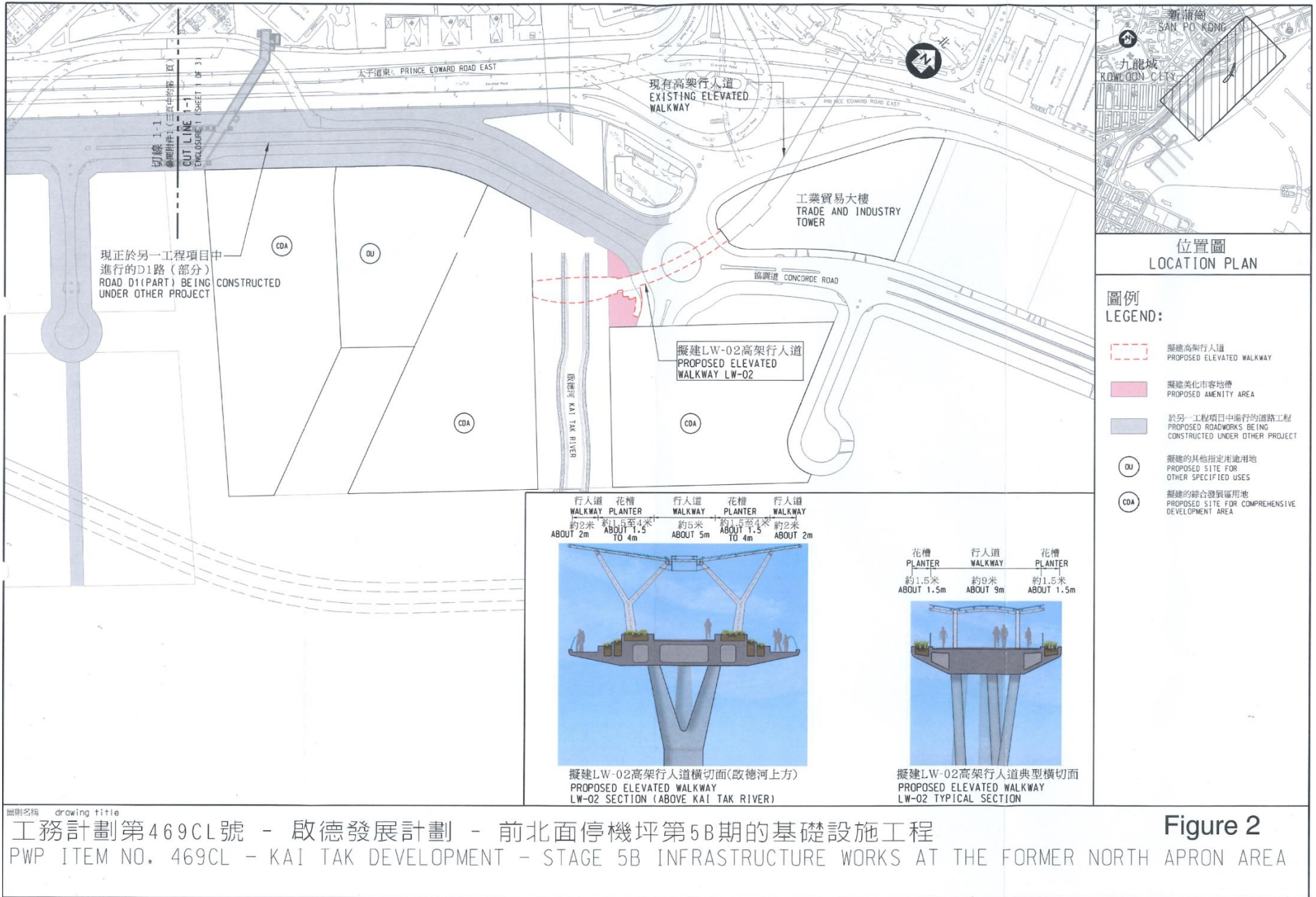
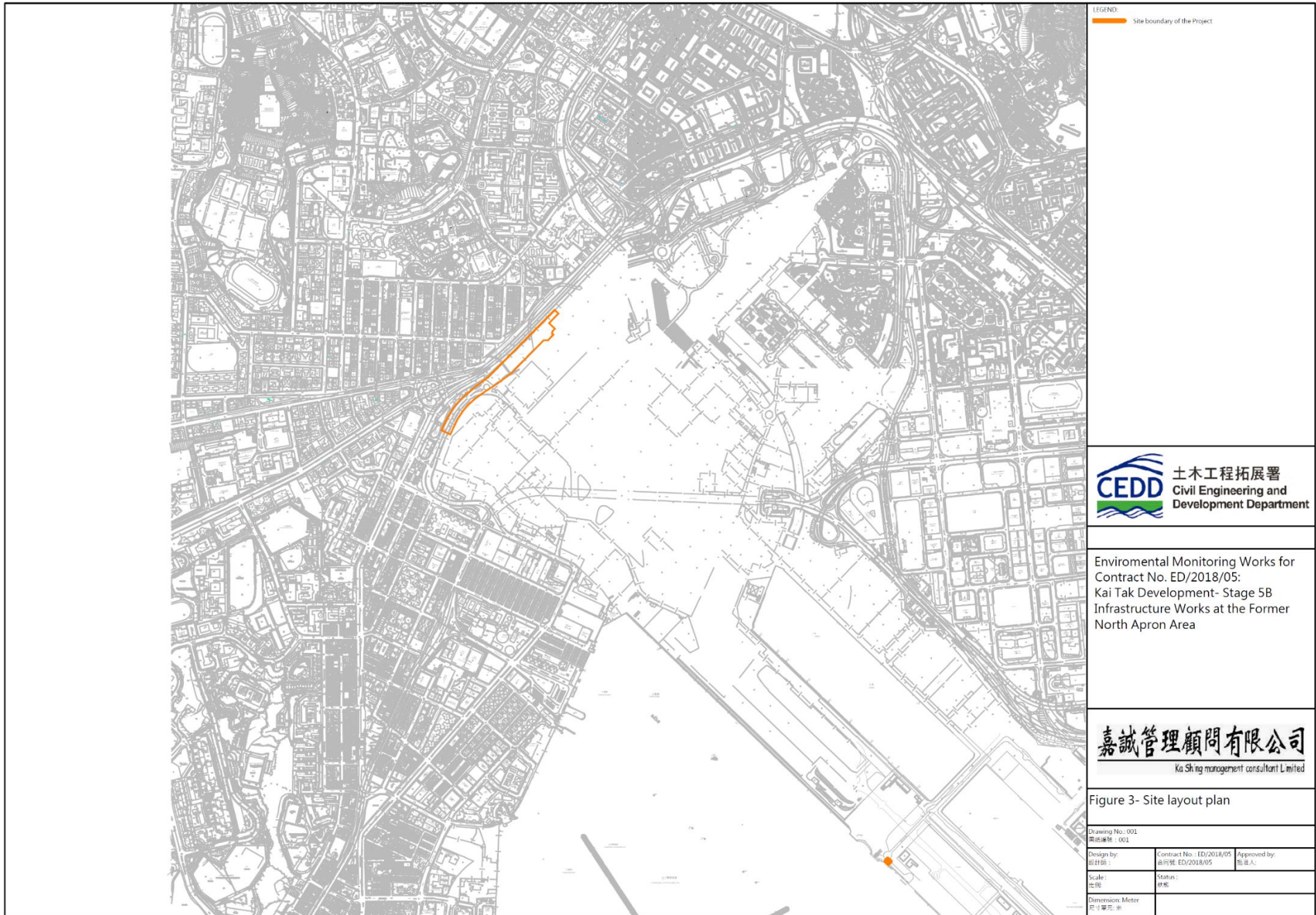


Figure 2

Figure 2 – Proposed works of Contract No. ED/2018/05



LEGEND:  
— Site boundary of the Project

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

Environmental Monitoring Works for  
 Contract No. ED/2018/05:  
 Kai Tak Development- Stage 5B  
 Infrastructure Works at the Former  
 North Apron Area

**嘉誠管理顧問有限公司**  
 Ka Shing management consultant Limited

Figure 3- Site layout plan

Drawing No.: 001 圖則編號: 001		
Design by: 設計師:	Contract No.: ED/2018/05 合約號: ED/2018/05	Approved by: 批准人:
Scale: 比例:	Status: 狀態:	
Dimension: Meter 尺寸單位: 米		

Figure 3 – D1 Road Site Layout Plan

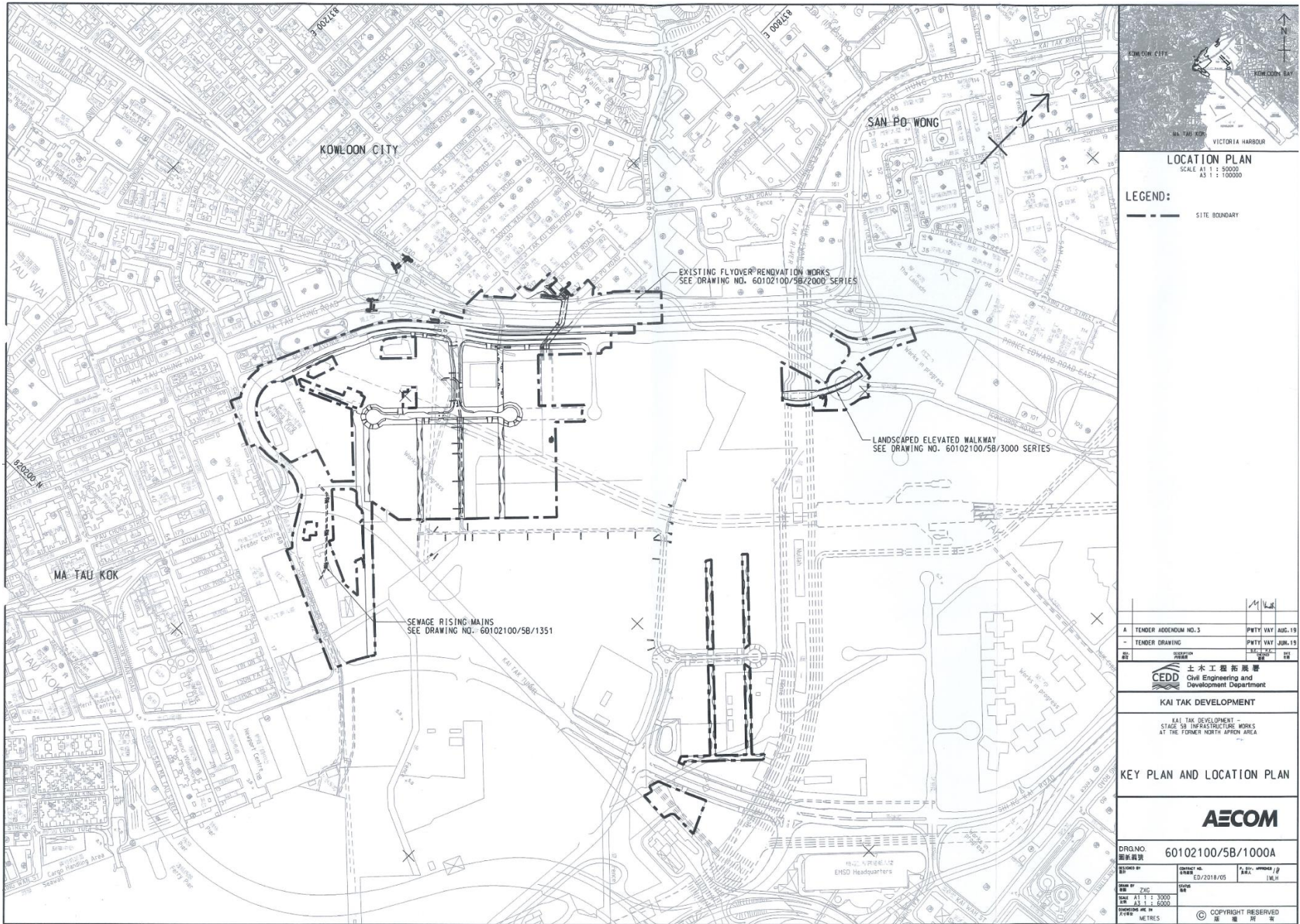


Figure 4 – Site Layout Plan

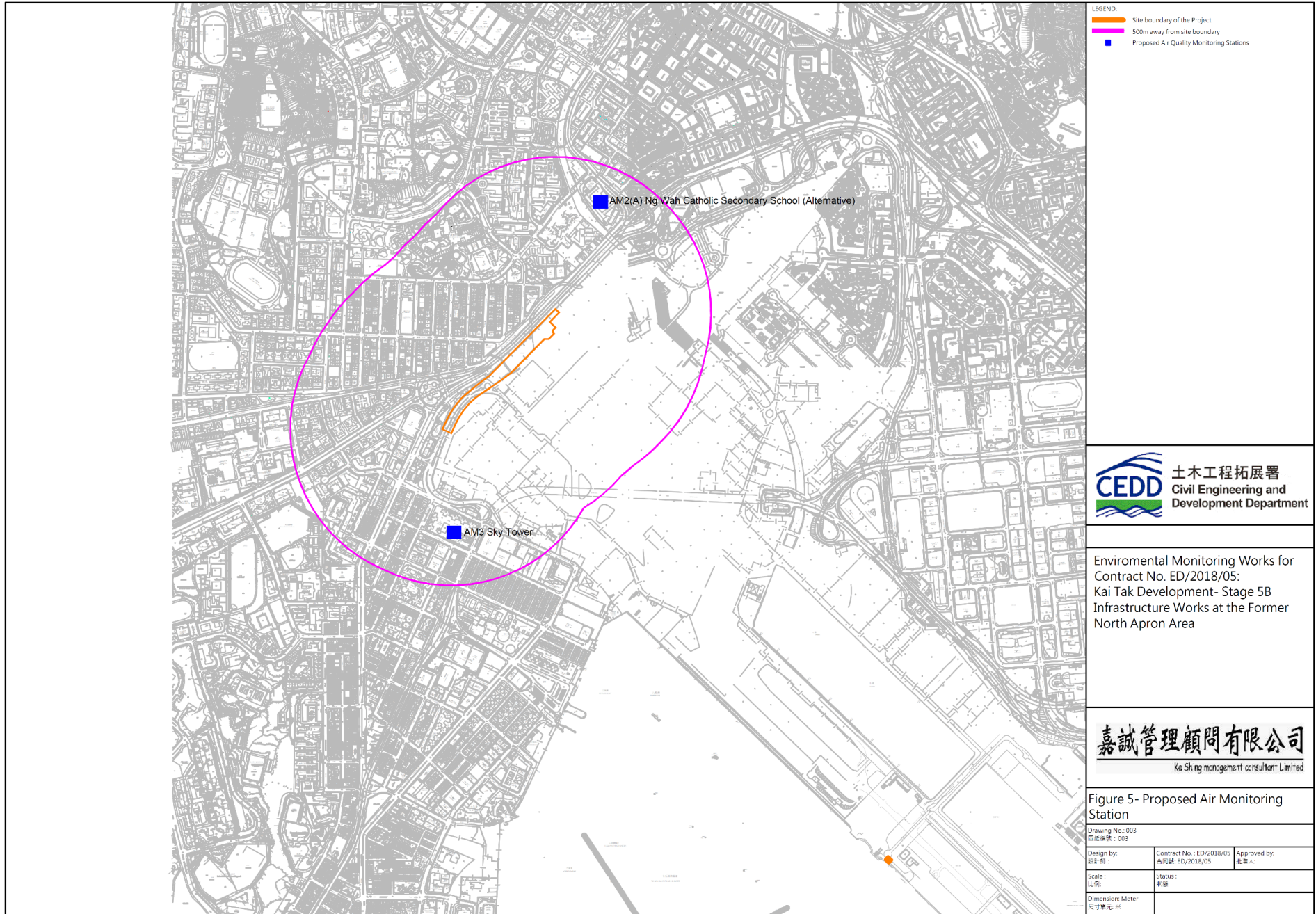


Figure 5 – Air Quality Monitoring Stations

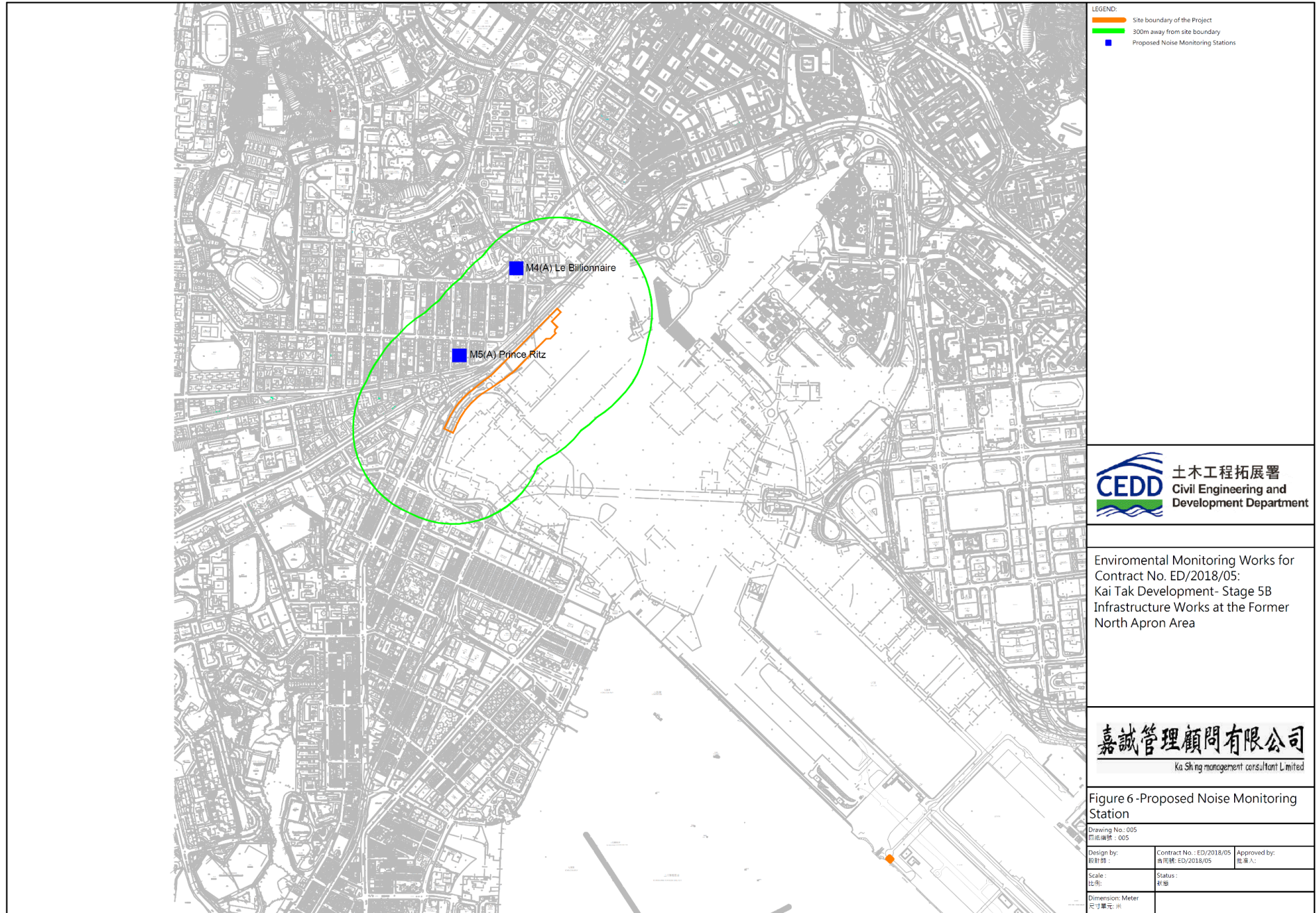
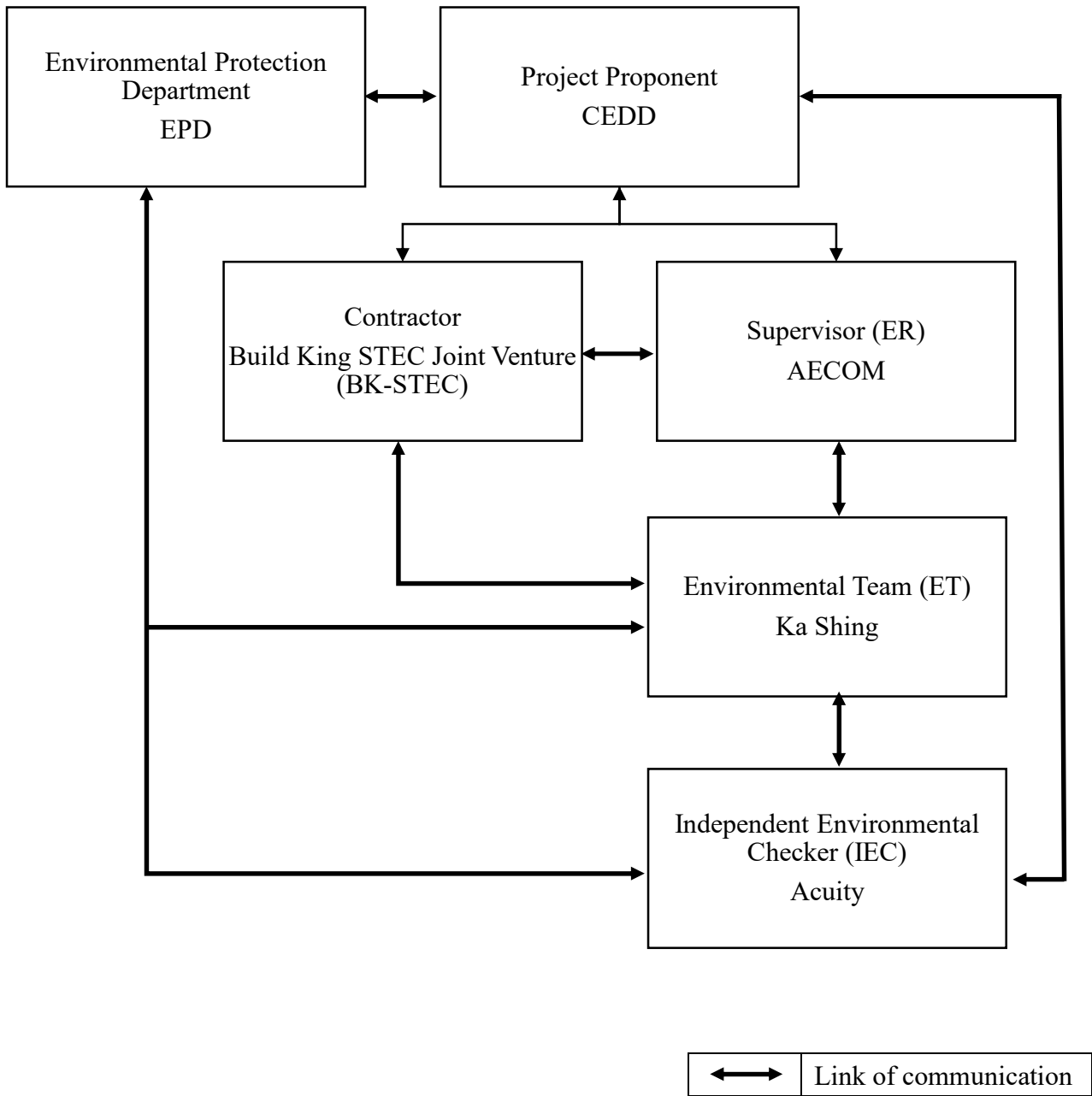


Figure 6 – Noise Monitoring Stations

**Appendix A – Organization Chart of EM&A Team**





# Appendix B – Construction Programme











**Appendix C – Weather information**



## General Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)	Mean Relative Humidity (%)	Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)	Mean Relative Humidity (%)
01/11/2022	18.9	25.3	4.5	64	01/12/2022	14.8	18.4	Trace	72
02/11/2022	18.9	21.5	23.7	86	02/12/2022	13.6	19.4	0	69
03/11/2022	20.9	23.2	58.1	93	03/12/2022	16.9	21.5	0	73
04/11/2022	21.9	24	4	87	04/12/2022	19.9	23.3	0	74
05/11/2022	20.8	22.2	Trace	79	05/12/2022	15.7	20.7	0	66
06/11/2022	19.3	22.5	6.6	84	06/12/2022	14.9	19.8	0	68
07/11/2022	19.7	23.5	1.6	85	07/12/2022	16.6	21.5	Trace	68
08/11/2022	20.6	23.7	7.7	85	08/12/2022	17.7	22.6	0	72
09/11/2022	21.6	26.7	0	77	09/12/2022	17.4	22.7	0	67
10/11/2022	23	27.9	0	78	10/12/2022	15.6	21.6	0	61
11/11/2022	23.5	28.1	0	77	11/12/2022	15.3	19.0	0	60
12/11/2022	23.3	26.8	Trace	79	12/12/2022	15.0	18.0	Trace	61
13/11/2022	22.9	28.5	0	81	13/12/2022	12.9	16.7	3.2	71
14/11/2022	23.2	25.7	0	79	14/12/2022	11.5	13.1	8.7	91
15/11/2022	23.4	26	0	78	15/12/2022	12.3	16.2	3.8	91
16/11/2022	23.2	25.8	0	80	16/12/2022	15.1	18.2	0.9	90
17/11/2022	22.9	27.2	0	80	17/12/2022	11.8	15.1	9.1	60
18/11/2022	23.1	26.9	0	80	18/12/2022	9.4	13.8	Trace	30
19/11/2022	23.7	27.6	0	77	19/12/2022	10.6	16.6	0	50
20/11/2022	23.3	27.5	0	78	20/12/2022	14.7	19.2	0	71
21/11/2022	23.1	25.3	0.5	78	21/12/2022	15.5	19.8	Trace	46
22/11/2022	22.3	24.1	2.5	86	22/12/2022	13.9	20.3	0	35
23/11/2022	22.5	24.8	3.4	91	23/12/2022	14.7	20.2	0	40
24/11/2022	21.4	22.6	9.6	93	24/12/2022	14.4	20.1	0	49
25/11/2022	21.3	23.4	4.8	92	25/12/2022	14.1	18.5	0	59
26/11/2022	21.7	23.6	0.5	88	26/12/2022	14.3	18.8	0	65
27/11/2022	22.1	23.7	1.9	90	27/12/2022	14.9	18.8	0	70
28/11/2022	23.4	28.6	1.4	88	28/12/2022	14.7	20.6	0	68
29/11/2022	24.3	27.8	0	85	29/12/2022	14.5	18.9	Trace	60
30/11/2022	18.3	26.1	0	82	30/12/2022	12.4	17.3	0	62
					31/12/2022	12.0	18.7	0	65

NOTE1: The above weather information was obtained from manned weather station of Hong Kong Observatory.

NOTE2: Trace means rainfall less than 0.05 mm

<https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2022&m=11>

NOTE1: The above weather information was obtained from manned weather station of Hong Kong Observatory.

NOTE2: Trace means rainfall less than 0.05 mm

<https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2022&m=12>

## General Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)	Mean Relative Humidity (%)
01/01/2023	14.5	19.3	0.1	65
02/01/2023	17.2	21.6	Trace	65
03/01/2023	16.1	19.2	Trace	69
04/01/2023	15.8	19.9	Trace	74
05/01/2023	16.8	21.4	0	77
06/01/2023	17	23.4	0	62
07/01/2023	17.9	21.3	0	59
08/01/2023	17	20	Trace	57
09/01/2023	18.2	21.4	0.1	72
10/01/2023	17.6	19	5.5	91
11/01/2023	17	19.1	3.2	87
12/01/2023	17.5	19.6	0.5	88
13/01/2023	18.9	23.9	4.5	93
14/01/2023	20	24.7	3.4	90
15/01/2023	13	21.6	Trace	80
16/01/2023	11.3	13.2	0	66
17/01/2023	11	15.2	0	71
18/01/2023	11.5	17.1	0	58
19/01/2023	13.3	18.7	0	63
20/01/2023	15.9	20.9	Trace	62
21/01/2023	16	18.8	Trace	79
22/01/2023	16.6	22.4	0.6	83
23/01/2023	16.9	21.1	0	86
24/01/2023	12	18.7	0.3	51
25/01/2023	10.6	14.4	0	54
26/01/2023	13	18.6	0	66
27/01/2023	12.4	17.3	0	46
28/01/2023	10.6	15.7	0	28
29/01/2023	9.8	16	0	35
30/01/2023	11.7	18.8	0	48
31/01/2023	13.8	20.1	0	61

NOTE1: The above weather information was obtained from manned weather station of Hong Kong Observatory.

NOTE2: Trace means rainfall less than 0.05 mm

<https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2023&m=01>

### Kai Tak Runway Park Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)
01/11/2022	19.0	25.2	01/12/2022	14.5	19.0
02/11/2022	19.4	22.3	02/12/2022	13.4	20.6
03/11/2022	21.1	23.3	03/12/2022	16.4	23.7
04/11/2022	21.9	24.3	04/12/2022	19.9	25.5
05/11/2022	20.5	22.0	05/12/2022	15.3	20.5
06/11/2022	19.2	23.5	06/12/2022	14.6	20.8
07/11/2022	19.7	24.0	07/12/2022	16.7	22.3
08/11/2022	20.8	24.8	08/12/2022	17.8	23.4
09/11/2022	21.7	27.1	09/12/2022	17.2	24.6
10/11/2022	22.9	28.2	10/12/2022	15.2	23.6
11/11/2022	23.4	28.4	11/12/2022	15.0	19.4
12/11/2022	22.9	27.4	12/12/2022	14.9	19.0
13/11/2022	22.4	27.6	13/12/2022	12.7	17.3
14/11/2022	23.0	25.1	14/12/2022	11.6	13.8
15/11/2022	23.4	25.7	15/12/2022	12.7	16.8
16/11/2022	22.8	25.8	16/12/2022	15.5	18.6
17/11/2022	22.6	27.4	17/12/2022	12.2	15.5
18/11/2022	23.0	27.3	18/12/2022	9.2	15.0
19/11/2022	23.4	27.7	19/12/2022	10.6	17.7
20/11/2022	22.9	27.5	20/12/2022	14.6	20.3
21/11/2022	22.8	24.9	21/12/2022	16.2	21.1
22/11/2022	22.3	24.7	22/12/2022	13.9	21.9
23/11/2022	22.3	24.4	23/12/2022	14.7	21.2
24/11/2022	21.4	22.6	24/12/2022	14.4	21.6
25/11/2022	21.2	23.2	25/12/2022	13.6	18.7
26/11/2022	21.6	23.7	26/12/2022	13.8	18.7
27/11/2022	22.0	23.4	27/12/2022	14.4	19.1
28/11/2022	23.2	28.7	28/12/2022	14.4	21.9
29/11/2022	23.8	27.4	29/12/2022	14.2	20.0
30/11/2022	18.6	28.3	30/12/2022	12.0	18.6
			31/12/2022	11.4	20.2

NOTE1: The above weather information was obtained from manned weather station of Kai Tak Runway Park.

[https://i-lens.hk/hkweather/history\\_chart.php?date=2022-11-01&chart\\_type=DG\\_TEMP](https://i-lens.hk/hkweather/history_chart.php?date=2022-11-01&chart_type=DG_TEMP)

NOTE1: The above weather information was obtained from manned weather station of Kai Tak Runway Park.

[https://i-lens.hk/hkweather/history\\_chart.php?date=2022-12-01&chart\\_type=DG\\_TEMP](https://i-lens.hk/hkweather/history_chart.php?date=2022-12-01&chart_type=DG_TEMP)

## Kai Tak Runway Park Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)
01/01/2023	14.6	20.2
02/01/2023	17.5	21.8
03/01/2023	16.2	19.6
04/01/2023	15.9	20.1
05/01/2023	16.6	20.8
06/01/2023	16.8	25.4
07/01/2023	18.1	21.4
08/01/2023	16.2	19.8
09/01/2023	18.0	21.4
10/01/2023	17.4	18.7
11/01/2023	16.9	19.2
12/01/2023	17.5	19.4
13/01/2023	18.6	23.7
14/01/2023	19.0	26.1
15/01/2023	12.7	22.3
16/01/2023	11.3	13.5
17/01/2023	11.0	15.5
18/01/2023	11.5	19.0
19/01/2023	13.3	20.0
20/01/2023	15.8	22.0
21/01/2023	15.8	18.0
22/01/2023	16.5	20.9
23/01/2023	16.6	21.1
24/01/2023	11.9	18.8
25/01/2023	10.0	14.2
26/01/2023	12.6	18.4
27/01/2023	12.2	17.4
28/01/2023	10.5	16.3
29/01/2023	9.4	16.8
30/01/2023	11.4	18.6
31/01/2023	13.6	20.2

NOTE1: The above weather information was obtained from manned weather station of Kai Tak Runway Park.

[https://i-lens.hk/hkweather/history\\_chart.php?date=2023-01-01&ch24art\\_type=DG\\_TEMP](https://i-lens.hk/hkweather/history_chart.php?date=2023-01-01&ch24art_type=DG_TEMP)

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
01/11/2022	0:00	1.3	112.5	02/11/2022	0:00	1.3	11.5	03/11/2022	0:00	0.4	112.5	04/11/2022	0:00	1.3	112.5
01/11/2022	1:00	1.3	112.5	02/11/2022	1:00	0.9	112.5	03/11/2022	1:00	0.9	45	04/11/2022	1:00	1.8	90
01/11/2022	2:00	1.8	45	02/11/2022	2:00	0.9	45	03/11/2022	2:00	0.9	90	04/11/2022	2:00	1.3	90
01/11/2022	3:00	1.3	157.5	02/11/2022	3:00	1.3	112.5	03/11/2022	3:00	1.3	112.5	04/11/2022	3:00	2.2	45
01/11/2022	4:00	1.8	90	02/11/2022	4:00	0.9	90	03/11/2022	4:00	0.9	112.5	04/11/2022	4:00	1.3	45
01/11/2022	5:00	1.8	90	02/11/2022	5:00	1.3	45	03/11/2022	5:00	0.9	90	04/11/2022	5:00	2.2	45
01/11/2022	6:00	2.2	45	02/11/2022	6:00	0.9	112.5	03/11/2022	6:00	1.3	135	04/11/2022	6:00	1.3	112.5
01/11/2022	7:00	1.3	112.5	02/11/2022	7:00	1.3	112.5	03/11/2022	7:00	0.4	112.5	04/11/2022	7:00	1.8	112.5
01/11/2022	8:00	1.3	112.5	02/11/2022	8:00	1.3	45	03/11/2022	8:00	0.4	90	04/11/2022	8:00	1.3	135
01/11/2022	9:00	0.9	90	02/11/2022	9:00	1.8	45	03/11/2022	9:00	0.4	112.5	04/11/2022	9:00	2.2	135
01/11/2022	10:00	0.9	112.5	02/11/2022	10:00	0.9	45	03/11/2022	10:00	0.9	90	04/11/2022	10:00	1.8	135
01/11/2022	11:00	0.9	337.5	02/11/2022	11:00	0.9	45	03/11/2022	11:00	0.9	112.5	04/11/2022	11:00	2.2	112.5
01/11/2022	12:00	1.3	45	02/11/2022	12:00	1.3	90	03/11/2022	12:00	0.4	90	04/11/2022	12:00	1.3	112.5
01/11/2022	13:00	0.9	67.5	02/11/2022	13:00	0.9	112.5	03/11/2022	13:00	0.9	112.5	04/11/2022	13:00	1.3	90
01/11/2022	14:00	0.0	112.5	02/11/2022	14:00	0.9	112.5	03/11/2022	14:00	0.4	112.5	04/11/2022	14:00	1.8	45
01/11/2022	15:00	1.3	90	02/11/2022	15:00	1.8	45	03/11/2022	15:00	0.4	90	04/11/2022	15:00	0.9	112.5
01/11/2022	16:00	1.8	112.5	02/11/2022	16:00	1.3	112.5	03/11/2022	16:00	0.4	112.5	04/11/2022	16:00	1.3	112.5
01/11/2022	17:00	1.3	112.5	02/11/2022	17:00	45	90	03/11/2022	17:00	0.4	90	04/11/2022	17:00	0.9	135
01/11/2022	18:00	0.9	90	02/11/2022	18:00	1.3	112.5	03/11/2022	18:00	0.4	45	04/11/2022	18:00	1.8	135
01/11/2022	19:00	0.0	90	02/11/2022	19:00	0.0	112.5	03/11/2022	19:00	0.9	112.5	04/11/2022	19:00	0.9	135
01/11/2022	20:00	1.3	90	02/11/2022	20:00	1.3	90	03/11/2022	20:00	0.9	45	04/11/2022	20:00	0.9	112.5
01/11/2022	21:00	0.9	112.5	02/11/2022	21:00	0.9	112.5	03/11/2022	21:00	0.4	45	04/11/2022	21:00	1.3	112.5
01/11/2022	22:00	1.3	112.5	02/11/2022	22:00	1.8	90	03/11/2022	22:00	1.3	90	04/11/2022	22:00	1.3	90
01/11/2022	23:00	0.9	112.5	02/11/2022	23:00	1.3	112.5	03/11/2022	23:00	1.3	112.5	04/11/2022	23:00	1.3	45

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
05/11/2022	0:00	0.4	112.5	06/11/2022	0:00	0.9	135	07/11/2022	0:00	0.9	292.5	08/11/2022	0:00	0.9	112..5
05/11/2022	1:00	0.9	112.5	06/11/2022	1:00	1.3	135	07/11/2022	1:00	0.9	112.5	08/11/2022	1:00	1.3	112.5
05/11/2022	2:00	0.4	112.5	06/11/2022	2:00	0.9	112.5	07/11/2022	2:00	0.9	135	08/11/2022	2:00	1.3	90
05/11/2022	3:00	0.9	90	06/11/2022	3:00	0.9	135	07/11/2022	3:00	0.9	135	08/11/2022	3:00	1.8	90
05/11/2022	4:00	0.4	112.5	06/11/2022	4:00	1.3	202.5	07/11/2022	4:00	1.3	135	08/11/2022	4:00	1.3	112.5
05/11/2022	5:00	0.9	90	06/11/2022	5:00	0.9	112.5	07/11/2022	5:00	0.9	315	08/11/2022	5:00	0.9	112.5
05/11/2022	6:00	0.9	112.5	06/11/2022	6:00	0.9	90	07/11/2022	6:00	1.3	112.5	08/11/2022	6:00	0.9	112.5
05/11/2022	7:00	0.9	112.5	06/11/2022	7:00	0.9	112.5	07/11/2022	7:00	0.9	135	08/11/2022	7:00	1.3	112.5
05/11/2022	8:00	1.8	112.5	06/11/2022	8:00	0.9	45	07/11/2022	8:00	0.4	45	08/11/2022	8:00	1.3	112.5
05/11/2022	9:00	1.3	135	06/11/2022	9:00	0.9	67.5	07/11/2022	9:00	1.3	337.5	08/11/2022	9:00	0.9	90
05/11/2022	10:00	0.4	45	06/11/2022	10:00	0.9	112.5	07/11/2022	10:00	1.3	135	08/11/2022	10:00	0.9	135
05/11/2022	11:00	0.9	45	06/11/2022	11:00	1.3	135	07/11/2022	11:00	1.3	22.5	08/11/2022	11:00	0.9	135
05/11/2022	12:00	1.3	112.5	06/11/2022	12:00	0.4	135	07/11/2022	12:00	1.3	22.5	08/11/2022	12:00	0.9	112.5
05/11/2022	13:00	0.9	45	06/11/2022	13:00	0.9	135	07/11/2022	13:00	0.9	112.5	08/11/2022	13:00	0.4	135
05/11/2022	14:00	0.4	202.5	06/11/2022	14:00	0.9	135	07/11/2022	14:00	0.9	112.5	08/11/2022	14:00	0.4	180
05/11/2022	15:00	0.4	45	06/11/2022	15:00	0.9	112.5	07/11/2022	15:00	0.9	90	08/11/2022	15:00	0.4	292.5
05/11/2022	16:00	0.4	292.5	06/11/2022	16:00	0.9	67.5	07/11/2022	16:00	0.9	112.5	08/11/2022	16:00	0.9	112.5
05/11/2022	17:00	0.4	112.5	06/11/2022	17:00	0.4	135	07/11/2022	17:00	1.3	90	08/11/2022	17:00	0.4	22.5
05/11/2022	18:00	0.4	45	06/11/2022	18:00	0.9	22.5	07/11/2022	18:00	1.3	112.5	08/11/2022	18:00	0.4	22.5
05/11/2022	19:00	0.4	45	06/11/2022	19:00	0.9	135	07/11/2022	19:00	1.3	90	08/11/2022	19:00	0.4	112.5
05/11/2022	20:00	0.4	135	06/11/2022	20:00	1.3	135	07/11/2022	20:00	1.8	202.5	08/11/2022	20:00	0.4	112.5
05/11/2022	21:00	0.4	135	06/11/2022	21:00	1.3	45	07/11/2022	21:00	1.3	112.5	08/11/2022	21:00	0.4	45
05/11/2022	22:00	0.4	135	06/11/2022	22:00	1.3	337.5	07/11/2022	22:00	1.8	112.5	08/11/2022	22:00	0.9	22.5
05/11/2022	23:00	0.9	67.5	06/11/2022	23:00	0.9	247.5	07/11/2022	23:00	1.8	112.5	08/11/2022	23:00	0.9	22.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
09/11/2022	0:00	0.4	135	10/11/2022	0:00	0.9	157.5	11/11/2022	0:00	0.4	135	12/11/2022	0:00	0.4	22.5
09/11/2022	1:00	0.9	112.5	10/11/2022	1:00	1.3	135	11/11/2022	1:00	0.4	270	12/11/2022	1:00	0.4	22.5
09/11/2022	2:00	0.4	112.5	10/11/2022	2:00	1.3	112.5	11/11/2022	2:00	0.4	270	12/11/2022	2:00	0.4	112.5
09/11/2022	3:00	0.9	22.5	10/11/2022	3:00	1.8	112.5	11/11/2022	3:00	0.4	270	12/11/2022	3:00	0.9	112.5
09/11/2022	4:00	0.4	337.5	10/11/2022	4:00	0.9	90	11/11/2022	4:00	0.9	225	12/11/2022	4:00	0.9	135
09/11/2022	5:00	0.4	315	10/11/2022	5:00	0.9	135	11/11/2022	5:00	0.9	225	12/11/2022	5:00	0.9	112.5
09/11/2022	6:00	0.9	22.5	10/11/2022	6:00	0.9	135	11/11/2022	6:00	1.3	202.5	12/11/2022	6:00	0.9	112.5
09/11/2022	7:00	0.9	22.5	10/11/2022	7:00	0.9	112.5	11/11/2022	7:00	1.3	247.5	12/11/2022	7:00	0.9	112.5
09/11/2022	8:00	1.3	112.5	10/11/2022	8:00	1.3	135	11/11/2022	8:00	1.3	270	12/11/2022	8:00	0.9	112.5
09/11/2022	9:00	1.3	112.5	10/11/2022	9:00	1.3	112.5	11/11/2022	9:00	1.3	247.5	12/11/2022	9:00	0.9	112.5
09/11/2022	10:00	1.3	135	10/11/2022	10:00	1.3	112.5	11/11/2022	10:00	0.4	247.5	12/11/2022	10:00	0.9	112.5
09/11/2022	11:00	0.9	112.5	10/11/2022	11:00	1.3	45	11/11/2022	11:00	0.9	247.5	12/11/2022	11:00	0.9	112.5
09/11/2022	12:00	1.3	22.5	10/11/2022	12:00	0.9	157.5	11/11/2022	12:00	0.4	225	12/11/2022	12:00	0.4	112.5
09/11/2022	13:00	0.9	112.5	10/11/2022	13:00	0.4	22.5	11/11/2022	13:00	0.9	22.5	12/11/2022	13:00	0.4	90
09/11/2022	14:00	0.9	90	10/11/2022	14:00	0.4	22.5	11/11/2022	14:00	0.9	90	12/11/2022	14:00	0.9	112.5
09/11/2022	15:00	1.3	112.5	10/11/2022	15:00	0.4	112.5	11/11/2022	15:00	0.9	135	12/11/2022	15:00	1.3	112.5
09/11/2022	16:00	0.4	22.5	10/11/2022	16:00	0.9	90	11/11/2022	16:00	1.3	112.5	12/11/2022	16:00	1.8	45
09/11/2022	17:00	0.4	22.5	10/11/2022	17:00	0.4	112.5	11/11/2022	17:00	1.3	112.5	12/11/2022	17:00	1.3	112.5
09/11/2022	18:00	0.4	112.5	10/11/2022	18:00	0.4	112.5	11/11/2022	18:00	0.9	112.5	12/11/2022	18:00	0.4	112.5
09/11/2022	19:00	0.4	22.5	10/11/2022	19:00	1.3	112.5	11/11/2022	19:00	1.3	112.5	12/11/2022	19:00	1.3	112.5
09/11/2022	20:00	0.4	112.5	10/11/2022	20:00	0.4	180	11/11/2022	20:00	0.9	67.5	12/11/2022	20:00	0.4	90
09/11/2022	21:00	0.4	112.5	10/11/2022	21:00	0.4	112.5	11/11/2022	21:00	0.9	90	12/11/2022	21:00	0.9	112.5
09/11/2022	22:00	0.4	112.5	10/11/2022	22:00	0.4	270	11/11/2022	22:00	1.3	135	12/11/2022	22:00	0.4	45
09/11/2022	23:00	0.4	112.5	10/11/2022	23:00	0.4	112.5	11/11/2022	23:00	0.4	135	12/11/2022	23:00	0.4	112.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
13/11/2022	0:00	1.3	112.5	14/11/2022	0:00	0.9	112.5	15/11/2022	0:00	1.3	90	16/11/2022	0:00	0.4	112.5
13/11/2022	1:00	0.9	90	14/11/2022	1:00	0.9	90	15/11/2022	1:00	0.9	90	16/11/2022	1:00	0.4	112.5
13/11/2022	2:00	1.3	135	14/11/2022	2:00	0.4	135	15/11/2022	2:00	0.4	90	16/11/2022	2:00	0.4	112.5
13/11/2022	3:00	1.8	90	14/11/2022	3:00	0.4	90	15/11/2022	3:00	0.4	90	16/11/2022	3:00	0.9	112.5
13/11/2022	4:00	1.3	90	14/11/2022	4:00	0.9	135	15/11/2022	4:00	0.9	112.5	16/11/2022	4:00	0.4	112.5
13/11/2022	5:00	1.8	112.5	14/11/2022	5:00	0.9	90	15/11/2022	5:00	1.3	112.5	16/11/2022	5:00	0.9	112.5
13/11/2022	6:00	1.3	112.5	14/11/2022	6:00	0.4	90	15/11/2022	6:00	1.3	112.5	16/11/2022	6:00	0.4	90
13/11/2022	7:00	1.8	112.5	14/11/2022	7:00	0.9	90	15/11/2022	7:00	1.3	90	16/11/2022	7:00	0.4	90
13/11/2022	8:00	2.2	112.5	14/11/2022	8:00	0.9	90	15/11/2022	8:00	1.3	90	16/11/2022	8:00	0.4	112.5
13/11/2022	9:00	1.3	90	14/11/2022	9:00	0.9	112.5	15/11/2022	9:00	0.4	112.5	16/11/2022	9:00	0.9	112.5
13/11/2022	10:00	1.3	90	14/11/2022	10:00	0.9	112.5	15/11/2022	10:00	1.3	135	16/11/2022	10:00	0.4	90
13/11/2022	11:00	0.9	112.5	14/11/2022	11:00	0.9	112.5	15/11/2022	11:00	0.9	45	16/11/2022	11:00	0.9	202.5
13/11/2022	12:00	0.9	112.5	14/11/2022	12:00	0.9	112.5	15/11/2022	12:00	0.4	45	16/11/2022	12:00	0.9	202.5
13/11/2022	13:00	1.3	112.5	14/11/2022	13:00	0.9	112.5	15/11/2022	13:00	1.3	112.5	16/11/2022	13:00	0.4	45
13/11/2022	14:00	0.4	112.5	14/11/2022	14:00	0.9	112.5	15/11/2022	14:00	0.9	90	16/11/2022	14:00	0.9	112.5
13/11/2022	15:00	0.4	135	14/11/2022	15:00	0.4	112.5	15/11/2022	15:00	1.3	112.5	16/11/2022	15:00	0.4	112.5
13/11/2022	16:00	0.4	135	14/11/2022	16:00	0.4	112.5	15/11/2022	16:00	0.9	90	16/11/2022	16:00	0.4	112.5
13/11/2022	17:00	0.4	135	14/11/2022	17:00	0.4	112.5	15/11/2022	17:00	0.4	90	16/11/2022	17:00	0.9	112.5
13/11/2022	18:00	0.9	112.5	14/11/2022	18:00	0.4	112.5	15/11/2022	18:00	0.9	112.5	16/11/2022	18:00	0.4	112.5
13/11/2022	19:00	0.9	202.5	14/11/2022	19:00	0.9	112.5	15/11/2022	19:00	0.4	112.5	16/11/2022	19:00	0.9	112.5
13/11/2022	20:00	1.3	202.5	14/11/2022	20:00	0.9	45	15/11/2022	20:00	0.9	90	16/11/2022	20:00	0.4	90
13/11/2022	21:00	1.3	247.5	14/11/2022	21:00	1.3	45	15/11/2022	21:00	45	90	16/11/2022	21:00	0.4	90
13/11/2022	22:00	1.3	270	14/11/2022	22:00	1.3	45	15/11/2022	22:00	45	90	16/11/2022	22:00	0.4	112.5
13/11/2022	23:00	0.4	135	14/11/2022	23:00	0.4	112.5	15/11/2022	23:00	0.9	112.5	16/11/2022	23:00	0.9	112.5



Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
17/11/2022	0:00	0.9	112.5	18/11/2022	0:00	0.9	112.5	19/11/2022	0:00	0.4	90	20/11/2022	0:00	0.9	45
17/11/2022	1:00	0.9	90	18/11/2022	1:00	0.9	112.5	19/11/2022	1:00	0.4	90	20/11/2022	1:00	0.9	135
17/11/2022	2:00	1.3	112.5	18/11/2022	2:00	0.4	90	19/11/2022	2:00	0.9	90	20/11/2022	2:00	0.9	90
17/11/2022	3:00	0.9	112.5	18/11/2022	3:00	0.4	112.5	19/11/2022	3:00	0.4	112.5	20/11/2022	3:00	0.4	112.5
17/11/2022	4:00	1.3	112.5	18/11/2022	4:00	0.9	112.5	19/11/2022	4:00	0.4	90	20/11/2022	4:00	0.9	90
17/11/2022	5:00	1.3	90	18/11/2022	5:00	0.9	112.5	19/11/2022	5:00	0.9	112.5	20/11/2022	5:00	0.4	112.5
17/11/2022	6:00	0.9	112.5	18/11/2022	6:00	0.4	112.5	19/11/2022	6:00	0.9	90	20/11/2022	6:00	0.9	90
17/11/2022	7:00	0.9	135	18/11/2022	7:00	0.4	112.5	19/11/2022	7:00	1.3	90	20/11/2022	7:00	0.4	135
17/11/2022	8:00	0.9	112.5	18/11/2022	8:00	0.4	112.5	19/11/2022	8:00	1.3	90	20/11/2022	8:00	0.4	45
17/11/2022	9:00	0.9	112.5	18/11/2022	9:00	0.4	90	19/11/2022	9:00	0.9	112.5	20/11/2022	9:00	0.9	112.5
17/11/2022	10:00	1.3	112.5	18/11/2022	10:00	0.4	90	19/11/2022	10:00	0.4	180	20/11/2022	10:00	0.4	45
17/11/2022	11:00	0.9	112.5	18/11/2022	11:00	0.4	90	19/11/2022	11:00	0.9	90	20/11/2022	11:00	0.4	90
17/11/2022	12:00	1.3	90	18/11/2022	12:00	0.4	180	19/11/2022	12:00	0.4	90	20/11/2022	12:00	1.8	45
17/11/2022	13:00	0.9	112.5	18/11/2022	13:00	0.4	112.5	19/11/2022	13:00	1.3	90	20/11/2022	13:00	0.9	202.5
17/11/2022	14:00	1.3	112.5	18/11/2022	14:00	0.9	90	19/11/2022	14:00	0.9	112.5	20/11/2022	14:00	0.9	90
17/11/2022	15:00	0.9	112.5	18/11/2022	15:00	0.9	112.5	19/11/2022	15:00	0.4	90	20/11/2022	15:00	0.4	112.5
17/11/2022	16:00	1.3	112.5	18/11/2022	16:00	0.4	112.5	19/11/2022	16:00	0.9	112.5	20/11/2022	16:00	0.9	90
17/11/2022	17:00	1.3	90	18/11/2022	17:00	1.3	90	19/11/2022	17:00	0.9	45	20/11/2022	17:00	0.4	112.5
17/11/2022	18:00	0.9	112.5	18/11/2022	18:00	0.4	112.5	19/11/2022	18:00	1.3	45	20/11/2022	18:00	0.9	90
17/11/2022	19:00	0.9	135	18/11/2022	19:00	0.4	112.5	19/11/2022	19:00	1.3	112.5	20/11/2022	19:00	0.4	135
17/11/2022	20:00	0.9	112.5	18/11/2022	20:00	0.9	112.5	19/11/2022	20:00	0.9	112.5	20/11/2022	20:00	0.4	45
17/11/2022	21:00	0.9	112.5	18/11/2022	21:00	0.9	90	19/11/2022	21:00	0.4	180	20/11/2022	21:00	0.9	112.5
17/11/2022	22:00	1.3	112.5	18/11/2022	22:00	0.4	45	19/11/2022	22:00	0.9	90	20/11/2022	22:00	0.4	45
17/11/2022	23:00	0.9	112.5	18/11/2022	23:00	0.4	45	19/11/2022	23:00	0.4	112.5	20/11/2022	23:00	0.4	90

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
21/11/2022	0:00	0.9	22.5	22/11/2022	0:00	0.9	45	23/11/2022	0:00	0.9	90	24/11/2022	0:00	0.9	90
21/11/2022	1:00	0.9	22.5	22/11/2022	1:00	0.9	135	23/11/2022	1:00	0.9	90	24/11/2022	1:00	0.4	90
21/11/2022	2:00	0.9	135	22/11/2022	2:00	0.9	90	23/11/2022	2:00	0.9	90	24/11/2022	2:00	0.9	112.5
21/11/2022	3:00	0.9	45	22/11/2022	3:00	0.4	45	23/11/2022	3:00	0.9	90	24/11/2022	3:00	0.4	292.5
21/11/2022	4:00	0.4	45	22/11/2022	4:00	0.9	90	23/11/2022	4:00	1.3	112.5	24/11/2022	4:00	0.4	112.5
21/11/2022	5:00	0.4	22.5	22/11/2022	5:00	0.4	112.5	23/11/2022	5:00	0.9	90	24/11/2022	5:00	0.4	90
21/11/2022	6:00	0.9	22.5	22/11/2022	6:00	0.9	90	23/11/2022	6:00	0.9	135	24/11/2022	6:00	0.4	90
21/11/2022	7:00	0.9	22.5	22/11/2022	7:00	0.4	112.5	23/11/2022	7:00	0.9	112.5	24/11/2022	7:00	0.9	112.5
21/11/2022	8:00	0.4	112.5	22/11/2022	8:00	0.4	45	23/11/2022	8:00	0.9	112.5	24/11/2022	8:00	1.3	90
21/11/2022	9:00	0.4	22.5	22/11/2022	9:00	0.9	112.5	23/11/2022	9:00	0.9	225	24/11/2022	9:00	0.9	90
21/11/2022	10:00	0.4	315	22/11/2022	10:00	0.4	90	23/11/2022	10:00	0.4	180	24/11/2022	10:00	0.4	90
21/11/2022	11:00	0.9	22.5	22/11/2022	11:00	0.4	90	23/11/2022	11:00	0.9	180	24/11/2022	11:00	0.9	112.5
21/11/2022	12:00	0.9	22.5	22/11/2022	12:00	1.8	45	23/11/2022	12:00	0.4	112.5	24/11/2022	12:00	0.9	112.5
21/11/2022	13:00	1.3	112.5	22/11/2022	13:00	0.9	45	23/11/2022	13:00	0.9	90	24/11/2022	13:00	0.9	135
21/11/2022	14:00	0.4	90	22/11/2022	14:00	0.9	90	23/11/2022	14:00	0.9	90	24/11/2022	14:00	0.9	112.5
21/11/2022	15:00	112.5	45	22/11/2022	15:00	0.4	45	23/11/2022	15:00	0.9	90	24/11/2022	15:00	0.9	90
21/11/2022	16:00	0.9	90	22/11/2022	16:00	0.9	90	23/11/2022	16:00	1.3	112.5	24/11/2022	16:00	0.4	90
21/11/2022	17:00	1.3	112.5	22/11/2022	17:00	0.4	112.5	23/11/2022	17:00	0.9	90	24/11/2022	17:00	0.9	112.5
21/11/2022	18:00	0.9	90	22/11/2022	18:00	0.9	90	23/11/2022	18:00	0.9	135	24/11/2022	18:00	0.4	112.5
21/11/2022	19:00	45	22.5	22/11/2022	19:00	0.4	112.5	23/11/2022	19:00	0.9	112.5	24/11/2022	19:00	0.4	112.5
21/11/2022	20:00	0.4	112.5	22/11/2022	20:00	0.4	45	23/11/2022	20:00	0.9	112.5	24/11/2022	20:00	0.4	90
21/11/2022	21:00	0.9	90	22/11/2022	21:00	0.9	112.5	23/11/2022	21:00	0.9	225	24/11/2022	21:00	0.4	90
21/11/2022	22:00	0.4	112.5	22/11/2022	22:00	0.4	90	23/11/2022	22:00	0.4	180	24/11/2022	22:00	0.9	112.5
21/11/2022	23:00	1.3	112.5	22/11/2022	23:00	0.4	90	23/11/2022	23:00	0.9	180	24/11/2022	23:00	1.3	90

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
25/11/2022	0:00	0.9	112.5	26/11/2022	0:00	0.9	90	27/11/2022	0:00	1.3	157.5	28/11/2022	0:00	0.9	22.5
25/11/2022	1:00	0.9	135	26/11/2022	1:00	0.9	90	27/11/2022	1:00	1.3	67.5	28/11/2022	1:00	0.4	22.5
25/11/2022	2:00	0.9	135	26/11/2022	2:00	1.3	112.5	27/11/2022	2:00	0.9	45	28/11/2022	2:00	0.4	22.5
25/11/2022	3:00	0.9	112.5	26/11/2022	3:00	1.3	67.5	27/11/2022	3:00	0.9	67.5	28/11/2022	3:00	0.9	22.5
25/11/2022	4:00	1.3	112.5	26/11/2022	4:00	1.3	67.5	27/11/2022	4:00	0.4	90	28/11/2022	4:00	0.4	135
25/11/2022	5:00	1.3	112.5	26/11/2022	5:00	1.3	67.5	27/11/2022	5:00	0.9	112.5	28/11/2022	5:00	0.9	135
25/11/2022	6:00	0.9	112.5	26/11/2022	6:00	1.3	45	27/11/2022	6:00	0.4	112.5	28/11/2022	6:00	0.9	90
25/11/2022	7:00	1.3	90	26/11/2022	7:00	1.8	112.5	27/11/2022	7:00	0.4	112.5	28/11/2022	7:00	0.9	270
25/11/2022	8:00	1.3	112.5	26/11/2022	8:00	0.9	337.5	27/11/2022	8:00	0.4	337.5	28/11/2022	8:00	0.4	247.5
25/11/2022	9:00	1.8	135	26/11/2022	9:00	0.9	112.5	27/11/2022	9:00	1.3	22.5	28/11/2022	9:00	0.4	112.5
25/11/2022	10:00	1.3	112.5	26/11/2022	10:00	1.3	90	27/11/2022	10:00	1.3	315	28/11/2022	10:00	1.3	45
25/11/2022	11:00	1.8	90	26/11/2022	11:00	1.3	112.5	27/11/2022	11:00	1.3	22.5	28/11/2022	11:00	1.3	112.5
25/11/2022	12:00	1.8	135	26/11/2022	12:00	1.3	112.5	27/11/2022	12:00	0.9	225	28/11/2022	12:00	1.3	90
25/11/2022	13:00	0.4	112.5	26/11/2022	13:00	1.3	157.5	27/11/2022	13:00	0.9	90	28/11/2022	13:00	1.3	67.5
25/11/2022	14:00	0.9	90	26/11/2022	14:00	0.9	112.5	27/11/2022	14:00	0.9	90	28/11/2022	14:00	1.3	135
25/11/2022	15:00	0.4	135	26/11/2022	15:00	0.9	135	27/11/2022	15:00	0.9	90	28/11/2022	15:00	0.9	90
25/11/2022	16:00	0.9	112.5	26/11/2022	16:00	0.4	135	27/11/2022	16:00	0.9	90	28/11/2022	16:00	0.9	45
25/11/2022	17:00	0.9	112.5	26/11/2022	17:00	1.3	112.5	27/11/2022	17:00	1.3	112.5	28/11/2022	17:00	1.3	67.5
25/11/2022	18:00	0.4	135	26/11/2022	18:00	0.4	135	27/11/2022	18:00	0.9	90	28/11/2022	18:00	0.9	112.5
25/11/2022	19:00	0.4	135	26/11/2022	19:00	0.9	135	27/11/2022	19:00	0.9	135	28/11/2022	19:00	0.9	90
25/11/2022	20:00	0.4	135	26/11/2022	20:00	0.4	135	27/11/2022	20:00	0.9	112.5	28/11/2022	20:00	1.3	112.5
25/11/2022	21:00	0.9	225	26/11/2022	21:00	0.4	90	27/11/2022	21:00	0.9	112.5	28/11/2022	21:00	1.8	135
25/11/2022	22:00	0.9	112.5	26/11/2022	22:00	0.4	112.5	27/11/2022	22:00	0.9	225	28/11/2022	22:00	1.8	337.5
25/11/2022	23:00	0.4	112.5	26/11/2022	23:00	0.4	112.5	27/11/2022	23:00	0.4	180	28/11/2022	23:00	1.3	90

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
29/11/2022	0:00	0.9	112.5	30/11/2022	0:00	0.9	112.5								
29/11/2022	1:00	1.8	67.5	30/11/2022	1:00	0.9	90								
29/11/2022	2:00	1.3	90	30/11/2022	2:00	0.9	67.5								
29/11/2022	3:00	1.3	45	30/11/2022	3:00	1.3	135								
29/11/2022	4:00	0.4	135	30/11/2022	4:00	0.9	135								
29/11/2022	5:00	0.4	67.5	30/11/2022	5:00	0.9	135								
29/11/2022	6:00	0.9	90	30/11/2022	6:00	0.4	135								
29/11/2022	7:00	1.3	90	30/11/2022	7:00	0.9	135								
29/11/2022	8:00	1.3	90	30/11/2022	8:00	0.4	112.5								
29/11/2022	9:00	1.3	112.5	30/11/2022	9:00	0.4	90								
29/11/2022	10:00	1.3	135	30/11/2022	10:00	0.4	112.5								
29/11/2022	11:00	0.9	90	30/11/2022	11:00	0.4	112.5								
29/11/2022	12:00	0.4	45	30/11/2022	12:00	0.4	112.5								
29/11/2022	13:00	0.9	67.5	30/11/2022	13:00	0.4	112.5								
29/11/2022	14:00	0.9	22.5	30/11/2022	14:00	0.9	90								
29/11/2022	15:00	0.9	67.5	30/11/2022	15:00	0.4	90								
29/11/2022	16:00	0.9	292.5	30/11/2022	16:00	0.4	90								
29/11/2022	17:00	0.9	180	30/11/2022	17:00	0.9	90								
29/11/2022	18:00	0.9	337.5	30/11/2022	18:00	0.9	90								
29/11/2022	19:00	1.3	112.5	30/11/2022	19:00	0.4	90								
29/11/2022	20:00	1.3	292.5	30/11/2022	20:00	0.9	112.5								
29/11/2022	21:00	1.3	292.5	30/11/2022	21:00	1.3	90								
29/11/2022	22:00	0.9	112.5	30/11/2022	22:00	0.9	112.5								
29/11/2022	23:00	0.9	157.5	30/11/2022	23:00	1.3	112.5								

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
01/12/2022	0:00	0.9	112.5	02/12/2022	0:00	0.9	90	03/12/2022	0:00	1.3	112.5	04/12/2022	0:00	0.4	67.5
01/12/2022	1:00	1.3	90	02/12/2022	1:00	0.4	112.5	03/12/2022	1:00	0.9	112.5	04/12/2022	1:00	0.4	90
01/12/2022	2:00	0.9	112.5	02/12/2022	2:00	0.4	112.5	03/12/2022	2:00	1.3	112.5	04/12/2022	2:00	0.9	112.5
01/12/2022	3:00	0.9	112.5	02/12/2022	3:00	0.9	45	03/12/2022	3:00	1.3	315	04/12/2022	3:00	0.4	135
01/12/2022	4:00	1.8	90	02/12/2022	4:00	0.9	90	03/12/2022	4:00	0.9	247.5	04/12/2022	4:00	0.4	90
01/12/2022	5:00	1.3	90	02/12/2022	5:00	1.3	157.5	03/12/2022	5:00	0.9	22.5	04/12/2022	5:00	0.9	135
01/12/2022	6:00	0.4	112.5	02/12/2022	6:00	0.9	157.5	03/12/2022	6:00	0.9	45	04/12/2022	6:00	0.4	135
01/12/2022	7:00	0.4	112.5	02/12/2022	7:00	0.4	112.5	03/12/2022	7:00	0.4	67.5	04/12/2022	7:00	0.4	135
01/12/2022	8:00	90	112.5	02/12/2022	8:00	0.9	112.5	03/12/2022	8:00	0.9	112.5	04/12/2022	8:00	0.9	112.5
01/12/2022	9:00	1.3	90	02/12/2022	9:00	1.3	45	03/12/2022	9:00	0.4	112.5	04/12/2022	9:00	0.4	112.5
01/12/2022	10:00	0.9	45	02/12/2022	10:00	1.3	45	03/12/2022	10:00	0.9	45	04/12/2022	10:00	0.4	112.5
01/12/2022	11:00	1.3	45	02/12/2022	11:00	0.9	112.5	03/12/2022	11:00	1.3	45	04/12/2022	11:00	0.4	112.5
01/12/2022	12:00	1.8	112.5	02/12/2022	12:00	0.4	90	03/12/2022	12:00	0.4	135	04/12/2022	12:00	0.4	180
01/12/2022	13:00	1.3	90	02/12/2022	13:00	0.4	90	03/12/2022	13:00	0.4	135	04/12/2022	13:00	0.4	112.5
01/12/2022	14:00	0.9	90	02/12/2022	14:00	1.3	45	03/12/2022	14:00	0.9	112.5	04/12/2022	14:00	0.9	112.5
01/12/2022	15:00	0.4	112.5	02/12/2022	15:00	0.4	112.5	03/12/2022	15:00	0.9	135	04/12/2022	15:00	1.3	90
01/12/2022	16:00	0.4	112.5	02/12/2022	16:00	0.9	45	03/12/2022	16:00	0.4	292.5	04/12/2022	16:00	0.4	90
01/12/2022	17:00	0.9	90	02/12/2022	17:00	1.3	90	03/12/2022	17:00	0.9	112.5	04/12/2022	17:00	0.9	22.5
01/12/2022	18:00	1.3	112.5	02/12/2022	18:00	0.9	90	03/12/2022	18:00	1.3	112.5	04/12/2022	18:00	0.9	112.5
01/12/2022	19:00	0.4	45	02/12/2022	19:00	0.4	112.5	03/12/2022	19:00	0.9	157.5	04/12/2022	19:00	0.4	112.5
01/12/2022	20:00	0.9	45	02/12/2022	20:00	1.3	90	03/12/2022	20:00	0.4	157.5	04/12/2022	20:00	0.4	112.5
01/12/2022	21:00	1.3	112.5	02/12/2022	21:00	0.9	112.5	03/12/2022	21:00	0.9	112.5	04/12/2022	21:00	1.3	135
01/12/2022	22:00	0.4	112.5	02/12/2022	22:00	0.9	112.5	03/12/2022	22:00	0.9	112.5	04/12/2022	22:00	0.4	135
01/12/2022	23:00	0.4	90	02/12/2022	23:00	0.4	90	03/12/2022	23:00	0.4	270	04/12/2022	23:00	0.9	112.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
05/12/2022	0:00	0.9	135	06/12/2022	0:00	1.3	112.5	07/12/2022	0:00	0.9	135	08/12/2022	0:00	0.9	135
05/12/2022	1:00	1.3	315	06/12/2022	1:00	1.3	112.5	07/12/2022	1:00	0.9	157.5	08/12/2022	1:00	0.9	135
05/12/2022	2:00	1.8	202.5	06/12/2022	2:00	0.9	90	07/12/2022	2:00	0.9	135	08/12/2022	2:00	0.9	135
05/12/2022	3:00	0.9	135	06/12/2022	3:00	0.9	112.5	07/12/2022	3:00	0.9	112.5	08/12/2022	3:00	0.9	157.5
05/12/2022	4:00	1.8	157.5	06/12/2022	4:00	0.9	112.5	07/12/2022	4:00	0.9	135	08/12/2022	4:00	0.9	135
05/12/2022	5:00	1.3	135	06/12/2022	5:00	0.9	180	07/12/2022	5:00	0.9	135	08/12/2022	5:00	0.9	112.5
05/12/2022	6:00	1.3	202.5	06/12/2022	6:00	1.3	45	07/12/2022	6:00	0.9	112.5	08/12/2022	6:00	0.9	112.5
05/12/2022	7:00	2.2	135	06/12/2022	7:00	0.9	112.5	07/12/2022	7:00	0.9	135	08/12/2022	7:00	0.9	112.5
05/12/2022	8:00	1.3	112.5	06/12/2022	8:00	1.3	112.5	07/12/2022	8:00	0.9	135	08/12/2022	8:00	0.9	157.5
05/12/2022	9:00	0.9	112.5	06/12/2022	9:00	0.9	292.5	07/12/2022	9:00	1.3	112.5	08/12/2022	9:00	1.3	135
05/12/2022	10:00	0.9	112.5	06/12/2022	10:00	0.9	112.5	07/12/2022	10:00	1.8	112.5	08/12/2022	10:00	0.9	112.5
05/12/2022	11:00	1.3	112.5	06/12/2022	11:00	1.3	45	07/12/2022	11:00	1.3	112.5	08/12/2022	11:00	0.9	225
05/12/2022	12:00	1.3	202.5	06/12/2022	12:00	1.3	135	07/12/2022	12:00	1.3	112.5	08/12/2022	12:00	0.4	112.5
05/12/2022	13:00	1.3	45	06/12/2022	13:00	1.3	112.5	07/12/2022	13:00	0.4	22.5	08/12/2022	13:00	0.4	112.5
05/12/2022	14:00	1.3	90	06/12/2022	14:00	1.3	45	07/12/2022	14:00	0.4	135	08/12/2022	14:00	1.3	90
05/12/2022	15:00	0.9	135	06/12/2022	15:00	0.9	90	07/12/2022	15:00	0.9	112.5	08/12/2022	15:00	1.8	90
05/12/2022	16:00	0.9	270	06/12/2022	16:00	1.3	67.5	07/12/2022	16:00	0.9	135	08/12/2022	16:00	1.8	90
05/12/2022	17:00	0.9	247.5	06/12/2022	17:00	1.3	67.5	07/12/2022	17:00	0.4	135	08/12/2022	17:00	1.8	90
05/12/2022	18:00	0.9	202.5	06/12/2022	18:00	1.8	67.5	07/12/2022	18:00	0.9	225	08/12/2022	18:00	0.4	112.5
05/12/2022	19:00	1.3	270	06/12/2022	19:00	1.8	67.5	07/12/2022	19:00	1.3	135	08/12/2022	19:00	0.4	157.5
05/12/2022	20:00	1.3	247.5	06/12/2022	20:00	2.2	135	07/12/2022	20:00	0.9	135	08/12/2022	20:00	0.4	45
05/12/2022	21:00	1.3	247.5	06/12/2022	21:00	1.3	112.5	07/12/2022	21:00	1.3	112.5	08/12/2022	21:00	0.9	112.5
05/12/2022	22:00	1.3	45	06/12/2022	22:00	1.3	45	07/12/2022	22:00	1.3	135	08/12/2022	22:00	0.9	45
05/12/2022	23:00	1.3	90	06/12/2022	23:00	0.9	90	07/12/2022	23:00	1.3	135	08/12/2022	23:00	0.4	22.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
09/12/2022	0:00	1.3	112.5	10/12/2022	0:00	1.3	45	11/12/2022	0:00	1.3	45	12/12/2022	0:00	0.9	112.5
09/12/2022	1:00	0.9	112.5	10/12/2022	1:00	1.8	45	11/12/2022	1:00	1.8	45	12/12/2022	1:00	0.9	112.5
09/12/2022	2:00	1.3	112.5	10/12/2022	2:00	1.3	225	11/12/2022	2:00	1.3	225	12/12/2022	2:00	0.4	112.5
09/12/2022	3:00	1.8	90	10/12/2022	3:00	0.9	202.5	11/12/2022	3:00	0.9	202.5	12/12/2022	3:00	0.4	112.5
09/12/2022	4:00	1.3	112.5	10/12/2022	4:00	0.9	157.5	11/12/2022	4:00	0.9	157.5	12/12/2022	4:00	0.4	112.5
09/12/2022	5:00	0.9	90	10/12/2022	5:00	1.3	90	11/12/2022	5:00	1.3	90	12/12/2022	5:00	0.4	112.5
09/12/2022	6:00	1.3	112.5	10/12/2022	6:00	2.2	90	11/12/2022	6:00	2.2	90	12/12/2022	6:00	0.9	112.5
09/12/2022	7:00	1.3	90	10/12/2022	7:00	1.3	22.5	11/12/2022	7:00	1.3	22.5	12/12/2022	7:00	0.9	45
09/12/2022	8:00	1.8	112.5	10/12/2022	8:00	1.3	112.5	11/12/2022	8:00	1.3	112.5	12/12/2022	8:00	1.3	45
09/12/2022	9:00	1.3	135	10/12/2022	9:00	1.3	67.5	11/12/2022	9:00	1.3	67.5	12/12/2022	9:00	0.9	112.5
09/12/2022	10:00	1.8	45	10/12/2022	10:00	1.8	67.5	11/12/2022	10:00	1.8	67.5	12/12/2022	10:00	0.9	112.5
09/12/2022	11:00	1.3	135	10/12/2022	11:00	1.3	45	11/12/2022	11:00	1.3	45	12/12/2022	11:00	0.4	112.5
09/12/2022	12:00	1.8	67.5	10/12/2022	12:00	1.3	270	11/12/2022	12:00	1.3	270	12/12/2022	12:00	0.4	112.5
09/12/2022	13:00	1.8	112.5	10/12/2022	13:00	1.3	112.5	11/12/2022	13:00	1.3	112.5	12/12/2022	13:00	1.3	90
09/12/2022	14:00	1.3	45	10/12/2022	14:00	2.2	90	11/12/2022	14:00	2.2	90	12/12/2022	14:00	1.3	90
09/12/2022	15:00	1.8	112.5	10/12/2022	15:00	0.9	67.5	11/12/2022	15:00	0.9	67.5	12/12/2022	15:00	0.9	112.5
09/12/2022	16:00	1.8	90	10/12/2022	16:00	0.9	90	11/12/2022	16:00	0.9	90	12/12/2022	16:00	0.4	180
09/12/2022	17:00	1.8	135	10/12/2022	17:00	0.4	270	11/12/2022	17:00	0.4	270	12/12/2022	17:00	0.9	90
09/12/2022	18:00	1.3	135	10/12/2022	18:00	0.4	225	11/12/2022	18:00	0.4	225	12/12/2022	18:00	0.4	90
09/12/2022	19:00	1.3	112.5	10/12/2022	19:00	0.9	270	11/12/2022	19:00	0.9	270	12/12/2022	19:00	1.3	90
09/12/2022	20:00	1.8	135	10/12/2022	20:00	0.4	247.5	11/12/2022	20:00	0.4	247.5	12/12/2022	20:00	0.9	112.5
09/12/2022	21:00	1.3	180	10/12/2022	21:00	0.4	247.5	11/12/2022	21:00	0.4	247.5	12/12/2022	21:00	0.4	90
09/12/2022	22:00	1.3	135	10/12/2022	22:00	0.4	270	11/12/2022	22:00	0.4	270	12/12/2022	22:00	0.9	112.5
09/12/2022	23:00	1.8	112.5	10/12/2022	23:00	0.9	67.5	11/12/2022	23:00	0.9	67.5	12/12/2022	23:00	0.9	45

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
13/12/2022	0:00	0.4	22.5	14/12/2022	0:00	0.9	112.5	15/12/2022	0:00	0.4	112.5	16/12/2022	0:00	0.9	90
13/12/2022	1:00	0.9	22.5	14/12/2022	1:00	0.9	112.5	15/12/2022	1:00	0.4	90	16/12/2022	1:00	1.3	135
13/12/2022	2:00	0.9	22.5	14/12/2022	2:00	0.9	135	15/12/2022	2:00	0.4	112.5	16/12/2022	2:00	0.4	112.5
13/12/2022	3:00	0.4	112.5	14/12/2022	3:00	0.9	112.5	15/12/2022	3:00	0.4	112.5	16/12/2022	3:00	0.4	90
13/12/2022	4:00	0.4	22.5	14/12/2022	4:00	0.9	90	15/12/2022	4:00	0.4	112.5	16/12/2022	4:00	0.4	112.5
13/12/2022	5:00	0.4	315	14/12/2022	5:00	0.4	90	15/12/2022	5:00	0.4	112.5	16/12/2022	5:00	0.9	90
13/12/2022	6:00	0.9	22.5	14/12/2022	6:00	0.9	112.5	15/12/2022	6:00	0.9	90	16/12/2022	6:00	0.9	112.5
13/12/2022	7:00	0.9	22.5	14/12/2022	7:00	0.4	112.5	15/12/2022	7:00	0.4	90	16/12/2022	7:00	0.4	90
13/12/2022	8:00	1.3	112.5	14/12/2022	8:00	0.4	112.5	15/12/2022	8:00	0.4	90	16/12/2022	8:00	0.9	112.5
13/12/2022	9:00	0.4	90	14/12/2022	9:00	0.4	90	15/12/2022	9:00	0.9	90	16/12/2022	9:00	0.4	112.5
13/12/2022	10:00	112.5	45	14/12/2022	10:00	0.4	90	15/12/2022	10:00	0.9	90	16/12/2022	10:00	0.4	90
13/12/2022	11:00	0.9	90	14/12/2022	11:00	0.9	112.5	15/12/2022	11:00	0.4	90	16/12/2022	11:00	0.4	112.5
13/12/2022	12:00	0.9	112.5	14/12/2022	12:00	1.3	90	15/12/2022	12:00	0.9	112.5	16/12/2022	12:00	0.4	90
13/12/2022	13:00	0.4	90	14/12/2022	13:00	0.9	270	15/12/2022	13:00	0.4	112.5	16/12/2022	13:00	0.4	45
13/12/2022	14:00	0.4	90	14/12/2022	14:00	0.4	247.5	15/12/2022	14:00	1.8	67.5	16/12/2022	14:00	0.9	112.5
13/12/2022	15:00	1.8	45	14/12/2022	15:00	0.4	112.5	15/12/2022	15:00	1.3	90	16/12/2022	15:00	0.9	135
13/12/2022	16:00	0.9	45	14/12/2022	16:00	1.3	45	15/12/2022	16:00	1.3	45	16/12/2022	16:00	0.4	45
13/12/2022	17:00	0.9	90	14/12/2022	17:00	1.3	112.5	15/12/2022	17:00	0.4	135	16/12/2022	17:00	1.3	337.5
13/12/2022	18:00	0.4	45	14/12/2022	18:00	1.3	90	15/12/2022	18:00	0.4	67.5	16/12/2022	18:00	1.3	135
13/12/2022	19:00	0.9	90	14/12/2022	19:00	1.3	67.5	15/12/2022	19:00	0.9	90	16/12/2022	19:00	1.3	22.5
13/12/2022	20:00	0.4	112.5	14/12/2022	20:00	1.3	135	15/12/2022	20:00	1.3	90	16/12/2022	20:00	1.3	22.5
13/12/2022	21:00	0.9	112.5	14/12/2022	21:00	0.9	90	15/12/2022	21:00	1.3	90	16/12/2022	21:00	0.9	112.5
13/12/2022	22:00	0.4	90	14/12/2022	22:00	0.9	45	15/12/2022	22:00	1.3	112.5	16/12/2022	22:00	0.9	112.5
13/12/2022	23:00	0.4	90	14/12/2022	23:00	1.3	67.5	15/12/2022	23:00	1.3	135	16/12/2022	23:00	0.9	90



Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
17/12/2022	0:00	0.4	135	18/12/2022	0:00	0.9	135	19/12/2022	0:00	1.3	112.5	20/12/2022	0:00	0.9	67.5
17/12/2022	1:00	0.9	135	18/12/2022	1:00	0.9	112.5	19/12/2022	1:00	0.9	135	20/12/2022	1:00	1.3	45
17/12/2022	2:00	0.9	135	18/12/2022	2:00	0.9	90	19/12/2022	2:00	0.9	112.5	20/12/2022	2:00	1.3	45
17/12/2022	3:00	0.9	135	18/12/2022	3:00	0.9	90	19/12/2022	3:00	1.3	112.5	20/12/2022	3:00	0.9	67.5
17/12/2022	4:00	0.9	135	18/12/2022	4:00	0.9	90	19/12/2022	4:00	0.9	135	20/12/2022	4:00	0.4	45
17/12/2022	5:00	0.9	157.5	18/12/2022	5:00	0.4	112.5	19/12/2022	5:00	0.9	90	20/12/2022	5:00	1.3	67.5
17/12/2022	6:00	0.9	135	18/12/2022	6:00	0.4	90	19/12/2022	6:00	1.3	112.5	20/12/2022	6:00	1.3	67.5
17/12/2022	7:00	0.9	112.5	18/12/2022	7:00	0.4	135	19/12/2022	7:00	1.3	112.5	20/12/2022	7:00	0.4	22.5
17/12/2022	8:00	0.9	112.5	18/12/2022	8:00	0.9	90	19/12/2022	8:00	1.3	135	20/12/2022	8:00	0.9	135
17/12/2022	9:00	0.9	112.5	18/12/2022	9:00	0.9	157.5	19/12/2022	9:00	1.3	135	20/12/2022	9:00	0.9	90
17/12/2022	10:00	0.4	135	18/12/2022	10:00	0.4	112.5	19/12/2022	10:00	1.8	112.5	20/12/2022	10:00	1.3	112.5
17/12/2022	11:00	0.4	135	18/12/2022	11:00	0.9	112.5	19/12/2022	11:00	0.9	90	20/12/2022	11:00	1.3	135
17/12/2022	12:00	0.9	45	18/12/2022	12:00	0.9	112.5	19/12/2022	12:00	1.3	135	20/12/2022	12:00	0.4	112.5
17/12/2022	13:00	0.4	90	18/12/2022	13:00	0.9	112.5	19/12/2022	13:00	0.4	112.5	20/12/2022	13:00	0.9	67.5
17/12/2022	14:00	0.9	112.5	18/12/2022	14:00	0.9	112.5	19/12/2022	14:00	0.4	90	20/12/2022	14:00	1.3	45
17/12/2022	15:00	0.9	135	18/12/2022	15:00	1.3	112.5	19/12/2022	15:00	0.9	90	20/12/2022	15:00	1.3	45
17/12/2022	16:00	0.9	135	18/12/2022	16:00	0.9	112.5	19/12/2022	16:00	0.9	90	20/12/2022	16:00	0.9	67.5
17/12/2022	17:00	0.9	112.5	18/12/2022	17:00	1.3	90	19/12/2022	17:00	1.3	112.5	20/12/2022	17:00	0.4	45
17/12/2022	18:00	0.9	135	18/12/2022	18:00	0.9	90	19/12/2022	18:00	1.3	135	20/12/2022	18:00	1.3	67.5
17/12/2022	19:00	0.9	135	18/12/2022	19:00	1.3	112.5	19/12/2022	19:00	0.9	112.5	20/12/2022	19:00	1.3	67.5
17/12/2022	20:00	0.9	112.5	18/12/2022	20:00	0.9	112.5	19/12/2022	20:00	0.4	112.5	20/12/2022	20:00	0.4	22.5
17/12/2022	21:00	0.4	135	18/12/2022	21:00	0.4	112.5	19/12/2022	21:00	0.4	112.5	20/12/2022	21:00	0.9	135
17/12/2022	22:00	0.9	135	18/12/2022	22:00	0.4	112.5	19/12/2022	22:00	1.3	112.5	20/12/2022	22:00	0.9	90
17/12/2022	23:00	0.4	22.5	18/12/2022	23:00	0.9	112.5	19/12/2022	23:00	1.8	112.5	20/12/2022	23:00	1.3	112.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
21/12/2022	0:00	0.9	45	22/12/2022	0:00	0.9	135	23/12/2022	0:00	0.4	112.5	24/12/2022	0:00	0.4	45
21/12/2022	1:00	0.9	90	22/12/2022	1:00	0.4	135	23/12/2022	1:00	0.4	180	24/12/2022	1:00	0.4	67.5
21/12/2022	2:00	1.3	90	22/12/2022	2:00	0.4	90	23/12/2022	2:00	0.4	112.5	24/12/2022	2:00	0.9	112.5
21/12/2022	3:00	1.3	90	22/12/2022	3:00	1.3	135	23/12/2022	3:00	0.4	270	24/12/2022	3:00	0.9	135
21/12/2022	4:00	1.3	45	22/12/2022	4:00	1.3	135	23/12/2022	4:00	0.9	112.5	24/12/2022	4:00	0.4	112.5
21/12/2022	5:00	0.9	67.5	22/12/2022	5:00	0.4	135	23/12/2022	5:00	0.4	112.5	24/12/2022	5:00	0.4	292.5
21/12/2022	6:00	1.3	45	22/12/2022	6:00	0.9	45	23/12/2022	6:00	0.9	90	24/12/2022	6:00	0.9	112.5
21/12/2022	7:00	1.3	22.5	22/12/2022	7:00	1.3	45	23/12/2022	7:00	0.9	90	24/12/2022	7:00	0.4	225
21/12/2022	8:00	1.3	22.5	22/12/2022	8:00	1.3	292.5	23/12/2022	8:00	0.4	90	24/12/2022	8:00	0.4	315
21/12/2022	9:00	0.9	22.5	22/12/2022	9:00	0.4	292.5	23/12/2022	9:00	0.9	67.5	24/12/2022	9:00	0.4	112.5
21/12/2022	10:00	0.9	247.5	22/12/2022	10:00	1.3	112.5	23/12/2022	10:00	0.4	112.5	24/12/2022	10:00	0.4	112.5
21/12/2022	11:00	0.9	45	22/12/2022	11:00	0.9	90	23/12/2022	11:00	0.4	90	24/12/2022	11:00	0.9	45
21/12/2022	12:00	1.3	45	22/12/2022	12:00	1.3	112.5	23/12/2022	12:00	0.9	90	24/12/2022	12:00	0.4	67.5
21/12/2022	13:00	0.9	45	22/12/2022	13:00	1.3	112.5	23/12/2022	13:00	0.9	90	24/12/2022	13:00	0.4	45
21/12/2022	14:00	0.9	90	22/12/2022	14:00	1.3	112.5	23/12/2022	14:00	0.4	90	24/12/2022	14:00	0.4	67.5
21/12/2022	15:00	1.3	90	22/12/2022	15:00	0.4	112.5	23/12/2022	15:00	0.4	157.5	24/12/2022	15:00	0.9	112.5
21/12/2022	16:00	0.4	112.5	22/12/2022	16:00	0.4	112.5	23/12/2022	16:00	0.9	112.5	24/12/2022	16:00	0.9	135
21/12/2022	17:00	0.4	112.5	22/12/2022	17:00	0.4	112.5	23/12/2022	17:00	0.4	112.5	24/12/2022	17:00	0.4	112.5
21/12/2022	18:00	0.9	90	22/12/2022	18:00	0.4	112.5	23/12/2022	18:00	0.4	90	24/12/2022	18:00	0.4	292.5
21/12/2022	19:00	1.3	90	22/12/2022	19:00	0.4	112.5	23/12/2022	19:00	0.4	112.5	24/12/2022	19:00	0.9	112.5
21/12/2022	20:00	0.4	90	22/12/2022	20:00	0.9	112.5	23/12/2022	20:00	0.9	135	24/12/2022	20:00	0.4	225
21/12/2022	21:00	0.4	112.5	22/12/2022	21:00	0.9	112.5	23/12/2022	21:00	1.3	157.5	24/12/2022	21:00	0.4	315
21/12/2022	22:00	0.9	112.5	22/12/2022	22:00	1.3	112.5	23/12/2022	22:00	1.3	112.5	24/12/2022	22:00	0.4	112.5
21/12/2022	23:00	1.3	112.5	22/12/2022	23:00	1.8	112.5	23/12/2022	23:00	1.3	112.5	24/12/2022	23:00	0.4	112.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
25/12/2022	0:00	0.4	22.5	26/12/2022	0:00	0.4	22.5	27/12/2022	0:00	1.3	112.5	28/12/2022	0:00	0	90
25/12/2022	1:00	0.4	112.5	26/12/2022	1:00	0.4	112.5	27/12/2022	1:00	0.9	112.5	28/12/2022	1:00	0.4	22.5
25/12/2022	2:00	0.4	112.5	26/12/2022	2:00	0.4	112.5	27/12/2022	2:00	0.9	112.5	28/12/2022	2:00	0.4	112.5
25/12/2022	3:00	0.4	135	26/12/2022	3:00	0.4	135	27/12/2022	3:00	0.9	112.5	28/12/2022	3:00	0.4	112.5
25/12/2022	4:00	0	112.5	26/12/2022	4:00	0	112.5	27/12/2022	4:00	0.9	135	28/12/2022	4:00	0.4	135
25/12/2022	5:00	0.4	112.5	26/12/2022	5:00	0.4	112.5	27/12/2022	5:00	0.4	112.5	28/12/2022	5:00	0	112.5
25/12/2022	6:00	0.4	112.5	26/12/2022	6:00	0.4	112.5	27/12/2022	6:00	0.4	112.5	28/12/2022	6:00	0.4	112.5
25/12/2022	7:00	0.4	112.5	26/12/2022	7:00	0.4	112.5	27/12/2022	7:00	0	112.5	28/12/2022	7:00	0.4	112.5
25/12/2022	8:00	0.9	112.5	26/12/2022	8:00	0.9	112.5	27/12/2022	8:00	0.4	112.5	28/12/2022	8:00	0.4	112.5
25/12/2022	9:00	0.9	112.5	26/12/2022	9:00	0.9	112.5	27/12/2022	9:00	0.9	135	28/12/2022	9:00	0.9	112.5
25/12/2022	10:00	1.3	112.5	26/12/2022	10:00	1.3	112.5	27/12/2022	10:00	0.4	112.5	28/12/2022	10:00	0.9	112.5
25/12/2022	11:00	0.9	112.5	26/12/2022	11:00	0.9	112.5	27/12/2022	11:00	0	112.5	28/12/2022	11:00	1.3	112.5
25/12/2022	12:00	0.9	247.5	26/12/2022	12:00	0.9	247.5	27/12/2022	12:00	0.4	135	28/12/2022	12:00	0	90
25/12/2022	13:00	0.9	112.5	26/12/2022	13:00	0.9	112.5	27/12/2022	13:00	1.3	112.5	28/12/2022	13:00	0.4	22.5
25/12/2022	14:00	0.4	135	26/12/2022	14:00	0.4	135	27/12/2022	14:00	0.9	112.5	28/12/2022	14:00	0.4	112.5
25/12/2022	15:00	0.4	135	26/12/2022	15:00	0.4	135	27/12/2022	15:00	0.9	112.5	28/12/2022	15:00	0.4	135
25/12/2022	16:00	0.4	112.5	26/12/2022	16:00	0.4	112.5	27/12/2022	16:00	0.9	135	28/12/2022	16:00	0.9	270
25/12/2022	17:00	0.4	112.5	26/12/2022	17:00	0.4	112.5	27/12/2022	17:00	0.4	112.5	28/12/2022	17:00	0.9	225
25/12/2022	18:00	1.3	112.5	26/12/2022	18:00	1.3	112.5	27/12/2022	18:00	0.9	112.5	28/12/2022	18:00	0.4	225
25/12/2022	19:00	0.4	112.5	26/12/2022	19:00	0.4	112.5	27/12/2022	19:00	0.4	90	28/12/2022	19:00	0.4	225
25/12/2022	20:00	0.4	135	26/12/2022	20:00	0.4	135	27/12/2022	20:00	0.9	45	28/12/2022	20:00	0.9	135
25/12/2022	21:00	0.9	112.5	26/12/2022	21:00	0.9	112.5	27/12/2022	21:00	0.9	90	28/12/2022	21:00	0	270
25/12/2022	22:00	0.4	112.5	26/12/2022	22:00	0.4	112.5	27/12/2022	22:00	0.9	112.5	28/12/2022	22:00	0.4	225
25/12/2022	23:00	0	180	26/12/2022	23:00	0	180	27/12/2022	23:00	0.4	135	28/12/2022	23:00	0.4	247.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
29/12/2022	0:00	0.4	67.5	30/12/2022	0:00	0.4	135	31/12/2022	0:00	0.4					
29/12/2022	1:00	0.9	112.5	30/12/2022	1:00	0.4	157.5	31/12/2022	1:00	0.9					
29/12/2022	2:00	1.3	90	30/12/2022	2:00	0.4	90	31/12/2022	2:00	0.9					
29/12/2022	3:00	0.9	112.5	30/12/2022	3:00	0.4	315	31/12/2022	3:00	1.3					
29/12/2022	4:00	0.9	90	30/12/2022	4:00	0.9	22.5	31/12/2022	4:00	0.9					
29/12/2022	5:00	0.9	90	30/12/2022	5:00	1.3	0	31/12/2022	5:00	1.3					
29/12/2022	6:00	0.9	67.5	30/12/2022	6:00	1.3	0	31/12/2022	6:00	1.3					
29/12/2022	7:00	0.4	112.5	30/12/2022	7:00	0.9	337.5	31/12/2022	7:00	0.9					
29/12/2022	8:00	0.4	135	30/12/2022	8:00	1.3	337.5	31/12/2022	8:00	0.4					
29/12/2022	9:00	0.4	112.5	30/12/2022	9:00	0.9	22.5	31/12/2022	9:00	0.9					
29/12/2022	10:00	0.9	112.5	30/12/2022	10:00	0.4	90	31/12/2022	12:00	1.3					
29/12/2022	11:00	0.9	112.5	30/12/2022	11:00	0.4	112.5	31/12/2022	12:00	1.3					
29/12/2022	12:00	0.9	90	30/12/2022	12:00	0.4	135	31/12/2022	12:00	0.4					
29/12/2022	13:00	0.9	112.5	30/12/2022	13:00	0.9	67.5	31/12/2022	13:00	0.9					
29/12/2022	14:00	0.4	112.5	30/12/2022	14:00	0.9	90	31/12/2022	14:00	0.4					
29/12/2022	15:00	0.4	45	30/12/2022	15:00	0.9	45	31/12/2022	15:00	0.4					
29/12/2022	16:00	0.4	67.5	30/12/2022	16:00	0.9	90	31/12/2022	16:00	0.4					
29/12/2022	17:00	0.4	67.5	30/12/2022	17:00	0.9	67.5	31/12/2022	17:00	0.4					
29/12/2022	18:00	0.9	112.5	30/12/2022	18:00	0.9	90	31/12/2022	18:00	1.3					
29/12/2022	19:00	1.3	90	30/12/2022	19:00	0.9	90	31/12/2022	19:00	1.3					
29/12/2022	20:00	0.9	112.5	30/12/2022	20:00	0.9	90	31/12/2022	20:00	0.9					
29/12/2022	21:00	0.9	90	30/12/2022	21:00	0.9	90	31/12/2022	21:00	0.4					
29/12/2022	22:00	0.9	90	30/12/2022	22:00	0.9	45	31/12/2022	22:00	0.4					
29/12/2022	23:00	0.9	67.5	30/12/2022	23:00	0.9	67.5	31/12/2022	23:00	0.4					

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
01/01/2023	0:00	1.3	90	02/01/2023	0:00	0.9	45	03/01/2023	0:00	1.3	22.5	04/01/2023	0:00	1.3	22.5
01/01/2023	1:00	1.3	112.5	02/01/2023	1:00	0.9	22.5	03/01/2023	1:00	1.3	135	04/01/2023	1:00	1.3	112.5
01/01/2023	2:00	1.3	135	02/01/2023	2:00	0.9	247.5	03/01/2023	2:00	1.3	90	04/01/2023	2:00	1.3	135
01/01/2023	3:00	1.3	90	02/01/2023	3:00	0.9	22.5	03/01/2023	3:00	1.8	112.5	04/01/2023	3:00	0.4	135
01/01/2023	4:00	0.9	67.5	02/01/2023	4:00	1.3	0	03/01/2023	4:00	1.3	90	04/01/2023	4:00	0.4	112.5
01/01/2023	5:00	1.3	112.5	02/01/2023	5:00	0.4	45	03/01/2023	5:00	1.3	112.5	04/01/2023	5:00	0.9	90
01/01/2023	6:00	0.9	90	02/01/2023	6:00	1.3	247.5	03/01/2023	6:00	0.4	112.5	04/01/2023	6:00	1.8	45
01/01/2023	7:00	0.9	90	02/01/2023	7:00	1.3	0	03/01/2023	7:00	0.4	112.5	04/01/2023	7:00	1.8	112.5
01/01/2023	8:00	1.3	135	02/01/2023	8:00	0.9	112.5	03/01/2023	8:00	0.4	247.5	04/01/2023	8:00	1.3	90
01/01/2023	9:00	0.9	112.5	02/01/2023	9:00	0.9	337.5	03/01/2023	9:00	0.9	247.5	04/01/2023	9:00	0.9	90
01/01/2023	10:00	0.9	112.5	02/01/2023	10:00	1.3	22.5	03/01/2023	10:00	0.9	180	04/01/2023	10:00	1.8	112.5
01/01/2023	11:00	0.9	90	02/01/2023	11:00	1.3	22.5	03/01/2023	11:00	0.9	247.5	04/01/2023	11:00	0.9	135
01/01/2023	12:00	0.9	90	02/01/2023	12:00	0.9	22.5	03/01/2023	12:00	1.3	270	04/01/2023	12:00	0.9	90
01/01/2023	13:00	0.4	112.5	02/01/2023	13:00	1.3	112.5	03/01/2023	13:00	1.3	247.5	04/01/2023	13:00	0.4	135
01/01/2023	14:00	0.4	112.5	02/01/2023	14:00	0.9	112.5	03/01/2023	14:00	0.9	67.5	04/01/2023	14:00	0.4	90
01/01/2023	15:00	0.4	112.5	02/01/2023	15:00	0.9	112.5	03/01/2023	15:00	0.9	90	04/01/2023	15:00	0.9	22.5
01/01/2023	16:00	0.4	112.5	02/01/2023	16:00	0.4	112.5	03/01/2023	16:00	0.9	90	04/01/2023	16:00	0.4	292.5
01/01/2023	17:00	0.9	90	02/01/2023	17:00	0.4	135	03/01/2023	17:00	1.3	45	04/01/2023	17:00	0.4	157.5
01/01/2023	18:00	0.4	90	02/01/2023	18:00	0.9	112.5	03/01/2023	18:00	0.9	67.5	04/01/2023	18:00	0.9	112.5
01/01/2023	19:00	0.9	90	02/01/2023	19:00	0.9	112.5	03/01/2023	19:00	0.4	22.5	04/01/2023	19:00	1.3	90
01/01/2023	20:00	0.9	112.5	02/01/2023	20:00	0.4	135	03/01/2023	20:00	1.3	292.5	04/01/2023	20:00	0.4	90
01/01/2023	21:00	0.9	90	02/01/2023	21:00	0.4	90	03/01/2023	21:00	0.9	337.5	04/01/2023	21:00	0.9	67.5
01/01/2023	22:00	0.9	90	02/01/2023	22:00	0.9	112.5	03/01/2023	22:00	1.3	337.5	04/01/2023	22:00	0.9	90
01/01/2023	23:00	0.9	90	02/01/2023	23:00	0.4	90	03/01/2023	23:00	0.4	247.5	04/01/2023	23:00	0.9	22.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
05/01/2023	0:00	0.4	22.5	06/01/2023	0:00	0.9	112.5	07/01/2023	0:00	1.3	135	08/01/2023	0:00	0.9	90
05/01/2023	1:00	0.4	337.5	06/01/2023	1:00	0.4	112.5	07/01/2023	1:00	0.9	135	08/01/2023	1:00	0.9	135
05/01/2023	2:00	0.9	225	06/01/2023	2:00	0.9	112.5	07/01/2023	2:00	1.3	135	08/01/2023	2:00	0.9	90
05/01/2023	3:00	0.4	22.5	06/01/2023	3:00	0.9	112.5	07/01/2023	3:00	1.3	112.5	08/01/2023	3:00	0.9	45
05/01/2023	4:00	0.4	22.5	06/01/2023	4:00	0.4	45	07/01/2023	4:00	1.3	112.5	08/01/2023	4:00	1.3	112.5
05/01/2023	5:00	0.4	202.5	06/01/2023	5:00	1.3	202.5	07/01/2023	5:00	0.9	112.5	08/01/2023	5:00	1.3	45
05/01/2023	6:00	0.4	202.5	06/01/2023	6:00	1.3	90	07/01/2023	6:00	0.9	112.5	08/01/2023	6:00	0.9	90
05/01/2023	7:00	0.4	112.5	06/01/2023	7:00	0.9	90	07/01/2023	7:00	1.3	202.5	08/01/2023	7:00	0.4	112.5
05/01/2023	8:00	0.4	90	06/01/2023	8:00	1.8	22.5	07/01/2023	8:00	1.3	112.5	08/01/2023	8:00	0.9	90
05/01/2023	9:00	0.9	22.5	06/01/2023	9:00	0.9	45	07/01/2023	9:00	1.3	112.5	08/01/2023	9:00	1.3	90
05/01/2023	10:00	0.9	112.5	06/01/2023	10:00	0.4	112.5	07/01/2023	10:00	0.9	67.5	08/01/2023	10:00	0.9	90
05/01/2023	11:00	0.4	112.5	06/01/2023	11:00	0.9	45	07/01/2023	11:00	0.9	112.5	08/01/2023	11:00	0.9	135
05/01/2023	12:00	0.4	112.5	06/01/2023	12:00	1.3	22.5	07/01/2023	12:00	1.8	112.5	08/01/2023	12:00	0.9	90
05/01/2023	13:00	1.3	135	06/01/2023	13:00	1.3	270	07/01/2023	13:00	1.3	90	08/01/2023	13:00	0.4	45
05/01/2023	14:00	0.4	135	06/01/2023	14:00	0.9	202.5	07/01/2023	14:00	1.3	90	08/01/2023	14:00	0.4	22.5
05/01/2023	15:00	0.4	112.5	06/01/2023	15:00	2.2	202.5	07/01/2023	15:00	0.9	67.5	08/01/2023	15:00	0.9	45
05/01/2023	16:00	0.4	112.5	06/01/2023	16:00	1.8	135	07/01/2023	16:00	1.3	90	08/01/2023	16:00	1.3	22.5
05/01/2023	17:00	0.9	112.5	06/01/2023	17:00	1.8	135	07/01/2023	17:00	1.8	112.5	08/01/2023	17:00	0.9	202.5
05/01/2023	18:00	0.4	112.5	06/01/2023	18:00	2.2	112.5	07/01/2023	18:00	2.2	112.5	08/01/2023	18:00	0.9	292.5
05/01/2023	19:00	0.4	112.5	06/01/2023	19:00	2.2	112.5	07/01/2023	19:00	1.3	112.5	08/01/2023	19:00	0.9	337.5
05/01/2023	20:00	0.4	202.5	06/01/2023	20:00	1.3	135	07/01/2023	20:00	1.3	112.5	08/01/2023	20:00	0.9	90
05/01/2023	21:00	0.4	112.5	06/01/2023	21:00	0.9	112.5	07/01/2023	21:00	1.3	202.5	08/01/2023	21:00	0.4	45
05/01/2023	22:00	0.4	135	06/01/2023	22:00	1.8	202.5	07/01/2023	22:00	1.3	45	08/01/2023	22:00	0.4	45
05/01/2023	23:00	0.9	112.5	06/01/2023	23:00	1.3	202.5	07/01/2023	23:00	1.3	90	08/01/2023	23:00	0.4	22.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
09/01/2023	0:00	1.3	135	10/01/2023	0:00	1.3	135	11/01/2023	0:00	0.9	112.5	12/01/2023	0:00	1.3	112.5
09/01/2023	1:00	0.9	45	10/01/2023	1:00	0.9	45	11/01/2023	1:00	0.9	67.5	12/01/2023	1:00	1.8	90
09/01/2023	2:00	1.3	45	10/01/2023	2:00	1.3	45	11/01/2023	2:00	0.9	112.5	12/01/2023	2:00	1.8	90
09/01/2023	3:00	0.9	45	10/01/2023	3:00	0.9	45	11/01/2023	3:00	1.3	112.5	12/01/2023	3:00	1.3	112.5
09/01/2023	4:00	0.9	135	10/01/2023	4:00	0.9	135	11/01/2023	4:00	1.3	67.5	12/01/2023	4:00	0.9	112.5
09/01/2023	5:00	0.4	112.5	10/01/2023	5:00	0.4	112.5	11/01/2023	5:00	0.9	67.5	12/01/2023	5:00	1.3	112.5
09/01/2023	6:00	0.4	90	10/01/2023	6:00	0.4	90	11/01/2023	6:00	0.9	90	12/01/2023	6:00	1.8	112.5
09/01/2023	7:00	0.9	112.5	10/01/2023	7:00	0.9	112.5	11/01/2023	7:00	0.4	180	12/01/2023	7:00	0.9	90
09/01/2023	8:00	0.4	292.5	10/01/2023	8:00	0.4	292.5	11/01/2023	8:00	0.4	180	2/01/2023	8:00	1.3	90
09/01/2023	9:00	0.4	292.5	10/01/2023	9:00	0.4	292.5	11/01/2023	9:00	0.9	112.5	12/01/2023	9:00	1.3	112.5
09/01/2023	10:00	0.9	180	10/01/2023	10:00	0.9	180	11/01/2023	10:00	0.4	202.5	12/01/2023	10:00	0.9	112.5
09/01/2023	11:00	0.9	180	10/01/2023	11:00	0.9	180	11/01/2023	11:00	0.4	112.5	12/01/2023	11:00	1.3	112.5
09/01/2023	12:00	1.3	22.5	10/01/2023	12:00	1.3	22.5	11/01/2023	12:00	0.4	180	12/01/2023	12:00	0.9	112.5
09/01/2023	13:00	0.9	112.5	10/01/2023	13:00	0.9	112.5	11/01/2023	13:00	0.4	112.5	12/01/2023	13:00	1.3	112.5
09/01/2023	14:00	0.4	90	10/01/2023	14:00	0.4	90	11/01/2023	14:00	0.4	112.5	12/01/2023	14:00	1.8	22.5
09/01/2023	15:00	0.4	112.5	10/01/2023	15:00	0.4	112.5	11/01/2023	15:00	0.4	112.5	12/01/2023	15:00	2.7	135
09/01/2023	16:00	0.9	135	10/01/2023	16:00	0.9	135	11/01/2023	16:00	0.9	90	12/01/2023	16:00	0.4	180
09/01/2023	17:00	0.9	135	10/01/2023	17:00	0.9	135	11/01/2023	17:00	1.3	112.5	12/01/2023	17:00	0.9	337.5
09/01/2023	18:00	1.3	112.5	10/01/2023	18:00	1.3	112.5	11/01/2023	18:00	1.3	90	12/01/2023	18:00	1.3	22.5
09/01/2023	19:00	1.3	135	10/01/2023	19:00	1.3	135	11/01/2023	19:00	1.8	90	12/01/2023	19:00	1.3	67.5
09/01/2023	20:00	1.3	90	10/01/2023	20:00	1.3	90	11/01/2023	20:00	1.8	90	12/01/2023	20:00	1.3	337.5
09/01/2023	21:00	0.9	90	10/01/2023	21:00	0.9	90	11/01/2023	21:00	1.8	90	12/01/2023	21:00	0.9	22.5
09/01/2023	22:00	0.9	112.5	10/01/2023	22:00	0.9	112.5	11/01/2023	22:00	0.4	112.5	12/01/2023	22:00	2.2	22.5
09/01/2023	23:00	1.3	1	10/01/2023	23:00	1.3	1	11/01/2023	23:00	0.4	157.5	12/01/2023	23:00	1.8	22.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
13/01/2023	0:00	0.4	67.5	14/01/2023	0:00	0.9	112.5	15/01/2023	0:00	1.3	90	16/01/2023	0:00	0.9	112.5
13/01/2023	1:00	0.9	45	14/01/2023	1:00	0.9	135	15/01/2023	1:00	1.3	135	16/01/2023	1:00	1.3	90
13/01/2023	2:00	0.4	67.5	14/01/2023	2:00	0.9	112.5	15/01/2023	2:00	0.9	112.5	16/01/2023	2:00	1.3	112.5
13/01/2023	3:00	0.4	67.5	14/01/2023	3:00	0.9	135	15/01/2023	3:00	1.3	112.5	16/01/2023	3:00	1.3	112.5
13/01/2023	4:00	0.4	67.5	14/01/2023	4:00	0.9	112.5	15/01/2023	4:00	1.3	112.5	16/01/2023	4:00	0.9	112.5
13/01/2023	5:00	0.9	90	14/01/2023	5:00	0.9	90	15/01/2023	5:00	1.3	90	16/01/2023	5:00	0.9	112.5
13/01/2023	6:00	0.9	112.5	14/01/2023	6:00	0.4	135	15/01/2023	6:00	1.3	90	16/01/2023	6:00	1.3	112.5
13/01/2023	7:00	1.3	90	14/01/2023	7:00	0.4	90	15/01/2023	7:00	0.9	90	16/01/2023	7:00	1.3	135
13/01/2023	8:00	1.3	67.5	14/01/2023	8:00	0.9	135	15/01/2023	8:00	0.9	135	16/01/2023	8:00	0.9	112.5
13/01/2023	9:00	0.4	67.5	14/01/2023	9:00	0.9	90	15/01/2023	9:00	0.9	135	16/01/2023	9:00	0.9	112.5
13/01/2023	10:00	0.4	67.5	14/01/2023	10:00	0.4	135	15/01/2023	10:00	0.9	22.5	16/01/2023	10:00	1.3	112.5
13/01/2023	11:00	0.4	45	14/01/2023	11:00	0.9	90	15/01/2023	11:00	0.4	157.5	16/01/2023	11:00	0.9	112.5
13/01/2023	12:00	1.3	112.5	14/01/2023	12:00	0.9	90	15/01/2023	12:00	0.4	67.5	16/01/2023	12:00	0.9	135
13/01/2023	13:00	1.3	112.5	14/01/2023	13:00	0.4	112.5	15/01/2023	13:00	0.9	112.5	16/01/2023	13:00	0.9	112.5
13/01/2023	14:00	0.4	135	14/01/2023	14:00	0.9	112.5	15/01/2023	14:00	0.9	112.5	16/01/2023	14:00	0.4	135
13/01/2023	15:00	0.4	135	14/01/2023	15:00	0.9	135	15/01/2023	15:00	0.9	112.5	16/01/2023	15:00	0.9	90
13/01/2023	16:00	0.9	112.5	14/01/2023	16:00	0.9	112.5	15/01/2023	16:00	0.9	112.5	16/01/2023	16:00	0.9	157.5
13/01/2023	17:00	0.9	112.5	14/01/2023	17:00	0.9	112.5	15/01/2023	17:00	1.3	90	16/01/2023	17:00	0.4	135
13/01/2023	18:00	0.4	112.5	14/01/2023	18:00	0.9	112.5	15/01/2023	18:00	0.9	135	16/01/2023	18:00	0.4	112.5
13/01/2023	19:00	0.9	90	14/01/2023	19:00	0.9	112.5	15/01/2023	19:00	0.9	135	16/01/2023	19:00	0.9	135
13/01/2023	20:00	0.9	112.5	14/01/2023	20:00	0.9	112.5	15/01/2023	20:00	0.9	112.5	16/01/2023	20:00	0.9	112.5
13/01/2023	21:00	0.9	90	14/01/2023	21:00	0.9	112.5	15/01/2023	21:00	0.4	112.5	16/01/2023	21:00	0.9	90
13/01/2023	22:00	0.9	112.5	14/01/2023	22:00	0.9	112.5	15/01/2023	22:00	0.9	112.5	16/01/2023	22:00	0.9	135
13/01/2023	23:00	0.9	180	14/01/2023	23:00	0.4	112.5	15/01/2023	23:00	0.4	112.5	16/01/2023	23:00	0.9	90



Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
17/01/2023	0:00	0.9	112.5	18/01/2023	0:00	0.9	225	19/01/2023	0:00	0.9	247.5	20/01/2023	0:00	1.3	112.5
17/01/2023	1:00	1.3	90	18/01/2023	1:00	0.9	180	19/01/2023	1:00	0.9	270	20/01/2023	1:00	1.3	112.5
17/01/2023	2:00	1.3	90	18/01/2023	2:00	1.3	202.5	19/01/2023	2:00	0.9	270	20/01/2023	2:00	1.3	135
17/01/2023	3:00	0.9	112.5	18/01/2023	3:00	0.9	202.5	19/01/2023	3:00	0.4	247.5	20/01/2023	3:00	0.9	112.5
17/01/2023	4:00	0.9	90	18/01/2023	4:00	0.4	225	19/01/2023	4:00	0.9	247.5	20/01/2023	4:00	0.9	90
17/01/2023	5:00	0.9	112.5	18/01/2023	5:00	0.9	247.5	19/01/2023	5:00	0.9	247.5	20/01/2023	5:00	1.3	112.5
17/01/2023	6:00	1.3	90	18/01/2023	6:00	0.9	270	19/01/2023	6:00	0.9	135	20/01/2023	6:00	0.9	112.5
17/01/2023	7:00	1.3	67.5	18/01/2023	7:00	0.9	315	19/01/2023	7:00	0.9	112.5	20/01/2023	7:00	1.3	112.5
17/01/2023	8:00	1.8	135	18/01/2023	8:00	0.9	67.5	19/01/2023	8:00	0.9	112.5	20/01/2023	8:00	1.3	90
17/01/2023	9:00	1.8	135	18/01/2023	9:00	0.9	67.5	19/01/2023	9:00	1.3	112.5	20/01/2023	9:00	0.9	112.5
17/01/2023	10:00	1.8	90	18/01/2023	10:00	0.9	67.5	19/01/2023	10:00	1.3	112.5	20/01/2023	10:00	0.9	135
17/01/2023	11:00	2.2	135	18/01/2023	11:00	0.4	112.5	19/01/2023	11:00	0.4	90	20/01/2023	11:00	0.9	112.5
17/01/2023	12:00	1.8	135	18/01/2023	12:00	0.9	112.5	19/01/2023	12:00	0.4	112.5	20/01/2023	12:00	0.9	112.5
17/01/2023	13:00	0.9	135	18/01/2023	13:00	0.9	112.5	19/01/2023	13:00	0.4	112.5	20/01/2023	13:00	1.3	112.5
17/01/2023	14:00	0.9	90	18/01/2023	14:00	1.3	157.5	19/01/2023	14:00	0.9	247.5	20/01/2023	14:00	0.9	112.5
17/01/2023	15:00	1.3	180	18/01/2023	15:00	1.3	135	19/01/2023	15:00	1.3	270	20/01/2023	15:00	1.3	112.5
17/01/2023	16:00	1.3	157.5	18/01/2023	16:00	1.3	90	19/01/2023	16:00	0.9	270	20/01/2023	16:00	1.3	112.5
17/01/2023	17:00	1.3	90	18/01/2023	17:00	1.3	112.5	19/01/2023	17:00	0.9	225	20/01/2023	17:00	0.4	112.5
17/01/2023	18:00	1.3	90	18/01/2023	18:00	1.3	112.5	19/01/2023	18:00	0.4	112.5	20/01/2023	18:00	0.4	112.5
17/01/2023	19:00	1.3	135	18/01/2023	19:00	0.4	135	19/01/2023	19:00	0.9	112.5	20/01/2023	19:00	0.4	112.5
17/01/2023	20:00	1.3	112.5	18/01/2023	20:00	0.4	112.5	19/01/2023	20:00	0.4	112.5	20/01/2023	20:00	0.4	112.5
17/01/2023	21:00	1.3	112.5	18/01/2023	21:00	0.4	112.5	19/01/2023	21:00	0.9	135	20/01/2023	21:00	0.4	112.5
17/01/2023	22:00	0.9	112.5	18/01/2023	22:00	0.4	90	19/01/2023	22:00	0.4	135	20/01/2023	22:00	0.4	112.5
17/01/2023	23:00	0.9	135	18/01/2023	23:00	0.9	112.5	19/01/2023	23:00	0.9	247.5	20/01/2023	23:00	0.4	112.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
21/01/2023	0:00	0.4	135	22/01/2023	0:00	0.4	22.5	23/01/2023	0:00	0.4	22.5	24/01/2023	0:00	0.9	112.5
21/01/2023	1:00	0.4	90	22/01/2023	1:00	0.4	270	23/01/2023	1:00	0	135	24/01/2023	1:00	0.4	135
21/01/2023	2:00	0.4	135	22/01/2023	2:00	0.9	45	23/01/2023	2:00	0.4	292.5	24/01/2023	2:00	0.9	135
21/01/2023	3:00	0.4	135	22/01/2023	3:00	0.9	157.5	23/01/2023	3:00	0	90	24/01/2023	3:00	0.4	112.5
21/01/2023	4:00	0.9	90	22/01/2023	4:00	0.4	67.5	23/01/2023	4:00	0.4	112.5	24/01/2023	4:00	0.9	90
21/01/2023	5:00	0.9	135	22/01/2023	5:00	0.9	67.5	23/01/2023	5:00	0.9	112.5	24/01/2023	5:00	0.9	90
21/01/2023	6:00	1.3	90	22/01/2023	6:00	0.9	22.5	23/01/2023	6:00	0.9	135	24/01/2023	6:00	0.9	67.5
21/01/2023	7:00	1.3	22.5	22/01/2023	7:00	0.9	67.5	23/01/2023	7:00	0.9	90	24/01/2023	7:00	0.9	67.5
21/01/2023	8:00	1.3	112.5	22/01/2023	8:00	0.4	112.5	23/01/2023	8:00	0.9	45	24/01/2023	8:00	0.4	135
21/01/2023	9:00	0.9	90	22/01/2023	9:00	0.9	292.5	23/01/2023	9:00	0.9	45	24/01/2023	9:00	0.9	90
21/01/2023	10:00	1.3	112.5	22/01/2023	10:00	0.4	112.5	23/01/2023	10:00	0.4	135	24/01/2023	10:00	0.9	112.5
21/01/2023	11:00	1.3	112.5	22/01/2023	11:00	0.4	135	23/01/2023	11:00	0.9	135	24/01/2023	11:00	0.9	135
21/01/2023	12:00	1.3	112.5	22/01/2023	12:00	0.9	270	23/01/2023	12:00	0.4	112.5	24/01/2023	12:00	0.4	112.5
21/01/2023	13:00	0.9	112.5	22/01/2023	13:00	0.9	225	23/01/2023	13:00	0.9	112.5	24/01/2023	13:00	0.4	135
21/01/2023	14:00	0.9	90	22/01/2023	14:00	1.8	135	23/01/2023	14:00	0.4	90	24/01/2023	14:00	0.9	112.5
21/01/2023	15:00	0.4	90	22/01/2023	15:00	0.9	112.5	23/01/2023	15:00	1.3	112.5	24/01/2023	15:00	1.3	67.5
21/01/2023	16:00	0.9	22.5	22/01/2023	16:00	1.3	67.5	23/01/2023	16:00	1.3	112.5	24/01/2023	16:00	1.3	225
21/01/2023	17:00	0.9	45	22/01/2023	17:00	1.3	90	23/01/2023	17:00	1.3	135	24/01/2023	17:00	0.9	90
21/01/2023	18:00	0.9	67.5	22/01/2023	18:00	0.9	90	23/01/2023	18:00	1.3	112.5	24/01/2023	18:00	1.8	112.5
21/01/2023	19:00	0.9	112.5	22/01/2023	19:00	1.3	45	23/01/2023	19:00	1.3	112.5	24/01/2023	19:00	1.8	90
21/01/2023	20:00	1.3	112.5	22/01/2023	20:00	1.3	135	23/01/2023	20:00	0.9	135	24/01/2023	20:00	0.9	112.5
21/01/2023	21:00	0.4	90	22/01/2023	21:00	1.3	135	23/01/2023	21:00	0.9	112.5	24/01/2023	21:00	0.9	22.5
21/01/2023	22:00	1.3	90	22/01/2023	22:00	1.8	90	23/01/2023	22:00	1.3	112.5	24/01/2023	22:00	1.3	90
21/01/2023	23:00	0.9	90	22/01/2023	23:00	1.8	135	23/01/2023	23:00	0.9	135	24/01/2023	23:00	0.9	112.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
25/01/2023	0:00	1.3	112.5	26/01/2023	0:00	0.9	112.5	27/01/2023	0:00	0.9	22.5	28/01/2023	0:00	0.9	112.5
25/01/2023	1:00	1.3	112.5	26/01/2023	1:00	0.4	135	27/01/2023	1:00	0.9	0	28/01/2023	1:00	0.9	135
25/01/2023	2:00	1.3	135	26/01/2023	2:00	0.9	135	27/01/2023	2:00	0.9	45	28/01/2023	2:00	1.3	67.5
25/01/2023	3:00	1.3	112.5	26/01/2023	3:00	0.4	112.5	27/01/2023	3:00	0.9	45	28/01/2023	3:00	0.9	90
25/01/2023	4:00	1.3	112.5	26/01/2023	4:00	0.9	90	27/01/2023	4:00	1.3	112.5	28/01/2023	4:00	0.9	112.5
25/01/2023	5:00	0.9	135	26/01/2023	5:00	0.9	90	27/01/2023	5:00	0.9	112.5	28/01/2023	5:00	1.3	112.5
25/01/2023	6:00	0.9	112.5	26/01/2023	6:00	0.9	67.5	27/01/2023	6:00	0.9	112.5	28/01/2023	6:00	0.9	112.5
25/01/2023	7:00	1.3	112.5	26/01/2023	7:00	0.9	67.5	27/01/2023	7:00	0.4	67.5	28/01/2023	7:00	1.8	90
25/01/2023	8:00	0.9	135	26/01/2023	8:00	0.4	135	27/01/2023	8:00	0.4	22.5	28/01/2023	8:00	1.3	112.5
25/01/2023	9:00	0.9	90	26/01/2023	9:00	0.9	90	27/01/2023	9:00	0.9	67.5	28/01/2023	9:00	1.8	90
25/01/2023	10:00	1.3	112.5	26/01/2023	10:00	0.9	112.5	27/01/2023	10:00	0.9	22.5	28/01/2023	10:00	1.8	90
25/01/2023	11:00	1.3	112.5	26/01/2023	11:00	0.9	135	27/01/2023	11:00	0.4	45	28/01/2023	11:00	1.3	90
25/01/2023	12:00	1.3	135	26/01/2023	12:00	0.4	112.5	27/01/2023	12:00	0.4	67.5	28/01/2023	12:00	1.3	112.5
25/01/2023	13:00	1.8	135	26/01/2023	13:00	0.9	112.5	27/01/2023	13:00	0.4	67.5	28/01/2023	13:00	1.3	112.5
25/01/2023	14:00	0.4	112.5	26/01/2023	14:00	0.4	112.5	27/01/2023	14:00	0.4	90	28/01/2023	14:00	0.9	112.5
25/01/2023	15:00	0.4	112.5	26/01/2023	15:00	1.3	135	27/01/2023	15:00	0.4	270	28/01/2023	15:00	0.9	90
25/01/2023	16:00	0.4	112.5	26/01/2023	16:00	0.9	90	27/01/2023	16:00	0.9	112.5	28/01/2023	16:00	0.9	90
25/01/2023	17:00	0.9	112.5	26/01/2023	17:00	0.9	112.5	27/01/2023	17:00	0.4	112.5	28/01/2023	17:00	0.9	180
25/01/2023	18:00	0.4	90	26/01/2023	18:00	0.9	112.5	27/01/2023	18:00	0.4	112.5	28/01/2023	18:00	0.4	45
25/01/2023	19:00	0.4	112.5	26/01/2023	19:00	0.9	112.5	27/01/2023	19:00	0.4	90	28/01/2023	19:00	0.9	22.5
25/01/2023	20:00	0.4	112.5	26/01/2023	20:00	0.9	90	27/01/2023	20:00	1.3	112.5	28/01/2023	20:00	0.9	67.5
25/01/2023	21:00	0.4	90	26/01/2023	21:00	1.3	112.5	27/01/2023	21:00	1.3	112.5	28/01/2023	21:00	0.4	45
25/01/2023	22:00	0.9	90	26/01/2023	22:00	0.9	90	27/01/2023	22:00	0.9	112.5	28/01/2023	22:00	0.4	112.5
25/01/2023	23:00	0.9	112.5	26/01/2023	23:00	0.9	90	27/01/2023	23:00	0.9	112.5	28/01/2023	23:00	0.4	112.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Ng Wah Catholic Secondary School

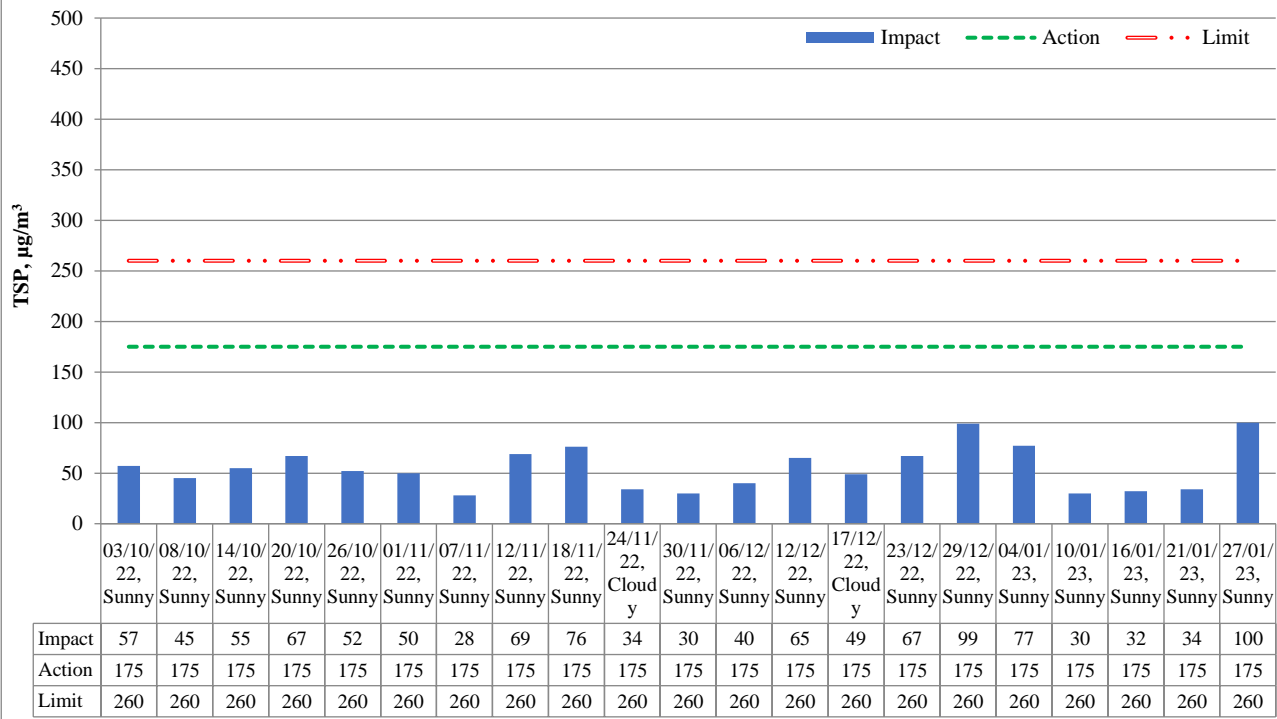
Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
29/01/2023	0:00	0.4	112.5	30/01/2023	0:00	0.4	225	31/01/2023	0:00	0.4	112.5				
29/01/2023	1:00	0.4	90	30/01/2023	1:00	0.4	112.5	31/01/2023	1:00	0.4	112.5				
29/01/2023	2:00	0.9	112.5	30/01/2023	2:00	0.4	90	31/01/2023	2:00	0.4	90				
29/01/2023	3:00	0.4	90	30/01/2023	3:00	0.9	112.5	31/01/2023	3:00	0.4	135				
29/01/2023	4:00	0.4	112.5	30/01/2023	4:00	0.4	90	31/01/2023	4:00	1.8	112.5				
29/01/2023	5:00	0.9	112.5	30/01/2023	5:00	0.4	112.5	31/01/2023	5:00	1.3	90				
29/01/2023	6:00	0.9	112.5	30/01/2023	6:00	0.9	112.5	31/01/2023	6:00	0.9	112.5				
29/01/2023	7:00	0.9	90	30/01/2023	7:00	0.9	112.5	31/01/2023	7:00	1.3	112.5				
29/01/2023	8:00	0.9	112.5	30/01/2023	8:00	0.9	90	31/01/2023	8:00	1.3	90				
29/01/2023	9:00	0.9	112.5	30/01/2023	9:00	0.9	112.5	31/01/2023	9:00	1.3	90				
29/01/2023	10:00	1.8	112.5	30/01/2023	10:00	0.9	112.5	31/01/2023	10:00	1.3	135				
29/01/2023	11:00	1.8	22.5	30/01/2023	11:00	1.8	112.5	31/01/2023	11:00	1.3	112.5				
29/01/2023	12:00	1.3	112.5	30/01/2023	12:00	1.8	22.5	31/01/2023	12:00	0.9	112.5				
29/01/2023	13:00	1.3	112.5	30/01/2023	13:00	1.3	112.5	31/01/2023	13:00	1.3	112.5				
29/01/2023	14:00	1.3	90	30/01/2023	14:00	0.9	90	31/01/2023	14:00	2.2	45				
29/01/2023	15:00	0.9	90	30/01/2023	15:00	1.3	202.5	31/01/2023	15:00	1.8	90				
29/01/2023	16:00	0.9	112.5	30/01/2023	16:00	0.9	112.5	31/01/2023	16:00	1.3	90				
29/01/2023	17:00	0.9	112.5	30/01/2023	17:00	0.9	112.5	31/01/2023	17:00	1.3	22.5				
29/01/2023	18:00	0.9	112.5	30/01/2023	18:00	0.4	90	31/01/2023	18:00	0.9	112.5				
29/01/2023	19:00	0.9	112.5	30/01/2023	19:00	0.4	112.5	31/01/2023	19:00	0.4	112.5				
29/01/2023	20:00	1.3	67.5	30/01/2023	20:00	0.9	135	31/01/2023	20:00	0.9	112.5				
29/01/2023	21:00	1.3	112.5	30/01/2023	21:00	0.9	67.5	31/01/2023	21:00	0.9	90				
29/01/2023	22:00	1.3	112.5	30/01/2023	22:00	0.4	112.5	31/01/2023	22:00	0.4	90				
29/01/2023	23:00	0.9	22.5	30/01/2023	23:00	0.4	112.5	31/01/2023	23:00	2.2	45				

# Appendix D – Monitoring data and graphical plots

## 24-hour average TSP

Air Monitoring Station		AM2(A) – Ng Wah Catholic Secondary School	AM3 – Sky Tower
Start Date	Weather	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
01/11/2022	Sunny	50	42
07/11/2022	Sunny	28	47
12/11/2022	Sunny	69	63
18/11/2022	Sunny	76	91
24/11/2022	Cloudy	34	50
30/11/2022	Sunny	30	50
06/12/2022	Sunny	40	38
12/12/2022	Sunny	65	89
17/12/2022	Cloudy	49	85
23/12/2022	Sunny	67	77
29/12/2022	Sunny	99	113
04/01/2023	Sunny	77	88
10/01/2023	Cloudy	30	35
16/01/2023	Cloudy	32	46
21/01/2023	Sunny	34	56
27/01/2023	Sunny	100	98

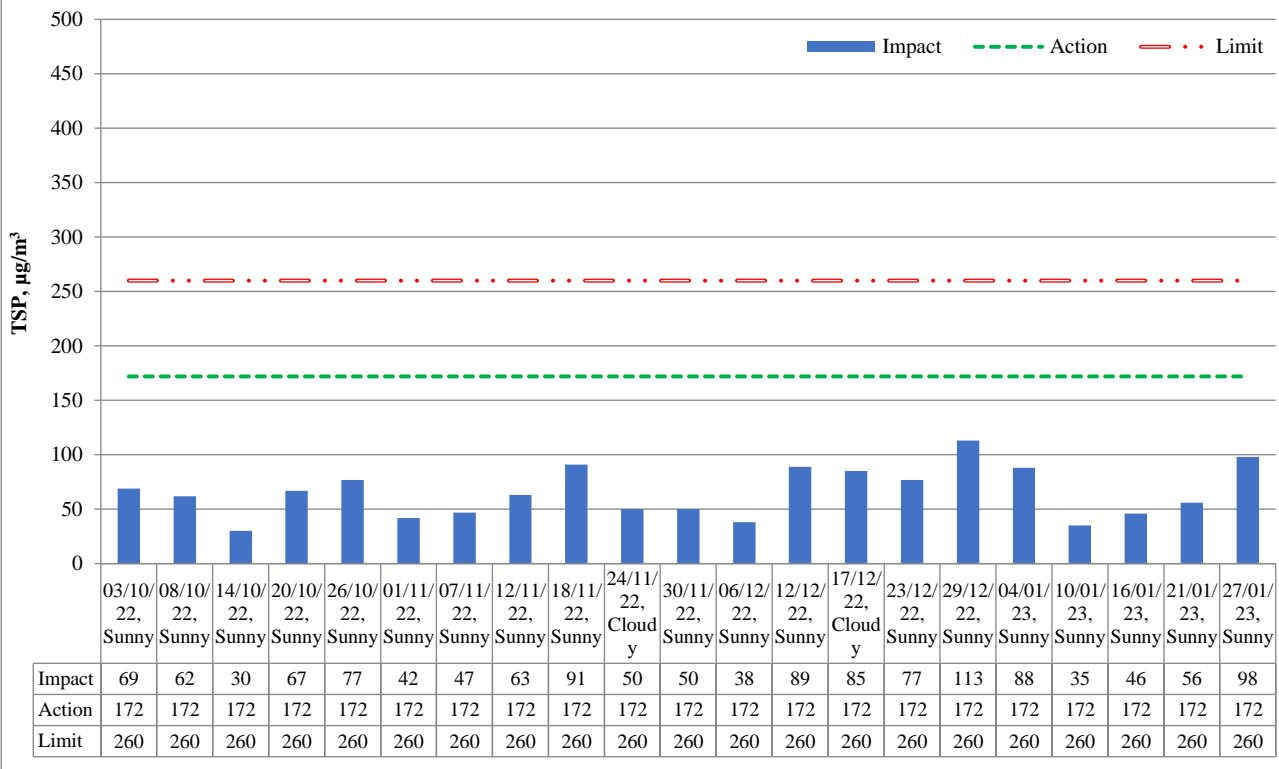
**24-Hour Total Suspended Particulate Results - AM2(A) Ng Wah Catholic Secondary School**



Major Construction Activities	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Construction works at Crowd Dispersal Route	✓			
Construction of DCS	✓	✓	✓	✓
Construction works for Road L16	✓	✓	✓	✓
Construction works for Olympic Avenue	✓	✓	✓	✓
Construction works for additional run-in at Road L7		✓	✓	✓
Construction of gantry footing at launching shaft for subway SB-01				✓
Dismantling of gantry crane at casting yard			✓	✓
ELS and excavation works at Sa Po Road			✓	✓
ELS and excavation works for lift and staircase of LW-02				✓
Post-piling tests and proof drilling for LW02 lift and staircase		✓	✓	
Pre-bored socket H-pile construction works for Slip Road S14	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	✓	✓	✓	✓
UU diversion at Sa Po Road under TTA Stage 2A	✓			
RC construction at launching shaft for subway SB-01	✓	✓	✓	✓
Construction works for Pedestrian Street No. 2	✓	✓	✓	
RC construction for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓	✓	✓
Mini pile construction works for LW-02 lift and staircase	✓	✓		
Ground improvement works at Sa Po Road	✓	✓		

Factors might affect the monitoring results	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓

### 24-Hour Total Suspended Particulate Results - AM3 Sky Tower



Major Construction Activities	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Construction works at Crowd Dispersal Route	✓			
Construction of DCS	✓	✓	✓	✓
Construction works for Road L16	✓	✓	✓	✓
Construction works for Olympic Avenue	✓	✓	✓	✓
Construction works for additional run-in at Road L7		✓	✓	✓
Construction of gantry footing at launching shaft for subway SB-01				✓
Dismantling of gantry crane at casting yard			✓	✓
ELS and excavation works at Sa Po Road			✓	✓
ELS and excavation works for lift and staircase of LW-02				✓
Post-piling tests and proof drilling for LW02 lift and staircase		✓	✓	
Pre-bored socket H-pile construction works for Slip Road S14	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	✓	✓	✓	✓
UU diversion at Sa Po Road under TTA Stage 2A	✓			
RC construction at launching shaft for subway SB-01	✓	✓	✓	✓
Construction works for Pedestrian Street No. 2	✓	✓	✓	
RC construction for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓	✓	✓
Mini pile construction works for LW-02 lift and staircase	✓	✓		
Ground improvement works at Sa Po Road	✓	✓		

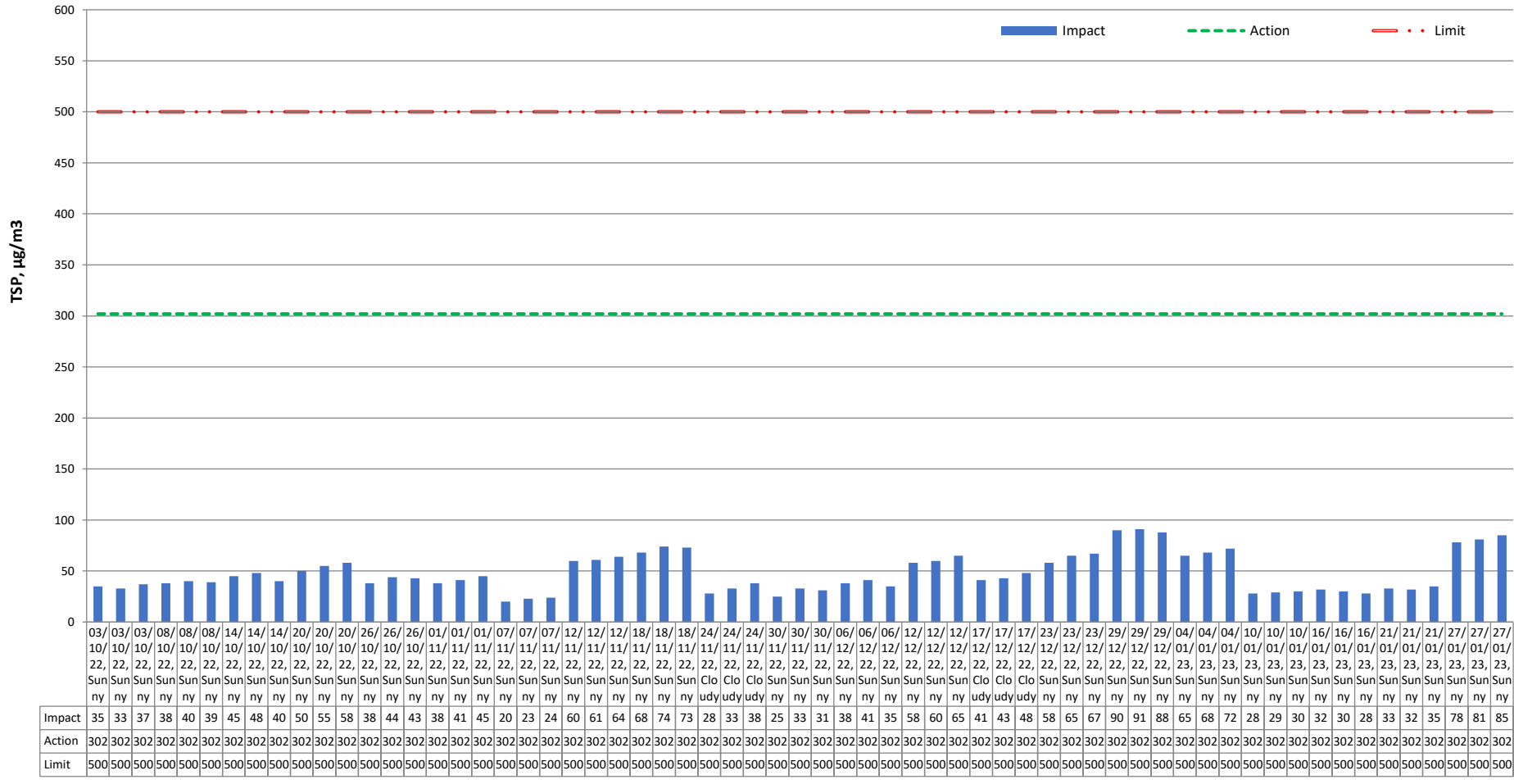
Factors might affect the monitoring results	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓



### 1-hour average TSP

Air Monitoring Station				AM2(A) – Ng Wah Catholic Secondary School	
Date	Measurement Period			Weather	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
01/11/2022	13:00	-	14:00	Sunny	38
01/11/2022	14:00	-	15:00		41
01/11/2022	15:00	-	16:00		45
07/11/2022	9:00	-	10:00	Sunny	20
07/11/2022	10:00	-	11:00		23
07/11/2022	11:00	-	12:00		24
12/11/2022	13:00	-	14:00	Sunny	60
12/11/2022	14:00	-	15:00		61
12/11/2022	15:00	-	16:00		64
18/11/2022	9:00	-	10:00	Sunny	68
18/11/2022	10:00	-	11:00		74
18/11/2022	11:00	-	12:00		73
24/11/2022	13:00	-	14:00	Cloudy	28
24/11/2022	14:00	-	15:00		33
24/11/2022	15:00	-	16:00		38
30/11/2022	9:00	-	10:00	Sunny	25
30/11/2022	10:00	-	11:00		33
30/11/2022	11:00	-	12:00		31
06/12/2022	13:00	-	14:00	Sunny	38
06/12/2022	14:00	-	15:00		41
06/12/2022	15:00	-	16:00		35
12/12/2022	9:00	-	10:00	Sunny	58
12/12/2022	10:00	-	11:00		60
12/12/2022	11:00	-	12:00		65
17/12/2022	13:00	-	14:00	Cloudy	41
17/12/2022	14:00	-	15:00		43
17/12/2022	15:00	-	16:00		48
23/12/2022	9:00	-	10:00	Sunny	58
23/12/2022	10:00	-	11:00		65
23/12/2022	11:00	-	12:00		67
29/12/2022	13:00	-	14:00	Sunny	90
29/12/2022	14:00	-	15:00		91
29/12/2022	15:00	-	16:00		88
04/01/2023	13:00	-	14:00	Sunny	65
04/01/2023	14:00	-	15:00		68
04/01/2023	15:00	-	16:00		72
10/01/2023	9:00	-	10:00	Cloudy	28
10/01/2023	10:00	-	11:00		29
10/01/2023	11:00	-	12:00		30
16/01/2023	13:00	-	14:00	Cloudy	32
16/01/2023	14:00	-	15:00		30
16/01/2023	15:00	-	16:00		28
21/01/2023	9:00	-	10:00	Sunny	33
21/01/2023	10:00	-	11:00		32
21/01/2023	11:00	-	12:00		35
27/01/2023	9:00	-	10:00	Sunny	78
27/01/2023	10:00	-	11:00		81
27/01/2023	11:00	-	12:00		85

### 1-Hour Total Suspended Particulate Results - AM2(A) Ng Wah Catholic Secondary School

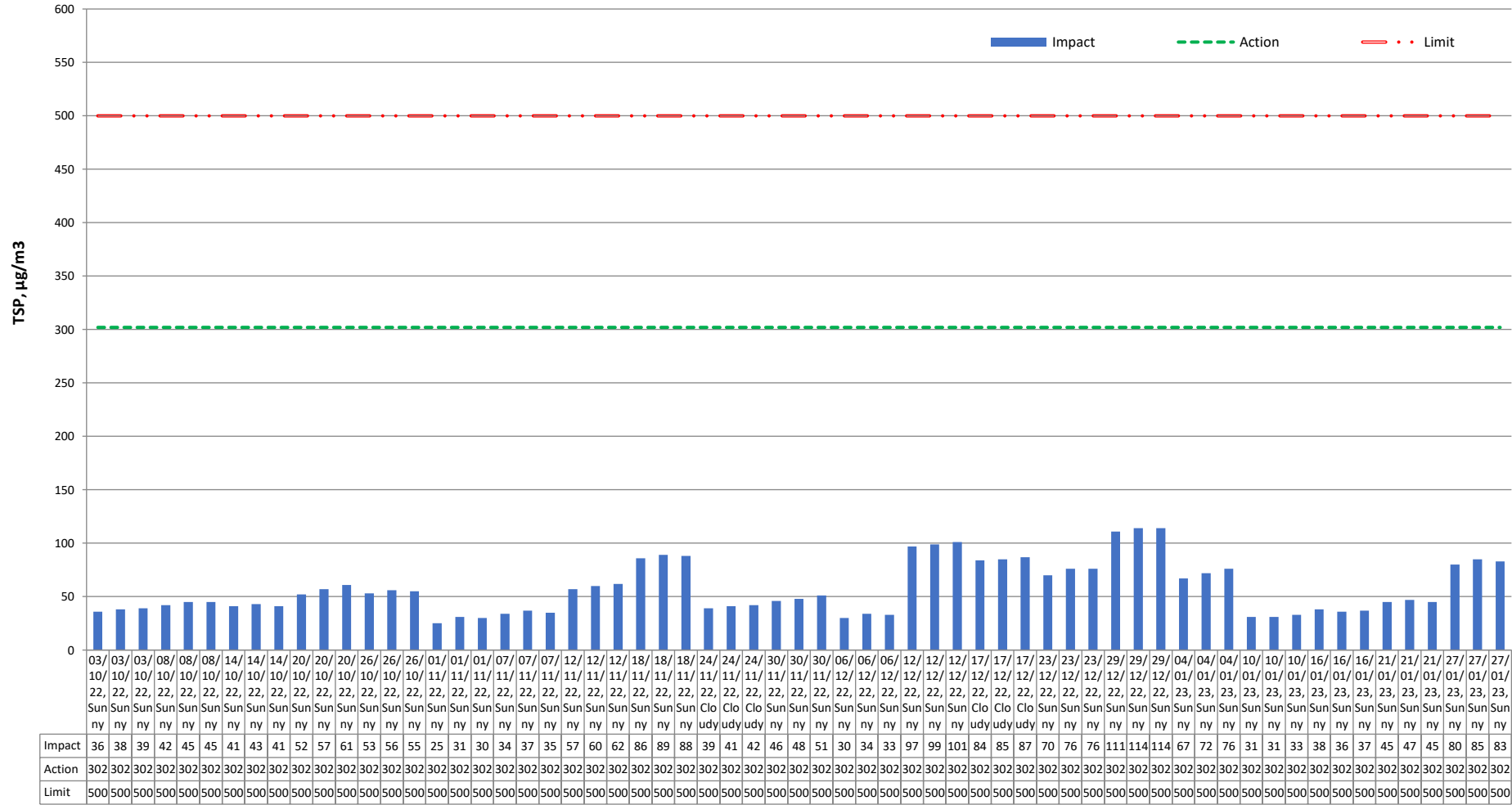


Major Construction Activities	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Construction works at Crowd Dispersal Route	✓			
Construction of DCS	✓	✓	✓	✓
Construction works for Road L16	✓	✓	✓	✓
Construction works for Olympic Avenue	✓	✓	✓	✓
Construction works for additional run-in at Road L7		✓	✓	✓
Construction of gantry footing at launching shaft for subway SB-01				✓
Dismantling of gantry crane at casting yard			✓	✓
ELS and excavation works at Sa Po Road			✓	✓
ELS and excavation works for lift and staircase of LW-02				✓
Post-piling tests and proof drilling for LW02 lift and staircase		✓	✓	
Pre-bored socket H-pile construction works for Slip Road S14	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	✓	✓	✓	✓
UU diversion at Sa Po Road under TTA Stage 2A	✓			
RC construction at launching shaft for subway SB-01	✓	✓	✓	✓
Construction works for Pedestrian Street No. 2	✓	✓	✓	
RC construction for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓	✓	✓
Mini pile construction works for LW-02 lift and staircase	✓	✓		
Ground improvement works at Sa Po Road	✓	✓		

Factors might affect the monitoring results	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓

Air Monitoring Station				AM3 – Sky Tower	
Date	Measurement Period			Weather	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
01/11/2022	9:00	-	10:00	Sunny	25
01/11/2022	10:00	-	11:00		31
01/11/2022	11:00	-	12:00		30
07/11/2022	13:00	-	14:00	Sunny	34
07/11/2022	14:00	-	15:00		37
07/11/2022	15:00	-	16:00		35
12/11/2022	13:00	-	14:00	Sunny	57
12/11/2022	14:00	-	15:00		60
12/11/2022	15:00	-	16:00		62
18/11/2022	13:00	-	14:00	Sunny	86
18/11/2022	14:00	-	15:00		89
18/11/2022	15:00	-	16:00		88
24/11/2022	9:00	-	10:00	Cloudy	39
24/11/2022	10:00	-	11:00		41
24/11/2022	11:00	-	12:00		42
30/11/2022	13:00	-	14:00	Sunny	46
30/11/2022	14:00	-	15:00		48
30/11/2022	15:00	-	16:00		51
06/12/2022	9:00	-	10:00	Sunny	30
06/12/2022	10:00	-	11:00		34
06/12/2022	11:00	-	12:00		33
12/12/2022	9:00	-	10:00	Sunny	97
12/12/2022	10:00	-	11:00		99
12/12/2022	11:00	-	12:00		101
17/12/2022	13:00	-	14:00	Cloudy	84
17/12/2022	14:00	-	15:00		85
17/12/2022	15:00	-	16:00		87
23/12/2022	13:00	-	14:00	Sunny	70
23/12/2022	14:00	-	15:00		76
23/12/2022	15:00	-	16:00		76
29/12/2022	9:00	-	10:00	Sunny	111
29/12/2022	10:00	-	11:00		114
29/12/2022	11:00	-	12:00		114
04/01/2023	9:00	-	10:00	Sunny	67
04/01/2023	10:00	-	11:00		72
04/01/2023	11:00	-	12:00		76
10/01/2023	13:00	-	14:00	Cloudy	31
10/01/2023	14:00	-	15:00		31
10/01/2023	15:00	-	16:00		33
16/01/2023	9:00	-	10:00	Cloudy	38
16/01/2023	10:00	-	11:00		36
16/01/2023	11:00	-	12:00		37
21/01/2023	13:00	-	14:00	Sunny	45
21/01/2023	14:00	-	15:00		47
21/01/2023	15:00	-	16:00		45
27/01/2023	13:00	-	14:00	Sunny	80
27/01/2023	14:00	-	15:00		85
27/01/2023	15:00	-	16:00		83

### 1-Hour Total Suspended Particulate Results - AM3 Sky Tower

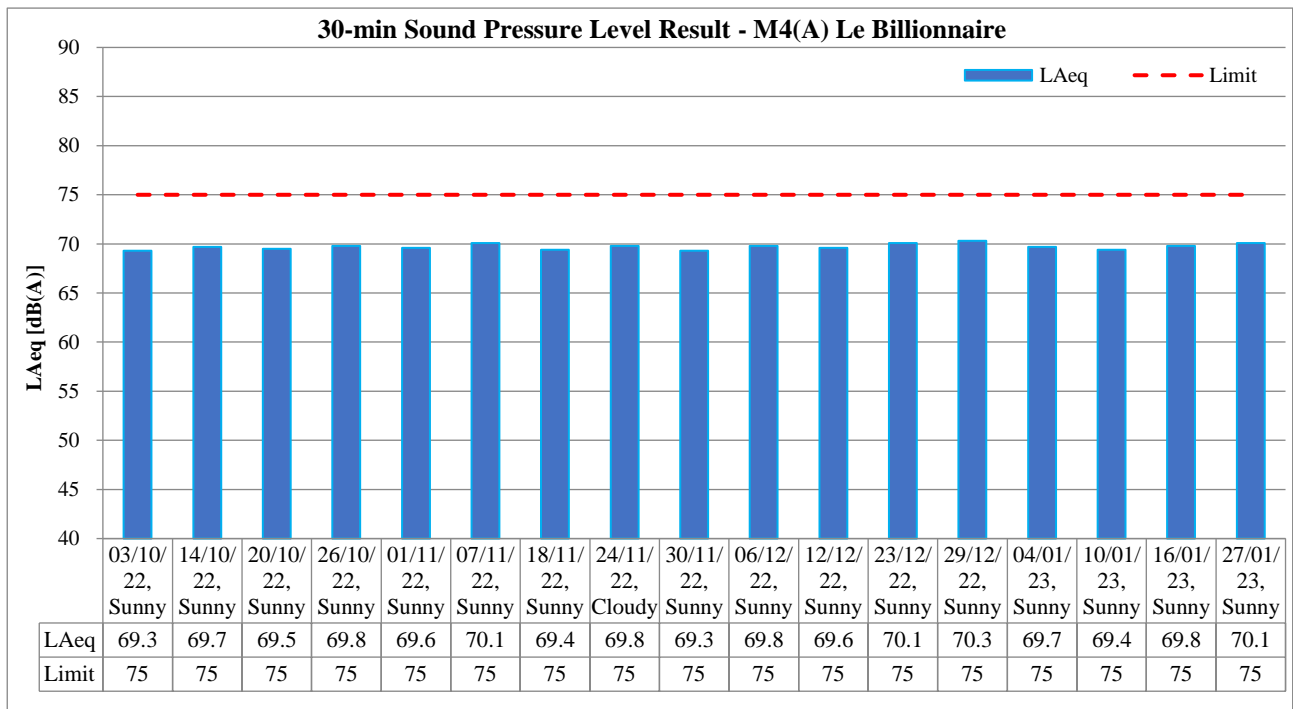


Major Construction Activities	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Construction works at Crowd Dispersal Route	✓			
Construction of DCS	✓	✓	✓	✓
Construction works for Road L16	✓	✓	✓	✓
Construction works for Olympic Avenue	✓	✓	✓	✓
Construction works for additional run-in at Road L7		✓	✓	✓
Construction of gantry footing at launching shaft for subway SB-01				✓
Dismantling of gantry crane at casting yard			✓	✓
ELS and excavation works at Sa Po Road			✓	✓
ELS and excavation works for lift and staircase of LW-02				✓
Post-piling tests and proof drilling for LW02 lift and staircase		✓	✓	
Pre-bored socket H-pile construction works for Slip Road S14	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	✓	✓	✓	✓
UU diversion at Sa Po Road under TTA Stage 2A	✓			
RC construction at launching shaft for subway SB-01	✓	✓	✓	✓
Construction works for Pedestrian Street No. 2	✓	✓	✓	
RC construction for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓	✓	✓
Mini pile construction works for LW-02 lift and staircase	✓	✓		
Ground improvement works at Sa Po Road	✓	✓		

Factors might affect the monitoring results	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓

### 30-minute Noise

Noise Monitoring Station			M4(A) – Le Billionnaire				
Date	Measurement Period		Weather	L <sub>Aeq</sub> , dB(A)	L <sub>A10</sub> , dB(A)	L <sub>A90</sub> , dB(A)	
01/11/2022	9:20	- 9:50	Sunny	69.6	70.9	68.4	
07/11/2022	13:15	- 13:45	Sunny	70.1	71.5	68.8	
18/11/2022	9:05	- 9:35	Sunny	69.4	70.7	68.3	
24/11/2022	13:20	- 13:50	Cloudy	69.8	71.2	68.5	
30/11/2022	13:20	- 13:50	Sunny	69.3	70.5	68.1	
06/12/2022	9:30	- 10:00	Sunny	69.8	71.2	68.6	
12/12/2022	9:10	- 9:40	Sunny	69.6	71.0	68.3	
23/12/2022	13:05	- 13:35	Sunny	70.1	71.8	68.8	
29/12/2022	13:20	- 13:50	Sunny	70.3	72.1	70.1	
04/01/2023	9:30	- 10:00	Sunny	69.7	71.1	68.3	
10/01/2023	13:15	- 13:45	Cloudy	69.4	70.8	68.1	
16/01/2023	13:10	- 13:40	Cloudy	69.8	71.3	68.5	
27/01/2023	9:26	- 9:56	Sunny	70.1	71.4	68.7	

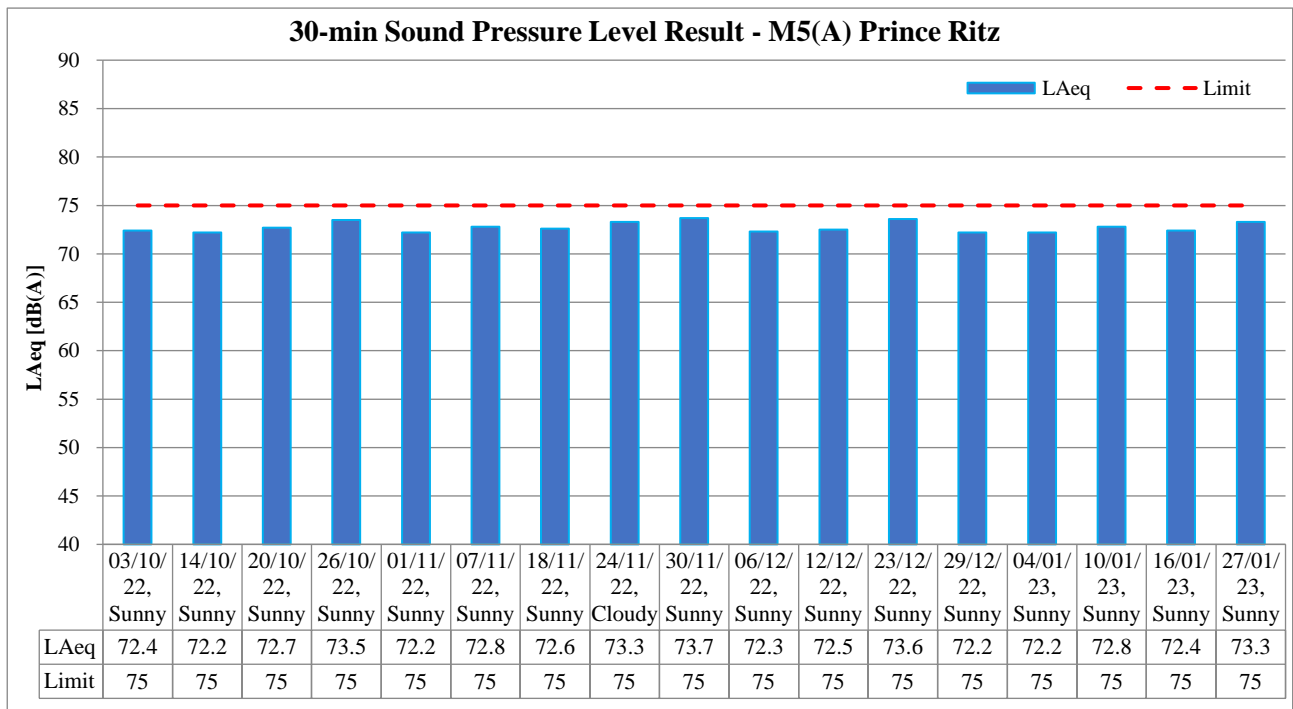


Major Construction Activities	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Construction works at Crowd Dispersal Route	✓			
Construction of DCS	✓	✓	✓	✓
Construction works for Road L16	✓	✓	✓	✓
Construction works for Olympic Avenue	✓	✓	✓	✓
Construction works for additional run-in at Road L7		✓	✓	✓
Construction of gantry footing at launching shaft for subway SB-01				✓
Dismantling of gantry crane at casting yard			✓	✓
ELS and excavation works at Sa Po Road			✓	✓
ELS and excavation works for lift and staircase of LW-02				✓
Post-piling tests and proof drilling for LW02 lift and staircase		✓	✓	
Pre-bored socket H-pile construction works for Slip Road S14	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	✓	✓	✓	✓
UU diversion at Sa Po Road under TTA Stage 2A	✓			
RC construction at launching shaft for subway SB-01	✓	✓	✓	✓
Construction works for Pedestrian Street No. 2	✓	✓	✓	
RC construction for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓	✓	✓
Mini pile construction works for LW-02 lift and staircase	✓	✓		
Ground improvement works at Sa Po Road	✓	✓		

Factors might affect the monitoring results	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓



Noise Monitoring Station				M5(A) – Prince Ritz			
Date	Measurement Period			Weather	L <sub>Aeq</sub> , dB(A)	L <sub>A10</sub> , dB(A)	L <sub>A90</sub> , dB(A)
01/11/2022	10:30	-	11:00	Sunny	72.2	73.7	69.6
07/11/2022	14:25	-	14:55	Sunny	72.8	74.1	70.4
18/11/2022	10:05	-	10:35	Sunny	72.6	73.9	70.2
24/11/2022	14:30	-	15:00	Cloudy	73.3	74.7	71.7
30/11/2022	9:40	-	10:10	Sunny	73.7	75.1	72.0
06/12/2022	10:30	-	11:00	Sunny	72.3	73.9	69.4
12/12/2022	13:15	-	13:45	Sunny	72.5	74.3	70.6
23/12/2022	9:15	-	9:45	Sunny	73.6	75.0	71.8
29/12/2022	14:30	-	15:00	Sunny	72.2	73.8	69.7
04/01/2023	10:30	-	11:00	Sunny	72.2	73.9	69.6
10/01/2023	14:30	-	15:00	Cloudy	72.8	74.7	70.3
16/01/2023	14:25	-	14:55	Cloudy	72.4	74.0	69.8
27/01/2023	10:21	-	10:51	Sunny	73.3	75.0	70.7



Major Construction Activities	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Construction works at Crowd Dispersal Route	✓			
Construction of DCS	✓	✓	✓	✓
Construction works for Road L16	✓	✓	✓	✓
Construction works for Olympic Avenue	✓	✓	✓	✓
Construction works for additional run-in at Road L7		✓	✓	✓
Construction of gantry footing at launching shaft for subway SB-01				✓
Dismantling of gantry crane at casting yard			✓	✓
ELS and excavation works at Sa Po Road			✓	✓
ELS and excavation works for lift and staircase of LW-02				✓
Post-piling tests and proof drilling for LW02 lift and staircase		✓	✓	
Pre-bored socket H-pile construction works for Slip Road S14	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	✓	✓	✓	✓
UU diversion at Sa Po Road under TTA Stage 2A	✓			
RC construction at launching shaft for subway SB-01	✓	✓	✓	✓
Construction works for Pedestrian Street No. 2	✓	✓	✓	
RC construction for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓	✓	✓
Mini pile construction works for LW-02 lift and staircase	✓	✓		
Ground improvement works at Sa Po Road	✓	✓		

Factors might affect the monitoring results	Reporting Period			
	Oct 2022	Nov 2022	Dec 2022	Jan 2023
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓

**Appendix E – Event and Action Plans for Construction Dust  
Monitoring, Construction Noise and Landscape and Visual Impact**

<b>Event and Action Plans for Construction Dust Monitoring</b>				
<b>Event</b>	<b>Action</b>			
	<b>ET</b>	<b>IEC</b>	<b>Supervisor / ER</b>	<b>Contractor</b>
Action Level being exceeded by one sampling	<ol style="list-style-type: none"> <li>1. Identify source and investigate the causes of exceedance;</li> <li>2. Inform Contractor, IEC and Supervisor /ER;</li> <li>3. Repeat measurement to confirm finding.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method.</li> </ol>	<ol style="list-style-type: none"> <li>1. Notify Contractor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Rectify any unacceptable practice;</li> <li>2. Amend working methods if appropriate.</li> </ol>
Action Level being exceeded by two or more consecutive sampling	<ol style="list-style-type: none"> <li>1. Identify source and investigate the causes of exceedance;</li> <li>2. Inform Contractor, IEC and Supervisor /ER;</li> <li>3. Increase monitoring frequency to daily;</li> <li>4. Discuss with IEC and Contractor on remedial actions required;</li> <li>5. Assess the effectiveness of Contractor's remedial actions;</li> <li>6. If exceedance continues, arrange meeting with IEC and Supervisor /ER;</li> <li>7. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss with ET and Contractor on possible remedial measures;</li> <li>4. Advise the Supervisor /ER on the effectiveness of the proposed remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Notify Contractor;</li> <li>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>4. Supervise implementation of remedial measures;</li> <li>5. Conduct meeting with ET and IEC if exceedance continues.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET and IEC on proper remedial actions;</li> <li>2. Submit proposals for remedial actions to Supervisor /ER and IEC within three working day of notification;</li> <li>3. Implement the agreed proposals;</li> <li>4. Amend proposal if appropriate.</li> </ol>
Limit Level being exceeded by one sampling	<ol style="list-style-type: none"> <li>1. Identify source and investigate the causes of exceedance;</li> <li>2. Inform Contractor, IEC, Supervisor /ER, and EPD;</li> <li>3. Repeat measurement to confirm finding;</li> <li>4. Assess effectiveness of</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss possible remedial measures with ET and Contractor;</li> <li>4. Advise the Supervisor /ER</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Notify Contractor;</li> <li>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Discuss with ET and IEC on proper remedial actions;</li> <li>3. Submit proposal for remedial actions to Supervisor /ER and IEC</li> </ol>

<b>Event and Action Plans for Construction Dust Monitoring</b>				
<b>Event</b>	<b>Action</b>			
	<b>ET</b>	<b>IEC</b>	<b>Supervisor / ER</b>	<b>Contractor</b>
	Contractor's remedial actions and keep EPD, IEC and Supervisor /ER informed of the results.	on the effectiveness of the proposed remedial measures.	implemented; 4. Supervise implementation of remedial measures; 5. Conduct meeting with ET and IEC if exceedance continues.	within three working days of notification; 4. Implement the agreed proposals.
Limit Level being exceeded by two or more consecutive sampling	<ol style="list-style-type: none"> <li>1. Notify IEC, Supervisor /ER, Contractor and EPD;</li> <li>2. Repeat measurement to confirm findings;</li> <li>3. Carry out analysis of Contractor's working procedures to identify source and investigate the causes of exceedance;</li> <li>4. Increase monitoring frequency to daily;</li> <li>5. Arrange meeting with IEC, Supervisor /ER and Contractor to discuss the remedial action to be taken;</li> <li>6. Assess effectiveness of Contractor's remedial actions and keep EPD, IEC and Supervisor /ER informed of the results;</li> <li>7. If exceedance stop, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET;</li> <li>2. Check Contractor's working method;</li> <li>3. Discuss with Supervisor /ER, ET, and Contractor on the potential remedial actions;</li> <li>4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the Supervisor /ER accordingly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Notify Contractor;</li> <li>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>4. Supervise implementation of remedial measures;</li> <li>5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated.</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Discuss with ET and IEC on proper remedial actions;</li> <li>3. Submit proposal for remedial actions to Supervisor /ER and IEC within three working days of notification;</li> <li>4. Implement the agreed proposals;</li> <li>5. Submit further remedial actions if problem still not under control;</li> <li>6. Stop the relevant portion of works as instructed by the Supervisor /ER until the exceedance is abated.</li> </ol>

Event and Action Plans for Construction Noise				
Event	Action			
	ET	IEC	Supervisor / ER	Contractor
Action Level being exceeded	<ol style="list-style-type: none"> <li>1. Notify Supervisor / ER, IEC and Contractor;</li> <li>2. Carry out investigation;</li> <li>3. Report the results of investigation to the IEC, Supervisor / ER and Contractor;</li> <li>4. Discuss with the IEC and Contractor on remedial measures required;</li> <li>5. Increase monitoring frequency to check mitigation effectiveness.</li> </ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified.)</p>	<ol style="list-style-type: none"> <li>1. Review the investigation results submitted by the ET;</li> <li>2. Review the proposed remedial measures submitted by the Contractor and advise the ER accordingly;</li> <li>3. Advise the Supervisor / ER on the proposed remedial measures.</li> </ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified.)</p>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>4. Supervise the implementation of remedial measures.</li> </ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified.)</p>	<ol style="list-style-type: none"> <li>1. Submit noise mitigation proposal to IEC and Supervisor / ER;</li> <li>2. Implement noise mitigation proposals.</li> </ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified.)</p>
Limit Level being exceeded	<ol style="list-style-type: none"> <li>1. Inform IEC, Supervisor /ER, Contractor and EPD;</li> <li>2. Repeat measurement to confirm findings;</li> <li>3. Increase monitoring frequency;</li> <li>4. Identify source and investigate the cause of exceedance;</li> <li>5. Carry out analysis of Contract's working procedure;</li> <li>6. Discuss remedial measures required with the IEC, Contractor and Supervisor /ER;</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss the potential remedial actions with Supervisor /ER, ET and Contractor;</li> <li>2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the Supervisor /ER accordingly.</li> </ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified.)</p>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>4. Supervise the implementation of remedial measures;</li> <li>5. If exceedance continues, consider stopping the Contractor to continue working on that portion of</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Submit proposals for remedial actions to IEC and Supervisor /ER within 3 working days of notification;</li> <li>3. Implement the agreed proposal;</li> <li>4. Submit further proposal if problem still not under control;</li> <li>5. Stop the relevant portion of works as instructed by the Supervisor /ER until the exceedance is abated.</li> </ol>

<b>Event and Action Plans for Construction Noise</b>				
<b>Event</b>	<b>Action</b>			
	<b>ET</b>	<b>IEC</b>	<b>Supervisor / ER</b>	<b>Contractor</b>
	<p>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD, and Supervisor /ER informed of the results;</p> <p>8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified.)</p>		<p>work which causes the exceedance until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified.)</p>	<p>(The above actions should be taken within 2 working days after the exceedance is identified.)</p>

<b>Event and Action Plans for Landscape and Visual Impact</b>				
<b>Event</b>	<b>Action</b>			
	<b>ET</b>	<b>IEC</b>	<b>Supervisor / ER</b>	<b>Contractor</b>
Design Check	<ol style="list-style-type: none"> <li>1. Check final design conforms to the requirements of EP and prepare report.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check report.</li> <li>2. Recommend remedial design if necessary.</li> </ol>	<ol style="list-style-type: none"> <li>1. Undertake remedial design if necessary.</li> </ol>	
Non-conformity on one occasion	<ol style="list-style-type: none"> <li>1. Identify Source.</li> <li>2. Inform IEC and Supervisor /ER.</li> <li>3. Discuss remedial actions with IEC, Supervisor /ER and Contractor.</li> <li>4. Monitor remedial actions until rectification has been completed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check report.</li> <li>2. Check Contractor's working method.</li> <li>3. Discuss with ET and Contractor on possible remedial measures.</li> <li>4. Advise Supervisor /ER on effectiveness of proposed remedial measures.</li> <li>5. Check implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Notify Contractor.</li> <li>2. Ensure remedial measures are properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Amend working methods.</li> <li>2. Rectify damage and undertake any necessary replacement.</li> </ol>
Repeated Non-conformity	<ol style="list-style-type: none"> <li>1. Identify Source.</li> <li>2. Inform IEC and Supervisor /ER.</li> <li>3. Increase monitoring frequency.</li> <li>4. Discuss remedial actions with IEC, Supervisor /ER and Contractor.</li> <li>5. Monitor remedial actions until rectification has been completed.</li> <li>6. If non-conformity stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring report.</li> <li>2. Check Contractor's working method.</li> <li>3. Discuss with ET and Contractor on possible remedial measures.</li> <li>4. Advise Supervisor /ER on effectiveness of proposed remedial measures.</li> <li>5. Supervise implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Notify Contractor.</li> <li>2. Ensure remedial measures are properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Amend working methods.</li> <li>2. Rectify damage and undertake any necessary replacement.</li> </ol>



**Appendix F – Waste Flow Table**

**MONTHLY SUMMARY WASTE FLOW TABLE FOR 2022 (YEAR)**

Month	Actual Quantities of Inert C&D Materials Generated Monthly								Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated A + B	Broken Concrete Generated A	General fill Generated B	Broken Concrete Reused in the Contract	General Fill Reused in the Contract	Reused in other Projects	Disposal as Public Fill	Import Fill	Metals	Paper / Cardboard Packaging	Plastics (3)	Chemical Waste	Other, e.g. general refuse
	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000m <sup>3</sup> ]
JAN	1.91	0.00	1.91	0.00	1.20	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.01
FEB	0.66	0.03	0.63	0.00	0.30	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
MAR	0.97	0.00	0.97	0.00	0.25	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.01
APR	0.97	0.00	0.97	0.00	0.30	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.01
MAY	0.37	0.01	0.36	0.00	0.22	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.01
JUNE	0.47	0.00	0.47	0.00	0.22	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.01
SUB-TOTAL	5.35	0.04	5.31	0.00	2.49	0.00	2.82	0.00	0.00	0.00	0.00	0.00	0.05
JULY	1.88	0.00	1.88	0.00	0.35	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.01
AUG	1.73	0.00	1.73	0.00	0.28	0.00	1.45	0.00	0.00	0.00	0.00	0.00	0.01
SEPT	0.42	0.00	0.42	0.00	0.11	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.01
OCT	0.56	0.00	0.56	0.00	0.13	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.01
NOV	0.58	0.00	0.58	0.00	0.19	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.01
DEC	0.25	0.00	0.25	0.00	0.09	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.01
<b>TOTAL</b>	<b>10.77</b>	<b>0.04</b>	<b>10.73</b>	<b>0.00</b>	<b>3.64</b>	<b>0.00</b>	<b>7.09</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.11</b>

**MONTHLY SUMMARY WASTE FLOW TABLE FOR 2023 (YEAR)**

Month	Actual Quantities of Inert C&D Materials Generated Monthly								Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated A + B	Broken Concrete Generated A	General fill Generated B	Broken Concrete Reused in the Contract	General Fill Reused in the Contract	Reused in other Projects	Disposal as Public Fill	Import Fill	Metals	Paper / Cardboard Packaging	Plastics (3)	Chemical Waste	Other, e.g. general refuse
	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000m <sup>3</sup> ]
JAN	0.67	0.00	0.67	0.00	0.09	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.01
FEB													
MAR													
APR													
MAY													
JUNE													
SUB-TOTAL	0.67	0.00	0.67	0.00	0.09	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.01
JULY													
AUG													
SEPT													
OCT													
NOV													
DEC													
TOTAL	0.67	0.00	0.67	0.00	0.09	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.01

**Appendix G – Environmental Mitigation Implementation Schedule  
(EMIS)**

EIA Ref	Recommended Mitigation Measures	Implementation			
Part B Water Quality		Not Observed	Yes	No	Remark
S8.8	Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. <del>Construction runoff related impacts associated with the above ground construction activities can be readily controlled through the use of appropriate mitigation measures which include use of sediment traps and adequate maintenance of drainage systems to prevent flooding and overflow</del>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Construction site should be provided with adequately designed perimeter channel and pre-treatment facilities and proper maintenance. <del>The boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94.</del>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Construction works should be programmed to minimise surface excavation works during the rainy season (April to September). All exposed earth areas should be completed as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Sediment tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m <sup>3</sup> capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. <del>The system capacity is flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.</del>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50 m <sup>3</sup> should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms. Particular attention should be paid to the control of silty surface runoff during storm events.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Oil interceptors should be provided in the drainage system and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor should have a bypass to prevent flushing during periods of heavy rain.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. <del>An adequately designed and located wheel washing bay should be provided at every site exit, and wash water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel wash bay to the public road should be paved with sufficient backfall toward the wheel wash bay to prevent vehicle tracking of soil and silty water to public roads and drains.</del>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S8.8	<i>Drainage</i> On-site drainage system should be installed prior to the commencement of other construction activities. Sediment traps should be installed in order to minimise the sediment loading of the effluent prior to discharge into foul sewers. There should be no direct discharge of effluent from the site into the sea.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage should be reinstated to its original condition when the construction work has finished or the temporary diversion is no longer required.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	All fuel tanks and storage areas should be provided with locks and be located on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank, to prevent spilled fuel oils from reaching the coastal waters of the Victoria Harbour WCZ	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	<i>Sewage Effluent</i> Construction work force sewage discharges on site are expected to be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage may need to be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets should be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor should also be responsible for waste disposal and maintenance practices.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	<i>Stormwater Discharges</i> Minimum distances of 100 m should be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	<i>Debris and Litter</i> In order to maintain water quality in acceptable conditions with regard to aesthetic quality, contractors should be required, under conditions of contract, to ensure that site management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EIA Ref	Recommended Mitigation Measures	Implementation			
	is optimised and that disposal of any solid materials, litter or wastes to marine waters does not occur				
S8.8	Construction Works at or in Close Proximity of Storm Culvert or Seafront The proposed works should preferably be carried out within the dry season where the flow in the drainage channel /storm culvert/ nullah is low.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	The use of less or smaller construction plants may be specified to reduce the disturbance to the bottom sediment at the drainage channel /storm culvert / nullah.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from any water courses during carrying out of the construction works.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Stockpiling of construction materials and dusty materials should be covered and located away from any water courses.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S8.8	Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S8.8	Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the waterfront, where practicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Mitigation measures to control site runoff from entering the nearby water environment should be implemented to minimize water quality impacts. Surface channels should be provided along the edge of the waterfront within the work sites to intercept the runoff.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Construction effluent, site run-off and sewage should be properly collected and/or treated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Any works site inside the storm water courses should be temporarily isolated, such as by placing of sandbags or silt curtains with lead edge at bottom and properly supported props to prevent adverse impact on the storm water quality.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Silt curtain may be installed around the construction activities at the seafront to minimize the potential impacts due to accidental spillage of construction materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert/drainage channel/sea.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S8.8	Supervisory staff should be assigned to station on site to closely supervise and monitor the works	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Part C Construction Noise Impact</b>		Not Observed	Yes	No	Remark
S7.8	Use of quiet PME, movable barriers for <del>Asphalt Paver, Breaker, Excavator and Hand-held breaker</del> and full enclosure for <del>Air Compressor, Bar Bender, Concrete Pump, Generator and Water Pump</del>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S7.9	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program. <del>Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program. Mobile plant, if any, should be sited as far away from NSRs as possible.</del>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Machines and plant (such as trucks) that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum. <del>Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.</del>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Part D Waste / Chemical Management</b>		Not Observed	Yes	No	Remark
S5.2	Prepare a Waste Management Plan, which becomes a part of the Environmental Management Plan, in accordance with the requirements stipulated in ETWB TC(W) No. 19/2005, approved by the Engineer/Supervising Officer of the Project based on current practices on construction sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Training of site personnel in site cleanliness, proper waste management and chemical waste handling procedures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Provision of sufficient waste disposal points and regular collection for waste. Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors. Separation of chemical wastes for special handling and appropriate treatment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S9.5	1)Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site 2)Training of site personnel in proper waste management and chemical waste handling procedures 3)Provision of sufficient waste disposal points and regular collection for disposal 4)Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers 5)A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

EIA Ref	Recommended Mitigation Measures	Implementation			
S9.5	Waste Reduction Measures 1) Sort C&D waste from demolition of the remaining structures to recover recyclable portions such as metals 2) Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal 3) Encourage collection of aluminum cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force 4) Any unused chemicals or those with remaining functional capacity should be recycled 5) Proper storage and site practices to minimize the potential for damage or contamination of construction materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S9.5	Construction and Demolition Material Mitigation measures and good site practices should be incorporated into contract document to control potential environmental impact from handling and transportation of C&D material. The mitigation measures include: 1) <del>Where it is unavoidable to have transient stockpiles of C&amp;D material within the Project work site pending collection for disposal, the transient stockpiles should be located away from waterfront or storm drains as far as possible</del> 2) <del>Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric</del> 3) <del>Skip hoist for material transport should be totally enclosed by impervious sheeting</del> 4) Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site 5) The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores 6) <del>The load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle</del> 7) <del>All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet</del>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S9.5	When delivering inert C&D material to public fill reception facilities, the material should consist entirely of inert construction waste and of size less than 250mm or other sizes as agreed with the Secretary of the Public Fill Committee. In order to monitor the disposal of the surplus C&D material at the designed public fill reception facility and to control fly tipping, a trip-ticket system as stipulated in the ETWB TCW No. 31/2004 "Trip Ticket System for Disposal of Construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S9.5	Chemical Waste After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals should be collected by a licensed collector for disposal at the CWTF or other licensed facility, in accordance with the <i>Waste Disposal (Chemical Waste) (General) Regulation</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Part E Landscape &amp; Visual</b>		Not Observed	Yes	No	Remark
S13.9	CM1 - All existing trees should be carefully protected during construction. <del>CM2 - Trees unavoidably affected by the works should be transplanted where practical. Detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBC 2/2004 and 3/2006. Final locations of transplanted trees should be agreed prior to commencement of the work.</del> CM3 - Control of night-time lighting. CM4 - Erection of decorative screen hoarding.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Part F Air Quality</b>		Not Observed	Yes	No	Remark
S6.8	<del>Stockpiling site(s) should be lined with impermeable sheeting and bunded.</del> Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S6.8	Misting for the dusty material should be carried out before being loaded into the vehicle.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S6.8	Material having the potential to create dust should not be loaded from a level higher than the side and tail boards and should be dampened and covered by a clean tarpaulin.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S6.8	The tarpaulin should be properly secured and should extend at least 300 mm over the edges of the sides and tailboards. The material should also be dampened if necessary before transportation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S6.8	<del>The vehicles should be restricted to maximum speed of 10 km per hour and confined haulage and delivery vehicle to designated roadways inside the site. On-site unpaved roads should be compacted and kept free of loose materials</del>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S6.8	Vehicle washing facilities should be provided at every vehicle exit point	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S6.8	The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S6.8	<del>Every main haul road should be sealed with concrete and kept clear of dusty materials or sprayed with water so as to maintain the entire road surface wet.</del>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

EIA Ref	Recommended Mitigation Measures	Implementation			
S6.8	Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the three sides.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
S6.8	Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
S6.5	8 times daily watering of the work site with active dust emitting activities.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



**Appendix H – Summaries of Environmental Complaint, Warning,  
Summon and Notification of Successful Prosecution**

**Reporting Period: November 2022 to January 2023**

<b>Contract No.</b>	<b>Record of Complaint (Yes/No)</b>	<b>Record of Warning (Yes/No)</b>	<b>Notification of Summons and Successful Prosecutions (Yes/No)</b>
ED/2018/05	No	No	No

**Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions upto reporting period**

<b>Contract No.</b>	<b>Record of Complaint</b>	<b>Record of Warning</b>	<b>Notification of Summons and Successful Prosecutions</b>
ED/2018/05	1	0	0