

Our ref: 14-7-2020

14-7-2020

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 15/2018

**Environmental Monitoring Works for Contract No. ED/2018/01 – Kai Tak Development – Stage 4
infrastructure at the former runway and south apron**

Submission of Quarterly EM&A Report (January to March 2020)

We are pleased to submit herewith quarterly EM&A report (January to March 2020) for your perusal and retention.

Thank you very much for your attention and please feel free to contact the undersigned should you require further information.

Yours faithfully,

For and on behalf of
Ka Shing Management Consultant Limited

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L.W.H.

Encl. Quarterly EM&A Report (January to March 2020)

**Quarterly Environmental Monitoring and Audit
Summary Report (January 2020 – March 2020)**
for
Contract No. ED/2018/01 –
Kai Tak Development – Stage 4 infrastructure at the
former runway and south apron

Contract No.: EDO 15/2018

(Version 1.2)

Certified By: _____



(Environmental Team Leader)

8 July 2020

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

By Post and E-mail

Attention: Mr. Clive Cheng

Dear Sir,

**Re: Contract No. ED/2018/01 – Kai Tak Development
Stage 4 Infrastructure at the Former Runway and South Apron**

Quarterly EM&A Summary Report for January 2020 to March 2020

Reference is made to the Environmental Team's submission of the Quarterly EM&A Summary Report for January 2020 to March 2020 (Version 1.2) certified by the ET Leader and provided to us via email on 7 July 2020.

Please be informed that we have no further comments on the captioned submission.

The ET Leader is reminded that it is the ET's responsibility to ensure the reported information be true, valid and correct as per Condition 3.4 of EP-337/2009, Condition 3.3 of EP-445/2013 and Condition 3.3 of EP-445/2013/A.

Thank you for your attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully,

For and on behalf of

Ramboll Hong Kong Limited



Manson Yeung

Independent Environmental Checker

c.c.	CEDD	Attn.: Mr. Ronald Siu	Fax: 2739 0076
	Ka Shing	Attn.: Mr. Chan Pang	By e-mail
	Penta-Ocean	Attn.: Mr. Daniel Ho	Fax: 2572 4080

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EXECUTIVE SUMMARY

1. This is the 1st Quarterly Environmental Monitoring & Audit (EM&A) Summary Report which summaries the findings of the EM&A Programme during the reporting period from 20 January 2020 to 31 March 2020 (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 undertaken during the reporting period included:

Table I Major construction activities in the reporting period

January 2020	February 2020	March 2020
- Ground investigation works	- Ground investigation works	- Ground investigation works
- Piling works for Bridge D3	- Underground Utilities	- Underground Utilities
- Installation of sheetpile for North Approach Ramp	- Detection	- Detection
- Excavation for North Depressed Road	- Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass	- Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass
	- Pumping Test at North Depressed Road Cofferdam	- Pumping Test at North Depressed Road Cofferdam
	- Construction of Bored Pile of Bridge D3	- Construction of Bored Pile of Bridge D3
	- ELS Installation & Excavation for North Depressed Road	- ELS Installation & Excavation for North Depressed Road

1. INTRODUCTION

Project Background

- 1.1 The Kai Tak Development (KTD) is located in the south-eastern 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/2018/01 - Kai Tak Development – stage 4 infrastructure at the former runway and south apron (The Project), comprises mainly the design and construction of a dual two-lane Road D3 (Metro Park Section), a single 2-lane Road L12d, a salt water pumping station, a sewage pumping station, landscaped deck and promenade above and adjoining Road D3 (Metro Park Section) respectively, some remaining road works at Road L14, noise barrier at Road D3A, and other associated works at the former runway and south apron. The proposed works are shown in Figure 1 and Figure 2. During the course of the Contract No. ED/2018/01, there may be modification of noise barriers in association with the construction of footbridges connecting to the landscaped deck of Road D3A by developers of adjacent lands (Figure 3). The proposed works and site boundary are shown in Figure 4.
- 1.3 Civil Engineering and Development Department (CEDD) had completed an Environmental Impact Assessment (EIA) and is the Permit Holder.
- 1.4 The construction work under ED/2018/01 comprises the EM&A Manuals (EIA Register Nos. AEIAR-130/2009 for Kai Tak Development and EIA Register Nos. AEIAR-170/2013 for Roads D3A and D4A) and Environmental Permit (EP) Nos. EP-337/2009, EP-445/2013 and Variation to the EP (VEP) No. EP-445/2013/A.
- 1.5 Air quality and noise monitoring has been proposed in the EM&A Manual with EIA Register Nos. AEIAR-130/2009 for Kai Tak Development while no air quality and noise monitoring are proposed in EM&A Manual with EIA Register Nos. AEIAR-170/2013 for Roads D3A and D4A.

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.	Fax No.
Civil Engineering and Development Department (CEDD)	Project Proponent	Mr. Ronald Siu	Senior Engineer	3579 2452	2739 0076
		Mr. Edwin Chan	Engineer	3579 2458	2739 0076
AECOM Asia Co. Ltd. (AECOM)	Supervisor (act as Engineers' Representative (ER) listed in EM&A Manual)	Mr. Clive Cheng	CRE	3911 4201	3911 4288
Ramboll Hong Kong Limited (Ramboll)	Independent Environmental Checker (IEC)	Mr. Ray Yan	IEC	3465 2836	3465 2899
Ka Shing Management Consultant Limited (Ka Shing)	Environmental Team (ET)	Mr. Chan Pang	ET Leader	6082 2973	2120 7752
Penta-Ocean Construction Co., Ltd. (Penta-Ocean)	Contractor	Mr. Tony Tang	Environmental Officer	9433 2628	3465 8898

Works Area and Construction Programme

1.7 The construction works commenced on 20 January 2020. 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

January 2020	February 2020	March 2020
- Ground investigation works	- Ground investigation works	- Ground investigation works
- Piling works for Bridge D3	- Underground Utilities	- Underground Utilities
- Installation of sheetpile for North Approach Ramp	- Detection	- Detection
- Excavation for North Depressed Road	- Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass	- Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass
	- Pumping Test at North Depressed Road Cofferdam	- Pumping Test at North Depressed Road Cofferdam
	- Construction of Bored Pile of Bridge D3	- Construction of Bored Pile of Bridge D3
	- ELS Installation & Excavation for North Depressed Road	- ELS Installation & Excavation for North Depressed Road

2. SUMMARY OF EM&A REQUIREMENTS AND MONITORING RESULTS

Monitoring Requirements

2.1 In accordance with EM&A Manuals (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 Three designated monitoring stations were selected for air quality monitoring programme. Impact air quality monitoring was conducted at three 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
AM3 - Sky Tower	Podium floor near T7
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Rooftop
AM7 – Hong Kong Children's Hospital	Rooftop

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
AM3 - Sky Tower	Podium floor near T7			
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Rooftop	- 24-hour average TSP	- 24 hours	- Once every 6 days
		- 1-hour	- 1 hour	- Three times

Air Monitoring Station	Location for Measurement	Parameter	Duration	Frequency
AM7 - Hong Kong Children's Hospital	Rooftop	average TSP		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
HVS Sampler	TE-5170 X c/w of TSP sampling inlet	3
Calibrator	TISCH TE-5025A	1
1-hour TSP Dust Meter	TSI Model AM510 SidePak Personal Aerosol Monitor	2
Wind Anemometer	Davis Vantage Pro2 Weather Station	1

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.
- The sampler was more than 20m from the dripline.
- 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 m³/min. and 1.7 m³/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. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing 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 Castco Testing Centre Limited for weighting.

2.15 Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature was between 25°C and 30°C and not vary by more than $\pm 3^\circ\text{C}$; the relative humidity (RH) was less than 50% and not vary by more than $\pm 5\%$. A convenient working RH is 40%.

Maintenance/Calibration

2.16 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

2.17 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, initial/final reading at each sampling location for data processing.
- Recorded any activities that may generate dust during measurement period.

Maintenance/Calibration

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

- To validity 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

2.19 Wind Anemometer was installed at the roof-top of AM7 - Hong Kong Children's Hospital with 10m above ground and clear of constructions or turbulence caused by the buildings to record wind speed and wind direction.

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

Impact Air Quality Action and Limit Levels

2.21 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	AM3	182	260
	AM4(A)	187	260
	AM7	181	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	AM3	297	500
	AM4(A)	326	500
	AM7	315	500

Impact Air Quality Monitoring results

2.22 Impact monitoring results for 24-hour average TSP and 1-hour average TSP levels at the

designed 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	January 2020		February 2020		March 2020		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, $\mu\text{g}/\text{m}^3$		
AM3	85	35 - 125	54	30 - 79	72	29 - 104	182	260
AM4(A)	53	40 - 70	58	25 - 115	88	40 - 112	187	260
AM7	52	31 - 78	52	30 - 73	62	21 - 104	181	260

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

Air Monitoring Station	January 2020		February 2020		March 2020		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, $\mu\text{g}/\text{m}^3$		
AM3	80	68 - 92	75	48-91	56	42-81	297	500
AM4(A)	75	64 - 85	75	43-98	53	38-72	326	500
AM7	74	63 - 89	81	64-98	64	46-85	315	500

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

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

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

2.26 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

2.27 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
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Rooftop (Façade)
M12 - Hong Kong Children's Hospital	Rooftop (Façade)

Noise Monitoring Parameters, Frequency and Duration

2.28 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
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Rooftop (Façade)	L_{Aeq} , L_{A10} and L_{A90}	30 - minutes measurement at each monitoring station between 0700 – 1900 hrs on normal weekdays (Monday to Saturday) at frequency of once per week.
M12 - Hong Kong Children's Hospital	Rooftop (Façade)		

Noise Monitoring Equipment

2.29 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
Sound Level Meter	RION NL52	2
Sound Level Calibrator	RION NC 74	1
Air Flowmeter	TSI TA440 Air Velocity	1

Monitoring Methodology and QA/QC Procedure

- 2.30 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.
- 2.31 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.
- 2.32 Turned on the sound level meter and check the battery, if too low, change new ones.
- 2.33 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.
- 2.34 Noise level was recorded.
- 2.35 Recorded any activities that may generate noise during measurement period.

Maintenance and Calibration

- 2.36 The microphone head of the sound level meter and calibrator was cleaned with a soft cloth at quarterly intervals.
- 2.37 The sound level meter and sound calibrator were calibrated annually.
- 2.38 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

2.39 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	M11	68.3	When one documented complaint is received.	75 dB(A)
	M12	61.9		

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

2.40 Impact noise monitoring results at the designed noise monitoring stations are summarized in Table 2.12.

Table 2.12 Summary of noise monitoring data during the reporting period

Noise Monitoring Station	January 2020		February 2020		March 2020		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)		
M11	66.6	64.5 – 68	67.4	64.8 – 69.2	69.0	68.4 – 69.4	When one documented complaint is received	75 dB(A)
M12	65.4	64.3 – 66.2	66.4	64.6 – 68.1	65.1	64.2 – 66.1		

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.

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

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

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

2.44 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

2.45 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 (January 2020) $\mu\text{g}/\text{m}^3$	Measured 24-hr average TSP in Reporting Month (February 2020) $\mu\text{g}/\text{m}^3$	Measured 24-hr average TSP in Reporting Month (March 2020) $\mu\text{g}/\text{m}^3$
		Scenario 1 (Mid 2009 to Mid 2013), $\mu\text{g}/\text{m}^3$	Scenario 2 (Mid 2013 to Late 2016), $\mu\text{g}/\text{m}^3$			
AM3 - Sky Tower	A40^	106	138	35 - 125	30 - 79	29 - 104
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	A43^	123	195	40 - 70	25 - 115	40 - 112
AM7 - Hong Kong Children's Hospital	PA60	NA	NA	31 - 78	30 - 73	21 - 104

Note:

^ Prediction results are given in the Table 3.13 of the EIA report EIA Register Nos. 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	Measured 1-hr average TSP in	Measured 1-hr average TSP in
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		Scenario 1 (Mid 2009 to Mid 2013), $\mu\text{g}/\text{m}^3$	Scenario 2 (Mid 2013 to Late 2016), $\mu\text{g}/\text{m}^3$	Reporting Month (January 2020) $\mu\text{g}/\text{m}^3$	Reporting Month (February 2020) $\mu\text{g}/\text{m}^3$	Reporting Month (March 2020) $\mu\text{g}/\text{m}^3$
AM3 - Sky Tower	A40	217 [^]	247 [^]	68 - 92	48 - 91	42 - 81
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	A43	283 [^]	409 [^]	64 - 85	43 - 98	38 - 72
AM7 – Hong Kong Children's Hospital	PA60	NA	NA	63 - 89	64 - 98	46 - 85

Note:

[^] Prediction results are given in the Table 3.13 of the EIA report EIA Register Nos. 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 (January 2020) $L_{Aeq, 30min}, \text{dB(A)}$	Measured Noise Level in Reporting Month (February 2020) $L_{Aeq, 30min}, \text{dB(A)}$	Measured Noise Level in Reporting Month (March 2020) $L_{Aeq, 30min}, \text{dB(A)}$
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	N18	50 – 76*	64.5 – 68	64.8 – 69.2	68.4 – 69.4
M12 - Hong Kong Children's Hospital	PN83, PN84, PN84A	NA	64.3 – 66.2	64.6 – 68.1	64.2 – 66.1

Note:

* Prediction results are given in the Table 3.20 of the EIA report EIA Register Nos. AEIAR-130/2009 for Kai Tak Development.

2.46 One 24-hour TSP monitoring results at AM3 on 21 January 2020 was recorded higher than the Scenario 1 (Mid 2009 to Mid 2013) prediction but lower than the Scenario 2 (Mid 2013 to Late 2016) in the EIA Report. Non-project related construction activities in the adjacent construction sites were observed during the reporting period (January 2020 to March 2020) and may affect the monitoring results. For February 2020 and March 2020, 24-hour TSP monitoring results at AM3 were recorded lower than the prediction in the EIA Report.

2.47 24-hour TSP monitoring results at AM4(A) recorded in the reporting period were lower than the prediction in the EIA Report.

2.48 No prediction in the EIA Report for 24-hour TSP monitoring results at AM7.

2.49 1-hour TSP monitoring results at AM3, AM4(A) recorded in the reporting period were recorded lower than the prediction in the EIA Report.

2.50 No prediction in the EIA Report for 1-hour TSP monitoring results at AM7.

2.51 Noise monitoring results at M11 recorded in the reporting period were lower than the prediction in the EIA Report.

2.52 No prediction in the EIA Report for noise monitoring results at M12.

3. LANDSCAPE AND VISUAL MONITORING

- 3.1 In accordance with EM&A Manuals (EIA Register Nos. AEIAR-130/2009 and AEIAR-170/2013), 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. 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.
- 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.

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 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	Recommendations / Actions	Close-out Date / Status
22 Jan 2020	No	NA	NA
6 Feb 2020	Observations: Dust suppression measures should be implemented on dusty road.	Actions taken: Water spraying were set regularly to minimize the dust emission.	Closed-out on 13 Feb 2020
13 Feb 2020	Reminder: Please make sure if marine mud is found in bored-pile construction, it is not allowed to be disposed of at any public fill reception facility.	Actions taken: The marine mud has been collected in bored-pile construction. It is not allowed to be disposed of at any public fill reception facility.	Closed-out on 21 Feb 2020
21 Feb 2020	No	No	NA
27 Feb 2020	Observation: The open stockpiles of construction materials on sites were not covered properly.	Actions taken: The open stockpiles of construction materials on sites were covered.	Closed-out 29 Feb 2020
5 Mar 2020	Observation: Accumulate wastes were observed.	Actions taken: C&D waste was removed.	Closed-out on 12 Mar 2020
12 Mar 2020	Observation: Large C&D materials were found at north apron.	Recommendation: When the C&D material are sent to public fill reception facilities, material shall be less than 250mm and checked by environmental officer.	Closed-out on 26 Mar 2020

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
19 Mar 2020	Observation: Large C&D materials were found at north apron.	Actions taken: C&D materials were removed.	Closed-out on 26 Mar 2020
19 Mar 2020	Observation: The open stockpiles of construction materials on sites were not covered properly.	Recommendation: The open stockpiles of construction materials on sites should be covered properly.	Closed-out 02 April 2020
26 Mar 2020	Observation: Dust suppression measures were not implemented on dusty road.	Recommendation: Dust suppression measures should be implemented on dusty road.	On-going
26 Mar 2020	Observation: The open stockpiles of construction materials on sites were not covered.	Actions taken: The open stockpiles of construction materials on sites were covered.	Closed-out 02 April 2020

Implementation Status of Environmental Mitigation Measures

5.4 The Contractor has implemented environmental mitigation measures and requirement as stated in the EIA reports, the EPs and the EM&A Manuals. The implementation status of the mitigation measures during the reporting period is summarized in Appendix G.

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		Action Taken
		Action Level	Limit Level	
1-hr TSP	Jan 2020	0	0	N/A
	Feb 2020	0	0	N/A
	Mar 2020	0	0	N/A
24-hr TSP	Jan 2020	0	0	N/A
	Feb 2020	0	0	N/A
	Mar 2020	0	0	N/A
Construction noise	Jan 2020	0	0	N/A
	Feb 2020	0	0	N/A
	Mar 2020	0	0	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 Notification from EPD	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
22 Jan 2020	No
6 Feb 2020	Dust suppression measures should be implemented on dusty road.
13 Feb 2020	Ensure marine mud is found in bored-pile construction, it is not allowed to be disposed of at any public fill reception facility.
21 Feb 2020	No
27 Feb 2020	The open stockpiles of construction materials on sites should be covered properly.
5 Mar 2020	Accumulate wastes should be cleared regularly.
12 Mar 2020	When the C&D material are sent to public fill reception facilities, material shall be less than 250mm and checked by environmental officer.
19 Mar 2020	C&D materials should be cleared regularly.
19 Mar 2020	The open stockpiles of construction materials on sites should be covered properly.

Inspection Date	Recommendations / Reminders
26 Mar 2020	Dust suppression measures should be implemented on dusty road.
26 Mar 2020	The open stockpiles of construction materials on sites should be covered properly.

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

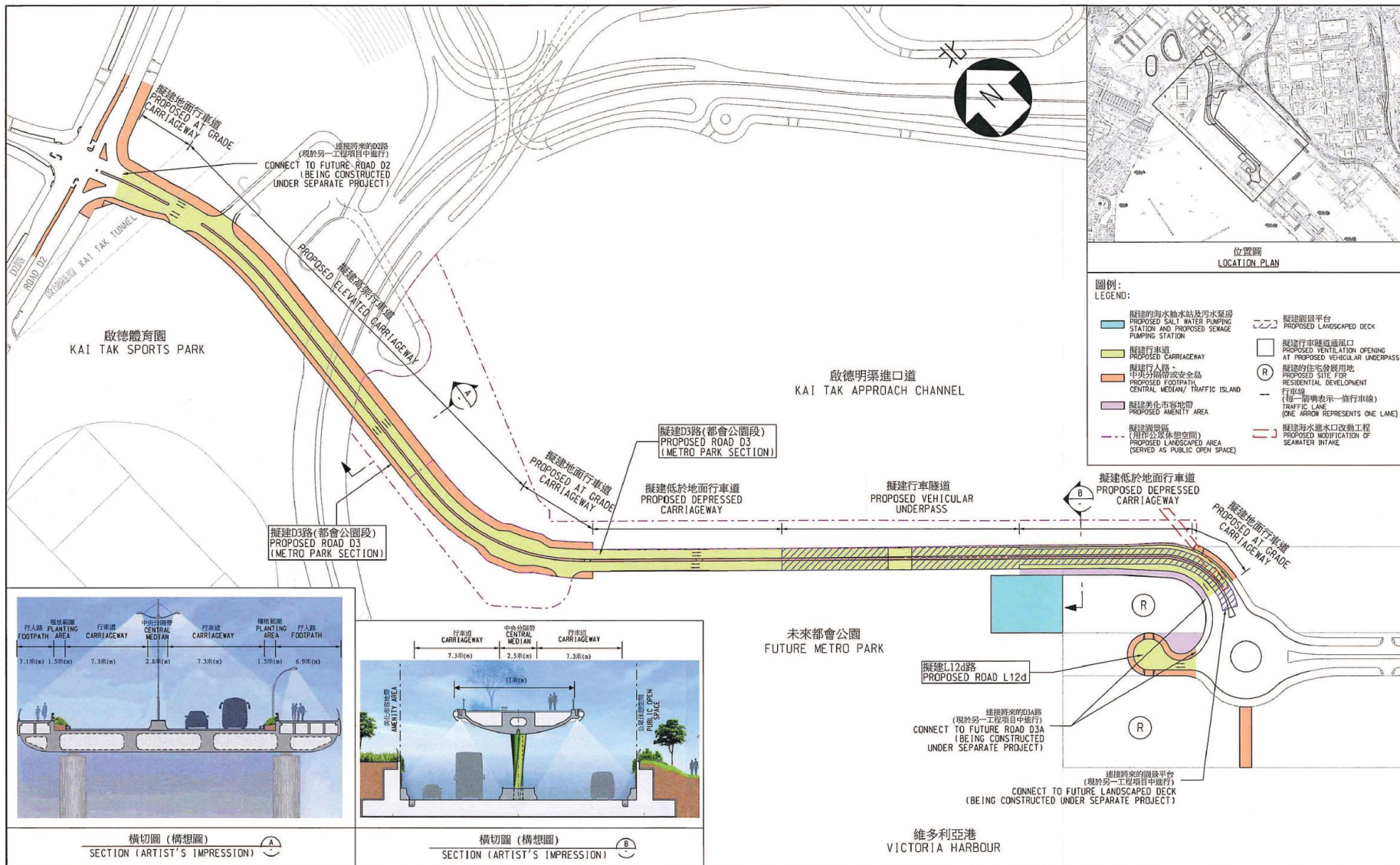


Figure 1 – Proposed works of Contract No. ED/2018/01

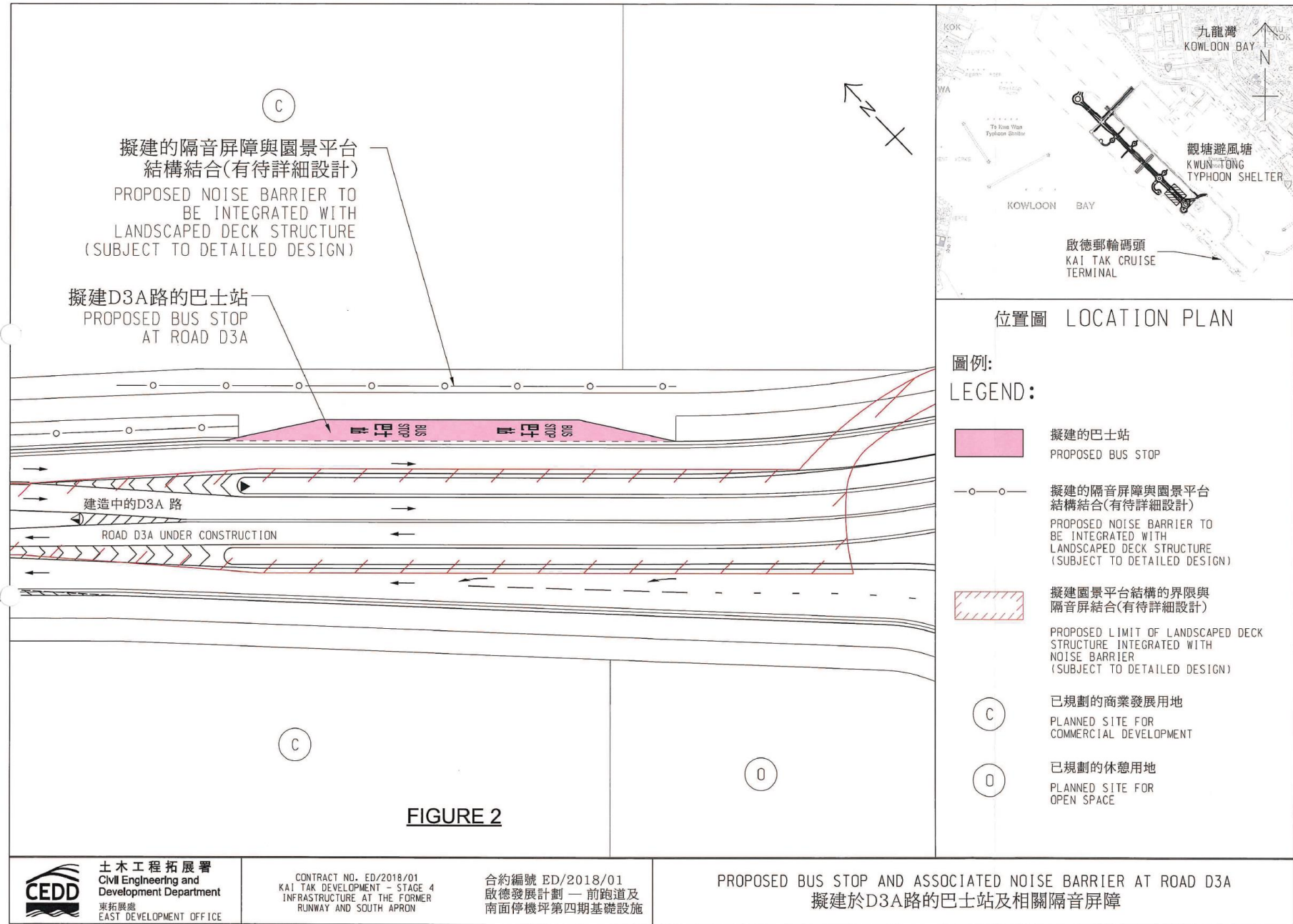


Figure 2 – Proposed Bus Stop And Associated Noise Barrier At Road D3A

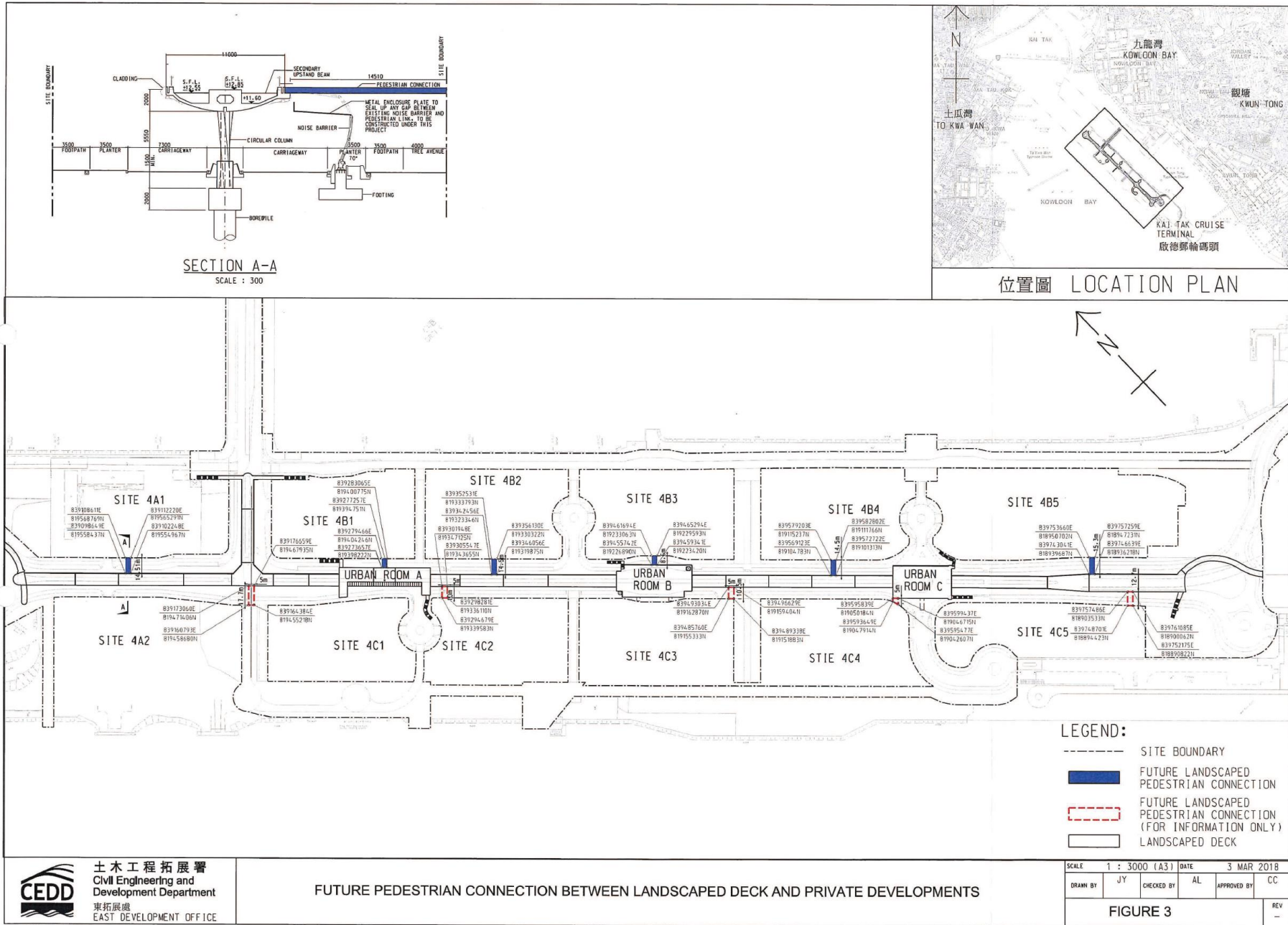


Figure 3 – Future Pedestrian Connection Between Landscaped Deck And Private Developments

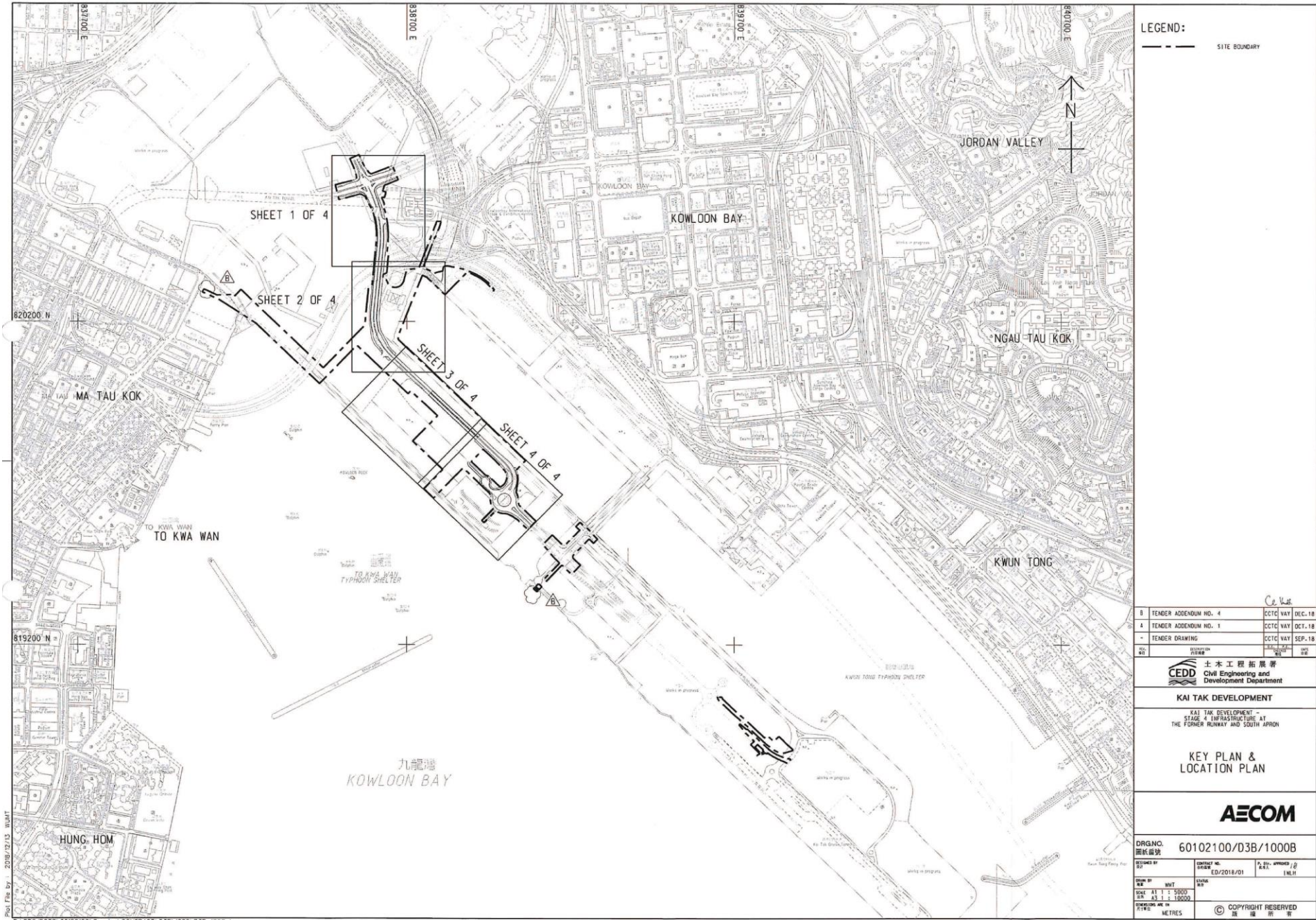


Figure 4 – Site Layout Plan

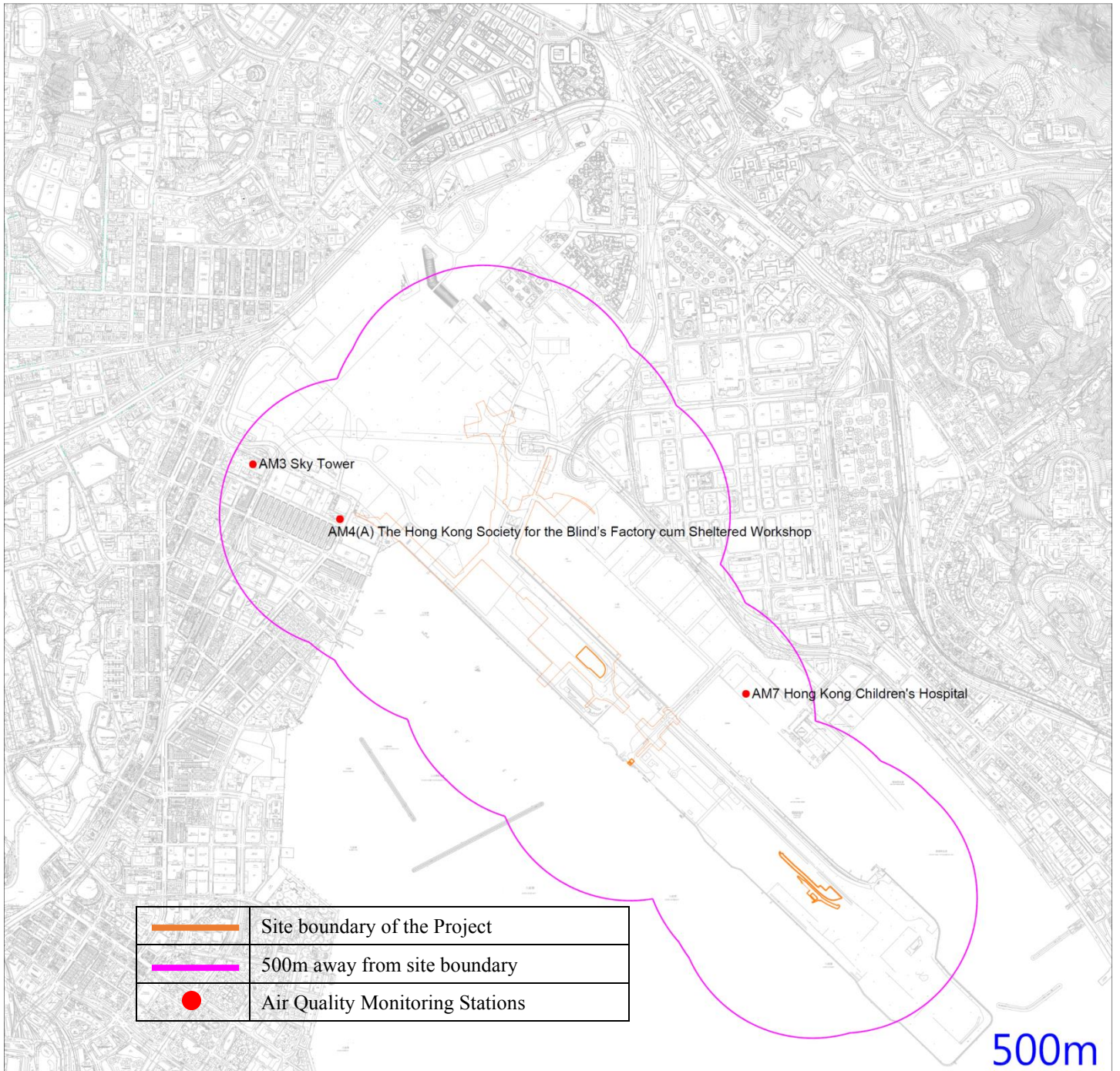


Figure 5 – Air Quality Monitoring Stations

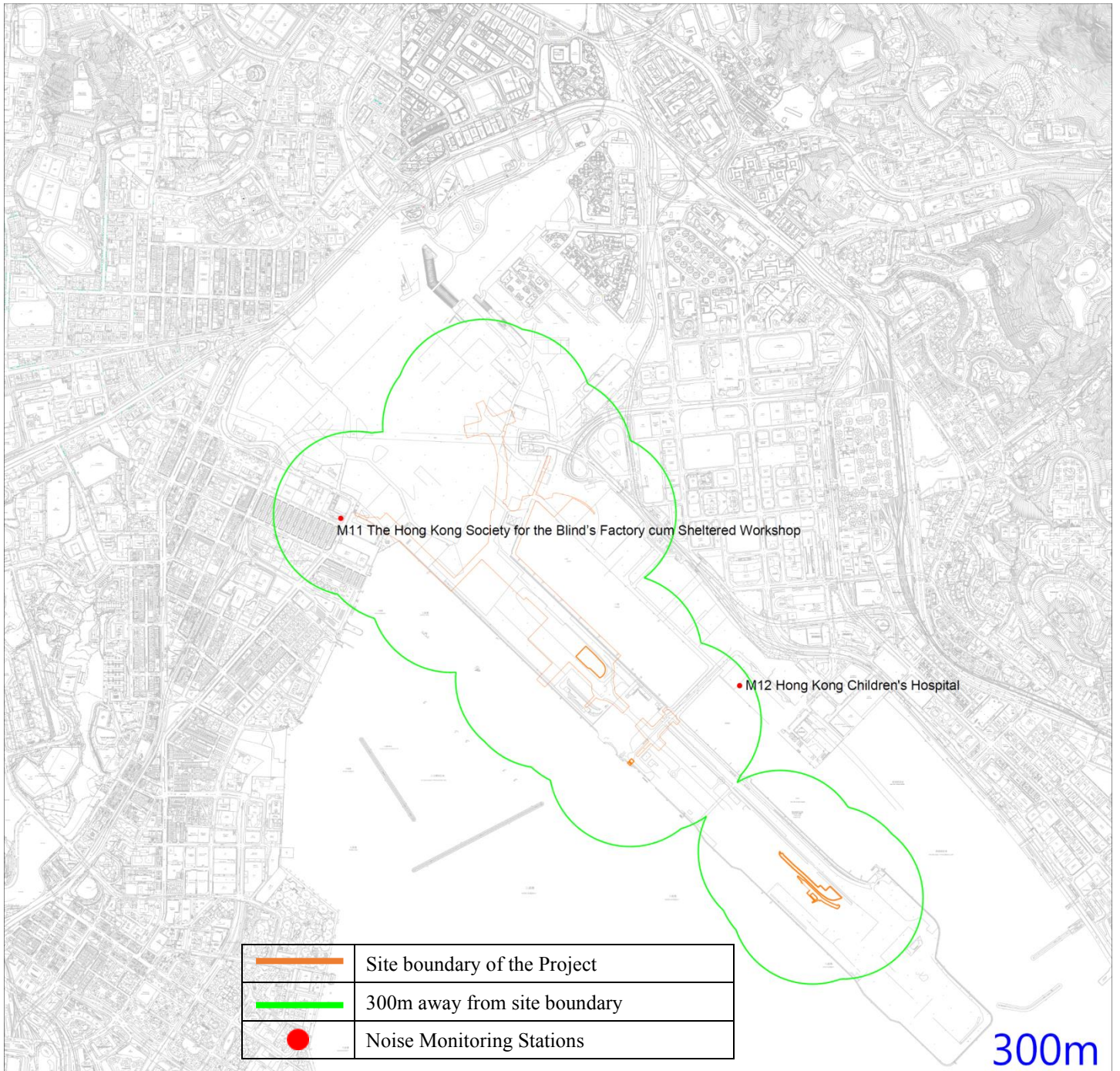
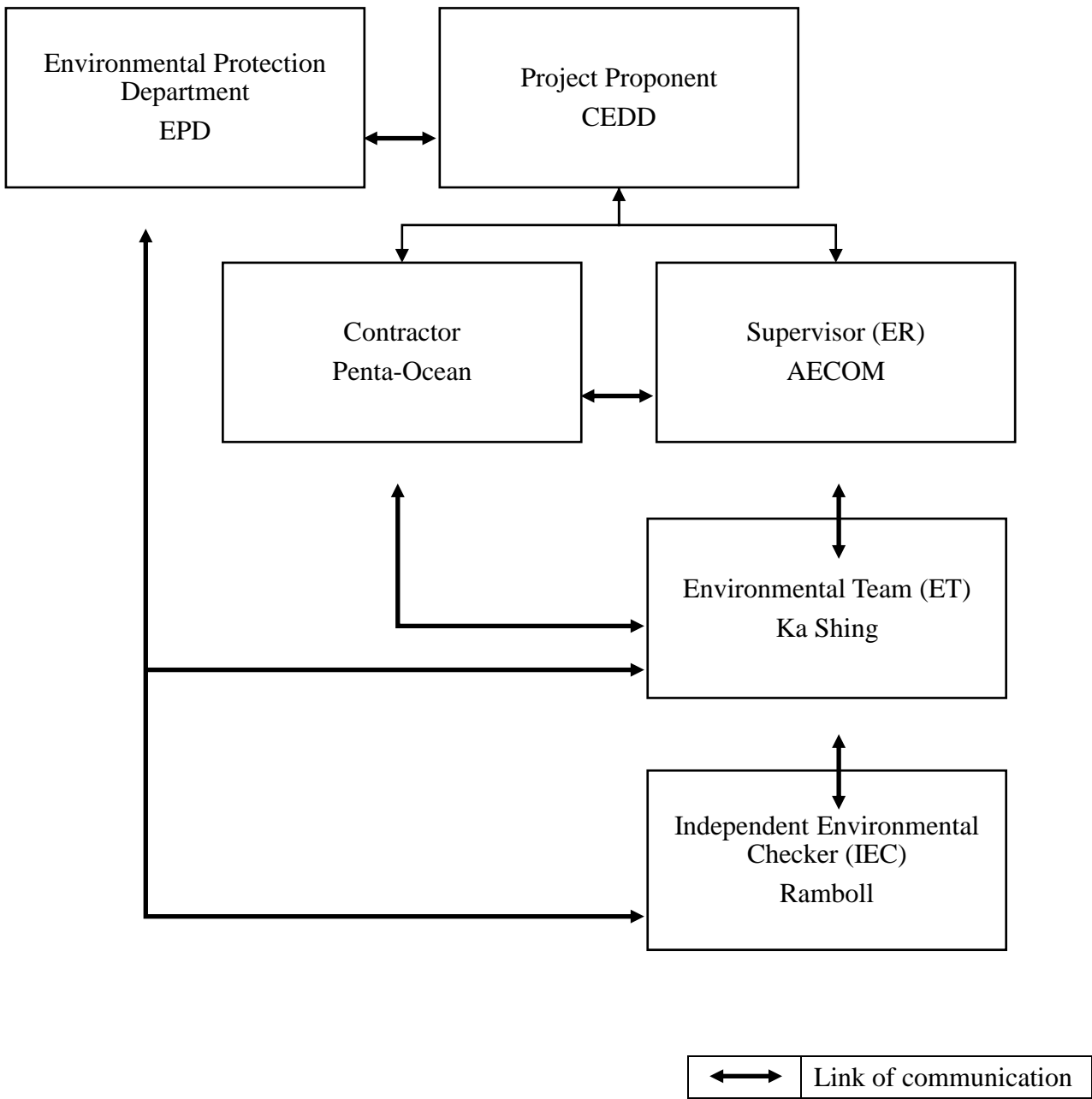


Figure 6 – Noise Monitoring Stations

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



Penta-Ocean Construction Co., Ltd

Contract No. ED/2018/01 –Kai Tak development –
stage 4 infrastructure at the former runway and south apron



緊急應變小組成員及聯絡電話 Emergency Team Contact List

NAME 姓名	TEAM MEMBER 成員	POSITION 職位	TEL. 電話
Emergency Hotline : 9317-0821			
何先生 Daniel HO	總隊長 Emergency Coordinator	地盤代表 Site Agent	9271-6455
林先生 C. K. LAM	副隊長 Asst. Emergency Coordinator	地盤總管 General Foreman	9869-9978
鄧先生 Nelson TANG	副隊長 (急救員) Asst. Emergency Coordinator (First Aider)	安全經理 Safety Manager	9630 1923 
蔣先生 Kay CHEUNG	副隊長 (急救員) Asst. Emergency Coordinator (First Aider)	安全主任 Safety Officer	9094-1110  
梁先生 Kevin LEUNG	隊員 (急救員) Member (First Aider)	安全督導員 Safety Supervisor	6015-7981 
鄧先生 Tony TANG	隊員 Member	助理地盤代表 Sub Agent	9433-2628
林先生 YS LAM	隊員 Member	電工 Electrician	9603-2722
Emergency Contact of Authorities / Utility Companies			
Authorities / Utility Companies 政府部門/公營機構名稱		Emergency Service Hotline 緊急服務召援電話	
<i>Ambulance Console (Hotline) 救護車總機 (Serious Injury)</i>		2735-3355	
<i>Fire Station (Ma Tau Chung) 消防處 (馬頭涌消防局)</i>		2711-0292	
<i>Police Station (Ngau Tau Kok) 警署 (牛頭角分區)</i>		3661-1626	
<i>LabourDept (Enquiry Hotline) 勞工處</i>		2717-1771	
<i>Environmental Protection Dept 環保處</i>		2802-3111	
<i>Marine Dept 海事處</i>			
Maritime Rescue Co-ordination Centre (24 hours)		2233-7999	
Marine Dept Harbour Division - Duty Officer		2885-9385	
<i>E&MD Dept 機電工程</i>		2882-8011 / 2333-3762	
<i>Highways Dept (24hrs) 路政處熱線</i>		2923-7766	
Utility Undertakers Companies			
China Light Power Ltd 中華電力	2728-8333	HK Observatory 香港天文台	2835-1473
Hong Kong Electric 港燈電力	2555-4999	Weather Enquiry 查詢天氣	1878-200
Town Gas 中華煤氣	2963-1811 / 2880-6999	Security Guard Service 保安	5725-2784
Water Supplies Dept 水務署	2824-5000	Drainage Services Dept 渠務署	2300-1110
PCCW Limited 電話公司	109		

REV. D

Appendix B – Construction Programme

ID	Task Name	Duration	Remaining Duration	Actual Start	Actual Finish	Plan Start	Plan Finish	Late Start	Late Finish	Physical % Complete	Free Slack	Time Risk Allowances (TRA)	Total Slack	2019	2020	2021	2022	2023	2024				
														H1	H2	H1	H2	H1	H2	H1	H2	H1	
311	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	May 15, 2020	July 13, 2020	December 13, 2021	February 10, 2022	0%	434 days	0 days	577 days		Sun September 22								
312	AIP for Box Culvert and Intake Structures (Draft)	60 days	60 days	NA	NA	October 30, 2019	December 28, 2019	May 31, 2020	July 29, 2020	0%	0 days	1 day	214 days										
313	AIP for Box Culvert and Intake Structures (Final)	38 days	38 days	NA	NA	December 29, 2019	February 4, 2020	November 13, 2021	December 20, 2021	0%	52 days	0.5 days	685 days										
314	DDA for Box Culvert and Intake Structures (Draft)	90 days	90 days	NA	NA	December 29, 2019	March 27, 2020	July 30, 2020	October 27, 2020	0%	0 days	1 day	214 days										
315	DDA for Box Culvert and Intake Structures (Final)	52 days	52 days	NA	NA	March 28, 2020	May 18, 2020	December 21, 2021	February 10, 2022	0%	490 days	1 day	633 days										
316	AIP for Remaining Works (Draft)	60 days	60 days	NA	NA	March 28, 2020	May 26, 2020	October 28, 2020	December 26, 2020	0%	0 days	1 day	214 days										
317	AIP for Remaining Works (Final)	38 days	38 days	NA	NA	May 27, 2020	July 3, 2020	November 13, 2021	December 20, 2021	0%	52 days	0.5 days	535 days										
318	DDA for Remaining Works (Draft)	90 days	90 days	NA	NA	May 27, 2020	August 24, 2020	September 22, 2021	December 20, 2021	0%	0 days	1 day	483 days										
319	DDA for Remaining Works (Final)	52 days	52 days	NA	NA	August 25, 2020	October 15, 2020	December 21, 2021	February 10, 2022	0%	340 days	1 day	483 days										
320	Elevated Landscape Deck Staircase & Associated Work	302 days	173.99 days	May 30, 2019	NA	May 30, 2019	March 26, 2020	May 30, 2019	May 5, 2020	0%	40 days		40 days										
321	Prepare AIP and ICE certification (Draft)	96 days	0 days	May 30, 2019	September 2, 2019	May 30, 2019	September 2, 2019	May 30, 2019	September 2, 2019	100%	0 days	3 days	0 days										
322	Submit & endorse by PM and Statutory Authorities/Gov. Dept	18 days	0 days	September 3, 2019	September 20, 2019	September 3, 2019	September 20, 2019	September 3, 2019	September 20, 2019	100%	0 days	1 days	0 days										
323	Prepare AIP and ICE certification (Final)	14 days	0 days	August 29, 2019	September 11, 2019	August 29, 2019	September 11, 2019	August 29, 2019	September 11, 2019	100%	0 days	0 days	0 days										
324	Prepare DDA and ICE certification (Draft)	52 days	46.9 days	September 14, 2019	NA	September 14, 2019	November 13, 2019	September 14, 2019	December 9, 2019	10%	0 days	1 day	26 days										
325	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	November 14, 2019	January 12, 2020	December 24, 2019	February 21, 2020	0%	0 days	0.5 days	40 days										
326	Prepare DDA for and ICE certification (Final)	14 days	14 days	NA	NA	January 13, 2020	January 26, 2020	February 22, 2020	March 6, 2020	0%	0 days	0 days	40 days										
327	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	January 27, 2020	March 26, 2020	March 7, 2020	May 5, 2020	0%	0 days	0 days	40 days										
328	Waterfront Promenade and At-grade Open Space	671 days	671 days	NA	NA	November 14, 2019	September 14, 2020	December 10, 2019	October 10, 2021	0%	0 days		26 days										
329	Prepare AIP for Observation Deck with Lift and Staircase and ICE certification (Draft)	61 days	61 days	NA	NA	November 14, 2019	January 13, 2020	December 10, 2019	February 8, 2020	0%	0 days	1 day	26 days										
330	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	January 14, 2020	March 13, 2020	March 17, 2021	May 15, 2021	0%	0 days	0.5 days	428 days										
331	Prepare AIP for Observation Deck with Lift and Staircase and ICE certification (Final)	14 days	14 days	NA	NA	March 14, 2020	March 27, 2020	May 16, 2021	May 29, 2021	0%	18 days	0 days	428 days										
332	Prepare DDA for Observation Deck with Lift and Staircase and ICE certification (Draft)	92 days	92 days	NA	NA	January 14, 2020	April 14, 2020	February 9, 2020	May 10, 2020	0%	0 days	1 day	26 days										
333	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	April 15, 2020	June 13, 2020	May 30, 2021	July 28, 2021	0%	0 days	0.5 days	410 days										
334	Prepare DDA for Observation Deck with Lift and Staircase and ICE certification (Final)	14 days	14 days	NA	NA	June 14, 2020	June 27, 2020	July 29, 2021	August 11, 2021	0%	0 days	0 days	410 days										
335	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	June 28, 2020	August 26, 2020	August 12, 2021	October 10, 2021	0%	384 days	0 days	410 days										
336	Prepare AIP for Remaining Works at Waterfront Promenade and ICE certification (Draft)	60 days	60 days	NA	NA	January 14, 2020	March 13, 2020	September 24, 2020	November 22, 2020	0%	0 days	1 day	254 days										
337	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	March 14, 2020	May 12, 2020	December 25, 2020	February 22, 2021	0%	0 days	0.5 days	286 days										
338	Prepare AIP for Remaining Works at Waterfront Promenade and ICE certification (Final)	10 days	10 days	NA	NA	May 13, 2020	May 22, 2020	February 23, 2021	March 4, 2021	0%	0 days	0 days	286 days										
339	Prepare DDA for Remaining Works at Waterfront Promenade and ICE certification (Draft)	90 days	90 days	NA	NA	May 23, 2020	August 20, 2020	March 5, 2021	June 2, 2021	0%	0 days	1 day	286 days										
340	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	August 21, 2020	October 19, 2020	June 3, 2021	August 1, 2021	0%	0 days	0.5 days	286 days										
341	Prepare DDA for Remaining Works at Waterfront Promenade and ICE certification (Final)	10 days	10 days	NA	NA	October 20, 2020	October 29, 2020	August 2, 2021	August 11, 2021	0%	0 days	0 days	286 days										
342	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	October 30, 2020	December 28, 2020	August 12, 2021	October 10, 2021	0%	260 days	0 days	286 days										
343	AIP for Cladding Desing of Landscape Deck, Lifts and associated Works (Draft)	60 days	60 days	NA	NA	October 28, 2020	December 26, 2020	November 23, 2020	January 21, 2021	0%	0 days	1 day	26 days										
344	AIP for Cladding Desing of Landscape Deck, Lifts and associated Works (Final)	38 days	38 days	NA	NA	December 27, 2020	February 2, 2021	July 13, 2021	August 19, 2021	0%	52 days	0.5 days	198 days										
345	DDA for Cladding Desing of Landscape Deck, Lifts and associated Works (Draft)	90 days	90 days	NA	NA	December 27, 2020	March 26, 2021	May 22, 2021	August 19, 2021	0%	0 days	1 day	146 days										
346	DDA for Cladding Desing of Landscape Deck, Lifts and associated Works (Final)	52 days	52 days	NA	NA	March 27, 2021	May 17, 2021	August 20, 2021	October 10, 2021	0%	120 days	1 day	146 days										
347	AIP for Water Works - Waterfront Promenade and at grade Open Space (Draft)	60 days	60 days	NA	NA	December 27, 2020	February 24, 2021	January 22, 2021	March 22, 2021	0%	0 days	1 day	26 days										
348	AIP for Water Works - Waterfront Promenade and at grade Open Space (Final)	38 days	38 days	NA	NA	February 25, 2021	April 3, 2021	July 13, 2021	August 19, 2021	0%	52 days	0.5 days	138 days										
349	DDA for Water Works - Waterfront Promenade and at grade Open Space (Draft)	90 days	90 days	NA	NA	February 25, 2021	May 25, 2021	May 22, 2021	August 19, 2021	0%	0 days	1 day	86 days										
350	DDA for Water Works - Waterfront Promenade and at grade Open Space (Final)	52 days	52 days	NA	NA	May 26, 2021	July 16, 2021	August 20, 2021	October 10, 2021	0%	60 days	1 day	86 days										
351	AIP for Balustrade and Railing of Promenade, Open Space and Associated Works (Draft)	60 days	60 days	NA	NA	February 25, 2021	April 25, 2021	March 23, 2021	May 21, 2021	0%	0 days	1 day	26 days										
352	AIP for Balustrade and Railing of Promenade, Open Space and Associated Works (Final)	38 days	38 days	NA	NA	April 26, 2021	June 2, 2021	July 13, 2021	August 19, 2021	0%	52 days	0.5 days	78 days										

Title: Revised Programme- ED/2018/01 with Progress Update as of 22-Sep-19
 Critical Split Task Split
 Critical Progress Task Progress
 Manual Task
 Start-only
 Finish-only
 Duration-only
 Baseline
 Baseline Split
 Baseline Milestone
 Milestone
 Summary Progress
 Summary
 Manual Summary
 Project Summary
 External Tasks
 External Milestone
 Inactive Task
 Inactive Milestone
 Inactive Summary
 Deadline
 Baseline Summary

ID	Task Name	Duration	Remaining Duration	Actual Start	Actual Finish	Plan Start	Plan Finish	Late Start	Late Finish	Physical % Complete	Free Slack	Time Risk Allowances (TRA)	Total Slack	2019	2020	2021	2022	2023	2024				
														H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
353	DDA for Balustrade and Railing of Promenade, Open Space and Associated Works (Draft)	90 days	90 days	NA	NA	April 26, 2021	July 24, 2021	May 22, 2021	August 19, 2021	0%	0 days	1 day	26 days										
354	DDA for Balustrade and Railing of Promenade, Open Space and Associated Works (Final)	52 days	52 days	NA	NA	July 25, 2021	September 14, 2021	August 20, 2021	October 10, 2021	0%	0 days	1 day	26 days										
355	Landscaping works	457 days	457 days	NA	NA	March 29, 2020	June 28, 2021	April 24, 2020	November 15, 2022	0%	26 days		26 days										
356	Prepare AIP for Roadside Landscaping Softworks and ICE certification (Draft)	61 days	61 days	NA	NA	March 29, 2020	May 28, 2020	April 24, 2020	June 23, 2020	0%	0 days	1 day	26 days										
357	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	May 29, 2020	July 27, 2020	April 22, 2022	June 20, 2022	0%	0 days	0.5 days	693 days										
358	Prepare AIP for roadside landscaping softworks and ICE certification (Final)	14 days	14 days	NA	NA	July 28, 2020	August 10, 2020	June 21, 2022	July 4, 2022	0%	18 days	0 days	693 days										
359	Prepare DDA for Roadside Landscaping Softworks and ICE certification (Draft)	92 days	92 days	NA	NA	May 29, 2020	August 28, 2020	June 24, 2020	September 23, 2020	0%	0 days	1 day	26 days										
360	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	August 29, 2020	October 27, 2020	July 5, 2022	September 2, 2022	0%	0 days	0.5 days	675 days										
361	Prepare DDA for Roadside Landscaping Softworks and ICE certification (Final)	14 days	14 days	NA	NA	October 28, 2020	November 10, 2020	September 3, 2022	September 16, 2022	0%	0 days	0 days	675 days										
362	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	November 11, 2020	January 9, 2021	September 17, 2022	November 15, 2022	0%	587 days	0 days	675 days										
363	Prepare AIP for irrigation system for all landscaping works and ICE certification (Draft)	60 days	60 days	NA	NA	August 29, 2020	October 27, 2020	September 24, 2020	November 22, 2020	0%	0 days	1 day	26 days										
364	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	October 28, 2020	December 26, 2020	March 17, 2022	May 15, 2022	0%	0 days	0.5 days	505 days										
365	Prepare AIP for irrigation system for all landscaping works and ICE certification (Final)	10 days	10 days	NA	NA	December 27, 2020	January 5, 2021	May 16, 2022	May 25, 2022	0%	0 days	0 days	505 days										
366	Prepare DDA for irrigation system for all landscaping works and ICE certification (Draft)	90 days	90 days	NA	NA	January 6, 2021	April 5, 2021	May 26, 2022	August 23, 2022	0%	0 days	1 day	505 days										
367	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	April 6, 2021	June 4, 2021	August 24, 2022	October 22, 2022	0%	0 days	0.5 days	505 days										
368	Prepare DDA for irrigation system for all landscaping works and ICE certification (Final)	10 days	10 days	NA	NA	June 5, 2021	June 14, 2021	October 23, 2022	November 1, 2022	0%	0 days	0 days	505 days										
369	Submit & endorse by PM and Statutory Authorities/Gov. Dept	14 days	14 days	NA	NA	June 15, 2021	June 28, 2021	November 2, 2022	November 15, 2022	0%	417 days	0 days	505 days										
370	Work Stage/ Phase - Planned Completion	1394 days	1394 days	NA	NA	August 4, 2020	May 29, 2024	August 7, 2020	May 29, 2024	0%	0 days		0 days										
371	Section 1	0 days	0 days	NA	NA	March 1, 2022	March 1, 2022	March 1, 2022	March 1, 2022	0%	0 days	0 days	0 days										
372	Section 2	0 days	0 days	NA	NA	May 26, 2021	May 26, 2021	June 2, 2021	June 2, 2021	0%	6 days	0 days	6 days										
373	Section 3	0 days	0 days	NA	NA	October 28, 2021	October 28, 2021	November 2, 2021	November 2, 2021	0%	4 days	0 days	4 days										
374	Section 4	0 days	0 days	NA	NA	May 17, 2023	May 17, 2023	May 30, 2023	May 30, 2023	0%	10 days	0 days	10 days										
375	Section 5	0 days	0 days	NA	NA	June 28, 2021	June 28, 2021	July 5, 2021	July 5, 2021	0%	5 days	0 days	5 days										
376	Section 6	0 days	0 days	NA	NA	May 30, 2023	May 30, 2023	May 30, 2023	May 30, 2023	0%	0 days	0 days	0 days										
377	Section 7	0 days	0 days	NA	NA	May 29, 2024	May 29, 2024	May 29, 2024	May 29, 2024	0%	0 days	0 days	0 days										
378	Section 8	0 days	0 days	NA	NA	November 24, 2021	November 24, 2021	December 2, 2021	December 2, 2021	0%	7 days	0 days	7 days										
379	Section 9	0 days	0 days	NA	NA	June 25, 2021	June 25, 2021	July 5, 2021	July 5, 2021	0%	7 days	0 days	7 days										
380	Section 10	0 days	0 days	NA	NA	May 18, 2023	May 18, 2023	May 30, 2023	May 30, 2023	0%	9 days	0 days	9 days										
381	KD1	0 days	0 days	NA	NA	August 4, 2020	August 7, 2020	August 7, 2020	August 7, 2020	0%	3 days	0 days	3 days										
382	KD2	0 days	0 days	NA	NA	March 29, 2021	March 29, 2021	April 18, 2021	April 18, 2021	0%	14 days	0 days	14 days										
383	KD3	0 days	0 days	NA	NA	May 21, 2021	May 21, 2021	June 1, 2021	June 1, 2021	0%	9 days	0 days	9 days										
384	KD4	0 days	0 days	NA	NA	January 31, 2022	January 31, 2022	January 31, 2022	January 31, 2022	0%	0 days	0 days	0 days										
385	KD5	0 days	0 days	NA	NA	September 17, 2021	September 17, 2021	September 17, 2021	September 17, 2021	0%	0 days	0 days	0 days										
386	KD6	0 days	0 days	NA	NA	December 14, 2021	December 14, 2021	December 29, 2021	December 29, 2021	0%	11 days	0 days	11 days										
387	KD7	0 days	0 days	NA	NA	May 27, 2022	May 27, 2022	June 3, 2022	June 3, 2022	0%	5 days	0 days	5 days										
388	Construction Works	1499 days	1491.94 days	May 16, 2019	NA	May 16, 2019	May 29, 2024	May 16, 2019	May 29, 2024	0%	0 days		0 days										
389	Office Accommodation	53 days	32 days	August 8, 2019	NA	August 8, 2019	October 31, 2019	August 8, 2019	January 10, 2020	40%	58 days	1 day	58 days										
390	Procurement of Materials and Equipments	509 days	509 days	NA	NA	November 4, 2019	July 23, 2021	November 26, 2019	July 27, 2022	0%	19 days		19 days										
398	Excavation Permit	297 days	297 days	NA	NA	October 18, 2019	October 16, 2020	November 22, 2020	November 21, 2021	0%	326 days		326 days										
400	Haul Road Diversion 3m wide within Kai Tak Sport Part	152 days	152 days	NA	NA	November 1, 2019	March 31, 2020	December 30, 2023	May 29, 2024	0%	1520 d...		1520 d...										
401	Section 1	831 days	825.54 days	May 16, 2019	NA	May 16, 2019	March 1, 2022	May 16, 2019	May 29, 2024	0%	668 days		668 days										
402	Agree Interface Coordination Plan with CKR & KTSP	14 days	0 days	August 27, 2019	September 11, 2019	August 27, 2019	September 11, 2019	August 27, 2019	September 11, 2019	100%	0 days	0 days	0 days										
403	Ground Investigation	60 days	52 days	September 12, 2019	NA	September 12, 2019	November 23, 2019	September 12, 2019	January 10, 2020	0%	38 days		38 days										
404	GI Work	60 days	52 days	September 12, 2019	NA	September 12, 2019	November 23, 2019	September 12, 2019	January 10, 2020	13%	38 days	0.5 days	38 days										
405	Part 1 - Junction Modification Rd L6 & D2	80 days	80 days	NA	NA	November 22, 2021	March 1, 2022	November 22, 2021	March 1, 2022	0%	0 days		0 days										
406	Break up existing pavement and traffic island	12 days	12 days	NA	NA	November 22, 2021	December 4, 2021	November 22, 2021	December 4, 2021	0%	0 days	0 days	0 days										
407	Utility ducting laying (by others)	25 days	25 days	NA	NA	December 6, 2021	January 6, 2022	December 6, 2021	January 6, 2022	0%	0 days	1 days	0 days										
408	Trim formation and lay sub base	7 days	7 days	NA	NA	December 13, 2021	December 20, 2021	December 13, 2021	December 20, 2021	0%	0 days	0 days	0 days										
409	Lay kerb	12 days	12 days	NA	NA	December 21, 2021	January 6, 2022	December 21, 2021	January 6, 2022	0%	0 days	0 days	0 days										
410	Construct pedestrian street/ footpath	7 days	7 days	NA	NA	January 7, 2022	January 14, 2022	January 7, 2022	January 14, 2022	0%	0 days	0 days	0 days										
411	Install central median	12 days	12 days	NA	NA	January 15, 2022	January 28, 2022	January 15, 2022	January 28, 2022	0%	0 days	0 days	0 days										
412	Concrete infill between profile barrier	4 days	4 days	NA	NA	January 29, 2022	February 5, 2022	January 29, 2022	February 5, 2022	0%	0 days	0 days	0 days										
413	Road pavement	5 days	5 days	NA	NA	February 7, 2022	February 11, 2022	February 7, 2022	February 11, 2022	0%	0 days	0 days	0 days										
414	Install street furniture	15 days	15 days	NA	NA	February 12, 2022	March 1, 2022	February 12, 2022	March 1, 2022	0%	0 days	1 days	0 days										
415	Part 1 - Road D3 CH1000-1087	269 days	269 days	NA	NA	January 5, 2021	November 29, 2021	February 25, 2021	March 1, 2022	0%	41 days		41 days										

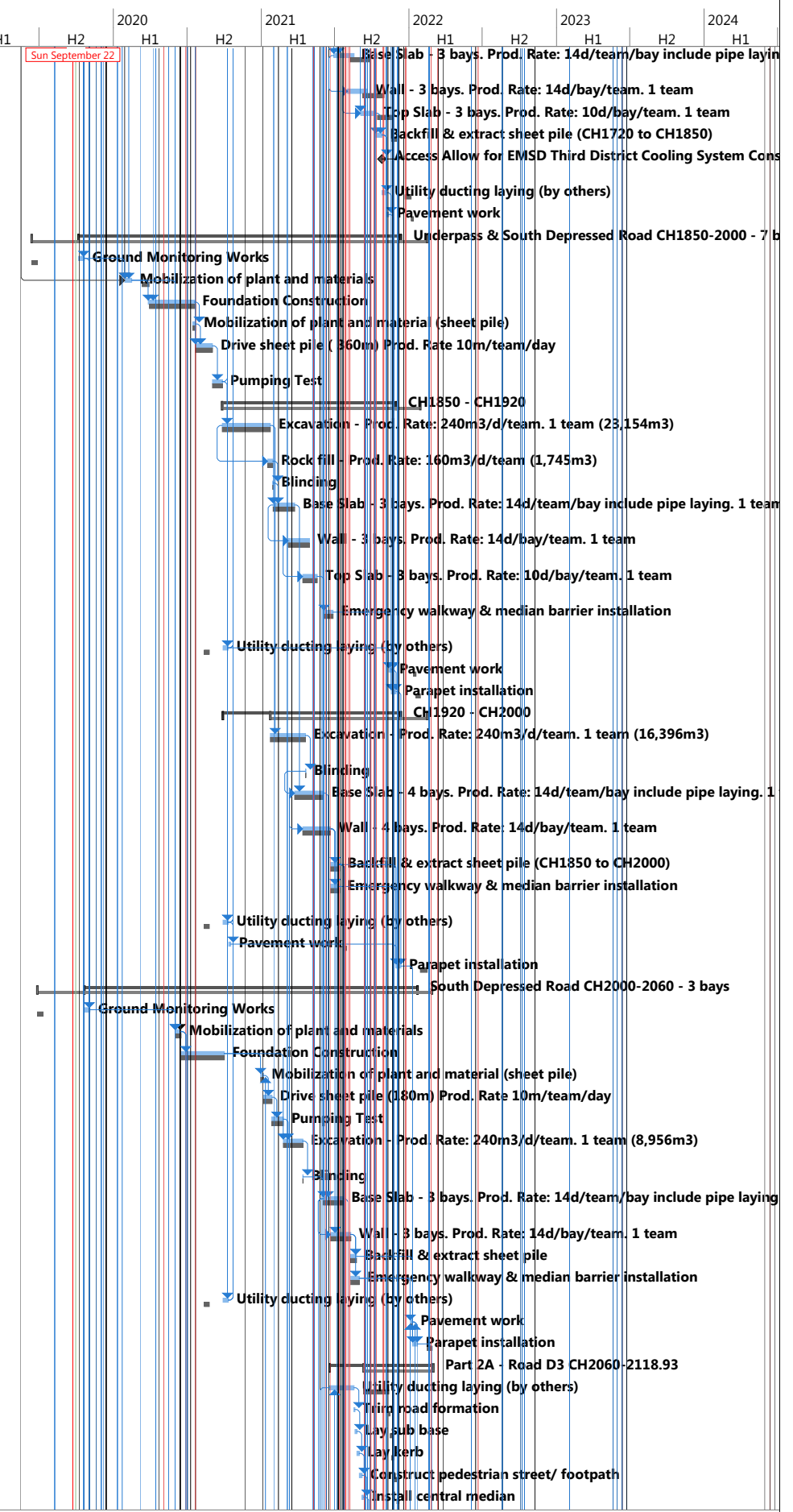
Title: Revised Programme- ED/2018/01 with Progress Update as of 22-Sep-19
 Critical Split: ----- Split: -----
 Critical Progress: ----- Task Progress: -----
 Manual Task: ----- Start-only: -----
 Duration-only: ----- Finish-only: -----
 Baseline: ----- Baseline Milestone: -----
 Baseline Split: ----- Milestone: -----
 Summary: ----- External Tasks: -----
 Manual Summary: ----- External Milestone: -----
 Project Summary: ----- Inactive Task: -----
 Inactive Milestone: ----- Baseline Summary: -----
 Inactive Summary: ----- Deadline: -----

ID	Task Name	Duration	Remaining Duration	Actual Start	Actual Finish	Plan Start	Plan Finish	Late Start	Late Finish	Physical % Complete	Free Slack	Time Risk Allowances (TRA)	Total Slack	2019	2020	2021	2022	2023	2024		
														H1	H2	H1	H2	H1	H2	H1	
416	Allow Access between CH1000 and CH1087 for EMSD Thied District Cooling System for Associated Pipeline Laying (Assume the DCS Pipeline Lay within CH1010 and Ch1087 Area)	0 days	0 days	NA	NA	January 5, 2021	January 5, 2021	February 25, 2021	February 25, 2021	0%	26 days		51 days			Sun September 22					
417	Between CH1000 and CH1087 Area Handover Back from EMSD third District Cooling System Contractor	0 days	0 days	NA	NA	July 30, 2021	July 30, 2021	August 24, 2021	August 24, 2021	0%	25 days		25 days								
418	Utility ducting laying (by others)	26 days	26 days	NA	NA	August 24, 2021	September 23, 2021	August 24, 2021	September 23, 2021	0%	0 days	2 days	0 days								
419	Trim road formation	3 days	3 days	NA	NA	September 24, 2021	September 27, 2021	September 24, 2021	September 27, 2021	0%	0 days	0 days	0 days								
420	Lay sub base	7 days	7 days	NA	NA	September 28, 2021	October 6, 2021	September 28, 2021	October 6, 2021	0%	0 days	0 days	0 days								
421	Lay kerb	12 days	12 days	NA	NA	October 7, 2021	October 21, 2021	October 7, 2021	October 21, 2021	0%	0 days	0 days	0 days								
422	Construct pedestrian street/ footpath	7 days	7 days	NA	NA	October 22, 2021	October 29, 2021	October 22, 2021	October 29, 2021	0%	0 days	0 days	0 days								
423	Install central median	10 days	10 days	NA	NA	October 30, 2021	November 10, 2021	October 30, 2021	November 10, 2021	0%	0 days	0 days	0 days								
424	Concrete infill between profile barrier	4 days	4 days	NA	NA	November 11, 2021	November 15, 2021	November 11, 2021	November 15, 2021	0%	0 days	0 days	0 days								
425	Road pavement	5 days	5 days	NA	NA	November 16, 2021	November 20, 2021	November 16, 2021	November 20, 2021	0%	0 days	0 days	0 days								
426	Install street furniture	7 days	7 days	NA	NA	November 22, 2021	November 29, 2021	February 22, 2022	March 1, 2022	0%	73 days	0 days	73 days								
427	Bridge D3 (Approach Ramp and Bridge) CH1087-1444.7	812 days	812 days	NA	NA	May 16, 2019	February 7, 2022	December 28, 2019	March 1, 2022	0%	19 days		19 days								
428	North Approach Ramp (Fronting CKR) CH1087-1189.4 - 7 bays	306 days	306 days	NA	NA	September 23, 2019	October 3, 2020	December 28, 2019	April 17, 2021	0%	79 days		79 days								
429	Procurement of Movement Joints for Bridge Works	90 days	90 days	NA	NA	January 11, 2020	April 9, 2020	March 4, 2020	June 1, 2020	0%	49 days		53 days								
430	Ground Monitoring Works	14 days	14 days	NA	NA	September 23, 2019	October 6, 2019	December 28, 2019	January 10, 2020	0%	0 days	0 days	96 days								
431	Mobilization of plant and material	10 days	10 days	NA	NA	January 11, 2020	January 22, 2020	January 11, 2020	January 22, 2020	0%	0 days	0 days	0 days								
432	Foundation Construction	64 days	64 days	NA	NA	January 23, 2020	April 14, 2020	January 23, 2020	April 14, 2020	0%	0 days	3 days	0 days								
433	Drive sheetpile (~200m) Prod. Rate: 10m/d/team	20 days	20 days	NA	NA	April 15, 2020	May 10, 2020	April 18, 2020	May 13, 2020	0%	0 days	1 days	3 days								
434	Excavation ~1,876m ³ & lateral support. Prod. Rate: 160m ³ /day/team (Bay 1 to 7)	12 days	12 days	NA	NA	May 11, 2020	May 24, 2020	May 14, 2020	May 27, 2020	0%	0 days	1 days	3 days								
435	Blinding layer. Prod. Rate: 2bays/day	4 days	4 days	NA	NA	May 25, 2020	May 28, 2020	May 28, 2020	June 1, 2020	0%	0 days	0 days	3 days								
436	Base slab Prod. Rate: 8d/bay/team	56 days	56 days	NA	NA	May 29, 2020	August 4, 2020	June 2, 2020	March 15, 2021	0%	3 days	3 days	3 days								
437	Base slab (Bay 2 & 4) -1 team	16 days	16 days	NA	NA	May 29, 2020	June 16, 2020	June 2, 2020	June 19, 2020	0%	0 days	1 days	3 days								
438	Base slab (Bay 1 & 3) - 1 team	16 days	16 days	NA	NA	June 17, 2020	July 7, 2020	June 20, 2020	July 10, 2020	0%	0 days	1 days	3 days								
439	Base slab (Bay 5 & 7) - 1 team	16 days	16 days	NA	NA	July 8, 2020	July 25, 2020	January 25, 2021	February 11, 2021	0%	0 days	0 days	166 days								
440	Base slab (Bay 6) - 1 team	8 days	8 days	NA	NA	July 27, 2020	August 4, 2020	March 6, 2021	March 15, 2021	0%	24 days	0 days	182 days								
441	Wall. Prod. Rate: 12d/bay/team	74 days	74 days	NA	NA	July 8, 2020	October 3, 2020	July 11, 2020	April 17, 2021	0%	3 days	3 days	3 days								
442	Wall (Bay 2 & 4) - 2 teams	12 days	12 days	NA	NA	July 8, 2020	July 21, 2020	July 11, 2020	July 24, 2020	0%	0 days	1 days	3 days								
443	Wall (Bay 1 & 3) 2 teams (KD1)	12 days	12 days	NA	NA	July 22, 2020	August 4, 2020	July 25, 2020	August 7, 2020	0%	0 days	1 days	3 days								
444	Wall (Bay 5 & 7) - 1 team	24 days	24 days	NA	NA	August 5, 2020	September 1, 2020	February 16, 2021	March 15, 2021	0%	0 days	0.5 days	158 days								
445	Wall (Bay 6) - 1 team (KD2)	12 days	12 days	NA	NA	September 2, 2020	September 15, 2020	March 16, 2021	March 29, 2021	0%	0 days	0 days	158 days								
446	Backfill and extract sheet pile	14 days	14 days	NA	NA	September 16, 2020	October 3, 2020	March 30, 2021	April 17, 2021	0%	144 days	0 days	158 days								
447	North Approach Ramp (Fronting KTSP) CH1087-1189.4 - 7 bays	608 days	608 days	NA	NA	October 7, 2019	October 23, 2021	April 1, 2020	February 21, 2022	0%	97 days		97 days								
448	Ground Monitoring Works	14 days	14 days	NA	NA	October 7, 2019	October 20, 2019	April 1, 2020	April 14, 2020	0%	0 days	0 days	177 days								
449	Mobilization of plant and materials	19 days	19 days	NA	NA	April 15, 2020	May 8, 2020	April 15, 2020	May 8, 2020	0%	0 days	1 days	0 days								
450	Foundation Construction	94 days	94 days	NA	NA	May 9, 2020	August 28, 2020	May 9, 2020	August 28, 2020	0%	0 days	4 days	0 days								
451	Drive sheetpile (~200m) Prod. Rate: 10m/d/team	24 days	24 days	NA	NA	August 29, 2020	September 25, 2020	August 29, 2020	September 25, 2020	0%	0 days	1 days	0 days								
452	Excavation ~1,996m ³ & lateral support. Prod. Rate: 160m ³ /day/team	18 days	18 days	NA	NA	September 26, 2020	October 19, 2020	September 26, 2020	October 19, 2020	0%	0 days	1 days	0 days								
453	Blinding layer. Prod. Rate: 2bays/day	13 days	13 days	NA	NA	October 20, 2020	November 4, 2020	October 20, 2020	November 4, 2020	0%	0 days	0 days	0 days								
454	Base slab (Bay 1 to 7) Prod Rate: 8d/bay/team- 1 team	64 days	64 days	NA	NA	November 5, 2020	January 21, 2021	November 5, 2020	January 21, 2021	0%	0 days	3 days	0 days								
455	Wall (Bay 1 to 7) 12d/bay/team - 1 team (KD3)	95 days	95 days	NA	NA	January 22, 2021	May 21, 2021	January 22, 2021	May 21, 2021	0%	0 days	4 days	0 days								
456	Backfilling ~8,372.91m ³ within approach ramp to formation level (160m ³ /day) considered time for SRT	53 days	53 days	NA	NA	May 22, 2021	July 24, 2021	May 22, 2021	July 24, 2021	0%	0 days	1 days	0 days								
457	Placing of precast planting channel along approach ramp	24 days	24 days	NA	NA	July 27, 2021	August 23, 2021	July 27, 2021	August 23, 2021	0%	0 days	1 days	0 days								
458	Utility ducting laying (by others)	26 days	26 days	NA	NA	July 26, 2021	August 24, 2021	July 26, 2021	August 24, 2021	0%	0 days	1 days	0 days								
459	Construct pedestrian street/ footpath	5 days	5 days	NA	NA	August 25, 2021	August 30, 2021	August 25, 2021	August 30, 2021	0%	0 days	0 days	0 days								
460	Install central median	6 days	6 days	NA	NA	August 31, 2021	September 6, 2021	August 31, 2021	September 6, 2021	0%	0 days	0 days	0 days								
461	Concrete infill between profile barrier	5 days	5 days	NA	NA	September 7, 2021	September 11, 2021	September 7, 2021	September 11, 2021	0%	0 days	0 days	0 days								
462	Lay sub base	4 days	4 days	NA	NA	September 13, 2021	September 16, 2021	September 13, 2021	September 16, 2021	0%	0 days	0 days	0 days								
463	Road pavement	5 days	5 days	NA	NA	September 17, 2021	September 23, 2021	September 17, 2021	September 23, 2021	0%	0 days	0 days	0 days								
464	Install railing on top of retaining wall & street furniture	24 days	24 days	NA	NA	September 24, 2021	October 23, 2021	January 21, 2022	February 21, 2022	0%	24 days	0.5 days	97 days								
465	Part 3G - CH1189.4 to CH1229 North Abutment	286 days	286 days	NA	NA	April 15, 2020	March 29, 2021	May 4, 2020	April 17, 2021	0%	14 days		14 days								
466	Pre-drilling Works	14 days	14 days	NA	NA	April 15, 2020	April 28, 2020	May 4, 2020	May 17, 2020	0%	0 days	1 days	19 days								
467	Bored pile (8 numbers). Prod. Rate: 10d/pile/rig.	80 days	80 days	NA	NA	April 29, 2020	August 4, 2020	May 18, 2020	August 20, 2020	0%	0 days	2 days	14 days								
468	Pile Testing (28d curing & 14 test) - 1 full-core to be carried out	42 days	42 days	NA	NA	August 5, 2020	September 22, 2020	August 21, 2020	October 10, 2020	0%	0 days	2 days	14 days								
469	Proof-drilling Works	7 days	7 days	NA	NA	August 5, 2020	August 11, 2020	October 4, 2020	October 10, 2020	0%	42 days	0 days	60 days								
470	Pile Loading Test	16 days	16 days	NA	NA	September 23, 2020	October 8, 2020	October 11, 2020	October 26, 2020	0%	0 days	1 days	18 days								
471	Drive sheetpile (~90m) Prod. Rate: 10m/d/team	9 days	9 days	NA	NA	October 9, 2020	October 19, 2020	October 27, 2020	November 5, 2020	0%	0 days	0 days	14 days								
472	Excavation ~780m ³ & lateral support. Prod. Rate: 160m ³ /day/team	6 days	6 days	NA	NA	October 20, 2020	October 27, 2020	November 6, 2020	November 12, 2020	0%	0 days	0 days	14 days								
473	Blinding layer	1 day	1 day	NA	NA	October 28, 2020	October 28, 2020	November 13, 2020	November 13, 2020	0%	0 days	0 days	14 days								

ID	Task Name	Duration	Remaining Duration	Actual Start	Actual Finish	Plan Start	Plan Finish	Late Start	Late Finish	Physical % Complete	Free Slack	Time Risk Allowances (TRA)	Total Slack	2019	2020	2021	2022	2023	2024	
														H1	H2	H1	H2	H1	H2	H1
475	Wall (3.85m thk). Prod. Rate: 18d/bay/team	30 days	30 days	NA	NA	November 21, 2020	December 28, 2020	December 8, 2020	January 14, 2021	0%	0 days	1 days	14 days							
476	Wall (0.5m thk). Prod. Rate: 14d/bay/team (KD2)	74 days	74 days	NA	NA	December 29, 2020	March 29, 2021	January 15, 2021	April 17, 2021	0%	0 days	0 days	14 days							
477	Backfill and extract sheet pile	7 days	7 days	NA	NA	December 29, 2020	January 6, 2021	March 27, 2021	April 7, 2021	0%	0 days	0 days	72 days							
478	Install bridge bearing	7 days	7 days	NA	NA	January 7, 2021	January 14, 2021	April 8, 2021	April 15, 2021	0%	61 days	0 days	72 days							
479	Part 3C - CH1229 to CH1279	573 days	573 days	NA	NA	January 11, 2020	December 14, 2021	January 20, 2020	December 29, 2021	0%	7 days	7 days	7 days							
480	Mobilization of plant and material	6 days	6 days	NA	NA	January 11, 2020	January 17, 2020	January 20, 2020	January 29, 2020	0%	0 days	1 days	7 days							
481	Pre-drilling Works	14 days	14 days	NA	NA	March 21, 2020	April 7, 2020	May 14, 2020	May 29, 2020	0%	0 days	0 days	40 days							
482	Bored pile (3 numbers) @ CH1229. Prod. Rate: 12d/pile/rig.	36 days	36 days	NA	NA	March 21, 2020	May 8, 2020	May 14, 2020	June 24, 2020	0%	0 days	0.5 days	40 days							
483	Pile Testing (14d curing & 14 test)	28 days	28 days	NA	NA	May 9, 2020	June 10, 2020	June 26, 2020	July 29, 2020	0%	0 days	0.5 days	40 days							
484	Proof-drilling Works	7 days	7 days	NA	NA	May 9, 2020	May 15, 2020	July 23, 2020	July 29, 2020	0%	26 days	0 days	75 days							
485	Pile Loading Test	14 days	14 days	NA	NA	June 11, 2020	June 24, 2020	July 30, 2020	August 12, 2020	0%	1 day	0 days	49 days							
486	Pile Cap @ CH1229	64 days	64 days	NA	NA	June 26, 2020	September 9, 2020	August 13, 2020	September 23, 2020	0%	12 days	12 days	12 days							
487	Drive sheetpile (~75m). Prod. Rate: 10m/day/side/team	8 days	8 days	NA	NA	June 26, 2020	July 6, 2020	August 13, 2020	August 21, 2020	0%	0 days	0 days	40 days							
488	Excavation ~75m3 & lateral support. Prod. Rate: 160m3/day/team	5 days	5 days	NA	NA	July 7, 2020	July 11, 2020	August 22, 2020	August 27, 2020	0%	0 days	0 days	40 days							
489	Blinding layer	1 day	1 day	NA	NA	July 13, 2020	July 13, 2020	August 28, 2020	August 28, 2020	0%	28 days	0 days	40 days							
490	Pilecap structure	14 days	14 days	NA	NA	August 15, 2020	August 31, 2020	August 29, 2020	September 14, 2020	0%	0 days	1 days	12 days							
491	Backfill and extract sheet pile	8 days	8 days	NA	NA	September 1, 2020	September 9, 2020	September 15, 2020	September 23, 2020	0%	0 days	0 days	12 days							
492	Pier @ CH1229	48 days	48 days	NA	NA	September 10, 2020	November 7, 2020	September 24, 2020	November 21, 2020	0%	0 days	2 days	12 days							
493	Pre-drilling Works	14 days	14 days	NA	NA	January 18, 2020	January 31, 2020	January 30, 2020	February 12, 2020	0%	0 days	1 days	12 days							
494	Bored pile (3 numbers) @ CH1269. Prod. Rate: 10d/pile/rig.	30 days	30 days	NA	NA	February 1, 2020	March 6, 2020	February 13, 2020	March 18, 2020	0%	0 days	0 days	10 days							
495	Pile Testing (14d curing & 14 test)	28 days	28 days	NA	NA	March 7, 2020	April 9, 2020	April 21, 2020	May 25, 2020	0%	0 days	0.5 days	34 days							
496	Proof-drilling Works	7 days	7 days	NA	NA	March 7, 2020	March 13, 2020	May 19, 2020	May 25, 2020	0%	27 days	0 days	73 days							
497	Pile Loading Test	14 days	14 days	NA	NA	April 10, 2020	April 23, 2020	May 26, 2020	June 8, 2020	0%	0 days	0 days	46 days							
498	Pile Cap @ CH1269	42 days	42 days	NA	NA	April 24, 2020	June 13, 2020	June 9, 2020	July 29, 2020	0%	37 days	37 days	37 days							
499	Drive sheetpile (~75m). Prod. Rate: 10m/day/side/team	8 days	8 days	NA	NA	April 24, 2020	May 5, 2020	June 9, 2020	June 17, 2020	0%	0 days	0 days	37 days							
500	Excavation ~1677m3 & lateral support. Prod. Rate: 160m3/day/team	11 days	11 days	NA	NA	May 6, 2020	May 18, 2020	June 18, 2020	July 2, 2020	0%	0 days	0 days	37 days							
501	Blinding layer	1 day	1 day	NA	NA	May 19, 2020	May 19, 2020	July 3, 2020	July 3, 2020	0%	0 days	0 days	37 days							
502	Pile Cap structure	14 days	14 days	NA	NA	May 20, 2020	June 4, 2020	July 4, 2020	July 20, 2020	0%	0 days	0 days	37 days							
503	Backfill and extract sheet pile	8 days	8 days	NA	NA	June 5, 2020	June 13, 2020	July 21, 2020	July 29, 2020	0%	0 days	0 days	37 days							
504	Pier @ CH1269	48 days	48 days	NA	NA	June 15, 2020	August 11, 2020	July 30, 2020	September 23, 2020	0%	25 days	0 days	37 days							
505	Bridge deck between CH1229-1269 [DB-SQ1]	116 days	116 days	NA	NA	November 9, 2020	March 30, 2021	January 22, 2021	April 15, 2021	0%	11 days	11 days	11 days							
506	Falsework erection	7 days	7 days	NA	NA	November 9, 2020	November 16, 2020	January 22, 2021	January 29, 2021	0%	50 days	0 days	61 days							
507	Structure deck	28 days	28 days	NA	NA	January 19, 2021	February 23, 2021	February 1, 2021	March 8, 2021	0%	0 days	1 days	11 days							
508	Prestressing	16 days	16 days	NA	NA	March 12, 2021	March 30, 2021	March 25, 2021	April 15, 2021	0%	0 days	1 days	11 days							
509	Median barrier, utility through, parapet	45 days	45 days	NA	NA	March 31, 2021	May 27, 2021	May 10, 2021	July 3, 2021	0%	0 days	0.5 days	30 days							
510	Utility ducting laying (by others)	14 days	14 days	NA	NA	May 28, 2021	June 12, 2021	September 25, 2021	October 12, 2021	0%	65 days	0 days	100 days							
511	Street furniture (KD6)	21 days	21 days	NA	NA	November 20, 2021	December 14, 2021	December 3, 2021	December 29, 2021	0%	0 days	2 days	11 days							
512	Bridge deck between CH1189-1229 [DB-T2-SQ2]	64 days	64 days	NA	NA	March 31, 2021	June 19, 2021	April 16, 2021	July 3, 2021	0%	11 days	11 days	11 days							
513	Falsework erection	7 days	7 days	NA	NA	March 31, 2021	April 10, 2021	April 16, 2021	April 23, 2021	0%	0 days	0 days	11 days							
514	Structure deck	28 days	28 days	NA	NA	April 12, 2021	May 14, 2021	April 24, 2021	May 28, 2021	0%	0 days	1 days	11 days							
515	Prestressing	15 days	15 days	NA	NA	June 2, 2021	June 19, 2021	June 16, 2021	July 3, 2021	0%	0 days	1 days	11 days							
516	Median barrier, utility through, parapet	46 days	46 days	NA	NA	June 21, 2021	August 13, 2021	July 5, 2021	August 26, 2021	0%	0 days	2 days	11 days							
517	Utility ducting laying (by others)	14 days	14 days	NA	NA	August 14, 2021	August 30, 2021	September 25, 2021	October 12, 2021	0%	0 days	0 days	35 days							
518	Street furniture	21 days	21 days	NA	NA	August 31, 2021	September 24, 2021	October 13, 2021	November 6, 2021	0%	24 days	0 days	35 days							
519	Part 3D - CH1279 to CH1311	257 days	257 days	NA	NA	January 9, 2021	November 19, 2021	January 22, 2021	December 2, 2021	0%	11 days	11 days	11 days							
520	Bridge deck between CH1269-1314 [DB-SQ1]	73 days	73 days	NA	NA	January 9, 2021	April 10, 2021	January 22, 2021	April 23, 2021	0%	11 days	11 days	11 days							
521	Falsework erection	8 days	8 days	NA	NA	January 9, 2021	January 18, 2021	January 22, 2021	January 30, 2021	0%	0 days	0 days	11 days							
522	Structure deck	28 days	28 days	NA	NA	January 19, 2021	February 23, 2021	February 1, 2021	March 8, 2021	0%	0 days	1 days	11 days							
523	Prestressing	23 days	23 days	NA	NA	March 12, 2021	April 10, 2021	March 25, 2021	April 23, 2021	0%	0 days	0 days	11 days							
524	Median barrier, utility through, parapet	45 days	45 days	NA	NA	August 14, 2021	October 7, 2021	August 27, 2021	October 21, 2021	0%	0 days	2 days	11 days							
525	Utility ducting laying (by others)	14 days	14 days	NA	NA	October 8, 2021	October 25, 2021	October 22, 2021	November 6, 2021	0%	0 days	1 days	11 days							
526	Street furniture (KD6)	22 days	22 days	NA	NA	October 26, 2021	November 19, 2021	November 8, 2021	December 2, 2021	0%	0 days	0 days	11 days							
527	Part 3E - CH1311 to CH1372	407 days	407 days	NA	NA	March 7, 2020	July 22, 2021	March 19, 2020	October 23, 2021	0%	10 days	10 days	10 days							
528	Pre-drilling Works	14 days	14 days	NA	NA	March 7, 2020	March 20, 2020	March 19, 2020	April 1, 2020	0%	0 days	0	12 days							
529	Bored pile (5 numbers) @ CH1314. Prod. Rate: 10d/pile/rig.	50 days	50 days	NA	NA	March 21, 2020	May 25, 2020	April 2, 2020	June 5, 2020	0%	0 days	1 days	10 days							
530	Pile Testing (14d curing & 14 test)	28 days	28 days	NA	NA	May 26, 2020	June 27, 2020	June 6, 2020	July 10, 2020	0%	0 days	1 days	10 days							
531	Proof-drilling Works	7 days	7 days	NA	NA	May 26, 2020	June 1, 2020	July 4, 2020	July 10, 2020	0%	26 days	0 days	39 days							
532	Pile Loading Test	14 days	14 days	NA	NA	June 28, 2020	July 11, 2020	July 11, 2020	July 24, 2020	0%	1 day	1 days	13 days							
533	Pile Cap @ CH1314	37 days	37 days	NA	NA	July 13, 2020	August 24, 2020	July 25, 2020	September 5, 2020	0%	11 days	11 days	11 days							
534	Drive sheetpile (~75m). Prod. Rate: 10m/day/side/team	8 days	8 days	NA	NA	July 13, 2020	July 21, 2020													

ID	Task Name	Duration	Remaining Duration	Actual Start	Actual Finish	Plan Start	Plan Finish	Late Start	Late Finish	Physical % Complete	Free Slack	Time Risk Allowances (TRA)	Total Slack	2019	2020	2021	2022	2023	2024		
														H1	H2	H1	H2	H1	H2	H1	H2
597	Lay sub base	4 days	4 days	NA	NA	December 22, 2021	December 28, 2021	January 17, 2022	January 20, 2022	0%	0 days	0 days	19 days								
598	Road pavement	7 days	7 days	NA	NA	December 29, 2021	January 6, 2022	January 21, 2022	January 28, 2022	0%	0 days	0 days	19 days								
599	Install railing on top of retaining wall	24 days	24 days	NA	NA	January 7, 2022	February 7, 2022	January 29, 2022	March 1, 2022	0%	19 days	0.5 days	19 days								
600	Part 1 - Road D3 CH1444.7-1560	69 days	69 days	NA	NA	December 4, 2021	March 1, 2022	December 4, 2021	March 1, 2022	0%	0 days		0 days								
601	Trim road formation	3 days	3 days	NA	NA	December 4, 2021	December 7, 2021	December 4, 2021	December 7, 2021	0%	0 days	0 days	0 days								
602	Utility ducting laying (by others)	14 days	14 days	NA	NA	December 8, 2021	December 23, 2021	December 8, 2021	December 23, 2021	0%	0 days	1 days	0 days								
603	Lay sub base	12 days	12 days	NA	NA	December 24, 2021	January 10, 2022	December 24, 2021	January 10, 2022	0%	0 days	0 days	0 days								
604	Lay kerb	7 days	7 days	NA	NA	January 11, 2022	January 18, 2022	January 11, 2022	January 18, 2022	0%	0 days	0 days	0 days								
605	Construct pedestrian street/ footpath	10 days	10 days	NA	NA	January 19, 2022	January 30, 2022	January 19, 2022	January 31, 2022	0%	0 days	0 days	0 days								
606	Install central median	7 days	7 days	NA	NA	January 31, 2022	February 10, 2022	January 31, 2022	February 10, 2022	0%	0 days	0 days	0 days								
607	Concrete infill between profile barrier	5 days	5 days	NA	NA	February 11, 2022	February 16, 2022	February 11, 2022	February 16, 2022	0%	0 days	0 days	0 days								
608	Road pavement	5 days	5 days	NA	NA	February 17, 2022	February 22, 2022	February 17, 2022	February 22, 2022	0%	0 days	0 days	0 days								
609	Install street furniture	6 days	6 days	NA	NA	February 23, 2022	March 1, 2022	February 23, 2022	March 1, 2022	0%	0 days	0 days	0 days								
610	Underpass and Depressed Road	739 days	733.65 days	September 3, 2019	NA	September 3, 2019	March 1, 2022	September 3, 2019	May 29, 2024	0%	668 days		668 days								
611	North Depressed Rd (CH1560-1720) - 8 bays	413 days	401.77 days	September 3, 2019	NA	September 3, 2019	January 22, 2021	September 3, 2019	March 1, 2022	0%	326 days		326 days								
612	Ground Monitoring Works	17 days	0 days	September 3, 2019	September 19, 2019	September 3, 2019	September 19, 2019	September 3, 2019	September 19, 2019	100%	0 days	2 days	0 days								
613	Mobilization	7 days	7 days	NA	NA	October 8, 2019	October 15, 2019	June 15, 2020	June 22, 2020	0%	0 days	0 days	203 days								
614	Complete the Diveration of Existing Overhang Cable along the North Depressed Rd	0 days	0 days	NA	NA	October 15, 2019	October 15, 2019	June 23, 2020	June 23, 2020	0%	1 day		252 days								
615	Drive Sheet Pile (380m) Prod. Rate 10m/team/day	38 days	38 days	NA		October 16, 2019	November 28, 2019	June 23, 2020	August 7, 2020	0%	0 days	1 days	203 days								
616	Pumping Test	21 days	21 days	NA	NA	November 29, 2019	December 23, 2019	August 8, 2020	September 1, 2020	0%	0 days	1 days	203 days								
617	CH1560 - CH1640	264 days	264 days	NA	NA	December 24, 2019	November 14, 2020	September 2, 2020	September 16, 2021	0%	203 days		203 days								
618	Excavation - Prod Rate: 240m3/d/team. (~26,663m3). 1 team	112 days	112 days	NA	NA	December 24, 2019	May 15, 2020	September 2, 2020	January 16, 2021	0%	0 days	1 days	203 days								
619	Rock fill - Prod. Rate: 160m3/d/team (1,807m3)	12 days	12 days	NA	NA	May 14, 2020	May 27, 2020	January 15, 2021	January 28, 2021	0%	0 days	1 days	203 days								
620	Blinding	1 day	1 day	NA	NA	May 28, 2020	May 28, 2020	January 29, 2021	January 29, 2021	0%	0 days	0 days	203 days								
621	Base Slab - 4 bays. Prod. Rate: 14d/team/bay include pipe laying. 1 team	56 days	56 days	NA	NA	May 29, 2020	August 4, 2020	January 30, 2021	April 12, 2021	0%	0 days	3 days	203 days								
622	Wall - 4 bays. Prod. Rate: 14d/bay/team. 1 team	56 days	56 days	NA	NA	July 3, 2020	September 5, 2020	June 26, 2021	August 31, 2021	0%	0 days	3 days	292 days								
623	Emergency walkway & median barrier installation	18 days	18 days	NA	NA	September 7, 2020	September 26, 2020	October 11, 2021	November 1, 2021	0%	0 days	0 days	324 days								
624	Utility ducting laying (by others)	10 days	10 days	NA	NA	September 28, 2020	October 10, 2020	November 2, 2021	November 12, 2021	0%	0 days	0 days	324 days								
625	Pavement work	5 days	5 days	NA	NA	October 12, 2020	October 16, 2020	November 13, 2021	November 18, 2021	0%	0 days	0 days	324 days								
626	Parapet installation	24 days	24 days	NA	NA	October 17, 2020	November 14, 2020	November 19, 2021	December 16, 2021	0%	32 days	0.5 days	324 days								
627	CH1640 - CH1720	208 days	208 days	NA	NA	May 16, 2020	January 22, 2021	January 18, 2021	March 1, 2022	0%	203 days		203 days								
628	Excavation - Prod Rate: 240m3/d/team. 1 team (10,926m3) (Remaining)	46 days	46 days	NA	NA	May 16, 2020	July 10, 2020	January 18, 2021	March 15, 2021	0%	0 days	1 days	203 days								
629	Rock fill - Prod. Rate: 160m3/d/team (2,203m3)	20 days	20 days	NA	NA	July 11, 2020	August 3, 2020	March 16, 2021	April 10, 2021	0%	0 days	1 days	203 days								
630	Blinding	1 day	1 day	NA	NA	August 4, 2020	August 4, 2020	April 12, 2021	April 12, 2021	0%	0 days	0 days	203 days								
631	Base Slab - 4 bays . Prod. Rate: 14d/team/bay include pipe laying. 1 team	56 days	56 days	NA	NA	August 5, 2020	October 10, 2020	April 13, 2021	June 19, 2021	0%	0 days	2 days	203 days								
632	Wall - 4 bays. Prod. Rate: 14d/bay/team. 1 team	56 days	56 days	NA	NA	September 7, 2020	November 13, 2020	September 1, 2021	November 8, 2021	0%	0 days	2 days	292 days								
633	Backfill & extract sheet pile (CH1560 to CH1720)	12 days	12 days	NA	NA	November 14, 2020	November 27, 2020	December 3, 2021	December 16, 2021	0%	21 days	1 day	313 days								
634	Access Allow for EMSD Third District Cooling System Constructor for CH1560-CH1720 Pipe Laying	0 days	0 days	NA	NA	November 27, 2020	November 27, 2020	March 1, 2022	March 1, 2022	0%	459 days		459 days								
635	Emergency walkway & median barrier installation	18 days	18 days	NA	NA	November 14, 2020	December 4, 2020	November 9, 2021	November 29, 2021	0%	0 days	0 days	292 days								
636	Utility ducting laying (by others)	10 days	10 days	NA	NA	December 5, 2020	December 16, 2020	November 30, 2021	December 10, 2021	0%	0 days	0 days	292 days								
637	Pavement work	5 days	5 days	NA	NA	December 17, 2020	December 22, 2020	December 11, 2021	December 16, 2021	0%	0 days	0 days	292 days								
638	Parapet installation	24 days	24 days	NA	NA	December 23, 2020	January 22, 2021	December 17, 2021	January 17, 2022	0%	243 days	0.5 days	292 days								
639	Underpass (CH1720-1850) - 7 bays	635 days	635 days	NA	NA	September 23, 2019	November 11, 2021	March 19, 2020	May 29, 2024	0%	145 days		145 days								
640	Ground Monitoring Works	14 days	14 days	NA	NA	September 23, 2019	October 6, 2019	March 19, 2020	April 1, 2020	0%	0 days	0 days	178 days								
641	Drive sheet pile (330m) Prod. Rate 10m/team/day	33 days	33 days	NA	NA	November 29, 2019	January 9, 2020	September 26, 2020	November 6, 2020	0%	212 days	0 days	245 days								
642	Pumping Test	21 days	21 days	NA	NA	September 26, 2020	October 22, 2020	November 7, 2020	December 1, 2020	0%	0 days	1 days	33 days								
643	CH1720 - CH1800	255 days	255 days	NA	NA	September 28, 2019	August 9, 2021	December 2, 2020	May 29, 2024	0%	53 days		53 days								
644	Excavation - Prod Rate: 240m3/d/team. 1 team (27,220m3)	114 days	114 days	NA	NA	October 23, 2020	March 12, 2021	December 2, 2020	April 23, 2021	0%	0 days	5 days	33 days								
645	Rock fill - Prod. Rate: 160m3/d/team (1,944m3)	13 days	13 days	NA	NA	March 3, 2021	March 17, 2021	June 3, 2021	June 18, 2021	0%	0 days	0 days	74 days								
646	Blinding	1 day	1 day	NA	NA	March 18, 2021	March 18, 2021	June 19, 2021	June 19, 2021	0%	0 days	0 days	74 days								
647	Base Slab - 4 bays. Prod. Rate: 14d/team/bay include pipe laying. 1 team	56 days	56 days	NA	NA	March 19, 2021	May 28, 2021	June 21, 2021	August 25, 2021	0%	0 days	1 day	74 days								
648	Wall - 4 bays. Prod. Rate: 14d/bay/team. 1 team	56 days	56 days	NA	NA	April 24, 2021	July 2, 2021	August 12, 2021	October 19, 2021	0%	0 days	1 day	90 days								
649	Top Slab - 4 bays. Prod. Rate: 10d/bay/team. 1 team	40 days	40 days	NA	NA	May 29, 2021	July 16, 2021	September 14, 2021	November 2, 2021	0%	41 days	0.5 days	90 days								
650	Emergency walkway & median barrier installation	18 days	18 days	NA	NA	July 20, 2021	August 9, 2021	May 8, 2024	May 29, 2024	0%	834 days	0 days	834 days								
651	Utility ducting laying (by others)	10 days	10 days	NA	NA	September 28, 2020	October 10, 2020	November 2, 2021	November 12, 2021	0%	0 days	0 days	324 days								
652	Pavement work	5 days	5 days	NA	NA	October 12, 2020	October 16, 2020	December 2, 2021	December 7, 2021	0%	291 days	0 days	340 days								
653	CH1800 - CH1850	199 days	199 days	NA	NA	March 13, 2021	November 11, 2021	April 24, 2021	March 1, 2022	0%	33 days		33 days								
654																					

ID	Task Name	Duration	Remaining Duration	Actual Start	Actual Finish	Plan Start	Plan Finish	Late Start	Late Finish	Physical % Complete	Free Slack	Time Risk Allowances (TRA)	Total Slack	2019	2020	2021	2022	2023	2024	
657	Base Slab - 3 bays. Prod. Rate: 14d/team/bay include pipe laying. 1 team	42 days	42 days	NA	NA	June 29, 2021	August 17, 2021	August 26, 2021	October 16, 2021	0%	0 days	2 days	49 days							
658	Wall - 3 bays. Prod. Rate: 14d/bay/team. 1 team	42 days	42 days	NA	NA	August 2, 2021	September 18, 2021	September 29, 2021	November 18, 2021	0%	0 days	1 days	49 days							
659	Top Slab - 3 bays. Prod. Rate: 10d/bay/team. 1 team	30 days	30 days	NA	NA	September 3, 2021	October 9, 2021	November 3, 2021	December 7, 2021	0%	0 days	1 days	49 days							
660	Backfill & extract sheet pile (CH1720 to CH1850)	12 days	12 days	NA	NA	October 11, 2021	October 25, 2021	December 8, 2021	December 21, 2021	0%	0 days	0 days	49 days							
661	Access Allow for EMSD Third District Cooling System Contractor for CH1720-CH1850 Pipe Laying	0 days	0 days	NA	NA	October 25, 2021	October 25, 2021	March 1, 2022	March 1, 2022	0%	127 days		127 days							
662	Utility ducting laying (by others)	10 days	10 days	NA	NA	October 26, 2021	November 5, 2021	December 22, 2021	January 5, 2022	0%	0 days	1 day	49 days							
663	Pavement work	5 days	5 days	NA	NA	November 6, 2021	November 11, 2021	January 6, 2022	January 11, 2022	0%	0 days	1 day	49 days							
664	Underpass & South Depressed Road CH1850-2000 - 7 bays	650 days	650 days	NA	NA	October 7, 2019	December 11, 2021	April 2, 2020	February 14, 2022	0%	49 days		49 days							
665	Ground Monitoring Works	14 days	14 days	NA	NA	October 7, 2019	October 20, 2019	April 2, 2020	April 15, 2020	0%	0 days	0 days	178 days							
666	Mobilization of plant and materials	15 days	15 days	NA	NA	January 29, 2020	February 14, 2020	April 16, 2020	May 5, 2020	0%	35 days	0 days	63 days							
667	Foundation Construction	90 days	90 days	NA	NA	March 27, 2020	July 18, 2020	May 6, 2020	August 20, 2020	0%	0 days	1 day	28 days							
668	Mobilization of plant and material (sheet pile)	6 days	6 days	NA	NA	July 15, 2020	July 21, 2020	August 17, 2020	August 22, 2020	0%	0 days	0 days	28 days							
669	Drive sheet pile (360m) Prod. Rate 10m/team/day	36 days	36 days	NA	NA	July 22, 2020	September 1, 2020	August 24, 2020	October 6, 2020	0%	0 days	0.5 days	28 days							
670	Pumping Test	21 days	21 days	NA	NA	September 2, 2020	September 25, 2020	October 7, 2020	October 31, 2020	0%	0 days	0 days	28 days							
671	CH1850 - CH1920	349 days	349 days	NA	NA	September 26, 2020	November 29, 2021	November 2, 2020	January 28, 2022	0%	28 days		28 days							
672	Excavation - Prod. Rate: 240m3/d/team. 1 team (23,154m3)	96 days	96 days	NA	NA	September 26, 2020	January 22, 2021	November 2, 2020	February 27, 2021	0%	0 days	1 day	28 days							
673	Rock fill - Prod. Rate: 160m3/d/team (1,745m3)	11 days	11 days	NA	NA	January 16, 2021	January 28, 2021	February 22, 2021	March 5, 2021	0%	0 days	0 days	28 days							
674	Blinding	1 day	1 day	NA	NA	January 29, 2021	January 29, 2021	March 6, 2021	March 6, 2021	0%	0 days	0 days	28 days							
675	Base Slab - 3 bays. Prod. Rate: 14d/team/bay include pipe laying. 1 team	42 days	42 days	NA	NA	January 30, 2021	March 23, 2021	March 8, 2021	April 28, 2021	0%	0 days	0.5 days	28 days							
676	Wall - 3 bays. Prod. Rate: 14d/bay/team. 1 team	42 days	42 days	NA	NA	March 8, 2021	April 28, 2021	September 29, 2021	November 18, 2021	0%	0 days	0.5 days	168 days							
677	Top Slab - 3 bays. Prod. Rate: 10d/bay/team. 1 team	30 days	30 days	NA	NA	April 13, 2021	May 18, 2021	November 3, 2021	December 7, 2021	0%	0 days	0.5 days	168 days							
678	Emergency walkway & median barrier installation	18 days	18 days	NA	NA	June 5, 2021	June 26, 2021	December 24, 2021	January 17, 2022	0%	119 days	0 days	168 days							
679	Utility ducting laying (by others)	10 days	10 days	NA	NA	September 28, 2020	October 10, 2020	November 2, 2021	November 12, 2021	0%	0 days	0 days	324 days							
680	Pavement work	5 days	5 days	NA	NA	November 12, 2021	November 17, 2021	January 12, 2022	January 17, 2022	0%	0 days	0 days	49 days							
681	Parapet installation	10 days	10 days	NA	NA	November 18, 2021	November 29, 2021	January 18, 2022	January 28, 2022	0%	0 days	0 days	49 days							
682	CH1920 - CH2000	359 days	359 days	NA	NA	September 28, 2020	December 11, 2021	April 14, 2021	February 14, 2022	0%	49 days		49 days							
683	Excavation - Prod. Rate: 240m3/d/team. 1 team (16,396m3)	68 days	68 days	NA	NA	January 23, 2021	April 19, 2021	April 14, 2021	July 6, 2021	0%	0 days	1 day	63 days							
684	Blinding	1 day	1 day	NA	NA	April 20, 2021	April 20, 2021	July 7, 2021	July 7, 2021	0%	0 days	0 days	63 days							
685	Base Slab - 4 bays. Prod. Rate: 14d/team/bay include pipe laying. 1 team	56 days	56 days	NA	NA	March 24, 2021	June 2, 2021	April 29, 2021	July 7, 2021	0%	0 days	1 day	28 days							
686	Wall - 4 bays. Prod. Rate: 14d/bay/team. 1 team	56 days	56 days	NA	NA	April 13, 2021	June 19, 2021	July 10, 2021	September 13, 2021	0%	0 days	1 day	72 days							
687	Backfill & extract sheet pile (CH1850 to CH2000)	18 days	18 days	NA	NA	June 21, 2021	July 12, 2021	September 14, 2021	October 6, 2021	0%	0 days	0 days	72 days							
688	Emergency walkway & median barrier installation	18 days	18 days	NA	NA	June 21, 2021	July 12, 2021	January 8, 2022	January 28, 2022	0%	117 days	0 days	166 days							
689	Utility ducting laying (by others)	10 days	10 days	NA	NA	September 28, 2020	October 10, 2020	November 2, 2021	November 12, 2021	0%	0 days	0 days	324 days							
690	Pavement work	5 days	5 days	NA	NA	October 12, 2020	October 16, 2020	January 24, 2022	January 28, 2022	0%	333 days	0 days	382 days							
691	Parapet installation	11 days	11 days	NA	NA	November 30, 2021	December 11, 2021	January 29, 2022	February 14, 2022	0%	21 days	0 days	49 days							
692	South Depressed Road CH2000-2060 - 3 bays	671 days	671 days	NA	NA	October 21, 2019	January 21, 2022	May 30, 2020	February 26, 2022	0%	28 days		28 days							
693	Ground Monitoring Works	14 days	14 days	NA	NA	October 21, 2019	November 3, 2019	May 30, 2020	June 12, 2020	0%	211 days	0 days	222 days							
694	Mobilization of plant and materials	12 days	12 days	NA	NA	June 2, 2020	June 15, 2020	June 13, 2020	June 27, 2020	0%	0 days	0 days	10 days							
695	Foundation Construction	90 days	90 days	NA	NA	June 16, 2020	September 30, 2020	December 18, 2020	April 12, 2021	0%	72 days	0.5 days	154 days							
696	Mobilization of plant and material (sheet pile)	5 days	5 days	NA	NA	December 30, 2020	January 5, 2021	April 13, 2021	April 17, 2021	0%	0 days	0 days	82 days							
697	Drive sheet pile (180m) Prod. Rate 10m/team/day	18 days	18 days	NA	NA	January 6, 2021	January 26, 2021	April 19, 2021	May 10, 2021	0%	0 days	0 days	82 days							
698	Pumping Test	21 days	21 days	NA	NA	January 27, 2021	February 23, 2021	May 11, 2021	June 4, 2021	0%	0 days	0 days	82 days							
699	Excavation - Prod. Rate: 240m3/d/team. 1 team (8,956m3)	38 days	38 days	NA	NA	February 24, 2021	April 12, 2021	June 5, 2021	July 21, 2021	0%	0 days	0.5 days	82 days							
700	Blinding	1 day	1 day	NA	NA	April 13, 2021	April 13, 2021	July 22, 2021	July 22, 2021	0%	41 days	0 days	82 days							
701	Base Slab - 3 bays. Prod. Rate: 14d/team/bay include pipe laying. 1 team	40 days	40 days	NA	NA	June 3, 2021	July 21, 2021	July 23, 2021	September 7, 2021	0%	0 days	0.5 days	41 days							
702	Wall - 3 bays. Prod. Rate: 14d/bay/team. 1 team	42 days	42 days	NA	NA	June 21, 2021	August 9, 2021	November 24, 2021	January 14, 2022	0%	0 days	0.5 days	130 days							
703	Backfill & extract sheet pile	12 days	12 days	NA	NA	August 10, 2021	August 23, 2021	January 28, 2022	February 14, 2022	0%	113 days	0 days	141 days							
704	Emergency walkway & median barrier installation	18 days	18 days	NA	NA	August 10, 2021	August 30, 2021	January 15, 2022	February 8, 2022	0%	102 days	0 days	130 days							
705	Utility ducting laying (by others)	10 days	10 days	NA	NA	September 28, 2020	October 10, 2020	November 2, 2021	November 12, 2021	0%	0 days	0 days	324 days							
706	Pavement work	5 days	5 days	NA	NA	January 4, 2022	January 8, 2022	February 9, 2022	February 14, 2022	0%	0 days	0 days	28 days							
707	Parapet installation	11 days	11 days	NA	NA	January 10, 2022	January 21, 2022	February 15, 2022	February 26, 2022	0%	27 days	0 days	28 days							
708	Part 2A - Road D3 CH2060-2118.93	208 days	208 days	NA	NA	June 19, 2021	February 28, 2022	November 22, 2021	March 1, 2022	0%	1 day		1 day							
709	Utility ducting laying (by others)	50 days	50 days	NA	NA	June 19, 2021	August 17, 2021	November 22, 2021	January 21, 2022	0%	0 days	0 days	129 days							
710	Trim road formation	2 days	2 days	NA	NA	August 18, 2021	August 19, 2021	January 22, 2022	January 24, 2022	0%	0 days	0 days	129 days							
711	Lay sub base	4 days	4 days	NA	NA	August 20, 2021	August 24, 2021	January 25, 2022	January 28, 2022	0%	0 days	0 days	129 days							
712	Lay kerb	5 days	5 days	NA	NA	August 25, 2021	August 30, 2021	January 29, 2022	February 7, 2022	0%	0 days	0 days	129 days							
713	Construct pedestrian street/ footpath	6 days	6 days	NA	NA	August 31, 2021	September 6, 2021	February 8, 2022	February 14, 2022	0%	0 days	0 days	129 days							
714	Install central median	4 days	4 days	NA	NA	September 7, 2021	September 10, 2021	February 15, 2022	February 18, 2022	0%	0 days	0 days	129 days							



Title: Revised Programme-ED/2018/01 with Progress Update as of 22-Sep-19

Critical Split Critical Progress

Task Split Task Progress

Manual Task Start-only Finish-only

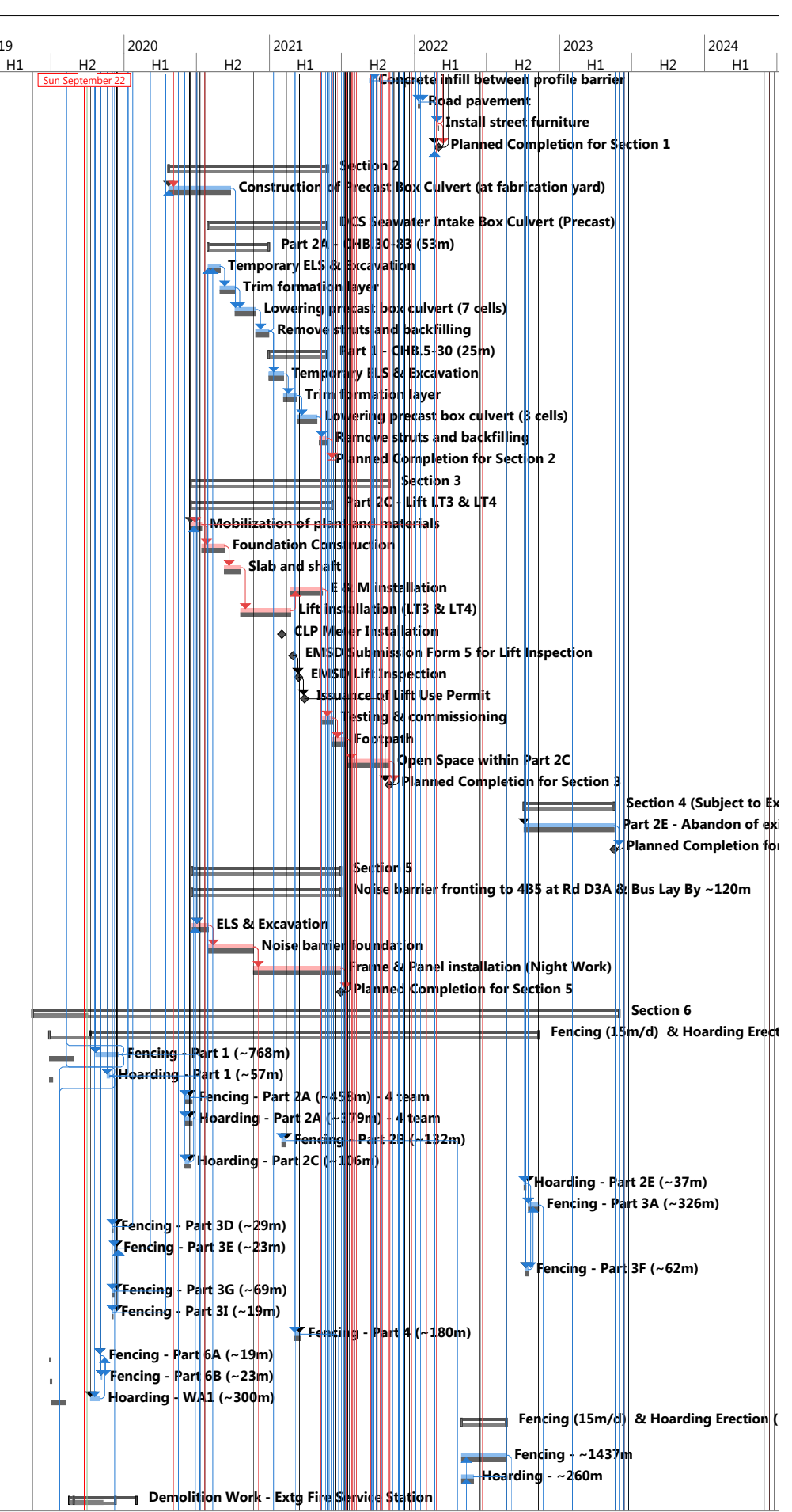
Duration-only Baseline Baseline Split

Baseline Milestone Summary Project Summary

External Tasks External Milestone Inactive Task

Inactive Milestone Inactive Summary Deadline

ID	Task Name	Duration	Remaining Duration	Actual Start	Actual Finish	Plan Start	Plan Finish	Late Start	Late Finish	Physical % Complete	Free Slack	Time Risk Allowances (TRA)	Total Slack	2019	2020	2021	2022	2023	2024
715	Concrete infill between profile barrier	2 days	2 days	NA	NA	September 11, 2021	September 13, 2021	February 19, 2022	February 21, 2022	0%	95 days	0 days	129 days						
716	Road pavement	5 days	5 days	NA	NA	January 10, 2022	January 14, 2022	February 22, 2022	February 26, 2022	0%	33 days	0 days	34 days						
717	Install street furniture	2 days	2 days	NA	NA	February 26, 2022	February 28, 2022	February 28, 2022	March 1, 2022	0%	1 day	0 days	1 day						
718	Planned Completion for Section 1	0 days	0 days	NA	NA	March 1, 2022	March 1, 2022	March 1, 2022	March 1, 2022	0%	0 days	0 days	0 days						
719	Section 2	325 days	325 days	NA	NA	April 22, 2020	May 26, 2021	May 14, 2020	June 2, 2021	0%	6 days	6 days	6 days						
720	Construction of Precast Box Culvert (at fabrication yard)	130 days	130 days	NA	NA	April 22, 2020	September 24, 2020	May 14, 2020	October 16, 2020	0%	7 days	1 day	17 days						
721	DCS Seawater Intake Box Culvert (Precast)	243 days	243 days	NA	NA	July 30, 2020	May 25, 2021	August 11, 2020	June 1, 2021	0%	6 days	6 days	6 days						
722	Part 2A - CHB.30-83 (53m)	126 days	126 days	NA	NA	July 30, 2020	December 29, 2020	August 11, 2020	January 11, 2021	0%	10 days	10 days	10 days						
723	Temporary ELS & Excavation	30 days	30 days	NA	NA	July 30, 2020	August 28, 2020	August 11, 2020	September 9, 2020	0%	0 days	1 days	12 days						
724	Trim formation layer	30 days	30 days	NA	NA	August 29, 2020	October 5, 2020	September 10, 2020	October 16, 2020	0%	0 days	1 days	10 days						
725	Lowering precast box culvert (7 cells)	44 days	44 days	NA	NA	October 6, 2020	November 26, 2020	October 17, 2020	December 8, 2020	0%	0 days	2 days	10 days						
726	Remove struts and backfilling	26 days	26 days	NA	NA	November 27, 2020	December 29, 2020	December 9, 2020	January 11, 2021	0%	0 days	1 days	10 days						
727	Part 1 - CHB.5-30 (25m)	117 days	117 days	NA	NA	December 30, 2020	May 25, 2021	January 12, 2021	June 1, 2021	0%	6 days	6 days	6 days						
728	Temporary ELS & Excavation	31 days	31 days	NA	NA	December 30, 2020	February 4, 2021	January 12, 2021	February 19, 2021	0%	0 days	1 days	10 days						
729	Trim formation layer	26 days	26 days	NA	NA	February 5, 2021	March 10, 2021	February 20, 2021	March 22, 2021	0%	0 days	1 days	10 days						
730	Lowering precast box culvert (3 cells)	40 days	40 days	NA	NA	March 11, 2021	April 29, 2021	March 23, 2021	May 12, 2021	0%	4 days	2 days	10 days						
731	Remove struts and backfilling	16 days	16 days	NA	NA	May 6, 2021	May 25, 2021	May 13, 2021	June 1, 2021	0%	0 days	1 days	6 days						
732	Planned Completion for Section 2	1 day	1 day	NA	NA	May 26, 2021	May 26, 2021	June 2, 2021	June 2, 2021	0%	0 days	0 days	6 days						
733	Section 3	408 days	408 days	NA	NA	June 16, 2020	October 28, 2021	June 20, 2020	May 29, 2024	0%	4 days	4 days	4 days						
734	Part 2C - Lift LT3 & LT4	291 days	291 days	NA	NA	June 16, 2020	June 8, 2021	June 20, 2020	May 29, 2024	0%	4 days	4 days	4 days						
735	Mobilization of plant and materials	22 days	22 days	NA	NA	July 16, 2020	July 13, 2020	June 20, 2020	July 17, 2020	0%	0 days	1 days	4 days						
736	Foundation Construction	49 days	49 days	NA	NA	July 14, 2020	September 8, 2020	July 18, 2020	September 12, 2020	0%	0 days	2 days	4 days						
737	Slab and shaft	33 days	33 days	NA	NA	September 9, 2020	October 19, 2020	September 14, 2020	October 23, 2020	0%	0 days	1 days	4 days						
738	E & M installation	65 days	65 days	NA	NA	February 23, 2021	May 13, 2021	February 27, 2021	May 18, 2021	0%	0 days	3 days	4 days						
739	Lift installation (LT3 & LT4)	101 days	101 days	NA	NA	October 20, 2020	February 22, 2021	October 24, 2020	February 26, 2021	0%	0 days	5 days	4 days						
740	CLP Meter Installation	0 days	0 days	NA	NA	February 1, 2021	February 1, 2021	May 29, 2024	May 29, 2024	0%	1214 d...	1214 d...	1214 d...						
741	EMSD Submission Form 5 for Lift Inspection	0 days	0 days	NA	NA	March 1, 2021	March 1, 2021	October 5, 2021	October 5, 2021	0%	0 days	218 days	218 days						
742	EMSD Lift Inspection	0 days	0 days	NA	NA	March 14, 2021	March 14, 2021	October 19, 2021	October 19, 2021	0%	0 days	218 days	218 days						
743	Issuance of Lift Use Permit	0 days	0 days	NA	NA	March 29, 2021	March 29, 2021	November 2, 2021	November 2, 2021	0%	213 days	218 days	218 days						
744	Testing & commissioning	21 days	21 days	NA	NA	May 14, 2021	June 8, 2021	May 20, 2021	June 12, 2021	0%	0 days	1 days	4 days						
745	Footpath	27 days	27 days	NA	NA	June 9, 2021	July 12, 2021	June 15, 2021	July 16, 2021	0%	0 days	1 days	4 days						
746	Open Space within Part 2C	90 days	90 days	NA	NA	July 13, 2021	October 28, 2021	July 17, 2021	November 2, 2021	0%	0 days	4 days	4 days						
747	Planned Completion for Section 3	0 days	0 days	NA	NA	October 28, 2021	October 28, 2021	November 2, 2021	November 2, 2021	0%	0 days	0 days	4 days						
748	Section 4 (Subject to Excision)	185 days	185 days	NA	NA	October 3, 2022	May 17, 2023	October 15, 2022	May 30, 2023	0%	10 days	10 days	10 days						
749	Part 2E - Abandon of existing DCS	185 days	185 days	NA	NA	October 3, 2022	May 17, 2023	October 15, 2022	May 30, 2023	0%	0 days	9 days	10 days						
750	Planned Completion for Section 4	0 days	0 days	NA	NA	May 17, 2023	May 17, 2023	May 30, 2023	May 30, 2023	0%	0 days	0 days	10 days						
751	Section 5	303 days	303 days	NA	NA	June 20, 2020	June 28, 2021	June 27, 2020	July 5, 2021	0%	5 days	5 days	5 days						
752	Noise barrier fronting to 4B5 at Rd D3A & Bus Lay By ~120m	303 days	303 days	NA	NA	June 20, 2020	June 28, 2021	June 27, 2020	July 5, 2021	0%	5 days	5 days	5 days						
753	ELS & Excavation	33 days	33 days	NA	NA	June 20, 2020	July 30, 2020	June 27, 2020	August 5, 2020	0%	0 days	2 days	5 days						
754	Noise barrier foundation	94 days	94 days	NA	NA	July 31, 2020	November 20, 2020	August 6, 2020	November 26, 2020	0%	0 days	4 days	5 days						
755	Frame & Panel installation (Night Work)	176 days	176 days	NA	NA	November 21, 2020	June 28, 2021	November 27, 2020	July 5, 2021	0%	0 days	8 days	5 days						
756	Planned Completion for Section 5	0 days	0 days	NA	NA	June 28, 2021	June 28, 2021	July 5, 2021	July 5, 2021	0%	0 days	0 days	5 days						
757	Section 6	1202 days	1198.4 days	May 16, 2019	NA	May 16, 2019	May 30, 2023	May 16, 2019	May 29, 2024	0%	297 days	297 days	297 days						
758	Fencing (15m/d) & Hoarding Erection (10m/d)	919 days	919 days	NA	NA	October 8, 2019	November 8, 2022	November 9, 2019	May 29, 2024	0%	28 days	28 days	28 days						
759	Fencing - Part 1 (~768m)	51 days	51 days	NA	NA	October 21, 2019	December 18, 2019	November 9, 2019	January 10, 2020	0%	17 days	1 day	17 days						
760	Hoarding - Part 1 (~57m)	6 days	6 days	NA	NA	November 19, 2019	November 25, 2019	January 4, 2020	January 10, 2020	0%	0 days	0 days	37 days						
761	Fencing - Part 2A (~458m) - 4 team	12 days	12 days	NA	NA	June 2, 2020	June 15, 2020	June 12, 2020	June 26, 2020	0%	4 days	1 days	9 days						
762	Hoarding - Part 2A (~379m) - 4 team	12 days	12 days	NA	NA	June 2, 2020	June 15, 2020	June 12, 2020	June 26, 2020	0%	4 days	1 days	9 days						
763	Fencing - Part 2B (~132m)	9 days	9 days	NA	NA	February 1, 2021	February 10, 2021	June 15, 2022	June 24, 2022	0%	347 days	0 days	404 days						
764	Hoarding - Part 2C (~106m)	9 days	9 days	NA	NA	June 2, 2020	June 11, 2020	June 10, 2020	June 19, 2020	0%	3 days	1 days	7 days						
765	Hoarding - Part 2E (~37m)	4 days	4 days	NA	NA	October 3, 2022	October 7, 2022	January 27, 2023	January 31, 2023	0%	0 days	0 days	95 days						
766	Fencing - Part 3A (~326m)	22 days	22 days	NA	NA	October 14, 2022	November 8, 2022	February 7, 2023	March 3, 2023	0%	0 days	0.5 days	95 days						
767	Fencing - Part 3D (~29m)	2 days	2 days	NA	NA	December 2, 2019	December 3, 2019	January 21, 2020	January 22, 2020	0%	40 days	0 days	40 days						
768	Fencing - Part 3E (~23m)	2 days	2 days	NA	NA	December 7, 2019	December 9, 2019	March 17, 2020	March 18, 2020	0%	70 days	0 days	80 days						
769	Fencing - Part 3F (~62m)	5 days	5 days	NA	NA	October 8, 2022	October 13, 2022	February 1, 2023	February 6, 2023	0%	0 days	0 days	95 days						
770	Fencing - Part 3G (~69m)	5 days	5 days	NA	NA	December 2, 2019	December 6, 2019	March 11, 2020	March 16, 2020	0%	0 days	0 days	80 days						
771	Fencing - Part 3I (~19m)	2 days	2 days	NA	NA	December 2, 2019	December 3, 2019	March 14, 2020	March 16, 2020	0%	3 days	0 days	83 days						
772	Fencing - Part 4 (~180m)	12 days	12 days	NA	NA	March 5, 2021	March 18, 2021	June 9, 2021	June 23, 2021	0%	77 days	0 days	77 days						
773	Fencing - Part 6A (~19m)	2 days	2 days	NA	NA	November 1, 2019	November 2, 2019	May 25, 2024	May 27, 2024	0%	0 days	0 days	1355 d...						
774	Fencing - Part 6B (~23m)	2 days	2 days	NA	NA	November 4, 2019	November 5, 2019	May 28, 2024	May 29, 2024	0%	1355 d...	0 days	1355 d...						
775	Hoarding - WA1 (~300m)	21 days	21 days	NA	NA	October 8, 2019	October 31, 2019	April 29, 2024	May 24, 2024	0%	0 days	0.5 days	1355 d...						
776	Fencing (15m/d) & Hoarding Erection (10m/d) - Upon Works Completion	95 days	95 days	NA	NA	April 29, 2022	August 19, 2022	July 25, 2022	November 15, 2022	0%	72 days	72 days	72 days						
777	Fencing - ~1437m	95 days	95 days	NA	NA	April 29, 2022	August 19, 2022	July 25, 2022	November 15, 2022	0%	0 days	1 day	72 days						
778	Hoarding - ~260m	26 days	26 days	NA	NA	April 29, 2022	May 28, 2022	October 17, 2022	November 15, 2022	0%	69 days	0.5 days	141 days						
779	Demolition Work - Extg Fire Service Station	136 days	117.24 days	August 16, 2019	NA	August 16, 2019	January 31, 2020	August 16, 2019	May 13, 2020	0%	82 days	82 days	82 days						



Appendix C – Weather information

General Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)	Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)
20/01/2020	15.7	20.6	0.0	01/02/2020	14.1	18.8	0
21/01/2020	17.3	21.1	0.0	02/02/2020	15.9	19.5	0
22/01/2020	18.0	23.6	Trace	03/02/2020	16.6	20.4	Trace
23/01/2020	20.5	25.7	0.0	04/02/2020	15.4	19	0.8
24/01/2020	20.1	23.1	Trace	05/02/2020	16.6	18.3	1
25/01/2020	18.8	22.2	2.1	06/02/2020	15.9	18.6	Trace
26/01/2020	13.7	19.2	12.3	07/02/2020	17.3	20.6	0
27/01/2020	11.5	16.0	0.2	08/02/2020	16.7	19.6	0
28/01/2020	10.8	16.1	0.1	09/02/2020	15	18.5	Trace
29/01/2020	11.0	17.1	0.0	10/02/2020	15.5	18.6	0
30/01/2020	11.6	18.5	0.0	11/02/2020	16.8	19.1	0.8
31/01/2020	11.8	18.9	0.0	12/02/2020	18.4	24.7	0
<p>NOTE1: The above weather information was obtained from manned weather station of Hong Kong Observatory.</p> <p>NOTE2: Trace means rainfall less than 0.05 mm</p> <p>https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2020&m=01</p>				13/02/2020	18.9	20.5	41.6
				14/02/2020	19.5	22.5	9.7
				15/02/2020	19.4	22.3	Trace
				16/02/2020	10.6	22.4	25.5
				17/02/2020	10.3	18	0
				18/02/2020	11.6	18.4	0
				19/02/2020	14	19.4	0
				20/02/2020	15.4	21.2	0
				21/02/2020	16.5	22.6	0
				22/02/2020	17.1	25.5	0
				23/02/2020	17.5	23.9	0
				24/02/2020	17.5	22	0
				25/02/2020	19.7	25	Trace
				26/02/2020	20.6	28.1	0
				27/02/2020	19.1	22.6	0.4
				28/02/2020	18.1	25.3	0
				29/02/2020	20.2	26.6	0
<p>NOTE1: The above weather information was obtained from manned weather station of Hong Kong Observatory.</p> <p>NOTE2: Trace means rainfall less than 0.05 mm</p> <p>https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2020&m=2</p>							

General Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)
01/03/2020	20.4	26.6	0.0
02/03/2020	18.8	21.8	Trace
03/03/2020	18.2	21.0	Trace
04/03/2020	18.2	21.5	3.1
05/03/2020	16.5	20.7	0.4
06/03/2020	17.2	19.8	Trace
07/03/2020	18.8	24.3	Trace
08/03/2020	20.9	23.6	Trace
09/03/2020	20.8	26.8	Trace
10/03/2020	20.7	26.7	Trace
11/03/2020	17.9	20.8	Trace
12/03/2020	18.0	20.2	Trace
13/03/2020	19.3	25.0	0.0
14/03/2020	19.8	25.9	0.4
15/03/2020	18.9	23.0	0.0
16/03/2020	18.5	22.8	0.0
17/03/2020	19.5	21.7	0.0
18/03/2020	19.7	21.6	10.7
19/03/2020	20.3	23.0	0.8
20/03/2020	20.5	23.0	0.4
21/03/2020	20.2	23.0	0.2
22/03/2020	21.6	28.5	0.0
23/03/2020	22.0	28.5	0.0
24/03/2020	21.0	26.6	Trace
25/03/2020	21.2	26.5	Trace
26/03/2020	22.0	26.3	1.0
27/03/2020	22.4	27.7	Trace
28/03/2020	19.8	25.9	9.8
29/03/2020	19.1	21.9	2.2
30/03/2020	19.7	21.4	6.5
31/03/2020	19.2	21.3	5.8

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?v=2020&m=3>

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
20/01/2020	0:00	1.29	168.5	21/1/2020	0:00	0.33	181.1	22/01/2020	0:00	1.36	228.8	23/01/2020	0:00	2.37	225
20/01/2020	1:00	0.36	180.5	21/1/2020	1:00	0.74	174.4	22/01/2020	1:00	0.75	236.3	23/01/2020	1:00	2.19	255
20/01/2020	2:00	0.3	197	21/1/2020	2:00	0.57	176.3	22/01/2020	2:00	0.91	232.5	23/01/2020	2:00	1.81	251.3
20/01/2020	3:00	0.56	220.5	21/1/2020	3:00	1.37	217.5	22/01/2020	3:00	1.33	247.5	23/01/2020	3:00	1.68	228.8
20/01/2020	4:00	0.1	260.5	21/1/2020	4:00	1.94	232.5	22/01/2020	4:00	1.38	243.8	23/01/2020	4:00	1.43	258.8
20/01/2020	5:00	0.6	195.8	21/1/2020	5:00	2.27	228.8	22/01/2020	5:00	1.85	232.5	23/01/2020	5:00	1.72	247.5
20/01/2020	6:00	0.37	155	21/1/2020	6:00	1.43	247.5	22/01/2020	6:00	2.93	198.8	23/01/2020	6:00	2.44	195.8
20/01/2020	7:00	0.38	277	21/1/2020	7:00	1.76	221.3	22/01/2020	7:00	3.18	183.8	23/01/2020	7:00	2.09	247.5
20/01/2020	8:00	0.54	198	21/1/2020	8:00	1.32	187.5	22/01/2020	8:00	2.45	187.5	23/01/2020	8:00	2.37	225
20/01/2020	9:00	1.46	180.5	21/1/2020	9:00	1.33	258.8	22/01/2020	9:00	2.08	180	23/01/2020	9:00	2.49	187.5
20/01/2020	10:00	1.48	175	21/1/2020	10:00	1.42	176.3	22/01/2020	10:00	1.94	195	23/01/2020	10:00	2.06	213.8
20/01/2020	11:00	1.38	236.3	21/1/2020	11:00	1.57	176.3	22/01/2020	11:00	1.89	195	23/01/2020	11:00	1.63	168.8
20/01/2020	12:00	1.38	237.8	21/1/2020	12:00	1.87	247.5	22/01/2020	12:00	1.55	297.3	23/01/2020	12:00	2.71	195
20/01/2020	13:00	1.86	256	21/1/2020	13:00	1.34	225.3	22/01/2020	13:00	1.16	228.8	23/01/2020	13:00	1.52	232.5
20/01/2020	14:00	1.64	241	21/1/2020	14:00	1.49	202.5	22/01/2020	14:00	1.25	221.3	23/01/2020	14:00	1.42	243.8
20/01/2020	15:00	1.16	214.8	21/1/2020	15:00	0.94	191.3	22/01/2020	15:00	0.97	288.8	23/01/2020	15:00	1.77	195
20/01/2020	16:00	1.2	252.3	21/1/2020	16:00	0.68	176.3	22/01/2020	16:00	0.92	187.5	23/01/2020	16:00	2.28	206.3
20/01/2020	17:00	0.49	228	21/1/2020	17:00	0.68	146.3	22/01/2020	17:00	0.94	195	23/01/2020	17:00	0.48	292.5
20/01/2020	18:00	0.26	221.3	21/1/2020	18:00	0.52	146.3	22/01/2020	18:00	0.62	303.8	23/01/2020	18:00	1.39	266.3
20/01/2020	19:00	0.19	214.6	21/1/2020	19:00	0.87	198.8	22/01/2020	19:00	0.86	180	23/01/2020	19:00	1.58	240
20/01/2020	20:00	0.13	207.9	21/1/2020	20:00	0.88	251.3	22/01/2020	20:00	1.12	258.8	23/01/2020	20:00	1.73	198.8
20/01/2020	21:00	0.09	201.2	21/1/2020	21:00	0.69	255	22/01/2020	21:00	1.09	213.8	23/01/2020	21:00	1.53	260
20/01/2020	22:00	0.06	194.5	21/1/2020	22:00	1.74	232.5	22/01/2020	22:00	1.49	251.3	23/01/2020	22:00	1.79	225
20/01/2020	23:00	0.05	187.8	21/1/2020	23:00	2.27	217.5	22/01/2020	23:00	2.11	232.5	23/01/2020	23:00	1.46	161.3

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
24/01/2020	0:00	1.73	228.8	25/01/2020	0:00	1.24	210	26/01/2020	0:00	0.19	173.1	27/01/2020	0:00	0.24	138.8
24/01/2020	1:00	1.42	285	25/01/2020	1:00	0.73	225	26/01/2020	1:00	0.78	166.4	27/01/2020	1:00	0.06	157.5
24/01/2020	2:00	1.61	225	25/01/2020	2:00	0.63	202.5	26/01/2020	2:00	0.76	159.7	27/01/2020	2:00	0.59	165
24/01/2020	3:00	1.32	236.3	25/01/2020	3:00	0.75	315.5	26/01/2020	3:00	0.37	247.5	27/01/2020	3:00	0.63	146.3
24/01/2020	4:00	1.79	251.3	25/01/2020	4:00	1.53	304.3	26/01/2020	4:00	0.79	206.3	27/01/2020	4:00	0.22	123.8
24/01/2020	5:00	2.21	187.5	25/01/2020	5:00	0.82	304.3	26/01/2020	5:00	0.96	210	27/01/2020	5:00	0.24	243.8
24/01/2020	6:00	2.29	217.5	25/01/2020	6:00	0.67	308	26/01/2020	6:00	0.41	195	27/01/2020	6:00	0.23	157.5
24/01/2020	7:00	1.82	236.3	25/01/2020	7:00	0.55	270.5	26/01/2020	7:00	0.1	138.8	27/01/2020	7:00	1.23	292.5
24/01/2020	8:00	1.84	206.3	25/01/2020	8:00	0.45	263	26/01/2020	8:00	0.88	161.3	27/01/2020	8:00	1.49	300
24/01/2020	9:00	1.54	198.8	25/01/2020	9:00	0.96	270.5	26/01/2020	9:00	0.97	183.8	27/01/2020	9:00	1.67	300
24/01/2020	10:00	1.62	195	25/01/2020	10:00	0.94	274.3	26/01/2020	10:00	1.12	168.8	27/01/2020	10:00	2.1	307.5
24/01/2020	11:00	2.05	210	25/01/2020	11:00	1.13	278	26/01/2020	11:00	0.69	191.3	27/01/2020	11:00	1.98	315
24/01/2020	12:00	2.64	195	25/01/2020	12:00	1.63	263	26/01/2020	12:00	0.87	168.8	27/01/2020	12:00	1.69	288
24/01/2020	13:00	2.34	213.8	25/01/2020	13:00	1.26	248	26/01/2020	13:00	0.89	202.5	27/01/2020	13:00	2.03	313.3
24/01/2020	14:00	2.37	217.5	25/01/2020	14:00	1.95	233	26/01/2020	14:00	1.24	161.3	27/01/2020	14:00	1.98	285
24/01/2020	15:00	2.17	198.8	25/01/2020	15:00	1.9	206.8	26/01/2020	15:00	1.09	176.3	27/01/2020	15:00	2.36	290.5
24/01/2020	16:00	2.27	206.3	25/01/2020	16:00	1.4	244.3	26/01/2020	16:00	0.79	191.3	27/01/2020	16:00	1.98	300.5
24/01/2020	17:00	2.21	221.3	25/01/2020	17:00	1.7	220	26/01/2020	17:00	0.55	277.5	27/01/2020	17:00	1.8	288.4
24/01/2020	18:00	1.8	202.5	25/01/2020	18:00	1.41	213.3	26/01/2020	18:00	0.64	183.8	27/01/2020	18:00	1.49	270
24/01/2020	19:00	2.41	213.8	25/01/2020	19:00	0.94	206.6	26/01/2020	19:00	0.39	225	27/01/2020	19:00	1.34	307.5
24/01/2020	20:00	2.23	225	25/01/2020	20:00	0.66	199.9	26/01/2020	20:00	0.81	258.8	27/01/2020	20:00	1.21	311.3
24/01/2020	21:00	2.41	228.8	25/01/2020	21:00	0.66	193.2	26/01/2020	21:00	0.32	228.8	27/01/2020	21:00	1.06	292.5
24/01/2020	22:00	2.02	247.5	25/01/2020	22:00	0.76	186.5	26/01/2020	22:00	0.46	217.5	27/01/2020	22:00	1.17	311.3
24/01/2020	23:00	1.93	183.8	25/01/2020	23:00	0.66	179.8	26/01/2020	23:00	0.35	135	27/01/2020	23:00	1.52	303.8

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
28/01/2020	0:00	1.47	298.8	29/01/2020	0:00	0.79	281.8	30/01/2020	0:00	2.21	292.5	31/01/2020	0:00	0.47	204.4
28/01/2020	1:00	1.37	315	29/01/2020	1:00	1.39	296.8	30/01/2020	1:00	2.63	281.3	31/01/2020	1:00	0.4	208.2
28/01/2020	2:00	1.11	331.3	29/01/2020	2:00	0.93	300.5	30/01/2020	2:00	2.28	292.5	31/01/2020	2:00	0.58	196.9
28/01/2020	3:00	1.1	322.5	29/01/2020	3:00	1.23	296.8	30/01/2020	3:00	2.12	288.8	31/01/2020	3:00	0.76	271.9
28/01/2020	4:00	0.84	313.3	29/01/2020	4:00	1.69	285.5	30/01/2020	4:00	2.24	285	31/01/2020	4:00	0.3	298.2
28/01/2020	5:00	0.74	297.5	29/01/2020	5:00	1.46	311.8	30/01/2020	5:00	2.86	288.8	31/01/2020	5:00	0.07	320.7
28/01/2020	6:00	2.14	276.5	29/01/2020	6:00	2.68	195.5	30/01/2020	6:00	0.83	285	31/01/2020	6:00	0.16	313.2
28/01/2020	7:00	2.19	296.3	29/01/2020	7:00	2.34	199.3	30/01/2020	7:00	1.98	296.3	31/01/2020	7:00	0.09	316.9
28/01/2020	8:00	1.76	288.8	29/01/2020	8:00	2.23	188	30/01/2020	8:00	2.2	288.8	31/01/2020	8:00	0.75	320.7
28/01/2020	9:00	3.14	281.3	29/01/2020	9:00	2.81	263	30/01/2020	9:00	2.71	121.9	31/01/2020	9:00	1.15	213.8
28/01/2020	10:00	3.12	277.5	29/01/2020	10:00	3.51	289.3	30/01/2020	10:00	2.62	121.9	31/01/2020	10:00	1.39	180
28/01/2020	11:00	2.74	295	29/01/2020	11:00	3.07	311.8	30/01/2020	11:00	2.82	121.9	31/01/2020	11:00	0.93	251.3
28/01/2020	12:00	2.52	286.8	29/01/2020	12:00	3.38	304.3	30/01/2020	12:00	2.7	178.2	31/01/2020	12:00	1.78	315
28/01/2020	13:00	2.58	296.3	29/01/2020	13:00	3.62	308	30/01/2020	13:00	2.95	204.4	31/01/2020	13:00	1.87	337
28/01/2020	14:00	3.17	298.8	29/01/2020	14:00	2.15	311.8	30/01/2020	14:00	2.53	174.4	31/01/2020	14:00	0.53	318.8
28/01/2020	15:00	2.83	113	29/01/2020	15:00	2	285	30/01/2020	15:00	2.11	238.2	31/01/2020	15:00	0.24	206.3
28/01/2020	16:00	2.46	113	29/01/2020	16:00	1.91	292.5	30/01/2020	16:00	2.21	313.2	31/01/2020	16:00	0.66	180.3
28/01/2020	17:00	2.54	113	29/01/2020	17:00	2.02	303.8	30/01/2020	17:00	1.58	298.2	31/01/2020	17:00	1.13	313.8
28/01/2020	18:00	2.26	169.3	29/01/2020	18:00	1.63	303.8	30/01/2020	18:00	0.56	290.7	31/01/2020	18:00	0.24	262.5
28/01/2020	19:00	2.58	195.5	29/01/2020	19:00	0.93	273.8	30/01/2020	19:00	0.73	305.7	31/01/2020	19:00	0.26	286.3
28/01/2020	20:00	1.72	168.5	29/01/2020	20:00	0.78	281.3	30/01/2020	20:00	0.41	309.4	31/01/2020	20:00	1	157.5
28/01/2020	21:00	1.34	229.3	29/01/2020	21:00	1.57	281.3	30/01/2020	21:00	0.58	305.7	31/01/2020	21:00	1.38	165.3
28/01/2020	22:00	0.75	303.3	29/01/2020	22:00	2.68	292.5	30/01/2020	22:00	0.84	294.4	31/01/2020	22:00	1.17	187
28/01/2020	23:00	1.17	289.3	29/01/2020	23:00	2.71	288.8	30/01/2020	23:00	0.71	320.7	31/01/2020	23:00	0.81	165

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
1/2/2020	0:00	1.12	307.5	2/2/2020	0:00	1.65	311.25	3/2/2020	0:00	0.83	318.75	4/2/2020	0:00	0.09	315
1/2/2020	1:00	1.52	311.25	2/2/2020	1:00	1.92	296.25	3/2/2020	1:00	0.62	315	4/2/2020	1:00	0.16	292.5
1/2/2020	2:00	2.08	296.25	2/2/2020	2:00	1.49	285	3/2/2020	2:00	1.44	277.5	4/2/2020	2:00	0.04	292.5
1/2/2020	3:00	2.64	285	2/2/2020	3:00	1.43	285	3/2/2020	3:00	0.52	318.75	4/2/2020	3:00	0.06	270
1/2/2020	4:00	2.22	326.25	2/2/2020	4:00	0.99	292.5	3/2/2020	4:00	0.76	195	4/2/2020	4:00	0.48	315
1/2/2020	5:00	1.72	315	2/2/2020	5:00	0.82	326.25	3/2/2020	5:00	0.04	240	4/2/2020	5:00	0.16	337.5
1/2/2020	6:00	2.29	273.75	2/2/2020	6:00	0.35	288.75	3/2/2020	6:00	0.22	247.5	4/2/2020	6:00	0.42	377.5
1/2/2020	7:00	1.7	273.75	2/2/2020	7:00	0.67	292.5	3/2/2020	7:00	0.01	326.25	4/2/2020	7:00	0.35	56.25
1/2/2020	8:00	1.95	262.5	2/2/2020	8:00	0.97	292.5	3/2/2020	8:00	0.12	307.5	4/2/2020	8:00	0.6	330
1/2/2020	9:00	1.59	292.5	2/2/2020	9:00	0.23	281.25	3/2/2020	9:00	0.45	333.75	4/2/2020	9:00	1.09	318.75
1/2/2020	10:00	1.92	311.25	2/2/2020	10:00	0.3	318.75	3/2/2020	10:00	0.22	330	4/2/2020	10:00	1.05	311.25
1/2/2020	11:00	1.68	303.75	2/2/2020	11:00	0.67	315	3/2/2020	11:00	0.21	318.75	4/2/2020	11:00	1.7	322.5
1/2/2020	12:00	1.9	315	2/2/2020	12:00	1.19	311.25	3/2/2020	12:00	0.09	303.75	4/2/2020	12:00	1.28	296.25
1/2/2020	13:00	1.35	300	2/2/2020	13:00	1.95	326.25	3/2/2020	13:00	0.04	307.5	4/2/2020	13:00	0.89	292.5
1/2/2020	14:00	1.36	326.25	2/2/2020	14:00	0.77	307.5	3/2/2020	14:00	0.73	326.25	4/2/2020	14:00	0.83	307.5
1/2/2020	15:00	1.13	300	2/2/2020	15:00	0.36	330	3/2/2020	15:00	0.37	322.5	4/2/2020	15:00	0.48	315
1/2/2020	16:00	1.72	322.5	2/2/2020	16:00	0.67	326.25	3/2/2020	16:00	0.12	322.5	4/2/2020	16:00	0.61	333.75
1/2/2020	17:00	1.47	326.25	2/2/2020	17:00	1.58	292.5	3/2/2020	17:00	0.01	330	4/2/2020	17:00	1.57	333.75
1/2/2020	18:00	1.31	330	2/2/2020	18:00	1.66	296.25	3/2/2020	18:00	0.3	330	4/2/2020	18:00	1.14	303.75
1/2/2020	19:00	2.02	322.5	2/2/2020	19:00	0.64	326.25	3/2/2020	19:00	0.77	330	4/2/2020	19:00	2.67	326.25
1/2/2020	20:00	1.14	307.5	2/2/2020	20:00	0.99	322.5	3/2/2020	20:00	0.47	318.75	4/2/2020	20:00	2.3	337.5
1/2/2020	21:00	0.49	318.75	2/2/2020	21:00	0.6	288.75	3/2/2020	21:00	0.85	236.25	4/2/2020	21:00	2.04	311.25
1/2/2020	22:00	0.62	333.75	2/2/2020	22:00	0.92	322.5	3/2/2020	22:00	0.79	52.5	4/2/2020	22:00	2.28	322.5
1/2/2020	23:00	0.03	326.25	2/2/2020	23:00	0.77	326.25	3/2/2020	23:00	0.61	0	4/2/2020	23:00	1.62	225

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
5/2/2020	0:00	2.18	221.25	6/2/2020	0:00	0.61	311.25	7/2/2020	0:00	0.61	315	8/2/2020	0:00	0.97	292.5
5/2/2020	1:00	1.6	123.75	6/2/2020	1:00	1.26	300	7/2/2020	1:00	1.26	337.5	8/2/2020	1:00	0.91	240
5/2/2020	2:00	2.19	183.75	6/2/2020	2:00	0.97	292.5	7/2/2020	2:00	0.97	337.5	8/2/2020	2:00	0.69	93.75
5/2/2020	3:00	4.03	60	6/2/2020	3:00	1.3	288.75	7/2/2020	3:00	1.3	315	8/2/2020	3:00	0.44	191.25
5/2/2020	4:00	3.54	41.25	6/2/2020	4:00	0.82	288.75	7/2/2020	4:00	0.82	315	8/2/2020	4:00	0.61	228.75
5/2/2020	5:00	3.75	225	6/2/2020	5:00	1.13	300	7/2/2020	5:00	1.13	292.5	8/2/2020	5:00	0.7	307.5
5/2/2020	6:00	3.65	307.5	6/2/2020	6:00	1.03	315	7/2/2020	6:00	1.03	292.5	8/2/2020	6:00	1.08	311.25
5/2/2020	7:00	3.1	285	6/2/2020	7:00	1.44	311.25	7/2/2020	7:00	1.44	292.5	8/2/2020	7:00	0.92	300
5/2/2020	8:00	2.45	273.75	6/2/2020	8:00	1.15	330	7/2/2020	8:00	1.15	292.5	8/2/2020	8:00	1.19	285
5/2/2020	9:00	2.58	273.75	6/2/2020	9:00	0.82	322.5	7/2/2020	9:00	0.82	292.5	8/2/2020	9:00	0.95	281.25
5/2/2020	10:00	2.75	288.75	6/2/2020	10:00	1.41	315	7/2/2020	10:00	1.41	157.5	8/2/2020	10:00	0.88	296.25
5/2/2020	11:00	2.82	281.25	6/2/2020	11:00	1.18	322.5	7/2/2020	11:00	1.18	337.5	8/2/2020	11:00	0.84	300
5/2/2020	12:00	2.95	307.5	6/2/2020	12:00	2.19	296.25	7/2/2020	12:00	2.19	337.5	8/2/2020	12:00	1.15	285
5/2/2020	13:00	3.06	315	6/2/2020	13:00	1.7	311.25	7/2/2020	13:00	1.7	55.5	8/2/2020	13:00	1.29	266.25
5/2/2020	14:00	3.13	303.75	6/2/2020	14:00	1.3	333.75	7/2/2020	14:00	1.3	315	8/2/2020	14:00	1.04	206.25
5/2/2020	15:00	2.83	311.25	6/2/2020	15:00	1.77	337.5	7/2/2020	15:00	1.77	337.5	8/2/2020	15:00	1.31	195
5/2/2020	16:00	2.05	311.25	6/2/2020	16:00	1.12	326.25	7/2/2020	16:00	1.12	337.5	8/2/2020	16:00	2.24	146.25
5/2/2020	17:00	2.99	307.5	6/2/2020	17:00	1.21	333.75	7/2/2020	17:00	1.21	337.5	8/2/2020	17:00	1.93	157.5
5/2/2020	18:00	3.41	307.5	6/2/2020	18:00	1.04	322.5	7/2/2020	18:00	1.04	337.5	8/2/2020	18:00	2.14	183.75
5/2/2020	19:00	2.5	330	6/2/2020	19:00	0.37	333.75	7/2/2020	19:00	0.37	337.5	8/2/2020	19:00	2.36	206.25
5/2/2020	20:00	2.21	322.5	6/2/2020	20:00	0.5	333.75	7/2/2020	20:00	0.5	45	8/2/2020	20:00	1.16	210
5/2/2020	21:00	2.11	311.25	6/2/2020	21:00	0.91	337.5	7/2/2020	21:00	0.91	45	8/2/2020	21:00	0.73	210
5/2/2020	22:00	2.08	296.25	6/2/2020	22:00	0.62	318.75	7/2/2020	22:00	0.62	337.5	8/2/2020	22:00	0.46	221.25
5/2/2020	23:00	2.64	296.25	6/2/2020	23:00	0.47	277.5	7/2/2020	23:00	0.47	337.5	8/2/2020	23:00	1.33	206.25

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
9/2/2020	0:00	1.97	161.25	10/2/2020	0:00	0.42	198.75	11/2/2020	0:00	2.89	168.75	12/2/2020	0:00	1.51	221.25
9/2/2020	1:00	1.82	191.25	10/2/2020	1:00	1.12	165	11/2/2020	1:00	1.89	176.25	12/2/2020	1:00	0.97	198.75
9/2/2020	2:00	1.43	176.25	10/2/2020	2:00	1.66	191.25	11/2/2020	2:00	2.26	168.75	12/2/2020	2:00	1.09	183.75
9/2/2020	3:00	1.24	161.25	10/2/2020	3:00	0.88	202.5	11/2/2020	3:00	1.7	180	12/2/2020	3:00	1.26	168.75
9/2/2020	4:00	2.08	168.75	10/2/2020	4:00	0.99	165	11/2/2020	4:00	1.79	198.75	12/2/2020	4:00	1.54	168.75
9/2/2020	5:00	1.75	165	10/2/2020	5:00	0.86	168.75	11/2/2020	5:00	1.41	180	12/2/2020	5:00	1.13	168.75
9/2/2020	6:00	1.97	206.25	10/2/2020	6:00	1.39	213.75	11/2/2020	6:00	2.8	172.5	12/2/2020	6:00	0.61	176.25
9/2/2020	7:00	1.33	176.25	10/2/2020	7:00	0.92	202.5	11/2/2020	7:00	1.87	157.5	12/2/2020	7:00	1.19	172.5
9/2/2020	8:00	0.82	210	10/2/2020	8:00	0.37	161.25	11/2/2020	8:00	1.8	172.5	12/2/2020	8:00	1.4	195
9/2/2020	9:00	0.97	180	10/2/2020	9:00	1.46	176.25	11/2/2020	9:00	1.67	168.75	12/2/2020	9:00	1.84	176.25
9/2/2020	10:00	0.96	195	10/2/2020	10:00	0.72	157.5	11/2/2020	10:00	2.21	161.25	12/2/2020	10:00	1.47	191.25
9/2/2020	11:00	1.18	172.5	10/2/2020	11:00	1.56	180	11/2/2020	11:00	1.72	180	12/2/2020	11:00	1.98	180
9/2/2020	12:00	0.86	180	10/2/2020	12:00	1.19	142.5	11/2/2020	12:00	2.72	176.25	12/2/2020	12:00	2.1	213.75
9/2/2020	13:00	0.55	228.75	10/2/2020	13:00	1.35	157.5	11/2/2020	13:00	1.74	161.25	12/2/2020	13:00	2.01	213.75
9/2/2020	14:00	0.73	217.5	10/2/2020	14:00	1.41	172.5	11/2/2020	14:00	1.16	172.5	12/2/2020	14:00	1.62	243.75
9/2/2020	15:00	1.2	236.25	10/2/2020	15:00	1.57	180	11/2/2020	15:00	1.35	176.25	12/2/2020	15:00	1.43	240
9/2/2020	16:00	0.74	210	10/2/2020	16:00	0.73	195	11/2/2020	16:00	1.51	146.25	12/2/2020	16:00	2.22	243.75
9/2/2020	17:00	0.85	187.5	10/2/2020	17:00	1.36	168.75	11/2/2020	17:00	1.41	142.5	12/2/2020	17:00	1.96	273.75
9/2/2020	18:00	1.06	228.75	10/2/2020	18:00	1.35	195	11/2/2020	18:00	1.66	180	12/2/2020	18:00	1.73	187.5
9/2/2020	19:00	0.9	228.75	10/2/2020	19:00	1.28	138.75	11/2/2020	19:00	1.84	191.25	12/2/2020	19:00	2.31	183.75
9/2/2020	20:00	0.45	210	10/2/2020	20:00	1.44	112.5	11/2/2020	20:00	2.78	228.75	12/2/2020	20:00	2.29	183.75
9/2/2020	21:00	1.28	202.5	10/2/2020	21:00	1.45	146.25	11/2/2020	21:00	1.21	195	12/2/2020	21:00	2.06	202.5
9/2/2020	22:00	0.57	210	10/2/2020	22:00	1.65	273.75	11/2/2020	22:00	0.64	198.75	12/2/2020	22:00	1.95	202.5
9/2/2020	23:00	1	221.25	10/2/2020	23:00	1.09	150	11/2/2020	23:00	0.83	202.5	12/2/2020	23:00	1.91	202.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
13/2/2020	0:00	1.21	195	14/2/2020	0:00	0.89	183.75	15/2/2020	0:00	1.91	202.5	16/2/2020	0:00	0.49	180
13/2/2020	1:00	1.65	168.75	14/2/2020	1:00	0.88	213.75	15/2/2020	1:00	1.14	195	16/2/2020	1:00	0.69	157.5
13/2/2020	2:00	2.22	165	14/2/2020	2:00	0.81	232.5	15/2/2020	2:00	0.76	206.25	16/2/2020	2:00	1.07	157.5
13/2/2020	3:00	1.4	165	14/2/2020	3:00	0.9	221.25	15/2/2020	3:00	1.17	232.5	16/2/2020	3:00	1.09	165
13/2/2020	4:00	1.56	153.75	14/2/2020	4:00	0.79	180	15/2/2020	4:00	0.74	183.75	16/2/2020	4:00	1.08	142.5
13/2/2020	5:00	1.33	168.75	14/2/2020	5:00	0.79	206.25	15/2/2020	5:00	0.58	251.25	16/2/2020	5:00	0.96	153.75
13/2/2020	6:00	1.19	150	14/2/2020	6:00	0.74	195	15/2/2020	6:00	1.17	198.75	16/2/2020	6:00	0.57	195
13/2/2020	7:00	1.08	157.5	14/2/2020	7:00	1.18	168.75	15/2/2020	7:00	1.51	221.25	16/2/2020	7:00	0.73	240
13/2/2020	8:00	0.94	161.25	14/2/2020	8:00	1.15	198.75	15/2/2020	8:00	0.97	213.75	16/2/2020	8:00	0.1	311.25
13/2/2020	9:00	1.21	165	14/2/2020	9:00	0.96	210	15/2/2020	9:00	0.98	168.75	16/2/2020	9:00	0.08	307.5
13/2/2020	10:00	1.24	180	14/2/2020	10:00	1.31	228.75	15/2/2020	10:00	1.55	176.25	16/2/2020	10:00	0.1	326.25
13/2/2020	11:00	1.15	172.5	14/2/2020	11:00	1.16	221.25	15/2/2020	11:00	1.4	176.25	16/2/2020	11:00	0.25	315
13/2/2020	12:00	0.84	195	14/2/2020	12:00	0.82	195	15/2/2020	12:00	0.82	202.5	16/2/2020	12:00	0.83	315
13/2/2020	13:00	1.31	183.75	14/2/2020	13:00	1.24	191.25	15/2/2020	13:00	0.44	221.25	16/2/2020	13:00	0.18	311.25
13/2/2020	14:00	1.07	183.75	14/2/2020	14:00	1.06	165	15/2/2020	14:00	0.71	240	16/2/2020	14:00	0.18	337.5
13/2/2020	15:00	0.47	180	14/2/2020	15:00	1.21	187.5	15/2/2020	15:00	0.96	228.75	16/2/2020	15:00	0.02	318.75
13/2/2020	16:00	0.82	157.5	14/2/2020	16:00	0.99	195	15/2/2020	16:00	0.68	198.75	16/2/2020	16:00	0.11	307.5
13/2/2020	17:00	0.18	191.25	14/2/2020	17:00	1.43	243.75	15/2/2020	17:00	1.57	262.5	16/2/2020	17:00	0.28	270
13/2/2020	18:00	0.28	183.75	14/2/2020	18:00	1.09	210	15/2/2020	18:00	1.91	202.5	16/2/2020	18:00	0.06	206.25
13/2/2020	19:00	0.53	217.5	14/2/2020	19:00	1.25	165	15/2/2020	19:00	1.2	232.5	16/2/2020	19:00	0.36	138.75
13/2/2020	20:00	1.26	221.25	14/2/2020	20:00	0.96	172.5	15/2/2020	20:00	0.48	198.75	16/2/2020	20:00	0.34	90
13/2/2020	21:00	0.73	198.75	14/2/2020	21:00	1.32	187.5	15/2/2020	21:00	1.37	206.25	16/2/2020	21:00	0.32	112.5
13/2/2020	22:00	0.91	198.75	14/2/2020	22:00	0.98	195	15/2/2020	22:00	1.07	202.5	16/2/2020	22:00	0.14	142.5
13/2/2020	23:00	1.18	210	14/2/2020	23:00	1.56	217.5	15/2/2020	23:00	0.47	172.5	16/2/2020	23:00	0.07	168.75

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
17/2/2020	0:00	0.88	157.5	18/2/2020	0:00	1.06	303.75	19/2/2020	0:00	1.79	157.5	20/2/2020	0:00	0.76	326.25
17/2/2020	1:00	1.77	172.5	18/2/2020	1:00	1.72	180	19/2/2020	1:00	2.08	161.25	20/2/2020	1:00	1.23	288.75
17/2/2020	2:00	1.41	180	18/2/2020	2:00	1.57	176.25	19/2/2020	2:00	1.85	176.25	20/2/2020	2:00	0.67	322.5
17/2/2020	3:00	1.58	266.25	18/2/2020	3:00	0.88	221.25	19/2/2020	3:00	2.31	176.25	20/2/2020	3:00	1.14	311.25
17/2/2020	4:00	1.39	281.25	18/2/2020	4:00	2.1	176.25	19/2/2020	4:00	2.5	303.75	20/2/2020	4:00	1.25	300
17/2/2020	5:00	1.69	228.75	18/2/2020	5:00	1.48	176.25	19/2/2020	5:00	1.7	303.75	20/2/2020	5:00	0.73	292.5
17/2/2020	6:00	1.34	243.75	18/2/2020	6:00	1.55	210	19/2/2020	6:00	2.12	296.25	20/2/2020	6:00	0.76	307.5
17/2/2020	7:00	0.92	198.75	18/2/2020	7:00	1.42	157.5	19/2/2020	7:00	1.8	277.5	20/2/2020	7:00	0.3	303.75
17/2/2020	8:00	1.23	183.75	18/2/2020	8:00	3.61	187.5	19/2/2020	8:00	2.06	296.25	20/2/2020	8:00	0.61	315
17/2/2020	9:00	0.61	161.25	18/2/2020	9:00	3.92	292.5	19/2/2020	9:00	1.88	303.75	20/2/2020	9:00	0.39	303.75
17/2/2020	10:00	0.05	206.25	18/2/2020	10:00	2.68	285	19/2/2020	10:00	2.34	296.25	20/2/2020	10:00	0.35	303.75
17/2/2020	11:00	0.28	183.75	18/2/2020	11:00	2.56	285	19/2/2020	11:00	1.2	251.25	20/2/2020	11:00	0.55	315
17/2/2020	12:00	0.09	232.5	18/2/2020	12:00	2.41	288.75	19/2/2020	12:00	1	303.75	20/2/2020	12:00	0.7	307.5
17/2/2020	13:00	0.05	195	18/2/2020	13:00	2.24	273.75	19/2/2020	13:00	1.46	303.75	20/2/2020	13:00	0.95	307.5
17/2/2020	14:00	0.27	206.25	18/2/2020	14:00	3.23	236.25	19/2/2020	14:00	1.16	281.25	20/2/2020	14:00	0.63	315
17/2/2020	15:00	0.17	266.25	18/2/2020	15:00	2.86	285	19/2/2020	15:00	0.98	277.5	20/2/2020	15:00	0.64	315
17/2/2020	16:00	0.29	243.75	18/2/2020	16:00	2.52	243.75	19/2/2020	16:00	1.04	288.75	20/2/2020	16:00	0.5	307.5
17/2/2020	17:00	0.37	303.75	18/2/2020	17:00	2.4	262.5	19/2/2020	17:00	1.61	315	20/2/2020	17:00	0.34	330
17/2/2020	18:00	0.13	243.75	18/2/2020	18:00	2.94	247.5	19/2/2020	18:00	0.9	303.75	20/2/2020	18:00	0.66	318.75
17/2/2020	19:00	0.04	213.75	18/2/2020	19:00	2.98	202.5	19/2/2020	19:00	0.41	270	20/2/2020	19:00	0.42	307.5
17/2/2020	20:00	0.16	225	18/2/2020	20:00	3.14	168.75	19/2/2020	20:00	0.45	281.25	20/2/2020	20:00	1.42	315
17/2/2020	21:00	0.82	262.5	18/2/2020	21:00	2.1	157.5	19/2/2020	21:00	1.57	303.75	20/2/2020	21:00	1.48	326.25
17/2/2020	22:00	1.27	300	18/2/2020	22:00	2.75	217.5	19/2/2020	22:00	0.47	318.75	20/2/2020	22:00	1.08	262.5
17/2/2020	23:00	1.46	300	18/2/2020	23:00	1.98	168.75	19/2/2020	23:00	0.53	322.5	20/2/2020	23:00	0.68	326.25

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
21/2/2020	0:00	0.18	337.5	22/2/2020	0:00	0.2	330	23/2/2020	0:00	1.26	255	24/2/2020	0:00	0.21	292.5
21/2/2020	1:00	0.19	337.5	22/2/2020	1:00	0.06	330	23/2/2020	1:00	1.38	277.5	24/2/2020	1:00	0.17	288.75
21/2/2020	2:00	0.31	326.25	22/2/2020	2:00	0.5	217.5	23/2/2020	2:00	1.99	221.25	24/2/2020	2:00	0.33	285
21/2/2020	3:00	0.21	322.5	22/2/2020	3:00	0.49	277.5	23/2/2020	3:00	2.71	333.75	24/2/2020	3:00	0.39	281.25
21/2/2020	4:00	0.34	318.75	22/2/2020	4:00	0.23	326.25	23/2/2020	4:00	1.39	326.25	24/2/2020	4:00	0.36	225
21/2/2020	5:00	0.08	322.5	22/2/2020	5:00	0.19	330	23/2/2020	5:00	2.42	217.5	24/2/2020	5:00	0.09	292.5
21/2/2020	6:00	0.01	315	22/2/2020	6:00	0.09	330	23/2/2020	6:00	2.19	165	24/2/2020	6:00	0.13	266.25
21/2/2020	7:00	0.07	303.75	22/2/2020	7:00	0.65	285	23/2/2020	7:00	2.24	258.75	24/2/2020	7:00	0.13	228.75
21/2/2020	8:00	0.08	311.25	22/2/2020	8:00	0.52	322.5	23/2/2020	8:00	2.27	277.5	24/2/2020	8:00	0.11	217.5
21/2/2020	9:00	0.15	330	22/2/2020	9:00	0.16	315	23/2/2020	9:00	2.26	303.75	24/2/2020	9:00	0.16	206.25
21/2/2020	10:00	0.31	318.75	22/2/2020	10:00	1.06	296.25	23/2/2020	10:00	2.46	333.75	24/2/2020	10:00	0.34	198.75
21/2/2020	11:00	0.24	300	22/2/2020	11:00	1.35	300	23/2/2020	11:00	1.53	337.5	24/2/2020	11:00	0.24	195
21/2/2020	12:00	0.45	311.25	22/2/2020	12:00	1.4	311.25	23/2/2020	12:00	0.55	337.5	24/2/2020	12:00	0.71	217.5
21/2/2020	13:00	0.49	318.75	22/2/2020	13:00	1.15	307.5	23/2/2020	13:00	0.82	333.75	24/2/2020	13:00	0.21	225
21/2/2020	14:00	0.02	315	22/2/2020	14:00	1.4	285	23/2/2020	14:00	1.36	333.75	24/2/2020	14:00	0.05	217.5
21/2/2020	15:00	0.09	318.75	22/2/2020	15:00	1.53	307.5	23/2/2020	15:00	2.43	337.5	24/2/2020	15:00	0.06	187.5
21/2/2020	16:00	0.02	337.5	22/2/2020	16:00	1.57	303.75	23/2/2020	16:00	3.25	318.75	24/2/2020	16:00	0.47	150
21/2/2020	17:00	0.02	322.5	22/2/2020	17:00	1.5	311.25	23/2/2020	17:00	3.16	322.5	24/2/2020	17:00	0.06	168.75
21/2/2020	18:00	0.39	333.75	22/2/2020	18:00	2.15	307.5	23/2/2020	18:00	2.17	330	24/2/2020	18:00	0.05	168.75
21/2/2020	19:00	0.2	285	22/2/2020	19:00	2.25	270	23/2/2020	19:00	2.02	315	24/2/2020	19:00	0.19	176.25
21/2/2020	20:00	0.24	277.5	22/2/2020	20:00	2.11	273.75	23/2/2020	20:00	3.57	322.5	24/2/2020	20:00	0.77	161.25
21/2/2020	21:00	0.53	142.5	22/2/2020	21:00	2.13	270	23/2/2020	21:00	2.93	285	24/2/2020	21:00	0.15	165
21/2/2020	22:00	0.68	307.5	22/2/2020	22:00	2.63	270	23/2/2020	22:00	2.02	315	24/2/2020	22:00	0.73	142.5
21/2/2020	23:00	0.78	333.75	22/2/2020	23:00	2.77	262.5	23/2/2020	23:00	2.81	300	24/2/2020	23:00	0.91	180

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
25/2/2020	0:00	1.16	198.75	26/2/2020	0:00	0.45	296.25	27/2/2020	0:00	0	0	28/2/2020	0:00	0.54	187.5
25/2/2020	1:00	0.69	183.75	26/2/2020	1:00	0.23	296.25	27/2/2020	1:00	0	0	28/2/2020	1:00	0.24	202.5
25/2/2020	2:00	0.79	161.25	26/2/2020	2:00	0.18	288.75	27/2/2020	2:00	0	0	28/2/2020	2:00	0.17	198.75
25/2/2020	3:00	0.49	168.75	26/2/2020	3:00	0.34	292.5	27/2/2020	3:00	0.95	262.5	28/2/2020	3:00	0.06	221.25
25/2/2020	4:00	0.72	161.25	26/2/2020	4:00	0.23	288.75	27/2/2020	4:00	1.81	322.5	28/2/2020	4:00	0.23	191.25
25/2/2020	5:00	0.52	161.25	26/2/2020	5:00	0.69	243.75	27/2/2020	5:00	0.93	326.25	28/2/2020	5:00	0.14	168.75
25/2/2020	6:00	0.63	165	26/2/2020	6:00	1.03	322.5	27/2/2020	6:00	0.72	300	28/2/2020	6:00	0.18	157.5
25/2/2020	7:00	0.25	150	26/2/2020	7:00	0.92	326.25	27/2/2020	7:00	0.92	326.25	28/2/2020	7:00	0.05	277.5
25/2/2020	8:00	0.64	157.5	26/2/2020	8:00	0.63	307.5	27/2/2020	8:00	0.61	281.25	28/2/2020	8:00	0.04	232.5
25/2/2020	9:00	0.27	168.75	26/2/2020	9:00	1.35	255	27/2/2020	9:00	0.43	277.5	28/2/2020	9:00	0.07	326.25
25/2/2020	10:00	0.58	191.25	26/2/2020	10:00	0.46	150	27/2/2020	10:00	0.59	333.75	28/2/2020	10:00	0.07	337.5
25/2/2020	11:00	2.42	180	26/2/2020	11:00	0.29	232.5	27/2/2020	11:00	0.57	330	28/2/2020	11:00	0.08	303.75
25/2/2020	12:00	0.98	198.75	26/2/2020	12:00	0.42	285	27/2/2020	12:00	0.58	285	28/2/2020	12:00	0.01	273.75
25/2/2020	13:00	0.48	172.5	26/2/2020	13:00	1.6	277.5	27/2/2020	13:00	0.79	300	28/2/2020	13:00	0.01	258.75
25/2/2020	14:00	0.27	202.5	26/2/2020	14:00	1.39	330	27/2/2020	14:00	0.47	262.5	28/2/2020	14:00	0.14	277.5
25/2/2020	15:00	1.18	210	26/2/2020	15:00	0.96	266.25	27/2/2020	15:00	0.65	303.75	28/2/2020	15:00	0.31	288.75
25/2/2020	16:00	1.06	307.5	26/2/2020	16:00	0.33	337.5	27/2/2020	16:00	0.56	112.5	28/2/2020	16:00	0.71	303.75
25/2/2020	17:00	0.74	300	26/2/2020	17:00	0.99	337.5	27/2/2020	17:00	1.17	0	28/2/2020	17:00	0.25	288.75
25/2/2020	18:00	0.46	296.25	26/2/2020	18:00	1.27	337.5	27/2/2020	18:00	1.74	225	28/2/2020	18:00	0.1	292.5
25/2/2020	19:00	0.95	296.25	26/2/2020	19:00	0.82	296.25	27/2/2020	19:00	1.94	333.75	28/2/2020	19:00	0.24	288.75
25/2/2020	20:00	0.33	285	26/2/2020	20:00	0.52	322.5	27/2/2020	20:00	2.36	45	28/2/2020	20:00	0.26	285
25/2/2020	21:00	0.13	288.75	26/2/2020	21:00	0.92	315	27/2/2020	21:00	2.15	45	28/2/2020	21:00	0.06	255
25/2/2020	22:00	0.18	288.75	26/2/2020	22:00	0.88	168.75	27/2/2020	22:00	1.43	45	28/2/2020	22:00	0.15	213.75
25/2/2020	23:00	0.26	292.5	26/2/2020	23:00	1.59	168.75	27/2/2020	23:00	1.46	183.75	28/2/2020	23:00	0.41	225

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
29/2/2020	0:00	0.82	183.75												
29/2/2020	1:00	0.05	187.5												
29/2/2020	2:00	0.18	183.75												
29/2/2020	3:00	0.04	255												
29/2/2020	4:00	0.87	270												
29/2/2020	5:00	0.43	277.5												
29/2/2020	6:00	0.59	285												
29/2/2020	7:00	0.61	225												
29/2/2020	8:00	0.52	206.25												
29/2/2020	9:00	0.66	236.25												
29/2/2020	10:00	0.87	255												
29/2/2020	11:00	0.98	206.25												
29/2/2020	12:00	0.75	191.25												
29/2/2020	13:00	1.16	195												
29/2/2020	14:00	0.64	202.5												
29/2/2020	15:00	1.08	206.25												
29/2/2020	16:00	0.73	183.75												
29/2/2020	17:00	0.66	206.25												
29/2/2020	18:00	0.62	221.25												
29/2/2020	19:00	0.32	213.75												
29/2/2020	20:00	0.21	251.25												
29/2/2020	21:00	0.38	221.25												
29/2/2020	22:00	0.51	217.5												
29/2/2020	23:00	1.02	210												

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
1/3/2020	0:00	3.1	120	2/3/2020	0:00	1.6	157.5	3/3/2020	0:00	1.8	157.5	4/3/2020	0:00	4	292.5
1/3/2020	1:00	3.1	120	2/3/2020	1:00	1.6	180	3/3/2020	1:00	2.2	180	4/3/2020	1:00	4.5	292.5
1/3/2020	2:00	4.9	157.5	2/3/2020	2:00	1.6	157.5	3/3/2020	2:00	1.8	202.5	4/3/2020	2:00	4.5	292.5
1/3/2020	3:00	4.9	202.5	2/3/2020	3:00	1.6	180	3/3/2020	3:00	3.6	202.5	4/3/2020	3:00	4.9	292.5
1/3/2020	4:00	3.1	315	2/3/2020	4:00	1.6	157.5	3/3/2020	4:00	2.2	180	4/3/2020	4:00	4.5	292.5
1/3/2020	5:00	3.6	315	2/3/2020	5:00	1.6	135	3/3/2020	5:00	3.6	180	4/3/2020	5:00	4.5	292.5
1/3/2020	6:00	3.6	315	2/3/2020	6:00	1.6	157.5	3/3/2020	6:00	5.4	157.5	4/3/2020	6:00	4.5	292.5
1/3/2020	7:00	3.6	315	2/3/2020	7:00	1.6	157.5	3/3/2020	7:00	4	135	4/3/2020	7:00	4.5	180
1/3/2020	8:00	2.7	157.5	2/3/2020	8:00	1.6	135	3/3/2020	8:00	2.2	135	4/3/2020	8:00	4	157.5
1/3/2020	9:00	2.7	157.5	2/3/2020	9:00	3.2	157.5	3/3/2020	9:00	1.3	157.5	4/3/2020	9:00	2.7	157.5
1/3/2020	10:00	1.8	157.5	2/3/2020	10:00	3.2	157.5	3/3/2020	10:00	2.7	180	4/3/2020	10:00	3.1	292.5
1/3/2020	11:00	2.7	202.5	2/3/2020	11:00	1.6	157.5	3/3/2020	11:00	1.8	202.5	4/3/2020	11:00	1.8	292.5
1/3/2020	12:00	1.8	157.5	2/3/2020	12:00	1.6	157.5	3/3/2020	12:00	1.8	180	4/3/2020	12:00	2.2	292.5
1/3/2020	13:00	1.8	180	2/3/2020	13:00	1.6	157.5	3/3/2020	13:00	2.7	180	4/3/2020	13:00	3.1	292.5
1/3/2020	14:00	1.3	157.5	2/3/2020	14:00	4.8	157.5	3/3/2020	14:00	3.1	225	4/3/2020	14:00	3.1	292.5
1/3/2020	15:00	1.3	135	2/3/2020	15:00	3.2	157.5	3/3/2020	15:00	1.3	180	4/3/2020	15:00	3.1	292.5
1/3/2020	16:00	1.3	292.5	2/3/2020	16:00	4.8	157.5	3/3/2020	16:00	2.7	180	4/3/2020	16:00	3.1	292.5
1/3/2020	17:00	1.3	292.5	2/3/2020	17:00	3.1	157.5	3/3/2020	17:00	3.1	157.5	4/3/2020	17:00	1.3	157.5
1/3/2020	18:00	1.8	292.5	2/3/2020	18:00	1.6	157.5	3/3/2020	18:00	3.1	157.5	4/3/2020	18:00	1.8	157.5
1/3/2020	19:00	3.1	157.5	2/3/2020	19:00	1.6	157.5	3/3/2020	19:00	1.3	180	4/3/2020	19:00	1.3	180
1/3/2020	20:00	3.1	157.5	2/3/2020	20:00	1.6	180	3/3/2020	20:00	1.3	180	4/3/2020	20:00	1.8	180
1/3/2020	21:00	2.7	180	2/3/2020	21:00	1.6	157.5	3/3/2020	21:00	1.8	180	4/3/2020	21:00	1.3	292.5
1/3/2020	22:00	1.8	157.5	2/3/2020	22:00	1.6	157.5	3/3/2020	22:00	1.8	180	4/3/2020	22:00	1.3	180
1/3/2020	23:00	3.6	157.5	2/3/2020	23:00	1.6	157.5	3/3/2020	23:00	1.8	180	4/3/2020	23:00	1.8	225

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
5/3/2020	0:00	1.8	292.5	6/3/2020	0:00	7.6	315	7/3/2020	0:00	4.9	225	8/3/2020	0:00	0.4	292.5
5/3/2020	1:00	3.1	225	6/3/2020	1:00	6.7	270	7/3/2020	1:00	1.8	225	8/3/2020	1:00	0.4	180
5/3/2020	2:00	4	292.5	6/3/2020	2:00	5.8	180	7/3/2020	2:00	1.8	225	8/3/2020	2:00	0.4	157.5
5/3/2020	3:00	4.9	315	6/3/2020	3:00	7.2	202.5	7/3/2020	3:00	1.3	180	8/3/2020	3:00	0.4	225
5/3/2020	4:00	1.8	247.5	6/3/2020	4:00	7.6	225	7/3/2020	4:00	1.3	202.5	8/3/2020	4:00	0.4	180
5/3/2020	5:00	3.6	315	6/3/2020	5:00	6.3	202.5	7/3/2020	5:00	1.3	135	8/3/2020	5:00	0.4	157.5
5/3/2020	6:00	2.7	270	6/3/2020	6:00	4.9	180	7/3/2020	6:00	1.3	157.5	8/3/2020	6:00	0.4	292.5
5/3/2020	7:00	1.3	292.5	6/3/2020	7:00	5.8	202.5	7/3/2020	7:00	1.3	157.5	8/3/2020	7:00	0.4	315
5/3/2020	8:00	1.8	270	6/3/2020	8:00	6.7	292.5	7/3/2020	8:00	1.8	157.5	8/3/2020	8:00	0.9	315
5/3/2020	9:00	4	292.5	6/3/2020	9:00	4.5	157.5	7/3/2020	9:00	1.3	157.5	8/3/2020	9:00	0.9	315
5/3/2020	10:00	4.5	292.5	6/3/2020	10:00	4.5	180	7/3/2020	10:00	1.3	202.5	8/3/2020	10:00	0.4	315
5/3/2020	11:00	7.2	247.5	6/3/2020	11:00	4.9	180	7/3/2020	11:00	1.3	202.5	8/3/2020	11:00	0.4	315
5/3/2020	12:00	8	315	6/3/2020	12:00	4.5	202.5	7/3/2020	12:00	1.3	180	8/3/2020	12:00	0.4	315
5/3/2020	13:00	7.2	315	6/3/2020	13:00	5.4	202.5	7/3/2020	13:00	0.9	180	8/3/2020	13:00	1.3	292.5
5/3/2020	14:00	7.2	315	6/3/2020	14:00	5.8	247.5	7/3/2020	14:00	0.9	157.5	8/3/2020	14:00	0.9	315
5/3/2020	15:00	8.9	202.5	6/3/2020	15:00	5.8	180	7/3/2020	15:00	1.3	202.5	8/3/2020	15:00	1.3	337.5
5/3/2020	16:00	7.6	225	6/3/2020	16:00	5.8	225	7/3/2020	16:00	1.8	180	8/3/2020	16:00	0.9	337.5
5/3/2020	17:00	7.2	202.5	6/3/2020	17:00	3.1	202.5	7/3/2020	17:00	0.9	180	8/3/2020	17:00	1.3	292.5
5/3/2020	18:00	7.2	202.5	6/3/2020	18:00	3.1	180	7/3/2020	18:00	0.9	180	8/3/2020	18:00	1.8	225
5/3/2020	19:00	7.2	202.5	6/3/2020	19:00	4.9	202.5	7/3/2020	19:00	1.3	180	8/3/2020	19:00	1.3	337.5
5/3/2020	20:00	6.3	180	6/3/2020	20:00	4.9	202.5	7/3/2020	20:00	0.9	157.5	8/3/2020	20:00	1.3	315
5/3/2020	21:00	8.5	225	6/3/2020	21:00	3.1	225	7/3/2020	21:00	0.9	157.5	8/3/2020	21:00	1.3	315
5/3/2020	22:00	6.7	270	6/3/2020	22:00	3.6	225	7/3/2020	22:00	0.4	180	8/3/2020	22:00	1.8	315
5/3/2020	23:00	6.3	292.5	6/3/2020	23:00	3.6	292.5	7/3/2020	23:00	0.4	180	8/3/2020	23:00	1.3	315

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
9/3/2020	0:00	1.3	157.5	10/3/2020	0:00	0.4	45	11/3/2020	0:00	0.4	112.5	12/3/2020	0:00	0.9	337.5
9/3/2020	1:00	1.8	135	10/3/2020	1:00	0.4	90	11/3/2020	1:00	0.4	112.5	12/3/2020	1:00	1.8	337.5
9/3/2020	2:00	0.9	202.5	10/3/2020	2:00	0.4	90	11/3/2020	2:00	0.9	112.5	12/3/2020	2:00	1.3	337.5
9/3/2020	3:00	0.9	112.5	10/3/2020	3:00	0.4	90	11/3/2020	3:00	0.9	22.5	12/3/2020	3:00	0.9	337.5
9/3/2020	4:00	0.9	180	10/3/2020	4:00	0	0	11/3/2020	4:00	0.9	22.5	12/3/2020	4:00	1.3	225
9/3/2020	5:00	0.4	180	10/3/2020	5:00	0.4	157.5	11/3/2020	5:00	0.9	22.5	12/3/2020	5:00	0.9	225
9/3/2020	6:00	0.9	180	10/3/2020	6:00	0.4	157.5	11/3/2020	6:00	1.3	45	12/3/2020	6:00	0.9	180
9/3/2020	7:00	0.9	135	10/3/2020	7:00	0.9	135	11/3/2020	7:00	1.3	90	12/3/2020	7:00	0.9	180
9/3/2020	8:00	0.9	112.5	10/3/2020	8:00	0.9	135	11/3/2020	8:00	1.3	90	12/3/2020	8:00	1.3	157.5
9/3/2020	9:00	0.9	112.5	10/3/2020	9:00	0.9	135	11/3/2020	9:00	1.3	90	12/3/2020	9:00	1.3	180
9/3/2020	10:00	0.4	135	10/3/2020	10:00	0.9	157.5	11/3/2020	10:00	1.8	90	12/3/2020	10:00	0.9	202.5
9/3/2020	11:00	0.9	112.5	10/3/2020	11:00	0.9	157.5	11/3/2020	11:00	2.2	157.5	12/3/2020	11:00	1.3	202.5
9/3/2020	12:00	1.3	112.5	10/3/2020	12:00	1.3	135	11/3/2020	12:00	1.8	157.5	12/3/2020	12:00	1.8	202.5
9/3/2020	13:00	1.3	157.5	10/3/2020	13:00	1.3	157.5	11/3/2020	13:00	2.2	180	12/3/2020	13:00	1.3	202.5
9/3/2020	14:00	1.3	157.5	10/3/2020	14:00	1.3	135	11/3/2020	14:00	2.2	157.5	12/3/2020	14:00	1.3	202.5
9/3/2020	15:00	0.9	112.5	10/3/2020	15:00	1.3	180	11/3/2020	15:00	2.2	157.5	12/3/2020	15:00	0.9	180
9/3/2020	16:00	0.9	112.5	10/3/2020	16:00	0.9	112.5	11/3/2020	16:00	2.2	225	12/3/2020	16:00	0.9	202.5
9/3/2020	17:00	0.9	157.5	10/3/2020	17:00	0.9	225	11/3/2020	17:00	1.3	270	12/3/2020	17:00	0.9	180
9/3/2020	18:00	0.9	157.5	10/3/2020	18:00	1.3	202.5	11/3/2020	18:00	1.3	157.5	12/3/2020	18:00	0.9	337.5
9/3/2020	19:00	0.9	112.5	10/3/2020	19:00	0.9	337.5	11/3/2020	19:00	1.3	225	12/3/2020	19:00	0.9	337.5
9/3/2020	20:00	0.9	112.5	10/3/2020	20:00	0.9	337.5	11/3/2020	20:00	1.8	270	12/3/2020	20:00	1.3	337.5
9/3/2020	21:00	0.9	112.5	10/3/2020	21:00	0.4	337.5	11/3/2020	21:00	1.8	270	12/3/2020	21:00	1.3	337.5
9/3/2020	22:00	0.4	112.5	10/3/2020	22:00	0.4	337.5	11/3/2020	22:00	1.3	157.5	12/3/2020	22:00	1.3	337.5
9/3/2020	23:00	0.4	112.5	10/3/2020	23:00	0.4	337.5	11/3/2020	23:00	0.9	157.5	12/3/2020	23:00	0.9	337.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
13/3/2020	0:00	0.9	157.5	14/3/2020	0:00	0	157.5	15/3/2020	0:00	0.9	67.5	16/3/2020	0:00	0.9	206.25
13/3/2020	1:00	0.9	157.5	14/3/2020	1:00	0	157.5	15/3/2020	1:00	0.9	67.5	16/3/2020	1:00	1.3	198.75
13/3/2020	2:00	0.9	180	14/3/2020	2:00	0	180	15/3/2020	2:00	0.9	67.5	16/3/2020	2:00	0.9	195
13/3/2020	3:00	0.9	270	14/3/2020	3:00	0.4	292.5	15/3/2020	3:00	0.4	67.5	16/3/2020	3:00	0.9	0
13/3/2020	4:00	0.4	270	14/3/2020	4:00	0.4	292.5	15/3/2020	4:00	0.4	67.5	16/3/2020	4:00	1.3	0
13/3/2020	5:00	0.4	292.5	14/3/2020	5:00	0.4	292.5	15/3/2020	5:00	0.4	0	16/3/2020	5:00	0.9	0
13/3/2020	6:00	0.9	270	14/3/2020	6:00	0.4	270	15/3/2020	6:00	0.4	67.5	16/3/2020	6:00	0.9	0
13/3/2020	7:00	0.9	270	14/3/2020	7:00	0	22.5	15/3/2020	7:00	0.4	67.5	16/3/2020	7:00	1.8	0
13/3/2020	8:00	0.9	270	14/3/2020	8:00	0.9	22.5	15/3/2020	8:00	0.4	45	16/3/2020	8:00	2.2	0
13/3/2020	9:00	0.9	292.5	14/3/2020	9:00	0.9	22.5	15/3/2020	9:00	0.4	337.5	16/3/2020	9:00	2.2	0
13/3/2020	10:00	0.9	315	14/3/2020	10:00	0.4	22.5	15/3/2020	10:00	0.9	315	16/3/2020	10:00	2.2	67.5
13/3/2020	11:00	0.9	292.5	14/3/2020	11:00	0.9	22.5	15/3/2020	11:00	0.4	315	16/3/2020	11:00	1.8	67.5
13/3/2020	12:00	0.9	292.5	14/3/2020	12:00	0.9	22.5	15/3/2020	12:00	1.3	315	16/3/2020	12:00	2.7	67.5
13/3/2020	13:00	0.9	292.5	14/3/2020	13:00	0.9	22.5	15/3/2020	13:00	1.8	315	16/3/2020	13:00	1.8	67.5
13/3/2020	14:00	0.9	292.5	14/3/2020	14:00	1.8	22.5	15/3/2020	14:00	1.8	315	16/3/2020	14:00	2.2	67.5
13/3/2020	15:00	1.3	213.75	14/3/2020	15:00	2.2	157.5	15/3/2020	15:00	1.3	292.5	16/3/2020	15:00	1.8	183.75
13/3/2020	16:00	1.3	225	14/3/2020	16:00	1.8	157.5	15/3/2020	16:00	1.3	270	16/3/2020	16:00	1.8	183.75
13/3/2020	17:00	1.3	183.75	14/3/2020	17:00	1.8	292.5	15/3/2020	17:00	1.3	292.5	16/3/2020	17:00	1.3	0
13/3/2020	18:00	0.9	187.5	14/3/2020	18:00	1.3	292.5	15/3/2020	18:00	1.3	270	16/3/2020	18:00	1.3	0
13/3/2020	19:00	0.9	183.75	14/3/2020	19:00	0.9	292.5	15/3/2020	19:00	1.3	270	16/3/2020	19:00	1.3	270
13/3/2020	20:00	0.9	183.75	14/3/2020	20:00	0.9	157.5	15/3/2020	20:00	1.3	270	16/3/2020	20:00	0.9	247.5
13/3/2020	21:00	0.4	183.75	14/3/2020	21:00	0.9	157.5	15/3/2020	21:00	0.9	292.5	16/3/2020	21:00	1.8	270
13/3/2020	22:00	0.4	183.75	14/3/2020	22:00	0.9	157.5	15/3/2020	22:00	0.9	315	16/3/2020	22:00	1.3	270
13/3/2020	23:00	0.4	180	14/3/2020	23:00	0.4	217.5	15/3/2020	23:00	0.9	292.5	16/3/2020	23:00	1.3	270

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
17/3/2020	0:00	0.9	292.5	18/3/2020	0:00	0.4	270	19/3/2020	0:00	0.4	202.5	20/3/2020	0:00	0.4	157.5
17/3/2020	1:00	1.8	292.5	18/3/2020	1:00	0.9	270	19/3/2020	1:00	0.4	247.5	20/3/2020	1:00	0.4	157.5
17/3/2020	2:00	0.4	270	18/3/2020	2:00	0.4	270	19/3/2020	2:00	0.4	202.5	20/3/2020	2:00	0	157.5
17/3/2020	3:00	0.9	292.5	18/3/2020	3:00	0.4	270	19/3/2020	3:00	0.4	315	20/3/2020	3:00	0.4	157.5
17/3/2020	4:00	0.9	292.5	18/3/2020	4:00	0.4	292.5	19/3/2020	4:00	0.9	202.5	20/3/2020	4:00	0.4	157.5
17/3/2020	5:00	0.9	292.5	18/3/2020	5:00	0.4	292.5	19/3/2020	5:00	0.9	202.5	20/3/2020	5:00	0.4	157.5
17/3/2020	6:00	0.9	292.5	18/3/2020	6:00	0.9	315	19/3/2020	6:00	0.9	157.5	20/3/2020	6:00	0.4	157.5
17/3/2020	7:00	0.9	292.5	18/3/2020	7:00	0.4	315	19/3/2020	7:00	0.9	157.5	20/3/2020	7:00	0.9	292.5
17/3/2020	8:00	1.3	315	18/3/2020	8:00	0.4	315	19/3/2020	8:00	0.9	157.5	20/3/2020	8:00	0.9	157.5
17/3/2020	9:00	0.9	292.5	18/3/2020	9:00	0.4	202.5	19/3/2020	9:00	0.9	157.5	20/3/2020	9:00	0.9	225
17/3/2020	10:00	0.9	292.5	18/3/2020	10:00	0.9	202.5	19/3/2020	10:00	0.9	180	20/3/2020	10:00	0.9	157.5
17/3/2020	11:00	0.4	292.5	18/3/2020	11:00	1.3	202.5	19/3/2020	11:00	0.4	157.5	20/3/2020	11:00	0.9	180
17/3/2020	12:00	0.9	292.5	18/3/2020	12:00	0.9	202.5	19/3/2020	12:00	0.9	157.5	20/3/2020	12:00	0.9	157.5
17/3/2020	13:00	0.4	292.5	18/3/2020	13:00	0.4	180	19/3/2020	13:00	0.4	157.5	20/3/2020	13:00	1.3	292.5
17/3/2020	14:00	0.9	292.5	18/3/2020	14:00	0.4	225	19/3/2020	14:00	0.9	225	20/3/2020	14:00	1.3	315
17/3/2020	15:00	0.9	292.5	18/3/2020	15:00	0.4	157.5	19/3/2020	15:00	0.9	157.5	20/3/2020	15:00	0.9	180
17/3/2020	16:00	0.9	292.5	18/3/2020	16:00	1.8	247.5	19/3/2020	16:00	0.9	157.5	20/3/2020	16:00	0.9	247.5
17/3/2020	17:00	0.9	292.5	18/3/2020	17:00	0.9	225	19/3/2020	17:00	0	157.5	20/3/2020	17:00	1.3	225
17/3/2020	18:00	0.9	315	18/3/2020	18:00	0.9	157.5	19/3/2020	18:00	0	225	20/3/2020	18:00	0.9	157.5
17/3/2020	19:00	0.9	315	18/3/2020	19:00	0.4	157.5	19/3/2020	19:00	0.4	157.5	20/3/2020	19:00	0.9	180
17/3/2020	20:00	0.4	292.5	18/3/2020	20:00	0	135	19/3/2020	20:00	0.9	180	20/3/2020	20:00	0.4	225
17/3/2020	21:00	0.4	315	18/3/2020	21:00	0	157.5	19/3/2020	21:00	0.9	180	20/3/2020	21:00	0.9	202.5
17/3/2020	22:00	0.4	315	18/3/2020	22:00	0.4	157.5	19/3/2020	22:00	0.4	180	20/3/2020	22:00	0.9	225
17/3/2020	23:00	0.9	292.5	18/3/2020	23:00	0.4	157.5	19/3/2020	23:00	0.4	157.5	20/3/2020	23:00	0.9	202.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
21/3/2020	0:00	0.4	157.5	22/3/2020	0:00	0.4	202.5	23/3/2020	0:00	0	157.5	24/3/2020	0:00	1.3	315
21/3/2020	1:00	0.9	180	22/3/2020	1:00	0.4	202.5	23/3/2020	1:00	0.4	157.5	24/3/2020	1:00	0.9	315
21/3/2020	2:00	0.9	157.5	22/3/2020	2:00	0.4	202.5	23/3/2020	2:00	0	157.5	24/3/2020	2:00	1.3	157.5
21/3/2020	3:00	0.4	157.5	22/3/2020	3:00	0	202.5	23/3/2020	3:00	0	202.5	24/3/2020	3:00	1.3	157.5
21/3/2020	4:00	0.9	157.5	22/3/2020	4:00	0.9	202.5	23/3/2020	4:00	0.4	157.5	24/3/2020	4:00	1.3	292.5
21/3/2020	5:00	0.9	157.5	22/3/2020	5:00	0.4	180	23/3/2020	5:00	0	157.5	24/3/2020	5:00	1.3	292.5
21/3/2020	6:00	0.9	180	22/3/2020	6:00	0	180	23/3/2020	6:00	0	337.5	24/3/2020	6:00	0.9	292.5
21/3/2020	7:00	0.9	180	22/3/2020	7:00	0.4	180	23/3/2020	7:00	0.4	337.5	24/3/2020	7:00	1.3	292.5
21/3/2020	8:00	0.9	180	22/3/2020	8:00	0	202.5	23/3/2020	8:00	0.4	292.5	24/3/2020	8:00	1.8	112.5
21/3/2020	9:00	0.9	157.5	22/3/2020	9:00	0	202.5	23/3/2020	9:00	0.4	337.5	24/3/2020	9:00	1.3	112.5
21/3/2020	10:00	0.9	270	22/3/2020	10:00	0	202.5	23/3/2020	10:00	0.9	337.5	24/3/2020	10:00	1.8	135
21/3/2020	11:00	0.9	202.5	22/3/2020	11:00	0	157.5	23/3/2020	11:00	0.4	337.5	24/3/2020	11:00	0.9	157.5
21/3/2020	12:00	0.9	247.5	22/3/2020	12:00	0	157.5	23/3/2020	12:00	0.4	292.5	24/3/2020	12:00	1.3	112.5
21/3/2020	13:00	0.4	270	22/3/2020	13:00	0	157.5	23/3/2020	13:00	1.3	292.5	24/3/2020	13:00	0.9	157.5
21/3/2020	14:00	0.4	202.5	22/3/2020	14:00	0.4	337.5	23/3/2020	14:00	1.3	337.5	24/3/2020	14:00	1.3	157.5
21/3/2020	15:00	0.9	157.5	22/3/2020	15:00	1.3	337.5	23/3/2020	15:00	1.8	337.5	24/3/2020	15:00	1.8	157.5
21/3/2020	16:00	0.9	270	22/3/2020	16:00	1.8	337.5	23/3/2020	16:00	1.3	337.5	24/3/2020	16:00	1.8	90
21/3/2020	17:00	1.3	270	22/3/2020	17:00	0.4	337.5	23/3/2020	17:00	0.9	337.5	24/3/2020	17:00	1.8	90
21/3/2020	18:00	0.9	157.5	22/3/2020	18:00	0.4	337.5	23/3/2020	18:00	0.9	337.5	24/3/2020	18:00	1.3	90
21/3/2020	19:00	0.9	157.5	22/3/2020	19:00	0.4	337.5	23/3/2020	19:00	0.9	337.5	24/3/2020	19:00	1.3	90
21/3/2020	20:00	0.9	157.5	22/3/2020	20:00	0.4	315	23/3/2020	20:00	1.3	337.5	24/3/2020	20:00	1.3	157.5
21/3/2020	21:00	0.4	180	22/3/2020	21:00	0	315	23/3/2020	21:00	1.3	337.5	24/3/2020	21:00	1.3	135
21/3/2020	22:00	0.4	135	22/3/2020	22:00	0.4	315	23/3/2020	22:00	1.8	157.5	24/3/2020	22:00	0.9	135
21/3/2020	23:00	0.4	202.5	22/3/2020	23:00	0.4	315	23/3/2020	23:00	1.3	157.5	24/3/2020	23:00	1.3	112.5

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
25/3/2020	0:00	0.9	157.5	26/3/2020	0:00	0.4	157.5	27/3/2020	0:00	0.9	337.5	28/3/2020	0:00	0.9	292.5
25/3/2020	1:00	0.9	135	26/3/2020	1:00	0	315	27/3/2020	1:00	0.9	292.5	28/3/2020	1:00	0.4	157.5
25/3/2020	2:00	1.3	135	26/3/2020	2:00	0.4	180	27/3/2020	2:00	0.4	292.5	28/3/2020	2:00	0.9	157.5
25/3/2020	3:00	1.3	112.5	26/3/2020	3:00	0.4	247.5	27/3/2020	3:00	0.4	315	28/3/2020	3:00	0.9	180
25/3/2020	4:00	1.3	90	26/3/2020	4:00	0.4	202.5	27/3/2020	4:00	0.9	315	28/3/2020	4:00	0.4	180
25/3/2020	5:00	1.3	90	26/3/2020	5:00	0.4	157.5	27/3/2020	5:00	0.4	180	28/3/2020	5:00	0.4	157.5
25/3/2020	6:00	1.8	157.5	26/3/2020	6:00	0.9	157.5	27/3/2020	6:00	0	292.5	28/3/2020	6:00	0.4	225
25/3/2020	7:00	0.9	157.5	26/3/2020	7:00	0.4	157.5	27/3/2020	7:00	0	292.5	28/3/2020	7:00	0.4	157.5
25/3/2020	8:00	1.3	135	26/3/2020	8:00	0.4	180	27/3/2020	8:00	0.4	157.5	28/3/2020	8:00	0.4	135
25/3/2020	9:00	1.8	225	26/3/2020	9:00	0.4	157.5	27/3/2020	9:00	0.4	157.5	28/3/2020	9:00	0.4	225
25/3/2020	10:00	2.2	157.5	26/3/2020	10:00	0.4	157.5	27/3/2020	10:00	0.4	202.5	28/3/2020	10:00	0.4	225
25/3/2020	11:00	2.2	180	26/3/2020	11:00	0.4	157.5	27/3/2020	11:00	1.3	247.5	28/3/2020	11:00	0.4	202.5
25/3/2020	12:00	1.8	157.5	26/3/2020	12:00	0.4	202.5	27/3/2020	12:00	1.3	157.5	28/3/2020	12:00	0.9	270
25/3/2020	13:00	0.9	157.5	26/3/2020	13:00	0.4	225	27/3/2020	13:00	1.8	157.5	28/3/2020	13:00	1.3	270
25/3/2020	14:00	0.9	157.5	26/3/2020	14:00	0.9	180	27/3/2020	14:00	1.8	135	28/3/2020	14:00	1.3	202.5
25/3/2020	15:00	0.9	180	26/3/2020	15:00	1.3	202.5	27/3/2020	15:00	1.8	157.5	28/3/2020	15:00	0.4	202.5
25/3/2020	16:00	1.3	157.5	26/3/2020	16:00	1.3	292.5	27/3/2020	16:00	1.8	180	28/3/2020	16:00	0.4	180
25/3/2020	17:00	1.3	157.5	26/3/2020	17:00	1.3	225	27/3/2020	17:00	1.3	157.5	28/3/2020	17:00	0.4	157.5
25/3/2020	18:00	1.8	292.5	26/3/2020	18:00	0.9	157.5	27/3/2020	18:00	1.3	112.5	28/3/2020	18:00	0.4	157.5
25/3/2020	19:00	0.4	135	26/3/2020	19:00	1.3	180	27/3/2020	19:00	0.9	157.5	28/3/2020	19:00	0	157.5
25/3/2020	20:00	0.9	157.5	26/3/2020	20:00	0.4	247.5	27/3/2020	20:00	0.4	157.5	28/3/2020	20:00	1.3	180
25/3/2020	21:00	0.9	157.5	26/3/2020	21:00	0.4	315	27/3/2020	21:00	0.4	157.5	28/3/2020	21:00	0.9	157.5
25/3/2020	22:00	0.4	270	26/3/2020	22:00	0.4	292.5	27/3/2020	22:00	0.4	157.5	28/3/2020	22:00	2.2	157.5
25/3/2020	23:00	0.4	292.5	26/3/2020	23:00	0.4	292.5	27/3/2020	23:00	0.9	157.5	28/3/2020	23:00	2.2	157.5

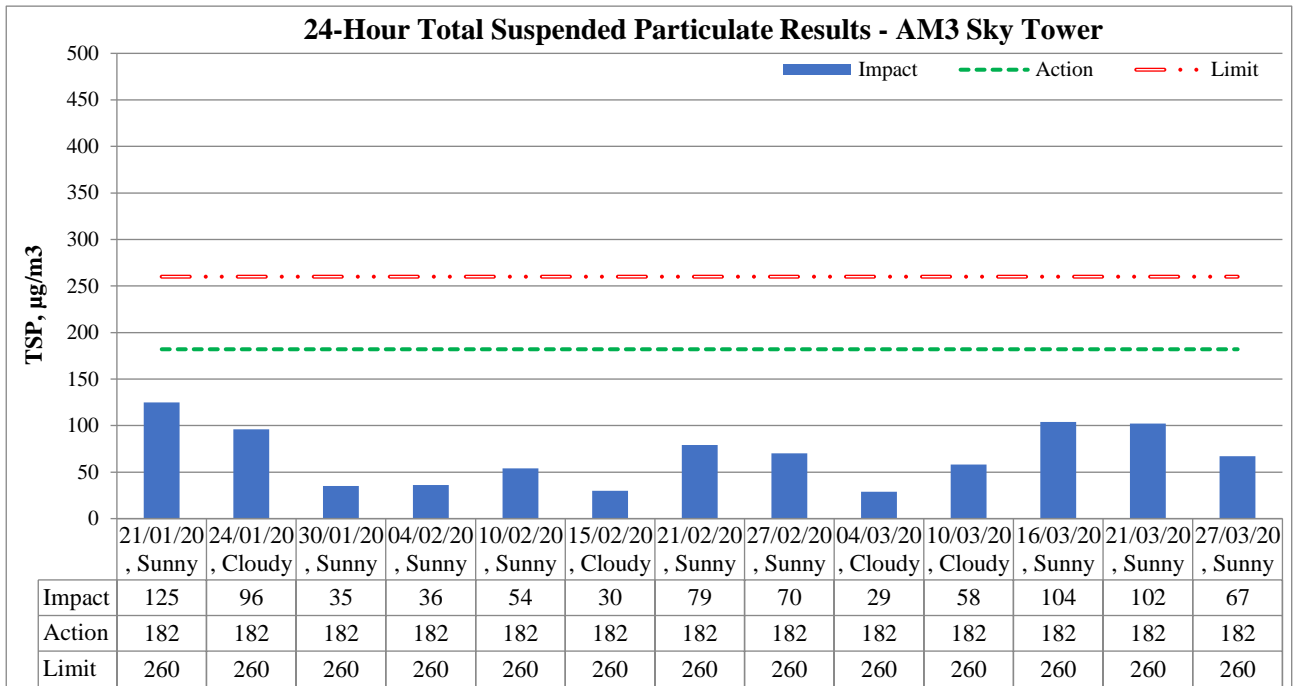
Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

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
29/3/2020	0:00	2.2	292.5	30/3/2020	0:00	1.3	247.5	31/3/2020	0:00	1.8	112.5				
29/3/2020	1:00	2.2	292.5	30/3/2020	1:00	1.8	247.5	31/3/2020	1:00	2.2	112.5				
29/3/2020	2:00	2.2	270	30/3/2020	2:00	0.9	247.5	31/3/2020	2:00	1.8	157.5				
29/3/2020	3:00	2.2	270	30/3/2020	3:00	1.3	270	31/3/2020	3:00	2.2	157.5				
29/3/2020	4:00	2.2	292.5	30/3/2020	4:00	1.3	270	31/3/2020	4:00	0.4	157.5				
29/3/2020	5:00	2.2	315	30/3/2020	5:00	1.3	247.5	31/3/2020	5:00	1.8	157.5				
29/3/2020	6:00	1.8	315	30/3/2020	6:00	0.9	247.5	31/3/2020	6:00	2.2	157.5				
29/3/2020	7:00	1.8	247.5	30/3/2020	7:00	3.1	247.5	31/3/2020	7:00	0.9	157.5				
29/3/2020	8:00	1.8	292.5	30/3/2020	8:00	4.8	202.5	31/3/2020	8:00	0.9	337.5				
29/3/2020	9:00	1.8	270	30/3/2020	9:00	3.1	202.5	31/3/2020	9:00	0.9	292.5				
29/3/2020	10:00	1.8	292.5	30/3/2020	10:00	3.1	202.5	31/3/2020	10:00	1.3	292.5				
29/3/2020	11:00	1.3	292.5	30/3/2020	11:00	3.2	202.5	31/3/2020	11:00	1.3	337.5				
29/3/2020	12:00	1.8	292.5	30/3/2020	12:00	4.8	202.5	31/3/2020	12:00	1.3	270				
29/3/2020	13:00	1.3	90	30/3/2020	13:00	0.4	202.5	31/3/2020	13:00	0.9	292.5				
29/3/2020	14:00	1.8	90	30/3/2020	14:00	0.4	202.5	31/3/2020	14:00	1.3	292.5				
29/3/2020	15:00	1.8	67.5	30/3/2020	15:00	0.4	202.5	31/3/2020	15:00	1.8	270				
29/3/2020	16:00	1.8	67.5	30/3/2020	16:00	0.9	202.5	31/3/2020	16:00	3.1	315				
29/3/2020	17:00	1.3	90	30/3/2020	17:00	0.9	202.5	31/3/2020	17:00	1.3	315				
29/3/2020	18:00	0.9	67.5	30/3/2020	18:00	0.9	112.5	31/3/2020	18:00	1.3	292.5				
29/3/2020	19:00	1.3	90	30/3/2020	19:00	0.9	135	31/3/2020	19:00	1.8	292.5				
29/3/2020	20:00	1.3	112.5	30/3/2020	20:00	1.3	157.5	31/3/2020	20:00	1.8	292.5				
29/3/2020	21:00	1.3	112.5	30/3/2020	21:00	1.3	157.5	31/3/2020	21:00	1.8	292.5				
29/3/2020	22:00	1.3	112.5	30/3/2020	22:00	1.3	157.5	31/3/2020	22:00	1.8	270				
29/3/2020	23:00	1.3	112.5	30/3/2020	23:00	1.3	157.5	31/3/2020	23:00	1.3	270				

Appendix D – Monitoring data and graphical plots

24-hour average TSP

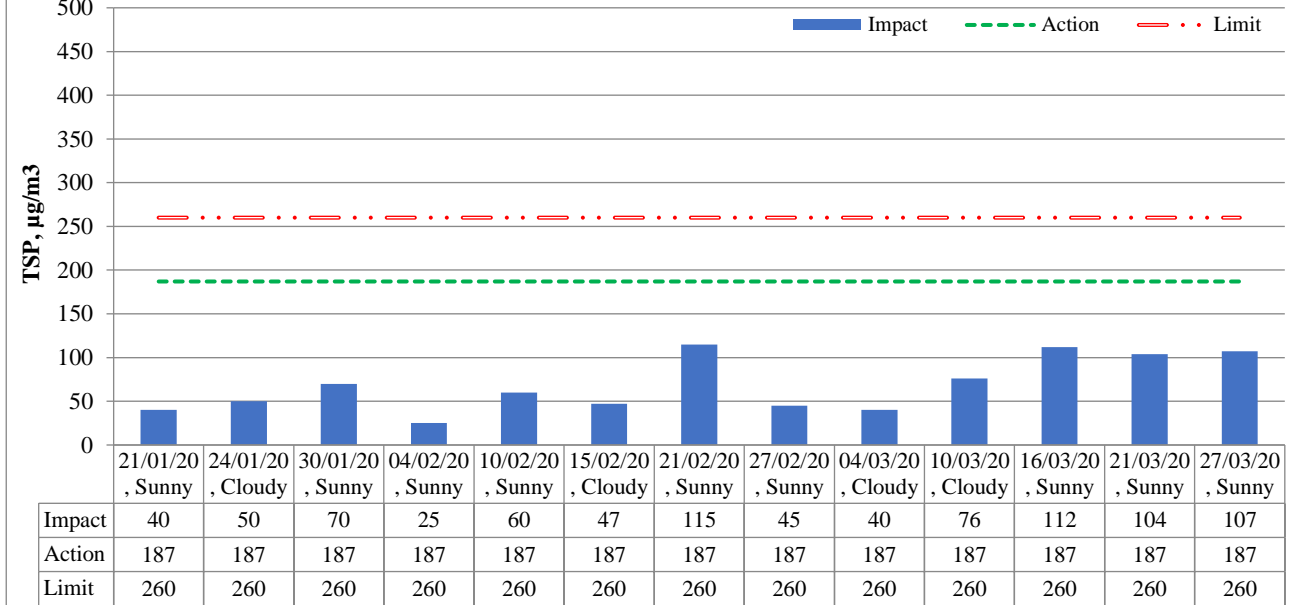
Air Monitoring Station		AM3 – Sky Tower	AM4(A) – The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	AM7 – Hong Kong Children's Hospital
Start Date	Weather	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
21/1/2020	Sunny	125	40	31
24/1/2020	Cloudy	96	50	46
30/1/2020	Sunny	35	70	78
4/2/2020	Sunny	36	25	36
10/2/2020	Sunny	54	60	65
15/2/2020	Cloudy	30	47	30
21/2/2020	Sunny	79	115	58
27/2/2020	Sunny	70	45	73
4/3/2020	Cloudy	29	40	21
10/3/2020	Cloudy	58	76	52
16/3/2020	Sunny	104	112	104
21/3/2020	Sunny	102	104	87
27/3/2020	Sunny	67	107	47



Major Construction Activities	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Ground investigation works	✓	✓	✓
Piling works for Bridge D3	✓		
Installation of sheetpile for North Approach Ramp	✓		
Excavation for North Depressed Road	✓		
ELS Installation for North Depressed Road		✓	✓
Underground Utilities Detection		✓	✓
Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass		✓	✓
Pumping Test at North Depressed Road Cofferdam		✓	✓
Construction of Bored Pile of Bridge D3		✓	✓

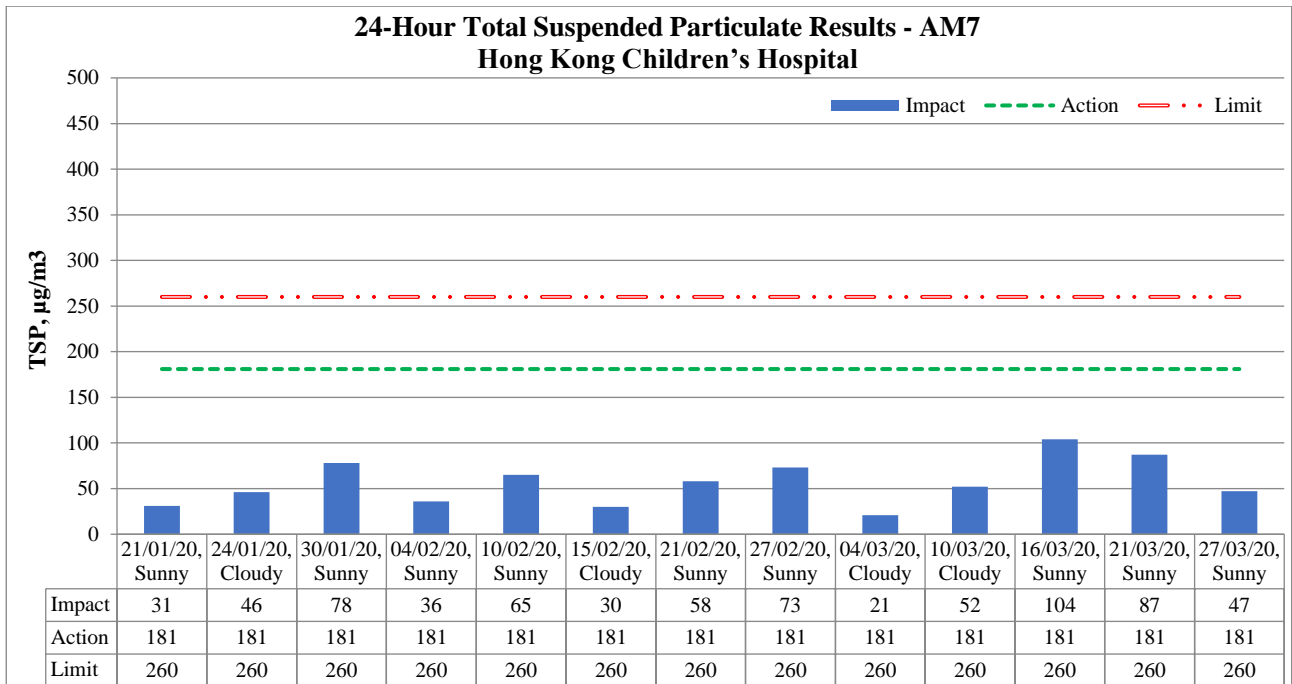
Factors might affect the monitoring results	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓

24-Hour Total Suspended Particulate Results - AM4(A)
The Hong Kong Society for the Blind's Factory cum Sheltered Workshop



Major Construction Activities	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Ground investigation works	✓	✓	✓
Piling works for Bridge D3	✓		
Installation of sheetpile for North Approach Ramp	✓		
Excavation for North Depressed Road	✓		
ELS Installation for North Depressed Road		✓	✓
Underground Utilities Detection		✓	✓
Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass		✓	✓
Pumping Test at North Depressed Road Cofferdam		✓	✓
Construction of Bored Pile of Bridge D3		✓	✓

Factors might affect the monitoring results	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓

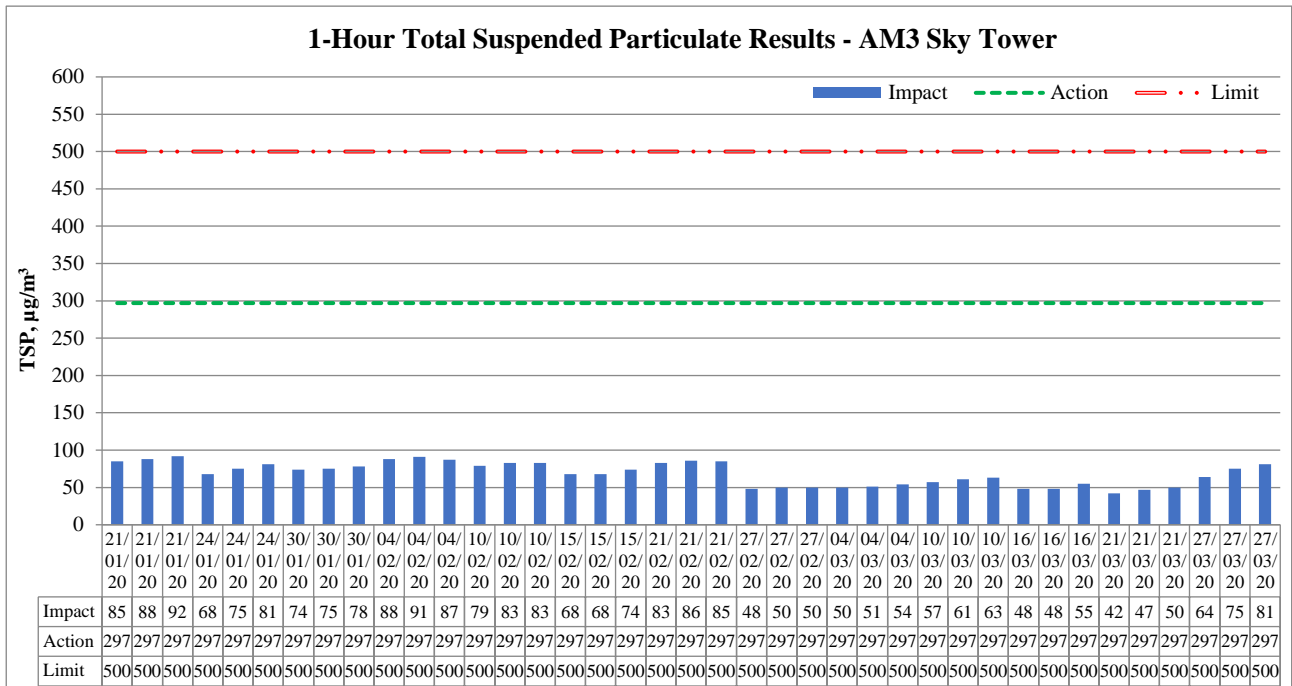


Major Construction Activities	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Ground investigation works	✓	✓	✓
Piling works for Bridge D3	✓		
Installation of sheetpile for North Approach Ramp	✓		
Excavation for North Depressed Road	✓		
ELS Installation for North Depressed Road		✓	✓
Underground Utilities Detection		✓	✓
Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass		✓	✓
Pumping Test at North Depressed Road Cofferdam		✓	✓
Construction of Bored Pile of Bridge D3		✓	✓

Factors might affect the monitoring results	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓

1-hour average TSP

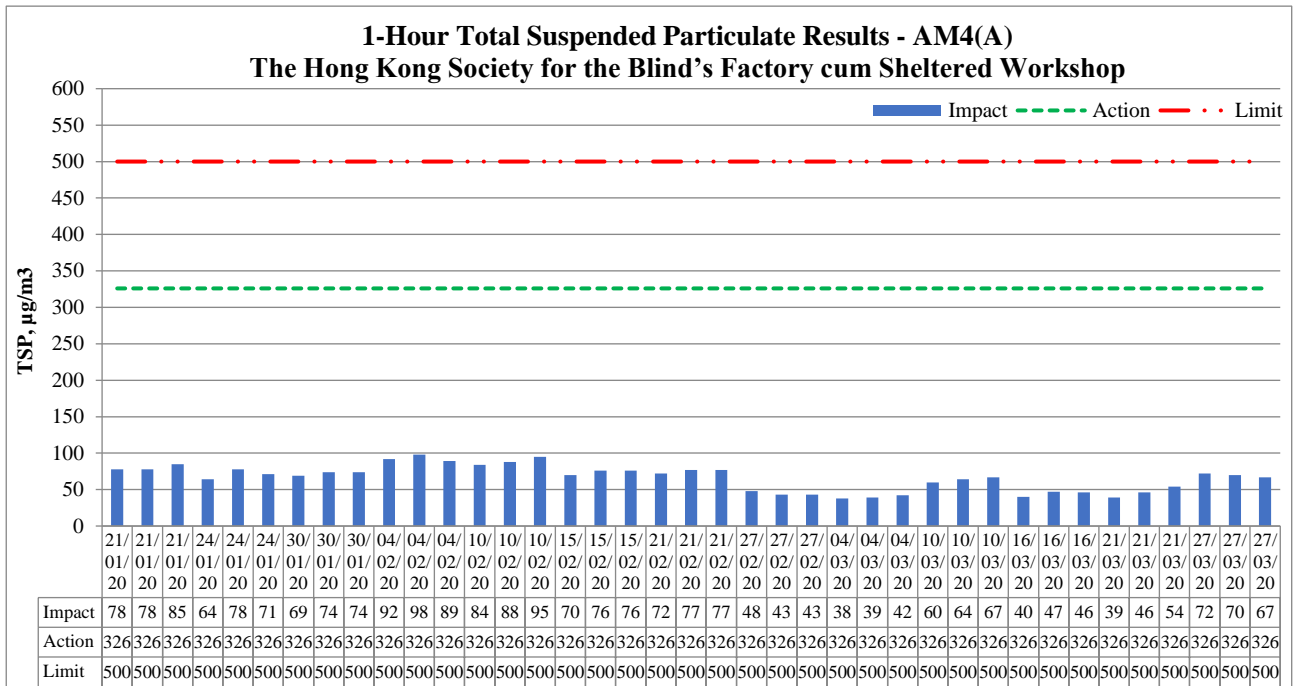
Air Monitoring Station				AM3 – Sky Tower	
Date	Measurement Period			Weather	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
21/1/2020	13:00	-	14:00	Sunny	85
21/1/2020	14:00	-	15:00		88
21/1/2020	15:00	-	16:00		92
24/1/2020	9:00	-	10:00	Cloudy	68
24/1/2020	10:00	-	11:00		75
24/1/2020	11:00	-	12:00		81
30/1/2020	13:00	-	14:00	Sunny	74
30/1/2020	14:00	-	15:00		75
30/1/2020	15:00	-	16:00		78
4/2/2020	9:00	-	10:00	Sunny	88
4/2/2020	10:00	-	11:00		91
4/2/2020	11:00	-	12:00		87
10/2/2020	13:00	-	14:00	Sunny	79
10/2/2020	14:00	-	15:00		83
10/2/2020	15:00	-	16:00		83
15/2/2020	13:00	-	14:00	Cloudy	68
15/2/2020	14:00	-	15:00		68
15/2/2020	15:00	-	16:00		74
21/2/2020	9:00	-	10:00	Sunny	83
21/2/2020	10:00	-	11:00		86
21/2/2020	11:00	-	12:00		85
27/2/2020	13:54	-	14:54	Sunny	48
27/2/2020	14:54	-	15:54		50
27/2/2020	15:54	-	16:54		50
4/3/2020	13:00	-	14:00	Cloudy	50
4/3/2020	14:00	-	15:00		51
4/3/2020	15:00	-	16:00		54
10/3/2020	9:00	-	10:00	Cloudy	57
10/3/2020	10:00	-	11:00		61
10/3/2020	11:00	-	12:00		63
16/3/2020	13:00	-	14:00	Sunny	48
16/3/2020	14:00	-	15:00		48
16/3/2020	15:00	-	16:00		55
21/3/2020	13:00	-	14:00	Sunny	42
21/3/2020	14:00	-	15:00		47
21/3/2020	15:00	-	16:00		50
27/3/2020	9:00	-	10:00	Sunny	64
27/3/2020	10:00	-	11:00		75
27/3/2020	11:00	-	12:00		81



Major Construction Activities	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Ground investigation works	✓	✓	✓
Piling works for Bridge D3	✓		
Installation of sheetpile for North Approach Ramp	✓		
Excavation for North Depressed Road	✓		
ELS Installation for North Depressed Road		✓	✓
Underground Utilities Detection		✓	✓
Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass		✓	✓
Pumping Test at North Depressed Road Cofferdam		✓	✓
Construction of Bored Pile of Bridge D3		✓	✓

Factors might affect the monitoring results	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓

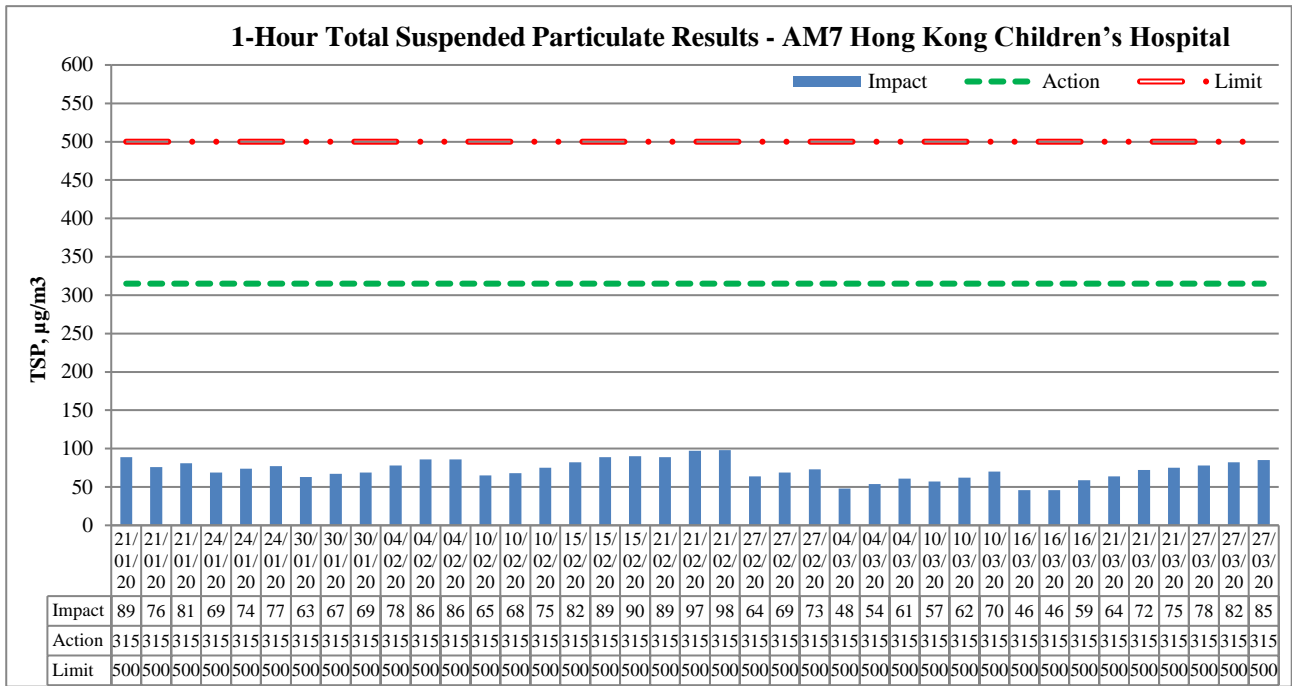
Air Monitoring Station				AM4(A) – The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	
Date	Measurement Period			Weather	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
21/1/2020	9:00	-	10:00	Sunny	78
21/1/2020	10:00	-	11:00		78
21/1/2020	11:00	-	12:00		85
24/1/2020	13:00	-	14:00	Cloudy	64
24/1/2020	14:00	-	15:00		78
24/1/2020	15:00	-	16:00		71
30/1/2020	9:00	-	10:00	Sunny	69
30/1/2020	10:00	-	11:00		74
30/1/2020	11:00	-	12:00		74
4/2/2020	13:00	-	14:00	Sunny	92
4/2/2020	14:00	-	15:00		98
4/2/2020	15:00	-	16:00		89
10/2/2020	9:00	-	10:00	Sunny	84
10/2/2020	10:00	-	11:00		88
10/2/2020	11:00	-	12:00		95
15/2/2020	9:00	-	10:00	Cloudy	70
15/2/2020	10:00	-	11:00		76
15/2/2020	11:00	-	12:00		76
21/2/2020	13:00	-	14:00	Sunny	72
21/2/2020	14:00	-	15:00		77
21/2/2020	15:00	-	16:00		77
27/2/2020	9:25	-	10:25	Sunny	48
27/2/2020	10:25	-	11:25		43
27/2/2020	17:25	-	18:25		43
4/3/2020	9:00	-	10:00	Cloudy	38
4/3/2020	10:00	-	11:00		39
4/3/2020	11:00	-	12:00		42
10/3/2020	13:00	-	14:00	Cloudy	60
10/3/2020	14:00	-	15:00		64
10/3/2020	15:00	-	16:00		67
16/3/2020	9:00	-	10:00	Sunny	40
16/3/2020	10:00	-	11:00		47
16/3/2020	11:00	-	12:00		46
21/3/2020	9:00	-	10:00	Sunny	39
21/3/2020	10:00	-	11:00		46
21/3/2020	11:00	-	12:00		54
27/3/2020	13:00	-	14:00	Sunny	72
27/3/2020	14:00	-	15:00		70
27/3/2020	15:00	-	16:00		67



Major Construction Activities	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Ground investigation works	✓	✓	✓
Piling works for Bridge D3	✓		
Installation of sheetpile for North Approach Ramp	✓		
Excavation for North Depressed Road	✓		
ELS Installation for North Depressed Road		✓	✓
Underground Utilities Detection		✓	✓
Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass		✓	✓
Pumping Test at North Depressed Road Cofferdam		✓	✓
Construction of Bored Pile of Bridge D3		✓	✓

Factors might affect the monitoring results	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓

Air Monitoring Station				AM7 – Hong Kong Children’s Hospital	
Date	Measurement Period			Weather	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
21/1/2020	9:00	-	10:00	Sunny	89
21/1/2020	10:00	-	11:00		76
21/1/2020	11:00	-	12:00		81
24/1/2020	13:00	-	14:00	Cloudy	69
24/1/2020	14:00	-	15:00		74
24/1/2020	15:00	-	16:00		77
30/1/2020	9:00	-	10:00	Sunny	63
30/1/2020	10:00	-	11:00		67
30/1/2020	11:00	-	12:00		69
4/2/2020	9:00	-	10:00	Sunny	78
4/2/2020	10:00	-	11:00		86
4/2/2020	11:00	-	12:00		86
10/2/2020	9:00	-	10:00	Sunny	65
10/2/2020	10:00	-	11:00		68
10/2/2020	11:00	-	12:00		75
15/2/2020	13:00	-	14:00	Cloudy	82
15/2/2020	14:00	-	15:00		89
15/2/2020	15:00	-	16:00		90
21/2/2020	13:00	-	14:00	Sunny	89
21/2/2020	14:00	-	15:00		97
21/2/2020	15:00	-	16:00		98
27/2/2020	9:00	-	10:00	Sunny	64
27/2/2020	10:00	-	11:00		69
27/2/2020	11:00	-	12:00		73
4/3/2020	13:00	-	14:00	Cloudy	48
4/3/2020	14:00	-	15:00		54
4/3/2020	15:00	-	16:00		61
10/3/2020	13:00	-	14:00	Cloudy	57
10/3/2020	14:00	-	15:00		62
10/3/2020	15:00	-	16:00		70
16/3/2020	9:00	-	10:00	Sunny	46
16/3/2020	10:00	-	11:00		46
16/3/2020	11:00	-	12:00		59
21/3/2020	9:00	-	10:00	Sunny	64
21/3/2020	10:00	-	11:00		72
21/3/2020	11:00	-	12:00		75
27/3/2020	9:00	-	10:00	Sunny	78
27/3/2020	10:00	-	11:00		82
27/3/2020	11:00	-	12:00		85

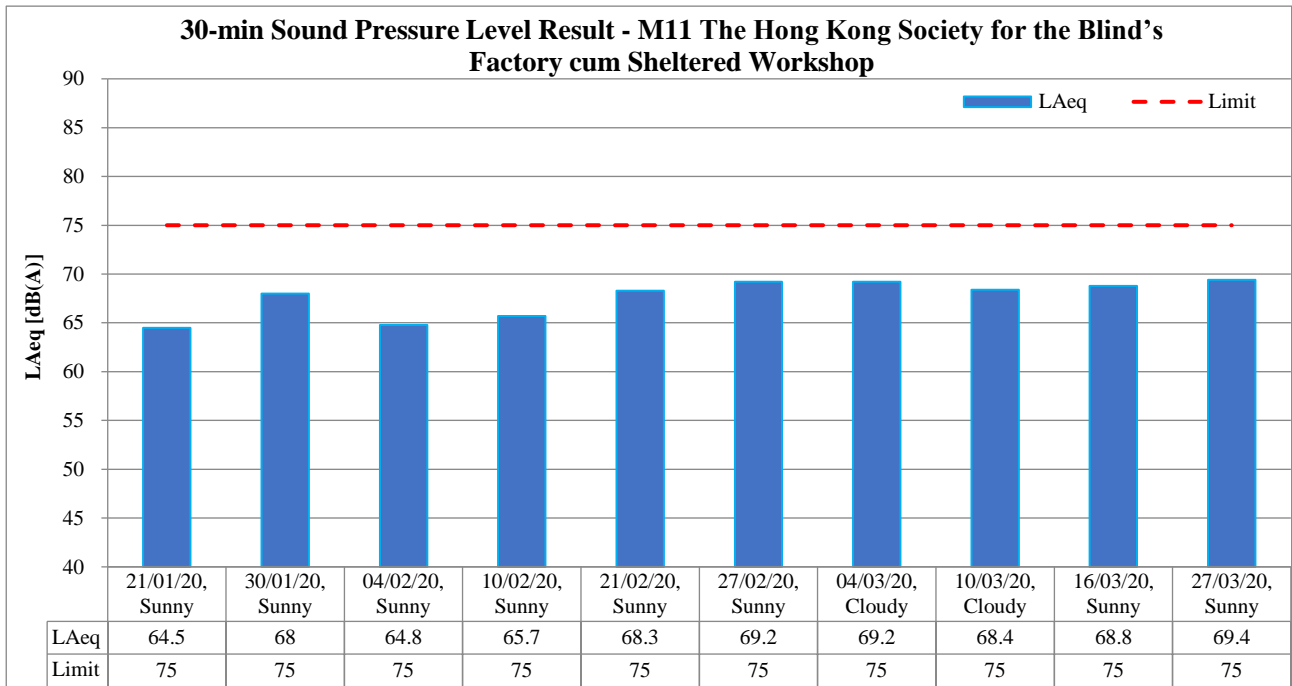


Major Construction Activities	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Ground investigation works	✓	✓	✓
Piling works for Bridge D3	✓		
Installation of sheetpile for North Approach Ramp	✓		
Excavation for North Depressed Road	✓		
ELS Installation for North Depressed Road		✓	✓
Underground Utilities Detection		✓	✓
Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass		✓	✓
Pumping Test at North Depressed Road Cofferdam		✓	✓
Construction of Bored Pile of Bridge D3		✓	✓

Factors might affect the monitoring results	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓

30-minute Noise

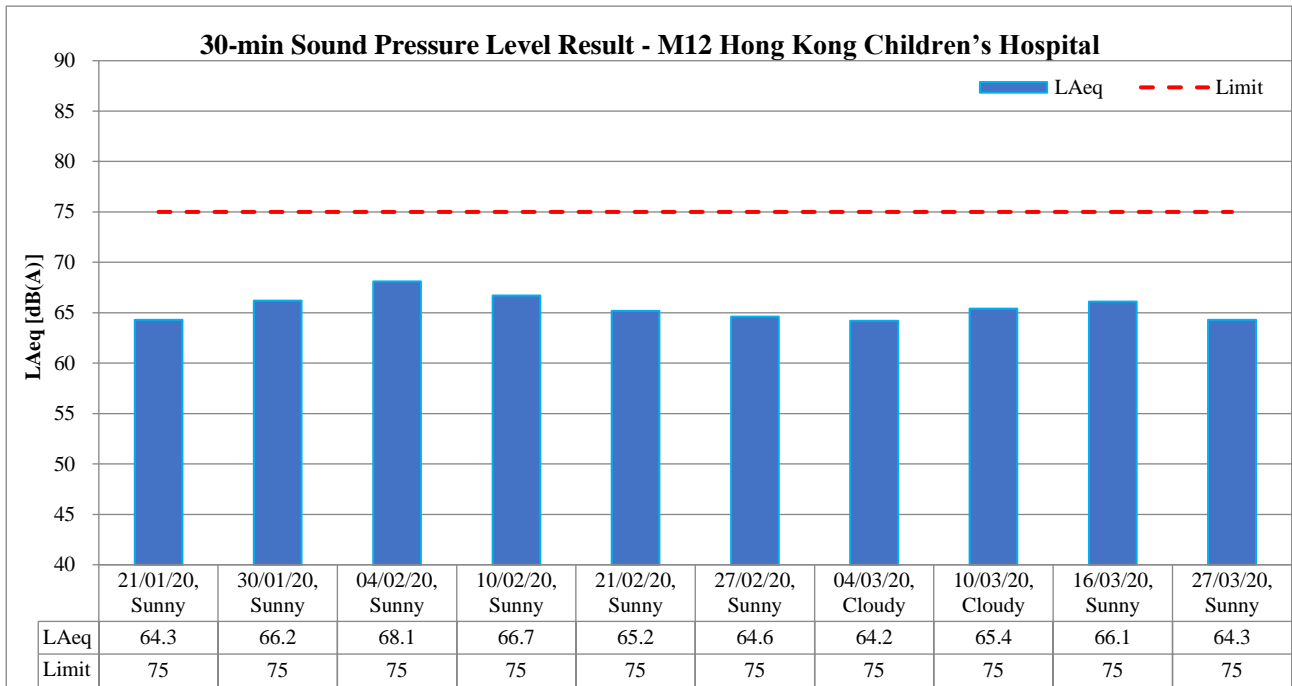
Noise Monitoring Station				M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop			
Date	Measurement Period			Weather	L _{Aeq} , dB(A)	L _{A10} , dB(A)	L _{A90} , dB(A)
21/01/2020	10:15	-	10:45	Sunny	64.5	68	63.2
30/01/2020	11:00	-	11:30	Sunny	68.0	70.9	65.2
04/02/2020	9:45	-	10:15	Sunny	64.8	71.0	60.4
10/02/2020	15:00	-	15:30	Sunny	65.7	69.4	61.6
21/02/2020	14:05	-	14:35	Sunny	68.3	72.1	64.2
27/02/2020	9:50	-	10:20	Sunny	69.2	70.9	64.5
04/03/2020	10:38	-	11:08	Cloudy	69.2	71.5	64.1
10/03/2020	13:05	-	13:35	Cloudy	68.4	72.3	64.8
16/03/2020	10:10	-	10:40	Sunny	68.8	71.2	64.7
27/03/2020	13:15	-	13:45	Sunny	69.4	73.0	65.2



Major Construction Activities	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Ground investigation works	✓	✓	✓
Piling works for Bridge D3	✓		
Installation of sheetpile for North Approach Ramp	✓		
Excavation for North Depressed Road	✓		
ELS Installation for North Depressed Road		✓	✓
Underground Utilities Detection		✓	✓
Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass		✓	✓
Pumping Test at North Depressed Road Cofferdam		✓	✓
Construction of Bored Pile of Bridge D3		✓	✓

Factors might affect the monitoring results	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓

Noise Monitoring Station				M12 - Hong Kong Children's Hospital			
Date	Measurement Period			Weather	L _{Aeq} , dB(A)	L _{A10} , dB(A)	L _{A90} , dB(A)
21/01/2020	11:20	-	11:50	Sunny	64.3	68.4	61.7
30/01/2020	10:45	-	11:15	Sunny	66.2	68.4	62.9
04/02/2020	10:45	-	11:15	Sunny	68.1	70.3	64.5
10/02/2020	11:05	-	11:35	Sunny	66.7	69.8	62.0
21/02/2020	15:10	-	15:40	Sunny	65.2	68.8	61.7
27/02/2020	11:10	-	11:40	Sunny	64.6	68.3	62.1
04/03/2020	14:27	-	14:57	Cloudy	64.2	66.6	61.7
10/03/2020	15:00	-	15:30	Cloudy	65.4	68.3	61.9
16/03/2020	11:10	-	11:40	Sunny	66.1	67.7	62.7
27/03/2020	10:10	-	10:40	Sunny	64.3	67.5	61.8



Major Construction Activities	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
Ground investigation works	✓	✓	✓
Piling works for Bridge D3	✓		
Installation of sheetpile for North Approach Ramp	✓		
Excavation for North Depressed Road	✓		
ELS Installation for North Depressed Road		✓	✓
Underground Utilities Detection		✓	✓
Installation of Sheet Pile for Construction of North Depressed Road Cofferdam & D3 Underpass		✓	✓
Pumping Test at North Depressed Road Cofferdam		✓	✓
Construction of Bored Pile of Bridge D3		✓	✓

Factors might affect the monitoring results	Reporting Period		
	Jan 2020	Feb 2020	Mar 2020
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**

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

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

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

Event and Action Plans for Construction Noise				
Event	Action			
	ET	IEC	Supervisor / ER	Contractor
	<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>

Event and Action Plans for Landscape and Visual Impact				
Event	Action			
	ET	IEC	Supervisor / ER	Contractor
Design Check	1. Check final design conforms to the requirements of EP and prepare report.	1. Check report. 2. Recommend remedial design if necessary.	1. Undertake remedial design if necessary.	
Non-conformity on one occasion	1. Identify Source. 2. Inform IEC and Supervisor /ER. 3. Discuss remedial actions with IEC, Supervisor /ER and Contractor. 4. Monitor remedial actions until rectification has been completed.	1. Check report. 2. Check Contractor's working method. 3. Discuss with ET and Contractor on possible remedial measures. 4. Advise Supervisor /ER on effectiveness of proposed remedial measures. 5. Check implementation of remedial measures.	1. Notify Contractor. 2. Ensure remedial measures are properly implemented.	1. Amend working methods. 2. Rectify damage and undertake any necessary replacement.
Repeated Non-conformity	1. Identify Source. 2. Inform IEC and Supervisor /ER. 3. Increase monitoring frequency. 4. Discuss remedial actions with IEC, Supervisor /ER and Contractor. 5. Monitor remedial actions until rectification has been completed. 6. If non-conformity stops, cease additional monitoring.	1. Check monitoring report. 2. Check Contractor's working method. 3. Discuss with ET and Contractor on possible remedial measures. 4. Advise Supervisor /ER on effectiveness of proposed remedial measures. 5. Supervise implementation of remedial measures.	1. Notify Contractor. 2. Ensure remedial measures are properly implemented.	1. Amend working methods. 2. Rectify damage and undertake any necessary replacement.

Appendix F – Waste Flow Table

Appendix F - Monthly Summary Waste Flow Table

Name of Department : CEDD

Contract No.: ED/2018/01

Monthly Summary Waste Flow Table for March 2020

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
Jan	1.030	--	--	--	1.030	--	--	--	--	--	0.0070
Feb	3.461	--	--	--	3.461	--	--	--	--	--	0.0008
Mar	18.566	--	--	15.865	0.928	1.773	--	--	--	--	0.0014
Apr	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--
Jun	--	--	--	--	--	--	--	--	--	--	--
Sub-total	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--
Aug	--	--	--	--	--	--	--	--	--	--	--
Sep	--	--	--	--	--	--	--	--	--	--	--
Oct	--	--	--	--	--	--	--	--	--	--	--
Nov	--	--	--	--	--	--	--	--	--	--	--
Dec	--	--	--	--	--	--	--	--	--	--	--
Total	23.057	--	--	15.865	5.419	1.773	--	--	--	--	0.0092

Forecast of Total Quantities of C&D Materials to be Generated from the Contract*										
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m ³)
181.35	2.1	10.2	120	48	1.05	200	0.8	--	--	3.4

- Notes: (1) The performance targets are given in **ER Appendix 8I Clause 14** and the EM&A Manual
(2) The waste flow table shall also include C&D materials to be imported for use at the Site
(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
(4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000m³ (**ER Part 8 Clause 8.7.5(d)**(ii) refers)
(5) Assume inert C&D materials density and non-inert C&D materials are 1.9 m³/ton and 1.5 m³/ton

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

Implementation Schedule for Air Quality Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.2		8 times daily watering of the work site with active dust emitting activities.	^
S3.2	S4.8	Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimize cumulative dust impacts.	
		- Stockpiling site(s) should be lined with impermeable sheeting and bunded. Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.	^*
		- Misting for the dusty material should be carried out before being loaded into the vehicle.	^
		- Any vehicle with an open load carrying area should have properly fitted side and tail boards.	^
		- 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.	^
		- 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.	^
		- 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.	^
		- Vehicle washing facilities should be provided at every vehicle exit point.	^
		- 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 hardcore.	^
		- 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.	^#
		- 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.	NA
		- Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.	^

Implementation Schedule for Noise Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.3		Use of quiet PME, movable barriers barrier for Asphalt Paver, Breaker, Excavator and Hand-held breaker and full enclosure for Air Compressor, Bar Bender, Concrete Pump, Generator and Water Pump.	^
S3.3		Good Site Practice:	
S3.3		- Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program.	^
		- 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.	^
		- 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.	^
		- 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.	^
		- Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	^
		- Scheduling of Construction Works during School Examination Period	^

Implementation Schedule for Water Quality Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.4		<u>Construction Runoff</u> Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. Construction runoff related impacts associated with the above ground construction activities can be readily controlled through the use of appropriate mitigation measures which include:	
S3.4		- use of sediment traps.	^
S3.4		- adequate maintenance of drainage systems to prevent flooding	^

Implementation Schedule for Water Quality Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		and overflow.	
	S5.8	- Surface run-off from construction sites should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins.	^
	S5.8	- Channels or earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels should be provided on site boundaries where necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	^
	S5.8	- Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Any practical options for the diversion and re-alignment of drainage should comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains. Minimum distance of 100 m should be maintained between the discharge points of construction site run-off and the existing saltwater intakes.	^
	S5.8	- Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.	^
	S5.8	- Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	^
	S5.8	- Open stockpiles of construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms.	^*
	S5.8	- Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must	NA

Implementation Schedule for Water Quality Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		always be prevented in order not to unduly overload the foul sewerage system.	
	S5.8	- Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	^
S3.4		Construction site should be provided with adequately designed perimeter channel and pre-treatment facilities and proper maintenance. 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.	^
S3.4	S5.8	Ideally, 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. If excavation in soil cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.	^
S3.4		Sediment tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m ³ capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is	^

Implementation Schedule for Water Quality Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.	
S3.4		Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50 m ³ 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.	^
S3.4		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.	NA
S3.4		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 are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events.	^
S3.4		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.	NA
S3.4	S5.8	<u>Wheel Washing Water</u> 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. 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.	^
S3.4		<u>Drainage</u> It is recommended that 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.	^

Implementation Schedule for Water Quality Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.4		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.	^
S3.4		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.	^
S3.4	S5.8	<p><u>Sewage Effluent</u></p> <p>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.</p> <p>Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment. Regular environmental audit of the construction site will provide an effective control of any malpractices and can encourage continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the project would not cause water pollution problem after undertaking all required measures.</p>	^
S3.4		<p><u>Stormwater Discharges</u></p> <p>Minimum distances of 100 m should be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes</p>	^
S3.4		<p><u>Debris and Litter</u></p> <p>In order to maintain water quality in acceptable conditions with regard to aesthetic quality, contractors should be required, under</p>	^

Implementation Schedule for Water Quality Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		conditions of contract, to ensure that site management is optimised and that disposal of any solid materials, litter or wastes to marine waters does not occur.	
	S5.8	<u>Boring and Drilling Water</u> Water used in ground boring and drilling for site investigation or rock / soil anchoring should as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	^
	S5.8	<u>Acid Cleaning, Etching and Pickling Wastewater</u> Acidic wastewater generated from acid cleaning, etching, pickling and similar activities should be neutralized to within the pH range of 6 to 10 before discharging into foul sewers.	NA
	S5.8	<u>Effluent Discharge</u> There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. Minimum distance of 100 m should be maintained between the discharge points of construction site effluent and the existing seawater intakes and the planned WSR mentioned in S5.3.1 as appropriate. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence which is under the ambit of regional office (RO) of EPD.	^
	S5.8	<u>Accidental Spillage</u> Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied with for control of chemical wastes.	^

Implementation Schedule for Water Quality Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.	
	S5.8	Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: - Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport.	^
	S5.8	- Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents.	^
	S5.8	- Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.	^

Implementation Schedule for Waste Management Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.5		<u>Good Site Practices</u> It is not anticipated that adverse waste management related impacts would arise, provided that good site practices are adhered to. Recommendations for good site practices during construction activities include:	
S3.5		- 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.	^
	S6.7	- 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.	^

Implementation Schedule for Waste Management Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.5	S6.7	- Training of site personnel in proper waste management and chemical waste handling procedures.	^
S3.5	S6.7	- Provision of sufficient waste disposal points and regular collection for disposal.	^*
S3.5	S6.7	- Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	^
S3.5		- A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).	^
	S6.7	- Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	^
	S6.7	- Training should be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycle.	^
S3.5		<u>Waste Reduction Measures</u> Good management and control can prevent the generation of a significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:	^
S3.5	S6.7	- Sort C&D waste from demolition of the remaining structures to recover recyclable portions such as metals.	^
S3.5	S6.7	- 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.	^
S3.5	S6.7	- Encourage collection of aluminium 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.	^
S3.5		- Any unused chemicals or those with remaining functional capacity should be recycled.	^
S3.5	S6.7	- Proper storage and site practices to minimise the potential for damage or contamination of construction materials.	^
S3.5		<u>Construction and Demolition Materials</u> Mitigation measures and good site practices should be incorporated in the contract document to control potential environmental impact from handling and transportation of C&D material. The mitigation measures include:	

Implementation Schedule for Waste Management Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.5		- Where it is unavoidable to have transient stockpiles of C&D material within the Project work site pending collection for disposal, the transient stockpiles shall be located away from waterfront or storm drains as far as possible.	^
S3.5		- Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric.	^*
S3.5		- Skip hoist for material transport should be totally enclosed by impervious sheeting.	^
S3.5		- Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site.	^
S3.5		- 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.	^
S3.5		- 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.	^
S3.5		- All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet.	^
S3.5		- The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.	^
S3.5		- 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 and Demolition Materials” should be included as one of the contractual requirements and implemented by an Environmental Team undertaking the Environmental Monitoring and Audit work. An Independent Environmental Checker should be responsible for auditing the results of the system.	^

Implementation Schedule for Waste Management Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
	S6.7	- Plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste.	^
S3.5		<u>Chemical Waste</u> 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 Waste Disposal (Chemical Waste) (General) Regulation.	^
	S6.7	Separation of chemical wastes for special handling and appropriate treatment.	^
S3.5		<u>General Refuse</u> General refuse should be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Effective collection and storage methods (including enclosed and covered area) of site wastes would be required to prevent waste materials from being blown around by wind, wastewater discharge by flushing or leaching into the marine environment, or creating odour nuisance or pest and vermin problem.	^

Implementation Schedule for Landscape and Visual Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.8.12		All existing trees should be carefully protected during construction	^
S3.8.12		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.	^
S3.8.12		Control of night-time lighting.	^
S3.8.12		Erection of decorative screen hoarding.	^
	S7.9	<u>Construction Site Control</u> - CM1 - Minimized construction area and contractor's temporary works areas.	^
		- CM2- Control of night-time lighting and glare by hooding all	^

Implementation Schedule for Landscape and Visual Measures			
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		lights.	
		- CM3 - Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	^
		- CM4 - Reduction of construction period to practical minimum.	^
		- CM5 - Limitation of / Ensuring no run-off into surrounding landscape and adjacent seawater areas.	^
		- CM6 - Temporary or advance landscape should be provided along the temporary access roads to the Cruise Terminal until such time as road D3 is open.	^

Remarks:			
^	Compliance of mitigation measure.	X	Non-compliance of mitigation measure.
N/A	Not Applicable at this stage.	●	Non-compliance but rectified by the contractor.
N/A (1)	Not observed.		
*	Recommendation was made during site audit but improved/rectified by the contractor.	#	Recommendation was made during audit and to be improved/ rectified by the contractor.

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

Reporting Period: January 2020 to March 2020

Contract No.	Record of Complaint (Yes/No)	Record of Warning (Yes/No)	Notification of Summons and Successful Prosecutions (Yes/No)
ED/2018/01	No	No	No

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

Contract No.	Record of Complaint	Record of Warning	Notification of Summons and Successful Prosecutions
ED/2018/01	0	0	0

