

Our ref: 13-1-2021

13-1-2021

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 Summary Report July 2020 – September 2020**

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

Please find enclosed four hard copies and one electronic copy of Quarterly EM&A Summary Report July 2020 – September 2020, which has been certified by the ET leader and verified by the IEC, for your reference.

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



Ir Chan Pang

Environmental Team Leader

Encl. Quarterly EM&A Summary Report July 2020 – September 2020

**Quarterly Environmental Monitoring and Audit  
Summary Report (July 2020 – September 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 1.1)

Certified By: \_\_\_\_\_



(Environmental Team Leader)

Ref.: CEDKTDS4EM00\_0\_0120L.20

31 December 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 July 2020 to September 2020**

Reference is made to the Environmental Team's submission of the Quarterly EM&A Summary Report for July 2020 to September 2020 (Version 1.1) certified by the ET Leader and provided to us via email on 31 December 2020.

Please be informed that we have no further comment 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

Q:\Projects\CEDKTDS4EM00\02 Proj\_Mgt\02 Corr\CEDKTDS4EM00\_0\_0120L.20.doc

<b>Table of Content</b>	<b>Page</b>
EXECUTIVE SUMMARY .....	1
Breaches of Action and Limit Levels .....	1
Complaint log .....	1
Notifications of Summons and Successful Prosecutions.....	1
Report changes .....	1
Major construction works in the reporting period .....	2
1.    INTRODUCTION.....	3
Project Background .....	3
Project Organization .....	4
Works Area and Construction Programme.....	4
Construction works undertaken during reporting period.....	5
2.    SUMMARY OF EM&A REQUIREMENTS AND MONITORING RESULTS .....	6
Monitoring Requirements.....	6
Air Quality Monitoring Locations .....	6
Air Quality Monitoring Parameters, Frequency and Duration .....	6
Air Quality Monitoring Equipment .....	7
Air Quality Monitoring Methodology and QA/QC Procedure.....	7
Wind Data Monitoring.....	10
Impact Air Quality Action and Limit Levels.....	10
Impact Air Quality Monitoring results .....	10
Noise Monitoring Locations .....	11
Noise Monitoring Parameters, Frequency and Duration .....	12
Noise Monitoring Equipment .....	12
Monitoring Methodology and QA/QC Procedure .....	13
Maintenance and Calibration.....	13
Impact Noise Action and Limit Levels.....	14

	Impact Noise Monitoring results .....	14
	Comparison of EM&A Results with EIA Predictions.....	15
3.	LANDSCAPE AND VISUAL MONITORING .....	18
4.	SOLID AND LIQUID WASTE MANAGEMENT .....	19
5.	ENVIRONMENTAL SITE INSPECTION AND AUDIT .....	20
	Site Inspection .....	20
	Implementation Status of Environmental Mitigation Measures.....	21
6.	SUMMARY OF NON-COMPLIANCE STATUS .....	22
	Breaches of Action and Limit Levels .....	22
	Environmental Complaint and Non-compliance .....	22
	Notifications of summons and successful prosecutions .....	23
7.	COMMENTS, RECOMMENDATIONS AND CONCLUSIONS .....	24
	Comments.....	24
	Recommendations .....	24
	Conclusions .....	25

**List of Tables**

Table I	Major construction activities in the reporting period
Table 1.1	Contact information of key personnel
Table 1.2	Major construction activities in the reporting period
Table 2.1	Locations of air quality monitoring stations
Table 2.2	Air quality monitoring parameters, frequency and duration
Table 2.3	Air Quality Monitoring Equipment
Table 2.4	Action and Limit Levels of 24-hour average TSP for construction dust monitoring
Table 2.5	Action and Limit Levels of 1-hour average TSP for construction dust monitoring
Table 2.6	Summary of 24-hour average TSP monitoring data during the reporting period
Table 2.7	Summary of 1-hour average TSP monitoring data during the reporting period

Table 2.8	Locations of noise monitoring stations
Table 2.9	Noise monitoring parameters, frequency and duration
Table 2.10	Noise Monitoring Equipment
Table 2.11	Baseline noise level and Action and Limit Levels for construction noise monitoring
Table 2.12	Summary of noise monitoring data during the reporting period
Table 2.13	Comparison of 24-hour average TSP monitoring data with EIA predictions
Table 2.14	Comparison of 1-hour average TSP monitoring data with EIA predictions
Table 2.15	Comparison of noise monitoring data with EIA predictions
Table 3.1	Summary of observations of Landscape and Visual impact during the reporting period
Table 5.1	Summary of site inspections observations during the reporting period
Table 6.1	Non-compliance record in the reporting period
Table 6.2	Summary of complaints in the reporting period
Table 6.3	Summary of summons and successful prosecutions in the reporting period
Table 7.1	Summary of recommendations / reminders made in site inspections during the reporting period

### **List of 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

## List of Appendices

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

Appendix B – Construction Programme

Appendix C – Weather information

Appendix D – Monitoring data and graphical plots

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

Appendix F – Waste Flow Table

Appendix G – Environmental Mitigation Implementation Schedule (EMIS)

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

## **EXECUTIVE SUMMARY**

1. This is the 3<sup>rd</sup> Quarterly Environmental Monitoring & Audit (EM&A) Summary Report which summaries the findings of the EM&A Programme during the reporting period from 1 July 2020 to 30 September 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*

July 2020	August 2020	September 2020
<ul style="list-style-type: none"> <li>- Installation of Sheet Pile for Construction of Underpass</li> <li>- Pumping Test at North Depressed Road Cofferdam and South Depressed Road</li> <li>- Construction of Bored Pile of Bridge D3</li> <li>- ELS Installation &amp; Excavation for North Depressed Road (CH1560 to CH1720)</li> <li>- Construction of base slab, walls and columns for North Approach Ramp</li> <li>- Permanent Structure Construction for North Depressed Road</li> </ul>	<ul style="list-style-type: none"> <li>- Installation of Sheet Pile for Construction of DCS</li> <li>- Pumping Test at North Depressed Road Cofferdam and South Depressed Road</li> <li>- Construction of Bored Pile of Bridge D3</li> <li>- ELS Installation &amp; Excavation for South Depressed Road</li> <li>- Construction of base slab, walls and columns for North Approach Ramp</li> <li>- Permanent Structure Construction for North Depressed Road</li> </ul>	<ul style="list-style-type: none"> <li>- Ground investigation works</li> <li>- Excavation for North Approach Ramp</li> <li>- Construction of base slab and wall for North Approach Ramp</li> <li>- Bored Pile Construction for Bridge D3</li> <li>- ELS Installation &amp; Excavation for North Depressed Road</li> <li>- Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road</li> <li>- Permanent Structure Construction for North Depressed Road</li> <li>- ELS works for Noise Barrier Foundation</li> </ul>

# 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. Manson Yeung	IEC	9700 6767	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	Ms. Juliet Ting	Environmental Officer	9555 8820	2572 4080

## **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*

July 2020	August 2020	September 2020
<ul style="list-style-type: none"> <li>- Installation of Sheet Pile for Construction of Underpass</li> <li>- Pumping Test at North Depressed Road Cofferdam and South Depressed Road</li> <li>- Construction of Bored Pile of Bridge D3</li> <li>- ELS Installation &amp; Excavation for North Depressed Road (CH1560 to CH1720)</li> <li>- Construction of base slab, walls and columns for North Approach Ramp</li> <li>- Permanent Structure Construction for North Depressed Road</li> </ul>	<ul style="list-style-type: none"> <li>- Installation of Sheet Pile for Construction of DCS</li> <li>- Pumping Test at North Depressed Road Cofferdam and South Depressed Road</li> <li>- Construction of Bored Pile of Bridge D3</li> <li>- ELS Installation &amp; Excavation for South Depressed Road</li> <li>- Construction of base slab, walls and columns for North Approach Ramp</li> <li>- Permanent Structure Construction for North Depressed Road</li> </ul>	<ul style="list-style-type: none"> <li>- Ground investigation works</li> <li>- Excavation for North Approach Ramp</li> <li>- Construction of base slab and wall for North Approach Ramp</li> <li>- Bored Pile Construction for Bridge D3</li> <li>- ELS Installation &amp; Excavation for North Depressed Road</li> <li>- Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road</li> <li>- Permanent Structure Construction for North Depressed Road</li> <li>- ELS works for Noise Barrier Foundation</li> </ul>

## 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	3
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 m<sup>3</sup>/min. and 1.7 m<sup>3</sup>/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.

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

2.9 The power supply was checked to ensure the sampler worked properly. 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	July 2020		August 2020		September 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	33	26 – 42	47	25-70	46	31-62	182	260
AM4(A)	30	25 – 44	38	23-60	42	34-64	187	260
AM7	40	34 - 45	45	27-67	47	40-60	181	260

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

Air Monitoring Station	July 2020		August 2020		September 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	36	26-48	57	32-106	77	57-91	297	500
AM4(A)	36	29-49	53	34-84	76	60-104	326	500
AM7	44	36-52	59	39-96	85	69-106	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	2
Air Flowmeter	TSI TA440 Air Velocity	2

## **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	July 2020		August 2020		September 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	67.9	65.3 – 68.8	68.1	66.0 – 70.0	69.5	65.7 – 72.2	When one documented complaint is received	75 dB(A)
M12	64.8	62.0 – 65.6	67.6	62.8 – 69.6	66.7	65.3 – 68.6		

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 (July 2020) $\mu\text{g}/\text{m}^3$	Measured 24-hr average TSP in Reporting Month (August 2020) $\mu\text{g}/\text{m}^3$	Measured 24-hr average TSP in Reporting Month (September 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	26 – 42	25 – 70	31 – 62
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	A43^	123	195	25 – 44	23 – 60	34– 64
AM7 – Hong Kong Children's Hospital	PA60	NA	NA	34 – 45	27 – 67	40 – 60

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 Reporting Month (July 2020) $\mu\text{g}/\text{m}^3$	Measured 1-hr average TSP in Reporting Month (August 2020) $\mu\text{g}/\text{m}^3$	Measured 1-hr average TSP in Reporting Month (September 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	217 <sup>^</sup>	247 <sup>^</sup>	26 – 48	32 – 106	57 – 91
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	A43	283 <sup>^</sup>	409 <sup>^</sup>	29 – 49	34 – 84	60 – 104
AM7 – Hong Kong Children's Hospital	PA60	NA	NA	36 - 52	39 – 96	69 – 106

Note:

<sup>^</sup> 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 (July 2020) $L_{Aeq, 30min}, \text{dB(A)}$	Measured Noise Level in Reporting Month (August 2020) $L_{Aeq, 30min}, \text{dB(A)}$	Measured Noise Level in Reporting Month (September 2020) $L_{Aeq, 30min}, \text{dB(A)}$
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	N18	50 – 76*	65.3 – 68.8	66.0 – 70.0	65.7 – 72.2
M12 - Hong Kong Children's Hospital	PN83, PN84, PN84A	NA	62.0 – 65.6	62.8 – 69.6	65.3 – 68.6

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

2.47 24-hour TSP monitoring results at AM3, 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 The summaries of site audits are attached in Table 3.1.

*Table 3.1 Summary of observations of Landscape and Visual impact during the reporting period*

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
2 July 2020	NA	NA	NA
9 July 2020	NA	NA	NA
16 July 2020	NA	NA	NA
23 July 2020	NA	NA	NA
30 July 2020	NA	NA	NA
6 August 2020	NA	NA	NA
13 August 2020	NA	NA	NA
20 August 2020	NA	NA	NA
27 August 2020	NA	NA	NA
3 September 2020	NA	NA	NA
10 September 2020	Observation: Penta-Ocean was reminded to maintain the tree protection zone.	Action Taken: The tree protection zone was maintained.	Closed-out 17 September 2020
17 September 2020	NA	NA	NA
24	NA	NA	NA

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
September 2020			
30 September 2020	NA	NA	NA

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 reduction 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
2 July 2020	NA	NA	NA
9 July 2020	Observation: Dusty material of sawdust generated from plywood cutting machine was not equipped with collection bag to prevent sawdust emission.	Action Taken: Dusty material of sawdust generated from plywood cutting machine was collected to prevent sawdust emission.	Closed-out 16 July 2020
	Observation: Number of domestic garbage bins for proper waste storage was not enough.	Action Taken: Number of domestic garbage bins are increased for waste storage.	Closed-out 16 July 2020
16 July 2020	NA	NA	NA
23 July 2020	Observation: The water drip from air conditioners was not cleared.	Action Taken: Container was used to dispatch the water drip.	Closed-out 31 July 2020
30 July 2020	Observation: The waste was accumulated.	Action Taken: Waste was cleared.	Closed-out 31 July 2020
6 August 2020	NA	NA	NA
13 August 2020	Observation: Domestic waste, especially lunch box, were not covered properly & disposed timely.	Action Taken: More domestic garbage bins were provided for waste storage.	Closed-out 20 August 2020

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
	Observation: Stagnant water from A/C was condensed and promoted mosquito breeding.	Action Taken: Containers were used to dispatch the water drip.	Closed-out 20 August 2020
20 August 2020	Observation: Manholes were not covered and temporarily sealed.	Action Taken: Manholes were covered adequately and temporarily sealed.	Closed-out 27 August 2020
27 August 2020	Observation: The water drip from air condition was condensed.	Action Taken: Containers were used to dispatch the water drip.	Closed-out 3 September 2020
3 September 2020	NA	NA	NA
10 September 2020	Observation: Penta-Ocean were not properly maintaining the tree protection zone.	Action Taken: The tree protection zone was maintained.	Closed-out 17 September 2020
17 September 2020	Observation: The stagnant water was not cleared.	Action Taken: The stagnant water was cleared.	Closed-out 24 September 2020
24 September 2020	NA	NA	NA
30 September 2020	NA	NA	NA

### **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	July 2020	0	0	N/A
	August 2020	0	0	N/A
	September 2020	0	0	N/A
24-hr TSP	July 2020	0	0	N/A
	August 2020	0	0	N/A
	September 2020	0	0	N/A
Construction noise	July 2020	0	0	N/A
	August 2020	0	0	N/A
	September 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 / Reminder
2 July 2020	No
9 July 2020	Dusty material of sawdust generated from plywood cutting machine should be collected to prevent sawdust emission.
	Number of domestic garbage bins should be increased for waste storage.
16 July 2020	No
23 July 2020	The water drip from air conditioners should be cleared.
30 July 2020	Accumulated waste should be removed.
6 August 2020	No
13 August 2020	Providing more domestic garbage bins for storage waste.
	Stagnant water from A/C should be cleared to minimize the promote of mosquito breeding.
20 August 2020	Manholes should be adequately covered and temporarily sealed.
27 August 2020	The water drip from air conditioners should be cleared.

Inspection Date	Recommendations / Reminder
3 September 2020	No
10 September 2020	The tree protection zone should be regularly maintained.
17 September 2020	Stagnant water should be cleared.
24 September 2020	No
30 September 2020	No

### **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**



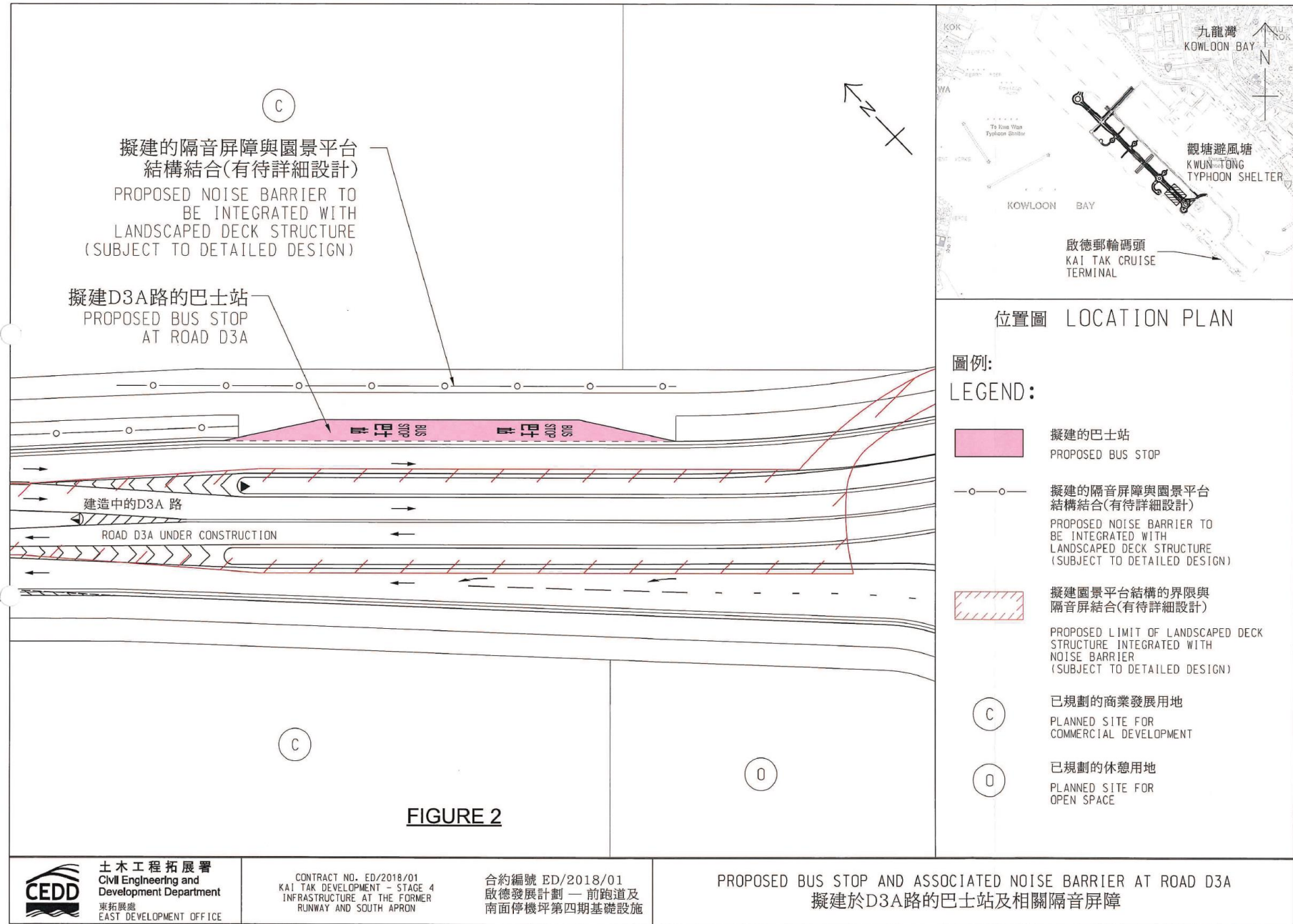
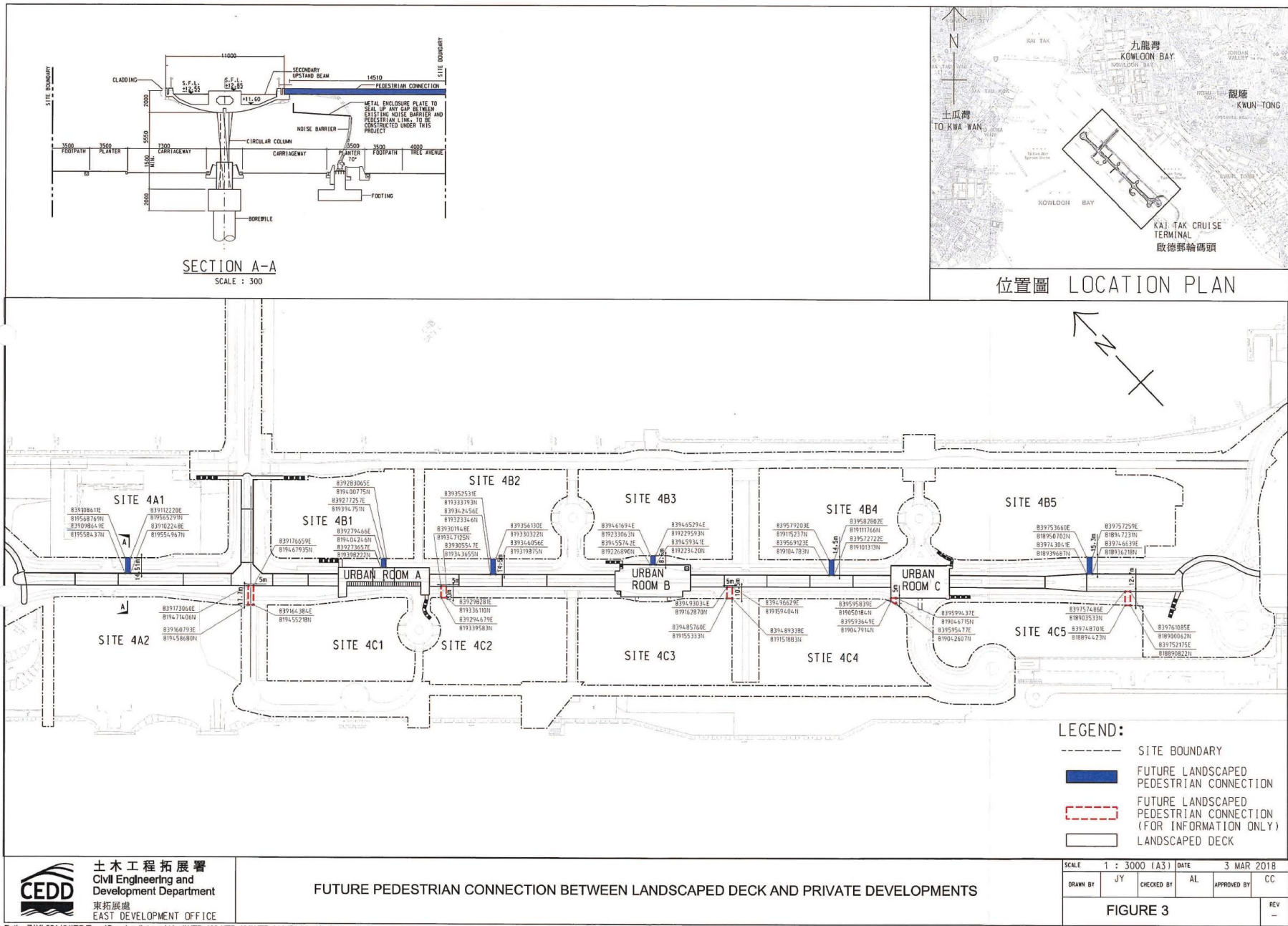


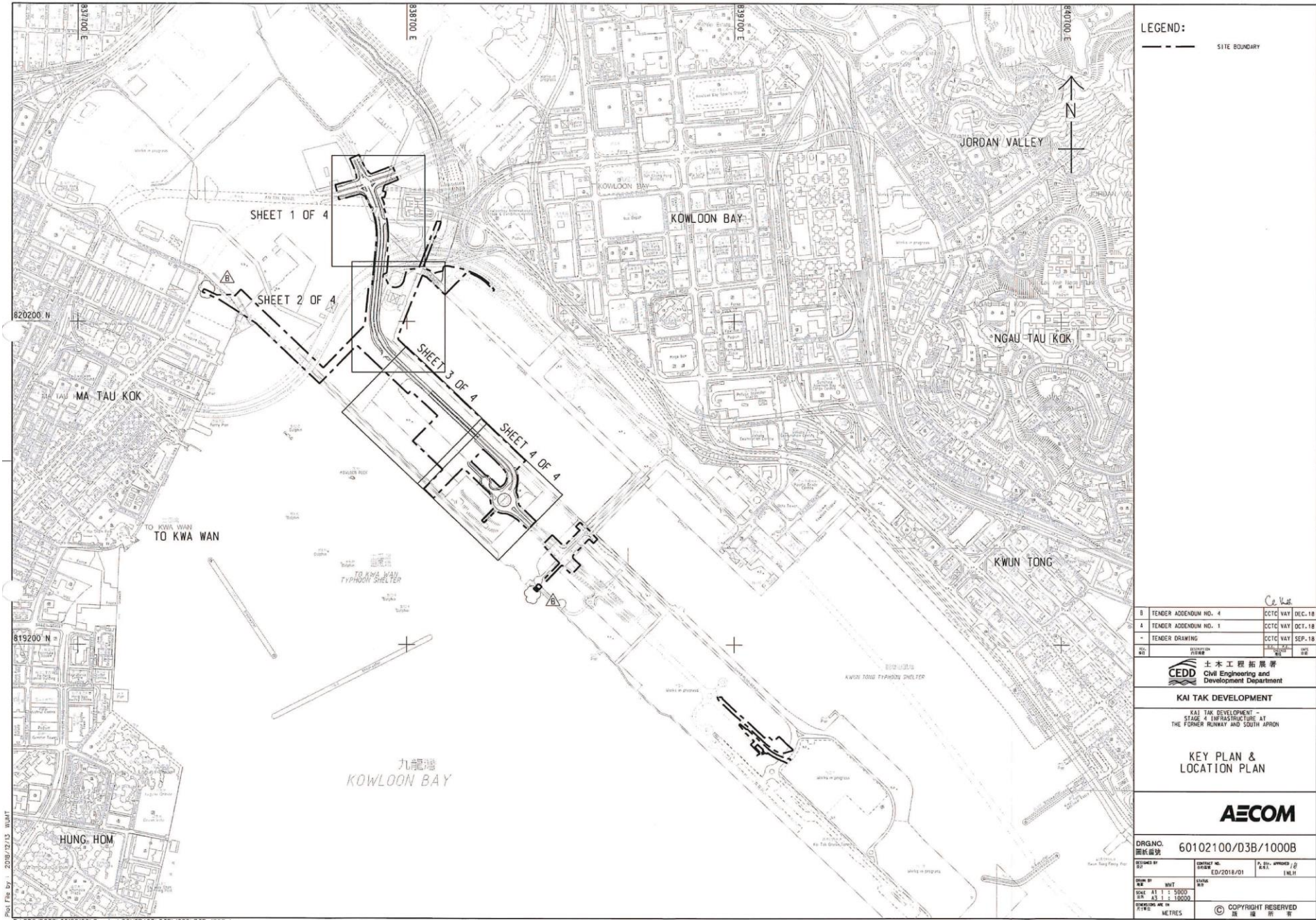
Figure 2 – Proposed Bus Stop And Associated Noise Barrier At Road D3A



Path : Z:\KL2014011TO Team\Drawing (Internal Use)\KTD-400-KTD-499\KTD-414 (PL Location).dgn

Print Date : 7/3/2019

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



LEGEND:  
 --- SITE BOUNDARY

B	TENDER ADDENDUM NO. 4	CCTC VAY	DEC. 18
A	TENDER ADDENDUM NO. 1	CCTC VAY	DEC. 18
-	TENDER DRAWING	CCTC VAY	SEP. 18

CE 1818  
 CEDD 土木工程拓展署  
 Civil Engineering and  
 Development Department

KAI TAK DEVELOPMENT  
 KAI TAK DEVELOPMENT -  
 STAGE 4 INFRASTRUCTURE AT  
 THE FORMER RUNWAY AND SOUTH APRON

KEY PLAN &  
 LOCATION PLAN

**AECOM**

DRGNO. 圖紙編號	60102100/D3B/1000B		
DESIGNED BY 設計	CONTRACT NO. 合約編號	DATE 日期	APPROVED BY 核准
	ED-2018/D1		IMEH
SHEET NO. 圖號	SCALE 比例尺	DATE 日期	
1	A1 1:5000 A3 1:10000		
REVISION NO. 修訂編號	METRES		
	© COPYRIGHT RESERVED 版權保留		

Figure 4 – Site Layout Plan

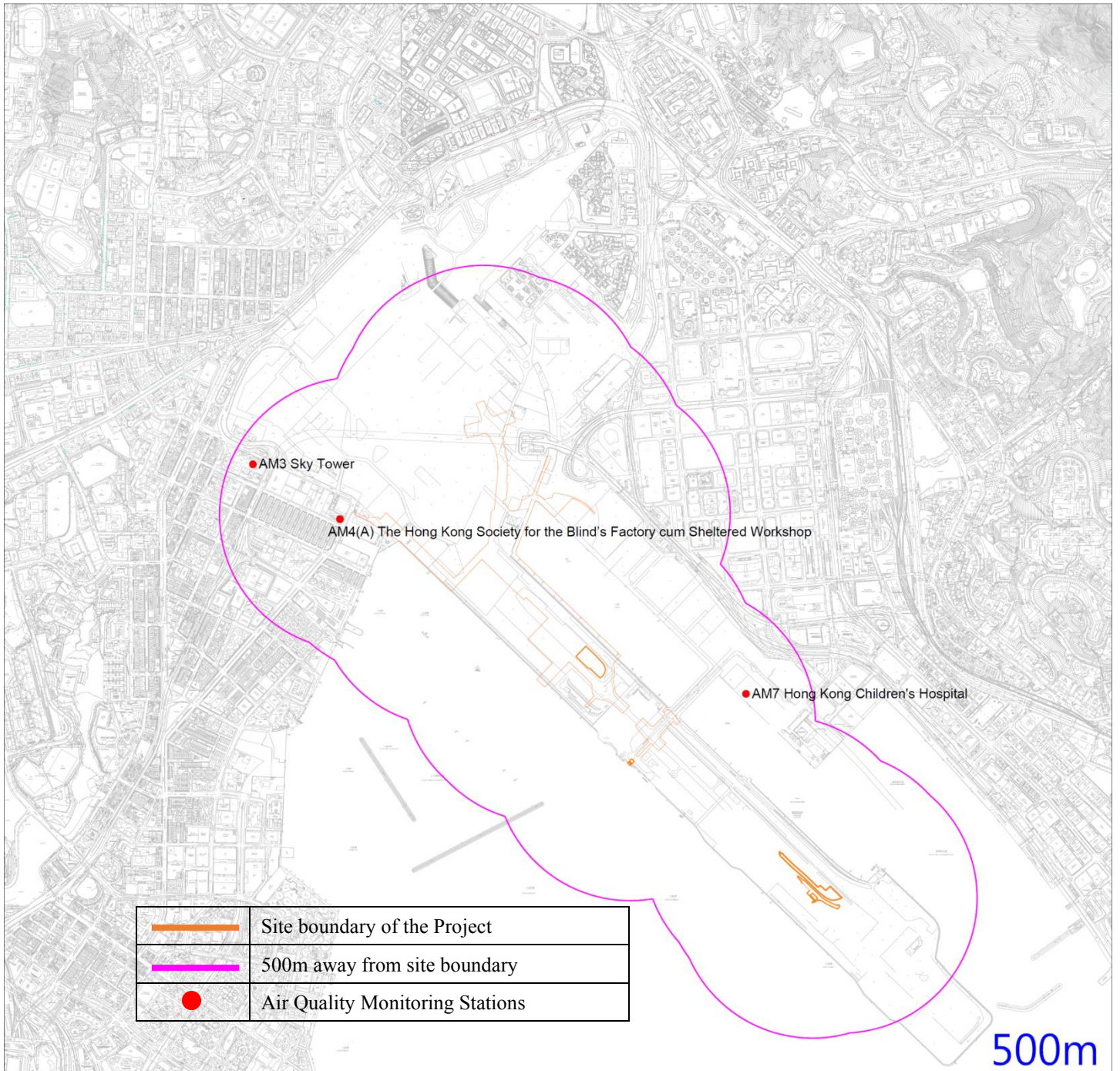


Figure 5 – Air Quality Monitoring Stations

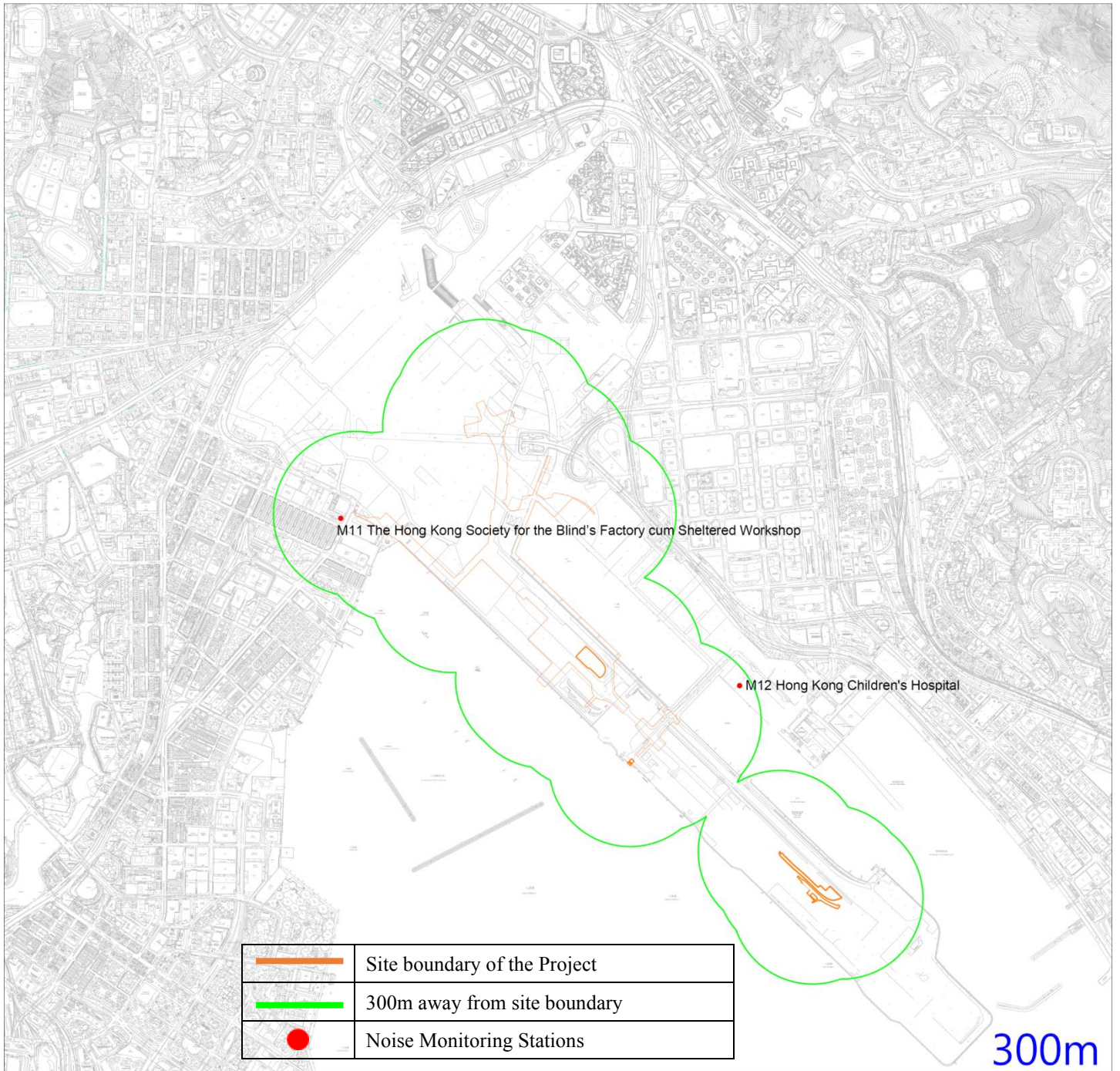
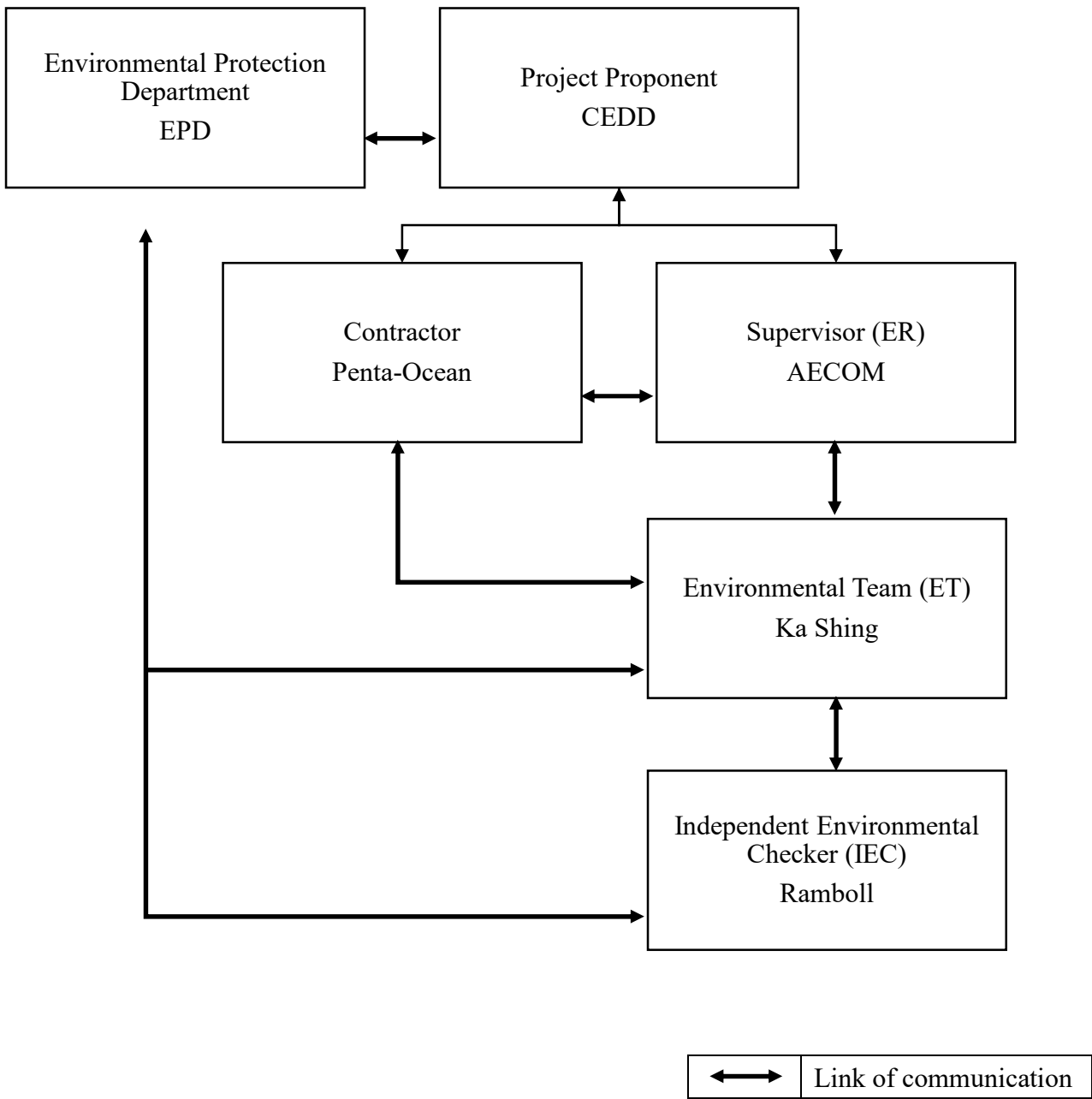


Figure 6 – Noise Monitoring Stations

**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**

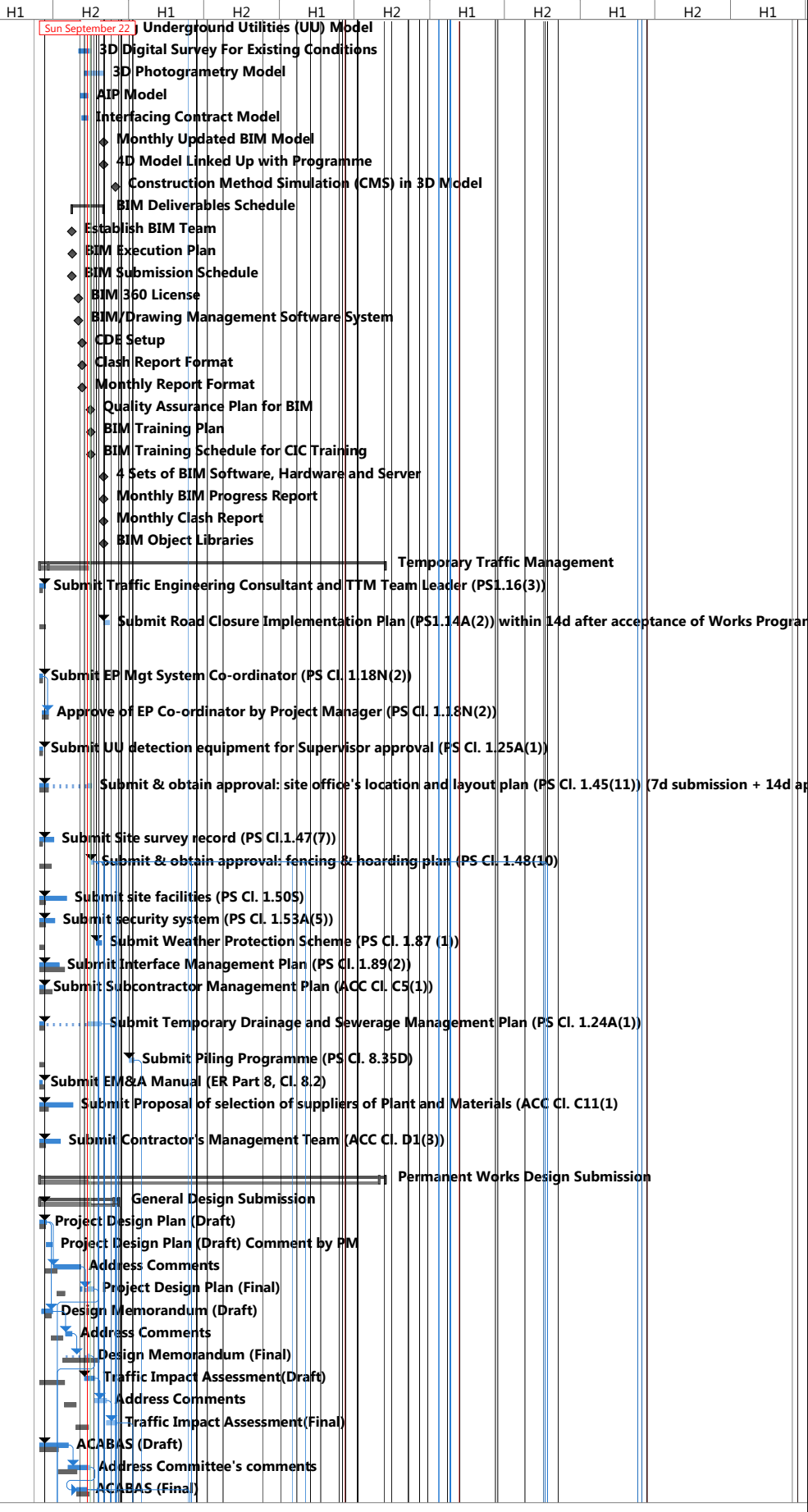
NAME 姓名	TEAM MEMBER 成員	POSITION 職位	TEL. 電話
<b>Emergency Hotline : 9317-0821</b>			
何先生 Daniel HO	總隊長 Emergency Coordinator	地盤代表 Site Agent	9271-6455
林先生 C. K. LAM	副隊長 Asst. Emergency Coordinator	地盤總管 General Foreman	9869-9978
鄧先生 Nelson TANG	副隊長 (急救員) Asst. Emergency Coordinator (First Aider)	安全經理 Safety 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
<b>Emergency Contact of Authorities / Utility Companies</b>			
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&amp;MD Dept 機電工程</i>		2882-8011 / 2333-3762	
<i>Highways Dept (24hrs) 路政處熱線</i>		2923-7766	
<b>Utility Undertakers Companies</b>			
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 H1	2019 H2	2020 H1	2020 H2	2021 H1	2021 H2	2022 H1	2022 H2	2023 H1	2023 H2	2024 H1
1	<b>Project Dates</b>	<b>1841 days</b>	<b>1841 days</b>	<b>May 16, 2019</b>	<b>NA</b>	<b>May 16, 2019</b>	<b>May 29, 2024</b>	<b>May 16, 2019</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>											
2	Contract Date	0 days	0 days	May 16, 2019	May 16, 2019	May 16, 2019	May 16, 2019	May 16, 2019	May 16, 2019	0%	0 days	0 days	0 days											
3	<b>Date of Commencement &amp; Completion (CDP1: Item 3)</b>	<b>1827 days</b>	<b>1827 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>May 29, 2024</b>	<b>May 30, 2019</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>											
4	Starting Date (CDPart1: Item 3)	0 days	0 days	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	100%	0 days	0 days	0 days											
5	Completion Date	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											
6	Establishment Work	365 days	365 days	NA	NA	May 31, 2023	May 29, 2024	May 31, 2023	May 29, 2024	0%	0 days	0 days	0 days											
7	<b>Schedule of Access Dates (CDP1: Item 3[TA No.1])</b>	<b>1221 days</b>	<b>1221 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>October 2, 2022</b>	<b>May 30, 2019</b>	<b>October 2, 2022</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>											
8	Access Date - Part 1, 6A,6B,9A,9B	0 days	0 days	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	100%	0 days	0 days	0 days											
9	Access Date - Part 2A,2C	0 days	0 days	NA	NA	June 2, 2020	June 2, 2020	June 2, 2020	June 2, 2020	0%	0 days	0 days	0 days											
10	Access Date - Part 2B	0 days	0 days	NA	NA	January 31, 2021	January 31, 2021	January 31, 2021	January 31, 2021	0%	0 days	0 days	0 days											
11	Access Date - Part 2E	0 days	0 days	NA	NA	October 2, 2022	October 2, 2022	October 2, 2022	October 2, 2022	0%	0 days	0 days	0 days											
12	Access Date - Part 3A	0 days	0 days	NA	NA	March 6, 2022	March 6, 2022	March 6, 2022	March 6, 2022	0%	0 days	0 days	0 days											
13	Access Date - Part 3B,4	0 days	0 days	NA	NA	March 5, 2021	March 5, 2021	March 5, 2021	March 5, 2021	0%	0 days	0 days	0 days											
14	Access Date - Part 3C,3D,3E,3G,3I	0 days	0 days	NA	NA	December 2, 2019	December 2, 2019	December 2, 2019	December 2, 2019	0%	0 days	0 days	0 days											
15	Access Date - Part 3F	0 days	0 days	NA	NA	June 3, 2022	June 3, 2022	June 3, 2022	June 3, 2022	0%	0 days	0 days	0 days											
16	Access Date - Part 3H,7A,7B,8,9 (TA No.1)	0 days	0 days	NA	NA	August 31, 2021	August 31, 2021	August 31, 2021	August 31, 2021	0%	0 days	0 days	0 days											
17	Access Date - Part 10	0 days	0 days	NA	NA	June 2, 2021	June 2, 2021	June 2, 2021	June 2, 2021	0%	0 days	0 days	0 days											
18	Access Date - Area WA1	0 days	0 days	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	May 30, 2019	100%	0 days	0 days	0 days											
19	<b>Schedule of Time for Ordering (CDP1: Item Cl.B5)</b>	<b>695 days</b>	<b>695 days</b>	<b>July 5, 2019</b>	<b>NA</b>	<b>July 5, 2019</b>	<b>May 30, 2021</b>	<b>July 5, 2019</b>	<b>May 30, 2021</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>											
20	Time for Ordering "Section Subject to Excision" - Section 4	0 days	0 days	NA	NA	June 2, 2020	June 2, 2020	June 2, 2020	June 2, 2020	0%	0 days	0 days	0 days											
21	Time for Ordering "Section Subject to Excision" - Section 8	0 days	0 days	NA	NA	June 2, 2020	June 2, 2020	June 2, 2020	June 2, 2020	0%	0 days	0 days	0 days											
22	Time for Ordering "Section Subject to Excision" - Section 9	0 days	0 days	July 5, 2019	July 5, 2019	July 5, 2019	July 5, 2019	July 5, 2019	July 5, 2019	100%	0 days	0 days	0 days											
23	Time for Ordering "Section Subject to Excision" - Section 10	0 days	0 days	NA	NA	May 30, 2021	May 30, 2021	May 30, 2021	May 30, 2021	0%	0 days	0 days	0 days											
24	<b>Schedule of Key Dates (CDP1: Item 3[TA No.1])</b>	<b>665 days</b>	<b>665 days</b>	<b>NA</b>	<b>NA</b>	<b>August 7, 2020</b>	<b>June 3, 2022</b>	<b>August 7, 2020</b>	<b>June 3, 2022</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>											
25	KD1	0 days	0 days	NA	NA	August 7, 2020	August 7, 2020	August 7, 2020	August 7, 2020	0%	0 days	0 days	0 days											
26	KD2	0 days	0 days	NA	NA	April 18, 2021	April 18, 2021	April 18, 2021	April 18, 2021	0%	0 days	0 days	0 days											
27	KD3	0 days	0 days	NA	NA	June 1, 2021	June 1, 2021	June 1, 2021	June 1, 2021	0%	0 days	0 days	0 days											
28	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											
29	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											
30	KD6	0 days	0 days	NA	NA	December 29, 2021	December 29, 2021	December 29, 2021	December 29, 2021	0%	0 days	0 days	0 days											
31	KD7	0 days	0 days	NA	NA	June 3, 2022	June 3, 2022	June 3, 2022	June 3, 2022	0%	0 days	0 days	0 days											
32	<b>Schedule of Section Completion (CDP1 Cl. X5)</b>	<b>1092 days</b>	<b>1092 days</b>	<b>NA</b>	<b>NA</b>	<b>June 2, 2021</b>	<b>May 29, 2024</b>	<b>June 2, 2021</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>											
33	Section Completion Date 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											
34	Section Completion Date Section 2	0 days	0 days	NA	NA	June 2, 2021	June 2, 2021	June 2, 2021	June 2, 2021	0%	0 days	0 days	0 days											
35	Section Completion Date Section 3	0 days	0 days	NA	NA	November 2, 2021	November 2, 2021	November 2, 2021	November 2, 2021	0%	0 days	0 days	0 days											
36	Section Completion Date Section 4	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											
37	Section Completion Date Section 5	0 days	0 days	NA	NA	July 5, 2021	July 5, 2021	July 5, 2021	July 5, 2021	0%	0 days	0 days	0 days											
38	Section Completion Date 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											
39	Section Completion Date 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											
40	Section Completion Date Section 8	0 days	0 days	NA	NA	December 2, 2021	December 2, 2021	December 2, 2021	December 2, 2021	0%	0 days	0 days	0 days											
41	Section Completion Date Section 9	0 days	0 days	NA	NA	July 5, 2021	July 5, 2021	July 5, 2021	July 5, 2021	0%	0 days	0 days	0 days											
42	Section Completion Date Section 10	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											
43	<b>Pre-meeting of ACABAS</b>	<b>153 days</b>	<b>153 days</b>	<b>NA</b>	<b>NA</b>	<b>November 29, 2019</b>	<b>April 30, 2020</b>	<b>May 29, 2024</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>1491 d...</b>	<b>1491 d...</b>												
44	Design Working Group Meeting	0 days	0 days	NA	NA	November 29, 2019	November 29, 2019	May 29, 2024	May 29, 2024	0%	1644 d...	1644 d...	1644 d...											
45	Task Force on Kai Tak Harbourfront Development Meeting	0 days	0 days	NA	NA	January 31, 2020	January 31, 2020	May 29, 2024	May 29, 2024	0%	1581 d...	1581 d...	1581 d...											
46	District Council Consultation	0 days	0 days	NA	NA	April 30, 2020	April 30, 2020	May 29, 2024	May 29, 2024	0%	1491 d...	1491 d...	1491 d...											
47	<b>Project Submission</b>	<b>853 days</b>	<b>679.02 days</b>	<b>May 16, 2019</b>	<b>NA</b>	<b>May 16, 2019</b>	<b>September 14, 20...</b>	<b>May 16, 2019</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>988 days</b>	<b>0 days</b>	<b>988 days</b>											
48	Submit Third Parties Insurance	71 days	0 days	June 18, 2019	August 27, 2019	June 18, 2019	August 27, 2019	June 18, 2019	August 27, 2019	100%	0 days	0 days	0 days											
49	Submit Professional Indemnity Insurance	29.39 days	14 days	June 11, 2019	NA	June 11, 2019	October 22, 2019	June 11, 2019	May 29, 2024	52%	2 days	0 days	1681.1...											
50	Review, Comment and Acceptance of Insurances by Project Manager	139.1 days	50 days	June 13, 2019	NA	June 13, 2019	November 11, 2019	June 13, 2019	May 29, 2024	64%	1661 days	0 days	1661 days											
51	<b>Works Programme</b>	<b>160 days</b>	<b>60.42 days</b>	<b>May 16, 2019</b>	<b>NA</b>	<b>May 16, 2019</b>	<b>October 22, 2019</b>	<b>May 16, 2019</b>	<b>June 1, 2020</b>	<b>0%</b>	<b>223 days</b>	<b>0 days</b>	<b>223 days</b>											
52	Submit First Programme	20 days	0 days	May 16, 2019	June 4, 2019	May 16, 2019	June 4, 2019	May 16, 2019	June 4, 2019	100%	0 days	0 days	0 days											
53	Review and Comment by Project Manager	9 days	0 days	June 5, 2019	June 13, 2019	June 5, 2019	June 13, 2019	June 5, 2019	June 13, 2019	100%	0 days	0 days	0 days											
54	Revise and Resubmission of Works Programme	30 days	9.21 days	June 14, 2019	NA	June 14, 2019	October 2, 2019	June 14, 2019	May 11, 2020	69%	0 days	0 days	222.79...											
55	Final Review and Acceptance of the First Programme by Project Manager	21 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	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2																																						
62	Existing Underground Utilities (UU) Model	5 days	0 days	August 26, 2019	August 30, 2019	August 26, 2019	August 30, 2019	August 26, 2019	August 30, 2019	100%	0 days		0 days	Underground Utilities (UU) Model																																																																							
63	3D Digital Survey For Existing Conditions	28 days	4.8 days	September 2, 2019	NA	September 2, 2019	September 30, 2019	September 2, 2019	May 29, 2024	83%	1703 d...		1703 d...	3D Digital Survey For Existing Conditions																																																																							
64	3D Photogrammetry Model	46 days	40.02 days	September 16, 2019	NA	September 16, 2019	November 2, 2019	September 16, 2019	May 29, 2024	13%	1670.9...		1670.9...	3D Photogrammetry Model																																																																							
65	AIP Model	18 days	1.08 days	September 6, 2019	NA	September 6, 2019	September 24, 2019	September 6, 2019	May 29, 2024	94%	1709.9...		1709.9...	AIP Model																																																																							
66	Interfacing Contract Model	15 days	1.05 days	September 9, 2019	NA	September 9, 2019	September 24, 2019	September 9, 2019	May 29, 2024	93%	1709.9...		1709.9...	Interfacing Contract Model																																																																							
67	Monthly Updated BIM Model	0 days	0 days	NA	NA	October 31, 2019	October 31, 2019	October 31, 2019	October 31, 2019	0%	0 days		0 days	Monthly Updated BIM Model																																																																							
68	4D Model Linked Up with Programme	0 days	0 days	NA	NA	October 31, 2019	October 31, 2019	October 31, 2019	October 31, 2019	0%	0 days		0 days	4D Model Linked Up with Programme																																																																							
69	Construction Method Simulation (CMS) in 3D Model	0 days	0 days	NA	NA	November 30, 2019	November 30, 2019	November 30, 2019	November 30, 2019	0%	0 days		0 days	Construction Method Simulation (CMS) in 3D Model																																																																							
70	BIM Deliverables Schedule	77 days	77 days	August 16, 2019	NA	August 16, 2019	October 31, 2019	August 16, 2019	October 31, 2019	0%	0 days		0 days	BIM Deliverables Schedule																																																																							
71	Establish BIM Team	0 days	0 days	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	100%	0 days		0 days	Establish BIM Team																																																																							
72	BIM Execution Plan	0 days	0 days	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	100%	0 days		0 days	BIM Execution Plan																																																																							
73	BIM Submission Schedule	0 days	0 days	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	August 16, 2019	100%	0 days		0 days	BIM Submission Schedule																																																																							
74	BIM 360 License	0 days	0 days	August 31, 2019	August 31, 2019	August 31, 2019	August 31, 2019	August 31, 2019	August 31, 2019	100%	0 days		0 days	BIM 360 License																																																																							
75	BIM/Drawing Management Software System	0 days	0 days	August 31, 2019	August 31, 2019	August 31, 2019	August 31, 2019	August 31, 2019	August 31, 2019	100%	0 days		0 days	BIM/Drawing Management Software System																																																																							
76	CDE Setup	0 days	0 days	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	100%	0 days		0 days	CDE Setup																																																																							
77	Clash Report Format	0 days	0 days	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	100%	0 days		0 days	Clash Report Format																																																																							
78	Monthly Report Format	0 days	0 days	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	September 9, 2019	100%	0 days		0 days	Monthly Report Format																																																																							
79	Quality Assurance Plan for BIM	0 days	0 days	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	100%	0 days		0 days	Quality Assurance Plan for BIM																																																																							
80	BIM Training Plan	0 days	0 days	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	100%	0 days		0 days	BIM Training Plan																																																																							
81	BIM Training Schedule for CIC Training	0 days	0 days	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	September 30, 2019	100%	0 days		0 days	BIM Training Schedule for CIC Training																																																																							
82	4 Sets of BIM Software, Hardware and Server	0 days	0 days	NA	NA	October 31, 2019	October 31, 2019	October 31, 2019	October 31, 2019	0%	0 days		0 days	4 Sets of BIM Software, Hardware and Server																																																																							
83	Monthly BIM Progress Report	0 days	0 days	NA	NA	October 31, 2019	October 31, 2019	October 31, 2019	October 31, 2019	0%	0 days		0 days	Monthly BIM Progress Report																																																																							
84	Monthly Clash Report	0 days	0 days	NA	NA	October 31, 2019	October 31, 2019	October 31, 2019	October 31, 2019	0%	0 days		0 days	Monthly Clash Report																																																																							
85	BIM Object Libraries	0 days	0 days	NA	NA	October 31, 2019	October 31, 2019	October 31, 2019	October 31, 2019	0%	0 days		0 days	BIM Object Libraries																																																																							
86	Temporary Traffic Management	839 days	682.35 days	May 30, 2019	NA	May 30, 2019	September 14, 2020	May 30, 2019	May 29, 2024	0%	988 days		988 days	Temporary Traffic Management																																																																							
87	Submit Traffic Engineering Consultant and TTM Team Leader (PS1.16(3))	14 days	0 days	May 30, 2019	June 12, 2019	May 30, 2019	June 12, 2019	May 30, 2019	June 12, 2019	100%	0 days		0 days	Submit Traffic Engineering Consultant and TTM Team Leader (PS1.16(3))																																																																							
88	Submit Road Closure Implementation Plan (PS1.14A(2)) within 14d after acceptance of Works Programme	14 days	14 days	NA	NA	November 1, 2019	November 14, 2019	May 16, 2024	May 29, 2024	0%	1658 days		1658 days	Submit Road Closure Implementation Plan (PS1.14A(2)) within 14d after acceptance of Works Programme																																																																							
89	Submit EP Mgt System Co-ordinator (PS Cl. 1.18N(2))	7 days	0 days	May 30, 2019	June 5, 2019	May 30, 2019	June 5, 2019	May 30, 2019	June 5, 2019	100%	0 days		0 days	Submit EP Mgt System Co-ordinator (PS Cl. 1.18N(2))																																																																							
90	Approve of EP Co-ordinator by Project Manager (PS Cl. 1.18N(2))	14 days	0 days	June 6, 2019	June 19, 2019	June 6, 2019	June 19, 2019	June 6, 2019	June 19, 2019	100%	0 days		0 days	Approve of EP Co-ordinator by Project Manager (PS Cl. 1.18N(2))																																																																							
91	Submit UU detection equipment for Supervisor approval (PS Cl. 1.25A(1))	7 days	0 days	May 30, 2019	June 5, 2019	May 30, 2019	June 5, 2019	May 30, 2019	June 5, 2019	100%	0 days		0 days	Submit UU detection equipment for Supervisor approval (PS Cl. 1.25A(1))																																																																							
92	Submit & obtain approval: site office's location and layout plan (PS Cl. 1.45(11)) (7d submission + 14d approval)	31 days	10 days	May 30, 2019	NA	May 30, 2019	October 2, 2019	May 30, 2019	May 29, 2024	100%	1701 days		1701 days	Submit & obtain approval: site office's location and layout plan (PS Cl. 1.45(11)) (7d submission + 14d approval)																																																																							
93	Submit Site survey record (PS Cl.1.47(7))	34 days	0 days	May 30, 2019	July 2, 2019	May 30, 2019	July 2, 2019	May 30, 2019	July 2, 2019	100%	0 days		0 days	Submit Site survey record (PS Cl.1.47(7))																																																																							
94	Submit & obtain approval: fencing & hoarding plan (PS Cl. 1.48(10))	5 days	5 days	NA	NA	October 2, 2019	October 6, 2019	November 4, 2019	November 8, 2019	0%	1 day	0.5 days	33 days	Submit & obtain approval: fencing & hoarding plan (PS Cl. 1.48(10))																																																																							
95	Submit site facilities (PS Cl. 1.50S)	65 days	0 days	May 30, 2019	August 2, 2019	May 30, 2019	August 2, 2019	May 30, 2019	August 2, 2019	100%	0 days		0 days	Submit site facilities (PS Cl. 1.50S)																																																																							
96	Submit security system (PS Cl. 1.53A(5))	36 days	0 days	May 30, 2019	July 4, 2019	May 30, 2019	July 4, 2019	May 30, 2019	July 4, 2019	100%	0 days		0 days	Submit security system (PS Cl. 1.53A(5))																																																																							
97	Submit Weather Protection Scheme (PS Cl. 1.87 (1))	12 days	0 days	October 15, 2019	October 26, 2019	October 15, 2019	October 26, 2019	October 15, 2019	October 26, 2019	100%	0 days		0 days	Submit Weather Protection Scheme (PS Cl. 1.87 (1))																																																																							
98	Submit Interface Management Plan (PS Cl. 1.89(2))	47 days	0 days	May 30, 2019	July 15, 2019	May 30, 2019	July 15, 2019	May 30, 2019	July 15, 2019	100%	0 days		0 days	Submit Interface Management Plan (PS Cl. 1.89(2))																																																																							
99	Submit Subcontractor Management Plan (ACC Cl. C5(1))	13 days	0 days	May 30, 2019	June 11, 2019	May 30, 2019	June 11, 2019	May 30, 2019	June 11, 2019	100%	0 days		0 days	Submit Subcontractor Management Plan (ACC Cl. C5(1))																																																																							
100	Submit Temporary Drainage and Sewerage Management Plan (PS Cl. 1.24A(1))	45 days	33.12 days	May 30, 2019	NA	May 30, 2019	October 26, 2019	May 30, 2019	August 7, 2020	32%	33.88 days		286.88 days	Submit Temporary Drainage and Sewerage Management Plan (PS Cl. 1.24A(1))																																																																							
101	Submit Piling Programme (PS Cl. 8.35D)	12 days	12 days	NA	NA	January 2, 2020	January 13, 2020	February 1, 2020	February 12, 2020	0%	18 days	0 days	30 days	Submit Piling Programme (PS Cl. 8.35D)																																																																							
102	Submit EM&A Manual (ER Part 8, Cl. 8.2)	6 days	0 days	May 30, 2019	June 4, 2019	May 30, 2019	June 4, 2019	May 30, 2019	June 4, 2019	100%	0 days		0 days	Submit EM&A Manual (ER Part 8, Cl. 8.2)																																																																							
103	Submit Proposal of selection of suppliers of Plant and Materials (ACC Cl. C11(1))	80 days	0 days	May 30, 2019	August 17, 2019	May 30, 2019	August 17, 2019	May 30, 2019	August 17, 2019	100%	0 days		0 days	Submit Proposal of selection of suppliers of Plant and Materials (ACC Cl. C11(1))																																																																							
104	Submit Contractor's Management Team (ACC Cl. D1(3))	50 days	0 days	May 30, 2019	July 18, 2019	May 30, 2019	July 18, 2019	May 30, 2019	July 18, 2019	100%	0 days		0 days	Submit Contractor's Management Team (ACC Cl. D1(3))																																																																							
105	Permanent Works Design Submission	839 days	705.7 days	May 30, 2019	NA	May 30, 2019	September 14, 2020	May 30, 2019	November 15, 2022	0%	427 days		427 days	Permanent Works Design Submission																																																																							
106	General Design Submission	192 days	43.98 days	May 30, 2019	NA	May 30, 2019	December 7, 2019	May 30, 2019	December 10, 2019	0%	3 days		3 days	General Design Submission																																																																							
107	Project Design Plan (Draft)	16 days	0 days	May 30, 2019	June 14, 2019	May 30, 2019	June 14, 2019	May 30, 2019	June 14, 2019	100%	0 days		0 days	Project Design Plan (Draft)																																																																							
108	Project Design Plan (Draft) Comment by PM	14 days	0 days	June 15, 2019	June 28, 2019	June 15, 2019	June 28, 2019	June 15, 2019	June 28, 2019	100%	0 days		0 days	Project Design Plan (Draft) Comment by PM																																																																							
109	Address Comments	66 days	0 days	July 2, 2019	September 5, 2019	July 2, 2019	September 5, 2019	July 2, 2019	September 5, 2019	100%	0 days	1 days	0 days	Address Comments																																																																							
110	Project Design Plan (Final)	19 days	15.2 days	September 5, 2019	NA	September 5, 2019	October 8, 2019	September 5, 2019	December 10, 2019	20%	63.8 days	0 days	63.8 days	Project Design Plan (Final)																																																																							
111	Design Memorandum (Draft)	26 days	0 days	June 4, 2019	June 29, 2019	June 4, 2019	June 29, 2019	June 4, 2019	June 29, 2019	100%	0 days		0 days	Design Memorandum (Draft)																																																																							
112	Address Comments	15 days	0 days	August 1, 2019	August 15, 2019	August 1, 2019	August 15, 2019	August 1, 2019	August 15, 2019	100%	0 days	1 days	0 days	Address Comments																																																																							
113	Design Memorandum (Final)	5 days	5 days	July 23, 2019	NA	July 23, 2019	September 27, 2019	July 23, 2019	December 10, 2019	0%	74 days		74 days	Design Memorandum (Final)																																																																							
114	Traffic Impact Assessment(Draft)	25 days	4 days	September 16, 2019	NA	September 16, 2019	October 10, 2019	September 16, 2019	October 18, 2019	84%	0 days	1 day	8 days	Traffic Impact Assessment(Draft)																																																																							
115	Address Comments	28 days	28 days	NA	NA	October 11, 2019	November 7, 2019	October 19, 2019	November 15, 2019	0%	0 days	0.5 days	8 days	Address Comments																																																																							
116	Traffic Impact Assessment(Final)	25 days	25 days	NA	NA	November 8, 2019	December 2, 2019	November 16, 2019	December 10, 2019	0%	8 days	0.5 days	8 days	Traffic Impact Assessment(Final)																																																																							
117	ACABAS (Draft)	69 days	0 days	May 30, 2019	August 6, 2019	May 30, 2019	August 6, 2019	May 30, 2019	August 6, 2019	100%	0 days	2 days	0 days	ACABAS (Draft)																																																																							
118	Address Committee's comments	51 days	6 days	August 7, 2019	NA	August 7, 2019	September 28, 2019	August 7, 2019	December 10, 2019	88%	73 days	2 days	73 days	Address Committee's comments																																																																							
119	ACABAS (Final)	25 days	0 days	August 28, 2019	September 21, 2019	August 28, 2019	September 21, 2019	August 28, 2019	September 21, 2019	100%	0 days	1 days	0 days	ACABAS (Final)																																																																							



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

**Legend:**

- █ Task
- █ Manual Task
- █ Duration-only
- █ Baseline Milestone
- █ Summary
- █ External Tasks
- █ Inactive Milestone
- █ Baseline Summary
- ⬤ Critical Split
- ⬤ Split
- ⬤ Start-only
- ⬤ Baseline
- ⬤ Milestone
- ⬤ Manual Summary
- ⬤ External Milestone
- ⬤ Inactive Summary
- ⬤ Critical Progress
- █ Task Progress
- █ Finish-only
- █ Baseline Split
- █ Summary Progress
- █ Project Summary
- █ Inactive Task
- █ 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	Gantt Chart (2019 H1 to 2024 H1)											
120	VCAB (Draft)	45 days	0 days	September 4, 2019	October 18, 2019	September 4, 2019	October 18, 2019	September 4, 2019	October 18, 2019	100%	0 days	2 days	0 days	Sun September 22, 2019											
121	Address Committee's comments	15 days	15 days	NA	NA	October 19, 2019	November 2, 2019	October 22, 2019	November 5, 2019	0%	0 days	2 days	3 days	Address Committee's comments											
122	VCAB (Final)	15 days	15 days	NA	NA	November 3, 2019	November 17, 2019	November 6, 2019	November 20, 2019	0%	0 days	2 days	3 days	VCAB (Final)											
123	Durability Assessment Report (Draft)	60 days	0 days	May 30, 2019	July 28, 2019	May 30, 2019	July 28, 2019	May 30, 2019	July 28, 2019	0%	0 days	3 days	0 days	Durability Assessment Report (Draft)											
124	Address Comments	30 days	0 days	July 29, 2019	August 27, 2019	July 29, 2019	August 27, 2019	July 29, 2019	August 27, 2019	0%	0 days	2 days	0 days	Address Comments											
125	Durability Assessment Report (Final)	30 days	4 days	August 28, 2019	NA	August 28, 2019	September 26, 2019	August 28, 2019	November 20, 2019	0%	52 days	2 days	55 days	Durability Assessment Report (Final)											
126	Landscape Mitigation Plan	20 days	20 days	NA	NA	November 18, 2019	December 7, 2019	November 21, 2019	December 10, 2019	0%	3 days	3 days	3 days	Landscape Mitigation Plan											
127	Site Investigation	209 days	116.69 days	June 1, 2019	NA	June 1, 2019	December 26, 2019	June 1, 2019	January 10, 2020	0%	15 days	15 days	15 days	Site Investigation											
128	Ground Investigation Proposal (Draft)	56 days	0 days	June 1, 2019	July 26, 2019	June 1, 2019	July 26, 2019	June 1, 2019	July 26, 2019	100%	0 days	1 days	0 days	Ground Investigation Proposal (Draft)											
129	Submit & endorse by Gov. Depts and PM	6 days	0 days	July 27, 2019	August 1, 2019	July 27, 2019	August 1, 2019	July 27, 2019	August 1, 2019	100%	0 days	1 days	0 days	Submit & endorse by Gov. Depts and PM											
130	Ground Investigation Proposal (Final)	25 days	25 days	August 2, 2019	NA	August 2, 2019	October 17, 2019	August 2, 2019	November 29, 2019	0%	0 days	1 days	43 days	Ground Investigation Proposal (Final)											
131	Submit and endorse by Gov. Depts and PM	14 days	14 days	NA	NA	October 18, 2019	October 31, 2019	November 30, 2019	December 13, 2019	0%	28 days	1 days	43 days	Submit and endorse by Gov. Depts and PM											
132	Supervise the SI Carry Out on Site	90 days	46 days	August 10, 2019	NA	August 10, 2019	November 7, 2019	August 10, 2019	November 22, 2019	49%	0 days	4 days	15 days	Supervise the SI Carry Out on Site											
133	Submit SI Report(Draft) for Comment	21 days	21 days	NA	NA	November 8, 2019	November 28, 2019	November 23, 2019	December 13, 2019	0%	0 days	1 days	15 days	Submit SI Report(Draft) for Comment											
134	Submit and endorse SI Report(Final) by Project Manager	28 days	28 days	NA	NA	November 29, 2019	December 26, 2019	December 14, 2019	January 10, 2020	0%	15 days	1 days	15 days	Submit and endorse SI Report(Final) by Project Manager											
135	Lifts (LT1 to LT4), Staircase and Associated Works	278 days	269.21 days	September 12, 20...	NA	September 12, 20...	June 15, 2020	September 12, 2019	June 19, 2020	0%	0 days	4 days	4 days	Lifts (LT1 to LT4), Staircase and Associated Works											
136	Prepare AIP and ICE certification (Draft)	60 days	49 days	September 12, 2019	NA	September 12, 2019	November 10, 2019	September 12, 2019	November 14, 2019	18%	0 days	3 days	4 days	Prepare AIP and ICE certification (Draft)											
137	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	November 11, 2019	January 9, 2020	December 5, 2019	February 2, 2020	0%	0 days	0.5 days	24 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
138	Prepare AIP and ICE certification (Final)	10 days	10 days	NA	NA	January 10, 2020	January 19, 2020	February 3, 2020	February 12, 2020	0%	20 days	0 days	24 days	Prepare AIP and ICE certification (Final)											
139	Prepare DDA and ICE certification (Draft)	90 days	90 days	NA	NA	November 11, 2019	February 8, 2020	November 15, 2019	February 12, 2020	0%	0 days	4 days	4 days	Prepare DDA and ICE certification (Draft)											
140	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	February 9, 2020	April 8, 2020	February 13, 2020	April 12, 2020	0%	0 days	3 days	4 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
141	Prepare DDA for and ICE certification (Final)	15 days	15 days	NA	NA	April 9, 2020	April 23, 2020	April 13, 2020	April 27, 2020	0%	0 days	1 days	4 days	Prepare DDA for and ICE certification (Final)											
142	Submit & endorse by PM and Statutory Authorities/Gov. Dept	53 days	53 days	NA	NA	April 24, 2020	June 15, 2020	April 28, 2020	June 19, 2020	0%	0 days	3 days	4 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
143	Noise barrier fronting to 4B5 at Rd D3A & Bus Lay By	222 days	222 days	NA	NA	November 11, 2019	June 19, 2020	November 18, 2019	June 26, 2020	0%	0 days	7 days	7 days	Noise barrier fronting to 4B5 at Rd D3A & Bus Lay By											
144	Prepare AIP and ICE certification (Draft)	50 days	50 days	NA	NA	November 11, 2019	December 30, 2019	November 18, 2019	January 6, 2020	0%	0 days	2 days	7 days	Prepare AIP and ICE certification (Draft)											
145	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	December 31, 2019	February 28, 2020	January 11, 2020	March 10, 2020	0%	0 days	0.5 days	11 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
146	Prepare AIP and ICE certification (Final)	14 days	14 days	NA	NA	February 29, 2020	March 13, 2020	March 11, 2020	March 24, 2020	0%	4 days	0 days	11 days	Prepare AIP and ICE certification (Final)											
147	Prepare DDA and ICE certification (Draft)	78 days	78 days	NA	NA	December 31, 2019	March 17, 2020	January 7, 2020	March 24, 2020	0%	0 days	4 days	7 days	Prepare DDA and ICE certification (Draft)											
148	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	40 days	NA	NA	March 18, 2020	April 26, 2020	March 25, 2020	May 3, 2020	0%	0 days	2 days	7 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
149	Prepare DDA for and ICE certification (Final)	14 days	14 days	NA	NA	April 27, 2020	May 10, 2020	May 4, 2020	May 17, 2020	0%	0 days	1 days	7 days	Prepare DDA for and ICE certification (Final)											
150	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	40 days	NA	NA	May 11, 2020	June 19, 2020	May 18, 2020	June 26, 2020	0%	0 days	1 days	7 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
151	Decking for Underpass (Rd L14)	390 days	390 days	NA	NA	May 11, 2020	June 4, 2021	May 23, 2020	June 16, 2021	0%	0 days	12 days	12 days	Decking for Underpass (Rd L14)											
152	Prepare AIP and ICE certification (Draft)	60 days	60 days	NA	NA	May 11, 2020	July 9, 2020	May 23, 2020	July 21, 2020	0%	0 days	3 days	12 days	Prepare AIP and ICE certification (Draft)											
153	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	July 10, 2020	September 7, 2020	August 23, 2020	October 21, 2020	0%	0 days	0.5 days	44 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
154	Prepare AIP and ICE certification (Final)	14 days	14 days	NA	NA	September 8, 2020	September 21, 2020	October 22, 2020	November 4, 2020	0%	0 days	0 days	44 days	Prepare AIP and ICE certification (Final)											
155	Prepare DDA and ICE certification (Draft)	90 days	90 days	NA	NA	September 22, 2020	December 20, 2020	November 5, 2020	February 2, 2021	0%	0 days	1 day	44 days	Prepare DDA and ICE certification (Draft)											
156	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	December 21, 2020	February 18, 2021	February 3, 2021	April 3, 2021	0%	0 days	0.5 days	44 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
157	Prepare DDA for and ICE certification (Final)	14 days	14 days	NA	NA	February 19, 2021	March 4, 2021	April 4, 2021	April 17, 2021	0%	0 days	0 days	44 days	Prepare DDA for and ICE certification (Final)											
158	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	March 5, 2021	May 3, 2021	April 18, 2021	June 16, 2021	0%	32 days	0 days	44 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
159	AIP for E&M Works and Architectural Finishes of Underpass and ICE certification (Draft)	60 days	60 days	NA	NA	July 10, 2020	September 7, 2020	July 22, 2020	September 19, 2020	0%	0 days	3 day	12 days	AIP for E&M Works and Architectural Finishes of Underpass and ICE certification (Draft)											
160	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	September 8, 2020	November 6, 2020	September 20, 2020	November 18, 2020	0%	0 days	3 days	12 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
161	Prepare AIP for E&M Works and Architectural Finishes of Underpass and ICE certification (Final)	10 days	10 days	NA	NA	November 7, 2020	November 16, 2020	November 19, 2020	November 28, 2020	0%	0 days	0 days	12 days	Prepare AIP for E&M Works and Architectural Finishes of Underpass and ICE certification (Final)											
162	Prepare DDA for E&M Works and Architectural Finishes of Underpass certification (Draft)	90 days	90 days	NA	NA	November 17, 2020	February 14, 2021	November 29, 2020	February 26, 2021	0%	0 days	3 days	12 days	Prepare DDA for E&M Works and Architectural Finishes of Underpass certification (Draft)											
163	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	February 15, 2021	April 15, 2021	February 27, 2021	April 27, 2021	0%	0 days	3 days	12 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
164	Prepare DDA for E&M Works and Architectural Finishes of Underpass and ICE certification (Final)	10 days	10 days	NA	NA	April 16, 2021	April 25, 2021	April 28, 2021	May 7, 2021	0%	0 days	0 days	12 days	Prepare DDA for E&M Works and Architectural Finishes of Underpass and ICE certification (Final)											
165	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	40 days	NA	NA	April 26, 2021	June 4, 2021	May 8, 2021	June 16, 2021	0%	12 days	2 days	12 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
166	Road D3 Bridge & Approach Ramps	226 days	98.71 days	May 30, 2019	NA	May 30, 2019	January 10, 2020	May 30, 2019	January 10, 2020	0%	0 days	0 days	0 days	Road D3 Bridge & Approach Ramps											
167	D3 Bridge	226 days	106.5 days	May 30, 2019	NA	May 30, 2019	January 10, 2020	May 30, 2019	January 10, 2020	0%	0 days	0 days	0 days	D3 Bridge											
168	Prepare AIP and ICE certification (Draft)	66 days	0 days	May 30, 2019	August 3, 2019	May 30, 2019	August 3, 2019	May 30, 2019	August 3, 2019	100%	0 days	3 days	0 days	Prepare AIP and ICE certification (Draft)											
169	Submit & endorse by PM and Statutory Authorities/Gov. Dept	15 days	0 days	August 5, 2019	August 19, 2019	August 5, 2019	August 19, 2019	August 5, 2019	August 19, 2019	100%	0 days	1 days	0 days	Submit & endorse by PM and Statutory Authorities/Gov. Dept											
170	Prepare AIP and ICE certification (Final)	21 days	21 days	August 20, 2019	NA	August 20, 2019	October 13, 2019	August 20, 2019	October 16, 2019	0%	3 days	0 days	3 days	Prepare AIP and ICE certification (Final)											
171	Prepare DDA and ICE certification (Draft)	90 days	24 days	July 19, 2019	NA	July 19, 2019	October 16, 2019	July 19, 2019	October 16, 2019	73%	0 days	5 days	0 days	Prepare DDA and ICE certification (Draft)											

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

█ Task  
█ Manual Task  
█ Duration-only  
█ Baseline Milestone  
█ Summary  
█ External Tasks  
█ Inactive Milestone  
█ Baseline Summary

● Critical Split  
● Start-only  
● Baseline  
● Milestone  
● Manual Summary  
● External Milestone  
● Inactive Summary

▬ Critical Progress  
▬ Task Progress  
▬ Finish-only  
▬ Baseline Split  
▬ Summary Progress  
▬ Project Summary  
▬ Inactive Task  
▬ 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	H2	
172	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	40 days	NA	NA	October 17, 2019	November 25, 2019	October 17, 2019	November 25, 2019	0%	0 days	3 days	0 days		Sun September 22							
173	Prepare DDA for and ICE certification (Final)	15 days	15 days	NA	NA	November 26, 2019	December 10, 2019	November 26, 2019	December 10, 2019	0%	0 days	1 days	0 days									
174	Submit & endorse by PM and Statutory Authorities/Gov. Dept	31 days	31 days	NA	NA	December 11, 2019	January 10, 2020	December 11, 2019	January 10, 2020	0%	0 days	1 days	0 days									
175	<b>D3 North Approach Ramp</b>	<b>226 days</b>	<b>103.48 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>January 10, 2020</b>	<b>May 30, 2019</b>	<b>January 10, 2020</b>	<b>0%</b>	<b>0 days</b>		<b>0 days</b>									
176	Prepare AIP and ICE certification (Draft)	56 days	0 days	May 30, 2019	July 24, 2019	May 30, 2019	July 24, 2019	May 30, 2019	July 24, 2019	100%	0 days	3 days	0 days									
177	Submit & endorse by PM and Statutory Authorities/Gov. Dept	12 days	0 days	July 25, 2019	August 5, 2019	July 25, 2019	August 5, 2019	July 25, 2019	August 5, 2019	100%	0 days	1 days	0 days									
178	Prepare AIP and ICE certification (Final)	29 days	15 days	August 6, 2019	NA	August 6, 2019	October 7, 2019	August 6, 2019	October 16, 2019	48%	9 days	0 days	9 days									
179	Prepare DDA and ICE certification (Draft)	90 days	24 days	July 19, 2019	NA	July 19, 2019	October 16, 2019	July 19, 2019	October 16, 2019	73%	0 days	5 days	0 days									
180	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	40 days	NA	NA	October 17, 2019	November 25, 2019	October 17, 2019	November 25, 2019	0%	0 days	3 days	0 days									
181	Prepare DDA for and ICE certification (Final)	15 days	15 days	NA	NA	November 26, 2019	December 10, 2019	November 26, 2019	December 10, 2019	0%	0 days	1 days	0 days									
182	Submit & endorse by PM and Statutory Authorities/Gov. Dept	31 days	31 days	NA	NA	December 11, 2019	January 10, 2020	December 11, 2019	January 10, 2020	0%	0 days	1 days	0 days									
183	<b>D3 South Approach Ramp</b>	<b>226 days</b>	<b>86.62 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>January 10, 2020</b>	<b>May 30, 2019</b>	<b>January 10, 2020</b>	<b>0%</b>	<b>0 days</b>		<b>0 days</b>									
184	Prepare AIP and ICE certification (Draft)	50 days	0 days	May 30, 2019	July 18, 2019	May 30, 2019	July 18, 2019	May 30, 2019	July 18, 2019	100%	0 days	3 days	0 days									
185	Submit & endorse by PM and Statutory Authorities/Gov. Dept	46 days	0 days	July 19, 2019	September 2, 2019	July 19, 2019	September 2, 2019	July 19, 2019	September 2, 2019	100%	0 days	1 days	0 days									
186	Prepare AIP and ICE certification (Final)	15 days	0 days	August 18, 2019	September 1, 2019	August 18, 2019	September 1, 2019	August 18, 2019	September 1, 2019	100%	0 days	0 days	0 days									
187	Prepare DDA and ICE certification (Draft)	90 days	24 days	July 19, 2019	NA	July 19, 2019	October 16, 2019	July 19, 2019	October 16, 2019	73%	0 days	5 days	0 days									
188	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	40 days	NA	NA	October 17, 2019	November 25, 2019	October 17, 2019	November 25, 2019	0%	0 days	3 days	0 days									
189	Prepare DDA for and ICE certification (Final)	15 days	15 days	NA	NA	November 26, 2019	December 10, 2019	November 26, 2019	December 10, 2019	0%	0 days	1 days	0 days									
190	Submit & endorse by PM and Statutory Authorities/Gov. Dept	31 days	31 days	NA	NA	December 11, 2019	January 10, 2020	December 11, 2019	January 10, 2020	0%	0 days	1 days	0 days									
191	<b>Road D3 Underpass and Depressed Road</b>	<b>412 days</b>	<b>213.27 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>July 14, 2020</b>	<b>May 30, 2019</b>	<b>December 1, 2020</b>	<b>0%</b>	<b>140 days</b>		<b>140 days</b>									
192	<b>Underpass</b>	<b>412 days</b>	<b>296 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>July 14, 2020</b>	<b>May 30, 2019</b>	<b>December 1, 2020</b>	<b>0%</b>	<b>100 days</b>		<b>140 days</b>									
193	Prepare AIP and ICE certification (Draft)	50 days	0 days	May 30, 2019	July 18, 2019	May 30, 2019	July 18, 2019	May 30, 2019	July 18, 2019	100%	0 days	3 days	0 days									
194	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	0 days	July 19, 2019	August 27, 2019	July 19, 2019	August 27, 2019	July 19, 2019	August 27, 2019	100%	0 days	1 days	0 days									
195	Prepare AIP and ICE certification (Final)	38 days	12 days	August 28, 2019	NA	August 28, 2019	October 4, 2019	August 28, 2019	October 4, 2019	68%	0 days	2 days	0 days									
196	Prepare DDA and ICE certification (Draft)	64 days	64 days	NA	NA	October 5, 2019	December 7, 2019	October 5, 2019	December 7, 2019	0%	0 days	3 days	0 days									
197	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	90 days	NA	NA	December 8, 2019	March 6, 2020	April 26, 2020	July 24, 2020	0%	0 days	0.5 days	140 days									
198	Prepare DDA for and ICE certification (Final)	40 days	40 days	NA	NA	March 7, 2020	April 15, 2020	July 25, 2020	September 2, 2020	0%	0 days	0 days	140 days									
199	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	90 days	NA	NA	April 16, 2020	July 14, 2020	September 3, 2020	December 1, 2020	0%	100 days	0 days	140 days									
200	<b>Depressed Road (North and South)</b>	<b>162 days</b>	<b>33.85 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>November 7, 2019</b>	<b>May 30, 2019</b>	<b>April 15, 2020</b>	<b>0%</b>	<b>46 days</b>		<b>160 days</b>									
201	Prepare AIP and ICE certification (Draft)	66 days	0 days	May 30, 2019	August 3, 2019	May 30, 2019	August 3, 2019	May 30, 2019	August 3, 2019	100%	0 days	1 days	0 days									
202	Submit & endorse by PM and Statutory Authorities/Gov. Dept	30 days	0 days	August 6, 2019	September 4, 2019	August 6, 2019	September 4, 2019	August 6, 2019	September 4, 2019	100%	0 days	2 days	0 days									
203	Prepare AIP and ICE certification (Final)	10 days	10 days	NA	NA	September 23, 2019	October 2, 2019	April 6, 2020	April 15, 2020	0%	196 days	0 days	196 days									
204	Prepare DDA and ICE certification (Draft)	71 days	0 days	May 30, 2019	August 8, 2019	May 30, 2019	August 8, 2019	May 30, 2019	August 8, 2019	100%	0 days	5 days	0 days									
205	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	0 days	August 9, 2019	September 17, 2019	August 9, 2019	September 17, 2019	August 9, 2019	September 17, 2019	100%	0 days	1 days	0 days									
206	Prepare DDA for and ICE certification (Final)	11 days	6 days	September 18, 2019	NA	September 18, 2019	September 28, 2019	September 18, 2019	March 6, 2020	45%	0 days	1 days	160 days									
207	Submit & endorse by PM and Statutory Authorities/Gov. Dept	40 days	40 days	NA	NA	September 29, 2019	November 7, 2019	March 7, 2020	April 15, 2020	0%	160 days	1 days	160 days									
208	<b>Remaining Road Works</b>	<b>332 days</b>	<b>316.32 days</b>	<b>August 13, 2019</b>	<b>NA</b>	<b>August 13, 2019</b>	<b>July 9, 2020</b>	<b>August 13, 2019</b>	<b>November 21, 2021</b>	<b>0%</b>	<b>500 days</b>		<b>500 days</b>									
209	Prepare AIP for At-grade Road D3 and ICE certification (Draft)	60 days	19 days	August 13, 2019	NA	August 13, 2019	October 11, 2019	August 13, 2019	May 16, 2020	68%	0 days	1 day	218 days									
210	Submit & endorse by PM and Statutory Authorities/Gov. Dept	28 days	28 days	NA	NA	October 12, 2019	November 8, 2019	April 30, 2021	May 27, 2021	0%	0 days	0.5 days	566 days									
211	Prepare AIP for At-grade Road D3 and ICE certification (Final)	14 days	14 days	NA	NA	November 9, 2019	November 22, 2019	May 28, 2021	June 10, 2021	0%	48 days	0 days	566 days									
212	Prepare DDA for At-grade Road D3 and ICE certification (Draft)	90 days	90 days	NA	NA	October 12, 2019	January 9, 2020	March 13, 2021	June 10, 2021	0%	0 days	1 day	518 days									
213	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	January 10, 2020	March 9, 2020	June 11, 2021	August 9, 2021	0%	0 days	0.5 days	518 days									
214	Prepare DDA for At-grade Road D3 and ICE certification (Final)	14 days	14 days	NA	NA	March 10, 2020	March 23, 2020	August 10, 2021	August 23, 2021	0%	0 days	0 days	518 days									
215	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	90 days	NA	NA	March 24, 2020	June 21, 2020	August 24, 2021	November 21, 2021	0%	518 days	0 days	518 days									
216	Prepare AIP for Road L12d and ICE certification (Draft)	60 days	60 days	NA	NA	October 12, 2019	December 10, 2019	May 17, 2020	July 15, 2020	0%	0 days	1 day	218 days									
217	Submit & endorse by PM and Statutory Authorities/Gov. Dept	28 days	28 days	NA	NA	December 11, 2019	January 7, 2020	April 24, 2021	May 21, 2021	0%	0 days	0.5 days	500 days									
218	Prepare AIP for Road L12d and ICE certification (Final)	10 days	10 days	NA	NA	January 8, 2020	January 17, 2020	May 22, 2021	May 31, 2021	0%	0 days	0 days	500 days									
219	Prepare DDA for Road L12d and ICE certification (Draft)	90 days	90 days	NA	NA	January 18, 2020	April 16, 2020	June 1, 2021	August 29, 2021	0%	0 days	1 day	500 days									
220	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	April 17, 2020	June 15, 2020	August 30, 2021	October 28, 2021	0%	0 days	0.5 days	500 days									
221	Prepare DDA for Road L12d and ICE certification (Final)	10 days	10 days	NA	NA	June 16, 2020	June 25, 2020	October 29, 2021	November 7, 2021	0%	0 days	0 days	500 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 Manual Task Start-only Finish-only Duration-only Baseline Baseline Split Baseline Milestone Milestone Summary Manual Summary Project Summary External Tasks External Milestone Inactive Milestone Inactive Summary Inactive Task 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	
222	Submit & endorse by PM and Statutory Authorities/Gov. Dept	14 days	14 days	NA	NA	June 26, 2020	July 9, 2020	November 8, 2021	November 21, 2021	0%	500 days	0 days	500 days		Sun September 22								
223	AIP for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Draft)	60 days	60 days	NA	NA	December 11, 2019	February 8, 2020	July 16, 2020	September 13, 2020	0%	0 days	1 day	218 days										
224	AIP for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Final)	38 days	38 days	NA	NA	February 9, 2020	March 17, 2020	August 24, 2021	September 30, 2021	0%	52 days	0.5 days	562 days										
225	DDA for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Draft)	90 days	90 days	NA	NA	February 9, 2020	May 8, 2020	July 3, 2021	September 30, 2021	0%	0 days	1 day	510 days										
226	DDA for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Final)	52 days	52 days	NA	NA	May 9, 2020	June 29, 2020	October 1, 2021	November 21, 2021	0%	510 days	0.5 days	510 days										
227	<b>Seawater &amp; DCS Intake Box Culverts</b>	<b>253 days</b>	<b>199.53 days</b>	<b>August 13, 2019</b>	<b>NA</b>	<b>August 13, 2019</b>	<b>April 21, 2020</b>	<b>August 13, 2019</b>	<b>April 21, 2020</b>	<b>0%</b>	<b>0 days</b>		<b>0 days</b>										
228	Prepare AIP and ICE certification (Draft)	60 days	19 days	August 13, 2019	NA	August 13, 2019	October 11, 2019	August 13, 2019	October 11, 2019	68%	0 days	3 days	0 days										
229	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	October 12, 2019	December 10, 2019	October 12, 2019	December 10, 2019	0%	0 days	3 days	0 days										
230	Prepare AIP and ICE certification (Final)	15 days	15 days	NA	NA	December 11, 2019	December 25, 2019	December 11, 2019	December 25, 2019	0%	0 days	1 days	0 days										
231	Prepare DDA and ICE certification (Draft)	135 days	94 days	August 13, 2019	NA	August 13, 2019	December 25, 2019	August 13, 2019	December 25, 2019	30%	0 days	1 days	0 days										
232	Submit & endorse by PM and Statutory Authorities/Gov. Dept	66 days	66 days	NA	NA	December 26, 2019	February 29, 2020	December 26, 2019	February 29, 2020	0%	0 days	3 days	0 days										
233	Prepare DDA for and ICE certification (Final)	14 days	14 days	NA	NA	March 1, 2020	March 14, 2020	March 1, 2020	March 14, 2020	0%	0 days	0 days	0 days										
234	Submit & endorse by PM and Statutory Authorities/Gov. Dept	38 days	38 days	NA	NA	March 15, 2020	April 21, 2020	March 15, 2020	April 21, 2020	0%	0 days	2 days	0 days										
235	<b>Rising Main</b>	<b>215 days</b>	<b>215 days</b>	<b>NA</b>	<b>NA</b>	<b>December 8, 2019</b>	<b>July 9, 2020</b>	<b>December 8, 2019</b>	<b>July 9, 2020</b>	<b>0%</b>	<b>0 days</b>		<b>0 days</b>										
236	Prepare AIP and ICE certification (Draft)	60 days	60 days	NA	NA	December 8, 2019	February 5, 2020	December 8, 2019	February 5, 2020	0%	0 days	3 days	0 days										
237	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	February 6, 2020	April 5, 2020	February 21, 2020	April 20, 2020	0%	0 days	0.5 days	15 days										
238	Prepare AIP and ICE certification (Final)	20 days	20 days	NA	NA	April 6, 2020	April 25, 2020	April 21, 2020	May 10, 2020	0%	15 days	0 days	15 days										
239	Prepare DDA and ICE certification (Draft)	90 days	90 days	NA	NA	December 8, 2019	March 6, 2020	December 8, 2019	March 6, 2020	0%	0 days	4 days	0 days										
240	Submit & endorse by PM and Statutory Authorities/Gov. Dept	55 days	55 days	NA	NA	March 7, 2020	April 30, 2020	March 7, 2020	April 30, 2020	0%	0 days	3 days	0 days										
241	Prepare DDA and ICE certification (Final)	10 days	10 days	NA	NA	May 1, 2020	May 10, 2020	May 1, 2020	May 10, 2020	0%	0 days	0 days	0 days										
242	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	May 11, 2020	July 9, 2020	May 11, 2020	July 9, 2020	0%	0 days	3 days	0 days										
243	<b>Stormwater and Sewage Drainage Works</b>	<b>442 days</b>	<b>442 days</b>	<b>NA</b>	<b>NA</b>	<b>December 8, 2019</b>	<b>February 21, 2021</b>	<b>March 18, 2020</b>	<b>June 2, 2021</b>	<b>0%</b>	<b>84 days</b>		<b>101 days</b>										
244	Prepare AIP for Bidge D3 and ICE certification (Draft)	60 days	60 days	NA	NA	December 8, 2019	February 5, 2020	March 18, 2020	May 16, 2020	0%	0 days	1 day	101 days										
245	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	February 6, 2020	April 5, 2020	August 17, 2020	October 15, 2020	0%	0 days	0.5 days	193 days										
246	Prepare AIP for Bidge D3 and ICE certification (Final)	10 days	10 days	NA	NA	April 6, 2020	April 15, 2020	October 16, 2020	October 25, 2020	0%	0 days	0 days	193 days										
247	Prepare DDA for Bidge D3 and ICE certification (Draft)	90 days	90 days	NA	NA	April 16, 2020	July 14, 2020	October 26, 2020	January 23, 2021	0%	0 days	1 day	193 days										
248	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	July 15, 2020	September 12, 2020	January 24, 2021	March 24, 2021	0%	0 days	0.5 days	193 days										
249	Prepare DDA for Bidge D3 and ICE certification (Final)	10 days	10 days	NA	NA	September 13, 2020	September 22, 2020	March 25, 2021	April 3, 2021	0%	0 days	0 days	193 days										
250	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	September 23, 2020	November 21, 2020	April 4, 2021	June 2, 2021	0%	176 days	0 days	193 days										
251	Prepare AIP for Underpass, Depressed Road and ICE certification (Draft)	60 days	60 days	NA	NA	February 6, 2020	April 5, 2020	May 17, 2020	July 15, 2020	0%	0 days	1 day	101 days										
252	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	April 6, 2020	June 4, 2020	August 17, 2020	October 15, 2020	0%	0 days	0.5 days	133 days										
253	Prepare AIP for Underpass, Depressed Road and ICE certification (Final)	10 days	10 days	NA	NA	June 5, 2020	June 14, 2020	October 16, 2020	October 25, 2020	0%	0 days	0 days	133 days										
254	Prepare DDA for Underpass, Depressed Road and ICE certification (Draft)	90 days	90 days	NA	NA	June 15, 2020	September 12, 2020	October 26, 2020	January 23, 2021	0%	0 days	1 day	133 days										
255	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	September 13, 2020	November 11, 2020	January 24, 2021	March 24, 2021	0%	0 days	0.5 days	133 days										
256	Prepare DDA for Underpass, Depressed Road and ICE certification (Final)	10 days	10 days	NA	NA	November 12, 2020	November 21, 2020	March 25, 2021	April 3, 2021	0%	0 days	0 days	133 days										
257	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	November 22, 2020	January 20, 2021	April 4, 2021	June 2, 2021	0%	116 days	0 days	133 days										
258	AIP for Water Works - Road L12d (Draft)	60 days	60 days	NA	NA	April 6, 2020	June 4, 2020	July 16, 2020	September 13, 2020	0%	0 days	1 day	101 days										
259	AIP for Water Works - Road L12d (Final)	38 days	38 days	NA	NA	June 5, 2020	July 12, 2020	March 5, 2021	April 11, 2021	0%	52 days	0.5 days	273 days										
260	DDA for Water Works - Road L12d (Draft)	90 days	90 days	NA	NA	June 5, 2020	September 2, 2020	January 12, 2021	April 11, 2021	0%	0 days	1 day	221 days										
261	DDA for Water Works - Road L12d (Final)	52 days	52 days	NA	NA	September 3, 2020	October 24, 2020	April 12, 2021	June 2, 2021	0%	204 days	1 day	221 days										
262	AIP for Water Works - Waterfront Promenade and at grade Open Space (Draft)	60 days	60 days	NA	NA	June 5, 2020	August 3, 2020	September 14, 2020	November 12, 2020	0%	0 days	1 day	101 days										
263	AIP for Water Works - Waterfront Promenade and at grade Open Space (Final)	38 days	38 days	NA	NA	August 4, 2020	September 10, 2020	March 5, 2021	April 11, 2021	0%	52 days	0.5 days	213 days										
264	DDA for Water Works - Waterfront Promenade and at grade Open Space (Draft)	90 days	90 days	NA	NA	August 4, 2020	November 1, 2020	January 12, 2021	April 11, 2021	0%	0 days	1 day	161 days										
265	DDA for Water Works - Waterfront Promenade and at grade Open Space (Final)	52 days	52 days	NA	NA	November 2, 2020	December 23, 2020	April 12, 2021	June 2, 2021	0%	144 days	1 day	161 days										
266	AIP for Water Works - Remaining water works (Draft)	60 days	60 days	NA	NA	August 4, 2020	October 2, 2020	November 13, 2020	January 11, 2021	0%	0 days	1 day	101 days										
267	AIP for Water Works - Remaining water works (Final)	38 days	38 days	NA	NA	October 3, 2020	November 9, 2020	March 5, 2021	April 11, 2021	0%	52 days	0.5 days	153 days										

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

█ Critical Task █ Manual Task █ Duration-only █ Baseline Milestone █ Inactive Milestone █ Baseline Summary  
● Critical Split ● Split ● Start-only ● Milestone ● Inactive Summary  
▬ Critical Progress ▬ Task Progress ▬ Finish-only ▬ Baseline Split ▬ Summary Progress ▬ Project Summary ▬ Inactive Task ▬ 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	
268	DDA for Water Works - Remaining water works (Draft)	90 days	90 days	NA	NA	October 3, 2020	December 31, 2020	January 12, 2021	April 11, 2021	0%	0 days	1 day	101 days								
269	DDA for Water Works - Remaining water works (Final)	52 days	52 days	NA	NA	January 1, 2021	February 21, 2021	April 12, 2021	June 2, 2021	0%	84 days	1 day	101 days								
270	<b>Water Works</b>	<b>442 days</b>	<b>442 days</b>	<b>NA</b>	<b>NA</b>	<b>October 17, 2019</b>	<b>December 31, 2020</b>	<b>May 1, 2020</b>	<b>July 16, 2021</b>	<b>0%</b>	<b>197 days</b>		<b>197 days</b>								
271	Prepare AIP for Bridge D3 and ICE certification (Draft)	60 days	60 days	NA	NA	October 17, 2019	December 15, 2019	May 1, 2020	June 29, 2020	0%	0 days	1 day	197 days								
272	Submit & endorse by PM and Statutory Authorities/Gov. Dept	28 days	28 days	NA	NA	December 16, 2019	January 12, 2020	October 28, 2020	November 24, 2020	0%	0 days	0.5 days	317 days								
273	Prepare AIP for Bridge D3 and ICE certification (Final)	14 days	14 days	NA	NA	January 13, 2020	January 26, 2020	November 25, 2020	December 8, 2020	0%	0 days	0 days	317 days								
274	Prepare DDA for Bridge D3 and ICE certification (Draft)	90 days	90 days	NA	NA	January 27, 2020	April 25, 2020	December 9, 2020	March 8, 2021	0%	0 days	1 day	317 days								
275	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	April 26, 2020	June 24, 2020	March 9, 2021	May 7, 2021	0%	0 days	0.5 days	317 days								
276	Prepare DDA for Dridge D3 and ICE certification (Final)	10 days	10 days	NA	NA	June 25, 2020	July 4, 2020	May 8, 2021	May 17, 2021	0%	0 days	0 days	317 days								
277	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	July 5, 2020	September 2, 2020	May 18, 2021	July 16, 2021	0%	268 days	0 days	317 days								
278	Prepare AIP for Underpass, Depressed Road and ICE certification (Draft)	60 days	60 days	NA	NA	December 16, 2019	February 13, 2020	June 30, 2020	August 28, 2020	0%	0 days	1 day	197 days								
279	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	February 14, 2020	April 13, 2020	September 30, 2020	November 28, 2020	0%	0 days	0.5 days	229 days								
280	Prepare AIP for Underpass, Depressed Road and ICE certification (Final)	10 days	10 days	NA	NA	April 14, 2020	April 23, 2020	November 29, 2020	December 8, 2020	0%	0 days	0	229 days								
281	Prepare DDA for Underpass, Depressed Road and ICE certification (Draft)	90 days	90 days	NA	NA	April 24, 2020	July 22, 2020	December 9, 2020	March 8, 2021	0%	0 days	1 day	229 days								
282	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	July 23, 2020	September 20, 2020	March 9, 2021	May 7, 2021	0%	0 days	0.5 days	229 days								
283	Prepare DDA for Underpass, Depressed Road and ICE certification (Final)	10 days	10 days	NA	NA	September 21, 2020	September 30, 2020	May 8, 2021	May 17, 2021	0%	0 days	0 days	229 days								
284	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	October 1, 2020	November 29, 2020	May 18, 2021	July 16, 2021	0%	180 days	0 days	229 days								
285	AIP for Water Works - Road L12d (Draft)	60 days	60 days	NA	NA	February 14, 2020	April 13, 2020	August 29, 2020	October 27, 2020	0%	0 days	1 day	197 days								
286	AIP for Water Works - Road L12d (Final)	38 days	38 days	NA	NA	April 14, 2020	May 21, 2020	April 18, 2021	May 25, 2021	0%	52 days	0.5 days	369 days								
287	DDA for Water Works - Road L12d (Draft)	90 days	90 days	NA	NA	April 14, 2020	July 12, 2020	February 25, 2021	May 25, 2021	0%	0 days	1 day	317 days								
288	DDA for Water Works - Road L12d (Final)	52 days	52 days	NA	NA	July 13, 2020	September 2, 2020	May 26, 2021	July 16, 2021	0%	268 days	1 day	317 days								
289	AIP for Water Works - Waterfront Promenade and at grade Open Space (Draft)	60 days	60 days	NA	NA	April 14, 2020	June 12, 2020	October 28, 2020	December 26, 2020	0%	0 days	1 day	197 days								
290	AIP for Water Works - Waterfront Promenade and at grade Open Space (Final)	38 days	38 days	NA	NA	June 13, 2020	July 20, 2020	April 18, 2021	May 25, 2021	0%	52 days	0.5 days	309 days								
291	DDA for Water Works - Waterfront Promenade and at grade Open Space (Draft)	90 days	90 days	NA	NA	June 13, 2020	September 10, 2020	February 25, 2021	May 25, 2021	0%	0 days	1 day	257 days								
292	DDA for Water Works - Waterfront Promenade and at grade Open Space (Final)	52 days	52 days	NA	NA	September 11, 2020	November 1, 2020	May 26, 2021	July 16, 2021	0%	208 days	1 day	257 days								
293	AIP for Water Works - Remaining water works (Draft)	60 days	60 days	NA	NA	June 13, 2020	August 11, 2020	December 27, 2020	February 24, 2021	0%	0 days	1 day	197 days								
294	AIP for Water Works - Remaining water works (Final)	38 days	38 days	NA	NA	August 12, 2020	September 18, 2020	April 18, 2021	May 25, 2021	0%	52 days	0.5 days	249 days								
295	DDA for Water Works - Remaining water works (Draft)	90 days	90 days	NA	NA	August 12, 2020	November 9, 2020	February 25, 2021	May 25, 2021	0%	0 days	1 day	197 days								
296	DDA for Water Works - Remaining water works (Final)	52 days	52 days	NA	NA	November 10, 2020	December 31, 2020	May 26, 2021	July 16, 2021	0%	148 days	1 day	197 days								
297	<b>Pumping Stations, Box Culverts and Intake Structures</b>	<b>505 days</b>	<b>409.17 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>October 15, 2020</b>	<b>May 30, 2019</b>	<b>February 10, 2022</b>	<b>0%</b>	<b>340 days</b>		<b>483 days</b>								
298	Prepare AIP for Structures and ICE certification (Draft)	61 days	0 days	May 30, 2019	July 29, 2019	May 30, 2019	July 29, 2019	May 30, 2019	July 29, 2019	100%	0 days	1 day	0 days								
299	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	5 days	July 30, 2019	NA	July 30, 2019	September 27, 2019	July 30, 2019	September 15, 2021	92%	0 days	0.5 days	719 days								
300	Prepare AIP for Structures and ICE certification (Final)	14 days	14 days	NA	NA	September 28, 2019	October 11, 2019	September 16, 2021	September 29, 2021	0%	18 days	0 days	719 days								
301	Prepare DDA for Structures and ICE certification (Draft)	92 days	37 days	July 30, 2019	NA	July 30, 2019	October 29, 2019	July 30, 2019	May 30, 2020	0%	0 days	1 day	214 days								
302	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	October 30, 2019	December 28, 2019	September 30, 2021	November 28, 2021	0%	0 days	0.5 days	701 days								
303	Prepare DDA for Structures and ICE certification (Final)	14 days	14 days	NA	NA	December 29, 2019	January 11, 2020	November 29, 2021	December 12, 2021	0%	0 days	0 days	701 days								
304	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	January 12, 2020	March 11, 2020	December 13, 2021	February 10, 2022	0%	558 days	0 days	701 days								
305	Prepare AIP for E&M and ICE certification (Draft)	60 days	5 days	July 30, 2019	NA	July 30, 2019	September 27, 2019	July 30, 2019	May 30, 2020	0%	0 days	1 day	246 days								
306	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	September 28, 2019	November 26, 2019	April 27, 2021	June 25, 2021	0%	0 days	0.5 days	577 days								
307	Prepare AIP for E&M and ICE certification (Final)	10 days	10 days	NA	NA	November 27, 2019	December 6, 2019	June 26, 2021	July 5, 2021	0%	0 days	0 days	577 days								
308	Prepare DDA for E&M and ICE certification (Draft)	90 days	90 days	NA	NA	December 7, 2019	March 5, 2020	July 6, 2021	October 3, 2021	0%	0 days	1 day	577 days								
309	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	60 days	NA	NA	March 6, 2020	May 4, 2020	October 4, 2021	December 2, 2021	0%	0 days	0.5 days	577 days								
310	Prepare DDA for E&M and ICE certification (Final)	10 days	10 days	NA	NA	May 5, 2020	May 14, 2020	December 3, 2021	December 12, 2021	0%	0 days	0 days	577 days								

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

█ Task  
█ Manual Task  
█ Duration-only  
█ Baseline Milestone  
█ Summary  
█ External Tasks  
█ Inactive Milestone  
█ Baseline Summary  
█ Critical Split  
█ Start-only  
█ Baseline  
█ Milestone  
█ Manual Summary  
█ External Milestone  
█ Inactive Summary  
█ Critical Progress  
█ Task Progress  
█ Finish-only  
█ Baseline Split  
█ Summary Progress  
█ Project Summary  
█ Inactive Task  
█ 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	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	<b>Elevated Landscape Deck Staircase &amp; Associated Work</b>	<b>302 days</b>	<b>173.99 days</b>	<b>May 30, 2019</b>	<b>NA</b>	<b>May 30, 2019</b>	<b>March 26, 2020</b>	<b>May 30, 2019</b>	<b>May 5, 2020</b>	<b>0%</b>	<b>40 days</b>		<b>40 days</b>												
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	<b>Waterfront Promenade and At-grade Open Space</b>	<b>671 days</b>	<b>671 days</b>	<b>NA</b>	<b>NA</b>	<b>November 14, 2019</b>	<b>September 14, 2020</b>	<b>December 10, 2019</b>	<b>October 10, 2021</b>	<b>0%</b>	<b>0 days</b>		<b>26 days</b>												
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: [Red dashed line] Task Progress: [Red solid line]  
 Manual Task: [Blue solid line] Start-only: [Blue dashed line] Finish-only: [Blue solid line]  
 Duration-only: [Green solid line] Baseline: [Green dashed line] Baseline Split: [Green dotted line]  
 Baseline Milestone: [Green diamond] Milestone: [Green diamond]  
 Summary: [Grey solid line] External Tasks: [Grey solid line] Inactive Milestone: [Grey dashed line] Baseline Summary: [Grey solid line]  
 Manual Summary: [Grey solid line] External Milestone: [Grey diamond] Inactive Summary: [Grey dashed line]  
 Project Summary: [Grey solid line] Inactive Task: [Grey solid line] Deadline: [Green arrow]















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	
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		Sun September 22							
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	<b>Section 2</b>	<b>325 days</b>	<b>325 days</b>	<b>NA</b>	<b>NA</b>	<b>April 22, 2020</b>	<b>May 26, 2021</b>	<b>May 14, 2020</b>	<b>June 2, 2021</b>	<b>0%</b>	<b>6 days</b>	<b>0 days</b>	<b>6 days</b>									
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	<b>DCS Seawater Intake Box Culvert (Precast)</b>	<b>243 days</b>	<b>243 days</b>	<b>NA</b>	<b>NA</b>	<b>July 30, 2020</b>	<b>May 25, 2021</b>	<b>August 11, 2020</b>	<b>June 1, 2021</b>	<b>0%</b>	<b>6 days</b>	<b>0 days</b>	<b>6 days</b>									
722	<b>Part 2A - CHB.30-83 (53m)</b>	<b>126 days</b>	<b>126 days</b>	<b>NA</b>	<b>NA</b>	<b>July 30, 2020</b>	<b>December 29, 2020</b>	<b>August 11, 2020</b>	<b>January 11, 2021</b>	<b>0%</b>	<b>10 days</b>	<b>0 days</b>	<b>10 days</b>									
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	<b>Part 1 - CHB.5-30 (25m)</b>	<b>117 days</b>	<b>117 days</b>	<b>NA</b>	<b>NA</b>	<b>December 30, 2020</b>	<b>May 25, 2021</b>	<b>January 12, 2021</b>	<b>June 1, 2021</b>	<b>0%</b>	<b>6 days</b>	<b>0 days</b>	<b>6 days</b>									
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	<b>Section 3</b>	<b>408 days</b>	<b>408 days</b>	<b>NA</b>	<b>NA</b>	<b>June 16, 2020</b>	<b>October 28, 2021</b>	<b>June 20, 2020</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>4 days</b>	<b>0 days</b>	<b>4 days</b>									
734	<b>Part 2C - Lift LT3 &amp; LT4</b>	<b>291 days</b>	<b>291 days</b>	<b>NA</b>	<b>NA</b>	<b>June 16, 2020</b>	<b>June 8, 2021</b>	<b>June 20, 2020</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>4 days</b>	<b>0 days</b>	<b>4 days</b>									
735	Mobilization of plant and materials	22 days	22 days	NA	NA	June 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...	0 days	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	0 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	0 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	0 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	<b>Section 4 (Subject to Excision)</b>	<b>185 days</b>	<b>185 days</b>	<b>NA</b>	<b>NA</b>	<b>October 3, 2022</b>	<b>May 17, 2023</b>	<b>October 15, 2022</b>	<b>May 30, 2023</b>	<b>0%</b>	<b>10 days</b>	<b>0 days</b>	<b>10 days</b>									
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	<b>Section 5</b>	<b>303 days</b>	<b>303 days</b>	<b>NA</b>	<b>NA</b>	<b>June 20, 2020</b>	<b>June 28, 2021</b>	<b>June 27, 2020</b>	<b>July 5, 2021</b>	<b>0%</b>	<b>5 days</b>	<b>0 days</b>	<b>5 days</b>									
752	<b>Noise barrier fronting to 4B5 at Rd D3A &amp; Bus Lay By ~120m</b>	<b>303 days</b>	<b>303 days</b>	<b>NA</b>	<b>NA</b>	<b>June 20, 2020</b>	<b>June 28, 2021</b>	<b>June 27, 2020</b>	<b>July 5, 2021</b>	<b>0%</b>	<b>5 days</b>	<b>0 days</b>	<b>5 days</b>									
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	<b>Section 6</b>	<b>1202 days</b>	<b>1198.4 days</b>	<b>May 16, 2019</b>	<b>NA</b>	<b>May 16, 2019</b>	<b>May 30, 2023</b>	<b>May 16, 2019</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>297 days</b>	<b>0 days</b>	<b>297 days</b>									
758	<b>Fencing (15m/d) &amp; Hoarding Erection (10m/d)</b>	<b>919 days</b>	<b>919 days</b>	<b>NA</b>	<b>NA</b>	<b>October 8, 2019</b>	<b>November 8, 2022</b>	<b>November 9, 2019</b>	<b>May 29, 2024</b>	<b>0%</b>	<b>28 days</b>	<b>0 days</b>	<b>28 days</b>									
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																

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	
780	Asbestos Survey (PS Cl. 2.04(9))	8 days	0 days	August 16, 2019	August 23, 2019	August 16, 2019	August 23, 2019	August 16, 2019	August 23, 2019	100%	0 days	0 days	0 days							
781	Demolish of abandoned Fire Service Station	50 days	50 days	NA	NA	November 28, 2019	January 31, 2020	March 10, 2020	May 13, 2020	0%	65 days	1 day	82 days							
782	Ground Investigation	50 days	50 days	NA	NA	November 26, 2019	January 29, 2020	May 11, 2020	July 9, 2020	0%	131 days	0.5 days	131 days							
783	GI Work	50 days	50 days	NA	NA	November 26, 2019	January 29, 2020	May 11, 2020	July 9, 2020	0%	131 days	0.5 days	131 days							
784	Rising Main	765 days	765 days	NA	NA	July 10, 2020	February 1, 2023	July 10, 2020	May 30, 2023	0%	0 days	0 days	0 days							
785	Part 1 - CHA660-1097.77 - 2x160mm dia (~438m)	146 days	146 days	NA	NA	July 10, 2020	January 2, 2021	July 10, 2020	January 2, 2021	0%	0 days	7 days	0 days							
786	Part 9A - CHA32-71 - 2x160mm dia (~39m) (KD5)	211 days	211 days	NA	NA	January 4, 2021	September 17, 2021	January 4, 2021	September 17, 2021	0%	0 days	30 days	0 days							
787	Part 9B Rising Main	211 days	211 days	NA	NA	January 4, 2021	September 17, 2021	March 11, 2021	November 23, 2021	0%	49 days	30 days	54 days							
788	Part 3B - CHA418-443 - 2x160mm dia (~25m) (KD7)	365 days	365 days	NA	NA	March 5, 2021	May 27, 2022	March 11, 2021	June 2, 2022	0%	0 days	50 days	5 days							
789	Part 9 - CHA0-363 & 71-363 - 2x160mm dia. (~324m) (KD4)	126 days	126 days	NA	NA	August 31, 2021	January 31, 2022	August 31, 2021	January 31, 2022	0%	0 days	15 days	0 days							
790	Part 8 - CHA363-418&443-452 - 2x160mm dia (~64m)	150 days	150 days	NA	NA	February 4, 2022	August 4, 2022	September 2, 2022	March 3, 2023	0%	79 days	0 days	174 days							
791	Part 3A - CH452-660 - 2x160mm dia (~208m)	69 days	69 days	NA	NA	November 9, 2022	February 1, 2023	March 4, 2023	May 30, 2023	0%	0 days	1 day	95 days							
792	Allow Access for EMSD third District Cooling System Contractor for DCS Pipeline Laying at Parts 3A, 3B, 8, 9 and 9A	0 days	0 days	NA	NA	February 1, 2023	February 1, 2023	May 30, 2023	May 30, 2023	0%	118 days		118 days							
793	Underground Drainage	416 days	416 days	NA	NA	February 16, 2021	July 11, 2022	March 5, 2021	September 24, 2022	0%	15 days		15 days							
794	Procurement of Stormwater Drainage Pipes	90 days	90 days	NA	NA	February 16, 2021	May 16, 2021	March 5, 2021	June 2, 2021	0%	0 days		17 days							
795	Stormwater Drainage	308 days	308 days	NA	NA	May 17, 2021	May 28, 2022	June 3, 2021	September 24, 2022	0%	14 days		14 days							
796	CH1000 - CH1087 (~92.5m, 2 M/H)	16 days	16 days	NA	NA	November 24, 2021	December 11, 2021	November 24, 2021	December 11, 2021	0%	0 days	1 days	0 days							
797	CH1087 - CH1189.4 (~210m, 9 M/H)	24 days	24 days	NA	NA	June 3, 2021	July 2, 2021	June 3, 2021	July 2, 2021	0%	0 days	1 days	0 days							
798	CH1189.4 - CH1394 (~167m, 3 MH) - Bridge D3	24 days	24 days	NA	NA	May 29, 2021	June 26, 2021	September 11, 2021	October 11, 2021	0%	18 days	0.5 days	88 days							
799	CH1394 - CH1444.7 (~40m, 3 M/H) - S. Ramp	21 days	21 days	NA	NA	July 20, 2021	August 12, 2021	October 12, 2021	November 5, 2021	0%	70 days	0 days	70 days							
800	CH1444.7 - CH1560 (~222m, 10 M/H) - Rd D3	35 days	35 days	NA	NA	May 20, 2021	June 30, 2021	October 25, 2021	December 3, 2021	0%	130 days	0.5 days	130 days							
801	CH1560 - CH1720 (~239m, 8 M/H) - N.D. Rd	14 days	14 days	NA	NA	May 17, 2021	June 2, 2021	April 19, 2022	May 4, 2022	0%	0 days	0 days	273 days							
802	CH1720 - CH1920 (~450.7m, 13 M/H) Underpass	90 days	90 days	NA	NA	June 3, 2021	September 17, 2021	May 5, 2022	August 19, 2022	0%	0 days	1 day	273 days							
803	CH1920 - CH2000 (~160m, 6 M/H) S.D. Rd	14 days	14 days	NA	NA	September 18, 2021	October 6, 2021	August 20, 2022	September 5, 2022	0%	0 days	0 days	273 days							
804	CH2000 - CH2060 (~84m, 2 M/H) - S.D. Rd	14 days	14 days	NA	NA	October 7, 2021	October 23, 2021	September 6, 2022	September 22, 2022	0%	0 days	0 days	273 days							
805	CH2060 - CH2118.93 (~50.7m, 2 M/H) - Rd D3	14 days	14 days	NA	NA	June 19, 2021	July 6, 2021	September 8, 2022	September 24, 2022	0%	0 days	0 days	366 days							
806	CH100 - CH147 (~169m, 5 M/H) - L12 Road	35 days	35 days	NA	NA	April 19, 2022	May 28, 2022	June 25, 2022	August 5, 2022	0%	0 days	0.5 days	57 days							
807	Open Space & Promenade (~457m, 11 M/H)	70 days	70 days	NA	NA	January 19, 2022	April 14, 2022	March 30, 2022	June 24, 2022	0%	0 days	1 day	57 days							
808	Sewerage Drainage	392 days	392 days	NA	NA	March 16, 2021	July 11, 2022	April 4, 2021	September 16, 2022	0%	15 days		15 days							
809	Procurement of Sewerage Pipes	90 days	90 days	NA	NA	March 16, 2021	June 13, 2021	April 4, 2021	July 2, 2021	0%	19 days		19 days							
810	CH1000 - CH1087 (~68m, 3 M/H)	18 days	18 days	NA	NA	November 22, 2021	December 11, 2021	November 22, 2021	December 11, 2021	0%	0 days	1 days	0 days							
811	CH1087 - CH1189.4 (~47m, 1 no M/H)	12 days	12 days	NA	NA	July 3, 2021	July 16, 2021	July 3, 2021	July 16, 2021	0%	0 days	1 days	0 days							
812	CH100 - CH147 (~156m, 6 M/H) - L12 Road	35 days	35 days	NA	NA	May 30, 2022	July 11, 2022	August 6, 2022	September 16, 2022	0%	0 days	0.5 days	57 days							
813	Underground Watermain	392 days	392 days	NA	NA	May 29, 2021	September 19, 2022	July 16, 2021	October 14, 2022	0%	20 days		20 days							
814	Fresh Watermain	310 days	310 days	NA	NA	May 29, 2021	June 13, 2022	July 17, 2021	September 22, 2022	0%	40 days		40 days							
815	CH1000 - CH1087 (~191m) Rd D3	20 days	20 days	NA	NA	August 31, 2021	September 23, 2021	August 31, 2021	September 23, 2021	0%	0 days	1 days	0 days							
816	CH1087 - CH1189.4 (~212m) - N. Ramp	4 days	4 days	NA	NA	July 17, 2021	July 21, 2021	July 17, 2021	July 21, 2021	0%	0 days	0 days	0 days							
817	CH1189.4 - CH1394 (~409.2m) - Bridge D3	40 days	40 days	NA	NA	May 29, 2021	July 16, 2021	August 21, 2021	October 8, 2021	0%	0 days	0.5 days	70 days							
818	CH1394 - CH1444.7 (~101.4m) - S. Ramp	10 days	10 days	NA	NA	June 1, 2021	June 11, 2021	October 9, 2021	October 21, 2021	0%	0 days	0 days	108 days							
819	CH1444.7 - CH1560 (~165m) - Rd D3	18 days	18 days	NA	NA	June 25, 2021	July 16, 2021	October 19, 2021	November 8, 2021	0%	0 days	0 days	95 days							
820	CH1720 - CH1920 (~25m) - Underpass	2 days	2 days	NA	NA	September 18, 2021	September 20, 2021	September 19, 2022	September 20, 2022	0%	0 days	0 days	297 days							
821	CH2060 - CH2118.93 (~47m) - Rd D3	2 days	2 days	NA	NA	July 2, 2021	July 3, 2021	September 21, 2022	September 22, 2022	0%	69 days	0 days	366 days							
822	CH100 - CH147 (~280m) - L12 Road	28 days	28 days	NA	NA	May 11, 2022	June 13, 2022	July 5, 2022	August 5, 2022	0%	0 days	0.5 days	45 days							
823	Open Space & Promenade (~1,093m)	110 days	110 days	NA	NA	December 22, 2021	May 10, 2022	January 18, 2022	June 2, 2022	0%	0 days	1 day	20 days							
824	Salt Watermain	390 days	390 days	NA	NA	June 1, 2021	September 19, 2022	July 22, 2021	October 14, 2022	0%	20 days		20 days							
825	CH1000 - CH1087 (~157m) Rd D3	15 days	15 days	NA	NA	August 31, 2021	September 16, 2021	August 31, 2021	September 16, 2021	0%	0 days	1 days	0 days							
826	CH1087 - CH1189.4 (~218m) - N. Ramp	4 days	4 days	NA	NA	July 22, 2021	July 26, 2021	July 22, 2021	July 26, 2021	0%	0 days	0 days	0 days							
827	CH1189.4 - CH1394 (~409.2m) - Bridge D3	40 days	40 days	NA	NA	June 1, 2021	July 19, 2021	August 24, 2021	October 11, 2021	0%	0 days	0.5 days	70 days							
828	CH1394 - CH1444.7 (~101.4m) - S. Ramp	10 days	10 days	NA	NA	June 12, 2021	June 24, 2021	October 22, 2021	November 2, 2021	0%	0 days	0 days	108 days							
829	CH1444.7 - CH1560 (~165m) - Rd D3	18 days	18 days	NA	NA	July 17, 2021	August 6, 2021	November 9, 2021	November 29, 2021	0%	0 days	0 days	95 days							
830	CH1720 - CH1920 (~25m) - Underpass	2 days	2 days	NA	NA	September 21, 2021	September 23, 2021	September 21, 2022	September 22, 2022	0%	0 days	0 days	297 days							
831	CH2060 - CH2118.93 (~47m) - Rd D3	2 days	2 days	NA	NA	September 24, 2021	September 25, 2021	September 23, 2022	September 24, 2022	0%	24 days	0 days	297 days							
832	CH100 - CH147 (~455m) - L12 Road	45 days	45 days	NA	NA	June 14, 2022	August 5, 2022	August 6, 2022	September 28, 2022	0%	0 days	0.5 days	45 days							
833	Open Space & Promenade (~1,093m)	110 days	110 days	NA	NA	May 11, 2022	September 19, 2022	June 4, 2022	October 14, 2022	0%	0 days	1 day	20 days							
834	Irrigation System	337 days	337 days	NA	NA	June 25, 2021	August 10, 2022	July 16, 2021	October 5, 2022	0%	17 days		17 days							
835	CH1000 - CH1087 (~87m) Rd D3	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							
836	CH1087 - CH1189.4 (~205m) - N. Ramp	9 days	9 days	NA	NA	July 16, 2021	July 26, 2021	July 16, 2021	July 26, 2021	0%	0 days	0 days	0 days							
837	CH1189.4 - CH1394 (~409.2m) - Bridge D3	7 days	7 days	NA	NA	June 25, 2021	July 3, 2021	October 4, 2021	October 11, 2021	0%	13 days	0 days	83 days							
838	CH1394 - CH1444.7 (~101.4m) - S. Ramp	3 days	3 days	NA	NA	June 25, 2021	June 28, 2021	November 3, 2021	November 5, 2021	0%	108 days	0 days	108 days							
839	CH1444.7 - CH1560 (~175m) - Rd D3	4 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	
841	CH2000 - CH2060 (~60m) - S.D. Rd	2 days	2 days	NA	NA	October 25, 2021	October 26, 2021	September 23, 2022	September 24, 2022	0%	0 days	0 days	273 days		Sun September 22						
842	CH2060 - CH2118.93 (~100m) - Rd D3	3 days	3 days	NA	NA	October 27, 2021	October 29, 2021	September 26, 2022	September 28, 2022	0%	228 days	0 days	273 days								
843	CH100 - CH147 (~173m) - L12 Road	4 days	4 days	NA	NA	August 6, 2022	August 10, 2022	September 29, 2022	October 5, 2022	0%	0 days	0 days	45 days								
844	<b>Underground pump house next to underpass</b>	<b>168 days</b>	<b>168 days</b>	<b>NA</b>	<b>NA</b>	<b>June 29, 2021</b>	<b>January 18, 2022</b>	<b>August 7, 2021</b>	<b>March 1, 2022</b>	<b>0%</b>	<b>33 days</b>	<b>0 days</b>	<b>33 days</b>								
845	Underground pump house structure	90 days	90 days	NA	NA	June 29, 2021	October 15, 2021	August 7, 2021	November 23, 2021	0%	0 days	4 days	33 days								
846	E&M installation	60 days	60 days	NA	NA	October 16, 2021	December 24, 2021	November 24, 2021	February 8, 2022	0%	0 days	3 days	33 days								
847	Testing and Commissioning	18 days	18 days	NA	NA	December 28, 2021	January 18, 2022	February 9, 2022	March 1, 2022	0%	33 days	1 days	33 days								
848	<b>Salt Water Pumping Station</b>	<b>689 days</b>	<b>689 days</b>	<b>NA</b>	<b>NA</b>	<b>September 15, 20...</b>	<b>January 6, 2023</b>	<b>July 23, 2022</b>	<b>May 30, 2023</b>	<b>0%</b>	<b>114 days</b>	<b>0 days</b>	<b>114 days</b>								
849	ELS & Excavation	60 days	60 days	NA	NA	July 13, 2021	September 20, 2021	July 23, 2022	October 3, 2022	0%	14 days	1 day	307 days								
850	Structure	90 days	90 days	NA	NA	October 9, 2021	January 26, 2022	October 5, 2022	January 18, 2023	0%	0 days	1 day	293 days								
851	Finishing work and fitting out	60 days	60 days	NA	NA	January 27, 2022	April 11, 2022	January 30, 2023	April 13, 2023	0%	0 days	1 day	299 days								
852	Ironmongery work	24 days	24 days	NA	NA	April 12, 2022	May 12, 2022	April 14, 2023	May 12, 2023	0%	6 days	0.5 days	299 days								
853	E&M installation & ABWF work	90 days	90 days	NA	NA	January 27, 2022	May 19, 2022	January 19, 2023	May 12, 2023	0%	0 days	1 day	293 days								
854	Testing and Commissioning	14 days	14 days	NA	NA	May 20, 2022	June 6, 2022	May 13, 2023	May 30, 2023	0%	293 days	0 days	293 days								
855	WSD Form 542 Submission	0 days	0 days	NA	NA	September 15, 2020	September 15, 2020	May 1, 2023	May 1, 2023	0%	193 days	0 days	958 days								
856	WSD Form 46 Part I & II Submission	0 days	0 days	NA	NA	March 27, 2021	March 27, 2021	May 1, 2023	May 1, 2023	0%	353 days	0 days	765 days								
857	WSD Form 46 Part 46 Part IV Submission	0 days	0 days	NA	NA	March 15, 2022	March 15, 2022	May 1, 2023	May 1, 2023	0%	268 days	0 days	412 days								
858	CLP Meter Installation	0 days	0 days	NA	NA	June 19, 2022	June 19, 2022	May 1, 2023	May 1, 2023	0%	172 days	0 days	316 days								
859	FSD Form 501 Submission for FS Inspection	0 days	0 days	NA	NA	December 8, 2022	December 8, 2022	May 1, 2023	May 1, 2023	0%	0 days	0 days	144 days								
860	FSD Inspection	0 days	0 days	NA	NA	December 22, 2022	December 22, 2022	May 16, 2023	May 16, 2023	0%	0 days	0 days	144 days								
861	Issuance of FS Certificate	0 days	0 days	NA	NA	January 6, 2023	January 6, 2023	May 30, 2023	May 30, 2023	0%	144 days	0 days	144 days								
862	<b>Sewage Pumping Station</b>	<b>689 days</b>	<b>689 days</b>	<b>NA</b>	<b>NA</b>	<b>September 15, 20...</b>	<b>January 6, 2023</b>	<b>November 26, 2021</b>	<b>May 30, 2023</b>	<b>0%</b>	<b>114 days</b>	<b>0 days</b>	<b>114 days</b>								
863	ELS & Excavation	60 days	60 days	NA	NA	July 13, 2021	September 20, 2021	November 26, 2021	February 10, 2022	0%	0 days	1 day	114 days								
864	Structure	90 days	90 days	NA	NA	September 21, 2021	January 10, 2022	February 11, 2022	May 31, 2022	0%	0 days	1 day	114 days								
865	Finishing work and fitting out	60 days	60 days	NA	NA	January 11, 2022	March 24, 2022	June 9, 2022	August 18, 2022	0%	0 days	1 day	120 days								
866	Ironmongery work	24 days	24 days	NA	NA	March 25, 2022	April 26, 2022	August 19, 2022	September 16, 2022	0%	63 days	0.5 days	120 days								
867	E&M installation & ABWF work	90 days	90 days	NA	NA	January 11, 2022	May 3, 2022	June 1, 2022	September 16, 2022	0%	39 days	1 day	114 days								
868	Testing and Commissioning	14 days	14 days	NA	NA	July 12, 2022	July 27, 2022	September 17, 2022	October 5, 2022	0%	12 days	0 days	57 days								
869	WSD Form 542 Submission	0 days	0 days	NA	NA	September 15, 2020	September 15, 2020	May 1, 2023	May 1, 2023	0%	193 days	0 days	958 days								
870	WSD Form 46 Part I & II Submission	0 days	0 days	NA	NA	March 27, 2021	March 27, 2021	May 1, 2023	May 1, 2023	0%	353 days	0 days	765 days								
871	WSD Form 46 Part 46 Part IV Submission	0 days	0 days	NA	NA	March 15, 2022	March 15, 2022	May 1, 2023	May 1, 2023	0%	268 days	0 days	412 days								
872	CLP Meter Installation	0 days	0 days	NA	NA	June 19, 2022	June 19, 2022	May 1, 2023	May 1, 2023	0%	172 days	0 days	316 days								
873	FSD Form 501 Submission for FS Inspection	0 days	0 days	NA	NA	December 8, 2022	December 8, 2022	May 1, 2023	May 1, 2023	0%	0 days	0 days	144 days								
874	FSD Inspection	0 days	0 days	NA	NA	December 22, 2022	December 22, 2022	May 16, 2023	May 16, 2023	0%	0 days	0 days	144 days								
875	Issuance of FS Certificate	0 days	0 days	NA	NA	January 6, 2023	January 6, 2023	May 30, 2023	May 30, 2023	0%	144 days	0 days	144 days								
876	<b>Seawater Intake Box Culvert (~169m)</b>	<b>812 days</b>	<b>812 days</b>	<b>NA</b>	<b>NA</b>	<b>March 20, 2020</b>	<b>December 10, 2022</b>	<b>April 22, 2020</b>	<b>December 10, 2022</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>								
877	<b>Part 4 - CHA.0-79 (79m)</b>	<b>440 days</b>	<b>440 days</b>	<b>NA</b>	<b>NA</b>	<b>June 24, 2021</b>	<b>December 10, 2022</b>	<b>June 24, 2021</b>	<b>December 10, 2022</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>								
878	Temporary ELS & Excavation	24 days	24 days	NA	NA	June 24, 2021	July 22, 2021	June 24, 2021	July 22, 2021	0%	0 days	1 days	0 days								
879	Base Slab (12d/bay)	96 days	96 days	NA	NA	July 23, 2021	November 15, 2021	July 23, 2021	November 15, 2021	0%	0 days	5 days	0 days								
880	Wall (14d/bay)	112 days	112 days	NA	NA	September 20, 2021	February 7, 2022	September 20, 2021	February 7, 2022	0%	0 days	5 days	0 days								
881	Top Slab (20d/bay)	160 days	160 days	NA	NA	February 8, 2022	August 19, 2022	February 8, 2022	August 19, 2022	0%	0 days	8 days	0 days								
882	Remove struts and backfilling	18 days	18 days	NA	NA	August 20, 2022	September 9, 2022	August 20, 2022	September 9, 2022	0%	0 days	1 days	0 days								
883	<b>Precast Installation</b>	<b>76 days</b>	<b>76 days</b>	<b>NA</b>	<b>NA</b>	<b>September 12, 20...</b>	<b>September 12, 2022</b>	<b>September 12, 2022</b>	<b>December 10, 2022</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>								
884	Piling platform erection	26 days	26 days	NA	NA	September 12, 2022	October 13, 2022	September 12, 2022	October 13, 2022	0%	0 days	1 days	0 days								
885	Pipe pile installation	14 days	14 days	NA	NA	October 14, 2022	October 29, 2022	October 14, 2022	October 29, 2022	0%	0 days	1 days	0 days								
886	Remove of piling platform & existing seawall	21 days	21 days	NA	NA	October 31, 2022	November 23, 2022	October 31, 2022	November 23, 2022	0%	0 days	1 days	0 days								
887	Install precast seawall intake	5 days	5 days	NA	NA	November 24, 2022	November 29, 2022	November 24, 2022	November 29, 2022	0%	0 days	0 days	0 days								
888	Reinstate seawall	10 days	10 days	NA	NA	November 30, 2022	December 10, 2022	November 30, 2022	December 10, 2022	0%	0 days	0 days	0 days								
889	<b>Part 10 - CHA79-89 (10m)</b>	<b>348 days</b>	<b>348 days</b>	<b>NA</b>	<b>NA</b>	<b>April 22, 2020</b>	<b>June 23, 2021</b>	<b>April 1, 2021</b>	<b>June 23, 2021</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>								
890	Temporary ELS & Excavation	14 days	14 days	NA	NA	April 22, 2020	May 9, 2020	April 1, 2021	April 20, 2021	0%	82 days	0 days	282 days								
891	Base Slab (12d/bay)	12 days	12 days	NA	NA	August 17, 2020	August 29, 2020	April 21, 2021	May 5, 2021	0%	54 days	0 days	200 days								
892	Wall (14d/bay)	14 days	14 days	NA	NA	November 5, 2020	November 20, 2020	May 6, 2021	May 22, 2021	0%	146 days	0 days	146 days								
893	Top Slab (20d/bay)	20 days	20 days	NA	NA	May 24, 2021	June 16, 2021	May 24, 2021	June 16, 2021	0%	0 days	1 days	0 days								
894	Remove struts and backfilling	6 days	6 days	NA	NA	June 17, 2021	June 23, 2021	June 17, 2021	June 23, 2021	0%	0 days	0 days	0 days								
895	<b>Part 1 - CH89-169 (80m)</b>	<b>366 days</b>	<b>366 days</b>	<b>NA</b>	<b>NA</b>	<b>March 20, 2020</b>	<b>June 16, 2021</b>	<b>April 22, 2020</b>	<b>June 16, 2021</b>	<b>0%</b>	<b>0 days</b>	<b>0 days</b>	<b>0 days</b>								
896	Temporary ELS & Excavation	24 days	24 days	NA	NA	March 20, 2020	April 21, 2020	March 4, 2021	March 31, 2021	0%	0 days	0.5 days	282 days								
897	Base Slab (12d/bay)	96 days	96 days	NA	NA	April 22, 2020	August 15, 2020	April 22, 2020	August 15, 2020	0%	0 days	4 days	0 days								
898	Wall (14d/bay)	112 days	112 days	NA	NA	June 22, 2020	November 4, 2020	June 22, 2020	November 4, 2020	0%	0 days	5 days	0 days								
899	Top Slab (20d/bay)	160 days	160 days	NA	NA	November 5, 2020	May 22, 2021</														





**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)
01/07/2020	28.9	32.7	1.1	01/08/2020	25.9	29.4	28.3
02/07/2020	27.7	33.3	9.3	02/08/2020	26.2	29.4	25.6
03/07/2020	27.3	33.1	29.5	03/08/2020	25.7	27.8	46.9
04/07/2020	27.5	33.3	8.3	04/08/2020	26.1	30.1	4.7
05/07/2020	28	32.9	1.3	05/08/2020	24.9	31.9	53.3
06/07/2020	28.3	32.3	4.1	06/08/2020	25.2	33.5	1.7
07/07/2020	28.5	32.7	0.7	07/08/2020	27.6	33.9	0.2
08/07/2020	29	32.2	0.6	08/08/2020	28.4	34.4	0
09/07/2020	29	31.9	Trace	09/08/2020	27.8	33.4	0
10/07/2020	29.3	32.2	0	10/08/2020	28.3	33	0
11/07/2020	29.2	33.4	0	11/08/2020	29	32.2	0.6
12/07/2020	29.1	33.5	0	12/08/2020	26.6	29.5	29.4
13/07/2020	28.7	33.2	0	13/08/2020	26	31.2	16.5
14/07/2020	28.6	33.6	0	14/08/2020	26.2	33.4	9.3
15/07/2020	28.8	33.9	0	15/08/2020	27.9	33	0
16/07/2020	27.4	32.7	2.4	16/08/2020	26.8	33.8	Trace
17/07/2020	27.8	33.4	2.5	17/08/2020	26.4	31.4	16.6
18/07/2020	28.9	33.2	2.2	18/08/2020	25.6	29.9	52.7
19/07/2020	28.8	32.9	0	19/08/2020	24.9	27.9	119.5
20/07/2020	27.5	32.2	3.1	20/08/2020	27.2	32.2	Trace
21/07/2020	28.1	34.7	0	21/08/2020	27.6	33.5	0
22/07/2020	27.7	33.1	2.5	22/08/2020	27.2	33.3	0
23/07/2020	28.6	35.3	Trace	23/08/2020	27.5	33.8	0
24/07/2020	28.8	33.9	0	24/08/2020	27.9	33.4	0
25/07/2020	28.8	34	0	25/08/2020	28.6	33.8	1.1
26/07/2020	28.9	34.9	Trace	26/08/2020	26.5	32.7	12.3
27/07/2020	28.4	33.5	2.3	27/08/2020	26.4	31	3.1
28/07/2020	27.9	35	3	28/08/2020	25	34.2	22.6
29/07/2020	28.6	34.9	2.6	29/08/2020	27.8	33.2	3.2
30/07/2020	26	34.9	13.3	30/08/2020	28	32.4	0.6
31/07/2020	25.9	29.7	36.6	31/08/2020	28.2	34.3	0.2

NOTE1: The above weather information was obtained from manned weather station of Hong Kong Observatory.  
NOTE2: Trace means rainfall less than 0.05 mm  
<https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2020&m=7>

NOTE1: The above weather information was obtained from manned weather station of Hong Kong Observatory.  
NOTE2: Trace means rainfall less than 0.05 mm  
<https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2020&m=8>

## General Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)
01/09/2020	28	33.6	1.1
02/09/2020	28	34.2	0.4
03/09/2020	28.5	33.6	0.4
04/09/2020	28.4	32.3	0.1
05/09/2020	25.2	30.6	43.9
06/09/2020	27.2	32.3	0
07/09/2020	26.8	33.3	4.7
08/09/2020	25.3	29	68.9
09/09/2020	26.8	30.7	0.2
10/09/2020	26	32.1	8.2
11/09/2020	27.2	30.4	2.7
12/09/2020	26.2	32.4	27.9
13/09/2020	25.8	32.5	5.7
14/09/2020	25.6	31	38.2
15/09/2020	26.4	28.8	62.6
16/09/2020	27.3	32.9	4.4
17/09/2020	26.8	31.4	40.6
18/09/2020	26.4	30.2	15.9
19/09/2020	25.9	30.3	50.8
20/09/2020	26.4	32.1	0.7
21/09/2020	25.5	29.7	176.8
22/09/2020	26.6	31.4	0.5
23/09/2020	27.4	31.9	0
24/09/2020	27.1	31.3	0.6
25/09/2020	26.6	31.4	0
26/09/2020	27.1	29.7	Trace
27/09/2020	26.2	29.4	1.3
28/09/2020	25.7	27.4	26.2
29/09/2020	26	28.9	21.9
30/09/2020	25.3	31.1	104.1

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

NOTE2: Trace means rainfall less than 0.05 mm

<https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2020&m=9>



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
01/07/2020	0:00	0.4	112.5	02/07/2020	0:00	0.9	112.5	03/07/2020	0:00	0.9	45	04/07/2020	0:00	0.9	67.5
01/07/2020	1:00	0.4	112.5	02/07/2020	1:00	0.9	135	03/07/2020	1:00	0.9	45	04/07/2020	1:00	0.9	90
01/07/2020	2:00	0.4	90	02/07/2020	2:00	0.9	112.5	03/07/2020	2:00	0.4	67.5	04/07/2020	2:00	0.4	67.5
01/07/2020	3:00	0.9	112.5	02/07/2020	3:00	0.4	112.5	03/07/2020	3:00	0.4	67.5	04/07/2020	3:00	0.9	90
01/07/2020	4:00	1.3	112.5	02/07/2020	4:00	0.4	112.5	03/07/2020	4:00	0.4	67.5	04/07/2020	4:00	0.9	67.5
01/07/2020	5:00	0.9	112.5	02/07/2020	5:00	0.4	135	03/07/2020	5:00	0.4	45	04/07/2020	5:00	0.9	67.5
01/07/2020	6:00	0.9	112.5	02/07/2020	6:00	0	112.5	03/07/2020	6:00	0.4	45	04/07/2020	6:00	0.9	67.5
01/07/2020	7:00	0.9	90	02/07/2020	7:00	0.4	135	03/07/2020	7:00	0.9	67.5	04/07/2020	7:00	0.9	67.5
01/07/2020	8:00	0.9	112.5	02/07/2020	8:00	0.9	112.5	03/07/2020	8:00	0.9	90	04/07/2020	8:00	0.4	90
01/07/2020	9:00	0.9	135	02/07/2020	9:00	0.9	112.5	03/07/2020	9:00	0.4	90	04/07/2020	9:00	0.9	67.5
01/07/2020	10:00	0.9	157.5	02/07/2020	10:00	0.4	90	03/07/2020	10:00	0.4	157.5	04/07/2020	10:00	0.9	67.5
01/07/2020	11:00	1.3	135	02/07/2020	11:00	0.4	112.5	03/07/2020	11:00	0.9	112.5	04/07/2020	11:00	0.9	90
01/07/2020	12:00	0.9	112.5	02/07/2020	12:00	0.9	112.5	03/07/2020	12:00	0.4	112.5	04/07/2020	12:00	1.3	45
01/07/2020	13:00	0.9	112.5	02/07/2020	13:00	0.4	112.5	03/07/2020	13:00	0.4	90	04/07/2020	13:00	0.9	67.5
01/07/2020	14:00	1.3	67.5	02/07/2020	14:00	0.4	135	03/07/2020	14:00	0.4	112.5	04/07/2020	14:00	0.4	45
01/07/2020	15:00	1.8	45	02/07/2020	15:00	0.9	135	03/07/2020	15:00	0.9	135	04/07/2020	15:00	0.9	45
01/07/2020	16:00	1.3	157.5	02/07/2020	16:00	2.2	112.5	03/07/2020	16:00	1.3	157.5	04/07/2020	16:00	0.9	45
01/07/2020	17:00	0.9	157.5	02/07/2020	17:00	2.7	90	03/07/2020	17:00	1.3	112.5	04/07/2020	17:00	0.9	67.5
01/07/2020	18:00	0.9	112.5	02/07/2020	18:00	1.3	67.5	03/07/2020	18:00	1.3	112.5	04/07/2020	18:00	1.3	90
01/07/2020	19:00	0.4	112.5	02/07/2020	19:00	1.3	112.5	03/07/2020	19:00	1.3	157.5	04/07/2020	19:00	0.9	67.5
01/07/2020	20:00	0.4	90	02/07/2020	20:00	1.3	67.5	03/07/2020	20:00	1.3	135	04/07/2020	20:00	1.3	90
01/07/2020	21:00	0.9	112.5	02/07/2020	21:00	1.8	67.5	03/07/2020	21:00	0.4	90	04/07/2020	21:00	1.3	67.5
01/07/2020	22:00	0.9	135	02/07/2020	22:00	1.8	67.5	03/07/2020	22:00	0.4	112.5	04/07/2020	22:00	1.3	112.5
01/07/2020	23:00	0.9	112.5	02/07/2020	23:00	1.3	112.5	03/07/2020	23:00	0.4	112.5	04/07/2020	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
05/07/2020	0:00	0.4	45	06/07/2020	0:00	0.9	45	07/07/2020	0:00	0.9	45	08/07/2020	0:00	1.3	90
05/07/2020	1:00	0.4	67.5	06/07/2020	1:00	0.9	45	07/07/2020	1:00	0.9	45	08/07/2020	1:00	0.9	67.5
05/07/2020	2:00	0.4	90	06/07/2020	2:00	0.9	67.5	07/07/2020	2:00	0.9	67.5	08/07/2020	2:00	1.3	67.5
05/07/2020	3:00	0.4	90	06/07/2020	3:00	0.9	90	07/07/2020	3:00	1.3	67.5	08/07/2020	3:00	1.3	45
05/07/2020	4:00	0.4	67.5	06/07/2020	4:00	0.4	45	07/07/2020	4:00	1.3	45	08/07/2020	4:00	0.9	45
05/07/2020	5:00	0.4	90	06/07/2020	5:00	0.4	67.5	07/07/2020	5:00	0.9	45	08/07/2020	5:00	0.9	45
05/07/2020	6:00	0.4	67.5	06/07/2020	6:00	0.9	90	07/07/2020	6:00	0.9	247.5	08/07/2020	6:00	1.3	67.5
05/07/2020	7:00	0.4	90	06/07/2020	7:00	0.9	67.5	07/07/2020	7:00	1.3	67.5	08/07/2020	7:00	0.9	67.5
05/07/2020	8:00	0.4	90	06/07/2020	8:00	0.9	67.5	07/07/2020	8:00	0.9	45	08/07/2020	8:00	0.9	67.5
05/07/2020	9:00	0.4	112.5	06/07/2020	9:00	0.9	67.5	07/07/2020	9:00	1.3	45	08/07/2020	9:00	0.9	67.5
05/07/2020	10:00	0.9	67.5	06/07/2020	10:00	0.9	67.5	07/07/2020	10:00	1.3	45	08/07/2020	10:00	0.9	67.5
05/07/2020	11:00	0.9	67.5	06/07/2020	11:00	0.9	67.5	07/07/2020	11:00	0.9	45	08/07/2020	11:00	0.9	45
05/07/2020	12:00	1.3	45	06/07/2020	12:00	0.9	67.5	07/07/2020	12:00	0.9	270	08/07/2020	12:00	0.9	67.5
05/07/2020	13:00	1.3	90	06/07/2020	13:00	0.9	45	07/07/2020	13:00	0.9	247.5	08/07/2020	13:00	0.9	45
05/07/2020	14:00	0.9	90	06/07/2020	14:00	1.8	90	07/07/2020	14:00	1.3	225	08/07/2020	14:00	1.3	90
05/07/2020	15:00	0.9	90	06/07/2020	15:00	1.8	45	07/07/2020	15:00	0.9	45	08/07/2020	15:00	0.9	67.5
05/07/2020	16:00	1.3	67.5	06/07/2020	16:00	1.8	45	07/07/2020	16:00	0.9	45	08/07/2020	16:00	0.9	90
05/07/2020	17:00	1.3	67.5	06/07/2020	17:00	1.8	67.5	07/07/2020	17:00	0.9	45	08/07/2020	17:00	0.9	45
05/07/2020	18:00	1.3	247.5	06/07/2020	18:00	1.3	45	07/07/2020	18:00	0.9	45	08/07/2020	18:00	0.9	90
05/07/2020	19:00	1.3	90	06/07/2020	19:00	1.3	45	07/07/2020	19:00	0.9	45	08/07/2020	19:00	0.9	67.5
05/07/2020	20:00	1.8	67.5	06/07/2020	20:00	0.9	45	07/07/2020	20:00	1.3	67.5	08/07/2020	20:00	0.9	90
05/07/2020	21:00	2.7	45	06/07/2020	21:00	1.3	45	07/07/2020	21:00	1.3	45	08/07/2020	21:00	0.9	90
05/07/2020	22:00	2.2	67.5	06/07/2020	22:00	1.8	45	07/07/2020	22:00	0.9	45	08/07/2020	22:00	0.9	90
05/07/2020	23:00	1.3	67.5	06/07/2020	23:00	1.3	45	07/07/2020	23:00	1.3	45	08/07/2020	23:00	0.9	90

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
09/07/2020	0:00	0.9	90	10/07/2020	0:00	0.4	90	11/07/2020	0:00	0.4	90	12/07/2020	0:00	0.4	67.5
09/07/2020	1:00	0.9	90	10/07/2020	1:00	0.4	90	11/07/2020	1:00	0.4	112.5	12/07/2020	1:00	0.4	90
09/07/2020	2:00	0.9	67.5	10/07/2020	2:00	0.4	112.5	11/07/2020	2:00	0.4	90	12/07/2020	2:00	0.9	67.5
09/07/2020	3:00	0.9	67.5	10/07/2020	3:00	0.4	157.5	11/07/2020	3:00	0.9	112.5	12/07/2020	3:00	0.9	112.5
09/07/2020	4:00	0.9	112.5	10/07/2020	4:00	0.4	112.5	11/07/2020	4:00	1.3	90	12/07/2020	4:00	0.4	67.5
09/07/2020	5:00	0.9	90	10/07/2020	5:00	0.4	112.5	11/07/2020	5:00	2.2	90	12/07/2020	5:00	0.4	45
09/07/2020	6:00	0.4	112.5	10/07/2020	6:00	0.4	180	11/07/2020	6:00	1.8	112.5	12/07/2020	6:00	0.4	67.5
09/07/2020	7:00	0.4	112.5	10/07/2020	7:00	0.4	112.5	11/07/2020	7:00	0.9	112.5	12/07/2020	7:00	0.4	67.5
09/07/2020	8:00	0.9	90	10/07/2020	8:00	0.4	270	11/07/2020	8:00	1.8	90	12/07/2020	8:00	0.9	22.5
09/07/2020	9:00	0.9	67.5	10/07/2020	9:00	0.9	112.5	11/07/2020	9:00	0.9	67.5	12/07/2020	9:00	0.4	22.5
09/07/2020	10:00	0.9	67.5	10/07/2020	10:00	0.4	112.5	11/07/2020	10:00	0.9	90	12/07/2020	10:00	0.4	90
09/07/2020	11:00	0.9	67.5	10/07/2020	11:00	0.9	90	11/07/2020	11:00	0.9	112.5	12/07/2020	11:00	0.4	67.5
09/07/2020	12:00	0.9	90	10/07/2020	12:00	0.9	90	11/07/2020	12:00	0.9	112.5	12/07/2020	12:00	0.4	45
09/07/2020	13:00	0.9	67.5	10/07/2020	13:00	0.4	90	11/07/2020	13:00	1.3	135	12/07/2020	13:00	0.4	45
09/07/2020	14:00	0.9	67.5	10/07/2020	14:00	0.9	67.5	11/07/2020	14:00	0.9	112.5	12/07/2020	14:00	0.4	247.5
09/07/2020	15:00	1.3	67.5	10/07/2020	15:00	0.4	157.5	11/07/2020	15:00	0.9	135	12/07/2020	15:00	1.8	270
09/07/2020	16:00	0.9	67.5	10/07/2020	16:00	0.4	157.5	11/07/2020	16:00	1.3	247.5	12/07/2020	16:00	1.8	67.5
09/07/2020	17:00	1.3	67.5	10/07/2020	17:00	0.4	112.5	11/07/2020	17:00	0.9	247.5	12/07/2020	17:00	2.2	67.5
09/07/2020	18:00	0.9	45	10/07/2020	18:00	0.4	90	11/07/2020	18:00	0.9	90	12/07/2020	18:00	1.3	67.5
09/07/2020	19:00	1.3	67.5	10/07/2020	19:00	0.9	112.5	11/07/2020	19:00	1.3	90	12/07/2020	19:00	0.9	67.5
09/07/2020	20:00	1.3	45	10/07/2020	20:00	0.9	112.5	11/07/2020	20:00	1.3	270	12/07/2020	20:00	0.9	67.5
09/07/2020	21:00	0.9	45	10/07/2020	21:00	0.9	112.5	11/07/2020	21:00	1.3	67.5	12/07/2020	21:00	0.9	90
09/07/2020	22:00	0.9	90	10/07/2020	22:00	0.4	67.5	11/07/2020	22:00	1.3	45	12/07/2020	22:00	0.9	90
09/07/2020	23:00	0.9	67.5	10/07/2020	23:00	0.4	225	11/07/2020	23:00	1.3	45	12/07/2020	23:00	0.4	67.5

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
13/07/2020	0:00	0.9	67.5	14/07/2020	0:00	0.9	45	15/07/2020	0:00	0.4	90	16/07/2020	0:00	0.9	90
13/07/2020	1:00	0.9	67.5	14/07/2020	1:00	0.9	45	15/07/2020	1:00	0.9	67.5	16/07/2020	1:00	0.9	112.5
13/07/2020	2:00	0.9	45	14/07/2020	2:00	0.4	67.5	15/07/2020	2:00	0.4	90	16/07/2020	2:00	0.9	90
13/07/2020	3:00	0.9	45	14/07/2020	3:00	0	45	15/07/2020	3:00	0.4	90	16/07/2020	3:00	0.9	90
13/07/2020	4:00	1.3	45	14/07/2020	4:00	0.4	247.5	15/07/2020	4:00	0.4	67.5	16/07/2020	4:00	1.3	67.5
13/07/2020	5:00	0.9	225	14/07/2020	5:00	0.9	45	15/07/2020	5:00	0.4	90	16/07/2020	5:00	1.8	67.5
13/07/2020	6:00	0.9	247.5	14/07/2020	6:00	0.9	202.5	15/07/2020	6:00	0.9	112.5	16/07/2020	6:00	2.2	112.5
13/07/2020	7:00	0.4	247.5	14/07/2020	7:00	0.4	180	15/07/2020	7:00	0.4	67.5	16/07/2020	7:00	1.3	45
13/07/2020	8:00	0.4	247.5	14/07/2020	8:00	0.4	180	15/07/2020	8:00	0.4	67.5	16/07/2020	8:00	1.3	45
13/07/2020	9:00	0.9	247.5	14/07/2020	9:00	0.9	67.5	15/07/2020	9:00	0.4	90	16/07/2020	9:00	0.9	90
13/07/2020	10:00	0.9	247.5	14/07/2020	10:00	0.9	67.5	15/07/2020	10:00	0.4	67.5	16/07/2020	10:00	1.3	45
13/07/2020	11:00	0.4	247.5	14/07/2020	11:00	1.3	67.5	15/07/2020	11:00	0.4	67.5	16/07/2020	11:00	1.3	90
13/07/2020	12:00	0.9	270	14/07/2020	12:00	0.9	90	15/07/2020	12:00	0.4	67.5	16/07/2020	12:00	2.7	67.5
13/07/2020	13:00	0.9	225	14/07/2020	13:00	1.3	90	15/07/2020	13:00	0.9	67.5	16/07/2020	13:00	1.3	67.5
13/07/2020	14:00	0.9	45	14/07/2020	14:00	0.9	270	15/07/2020	14:00	0.9	67.5	16/07/2020	14:00	0.9	45
13/07/2020	15:00	1.8	45	14/07/2020	15:00	1.3	270	15/07/2020	15:00	0.9	112.5	16/07/2020	15:00	0.9	67.5
13/07/2020	16:00	3.1	247.5	14/07/2020	16:00	2.2	45	15/07/2020	16:00	0.9	90	16/07/2020	16:00	0.9	112.5
13/07/2020	17:00	1.8	247.5	14/07/2020	17:00	1.8	45	15/07/2020	17:00	0.9	90	16/07/2020	17:00	1.3	90
13/07/2020	18:00	2.2	45	14/07/2020	18:00	0.9	45	15/07/2020	18:00	0.9	315	16/07/2020	18:00	1.3	112.5
13/07/2020	19:00	1.3	45	14/07/2020	19:00	0.9	247.5	15/07/2020	19:00	1.3	67.5	16/07/2020	19:00	0.9	90
13/07/2020	20:00	1.3	45	14/07/2020	20:00	1.3	90	15/07/2020	20:00	1.3	112.5	16/07/2020	20:00	0.9	112.5
13/07/2020	21:00	1.3	45	14/07/2020	21:00	1.3	67.5	15/07/2020	21:00	1.3	112.5	16/07/2020	21:00	0.9	112.5
13/07/2020	22:00	1.3	45	14/07/2020	22:00	1.3	67.5	15/07/2020	22:00	0.9	180	16/07/2020	22:00	0.9	112.5
13/07/2020	23:00	1.3	45	14/07/2020	23:00	0.9	45	15/07/2020	23:00	1.3	157.5	16/07/2020	23:00	0.9	247.5

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
17/07/2020	0:00	0.9	90	18/07/2020	0:00	0.4	112.5	19/07/2020	0:00	0.9	112.5	20/07/2020	0:00	0.4	112.5
17/07/2020	1:00	0.4	45	18/07/2020	1:00	0.9	112.5	19/07/2020	1:00	0.9	112.5	20/07/2020	1:00	0.4	112.5
17/07/2020	2:00	0.4	67.5	18/07/2020	2:00	0.9	90	19/07/2020	2:00	0.9	112.5	20/07/2020	2:00	0.4	112.5
17/07/2020	3:00	0.9	112.5	18/07/2020	3:00	0.9	112.5	19/07/2020	3:00	0.9	112.5	20/07/2020	3:00	0.9	112.5
17/07/2020	4:00	0.9	112.5	18/07/2020	4:00	0.4	90	19/07/2020	4:00	0.9	135	20/07/2020	4:00	0.4	112.5
17/07/2020	5:00	0.9	112.5	18/07/2020	5:00	0.4	90	19/07/2020	5:00	0.9	135	20/07/2020	5:00	0.4	112.5
17/07/2020	6:00	0.9	67.5	18/07/2020	6:00	0.4	67.5	19/07/2020	6:00	0.9	135	20/07/2020	6:00	0.4	112.5
17/07/2020	7:00	0.4	90	18/07/2020	7:00	0.4	67.5	19/07/2020	7:00	1.3	112.5	20/07/2020	7:00	0.4	112.5
17/07/2020	8:00	0.9	90	18/07/2020	8:00	0.4	67.5	19/07/2020	8:00	1.3	90	20/07/2020	8:00	0.4	112.5
17/07/2020	9:00	0.4	90	18/07/2020	9:00	0.4	90	19/07/2020	9:00	1.3	112.5	20/07/2020	9:00	0.4	112.5
17/07/2020	10:00	0.4	112.5	18/07/2020	10:00	0.9	135	19/07/2020	10:00	2.2	90	20/07/2020	10:00	0.4	135
17/07/2020	11:00	0.9	90	18/07/2020	11:00	0.9	112.5	19/07/2020	11:00	1.8	112.5	20/07/2020	11:00	0.4	112.5
17/07/2020	12:00	0.4	90	18/07/2020	12:00	0.4	90	19/07/2020	12:00	1.8	112.5	20/07/2020	12:00	0.9	112.5
17/07/2020	13:00	0.4	90	18/07/2020	13:00	0.4	67.5	19/07/2020	13:00	1.3	135	20/07/2020	13:00	0.4	135
17/07/2020	14:00	0.4	90	18/07/2020	14:00	0.4	67.5	19/07/2020	14:00	1.8	112.5	20/07/2020	14:00	0.4	135
17/07/2020	15:00	0.9	67.5	18/07/2020	15:00	0.4	45	19/07/2020	15:00	1.8	90	20/07/2020	15:00	1.8	112.5
17/07/2020	16:00	1.3	112.5	18/07/2020	16:00	0.4	90	19/07/2020	16:00	1.3	112.5	20/07/2020	16:00	1.8	135
17/07/2020	17:00	1.3	45	18/07/2020	17:00	0.4	45	19/07/2020	17:00	1.8	112.5	20/07/2020	17:00	1.3	90
17/07/2020	18:00	0.9	90	18/07/2020	18:00	1.8	67.5	19/07/2020	18:00	1.3	90	20/07/2020	18:00	1.3	90
17/07/2020	19:00	1.3	67.5	18/07/2020	19:00	0.4	112.5	19/07/2020	19:00	1.3	90	20/07/2020	19:00	1.8	90
17/07/2020	20:00	1.3	90	18/07/2020	20:00	0.4	90	19/07/2020	20:00	1.8	112.5	20/07/2020	20:00	1.3	112.5
17/07/2020	21:00	1.3	90	18/07/2020	21:00	0.9	112.5	19/07/2020	21:00	1.8	90	20/07/2020	21:00	1.3	90
17/07/2020	22:00	1.3	67.5	18/07/2020	22:00	0.9	270	19/07/2020	22:00	1.8	112.5	20/07/2020	22:00	0.9	112.5
17/07/2020	23:00	1.3	45	18/07/2020	23:00	0.9	67.5	19/07/2020	23:00	0.9	112.5	20/07/2020	23:00	0.4	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
21/07/2020	0:00	0.9	135	22/07/2020	0:00	0.4	90	23/07/2020	0:00	0.9	67.5	24/07/2020	0:00	0.4	67.5
21/07/2020	1:00	1.3	135	22/07/2020	1:00	0.4	157.5	23/07/2020	1:00	0.4	45	24/07/2020	1:00	0.9	157.5
21/07/2020	2:00	1.3	112.5	22/07/2020	2:00	0.9	180	23/07/2020	2:00	0.4	67.5	24/07/2020	2:00	0.4	270
21/07/2020	3:00	1.3	112.5	22/07/2020	3:00	0.9	180	23/07/2020	3:00	0.4	67.5	24/07/2020	3:00	0.9	247.5
21/07/2020	4:00	1.3	112.5	22/07/2020	4:00	1.3	135	23/07/2020	4:00	0.9	90	24/07/2020	4:00	0.4	247.5
21/07/2020	5:00	1.3	112.5	22/07/2020	5:00	0.9	270	23/07/2020	5:00	1.3	90	24/07/2020	5:00	0.9	90
21/07/2020	6:00	0.9	112.5	22/07/2020	6:00	0.9	112.5	23/07/2020	6:00	0.9	90	24/07/2020	6:00	0.9	90
21/07/2020	7:00	0.9	112.5	22/07/2020	7:00	0.4	112.5	23/07/2020	7:00	1.8	67.5	24/07/2020	7:00	1.3	247.5
21/07/2020	8:00	0.9	90	22/07/2020	8:00	0.4	67.5	23/07/2020	8:00	1.8	67.5	24/07/2020	8:00	1.3	45
21/07/2020	9:00	0.9	112.5	22/07/2020	9:00	0.4	247.5	23/07/2020	9:00	1.8	67.5	24/07/2020	9:00	1.3	45
21/07/2020	10:00	1.3	112.5	22/07/2020	10:00	0.4	135	23/07/2020	10:00	1.8	67.5	24/07/2020	10:00	1.3	45
21/07/2020	11:00	0.9	112.5	22/07/2020	11:00	0.4	90	23/07/2020	11:00	2.2	67.5	24/07/2020	11:00	1.3	67.5
21/07/2020	12:00	0.4	247.5	22/07/2020	12:00	0.4	67.5	23/07/2020	12:00	0.9	247.5	24/07/2020	12:00	2.2	90
21/07/2020	13:00	0.9	112.5	22/07/2020	13:00	0.4	67.5	23/07/2020	13:00	0.9	247.5	24/07/2020	13:00	2.2	225
21/07/2020	14:00	0.9	112.5	22/07/2020	14:00	1.3	247.5	23/07/2020	14:00	1.8	247.5	24/07/2020	14:00	1.3	112.5
21/07/2020	15:00	0.9	90	22/07/2020	15:00	1.3	247.5	23/07/2020	15:00	1.8	225	24/07/2020	15:00	1.8	225
21/07/2020	16:00	0.9	90	22/07/2020	16:00	1.3	247.5	23/07/2020	16:00	3.1	225	24/07/2020	16:00	2.2	67.5
21/07/2020	17:00	0.4	112.5	22/07/2020	17:00	0.9	270	23/07/2020	17:00	2.7	247.5	24/07/2020	17:00	1.8	45
21/07/2020	18:00	0.4	90	22/07/2020	18:00	0.9	292.5	23/07/2020	18:00	0.9	247.5	24/07/2020	18:00	2.2	22.5
21/07/2020	19:00	0.4	45	22/07/2020	19:00	0.9	225	23/07/2020	19:00	0.9	247.5	24/07/2020	19:00	1.3	45
21/07/2020	20:00	0.4	112.5	22/07/2020	20:00	0.9	247.5	23/07/2020	20:00	0.9	45	24/07/2020	20:00	1.3	67.5
21/07/2020	21:00	0.4	112.5	22/07/2020	21:00	0.9	45	23/07/2020	21:00	0.9	67.5	24/07/2020	21:00	1.3	45
21/07/2020	22:00	0.4	90	22/07/2020	22:00	0.9	67.5	23/07/2020	22:00	1.8	67.5	24/07/2020	22:00	0.9	67.5
21/07/2020	23:00	0.4	90	22/07/2020	23:00	0.4	45	23/07/2020	23:00	1.3	67.5	24/07/2020	23:00	0.9	45

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
25/07/2020	0:00	0.9	45	26/07/2020	0:00	1.3	90	27/07/2020	0:00	0.4	112.5	28/07/2020	0:00	0.9	112.5
25/07/2020	1:00	0.9	90	26/07/2020	1:00	0.4	112.5	27/07/2020	1:00	0.9	112.5	28/07/2020	1:00	0.9	90
25/07/2020	2:00	0.9	112.5	26/07/2020	2:00	0.4	112.5	27/07/2020	2:00	1.8	112.5	28/07/2020	2:00	1.3	112.5
25/07/2020	3:00	0.9	45	26/07/2020	3:00	1.3	90	27/07/2020	3:00	1.3	157.5	28/07/2020	3:00	1.3	112.5
25/07/2020	4:00	0.9	67.5	26/07/2020	4:00	1.3	90	27/07/2020	4:00	0.9	67.5	28/07/2020	4:00	1.8	112.5
25/07/2020	5:00	0.4	112.5	26/07/2020	5:00	0.4	90	27/07/2020	5:00	0.9	90	28/07/2020	5:00	1.8	90
25/07/2020	6:00	0.4	67.5	26/07/2020	6:00	0.9	67.5	27/07/2020	6:00	1.3	90	28/07/2020	6:00	1.3	90
25/07/2020	7:00	0.4	67.5	26/07/2020	7:00	0.9	90	27/07/2020	7:00	0.4	112.5	28/07/2020	7:00	1.8	112.5
25/07/2020	8:00	0.4	67.5	26/07/2020	8:00	1.3	90	27/07/2020	8:00	0.4	135	28/07/2020	8:00	1.3	112.5
25/07/2020	9:00	0.4	45	26/07/2020	9:00	1.8	90	27/07/2020	9:00	0.4	135	28/07/2020	9:00	1.3	112.5
25/07/2020	10:00	1.3	45	26/07/2020	10:00	0.9	90	27/07/2020	10:00	0.4	90	28/07/2020	10:00	1.8	112.5
25/07/2020	11:00	0.4	90	26/07/2020	11:00	0.9	112.5	27/07/2020	11:00	0.4	90	28/07/2020	11:00	1.3	90
25/07/2020	12:00	0.4	67.5	26/07/2020	12:00	0.4	90	27/07/2020	12:00	0.9	90	28/07/2020	12:00	1.3	90
25/07/2020	13:00	0.4	90	26/07/2020	13:00	0.9	157.5	27/07/2020	13:00	1.3	202.5	28/07/2020	13:00	1.8	112.5
25/07/2020	14:00	0.4	90	26/07/2020	14:00	0.9	225	27/07/2020	14:00	1.3	135	28/07/2020	14:00	1.3	112.5
25/07/2020	15:00	0.9	45	26/07/2020	15:00	0.9	225	27/07/2020	15:00	1.8	135	28/07/2020	15:00	0.9	112.5
25/07/2020	16:00	0.9	67.5	26/07/2020	16:00	1.8	247.5	27/07/2020	16:00	1.8	270	28/07/2020	16:00	1.3	90
25/07/2020	17:00	0.9	90	26/07/2020	17:00	0.9	225	27/07/2020	17:00	1.3	90	28/07/2020	17:00	1.3	112.5
25/07/2020	18:00	0.9	67.5	26/07/2020	18:00	0.9	45	27/07/2020	18:00	1.3	247.5	28/07/2020	18:00	0.9	112.5
25/07/2020	19:00	0.9	67.5	26/07/2020	19:00	0.4	67.5	27/07/2020	19:00	1.8	225	28/07/2020	19:00	0.9	112.5
25/07/2020	20:00	0.9	45	26/07/2020	20:00	0.4	67.5	27/07/2020	20:00	0.9	135	28/07/2020	20:00	0.9	112.5
25/07/2020	21:00	0.9	67.5	26/07/2020	21:00	0.4	90	27/07/2020	21:00	1.3	112.5	28/07/2020	21:00	0.9	135
25/07/2020	22:00	1.3	45	26/07/2020	22:00	0.4	67.5	27/07/2020	22:00	0.9	90	28/07/2020	22:00	0.9	90
25/07/2020	23:00	1.3	67.5	26/07/2020	23:00	0.4	67.5	27/07/2020	23:00	0.9	112.5	28/07/2020	23:00	0.9	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
29/07/2020	0:00	1.8	67.5	30/07/2020	0:00	1.8	45	31/07/2020	0:00	1.8	90				
29/07/2020	1:00	1.3	135	30/07/2020	1:00	2.2	22.5	31/07/2020	1:00	1.3	112.5				
29/07/2020	2:00	1.3	112.5	30/07/2020	2:00	2.2	90	31/07/2020	2:00	1.8	112.5				
29/07/2020	3:00	1.8	112.5	30/07/2020	3:00	1.8	90	31/07/2020	3:00	1.8	90				
29/07/2020	4:00	0.9	22.5	30/07/2020	4:00	2.2	90	31/07/2020	4:00	1.3	112.5				
29/07/2020	5:00	1.3	90	30/07/2020	5:00	2.2	90	31/07/2020	5:00	1.3	112.5				
29/07/2020	6:00	2.2	112.5	30/07/2020	6:00	2.2	90	31/07/2020	6:00	1.8	90				
29/07/2020	7:00	2.7	45	30/07/2020	7:00	2.2	90	31/07/2020	7:00	1.3	112.5				
29/07/2020	8:00	1.3	90	30/07/2020	8:00	2.2	67.5	31/07/2020	8:00	1.3	90				
29/07/2020	9:00	1.8	67.5	30/07/2020	9:00	2.7	67.5	31/07/2020	9:00	1.8	22.5				
29/07/2020	10:00	1.8	90	30/07/2020	10:00	1.8	135	31/07/2020	10:00	0.9	90				
29/07/2020	11:00	1.3	90	30/07/2020	11:00	1.3	112.5	31/07/2020	11:00	1.3	90				
29/07/2020	12:00	1.8	112.5	30/07/2020	12:00	2.2	90	31/07/2020	12:00	2.2	157.5				
29/07/2020	13:00	1.8	112.5	30/07/2020	13:00	2.2	67.5	31/07/2020	13:00	2.7	135				
29/07/2020	14:00	2.2	90	30/07/2020	14:00	2.2	90	31/07/2020	14:00	1.3	90				
29/07/2020	15:00	3.1	90	30/07/2020	15:00	2.7	90	31/07/2020	15:00	1.8	112.5				
29/07/2020	16:00	1.8	45	30/07/2020	16:00	1.8	90	31/07/2020	16:00	1.8	112.5				
29/07/2020	17:00	2.2	90	30/07/2020	17:00	2.2	112.5	31/07/2020	17:00	2.2	112.5				
29/07/2020	18:00	2.2	67.5	30/07/2020	18:00	2.2	112.5	31/07/2020	18:00	1.8	112.5				
29/07/2020	19:00	2.7	112.5	30/07/2020	19:00	1.8	90	31/07/2020	19:00	2.2	112.5				
29/07/2020	20:00	2.2	45	30/07/2020	20:00	2.7	112.5	31/07/2020	20:00	2.2	247.5				
29/07/2020	21:00	2.2	67.5	30/07/2020	21:00	1.8	67.5	31/07/2020	21:00	2.7	90				
29/07/2020	22:00	2.2	90	30/07/2020	22:00	1.8	67.5	31/07/2020	22:00	2.7	315				
29/07/2020	23:00	2.7	45	30/07/2020	23:00	2.2	90	31/07/2020	23:00	2.7	135				



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
01/08/2020	0:00	0.4	270	02/08/2020	0:00	0.4	247.5	03/08/2020	0:00	0.9	45	04/08/2020	0:00	0.9	67.5
01/08/2020	1:00	0.4	112.5	02/08/2020	1:00	0.4	247.5	03/08/2020	1:00	0.9	45	04/08/2020	1:00	1.3	90
01/08/2020	2:00	0.4	112.5	02/08/2020	2:00	0.4	247.5	03/08/2020	2:00	0.4	67.5	04/08/2020	2:00	0.4	90
01/08/2020	3:00	0.4	112.5	02/08/2020	3:00	0.4	225	03/08/2020	3:00	0.4	67.5	04/08/2020	3:00	1.3	45
01/08/2020	4:00	0.4	135	02/08/2020	4:00	0.4	247.5	03/08/2020	4:00	0.4	67.5	04/08/2020	4:00	1.3	67.5
01/08/2020	5:00	0.4	135	02/08/2020	5:00	0.4	225	03/08/2020	5:00	0.4	45	04/08/2020	5:00	0.9	67.5
01/08/2020	6:00	0.9	112.5	02/08/2020	6:00	0.4	247.5	03/08/2020	6:00	0.4	45	04/08/2020	6:00	1.3	45
01/08/2020	7:00	0.9	112.5	02/08/2020	7:00	0.4	247.5	03/08/2020	7:00	0.9	67.5	04/08/2020	7:00	1.3	45
01/08/2020	8:00	1.3	112.5	02/08/2020	8:00	0.4	247.5	03/08/2020	8:00	0.9	90	04/08/2020	8:00	1.3	45
01/08/2020	9:00	1.8	112.5	02/08/2020	9:00	0.4	247.5	03/08/2020	9:00	0.4	90	04/08/2020	9:00	0.9	247.5
01/08/2020	10:00	1.8	112.5	02/08/2020	10:00	0.4	247.5	03/08/2020	10:00	0.4	157.5	04/08/2020	10:00	0.9	247.5
01/08/2020	11:00	0.9	135	02/08/2020	11:00	0.4	247.5	03/08/2020	11:00	0.9	112.5	04/08/2020	11:00	0.9	247.5
01/08/2020	12:00	0.9	90	02/08/2020	12:00	0.9	225	03/08/2020	12:00	0.4	112.5	04/08/2020	12:00	0.4	247.5
01/08/2020	13:00	1.3	90	02/08/2020	13:00	0.9	202.5	03/08/2020	13:00	0.4	90	04/08/2020	13:00	0.4	90
01/08/2020	14:00	0.9	247.5	02/08/2020	14:00	0.9	180	03/08/2020	14:00	0.4	112.5	04/08/2020	14:00	0.4	112.5
01/08/2020	15:00	0.9	247.5	02/08/2020	15:00	0.9	225	03/08/2020	15:00	0.9	135	04/08/2020	15:00	1.3	90
01/08/2020	16:00	1.3	270	02/08/2020	16:00	0.4	202.5	03/08/2020	16:00	1.3	157.5	04/08/2020	16:00	1.8	112.5
01/08/2020	17:00	0.9	225	02/08/2020	17:00	0.4	157.5	03/08/2020	17:00	1.3	112.5	04/08/2020	17:00	0.9	112.5
01/08/2020	18:00	0.9	247.5	02/08/2020	18:00	0.9	225	03/08/2020	18:00	1.3	112.5	04/08/2020	18:00	0.9	112.5
01/08/2020	19:00	0.9	315	02/08/2020	19:00	1.3	247.5	03/08/2020	19:00	1.3	157.5	04/08/2020	19:00	1.3	112.5
01/08/2020	20:00	0.9	135	02/08/2020	20:00	1.3	247.5	03/08/2020	20:00	1.3	135	04/08/2020	20:00	1.3	112.5
01/08/2020	21:00	0.9	112.5	02/08/2020	21:00	0.9	270	03/08/2020	21:00	0.4	90	04/08/2020	21:00	1.3	112.5
01/08/2020	22:00	1.3	90	02/08/2020	22:00	0.9	90	03/08/2020	22:00	0.4	112.5	04/08/2020	22:00	0.4	112.5
01/08/2020	23:00	1.8	135	02/08/2020	23:00	0.9	135	03/08/2020	23:00	0.4	112.5	04/08/2020	23:00	0	67.5

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
05/08/2020	0:00	0.9	112.5	06/08/2020	0:00	0.4	112.5	07/08/2020	0:00	0.9	112.5	08/08/2020	0:00	1.3	112.5
05/08/2020	1:00	0.9	112.5	06/08/2020	1:00	0	22.5	07/08/2020	1:00	1.3	112.5	08/08/2020	1:00	1.3	112.5
05/08/2020	2:00	1.3	90	06/08/2020	2:00	0	22.5	07/08/2020	2:00	0.9	112.5	08/08/2020	2:00	1.3	90
05/08/2020	3:00	0.9	90	06/08/2020	3:00	0.9	112.5	07/08/2020	3:00	0.9	112.5	08/08/2020	3:00	0.9	112.5
05/08/2020	4:00	0.9	90	06/08/2020	4:00	0.9	112.5	07/08/2020	4:00	0.9	112.5	08/08/2020	4:00	0.9	112.5
05/08/2020	5:00	1.3	112.5	06/08/2020	5:00	0.9	112.5	07/08/2020	5:00	0.4	0	08/08/2020	5:00	0.9	112.5
05/08/2020	6:00	1.8	90	06/08/2020	6:00	0.9	67.5	07/08/2020	6:00	0.4	135	08/08/2020	6:00	0.9	112.5
05/08/2020	7:00	0.9	135	06/08/2020	7:00	0.9	112.5	07/08/2020	7:00	0.4	112.5	08/08/2020	7:00	0.9	112.5
05/08/2020	8:00	1.8	90	06/08/2020	8:00	0.4	112.5	07/08/2020	8:00	0.4	112.5	08/08/2020	8:00	0.4	112.5
05/08/2020	9:00	1.8	90	06/08/2020	9:00	1.8	90	07/08/2020	9:00	0.9	112.5	08/08/2020	9:00	0.4	90
05/08/2020	10:00	2.7	112.5	06/08/2020	10:00	0.4	112.5	07/08/2020	10:00	1.8	90	08/08/2020	10:00	0.9	112.5
05/08/2020	11:00	2.7	135	06/08/2020	11:00	0.9	112.5	07/08/2020	11:00	1.3	112.5	08/08/2020	11:00	0.9	112.5
05/08/2020	12:00	2.2	112.5	06/08/2020	12:00	1.3	112.5	07/08/2020	12:00	0.9	112.5	08/08/2020	12:00	1.3	112.5
05/08/2020	13:00	2.2	112.5	06/08/2020	13:00	0.9	112.5	07/08/2020	13:00	0.9	112.5	08/08/2020	13:00	1.3	112.5
05/08/2020	14:00	2.7	90	06/08/2020	14:00	0.9	90	07/08/2020	14:00	0.9	90	08/08/2020	14:00	2.2	112.5
05/08/2020	15:00	2.7	112.5	06/08/2020	15:00	1.3	90	07/08/2020	15:00	1.3	112.5	08/08/2020	15:00	1.8	90
05/08/2020	16:00	2.2	112.5	06/08/2020	16:00	0.9	112.5	07/08/2020	16:00	1.3	112.5	08/08/2020	16:00	2.2	90
05/08/2020	17:00	2.2	112.5	06/08/2020	17:00	0.9	112.5	07/08/2020	17:00	1.3	112.5	08/08/2020	17:00	1.3	90
05/08/2020	18:00	1.8	247.5	06/08/2020	18:00	0.9	112.5	07/08/2020	18:00	0.4	112.5	08/08/2020	18:00	2.2	112.5
05/08/2020	19:00	0.9	135	06/08/2020	19:00	0.9	135	07/08/2020	19:00	0.4	112.5	08/08/2020	19:00	1.3	90
05/08/2020	20:00	0.9	67.5	06/08/2020	20:00	0.9	112.5	07/08/2020	20:00	1.3	135	08/08/2020	20:00	1.3	112.5
05/08/2020	21:00	0.4	202.5	06/08/2020	21:00	0.9	112.5	07/08/2020	21:00	1.3	90	08/08/2020	21:00	0.9	112.5
05/08/2020	22:00	0.4	270	06/08/2020	22:00	0.9	112.5	07/08/2020	22:00	0.9	112.5	08/08/2020	22:00	0.9	112.5
05/08/2020	23:00	0.4	90	06/08/2020	23:00	0.9	112.5	07/08/2020	23:00	0.9	112.5	08/08/2020	23:00	0.9	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
09/08/2020	0:00	1.3	112.5	10/08/2020	0:00	0.4	90	11/08/2020	0:00	0.4	112.5	12/08/2020	0:00	1.8	112.5
09/08/2020	1:00	0.9	112.5	10/08/2020	1:00	0.4	67.5	11/08/2020	1:00	0.4	112.5	12/08/2020	1:00	1.8	90
09/08/2020	2:00	0.4	112.5	10/08/2020	2:00	0.4	180	11/08/2020	2:00	0.4	112.5	12/08/2020	2:00	1.8	90
09/08/2020	3:00	0	157.5	10/08/2020	3:00	0.4	112.5	11/08/2020	3:00	0.4	112.5	12/08/2020	3:00	1.8	112.5
09/08/2020	4:00	0.4	112.5	10/08/2020	4:00	0.4	112.5	11/08/2020	4:00	0.9	67.5	12/08/2020	4:00	1.3	112.5
09/08/2020	5:00	0	112.5	10/08/2020	5:00	0	112.5	11/08/2020	5:00	0.9	67.5	12/08/2020	5:00	1.8	45
09/08/2020	6:00	0	112.5	10/08/2020	6:00	0.4	90	11/08/2020	6:00	0.4	112.5	12/08/2020	6:00	0.4	180
09/08/2020	7:00	0	112.5	10/08/2020	7:00	0.4	225	11/08/2020	7:00	0.4	112.5	12/08/2020	7:00	0.4	157.5
09/08/2020	8:00	0	135	10/08/2020	8:00	1.3	225	11/08/2020	8:00	0.4	112.5	12/08/2020	8:00	0.4	247.5
09/08/2020	9:00	0	270	10/08/2020	9:00	0.9	270	11/08/2020	9:00	0.9	45	12/08/2020	9:00	0.4	112.5
09/08/2020	10:00	0.4	135	10/08/2020	10:00	1.3	247.5	11/08/2020	10:00	0.4	67.5	12/08/2020	10:00	0.9	90
09/08/2020	11:00	0.4	112.5	10/08/2020	11:00	0.9	247.5	11/08/2020	11:00	0.9	67.5	12/08/2020	11:00	1.8	112.5
09/08/2020	12:00	1.3	112.5	10/08/2020	12:00	1.3	247.5	11/08/2020	12:00	0.9	90	12/08/2020	12:00	2.7	90
09/08/2020	13:00	1.3	112.5	10/08/2020	13:00	0.9	270	11/08/2020	13:00	0.9	67.5	12/08/2020	13:00	1.3	112.5
09/08/2020	14:00	1.8	112.5	10/08/2020	14:00	1.8	270	11/08/2020	14:00	0.9	67.5	12/08/2020	14:00	1.3	112.5
09/08/2020	15:00	1.3	90	10/08/2020	15:00	0.9	112.5	11/08/2020	15:00	0.9	135	12/08/2020	15:00	1.3	112.5
09/08/2020	16:00	0.9	90	10/08/2020	16:00	1.8	112.5	11/08/2020	16:00	0.9	112.5	12/08/2020	16:00	0.9	112.5
09/08/2020	17:00	0.9	112.5	10/08/2020	17:00	1.3	112.5	11/08/2020	17:00	1.3	90	12/08/2020	17:00	1.8	90
09/08/2020	18:00	0.4	22.5	10/08/2020	18:00	0.9	112.5	11/08/2020	18:00	1.8	112.5	12/08/2020	18:00	1.3	112.5
09/08/2020	19:00	0.4	22.5	10/08/2020	19:00	1.3	112.5	11/08/2020	19:00	1.3	90	12/08/2020	19:00	0.9	112.5
09/08/2020	20:00	0.4	112.5	10/08/2020	20:00	0.9	112.5	11/08/2020	20:00	1.8	112.5	12/08/2020	20:00	1.3	90
09/08/2020	21:00	0.4	112.5	10/08/2020	21:00	0.4	112.5	11/08/2020	21:00	1.8	112.5	12/08/2020	21:00	2.2	90
09/08/2020	22:00	0.4	112.5	10/08/2020	22:00	0.4	67.5	11/08/2020	22:00	1.8	112.5	12/08/2020	22:00	1.3	112.5
09/08/2020	23:00	0.4	112.5	10/08/2020	23:00	0.4	90	11/08/2020	23:00	2.2	90	12/08/2020	23:00	1.8	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
13/08/2020	0:00	0.9	112.5	14/08/2020	0:00	1.3	112.5	15/08/2020	0:00	0.9	112.5	16/08/2020	0:00	0.9	112.5
13/08/2020	1:00	1.3	90	14/08/2020	1:00	0.9	112.5	15/08/2020	1:00	0.9	112.5	16/08/2020	1:00	1.3	112.5
13/08/2020	2:00	1.3	112.5	14/08/2020	2:00	0.4	112.5	15/08/2020	2:00	0	135	16/08/2020	2:00	0.9	112.5
13/08/2020	3:00	1.3	112.5	14/08/2020	3:00	0.4	135	15/08/2020	3:00	0.9	112.5	16/08/2020	3:00	0.9	135
13/08/2020	4:00	0	112.5	14/08/2020	4:00	0.9	112.5	15/08/2020	4:00	0.4	112.5	16/08/2020	4:00	0.4	112.5
13/08/2020	5:00	0	270	14/08/2020	5:00	1.3	112.5	15/08/2020	5:00	0.4	112.5	16/08/2020	5:00	1.8	112.5
13/08/2020	6:00	0.4	112.5	14/08/2020	6:00	1.3	112.5	15/08/2020	6:00	0.4	112.5	16/08/2020	6:00	0.4	67.5
13/08/2020	7:00	0.4	112.5	14/08/2020	7:00	0.9	337.5	15/08/2020	7:00	0	90	16/08/2020	7:00	0	112.5
13/08/2020	8:00	0	112.5	14/08/2020	8:00	0	67.5	15/08/2020	8:00	0	90	16/08/2020	8:00	0	112.5
13/08/2020	9:00	0.9	112.5	14/08/2020	9:00	0.4	112.5	15/08/2020	9:00	0.4	135	16/08/2020	9:00	0.4	112.5
13/08/2020	10:00	1.8	90	14/08/2020	10:00	0.9	112.5	15/08/2020	10:00	0.4	157.5	16/08/2020	10:00	0.9	135
13/08/2020	11:00	1.8	90	14/08/2020	11:00	1.3	112.5	15/08/2020	11:00	0.9	112.5	16/08/2020	11:00	0.4	112.5
13/08/2020	12:00	3.1	112.5	14/08/2020	12:00	1.3	90	15/08/2020	12:00	0.9	112.5	16/08/2020	12:00	0.9	112.5
13/08/2020	13:00	1.8	90	14/08/2020	13:00	1.3	112.5	15/08/2020	13:00	0.4	90	16/08/2020	13:00	1.3	90
13/08/2020	14:00	1.8	112.5	14/08/2020	14:00	1.3	112.5	15/08/2020	14:00	0.9	67.5	16/08/2020	14:00	1.3	112.5
13/08/2020	15:00	0.4	180	14/08/2020	15:00	1.3	112.5	15/08/2020	15:00	0.9	67.5	16/08/2020	15:00	1.3	135
13/08/2020	16:00	1.3	112.5	14/08/2020	16:00	0.9	90	15/08/2020	16:00	0.9	67.5	16/08/2020	16:00	1.3	90
13/08/2020	17:00	1.3	90	14/08/2020	17:00	0.9	112.5	15/08/2020	17:00	0.4	90	16/08/2020	17:00	1.8	90
13/08/2020	18:00	1.3	112.5	14/08/2020	18:00	0.9	90	15/08/2020	18:00	0.9	67.5	16/08/2020	18:00	1.3	90
13/08/2020	19:00	1.3	112.5	14/08/2020	19:00	0.4	90	15/08/2020	19:00	0.4	112.5	16/08/2020	19:00	0.9	90
13/08/2020	20:00	0.9	112.5	14/08/2020	20:00	0.4	112.5	15/08/2020	20:00	0.4	90	16/08/2020	20:00	1.3	112.5
13/08/2020	21:00	1.3	112.5	14/08/2020	21:00	0.4	112.5	15/08/2020	21:00	0.4	157.5	16/08/2020	21:00	0.9	112.5
13/08/2020	22:00	0.9	112.5	14/08/2020	22:00	0.9	112.5	15/08/2020	22:00	0.9	112.5	16/08/2020	22:00	0.4	67.5
13/08/2020	23:00	0.9	90	14/08/2020	23:00	0.9	112.5	15/08/2020	23:00	1.3	112.5	16/08/2020	23:00	0.4	135

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
17/08/2020	0:00	0.9	112.5	18/08/2020	0:00	0.4	337.5	19/08/2020	0:00	4.5	45	20/08/2020	0:00	0.4	112.5
17/08/2020	1:00	1.3	90	18/08/2020	1:00	0.4	45	19/08/2020	1:00	3.1	67.5	20/08/2020	1:00	0.4	67.5
17/08/2020	2:00	1.3	112.5	18/08/2020	2:00	0.9	45	19/08/2020	2:00	3.6	67.5	20/08/2020	2:00	0.9	90
17/08/2020	3:00	1.3	157.5	18/08/2020	3:00	1.3	112.5	19/08/2020	3:00	4	22.5	20/08/2020	3:00	0.9	112.5
17/08/2020	4:00	1.3	90	18/08/2020	4:00	0.9	112.5	19/08/2020	4:00	5.4	90	20/08/2020	4:00	0.9	45
17/08/2020	5:00	0.9	112.5	18/08/2020	5:00	0.9	112.5	19/08/2020	5:00	4	90	20/08/2020	5:00	0.9	90
17/08/2020	6:00	0.4	112.5	18/08/2020	6:00	0.9	112.5	19/08/2020	6:00	4.9	112.5	20/08/2020	6:00	0.9	90
17/08/2020	7:00	0.4	112.5	18/08/2020	7:00	1.3	135	19/08/2020	7:00	4	90	20/08/2020	7:00	1.3	90
17/08/2020	8:00	0.9	112.5	18/08/2020	8:00	1.3	135	19/08/2020	8:00	4	90	20/08/2020	8:00	1.3	112.5
17/08/2020	9:00	0.9	112.5	18/08/2020	9:00	0.9	67.5	19/08/2020	9:00	3.1	112.5	20/08/2020	9:00	1.3	112.5
17/08/2020	10:00	0.9	112.5	18/08/2020	10:00	1.3	45	19/08/2020	10:00	3.1	90	20/08/2020	10:00	0.9	112.5
17/08/2020	11:00	1.3	22.5	18/08/2020	11:00	0.9	67.5	19/08/2020	11:00	3.1	90	20/08/2020	11:00	0.9	90
17/08/2020	12:00	0.9	112.5	18/08/2020	12:00	1.3	67.5	19/08/2020	12:00	3.1	90	20/08/2020	12:00	1.3	112.5
17/08/2020	13:00	0.9	112.5	18/08/2020	13:00	1.8	90	19/08/2020	13:00	2.7	112.5	20/08/2020	13:00	1.3	112.5
17/08/2020	14:00	1.3	45	18/08/2020	14:00	1.3	112.5	19/08/2020	14:00	2.7	112.5	20/08/2020	14:00	0.9	90
17/08/2020	15:00	0.9	270	18/08/2020	15:00	1.3	45	19/08/2020	15:00	2.7	112.5	20/08/2020	15:00	0.9	112.5
17/08/2020	16:00	0.9	90	18/08/2020	16:00	0.9	90	19/08/2020	16:00	2.2	112.5	20/08/2020	16:00	0.4	112.5
17/08/2020	17:00	0.9	90	18/08/2020	17:00	2.7	112.5	19/08/2020	17:00	2.2	112.5	20/08/2020	17:00	0.4	112.5
17/08/2020	18:00	0.9	45	18/08/2020	18:00	2.2	67.5	19/08/2020	18:00	0.4	112.5	20/08/2020	18:00	0.9	112.5
17/08/2020	19:00	0.9	67.5	18/08/2020	19:00	4	90	19/08/2020	19:00	0.4	112.5	20/08/2020	19:00	0.9	112.5
17/08/2020	20:00	0.4	45	18/08/2020	20:00	2.7	112.5	19/08/2020	20:00	1.3	135	20/08/2020	20:00	0.9	112.5
17/08/2020	21:00	0.9	22.5	18/08/2020	21:00	2.7	112.5	19/08/2020	21:00	1.3	112.5	20/08/2020	21:00	0.9	112.5
17/08/2020	22:00	2.2	337.5	18/08/2020	22:00	2.7	112.5	19/08/2020	22:00	1.3	112.5	20/08/2020	22:00	1.3	112.5
17/08/2020	23:00	0.9	90	18/08/2020	23:00	2.7	112.5	19/08/2020	23:00	1.8	112.5	20/08/2020	23:00	0.9	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
21/08/2020	0:00	0.4	22.5	22/08/2020	0:00	0.9	112.5	23/08/2020	0:00	0	112.5	24/08/2020	0:00	1.3	90
21/08/2020	1:00	0.4	22.5	22/08/2020	1:00	0.4	112.5	23/08/2020	1:00	0	112.5	24/08/2020	1:00	0.9	45
21/08/2020	2:00	0.4	67.5	22/08/2020	2:00	0.9	112.5	23/08/2020	2:00	0	112.5	24/08/2020	2:00	0.4	67.5
21/08/2020	3:00	0.4	292.5	22/08/2020	3:00	0.4	112.5	23/08/2020	3:00	0	112.5	24/08/2020	3:00	0.9	67.5
21/08/2020	4:00	0.4	22.5	22/08/2020	4:00	0.4	112.5	23/08/2020	4:00	1.3	67.5	24/08/2020	4:00	0.9	225
21/08/2020	5:00	0.4	337.5	22/08/2020	5:00	0.4	112.5	23/08/2020	5:00	1.3	90	24/08/2020	5:00	0.9	225
21/08/2020	6:00	0.9	112.5	22/08/2020	6:00	0	135	23/08/2020	6:00	1.3	90	24/08/2020	6:00	1.3	225
21/08/2020	7:00	0.4	45	22/08/2020	7:00	0	135	23/08/2020	7:00	1.3	90	24/08/2020	7:00	0.9	247.5
21/08/2020	8:00	0.4	135	22/08/2020	8:00	0	135	23/08/2020	8:00	1.3	90	24/08/2020	8:00	0.9	247.5
21/08/2020	9:00	0.4	112.5	22/08/2020	9:00	0	135	23/08/2020	9:00	1.3	292.5	24/08/2020	9:00	0.4	247.5
21/08/2020	10:00	0.4	135	22/08/2020	10:00	0.4	202.5	23/08/2020	10:00	1.3	135	24/08/2020	10:00	0.9	225
21/08/2020	11:00	0.4	112.5	22/08/2020	11:00	0.4	112.5	23/08/2020	11:00	0.9	112.5	24/08/2020	11:00	1.3	247.5
21/08/2020	12:00	1.3	112.5	22/08/2020	12:00	0.4	135	23/08/2020	12:00	0.9	112.5	24/08/2020	12:00	0.9	270
21/08/2020	13:00	1.3	90	22/08/2020	13:00	0.4	112.5	23/08/2020	13:00	0.9	112.5	24/08/2020	13:00	0.9	270
21/08/2020	14:00	1.3	112.5	22/08/2020	14:00	0.9	112.5	23/08/2020	14:00	0.9	112.5	24/08/2020	14:00	3.1	247.5
21/08/2020	15:00	1.8	90	22/08/2020	15:00	0.9	112.5	23/08/2020	15:00	0.9	90	24/08/2020	15:00	2.7	247.5
21/08/2020	16:00	1.8	90	22/08/2020	16:00	0.9	112.5	23/08/2020	16:00	1.3	112.5	24/08/2020	16:00	3.1	112.5
21/08/2020	17:00	1.3	90	22/08/2020	17:00	0.9	112.5	23/08/2020	17:00	1.3	112.5	24/08/2020	17:00	2.7	112.5
21/08/2020	18:00	0.9	112.5	22/08/2020	18:00	1.3	112.5	23/08/2020	18:00	1.3	112.5	24/08/2020	18:00	0.9	67.5
21/08/2020	19:00	1.3	90	22/08/2020	19:00	1.3	90	23/08/2020	19:00	0.4	112.5	24/08/2020	19:00	0.9	67.5
21/08/2020	20:00	0.9	112.5	22/08/2020	20:00	1.3	112.5	23/08/2020	20:00	0.4	90	24/08/2020	20:00	0.9	45
21/08/2020	21:00	0.4	112.5	22/08/2020	21:00	0.9	135	23/08/2020	21:00	0	157.5	24/08/2020	21:00	0.9	247.5
21/08/2020	22:00	0.9	112.5	22/08/2020	22:00	0.9	112.5	23/08/2020	22:00	0	157.5	24/08/2020	22:00	0.4	247.5
21/08/2020	23:00	1.3	112.5	22/08/2020	23:00	0.9	112.5	23/08/2020	23:00	0	112.5	24/08/2020	23:00	1.3	247.5

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
25/08/2020	0:00	2.2	247.5	26/08/2020	0:00	0.9	67.5	27/08/2020	0:00	0	90	28/08/2020	0:00	0.4	45
25/08/2020	1:00	2.7	247.5	26/08/2020	1:00	1.3	67.5	27/08/2020	1:00	0	90	28/08/2020	1:00	0.4	67.5
25/08/2020	2:00	2.7	247.5	26/08/2020	2:00	0.9	45	27/08/2020	2:00	0.4	202.5	28/08/2020	2:00	1.3	67.5
25/08/2020	3:00	2.7	270	26/08/2020	3:00	0.9	45	27/08/2020	3:00	0.4	180	28/08/2020	3:00	0.9	67.5
25/08/2020	4:00	2.2	270	26/08/2020	4:00	0.9	45	27/08/2020	4:00	0.9	180	28/08/2020	4:00	0.4	90
25/08/2020	5:00	1.8	247.5	26/08/2020	5:00	1.3	247.5	27/08/2020	5:00	0.4	90	28/08/2020	5:00	0	22.5
25/08/2020	6:00	1.8	247.5	26/08/2020	6:00	2.2	247.5	27/08/2020	6:00	0.4	22.5	28/08/2020	6:00	0	112.5
25/08/2020	7:00	3.1	247.5	26/08/2020	7:00	2.2	247.5	27/08/2020	7:00	0.9	22.5	28/08/2020	7:00	0.4	112.5
25/08/2020	8:00	2.7	247.5	26/08/2020	8:00	2.7	247.5	27/08/2020	8:00	0.9	22.5	28/08/2020	8:00	0.4	112.5
25/08/2020	9:00	1.3	247.5	26/08/2020	9:00	1.8	225	27/08/2020	9:00	0.9	135	28/08/2020	9:00	0.4	112.5
25/08/2020	10:00	1.8	247.5	26/08/2020	10:00	1.3	247.5	27/08/2020	10:00	0.4	135	28/08/2020	10:00	0.4	112.5
25/08/2020	11:00	1.8	247.5	26/08/2020	11:00	0.9	247.5	27/08/2020	11:00	0.4	112.5	28/08/2020	11:00	0.9	135
25/08/2020	12:00	1.3	247.5	26/08/2020	12:00	0.9	270	27/08/2020	12:00	0.4	22.5	28/08/2020	12:00	1.3	247.5
25/08/2020	13:00	1.8	247.5	26/08/2020	13:00	1.3	247.5	27/08/2020	13:00	0.4	67.5	28/08/2020	13:00	1.3	247.5
25/08/2020	14:00	1.3	45	26/08/2020	14:00	1.8	45	27/08/2020	14:00	0.4	67.5	28/08/2020	14:00	0.9	112.5
25/08/2020	15:00	0.9	67.5	26/08/2020	15:00	1.8	45	27/08/2020	15:00	0.9	45	28/08/2020	15:00	0.9	112.5
25/08/2020	16:00	2.2	45	26/08/2020	16:00	0.9	45	27/08/2020	16:00	1.3	112.5	28/08/2020	16:00	0.9	112.5
25/08/2020	17:00	1.3	45	26/08/2020	17:00	1.3	225	27/08/2020	17:00	0.9	112.5	28/08/2020	17:00	0.9	112.5
25/08/2020	18:00	1.3	45	26/08/2020	18:00	1.8	247.5	27/08/2020	18:00	0.9	67.5	28/08/2020	18:00	1.3	112.5
25/08/2020	19:00	1.3	45	26/08/2020	19:00	1.3	247.5	27/08/2020	19:00	1.8	90	28/08/2020	19:00	0.9	135
25/08/2020	20:00	1.3	67.5	26/08/2020	20:00	0.4	225	27/08/2020	20:00	0.9	67.5	28/08/2020	20:00	0.9	135
25/08/2020	21:00	0.9	67.5	26/08/2020	21:00	1.3	45	27/08/2020	21:00	0.4	90	28/08/2020	21:00	0.4	112.5
25/08/2020	22:00	0.9	67.5	26/08/2020	22:00	1.3	67.5	27/08/2020	22:00	0.9	22.5	28/08/2020	22:00	0	112.5
25/08/2020	23:00	0.9	45	26/08/2020	23:00	1.8	45	27/08/2020	23:00	0.9	90	28/08/2020	23:00	0	135

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
29/08/2020	0:00	0.4	135	30/08/2020	0:00	0	112.5	31/08/2020	0:00	0.4	67.5				
29/08/2020	1:00	0.4	112.5	30/08/2020	1:00	0	112.5	31/08/2020	1:00	0.4	112.5				
29/08/2020	2:00	0.4	90	30/08/2020	2:00	0	135	31/08/2020	2:00	0.9	22.5				
29/08/2020	3:00	0.4	112.5	30/08/2020	3:00	0.4	135	31/08/2020	3:00	0.9	90				
29/08/2020	4:00	1.3	112.5	30/08/2020	4:00	0.4	135	31/08/2020	4:00	0.9	292.5				
29/08/2020	5:00	0.9	90	30/08/2020	5:00	0.4	202.5	31/08/2020	5:00	0.4	292.5				
29/08/2020	6:00	0.9	247.5	30/08/2020	6:00	0.4	247.5	31/08/2020	6:00	0.4	292.5				
29/08/2020	7:00	0.9	247.5	30/08/2020	7:00	0.9	157.5	31/08/2020	7:00	0.9	22.5				
29/08/2020	8:00	0.4	247.5	30/08/2020	8:00	0.9	157.5	31/08/2020	8:00	0.4	22.5				
29/08/2020	9:00	1.3	247.5	30/08/2020	9:00	0.4	135	31/08/2020	9:00	1.3	45				
29/08/2020	10:00	0.4	247.5	30/08/2020	10:00	0.9	247.5	31/08/2020	10:00	0.9	22.5				
29/08/2020	11:00	0.4	247.5	30/08/2020	11:00	0.4	225	31/08/2020	11:00	0.4	22.5				
29/08/2020	12:00	0.4	247.5	30/08/2020	12:00	0.4	157.5	31/08/2020	12:00	0.9	45				
29/08/2020	13:00	0.4	225	30/08/2020	13:00	0.9	135	31/08/2020	13:00	0.9	337.5				
29/08/2020	14:00	0.4	202.5	30/08/2020	14:00	0.9	112.5	31/08/2020	14:00	1.3	270				
29/08/2020	15:00	0.4	180	30/08/2020	15:00	0.9	112.5	31/08/2020	15:00	0.9	112.5				
29/08/2020	16:00	0.4	225	30/08/2020	16:00	0.9	112.5	31/08/2020	16:00	1.3	90				
29/08/2020	17:00	0.4	202.5	30/08/2020	17:00	0.4	112.5	31/08/2020	17:00	1.3	112.5				
29/08/2020	18:00	0.4	157.5	30/08/2020	18:00	0.4	90	31/08/2020	18:00	0.9	112.5				
29/08/2020	19:00	0.4	225	30/08/2020	19:00	0.4	90	31/08/2020	19:00	0.9	112.5				
29/08/2020	20:00	0.4	135	30/08/2020	20:00	0.9	247.5	31/08/2020	20:00	1.3	135				
29/08/2020	21:00	0	90	30/08/2020	21:00	0.9	247.5	31/08/2020	21:00	0.9	135				
29/08/2020	22:00	0	112.5	30/08/2020	22:00	1.3	112.5	31/08/2020	22:00	0.9	112.5				
29/08/2020	23:00	0	112.5	30/08/2020	23:00	1.3	112.5	31/08/2020	23:00	0.9	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
01/09/2020	0:00	0.4	225	02/09/2020	0:00	0	135	03/09/2020	0:00	0.9	225	04/09/2020	0:00	0.4	112.5
01/09/2020	1:00	0.9	225	02/09/2020	1:00	0	90	03/09/2020	1:00	0.9	247.5	04/09/2020	1:00	0.4	112.5
01/09/2020	2:00	0.9	112.5	02/09/2020	2:00	0	180	03/09/2020	2:00	0.9	270	04/09/2020	2:00	0.9	112.5
01/09/2020	3:00	1.3	180	02/09/2020	3:00	0.9	112.5	03/09/2020	3:00	0.9	225	04/09/2020	3:00	1.3	112.5
01/09/2020	4:00	0.4	337.5	02/09/2020	4:00	0.4	247.5	03/09/2020	4:00	0.9	247.5	04/09/2020	4:00	0	112.5
01/09/2020	5:00	0.4	247.5	02/09/2020	5:00	0.4	247.5	03/09/2020	5:00	1.3	247.5	04/09/2020	5:00	0	112.5
01/09/2020	6:00	0.4	225	02/09/2020	6:00	0.4	202.5	03/09/2020	6:00	0.4	247.5	04/09/2020	6:00	0	112.5
01/09/2020	7:00	0.4	247.5	02/09/2020	7:00	0.4	225	03/09/2020	7:00	0.4	247.5	04/09/2020	7:00	0.4	112.5
01/09/2020	8:00	0.4	180	02/09/2020	8:00	0.4	247.5	03/09/2020	8:00	0.4	112.5	04/09/2020	8:00	0.4	112.5
01/09/2020	9:00	0.9	225	02/09/2020	9:00	0.4	90	03/09/2020	9:00	0.4	90	04/09/2020	9:00	0.4	112.5
01/09/2020	10:00	0.9	112.5	02/09/2020	10:00	0.4	270	03/09/2020	10:00	0.4	112.5	04/09/2020	10:00	0.4	90
01/09/2020	11:00	0.9	270	02/09/2020	11:00	0.4	247.5	03/09/2020	11:00	0.4	112.5	04/09/2020	11:00	0.4	90
01/09/2020	12:00	0.9	90	02/09/2020	12:00	1.3	270	03/09/2020	12:00	0.4	90	04/09/2020	12:00	0.4	112.5
01/09/2020	13:00	0.4	67.5	02/09/2020	13:00	1.3	247.5	03/09/2020	13:00	0.4	225	04/09/2020	13:00	0.4	112.5
01/09/2020	14:00	0.4	270	02/09/2020	14:00	1.3	270	03/09/2020	14:00	0.4	225	04/09/2020	14:00	1.3	90
01/09/2020	15:00	0.4	112.5	02/09/2020	15:00	1.3	90	03/09/2020	15:00	0.4	202.5	04/09/2020	15:00	0.9	90
01/09/2020	16:00	1.8	112.5	02/09/2020	16:00	1.8	180	03/09/2020	16:00	0	270	04/09/2020	16:00	0.9	112.5
01/09/2020	17:00	1.8	135	02/09/2020	17:00	0.4	247.5	03/09/2020	17:00	0.4	247.5	04/09/2020	17:00	1.3	112.5
01/09/2020	18:00	2.7	90	02/09/2020	18:00	0.4	247.5	03/09/2020	18:00	0.4	135	04/09/2020	18:00	1.3	135
01/09/2020	19:00	2.2	292.5	02/09/2020	19:00	0.4	247.5	03/09/2020	19:00	0	112.5	04/09/2020	19:00	1.3	135
01/09/2020	20:00	1.3	225	02/09/2020	20:00	0.4	292.5	03/09/2020	20:00	0.4	112.5	04/09/2020	20:00	0.9	112.5
01/09/2020	21:00	1.8	247.5	02/09/2020	21:00	0.4	292.5	03/09/2020	21:00	0.4	180	04/09/2020	21:00	1.3	112.5
01/09/2020	22:00	0.9	247.5	02/09/2020	22:00	0.4	225	03/09/2020	22:00	0	180	04/09/2020	22:00	0.4	135
01/09/2020	23:00	0.4	247.5	02/09/2020	23:00	0.4	225	03/09/2020	23:00	0.4	247.5	04/09/2020	23:00	0.9	135

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
05/09/2020	0:00	0.4	67.5	06/09/2020	0:00	0	90	07/09/2020	0:00	0.4	112.5	08/09/2020	0:00	1.3	112.5
05/09/2020	1:00	0.9	90	06/09/2020	1:00	0	135	07/09/2020	1:00	0.9	112.5	08/09/2020	1:00	1.3	112.5
05/09/2020	2:00	0.4	112.5	06/09/2020	2:00	0.4	112.5	07/09/2020	2:00	0.9	112.5	08/09/2020	2:00	1.3	112.5
05/09/2020	3:00	0.4	112.5	06/09/2020	3:00	0.4	112.5	07/09/2020	3:00	0.4	90	08/09/2020	3:00	0.9	112.5
05/09/2020	4:00	0.4	90	06/09/2020	4:00	0	112.5	07/09/2020	4:00	0.4	135	08/09/2020	4:00	0.9	180
05/09/2020	5:00	0.4	112.5	06/09/2020	5:00	0	112.5	07/09/2020	5:00	0.4	112.5	08/09/2020	5:00	0.4	270
05/09/2020	6:00	0.4	45	06/09/2020	6:00	0	112.5	07/09/2020	6:00	0.4	112.5	08/09/2020	6:00	0.4	22.5
05/09/2020	7:00	0.4	112.5	06/09/2020	7:00	0.9	112.5	07/09/2020	7:00	0.9	247.5	08/09/2020	7:00	1.3	67.5
05/09/2020	8:00	0.4	90	06/09/2020	8:00	0.9	112.5	07/09/2020	8:00	0.9	247.5	08/09/2020	8:00	0.4	67.5
05/09/2020	9:00	0.9	22.5	06/09/2020	9:00	0.9	135	07/09/2020	9:00	0.9	135	08/09/2020	9:00	0.4	112.5
05/09/2020	10:00	0.4	112.5	06/09/2020	10:00	0.9	112.5	07/09/2020	10:00	0.9	112.5	08/09/2020	10:00	0.9	112.5
05/09/2020	11:00	0.4	90	06/09/2020	11:00	0.4	112.5	07/09/2020	11:00	0.4	112.5	08/09/2020	11:00	0.9	112.5
05/09/2020	12:00	0.9	67.5	06/09/2020	12:00	0.4	90	07/09/2020	12:00	0.4	90	08/09/2020	12:00	2.2	112.5
05/09/2020	13:00	0.4	67.5	06/09/2020	13:00	0.9	90	07/09/2020	13:00	0.4	135	08/09/2020	13:00	0.4	247.5
05/09/2020	14:00	0.4	90	06/09/2020	14:00	1.3	112.5	07/09/2020	14:00	0.9	112.5	08/09/2020	14:00	0.9	247.5
05/09/2020	15:00	0.4	90	06/09/2020	15:00	0.4	112.5	07/09/2020	15:00	0.9	112.5	08/09/2020	15:00	0.4	112.5
05/09/2020	16:00	1.3	135	06/09/2020	16:00	0.9	112.5	07/09/2020	16:00	0.4	135	08/09/2020	16:00	0.4	112.5
05/09/2020	17:00	0.9	135	06/09/2020	17:00	1.8	112.5	07/09/2020	17:00	0.9	112.5	08/09/2020	17:00	1.3	112.5
05/09/2020	18:00	0.4	112.5	06/09/2020	18:00	1.8	112.5	07/09/2020	18:00	1.3	112.5	08/09/2020	18:00	0.9	112.5
05/09/2020	19:00	0.4	112.5	06/09/2020	19:00	1.3	112.5	07/09/2020	19:00	1.3	112.5	08/09/2020	19:00	1.3	112.5
05/09/2020	20:00	0.4	112.5	06/09/2020	20:00	1.3	112.5	07/09/2020	20:00	1.3	112.5	08/09/2020	20:00	0.9	112.5
05/09/2020	21:00	0.4	112.5	06/09/2020	21:00	1.3	112.5	07/09/2020	21:00	1.3	112.5	08/09/2020	21:00	0.4	112.5
05/09/2020	22:00	0.4	112.5	06/09/2020	22:00	0.9	112.5	07/09/2020	22:00	0.9	112.5	08/09/2020	22:00	0.9	112.5
05/09/2020	23:00	0	337.5	06/09/2020	23:00	0.9	112.5	07/09/2020	23:00	0.9	112.5	08/09/2020	23:00	0.9	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
09/09/2020	0:00	0.4	112.5	10/09/2020	0:00	0.4	112.5	11/09/2020	0:00	0	90	12/09/2020	0:00	0	67.5
09/09/2020	1:00	0.4	112.5	10/09/2020	1:00	0.4	112.5	11/09/2020	1:00	0	90	12/09/2020	1:00	0.4	135
09/09/2020	2:00	0.4	112.5	10/09/2020	2:00	0.4	112.5	11/09/2020	2:00	0.4	90	12/09/2020	2:00	0	112.5
09/09/2020	3:00	0.4	112.5	10/09/2020	3:00	0.4	112.5	11/09/2020	3:00	0	90	12/09/2020	3:00	0.4	90
09/09/2020	4:00	0.4	90	10/09/2020	4:00	0	112.5	11/09/2020	4:00	0	112.5	12/09/2020	4:00	0.9	90
09/09/2020	5:00	0	45	10/09/2020	5:00	0	112.5	11/09/2020	5:00	0	112.5	12/09/2020	5:00	0.4	135
09/09/2020	6:00	0	112.5	10/09/2020	6:00	0	112.5	11/09/2020	6:00	1.3	135	12/09/2020	6:00	0.9	202.5
09/09/2020	7:00	0.4	112.5	10/09/2020	7:00	0.9	112.5	11/09/2020	7:00	0.9	180	12/09/2020	7:00	0.4	247.5
09/09/2020	8:00	0.9	112.5	10/09/2020	8:00	0.4	202.5	11/09/2020	8:00	0.4	225	12/09/2020	8:00	0.4	247.5
09/09/2020	9:00	0.9	112.5	10/09/2020	9:00	0.4	202.5	11/09/2020	9:00	0.4	225	12/09/2020	9:00	0.4	225
09/09/2020	10:00	0.4	112.5	10/09/2020	10:00	0.4	225	11/09/2020	10:00	0.4	247.5	12/09/2020	10:00	0.4	225
09/09/2020	11:00	0.4	112.5	10/09/2020	11:00	0.4	135	11/09/2020	11:00	0.4	247.5	12/09/2020	11:00	0.4	112.5
09/09/2020	12:00	0.4	112.5	10/09/2020	12:00	0.4	135	11/09/2020	12:00	0.4	270	12/09/2020	12:00	0.4	135
09/09/2020	13:00	0.4	112.5	10/09/2020	13:00	1.3	135	11/09/2020	13:00	0.4	247.5	12/09/2020	13:00	0.4	112.5
09/09/2020	14:00	0.9	112.5	10/09/2020	14:00	0.4	45	11/09/2020	14:00	0.4	90	12/09/2020	14:00	0.4	112.5
09/09/2020	15:00	0.9	112.5	10/09/2020	15:00	0.4	90	11/09/2020	15:00	0.4	67.5	12/09/2020	15:00	0.4	112.5
09/09/2020	16:00	0.4	247.5	10/09/2020	16:00	0.4	225	11/09/2020	16:00	0.4	90	12/09/2020	16:00	0.4	90
09/09/2020	17:00	0.9	112.5	10/09/2020	17:00	0.4	270	11/09/2020	17:00	0.4	247.5	12/09/2020	17:00	0.4	112.5
09/09/2020	18:00	0.9	270	10/09/2020	18:00	0.4	90	11/09/2020	18:00	0.4	90	12/09/2020	18:00	1.8	67.5
09/09/2020	19:00	1.3	247.5	10/09/2020	19:00	0.4	90	11/09/2020	19:00	0	112.5	12/09/2020	19:00	1.8	67.5
09/09/2020	20:00	0.9	247.5	10/09/2020	20:00	0.4	90	11/09/2020	20:00	0	112.5	12/09/2020	20:00	1.3	90
09/09/2020	21:00	0.4	247.5	10/09/2020	21:00	0.4	45	11/09/2020	21:00	0	112.5	12/09/2020	21:00	1.8	67.5
09/09/2020	22:00	0.9	112.5	10/09/2020	22:00	0.4	67.5	11/09/2020	22:00	0	112.5	12/09/2020	22:00	1.8	67.5
09/09/2020	23:00	0.4	135	10/09/2020	23:00	0.4	67.5	11/09/2020	23:00	0.4	135	12/09/2020	23:00	1.8	292.5

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
13/09/2020	0:00	1.3	22.5	14/09/2020	0:00	0.9	135	15/09/2020	0:00	0.9	67.5	16/09/2020	0:00	0.9	112.5
13/09/2020	1:00	1.3	180	14/09/2020	1:00	1.3	67.5	15/09/2020	1:00	0.4	112.5	16/09/2020	1:00	1.3	112.5
13/09/2020	2:00	0.9	90	14/09/2020	2:00	1.3	90	15/09/2020	2:00	0.4	112.5	16/09/2020	2:00	0.9	112.5
13/09/2020	3:00	0.4	22.5	14/09/2020	3:00	0.4	90	15/09/2020	3:00	0.9	180	16/09/2020	3:00	0.9	112.5
13/09/2020	4:00	0.9	90	14/09/2020	4:00	2.2	112.5	15/09/2020	4:00	0.9	112.5	16/09/2020	4:00	0.9	135
13/09/2020	5:00	1.8	112.5	14/09/2020	5:00	1.3	67.5	15/09/2020	5:00	0.4	112.5	16/09/2020	5:00	0.9	45
13/09/2020	6:00	1.3	67.5	14/09/2020	6:00	1.8	112.5	15/09/2020	6:00	0.4	112.5	16/09/2020	6:00	0.4	45
13/09/2020	7:00	0.9	45	14/09/2020	7:00	0.9	90	15/09/2020	7:00	0.4	112.5	16/09/2020	7:00	0.9	67.5
13/09/2020	8:00	1.3	45	14/09/2020	8:00	1.8	90	15/09/2020	8:00	0.4	135	16/09/2020	8:00	0.9	90
13/09/2020	9:00	1.3	67.5	14/09/2020	9:00	1.8	90	15/09/2020	9:00	0.4	135	16/09/2020	9:00	0.9	112.5
13/09/2020	10:00	1.3	67.5	14/09/2020	10:00	1.8	112.5	15/09/2020	10:00	0.9	112.5	16/09/2020	10:00	0.9	135
13/09/2020	11:00	1.8	45	14/09/2020	11:00	1.8	112.5	15/09/2020	11:00	0.9	112.5	16/09/2020	11:00	1.3	112.5
13/09/2020	12:00	1.3	22.5	14/09/2020	12:00	2.2	112.5	15/09/2020	12:00	0.9	112.5	16/09/2020	12:00	1.3	67.5
13/09/2020	13:00	0.9	112.5	14/09/2020	13:00	2.7	90	15/09/2020	13:00	0.9	112.5	16/09/2020	13:00	0.9	90
13/09/2020	14:00	1.3	112.5	14/09/2020	14:00	2.2	90	15/09/2020	14:00	0.9	90	16/09/2020	14:00	0.9	90
13/09/2020	15:00	1.3	112.5	14/09/2020	15:00	0.9	90	15/09/2020	15:00	1.3	90	16/09/2020	15:00	0.9	180
13/09/2020	16:00	1.8	112.5	14/09/2020	16:00	0.4	112.5	15/09/2020	16:00	0.9	90	16/09/2020	16:00	0.4	67.5
13/09/2020	17:00	1.8	135	14/09/2020	17:00	0.4	112.5	15/09/2020	17:00	1.3	90	16/09/2020	17:00	0.9	135
13/09/2020	18:00	1.8	112.5	14/09/2020	18:00	0.9	112.5	15/09/2020	18:00	1.3	90	16/09/2020	18:00	0.9	112.5
13/09/2020	19:00	1.3	112.5	14/09/2020	19:00	0.4	112.5	15/09/2020	19:00	1.3	112.5	16/09/2020	19:00	0.9	90
13/09/2020	20:00	1.3	135	14/09/2020	20:00	1.3	112.5	15/09/2020	20:00	0.9	112.5	16/09/2020	20:00	0.4	90
13/09/2020	21:00	1.8	67.5	14/09/2020	21:00	1.3	112.5	15/09/2020	21:00	0.4	112.5	16/09/2020	21:00	0	67.5
13/09/2020	22:00	2.2	90	14/09/2020	22:00	0.4	112.5	15/09/2020	22:00	0.9	112.5	16/09/2020	22:00	0.9	112.5
13/09/2020	23:00	1.3	90	14/09/2020	23:00	0.4	112.5	15/09/2020	23:00	1.3	112.5	16/09/2020	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
17/09/2020	0:00	0.9	112.5	18/09/2020	0:00	1.8	112.5	19/09/2020	0:00	0.9	112.5	20/09/2020	0:00	0	90
17/09/2020	1:00	0.9	112.5	18/09/2020	1:00	1.3	112.5	19/09/2020	1:00	0.4	112.5	20/09/2020	1:00	0	90
17/09/2020	2:00	0.4	112.5	18/09/2020	2:00	0.4	112.5	19/09/2020	2:00	0.9	112.5	20/09/2020	2:00	0	90
17/09/2020	3:00	0.9	112.5	18/09/2020	3:00	1.3	112.5	19/09/2020	3:00	0	157.5	20/09/2020	3:00	0	112.5
17/09/2020	4:00	0.9	112.5	18/09/2020	4:00	0.9	112.5	19/09/2020	4:00	0	337.5	20/09/2020	4:00	0	112.5
17/09/2020	5:00	0.9	112.5	18/09/2020	5:00	0.9	112.5	19/09/2020	5:00	0.4	22.5	20/09/2020	5:00	0	112.5
17/09/2020	6:00	0.9	112.5	18/09/2020	6:00	0.9	112.5	19/09/2020	6:00	0.4	22.5	20/09/2020	6:00	0	112.5
17/09/2020	7:00	0.9	112.5	18/09/2020	7:00	0.9	112.5	19/09/2020	7:00	0.4	337.5	20/09/2020	7:00	0.4	112.5
17/09/2020	8:00	0.9	112.5	18/09/2020	8:00	0.9	112.5	19/09/2020	8:00	0.4	135	20/09/2020	8:00	0	225
17/09/2020	9:00	1.3	112.5	18/09/2020	9:00	0.9	135	19/09/2020	9:00	0.4	180	20/09/2020	9:00	0.4	225
17/09/2020	10:00	1.3	112.5	18/09/2020	10:00	0.4	112.5	19/09/2020	10:00	0.4	225	20/09/2020	10:00	0.4	180
17/09/2020	11:00	0.9	112.5	18/09/2020	11:00	0.9	112.5	19/09/2020	11:00	0.4	225	20/09/2020	11:00	0.4	135
17/09/2020	12:00	0.9	112.5	18/09/2020	12:00	0.4	112.5	19/09/2020	12:00	0.9	225	20/09/2020	12:00	0.4	135
17/09/2020	13:00	0.9	112.5	18/09/2020	13:00	0.9	157.5	19/09/2020	13:00	1.3	112.5	20/09/2020	13:00	1.3	90
17/09/2020	14:00	0.4	112.5	18/09/2020	14:00	0.9	112.5	19/09/2020	14:00	0.9	112.5	20/09/2020	14:00	0.9	135
17/09/2020	15:00	0.4	112.5	18/09/2020	15:00	0.9	112.5	19/09/2020	15:00	0.4	135	20/09/2020	15:00	0.4	112.5
17/09/2020	16:00	0.9	112.5	18/09/2020	16:00	1.3	90	19/09/2020	16:00	0.4	135	20/09/2020	16:00	0.9	112.5
17/09/2020	17:00	0.9	135	18/09/2020	17:00	1.3	90	19/09/2020	17:00	0.9	112.5	20/09/2020	17:00	1.3	112.5
17/09/2020	18:00	0.9	135	18/09/2020	18:00	1.8	112.5	19/09/2020	18:00	0.9	112.5	20/09/2020	18:00	1.3	90
17/09/2020	19:00	0.9	135	18/09/2020	19:00	1.8	112.5	19/09/2020	19:00	1.3	112.5	20/09/2020	19:00	1.3	90
17/09/2020	20:00	0.9	112.5	18/09/2020	20:00	1.3	112.5	19/09/2020	20:00	1.3	135	20/09/2020	20:00	0.9	112.5
17/09/2020	21:00	0.9	112.5	18/09/2020	21:00	0.9	112.5	19/09/2020	21:00	0	67.5	20/09/2020	21:00	1.3	112.5
17/09/2020	22:00	0.9	112.5	18/09/2020	22:00	0.4	112.5	19/09/2020	22:00	0.4	22.5	20/09/2020	22:00	1.3	90
17/09/2020	23:00	0.9	112.5	18/09/2020	23:00	0.4	112.5	19/09/2020	23:00	0	67.5	20/09/2020	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
21/09/2020	0:00	1.3	90	22/09/2020	0:00	1.3	112.5	23/09/2020	0:00	0.9	112.5	24/09/2020	0:00	0.9	112.5
21/09/2020	1:00	0.9	112.5	22/09/2020	1:00	1.3	112.5	23/09/2020	1:00	1.3	90	24/09/2020	1:00	1.8	67.5
21/09/2020	2:00	1.3	90	22/09/2020	2:00	1.3	112.5	23/09/2020	2:00	1.3	90	24/09/2020	2:00	1.3	22.5
21/09/2020	3:00	0.9	112.5	22/09/2020	3:00	0.9	67.5	23/09/2020	3:00	0.9	90	24/09/2020	3:00	0.9	112.5
21/09/2020	4:00	0.9	112.5	22/09/2020	4:00	1.3	67.5	23/09/2020	4:00	1.8	135	24/09/2020	4:00	0.9	90
21/09/2020	5:00	0.9	112.5	22/09/2020	5:00	1.3	45	23/09/2020	5:00	1.3	90	24/09/2020	5:00	1.3	90
21/09/2020	6:00	1.8	112.5	22/09/2020	6:00	1.3	67.5	23/09/2020	6:00	1.3	67.5	24/09/2020	6:00	0.9	67.5
21/09/2020	7:00	1.3	90	22/09/2020	7:00	1.3	90	23/09/2020	7:00	1.3	157.5	24/09/2020	7:00	0.9	67.5
21/09/2020	8:00	0.9	67.5	22/09/2020	8:00	0.9	135	23/09/2020	8:00	0.4	67.5	24/09/2020	8:00	0.9	45
21/09/2020	9:00	0.9	90	22/09/2020	9:00	1.8	67.5	23/09/2020	9:00	0.9	22.5	24/09/2020	9:00	1.3	90
21/09/2020	10:00	1.3	67.5	22/09/2020	10:00	1.3	90	23/09/2020	10:00	0.9	112.5	24/09/2020	10:00	1.3	112.5
21/09/2020	11:00	1.8	112.5	22/09/2020	11:00	1.3	67.5	23/09/2020	11:00	1.3	112.5	24/09/2020	11:00	0.9	67.5
21/09/2020	12:00	0.9	112.5	22/09/2020	12:00	1.3	45	23/09/2020	12:00	1.3	112.5	24/09/2020	12:00	0.9	112.5
21/09/2020	13:00	1.8	112.5	22/09/2020	13:00	1.8	67.5	23/09/2020	13:00	1.3	67.5	24/09/2020	13:00	1.3	112.5
21/09/2020	14:00	1.3	112.5	22/09/2020	14:00	1.3	67.5	23/09/2020	14:00	1.8	67.5	24/09/2020	14:00	0.9	112.5
21/09/2020	15:00	1.3	112.5	22/09/2020	15:00	1.3	45	23/09/2020	15:00	1.3	90	24/09/2020	15:00	0.4	112.5
21/09/2020	16:00	1.8	112.5	22/09/2020	16:00	0.9	67.5	23/09/2020	16:00	1.3	90	24/09/2020	16:00	0.4	112.5
21/09/2020	17:00	1.8	112.5	22/09/2020	17:00	0.9	67.5	23/09/2020	17:00	0.9	22.5	24/09/2020	17:00	0.4	135
21/09/2020	18:00	1.8	112.5	22/09/2020	18:00	1.3	135	23/09/2020	18:00	0.9	112.5	24/09/2020	18:00	0.9	135
21/09/2020	19:00	1.3	90	22/09/2020	19:00	0.9	67.5	23/09/2020	19:00	0.9	112.5	24/09/2020	19:00	0.9	157.5
21/09/2020	20:00	1.8	112.5	22/09/2020	20:00	1.3	112.5	23/09/2020	20:00	0.9	112.5	24/09/2020	20:00	0.4	135
21/09/2020	21:00	1.3	112.5	22/09/2020	21:00	1.3	112.5	23/09/2020	21:00	0.9	112.5	24/09/2020	21:00	0.9	112.5
21/09/2020	22:00	1.3	112.5	22/09/2020	22:00	0.9	112.5	23/09/2020	22:00	0.9	112.5	24/09/2020	22:00	0.9	112.5
21/09/2020	23:00	1.8	112.5	22/09/2020	23:00	1.3	112.5	23/09/2020	23:00	0.9	112.5	24/09/2020	23:00	0.4	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
25/09/2020	0:00	0.4	112.5	26/09/2020	0:00	0.4	112.5	27/09/2020	0:00	0.9	270	28/09/2020	0:00	0.4	112.5
25/09/2020	1:00	0.4	112.5	26/09/2020	1:00	0.4	112.5	27/09/2020	1:00	1.3	270	28/09/2020	1:00	0.4	112.5
25/09/2020	2:00	0.4	112.5	26/09/2020	2:00	0.4	135	27/09/2020	2:00	0.4	112.5	28/09/2020	2:00	0.4	112.5
25/09/2020	3:00	0.4	112.5	26/09/2020	3:00	0.4	112.5	27/09/2020	3:00	0.4	112.5	28/09/2020	3:00	0.4	112.5
25/09/2020	4:00	0	112.5	26/09/2020	4:00	0.4	45	27/09/2020	4:00	0.4	90	28/09/2020	4:00	1.3	112.5
25/09/2020	5:00	0	112.5	26/09/2020	5:00	0.4	90	27/09/2020	5:00	0.4	90	28/09/2020	5:00	1.3	112.5
25/09/2020	6:00	0.9	112.5	26/09/2020	6:00	0.9	112.5	27/09/2020	6:00	1.3	112.5	28/09/2020	6:00	0.9	112.5
25/09/2020	7:00	0.4	112.5	26/09/2020	7:00	1.3	135	27/09/2020	7:00	0.4	112.5	28/09/2020	7:00	0.9	90
25/09/2020	8:00	0.4	67.5	26/09/2020	8:00	1.8	135	27/09/2020	8:00	0.4	112.5	28/09/2020	8:00	0.9	112.5
25/09/2020	9:00	0.4	67.5	26/09/2020	9:00	1.8	135	27/09/2020	9:00	0.4	112.5	28/09/2020	9:00	1.3	112.5
25/09/2020	10:00	0.4	112.5	26/09/2020	10:00	0.4	135	27/09/2020	10:00	0.9	157.5	28/09/2020	10:00	1.3	112.5
25/09/2020	11:00	0.4	337.5	26/09/2020	11:00	0.4	135	27/09/2020	11:00	0.4	157.5	28/09/2020	11:00	0.9	112.5
25/09/2020	12:00	0.4	90	26/09/2020	12:00	0.4	135	27/09/2020	12:00	0.9	135	28/09/2020	12:00	0.9	112.5
25/09/2020	13:00	0.9	67.5	26/09/2020	13:00	0.9	112.5	27/09/2020	13:00	0.4	315	28/09/2020	13:00	0.9	112.5
25/09/2020	14:00	0.9	135	26/09/2020	14:00	0.4	112.5	27/09/2020	14:00	0.4	135	28/09/2020	14:00	0.9	112.5
25/09/2020	15:00	0.4	112.5	26/09/2020	15:00	0.9	112.5	27/09/2020	15:00	1.3	112.5	28/09/2020	15:00	1.3	112.5
25/09/2020	16:00	0.9	22.5	26/09/2020	16:00	0.9	112.5	27/09/2020	16:00	2.2	112.5	28/09/2020	16:00	1.3	112.5
25/09/2020	17:00	1.3	112.5	26/09/2020	17:00	0.9	112.5	27/09/2020	17:00	0.4	112.5	28/09/2020	17:00	0.9	90
25/09/2020	18:00	1.3	112.5	26/09/2020	18:00	0.4	112.5	27/09/2020	18:00	0.4	135	28/09/2020	18:00	1.3	135
25/09/2020	19:00	1.3	90	26/09/2020	19:00	0.9	112.5	27/09/2020	19:00	0.4	90	28/09/2020	19:00	0.9	135
25/09/2020	20:00	1.3	112.5	26/09/2020	20:00	0.9	135	27/09/2020	20:00	0.4	112.5	28/09/2020	20:00	0.9	112.5
25/09/2020	21:00	1.3	135	26/09/2020	21:00	0.4	112.5	27/09/2020	21:00	1.3	112.5	28/09/2020	21:00	0.9	112.5
25/09/2020	22:00	0.4	112.5	26/09/2020	22:00	0.4	135	27/09/2020	22:00	0.9	112.5	28/09/2020	22:00	0.9	112.5
25/09/2020	23:00	0.4	112.5	26/09/2020	23:00	0.4	112.5	27/09/2020	23:00	0.9	112.5	28/09/2020	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

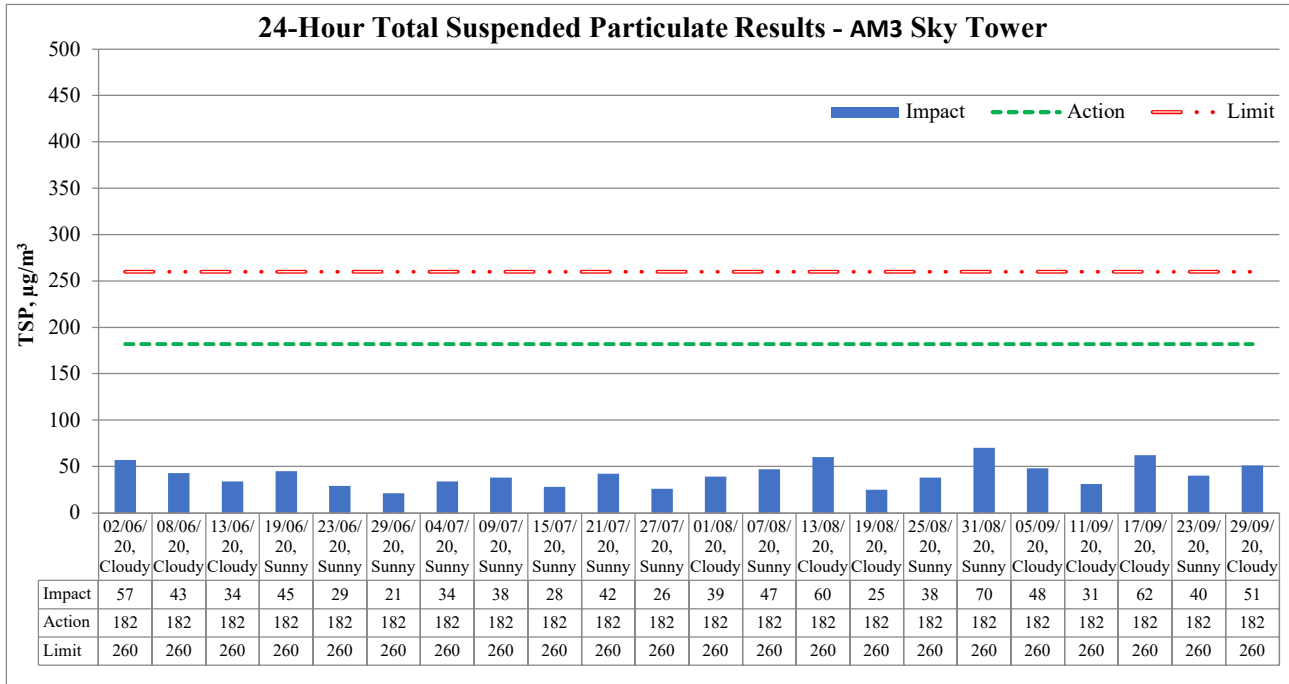
Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
29/09/2020	0:00	1.3	112.5	30/09/2020	0:00	1.3	112.5								
29/09/2020	1:00	1.3	112.5	30/09/2020	1:00	0.9	112.5								
29/09/2020	2:00	1.3	45	30/09/2020	2:00	0.4	112.5								
29/09/2020	3:00	0.9	45	30/09/2020	3:00	0.4	112.5								
29/09/2020	4:00	0.9	45	30/09/2020	4:00	0.4	135								
29/09/2020	5:00	0.4	270	30/09/2020	5:00	0.4	90								
29/09/2020	6:00	0.4	135	30/09/2020	6:00	0.4	90								
29/09/2020	7:00	1.3	247.5	30/09/2020	7:00	0.4	67.5								
29/09/2020	8:00	0.4	247.5	30/09/2020	8:00	0.4	67.5								
29/09/2020	9:00	0.4	225	30/09/2020	9:00	0.9	135								
29/09/2020	10:00	0.9	112.5	30/09/2020	10:00	0.4	112.5								
29/09/2020	11:00	0.9	112.5	30/09/2020	11:00	0.4	90								
29/09/2020	12:00	0.9	135	30/09/2020	12:00	0.4	90								
29/09/2020	13:00	1.3	112.5	30/09/2020	13:00	0.9	135								
29/09/2020	14:00	0.9	112.5	30/09/2020	14:00	0.4	202.5								
29/09/2020	15:00	0.9	112.5	30/09/2020	15:00	0.9	67.5								
29/09/2020	16:00	0.9	112.5	30/09/2020	16:00	0.9	67.5								
29/09/2020	17:00	0.9	112.5	30/09/2020	17:00	0.9	22.5								
29/09/2020	18:00	0.9	112.5	30/09/2020	18:00	0.4	22.5								
29/09/2020	19:00	0.9	112.5	30/09/2020	19:00	0.4	67.5								
29/09/2020	20:00	0.9	90	30/09/2020	20:00	0.4	112.5								
29/09/2020	21:00	0.9	112.5	30/09/2020	21:00	0.4	270								
29/09/2020	22:00	0.9	67.5	30/09/2020	22:00	0.4	247.5								
29/09/2020	23:00	0.9	135	30/09/2020	23:00	0.9	247.5								



**Appendix D – Monitoring data and graphical plots**

## 24-hour average TSP

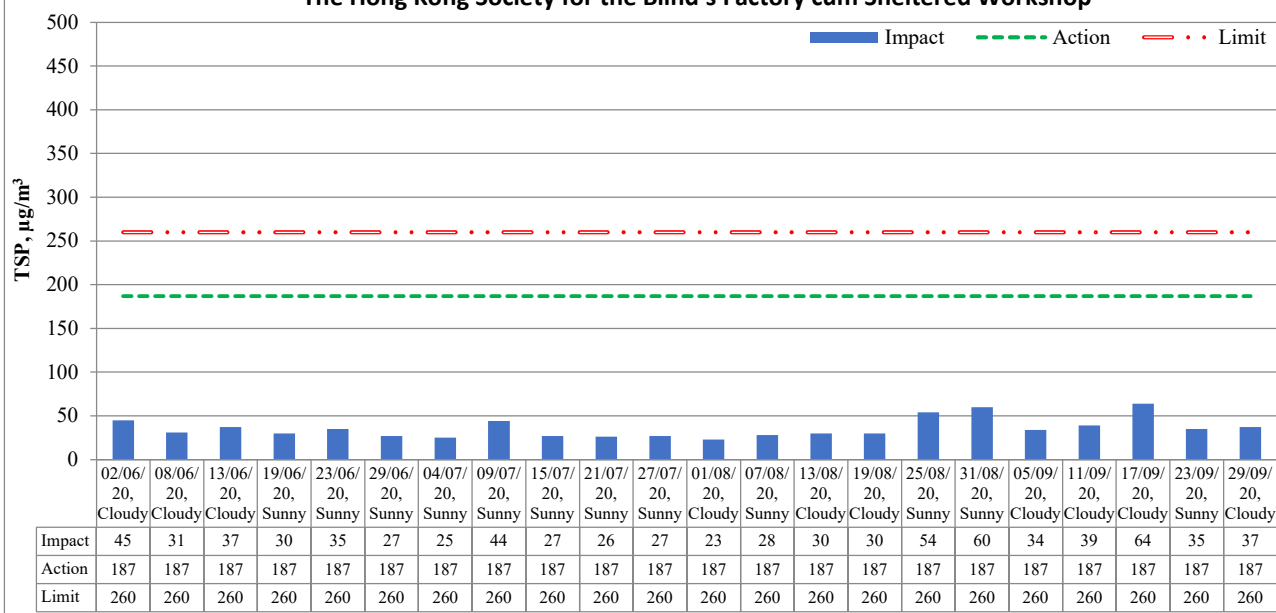
Air Monitoring Station		AM3 – Sky Tower	AM4(A) – The Hong Kong Society for the Blind’s Factory cum Sheltered Workshop	AM7 – Hong Kong Children’s Hospital
Start Date	Weather	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$	24-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
2/6/2020	Cloudy	57	45	44
8/6/2020	Cloudy	43	31	37
13/6/2020	Cloudy	34	37	45
19/6/2020	Sunny	45	30	38
23/6/2020	Sunny	29	35	36
29/6/2020	Sunny	21	27	29
4/7/2020	Sunny	34	25	41
9/7/2020	Sunny	38	44	34
15/7/2020	Sunny	28	27	39
21/7/2020	Sunny	42	26	43
27/7/2020	Sunny	26	27	45
1/8/2020	Cloudy	39	23	40
7/8/2020	Sunny	47	28	34
13/8/2020	Cloudy	60	30	56
19/8/2020	Cloudy	25	30	27
25/8/2020	Sunny	38	54	45
31/8/2020	Sunny	70	60	67
5/9/2020	Cloudy	48	34	40
11/9/2020	Cloudy	31	39	46
17/9/2020	Cloudy	62	64	60
23/9/2020	Sunny	40	35	46
29/9/2020	Cloudy	51	37	45



Major Construction Activities	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Installation of Sheet Pile for Construction of Underpass and Noise Barrier	✓			
Pumping Test at North Depressed Road Cofferdam and South Depressed Road	✓	✓	✓	
Construction of Bored Pile of Bridge D3	✓	✓	✓	✓
ELS Installation & Excavation for North Depressed Road and South Depressed Road	✓			
Construction of base slab, walls and columns for North Approach Ramp	✓	✓	✓	
Permanent Structure Construction for North Depressed Road	✓	✓	✓	✓
Installation of Sheet Pile for Construction of Underpass		✓		
ELS Installation & Excavation for North Depressed Road (CH1560 to CH1720)		✓		
Installation of Sheet Pile for Construction of DCS			✓	
ELS Installation & Excavation for South Depressed Road			✓	
Ground investigation works				✓
Excavation for North Approach Ramp				✓
Construction of base slab and wall for North Approach Ramp				✓
ELS Installation & Excavation for North Depressed Road				✓
Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road				✓
ELS works for Noise Barrier Foundation				✓

Factors might affect the monitoring results	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓

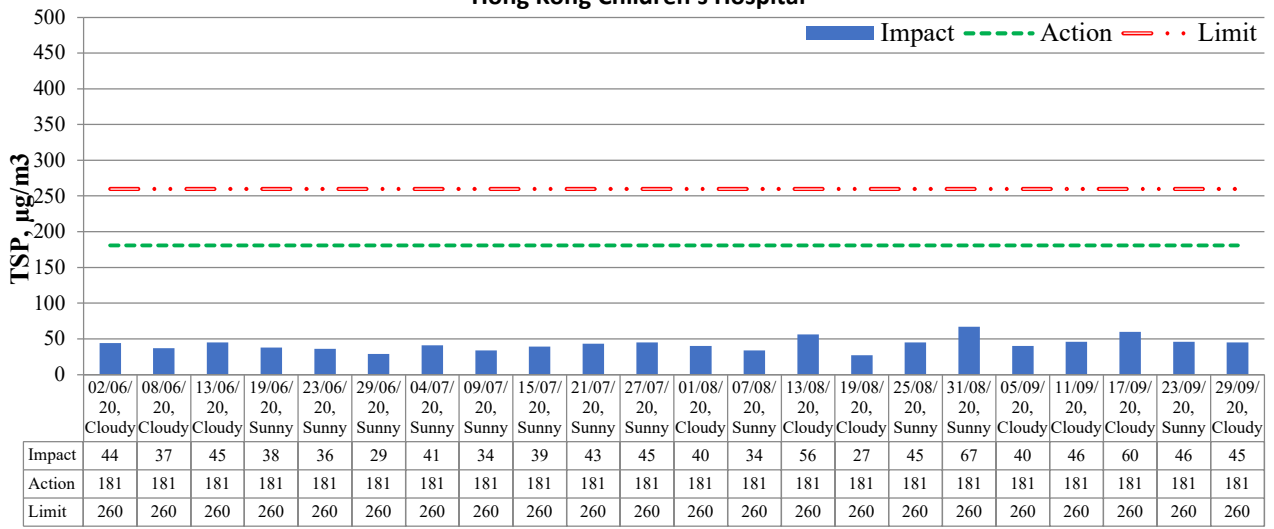
**24-Hour Total Suspended Particulate Results - AM4(A)**  
**The Hong Kong Society for the Blind's Factory cum Sheltered Workshop**



Major Construction Activities	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Installation of Sheet Pile for Construction of Underpass and Noise Barrier	✓			
Pumping Test at North Depressed Road Cofferdam and South Depressed Road	✓	✓	✓	
Construction of Bored Pile of Bridge D3	✓	✓	✓	✓
ELS Installation & Excavation for North Depressed Road and South Depressed Road	✓			
Construction of base slab, walls and columns for North Approach Ramp	✓	✓	✓	
Permanent Structure Construction for North Depressed Road	✓	✓	✓	✓
Installation of Sheet Pile for Construction of Underpass		✓		
ELS Installation & Excavation for North Depressed Road (CH1560 to CH1720)		✓		
Installation of Sheet Pile for Construction of DCS			✓	
ELS Installation & Excavation for South Depressed Road			✓	
Ground investigation works				✓
Excavation for North Approach Ramp				✓
Construction of base slab and wall for North Approach Ramp				✓
ELS Installation & Excavation for North Depressed Road				✓
Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road				✓
ELS works for Noise Barrier Foundation				✓

Factors might affect the monitoring results	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓

**24-Hour Total Suspended Particulate Results - AM7  
Hong Kong Children's Hospital**



Major Construction Activities	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Installation of Sheet Pile for Construction of Underpass and Noise Barrier	✓			
Pumping Test at North Depressed Road Cofferdam and South Depressed Road	✓	✓	✓	
Construction of Bored Pile of Bridge D3	✓	✓	✓	✓
ELS Installation & Excavation for North Depressed Road and South Depressed Road	✓			
Construction of base slab, walls and columns for North Approach Ramp	✓	✓	✓	
Permanent Structure Construction for North Depressed Road	✓	✓	✓	✓
Installation of Sheet Pile for Construction of Underpass		✓		
ELS Installation & Excavation for North Depressed Road (CH1560 to CH1720)		✓		
Installation of Sheet Pile for Construction of DCS			✓	
ELS Installation & Excavation for South Depressed Road			✓	
Ground investigation works				✓
Excavation for North Approach Ramp				✓
Construction of base slab and wall for North Approach Ramp				✓
ELS Installation & Excavation for North Depressed Road				✓
Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road				✓
ELS works for Noise Barrier Foundation				✓

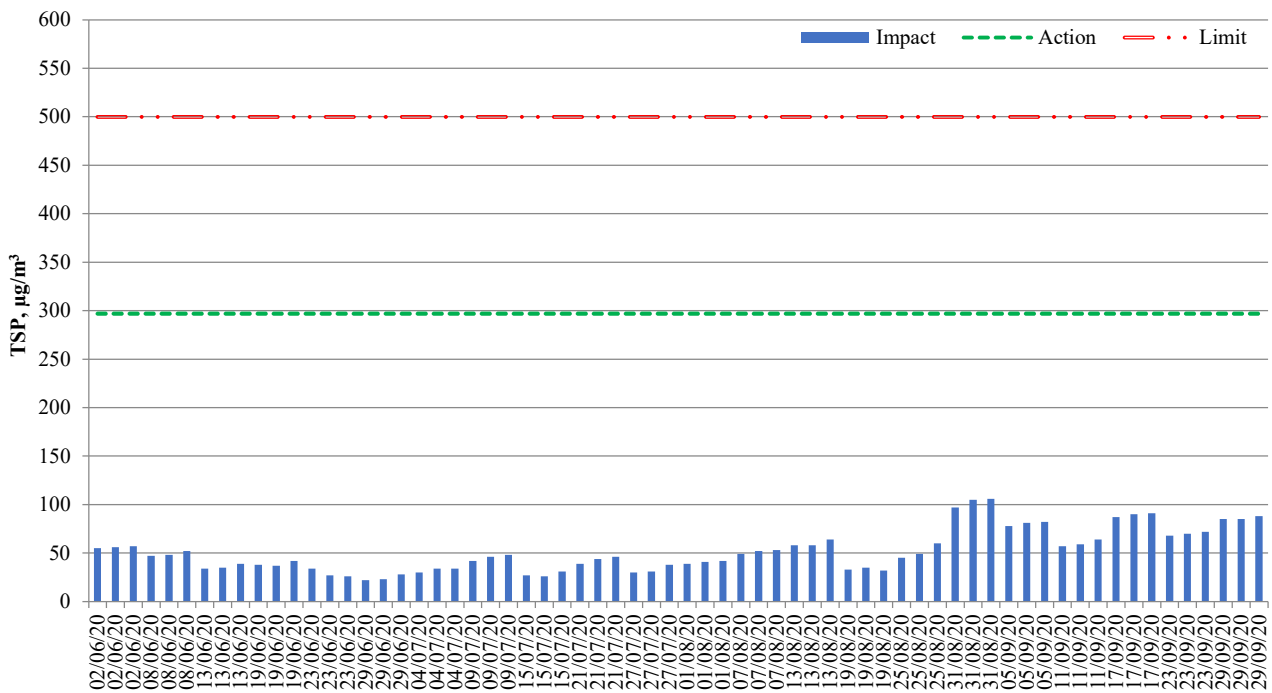
Factors might affect the monitoring results	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓

## 1-hour average TSP

Air Monitoring Station				AM3 – Sky Tower	
Date	Measurement Period			Weather	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
2/6/2020	13:00	-	14:00	Cloudy	55
2/6/2020	14:00	-	15:00		56
2/6/2020	15:00	-	16:00		57
8/6/2020	13:00	-	14:00	Cloudy	47
8/6/2020	14:00	-	15:00		48
8/6/2020	15:00	-	16:00		52
13/6/2020	9:00	-	10:00	Cloudy	34
13/6/2020	10:00	-	11:00		35
13/6/2020	11:00	-	12:00		39
19/6/2020	13:00	-	14:00	Sunny	38
19/6/2020	14:00	-	15:00		37
19/6/2020	15:00	-	16:00		42
23/6/2020	9:00	-	10:00	Sunny	34
23/6/2020	10:00	-	11:00		27
23/6/2020	11:00	-	12:00		26
29/6/2020	9:00	-	10:00	Sunny	22
29/6/2020	10:00	-	11:00		23
29/6/2020	11:00	-	12:00		28
4/7/2020	13:00	-	14:00	Sunny	30
4/7/2020	14:00	-	15:00		34
4/7/2020	15:00	-	16:00		34
9/7/2020	9:00	-	10:00	Sunny	42
9/7/2020	10:00	-	11:00		46
9/7/2020	11:00	-	12:00		48
15/7/2020	9:00	-	10:00	Sunny	27
15/7/2020	10:00	-	11:00		26
15/7/2020	11:00	-	12:00		31
21/7/2020	9:00	-	10:00	Sunny	39
21/7/2020	10:00	-	11:00		44
21/7/2020	11:00	-	12:00		46
27/7/2020	9:00	-	10:00	Sunny	30
27/7/2020	10:00	-	11:00		31
27/7/2020	11:00	-	12:00		38
1/8/2020	9:00	-	10:00	Cloudy	39
1/8/2020	10:00	-	11:00		41
1/8/2020	11:00	-	12:00		42
7/8/2020	9:00	-	10:00	Sunny	49
7/8/2020	10:00	-	11:00		52
7/8/2020	11:00	-	12:00		53
13/8/2020	9:00	-	10:00	Cloudy	58
13/8/2020	10:00	-	11:00		58
13/8/2020	11:00	-	12:00		64
19/8/2020	13:30	-	14:30	Cloudy	33
19/8/2020	14:30	-	15:30		35
19/8/2020	15:30	-	16:30		32
25/8/2020	9:00	-	10:00	Sunny	45
25/8/2020	10:00	-	11:00		49
25/8/2020	11:00	-	12:00		60

Air Monitoring Station				AM3 – Sky Tower	
Date	Measurement Period			Weather	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
31/8/2020	9:00	-	10:00	Sunny	97
31/8/2020	10:00	-	11:00		105
31/8/2020	11:00	-	12:00		106
5/9/2020	10:00	-	11:00	Cloudy	78
5/9/2020	11:00	-	12:00		81
5/9/2020	13:00	-	14:00		82
11/9/2020	13:00	-	14:00	Cloudy	57
11/9/2020	14:00	-	15:00		59
11/9/2020	15:00	-	16:00		64
17/9/2020	13:00	-	14:00	Cloudy	87
17/9/2020	14:00	-	15:00		90
17/9/2020	15:00	-	16:00		91
23/9/2020	9:00	-	10:00	Sunny	68
23/9/2020	10:00	-	11:00		70
23/9/2020	11:00	-	12:00		72
29/9/2020	13:00	-	14:00	Cloudy	85
29/9/2020	14:00	-	15:00		85
29/9/2020	15:00	-	16:00		88

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



Major Construction Activities	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Installation of Sheet Pile for Construction of Underpass and Noise Barrier	✓			
Pumping Test at North Depressed Road Cofferdam and South Depressed Road	✓	✓	✓	
Construction of Bored Pile of Bridge D3	✓	✓	✓	✓
ELS Installation & Excavation for North Depressed Road and South Depressed Road	✓			
Construction of base slab, walls and columns for North Approach Ramp	✓	✓	✓	
Permanent Structure Construction for North Depressed Road	✓	✓	✓	✓
Installation of Sheet Pile for Construction of Underpass		✓		
ELS Installation & Excavation for North Depressed Road (CH1560 to CH1720)		✓		
Installation of Sheet Pile for Construction of DCS			✓	
ELS Installation & Excavation for South Depressed Road			✓	
Ground investigation works				✓
Excavation for North Approach Ramp				✓
Construction of base slab and wall for North Approach Ramp				✓
ELS Installation & Excavation for North Depressed Road				✓
Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road				✓
ELS works for Noise Barrier Foundation				✓

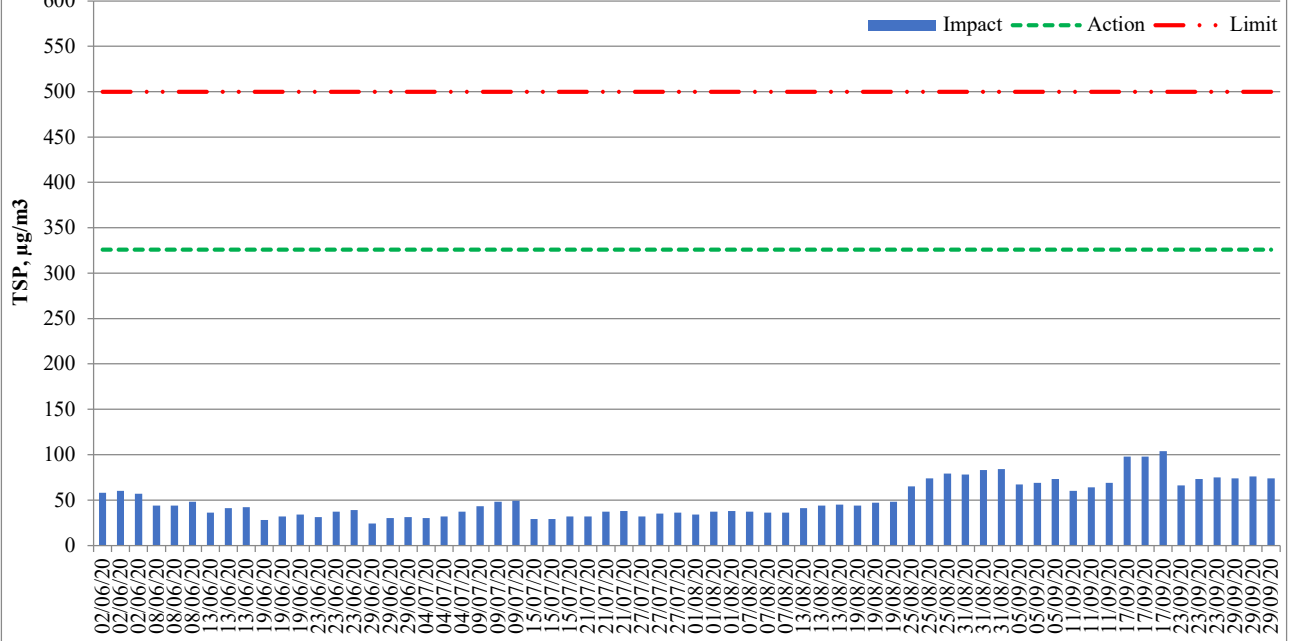
Factors might affect the monitoring results	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓



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, $\mu\text{g}/\text{m}^3$
2/6/2020	9:00	-	10:00	Cloudy	58
2/6/2020	10:00	-	11:00		60
2/6/2020	11:00	-	12:00		57
8/6/2020	13:00	-	14:00	Cloudy	44
8/6/2020	14:00	-	15:00		44
8/6/2020	15:00	-	16:00		48
13/6/2020	8:35	-	9:35	Cloudy	36
13/6/2020	9:35	-	10:35		41
13/6/2020	10:35	-	11:35		42
19/6/2020	13:00	-	14:00	Sunny	28
19/6/2020	14:00	-	15:00		32
19/6/2020	15:00	-	16:00		34
23/6/2020	9:00	-	10:00	Sunny	31
23/6/2020	10:00	-	11:00		37
23/6/2020	11:00	-	12:00		39
29/6/2020	9:00	-	10:00	Sunny	24
29/6/2020	10:00	-	11:00		30
29/6/2020	11:00	-	12:00		31
4/7/2020	9:00	-	10:00	Sunny	30
4/7/2020	10:00	-	11:00		32
4/7/2020	11:00	-	12:00		37
9/7/2020	9:00	-	10:00	Sunny	43
9/7/2020	10:00	-	11:00		48
9/7/2020	11:00	-	12:00		49
15/7/2020	9:00	-	10:00	Sunny	29
15/7/2020	10:00	-	11:00		29
15/7/2020	11:00	-	12:00		32
21/7/2020	9:00	-	10:00	Sunny	32
21/7/2020	10:00	-	11:00		37
21/7/2020	11:00	-	12:00		38
27/7/2020	13:00	-	14:00	Sunny	32
27/7/2020	14:00	-	15:00		35
27/7/2020	15:00	-	16:00		36
1/8/2020	9:00	-	10:00	Cloudy	34
1/8/2020	10:00	-	11:00		37
1/8/2020	11:00	-	12:00		38
7/8/2020	9:00	-	10:00	Sunny	37
7/8/2020	10:00	-	11:00		36
7/8/2020	11:00	-	12:00		36
13/8/2020	9:00	-	10:00	Cloudy	41
13/8/2020	10:00	-	11:00		44
13/8/2020	11:00	-	12:00		45
19/8/2020	13:00	-	14:00	Cloudy	44
19/8/2020	14:00	-	15:00		47
19/8/2020	15:00	-	16:00		48
25/8/2020	9:00	-	10:00	Sunny	65
25/8/2020	10:00	-	11:00		74
25/8/2020	11:00	-	12:00		79
31/8/2020	9:00	-	10:00	Sunny	78
31/8/2020	10:00	-	11:00		83

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, $\mu\text{g}/\text{m}^3$
31/8/2020	11:00	-	12:00		84
5/9/2020	9:00	-	10:00	Cloudy	67
5/9/2020	10:00	-	11:00		69
5/9/2020	11:00	-	12:00		73
11/9/2020	9:00	-	10:00		60
11/9/2020	10:00	-	11:00	Cloudy	64
11/9/2020	11:00	-	12:00		69
17/9/2020	9:00	-	10:00		98
17/9/2020	10:00	-	11:00	Cloudy	98
17/9/2020	11:00	-	12:00		104
23/9/2020	9:00	-	10:00		66
23/9/2020	10:00	-	11:00	Sunny	73
23/9/2020	11:00	-	12:00		75
29/9/2020	13:00	-	14:00		74
29/9/2020	14:00	-	15:00	Cloudy	76
29/9/2020	15:00	-	16:00		74

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



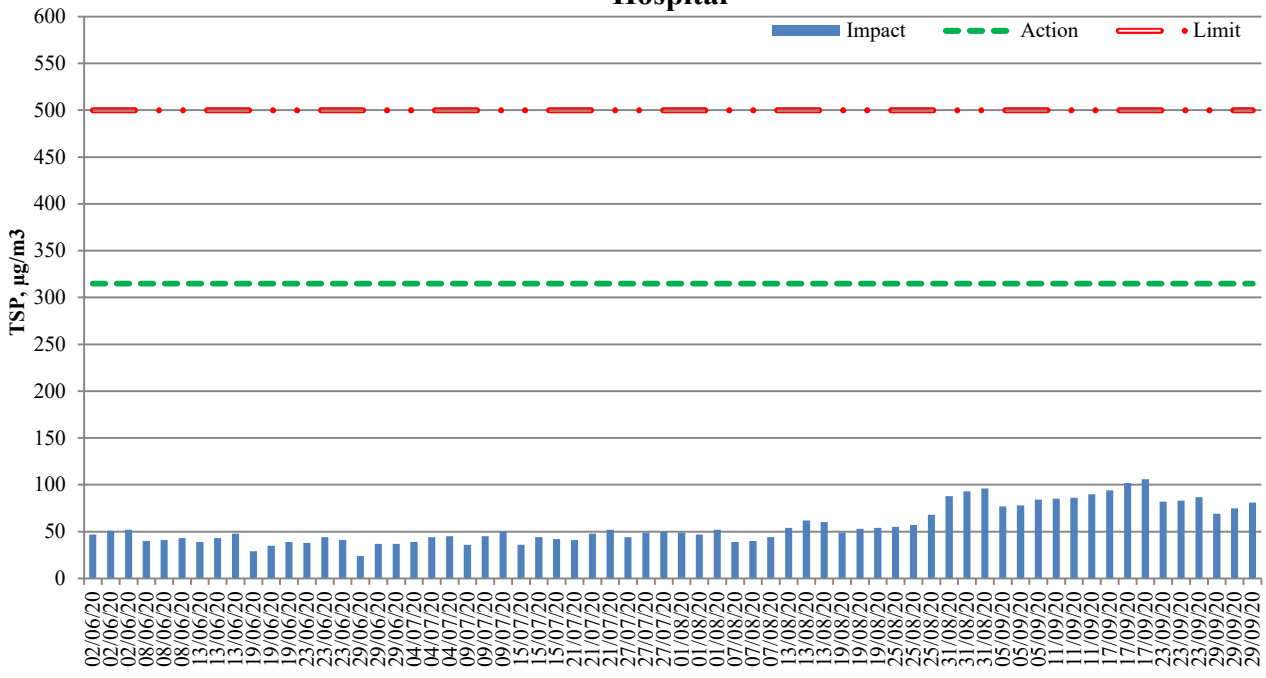
Major Construction Activities	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Installation of Sheet Pile for Construction of Underpass and Noise Barrier	✓			
Pumping Test at North Depressed Road Cofferdam and South Depressed Road	✓	✓	✓	
Construction of Bored Pile of Bridge D3	✓	✓	✓	✓
ELS Installation & Excavation for North Depressed Road and South Depressed Road	✓			
Construction of base slab, walls and columns for North Approach Ramp	✓	✓	✓	
Permanent Structure Construction for North Depressed Road	✓	✓	✓	✓
Installation of Sheet Pile for Construction of Underpass		✓		
ELS Installation & Excavation for North Depressed Road (CH1560 to CH1720)		✓		
Installation of Sheet Pile for Construction of DCS			✓	
ELS Installation & Excavation for South Depressed Road			✓	
Ground investigation works				✓
Excavation for North Approach Ramp				✓
Construction of base slab and wall for North Approach Ramp				✓
ELS Installation & Excavation for North Depressed Road				✓
Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road				✓
ELS works for Noise Barrier Foundation				✓

Factors might affect the monitoring results	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 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, $\mu\text{g}/\text{m}^3$
2/6/2020	9:00	-	10:00	Cloudy	47
2/6/2020	10:00	-	11:00		51
2/6/2020	11:00	-	12:00		52
8/6/2020	10:00	-	11:00	Cloudy	40
8/6/2020	11:00	-	12:00		41
8/6/2020	17:00	-	18:00		43
13/6/2020	13:00	-	14:00	Cloudy	39
13/6/2020	14:00	-	15:00		43
13/6/2020	15:00	-	16:00		48
19/6/2020	9:30	-	10:30	Sunny	29
19/6/2020	10:30	-	11:30		35
19/6/2020	17:00	-	18:00		39
23/6/2020	13:00	-	14:00	Sunny	38
23/6/2020	14:00	-	15:00		44
23/6/2020	15:00	-	16:00		41
29/6/2020	13:00	-	14:00	Sunny	24
29/6/2020	14:00	-	15:00		37
29/6/2020	15:00	-	16:00		37
4/7/2020	9:00	-	10:00	Sunny	39
4/7/2020	10:00	-	11:00		44
4/7/2020	11:00	-	12:00		45
9/7/2020	13:00	-	14:00	Sunny	36
9/7/2020	14:00	-	15:00		45
9/7/2020	15:00	-	16:00		50
15/7/2020	13:00	-	14:00	Sunny	36
15/7/2020	14:00	-	15:00		44
15/7/2020	15:00	-	16:00		42
21/7/2020	13:00	-	14:00	Sunny	41
21/7/2020	14:00	-	15:00		48
21/7/2020	15:00	-	16:00		52
27/7/2020	9:00	-	10:00	Sunny	44
27/7/2020	10:00	-	11:00		49
27/7/2020	11:00	-	12:00		50
1/8/2020	13:00	-	14:00	Cloudy	49
1/8/2020	14:00	-	15:00		47
1/8/2020	15:00	-	16:00		52
7/8/2020	13:00	-	14:00	Sunny	39
7/8/2020	14:00	-	15:00		40
7/8/2020	15:00	-	16:00		44
13/8/2020	13:00	-	14:00	Cloudy	54
13/8/2020	14:00	-	15:00		62
13/8/2020	15:00	-	16:00		60
19/8/2020	15:00	-	16:00	Cloudy	49
19/8/2020	16:00	-	17:00		53
19/8/2020	17:00	-	18:00		54
25/8/2020	13:00	-	14:00	Sunny	55
25/8/2020	14:00	-	15:00		57
25/8/2020	15:00	-	16:00		68
31/8/2020	13:00	-	14:00	Sunny	88
31/8/2020	14:00	-	15:00		93
31/8/2020	15:00	-	16:00		96

Air Monitoring Station				AM7 – Hong Kong Children’s Hospital	
Date	Measurement Period			Weather	1-hr Average TSP Concentration, $\mu\text{g}/\text{m}^3$
5/9/2020	13:00	-	14:00	Cloudy	77
5/9/2020	14:00	-	15:00		78
5/9/2020	15:00	-	16:00		84
11/9/2020	13:00	-	14:00	Cloudy	85
11/9/2020	14:00	-	15:00		86
11/9/2020	15:00	-	16:00		90
17/9/2020	9:00	-	10:00	Cloudy	94
17/9/2020	10:00	-	11:00		102
17/9/2020	11:00	-	12:00		106
23/9/2020	13:00	-	14:00	Sunny	82
23/9/2020	14:00	-	15:00		83
23/9/2020	15:00	-	16:00		87
29/9/2020	9:00	-	10:00	Cloudy	69
29/9/2020	10:00	-	11:00		75
29/9/2020	11:00	-	12:00		81

### 1-Hour Total Suspended Particulate Results - AM7 Hong Kong Children's Hospital



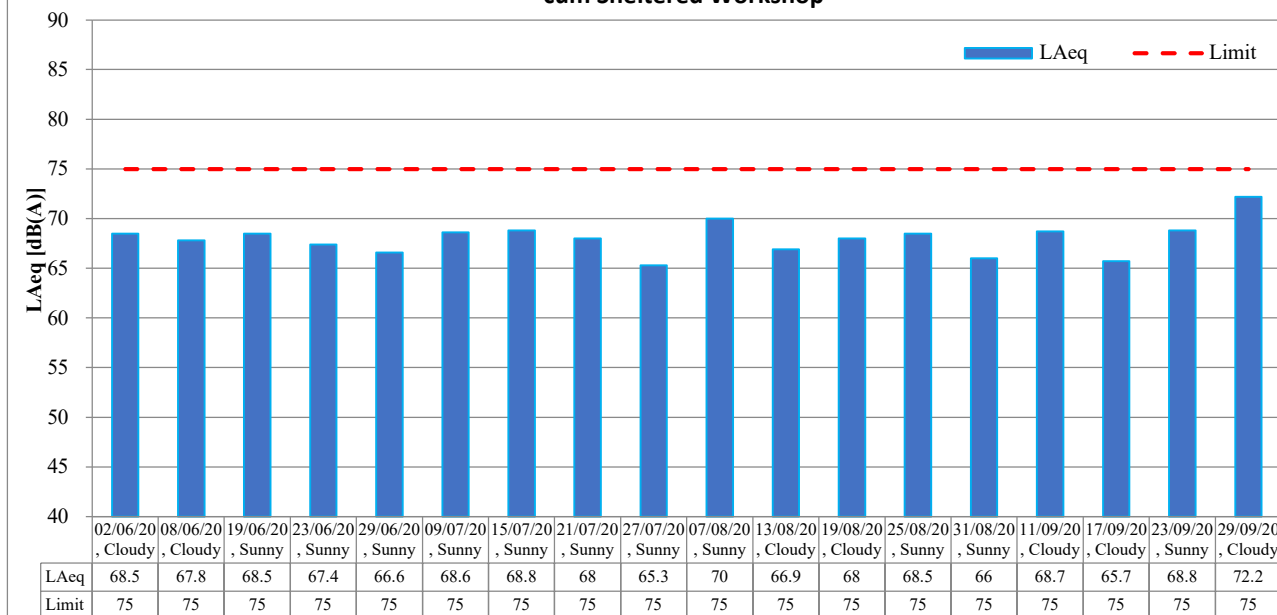
Major Construction Activities	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Installation of Sheet Pile for Construction of Underpass and Noise Barrier	✓			
Pumping Test at North Depressed Road Cofferdam and South Depressed Road	✓	✓	✓	
Construction of Bored Pile of Bridge D3	✓	✓	✓	✓
ELS Installation & Excavation for North Depressed Road and South Depressed Road	✓			
Construction of base slab, walls and columns for North Approach Ramp	✓	✓	✓	
Permanent Structure Construction for North Depressed Road	✓	✓	✓	✓
Installation of Sheet Pile for Construction of Underpass		✓		
ELS Installation & Excavation for North Depressed Road (CH1560 to CH1720)		✓		
Installation of Sheet Pile for Construction of DCS			✓	
ELS Installation & Excavation for South Depressed Road			✓	
Ground investigation works				✓
Excavation for North Approach Ramp				✓
Construction of base slab and wall for North Approach Ramp				✓
ELS Installation & Excavation for North Depressed Road				✓
Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road				✓
ELS works for Noise Barrier Foundation				✓

Factors might affect the monitoring results	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 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 <sub>Aeq</sub> , dB(A)	L <sub>A10</sub> , dB(A)	L <sub>A90</sub> , dB(A)
02/06/2020	9:54	-	10:24	Cloudy	68.5	71.2	63
08/06/2020	15:00	-	15:30	Cloudy	67.8	70.9	64.1
19/06/2020	14:34	-	15:04	Sunny	68.5	71.5	61.3
23/06/2020	11:03	-	11:33	Sunny	67.4	70.1	60.9
29/06/2020	11:08	-	11:38	Sunny	66.6	67.0	66.1
09/07/2020	10:18	-	10:48	Sunny	68.6	71.5	62.0
15/07/2020	10:53	-	11:23	Sunny	68.8	72.0	63.0
21/07/2020	11:05	-	11:35	Sunny	68.0	71.8	63.7
27/07/2020	14:16	-	14:46	Sunny	65.3	67.5	62.0
07/08/2020	10:51	-	11:21	Sunny	70	73	64.4
13/08/2020	10:08	-	10:38	Cloudy	66.9	67.8	62.9
19/08/2020	14:37	-	15:07	Cloudy	68.0	68.9	61.2
25/08/2020	10:07	-	10:37	Sunny	68.5	71.6	62.2
31/08/2020	10:33	-	11:03	Sunny	66.0	68.8	60.1
11/09/2020	10:47	-	11:17	Cloudy	68.7	70.4	61.4
17/09/2020	9:20	-	9:50	Cloudy	65.7	67.1	63.8
23/09/2020	10:49	-	11:19	Sunny	68.8	71.8	62.4
29/09/2020	15:01	-	15:31	Cloudy	72.2	75.0	68.1

**30-min Sound Pressure Level Result - M11 The Hong Kong Society for the Blind's Factory cum Sheltered Workshop**

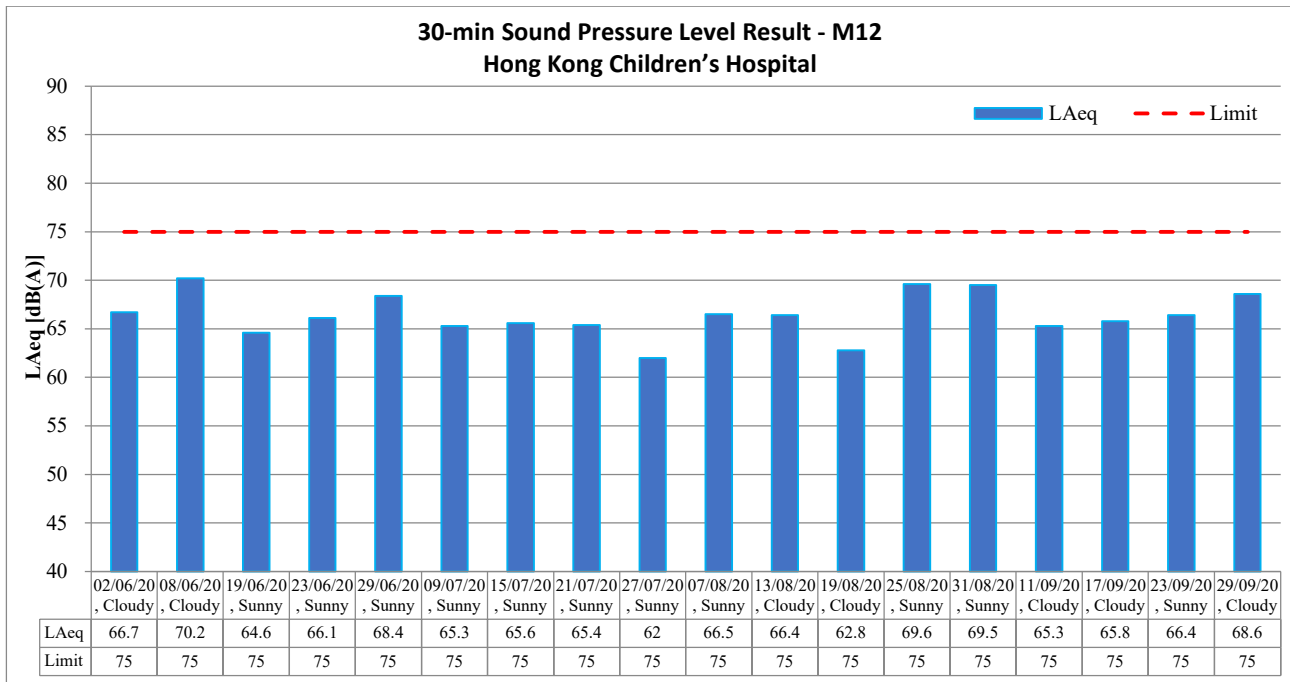


Major Construction Activities	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Installation of Sheet Pile for Construction of Underpass and Noise Barrier	✓			
Pumping Test at North Depressed Road Cofferdam and South Depressed Road	✓	✓	✓	
Construction of Bored Pile of Bridge D3	✓	✓	✓	✓
ELS Installation & Excavation for North Depressed Road and South Depressed Road	✓			
Construction of base slab, walls and columns for North Approach Ramp	✓	✓	✓	
Permanent Structure Construction for North Depressed Road	✓	✓	✓	✓
Installation of Sheet Pile for Construction of Underpass		✓		
ELS Installation & Excavation for North Depressed Road (CH1560 to CH1720)		✓		
Installation of Sheet Pile for Construction of DCS			✓	
ELS Installation & Excavation for South Depressed Road			✓	
Ground investigation works				✓
Excavation for North Approach Ramp				✓
Construction of base slab and wall for North Approach Ramp				✓
ELS Installation & Excavation for North Depressed Road				✓
Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road				✓
ELS works for Noise Barrier Foundation				✓

Factors might affect the monitoring results	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 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 <sub>Aeq</sub> , dB(A)	L <sub>A10</sub> , dB(A)	L <sub>A90</sub> , dB(A)
02/06/2020	11:14	-	11:44	Cloudy	66.7	68.1	63.5
08/06/2020	11:24	-	11:54	Cloudy	70.2	70.7	68.0
19/06/2020	10:37	-	11:07	Sunny	64.6	66.5	62.1
23/06/2020	14:03	-	14:33	Sunny	66.1	68.6	63.1
29/06/2020	13:43	-	14:13	Sunny	68.4	68.7	68.1
09/07/2020	13:25	-	13:55	Sunny	65.3	67.5	62.5
15/07/2020	13:19	-	13:49	Sunny	65.6	67.7	62.7
21/07/2020	14:14	-	14:44	Sunny	65.4	67.3	62.4
27/07/2020	10:19	-	10:49	Sunny	62.0	63.5	59.9
07/08/2020	13:48	-	14:18	Sunny	66.5	68.2	61.7
13/08/2020	13:45	-	14:15	Cloudy	66.4	69.4	62.5
19/08/2020	15:19	-	15:49	Cloudy	62.8	63.7	61.6
25/08/2020	13:39	-	14:09	Sunny	69.6	70.4	69.2
31/08/2020	14:13	-	14:43	Sunny	69.5	73.2	64.1
11/09/2020	14:08	-	14:38	Cloudy	65.3	66.9	63.7
17/09/2020	11:28	-	11:58	Cloudy	65.8	68.1	62.4
23/09/2020	13:51	-	14:21	Sunny	66.4	68.3	64.1
29/09/2020	9:27	-	9:57	Cloudy	68.6	71.3	63.7



Major Construction Activities	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 2020
Installation of Sheet Pile for Construction of Underpass and Noise Barrier	✓			
Pumping Test at North Depressed Road Cofferdam and South Depressed Road	✓	✓	✓	
Construction of Bored Pile of Bridge D3	✓	✓	✓	✓
ELS Installation & Excavation for North Depressed Road and South Depressed Road	✓			
Construction of base slab, walls and columns for North Approach Ramp	✓	✓	✓	
Permanent Structure Construction for North Depressed Road	✓	✓	✓	✓
Installation of Sheet Pile for Construction of Underpass		✓		
ELS Installation & Excavation for North Depressed Road (CH1560 to CH1720)		✓		
Installation of Sheet Pile for Construction of DCS			✓	
ELS Installation & Excavation for South Depressed Road			✓	
Ground investigation works				✓
Excavation for North Approach Ramp				✓
Construction of base slab and wall for North Approach Ramp				✓
ELS Installation & Excavation for North Depressed Road				✓
Sheet pile installation, pumping test and ELS for Underpass and South Depressed Road				✓
ELS works for Noise Barrier Foundation				✓

Factors might affect the monitoring results	Reporting Period			
	Jun 2020	Jul 2020	Aug 2020	Sep 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**

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

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

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

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

<b>Event and Action Plans for Landscape and Visual Impact</b>				
<b>Event</b>	<b>Action</b>			
	<b>ET</b>	<b>IEC</b>	<b>Supervisor / ER</b>	<b>Contractor</b>
Design Check	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 September 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 <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
Jan	1.030	--	--	--	1.030	--	--	--	--	--	0.0070
Feb	3.535	--	--	--	3.535	--	--	--	--	--	0.0008
Mar	13.992	--	--	13.075	0.917	0.933	--	--	--	--	0.0014
Apr	7.335	--	--	5.557	1.778	18.77	--	--	--	--	0.0127
May	8.024	--	--	5.642	2.382	0.620	--	0.111	--	--	0.0264
Jun	5.057	--	--	3.919	1.138	--	--	--	--	--	0.0120
<b>Sub-total</b>	<b>38.973</b>	<b>0</b>	<b>0</b>	<b>28.193</b>	<b>10.78</b>	<b>20.323</b>	<b>0</b>	<b>0.111</b>	<b>0</b>	<b>0</b>	<b>0.0603</b>
July	7.664	--	--	6.877	0.787	0.262	--	--	--	--	0.0537
Aug	6.549	--	--	1.686	4.863	0.645	--	--	--	--	0.0306
Sep	15.33	--	--	5.772	9.558	2.176	--	0.154	--	--	0.0158
Oct	--	--	--	--	--	--	--	--	--	--	--
Nov	--	--	--	--	--	--	--	--	--	--	--
Dec	--	--	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>68.516</b>	<b>0</b>	<b>0</b>	<b>42.528</b>	<b>25.988</b>	<b>23.406</b>	<b>0</b>	<b>0.265</b>	<b>0</b>	<b>0</b>	<b>0.1604</b>

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 <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
<b>195.01</b>	<b>2.103</b>	<b>10.2</b>	<b>140</b>	<b>19.81</b>	<b>25</b>	<b>200</b>	<b>0.8</b>	<b>--</b>	<b>--</b>	<b>3.4</b>

- 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 50,000m<sup>3</sup> (**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 m<sup>3</sup>/ton and 1.5 m<sup>3</sup>/ton

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

<b>Implementation Schedule for Air Quality Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
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 extent 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 insider the site. On- site unpaved roads should be compacted and kept free of lose 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 hardcores.	^
		- Every main haul road should be scaled 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.	^

<b>Implementation Schedule for Noise Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
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	^

<b>Implementation Schedule for Water Quality Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
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	^*

<b>Implementation Schedule for Water Quality Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
		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	^*

<b>Implementation Schedule for Water Quality Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
		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 <sup>3</sup> capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is	^

<b>Implementation Schedule for Water Quality Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
		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 <sup>3</sup> should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.	^
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.	^*
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.	^



<b>Implementation Schedule for Water Quality Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
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>	^

<b>Implementation Schedule for Water Quality Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
		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.	^

<b>Implementation Schedule for Water Quality Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
		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.	^

<b>Implementation Schedule for Waste Management Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
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.	^

<b>Implementation Schedule for Waste Management Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
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.	NA
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:	

<b>Implementation Schedule for Waste Management Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
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.	^

<b>Implementation Schedule for Waste Management Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
	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.	^

<b>Implementation Schedule for Landscape and Visual Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
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.	NA
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	^

<b>Implementation Schedule for Landscape and Visual Measures</b>			
<b>EIA for KTD Development Ref.</b>	<b>EIA for KTD – Roads D3A &amp; D4A Ref.</b>	<b>Environmental Protection Measures / Mitigation Measures</b>	<b>Status</b>
		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.	NA

<b>Remarks:</b>			
^	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: July 2020 to September 2020**

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

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

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

<b>Complaint Log for ED/2018/01</b>				
<b>EPD Complaint Ref. No.</b>	<b>Date of Complaint</b>	<b>Description of Complaint</b>	<b>Investigation / Recommendations / Actions</b>	<b>Close-Out Date / Status</b>
		No complaint was received in between Jan to September 2020.		